

Petition No. 1221  
Interrogatories  
Set Two  
May 26, 2016

Windham Solar LLC (WS) Responses June 21, 2016

39. Did Windham Solar, LLC (WS) secure an access easement to the east from the auto body property in order to avoid constructing new access from Route 14A?  
As of 6-21-16 an easement has not been secured. The landowner has been contacted [Leo Properties, LLC, 93 High Street, Moosup, CT 06354] and WS is working on securing easements prior to the September decision date.
40. Was WS able to secure access to the north for the North Project? Would the access drive be gravel? Please provide the most up to date Overall Site Plan Drawing taking into account any revisions that have been made to the number and locations of solar panels proposed, megawatts proposed, access proposed including but not limited to the North Project if applicable, etc. If the project is approved, would WS file the North Project, the South Project, and the East Project (and associated access and equipment) as one Development and Management Plan filing for Council review and approval and seek to go forward with the entire project? Explain.  
As of 6-21-16 access has not been secured to the north. The initial phase of the project is outlined in the revised site plan which consists of the East and South Project only - Exhibit A. Pursuing an easement for the facility on Exhibit A is not required at this time. (See additional response #51).
41. Indicate on the most up to date Overall Site Plan approximately where the brook is located that currently isolates the North Project from access to the east.  
The revised site plan identifies the brook locations and the mapped USGS streams. Exhibit A.
42. Does the Wetland Report dated April 27, 2016 take into account the most up to date Overall Site Plan and North Project access road? Provide any associated wetland protective measures, if recommended.  
Yes, the Wetland Report takes into account the most up to site plan. – Exhibit B.
43. If WS secured access to the North Project, provide a wetland report for the north property if wetlands exist on that site. Include a Klemens and Calhoun 2002 Vernal Pool analysis if vernal pools exist. Provide a diagram to scale with the vernal pool analysis showing the shape and locations of the vernal pools on the subject property and the property to the north for the North Project (if applicable) and include the 100-foot vernal pool envelopes (VPE) and the 100-foot to 750-foot critical terrestrial habitat (CTH) along with the proposed project. Compare the existing percent development areas of the VPEs and CTHs to the post-construction percent development areas of the VPEs and CTHs. Attached please find the Docket No. 455 sample diagram.  
N/A at this time.

44. If WS secured access to the North Project, include the tree clearing areas on the revised site plan. Update the carbon debt analysis with the additional tree clearing areas that may be associated with new access to the North Project.  
**N/A at this time.**
45. Provide a response from the Connecticut Department of Energy and Environmental Protection (DEEP) regarding Natural Diversity Database species in the vicinity of the project. How would WS implement DEEP's recommendations to protect such species, if applicable?  
**WS will work with our biologist to adhere to DEEP requirements and federal requirements. DEEP is still yet to issue a response to the inquiry that was sent to them in November 2015. (See additional information in response #46)**
46. Referencing the response to questions 22 of the first set of interrogatories, provide the status of the wildlife biologist review of the site with respect to federally-listed species, including but not limited to the northern long-eared bat, piping plover, sandplain gerardia, and small whorled pogonia. Provide a copy of the biologist's report including the presence and/or suitable habitat at the site for federally-listed species, and any recommended protective measures for such species.  
**See attached documentation from E3 Environmental, LLC – Exhibit C**
47. Provide a final stormwater management report for the most up to date Overall Site Plan, consistent with the *2004 Connecticut Stormwater Quality Manual* and stamped by a Professional Engineer duly licensed in the State of Connecticut.  
**A final stormwater management report will be prepared for the Project 1 and 2 footprints and delivered with the construction documents which have yet to be prepared.**
48. Provide the determination letter from the State Historic Preservation Office (SHPO) and indicate how SHPO's recommendations, if applicable, could be implemented.  
**SHPO Letter is attached – Exhibit D.**
49. Provide the final erosion and sedimentation control (E&S controls) plan for the most up to date Overall Site Plan consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.  
**A final erosion and sediment control document, stormwater pollution prevention plan ("SWPPP") and an application to CTDEEP for a construction general permit will be made for the project prior to groundbreaking. The document will be prepared for the Project 1 and 2 footprints. A preliminary erosion and sediment control document for the phase is attached. – Exhibit E**
50. Provide the U.S. Army Corps of Engineers Category I Form and also note the total area of direct wetland impacts associated with the project.  
**The Cat 1 Form is attached – Exhibit F**
51. What is the status of the Eversource System Impact Study? To WS' knowledge, can the local electrical distribution system support the 3.5 MW AC solar output of the project, assuming that the North, South and East Projects are going forward?

WS has recently received confirmation from Eversource that the initial interconnection capacity of (2) 1 MW AC is available. The site plan (Exhibit A) identifies the locations of the two projects. Additional capacity on the distribution system is currently under investigation with Eversource, at 1.5 MW and is outlined as "Future Project" on the site plan.

52. Clarify whether utilities would be run underground or overhead from the inverter/transformer area until close to Route 14A and then run overhead on three new poles to connect to existing distribution on Route 14A? Would an all overhead utility plan be advantageous to reduce wetland impacts and prevent an underground conduit from being exposed to excessive water? Could the poles be strategically placed to minimize wetland impacts? Indicate the final utility route and underground versus overhead on the most up to date Overall Site Plan.

The final alignment of the interconnection will be explored during the adjacent property owner easement negotiation. The final alignment will be prepared with the final electrical drawings.

53. Has WS evaluated the cost differential between 2-inch chain link mesh and a smaller size (e.g. less than two-inch mesh)? What size mesh would be used for the 7-foot tall chain link fence? Would WS still have individual fencing around the North Project, South Project, and East Project, respectively?

WS would prefer to install a 2-inch chain link mesh fence. A 1" mesh nearly doubles the cost of material fencing and there is little added value given our other on-site security measures.

54. Please provide the revised total amounts of cut and fill for the project (as previously requested in an interrogatory) if it would materially change.

A preliminary erosion and sediment control document for phase 1 is attached illustrating total cut/fill. – Exhibit D

55. Does the proposed host property contain any Connecticut Prime and Important Farmland Soils? If so, what acreage of Prime and Important Farmland Soils would the solar panels and associated equipment be located on?

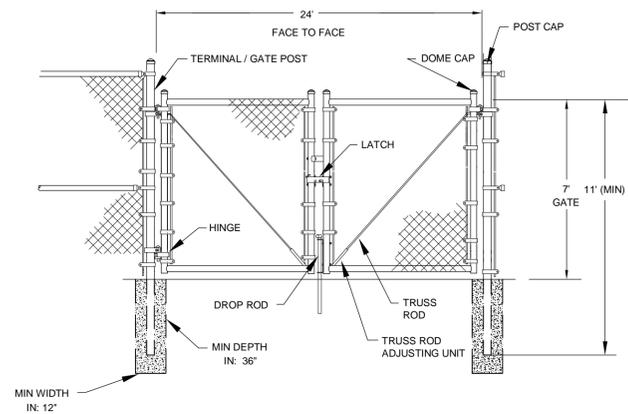
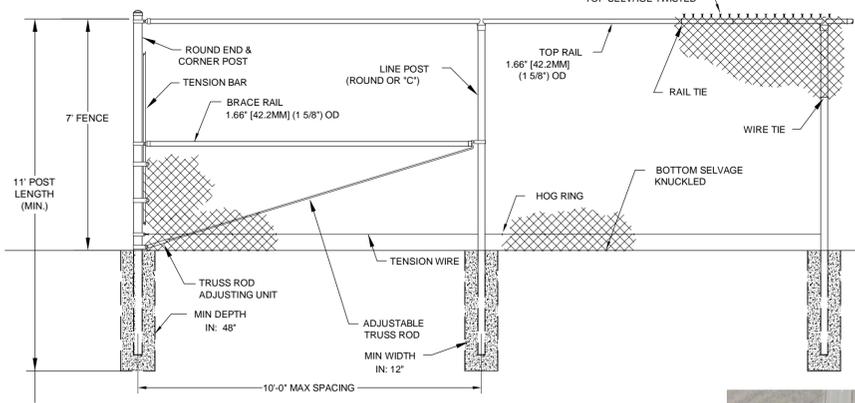
Attached is an exhibit illustrating the soil types and their associated farmland designations, and % impacts. – Exhibit G

56. Has the State of Connecticut Department of Agriculture purchased any development rights for the proposed site as part of the State Program for the Preservation of Agricultural Land?

WS owns all development rights on the parcel.

© 2016 Westwood Professional Services, Inc.

## PERIMETER FENCE DETAIL:



## PROJECT AREAS & IMPACTS:

TOTAL SITE AREA = 67.2 ACRES

ARRAY FOOTPRINT (PROJECT FENCE LIMITS)

- SOUTH PROJECT = 5.2 ACRES
- EAST PROJECT = 6.2 ACRES
- FUTURE PROJECT = 5.6 ACRES
- TOTAL = 17.0 ACRES

PROPOSED IMPERVIOUS (GRAVEL ACCESS ROAD, STRUCTURAL POSTS & EQUIPMENT PADS)

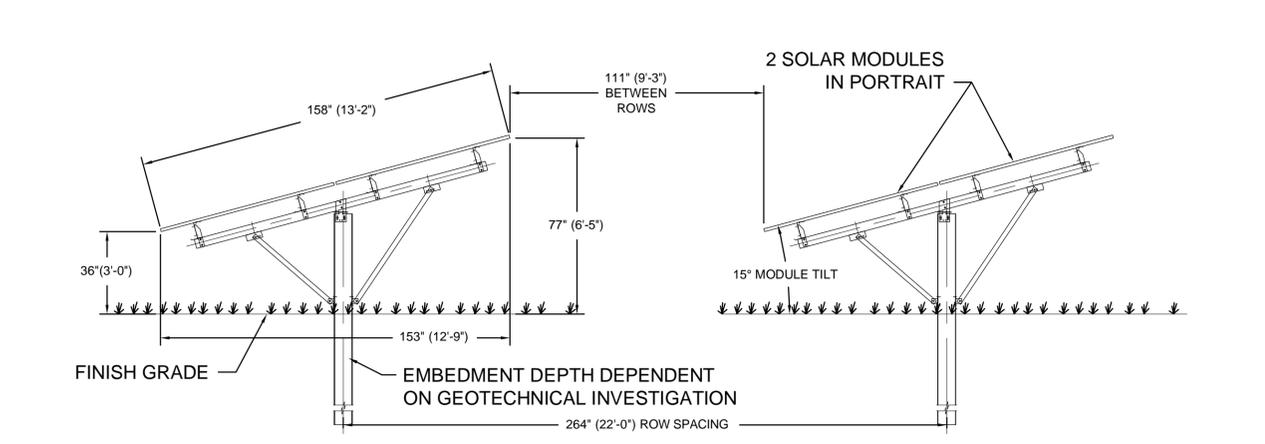
- SOUTH & EAST PROJECT (OFF SITE ACCESS ROAD INCLUDED) = 0.84 ACRES
- FUTURE PROJECT (OFF SITE ACCESS ROAD INCLUDED) = 0.40 ACRES

PROPOSED WETLAND IMPACTS: 4660 SF (0.1 ACRES SOUTH PROJECT SITE ACCESS)

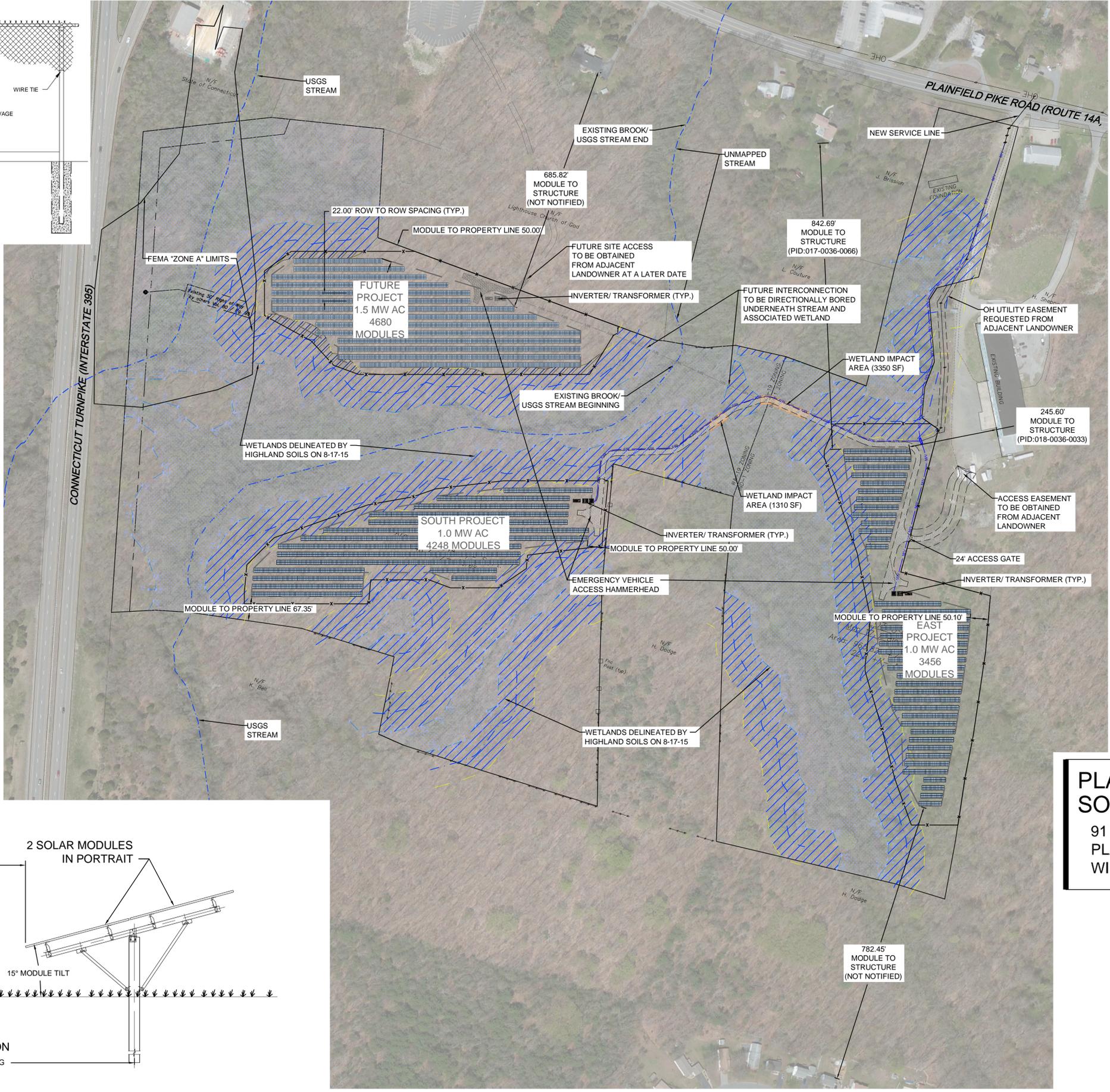
## LEGEND:

- EXISTING PROPERTY LINE
- - - PROPOSED PROJECT FENCE
- - - PROPOSED GRAVEL ACCESS ROAD
- MV PROPOSED AC DISTRIBUTION
- 100' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE
- 18 x 2 SOLAR MODULE BOCK

## RACKING PROFILE DETAIL:



## AERIAL SITE PLAN:



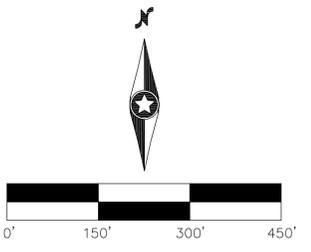
Designed: ADC  
 Checked: SAW  
 Drawn: SJB

Record Drawing by/date:

#	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION
-	4/26/2016	CT SITING BOARD COMMENTS
-	6/21/2016	CT SITING BOARD IR RESPONSES

Prepared for:

**ecos ENERGY**  
 222 SOUTH 9TH STREET  
 SUITE 1600  
 MINNEAPOLIS, MN 55402



**PLAINFIELD PIKE SOLAR**  
 91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

## OVERALL SITE PLAN

SITING BOARD REVIEW

DATE: 06/21/2016  
 SHEET: 1 of 1

# EXHIBIT B

## HIGHLAND SOILS LLC

June 22, 2016

Steve Broyer  
Ecos Energy  
222 S. 9<sup>th</sup> Street  
Minneapolis, MN 55402

**RE: WETLAND REPORT ADDENDUM  
PLAINFIELD PIKE SOLAR  
91 PLAINFIELD PIKE  
PLAINFIELD, CT  
DATED APRIL 27, 2016**

Dear Steve:

This letter is intended to provide some additional information in response to the changes that were made to the Plainfield Pike Solar plans after the issuance of my Wetland Report (dated April 27, 2016).

The updated plans eliminate the wetland crossing to the North Project Array. By eliminating this proposed crossing the wetland impacts have been reduced to 4,660 square feet of direct wetland impact. The impact is unavoidable and provides access to the Southern Project Array. This crossing has been designed to minimize wetland impacts through grading and utilization of the narrowest point in the wetland system.

The Northern Project Array will be accessed from a private property located further east on Plainfield Pike and no wetland impacts are anticipated with this updated crossing.

This reduction in direct wetland impacts has been achieved through an evaluation of the most feasible and prudent alternatives available.

If you have any questions, or require additional information, please call me at (860) 742-5868.

Very truly yours,

John P. Ianni Electronic signature

John P. Ianni M.S.  
Professional Soil Scientist  
CPESC

P.O Box 337, Storrs, CT 06268 • 860-742-5868 • Highlandsoils@aol.com

## Endangered Species Review and Analysis

ECOS Energy, LLC  
Plainfield Pike Solar Garden  
Windham County, Connecticut

# EXHIBIT C

ECOS Energy, LLC (ECOS) has proposed the development of a renewable energy facility designed to gather solar energy to be located at 2-90 Plainfield Pike, Windham County, Connecticut. The proposed facility would install photovoltaic panels to collect solar energy for distribution. ECOS has contracted E3 Environmental, LLC (E3) to conduct a review of the project and assess the potential impacts to species that are afforded protection under the Endangered Species Act of 1973 (ESA; 16 U.S.C. § 1531 et seq.) which is administered by the US Fish and Wildlife Service (FWS).

The FWS maintains various databases with entries for every species listed under the ESA. This information is accessible to the general public and provides detailed species information such as species specific life cycles, habitat requirements, current and historical recorded occurrences. This information is provided by the FWS as a service to the general public for informational purposes and to professionals for project planning. The Environmental Conservation Online System provided by the FWS offers the Information for Planning and Conservation (IPaC) web based service which is a project planning tool designed to streamline the FWS environmental review process. On June 23, 2016, E3 accessed the IPaC system to evaluate potential occurrences of ESA listed species within the proposed project area; the results were analyzed with respect to potential impacts to ESA listed species with the potential to occur within the project area.

### IPaC Results – ESA Listed Species:

- Northern long-eared bat (*Myotis septentrionalis*)
  - ESA Status: Threatened

The northern long-eared bat (NLEB) was the only species identified by the IPaC consultation conducted for this project. This species has an expansive range which encompasses all of New England. Scientist have observed a measurable decline in this species' population throughout its range and have attributed the loss in population primarily due to the white-nose syndrome. The FWS has determined that the most effective conservation measure to protect this species throughout its range will be through restrictions of tree clearing activities. As of February 16, 2016 the Final 4(d) Rule for the northern long-Eared bat went into effect which states the following management measures:

- Tree clearing at any time of the year within a 0.25 mile radius of known NLEB is prohibited; and
- Tree clearing within 150-foot radius of known occupied maternity roost trees during the pup season (June 1 through July 31) is prohibited.

E3 has reviewed FWS published data with respect to the locations of known NLEB hibernacula in Connecticut and confirmed that there is no known NLEB hibernacula recorded in Windham or surrounding counties. Provided tree clearing is suspended during the pup rearing season (June 1 through July 31) the proposed project would not result in adverse impacts to this species.

Other ESA Species Reported to Occur in Windham County:

- Sandplain gerardia (*Agalinis acuta*)
  - ESA Status: Endangered

The sandplain gerardia is a plant species that is known to favor the coastal plains. The project, due to its distance from the coast, will not result in a negative impact to this species. ESA protection is not granted to plants for activities on private land that are not federally funded.

- Small whorled pogonia (*Isotria medeoloides*)
  - ESA Status: Threatened

The small whorled pogonia is an extremely rare forest orchid. This plant species favors acidic soils under the canopy of deciduous or mixed deciduous – coniferous forests. Due to the lack of preferred habitat and based upon previous consultation with state agency, the proposed project will not have adverse impacts on this species. ESA protection is not granted to plants for activities on private land that are not federally funded.



June 23, 2016

Mr. Christopher Little  
Ecos Energy  
222 South Ninth Street, Suite 1600  
Minneapolis, MN 55402

## EXHIBIT D

Subject: Solar Farm Development  
91 Plainfield Pike Road  
Plainfield, Connecticut

Dear Mr. Little:

The State Historic Preservation Office (SHPO) has reviewed your request for information concerning the potential effects to historic properties associated with the referenced project. SHPO understands that the proposed solar voltaic facility will entail the construction of ground mounted solar arrays and ancillary facilities (e.g. access road) within an area encompassing approximately 10 acres. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA).

Although no properties listed on the National Register of Historic Places have been documented within the project parcels, several historic properties have been recorded in its immediate vicinity. The project area is situated on well-drained soils adjacent to unnamed wetlands. This type of environmental setting tends to be associated with pre-contact Native American settlement. We are therefore requesting that a professional cultural resources assessment and reconnaissance survey be completed prior to construction. SHPO acknowledges that portions of the property have been subjected to substantial prior ground disturbances. Not all areas of the proposed solar field are archeologically sensitive, but it is SHPO's opinion that intact and relatively well-drained soils within portions of the Area of Potential Effect have an elevated potential to contain significant archeological resources. Subsurface testing should assess all areas of anticipated ground disturbance that are considered to have a moderate/high sensitivity for containing significant archeological deposits, unless sufficient research or fieldwork documents that this level of effort is unwarranted. All work should be in compliance with our *Environmental Review Primer for Connecticut's Archaeological Resources* and no construction or other project-related ground disturbance should be initiated until SHPO has had an opportunity to review and comment upon the requested survey. A list of qualified consultants is attached for your convenience.

This office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act. For additional information, please contact me at (860) 256-2764 or [catherine.labadia@ct.gov](mailto:catherine.labadia@ct.gov).

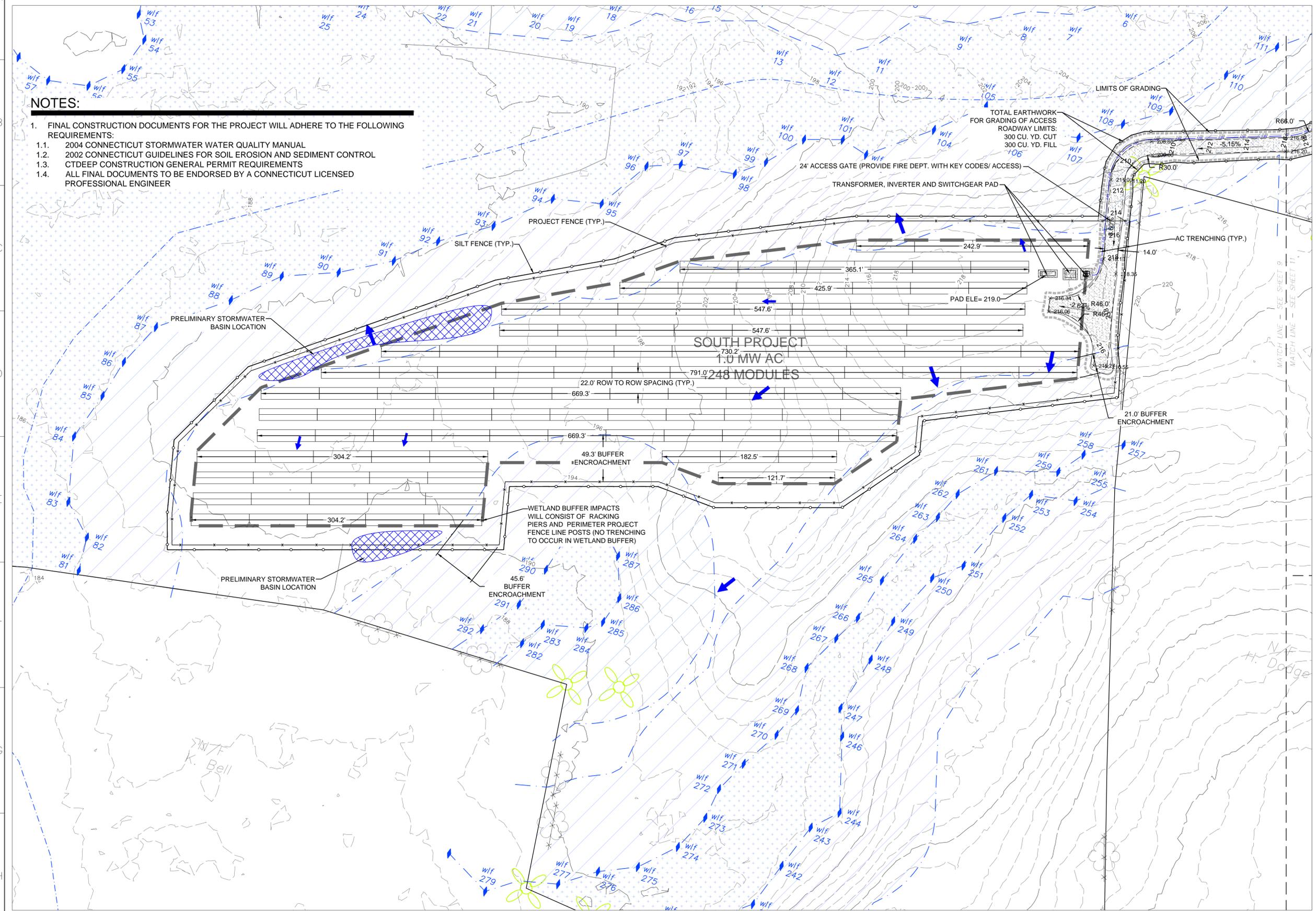
Sincerely,

Catherine Labadia  
Deputy State Historic Preservation Officer

**EXHIBIT E**

**NOTES:**

1. FINAL CONSTRUCTION DOCUMENTS FOR THE PROJECT WILL ADHERE TO THE FOLLOWING REQUIREMENTS:
  - 1.1. 2004 CONNECTICUT STORMWATER WATER QUALITY MANUAL
  - 1.2. 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL
  - 1.3. CTDEEP CONSTRUCTION GENERAL PERMIT REQUIREMENTS
  - 1.4. ALL FINAL DOCUMENTS TO BE ENDORSED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER



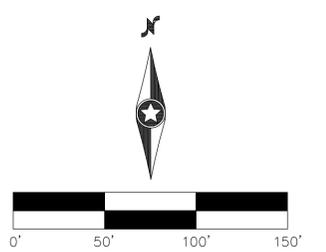
Designed: ADC  
 Checked: SAW  
 Drawn: SJB

Record Drawing by/date:

Revisions	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION
-	4/26/2016	CT SITING BOARD COMMENTS
-	6/21/2016	CT SITING BOARD IR3 REVISIONS

Prepared for:

**ecos ENERGY**  
 222 SOUTH 9TH STREET  
 SUITE 1600  
 MINNEAPOLIS, MN 55402



**PLAINFIELD PIKE SOLAR**  
 91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

**SOUTHWEST SITE/GRADING/ EROSION CONTROL PLAN**

SITING BOARD REVIEW

DATE: 03/15/2016  
 SHEET: 9 of 17

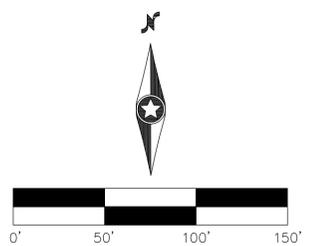
**EXHIBIT E**

Designed: ADC  
 Checked: SAW  
 Drawn: SJB

Record Drawing by/date:

Revisions:	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION
-	4/26/2016	CT SITING BOARD COMMENTS
-	6/21/2016	CT SITING BOARD IR3 REVISIONS

Prepared for:



**PLAINFIELD PIKE SOLAR**

91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

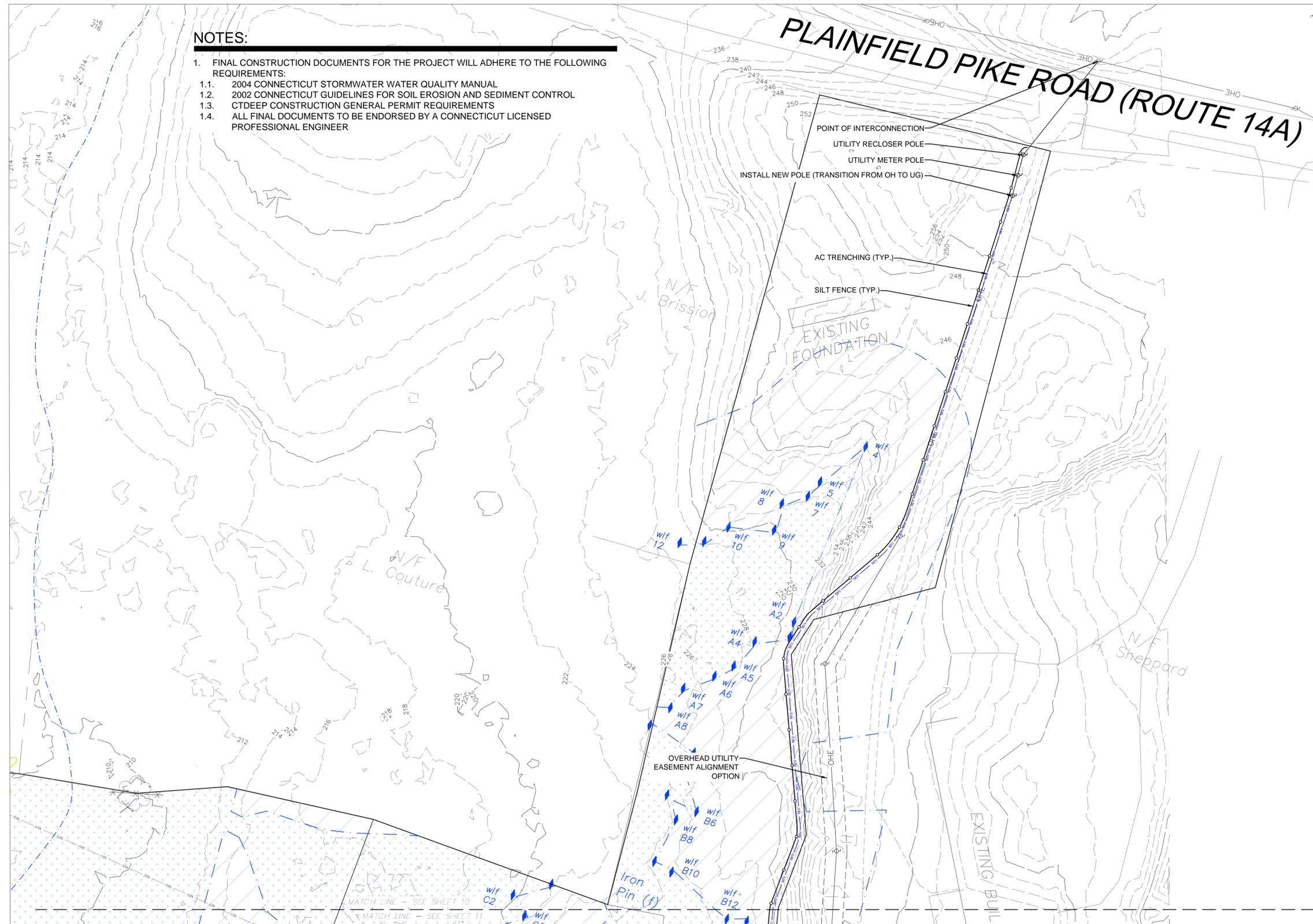
**NORTHEAST  
 SITE/GRADING/  
 EROSION CONTROL  
 PLAN**

SITING BOARD REVIEW

DATE: 03/15/2016  
 SHEET: 10 of 17

**NOTES:**

1. FINAL CONSTRUCTION DOCUMENTS FOR THE PROJECT WILL ADHERE TO THE FOLLOWING REQUIREMENTS:
  - 1.1. 2004 CONNECTICUT STORMWATER WATER QUALITY MANUAL
  - 1.2. 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL
  - 1.3. CTDEEP CONSTRUCTION GENERAL PERMIT REQUIREMENTS
  - 1.4. ALL FINAL DOCUMENTS TO BE ENDORSED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER



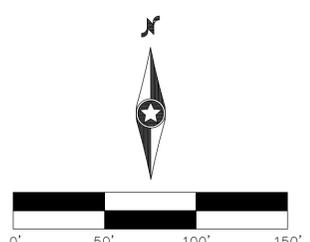
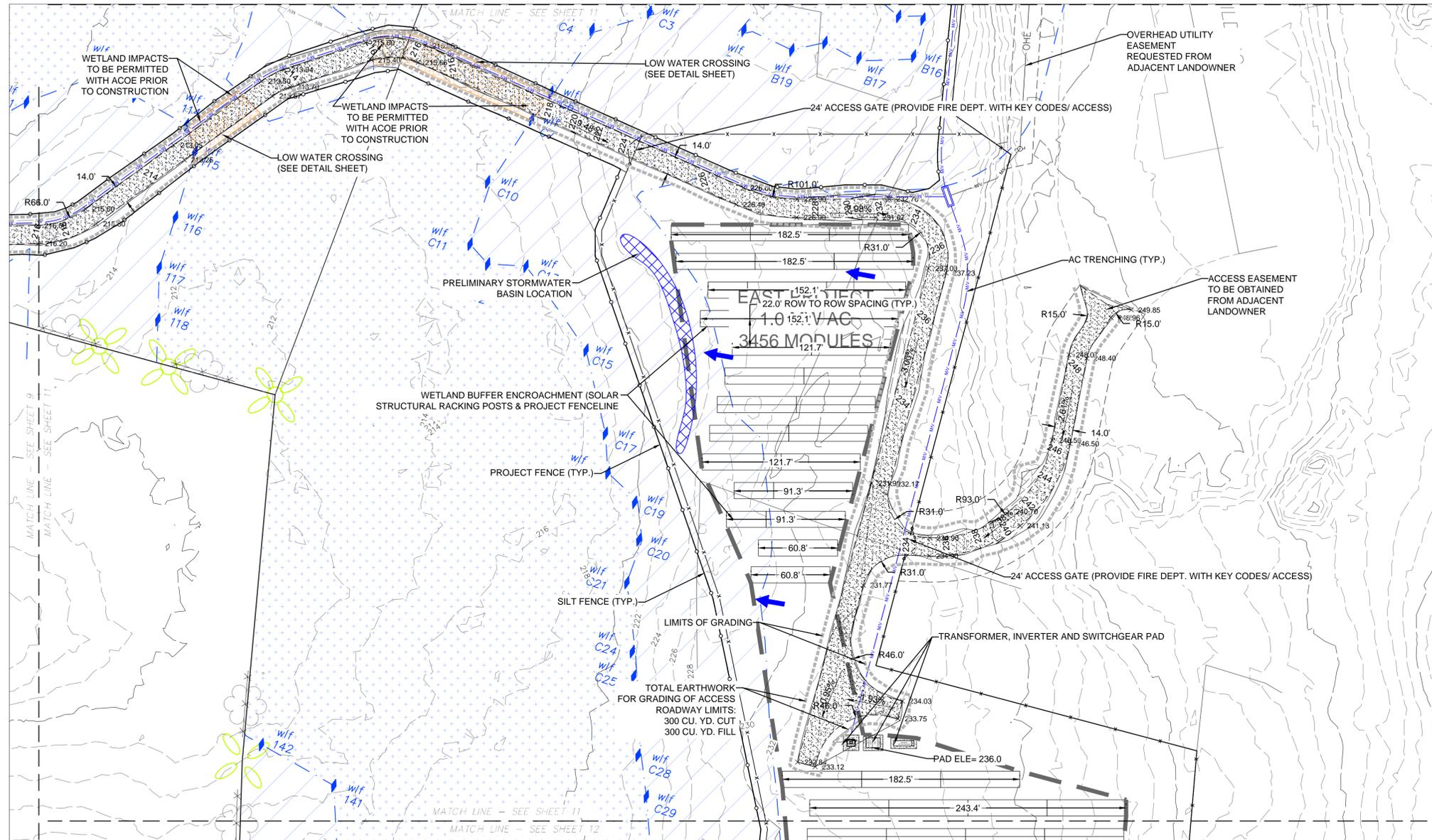
**EXHIBIT E**

Designed: ADC  
 Checked: SAW  
 Drawn: SJB

Record Drawing by/date:

Revisions:	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION
-	4/26/2016	CT SITING BOARD COMMENTS
-	6/21/2016	CT SITING BOARD IR3 REVISIONS

Prepared for:



**NOTES:**

1. FINAL CONSTRUCTION DOCUMENTS FOR THE PROJECT WILL ADHERE TO THE FOLLOWING REQUIREMENTS:
  - 1.1. 2004 CONNECTICUT STORMWATER WATER QUALITY MANUAL
  - 1.2. 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL
  - 1.3. CTDEEP CONSTRUCTION GENERAL PERMIT REQUIREMENTS
  - 1.4. ALL FINAL DOCUMENTS TO BE ENDORSED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER

**PLAINFIELD PIKE SOLAR**  
 91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

**EAST SITE/GRADING/  
 EROSION CONTROL  
 PLAN**

SITING BOARD REVIEW

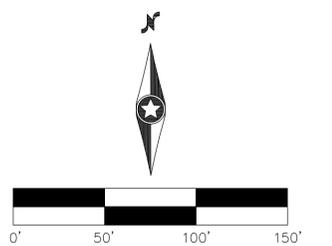
DATE: 03/15/2016  
 SHEET: 11 of 17

Designed: ADC  
 Checked: SAW  
 Drawn: SJB

Record Drawing by/date:

Revisions #	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION
-	4/26/2016	CT SITING BOARD COMMENTS
-	6/21/2016	CT SITING BOARD IR3 REVISIONS

Prepared for:



**PLAINFIELD PIKE SOLAR**

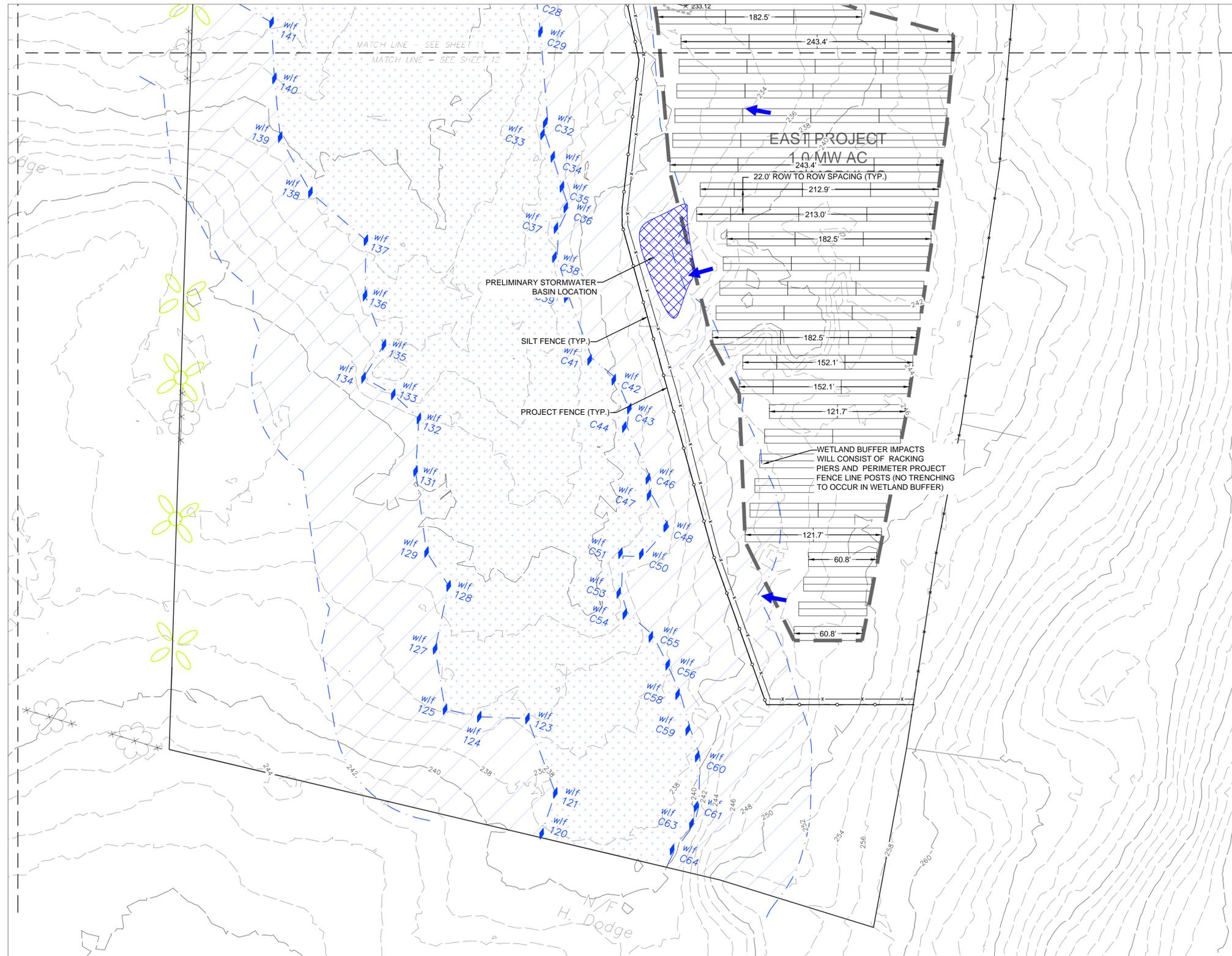
91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

**SOUTHEAST  
 SITE/GRADING/  
 EROSION CONTROL  
 PLAN**

SITING BOARD REVIEW

DATE: 03/15/2016

SHEET: 12 of 17



**NOTES:**

1. FINAL CONSTRUCTION DOCUMENTS FOR THE PROJECT WILL ADHERE TO THE FOLLOWING REQUIREMENTS:
  - 1.1. 2004 CONNECTICUT STORMWATER WATER QUALITY MANUAL
  - 1.2. 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL
  - 1.3. CTDEEP CONSTRUCTION GENERAL PERMIT REQUIREMENTS
  - 1.4. ALL FINAL DOCUMENTS TO BE ENDORSED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER



Appendix 1A: Category 1 Certification Form  
(Required for all Inland Projects in Connecticut)

EXHIBIT F

US Army Corps  
of Engineers®

New England District

Submit this form **before** work commences to the following addresses:

U.S. Army Corps of Engineers, Permits & Enforcement Branch B (CT),  
696 Virginia Road, Concord, MA 01742-2751

Connecticut Department of Energy & Environmental Protection, CT DEEP,  
Inland Water Resources Division, 79 Elm Street, Hartford, CT 06106-5127  
(not required if work is done within exterior boundaries of Mashantucket)

**Permittee Name & Address:** WINDHAM SOLAR LLC (CONTACT: STEVEN BROYER)

Phone number & Email address: (612)326-1500 - STEVE.BROYER@ECOSRENEWABLE.COM

Work Location/Address: 91 PLAINFIELD PIKE ROAD, PLAINFIELD CT 06374

Latitude/Longitude coordinates: LAT: 41.678 LON: -71.901

Waterway name: UNNAMED

**Contractor Name & Address:** TBD

Phone number & Email address: \_\_\_\_\_

Proposed Work Dates: Start: TBD Finish: TBD

**Work will be done within Inland Waters & Wetlands under the following categories – refer to Appendix 1 (check all that apply):**

1.A. New Fill and/or Fill Associated with Excavation

1.B. Stream Bank Stabilization

1.C. Repair & Maintenance of Existing Authorized or Grandfathered Fill.

Wetland impact: 4660 square feet (sf) Waterway impact: \_\_\_\_\_sf and/or \_\_\_\_\_ linear feet

Brief Project Description GRADING AND INSTALLATION OF A 14' WIDE GRAVEL ACCESS ROADWAY. ROADWAY WILL BE SUBCUT AND INSTALLED AT EX. GRADE.

Project purpose: ACCESS TO UPLAND PACEL OF PROPERTY FOR 1.0 MW SOLAR FACILITY

**Secondary Impacts include but are not limited to impacts to inland waters or wetlands drained, dredged, flooded, cleared or degraded resulting from a single and complete project. See General Condition 3.**

Does your project include any of these secondary impacts? Y/N – If yes, please describe them:

NA

**Your signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of this Connecticut General Permit.**

Permittee Signature: \_\_\_\_\_

Date: 6-21-16



**LEGEND:**

—	EXISTING PROPERTY LINE		100' WETLAND BUFFER AREA
-x-	PROPOSED PROJECT FENCE		WETLAND DELINEATION LINE
- - -	PROPOSED GRAVEL ACCESS ROAD		18 x 2 SOLAR MODULE BOCK
-MV-	PROPOSED AC DISTRIBUTION		NRCS SOIL DESIGNATION LINES

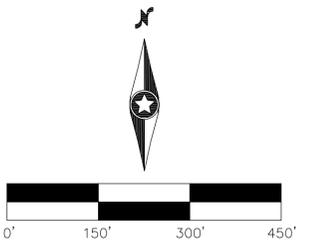
Project #	Soil Type	Designation	Impact Area (AC)	% Project Footprint
P1 & P2	7	Farmland of statewide importance	3.07	25.6%
P1 & P2	3	Not prime farmland	2.75	23.0%
P1 & P2	38C	Farmland of statewide importance	6.03	50.4%
P1 & P2	62C	Not prime farmland	0.12	1.0%
F1	23A	Prime farmland	0.86	15.4%
F1	62C	Not prime farmland	1.73	30.9%
F1	61B	Not prime farmland	2.99	53.5%
F1	3	Not prime farmland	0.01	0.2%

Designed: ADC  
 Checked: SAW  
 Drawn: SJB  
 Record Drawing by/date:

Revisions:	#	DATE	DESCRIPTION
-	3/15/2016	CT SITING BOARD SUBMISSION	
-	4/26/2016	CT SITING BOARD COMMENTS	
-	6/21/2016	CT SITING BOARD IR RESPONSES	

Prepared for:

**ecOS ENERGY**  
 222 SOUTH 9TH STREET  
 SUITE 1600  
 MINNEAPOLIS, MN 55402



**PLAINFIELD PIKE SOLAR**  
 91 PLAINFIELD PIKE RD  
 PLAINFIELD, CT 06374  
 WINDHAM COUNTY

**AGG SOIL EXHIBIT**

SITING BOARD REVIEW

## **Identification of Important Farmland**

### **I. Prime Farmland**

#### **A. General**

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. The land could be cropland, pastureland, rangeland, forestland, or other land, but not urban built-up land or water. Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to modern farming methods.

In general, prime farmlands have an adequate and dependable moisture supply, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time. Typically they do not flood during the growing season or they are protected from flooding.

Examples of soils that qualify as prime farmland are Canton and Charlton soils, 3 to 8 percent slopes; Agawam fine sandy loam, 0 to 3 percent slopes; and Woodbridge fine sandy loam, 0 to 3 percent slopes.

#### **B. Specific Criteria**

Prime farmlands meet the following criteria. Terms used in this section are defined in USDA publications: Soil Taxonomy, Agriculture Handbook 436; Soil Survey Manual, Agriculture Handbook 18; Predicting Rainfall and Erosion Losses: A Guide to Conservation, Agriculture Handbook 537; and Saline and Alkali Soils, Agriculture Handbook 60.

##### **1. The soils have:**

- a) Aquic, udic, ustic, or xeric moisture regimes and sufficient available water capacity within a depth of 40 inches (1 meter), or in the root zone if the root zone is less than 40 inches deep to produce the commonly grown crops in 7 or more years out of 10; or,
- b) Xeric or ustic moisture regimes in which the available water capacity is limited, but the area has a developed irrigation water supply that is dependable (a dependable water supply is one in which enough water is available for irrigation in 8 out of 10 years for the crops commonly grown) and of adequate quality; or,

- c) Aridic or torric moisture regimes and the area has a developed irrigation water supply that is dependable and of adequate quality; and,
- 2. The soils have a temperature regime that is frigid, mesic, thermic, or hyperthermic (pergelic and cryic regimes are excluded). These are soils that, at a depth of 20 inches (50 cm), have a mean annual temperature higher than 32°F (0°C). In addition, the mean summer temperature at this depth in soils with a 0 horizon is higher than 47°F (8°C); in soils that have no 0 horizon, the mean summer temperature is higher than 59°F (15°C); and,
- 3. The soils have a pH between 4.5 and 8.4 in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone is less than 40 inches deep; and,
- 4. The soils either have no water table or have a water table that is maintained at a sufficient depth during the cropping season to allow cultivated crops common to the area to be grown; and,
- 5. The soils can be managed so that, in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone is less than 40 inches deep, during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15; and,
- 6. The soils are not flooded frequently during the growing season (less often than once in 2 years); and,
- 7. The product of K (erodibility factor) x percent slope is less than 2.0, and the product of I (soil erodibility) x C (climatic factor) does not exceed 60; and,
- 8. The soils have a permeability rate of at least 0.06 inch (0.15 cm) per hour in the upper 20 inches (50 cm) and the mean annual soil temperature at a depth of 20 inches (50 cm) is less than 59°F (15°C); the permeability rate is not a limiting factor if the mean annual soil temperature is 59°F (15°C) or higher; and,
- 9. Less than 10 percent of the surface layer (upper 6 inches) in these soils consists of rock fragments coarser than 3 inches (7.6 cm).

C. Additional Farmland of Statewide Importance

This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops. Criteria for defining and delineating this land are to be determined by the appropriate state

agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable. In some states, additional farmlands of statewide importance may include tracts of land that have been designated for agriculture by state laws.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
2	Ridgebury fine sandy loam	Farmland of statewide importance
3	Ridgebury, Leicester, and Whitman soils, extremely stony	Not prime farmland
4	Leicester fine sandy loam	Farmland of statewide importance
5	Wilbraham silt loam	Farmland of statewide importance
6	Wilbraham and Menlo soils, extremely stony	Not prime farmland
7	Mudgepond silt loam	Farmland of statewide importance
8	Mudgepond and Alden soils, extremely stony	Not prime farmland
9	Scitico, Shaker, and Maybid soils	Farmland of statewide importance
10	Raynham silt loam	Farmland of statewide importance
12	Raypol silt loam	Farmland of statewide importance
13	Walpole sandy loam	Farmland of statewide importance
14	Fredon silt loam	Farmland of statewide importance
15	Scarboro muck	Not prime farmland
16	Halsey silt loam	Not prime farmland
17	Timakwa and Natchaug soils	Not prime farmland
18	Catden and Freetown soils	Not prime farmland
20A	Ellington silt loam, 0 to 5 percent slopes	All areas are prime farmland
21A	Ninigret and Tisbury soils, 0 to 5 percent slopes	All areas are prime farmland
22A	Hero gravelly loam, 0 to 3 percent slopes	All areas are prime farmland
22B	Hero gravelly loam, 3 to 8 percent slopes	All areas are prime farmland
23A	Sudbury sandy loam, 0 to 5 percent slopes	All areas are prime farmland
24A	Deerfield loamy fine sand, 0 to 3 percent slopes	Farmland of statewide importance
25A	Brancroft silt loam, 0 to 3 percent slopes	Farmland of statewide importance
25B	Brancroft silt loam, 3 to 8 percent slopes	Farmland of statewide importance
25C	Brancroft silt loam, 8 to 15 percent slopes	Farmland of statewide importance
26A	Berlin silt loam, 0 to 3 percent slopes	All areas are prime farmland
26B	Berlin silt loam, 3 to 8 percent slopes	Farmland of statewide importance
27A	Belgrade silt loam, 0 to 5 percent slopes	All areas are prime farmland
28A	Elmridge fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
28B	Elmridge fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
29A	Agawam fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
29B	Agawam fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
29C	Agawam fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
30A	Branford silt loam, 0 to 3 percent slopes	All areas are prime farmland
30B	Branford silt loam, 3 to 8 percent slopes	All areas are prime farmland
30C	Branford silt loam, 8 to 15 percent slopes	Farmland of statewide importance

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
31A	Copake fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
31B	Copake fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
31C	Copake gravelly loam, 8 to 15 percent slopes	Farmland of statewide importance
32A	Haven and Enfield soils, 0 to 3 percent slopes	All areas are prime farmland
32B	Haven and Enfield soils, 3 to 8 percent slopes	All areas are prime farmland
32C	Haven and Enfield soils, 8 to 15 percent slopes	Farmland of statewide importance
33A	Hartford sandy loam, 0 to 3 percent slopes	All areas are prime farmland
33B	Hartford sandy loam, 3 to 8 percent slopes	All areas are prime farmland
34A	Merrimac sandy loam, 0 to 3 percent slopes	All areas are prime farmland
34B	Merrimac sandy loam, 3 to 8 percent slopes	All areas are prime farmland
34C	Merrimac sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
35A	Penwood loamy sand, 0 to 3 percent slopes	Farmland of statewide importance
35B	Penwood loamy sand, 3 to 8 percent slopes	Farmland of statewide importance
36A	Windsor loamy sand, 0 to 3 percent slopes	Farmland of statewide importance
36B	Windsor loamy sand, 3 to 8 percent slopes	Farmland of statewide importance
36C	Windsor loamy sand, 8 to 15 percent slopes	Farmland of statewide importance
37A	Manchester gravelly sandy loam, 0 to 3 percent slopes	Farmland of statewide importance
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	Farmland of statewide importance
37E	Manchester gravelly sandy loam, 15 to 45 percent slopes	Not prime farmland
38A	Hinckley gravelly sandy loam, 0 to 3 percent slopes	Farmland of statewide importance
38C	Hinckley gravelly sandy loam, 3 to 15 percent slopes	Farmland of statewide importance
38E	Hinckley gravelly sandy loam, 15 to 45 percent slopes	Not prime farmland
39A	Groton gravelly sandy loam, 0 to 3 percent slopes	Farmland of statewide importance
39C	Groton gravelly sandy loam, 3 to 15 percent slopes	Farmland of statewide importance
39E	Groton gravelly sandy loam, 15 to 45 percent slopes	Not prime farmland
40A	Ludlow silt loam, 0 to 3 percent slopes	All areas are prime farmland
40B	Ludlow silt loam, 3 to 8 percent slopes	All areas are prime farmland
41B	Ludlow silt loam, 2 to 8 percent slopes, very stony	Not prime farmland
42C	Ludlow silt loam, 2 to 15 percent slopes, extremely stony	Not prime farmland
43A	Rainbow silt loam, 0 to 3 percent slopes	All areas are prime farmland
43B	Rainbow silt loam, 3 to 8 percent slopes	All areas are prime farmland
44B	Rainbow silt loam, 2 to 8 percent slopes, very stony	Not prime farmland
45A	Woodbridge fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
46B	Woodbridge fine sandy loam, 2 to 8 percent slopes, very stony	Not prime farmland
46C	Woodbridge fine sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
47C	Woodbridge fine sandy loam, 2 to 15 percent slopes, extremely stony	Not prime farmland
48B	Georgia and Amenia silt loams, 2 to 8 percent slopes	All areas are prime farmland
48C	Georgia and Amenia silt loams, 8 to 15 percent slopes	Farmland of statewide importance
49B	Georgia and Amenia silt loams, 3 to 8 percent slopes, very stony	Not prime farmland
49C	Georgia and Amenia silt loams, 8 to 15 percent slopes, very stony	Not prime farmland
50A	Sutton fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
50B	Sutton fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	Not prime farmland
52C	Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	Not prime farmland
53A	Wapping very fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
53B	Wapping very fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
54B	Wapping very fine sandy loam, 2 to 8 percent slopes, very stony	Not prime farmland
55A	Watchaug fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
55B	Watchaug fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
56B	Watchaug fine sandy loam, 2 to 8 percent slopes, very stony	Not prime farmland
57B	Gloucester gravelly sandy loam, 3 to 8 percent slopes	All areas are prime farmland
57C	Gloucester gravelly sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
57D	Gloucester gravelly sandy loam, 15 to 25 percent slopes	Not prime farmland
58B	Gloucester gravelly sandy loam, 3 to 8 percent slopes, very stony	Not prime farmland
58C	Gloucester gravelly sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland
59C	Gloucester gravelly sandy loam, 3 to 15 percent slopes, extremely stony	Not prime farmland
59D	Gloucester gravelly sandy loam, 15 to 35 percent slopes, extremely stony	Not prime farmland
60B	Canton and Charlton soils, 3 to 8 percent slopes	All areas are prime farmland
60C	Canton and Charlton soils, 8 to 15 percent slopes	Farmland of statewide importance
60D	Canton and Charlton soils, 15 to 25 percent slopes	Not prime farmland
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	Not prime farmland
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	Not prime farmland
62C	Canton and Charlton soils, 3 to 15 percent slopes, extremely stony	Not prime farmland
62D	Canton and Charlton soils, 15 to 35 percent slopes, extremely stony	Not prime farmland
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
63C	Cheshire fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
63D	Cheshire fine sandy loam, 15 to 25 percent slopes	Not prime farmland
64B	Cheshire fine sandy loam, 3 to 8 percent slopes, very stony	Not prime farmland
64C	Cheshire fine sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland
65C	Cheshire fine sandy loam, 3 to 15 percent slopes, extremely stony	Not prime farmland
65D	Cheshire fine sandy loam, 15 to 35 percent slopes, extremely stony	Not prime farmland
66B	Narragansett silt loam, 2 to 8 percent slopes	All areas are prime farmland
66C	Narragansett silt loam, 8 to 15 percent slopes	Farmland of statewide importance
67B	Narragansett silt loam, 3 to 8 percent slopes, very stony	Not prime farmland
67C	Narragansett silt loam, 8 to 15 percent slopes, very stony	Not prime farmland
68C	Narragansett silt loam, 3 to 15 percent slopes, extremely stony	Not prime farmland
68D	Narragansett silt loam, 15 to 25 percent slopes, extremely stony	Not prime farmland
69B	Yalesville fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland

# Farmland Classification

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

State of Connecticut

Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
69C	Yalesville fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
70C	Branford-Holyoke complex, 3 to 15 percent slopes, very rocky	Not prime farmland
71C	Brookfield-Brimfield-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
71E	Brookfield-Brimfield-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
73C	Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky	Not prime farmland
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	Not prime farmland
74C	Narragansett-Hollis complex, 3 to 15 percent slopes, very rocky	Not prime farmland
75C	Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
76E	Rock outcrop-Hollis complex, 3 to 45 percent slopes	Not prime farmland
76F	Rock outcrop-Hollis complex, 45 to 60 percent slopes	Not prime farmland
77C	Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky	Not prime farmland
77D	Cheshire-Holyoke complex, 15 to 35 percent slopes, very rocky	Not prime farmland
78C	Holyoke-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
78E	Holyoke-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
79E	Rock outcrop-Holyoke complex, 3 to 45 percent slopes	Not prime farmland
80B	Bernardston silt loam, 3 to 8 percent slopes	All areas are prime farmland
80C	Bernardston silt loam, 8 to 15 percent slopes	Farmland of statewide importance
81C	Bernardston silt loam, 3 to 15 percent slopes, extremely stony	Not prime farmland
81D	Bernardston silt loam, 15 to 25 percent slopes, extremely stony	Not prime farmland
82B	Broadbrook silt loam, 3 to 8 percent slopes	All areas are prime farmland
82C	Broadbrook silt loam, 8 to 15 percent slopes	Farmland of statewide importance
82D	Broadbrook silt loam, 15 to 25 percent slopes	Not prime farmland
83B	Broadbrook silt loam, 3 to 8 percent slopes, very stony	Not prime farmland
83C	Broadbrook silt loam, 8 to 15 percent slopes, very stony	Not prime farmland
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	All areas are prime farmland
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	Farmland of statewide importance
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	Not prime farmland
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	Not prime farmland
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	Not prime farmland
86C	Paxton and Montauk fine sandy loams, 3 to 15 percent slopes, extremely stony	Not prime farmland
86D	Paxton and Montauk fine sandy loams, 15 to 35 percent slopes, extremely stony	Not prime farmland
87B	Wethersfield loam, 3 to 8 percent slopes	All areas are prime farmland
87C	Wethersfield loam, 8 to 15 percent slopes	Farmland of statewide importance
87D	Wethersfield loam, 15 to 25 percent slopes	Not prime farmland
88B	Wethersfield loam, 3 to 8 percent slopes, very stony	Not prime farmland
88C	Wethersfield loam, 8 to 15 percent slopes, very stony	Not prime farmland
89C	Wethersfield loam, 3 to 15 percent slopes, extremely stony	Not prime farmland
89D	Wethersfield loam, 15 to 35 percent slopes, extremely stony	Not prime farmland
90B	Stockbridge loam, 3 to 8 percent slopes	All areas are prime farmland
90C	Stockbridge loam, 8 to 15 percent slopes	Farmland of statewide importance
90D	Stockbridge loam, 15 to 25 percent slopes	Not prime farmland
91B	Stockbridge loam, 3 to 8 percent slopes, very stony	Not prime farmland

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
91C	Stockbridge loam, 8 to 15 percent slopes, very stony	Not prime farmland
91D	Stockbridge loam, 15 to 35 percent slopes, very stony	Not prime farmland
92B	Nellis fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
92C	Nellis fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
92D	Nellis fine sandy loam, 15 to 25 percent slopes	Not prime farmland
93C	Nellis fine sandy loam, 3 to 15 percent slopes, very stony	Not prime farmland
94C	Farmington-Nellis complex, 3 to 15 percent slopes, very rocky	Not prime farmland
94E	Farmington-Nellis complex, 15 to 35 percent slopes, very rocky	Not prime farmland
95C	Farmington-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
95E	Farmington-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
96	Ipswich mucky peat	Not prime farmland
97	Pawcatuck mucky peat	Not prime farmland
98	Westbrook mucky peat	Not prime farmland
99	Westbrook mucky peat, low salt	Not prime farmland
100	Suncook loamy fine sand	Farmland of statewide importance
101	Occum fine sandy loam	All areas are prime farmland
102	Pootatuck fine sandy loam	All areas are prime farmland
103	Rippowam fine sandy loam	Farmland of statewide importance
104	Bash silt loam	Farmland of statewide importance
105	Hadley silt loam	All areas are prime farmland
106	Winooski silt loam	All areas are prime farmland
107	Limerick and Lim soils	Farmland of statewide importance
108	Saco silt loam	Not prime farmland
109	Fluvaquents-Udifluvents complex, frequently flooded	Not prime farmland
221A	Ninigret-Urban land complex, 0 to 5 percent slopes	Not prime farmland
224A	Deerfield-Urban land complex, 0 to 3 percent slopes	Not prime farmland
225B	Brancroft-Urban land complex, 0 to 8 percent slopes	Not prime farmland
226B	Berlin-Urban land complex, 0 to 8 percent slopes	Not prime farmland
228B	Elmridge-Urban land complex, 0 to 8 percent slopes	Not prime farmland
229B	Agawam-Urban land complex, 0 to 8 percent slopes	Not prime farmland
229C	Agawam-Urban land complex, 8 to 15 percent slopes	Not prime farmland
230B	Branford-Urban land complex, 0 to 8 percent slopes	Not prime farmland
230C	Branford-Urban land complex, 8 to 15 percent slopes	Not prime farmland
232B	Haven-Urban land complex, 0 to 8 percent slopes	Not prime farmland
234B	Merrimac-Urban land complex, 0 to 8 percent slopes	Not prime farmland
235B	Penwood-Urban land complex, 0 to 8 percent slopes	Not prime farmland
236B	Windsor-Urban land complex, 0 to 8 percent slopes	Not prime farmland
237A	Manchester-Urban land complex, 0 to 3 percent slopes	Not prime farmland
237C	Manchester-Urban land complex, 3 to 15 percent slopes	Not prime farmland
238A	Hinckley-Urban land complex, 0 to 3 percent slopes	Not prime farmland
238C	Hinckley-Urban land complex, 3 to 15 percent slopes	Not prime farmland
240B	Ludlow-Urban land complex, 0 to 8 percent slopes	Not prime farmland
243B	Rainbow-Urban land complex, 0 to 8 percent slopes	Not prime farmland
245B	Woodbridge-Urban land complex, 0 to 8 percent slopes	Not prime farmland

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
245C	Woodbridge-Urban land complex, 8 to 15 percent slopes	Not prime farmland
248B	Georgia-Urban land complex, 2 to 8 percent slopes	Not prime farmland
250B	Sutton-Urban land complex, 0 to 8 percent slopes	Not prime farmland
253B	Wapping-Urban land complex, 0 to 8 percent slopes	Not prime farmland
255B	Watchaug-Urban land complex, 0 to 8 percent slopes	Not prime farmland
260B	Charlton-Urban land complex, 3 to 8 percent slopes	Not prime farmland
260C	Charlton-Urban land complex, 8 to 15 percent slopes	Not prime farmland
260D	Charlton-Urban land complex, 15 to 25 percent slopes	Not prime farmland
263B	Cheshire-Urban land complex, 3 to 8 percent slopes	Not prime farmland
263C	Cheshire-Urban land complex, 8 to 15 percent slopes	Not prime farmland
266B	Narragansett-Urban land complex, 3 to 8 percent slopes	Not prime farmland
269B	Yalesville-Urban land complex, 3 to 8 percent slopes	Not prime farmland
269C	Yalesville-Urban land complex, 8 to 15 percent slopes	Not prime farmland
273C	Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes	Not prime farmland
273E	Urban land-Charlton-Chatfield complex, rocky, 15 to 45 percent slopes	Not prime farmland
275C	Urban land-Chatfield complex, rocky, 3 to 15 percent slopes	Not prime farmland
275E	Urban land-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
282B	Broadbrook-Urban land complex, 3 to 8 percent slopes	Not prime farmland
284B	Paxton-Urban land complex, 3 to 8 percent slopes	Not prime farmland
284C	Paxton-Urban land complex, 8 to 15 percent slopes	Not prime farmland
284D	Paxton-Urban land complex, 15 to 25 percent slopes	Not prime farmland
287B	Wethersfield-Urban land complex, 3 to 8 percent slopes	Not prime farmland
287C	Wethersfield-Urban land complex, 8 to 15 percent slopes	Not prime farmland
287D	Wethersfield-Urban land complex, 15 to 25 percent slopes	Not prime farmland
290B	Stockbridge-Urban land complex, 3 to 8 percent slopes	Not prime farmland
290C	Stockbridge-Urban land complex, 8 to 15 percent slopes	Not prime farmland
290D	Stockbridge-Urban land complex, 15 to 25 percent slopes	Not prime farmland
301	Beaches-Udipsamments complex, coastal	Not prime farmland
302	Dumps	Not prime farmland
303	Pits, quarries	Not prime farmland
304	Udorthents, loamy, very steep	Not prime farmland
305	Udorthents-Pits complex, gravelly	Not prime farmland
306	Udorthents-Urban land complex	Not prime farmland
307	Urban land	Not prime farmland
308	Udorthents, smoothed	Not prime farmland
309	Udorthents, flood control	Not prime farmland
310	Udorthents, periodically flooded	Not prime farmland
401C	Macomber-Taconic complex, 3 to 15 percent slopes, very rocky	Not prime farmland
402D	Taconic-Macomber-Rock outcrop complex, 15 to 25 percent slopes	Not prime farmland
403C	Taconic-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
403E	Taconic-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
403F	Taconic-Rock outcrop complex, 45 to 70 percent slopes	Not prime farmland
405C	Dummerston gravelly loam, 3 to 15 percent slopes, very stony	Not prime farmland
405E	Dummerston gravelly loam, 15 to 45 percent slopes, very stony	Not prime farmland
407C	Lanesboro loam, 3 to 15 percent slopes, very stony	Not prime farmland
407E	Lanesboro loam, 15 to 45 percent slopes, very stony	Not prime farmland
408C	Fullam silt loam, 3 to 15 percent slopes, very stony	Not prime farmland

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
409B	Brayton mucky silt loam, 0 to 8 percent slopes, very stony	Not prime farmland
412B	Bice fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
412C	Bice fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
412D	Bice fine sandy loam, 15 to 25 percent slopes	Not prime farmland
413C	Bice-Millsite complex, 3 to 15 percent slopes, very rocky	Not prime farmland
413E	Bice-Millsite complex, 15 to 45 percent slopes, very rocky	Not prime farmland
414	Fredon silt loam, cold	Farmland of statewide importance
415C	Westminster-Millsite-Rock outcrop complex, 3 to 15 percent slopes	Not prime farmland
415E	Westminster-Millsite-Rock outcrop complex, 15 to 45 percent slopes	Not prime farmland
416E	Rock outcrop-Westminster complex, 8 to 45 percent slopes	Not prime farmland
416F	Rock outcrop-Westminster complex, 45 to 70 percent slopes	Not prime farmland
417B	Bice fine sandy loam, 3 to 8 percent slopes, very stony	Not prime farmland
417C	Bice fine sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland
417D	Bice fine sandy loam, 15 to 25 percent slopes, very stony	Not prime farmland
418C	Schroon fine sandy loam, 2 to 15 percent slopes, very stony	Not prime farmland
420A	Schroon fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
420B	Schroon fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
421A	Ninigret fine sandy loam, cold, 0 to 3 percent slopes	All areas are prime farmland
423A	Sudbury sandy loam, cold, 0 to 3 percent slopes	All areas are prime farmland
424B	Shelburne fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
424C	Shelburne fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
424D	Shelburne fine sandy loam, 15 to 25 percent slopes	Not prime farmland
425B	Shelburne fine sandy loam, 3 to 8 percent slopes, very stony	Not prime farmland
425C	Shelburne fine sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland
426D	Shelburne fine sandy loam, 15 to 35 percent slopes, extremely stony	Not prime farmland
427B	Ashfield fine sandy loam, 2 to 8 percent slopes, very stony	Not prime farmland
427C	Ashfield fine sandy loam, 8 to 15 percent slopes, very stony	Not prime farmland
428A	Ashfield fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
428B	Ashfield fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
428C	Ashfield fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
429A	Agawam fine sandy loam, cold, 0 to 3 percent slopes	All areas are prime farmland
429B	Agawam fine sandy loam, cold, 3 to 8 percent slopes	All areas are prime farmland
429C	Agawam fine sandy loam, cold, 8 to 15 percent slopes	Farmland of statewide importance
433	Moosilauke sandy loam	Farmland of statewide importance
434A	Merrimac sandy loam, cold, 0 to 3 percent slopes	All areas are prime farmland
434B	Merrimac sandy loam, cold, 3 to 8 percent slopes	All areas are prime farmland
434C	Merrimac sandy loam, cold, 8 to 15 percent slopes	Farmland of statewide importance
435	Scarboro muck, cold	Not prime farmland
436	Halsey silt loam, cold	Not prime farmland
437	Wonsqueak mucky peat	Not prime farmland
438	Buckspout muck	Not prime farmland
440A	Boscawen gravelly sandy loam, 0 to 3 percent slopes	Farmland of statewide importance

# Farmland Classification

Aggregation Method: No Aggregation Necessary  
Tie-break Rule: Lower

State of Connecticut  
Survey Area Version and Date: 8 - 12/13/2010

Map symbol	Map unit name	Rating
440C	Boscawen gravelly sandy loam, 3 to 15 percent slopes	Farmland of statewide importance
440E	Boscawen gravelly sandy loam, 15 to 45 percent slopes	Not prime farmland
442	Brayton loam	Farmland of statewide importance
443	Brayton-Loonmeadow complex, extremely stony	Not prime farmland
448B	Hogansburg loam, 3 to 8 percent slopes	All areas are prime farmland
449B	Hogansburg loam, 3 to 8 percent slopes, very stony	Not prime farmland
449C	Hogansburg loam, 8 to 15 percent slopes, very stony	Not prime farmland
450B	Pyrities loam, 3 to 8 percent slopes	All areas are prime farmland
450C	Pyrities loam, 8 to 15 percent slopes	Farmland of statewide importance
450D	Pyrities loam, 15 to 25 percent slopes	Not prime farmland
451B	Pyrities loam, 3 to 8 percent slopes, very stony	Not prime farmland
451C	Pyrities loam, 8 to 15 percent slopes, very stony	Not prime farmland
451D	Pyrities loam, 15 to 25 percent slopes, very stony	Not prime farmland
457	Mudgepond silt loam, cold	Farmland of statewide importance
458	Mudgepond and Alden soils, extremely stony, cold	Not prime farmland
501	Ondawa fine sandy loam	All areas are prime farmland
503	Rumney fine sandy loam	Farmland of statewide importance
508	Medomak silt loam	Not prime farmland
800	Wequetequock mucky silt loam, 0 to 2 meter water depth	Not prime farmland
810	Napatree sand, 0 to 1 meter water depth, bouldery	Not prime farmland
811	Napatree sand, 0 to 1 meter water depth, extremely bouldery	Not prime farmland
820	Fort Neck mucky silt loam, 0 to 1 meter water depth	
830	Anguilla mucky sand, 0 to 1 meter water depth	Not prime farmland
840	Rhodesfolly fine sand, 0 to 1 meter water depth	Not prime farmland
841	Rhodesfolly fine sand, 1 to 2 meter water depth	Not prime farmland
850	Marshneck loam, 1 to 2 meter water depth	Not prime farmland
860	Billington silt loam, 0 to 1 meter water depth	Not prime farmland
910	Fort Neck mucky silt loam, 1 to 2 meter water depth	Not prime farmland
W	Water	Not prime farmland

# Farmland Classification

## Rating Options

Attribute Name: Farmland Classification

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value to represent the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. The components in the map unit name represent the major soils within a map unit delineation. Minor components make up the balance of the map unit. Great differences in soil properties can occur between map unit components and within short distances. Minor components may be very different from the major components. Such differences could significantly affect use and management of the map unit. Minor components may or may not be documented in the database. The results of aggregation do not reflect the presence or absence of limitations of the components which are not listed in the database. An on-site investigation is required to identify the location of individual map unit components.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be generated. Aggregation must be done because, on any soil map, map units are delineated but components are not. The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.