

13.27 Utility Scale Solar Energy Systems. The following requirements shall apply to all Utility Scale Solar Energy Systems.

- A. **Purpose and Intent:** The purpose and intent of this Section is to establish standards for the siting, installation, operation, repair, decommissioning, and removal of Utility Scale Solar Energy Systems, as a permitted Special Use with conditions in the following districts: RD, WRD, AR, RR, NSC, and LI.
- B. All applications for a Utility Scale Solar Energy Systems use must be accompanied by a **conceptual plan**, at time of submission of application. Conceptual Plan shall be reviewed by Planning Commission and allow for discussion with and feedback from the Planning Commission. This plan must be approved by the Planning Commission prior to final site plan submittal.
- C. Final site plan submittal must include a detailed site plan including all applicable requirements found in this ordinance, drawn to scale, dimensioned, and certified by a registered engineer licensed in the State of Michigan, displaying the following information:
- 1 All requirements for a site plan contained in Article XX of the Cohoctah Township Zoning Ordinance, unless otherwise specified in the information below;
 - 2 Scale of 1 inch = 200 feet;
 - 3 All lot lines and dimensions, including a legal description of each lot or parcel comprising the Utility Scale Solar Energy System;
 - 4 Names of owners of each lot or parcel within Cohoctah Township that is proposed to be within the Utility Scale Solar Energy System;
 - 5 Vicinity map showing the location of all surrounding land uses;
 - 6 Location of all above or below ground drainage systems including but not limited to, farm tiles, county drains, wetlands, and road ditches;
 - 7 Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with a Utility Scale Solar Energy System;
 - a. Vertical bifacial solar arrays are permitted as modification, subject to Planning Commission discretion;
 - 8 Horizontal and vertical (elevation) to scale drawings with dimensions that show the location of the proposed Solar Array(s), buildings, structures,

Commented [AC1]: In conjunction with this amendment, in other parts of the Zoning Ordinance, PC should consider:
-Adding definitions of Utility Scale Solar Energy Systems, Solar Array in Section 2.02.
-Remove definition of "Solar Farm" from Section 2.02 and any other part of the ZO.
-Update wording in all districts where Utility Scale Solar Energy Systems are permitted as SLU.
-Delete Sect. 13.17 regarding Solar Buildings.

Commented [AC2]: Section 20.07 of the Zoning Ordinance allows for a "Preliminary Plan." How is this different? Consider using the same wording here as in 20.07 and indicating what, if any, additional requirements/deviations we would want from those provisions to apply to solar.

electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property;

- 9 Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Utility Scale Solar Energy System and within 100 feet of all exterior property lines of the Utility Scale Solar Energy System;
- 10 Proposed setbacks from the Solar Array(s) to all existing and proposed structures within the Utility Scale Solar Energy System;
- 11 Land elevations for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Utility Scale Solar Energy System at a minimum of 5' (five foot) contours;
- 12 Access driveways within and to the Utility Scale Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access drives shall be subject to Livingston County Road Commission approval and shall be planned so as to minimize the use of lands for that purpose;
- 13 Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Utility Scale Solar Energy System;
- 14 A written description of the maintenance program to be used for the Solar Array and other components of the Utility Scale Solar Energy System, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Utility Scale Solar Energy System is decommissioned;
- 15 Planned lighting protection measures;
- 16 Additional detail(s) and information as required by ~~this Article XII for Special Land Uses, Article XX for Site Plans, and~~ as required by the Planning Commission.

- D. Application Escrow Account: An escrow account shall be deposited with the Township by the Applicant when the Applicant applies for a Special Land Use Permit for a Utility Scale Solar Energy System. The monetary amount deposited by the Applicant in escrow with the Township shall be the amount estimated by the Township, to cover all reasonable costs and expenses associated with the Special Land Use Permit review and approval process, which costs shall include, but are not limited to, reasonable fees of the Township Attorney, Township Board, Township Planner and Township Engineer, as well as costs for any reports or

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studies that are reasonably related to the zoning review process for the application. The Applicant shall have thirty (30) days to refuse or approve of the amount estimated by the Township. Such escrow amount shall be in addition to any filing or application fees established by resolution. At any point during the Special Land Use Permit review process, the Township may require the Applicant to place additional funds into escrow with the Township if the existing escrow amount deposited by the Applicant is deemed insufficient by the Township. If the escrow account needs replenishing and the Applicant refuses to do so within thirty (30) days, the Special Land Use Permit process shall cease unless and until the Applicant makes the required additional escrow deposit. Any applicable escrow policies adopted by the Township must also be complied with by the Applicant. The Township shall provide a summary of all account activity to the Applicant within a timely manner upon request. Any funds remaining within the escrow after approval or denial of the Special Land Use Permit shall be returned in a timely manner to the Applicant.

Commented [AC3]: Should this be "pay"?

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- E. Land Enrolled in PA 116 Farmland Development Rights Program. Per the Michigan Department of Agriculture and Rural Development (MDARD), land enrolled in the PA 116 program may be permitted to participate in solar energy development subject to MDARD policy and requirements. Per MDARD standards, this land must be able to be returned to agricultural uses following the end of the solar development agreement or if/when the solar development is decommissioned for any reason. Developers are to maintain existing field tile, plant a cover crop that includes pollinator habitat, and post a surety bond or letter of credit with the State to ensure that solar panels will be removed, and the land will be returned to a condition that enables farming at the end of the project life.
- F. Compliance with the County Building Code and the National Electric Safety Code: Construction of a Utility Scale Solar Energy System shall comply with the National Electric Safety Code and the County Building Code (as shown by approval by the County) as a condition of any Special Land Use Permit under this section. In the event of a conflict between the County Building Code and National Electric Safety Code (NESC), the NESC shall prevail.
- G. Certified Solar Array Components: Components of a Solar Array shall be approved by the Institute of Electrical and Electronics Engineers ("IEEE"), Solar Rating and Certification Corporation ("SRCC"), Electronic Testing Laboratories ("EIL"), or other similar certification organization if the similar certification organization is approved by the Township, which approval shall not be unreasonably withheld.
- H. Height: Maximum height of a Solar Array, other collection device, components or buildings of the Utility Scale Solar Energy System, excluding substation and electrical transmission equipment, shall not exceed sixteen (16) feet (at full tilt) (as measured from the natural grade at the base of improvements) at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet in height.

Commented [AC4]: Consider whether we want to list out the MDARD requirements here. What if they change? How does these requirements interact with the Zoning Ordinance? It could be enough to end this section E after the first sentence.

I. Lot Size: A Utility Scale Solar Energy System shall be located on one or more parcels with an aggregate area of ten (10) acres or greater.

J. Setbacks: A minimum setback distance of seventy-five (75) feet from all exterior property lines of the Utility Scale Solar Energy System and existing public roads and railroad rights-of-way shall be required for all buildings and Solar Arrays. Additionally, a minimum setback distance of one hundred (100) feet shall be provided from solar arrays, equipment, and/or fencing from all non-participating residential property lines.

K. Lot Coverage: Total area of arrays shall not be included in the calculation of maximum permitted lot coverage requirement for parcel.

L. Dual Use/Groundcover. A Utility Scale Solar Energy System shall include the installation of perennial ground cover vegetation maintained for the duration of operation until the site is decommissioned. The applicant shall include a ground cover vegetation establishment and management plan as part of the site plan. Properties bound by PA 116 agreements must follow Michigan Department of Agriculture and Rural Development (MDARD) Policy for Allowing Commercial Solar Panel Development on PA 116 lands.

Commented [AC5]: We sometimes capitalize and sometimes do not. Just want to be consistent within this section and other parts of the ZO.

Commented [AC6]: Same comment as in E above. Are we saying something different here than in E?

1 All properties not enrolled in the PA 116 program must provide one of the following three Agrovoltas to promote ecological benefits, and submit with the application a Michigan Pollinator habitat planning scorecard from Michigan State University Department of Entomology to guide vegetation management decisions at solar installations (www.pollinators.msu.edu):

a. Pollinator habitat

b. Conservation cover

c. Forage/grazing

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2 If it is not feasible to provide Agrovoltas to promote ecological benefits, developer must demonstrate why it is not reasonably feasible.

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3 All groundcover must be native plants with substantial root system to support soil, no turf grass.

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J. Screening/Security: A Utility Scale Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access. Such fencing shall be seven (7) feet in height and be constructed of a woven wire fence, such as deer fencing. The Planning Commission may consider an alternative fence-type as part of the special use approval. Electric fencing or barbed wire is not permitted. The perimeter of Utility Scale Solar Energy Systems shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the

Utility Scale Solar Energy System from adjacent residential structures, subject to the following requirements:

- 1 No landscaping shall be placed within fifty (50) feet of any right-of-way.
 - 2 Landscape screening shall be installed to obscure the Utility Scale Solar Energy System from adjacent uses and from passersby. Utility Scale Solar Energy Systems shall be reasonably screened from the view of the surrounding streets and roads to the maximum extent practicable by garden walls, fences, hedges, landscaping, earth berms, or other means, except to the extent that such screening is either impracticable or would result in ineffective solar access on the site in question.
 - a. Utility Scale Solar Energy Systems that are visible from a road or adjacent properties shall, to the maximum extent feasible, and without compromising the ability to effectively use solar collectors on the lot in question, use materials, textures, screening, and landscaping that will screen the Utility Scale Solar Energy Systems from view, and blend with the natural setting, existing environment, and neighborhood character.
 - b. All Utility Scale Solar Energy Systems that rely on landscaping or a vegetative buffer for screening shall maintain a minimum opacity of at least eighty percent (80%), and a mature height of not less than six (6) feet of sixty percent (60%) of the height of the Ground Mounted Utility Scale Solar Energy System when oriented to maximum tilt.
 - a. All plant materials shall be installed between March 15 and November 15. If the Applicant requests a Land Use Permit from the Township and the Applicant is unable to plant during the installation period, the Applicant will provide the Township with a surety or corporate guarantee for an amount equal to one and one-half (1.5) times the cost of any planting deficiencies that the Township shall hold until the next planting season. After all plantings have occurred, the Township shall return the financial guarantee.
 - b. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance and any Special Use Permit may be subject to revocation.
- N. Signage: No advertising or non-project related graphics shall be on any part of the Solar Arrays or other components of the Utility Scale Solar Energy System. This exclusion does not apply to entrance gate signage or notifications containing points of contact or all other information that may be required by authorities having jurisdiction for electrical operations and the safety and welfare of the public.

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Commented [AC8]: Is this (a) duplicate of the language above in (2)?

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- O. Agricultural preservation: Minimize land disturbance or clearing except for minimally necessary; topsoil shall be retained.
- 1 Access drives designed to minimize extent of soil disturbance, water runoff, soil compaction.
- P. Noise: No component of any Utility Scale Solar Energy System shall emit noise exceeding forty-five (45) dBA as measured at the exterior property boundary or the existing ROW line.
- Q. Lighting: All lighting for parking lots, driveways, external illumination of buildings, or the illumination of signs shall be directed away from and be shielded from adjacent properties and shall be so arranged as to not adversely affect driver visibility on adjacent public roads or neighboring properties.
- R. Drain Tiles: Drain tiles on the Utility Scale Solar Energy System site rendered non-functioning directly as a result of construction or operation on the Utility Scale Solar Energy System will be replaced or repaired so as not to create any drainage issues on the Utility Scale Solar Energy System site or on adjacent and surrounding properties.
- S. Distribution, Transmission and Interconnection: All collection lines and interconnections from the Solar Array(s) to any electrical substations shall be located and maintained underground inside the Utility Scale Solar Energy System, except in areas where technical or physical constraints make it preferable to install equipment above ground. This requirement excludes transmission equipment meant to connect the project substation to the local transmission system.
- T. Abandonment and Decommissioning: Following the operational life of the project, the Applicant shall perform decommissioning and removal of the Utility Scale Solar Energy System and all its components. The Applicant shall prepare a Decommissioning Plan and submit it to the Planning Commission for review and approval prior to issuance of the Special Land User Permit. The decommissioning plan shall be written to provide security to the Township for one hundred percent (100%) of the cost to remove and dispose of all panels, wiring, and restoration of the land to its original conditions. All work must be done when soil is dry to prevent compaction. The value of decommissioning shall be determined by a third-party financial consultant or engineer selected by the Township and paid for by the developer. Once value of decommissioning is determined, it shall be updated on a periodic basis of not less than every three (3) years. Any Solar Array or combination of Photovoltaic Devices that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed

Commented [AC10]: Suggest combining these two paragraphs and expand the sentences. Given the importance of this issue to the Township, is there anything else that needs to be said on this issue?

under the Decommissioning Plan. The ground must be restored to its original topography within three hundred sixty-five (365) days of abandonment or decommissioning.

- 1 Continuing Obligations: Failure to keep any required financial security in full force and effect at all times while a Utility Scale Solar Energy System exists or is in place shall constitute a material and significant violation of the Special Land Use Permit and this Ordinance, and will subject the Utility Scale Solar Energy System Applicant, owner and operator to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the Special Land Use Permit.
- U. Complaint Resolution Protocol: Applicant shall provide a Complaint Resolution protocol at time of submission of final site plan. The operator of the project or its assigns shall initially respond within (10) business days to complaints from neighboring property owners arising from and related to the operation of the Utility Scale Solar Energy System. Any resolution shall include lawful and reasonable solutions consistent with the Zoning Ordinance, which shall also be provided to the Township Zoning Administrator. The operator of the Utility Scale Solar Energy System or its assigns reserve the right to adjudicate any claims, including Residential Claims, in a court of proper jurisdiction.
- 1 Applicant will submit an annual report to Township Board that details complaints received regarding the Utility Scale Solar Energy System and status of complaint resolution and actions taken to mitigate complaints.
- V. Indemnity/Insurance: The Township shall be indemnified from all third-party claims for personal or property damage arising from the Developer's negligent and/or intentional acts and/or omissions during construction, maintenance and decommissioning of the Utility Scale Solar Energy System and shall be listed as an additional insured on applicable insurance policies during the life of the project.
- W. General Standards: The Planning Commission shall not approve any Utility Scale Solar Energy System Special Land Use Permit unless it finds that all of the general standards for Special Land Uses contained in Article XIII of this Ordinance are met. This includes the developer shall enter into a Special Land Use Permit Agreement outlined in Section 13.03.
- X. Approval Time Limit and Extension: Special Use and Site Plan approvals or permits under this Section shall be valid for one year but, if requested by the Applicant prior to that expiration date, shall automatically be extended for an additional one-year period.
- Y. Maintenance and Repair: Each Utility Scale Solar Energy System must always be kept and maintained in good repair and condition. If the Township Zoning Administrator determines that a Utility Scale Solar Energy System fails to meet the requirements of this Ordinance and the Special Land Use Permit, or that it

Commented [AC11]: Does the PC want to consider broadening the annual report to include any other items? Example may be to include the current amount and age of the decommissioning cost quote in paragraph Q to keep that top of mind for Twp and operator.

Commented [AC12]: Should this be capitalized?

Commented [AC13]: I don't see this reference in Section 13.03. Is it somewhere else?

poses a safety hazard, the Zoning Administrator, or his or her designee, shall provide notice to the Applicant of the safety hazard. If, after a reasonable cure period (not to exceed 7 days), the safety hazards are not addressed, the Applicant is entitled to a hearing before the Township Board. If the Township Board determines that the safety hazard requires that the Utility Scale Solar Energy System must be shut down, Applicant shall immediately shut down the Utility Scale Solar Energy System and not operate, start or restart the Utility Scale Solar Energy System until the issues have been resolved. Applicant shall keep all sites within the Utility Scale Solar Energy System neat, clean, and free of refuse, waste or unsightly, hazardous, or unsanitary conditions.

Commented [AC14]: Are the notice and enforcement provisions of this section just meant to cover "safety hazards" or all violations? Once intent is determined here, I think the language should be tightened a bit to fit that intent.

- Z. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance, or operation of a Utility Scale Solar Energy System shall be repaired at the Applicant's expense. In addition, the Applicant shall submit to the appropriate Livingston County agency a description of the routes to be used by construction and delivery vehicles; any road improvements that will be necessary to accommodate construction vehicles, equipment, or other deliveries. The Applicant shall abide by all Livingston County requirements regarding the use and/or repair of Livingston County roads.
- AA. Density; location. No more than 2.5% (two- and one-half percent) of the land in a ten (10) mile radius of the project area (radius is determined by central point of project) of any existing Utility Scale Solar Energy System shall be approved for use as the project area for a new Utility Scale Solar Energy
- BB. System.Repowering: In addition to repairing or replacing solar energy components to maintain the system, a Utility Scale Solar Energy System may at any time be repowered by reconfiguring, renovating, or replacing the system to increase the power rating within the existing project footprint.
 - 1 A proposal to change the project footprint of an existing Utility Scale Solar Energy System shall be considered a new application, subject to the ordinance standards at the time of the request
- CC. Other Requirements: Each Utility Scale Solar Energy System shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances.
 - 1 Additional approvals and agency reviews required as part of final site plan review, subject to Planning Commission:
 - a. Department of Environment, Great Lakes, and Energy (EGLE);
 - b. Livingston County Soil Erosion Permitting Agency – if the project is twenty (20) or more acres in size or is within five hundred (500) feet of a lake or stream.
 - c. Livingston County Drain Commission