

Findings of Fact and Conclusions of Law

for the Special Use Permit, Large Project Plan, and Subdivision application
submitted by
Midcoast Solar, LLC for
Tax Map 003, Lot 024 (745 US Route 1)

FINDINGS OF FACT

Pursuant to the ordinances of the Town of Newcastle, the Planning Board of the Town of Newcastle has considered the submitted application of Midcoast Solar, LLC dated November 21, 2023 and updated through January 18, 2024, including staff review comments and related materials contained in the record. The Planning Board has made the following findings of fact.

Project Information

Applicant/contact information:

Property Owner:	Timothy Hanley
Owner Address:	745 Route One, Newcastle, ME 04553
Owner Phone:	207.242.6131
Owner Email:	inc@gmail.com
Applicant:	Midcoast Solar, LLC
Applicant Address:	6 Balsam Circle, New Harbor, ME 04554
Applicant Phone:	810.625.1801
Applicant Email:	tech@northeast.energy
Applicant's Agent:	Sean Murphy, Senior Project Manager, Flycatcher
Agent Address:	106 Lafayette Street, Suite 1C, Yarmouth, ME 04096
Agent Phone:	207.400.6161
Agent Email:	Sean@flycatcherllc.com

Site Information:

Project Address:	745 US Route 1, Newcastle
Tax Lot:	Map 003, Lot 024
Zoning:	SD - Rural Highway
Acreage:	51.4 Acres
Public ROW Frontage:	555 feet
Existing Development:	Undeveloped

Application Information:

Application Date: November 21, 2023

Proposed Development: Installation of a 1.55 MWdc photovoltaic solar array mounted on fixed-tilt racking, equipment pads, inverters and transformers, and an access drive to US Route 1.

Identified Use: Utilities & Services
Definition: Buildings and structures that provide or facilitate the transmission of services consumed by the public including electricity, Internet, natural gas, water, and sewage.

Proposed Building/Structure Type: None - No buildings are proposed as part of this application.

Required Review(s) Permitting Authority

Special Use Permit (CZC): Planning Board
A Special Use Permit is required for Utilities & Services uses in the SD - Rural Highway District.

Large Project Plan (CZC): CEO *(The CEO has opted to send this application to the Planning Board for review.)*

Projects that create significant on- or off-site impact.

- a. On-site significant impacts may include but are not limited to excavation, grading, or blasting; noise, glare, or smell; and,
- b. Off-site significant impacts may include but are not limited to existing utilities, stormwater infrastructure or alterations within the road right-of-way.

Changes to a nonconforming lot, use, structure, site improvement, if the subject property is over 10 acres in lot area.

Entrances (RD&E) CEO *(The CEO has opted to send this application to the Planning Board for review.)*

Applies to any new access to a lot from a public way, utilizing a driveway, private road, public road, or parking lot.

Subdivision (CZC) N/A

The Planning Board discussed the language in the Code and determined that Subdivision review was applicable to "neighborhood"-type utility installation—such as a sewer network or street network—and that this application was not required to submit to Subdivision review.

Additional Requirements:

Pre-Submittal Meeting: Required

A pre-submittal meeting is mandatory for Large Project Plan and Special Permit applications. A pre-submittal meeting was held for this application with the Planning Board on January 18, 2024.

Public Hearing: Required
A Public Hearing is required for Special Permits.

Public Notice: Required
Mailed notice is required within 250 feet of the subject property. Published notice is required on the Town's website and in the newspaper.

Standards for Review:

Core Zoning Code Review

Article 2 - District Standards

SD-Rural Highway

Minimum Lot Width Required 1,000 ft; Existing: ~570 ft

Per Article 2, Section 2.D. Nonconforming Lots, a lot that is nonconforming due to insufficient lot width or insufficient lot area may be developed as long as any applicable setback standards are met. Because no buildings are proposed and setback standards only apply to Primary Buildings and Accessory Buildings (Art. 2, Sec. 3.B. Applicability), no other setback standards are required to be met.

A Level 4 Natural Screen is required along the entire length of the Route 1 Frontage of the lot, but is not required in areas necessary for entrances, driveways, and public or private roads. (see review of standards under Article 3, Section 5, below)

Utilities & Services uses are permitted with an Expanded Use Permit.

Article 3 - Site Standards

Section 2. Driveways

(see review under Road, Driveway, and Entrance Ordinance, below)

Section 5. Natural Screening

The standards for Natural screening apply to this application as it requires a Special Permit. Per standards set forth under Article 2 - District Standards for the Rural Highway district, a Level 4 Natural Screen is required along the entire length of the Route 1 Frontage of the lot.

The requirements for a Level 4 Natural Screen are as follows:

- a. *Total visual opacity shall be defined as untouched vegetation. No cutting of trees, shrubs, or undergrowth shall be permitted.*
- i. *Removal of dead or dangerous trees shall be permitted by the CEO.*
- ii. *If total visual opacity cannot be provided by natural vegetation, the Planning Board may require a 100% opaque fence, or additional setbacks to fulfill this standard.*

The existing vegetation is essentially untouched and has not been harvested or reduced in any apparent way.

Section 8. Fences & Walls

1. *Fences and walls shall have a minimum 6 inch setback from any lot line or virtual lot line.*

Confirm the fence will not be located less than 6 inches from the property line.

2. *Fence posts or supporting rails must face inward toward the property being fenced and the finished face must be oriented towards the abutting property, road, or civic space.*

Confirm.

3. *Fences and walls located within the frontage zone may be no more than 4 feet in height, and must be constructed of pickets or pickets set onto a low wall, where the pickets are no more than 50% opaque, except when fences are located within 4 feet of windows, then it must be a minimum of 70% opaque. Fence and gate posts may not be more than 4.5 feet in height.*

No fences or walls will be located within the frontage zone.

4. *Fences and walls located behind the frontage zone may be up to 8 feet in height. Fence and gate posts may not be more than 8.5 feet in height.*

The proposed fences, which are not located within the frontage zone, are proposed to be 8 feet in height.

5. *Fences and walls must be constructed of durable natural materials such as wood, brick, stone, or painted metal, or have the appearance of natural materials. Chain link fences are prohibited within the frontage zone, except when located behind a land type. Barbed wire and concertina wire are prohibited.*

All proposed fencing is located outside of the frontage zone. Confirm type of fencing.

6. *Fences and walls may not cross roads, driveways, or parking lots, except where lots on both sides of a road or driveway are used for agricultural activities.*

It looks like their proposed fence does cross their driveway. Confirm and address.

Section 9. Mechanical Equipment

These standards are not applicable to this application as it “Applies to all new buildings or substantial modifications to existing buildings” and no new or existing buildings are proposed or addressed under this application.

Section 12. Lighting

No exterior lighting is proposed under this application.

The potential need for lighting at the transformers to allow for potential nighttime repairs may require review if it is to be installed.

Article 6 - Use Standards

Section 63. Utilities & Services

No wind energy facilities or buildings are proposed under this application, making standards 1-3 not applicable.

4. *The proposed Use shall comply with the Nuisance Standards in Article 6 Section 1.G.*

G. *NUISANCE STANDARDS*

(see review provided under Special Use Permit Approval Standards, above.)

Article 7 - Administration

Section 18. Special Use Permit

Part E. Approval Standards

a. *The adopted Comprehensive Plan of the Town of Newcastle;*

b. *The purpose and intent of this Code;*

To equitably balance the regulation of real property with the interests of the community as a whole.

c. *The purpose of the District(s) where the property is located;*

One intention of the SD-Rural Highway district is “To allow new development along the highway in a manner that preserves the rural character”. By locating the proposed solar array away from US Route 1, it is likely that it will be minimally visible from the highway, if at all. In addition, the development of renewable power generation locally should help to maintain the relatively clean local environment and help stabilize local power supply.

d. *The proposed use or activity will be established, maintained, and operated so as to be harmonious with the surrounding area and will not impede the development, use, and quiet enjoyment of abutting property in any foreseeable manner;*

The proposed solar array will be located approximately 1,500 feet away from US Route 1 and approximately 1,700 feet from the nearest building, resulting in minimal off-site impact. A single roadway that is designed to be the shortest practical distance, while avoiding protected natural resources, will provide access to the development through the currently forested parcel.

- e. *The proposed use or activity will be of a character that does not produce excessive noise, heat, glare, dust, smoke, fumes, odors, or vibration detectable off the property or that adversely affects the surrounding area;*

Construction noise is expected to be typical of that associated with any residential or commercial development. Construction activities will be planned to occur between 7:00 am and 7:00 pm and only during daylight hours. Construction noise levels will exceed ambient conditions at times, mainly when the equipment is in operation in close proximity to the Project site boundary.

During operation of the solar facility after construction, site components and the on-site substation should be assumed to be limited to daytime hours only.

The applicant provided information on studies that show comparable solar facilities produced noise at a level comparable to a normal conversation (50 dBA), up to that of a vacuum cleaner (75 dBA). Sound levels along the boundary of the arrays are expected to be near background levels with a faint inverter hum audible in some locations during the day. After sunset and before sunrise, the inverters will not produce noise and the transformers will typically operate without fans.

The nearest residential building is approximately 1,700 feet from the solar array and the intervening ground cover and vegetation is expected to provide sound attenuation.

- f. *The proposed use or activity will not result in the destruction, loss, or damage of any feature determined to be of significant natural, scenic or historic importance;*

The applicant has stated that the submitted design, based on field studies of the project area, has minimized overall impacts to protected resources to the greatest extent practicable, including locating an access road to cross an unnamed stream at a point where the wetlands on the site are at their narrowest point (approximately 15 feet), resulting in only 715 square feet of wetland impact. The Applicant received a Natural Resources Protection Act (NRPA) Permit-by-Rule to account for this stream crossing and will be filing a Maine General Permit application with the U.S. Army Corps of Engineers.

In addition, the Applicant inquired with the Maine Historical Preservation Commission regarding potential archaeological or historical resources in the Project area. In a communication dated November 8, 2023, the State Historic Preservation Officer stated "Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act."

Section 11. Large Project Plan

Part E. Approval Standards

Road, Driveway, and Entrances Ordinance Review

Article 2 - Standards

Section 1. Entrances

C. GENERAL

An entrance onto existing state-aid or state highway must be approved by the MeDOT. Copies of such approval shall be submitted to the permitting authority at the time of application review.

D. DESIGN

1. *All entrances shall be designed and constructed in accordance with the latest Maine Department of Transportation's Manual for Standard Specifications.*

The proposed development will utilize an existing driveway entrance from US Route 1 which will need to meet the Town's Road, Driveway, and Entrance Ordinance Standards.

The Applicant submitted a Driveway/Entrance Permit application to MDOT on February 5, 2024. The Applicant has requested that providing the Town with a copy of MDOT's approval before a Building Permit can be issued by the Code Enforcement Officer be made a condition of the Planning Board's approval, should such approval be granted.

2. *Entrances shall be constructed to prevent water run-off onto the adjacent traveled way.*

The applicant has stated that all surface water flowing or diverted towards the construction entrance will be piped beneath the entrance or, if piping is impractical, a mountable berm with 5:1 slopes will be installed.

- a. *Public Roads and Private Roads shall be sloped no greater than 3% above or below the adjacent traveled way for the first 20 ft of the entrance.*

The submitted plans show the driveway entrance from US Route 1 rising approximately 10 ft over a distance of approximately 55 feet for a slope of less than 2% and likely even less near the road.

- b. *If the Permitting Authority determines that an entrance culvert is necessary, the applicant shall bear the burden of the cost for the culvert installation, which shall be constructed to the standards of this ordinance.*

The applicant agrees to comply with the standard should a culvert be necessary.

3. *Entrances shall intersect the adjacent traveled way at a horizontal angle of 90 degrees.*

The existing entrance is currently at an approximately 90 degree horizontal angle in relation to Route 1 and the applicant agrees that any modifications shall not result in a less than 75 degree horizontal angle.

- b. Entrances shall have an unobstructed view to and of the adjacent traveled way, and shall be wide enough to allow emergency vehicles to enter from either direction.*

The proposed access road is 16 feet wide, which is adequate to accommodate emergency vehicles.

- c. Entrances shall have a 35 ft radius along the edge of intersection between the entrance and adjacent traveled way.*

Is curbing proposed?

4. *No part of the entrance shall extend beyond the property lot frontage.*

No part of the entrance extended beyond the property lot frontage.

5. *Entrance side slopes and banks shall not be steeper than horizontal to vertical ratio of 2:1.*

Maximum side slope does not exceed 15%.

E. LOCATION

1. *All entrances shall be so located such that vehicles approaching or using the entrance shall be able to obtain unobstructed sight distance in both directions along the adjacent traveled way and shall be able to maneuver safely without interference with traffic.*

The access road is an existing forest management roadway. There will be no obstructions for vehicles approaching or using the entrance.

2. *Entrances shall not be constructed within 75 ft of an unsignalized intersection or 125 ft of a signaled intersection.*

The nearest intersection is approximately a half mile away.

F. SIGHT DISTANCE

1. *Entrances shall be placed such that an exiting vehicle has an unobstructed view in both directions along the adjacent traveled way.*

The applicant states that “[b]ased on a site visit completed on January 18, 2024, the proposed Project access road has an unobstructed view for at least 645 feet in either direction”.

CONCLUSIONS OF LAW

The proposed...

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Decision of the Planning Board

In consideration of the submitted application by Midcoast Solar, LLC dated November 21, 2023, and revised through February 15, 2024, for the proposed project at 745 Use Route 1, Newcastle (Map 003, Lot 024), including staff review comments, public hearing testimony, and related materials contained in the record, the Planning Board of the Town of Newcastle, at a regular meeting held on February 15, 2024, voted as detailed below to ... this application for Special Use Permit, Large Project Plan, and Entrance application.

Motion:	...	
Moved by:	...	
Second:	...	
Vote:	Yea:	0
	Nay:	0
	Abstention:	0
Result:	...	

No real property may be occupied or used, no use of an existing building or land may change, no building or structure may be constructed, altered, expanded, or enlarged in whole or in part for any purpose except as specifically authorized by the decision of the Planning Board of the Town of Newcastle and the Code Enforcement Officer of the Town of Newcastle.

Failure to comply with any condition or restriction related to any ordinance of the Town of Newcastle or the Planning Board's decision constitutes a violation and, in addition to any civil or criminal remedy or enforcement procedure, is grounds for modification, suspension, or revocation of the permit.

