

**DRAFT**

**Petition No. 1395A  
Windham Solar LLC  
31 Benz Street, Ansonia**

**Partial Development & Management Plan  
Staff Report  
July 23, 2021**

On June 21, 2021, the Connecticut Siting Council (Council) issued a Declaratory Ruling to Windham Solar LLC (WS), pursuant to Connecticut General Statutes §4-176 and §16-50k, for the construction, maintenance, and operation of an approximately 1.99-megawatt (MW) alternating current (AC) solar photovoltaic electric generating facility located at 31 Benz Street in Ansonia and an associated electrical interconnection (Project). In its Declaratory Ruling, the Council required WS to submit a Development and Management Plan (D&M Plan).

On June 28, 2021, WS submitted a Partial D&M Plan that included site plans and documentation specific to the pre-construction phase of the project. WS would submit an additional partial D&M Plan prior to the commencement of solar array construction.

As required by the Council's Declaratory Ruling Condition 1, the Partial D&M Plan was served on the parties and intervenors listed on the service list including the City of Ansonia (City). No comments regarding the D&M Plan were received.

The Council submitted interrogatories to WS on July 6, 2021. WS submitted responses to the interrogatories on July 13, 2021.

The Project consists of the installation of two solar photovoltaic electric generating facilities (1.0 MW and 0.99 MW) on an approximately 12.72 acre parcel, zoned residential, that is mostly wooded. A two-story house, a shed, and a barn foundation are located in the southeastern portion of the parcel, accessed by an existing paved driveway extending north from Benz Street.

Condition 1 of the Council's Declaratory Ruling requires the following information to be included in the D&M Plan:

- a. A final site plan including, but not limited to, final facility layout, access roads, electrical interconnection including riser pole locations, fence design, equipment pads, and stormwater management control structures;**

The final site plan provided illustrates the site design, solar array layout, equipment pads, perimeter fencing, and access roads.

The Project would consist of approximately 4,860 Trina 475 Watt solar modules installed on a fixed-tilt ground-mounted racking system and oriented to the south at a 25 degree angle.

The modules would be installed with a minimum ground clearance of approximately 3 feet. The maximum height at the top of the solar panels would be approximately 9.4 feet. The aisles between the panel rows would be approximately 11.1 feet wide.

WS initially proposed to demolish the on-site residential structure, outbuilding and associated driveway; however, WS has revised the site plan to retain the house and driveway. The barn

foundation and shed will be removed. Concrete inverter/transformer pads and a switchgear pad to serve each array area will be installed on the east and west sides of the existing house, inside of the Project perimeter fence, rather than within the driveway and house footprint, as initially proposed. Gravel parking areas would be installed adjacent to the inverter/transformer pads.

From each of the concrete switchgear pads, an underground feeder cable would extend to the northwest side of Benz Street, transition to overhead on a new riser pole to interconnect with an existing United Illuminating Company (UI) overhead electric distribution line on the southeast side of Benz Street. A utility pole for each feeder will be required on the southeast side of Benz Street. WS is consulting with UI to determine if options are available to reduce the number of new utility poles required to facilitate the interconnection.

A seven-foot high chain link fence, compliant with the National Electrical Code, will enclose the solar array area. A minimum 15-foot wide clearance will be maintained between the fence and the solar panel rows except at the north end of the site where the fence is adjacent to the panels.

Two post-construction stormwater basins will be installed at the site. Basin #1 is located in the western portion of the site and will drain towards an adjacent wetland area. The wetland is a minimum 50 feet from the basin. Basin #2 is located in the southeast corner of the site, near Benz Street. The Basin #2 outlet will tie into an existing catch basin on Benz Street.

- b) Details of construction phasing that includes, at a minimum, one growing season upon completion of the stormwater basins, swales, perimeter erosion and sedimentation controls, and solar field grading, prior to the commencement of solar array construction. One growing season is defined as April 1 through June 15 or August 15 through October 15;**

The Partial D&M Plan Site Plans provide construction phasing detail that includes Clearing/Stabilization Phases (Phases 1A & 1B) and a solar array Construction Phase (Phase 2).

Phase 1A includes site clearing, establishment of perimeter erosion and sediment controls followed by the excavation and installation of Stormwater Basin #1. After Basin #1 is established, grubbing/grading will occur in the Basin #1 watershed (northern portion of site) followed by temporary stabilization of disturbed areas for 30 days. After the Phase 1A area is stabilized, Phase 1B work will proceed with the construction of Stormwater Basin #2, followed by grubbing/grading in the Basin #2 watershed (southern portion of site).

WS provided a schedule that indicates Phase 1A work will be completed by September 8, 2021, including stabilization. Phase 1B would commence on September 9, 2021 with an anticipated completion date, including the demobilization and stabilization of the rock crushing area, of September 23, 2021. Site perimeter fencing and landscaping would be installed mid to late September 2021. Landscaping will consist of 245 arborvitae planted 10 feet on center in areas abutting residences and Benz Street. The arborvitae will be 6 to 8 feet tall at planting.

The stabilization growing season per the DEEP Stormwater Division is specified as a minimum time period of August 15 through October 15 or April 1 through June 15. Since the project schedule does not follow this timeline exactly, WS intends to complete all Phase 1A/1B work by September 28, 2021, allowing disturbed areas to stabilize prior to the winter months. Temporary mulching may be applied to disturbed areas, if necessary. WS will spot seed if necessary in mid-March 2022. WS will let the site stabilize for the April 1 to June 15, 2022 growing season prior to the commencement of Phase 2 - solar array construction. WS will consult with the DEEP

Stormwater Division to determine if Phase 2 can commence prior to June 15, 2022 based upon stabilization of disturbed areas in Fall 2021.

Phase 2 construction includes the installation of the solar racking system and solar modules, trenching for conduit, installation of the concrete electrical pads and equipment. Seeding and the application of mulch will occur throughout construction to stabilize disturbed areas. Once construction is completed, the site will be seeded and the temporary sediment basins cleaned to convert them to permanent stormwater basins.

**c. Submit a box turtle protection program;**

A Box turtle protection plan has been submitted that includes an on-site environmental monitor, contractor education, protective barriers, initial site sweep, targeted sweeps from April 1 through May 31 at least once a week, and project reporting.

**d) Submit the final structural design for the racking system, stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;**

This information will be submitted as part of an additional partial D&M Plan.

**e) Final plans for hosting sheep grazing at the site, if applicable, including, but not limited to, provisions for emergency evacuation;**

WS intends to host sheep grazing at the site. A site-specific grazing plan will be submitted as part of an additional partial D&M Plan.

**f. Installation of a black vinyl-coated solar field perimeter fence along Benz Street with a six inch gap at the bottom for wildlife movement if WS opts not to host sheep grazing at the site under (e);**

A seven-foot high chain line fence, compliant with the National Electrical Code, will enclose the solar array area. A black vinyl coated perimeter fence will be installed where the fence faces Benz Street. The perimeter fence will be installed flush with the ground since WS will host sheep grazing at the site.

**g. Construction hours shall occur Monday through Saturday with any Sunday work to be requested, as necessary;**

WS previously indicated work hours will be from 7:00 a.m. to 6:00 p.m., Monday through Friday and 7:00 a.m. to 5:00 p.m. on Saturday.

WS is also requesting Sunday work hours from 7:00 a.m. to 5:00 p.m. in order to complete Phase 1 site work as soon as possible. Staff recommends any requests for Sunday work hours be specifically submitted for approval, as necessary.

The Petitioner will restrict any rock crushing activities to weekdays to minimize weekend disturbance to area residences.

**h) Submit an updated DEEP NDDDB determination letter prior to commencement of construction;**

A DEEP NDDDB determination letter dated May 17, 2021 has been provided. The letter contains work procedures for Project construction as well as post-construction project maintenance. To avoid impacts to the box turtle, the NDDDB letter recommends that work within forested habitat occur from April 1-November 1 and that specific construction work procedures be followed. These procedures have been incorporated into the Box Turtle Protection program.

Post-construction protection measures include mowing restrictions for certain areas of the Project (stormwater basins, cleared areas outside of the array) and mowing procedures to reduce the potential for box turtle mortality.

**j. Consult with the DEEP Dam Safety Division regarding permitting requirements, if any, for the proposed stormwater basins prior to site construction;**

WS is consulting with the DEEP Dam Safety Division and will submit permitting requirements, if any, as part of an additional partial D&M Plan.

**k. Solar module specifications that indicate the selected solar module will not contain PFAS and will not be characterized as hazardous waste through applicable TCLP testing at the time of this decision; and**

Hazardous waste characterization information for the solar modules will be provided as part of an additional partial D&M Plan.

**k) Identification of the location for the on-site disposal of excess cut material from site grading activities. If a rock processor is to be used on-site, submit details regarding the location of the processor and associated erosion/sedimentation controls and sediment traps, and details of water use to control dust emissions**

WS intends to use a rock processor on site. The processor, screening equipment and related stockpiles will be located in the northeast corner of the site. Water for dust control will be obtained from a water hookup located at the on-site residence. Rock stockpiles will be located adjacent to the processor and would be isolated with silt fencing and/or hay bales.

Upon the Council's recommendation, WS included a revised Decommissioning Memo within the Partial D&M Plan to account for site grading. Decommissioning will include the removal and disposal or recycling of all above-surface Project components. It is anticipated 95 percent of the components will be recyclable.

In addition to the removal of all above ground equipment, steel racking posts and inverters/panelboard posts will be mechanically pulled out of the ground with any resulting holes backfilled with on-site soil to match existing site soil conditions. The concrete transformer and interconnection equipment pads will be removed from the site. Underground conduit at depths greater than 12 inches will remain in place.

The driveway, perimeter fencing and landscaping may remain in place, depending on the landowners' future use of the parcel. The topography within the solar field area and the stormwater management system will be maintained for future use. All disturbed areas will be seeded for re-vegetation.

### **Recommendations**

If approved, staff recommends following conditions:

1. Perform rock processing during approved weekday work hours; and
2. Submission of specific requests for Sunday work hours, as necessary.

## Site Layout



### LEGEND:

	EXISTING PROPERTY LINE		PROPOSED CLEARING LIMITS
	PROPOSED FENCE		26 x 2 SOLAR MODULE BLOCK
	PROPOSED GRAVEL ACCESS ROAD		13 x 2 SOLAR MODULE BLOCK
	PROPOSED UNDERGROUND MV CABLE		100' WETLAND REGULATED AREA LIMIT
	PROPOSED OVERHEAD ELECTRIC		WETLAND DELINEATION LINE & AREA
	EXISTING CONTOUR		RIP-RAP BASIN OUTLET
	PROPOSED CONTOUR		

### SEED LEGEND:

	STORMWATER BASIN SEED MIX (AREA = 0.45 AC)
	EROSION CONTROL BLANKET WITH SEED (AREA = 1.65 AC)
	SOLAR ARRAY SEEDING / HAY MULCH EROSION CONTROL (AREA = 7.9 AC)