
MEMORANDUM

TO: Freeport Planning Board

THROUGH: Caroline Pelletier, Assistant Planner

CC: Ben Smith, AICP, North Star Planning

From: Sarah DelGizzo, North Star Planning

RE: Solar Farm Zoning Changes

Date: October 30, 2019

Attached are edits to the proposed Freeport Zoning Ordinance that would allow medium (Community scale) and large (Utility scale) Solar Farms in certain zoning districts in Freeport. The first draft of this ordinance was reviewed at the Planning Board Meeting held on October 2, 2019. This round of edits includes:

- Additional language on decommissioning
- Additional language on signage and safety
- Additional language on height standards and definition

The attached materials also include current setbacks in the zones where solar is to be discussed, as well as a parcel break down by size and zone. This information is meant to provide the Planning Board with context to discuss permitted zones and setback standards for Solar Farm, Community and Solar Farm, Utility in the Town of Freeport.

As you review the attached materials, please keep the following questions in mind regarding:

Solar Farm Location

- Zoning Districts. Are there certain zoning districts that are more appropriate for this type of development than others, or districts where medium or large scale projects are not appropriate?
- Design Review District. How will medium or large sized systems integrate with the character of the built environment within the Design Review District? Should this question be addressed now or in the future?
- 3-phase power. Will 3-phase power limit the location of these systems? Any system over 150 – 200 KW typically requires 3-phase power. Developers typically look for sites within ½ mile of 3-phase.
- Are Solar Farm uses appropriate in the common land of an Open Space Subdivision? Should changes to the subdivision ordinance be considered at this time?

Solar Farm Size

- Differentiation between Community and Utility Solar Farm sizes. Should there be any different treatment between these systems of different sizes in regard to certain standards like setbacks, buffers or decommissioning?
- Maximum system size. Is there a system that would be too large to locate anywhere in Freeport (current state regulations allow for up to 500MW which is roughly 25-30 acres)?
- What size system should be considered a Utility Solar Farm rather than a Community Solar Farm?
- What should the maximum height standard be? Fixed ground mounted systems are generally 12' or slightly higher and trackers can be as high as 20'. 25' maximum would allow for most systems.

Zone	Minimum Setbacks [Note: shoreland area to be discussed]
C1	Front, Rear, Side: 15 ft
C3	<p>a. All setbacks except from I-95 boundary: Front: 50 feet, if parking is located between the 25' front landscaped setback and the 50' setback. 25' if parking is located beyond 50' of the front property boundary line.</p> <p>Side: On a lot with two side lot lines, the total combined minimum width of both side setbacks shall be 75' and the minimum side setback shall be 25'. If a parcel has only one side lot line, the minimum side setback shall be 35'. Rear: 35 feet</p> <p>b. All setbacks from I-95 boundary: 25 ft</p>
C4	Front, Rear, Side: 25 ft
I1	Front: 100 ft, Side: 15 ft, Rear 15 ft (Minimum setback from a lot line of a parcel containing a residential use: 100 ft)
I2	Front: 100 ft, Side: 15 ft, Rear 15 ft
LB	Front: 50 ft, Side: 35 ft, Rear: 35 ft, Shore: 75 ft
MDA	Minor Street Front: 60 ft, Side: 40 ft, Rear: 40 ft / US RT 150 ft ** not including Lots within subdivisions
MDB	Minor Street Front: 60 ft, Side: 40 ft, Rear: 40 ft / US RT 150 ft ** not including Lots within subdivisions
MDR2	Front: 30 ft, Side: 20 ft, Rear: 30 ft, Shore: 75 ft ** not including Lots within subdivisions
RP2	Front: 50 ft, Side: 50 ft, Rear: 75 ft, Shore: 100 ft ** not including Lots within subdivisions
RR1	Front: 50 ft, Side: 50 ft, Rear: 75 ft, Shore: 75 ft ** not including Lots within subdivisions
RR1A	Front: 50 ft, Side: 50 ft, Rear: 75 ft, Shore: 75 ft ** not including Lots within subdivisions
RR2	Front: 50 ft, Side: 50 ft, Rear: 75 ft, Shore: 75 ft ** not including Lots within subdivisions

Below is a breakdown of the amount of parcels in each zone categorized by size:

50+ ACRES	
Zone	Number of Parcels
C1	1
C3	1
C4	0
I1	0
I2	3
LB	0
MDA	3
MDB	1
MDR2	0
RP2	6
RR1	40
RR1A	1
RR2	10

25-50 ACRES	
Zone	Number of Parcels
C1	2
C3	1
C4	0
I1	0
I2	1
LB	0
MDA	3
MDB	3
MDR2	1
RP2	8
RR1	78
RR1A	0
RR2	29

5-25 ACRES	
Zone	Number of Parcels
C1	12
C3	3
C4	3
I1	2
I2	2
LB	1
MDA	13
MDB	12
MDR2	9
RP2	38
RR1	377
RR1A	1
RR2	61

2-5 ACRES	
Zone	Number of Parcels
C1	23
C3	4
C4	3
I1	0
I2	2
LB	3
MDA	20
MDB	24
MDR2	35
RP2	89
RR1	822
RR1A	5
RR2	163

Section 104 Definitions

Solar Energy System: A device or structural design feature whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means.

Solar Farm, Community: a Solar Energy System, roof or ground-mounted, that generates electricity for off-site accounts and has an array area (including panel area and inter-panel space) smaller than 87,120 square feet (2 acres).

[Note: this size system generates up to about 350 kilowatts]

Solar Farm, Utility: a Solar Energy System, roof or ground-mounted, that generates electricity for off-site accounts, and has an array area (including panel area and inter-panel space) between 2 acres and 30 acres.

[Note: By statute, Solar Farms can generate up to 5MW, which would have a size of about 25-30 acres]

Section 400s Zoning Districts

Solar Farm, Community & Solar Farm, Utility by zoning district, as Permitted (P) or Not Permitted (X).

[Note: Based on previous discussions with staff, selected zones (X) have been highlighted as not permitting Solar Farm, Community or Solar Farm, Utility. All zones should be discussed among the Planning Board to determine where this use should be permitted.]

C1	C3	C4	I1	I2	LB	MDA
MDB	MDR1	MDR2	RP1	RP2	RR1	RR1A
	X		X			
RR2	VC1	VC2	VC3	VC4	VMU-1	VMU-2
	X	X	X	X	X	X
V1	V2	Bustins	ID	MW	SP	SA
X	X	X	X		X	

Section 500s Solar Energy Systems

A. General Standards

- a) Solar Energy Systems generating power for on-site consumption or to offset electrical use of on-site accounts shall be considered Accessory to the Principal Use. These

Solar Energy Systems shall be permitted wherever Accessory Uses are permitted and shall conform to the standards for Accessory Structures of the applicable district.

- a. Building or roof mounted Solar Energy Systems shall be considered part of the structure and reviewed by the Code Enforcement Officer, subject to the Building Code
 - i. These Solar Energy Systems are exempt from the Application Requirements and Performance Standards of this Section.
- b. Ground mounted Solar Energy Systems shall be reviewed by the Staff Review Board.
- b) Solar Energy Systems generating power for off-site consumption or to offset electrical use of off-site accounts shall not be considered an Accessory Use and shall conform to the standards listed below.
 - a. Solar Farm, Community and Solar Farm, Utility uses shall be reviewed by the Project Review Board.

B. Application Requirements for Solar Farm, Community and Solar Farm, Utility

- a) A fully executed and signed copy of the application for Site Plan Review. The application will be provided by the planning department.
- b) Name of the owner and operator of the Solar Energy System, and the names of the owner of the property.
- c) Cover letter describing the project, with details on the proposed system and the subject property.
- d) Plans (including location of proposed system, identifying the location of the Solar Energy System on the property and physical dimensions of the system and the property. Location of any public road or right-of-way that is contiguous with the property. Location of overhead utility lines) See section 602.D.4
- e) A decommissioning plan for the removal of the Solar Energy System for the removal of the facility and stabilization of the site.
 - a. At the time of approval, the applicant shall submit to the Town a bond or similar form of financial surety, to be approved by the Town Manager, in an amount equal to one hundred twenty-five percent (125%) of the projected total cost of removing the entire Solar Energy System, and reclaiming the site to its pre-construction condition. Should the operation of the facility cease in the future, and the facility is dismantled by the owner and/or operator, the performance guarantee shall be returned to the owner and/or operator, including any interest that may have accrued during the time it was held by the town. The accepted form of surety shall be reviewed by the Town Manager or designee every five (5) years, and renewed or increased when necessary.

C. Performance Standards for Solar Farm, Community and Solar Farm, Utility

a) Space Standards

- i. Maximum height shall ~~be 25 feet, conform to requirements of zoning district.~~ Height shall be measured from ~~the lowest point of the structure above grade the ground~~ to the highest point of the facility.
- ii. Minimum setback shall conform to requirements of the zoning district or 20 feet from lot line, whichever is greater.

b) Design & Aesthetics

- i. Buffers shall, at minimum conform to requirements of the zoning district. Staff Review Board has the authority to require additional buffers dependant on solar energy system location (Section 506).
- ii. Safety and Signage. All signs on Solar Energy Systems shall conform to Section 511. A sign meeting those regulations shall be required to identify the owner and provide a 24-hour emergency contact phone number. All electrical and control equipment for a ground-mounted solar energy system shall be labeled and secured to prevent unauthorized access.
- iii. Stormwater management shall conform to requirements in Section 529.
- iv. Lighting shall conform to requirements in Section 521.A.
- v. Decommissioning and removal of the Solar Energy System is required after twelve (12) consecutive months of no power generation. The owner and/or operator shall remove the system, in its entirety, by no later than 90 days after the end of the twelve-month period.

Proposed amendment of existing Height definition:

Height: The vertical distance of a building measured from the average elevation of the finished grade within 20' of the building's contiguous perimeter, to the highest point of the roof for flat and mansard roofs and to a point which includes 30% of the height between eaves and ridge for other types of roofs. Height limitations shall not apply to chimneys, steeples, water standpipes, detached barns used for agricultural purposes, spires or other similar non-habitable structures. Height limitations do apply to wireless telecommunications facilities as defined in this Section 104, and those regulations are listed below and in Section 528. Height restrictions do apply to Solar Energy Systems as listed in Section 500.

Comment [SD1]: Solar Ordinance Section TBD