

Plainfield Zoning Board of Adjustment and Planning Board

August, 2017

53.3kW Array



- Would supply ~73,000 kWh per year net metered electrical power for Meriden Village Water District
- Construction would occur this year

Environmental



Estimated 30-year system generation:
~2,000,000 kWh

 Estimated CO2 avoided over 30-years of system operation: ~1,860,000 lbs. CO2

 Equivalent to carbon emissions from burning ~95,000 gallons of gasoline

3.8 Solar Energy Systems (SES)



- Application for Building permit for 53.3kW/AC (>7kW requiring ZBA special exemption hearing) ground mounted solar photovoltaic array on MVWD grounds.
- All ground mounted SES connected to commercial meter require site plan review by the Planning Board

August 2017

Application Requirements



- Names and addresses of the owners of the property where SES is proposed
- Abutter list
- Written description of the project
- Site map of the property and proposed facility design
- Visual analysis
- Decommissioning plan

Standards to be met



- Location: Minimize visual impact
- Fencing: Not required but may be deemed necessary by Town's boards
- Utilities: distribution lines should be underground if possible
- Approved solar components
- Utility Company Approval: Liberty Interconnection Application
- Decommissioning: Must provide provisions acceptable to the town that insure that the facility will be removed when no longer in use.

Names



Applicant:

Meriden Water Solar One, LLC For Meriden Village Water District

Abutters



PIERSON, NATHANIEL F. PO BOX 405 MERIDEN, NH 03770 LEGARE CATHERINE I GARFIELD LEGARE PETER L PO BOX 155 MERIDEN, NH 03770 PLAINFIELD SCHOOL DISTRICT 92 BONNER RD MERIDEN, NH 03770

SWARTS, JOHANNES & PERRY, HEATHER J PO BOX 36 PLAINFIELD, NH 03781 MERIDEN VILLAGE WATER DISTRICT C/O DONALD GARFIELD PO BOX 84 MERIDEN, NH 03770 RAMSEY, MARC C RAMSEY, JENNY L 64 BONNER ROAD MERIDEN, NH 03770

KIMBALL UNION ACADEMY, TEES OF PO BOX 188 MERIDEN, NH 03770

Description of Project



 53.3 kW/AC and 58.8 kW/DC ground-mounted solar array (<14ft height above ground) located adjacent to sewer treatment plant in Meriden. The Rural Residential site is buffered and screened on all sides by the 18 acre applicant owned parcel. Interconnection to the electrical grid and Liberty Utilities will be via MVWD's electrical service.

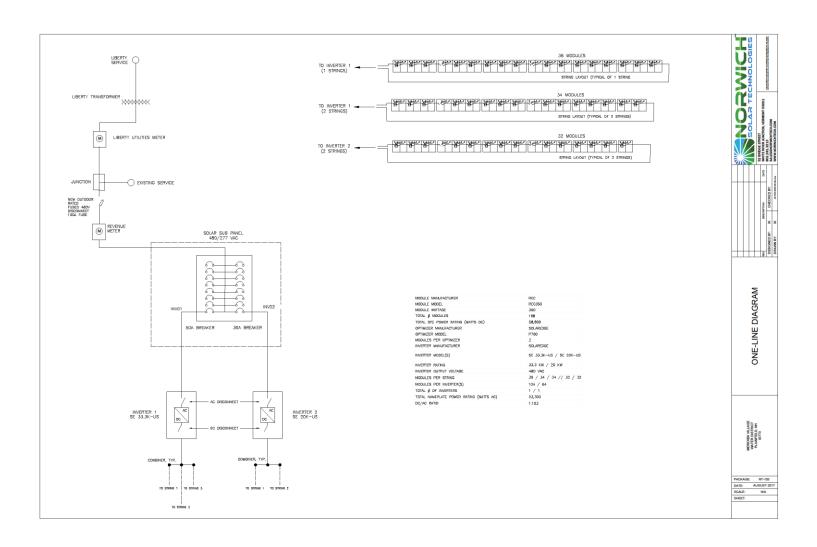
Site Plan





Electrical Diagram

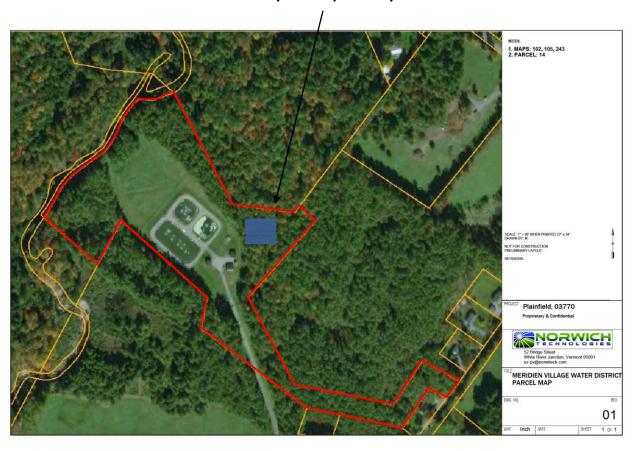




Visual Analysis



Solar array completely screened



Wiring-"Not readily accessible"



 Chain link fence similar to that existing around the water treatment plant will be extended to encompass the solar array.

Decommissioning Plan



- Remove modules
- Disassemble rack/cut aluminum
- Pull posts
- Remove electrical equipment and underground wires
- Recycle/dispose of materials
- Grade and seed areas of disturbance

THE END



• Questions?