

3.7.7 Miscellaneous Uses.

12-27-22 Draft

a. Solar Energy Systems.

1. Identification and Exemptions:

i. "Solar energy system" means equipment that directly converts solar energy into a usable form of thermal or electrical energy, and then transfers or stores the usable thermal or electrical energy.

ii. Mounting Types-

a. **Building-mounted** Solar Energy System: A accessory use that is the installation of equipment mounted on a building or incorporated into the exterior building materials that uses sunlight to produce electricity, provide heat, or hot water.

b. **Free-Standing** Solar Energy System: A principal or accessory use that is the installation of equipment mounted on the ground that uses sunlight to produce electricity, provide heat, or hot water.

iii. For purposes of this section, "Solar energy system" shall exclude solar powered light fixtures that are ground or wall mounted, solar powered electric fences, portable non-connected solar systems and any solar powered energy system that directly converts solar energy into a usable form of thermal or electrical energy but **does not** transfer or store the usable thermal or electrical energy.

iv. Solar Energy Systems 50kW or less are exempt from the required Conditional Use Permit.

2. Solar System Standards:

i. For purposes of applying these standards, solar energy system size shall be determined by using the total solar energy system module DC nameplate rating.

ii. Electric solar energy systems components must have a UL or equivalent listing and solar hot water must have an SRCC rating.

iii. All solar farms shall be in compliance with all applicable local, state, and federal regulatory codes, including the State of Wisconsin Uniform Building Code, as amended; and the National Electric Code, as amended.

iv. An approved Conditional Use permit is required for the installation or expansion of any "Solar Energy System" over 50kW in the Town of Calumet. A conditional use permit is not required for the installation or expansion of any completed size "Solar Energy System of 50kW or less.

v. A building permit is required for all installations.

vi. A Joint Development Agreement by and among the Solar developer, Fond du Lac County, and the Town of Calumet, is required for all Solar Energy System projects occupying more than 20 acres in the Town of Calumet.

vii. The Town of Calumet will provide a template Joint Development Agreement as a basis for agreement completion.

viii. A Joint Development Agreement if required, must be complete and signed by all applicable parties before any type of construction may proceed.

ix. All solar energy system installations located within the area known as the Pipe Creek Watershed shall be limited to a maximum use of one-eighth acre of land, per address.

For the purpose of implementing this ordinance, the Pipe Creek Watershed area located in the Town of Calumet shall be bounded by the following: The north Town of Calumet Township boundary line, east to the intersection of a line extending north of Town Hall Road, south on Town Hall Road to Calmar Road, west on Calmar Road to County Road W, south on County Road W to the intersection with the south Town of Calumet Township boundary line, west on the South Town of Calumet Township boundary line to Lake Winnebago, north following the shore of Lake

Winnebago to the intersection with the north Town of Calumet Township boundary line.

x. There shall be no loss of existing Town valuation-based tax revenue as a result of any solar installation. Any loss of valuation-based tax revenue because of a solar installation shall be addressed in the Joint Development Agreement and shall include offsetting payments by the original solar developer, its successors, or assigns, with a yearly escalator for the life of the project, to cover said tax losses to the County, Schools, or Township.

xi. A solar energy system installation shall cause no additional incurred costs to any adjacent non-participating landowner or occupant thereof, such as but not limited to, tv or radio signal disturbance, electromagnetic interference, or glare protection.

xii. Building-Mounted Solar Energy Systems

a. The height of a building mounted solar energy system shall comply with the maximum height restrictions of an accessory use for the zoning district in which it is located.

b. All portions of a roof mounted solar energy system shall be a minimum, of four (4) feet from any roof edge and three (3) feet from a roof ridge or high point.

c. The panels of the solar energy system that are mounted on a pitched roof may be either fixed or movable and may be placed at an angle to optimize efficiency of the system, but shall be limited to a maximum projection from the roof surface of twelve (12) inches.

d. The panels of the solar energy system that are mounted on a flat roof may be either fixed or movable and may be placed at an angle to optimize efficiency of the system.

e. No portion of a wall mounted solar energy system may extend laterally beyond the wall surface to which it is attached.

f. A solar energy system, mounted on the facade of a building, shall have the same finished pitch as the

facade on which it is mounted, and project no more than ten inches from the facade surface.

xiii. The maximum height of a free-standing solar energy system shall not exceed fourteen (14) feet in height above grade, which is to be measured at the apex when the tracker is at its maximum tilt in early morning or late evening.

xiv. Free-Standing Solar Energy System located in a residential district.

a. The collection surface area of a solar energy system shall not exceed one hundred and fifty (150) square feet when located in a residential district.

b. There shall be no more than one (1) free-standing solar energy system per address, when located in a residential district.

c. A free-standing solar energy system located in a residential district shall comply with the property line setback restrictions as an accessory use in a residential district.

xv. Power and communication line running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted for instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes underground installation infeasible.

xvi. Setbacks

a. Navigable Waterways: Any project shall maintain a minimum setback from water if deemed "navigable" by the WDNR at a distance required by the PSCW or the appropriate Federal, State, and/or County regulatory authority. Any project shall also comply with the Fond du Lac County Shoreland Zoning Ordinance, regarding the restrictions on removing vegetation along any navigable waterway (except access roads).

b. Non-navigable Waterways: Waterways that are not deemed navigable, shall have a minimum twenty (20) foot setback from the ordinary high-water mark to all aboveground project components including fences.

c. Free-standing solar energy systems located in other than residential districts shall comply with the following setbacks.

1. All aboveground project components such as buildings, structures, fences, and access roads shall maintain a minimum twenty (20) foot setback from property lines of non-participating landowners, with no minimum setback from property lines of participating landowners.

2. Roadway setback of a solar energy system shall be a minimum of one hundred-fifty (150) feet from ROW centerline for State and County highways, and a minimum of one hundred (100) feet from the ROW centerline for all other roads, excluding security fencing, screening, or berm.

3. A setback minimum of one hundred-fifty (150) feet is required from an existing dwelling unit to the nearest aboveground project component.

4. For any landowner whose property is bounded on two (2) or more sides, a minimum setback of two hundred (200) feet is required from an existing dwelling unit to the nearest aboveground project component.

xvii. Sound Impacts

a. Any project will comply with PSCW standards set forth in Wisconsin Admin. Code PSC 128.14 and any Town of Calumet sound impact standards set forth in the Zoning Ordinance for the zoning district where the project is located, which together include maximum sound levels attributable to the project during daylight and evening hours.

b. Any projects inverters, substations, motors, and other noise emitting equipment shall not exceed the

PSCW mandated maximum nighttime sound level of 45 dBA, nor the maximum daytime sound level of 50 dBA at the walls of the noise-sensitive receptors, hereby identified at the single-family residences within proximity of the project. To ensure noise level estimates associated with facility design are conservative, a 5 dBA tonal penalty shall be included in the pre-construction or any post-construction sound analysis and, even with the additional 5 dBA tonal penalty, resulting projected noise levels from the project must remain below the PSCW limits.

xviii. Privacy Screening

The developer of community and large-scale projects may be required to provide at their sole expense, eight (8) foot tall screening between adjacent existing residential dwellings and solar installation property, if required by an existing dwelling owner at time of development.

xix. Fencing

Solar energy projects over one (1) acre shall:

a. Install deer exclusion fencing around the solar equipment at the height of seven (7) to eight (8) foot high or a height mandated by the PSCW to mitigate changes to aesthetics of agricultural landscape and to prevent larger animals from gaining access to solar equipment. In the event of conflict between a height of seven (7) to eight (8) foot high or a height mandated by the PSCW shall control.

b. Install deer exclusion fencing specified for the project that will have openings large enough to allow the safe passage of small mammals.

c. Include areas at exclusion fencing where larger wildlife such as deer will have crossings or passage along waterway corridors, and at other locations as needed. The Wisconsin DNR wildlife biologist shall be contacted to provide guidance.

- d. Use chain link and barbed wire for substation protection as required by the electrical code.
- e. Install no fence within twenty (20) feet of the high-water mark of any waterway. See xiv. Setbacks a & b.

xx. Site Vegetation

- a. A project site Vegetative Management Plan is required for solar installations occupying more than one (1) acre on land.
- b. Large scale removal of on-site mature trees for the purpose of solar installation is strictly prohibited.
- c. The applicant shall submit a Vegetative Management Plan prepared by a qualified professional or reviewed and approved by a natural resource agency or authority, such as the Wisconsin DNR, County Soil and Water Conservation Department, or Natural Resource Conservation Service. Final acceptance of the proposed Vegetative Management Plan will be by the Town of Calumet Town Board.

The plan shall identify:

1. The natural resource professionals consulted or responsible for the plan.
2. The conservation, habitat, eco-system, or agricultural goals, which may include, providing habitat for pollinators such as bees and monarch butterflies, providing habitat for wildlife such as upland nesting birds and other wildlife, establishing vegetation for livestock grazing, reducing on-site soil erosion, and improving or protecting surface and/or ground water quality.
3. The intended mix of vegetation upon establishment.
4. The management methods and schedules for how vegetation will be managed on an annual

basis, with particular attention given to the establishment period of approximately three (3) years.

5. Soils shall be planted and maintained in perennial vegetation for the full operational life of the project, to prevent erosion, manage run off and build soil.

6. Vegetative cover should include a mix of perennial grasses and wildflowers that will preferably result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening. Perennial vegetation (grasses and forbs) are preferably native to Wisconsin, but where appropriate to the vegetative management plan goals, may also include other naturalized and non-invasive species which provide habitat for pollinators and wildlife and/or other ecosystems services (i.e. clovers).

7. Plant material must not have been or will be treated with systemic insecticides, particularly neonicotinoids.

d. All project sites implementing a vegetative management plan are subject to an annual inspection by a Town of Calumet appointed representative.

xxi. Aesthetics

The original solar developer, its successors, or assigns, shall, at all times and at its sole expense, maintain the project in good condition and repair. The above named shall also maintain at its sole expense, the project in a manner that prevents equipment or fencing from remaining in a state of disrepair.

xxii. Stormwater Management and Erosion Control

a. Stormwater and NPDES – Solar farms are subject to the Town of Calumet stormwater management

erosion control provisions and NPDES permit requirements.

b. Solar collectors shall not be considered impervious surfaces if the project establishes vegetation per the approved Site Vegetative Management Plan. The importance of one hundred percent (100%) compliance of said Site Vegetative Management Plan cannot be stressed enough, and non-compliance alone may be reason for revocation of the Conditional Use Permit.

xxiii. Agricultural Land Protection

a. Solar installations over one (1) acre must comply with site assessment or soil identification standards that are intended to identify agricultural soils. The Town of Calumet may require mitigation for use of prime soils for solar array placement, including the following:

1. Demonstrating co-location of agricultural uses (agrivoltaics) on the project site.
2. Using an interim use or time limited CUP that allows the site to be returned to agriculture use at the end of life of the solar installation.
3. Placing agricultural conservation easements on an equivalent number of prime soil acres adjacent to or surrounding the project.

xxiv. Decommissioning / Rebuilding

a. A decommissioning / rebuilding plan, for all solar installations over one (1) acre, shall be required to ensure that facilities and materials are properly removed and disposed of. The plan prepared by a licensed engineer, shall include provisions for removal of all structures and foundations, panels, wiring and conduits, restoration of soil and vegetation, projected costs, and assurances that financial resources will be available to fully decommission the site sufficient to restore the farmland to a productive agricultural condition. The decommissioning plan shall also list all owner's specific responsibilities and provide a timeline for the

decommissioning process from end of project to final restoration.

b. Disposal of structures and/or foundations shall meet the provisions of the Town of Calumet solid waste ordinance.

c. Town of Calumet requires the posting of a surety bond, letter of credit, or the establishment of an escrow account issued by a federally insured or equivalent financial institution, to ensure proper decommissioning for all solar systems occupying more than one (1) acre. The amount of a surety bond, letter of credit, or escrow account shall equal to 5 percent of the total project cost, with a built-in 2.5 percent yearly escalator. All decommissioning plans shall be reviewed every ten (10) years.

d. The requirement of a decommissioning surety bond, letter of credit or establishment of an escrow account must be fulfilled before a building permit may be issued.

e. Decommissioning agent shall provide documentation that a decommissioned solar project has been properly recycled or legally disposed of, before closure of said bonding, letter of credit or escrow account may be occur.

f. If it is determined that more than fifty (50) percent of the panels (measured by total area) have not been operational for a continuous period of twelve (12) months, decommissioning and removal of the system must occur.

3. Permitting Requirements

i. Application for the installation or expansion of all solar energy systems requiring a Conditional Use Permit, shall include the following information, or be attached to the Town of Calumet - Conditional Use Permit application:

ii. Name and address of applicant.

iii. Evidence that the applicant is the owner of the property involved or has written permission of the owner to make such an application.

iv. Scaled drawing of the solar energy system and its dimensions, its height above ground level, orientation, and slope from horizontal.

v. Site plan showing lot lines and dimensions of the solar energy system user's lot and neighboring lots that might be affected by the solar energy system.

vi. Documentation showing that no reasonable alternative location exists for the solar energy system that would result in less impact on neighboring lots.

vii. Documentation showing that removing or trimming vegetation on the applicant's lot will not permit an alternative location for the solar energy system that would result in less impact on neighboring lots.

viii. An applicant of a solar energy system occupying more than one (1) acre shall provide, with the building permit application, one of the following to fulfill the decommissioning requirements of this ordinance: surety bond, letter of credit or an established escrow account.

ix. An applicant for a solar energy system 5MW or greater shall deposit an application fee of ten thousand (\$10,000) dollars with the Town of Calumet at the time the Conditional Use Permit application is filed. All costs incurred by the Town relating to the review and processing of the application, including the cost of services necessary to review an application that are provided by outside engineers, attorneys, planners, environmental specialists, and other consultants or experts shall be billed against the deposit. The applicant shall maintain a minimum of five thousand (\$5,000) dollars in the account until the review process and construction (if approved) is completed. If the balance in the account drops below five thousand (\$5,000), the applicant shall deposit additional money to bring the account balance to seventy-five hundred (\$7,500) dollars within 5 business days. The Town will refund any remaining balance in the account within sixty (60) days after the final inspection of the constructed solar energy system or after denial of the application, as applicable. The Town reserves the right to

refuse review of an application in the event an applicant fails to comply with this subsection.

x. An applicant for a solar energy system greater than 500kW but less than 5MW shall deposit an application fee of five thousand (\$5,000) dollars with the Town of Calumet at the time the Conditional Use Permit application is filed. All costs incurred by the Town relating to the review and processing of the application, including the cost of services necessary to review an application that are provided by outside engineers, attorneys, planners, environmental specialists, and other consultants or experts shall be billed against the deposit. The applicant shall maintain a minimum of two thousand (\$2,000) dollars in the account until the review process and construction (if approved) is completed. If the balance in the account drops below two thousand (\$2,000), the applicant shall deposit additional money to bring the account balance to thirty-five hundred (\$3,500) dollars within 5 business days. The Town will refund any remaining balance in the account within sixty (60) days after the final inspection of the constructed solar energy system or after denial of the application, as applicable. The Town reserves the right to refuse review of an application in the event an applicant fails to comply with this subsection.

xi. Such additional information as may be reasonably requested.

xii. Any information required by this sub-section may be waived by the Town at its discretion.

4. Additional Standards for Granting Solar Energy System Conditional Use Permit.

i. The Town will consider each solar energy system on a case-by-case basis.

ii. The Town may deny a Conditional Use permit for a solar energy system or may impose restrictions on a solar energy system if the Town finds that the denial or restrictions satisfy one of the following conditions:

- a. The denial or restriction serves to preserve or protect the public health or safety.
 - b. The denial or restriction does not significantly increase the cost of the system or significantly decrease its efficiency.
 - c. The denial or restriction allows for an alternative system of comparable cost efficiency.
- iii. The Town may impose conditions on a solar energy system conditional use permit relating to any of the following:
- a. Setbacks from inhabited structures, property lines, public roads, communication and electrical lines, and other sensitive structures and locations.
 - b. Wiring and electrical controls of the solar energy system.
 - c. Reimbursement for emergency services required as a result of the solar energy system.
 - d. Solar energy system ground clearance.
 - e. Solar energy system height.
 - f. Screening adjacent to existing dwellings.
 - g. Direction by the WI. DNR or Fond du Lac County Land and Water Conservationist to implement best practices to control predictable erosion.
 - h. Agricultural protection mitigation.
 - i. Aesthetic degradation. Set land usage limits to reduce the loss of natural beauty within the Town of Calumet, especially the Niagara Escarpment formation features and surrounding area located within the Pipe Creek Watershed area.
 - j. Any other matters that the Town finds appropriate.

k.. Any Conditional Use permit for the installation or maintenance of a solar energy system may be revoked by the Town if the permit holder, its heirs, or assigns, violates the provisions of this ordinance or the provisions of a Conditional Use Permit granted pursuant to this ordinance.

5. Penalties

i. Any violation of any provision of this Ordinance subsection shall be punishable by a forfeiture of not less than five hundred (500) dollars, nor more than one thousand (1000) dollars for each violation committed hereunder and may result in revocation of the Condition Use Permit.

ii. Each day a violation exists after receiving the violation notice or order shall constitute a separate violation of this Ordinance.

iii. Penalties set forth in this section shall be in addition to all other remedies of injunction, abatement, or costs whether existing under this Ordinance or otherwise.

6. Severability.

If any portion of this sub-section is ever determined by a court of competent jurisdiction to be unconstitutional or otherwise unenforceable, said portion shall be removed so as to allow the remaining provisions of this sub-section to be enforceable.

b. **Wind Energy Systems**

c. **Transportation, Communications, Pipeline, Electric Production / Transmission, Utility, or Drainage Uses:**

These uses require a conditional use permit unless the use is required under state or federal law to be located in a specific place or that is authorized to be located in a specific place under a state or federal law that preempts the requirement of a conditional use permit for that use.

The following definitions need to be added to 3.3.2 Definitions:

Solar Energy System.

Means: equipment that directly converts solar energy into a usable form of thermal or electrical energy, and then transfers or stores the usable thermal or electrical energy.

Passive Solar Energy System

Passive Solar Energy System — A solar energy system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

Community-Scale Solar Energy System

A commercial solar energy system that converts sunlight into electricity for the primary purpose of serving electric demands off-site from the facility, either retail or wholesale. Community-scale systems are principal uses and projects typically cover less than 20 acres.

Large-Scale Solar Energy System

A commercial solar energy system that converts sunlight into electricity for the primary purpose of wholesale sales of generated electricity. A largescale solar energy system will have a project size greater than 20 acres and is the principal land use for the parcel(s) on which it is located.