

MATRIX DEVELOPMENT, LLC

153 Mercer Street, #4
New York, New York 10012



December 13th, 2021

Attn: Mayor Pugh
Croton-On-Hudson Planning Board
1 Van Wyck Street
Croton-on-Hudson, NY 10520

RE: Chazen 12-1-2021 HNGC/Matrix Development – Solar Project - Engineering Review

Dear Mayor Pugh,

In response to Chazen Companies recent engineering review dated 12-1-2021 the following responses have been prepared.

COMMENTS ON ADDITIONAL ENVIRONMENTAL MATERIALS

7. Mega Pack Datasheet

- a. Does inclusion of this specification indicate the applicant's intent to provide energy storage as part of this application?

Matrix: Yes. The energy storage system concrete slab is included in the October 15th 2021 submission and reviewed by Chazen prior to December 1, 2021 memorandum. Energy Storage was recommended by the Planning Board prior to the issuance of the referral to the Village Board of Trustees and is being utilized on Village related solar project at the train station. Energy Storage is a huge benefit to the community as the transportation sector converts to electric motors and peak power demands increase when solar generation is either not operating or not at its peak capacity.

8. Decommissioning Plan – Prickly Pear Solar, LLC – 11-23-2021

- a. If energy storage systems are installed in the future, the decommissioning plan should be modified to include discussion of the removal of energy storage devices. We suggest making this a condition of the approval.
- b. Section 2.3 refers to removal of gravel access roads, but the proposed plans indicate the access roads will be grass. It is expected that this section could, therefore, be removed.
- c. Section 2.5 should be modified to include cost of removing the energy storage systems and to remove the costs associated with the access paths.

Matrix: The Decommissioning Plan Dated 12/13/2021 has been updated to reflect the decommissioning of the energy storage system and planned grass access roads.

9. Matrix Response – Chazen 11-22-21 Public Comment; 10-29-21 Eng Review

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- a. To the response about contacting the fire department, it appears the applicant has attempted to reach the fire department but has been unsuccessful. Perhaps the Village could send a correspondence? The fire department should have an opportunity to weigh in. This should be a condition of site plan approval.

Matrix: Mr. Doud met with Assistant Chief Karpoff on December 6th, 2021 at the Hudson National Golf Course to review the proposed solar project. Our discussion covered an assortment of topics including, engagement protocols, access, slopes, firefighting methodologies, and post construction support coordination. As requested by Chief Karpoff, proposed equipment datasheets have been emailed to him the following day. Datasheets provided include Trina solar panels, Tesla energy storage system, Terrasmart racking drawing and site plan. Chief Karpoff agreed to provide the Village a letter documenting his review of the project.

COMMENTS ON REVISED PLANS (both the 7-sheet set and the 3-sheet set)

2. We suggest adding the jute mats as a “permanent” stormwater device to be inspected annually and replaced as needed.

3. Please provide a detail of the temporary diversion paths.

Matrix: Site Plan has been revised as requested. See Ralph Mastromonaco’s 12-13-2021 response letter.

4. It appears that a new 15” CMP culvert is proposed for the driveway to Lands N/F of Reilly. What is the intent with the existing drain inlet along this driveway? Matrix: Site Plan has been revised as requested. See Ralph Mastromonaco’s 12-13-2021 response letter.

5. It appears there is a typo in the label for the electrical distribution and inverter pad. It is assumed the height is 8” and not 8’. Please confirm. Detailed designs of the slabs shall be provided prior to issuance of a building permit.

Matrix: Site Plan has been revised as requested.

6. The rain garden detail should be corrected to note that the 1,200 s.f. to be captured and treated is not all impervious. The plans indicate that roughly 400 s.f. of impervious drain to the rain garden, with the remainder presumed to be lawn or some other pervious surface. Per NYSDEC, the total allowable impervious inflow to rain gardens is 1,000 s.f. The detail should also be modified to comply with the soil mixture provided in the NYSDEC design manual. The average organic content should be 5%, not 20-30% as stated. Lastly, please indicate the daylight location of the overflow structure on the plan. Matrix: Plans have been revised accordingly.

Matrix: See Ralph Mastromonaco’s 12-13-2021 response letter.

7. Rain garden maintenance should include weeding, mulching, pruning/trimming of plants, and replacement of plants as needed.

Matrix: Hudson National golf course staff to maintain stormwater control measures as indicated.

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8. Soil tests to confirm feasibility of the rain garden design shall be performed and the results provided.

Matrix: See Ralph Mastromonaco's 12-13-2021 response letter.

COMMENTS ON TIM MILLER ASSOCIATES, INC. RESPONSE TO CHAZEN MEMO

Matrix: See Tim Miller Associates response letter dated 12-10-2021.

COMMENTS ON DRAINAGE COMPUTATIONS (included in "Response to Chazen Memo of October 29, 2021")

Matrix: Additional review of the Site Plan will be completed by the planning board. We respectfully request that Matrix is allowed to update the HydroCad model as a condition of approval.

Regards,

A handwritten signature in black ink, appearing to read "Michael Doud", written in a cursive style.

Michael Doud
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