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August 09, 2024

Town of Marlborough
Planning Board
21 Milton Turnpike, Suite 200
Milton, NY 12547

Attn: Chris Brand, Planning Board Chair

**RE: ELP MARLBOROUGH SOLAR
335 BINGHAM ROAD, TOWN OF MARLBOROUGH, NEW YORK
TAX MAP ID: 108.3-3-21
TECHNICAL REVIEW COMMENTS – RESPONSE LETTER #2
C&A # 4996.26**

Dear Chair Brand:

Thank you for your time and attention at the July 15, 2024, Planning Board meeting in relation to the Site Plan Review Application that was submitted for ELP Marlborough Solar, located at 335 Bingham Road. Crawford & Associates Engineering (C&A) is in receipt of a comment letter dated July 15, 2024 from the Town's consultant, Patrick J. Hines, MHE Engineering, D.P.C. We have reviewed the comments from MHE and offer responses herein for the Board's consideration. Please see original comments from MHE below in **bold**, C&A responses in *italics*.

- 1. The applicants have submitted the interconnection agreement between the project and the publicly owned utility. Review of this document should be received from the Planning Board Attorney.**

Comment noted. Feedback from the Planning Board Attorney has not yet been received.

- 2. A Stormwater Pollution Prevention Plan must be prepared for the project. It is identified that only an Erosion and Sediment Control Plan will be prepared for the project. Based on this office's experience with solar projects, a site specific SWPPP containing both water quantity and water quality control should be implemented on the project.**

It is anticipated that an Erosion & Sediment Control Only SWPPP will be required and a SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-20-001, will be obtained prior to issue of Building Permit and commencement of construction. The Applicant has provided a draft SWPPP to the Board for review and comment. In our extensive experience (+100 MW) with solar installations in the Hudson Valley, water quantity controls are not necessary, and water quality is controlled inherently by the dense vegetated landscape.

3. The proposed solar array must follow the NYSDEC Solar Panel Guidance and the Maryland Department of Environmental Stormwater Design Guidance for solar installations. (As required by the NYSDEC) the proposed solar panels are not parallel to the contours as identified in the response letter. The response letter states that the panels are generally parallel to the contours. Review of the site plan shows solar arrays not parallel to the contours.

Our office has been in contact with Patrick J. Hines of MHE Engineering to discuss this comment in further detail to reach a solution which will resolve any concerns. The NYSDEC memo states that "For solar panels constructed on slopes, the individual rows of solar panels are generally installed along the contour so rainwater sheet flows down slope." Accordingly, in our experience, the NYSDEC's adopted guidance allows for reasonable flexibility. It is often impractical for an array to exactly run parallel to the contours and the project still effectively meets the criteria. We are also happy to discuss other additional erosion and sediment controls with the Town Engineer.

4. The Maryland Department of Environmental Stormwater Guidance for Solar Installations requires additional erosion and sediment control for projects greater than 5-10% and greater than 10% slopes. This document should be evaluated with regards to stormwater management on the site.

Our office has been in contact with Patrick J. Hines of MHE Engineering to discuss the referenced Maryland Department of the Environment document in further detail and to discuss any additional erosion and sediment controls for this project that might be necessary.

5. A decommissioning cost estimate has been provided.

Comment noted.

6. The slope analysis identifies large areas of slopes between 10 and 15% within the solar array areas.

Comment noted. The array has been designed to avoid steep slopes to the maximum extent possible. Areas over 15% have been totally avoided, while areas between 10 and 15% are used sparingly. Our experience has shown that development of dense vegetation mitigates any issues with slopes up to 15%. Please refer to the slope analysis submitted to the Board on July 3rd.

7. The applicants have provided a glare study as required by the Town Code. The glare study identifies periods of glare occurring at three of the monitored locations. This glare would be for approximately 15-20 minutes at specified times of the day. The glare study identifies that the landscaping plan will serve to mitigate instances of glare.

Comment noted.

8. A landscape plan prepared by Hubbard Land Design has been submitted. The landscape design identifies numerous orchard trees to remain. The landscape plan is supplemented with evergreen species and small shrubs. The plant list should contain the number of each species proposed to be planted. It is noted that the evergreen trees proposed to be planted are 4-5 feet in height. This height appears short based on the ability of the plants to provide screening. The landscape screening is proposed along the northerly property lines and easterly property lines in the vicinity of the neighboring houses.

We typically plant screening at this initial height to best ensure successful long term plant growth and survival. The proposed evergreen trees are expected to grow to 6-8 feet tall in the first year and will reach a height of 25 feet tall when mature, as noted in the Visual Analysis submission.

9. It is unclear if the proposed orchard trees to remain are to be maintained. Issues regarding lack of maintenance of orchard trees can cause pest and disease issues with nearby orchards. In addition, unpruned orchard trees often become unsightly. The Planning Board should discuss the use of the orchard trees and the operation and maintenance of the orchards.

Orchard trees used for screening purposes will be maintained by the owner of the project and will be kept pruned and disease free as necessary to maintain the health of the trees, per the O&M plan. Orchard trees outside the project lease area are not under the control of the applicant.

10. Continued coordination with the Jurisdictional Emergency Services should be undertaken. A signoff or comment letter from the emergency services should be provided to the Planning Board.

Comment noted. The applicant has been in contact with the Marlborough Fire Department per our previous comment response letter dated 7/3/2024. The applicant will continue to coordinate with the Marlborough Fire Department as needed.

11. The plans should be submitted to Ulster County Planning based on the recent resubmission. A 239 review should also be submitted to the Town of Newburgh due to proximity to the municipal boundary.

Comment noted. Please confirm that the Town is taking the lead on this submittal or if any support is required from the Applicant.

12. Input from the Planning Board regarding the line of sight drawings regarding visual impacts to the project should be addressed. The applicants have identified that rendering/visual simulations will be provided to the Board for review as requested.

Please see enclosed visual renderings for three observation points along Bingham Road as requested.

13. A no effect finding letter has been received from the Office of Parks, Recreation and Historic Preservation

Comment noted.

If you have any questions regarding the information above, please feel free to contact me at (518) 828-2700 x1138.

Sincerely,
Crawford & Associates
Engineering & Land Surveying, P.C.



Christopher J. Knox, PE
Project Manager II

Cc: Chris Brand, Planning Board Chair (cbrand@marlboroughny.us)
Jen Flynn, Planning Board Secretary (marlboroughplanning@marlboroughny.us)

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