4575 North Road Ground Mount Solar System – Community Solar Garden

Revised 9/10/2016

The proposed ground mount solar system is to be located at 4575 North Road, Town of Canandaigua, Tax Map #57.00-1-21.113 owned by Diane L, Eileen C, and Grace B Muller. The property is a 36 acre parcel in the AR-1 zoning district with an existing residence, horse barn, paddocks, old hay fields, overgrown scrub areas, wetlands, and a DEC protected stream.

The Community Solar Garden will have a maximum capacity of 1.98MW AC power generation and will be situated on approximately 10 acres of unused scrub areas with soil ratings classified as "Poor" and not used for agricultural activities. The array will be setback approximately 275 ft from North Road and over 400 ft from Andrews Road with proper setbacks and buffers from the property lines, public views, wetlands and protected stream. The system will connect to the existing power transmission lines at the NE corner of the site and North Road, where a gravel driveway will be located to access the power service and equipment. There will be a 6 ft. fence, with proper signage, around the AC power equipment for safety and security.

The solar array will consist of 12 ft. wide rows for approximately 3.3 acres with 18 feet of green space between the rows. The galvanized steel ground mount racking system will mount on driven steel piles with only 1200 sf of foundation area and minimal ground disturbance. The system will follow the existing grade contours and the 25 degree tilt of the panels will allow the rain and snow to runoff onto the existing vegetated ground and absorb into the ground as it does currently, meaning no increase in peak storm water runoff. The existing vegetation around the array will remain and be enhanced to further reduce runoff.

This relatively small, large scale solar system will be sited appropriately to blend harmoniously with the community landscape. With a maximum height of 8 1/2 feet, generous setbacks with buffers from the public views, and an open layout with vegetation between array rows, the system will be located on existing unused "Poor" soil areas currently supporting only overgrown scrub. While agricultural activities are essential to the community, the location selected has no productive agricultural use and other purposes are limited thereby making the location ideal for a Community Solar Garden.

The power lines will extend to the north edge of the solar array where a main switch, transformer, and six disconnects will be located on a small concrete pad and surrounded by a six ft. high fence. The underground power lines will connect to six AC panels and then to the 33 AC disconnects and inverters spread out among the array and to the 7,128 modules. The system will follow the new National Electric Code (NEC 2014).

The North Road Community Solar Garden will be designed to meet the state and local codes adhering to all special use permit submissions, reviews, and approvals. Compliance with NYSDEC storm water management and USACE federal wetland regulations is of great importance. The system will avoid both the wetlands to the east and west and be located beyond the 100 feet buffer from the protected stream. A wetlands delineation and updated survey has been done to identify and verify the locations of the wetlands. The proposed project will comply with all regulations and have no negative environmental impact.

This size Community Shared Solar Garden, though small enough to fit into the community landscape, will generate enough electricity by renewable sources to be used by about 300 local homes, apartments, farms, schools, and businesses. *All the electricity will be produced locally and used locally.*

Supporting Solar Energy and Community Shared Solar programs demonstrates support of local sustainability plans and efforts while improving the health and wellbeing of the community by making the community a cleaner, greener, more pleasant, attractive place for businesses and individuals to live, work and play.

I have a passion for sustainability and since my wife and family are the owners of the property I have an elevated interest, responsibility and commitment to make sure the development, construction, operations and maintenance are all done correctly to preserve and protect the property and community for future generations.

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