

Village of Wonder Lake, Illinois
Ordinance No. 489

**AN ORDINANCE AMENDING SECTION XV.A. OF THE
VILLAGE OF WONDER LAKE ZONING ORDINANCE
TO ADD PHOTOVOLTAIC SOLAR SYSTEMS AS
PERMITTED ACCESSORY STRUCTURES**

Passed by the Board of Trustees
and Approved by the President

This 6 day of
November, 2019

Published in pamphlet form by the authority of the President and Village Board of
Trustees of the Village of Wonder Lake, Illinois. .

ATTEST:


VILLAGE CLERK

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BE IT ORDAINED by the President and Board of Trustees of the Village of Wonder Lake as follows:

SECTION 1: Section XV.A. Accessory Uses and Structures of the Village of Wonder Lake Zoning Ordinance shall be amended to add a subsection XV.A.11, Photovoltaic Solar Systems as permitted accessory structures subject to the following restrictions:

1. Definitions. In addition to the definitions in Section XIX of the Wonder Lake Zoning Ordinance, terms (whether capitalized or not) used in this Section shall be the following meanings:
 - a. Accessory Solar Energy System. A photovoltaic solar energy system that is owned by a property owner primarily to provide solar electricity for the residence or accessory structure and secondarily for net metering.
 - b. 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.
 - c. Ground Mounted System. A photovoltaic solar energy system mounted on a rack or pole that rests or is attached to the ground.
 - d. 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.
 - e. 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.

- f. Roof or Building Mounted System. A photovoltaic solar energy system mounted on a rack that is fastened to or ballasted on a building roof.
 - g. 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.
 - h. Solar Energy. Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
 - i. 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 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. Setback. 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.
 - i. 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. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building integrated systems and are regulated as awnings.
 - ii. Ground Mounted Solar Energy Systems. Ground mounted systems may only be located on residential lots with a minimum lot area of a half acre (21,780 square feet). Further, 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.

3. Visibility. Accessory solar energy systems shall be subject to the following standards:
 - a. Building Integrated Photovoltaic Systems. Building integrated systems shall be designed to blend into the architecture of the building 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.
 - b. Pitch and Color of Roof Mounted Systems. 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. The color of the solar collector is not required to be consistent with other roofing materials.
 - c. Reflections. 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 the use of the reflector, or other remedies that limit glare.
4. Coverage. Roof or building mounted solar energy systems, excluding building integrated systems, shall be located a minimum of three feet (3') from the sides and peak of said roof (excluding the bottom/lowest edge of a peaked roof) upon which the panels are mounted in order to provide adequate roof access for firefighting purposes. The area covered by ground mounted systems shall not exceed 500 square feet and shall not be exempt from maximum impervious surface calculations. For purposes of calculating the impervious surface area of a ground mounted system, the area of the collector panel, regardless of tilt or orientation, shall be considered impervious area. Foundations, gravel or compacted soils associated with the system are also considered impervious.
5. 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.

6. Procedures and Requirements for Permitted Accessory Use Plan Approval. All solar energy systems shall require plan approval and issuance of a building permit.
- a. Applications. 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 and location of all structures on the subject and adjacent properties and include the property lines. Applications for roof mounted solar systems must include a structural analysis.
 - b. Pitched Roof Mounted Solar Energy Systems. For all roof mounted systems, 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.
 - c. Flat Roof Mounted Solar Energy Systems. For flat roof applications, a drawing must 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.
 - d. Additional Requirements. In addition, an Applicant must demonstrate compliance with the following:
 - i. Approved Solar Components. Electric solar energy system components must have a UL listing or approved equivalent.
 - ii. 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.
 - iii. Compliance with State Electric Code. All photovoltaic systems shall comply with the Illinois State Electric Code.
 - iv. 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.
 - e. Plan Approvals. Applications that meet the design requirements of this Section 2 of this Ordinance, and compliance with the

requirements of this Section 6, and all other requirements of the Zoning Ordinance shall be granted administrative approval by the Village President and shall not require Planning and Zoning Commission review. Plan approval under the requirements of this ordinance does not indicate compliance with other applicable building and electric codes.

7. Waiver of Vested Right to Solar Access. 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.
8. Abandonment and Removal.
 - a. Required Landscaping. If a ground mounted solar energy system is removed, any earth disturbance as a result of the removal shall be landscaped in accordance with any applicable local rules or regulations.
 - b. Abandonment. All solar energy systems are considered to be abandoned or defective if they have not been in operation for a period of 12 months. If abandoned, the solar energy system shall be repaired by the owner to meet federal, state and local safety standards or be removed by the owner within 60 days. If the owner fails to remove or repair the defective or abandoned solar energy system, the Village may pursue a legal action to have the system removed at the owner's expense.

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 as provided by law.

DATED this 6 day of November, 2019

10/26/19

AYES: Dyck, Learman, Palys, Reinhard, Wells, Windler

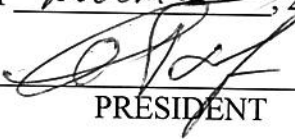
NAYS: None

ABSTAIN: None

ABSENT: None


PASSED this 6 day of November, 2019

APPROVED by me this 6 day of November, 2019



PRESIDENT

ATTEST:



VILLAGE CLERK