November 29, 2017

Section 159.039 SOLAR and SMALL WIND ENERGY DEVICES

(A) Intent and Purpose:

Uniform standards and procedures shall be established to manage the development, siting, installation, and operation of solar energy collection conversion systems (SECS) and small wind energy systems (SWES) to ensure that these devices are installed in a manner that will protect and promote public health and safety and preserve the character of the Village.

(B) Definitions:

Small Wind Energy Systems (SWES): A wind energy conversion system consisting of a wind turbine, a tower or post and associated controls of conversion electronics that is located on the ground as an accessory use/structure and with a nameplate capacity of less than fifty (50) kilowatts for residential systems and less than one hundred (100) kilowatts for nonresidential systems.

Solar Energy Conversion Systems (SECS): Solar energy collection panels are a type of photovoltaic (PV) system that collects energy from sunlight and converts it into usable energy for a building.

- (C) Solar Energy Conversion Systems (SECS):
 - (1) Solar panels shall be permitted on any roof in any zoning district as a permitted accessory use. No freestanding solar panels shall be allowed in any residential district.
 - (2) All frame and visible structural parts of the panels shall be neutral in color. No solar panel shall be artificially lighted.
 - (3) A building permit is required and the application shall conform to electrical/building code for wind and load requirements.
 - (4) Solar panels shall be used primarily to generate energy for the property where it is located.
 - (5) Roof Coverage shall not exceed more than fifty (50%) percent of the total roof surface of a structure.
 - (6) No solar panel shall be located closer than ten (10') feet from an adjacent property line.
 - (7) Solar panels shall be parallel with the roof line when possible especially when visible from the right of way and shall not be elevated more than thirty (30°)



degrees off the roof pitch where it is attached or no more than five (5') feet whichever is less.

- (8) Ground mounted (non-residential zoning district only) requirements:
 - a. Shall not be located in required street setbacks, front-yard or corner side yard of any non-residential zoning district.
 - b. Subject to applicable accessory structure height and lot coverage requirements of the Zoning Code.
 - c. All ground based utilities must be screened in accordance with landscaping requirements of the Zoning Code (Section 159.30).
 - d. Ground mounted systems shall not exceed 100 square feet in size.
- (D) Small Wind Energy Systems (SWES):
 - (1) SWES shall be permitted on the ground in any zoning district as a permitted accessory use.
 - (2) A SWES shall maintain a twelve (12') foot clearance between the blades and the ground.
 - (3) A SWES shall be setback a distance of at least one hundred ten (110%) of the height of the towner and the extended blades from the property line. A SWES shall not be located in front of the principal structure and shall not be located in any required yard or setback.
 - (4) SWES shall have a nonreflective finish and shall be neutral in color. No SWES shall be artificially lighted.
 - (5) SWES shall have an electronic braking system installed to regulate and limit the speed of the turbine in high wind events.
 - (6) SWES shall be primarily used to generate energy for the property where it is located.

- (7) Any SWES not in service for a period of one hundred (180) days shall be removed and the property on which it is located restored to its original condition within thirty (30) days.
- (8) SWES shall utilize single monopole tower without guywires. Satellite dishes, antennas and other accessory devices shall not be collocated on a SWES pole or device.
- (9) The maximum noise level allowed for SWES shall not exceed fifty five (55) decibels measured
- (10) A building permit is required and shall conform to all code requirements for wind and load with plans stamped by a licensed structural engineer.
- (11) The SWES must comply with applicable FAA regulations.
- (12) The maximum height of a SWES will be bound by the height restrictions per zoning district.
- (13) Only one propeller system is allowed per SWES monopole.

