Amendments to Existing Ordinance Requirements

ARTICLE 1: GENERAL PROVISIONS

SECTION 2 AUTHORITY

This Ordinance is enacted pursuant to the enabling provisions of Article VIII, Part 2, §1 of the Maine Constitution, the provisions of Title 30-A MRSA, §3001 (Home Rule), and the provisions of Title 30-A §4312 et. seq. (Comprehensive Planning and Site Plan Review Regulation, or "Growth Management" Act).

Commented [AW1]: This replaces the existing language, which does not mention 4312.

ARTICLE 2: PURPOSE

SECTION 1 PURPOSE

G. To p~~P~~ermit the Town to fairly and responsibly protect public health, safety and welfare;

H. To support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural and scenic resources.

Commented [AW2]: This language would be added to the existing language.

ARTICLE 3: APPLICABILITY

SECTION 1 APPLICABILITY

D. The establishment of a new non-residential use, including but not limited to gravel pits, mining operations, cemeteries, golf courses, non-residential solar energy-producing facilities, and telecommunication and wind power towers, even if no buildings or structures are proposed.

Commented [AW3]: Non-residential solar-energy producing facilities added to this existing language.

SECTION 2 USES NOT REQUIRING REVIEW

G. The following solar energy producing facilities:

1. A facility only providing electricity to the owner's residential land use or off-setting the electrical utility bill of a residential land use by means of net metering, and when the facility is located on property owned by the owner of the residential land use.
2. Roof-mounted solar energy facilities on any legally permitted non-residential or residential principle or accessory structure;
3. Building-integrated solar power, including shingle, roof, hanging or canopy solar modules, windows, skylights, or walls, installed in a legally permitted non-residential or residential principle or accessory structure; and,
4. Repair or replacement of solar modules or other facility components that do not enlarge a non-residential facility's impervious surface area.

Commented [AW4]: The Planning Board voted on March 17 to add this paragraph to Section 2 of Art. 3.

ARTICLE 4: ADMINISTRATION AND ENFORCEMENT

SECTION 9 REVISIONS TO AN APPROVED PLAN

9.1

- Any physical expansion, reconfiguration, or increase in the Rated Nameplate Capacity of an existing Non-Residential Solar Energy-Producing Facility shall also require approval from the same permitting authority as required for a new solar facility under this Ordinance.

Commented [AW5]: Added bullet point to page 16 of existing ordinance.

ARTICLE 8: DEFINITIONS

Community-based renewable energy project: a solar energy-producing facility which meets the definition in state statute (Title 35-A, subsection 3209-A) of a "community-based renewable energy project."

Decommissioning: means the full and complete physical removal of all components of a non-residential solar energy-producing facility, including but not limited to solar panels, associated anchoring systems and foundations, other structures, buildings, roads, fences, cables, electrical components, and associated facilities and foundations.

Distributed generation renewable energy project: a solar energy-producing facility which meets the definition in state statute (Title 35-A, subsection 3209-A) of a distributed generation renewable energy project.

Farmland: means any tract or tracts of land used for commercial farming:

A. That consists of 5 or more contiguous acres;

B~~B~~. That is land on which a farm product is produced.

"Farmland" does not include land used for woodlots, homes, farm buildings, roads, lawns or any area covered with non-crop vegetation.

Financial assurance: With specific regard to non-residential solar energy-producing facilities, financial assurance means the demonstration of current and future financial capacity, which must be unaffected by the owner's or operator's future financial condition, to fully fund decommissioning in accordance with an approved decommissioning plan under this ordinance.

Net metering: means the same as net energy billing (NEB) as defined by the Maine Public Utilities Commission in Chapter 313, titled "Customer Net Energy Billing," of the Commission's regulations, and includes both kWh credit and tariff rate programs.

Non-residential solar energy-producing facility: any commercial, industrial, institutional or other non-residential solar energy facility producing electricity with ground-mounted solar modules regardless of total size or power output, including, but not limited to, any facility:

1) selling power to the regional electric grid;

2) that is classified by the Maine Public Utilities Commission as a community-based or a distributed generation renewable energy project;

3) producing energy for use by a commercial, industrial or institutional land use; or

4) generating and providing electrical power to the grid under a net-metering agreement with Central Maine Power Company in accordance with Chapter 313 of the Maine Public Utilities Commission regulations.

Rated Nameplate Capacity: means the maximum rated output of electric power production of the photovoltaic system in watts of Alternating Current (AC)

Residential Dwelling Unit: A room or group of rooms designed and equipped for use as permanent, seasonal, or temporary living quarters for only one family at a time and containing cooking, sleeping, and toilet facilities. The term shall include mobile homes and rental units that contain cooking, sleeping and toilet facilities regardless of the time-period rented. Recreational vehicles are not residential dwelling units.

Commented [AW6]: The following definitions would be added to the existing definitions in Art. 8.

Commented [AW7]: This definition comes from the state statute cited within the definition.

Commented [AW8]: This language comes directly from the Shoreland Zoning Ordinance.

Transfer of ownership: means a change in the legal entity that owns or operates a solar energy development. A sale or exchange of stock or membership interests or a merger is not a transfer of ownership as long as the legal entity that owns or operates the solar energy development remains the same.

New Proposed Requirements Specific to Non-Residential Solar Facilities

~~TOWN OF BELGRADE~~SECTION 5

~~UTILITY SCALE~~ NON-RESIDENTIAL SOLAR ENERGY-PRODUCING FACILITIES~~Y ORDINANCE~~

~~DRAFT 10-18-2021~~

~~Section 1. Purpose~~

~~The purpose of this Ordinance is to~~The purpose of this section is to establish a municipal review procedure and siting standards for ~~Utility Scale~~Non-Residential Solar Energy-Producing Facilities (~~USSF's~~NSEPFs~~hereinafter referred to as "solar facilities~~~~y~~"). These standards are intended to:

1. Establish clear guidelines and standards to regulate ~~utility scale~~ solar ~~energy~~ facilities;

2.

~~Permit the Town to fairly and responsibly protect public health, safety and welfare;~~

~~Support~~ Regulate the development of ~~utility scale~~ solar ~~energy~~ facilities in a manner that minimizes any potential adverse effects on the scenic, cultural, ~~,~~and natural resource character of the Town;

3.

Provide for the removal of panels and associated solar facility~~utility~~ structures that are no longer being used for non-residential energy generation and transmission purpose~~.; and~~

~~a. Support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural and scenic resources.~~

~~Section 2. Authority~~

~~This Ordinance is enacted pursuant to the enabling provisions of Article VIII, Part 2, §1 of the Maine Constitution, the provisions of Title 30-A MRSA, §3001 (Home Rule), and the provisions of Title 30-A §4312 et. seq. (Comprehensive Planning and Site Plan Review Regulation, or "Growth Management" Act).~~

Commented [AW9]: Art. 1, Sec 2 on page 1 of the CDRO speaks to authority. It sites 3001, but not 4312. We could replace that entire section with this language.

Commented [GS10R9]: I agree with your suggestion.

~~Section 3. Applicability~~

~~No Utility Scale Solar Energy Facility shall be located within the Town of Belgrade without a Permit issued by the Town of Belgrade Planning Board, unless specifically exempted from the permit requirements of this Ordinance. Any physical expansion, reconfiguration, or increase in the Rated Nameplate Capacity of an existing Solar Energy Facility shall also require approval from the same permitting authority as required for a new Utility Scale Solar Energy Facility~~solar facility ~~under this Ordinance. Routine maintenance or replacements do not require a permit.~~

~~a. Exemption. Solar Energy Facilities occupying 800 square feet or less are exempt from the requirements of this Ordinance, but must meet state electrical codes and permitting requirements, and applicable requirements of any other Ordinance of the Town of Belgrade.~~

~~D. The establishment of a new non-residential use, including but not limited to gravel pits, mining operations, cemeteries, golf courses, and telecommunication and wind power towers, even if no buildings or structures are proposed.~~

~~Section 4. Definitions~~

~~As used in this Ordinance, unless the context otherwise indicates, the terms referenced below have the following meanings:~~

~~Financial capacity: Means the demonstration of current and future financial capacity, which must be unaffected by the owner's or operator's future financial condition, to fully fund decommissioning in accordance with an approved decommissioning plan under this ordinance.~~

~~Rated Nameplate Capacity: means the maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC)~~

~~Residential Dwelling Structure: means any structure that includes a room or group of rooms with a bathroom, cooking, and sleeping facilities designed and equipped exclusively for use as permanent, seasonal, or temporary living quarters. The term shall include mobile homes and rental units that contain cooking, sleeping and toilet facilities regardless of the time period rented. Recreational vehicles are not residential dwellings.~~

~~Transfer of ownership: means a change in the legal entity that owns or operates a solar energy development. A sale or exchange of stock or membership interests or a merger is not a transfer of ownership as long as the legal entity that owns or operates the solar energy development remains the same.~~

~~**Utility Scale Solar Facility (USSF): is any solar facility, project, or installation which is intended to and/or in fact does generate solar power and feeds said power into the electric grid supplying the local utility with power. This shall include, but is not limited to, any ground mounted photovoltaic (PV) project that is larger than 0.10 M.W. (ac) in capacity. Residential/commercial solar arrays smaller than 0.10 M.W. (ac) are not included in this definition.**~~

~~**Section 5.**~~ A. **Administration and Enforcement**.

~~This Ordinance~~ Regulations related to solar facilities will be administered as an additional level of review along with the provisions of the ~~Site Plan~~Commercial Development Review Ordinance, including ~~Sections H~~ Articles 1 through 8~~V~~, which are hereby incorporated by reference. ~~Specific application requirements, standards of review, and other requirements pertinent to Solar Energy Facilities within this Ordinance shall be added to the Application Requirements and Standards of Approval within the Site Plan Review Ordinance.~~ In case of a conflict, the stricter provision shall apply.

~~a. Permit Required. An approval Permit from the Planning Board is required prior to the installation, construction, or expansion of a Utility Scale Solar Energy Facility (USSF). USSF's must meet the requirements of this Ordinance and the Site Review Ordinance. All USSF's must also meet all federal and state electrical codes and permitting requirements.~~

~~Section 6.~~ B. ~~Specific Application Requirements~~Specific Application Requirements.

In addition to the requirements listed in Art. 4 Sec. 5.4 ~~tion II~~ of the ~~Site Plan~~Commercial Development Review Ordinance, an application for a ~~USSF~~ solar facility p~~P~~ermit must also include the following:

1. An additional permit-/-technical review fee to be set by the Board of Selectpersons~~men~~ shall be payable at the time of application. This fee will be reviewed and amended as necessary on an annual basis. The Planning Board may at its discretion retain independent technical or legal expertise to assist in review or supplement the evidence presented by the applicant and received during the public hearing. The cost of such assistance shall be borne by the applicant according to the terms of an escrow account set-up at the time the application is submitted as listed in the Permit Fee Schedule established by the Board of Selectpersons.

2.

A description of the owner of the facility, the operator if different, and detail of qualifications and track record to run the ~~USSF~~solar facility;

3.

If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities of the operator, landowner, and any other responsible party with regard to the ~~USSF~~ solar facility and the life of the agreement;

4.

A description of the energy to be produced and to whom it will be sold;

5.

A copy of the agreement and schematic details of the connection arrangement with the transmission facility, clearly indicating which party is responsible for various requirements and how they will be operated and maintained;

6.

A description of the panels to be installed, including make and model, and associated major facility components;

7.

A construction ~~plan and~~ timeline, identifying known contractors, site control, and anticipated on-line date;

8.

A full official land survey of the proposed site. Must include any Rights of way and Easements on the property and be sealed and/or stamped by a Maine licensed professional surveyor.

9.

An operations and maintenance plan, including site control and the projected operating life of the facility;

10.

An emergency management plan for all anticipated hazards;

11.

Proof of financial capacity to construct and operate the proposed ~~non residential~~ solar ~~energy producing~~ facility~~USSF~~; and

12.

Name and contact information for solar system installer, and if different, the name, contact information and license number of the supervising Maine licensed electrician;

13.

Written certification by the installer that all electrical components shall be installed in accordance with the National Electrical Code;

14.

Provide a one- or three-line electrical diagram detailing the electrical components installation and electrical inter-connections to the Belgrade fire chief;

15.

Stream crossing detailed design plans;

16.

Prime agricultural soils identification and mapping conducted by a Maine-licensed soil scientist in accordance with the Maine Department of Agriculture, Conservation & Forestry guidelines, Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine, May 2020, or as revised; and,

17.

Maine Inland Fisheries & Wildlife Beginning with Habitat program mapping of high-value plant and animal species habitat on the project parcel and abutting parcels. High and moderate deer yard mapping within 1,500 feet of the development.

18.

~~a.~~

A Visual Impact Assessment.

a~~A~~n analysis to determine potential visual effect of the solar facility. ~~USSF~~ must be undertaken.

In all visual impact assessments, scenic resources within the viewshed of the proposed activity must be identified and the existing surrounding landscape must be described. The assessment must be completed following standard professional practices, including Sections 4-7, Section 10 and Appendix A of Chapter 315 of the Maine Department of Environmental Protection regulations, Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses (except "Planning Board" replaces "Department"), to illustrate the proposed change to the visual environment and the effectiveness of any proposed mitigation measures.

A visual impact assessment must also include narratives to describe the significance of any potential impacts, the level of use and viewer expectations, measures taken to avoid and minimize visual impacts, and steps

that have been incorporated into the activity design that may mitigate any potential adverse visual impacts to scenic resources.

The Visual Impact Assessment must include the following elements:

a. A visual and cartographic analysis (Viewshed Analysis).

A geographical representation of all the areas within a minimum of 3 miles of where the ~~USSF~~solar facility, from its highest points is visible from the surrounding (impact) area ~~should~~ shall be presented. The radius of the impact area to be analyzed must be based on the relative size and scope of the proposed activity given the specific location. Areas of the impact area from which the ~~activity~~ facility will be visible, including representative and worst-case viewpoints, must be identified. At a minimum, these public recreation and scenic resources within the boundaries of the Town of Belgrade are to be considered viewpoints for inclusion in this analysis: Great Pond, Long Pond, Messalonskee Lake, Salmon Lake, McGrath Pond, Minot Hill Road, areas of the Belgrade Lakes Golf Club open to the general public and above 400 feet elevation, and areas of Belgrade accessible by public road with an elevation above sea level equal or greater than 550 feet. Line-of-sight profiles constitute the simplest acceptable method of illustrating the potential visual impact of the proposed activity from viewpoints within the context of its viewshed. A line-of-sight profile represents the path, real or imagined, that the eye follows from a specific point to another point when viewing the landscape.

b.

Site inventory and photographic review.

This should provide a comprehensive and objective means by which to analyze and assess the potential visual and aesthetic impacts that may result from the ~~USSF~~ solar facility and its associated elements.

c. Visual s~~S~~imulations. ~~—~~Visual simulations should be provided to show a photo-realistic perspective view of proposed ~~USSF~~ solar facility elements in the landscape, thereby allowing abutters to clearly visualize how a project will really look from their primary residential structure.

~~The visual impact assessment must be prepared by a design professional trained in visual assessment procedures, or as otherwise directed by the Planning Board.~~

~~iv.~~ The visual impact assessment must be prepared by a Maine-licensed landscape architect or other design professional trained in visual assessment procedures, or as otherwise directed by the Planning Board.

19. An application for a s~~Non-Residential S~~olar ~~Energy Producing~~ f~~F~~acility permit must include a decommissioning plan. "Decommissioning" means the full and complete physical removal of all above- and below-ground components of a solar energy facility, including but not limited to solar ~~panels~~modules ,

associated anchoring systems and foundations, other structures, buildings, roads, fences, cables, electrical components, and associated facilities and foundations. Decommissioning plans must include:

a. ~~A decommissioning plan, including:~~

A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if no electricity is sold commercially to external customers~~generated~~ for a continuous period of 12 months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation and commercial sale of of electricity, that although the project has not commercially sold ~~generated~~ electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.

b.

A description of the work required to physically remove all solar panels, associated foundations, buildings, cabling, electrical components, and any and all other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded, unless the landowner of the affected land requests otherwise in writing.

~~[Note:~~ At the time of decommissioning, the Applicant ~~may~~ must provide evidence of plans for continued beneficial use of any or all of the components of the Solar Energy Facility. No waste from a decommissioning may be disposed of at the Town of Belgrade Transfer Station. Any changes to the approved decommissioning plan shall be subject to review and approval by the Planning Board.~~]~~

c.

An estimate of the total cost of decommissioning ~~less salvage value of the equipment~~ and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, panel foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization, and road infrastructure removal and permanent stabilization. This cost estimate must be updated every three (3) years and submitted to the Planning Board for its approval.

d.

Demonstration in the form of ~~a performance bond, surety bond,~~an irrevocable letter of credit from a state or federally regulated bank or credit union, a certified check payable to the municipality or a savings account or certificate of deposit naming the municipality as owner, for the establishment of an escrow account; or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful life of the ~~USSF~~ solar facility the Applicant will have the necessary financial assurance in place for 125~~00~~% of the total cost of decommissioning~~, less salvage value~~. ~~T~~. The owner of the facility shall provide the Planning Board with a revised removal cost estimate and structural evaluation prepared by a professional civil engineer licensed in Maine or a professional array construction company every three (3) years from the date of the Planning Board's approval of the solar array complex plan.~~he Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the USSF.~~ The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the ~~USSF~~ development is abandoned or the Applicant or subsequent responsible party

fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board.

e.

Transfer of ownership. Upon a transfer of ownership of a commercial solar energy development subject to a decommissioning plan approved under this ordinance, a person that transfers ownership of the development remains jointly and severally liable for implementation of the plan until the Planning Board approves transfer of the decommissioning plan to the new owner or operator. New owners must demonstrate to the Planning Board's satisfaction an ability to meet the financial assurance requirement. ~~.~~

f. An environmental site assessment. The decommissioning plan shall include provisions for conducting a Phase 2 environmental site assessment adequate to determine if there has been a release or discharge of oil or hazardous substances at or near any transformers, inverters or other equipment containing liquid oil or hazardous substances as defined by state law. Decommissioning shall not be considered complete until such time as a site assessment has also been completed and submitted to the Belgrade Code Enforcement Officer. At a minimum, the site assessment shall include a soil sample regime sufficient to find environmental evidence of past leaks or discharges. A site assessment shall also describe the nature and extent of contamination and will make recommendations for further action. An environmental site assessment shall be completed in accordance with American Society for Testing and Materials (ASTM) E1903-19 Standard Practice for Environmental Site Assessments as revised and prior to the transfer of ownership or change in use of the facility site. The decommissioning plan will also require a copy of the environmental assessment be submitted to the Belgrade Code Enforcement Officer within 30 days of completion and include provisions for reporting of oil or hazardous substances contamination in accordance with state statute to the Maine Department of Environmental Protection.

~~Section 7~~C. Standards for Approval.

In addition to the requirements in Article 6: ~~-~~Development Standards Generally~~Section III of the Site Plan Review Ordinance~~, the following standards must also be met:

1. Siting prohibitions - The development or construction of a ~~non residential~~ solar ~~energy producing~~ facility shall be prohibited in the following locations:

a. The Shoreland Zone as mapped in the Belgrade Shoreland Zoning Ordinance map;

b. The Village and Critical Resource Conservation Districts as described and mapped by the Town of Belgrade 2014 Comprehensive Plan;

c.

Areas of 20% or greater slope; ~~and;~~

d. -Areas with elevations above sea level of 550 feet or greater; and~~.~~

e. ~~Protect prime farmland and farmland of statewide important agricultural soils/lands —~~No more than five (5) contiguous acres ~~10% -~~of the total project area may be located on land with soils defined by the U.S. Dept. of Agriculture's Natural Resources Conservation Services as "prime

farmland" or "farmland of statewide importance" as determined by a field survey conducted by a Maine licensed soil scientist and in accordance with the Maine Dept. of Agriculture, Conservation and Forestry's May 2020 guidance document titled "Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine."

2. Other prohibitions:

a. -The development or construction of solar concentrating power plants are prohibited; and

b. Transformers and other electrical equipment using halogen or PCB oils as coolants are prohibited.

3. The solar energy system shall be designed by a Maine-registered electrical engineer.

4. ~~L~~ Legal r~~R~~esponsibilities: The Applicant must provide proof of authorization to construct, use, and maintain the property and any access drive for the life of the ~~USSF~~ solar facility and including the decommissioning of the ~~USSF~~solar facility. The roles and responsibilities of the facility owner, operator, landowner and any other party involved in the project must be clear and meet the satisfaction of the Planning Board that the public interest is protected.

5. ~~Setbacks: Structures (including fencing) that are part of a USSF shall be setback a minimum of **100 feet** from any existing residential dwelling structure.~~Minimum Setbacks:

a. Solar modules may not be located less than 250 feet from existing public and private road rights-of-way;

b. Solar modules may not be located less than 250 feet from existing residential dwelling units;

c. Solar modules may not be located less than 125 feet from adjacent property lines, unless a residential dwelling is within 125~~00~~ feet of the property line, in which case the more stringent setback of 250 feet from the dwelling applies;

d. Transformers and inverters may not be located less than 150 feet from a property line.

6. Clear-cutting and open space: The maximum area of land that is primarily forestland or the maximum area of wooded vegetation that may be cleared for a solar facility is 10 acres. Additionally, a minimum of 15% of a solar facility's developed and disturbed land area is to be reserved as undeveloped and natural open space. The acreage to be reserved as open space is to be indicated on the site plan. Areas included in buffers and setbacks shall not be included in the open space provision.

7. Visual screening requirements. The solar facility shall be at least 80-percent visually obscured from ~~property lines,~~ public and private roads, and residential dwelling units by a vegetative screen or buffer, as determined by the visual impact assessment at zero to ten (10) feet above the road surface and above the ground surface at residential dwelling units, respectively. Additionally, no more than one-~~a~~half-~~n~~-acre of a solar development may ~~should~~ be viewable from Belgrade waters or from the viewpoints designated in- the ~~(~~viewpoint assessment section~~/ paragraph)~~. Property lines in common with an approved subdivision shall also be provided with visual screening. The screening shall be designed and maintained as follows:

Commented [GS11]: Is the inclusion of the 80% obscuration from a property line when not associated with a road or residence, correct? I only recall discussing in context of screening residential dwellings and public/private roads.

1) At the May 12th meeting I stipulated I would agree to the 125' setback from property lines if the minimum 50' screening from a property line (if not associated with a public road or residence) was limited to when that property line is in common with a Town approved subdivision (I had amended my position from that in my memo upon thinking about Steve Buchsbaum's later comments and said as such at the meeting). Requiring planting of 50' of screening along an unused hay field and an undeveloped property line of land where there are no development plans for the foreseeable future, is unreasonable. I thought we had agreement on this as part of the overall compromise.

2) 80% obscuration standard should not apply to all property lines, just those in common with residential dwellings and roads. As written actually requiring hundreds/;thousands of feet of vegetative screening along an undeveloped property line and deeper than 50' since I doubt 50 ft. provides 80% obscuration.

I've offered some possible amendments to make the 80% obscuration standard work to screen the solar facility from actual human receptors (residents of a home, passersby on roads, and even future homeowners in a yet to be developed subdivision). In light blue, but not apply to common property lines with woodlots and other undeveloped land.

Commented [AW12]: This was how I worked in the degree of obscuration favored by the Board.

Commented [GS13]: I hadn't thought of this on May 12th in the course of our discussion, but do we need to specify a height above ground level? For example, planting of vegetated screening will not initially obscure visibility from the second story of a home by 80% absent requiring planting for full size trees. So for example, should the standard be something like "80 percent visually obscured from public and private roads and residential dwelling units at a height of 4' and the first floor, respectively, by a vegetative screen or buffer."

Commented [GS14]: My attempt to capture the discussion in the waning minutes of our 6/2 meeting. Craig made clear he needed more time to think about this. No agreement was reached on this as of yet by the Board.

Commented [AW15]: Ditto here.

a. All vegetative screening shall maximize the retention and use of existing, naturally occurring woodland and shrubs, with clearing limited to hazard trees. Clearing of trees and other natural vegetation prior to receiving development approval from the Planning Board is prohibited. The Planning Board may require augmentation of naturally occurring vegetation with plantings of native trees and shrubs to achieve significant visual screening if sufficient density of growth does not already exist. If damaged by weather, fire or disease at any time over the operating life of the facility, the visual buffer shall be maintained with the planting of trees and shrubs.

b. Minimum vegetative screening dimensions:

~~50 feet in depth along abutting property lines except as provided below.~~

i. 200' ~~feet~~ in depth along public and private roads.

ii. 250~~'~~ in depth along the common property line(s) with an existing residential dwelling unit that extends along the length of the property line demarcated by a 180-degree arc with a radius of 250' from each corner of the residential dwelling unit. Screening will be provided along the greatest length of property line indicated by this measurement method.

iii. Greater depth may be required by the Board to achieve 80-percent obscuration when ~~-~~determined to be needed by the visual impact analysis ~~from property lines~~.

iv.
Vegetative screening is to be provided from any property line in common with a residential subdivision previously approved by the Town of Belgrade. Such vegetative screening is to be a minimum of 50' in depth. Eighty percent obscuration from such a property line is not required in this specific instance only.

v. On sites which lack existing woodland, a planted vegetative buffer shall be planted to the same dimensions as stated above in this subsection, sufficient to provide with time year-round screening. The buffer shall consist of a mixture of native conifer tree species (e.g., white pine, balsam fir, white or red spruce, etc.) and understory trees and shrubs. Trees shall be a minimum of 6 feet in height at the time of planting and spaced no more than 30 feet apart, with shrubs and understory trees filling all gaps between the future overstory trees. Trees shall be planted in alternating rows to achieve an effective visual screen of a minimum 80-percent obscuration from public and private roads and residential dwelling units, ~~property lines~~ as determined by a visual impact assessment. All shrubby plant material shall be at least 3 feet in height at the time of planting and the species selected will grow at least to 5 feet at maturity. A planted vegetative visual screen shall be maintained over the lifespan of the facility with all plantings that die replaced as soon as growing conditions allow.

vi. Where no vegetation can be grown due to unique site conditions, the Planning Board may approve a visual screen consisting of fences, walls, berms or a combination thereof that achieve 80-percent obscuration from a property line, provided that such structures are not placed closer than 15 feet to a property line or public or private road right-of-way. Artificial screening shall be a of sufficient height and length to effectively screen the facility from view.

vii. The visual screen shall be planted or installed prior to completion of the development and prior to the start of facility operation.

viii. The Planning Board may approve an alternative, equally effective visual screening for the specified 80-percent obscuration, but only when supported by the findings of the visual impact analysis conducted in accordance with the requirements of this ordinance and its associated visual impact mitigation measures.

7. Natural Resource Setbacks and Buffers: ~~.~~ The following setbacks and natural vegetation buffers shall be maintained throughout the life of the solar facility from the following natural resources:

a. ~~Maintain~~ 100' setback and buffer ~~7~~ of natural vegetation along any rivers, streams or brooks, except for perpendicular crossings required for vehicle/powerline access. For streams less than 6' wide with less than a 2% slope, stream crossings shall be designed and constructed in accordance with the Maine Department of Transportation's Stream Smart Road Crossing Pocket Guide. Larger stream crossings shall be designed by a Maine registered professional engineer based on the principles of the Maine Stream Smart program.

b. ~~-~~250' setback and natural vegetation buffer from habitat of high value plant and animal species as identified and mapped by the Maine Department of Inland Fisheries and Wildlife's Beginning with Habitat program, including but not limited to habitat for state or federally listed endangered species, significant vernal pools, and high or moderate value waterfowl and wading bird habitats.

c. 1,320' setback and natural vegetation buffer from areas identified and mapped by the Maine Department of Inland Fisheries and Wildlife as a high- or moderate-value deer wintering area.

d. 75' setback and naturally vegetated buffer from wetlands included in the U.S. Fish and Wildlife Service's National Wetland Inventory. ~~Protect prime farmland and farmland of statewide important agricultural soils/lands – No more than 10% of the total project area may be located on land with soils defined by the U.S. Dept. of Agriculture's Natural Resources Conservation Services as "prime farmland" or "farmland of statewide importance" as determined by a field survey conducted by a Maine licensed soil scientist and in accordance with the Maine Dept. of Agriculture, Conservation and Forestry's May 2020 guidance document titled "Determining Prime Farmland Soils and Soils of Statewide Importance for Siting Solar Projects in Maine."~~

8. Height: ~~The USSF shall be no more than 15 feet high at its tallest point of any equipment~~ Maximum solar module height, as measured from ground level to a module's highest point at full tilt, shall not exceed 12 feet. ~~.~~

~~H.~~ 9. Utility Notification: No ~~non residential~~ solar ~~energy producing~~ facility ~~USSF~~ shall be installed until evidence has been given to the Planning Board that the applicant has an agreement with the local utility to accept the power.

10. ~~I.~~ Fencing: Provide safety fencing around all solar modules and electrical equipment. Fencing shall be "Solid Lock Game Fence" or of similar design with 8-inch by 12-inch holes at bottom, or shall be elevated five (5) inches above ground level to allow small wildlife passage. Fencing shall be located between the required visual screening and the electrical components of the solar facility. Access gates may be located outside the required visual screening.

~~The Planning Board may require that a USSF be enclosed by fencing to prevent unauthorized access and may also require landscaping to avoid adverse aesthetic impacts of installed fencing to adjacent properties.~~

11. ~~J.~~
Signage: Signage shall be required to identify the owner of the ~~non-residential~~ solar ~~energy-producing~~ facility ~~USSF~~ and provide a 24-hour emergency contact phone number. This signage shall not be used for advertising except for reasonable identification of the manufacturer or operator of the ~~USSF~~solar facility. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the ~~USSF~~solar facility, informing individuals of potential voltage hazards, including stating the output of power (AC or DC).

Signage indicating the official e911 address of the solar f~~F~~acility shall also be required to clearly be visible, from both directions of travel, from the public road or roads from which the ~~USSF~~ facility is accessed.

12. ~~K.~~ Emergency Services: The solar facility owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A "3200 Series KNOX-BOX" shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the solar facility shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.

Access roads to the solar facility shall be of sufficient quality and dimensions to satisfy the fire chief that any emergency response vehicles be able to easily and safely gain access to and around the site.

13.

Visual Impact: A ~~non-residential~~ solar facility ~~ny USSF should~~ shall not have ~~any~~ detrimental effect on the public recreational and scenic resources of ~~the town~~Belgrade or significantly degrade the scenic ~~value~~ view from abutters' properties. ~~In order~~To determine the visual impact of any ~~USSF~~~~non-residential~~ solar facility, the Planning Board will, using the information provided in the Visual Impact Assessment study ~~(See above)~~, consider the following:

a. The significance of the potentially affected public recreational and scenic resources;

b. The existing character of the surrounding area;

c. The expectations of the typical viewer;

d. ~~iv.~~ The project purpose and the context of the proposed activity;

e. ~~v.~~ The extent, nature and duration of the potential effect of the ~~USSF's~~ ~~non-residential~~ solar facility's presence on the public's continued use and enjoyment of ~~the towns~~Belgrade's public recreational and scenic resources.

The Planning Board shall consider Belgrade's public recreational and scenic resources to include, but not be limited to, the following: areas of Great Pond, Long Pond, Messalonskee Lake, Salmon Lake and McGrath Pond within the Town of Belgrade; the Minot Hill Road; that portion of the Belgrade Lakes Golf Club open to the general public and with an elevation of 400 feet or greater; and locations in Belgrade accessible by public road with an elevation of 600 feet or greater.

In addition to the considerations listed above in a~~i~~. through e~~v~~. of this subsection, the Planning Board shall implement the visual impact standard in part using a rebuttable presumption that during those times of year when deciduous trees have all their leaves and if one-half acre or more of any solar facility is fully visible from areas of Great Pond, Long Pond, Messalonskee Lake, Salmon Lake and McGrath Pond within the Town of Belgrade; the Minot Hill Road; that portion of the Belgrade Lakes Golf Club open to the general

public and with an elevation of 400 feet or greater; and locations in Belgrade accessible by public road with an elevation of 5560̶0̶ feet or greater; it will be considered to have a detrimental effect on the public recreational and scenic resources of Belgrade and therefore will have an adverse effect on the scenic and natural beauty of the area under paragraph xvi of Article 5: Review Criteria of the ordinance.

f. ~~vi.~~ Vehicle access and electrical transmission routes shall be combined into a single corridor through required vegetative screening and buffers, or shall be co-located in existing rights-of-way, roads or other existing man-made linear features. Access roads shall have a vehicle travel surface that is no less than 12 feet and no more than 20 feet in width. ~~*The width of access roads shall be no less than 12 feet and no greater than 20 feet.*~~ When the proposed access road is unable to take advantage of an existing man-made linear feature, ~~-~~the layout of the road from a public road into the facility is to include at least one curve or angle such that the access road does not provide a straight line-of-sight of the facility's modules or other equipment. Access roads must be maintained year-round, including snowplowing, to ensure emergency vehicle access.

~~A. Emergency Services: The USSF owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Town of Belgrade Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A "3200 Series KNOX BOX" shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the USSF shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.~~

~~Access roads to the USSF shall be of sufficient quality and dimensions to satisfy the fire chief that any emergency response vehicles be able to easily and safely gain access to and around the site.~~

14. Herbicides: Use of herbicides to manage vegetation within the development is prohibited. Mechanical means are to be utilized, which may include animal grazing.

15. Maintenance Conditions: The ~~non residential~~ solar facility ~~USSF~~ owner or operator shall maintain the ~~non residential~~ solar facility ~~USSF~~ and all associated fencing, visual barrier measures and landscaping elements in good functional condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security and visual barrier measures. The ~~non residential~~ solar facility ~~USSF~~ must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety, or general welfare. Site access shall be maintained to a level acceptable to the Town of Belgrade Fire Chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the ~~non residential~~ solar facility ~~USSF~~ and any access road(s).

16. Inspection Requirements:

a. Project Completion Inspection. Within 30 days of the completion of facility construction and prior to the start of facility operation, a permit and ordinance compliance inspection report by a Maine registered professional engineer shall be conducted and submitted to the CEO, including recommendations for any required remediation measures and a timetable for their implementation.

b. Monthly inspections. A monthly physical inspection shall be conducted of the physical integrity all modules, transformers, inverters and other electrical components, and to identify any evidence of a leak or discharge of a hazardous substance or oil. The inspection shall be conducted by a qualified representative of the facility owner. A written paper or electronic inspection log shall be maintained with at a minimum the following information: inspection date, who conducted it, their

initials or electronic signature, and if and where any discharges were found. The inspection log will be maintained at the owner's place of business in Maine and will be made available upon request by the Town code enforcement officer, fire chief or duly authorized public officials from the State of Maine. Evidence of a discharge of a possible hazardous substance or oil shall be reported to the Maine Department of Environmental Protection in accordance with current law and regulations for determination of the need for possible further investigation or remediation.

~~Modifications: Any material modifications to a non-residential solar facility USSF made after issuance of the required Town permit(s) shall require approval by the Code Enforcement Officer and/or the Planning Board.~~

17. Satisfaction with All Aspects of Capacity and Plans Submitted: The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the ~~non-residential~~ solar facility~~USSF~~.