



Cortland County Soil and Water Conservation District

100 Grange Place, Room 202, Cortland, NY 13045
Phone: (607) 756-5991 • Fax: (607) 756-0029
www.cortlandswcd.org

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February 8, 2019

Bruce Weber, Planning and Zoning Officer
Town of Cortlandville
3577 Terrace Road
Cortland, NY 13045

Re: 6 sites, McLean Solar

Dear Mr. Weber:

We have conducted a preliminary assessment of six solar panel array sites proposed by McLean Solar and offer the following technical assessment to aid the Town Planning Board with regulatory determination relative to these sites under the Town of Cortlandville Stormwater Ordinance. The proposed projects would each include construction of an access road and installation of solar panel arrays and associated infrastructure.

As stated in our January 22, 2019 letter, our review is limited at this time to potential impacts associated with stormwater. Our assessment included review of materials provided by Paul Woodward of Keystone Associates, a brief visit to each site under winter (snowy) conditions and preliminary examination of mapped data.

Potential for stormwater issues such as erosion and sediment control and effective water quality and quantity management will depend on the details of each proposal. Solar panel arrays have significant potential for alteration of site hydrology and therefore opportunity for erosion even after installation is complete.

With respect to regulatory jurisdiction, we offer the following comments:

- At sites 3 and 5, because the disturbed area is estimated to be greater than 1 acre, completion of a SWPPP including water quality and quantity management appears to be required. Erosion and sediment control during construction and revegetation of all pervious area upon completion of construction will be essential at these sites.
- At sites 1, 2, 4 and 6, disturbed area is estimated to be less than 1 acre. However, depending on construction details, actual area disturbed may be greater than estimated. Importantly, whether the solar panel arrays should be considered pervious or impervious surfaces is unclear. To be exempted from the Town's Stormwater Ordinance, a project must disturb less than 1 acre, result in less than 10,000 square feet of impervious surface

and result in a total impervious surface of less than 35% of the total post-development area. Depending on design details, all of these sites have the potential to concentrate flow and greatly reduce the area available for stormwater infiltration relative to the area receiving rainfall. Functionally this results in altered hydrology, increased area that is not available for infiltration and increased potential for erosion. Given the uncertainties associated with project design and effects on stormwater and water quality, it is unclear whether the total and percent impervious surface area requirements for SWPPP exemption have been met.

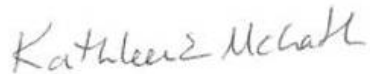
For these reasons, we recommend that, at a minimum, a “basic” SWPPP as described in §178-92E for erosion and sediment control be required for these sites.

For all six sites, we recommend that site inspections, vegetation maintenance and problem area remediation be required and that the Town retain the right to require installation of permanent water quantity and/or quality facilities designed by a stormwater professional at any site if problems are evidenced that cannot be resolved by short-term maintenance.

Solar panel array installation is relatively new in New York and relatively little information is available regarding effects on hydrology and water quality. In order to ensure that these projects are successful and acceptable to the general public and that unacceptable erosion does not occur, careful scrutiny of these projects is essential.

Please call me at 756-5991 if you have any questions.

Sincerely,



Kathleen E. McGrath
Water Quality Specialist

Cc: Katherine Wickwire, Cortlandville Planning Board
Amanda Barber, Cortland SWCD