



VIA EMAIL  
December 3, 2021

Town of Alfred  
Attention: Janice Burdick  
Town Clerk  
Box 230  
6340 Shaw Road  
Alfred Station, NY 14803  
town.alfred@gmail.com

Re: Request for Additional Information – Special Use Permit and Site Plan Review Application  
Proposed 5568 Jericho Hill Road Solar Farm Project (Second Review)  
Town of Alfred, Allegany County, New York

Dear Ms. Burdick:

At the Town of Alfred Town Board meeting on Thursday November 11, 2021, and through correspondence received after the meeting, your reviewing engineer, Labella, requested additional information on the proposed Jericho Hill Road Solar Project to the Town Board. Comments received from Labella in their correspondence dated November 23, 2021 are included below, along with our responses:

Memorandum dated November 23, 2021:

**1. C004 Site Plan (Now C005)**

- a.) ***"The dimension has been added. We defer to the emergency response officials to provide feedback on the 19 feet provided between modules and fence."***
- b.) ***"The gate width is called out as 24 feet. The road alignment has a significant radius south of the gate. The Applicant must ensure that the emergency response equipment to be used at the site can adequately clear the gate immediately following the turn."***

**Response:**

- a.) Noted.
- b.) An Emergency Vehicle Entrance Plan has been added to the plans to illustrate the adequate vehicle clearance along the proposed driveway radius. Please see sheet C008 for detail.

**2. C008 Grading Plan Details (Now C009 and C012, Details II)**

- a.) ***"A detail was added for access roads steeper than 10% on C012. We note that the NYSDEC approved road design includes an annotation that the road section be 8-inches minimum thickness. The specified road slope per the approved DEC detail is 2%, whereas the proposed plan detail shows 1.5%. The slope also appears to be annotated the opposite direction as expected for drainage. The Applicant shall review and edit as necessary."***

**Response:**

- a.) The pervious road detail has been updated to reflect the NYSDEC approved road design standards.



**3. Landscape Plan (Suggested-Not in Plan Set) (Now C010)**

- a.) *"A Landscape Plan has been added and is consistent with the recommendations made previously by LaBella. We defer to the Town for final approval of the proposed screening."*

**Response:**

- a.) Noted.

**4. Stormwater Pollution Prevention Plan (SWPPP)**

- a.) *"The response letter indicates that a formal phasing plan will be provided. We will complete a review when available."*
- b.) *"We note further that the limited use pervious access road is not intended to be used during construction (as included in Note #9 on current plan sheet C012). The Applicant should indicate the proposed road section to be used during construction. We note that the Sequence of Major Construction addresses the use of deep ripping/de-compaction techniques to address the soil restoration associated with the road, as described in Note #9."*
- c.) *"A grass filter strip is shown overlapping with a panel location. Per NYSDEC guidance, filter strips cannot be used (for credit) under a panel. The Applicant should revise accordingly."*
- d.) *"A revised SWPPP has not been provided for review, therefore, this cannot be verified at this time."*

**Response:**

- a.) Noted.
- b.) A temporary construction driveway detail has been added to the plans. In addition, the sequence of construction has been updated to provide reference to the detail mentioned above. Please see sheet C001 and C015 for detail.
- c.) The location of the grass filter strip has been adjusted to meet NYSDEC guidance.
- d.) A revised SWPPP is enclosed.

**5. New Comments:**

- a.) *"Per the Fire Code of New York State, fire access apparatus roads shall be provided, and shall extend to within 150 feet of all portions of the facility (panels). The Applicant should consider extending the roadway the full width (east to west) of the array to provide access. We defer to the Fire Code Official's interpretation of the Fire Code."*
- b.) *"Per the Fire Code of New York State, the road surface shall be designed to support the load of the emergency response equipment to be used. The local emergency management services should be involved in determining the appropriate load capacity, which may consider a vehicle with maximum gross weight of  $\pm 75,000$  pounds. We defer to the Fire Code Official's interpretation of the Fire Code."*
- c.) *"For the Board's reference, the New York State Department of Environmental Conservation (NYSDEC) has provided specific guidance related to stormwater management at solar facilities (Solar Panel Construction Stormwater Permitting/SWPPP Guidance, memo dated April 8, 2018)."*
- *Notably, the NYSDEC does not interpret the panels to act as impervious surfaces if the surface below the panels is vegetated and adequate space is available between the panels for runoff to sheet flow across the ground surface.*
  - *The Applicant must still prove that hydrology is not altered. The NYSDEC defines altering hydrology as:*



***“Alter Hydrology from Pre to Post-Development Conditions - means the post development peak flow rate(s) has increased by more than 5% of the pre developed condition for the design storm of interest (e.g. 10 yr and 100 yr)”.***

- ***The comparison from pre- to post-development is completed using modeling software (in this case, HydroCAD, which is commonly used) which compares the change in “cover type”, demonstrated by “curve number (CN)” (ie the ground surface – woods, pavement, etc), as well as a “time of concentration” flow path through each designated drainage area.***
  - I. ***The modeling is included within the Project SWPPP.***
  - II. ***Note that the DEC requires pre-development agricultural uses to be defined as “meadow”.***
  - III. ***For the soils present at the site, the “curve number” or CN for meadow is 77 and the value for woods is 78. By comparison, a compacted gravel surface has a CN of 96 and in provided SWPPP, the limited use road is assigned a CN of 75.***
  - IV. ***A comparison of the weighted average CN for the drainage areas from pre-development to post-development shows no difference between the two in this project.***
  - V. ***The pervious area for Drainage Area DA-A (pre) to DA-1 (post) appears to change from 96.85% to 96.52%. Drainage Area DA-B (pre) to DA-2 (post) appears to change from 99.39% to 99.29%***
  - VI. ***Therefore, without the cover type changing noticeably, and no change in flow path, the peak flows and the volumes for various design storms do not change significantly from pre- to post-development, meeting the DEC’s criteria for not altering hydrology. Therefore, water “quantity” controls to attenuate the peak flow from pre- to post-construction do not appear necessary.***
- ***Newly constructed impervious surfaces such as the inverter (on concrete pad) requires post-construction stormwater management controls. The Applicant has provided a grass filter strip as water quality treatment for this concrete pad. As noted in this review letter, the grass filter strip cannot be located under a panel and must be revised, but the use of a grass filter strip is an appropriate technique.***
- ***We request that the Applicant provide discussion in the SWPPP regarding the development of the CN value of 75 for the limited use pervious access road.”***

**Response:**

- a.) Noted.
- b.) Noted.
- c.) See below:
  - Noted.
  - Noted
  - Noted
  - As previously mentioned, the location of the proposed grass filter strip has been adjusted to follow the guidelines set forth in the NYSDEC Solar Panel Construction Stormwater Permitting/SWPPP Guidance, memo dated April 8, 2018.



- Further detail has been provided in the Stormwater Management Report (Appendix T) of the attached SWPPP to indicate the development of the CN value associated with the limited use pervious access driveway.

In addition, despite reassurance from the Town's consultant that stormwater and runoff items had been adequately addressed, additional concerns were expressed at the November 11, 2021 Town Board meeting with respect increased runoff caused by the solar panels. To further help alleviate these concerns, we have included the addition of level spreaders in the enclosed revised site plan set, which are proposed to be installed along the downslope edge of each row of solar panels to maintain sheet flow and to reduce possible erosion and runoff throughout the project site.

Please feel free to contact me at 518-588-8270 or via email at [dplante@bergmannpc.com](mailto:dplante@bergmannpc.com) in the event you have questions or need additional information with respect to this Project.

Sincerely,

**David J. Plante, AICP CEP**  
Energy + Environment Practice Leader, BERGMANN

Cc: Peter Dolgos, Alyssa Nielsen, Dan Compitello (DRS – New York, NY)  
Eric Redding, PE, Kathleen Connolly (Bergmann)  
Dwight Kanyuck, Esq. (Knauf Shaw, LLP)  
Sean Grasby (Town of Alfred Code Enforcement Officer)  
Kathy Spencer (LaBella)