March 2, 2020
VIA EMAIL AND MAIL

Frank H. Alessandrini, Chairman
Town of Schaghticoke Planning Board
290 Northline Drive
Melrose, NY 12121

RE: Initial Plan Review
Viall Solar-Stillwater Renewables
Town of Schaghticoke, New York

Dear Chairman Alessandrini:

Our initial plan review of the proposed Viall Solar Project (Stillwater Renewables) located on Stillwater Bridge Road, Tax Map ID# 22.-1-7.1 is based upon the following documents received:

- Application to the Schaghticoke Planning Board for Site Plan Review & Special Use Permit, dated 09/24/19;
- Full Environmental Assessment Form Part 1, dated 09/25/19;
- Agricultural Data Statement;
- Stormwater Pollution Prevention Plan with an issue date of 10/2019;
- Nexamp Solar O&M Overview, dated 09/2019;
- Nexamp Decommissioning Plan, no date; and
- Stillwater Renewables 3000 kW-AC Solar Project Plans, dated 09/06/2019.

We note that the project is a 4.5 MW DC solar farm on a 140 acre parcel with 16 acres of ground disturbance with 0.9 acres of new impervious surfaces. As such, this project is a Type I action under SEQR due to the physical alteration of greater than 10 acres. Supplemental information to the Full EAF should be submitted as follows:

1. A visual assessment report that includes a glare assessment and photos from the following vantage points:
    a. Intersection of Casey Road and Route 40;
    b. Intersection of Route 40 and Stillwater Bridge Road;
    c. At Stillwater Bridge Road and the entrance to the facility/point of connection;
    d. Stillwater Bridge Road at the Fairgrounds entrance; and
    e. Verbeck Avenue north of Stillwater Bridge Road 2,500 ft.
2. Cross section showing the proposed site lines from the locations indicated above should be submitted.
3. The point of connection, equipment, and any required utility poles, towers, battery storage, etc. should be shown at 1"=30' scale or greater. These may require additional vegetative screening.

4. The EAF indicates that there will be no noise above ambient levels. The applicant should provide documentation to substantiate this statement by identifying any noise producing equipment and submitting details regarding the noise generated by each piece of equipment and the facility as a whole.
5. The applicant should provide the results of consultation with the NYS Office of Parks and Recreation and Historic Preservation (NYS OPRHP) regarding potential impact to archaeologically sensitive areas on the site that includes the proposed area of impact. OPRHP must provide documentation that the project will not result in an impact to a historic/archeologically significant site. This documentation must be included in the project SWPPP prior to MS4 acceptance.
6. The applicant should confirm that there will be no site lighting on the project. If there will be lighting a photometric lighting plan will be required.
7. Since the project is located in the Rensselaer Co. 2015 Agricultural and Farmland Protection plan area the EAF should list the NYS Ag & Markets Agency in Part 1.B.
8. Since there is a possibility for the northern long-eared bat to utilized existing trees for roosting, the plans and the SWPPP should specifically state that tree removal shall be limited to between October 1 and March 30 in order to avoid taking a protected species.
9. The applicant should confirm the preliminary wetlands delineation with the USACOE and NYSDEC and provide the Jurisdictional Determination results for review. The project as currently proposed appears not to impact these resources. The JD will be required prior to further action on SEQRA.
10. The project should provide the stream crossing plan and details for review.
11. The applicant is proposing a 15 foot wide access road with portions that have a road grade in excess of 10 percent. Further, the proposed access also proposes a single turnaround within the gated portion of the facility at the end of the approximately 2,000 foot long road. However, the International Fire Code requires a width of not less than 20 feet exclusive of shoulders and the grade of the fire apparatus access road to be within limits established by the Fire Code Official based on the fire department's apparatus. Therefore the applicant should confirm with the Fire Code Official and the fire department the following that:
    a. A minimum of a 20 foot wide road is required due to the length of the road;
    b. A the single turn-around is adequate as proposed or that an additional turn-around should be provided outside of the facility enclosure;
    c. The access road grade is acceptable as the road is indicated to be up to a 12% grade in two separate locations.
12. The Applicant should submit a Coordinated Electrical System Impact Review (CESIR) that indicates the interconnection is feasible and specifies the required upgrades to the Electrical Power System (EPS). The extent of upgrades should be summarized and further detailed as to type and location so the impact of the improvements can be reviewed.
13. A copy of the lease agreement should be submitted for review and the lease parcel should be identified on the plans.
14. The following will be required during the construction and life of the facility:

a. Surety for construction and maintenance along with acceptable construction cost estimate;

b. Surety for removal; and

c. Documentation, every 5-year from the utility company that the facility is active. At which time the Board shall adjust the surety previously established.

15. Perimeter fencing is required to be 8 ½ feet high, the applicant should revise the fence details to indicate the required height.

16. The plans and details should indicate if security monitoring systems such as cameras and poles are to be utilized.

17. Details of the PV panel mounting and other equipment should be provide for further review. These details should clearly state the maximum height of the installations, the array configuration, foundation variations, etc.

18. Since areas will become compacted from construction activity which will alter site hydrology, a note should be added to the plans that requires all areas within the limits of disturbance (excluding new impervious areas) to be restored prior establishment of a meadow cover. The restoration specified should be in accordance with the NYS DEC Stormwater Design manual for soil restoration & "Deep-Ripping and De-compaction" document.

19. Likewise, the Decommissioning plan, should include full site restoration as noted above and include the recommendations of NYS Department of Agriculture and Markets "Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands".

20. In the event that the Town must assume decommissioning, it is unlikely that there will be any salvage value for the equipment available to the Town. Further, since it is also highly speculative to estimate a future salvage value and that a market for the equipment will exist; the estimate of the required decommissioning surety should be revised to exclude the credit for salvage.

21. The plans include a gravel road section detail that would indicate the construction of an impervious surface. The applicant should consider utilizing the NYS DEC approved limited use pervious access road details in place of the gravel road detail shown on the plans.

SWPPP COMMENTS

22. The executive summary and other parts of the SWPPP should be revised to reference the new construction general permit GP-0-20-001 with the effective date of January 29, 2020 and expiration date of January 28, 2025. This includes providing the current permit in the appendix.

23. The Project Description of the SWPPP references Appendix J as including the NYS DEC memo on solar panel arrays relative to stormwater management. However Appendix J contains the post development stormwater analysis.

24. The SWPPP should be revised to note that the entire Town has been self-designated as an MS4 beyond the automatically designated urbanized areas and that the project is regulated under the MS4. Further, the SWPPP Appendix B should include the MS4 Acceptance form required for filing a NOI.

25. The SWPPP section 2.0 first paragraph does not appear to be applicable and should be deleted.

26. The SWPPP should include the use of permanent rock check dams to slow channelized runoff and reduce erosion potential.

27. The location of the SWPPP referenced permanent turf reinforcement mats should be shown on the plans.
28. The SWPPP section 6.6.3 Description of Design Points should be completed by replacing the "xx" acres with project specifics.
29. The SWPPP section 6.6.4 references a Table 9 for a summary of the stormwater modeling results for both pre and post development conditions, however no Table 9 is found. A Table 7 is provided that indicates stormwater runoff rate increases from pre to post. It is recommended to provide a summary table that indicates the pre, post and post mitigated stormwater runoff rates that reflect the analysis provided.
30. The SWPPP stormwater analysis should add additional analysis points for consideration of the project's impacts. The DP1 analysis point should be retained and two additional points added in proximity to the two stormwater management facilities.
31. The SWPPP section 6.6.6 performance summary should be updated upon the completion of the revised stormwater analysis.
32. Question 9 of the Notice of Intent (NOI) should also indicate federal wetlands are onsite.
33. Question 29 of the NOI should be completed.
34. Question 36 regarding stream channel protection volume (Cp_v) is incomplete and is referenced to question 39 of the NOI. Per the NYS Stormwater Management Design Manual (Design Manual), the project is not exempt from this requirement.
35. Sheet SP1, the Line Table & Curve Table should also be identified as the lease boundary. This boundary should be adjusted to include the bioretention areas. The lease boundary should also be indicated on the other site drawings.
36. A table demonstrating the proposed site coverage should be included on the plans with items making up the coverage indicated.
37. Sheet C-130 should include the limits of the stormwater management facilities and the proposed lease and easement lines.
38. The proposed project should demonstrate and provide additional construction details and stormwater management "micro-scale practices" to provide stormwater management in accordance with the NYS DEC memo on solar panel arrays relative to stormwater management. This includes but is not limited to the following:
    a. Demonstration that the vegetated area receiving runoff is equal to or greater in length than the disconnected surface (e.g., width of the row of solar panels);
    b. Designs and details for disconnections:
        i. Where arrays will not be "...generally installed along the contour so rain water sheet flows down slope";
        ii. On slopes steeper than 5%, utilizing level spreaders, terraces, or berms;
        iii. On slopes greater than 10%, an engineered plan that ensures adequate treatment and the safe and non-erosive conveyance of runoff to the property line or downstream stormwater management practice; and

c. Designation of areas to be restored or of area restricted to construction equipment to in order to maintain undisturbed soils and or to minimize disturbance and compaction of areas used for disconnection during installation of the solar panels.

39. Construction details for the stormwater management systems should be provided on the plans and include sections with proposed grade elevations, design water stormwater levels indicated, depth to groundwater, etc.

40. The stormwater management practices should be provided with signage in accordance with the Design manual.

41. Design calculations for the vegetative swales should be presented for review that demonstrate capacity and resistance to erosion. Intermediate permanent stone checks are recommended along the length of these swales.

42. The stone lined apron detail provided on the plans is not applicable to the diversion swales. Therefore, supporting calculations and construction details should be provided for the design of the stone lined apron for diversion swales.

43. In addition to the use of stone lined aprons for the erosion control at swale terminus, the use of flow diffusers/flow spreaders should be considered.

44. The use of water bars along the gravel road should be considered as a permanent practice to limit the accumulation of erosive velocity.

45. Since the area of disturbance will exceed 5 acres a project phasing plan should be provided. If a waiver of the 5 acres is proposed this request should be made in writing to the Town and the SWPPP & plans revised to indicate the additional inspection required per the General Permit GP-0-20-001.

The applicant should submit the required/requested information for further review. Please contact our office with any questions or comments on the above.

Very truly yours,
LABERGE GROUP

By: 

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Project Manager

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