



**OFFICE OF THE
PLANNING BOARD**

TOWN HALL, 511 MAIN STREET
DUNSTABLE, MA 01827-1313
(978) 649-4514 FAX (978) 649-8893
<mailto:Planning@dunstable-ma.gov>

**Planning Board Minutes
Monday, October 2, 2023**

Approved: **October 16, 2023**

At 6:30pm, Chair Jeff Pallis, called the meeting to order.

Members present: Alan Chaney, Joan Simmons, Joe VLcek and Jim Wilkie

Members absent: *none*

Meeting held: At the Dunstable Town Hall, 511 Main Street, lower level

Meeting Minutes – September 18, 2023

Joe made a motion to approve the minutes of the September 18th meeting with a correction. Jim 2nd the motion. – Motion passed unanimously.

Bills and Payroll

No Bills.

Alan made a motion to sign off on payroll. Joe 2nd the motion. – Motion passed unanimously.

Special Permit Site Review Public Hearing– 116 Thorndike St., NE Clean Energy/James Russell

Jeff opened the Public Hearing at 6:35pm with Clerk Jim's reading of the Public Notice.

In attendance were applicants, NE Clean Energy's, Evan Vana and Mark Durrenberger along with property owner, James Russell, and Town Engineer/Hoyle Tanner, David Langlais.

Evan presented a summary of the project describing it as a relatively small ground mounted solar array with three racks of 16 panels each, totaling 48 panels. The panels are mounted at 35 degrees in a portrait orientation (2 up). Each rack is approximately 26' long and approximately 11' front to back. The highest point on the rack is 10'4" and



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the front of the racks are roughly 3' off the ground. The double rack will be 52' long by 11' width. The array location is to the east of the driveway as you drive up the hill, below the house. It will be 30' from property lines. An approximate 300' trench from the array will be cut back to the house to hold conduit. There will be no other disturbance to the soil and no fill will be needed. It is expected that whatever natural growth returns under the array will retain the soils.

The rack rests on 2'x2' galvanized steel plate feet. Each rack has feet on the end and in the middle to provide support. Cable earth anchors secure the array to the ground to prevent any movement due to wind.

Jeff inquired about any ability to see the array from Thorndike Street. There is a possibility to see the array from neighboring driveway approaches.

Joe inquired about the ground pitch of the panels, and any water runoff. Evan responded it will pitch a little to the east and south. Owner James noted there is a considerable distance from the array location. He noted when the hill was originally developed, a drainage catch basin system was installed by the Dumont family to divert rain run-off for the entire area. This array will have a ~1000 s.f. of ground coverage and virtually no effect of water run-off.

Joan asked about the total kilowatts of this system. Evan responded that the 48-panel system would generate 19.2 kWdc, which he considered a small system. She noted the town's rules and regulations indicated a 10kWdc system was considered small. Engineer David commented that the state provides guidance to help towns define it themselves. Evan noted that advances in solar panel technology have improved significantly in recent years. When updates to the bylaws were made six years ago this size panel would generate 250 watts vs. 395kW today.

Jeff requested Engineer David provide his feedback on his review of the Site Plan application provided by NE Clean Energy. He referred to his letter dated September 25, 2023 with comments and these notes, which the applicant had responded to on Oct. 2nd via email at 12:55pm:

1. The Applicant should either request a waiver or provide drainage calculations as noted in Article III, Section 3.03 Drainage Calculations.



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- ❖ This was tied to David's comment 4 below and he's satisfied with their request for a waiver.

2. The Applicant should clarify, with dimensions and notations, whether the boundaries of access shown on Site Plans PV-1.0 and PV 2.0 as "To Thorndike St." are the edge of driveway or the limits of the Existing Access, Utility, and Grading Easement indicated on several of the other plans and the included easement, per Article III, Sections 3.04 Plans - Site Layout, and Grading, Drainage, and Utilities.

- ❖ David still has concerns about this. Reason is related to #3 below.

3. The Applicant should provide a more precise location of the proposed array location on the Sewage Disposal System Design sheet 1, as the current location indicates that the array is within the utility easement noted above, and more precise dimensions of the plan length and width of the solar array and foundations, per Article III, Section 3.04 Plans - Site Layout.

- ❖ David noted that between the different documents provided he's seen different locations and configurations for the array.
- ❖ His concern is the utility easement which appears to be relatively close to the array location. If it's within a certain area of the utilities, it will be the owner's responsibility to move it when/if necessary.
- ❖ Mr. Russell responded he is "*confident that the location of the easement is not where this array is planned to be placed.*"

4. The Applicant should provide revised contours on the Sewage Disposal System Design sheet 1, to reflect "grading the site and bringing in fill to level the ground" as indicated in the narrative within "(a) Preservation of Landscape", per Article III, Section 3.04 Plans - Grading, Drainage, and Utilities.

- David noted an earlier comment during the hearing noting that no fill would be needed, which eliminated this concern.

5. The Applicant should include on the plans any electrical, not associated with the solar system, that is entering or crossing the site, per Article III, Section 3.04 Plans - Grading, Drainage, and Utilities, as there are indications of a utility easement per the plans and included easements.

- David was satisfied with the vendor's response that "*There are no other utility/service lines around the proposed location of the solar array.*"

6. The Applicant should be advised that a landscaping plan, per Article III, Section 3.04 Plans Landscaping, may be required based on the determination of the Planning Board relative to other comments listed below.



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- David noted this was tied to item 4 and the applicant would be requesting a waiver of this requirement.

7. The Applicant should either request a waiver or provide a lighting plan, as noted in Article III, Section 3.04 Plans - Lighting Plan.

- David noted the applicant would be requesting a waiver of this requirement.

Jim inquired about the trees which border the proposed location and their density. Mr. Russell noted that hickory trees are about 30' width. Jim further inquired about visibility from the property lines and Evan responded that except for winter months, when leaves are not on the trees, there should be no visibility from Thorndike Street.

David returned to his letter of comments, and vendor responses provided, specifically regarding the Town of Dunstable Zoning Bylaws, Section 25 - Solar Energy Systems:

1. The Applicant should provide an elevation view of the solar collector indicating the tallest finished height of the array, per Section 25.4.1.a, and subsequent Section 25.9.4.

- David noted the vendor response of: *The system will stand 36" in the front and 124" (10'4") at the back.* (A new elevation view was provided.)

2. The Applicant should include on the aforementioned elevation view details relative to how the system will be mounted to the ground (tube steel, micro-piles, drilled columns, concrete pad, etc.), per Section 25.4.1.b.

- David noted the vendor response of: *The system will be secured with earth anchors.* (The specs of the system were provided.)

3. The Applicant should indicate whether this system will be an interconnected, customer owned generator, or an off-grid system, as per Section 25.4.2.a. and subsequent Sections 25.4.2.b, and 25.8. If it is indicated that this will be an interconnected system, the Applicant should indicate that copies of all required documents have been sent to the concerned electrical utility, as per Section 25.12.1.

- David noted the vendor response of: *This system will be interconnected to the electrical grid. As of today, the interconnection application is approved by National Grid.* (Copies of the pertinent documents were provided.)



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4. The Applicant should indicate that copies of all required documents have been sent to the Fire Chief, as per Section 25.4.2.c, and subsequent Section 25.12.1.

- David noted the vendor response of: *The special permit package was sent to Dunstable Fire via email on August 27th 2023. (The email correspondence with Dunstable Fire was included.)*

5. The Applicant's attention should be brought to Sections 25.4.2d, 25.4.2.j, and 25.11.3 with regards to glare and screening, and should be advised that additional details and/or a site visit(s) by members of the Planning Board or it's Designated Agent may be required to observe whether or not the existing natural vegetation and proposed location of the array will satisfy the glare/screening requirements of the bylaw. The Applicant should be advised that screening may not be exempt and may be dependent on the appearance of the finished product. The Applicant should be cautioned that some existing installations in Town pre-date these bylaws and formed the genesis of said bylaws.

- David noted the vendor response of: *Noted and understood. Should the planning board need to visit the site, I am confident they will agree that the natural vegetation surrounding the proposed solar array will mitigate the potential glare.*

6. The Applicant should provide signage as noted in Section 25.11.1, and subsequent Section 25.12.1.

- David noted the vendor response of: *We will include a sign with a 24 hour emergency number as per the bylaws. We will also include all required signage as required by the fire department.*

Joan noted that it seems clear that someone driving by on Thorndike Street is not going to see this solar array. However, there may be visibility to some neighbors or when leaves are not on the trees. She noted the bylaw states anything in the front of a yard should provide suitable screening to abutters and passing motorists. She asked if it would be possible to add screening, if needed? The vendor asked if this decision could be made after the installation of the array, based upon need determination. Mr. Russell responded that the array will be "sitting in a valley" to the right side of the driveway. Alan commented that a site visit could help clarify this need or not and recommended that the Board go out to review the lay of the land. The Board agreed.



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The applicant requested whether they could begin their other permitting, contingent upon the forthcoming approval of the site plan, as that can take some time. The Board agreed that electrical and building permitting could proceed.

The Administrator shared the comments received from notified departments.

- The Board of Health/B. Braley had shared:
 - *"Solar panels should not be placed where they could impact current septic system and/or reserve area – or the well."*
- The Building Inspector and Conservation Commission had responded with *"No Comments"*
- The Fire Chief had inquired if there were any batteries planned for the system.
 - *"No batteries will be near the solar array. But there will be some at the house which will be reviewed by the electrical inspector as part of permitting."*

The applicant has requested Waivers to include:

1. drainage calculations requirement as noted in Article III, Section 3.03 Drainage Calculations.
2. a landscaping plan, per Article III, Section 3.04 Plans Landscaping,
3. a waiver or provide a lighting plan, as noted in Article III, Section 3.04 Plans - Lighting Plan

David agreed to each of these requested waivers. Noting that a screen landscaping plan may be contingent on the site visit findings from the Planning Board.

- Joe made a motion to grant these waivers requested, based on David's input. Jim 2nd the motion. – Motion passed unanimously.

The Board and property owner set October 4th at 4pm to visit the site and review the array location for screening needs.

- Alan made a motion to grant a continuation of the opened public hearing to the applicant until the next October 16th meeting. Joe 2nd the motion. – Motion passed unanimously.



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**Special Permit (for a Backland Lot, Site Review & Land Disturbance Tier II Permit)
Vote Application is Complete, 75 Mill St.**

Town Engineer, David Langlais, who was present, indicated to the Board that we had not previously followed this application review approval process before review begins. He shared that applicants are typically responsive to any requests or needs for clarification around applications. He stated "*The packet is sufficiently complete to begin the review process.*"

Joe made a motion to accept the application as complete. Alan 2nd the motion. – Motion passed unanimously.

The Public Hearing for the Special Permit consideration will be on Monday, October 16th at 6:35pm.

Zoning Bylaw 11.7.1 Backland Lot Requirement Change Proposal

The Board decided to table the topic until a future scheduled meeting.

Scenic Road / Stone Wall Guidance for Community

The Board decided to table the topic until a future scheduled meeting.

Additional Topics Discussed Not Noted on the Agenda

Alan made a motion to close the meeting at 8:07pm. Joan seconded the motion. – Motion passed unanimously.

The next scheduled meeting is Monday, October 16, 2023 at 6:30pm.

Respectfully submitted,

Carol A. Rock
Administrative Assistant Dunstable Planning Board