

**ORDINANCE 2018-19-**

***An Ordinance Amending Section 11 of the Bull Valley Zoning Code to Add Photovoltaic Solar Systems as Permitted Accessory Structures.***

BE IT ORDAINED by the President Village Board of the Village of Bull Valley, McHenry County, Illinois, as follows:

SECTION 1: Section 11, Accessory Structures and Uses of the Village of Bull Valley Zoning Code, shall be amended to add a subsection 11.4-4, Photovoltaic Solar Systems as permitted accessory structures subject to the following restrictions:

**1. Definitions:** In addition to the definitions in Section 4 of the Bull Valley Zoning Code, terms (whether capitalized or not) used in this Section shall have the following meanings:

**Accessory Solar Energy System:** A photovoltaic solar energy system that is owned by a homeowner or tenant primarily to provide solar electricity for the residence or accessory structure and secondarily for net metering.

**Building-integrated Solar Energy Systems:** A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building such as a system integrated into roofing materials, windows, skylights, and awnings.

**Ground-Mounted System:** A photovoltaic solar energy system mounted on a rack or pole that rests or is attached to the ground.

**Net Metering:** A utility billing mechanism available that offers a credit to residential and business customers who are making excess electricity with their solar panel systems and sending it back to the grid.

**Photovoltaic Solar Energy System:** A solar energy system consisting of one or more solar panels that are ground-mounted or attached in some way to another structure or building and that convert solar energy directly into electricity.

**Roof or Building-Mounted System:** A photovoltaic solar energy system mounted on a rack that is fastened to or ballasted on a building roof.

**Roof Pitch:** The final exterior slope of a building roof calculated by the rise over the run, typically but not exclusively expressed in twelfths such as 3/12, 9/12, 12/12.

**Solar Energy:** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

**Solar Storage Unit:** A component of a solar energy device that is used to store solar generated electricity or heat for later use.

**2. Standards:** A photovoltaic solar system shall be allowed as an accessory use in all zoning classifications where structures of any sort are allowed, subject to certain requirements as set forth below. All requirements of the underlying zoning district shall apply unless relief is granted by the Village.

A. Height: An accessory solar energy system must meet the following height requirements: A building or roof-mounted system shall not exceed the maximum allowed height in any zoning district. Ground or pole-mounted systems shall not exceed 12'6" in height when oriented at maximum tilt, notwithstanding any other less restrictive height requirement in this zoning ordinance.

B. Set-back: An accessory solar energy system must meet the accessory structure setbacks for the zoning district and primary land use associated with the lot on which the system is located. No solar installation will be permitted in front yards.

1. Roof or Building-mounted Solar Energy Systems. In addition to the building setback, the collector surface and mounting devices for roof-mounted systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.

2. Ground-mounted Solar Energy Systems. Ground-mounted systems may not extend into the side-yard or rear setback when oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

C. Visibility: Accessory solar energy systems shall be designed to blend into the architecture of the building or be screened from routine view from public right-of-ways provided that screening shall not affect the operation of the system. The color of the solar collector is not required to be consistent with other roofing materials.

1. Building Integrated Photovoltaic Systems. Building integrated systems shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated meets all required setback, land use or performance standards for the district in which the building is located.

2. Solar Energy Systems with Mounting Devices. Ground or Building Mounted solar energy systems shall not be visible from the closest edge of any public right-of-way. Roof Mounted systems that are visible from the nearest edge of the street frontage right-of-way shall not have a highest finished pitch steeper than the roof pitch on which the system is mounted, and shall be no higher than twelve (12) inches above the roof notwithstanding any other less restrictive height requirement in this zoning ordinance.

3. Reflectors. All solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties. Measures to minimize glare include selective placement of the system, screening on the north side of the solar system, modifying the orientation of the system, reducing use of the reflector, or other remedies that limit glare.

D. Coverage: Roof or building mounted solar energy systems, excluding building-integrated systems, shall allow 25% of perimeter clearance on the south-facing or flat roof upon which the panels are mounted, for adequate roof access for fire-fighting purposes. The area covered by ground-mount systems shall not exceed 500 square feet, and shall be exempt from impervious surface calculations if the soil under the collector is not compacted and is maintained in vegetation. Foundations, gravel, or compacted soils are considered impervious.

E. Historic Buildings: Solar energy systems on buildings within designated historic districts or on

locally designated historic buildings (exclusive of State or Federal historic designation) must receive approval of the McHenry County Historic Preservation Commission, consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior.

F. Procedures and Requirements for Permitted Accessory Use Plan Approval: All solar energy systems shall require plan approval and issuance of a building permit.

1. Applications for permitted accessory solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or property, including the property lines. Applications for roof-mounted solar systems must include a structural analysis.
2. Pitched Roof Mounted Solar Energy Systems. For all roof mounted systems other than a flat roof the elevation must show the highest finished slope of the solar collector and the slope of the finished roof surface on which it is mounted.
3. Flat Roof Mounted Solar Energy Systems. For flat roof applications a drawing shall be submitted showing the distance to the roof edge and any parapets on the building and shall identify the height of the building on the street frontage side, the shortest distance of the system from the street frontage edge of the building, and the highest finished height of the solar collector above the finished surface of the roof.
4. In addition applicant must demonstrate compliance with the following:
  - a. Approved Solar Components: Electric solar energy system components must have a UL listing or approved equivalent.
  - b. Compliance with Building Code: All active solar energy systems shall meet approval of local building code officials, consistent with the State of Illinois Building Code.
  - c. Compliance with State Electric Code: All photo voltaic systems shall comply with the Illinois State Electric Code.
  - d. Utility Notification: All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.
5. Plan Approvals. Applications that meet the design requirements of Section 2 of this ordinance, and compliance with requirements of this Section F shall be granted administrative approval by the Village Administrator and not require Zoning Commission review. Plan approval does not indicate compliance with building and electric codes.

**3. Prior to administrative approval and the issuance of a building permit**, applicants must acknowledge in writing that the issuing of said approval shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

SECTION 2: If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any Court of competent jurisdiction to be invalid, such judgment shall not affect, impair, invalidate or nullify the remainder thereof, which remainder shall remain and continue in

full force and effect.

SECTION 3: All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 4: This Ordinance shall be in full force and effect upon its passage, approval and publication in pamphlet form (which publication is hereby authorized) as provided by law.

Voting Aye:

Voting Nay:

Absent:

Abstain:

APPROVED:

Emily Berendt, President

(SEAL)

ATTEST: \_\_\_\_\_

Village Clerk, Phyllis Keinz

Passed: \_\_\_\_\_

Approved: \_\_\_\_\_

Published: