

Add to Section 153.006 - **Definitions.**

**Freestanding or Ground-Mounted Solar Energy System:** Any solar energy system that is directly installed on or in the ground and is not attached or affixed to any structure.

**Photovoltaic (PV) System:** A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever light strikes them.

**Roof-Mounted Solar Energy System:** A solar power system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as modules fixed to frames which can be tilted towards the south at an optimal angle.

**Commercial Solar Energy System:** An area of land designated for the purpose of producing photovoltaic electricity, which the power generated from a solar power system is sold to electric companies for distribution throughout the power grid. A Commercial Solar Energy System shall be a principal use of a property any may occupy the same property as another principal use. Commercial Solar Energy System are commonly known as a Solar Farm.

**Private Solar Energy System:** Any Solar Energy System that is accessory to a principal use that is designed and built to serve the principal use of the property. These systems shall not be utilized for any commercial sale of energy, except for the sale of surplus electrical energy back to the electrical grid.

**Solar Energy System (SES):** Any equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed. Solar Energy Systems consist primarily of solar thermal, photovoltaic and concentrated solar but may include other various experimental solar technologies.

**Solar Shingles:** A roofing product made by combining thin film solar technology with a durable backing to provide a structural roof shingle comparable to traditional roofing shingles.

**Structure:** Anything constructed or erected with a fixed location on the ground, or attached to something having a fixed location on the ground. Among other things, **STRUCTURES** include buildings, mobile homes, walls, fences, billboards, solar energy systems, and poster panels.

Add to Section 153.037 Special Land Uses (AG – Agricultural District) **Commercial Solar Energy System**

Add to Section 153.052 Special Land Uses (Residential Farm District) **Commercial Solar Energy System**

Add to Section 153.157 Special Land Uses (C-2 – General Commercial District) **Commercial Solar Energy System**

Add to Section 153.172 Special Land Uses (I-1 – Light Industrial District) **Commercial Solar Energy System**

Add to Section 153.219 – **Special Land Use Standards.**

AA. Commercial Solar Energy Systems (commonly known as a solar farm) – To promote the use of Solar Energy within the Township as a clean alternative energy source and to provide for the land development, installation and construction regulations for commercial SES facilities subject to reasonable condition that will protect the public health, safety and welfare. The regulations establish herein are minimum requirements and standards for the placement, construction and modification of commercial SES facilities, while promoting a renewable energy source for our community in a safe, effective and efficient manner.

(1) Commercial Solar Energy Systems shall be limited and subject to obtaining a Special Land Use Permit from the Planning Commission in AG, RF, C-2, I-1, and I-2 zoning districts.

(2) Commercial Solar Energy Systems facilities shall not be constructed on parcels less than twenty (20) acres in size.

(3) Freestanding or Ground-Mounted Solar Energy System shall be restricted to a height of fourteen (14) feet.

(4) All freestanding or ground-mounted solar energy system and supporting structures associated with such facilities (excluding perimeter security fencing and landscaping buffer) shall be a minimum of ten (10) feet from a side or rear property line and shall not be located within the required front yard setback for the zoning district in which it is located. All freestanding or ground-mounted solar energy system used in a commercial solar energy system including supporting structures associated with such facilities (excluding perimeter security fencing and landscaping buffer) shall be a minimum of five hundred (500) feet from any dwelling unit located on an adjoining property. The Planning Commission may upon approval of a site plan, allow a smaller setback requirement depending upon the location, surrounding development, and existing or proposed buffer being provided.

(5) Commercial Solar Energy Systems are not subject to any maximum lot coverage restrictions, however any other regulated structure located on the parcel are subject to the maximum lot coverage restrictions for the zoning district in which it is located.

(6) A security fence (height and material to be approved by the Planning Commission through the special land use permit process) shall be placed around the perimeter of a commercial solar energy system and the electrical equipment shall be locked. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.

(7) Commercial Solar Energy System facilities shall not exceed forty (40) dBA measured at the property line.

(8) Landscaping: Commercial solar energy system facilities shall be required to install perimeter landscaping equal to one (1) tree for each fifteen (15) feet of road or highway frontage. The equivalent of one (1) tree shall be required along the sides and rear of such developments equal to one (1) tree every fifteen (15) feet of property line when abutting existing homes or developed parcels. The Planning Commission may alter the landscaping requirement depending upon the location and existing plant material on the site. Trees shall be a minimum of four (4) feet tall when planted and remain in good condition for the life of the Commercial SES.

(9) Local, State and Federal Permits: Solar Energy Systems facilities shall be required to obtain all necessary permits from the U.S. Government, State of Michigan, and Montrose Township, and comply with standards of the State of Michigan adopted codes.

(10) Electrical Interconnections: All electrical interconnection or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be prohibited within the site, unless waived by the Planning Commission during its review and approval of the project.

(11) Additional Special Land Use Criteria: The following additional topics shall be included in a review of a site plan and special use permit application for a commercial SES facility in addition to the general standards listed in Section 153.218:

- (a) Project description and rationale: Identify the type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, and model. Identify time frame, project life, development phases, likely markets for the generated energy, and possible future expansions;
- (b) Analysis of onsite traffic;
- (c) Estimated construction jobs, estimated permanent jobs associated with the development;
- (d) Review and demonstrate the visual impact using photos or renditions of the project or similar projects with consideration given to tree plantings and setback requirements;

- (e) Review and demonstrate any potential impact on wildlife on the site;
- (f) Identify any impact on the water quality and water supply in the area, any storm water discharge concerns from the property, and any dust concerns generated from project activities;
- (g) Identify any solid waste or hazardous waste generated by the project;
- (h) Provide lighting plans showing all lighting within the facility. No light may adversely affect adjacent parcels. All lighting must be shielded from adjoining parcels, and light poles are restricted to eighteen (18) feet in height;
- (i) Provide site access plan during construction and operation phases. Show proposed project service road ingress and egress access onto primary and secondary routes, layout of the plant service road system. Due to infrequent access to such facilities after construction is completed, it is not required to pave or curb access drives. It will be necessary to pave any driveway and parking lots used for occupied offices that are located on site;
- (j) Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to the community in general that may be created;
- (k) Identify noise levels at the property line of the project boundary when completed;
- (l) Identify any electromagnetic fields and communications interference generated by the project;
- (m) Describe the decommissioning and final land reclamation plan after anticipated useful life or abandonment or termination of the project, including evidence of an agreement with the property owner that ensures proper final removal of power generating equipment within six (6) to twelve (12) months of decommissioning.

(12) The Planning Commission because of the ever-changing technical capabilities of Solar Energy Systems and of new technology in general shall have the authority to review and consider alternatives in both dimensional requirements as well as physical development requirements found in this Section. The Planning Commission shall not have the authority to review or to allow large commercial SES facilities within any other zoning district.

**Add to Section 153.340 BUILDINGS and or STRUCTURES ACCESSORY TO AGRICULTURAL AND SINGLE-FAMILY RESIDENTIAL USES.**

Buildings and or Structures accessory to agricultural and single-family residential uses shall be subject to the following regulations.

(A) Where the accessory building and or structures is structurally attached to a main building, it shall not exceed the ground floor area of the principal structure, and must conform to all regulations of this chapter applicable to main buildings.

(B) Where the accessory building and or structures is structurally detached from the main building, it shall comply with the following items.

(1) No detached accessory building and or structure shall be located in any required front yard setback area as required in ' 153.200.

(2) All detached accessory buildings and or structures located outside of the required setbacks, as listed in ' 153.200, but in a front yard area must comply with the following conditions:

(a) All such detached accessory buildings and or structures shall be located behind the front wall line of the main building on the adjoining properties.

(b) All such detached accessory buildings and or structures shall maintain a roof type and exterior wall covering to match or be compatible to that of the main principle residential dwelling unit located on the property.

(c) All such detached accessory buildings and or structures must maintain a 25-foot side yard setback from side or rear property lines of adjoining properties.

(d) All such detached accessory buildings and or structures shall not be placed directly in front of any living area of the main dwelling unit, unless the accessory building is located over 100 feet from the main dwelling unit.

(3) No detached accessory building and or structures may occupy more that 25% of a required rear yard, plus 40% of any non-required rear yard.

(4) (a) Detached accessory building and or structures shall not be located closer than 10 feet to any principal building or other accessory buildings and or structures, nor shall it be located closer than 10 feet to any rear or side lot line.

(b) Detached accessory buildings and or structures meeting all of the following requirements shall be permitted to be located within the 10-foot setback area from any principal building or other accessory buildings and/or structures. Such accessory buildings and or structures shall not be located closer than the required front, rear or side yard setback as listed for principle buildings in Section 153.200.

1. The detached accessory building and or structures shall have a foundation not less than the minimum required by the Michigan Building Code for frost protection.

2. On any section of the detached accessory building **and or structures** located 5 feet or less from any principal building or other accessory building and or structure, a fire partition shall be provided of not less than 1-hour fire resistance rating on the accessory building and or structure side.

3. The detached accessory building **and or structures** shall not be located closer than 15 feet to any side lot line.

(5) In subdivisions, detached accessory buildings **and or structures** of less than 150 square feet may be located as close as 5 feet to the side or rear lot line.

(6) Detached accessory buildings shall observe the following size requirements.

<i>Parcel Size</i>	<i>Maximum Building Sizes</i>	<i>Maximum Number of Buildings</i>
Up to 1 acre (43,560 square feet)	Accessory building shall be no greater than the foundation size of the main dwelling unit	1
	160 square feet	1
Greater than 1 acre and less than 5 acres (217,800 square feet)	The total combined area of 2 accessory buildings shall not exceed 3,000 square feet	2
	160 square feet	1
Greater than 5 acres (217,800 square feet)	The total combined area of 2 accessory buildings shall not exceed 4,000 square feet	2
	160 square feet	1
<b>Note: The maximum building lot coverage for all structures located on a single lot of record must be in compliance with Section 153.200.</b>		

(7) Accessory buildings **and or structures** on corner lots shall comply with the following;

(a) For the purposes of determining setbacks as measured from the right-of-way line, a corner lot shall maintain the minimum required front yard setback on both road and/or street frontages.

(b) The required rear yard setback shall be applied to the yard opposite of the buildings street address.

(8) No accessory building **and or structures** in a residential zoning district shall exceed 1 story or 18 feet in height, except for buildings accessory to agricultural uses.

(9) No accessory building **and or structures** shall be constructed prior to the completion of the footings of the **principal** building on the property.

(10) No accessory building and or structures shall involve any business, profession, trade, or occupation in the accessory buildings.

(11) Accessory buildings and or structures used in conjunction with a bona fide agricultural operation are exempt from the height limitation, restrictions on the number of buildings, and the floor area requirements noted above.

(12) When the placement of a detached accessory building and or structure is denied by the Building Official, a review before the Planning Commission may be requested by the property owner. Notification of surrounding property owners, as required under Section 153.427 of the code, must be complied with prior to the review.

(C) Private Solar Energy System that is accessory to a principal use that is designed and built to serve the principal use of the property shall comply with the following requirements.

1. Freestanding or Ground-Mounted Solar Energy System shall comply with the following:
  - a. SES shall not be located in any front yard area, except when said system is located near a rear yard area of an adjoining property and is located a minimum of 100 feet from any adjoining residential dwelling structure.
  - b. SES shall not be located closer than 10 feet to any principal building or other accessory buildings and or structures located on the property. SES shall not be located closer than 10 feet to any rear or side lot line and be a distance of at least 100 feet from an adjoining residential dwelling structure.
  - c. Private SES shall be restricted to a height of twelve (12) feet.
  - d. The total square feet of all Solar Energy System shall not exceed the total square footage of the foundation of the principal dwelling unit located on the property.
2. Roof-Mounted Solar Energy System, including Solar Shingles, shall be installed in compliance with the Michigan Residential Building Code and shall not project more than two (2) feet above the highest point of the roof it is located on.
3. When the placement of any Solar Energy System is denied by the Building Official, a review before the Planning Commission may be requested by the property owner. Notification of surrounding property owners, as required under Section 153.427 of the code, must be complied with prior to the review.