



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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VIA ELECTRONIC MAIL

June 10, 2020

Marianne Barbino Dubuque, Esq.
Carmody Torrance Sandak & Hennessey LLP
50 Leavenworth Street
Waterbury, CT 06702

RE: **PETITION NO. 1398** - LSE Pictor, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.99-megawatt AC solar photovoltaic electric generating facility on an approximately 104 acre parcel located off of Platt Hill Road, Winchester, Connecticut and associated electrical interconnection.

Dear Attorney Dubuque:

The Connecticut Siting Council (Council) is in receipt of the Town of Winchester's correspondence dated June 2, 2020 concerning the above-referenced petition. Thank you for taking the time to provide the Council with your comments.

This petition will be placed on a future Council meeting agenda for discussion and decision. Please note that you can view all of the documents related to this petition on our website at www.ct.gov/csc under the "Pending Proceedings" link. You may also keep apprised of Council events on the website calendar and agenda.

Before reaching a final decision on a petition, the Council carefully considers all of the facts contained in the record that is developed by the Council, the petitioner, parties and intervenors to the petition, and members of the public who submit written statements to the Council.

Your comments shall become part of the official record in this matter in the form of a limited appearance defined under subsection (f) of Connecticut General Statutes §16-50n. Copies of your correspondence will be distributed to the petitioner and any parties and intervenors to the petition.

Thank you for your interest and concern in this matter.

Sincerely,

s/ Melanie A. Bachman

Melanie A. Bachman
Executive Director

MAB/emr

c: Service List
Council Members

June 2, 2020

VIA ELECTRONIC MAIL

Attorney Melanie Bachman
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Petition #1398 LSE Pictor, LLC

Dear Attorney Bachman:

The Town of Winchester (the "Town") appreciates the opportunity to offer comments in the Petition #1398 proceeding and the courtesies it received with the granting of extensions of time to properly complete its analysis. The Town fully understands the jurisdiction of the Connecticut Siting Council (the "Council") under Connecticut General Statutes Section 16-50k(a); thus, the Town is endeavoring to participate within that framework in a constructive manner.

In order to assist the Council in its review of Petition #1398, the Town respectfully offers the following comments and insights, along with its requests. The Town's requests are summarized in Exhibit A, for the Council's convenience.

Environmental Review

This office retained Soil Science and Environmental Services, Inc. ("SSES") to review the documents relating to the wetland delineation and wetland resources. I have attached the SSES Report dated May 19, 2020, along with the resumes of Scott D. Stevens and Jennifer L. Beno, who conducted such review. See Attachment 1.

The Town requests that the Council consider requiring the Petitioner to adhere to the following recommendations of SSES:

- Prepare a vegetation management plan to prevent invasive species from potentially becoming established and colonizing cleared areas of uplands, wetlands, and wetland creation area during the solar array use and after the site has been decommissioned;
- Follow-up with CT DEEP Fisheries as recommended in the CT DEEP NDDB response letter dated February 28, 2020;
- Update soil symbols from letters to numbers on the site plans; and
- Re-establish the wetland boundary flags closest to the project area so contractors will see clearly defined wetland boundaries.

Emergency Services

The Winsted Fire Department is responsible for fire protection for the entire Town. The Winchester Center Volunteer Department services the district in which the proposed solar installation would be located. Both Fire Departments, which are staffed primarily by volunteers, would likely respond to an emergency event at the proposed site.

The Chiefs of the Fire Departments request that the Council require that:

- access to the interior solar farm be sufficient for fire apparatus (a width of 16 feet is recommended along with a turn-around area) and be well-maintained, including snow plowing, grading to maintain a smooth surface if gravel, and brush or tree removal, to allow fire truck access without causing damage to Department vehicles;
- site-specific training be provided to the Fire Departments with an annual update with Department officers to ensure that there are no significant changes to training protocol; and
- a Knox Box be provided with all necessary keys for access by the Fire Departments during any emergency.

Engineering Review

James Rollins, Director of Public Works of the Town and Bart Clark, P.E., Project Administrator of Public Works, were asked to review the revised site plans and the Petitioner's Responses to the Council's Interrogatories. I have attached the Memorandum of the Public Works Department dated May 27, 2020. See Attachment 2. Please note that as the Director of Public Works, Mr. Rollins plans, organizes, supervises and inspects work in the construction, maintenance and repair of public streets, drainage systems and bridges, water source and distribution systems, sanitary sewage collection and disposal systems, cemeteries and trees and parks. Additionally, Mr. Rollins was formerly an excavating contractor for 30 years, handling site work on residential, commercial and industrial projects, and Mr. Clark is a Professional Engineer and has 30 years' experience with site design and the review of commercial, residential and municipal projects.

The Town requests that the Council consider requiring the Petitioner to address the issues identified in this Memorandum. In particular, the Town wishes to highlight the following issues:

- Fragile condition of the existing road system (See Memo - Site Plans, p. 1, #3);
- Construction impacts with measures to lessen such impacts, in particular, construction phasing, including limiting Phase 1 to the construction of the driveway, construction trailer and staging areas only, to prevent damage to the wetlands by construction equipment; improvements to driveway design and details; concerns with stump grinding and the eastern grass swale (See Memo - Site Plans, p. 1, #4, p. 2, #9, p. 3, #13, p. 4, #23, #27, p. 5, #29 and Memo - Interrogatory Responses, p. 6, #6 and p. 7, #12);
- Advisability of a small maintenance building on site with sanitary facilities (See Memo - Site Plans, p. 2, #7); and
- Use of the constructed wetland as a temporary sediment basin during construction (See Memo - Site Plans, p. 3, #16 and p. 4, #28).

Stormwater Management

The Town understands that the CT DEEP, not the Council, has the final authority over stormwater management issues and in fact, that in January of 2020, the CT DEEP issued a new guidance on stormwater management for solar array projects.

Representations by the Petitioner

In response to CSC-01-24, the Petitioner indicated that no blasting would be necessary for the project. Given the potential detrimental impacts that can occur from blasting, especially to drinking water wells in the vicinity of the site, the Town requests that the Council be explicit in its final decision by prohibiting blasting.

Similarly, in response to CSC-01-62, the Petitioner states that no pesticides or herbicides would be used on site. Finally, in its Operations and Management Plan, the Petitioner states that no chemicals or additives would be used to clean PV modules. The Town requests that the Council be explicit in its final decision by prohibiting the use of pesticides or herbicides on site and the use of chemicals or additives to clean PV modules.

Information Needed from the Petitioner (requested in the Council's Interrogatories)

The Town notes that the following information was not provided yet or was incomplete and requests that the Petitioner be required to provide such information before the Council renders its decision:

- archeological assessment requested by the State Historic Preservation Office [CSC-01-48];
- exact provisions in the Lease Agreement with the property owner related to site restoration at the end of the project's useful life [CSC-01-07];
- detailed winter work procedures for each phase that address construction erosion and sediment control as well as stabilization of stormwater control swales and the wetland detention basin if winter work occurs [CSC-01-36] Note that the Petitioner merely indicated that

additional erosion control measures would be implemented if winter work occurred, without providing any details; and

- an explanation as to how the depth of the conical plunge pool would be cleaned of sediment without damaging the sides [CSC-01-47].

Operations and Maintenance Plan

The Town requests that the Council require the Petitioner to submit, prior to its decision:

- qualifications for the O&M Manager;
- location of data acquisition center and proximity to Winchester; and
- maintenance steps to be taken if the inspections detect any of the potential conditions listed in the Plan, including cracks, rust, corrosion, insect or rodent infestation.

Decommissioning Plan

The Petitioner's Decommissioning Plan generally calls for removal of all associated components of the project. The Plan does not specifically address removal, transport and proper disposal of any hazardous waste. To the extent any hazardous waste would be generated, the Town requests that the Plan be required to address these hazardous waste issues.

Moreover, because the Petitioner is a single-site limited liability company, the Town requests that the Council require that a bond for estimated removal costs, based on the projected decommissioning date, be posted with the Council or the Town so that taxpayers are not left to bear the cost of any decommissioning, if the limited liability company is no longer solvent.

Donation of Approximately 75 Acres to Winchester Land Trust

The Town strongly supports the donation of approximately 75 acres of the existing property to the Winchester Land Trust and looks forward to its capable stewardship over such property for generations to come.

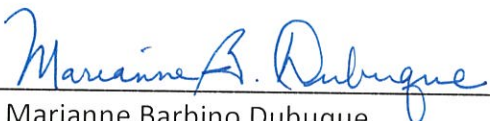
Page 6

General

Given the complexities of the constructed wetland and swales, the planned clearing of trees, and the potential issues identified in the Public Works Department Memorandum, the Town requests that the Council require an independent third party environmental inspector to monitor proper implementation of the site plans, including effective erosion and sedimentation control measures to protect the on-site and nearby sensitive resources, and to report his/her observations directly to the Council.

In conclusion, the Town respectfully offers its comments and insights, along with its requests and thanks the Council and its staff in advance for its thoughtful consideration.

Very truly yours,
CARMODY TORRANCE SANDAK &
HENNESSEY LLP

By 
Marianne Barbino Dubuque

MBD/mkw
Attachments

cc: Mr. Robert Geiger, Town Manager
Connecticut Siting Council (1 hard copy)
Mr. Jeffrey Macel, Principal (jmacel@lodestartenergy.com)
Carrie Larson Ortolano, Esq. (cortolano@lodestartenergy.com)

Exhibit A

Summary of Town's Requests

A. Of the Petitioner

1. SSES Recommendations

- (a) Prepare vegetation management plan
- (b) Follow-up with CT DEEP Fisheries
- (c) Update soil symbols
- (d) Re-establish wetland boundary flags

2. Fire Department Recommendations

provide:

- (a) Access to the interior solar farm 16 feet in width, to be well-maintained
- (b) Site-specific training to the Fire Departments with an annual update to Department officers
- (c) Knox Box

3. Public Works Department Recommendations

- (a) Avoid stone walls
- (b) Consider design of road systems and furnish surveys
- (c) Consider adding a small maintenance building
- (d) Relocate and protect stockpile areas
- (e) Address concerns about drying due to the grass swale diverting water to the west
- (f) Provide temporary construction road and temporary storage area for drying of excess soils with erosion and sediment controls

- (g) Modify design of service and emergency spillways
- (h) Provide appropriate rebar on the outlet structure
- (i) Provide more information, including height, for the boulder wall at the driveway through the wetland crossings
- (j) Phase construction with Phase 1 limited to the construction of the driveway, construction trailer and staging areas only, with appropriate erosion controls
- (k) Construct the constructed wetlands after the site is stabilized and use roughed out area for constructed wetlands as a temporary sediment basin during construction
- (l) Conduct appropriate seed bed preparation after stump removal to avoid erosion
- (m) Pay close attention to preventing sloughing of slopes
- (n) Provide actual slopes, not average slopes, for the paths along the east side of the arrays
- (o) Provide grass swale vegetation management plan

4. Interrogatory Responses

provide:

- (a) Archeological assessment requested by State Historic Preservation Office
- (b) Exact provisions in Lease Agreement related to site restoration at end of project's useful life
- (c) Detailed winter work procedures for each phase
- (d) Explanation as to how the depth of conical plunge pool would be cleaned

5. O&M Plan Information

provide:

- (a) Qualifications of O&M Manager
- (b) Location of data acquisition center and proximity to Winchester
- (c) Maintenance steps to be taken if inspections detect any potential conditions listed, including cracks, rust, corrosion, insect or rodent infestation

B. Of the Council

1. Prohibit in the decision documents:

- (a) Blasting
- (b) Use of pesticides or herbicides on site
- (c) Use of chemicals or additives for cleaning the PV modules

2. Require an independent third party environmental site inspector

3. Require construction phasing

4. Require a bond for estimated removal costs based on projected decommissioning date

Attachments

1. SSES Report with Resumes
2. Public Works Department Memorandum

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Wetland Delineations Ecological Studies Site Assessments Project Planning Soil Testing

May 19, 2020

ATTN: Marianne Barbino Dubuque
Carmody Torrance Sandak & Hennessey LLP
50 Leavenworth Street
Waterbury, CT 06702

**RE: Document Review
Lodestar Energy - Petition #1398 - CT Siting Council,
Platt Hill Road, Winchester, CT**

Dear Mrs. Dubuque:

In accordance with your request, Scott Stevens, Registered Professional Soil Scientist, and Jennifer Beno, Biologist/Wetland Scientist with Soil Science and Environmental Services, Inc. (SSES) reviewed documents pertaining to the wetland delineation and wetland resources associated with the proposed Lodestar Energy solar array project off of Platt Hill Road in Winchester, CT. We reviewed project documents on file at the CT Siting Council website. In addition, we reviewed resources available for the site through the CT Environmental Conditions Online, Web Soil Survey, and Town of Winchester websites. The purpose of the review was to determine if the provided wetland delineation and assessment information appears sufficient to verify that the proposed solar array project will not have a significant adverse impact on watercourses, wetlands and wetland functions both on the property and downstream of the property or if additional information is required. A site inspection was not conducted as part of this review. We recommend that a Professional Engineer evaluate the proposed erosion and sedimentation controls, the proposed gravel access road crossings and stormwater management/wetland creation area designs to determine that the proposed construction methods are appropriate. The Northwest Conservation District could also provide a review of the erosion and sedimentation control measures and project design associated with the project.

SSES reviewed the following documents:

“Site Development Plans, Proposed 1.99 MW Solar Array, Platt Hill Road, Winchester, Connecticut, Prepared for Lodestar Energy,” prepared by Trinkaus Engineering, LLC and dated 3/6/2020.

“Supporting Documentation, 1.99 MW Solar Array, Platt Hill Road, Winchester – Connecticut, Prepared for Lodestar Energy, March 20, 2020.”

“Wetland Soil Evaluation, 1.99 MW Solar Array, Platt Hill Road, Winchester – Connecticut, Prepared for Lodestar Energy, March 20, 2020” with attachments.

“Environmental Evaluations, 1.99 MW Solar Array, Platt Hill Road, Winchester – Connecticut, Prepared for Lodestar Energy, March 20, 2020” with attachments.

Town of Winchester Litchfield County, Connecticut Tax Maps 37, 38 43, and 44 available on the Town of Winchester website.

CT Environmental Conditions Online (CTECO) maps for the project area and general vicinity.

Natural Resources Conservation Service Web Soil Survey (WSS) map for the site and immediate vicinity.

Petitioner LSE Pictor LLC’s Responses To Siting Council Interrogatories Dated April 21, 2020

The following is a brief overview of the reviewed documents.

Site Plan

The site plans were prepared by Trinkaus Engineering, LLC. The plans show the following:

- Property boundary, topography, wetland boundaries established in 2003.
- Proposed 24.80 acre project site, access road, storm water management/wetland creation areas, and 75 acres to be conveyed to the Winchester Land Trust.
- Proposed gravel access road wetland crossings.
- Proposed project phasing, erosion and sedimentation control measures, and general construction notes.

SSES does not have a professional engineer on staff. A Professional Engineer should review the site plans and comment on the engineering aspects of the project such as storm water drainage patterns, the access road wetland crossings design, and the wetland creation area. The Northwest Conservation District also could review the proposed plans.

The plans do not include details on invasive species management and control within the wetlands adjacent to the proposed impact areas, the wetland creation area, and the non-wetland areas during the active energy generation use of the land and after the site has been decommissioned.

Wetland Soil Evaluation, 1.99 MW Solar Array, Platt Hill Road, Winchester – Connecticut, Prepared for Lodestar Energy, March 20, 2020

- Includes a description of the property location, size, and owners.
- Wetland/watercourse delineation overview and environmental reports.
- Included in Appendix A of this document are several reports and documents including:
 - Wetland Delineation Report by MB Soil Mapping (June 7, 2003), by Marc Beroz, Certified Soil Scientist.
 - Letter from Marc Beroz (October 23, 2019) confirming that the wetland boundary shown on the Class A-2 Survey represents the work he did in the field in 2003.
 - Letter from JMM Wetland Consulting Services, LLC (January 6, 2020), by James McManus, Certified Professional Soil Scientist confirming the wetland boundaries delineated by Marc Beroz.
 - Report from JMM Wetland Consulting Services, LLC (March 17, 2020) by James McManus, Certified Professional Soil Scientist evaluating the proposed wetland/intermittent stream crossings by the proposed driveway.
 - Town of Winchester – City of Winsted approval letter from the Inland Wetlands and Watercourses Commission for the Trade Winds Farm Subdivision for regulated activities associated with the 26 lot subdivision.

SSES reviewed the documents included in the Appendix. Marc Beroz (MB Soil Mapping) delineated the wetlands on the property in 2003. Marc Beroz indicated a sketch map with flag numbers was included with his report but it was not attached to the document that SSES reviewed. In November 2019, James McManus (JMM Wetland Consulting Services, LLC) verified the wetland boundaries in four areas. The locations of the four areas are not specified in the report and no map indicating the verified wetland boundary areas was included for review. The four areas were apparently shown on a “wetland verification plan” which was not included in the documents available for review. SSES is familiar with both Marc Beroz and James McManus and their work. Although SSES was not able to access the property to inspect the wetland delineations, based on the review of soil and topography maps available at the CTECO and WSS websites and our familiarity with Marc Beroz and James McManus, we assume that the wetland delineation

is substantially correct. The wetland boundary flags should be re-established on the site within and near the project area in order to clearly define the regulated areas prior to and during construction activities.

James McManus also provided a letter describing the proposed wetland impacts (2 wetland and intermittent watercourse crossings) that would be caused by the construction of the gravel access road. He describes the impact areas and the amount of fill required at each crossing location. He compares the proposed gravel access road crossings with the previously approved subdivision road crossings at the same locations. He concludes that “with diligent monitoring of erosion and sediment controls, the proposed gravel access driveway will not have significant adverse short-term (construction) or long-term (water quality/habitat) impacts upon the regulated resources.”

The Town of Winchester – City of Winsted wetland approval for the previously proposed 26-lot subdivision on this property was included with this document. Numerous conditions were included with the approval relative to the subdivision. Some of the conditions included with the 2005 wetlands permit, especially pertaining to erosion and sedimentation control measures and water quality testing downstream of the crossings, could be relevant to this project. The referenced prior approval was issued in 2005 and it is unknown whether or not if the Town has updated their Inland Wetlands regulations and requirements regarding wetland impacts and activities near wetlands and watercourses. Also, it is unknown if the 2005 subdivision approval included activities in the area of the currently proposed stormwater management/water quality basin or if this is a new regulated activity adjacent to wetlands.

Environmental Evaluations, 1.99 MW Solar Array, Platt Hill Road, Winchester – Connecticut, Prepared for Lodestar Energy, March 20, 2020”

- This document provides an overview of the property, vegetation conditions, wetland/watercourses, environmental evaluations, soil types, and topographic conditions.
- Included in Appendix A of this document are reports and documents including:
 - Environmental Assessment Report by Environmental Land Solutions, August 1, 2002 and revised to July 21, 2005
 - Report by Penelope Sharp, Environmental Consultant, July 5, 2003
 - Letter from CT DEEP Natural Diversity Database, February 28, 2020
 - Report by Environmental Land Solutions on the Species of Special Concern identified in the Natural Diversity Database, March 17, 2020

An Environmental Assessment Report was prepared by Matthew Popp (Environmental Land Solutions) in August 2003 (not 2002) and revised in both 2004 and 2005. The report provides a detailed description of the upland and wetland areas on the property including wildlife and vegetation lists and the primary wetland functions provided by the wetlands. Invasive species (including Japanese barberry, oriental bittersweet and multiflora rose) were included with the vegetation inventory list for this property. The report provides a description of the proposed wetland impacts caused by the construction

of the proposed subdivision road. Approximately 5,000 square feet of direct impacts for the two wetland road crossings was proposed (and subsequently approved in 2005) that would have incorporated the use of arch culverts at the crossings. The report concludes that "Although some work is proposed within wetland/watercourse areas and the associated upland review area, it is not expected that these activities will have a significant adverse impact on these resources or significantly alter their functions and/or value."

Penelope C. Sharp (Environmental Consultant) prepared a letter in July 2005 (not 2003) addressing potential vernal pools on the property. She found that only one of the isolated wetlands in the northeastern portion of the property contained 2 egg masses (1 each – spotted salamander and wood frog) and concluded that the majority of amphibian breeding must be occurring within the large wetland corridor along the eastern property boundary. The vernal pool (wetland flag #556-563) that was observed by Penelope Sharp to contain the two egg masses was not identified on the Wetland/Watercourse/Vernal Pool Mapping figure included with the documents. The pool containing the observed egg masses is situated south of the two other identified pools shown on the map.

Penelope Sharp concludes that "The fact that the pool contained only one egg mass of each species means that the wetland does not qualify as an exemplary pool. It is more likely that this wetland serves as a satellite pool for larger breeding areas likely contained within the Red Maple Swamp. Because the land between the small isolated wetland area and the Red Maple Swamp will remain undeveloped and because there will considerable uplands remaining in the area (no development occurring within a minimum of 150' of the small vernal pool), there will be ample habitat for the terrestrial phases of the amphibians that complete their larval stages in the pool." The report provides a general description of and vegetation list for the eastern wetland corridor and states that no state listed endangered, threatened, or special concern species were observed during her inspections. She concludes the report by stating that "By the observation of these areas during the growing season, I am able to confirm the findings of no significant impact on the Red Maple Swamp, the vernal pool, or any of the other hillside seepage wetlands as discussed in my letters of October 19, 2004, and November 7, 2004 to the Inland Wetlands Commission from the proposed 26 lot Open Space subdivision." The October 2004 and November 2004 reports were not included for review. SSES is familiar with Penelope Sharp's work and consulted with her on several projects. SSES was not able to access the property to inspect the wetlands. However, based on the information contained in the reviewed reports and familiarity with Penelope Sharp, we assume that the wetland descriptions, vernal pool information, and wetland impacts conclusions are accurate. In addition, the petitioner states that the nearest edge of clearing for the proposed solar array project area will be greater than 400 feet from the identified vernal pool. SSES measured the distance from the proposed edge of clearing for the solar array to the vernal pool contained within wetland flags #556-563 and determined the distance to be approximately 375 feet. Although not as long a distance as reported by the Petitioner, it is still a substantial increase over the 150-foot "no development area" that was approved as part of the subdivision activities.

Included in the Appendix is the Request for Natural Diversity Data Base (NDDB) State Listed Species Review submitted on June 2019 and the Natural Diversity Data Base response letter dated February 28, 2020. The NDDB letter states that two State of CT listed Special Concern Species, bridle shiner (*Notropis bifrenatus*) and eastern pondmussel (*Ligumia nasuta*), have been documented in the watershed and downstream of the proposed project area. The letter includes measures to protect the listed species and suggests that the Petitioner consult with DEEP Fisheries before proceeding with the project.

The final letter included in the Appendix was prepared by Matthew Popp (Environmental Land Solutions, LLC) and is dated March 17, 2020. The letter addresses the listed species identified by the NDDB in their letter dated February 28, 2020. He concludes that "If the project is constructed in accordance with the plans and NDDB recommendations, no adverse impact to Eastern Pondmussel and Bridle Shiner is anticipated."

Petitioner LSE Pictor LLC's Responses To Siting Council Interrogatories Dated April 21, 2020

- This document provides answers to numerous CT Siting Council questions regarding several subjects including Environmental.
- Included in this document is a revised plan set dated 5/1/20.
- Also included is a revised "SUPPORTING DOCUMENTATION1.99MW SOLAR ARRAY PLATT HILL ROAD WINCHESTER –CONNECTICUT PREPARED FOR LODESTAR ENERGY MARCH 20, 2020 Revised To May 1, 2020"

The Petitioner states that the wetlands crossings do not require DEEP or Army Corps permits. According to the document, trees will be cleared from 13.6 acres of land. The document provides additional information regarding the functioning of the wetland detention basin and information regarding Taylor Brook and downstream fisheries. However, the Petitioner does not mention if the CT DEEP Fisheries were consulted as suggested in the CT DEEP NDDB letter. The report describes the activity distances to the on-site vernal pools. The revised plan set includes a Construction Narrative sheet (13 of 13) that describes the maintenance requirements for grass swales/constructed wetland basin. No plan for invasive species control is included in the maintenance plan for these areas or for the remainder of the project site. Invasive species exist on the property as documented in the vegetation inventory provided with the wetland assessment. Areas colonized by invasive plant species generally result in reduced vegetation diversity that results in decreased wildlife habitat which is an important function provided by wetlands. This document states that the Petitioner proposes to "leave the actual wetland crossings in place as well as removal may cause more environmental harm to the wetland."

The supporting documentation generally describes the site conditions and the proposed project including wetland impacts. Also included is a summary of the proposed stormwater management. Photo documentation of the site is included at the end of this document.

Conclusion

SSES was not able to access the property as part of this project review. We were able to review documents available on the CT Siting Council website pertaining to wetland delineation and wetland assessment and impact reports. In addition, we reviewed resources available for the site through the CT Environmental Conditions Online, Web Soil Survey, and Town of Winchester websites. According to the filed documents, the property is situated to the east of Platt Hill Road and consists of approximately 104 acres. Approximately 4 acres of land along Platt Hill Road will be subdivided for future residential development. Approximately 75 acres will be transferred to the Winchester Land Trust. The solar array project is proposed to be constructed on approximately 24.8 acres at the highest elevation within the central portion of the site and will be situated on a south-facing slope. Of the 24.8 acres, approximately 13.6 acres of upland vegetation will be removed to install the gravel access road, stormwater management/wetland creation and solar array areas. The solar array project area will be enclosed by a fence with a small gap at the bottom to allow for small wildlife passage through the solar array area. In order to provide access to the site, the Petitioner is proposing to construct a 12-foot wide gravel access road that will impact approximately 1,617 square feet of wetland. The gravel access road is proposed to be constructed in the same location that a previously approved, but not constructed, subdivision road was proposed. The previously approved subdivision road would have resulted in approximately 5,000 square feet of direct wetland impacts and would have incorporated the use of arch culverts. The prior approval was issued in 2005 and it is unknown whether or not if the Town has updated their Inland Wetlands regulations and requirements regarding wetland impacts and activities near wetlands and watercourses. The Petitioner's environmental consultants determined that there will be no significant adverse impact to regulated resources caused by the proposed solar array project. According to James McManus with JMM Wetland Consulting Services, LLC, he inspected the wetlands within the project area, reviewed the proposed solar array project and concluded that "with diligent monitoring of erosion and sediment controls, the proposed gravel access driveway will not have significant adverse short-term (construction) or long-term (water quality/habitat) impacts upon the regulated resources." Matthew Popp with Environmental Land Solutions concluded that "If the project is constructed in accordance with the plans and NDDB recommendations, no adverse impact to Eastern Pondmussel and Bridle Shiner is anticipated."

After reviewing the available documents pertaining to the wetlands near the proposed solar array project area, SSES makes the following recommendations.

- A Professional Engineer should evaluate the proposed erosion and sedimentation controls, the proposed gravel access road crossings and stormwater management/wetland creation area designs to determine that the proposed construction methods are appropriate and to determine if stormwater quality testing is necessary.
- The Northwest Conservation District could be requested to provide a review of the erosion and sedimentation control measures and project design associated with the project.
- The Petitioner should prepare a vegetation management plan to prevent invasive species from potentially becoming established and colonizing cleared areas of

uplands, wetlands, and wetland creation area during the solar array use and after the site has been decommissioned.

- The Petitioner should follow-up with fisheries as recommended by the NDDB.
- The Petitioner should update soil symbols from letters to numbers on the site plans.
- And finally, the wetland boundary flags should be re-established closest to the project area so contractors will see clearly defined wetland boundaries.

Respectfully submitted,

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.



Scott D. Stevens
Registered Professional Soil Scientist



Jennifer L. Beno
Biologist/Wetland Scientist

Professional Resume**Jennifer L. Beno**Biologist/Wetland Scientist

- Education:** B.A., Zoology/Ecology, Connecticut College, New London, 1994.
- Specialized coursework in Terrestrial and Wetland Ecosystem Study, Marine Biology, Environmental Chemistry, Animal Ecology, Environmental Studies
- Memberships & Registrations:** Connecticut Association of Wetland Scientists (CAWS)
- Society of Wetland Scientists (SWS)
- New England Estuarine Research Society (NEERS)
- Recent Conferences:** CAWS Annual Conferences 2019, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, North Haven/Wallingford/Meriden/Southbury/Cromwell, CT
- CCIA's third Annual Environmental Symposium, "Construction Environmental Responsibilities and Their Regulatory Process," October 2, 1997, Berlin, CT
- Society of Wetland Scientists, 16th Annual Meeting, Cambridge, MA, 1995
- Years of Experience:** Since August 1994
- Professional Experience:** Ms. Beno is one of the partners at Soil Science And Environmental Services, Inc. She is the Senior Biologist/Wetland Scientist with the firm and since joining the company in 1994, has worked on over 1,000 projects throughout Connecticut, New York State and Long Island. She prepares a variety of reports including wetland assessments, wetland impact analyses, mitigation and planting plans, and invasive species identification and eradication plans. Ms. Beno also conducts vernal pool and State and Federal listed (Endangered, Threatened and Special Concern) species inspections. She is involved with both Federal and Tidal wetland delineations. During her time with the firm, she has worked on several large linear projects for utility companies evaluating wetland functions and identifying amphibian breeding habitat and invasive species. Her reports are submitted as supporting documentation for municipal, State and US Army Corps of Engineers review. Ms. Beno has represented numerous clients and projects at local inland wetland agency meetings and public hearings. She has also met with CT Department of Energy and Environmental Protection and US Army Corps of Engineers representatives on different projects.

Professional Resume

Jennifer L. Beno

Biologist/Wetland Scientist

Professional Experience: Ms. Beno worked as a research assistant for Richard Orson during her college summer semester break of 1993. This research was funded by a grant from the State of Connecticut. She conducted field work evaluating salt marsh vegetation, obtained peat core samples and conducted laboratory digestion analysis on peat core samples. The purpose of this investigation was to isolate pollen grains within the peat cores in order to determine the effects of sea level rise on plant communities within the salt marsh.

Recent Projects: **UCONN - Storrs/Mansfield .** Delineated CT and Federal wetlands along proposed water main project areas. 2016.

State and Municipal Bridge Projects Throughout Connecticut.

Conducted site inspections for Federal wetland delineation, reviewed site plans and prepared environmental assessment reports to be submitted to the CT Department of Energy and Environmental Protection and US Army Corps of Engineers.

Northeast Utilities Right-of-Way Work, Connecticut. Evaluated wetlands and amphibian breeding habitat along over 100 miles of existing transmission line right-of-way from Bethel to Norwalk and Middletown to Norwalk. Identified invasive species along 45 miles of right-of-way for several years in order to document invasive species management success and native vegetation re-establishment. Prepared reports that were submitted to and reviewed by the Siting Council, Army Corps of Engineers and Department of Energy and Environmental Protection.

State of CT Listed Species Inspections. Conducted inspections for State listed species in CT and Long island. Inspections were conducted for listed plant, amphibian, reptile, mammal, and bird species. Prepared a report of findings for each site.

Vernal Pool Studies, East Haddam, Connecticut. Inspected and monitored potential vernal pool habitat on 100+ acres over two years.

Kennedy High School, Waterbury, Connecticut. Conducted site inspection, reviewed plans and prepared a wetland assessment and impact analysis. Represented the client at local Inland Wetlands commission meeting.

Professional Resume

Jennifer L. Beno

Biologist/Wetland Scientist

Recent Projects
Continued:

Commercial Property Redevelopment, Boston Post Road, Milford, Connecticut. Conducted site inspection, reviewed plans and prepared a wetland assessment and impact analysis. Represented the client at local Inland Wetlands commission meeting.

Iroquois Gas, Pipeline Projects. Mapped tidal wetlands along Housatonic River for a natural gas transmission line in Milford. The project included compiling a list of wetland vegetation to determine appropriate regulatory jurisdiction (i.e. fresh or tidal wetland).

Rain Garden Plant Design. Prepared a planting plan for rain gardens on residential lots in Darien, CT.

Haddam Town-Wide Wetland Evaluation, Haddam, Connecticut. Project manager and inspected the majority of the wetland areas in the town in order to delineate Federal wetlands, map wetland subclasses, and collect inventories of flora and fauna. Assessed the wetland quality by the application of two standard models. Prepared the final report.

Proposed Golf Learning Center, Waterbury, Connecticut. Aided in (the delineation of Federal wetlands including data sheets and submitted a wetland permit application to the Army Corps of Engineers for the client. Prepared an environmental assessment of the site including wetland description/assessment and floral inventory.

University of Connecticut, Mansfield, Connecticut. Aided in wetland boundary location and prepared an environmental assessment of the former gravel pit which included wetland description/assessment and floral and faunal inventories.

Gardiner Wellfield, Cromwell, Connecticut. Prepared a modified environmental assessment which included wetland description/assessment and flora and fauna inventories within the floodplain.

Hunters Green II Condominium, Newington, Connecticut. Prepared a modified environmental assessment which included wetland description/assessment, floral and faunal inventories.

Professional Resume

Jennifer L. Beno

Biologist/Wetland Scientist

Recent Projects
Continued:**Dag Hammarskjold Junior High, Moran Junior High and Yalesville Elementary Schools, Wallingford, Connecticut.**

Prepared a modified environmental assessment which included wetland description/assessment, floral and faunal inventories.

West Main Street, Waterbury, Connecticut. Prepared a wetland restoration plan which included an inventory of flora on site. A mitigation plan with recommended wetland flora to be planted and approximate planting locations was also provided to enhance a disturbed wetland area.

Bucks Hills Meadows, Parkview Estates Section II, Waterbury, Connecticut. Prepared a modified environmental assessment which included wetland description/assessment, floral and faunal inventories.

Avalon property, West Avon Road, Avon, Connecticut. Prepared an environmental assessment which included assessment of wetland functional quality, mitigation, feasible and prudent alternatives, wetland vegetation inventory and soil evaluation.

Parcel D, Lordship Boulevard, Stratford, Connecticut. Prepared an environmental assessment which included assessment of wetland functional quality, wetland vegetation inventory and soil evaluation.

River Oak Landing, East Johnson Avenue, Cheshire, Connecticut. Prepared a modified environmental assessment which included wetland description/assessment, floral and faunal inventories. The project also required completion of impact statements.

Professional Resume

Scott D. Stevens

Registered Soil Scientist & Environmental Professional

Education:

M.S., Environmental Science, University of New Haven, West Haven, Connecticut, 1996

B.S., Business Management, Bryant University, Smithfield, Rhode Island, 1987

Graduate and undergraduate studies in Soil Science and Groundwater Hydrology, University of Connecticut and University of New Hampshire, 1989-1990

Memberships and Registrations:

Member of the Society of Soil Scientists of Southern New England

Town of Rocky Hill, CT - Open Space & Conservation Commission, Full Member of the town's wetland commission since 2012

Certification for attending a 40-hour Health and Safety Training Course in the regulation of toxic and hazardous materials (29 CFR 1910.120)

Conferences/Training:

Connecticut Farm Bureau, 1st Annual Conference, Farming and Inland Wetlands Forum, Maneeley's, South Windsor, CT, March 4, 2010.

Natural Resources Conservation Service (NRCS) - Northeast Regional Cooperative Soil Survey Conference, Narragansett, RI, June 2, 2008.

Connecticut Association of Wetland Scientists (CAWS) Annual Meeting, "Wetland Restoration, Creation and Monitoring," Sheraton, Meriden, CT, February 27, 2007.

Society of Soil Scientists of Southern New England (SSSSNE), Technical Conference - Recent Advances in Soil Science in Southern New England, Whispering Pines Conference Center, University of Rhode Island W. Alton Jones Campus, West Greenwich, Rhode Island, June 13, 2007.

Society of Soil Scientists of Southern New England (SSSSNE), Red Parent Material Soils Workshop, 4-H Education Center at Auer Farm, Bloomfield, CT, May 25, 2006.

Professional Resume**Scott D. Stevens**Registered Soil Scientist & Environmental Professional

**Conferences/Training
Continued:**

Connecticut Association of Wetland Scientists (CAWS) Annual Meeting, "Connecticut Wetlands and Watercourses - Current Research and Programs," Sheraton, Meriden, CT, February 23, 2006.

EPOC Review Course for first LEP Licensing Exam, Hartford Marriott, Rocky Hill, CT, February 24, 1997

Hydric Soils Professional Workshop sponsored by the Society of Soil Scientists of Southern New England, University of Rhode Island, October 19, 1995

Direct Groundwater and Soil Gas Flow Measurement with Subsurface Engineering Applications Course, K-V Associates, Inc., Falmouth, MA, June 20-21, 1995

Real Estate Site Assessment and Environmental Audits, Resource Education Institute, Inc., Sheraton Conference Center, Sturbridge, MA, 1988, 1989, 1990

Years of Experience:

Since 1987

Professional Experience:

Mr. Stevens is a part owner of Soil Science And Environmental Services, Inc. He is a Registered Professional Soil Scientist with the Society of Soil Scientists of Southern New England (SSSSNE) and has been delineating wetlands and classifying soil types since joining the firm in 1987. He has completed over a thousand wetland mapping projects throughout CT along with numerous sites in MA and NY. He has extensive experience delineating Inland, Tidal and Federal Wetland boundaries. He has reviewed the accuracy of wetland boundaries as an independent soil scientist at the request of municipal wetland agencies. Mr. Stevens has monitored sediment and erosion control measures on large construction projects. He has experience in soil evaluation for on-site sewage disposal systems, foundations, and drainage improvements. He has conducted numerous test hole inspections with the DEEP along with both state and local health departments for determining the suitability of subsurface soils for private residential and larger community sewage disposal systems.

Professional Resume**Scott D. Stevens**Registered Soil Scientist & Environmental Professional

**Professional Experience:
(Continued)**

Mr. Stevens has conducted hundreds of soil permeability analyses with detailed on-site deep test pit descriptions. He has represented numerous clients at local inland wetland commission meetings and public hearings, appeared before the Connecticut Siting Council, and has provided expert witness court testimony on several projects. Mr. Stevens has been serving as a full member of the Rocky Hill Open Space & Conservation Commission since 2012. Responsibilities as a wetlands commissioner for the Town of Rocky Hill include site walks, site plan reviews and providing recommendations to mitigate impacts to wetlands.

Recent Projects:

UCONN - Storrs/Mansfield. Delineated CT and Federal wetlands along proposed water main project areas. 2012, 2014, and 2016.

North Haven Landfill. Delineated inland and tidal wetlands, identified watercourses and coastal resources, and classified soil types for a solar array project on the landfill. Represented the client at a North Haven inland wetland public hearing.

Iroquois Gas, Pipeline Projects. Mapped inland and tidal wetlands along Housatonic River for a natural gas transmission line in Milford. The project also included compiling a list of wetland vegetation and conducted salinity testing to determine appropriate regulatory jurisdiction (ie fresh or tidal wetland).

Manchester Landfill. Delineated inland wetlands with floodplain soils along the access way from the landfill to the Hockanum River Water Pollution Control Facility off Thrall Road in Manchester.

Residential Subdivision off Riggs Street in Oxford. Delineated inland wetlands, identified watercourses and classified soil types on a 190 acre site involving over 700 inland wetland and watercourse flags.

Waterfront Residential Development. Represented client in Waterford for an application involving coastal resources and a detailed analysis of dunes associated with the project.

Northeast Utilities, Electric Transmission Line Projects. Conducted wetland delineations and soil mapping involving Inland, Tidal and Federal Wetlands for numerous projects within Connecticut. These have included the 70 mile Phase II Middletown to Norwalk overhead and alternate underground transmission lines.



Town of Winchester
Public Works Department

189 Rowley Street
Winsted, CT 06098
Phone: (860) 379-4101
Fax: (860) 738-3509

MEMORANDUM

Date: May 27, 2020

To: File

From: Jim Rollins and Bart Clark, P.E.

Re: Lodestar, Proposed Solar Array, Platt Hill Rd
Review of Materials Submitted to Siting Council

Comments concerning Site Plan prepared by Trinkaus Engineering, LLC dated March 6, 2020, last revised May 1, 2020.

Sheet 1 of 13

1. Engineering plans appears to be rushed due to the fit and finish, i.e. - mis-aligned labels, oddly shaped contours, lack of detail, etc. With a rushed effort, what important considerations have been missed?
2. Existing interior stone walls on the property are not shown on the base map. The construction should avoid the stonewalls where possible.

Sheet 2 of 13

3. The existing road system, north and south of the site, is fragile at best. Entry to the site with trucks should be limited to the site from State Rte 263. The road south of the site is not conducive to frequent truck traffic. A pre-construction survey should be performed to document the road's condition. A post- construction survey should also be performed to identify areas where damage needs to be repaired. A bond should be in place to allow the Town to enforce this requirement.
4. A Driveway Permit is required for the access road. A paved apron must be provided to protect the edge of the public road prior to beginning logging/clearing operations. The apron should begin at the edge of Platt Hill Rd. and extend to the property line to protect the edge of the Town road. Notes from the engineer indicate that a 60 radius is required for tractor trailers. a similar consideration of the radius on the apron should be

given to the apron and driveway width to prevent trailers from rolling off and damaging the edge of the pavement. Post-construction, damage to Platt Hill Rd. caused by heavy trucks/equipment turning into and out of the site must be repaired to the satisfaction of the Town. A bond should be in place to allow the Town to require damages to be repaired.

5. No anti tracking pad or wash down area is shown on the plans. An anti-tracking system should be placed at the end of the driveway apron. Significant detail is needed to allow the contractor to properly bid and construct this facility.
6. The plans show a small temporary construction office. We assume that this will include proper sanitary facilities for the construction workers.
7. Maintenance workers will likely spend considerable time at the site for vegetation management, panel washing, etc. A small maintenance building should be provided somewhere on-site to allow sanitary facilities for maintenance workers as would be required by building codes. This use could be classified as a light industrial use or as a "use not shown" in chapter 29. Table 2902.1 would require a minimum of one uni-sex bathroom.
8. On-site storage of vegetation management equipment and supplies would also seem necessary. A Storage area under cover would be preferable for stormwater permitting.
9. Passing areas should be provided in at least two locations along the driveway to facilitate construction and emergency vehicle traffic.
10. Stockpile areas should be located away from Platt Hill in order to keep them away from public view and reduce noise impact on neighbors. A stockpile to the south of the driveway and between the two wetlands/stream corridors could be used as long as appropriate protections are in place for erosion control. The Stockpile Areas shown are likely too small. Appropriate erosion and sediment controls need to be shown in either location. Construction fencing should be provided to limit access to the curious and to protect the public.

Sheet 4 of 13

11. Slope between the driveway and along the western side of the array should be 6:1 or less to allow maintenance equipment to access arrays without causing ground disturbance which could lead to erosion.
12. . There is no room for a vehicle at the eastern end of the row and to be able to turn into the next Row. Any vehicle would have to back out unless it was the smallest vehicle. This would present issues with potential for rutting and long term erosion issues not to mention safety for the maintenance workers.

Sheet 3 of 13

13. The Swale surrounding the array is changing the nature of the surface water flows to downstream wetlands. The area east, of the north/south ridgeline could potentially experience drying due to the grass swale diverting water to the west. What percentage will be collected, infiltrated, conveyed to the west?
14. A temporary construction road will be needed for equipment to access this location for removal of excess material and delivery of needed stone precast basin, etc. No provision is being made for this nor are the erosion controls needed being clearly indicated to the contractor that will need to build this basin. Further detail is needed.
15. The Soil excavated from this basin is far in excess of what is needed to construct the down stream berm. It will likely be wet and will require a temporary storage area for for drying before reuse or transportation. The provisions and the temporary road will require a greater clearing area than shown and further sediment and erosion controls details including a sequence of construction will be needed.
16. The basin should also be considered for use as a temporary sediment basin during construction.
17. The Concentrated discharge of the service spillway and emergency spillway is a potential erosion issue depending on nature of existing ground in the wetland that it discharges to. Based on a field visit, there appears to be an area where the terrain would be favorable. A note should be added to the plans that the service spillway and emergency spillway outlet should be field located by the engineer in order to locate the outlet in the best location possible. Additionally, the riprap should be extended far enough to discharge on a stable surface.

Sheet 7 of 13

18. The emergency spillway needs a cut-off to prevent flow through the riprap prior to the water reaching the design spillway elevation. This "early" and unaccounted for flow could have an impact on the flows downstream.
19. Shop drawings should be provided for the outlet structure to allow to the town to review.
20. Rebar used on the outlet structure trash rack should be: (a)No. 4; smooth to minimize debris collection; (b)galvanized after welding to allow for corrosion resistance; (c)horizontal bars should be behind vertical bars; and (d)set into precast or cast-in-place concrete at the base. The unit should be removable to allow cleaning or replacement. This would require a bolted connection to the outlet structure.

21. The driveway gravel entrance is generally unsuitable for a higher traffic project. A full washdown facility would do more to protect the Town roads from accumulating sediment and having that sediment cause safety, dust and downstream impacts. Alternatively, on-site sweeping equipment could be used to frequently remove sediment from the road.
22. Rather than a parabolic swale for the diversion, consideration should be given to a trapezoidal swale due to easier construction with common equipment.
23. A log corduroy type of watercourse protection is inadequate for anything but short term and light construction traffic. The extent of traffic and its duration suggests that as a minimum cable stayed timber mats would be needed extending through and to well beyond the wetland soils. A better solution would be to construct the driveway as early in the construction as possible.
24. The boulder wall detail for the driveway through the wetland crossings has very limited information concerning the construction. The building code requires walls greater than 36" obtain a building permit and greater than 48" require an engineered design.
25. Wood fence posts seem like a bad choice. They are more difficult to install, more maintenance and shorter life than galvanized steel.
26. The proposed driveway material selection and thicknesses should be reconsidered. My recommendation is 12" of 3"-5" minus, topped after construction is complete with just enough $\frac{3}{4}$ " processed to smooth the surface. This reduces the tire ruts and minimizes erosion, especially on steeper slopes.

Sheet 9 of 13

27. . Phase I should be limited to the construction of the driveway construction trailer and staging areas only in order to pave the way for the mass clearing for the array. THE DRIVEWAY SHOULD BE CONSTRUCTED PRIOR TO THE CLEARING OF THE ARRAY AREA TO PREVENT EXCESSIVE AND HARMFUL DISTURBANCE IN THE WETLANDS BY CONSTRUCTION EQUIPMENT.

Sheet 10 of 13

28. The constructed wetlands should not be constructed until after the site is stabilized. It should be roughed out initially to use as a temporary sediment basin during construction.

Sheet 11 of 13

29. Stump removal will disturb nearly the entire site. Some degree of seed bed preparation will be needed to remove leaf litter, smooth and de-compact the surface left after stump removal. A "York" rake will not be suited to this task. Grubbing blades/root grapples and rakes on a dozer will be required for this mass clearing project given the difficult terrain and frequent small stumps. This will leave the area cleared subject to erosion. Further preparation may be needed for seed bed preparation depending on the goal for the surface. A common equipment choice would be one of a variety of power rakes or farming equipment.

The reason for discussing this is to identify this as a critical step in erosion control. The light treatments described in the phasing plans don't represent the work that will be needed to prep the area even though the selected panel racking system doesn't require a perfect surface.

Sheet 13 of 13

30. Consider requiring straw or cellulose mulch rather than hay mulch to minimize introducing invasive plants to the site.

31. General E&S Notes has a typo naming Glastonbury as the reviewing agency. This should be changed to Winchester.

Sheet 14 of 15

32. It is inappropriate to extrapolate this groundwater level across the entire width of the basin due to significant changes in soil types shown on the soil survey. This is significant because the higher groundwater levels likely to be seen will make construction significantly more difficult. The level of disturbance will be much greater than shown on the plans because of this difficulty.

33. This slope may be subject to sloughing due to the groundwater trying to seep out of the ground. Extra precautions will be needed here to stabilize the slope.

34. One location with a firm stabilized surface on the interior basin slope should be provided to allow self rescue/ escape from the bottom of the 8 ft deep basin.

35. A 2:1 slope is shown on the forebay side slopes. it is likely that this forebay will fill in due to sloughing of the side slopes.

36. The 6ft deep forebay is in a difficult location to maintain with no real access. A better access would help and could potentially serve as the self-rescue location.

General Comments

37. The buried 6" conduit is not mentioned in any phasing plan nor are any details of construction shown. This is needed especially through the wetland Crossings.
38. It would be foolish to believe that winter maintenance would not be needed. Has a winter operations plan been prepared which shows the extent of snow removal and where snow being plowed to?

Petitioners Interrogatory Responses:

1. Item No. 3 - The purchase of electricity by the Town of Winchester is still unknown at this point but, how much is available to Winchester vs Windsor? Does Winchester have priority?
2. Item No.. 10 – There were several comments made during our review of the plans which highlighted issues with access to the site on Platt Hill Rd. The wear and tear on Platt Hill Rd is a major concern to the Town.
3. Item No. 11 a) – The response gives average slopes and misrepresent the steepness of the paths along the east side of the arrays. Slopes in these areas exceed 15% slopes in several areas. 12 to 15% slopes are common.
4. Item No. 11 f) – The response suggests that none of the Prime farmland will be impacted by the project. This appears to be an incorrect assertion. Based on a review of the CTECO viewers, the driveway passes directly through the mapped prime farmland soil. We don't recommend any changes to the plans to protect this small area of prime farmland.
5. Item No. 29 – The previous wetlands approvals were entirely different construction. It is unfair to infer that this different use would receive similar approvals due to the nature of and sequence of construction for the crossings proposed.
6. Item No. 30 – It is entirely misleading to suggest that no soil disturbance will occur in Phase I and that no erosion controls will be required. Any logging operation will have soil disturbance and so erosion control plans are typically provided generally associated with haul roads. Stump removal in the array area will expose the area to erosion and result in a significant amount of topsoil loss. Our comments on the plans address this in more detail, but, it is appropriate to provide for erosion control to be in place once the stump removal begins. The petitioner is under playing the impact of these activities.
7. Item No. 31 - The Timber "corduroy" crossings proposed do not do an adequate job of protecting the wetland they are crossing and those downstream given the amount of traffic they will see for this project. Phase I should completely construct the driveway with its crossings and then Phase II would be the clearing operations. This and other details are shown on the plans.
8. Item No. 32 - See our comments on the construction plans relative to construction of the water quality basin. Dewatering is a near certainty. Again, the phasing proposed should be reconsidered to provide for a temporary sediment basin.

9. Item No. 33 - The clearing area shown is inadequate. Please see our comments on the plans for additional details about the limits of clearing and other construction issues on the water quality basin.
10. Item No. 37 – The responses indicate that the cleared area will be “lightly” scarified; however, the level of disturbance from the stumping operations will demand a higher level of scarification. Also, in order to control brush regrowth and allow for reasonable vegetation management without the use of herbicides, the entire area cleared around the array would be heavily grubbed to a depth of 3 to 6 inches to remove roots. This area would have to be stabilized with a healthy stand of grass or heavily mulched to prevent erosion from rainfall off of the panels.
11. Item No.38b. The response indicates that accumulated sediment will be disposed of by hand spreading of sediment in upland areas, what does that mean exactly? Hand work of any type is almost never done, it’s always too much work. A procedure should be added to the Sediment control plan that is more likely to be followed.
12. Item No.56. It is misleading to state that there is no diversion of runoff. The proposed grass swale will divert runoff from the Panel array to the water quality basin. The diverted water is introduced back into the stream down hill from where it naturally runs; however, a significant watershed area is being diverted from the wetlands to the east of the project.
13. Item No. 62. The response suggests that no chemicals would be used to control vegetation or insects. A Vegetation Management Plan should be provided for review to ensure that the practices needed will be in place.
14. Item No. 64. It is misleading to suggest that the grass swale does not require maintenance. The swales will require vegetation maintenance and, due to the design storm used, the swales will be over topped and will likely require maintenance of the downstream berm.
15. Item No. 65. Please see our comments concerning additions to the design of the water quality basin that are needed in the plan review section.

Revised Stormwater Report:

1. What impact does panel washing have on water quality issues? Detergents and other treatments to the panels surface should be disclosed and considered as part of water quality treatment.
2. The report state that there will be no impacts to the wetlands to the east of the project. The Town remains skeptical of the petitioners claims that drying will not be experienced due to the grass swale diverting water to the west. What percentage will be collected, infiltrated, conveyed to the west?
3. Prime Farmland, is the land trust able to access and utilize it for farming without constructing additional access roads across the wetlands. An easement across the proposed driveway should be provided allowing this?

4. How will clearcutting impact the ability of remaining perimeter trees to withstand toppling, breaking in the wind? Who maintains the perimeter? If the Land Trust is responsible, do they have equipment access?
5. There is no vegetation management plan other than to cut the perimeter every 10 years.
6. The stormwater maintenance plan does not have reasonable expectations for the amount of maintenance needed as well. The responses/report indicate maintenance will not be needed because no erosion will occur and winter sand/salt applications will not be needed.
7. The Town questions collection of the stormwater into the water quality basin. Alternate approaches should be considered including infiltration of the run-off water from the array. This approach could avoid the swales and associated stormwater management construction? Prudent and feasible alternatives to the proposal should be included in the Petitioner's materials.