



SCS Dell 014136 Yorktown, LLC  
Sol Customer Solutions, LLC  
1101 Connecticut Ave NW, Second Floor  
Washington, DC 20036

September 21, 2022

Town of Yorktown Planning Board  
1974 Commerce St  
Yorktown Heights, NY 10598

## Dell Avenue Solar Farm Operations & Maintenance Plan

Preliminary Draft, **Revision #1** (updates in red)

SCOPE OF MAINTENANCE SERVICES – by maintenance provider to Sol Customer Solutions

<b>1. Monitoring, Reporting, &amp; Inventory</b>	<b>Frequency</b>
Configuration, Onboarding, & Training	Included
Active Site Monitoring (Remote)	Daily
DC Health Analysis	Monthly
Maintain Spare Parts	Included
Warranty Enforcement	Included

<b>2. Site Property Inspection/Maintenance</b>	<b>Frequency</b>
Site Host Relations	As necessary
Perimeter & Fence Inspection	Annually
Erosion Inspection	Annually
Site Security Systems Inspection	Annually
Signage & Labels Inspection	Annually
Vegetation Management	Refer to narrative at bottom
Panel Washing	TBD
Mid-Year Site Inspection	Included
On-Site Emergency Key Lock Box	Included

<b>3. DC Systems</b>	<b>Frequency</b>
Racking Inspections	As recommended by manufacturer
Ballast Blocks	If applicable
Module Inspections	Annually
Broken Module Replacement	As necessary
Wire Inspections	Annually
Combiner Box & Re-Combiner Inspections	If applicable
Combiner Box & Re-Combiner Torque Inspections	If applicable
DC Electrical Balance-of-System	Annually

<b>4. AC Systems</b>	<b>Frequency</b>
Inverters	As recommended by manufacturer
Inverter Air Filters & Transformer Heat Sinks	As recommended by manufacturer or Annually
AC Panelboards & Disconnects	Annually
Transformers	As recommended by manufacturer or Annually
AC Disconnect	Annually
Switchgear	Annually
AC Electrical Balance-of-System	Annually
MV Equipment	If applicable

<b>5. DAS/SCADA Inspections</b>	<b>Frequency</b>
General DAS Inspection	Annually
Sensor Verification	Annually
Pyranometers & Reference Cells	At least twice per year
Pyranometer Calibration	As recommended by manufacturer
Data/Instrument Accuracy & Communications Verification	As recommended by manufacturer

<b>6. Testing</b>	<b>Frequency</b>
Module Level Thermal Audits	Annually
Thermal Imaging	Annually
Transformer Oil Testing	If applicable
Point-to-Point Testing	Annually (5%)

<b>7. Corrective Maintenance</b>	<b>Frequency</b>
Remote Troubleshooting	Included
Remote Equipment Resets	Included
On-Site Troubleshooting, Repairs, Diagnostics	Included
On-Site Resets	Included
Corrective Maintenance	Included
Parts Procurement	TBD
Corrective Maintenance Exclusions	TBD



## VEGETATION MANAGEMENT – by maintenance provider to Sol Customer Solutions

For the Dell Avenue Solar Farm, Sol Systems recommends a mixture of native and naturalized grasses and legumes. Due to the site's shallow bedrock, moisture availability and retention will be limited. To support pollinator-friendly species, seed mixes such as or similar to Round Seed Panic Grass, Clover, Black Eyed Susan, and Birds Foot Trefoil are recommended. These grasses and flowers provide value to pollinators and stabilize the soil. Sol Systems will include pollinator-friendly plants in the mix and the final seed mix will be determined based on site conditions, timing of seeding, and availability of seeds.

Vegetation management of a pollinator-friendly site is accomplished through a combination of mowing and herbicide treatment. Long-term maintenance is performed by a vetted firm with conservation and ecology expertise on staff to assess on-site conditions and this same firm is typically that which first seeded the site during the construction phase. Typically, a site will be fully mowed several times in the first three years of growth. This technique, meant to mimic a prescribed burn on a meadow, limits the presence of invasive species while allowing for establishment of native species. Some targeted herbicide application may occur in these early years to manage specific invasive species. In later years, once vegetation is established, maintenance will focus on fewer, more targeted mowing events and some herbicide application. This will manage invasive species in the long term, while allowing the native / naturalized meadow to grow. Vegetation on solar sites is typically allowed to grow to the height of the leading edge of the solar module.

Sol Systems is also willing to explore additional benefits to the site such as the opportunity to add artificial or human-made nesting structures for bees and other pollinators to the perimeters of the site.

Attached is an example of a suitable seed mix to be considered for this site. **Once a seed mix is selected, an addendum to the Scope of Maintenance Services will be developed that covers the vegetation management services, including frequency of cutting/mowing.**

[Final selections are to be determined during detailed engineering design]



## Ernst Conservation Seeds

8884 Mercer Pike  
 Meadville, PA 16335  
 (800) 873-3321 Fax (814) 336-5191  
[www.ernstseed.com](http://www.ernstseed.com)

Date: March 21, 2021

### Fuzz & Buzz Mix - Standard - ERNMX-146

<b>Botanical Name</b>	<b>Common Name</b>
26.40 % <i>Lolium perenne</i> , 'Crave', Tetraploid	Perennial Ryegrass, 'Crave', Tetraploid
20.80 % <i>Dactylis glomerata</i> , 'Pennlate'	Orchardgrass, 'Pennlate'
18.90 % <i>Poa pratensis</i> , 'Ginger'	Kentucky Bluegrass, 'Ginger' (pasture type)
17.00 % <i>Festuca elatior</i> x <i>Lolium perenne</i> , Duo	Festulolium, 'Duo'
5.70 % <i>Trifolium hybridum</i>	Alsike Clover
4.80 % <i>Trifolium pratense</i> , Medium, Variety Not Stated	Red Clover, Medium, Variety Not Stated
2.00 % <i>Lotus corniculatus</i> , 'Leo'	Bird's Foot Trefoil, 'Leo'
1.30 % <i>Cichorium intybus</i>	Blue Chicory
1.00 % <i>Chrysanthemum leucanthemum</i>	Oxeye Daisy
0.90 % <i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis
0.80 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype
0.40 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype

**100.00 %**

**Seeding Rate:** Expect to apply about 40 lbs per acre with a cover crop of annual ryegrass 12 lbs/acre

Forage & Pasture Sites; Solar Sites

**EMERGENCY RESPONSE PLAN – to be finalized by EPC contractor on behalf of Sol Customer Solutions**

*Local Fire Department Training*

- The applicant will provide emergency response training to the local fire department and produce an electronic version of the training program, so that it can be utilized to train personnel in the future. The initial training will involve a site walkthrough with local fire department(s), the Town of Yorktown Fire Prevention Bureau, and the EPC (engineering-procurement-construction) contractor. It will occur at the end of the construction phase.

*Example of Emergency Response Plan*

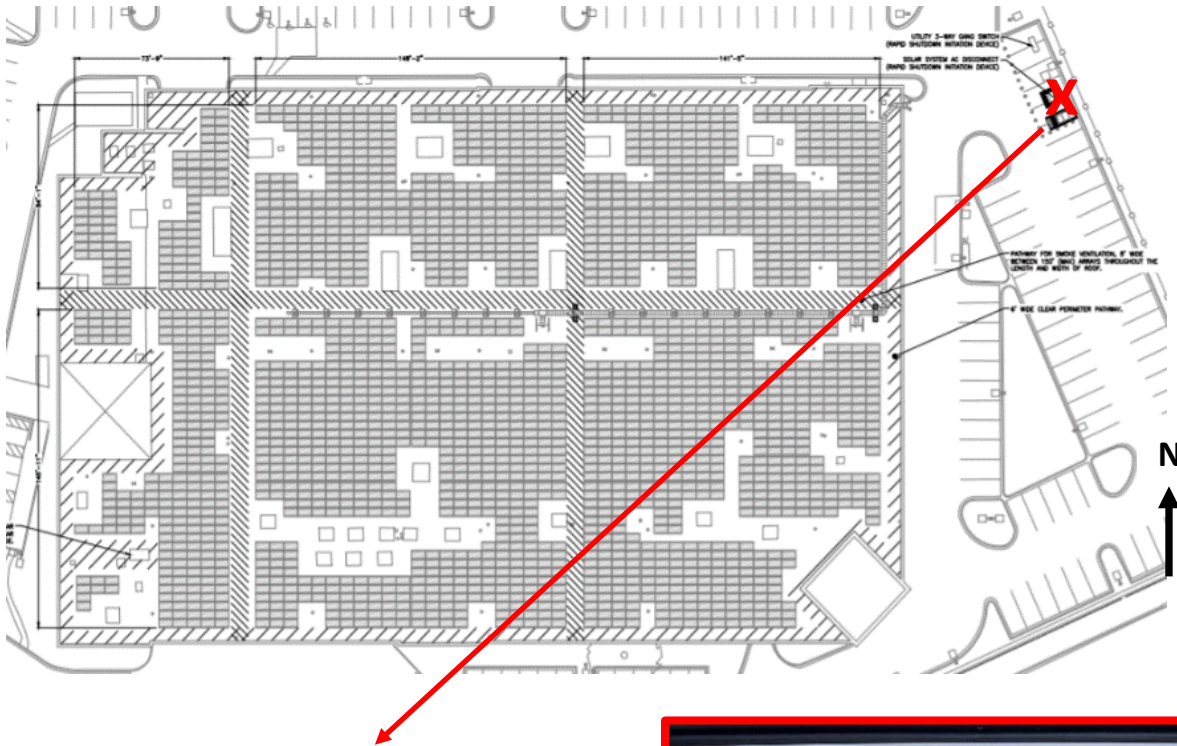
**Site Safety/Emergency Shutdown Procedure**

Call Sol Systems and/or O&M Provider for consultation.
If an immediate unsafe condition exists: CALL 911.
Walk to main AC electrical disconnect switch (noted on site plan as red X). <b>Cabinet lock combination is: 1234</b>
Follow instruction shown on the next page to shut down system.

*[Continues on next page]*



**Site Plan & Emergency Electrical Disconnect Panel Location**



**Cabinet lock combination is: 1234**