

Chapter 7 – Signs (DRAFT)

SECTION 7.01 PURPOSE AND INTENT

It is the purpose and intent of the sign ordinance; to protect and further the health, safety and welfare of the residents of the Township, to promote traffic safety, to provide safer conditions for pedestrians, to provide an esthetically pleasing environment, to promote economic development by regulating the construction, alteration (D2-1), repair, size, location, and number of signs within the Township, and to allow businesses within the Township an adequate mode of advertising.

SECTION 7.02 SIGNS PROHIBITED IN TUSCOLA TOWNSHIP

Any sign not expressly permitted by this ordinance is prohibited.

SECTION 7.03 SIGNS PERMITTED IN TUSCOLA TOWNSHIP WITHOUT A PERMIT

The following signs shall be permitted in Tuscola Township without the necessity of obtaining a sign permit and subject to the requirements stated herein:

- A. House numbers legible from the street (D2-18), and nameplates (fraternal, social, apartment (D2-2), and professional) identifying the occupant of a parcel (D2-13) of land and not exceeding 2 square feet in display surface area.
- B. Memorial signs or tables, especially those containing the names of buildings and dates of construction, and not exceeding 2 square feet in display surface area.
- C. For sale signs attached to vehicles
- D. Flags bearing the official design of a nation, state, municipality, business, institution or organization.
- E. Traffic, or other municipal signs, also private traffic control signs which conform to the requirements of the Michigan Manual of Uniform Traffic Control Devices.

~~F. Park (D2-13) and Playground signs~~

~~G. Election Signs (D2-15) subject to the following:~~

- ~~1. They shall be removed within 10 days following the election.~~

~~H. One temporary, non-illuminated real estate sign (D2-17) per lot (D2-10), advertising the sale or lease of a property or building (D2-2), said sign not exceed a total of 40 square feet in~~

Chapter 7 – Signs

~~surface display area (D2-17) (but no more than 20 square feet per side); such sign being placed no closer than 10 feet from the road right-of-way (D2-14). The bottom of such sign shall be no more than two 2 feet above the ground.~~

~~I. Temporary construction signs subject to the following:~~

- ~~1. The total surface display area (D2-17) shall not exceed a total of 32 square feet (no more than 16 square feet per side).~~
- ~~2. Sign height shall not exceed 8 feet.~~
- ~~3. Placement shall be at least 10 feet inside the property boundaries to which the sign pertains and not within the road right-of-way.~~
- ~~4. In the judgment of the Zoning Administrator said sign must not pose a traffic hazard and the Zoning Administrator has the authority to have the sign moved to another location on the property.~~

~~J.F. Trespassing, safety or caution signs not to exceed 2 square feet in area are permitted.~~

Where a federal, state or local law requires a property owner to post a sign signage on the owner's property to warn of a danger or to prohibit access to the property either generally or specifically, the owner must comply with the federal, state or local law to exercise that authority by posting a sign sign(s) each not to exceed 2 square feet on the property.

~~K.G. A sign not greater than a total of 6 square feet per side not to exceed 2 sides (12 square feet total size) is permitted to advertise for a home occupation (D2-9). The sign shall be no closer to the road than the road right-of-way. Illuminated or flashing signs are prohibited.~~

~~L. Temporary garage sale or yard sale sign are allowed provided that the sign is not posted for longer than 7 days.~~

~~M.H. Standard Centennial Farm signs~~One metal sign not to exceed 7.5 square feet in the agriculture district

~~N. Temporary signs (D2-17) supporting local school (D2-14) athletic teams or academic activities are permitted as follows:~~

- ~~1. One sign per residence or commercial location with a maximum size of 32 square feet.~~
- ~~2. Signs must be removed within ten days following the particular activities season or final event date.~~
- ~~3. These signs may not be placed within the road right-of-way.~~

Chapter 7 – Signs (DRAFT)

~~Q. Temporary and Promotional Signage on Commercial Property:~~

- ~~1. Additional signs including banners that promote brand names or special sales are permitted. These are smaller signs such as brand name oil signs at service stations and vehicle service areas, “S A L E” signs propped between an open vehicle hood and the grille of 4 vehicles, a sign indicating sale prices on merchandise, and banners promoting brand names or special promotions.~~
- ~~2. The total surface display area (D2-17) of all such signs shall not exceed 400 square feet. The maximum size of any 1 sign or banner is limited to 50 square feet per side.~~
- ~~3. Temporary and promotional signs and banners may be self-supporting and must be easily removable. They may be supported by temporary stakes in the ground or tied to support posts below freestanding signs (D2-15). They must not be wall mounted and the maximum height of these signs is 8 feet above ground level.~~
- ~~4. Such signs and banners must be placed 10 or more feet back of the road right-of-way (D2-14). They may also be placed against the building (D2-2).~~
- ~~5. If in the judgment of the Zoning Administrator, the signs and banners pose a traffic hazard he/she has the authority to have the signs and/or banners moved to another location on the property. At the Zoning Administrator’s discretion the matter may be referred to the Tuscola Township Planning Commission.~~

~~P.I. Window signs (D2-18):~~

- ~~1. May be used if mounted inside a window.~~
- ~~2. Maximum size is limited to 25% of the window area.~~

~~Q.J. Temporary Signs~~

~~1. Temporary non-residential signs~~

~~Temporary non-residential signs are allowed 14 days per year.~~

~~Maximum size is 50 square feet per street frontage.~~

Chapter 7 – Signs

- a. Temporary signs and banners may be self-supporting and must be easily removable. ~~They may be supported by temporary stakes in the ground or tied to support posts below freestanding signs (D2-15).~~ The maximum height of these signs is 8 feet above ground level.
 - b. Such signs and banners must be placed 10 or more feet back of the road right-of-way (D2-14). They may also be placed against the building (D2-2).
 - c. If in the judgment of the Zoning Administrator, the signs and banners pose a traffic hazard he/she has the authority to have the signs and/or banners moved to another location on the property. At the Zoning Administrator's discretion, the matter may be referred to the Tuscola Township Planning Commission.
- 4.2. Temporary residential sign – Any residence can place a 32 square foot sign for up to ~~4~~120 days per year. Such sign shall not be placed within the road right-of-way.
3. Other Temporary Signs
- ~~— Sign during election period — One additional sign up to 16 square feet in size may be displayed 30 days prior to an election. Such sign shall be removed within 10 days after the election. An election is any ballot issue conducted under federal, state, county, or township laws or ordinance in which residents of Tuscola Township are entitled to vote, including elections or votes regarding selection or recall of any federal, state, county or township officials, any ballot questions, referendum or advisory vote.~~
- a. During the time a property is up for rental, sale or lease, one sign advertising said situation shall be allowed. Said sign shall not exceed a total of 40 square feet in surface display area (D2-17) (but no more than 20 square feet per side). The sign shall be placed no closer than 10 feet from the road right-of-way (D2-14). The bottom of such sign shall be no more than two feet above the ground.
 - b. Signs during the development of a subdivision, multi-family development or a business.
 - 1) The total surface display area (D2-17) shall not exceed a total of 32 square feet (no more than 16 square feet per side).
 - 2) Sign height shall not exceed 8 feet.

Chapter 7 – Signs (DRAFT)

- 3) Placement shall be at least 10 feet inside the property boundaries to which the sign pertains and not within the road right-of-way.
- 4) In the judgment of the Zoning Administrator said sign must not pose a traffic hazard and the Zoning Administrator has the authority to have the sign moved to another location on the property.

SECTION 7.04 SIGNS PERMITTED IN TUSCOLA TOWNSHIP WITH A PERMIT

The following signs shall be permitted in Tuscola Township upon obtaining a sign permit through the Tuscola Township Zoning Administrator in accordance with the terms of this ordinance and subject to the requirements stated herein. It is further noted that the Zoning Administrator, at his/her discretion, may refer any and all such matters to the Tuscola Township Planning Commission for determination. Any banner, flag, sign, poster, streamer, placard, or other device used to attract attention or display information; such as but not limited to logo, phone number, business name, welcome, open, and/or product or service sales is considered to be a sign. All signs must be at least 10 feet from the road right of way (D2-14).

- ~~A. Bulletin Boards, such as, but not limited to, glass enclosed corkboards located on the exterior of the building shall not exceed a total of 8 square feet in surface display area (D2-17).~~
- B.A. 1 sign not to exceed a total of 32 square feet, 16 square feet per side, ~~identifying a subdivision or development~~ may be placed at each entrance of a subdivision or development. This sign may be illuminated. The sign and structure (D2-18) must be harmonious and appropriate in appearance with the existing and intended character of the general vicinity.
- C.B. 1 sign placed flat against the main building (D2-2) ~~announcing the identification of an apartment~~ (D2-2) development, not to exceed 12 square feet in surface display area (D2-17). Such sign may be illuminated provided that the source of light is not visible beyond the property lines of the parcel (D2-13) on which it is located.
- D.C. The following types of signs shall be permitted ~~on the premises of offices, businesses, or other commercial enterprises within the Tuscola Township Commercial District and for commercial establishments in the Mixed Development District~~ in the Commercial and Mixed Development zoning districts, and on the premises of public and quasi-public uses located in any zoning district t. These signs may be illuminated in accordance with the provisions of Section ~~7.04~~7.05.

1. Freestanding Signs (D2-15):

Chapter 7 – Signs

- a. 1 on-premises (D2-15) advertising sign per business that occupies the entirety of a building~~occupying 100% of a building~~ (D2-2) or 1 freestanding sign per ~~location~~building housing multiple businesses (attached as in a strip mall (D2-18) or housed a single building) is permitted. Freestanding signs must not exceed 260 square feet in surface area, not to exceed 130 square feet per side.

Additional freestanding signs are permitted based on the amount of road frontage (D2-8) the business location occupies as follows:

- i. For each foot of road frontage over 100 feet the business location occupies 1 additional square foot of freestanding signage is permitted.
 - ii. A maximum of 3 additional freestanding signs is permitted.
 - iii. Each additional sign may not exceed the size specifications listed above.
- b. Freestanding signs must be in the front yard (D2-22) with the leading edge of the sign at least 10 feet behind the road right of way (D2-14).
- c. The bottom of freestanding signs may be at ground level and shall be no higher than 31 feet above ground level. The sign may not create a traffic hazard for vehicles on the frontage road or nearby side intersecting streets.
- d. 1 freestanding sign identifying an industrial complex, located at the main entrance to the complex, not exceeding 100 square feet in total surface area, 50 square feet per side, and no higher than 6 feet above ground level is permitted. The sign shall be at least ten 10 feet back of the road right of way and may be illuminated provided that the illumination does not create a nuisance or traffic hazard.
- e. 1 additional freestanding sign may be permitted for neighborhood or community shopping centers (D2-4) upon application for and granting of a Conditional Use Permit by the Tuscola Township Planning commission. Contact The Tuscola Township Zoning Administrator to request an additional sign.
- f. The mounting structures for freestanding signs (D2-15) shall not pose a visual traffic hazard. The Tuscola Township Zoning Administrator is empowered under this ordinance to make such a determination and at his/her discretion may refer the matter to the Tuscola Township Planning Commission.

Chapter 7 – Signs

- d. Projecting signs shall not extend beyond the minimum required setback line or into or over the street (D2-18) right-of-way (D2-14).
 - e. The minimum clearance of a projecting sign over a sidewalk shall be 9 feet.
5. Service Station Signs:
- a. Vehicle fuel service stations shall be permitted an additional 2 sided ~~sign indicating the price and grade of fuel as shown on the pumps,~~ not to exceed 80 square feet in surface area, 40 square feet per side. This sign may be permanently attached to the support pole for a freestanding sign. If the support pole is poorly located, said price sign may be attached to a light standard or support.
 - ~~b. A service station price sign is not included in the total of three freestanding signs (D2-15) permitted at a commercial location.~~
6. Parking Lot Signs:
- a. 1 directional sign at each point of ingress or egress is permitted and must include directions of movement. ~~In addition, the sign may bear the sponsor's ad, name or trademark and/or the name of the enterprise it is intended to serve.~~
 - b. Surface area per sign shall not exceed 6 square feet per sign (3 square feet per side).
7. Malls and Shopping Centers:
- a. Freestanding signs (D2-15) identifying malls or shopping centers are permitted. The sign must conform to Section 7.04.D.1.
 - b. Each business within the mall shall be permitted 1 wall sign (D2-18) conforming to the requirements of Section 7.04.D.2. The size of the sign must not exceed 15 percent of the individual business's wall space.
 - c. Where the roof structure (D2-18) of a building (D2-2) containing more than 1 business is extended over a walkway along the outer edge of the building, 1 marquee sign (D2-16) or one under-hanging sign per business is permitted in lieu of the wall sign. The marquee or under-hanging may not exceed 6 square feet per side and bottom edge of

Chapter 7 – Signs (DRAFT)

such signs must have a minimum clearance of 9 feet above the sidewalk.

8. Neon Signs:
 - a. May be used if mounted inside a window or on a wall.
 - b. The maximum size is limited 25% of the window or wall area where it is mounted.
 - c. Cannot be flashing.
 - d. Neon signs are not counted as one of the 3 freestanding permitted.

SECTION 7.05 SIGN ILLUMINATION

Signs for which illumination is permitted may be illuminated by a direct or indirect source of light provided the light source is shielded in such a manner so that no direct rays or glare emanating from the light source shines on the public right-of-way (D2-14) or any residential lot (D2-10).

SECTION 7.06 MOVING OR REVOLVING SIGNS

Any sign that revolves or has any visible moving parts, visible revolving parts or visible mechanical movement of any type, or other apparent visible movement achieved by electrical, electronic or mechanical means, excepting those actions associated with time-temperature and programmable message signs, shall be prohibited in all districts. Programmable message signs are also called Electronic Message Centers (EMCs) and require a permit and shall be regulated as freestanding signs per Section 7.04(D)(1) above. An EMC may be a portion of a freestanding sign, or may comprise the entire sign area, when associated with a commercial, industrial, office, public or quasi-public institutional use, and when in compliance with the following standards. ~~All EMCs shall have automatic dimming controls in order to appropriately transition the EMC lighting levels from the daytime ambient light conditions to night time conditions.~~ All EMCs shall comply with the sign illumination standards in Section 7.05. ~~EMC display features such as scrolling, traveling, flashing, spinning, rotating, fade, dissolve, any other moving effects, and all dynamic frame effects or patterns of illusionary movement or simulated movement shall be minimized in order to not be distracting to drivers and automobile traffic.~~

Definitions (add these definitions to Chapter 2)

Electronic Message Center (EMC): A sign or portion thereof that displays electronic, images, graphics and/or text information, defined by a small number of matrix elements using different combinations of light emitting diodes (LEDs), fiber optics, light bulbs, or other illumination devices within the display area where the message change sequence is accomplished immediately or by

Chapter 7 – Signs

means of fade or repixelization. Electronic Message Center signs include, but are not limited to, computer programmable, microprocessor controlled electronic, or digital displays.

Footcandle: A measure of illumination produced by one candle at a distance of one foot on a one square foot area (one lumen per square foot).

a. General Requirements.

- (1) EMCs shall meet all applicable sign requirements in this zoning ordinance.
- (2) The face of the EMC shall have only one advertising message per duration of the display.

b. Location.

(1) EMCs are permitted in the following districts:

- a) Commercial.
- b) Mixed Development.
- c) Public and quasi-public uses located in any district.

(2) EMCs shall be located at least fifty (50) feet from the property line of an existing residential home.

(3) EMCs within one hundred (100) feet of the property line of an existing residential home must discontinue the display between the hours of 10:30 pm and 6:30 am.

c. Dimensional Requirements of EMCs in the Commercial Zoning District.

(1) Maximum Height – The bottom may be at ground level and shall be no higher than 31 feet above ground level.

(2) Maximum Size – No more than 48-square feet on each sign face

(3) Maximum Number Per Lot – One EMC per lot, regardless of road frontage

d. Dimensional Requirements of EMCs in the Mixed Development District and Public and Quasi-Public Uses Located in Any Zoning District.

(1) Maximum Height – The bottom may be at ground level and shall be no higher than 10 feet above ground level.

(2) Maximum Size – May occupy up to fifty (50) percent of the sign area or twenty-four (24) square feet on each sign face, whichever is less

(3) Maximum Number Per Lot – One EMC per lot, regardless of road frontage

e. Movement and Frequency of Message Change.

Chapter 7 – Signs (DRAFT)

(1) Electronic messages shall be displayed for at least ten (10) seconds, and lights in the display shall activate simultaneously, remain constantly activated for not less than ten (10) seconds and deactivate simultaneously.

(2) EMC display features such as scrolling, traveling, flashing, spinning, rotating, fade, dissolve, any other moving effects, and all dynamic frame effects or patterns of illusionary movement or simulated movement shall be minimized in order to not be distracting to drivers and automobile traffic.

f. Illumination.

(1) Brightness levels shall be automatically adjusted to be 0.3 footcandles above ambient light levels. This shall be measured at five feet above grade, using all white settings, or the solid color for single-color signs. Measurements shall be taken 75 feet away from the sign, perpendicular to the face of the sign.

(2) Automatic dimmers to maintain brightness measurements are required.

(3) Light levels shall be confirmed by the applicant and submitted to the Township in writing prior to approval of any EMC.

(4) In the event of a malfunction, an EMC shall turn to a dark screen. The dark screen shall remain until the malfunction is corrected.

SECTION 7.07 SIGNS NOT TO CONSTITUTE A TRAFFIC HAZARD

No sign shall be erected (*D2-7*) at the intersection of any street (*D2-18*) in such a manner as to obstruct free and clear vision, or at any location that by reason of the position, shape or color, it may interfere with, obstruct the view of or be confused with any authorized traffic sign, signal or device, or which makes use of the words “stop”, “look”, “danger”, or any word phrase, symbol or character in such a manner as to interfere with, mislead, and/or confuse traffic or distract drivers.

SECTION 7.08 OUTDOOR ADVERTISING STRUCTURES

Non-Premise signs shall only be located on property adjacent to M-15, in accordance with the State of Michigan Highway Advertising Act (PA 106 of 1972 as amended)

SECTION 7.09 CONSTRUCTION REQUIREMENTS

Signs and sign structures shall be designed and constructed in accordance with the Uniform Building code. All signs of electrical construction and installation shall comply with the National Electrical Code, the State of Michigan and Tuscola County construction codes.

Chapter 7 – Signs

SECTION 7.10 SIGN PERMITS

- A. Before any sign, other than those listed in Section 7.03 of this chapter, is erected in Tuscola Township, the property owner shall apply for a zoning permit from the Zoning Administrator. The Zoning Administrator shall present said application to the Tuscola Township Planning Commission and shall issue said permit only after the Planning Commission has determined the permissibility of such sign.
1. Sign permit fees for either permanent or temporary signs (D2-17) are to be established by resolution of the Tuscola Township Board of Trustees.
 2. A set of drawings for any sign that is to be installed, changed, or replaced must accompany the application. Such drawings shall include; a plot plan of the site showing the location and dimensions of the sign in relation to property lines, right-of-way (D2-14) lines, parking spaces, and buildings, as well as any existing signs on the property including billboards. These drawings shall also include each business building (D2-2) frontage (D2-8) size (height and length of building frontage) and business wall square footage for any and all signs.
 3. Lighting diagram shall be provided with the application.

SECTION 7.11 SIGN RELATED ITEMS NOT PERMITTED IN TUSCOLA TOWNSHIP

The following items, that serve to attract driver's attention, pose a traffic hazard and are therefore not permitted in the commercial district of Tuscola Township.

- A. Search lights.
- B. Strobe lights.
- C. Lighter than air blimps, balloons, or other tethered structures.
- D. Blinking, flashing, or fluttering lights.
- ~~E. Illuminating devices that change light intensity brightness or color.~~
- ~~F. No sign shall utilize a moving pattern of light so as to convey a illusion of motion or animation.~~

Chapter 7 – Signs (DRAFT)

G.E. No motor vehicles, trucks, trailers, shipping or storage containers, or like items can be painted, decorated, or otherwise used to display business related information and be parked so as to use the vehicle, truck, trailer, or like item as a sign.

No obscene message or profanity shall be displayed on any sign.

SECTION 7.12 EXPIRATION OF SIGN PERMIT

A zoning permit for a sign shall expire 1 year from the date it is issued, if the sign has not been completely constructed and installed prior to said time.

SECTION 7.13 SUBSTITUTION CLAUSE

The owner of any sign which is otherwise allowed by this sign ordinance may substitute non-commercial copy in lieu of and other commercial or non-commercial copy. This substitution of copy may be made without any additional approval or permitting. The purpose of this provision is to prevent any inadvertent favoring of commercial speech over non-commercial speech or favoring of any particular non-commercial message over any other non-commercial message. This provision prevails over any more specific provision to the contrary.

SECTION 7.14 SEVERABILITY CLAUSE

If any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term, or word of Chapter 7 of this zoning ordinance is for any reason declared invalid, such decision shall not affect the validity or enforceability of the remaining portions of Chapter 7 of this zoning ordinance.

Chapter 7 – Signs

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Chapter 9 – Alternative Energy Systems (DRAFT)

SECTION 9.01 PURPOSE AND INTENT

This ordinance balances the need for clean renewable energy resources with the necessity to protect the public health, safety, and welfare of the community. Tuscola Township establishes these regulations to ensure that wind energy turbines (WETs) (D2-21) **and other alternative energy systems** are properly designed, safely sited, installed and decommissioned at the end of their useful life.

SECTION 9.02 WIND ENERGY SYSTEMS: CLASSES OF WIND ENERGY TURBINES PERMITTED

Two classes of wind energy turbines each with 2 sub-classes are permitted in Tuscola Township as follows:

- A. The Personal Use Class (PUC) is primarily intended to serve the needs of the resident consumer for personal use. The 2 types of wind energy turbines in this class are:
1. Structure-Mounted Wind Energy Turbines (SMWETs) (D2-20) up to a total height (D2-21) of 25 feet above roof peak.
 2. Small Tower Mounted Wind Energy Turbines (STWETs) (D2-21) up to a total height of 100 feet.

Both Personal Use Class types may also be connected to the electric grid for distribution of excess power.

- B. The **Electric Grid Class (EGC)** is primarily intended to supply power to the electric utility power grid. The ~~2 types~~type of wind energy turbines in this class ~~are~~include:

- ~~1. Small Grid Wind Energy Turbines (SGWETs) (D2-20) up to a total height of 150 feet.~~
- 2.1. Large Grid Wind Energy Turbines (LGWETs) (D2-19) up to a total height of 495 feet.

~~Both Electric Grid Class types may also provide power for the personal use of resident consumers.~~

Chapter 9 – Alternative Energy Systems Wind

SECTION 9.03 WIND ENERGY SYSTEMS: TEMPORARY ANEMOMETER USE

Temporary use of an anemometer (D2-19) for measuring wind velocity to determine the feasibility of WET (D2-21) usage on a particular parcel (D2-13) of land is permitted in all zoning districts that are in compliance with this ordinance and applicable WET regulations as follows:

- A. The construction, installation, or modification of an anemometer tower shall conform to all applicable Township, County, State, and Federal safety, construction, environmental, electrical, communications, and FAA requirements.
- B. An anemometer must meet the minimum requirements for height, setback, separation, location, safety, and decommissioning (D2-19) requirements of this chapter that apply to the specific type of WET proposed for construction on the site as follows:
 1. Sections 9.04 ~~and 9.06~~ through 9.08 ~~07~~ for Personal Use Class WETs.
 2. Sections 9.04 and 9.09 ~~08~~ through 9.15 ~~14~~ for **Electric Grid Class** WETs.
- C. Anemometer usage is permitted ~~for not more than 12 months for a SMWET (D2-20), no more than 2 years for a STWET (D2-21), and no more than 5 years for a SGWET (D2-20) or LGWET (D2-19) in Tuscola Township for a temporary period, or for the life of the Wind Energy Turbine project, depending on the needs of the applicant.~~

SECTION 9.04 WIND ENERGY SYSTEMS: REQUIREMENTS APPLICABLE TO ALL WIND ENERGY TURBINES

The following requirements apply to all WETs installed in Tuscola Township:

- A. No WET shall be installed in any location where its proximity to existing fixed broadcast, retransmission, or reception antennae for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception unless the applicant provides a replacement signal to the affected party that will restore reception to at least the level present before operation of the WET. No WET shall be installed in any location within the line of sight of an existing microwave communications link where operation of the wind energy system is likely to produce electromagnetic interference in the link's operation unless the interference is insignificant. ~~Signal Interference—All WETs must not interfere with communication systems such as, but not limited to, radio, telephone, television, satellite or emergency communication systems.~~

Chapter 9 – Alternative Energy Systems (DRAFT)

B. WET Siting and Design Requirements:

1. Visual Appearance:

- a. A WET, including accessory ~~buildings-structures~~ (D2-1), towers, and related structures must be a non-reflective, non-obtrusive color (e.g. white, grey or black). The appearance of the turbine, and any ancillary facility must be maintained through the life of the WET.
- b. Except as required by the FAA, artificial lighting of the WET is not permitted.
- c. Use of the WET for display advertising (including flags, streamers, and decorative items) is not permitted, except for the identification of the manufacturer.

~~2. Vibrations produced by a WET must not be humanly perceptible beyond the parcel (D2-13) of property on which the WET is located.~~

~~3.2.~~ All WET installations shall not exceed 40 dB(A) measured as a 1-hour Leq. For Personal Use Class systems, sound measurements shall be from the property line closest to the wind energy system. For Electric Grid Class systems, sound measurements shall be made from non-participating property lines. ~~On-site Use wind energy systems shall not exceed 40 dB(A) at the property line closest to the wind energy system.~~ This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 40 dB(A), the standard shall be ambient dB(A) plus 5 dB(A). Additional requirements for Electric Grid Class systems are described further in Section 9.12.

~~4.3.~~ When guy wires are used to support Wind Energy Towers (D2-21) the towers must have one or more seven-foot safety sleeves placed at each guy wire anchor point and have at least one orange marker ball attached to each guy wire ~~base of the tower and all guy wires must be enclosed by an 8-foot high fence.~~

C. Safety Requirements:

1. All WET (D2-21) installations must comply with applicable FAA regulations, including necessary approvals for installations near airports.
2. If the WET(s) is connected to a public utility system for net metering (D2-20) purposes, it must meet the requirements for interconnection and operation as set forth in the public utility's then-current service regulations meeting federal, state, and industry standards applicable to wind power generation facilities and the connection shall be inspected by the appropriate public utility.

Chapter 9 – *Alternative Energy Systems* Wind

3. All electrical connection systems and lines from a WET to the electrical grid connection shall be located and maintained underground. Burial depth shall be at a depth that causes no known environmental, land use, or safety issues. Depth shall be a minimum of sixty inches below grade, be deeper than drain tiles, and comply with the current version of the National Electrical Code. The Planning Commission may waive the burial requirement and allow above-ground structures in limited circumstances, such as geography precludes, or a demonstrated benefit to the Township. Waiver of these requirements shall not be granted solely on cost savings to the Applicant. The Planning Commission's consideration of the requested waiver shall consider aesthetics, future use of land, and potential effects on nearby landowners.
~~All outdoor electrical controls, control wiring, grounding wires, power lines, and system components must be placed underground within the boundary of each parcel at a depth designed to accommodate the existing land use to the maximum extent practicable. Wires between the base of the tower and the wind generator are exempt from this requirement.~~
 4. The WET(s) must be equipped with an automatic braking, governing, or feathering system to prevent uncontrolled rotation, over speeding, and excessive pressure on the mounting structure, tower structure, rotor blades and other wind energy components.
 5. The structure (D2-20) and integrity of the WET(s) must conform to the design standards of the International Electrical Commission, specifically IEC 61400-1, "Wind Turbine Safety and Design" IEC 61400-22 "Wind Turbine Certification," and IEC 61400-23 "Blade Structural Testing" or any similar successor standards.
 6. All WET(s) must conform to all applicable electrical codes.
- D. Decommissioning (D2-19) - All WETs must be decommissioned at the end of their useful life as follows:
1. WET (D2-21) Owner(s) (D2-20) or Operator(s) (D2-20) must complete decommissioning within 12 months after the end of the useful life. Upon request of the Owner(s) or assigns of the WETs, and for good cause, the Township Board (D2-19) may grant a reasonable extension of time. Any WET will presume to be at the end of its useful life if no electricity is generated for a continuous period of 12 months. All decommissioning expenses are the responsibility of the owners or operators.

Chapter 9 – Alternative Energy Systems (DRAFT)

Section 9.05 was moved to Section 9.14

~~SECTION 9.05 WIND ENERGY SYSTEMS: PUBLIC NOISE LEVEL INQUIRIES AND COMPLAINTS~~

~~When an aggrieved property owner believes that a WET (D2-21) is not in compliance with noise requirements of this ordinance, the following procedure must be followed:~~

- ~~A. Notify Tuscola Township Zoning Administrator in writing regarding concerns about the noise level.~~
- ~~B. If the complaint is deemed sufficient to warrant an investigation by Tuscola Township, the Township will notify the aggrieved property owner to deposit funds in an amount sufficient to pay for a noise level test conducted by a certified acoustic technician to determine compliance with the requirements stated in section 9.04.B3.~~
- ~~C. If the test indicates that the noise level is within ordinance noise requirements, Tuscola Township will use the deposit to pay for the test.~~
- ~~D. If the WET owner(s) is in violation of the ordinance noise requirements, the owner(s) must reimburse Tuscola Township for the noise level test and take immediate action to bring the WET into compliance that may include ceasing operation of the WET until ordinance violations are corrected. Tuscola Township will refund the deposit to the aggrieved property owner.~~

SECTION 9.06-05 WIND ENERGY SYSTEMS: ADDITIONAL PERSONAL USE CLASS REQUIREMENTS

In addition to the requirements listed in ~~section~~ Section 9.04 Personal Use Class WETs must meet the following requirements:

- A. For all Personal use class WETs, the lowest extension of any moving part of a Personal Use WET must be at least 20 feet above the ground and above any outdoor surfaces intended for human use, such as balconies, roof gardens, driveways, and/or sidewalks located directly below a WET.
- B. Personal Use Class systems must have a clearly visible warning sign regarding voltage placed at the base of the WET.
- ~~C. No Personal Use Class WET may be connected to the electric grid before the energy company has granted approval for connection to their system.~~

Chapter 9 – *Alternative Energy Systems* Wind

D.C. In addition to the requirements in “A” and “B” above, Structure-Mounted WETs (D2-21) are subject to the following:

1. The total height (D2-21) of a SMWET (D2-20) must not exceed 25 feet as measured from the highest point of the roof, excluding chimneys, antennae, and other similar protuberances.
2. The location of the SMWET must be no closer to the property line setback (D2-14), public right-of-way (D2-14), public easement (D2-7), or overhead utility lines than 1.5 times its total height from the ground.
3. The SMWET must not be affixed to the wall or side of a structure (D2-20).
4. No more than 1 SMWET per building (D2-2) may be installed on residences and accessory buildings on the parcel (D2-13) of land. An attached garage is an accessory building for mounting 1 SMWET.

E.D. In addition to the requirements in “A” and “B” above in this Section and in Section 9.04, Small Tower Mounted WETs are subject to the following:

1. The total height of the STWET (D2-21), measured from the ground to the tip of a blade at its highest point, must not exceed 100 feet.
2. The location of the STWET must be no closer to the property line setback, public right-of-way (D2-14), public easement (D2-7), or overhead utility lines than its total height from the ground.
3. Only 1 STWET is permitted on any property parcel.
4. When a Small Tower Mounted WET (STWET) is decommissioned the following requirements must be met:
 - a. Decommissioning (D2-19) must include the removal of each STWET, tower, buildings, electrical components, and any associated facilities. Any foundation must be removed to a minimum depth of 60 inches below grade, or to the level of bedrock if less than 60 inches below grade.
 - b. The site and any disturbed earth shall be stabilized, graded, and cleared of any debris by the owner(s) or operator(s) of the facility or its assigns. If the land is not to be used for agricultural practices following the removal, the site must be seeded to prevent soil erosion.

SECTION 9.07–06 WIND ENERGY SYSTEMS: FAILURE TO DECOMMISSION PERSONAL USE CLASS WETS

If the Personal Use Class WET (D2-21) Owner(s) (D2-20) or Operator(s) (D2-20) fails to complete decommissioning (D2-19) within the period described 9.04.D.1, the Township Board (D2-19) may designate a contractor to complete decommissioning with the expense thereof to be charged to the violator and/or to become a lien against the premises. If the [Personal Use Class](#) WET(s) is not owned by the property owner(s), a bond must be provided to Township Board for the cost of decommissioning each [Personal Use Class](#) WET.

SECTION 9.08–07 WIND ENERGY SYSTEMS: PERSONAL USE CLASS PERMIT APPLICATION REQUIREMENTS

Personal Use Class WETs are permitted by right in all zoning districts when the proposed WET meets the requirements of this ordinance. However, a zoning permit is required before Tuscola County will issue a building permit.

A Personal Use Wind Energy Turbine Zoning Permit application for Personal Use Class WETs must be submitted to the Zoning Administrator. The permit application requires the following:

- A. Name of property owners, ~~their marital status~~, address, and parcel (D2-13) number.
- B. The signature of the applicant(s) and the property owner(s) if other than the applicant.
- C. Applications for SMWETs (D2-20) must include the number and location(s) of the SMWETs.
- D. A site plan (D2-18) including a detailed drawing showing the proposed location of all components and ancillary equipment of the SMWET(s) or STWET (D2-21), property lines, physical dimensions of the property, existing building(s) (D2-2), setback lines (D2-14), right-of-way (D2-14) lines, public easements (D2-7), overhead utility lines, any sidewalks, roads, and contours. The site plan must also depict adjoining properties.
- E. Other relevant information as may be reasonably requested.
- F. Notarized signature(s) of the property owners(s).

Chapter 9 – Alternative Energy Systems Wind

SECTION 9.09–08 WIND ENERGY SYSTEMS: LARGE ELECTRIC GRID CLASS WET REQUIREMENTS

Large Electric Grid Class Wind Energy Turbines are conditional uses as follows:

- A. ~~Small Grid Wind Energy Turbines (SGWETs) (D2-20) and~~ Large Electric Grid Wind Energy Turbines (LGWETs) (D2-19) are permitted as a conditional ~~uses~~ use in the agricultural, commercial, and industrial zoning districts where the property parcel (D2-13) dimensions meet the requirements of this ordinance. ~~A SGWET is also permitted as a conditional use in Condominium Developments (D2-5), and in Industrial zoned districts for WETs (D2-21) approved after the effective date of this ordinance.~~

The LGWET use will need to be added as a conditional use in Section 8.03(A)(3) for Agricultural, Section 8.03(G)(3) for Commercial, Section 8.03(H)(3) for Industrial, and to the table in Section 8.05.

SECTION 9.10–09 WIND ENERGY SYSTEMS: ELECTRIC GRID WET SITING AND DESIGN REQUIREMENTS

In addition to the Requirements in Section 9.04 the following requirements apply to Large Electric Grid Class WETs:

- A. The design of Large Electric Grid Class WETs must conform to all applicable industry standards.
- B. The Large Electric Grid Class WET owner(s) (D2-20) or operator(s) (D2-20) shall model and must conduct an analysis on potential shadow flicker (D2-20) at any occupied building (D2-20) with direct line-of-site to the ~~SGWET or~~ LGWET. The model and analysis shall be incorporated into a report that is submitted to the Planning Commission and must identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sun-rise to sun-set over the course of a year. ~~The analysis must identify situations where shadow flicker may affect the occupants of the buildings more than 30 hours per year, and describe measures that will be taken to eliminate or mitigate the problem. The model and analysis shall confirm that~~ shadow flicker must does not exceed 30 hours per year at any occupied building.
- C. Electrical systems must conform to the safety requirements of Section 9.04.C of this chapter.
- ~~D. In addition to the requirements listed in “A”, “B”, and “C” above, a SGWET is also subject to the following:~~
- ~~1. A SGWET located on property zoned agricultural, commercial, or industrial that has an occupied building must be located in the rear yard (D2-22). In a Condominium Development a SGWET must be located in the General Common element (D2-6).~~

Chapter 9 – Alternative Energy Systems (DRAFT)

- ~~2. The Total Height (D2-21) of a SGWET must not exceed 150 feet.~~
- ~~3. The lowest extension of any blade or other exposed moving component of a SGWET must be at least 20 feet above the ground (at the highest point of the grade level within 50 feet of the base of the tower), and, in addition at least 20 feet above any outdoor surfaces intended for human occupation, such as balconies or roof gardens, located directly below the SGWET.~~
- ~~4. No more than 1 SGWET (D2-20) is permitted for every 2 ½ acres of land included in the parcel (D2-13).~~
- ~~5. SGWET setback and separation requirements:
 - ~~a. The setback from occupied buildings (D2-20), public road right-of-ways (D2-14), drain rights-of-way, and zoning property setback lines (D2-14) must be equal to the total height (D2-21) of the SGWET measured from the base.~~
 - ~~b. Each SGWET must be setback from the nearest above-ground public telephone or electric power line a distance equal to the total height of the SGWET measured from the base of the WET (D2-21) to the utility line.~~
 - ~~c. SGWET Tower separation must be based on industry standard and manufacturer recommendations.~~~~

E.D. In addition to the requirements listed in 9.04 and in “A”, “B”, and “C” above in this Section, a LGWET (D2-19) is also subject to the following:

1. The lowest extension of any blade or other exposed moving component of a LGWET must be at least 50 feet above the ground (at the highest point of the grade level within 150 feet of the base of the tower).
2. The number of LGWETs permitted on a parcel of land is to be determined by the setback and separation requirements.
3. Setback and separation requirements:
 - a. Each LGWET must be setback from ~~the nearest occupied building non-participating parcels, and~~ public road right-of-ways (D2-14), ~~drain rights-of-way, communication lines, electric power lines, and zoning property setback lines~~ a minimum of 2 times its total height, or 1,000 feet as measured from the base of the tower, whichever is greater.
 - b. A setback for a wind turbine from the property lines of adjacent participating property is not required.
 - a.c. Maintenance and operations building(s), substation(s), and ancillary building(s), shall comply with the setback requirements of the underlying

Chapter 9 – Alternative Energy Systems Wind

zoning district. Such structures shall be located at least 500 feet from non-participating parcels.

~~b-d.~~ LGWETS located on parcels that border Township boundary lines must be setback at distance of 2 times the total height of tower.

~~e-e.~~ LGWET Tower separation must be based on industry standard and manufacturer recommendations.

4. Construction of a private driveway to permit Township and emergency vehicles access to the tower base is required. ~~Private driveways must meet the requirements specified in Section 3.13 of this ordinance.~~

SECTION 9.11–10 WIND ENERGY SYSTEMS: LARGE ELECTRIC GRID CLASS WET SAFETY REQUIREMENTS

In addition to the Safety Requirements listed in Section 9.04.C of this chapter, Large Electric Grid Class WETs must comply with the following:

- A. Security measures must be in place to prevent unauthorized trespass access. Each Large Electric Grid WET must not be climbable up to 15 feet above ground surfaces. All access doors to Large Electric Grid WETs and electrical equipment must be locked and/or fenced as appropriate, to prevent entry by unauthorized person(s).
- B. Each Large Electric Grid WET must have 1 sign, not to exceed 2 square feet in area, posted at the base of the tower and on the security fence if applicable. The sign must contain the following:
 1. Warning High Voltage
 2. Manufacturer's name and owner/operators (*D2-20*) name.
 3. Emergency contact numbers (more than 1 number must be listed).

C. The signal interference requirements listed in Section 9.04.A of this chapter apply to all LGWETs.

~~C-D.~~ Lighting:

1. Large Electric Grid WET towers shall not be illuminated unless required by the Federal Aviation Administration (FAA).
2. When illumination is required by the FAA, Large Electric Grid WET towers shall incorporate an Aircraft Detection Lighting System (ADLS).

Chapter 9 – Alternative Energy Systems (DRAFT)

3. All tower lighting required by the FAA shall be shielded to the maximum extent possible to reduce glare and visibility from the ground. Continuous nighttime lighting systems are not allowed.

SECTION 9.12–11 WIND ENERGY SYSTEMS: DECOMMISSIONING OF LARGE ELECTRIC GRID WETs

In addition to the requirements of Section 9.04.d the following regulation apply to Large Electric Grid WETs:

- A. All access driveways to decommissioned Large Electric Grid WETs shall be removed, cleared, and graded by the WET (D2-21) owner(s) unless the property owner(s) request, in writing, a desire to maintain the access driveway. The Township will not be assumed to take ownership of any access driveway unless through official action of the Township Board (D2-19).
- B. Following removal, the location of any remaining WET foundation must be identified on a map as such and recorded with the deed at the Tuscola County register of deeds office.
- C. If the Large Electric Grid Class WET Owner(s) (D2-20) or Operator(s) (D2-20) fails to complete decommissioning (D2-19) within the period described in Section 9.04.D of this chapter, the Township Board may designate a contractor to complete decommissioning with the expense thereof to be charged to the violator and or to become a lien against the premises. If the WET(s) is not owned by the property owner(s), a bond must be provided to Township Board for the cost of decommissioning each WET.
- D. An independent and certified professional engineer will be retained by the owner(s) or operator(s) to estimate the total cost of decommissioning (“Decommissioning Costs”) with no regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment (“Net Decommissioning Costs”). When determining this amount, the township may also require an annual escalator or increase based on the Federal Consumer Price Index (or equivalent or its successor). Said estimates will be submitted to the Tuscola Township Supervisor after the first year of operation and every fifth year thereafter.
- E. The Large Electric Grid Class WET Owner(s) or Operator(s) must post and maintain Decommissioning Funds in a amount equal to ~~Net~~ total cost of decommissioning ~~Decommissioning Costs~~; provided, that at no point shall the Decommissioning Funds be less than 100% of Decommissioning Costs. The Decommissioning Funds will be posted and maintained with a bonding company or Federal or State chartered lending institution chosen by the owner(s), or operator(s) and participating land owner(s) posting the financial security. Providing, the bonding or lending institution is authorized to conduct such business and is approved by Tuscola Township.

Chapter 9 – *Alternative Energy Systems* Wind

- F. Decommissioning Funds must be in the form of a performance bond payable to Tuscola Township.
- G. A condition of the bond must be notification by the bond company to the Tuscola Township Supervisor when the bond is about to expire or be terminated.
- H. Failure to keep the bond in effect while an [Large](#) Electric Grid Class WET is in place will be a violation of the conditional land use permit. If a lapse in the bond occurs, Tuscola Township may take action up to and including requiring ceasing operation of the WET until the bond is reposted.
- I. The escrow agent shall release the Decommissioning Funds when the owner(s) or operator(s) have demonstrated and the township concurs that decommissioning has been satisfactorily completed, or upon written approval of Tuscola Township in order to implement the decommissioning plan.
- J. If neither the owner(s) or operator(s), nor the landowner(s) complete decommissioning (D2-19) within the periods specified in Section 9.04.D.1 of this chapter, then the township may take such measures as necessary to complete decommissioning. The entry into and submission of evidence of a Participating Landowner agreement (D2-20) to the township shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors and assigns that Tuscola Township may take such action as necessary to implement the decommissioning plan.

SECTION 9.13–12 WIND ENERGY SYSTEMS: [LARGE](#) ELECTRIC GRID CLASS WET SITE PLAN REQUIREMENTS

Site plan (D2-18) review by the Planning Commission in compliance with chapter 10 and a public hearing in compliance with Section MCL125.3103 being the Michigan Zoning Enabling Act, PA 110 of 2006 as amended is required for [Large](#) Electric Grid WETs (D2-21). The site plan review will comply with the Conditional Use Permit Review Process detailed in Chapter 11 of this Ordinance. At Tuscola Township's discretion, a qualified wind energy expert may be retained to assist with site plan evaluation. The cost of this assistance will be the responsibility of the owners or operators. To prepare for the public hearing, the Planning Commission must be provided with the following at least 1 month before the site plan review:

- A. All applications for a [Large](#) Electric Grid Class WET conditional use permit must be accompanied by a detailed site plan map that is drawn to scale and dimensioned, displaying the following information:
 - 1. Existing property features including property lines, physical dimensions of the property, land use, zoning district, contours, setback lines (D2-14), right-of-ways (D2-14), public and utility easements (D2-7), public roads, access roads (including width) sidewalks, non-motorized pathways, large trees, and all buildings (D2-2). The site

Chapter 9 – Alternative Energy Systems (DRAFT)

plan must also include the adjoining properties as well as the location and use of all structures within 300 feet of the property.

2. Location and height of all proposed Large Electric Grid WETs, buildings, structures, ancillary equipment, underground utilities and their depth, towers, security fencing, access roads (including width, composition, and maintenance plans), electrical sub-stations, and other above-ground structures and utilities associated with the proposed WET.
- ~~2.3.~~ All electrical collection lines that are part of a Large Electric Grid WET shall be located and maintained underground, buried to a minimum depth of sixty inches below grade.
- ~~3.4.~~ Additional details and information as required by the conditional use requirements of this Zoning ordinance (D2-23) as required by Section 10.03.

B. The following site plan (D2-18) documentation must be included with the site plan:

1. The contact information for the owner(s) (D2-20) and operator(s) (D2-20) of the Large Electric Grid WET(s) (D2-21) ~~as well as the contact information for all property owners on which the Electric Grid WET(s) is located.~~
2. A copy of the lease, or recorded document, with the landowner(s) if the applicant does not own the land for the proposed Large Electric Grid WET(s). ~~A Statement from the landowner(s) of the leased site that he/she will abide by all applicable terms and conditions of the conditional use permit, if approved.~~
3. Identification and location, including parcel numbers, of the properties on which the proposed Large Electric Grid Class WET(s) will be located.
- ~~4. In the case of a Condominium Development (D2-5), a copy of the Condominium Development's Master Deed (D2-6) and/or Bylaws addressing the legal arrangements for the Electric Grid Class WET(s).~~
- ~~5.4.~~ The proposed number, representative types and total height (D2-21) of each Large Electric Grid Class WET to be constructed; including their manufacturer and model, product specifications including maximum noise output (measured in decibels (D2-19)), total rated capacity, rotor diameter (D2-20), and a description of ancillary facilities.
- ~~6. Documents must be submitted by the developer/manufacturer confirming specifications for the Electric Grid WET(s) tower separation.~~

Chapter 9 – *Alternative Energy Systems* Wind

7.5. Documented compliance with the noise and shadow flicker (D2-20) requirements of this ordinance.

i. Noise Requirements:

- A post-construction study documenting sound pressure level measurements shall be provided to the Planning Commission within 6 months from the commencement of operation of the Large Electric Grid Class WET.
- All Large Electric Grid Class WET installations shall not exceed 40 dB(A) measured as a 1-hour Leq.
- Sound measurements shall be made from non-participating property lines.
- The sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms.
- If the ambient sound pressure level exceeds 40 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).
- At a minimum, three measurement locations within the project area and three measurement locations at the periphery of the project area shall be selected, for a minimum of six total measurement locations.
- The measurement period shall be four hours minimum at each location and shall be continuously observed by a trained attendant.
- Measurements shall be supervised by third-party personnel who are well-qualified by training and experience in measurement and evaluation of environmental sound and are Board Certified members of the Institute of Noise Control Engineering (INCE).
- Unattended measurements that are performed may be submitted with the study but only as supplementary data.
- Measurement devices shall comply with the following requirements:
 - A sound level meter or alternative sound level measurement system used shall meet all of the Type 1 performance requirements of American National Standard Specifications for Sound Level Meters, ANSI S1.4.

Chapter 9 – Alternative Energy Systems (DRAFT)

- An integrating sound level meter (or measurement system) shall also meet the Class 1 performance requirements for integrating/averaging in the International Electrotechnical Commission Sound Level Meters, IEC Publication 61672-1.
- An acoustical calibrator shall be used of a type recommended by the manufacturer of the sound level meter and that meets the Type 1 performance requirements of American National Standard Specification for Acoustical Calibrators, ANSI S1.40.
- A microphone windscreen shall be used of a type that meets or exceeds the recommendations of manufacturer of the sound level meter.
- The sound level meter shall have been calibrated by a laboratory within 24 months of the measurement, and the microphone's response shall be traceable to the National Bureau of Standards.
- The sound level meter shall be used with the fast meter response and sampling frequency of one sample per second.
- Anemometer(s) used for surface wind speeds shall have a minimum manufacturer specified accuracy of ± 1 miles per hour providing data in five second integrations.
- Compass used for surface wind direction shall have a minimum manufacturer specified accuracy of $\pm 3^\circ$ providing data in five second integrations.
- Thermometer used for surface temperature shall have a minimum manufacturer specified accuracy of $\pm 2^\circ\text{C}$ providing data in five second integrations.
- A digital recording device used to store the time waveform of sound pressure levels shall comply with the requirements of ANSI/ASA S1.13.
- Required minimum study contents
 - A narrative description of the sound from the Large Electric Grid Class WET for the compliance measurement period result.
 - A narrative description of the sound measurements collected.

Chapter 9 – *Alternative Energy Systems* Wind

- A map showing the wind turbine locations and noise measurement locations.
- The dates, days of the week, and hours of the day when measurements were made.
- The wind direction and speed, temperature, precipitation, and sky conditions for each 4-hour measurement interval. Meteorological measurements of the wind speed and direction shall be documented. Both the average and maximum wind speeds for each 3-hour measurement interval shall be reported.
- Identification of all measurement equipment by make, model, and serial number.
- All meteorological, sound, windscreen, and audio instrumentation specifications and calibrations.
- All A-weighted sound level measurements for each 4-hour measurement interval.
- All attendant's notes and observations.
- Audio recordings may be submitted for identification of intrusive noise events. Audio collection shall occur through the same microphone/sound meter as the measurement data. Audio recordings shall be time stamped (hh:mm:ss), at an adequate quality for identifying events, and in the MP3 format.
- All periods removed from the data due to temperatures above or below manufacturer specifications, and wind speeds above ANSI S12.18 limits.

ii. Shadow Flicker Requirements: See Section 9.09.

- ~~8.6.~~ Engineering data concerning construction of the Large Electric Grid WET(s) and its base foundation, which may include, but not be limited to, soil boring data.
- ~~9.7.~~ A certified registered engineer must certify that the Large Electric Grid WET(s) meets or exceeds the manufacturer's construction and installation standards.
- ~~10.8.~~ Anticipated construction schedule.

Chapter 9 – Alternative Energy Systems (DRAFT)

- ~~41.9.~~ A copy of the maintenance and operation plan, including anticipated regular and unscheduled maintenance. Additionally, a description of the procedures that will be used for lowering or removing the [Large](#) Electric Grid Class WET(s) to conduct maintenance, if applicable.
- ~~42.10.~~ Documented compliance with Township, County, State, and Federal regulations including, but not limited to, all applicable safety, construction, environmental, electrical, and communications. The [Large](#) Electric Grid class WET(s) must comply with the Federal Aviation Administration (FAA) requirements, Michigan Airport Zoning Act, Michigan Tall Structures Act, and any applicable airport (D2-1) overlay zoning regulations.
- ~~43.11.~~ Proof of liability insurance covering the WET(s) (D2-21); to be submitted annually
- ~~44.12.~~ Evidence that the utility company has been informed of the customer's intent to install an interconnected, customer-owned generator and that such connection has been approved. Off-grid systems are exempt from this requirement.
- ~~45.13.~~ Other relevant information as may be requested by Tuscola Township to ensure compliance with the requirements of this ordinance.
14. ~~Following the~~ Within 180 days after the completion of construction, the applicant must certify through the submittal of as-built drawings that all construction is completed pursuant to the conditional use permit and approved site plan (D2-18).
15. A written description of the anticipated life of each [Large](#) Electric Grid class WET; the estimated cost of decommissioning (D2-19); the method of ensuring that funds will be available for decommissioning and site restoration; and removal and restoration procedures and schedules will be employed if the [Large](#) Electric Grid Class WET(s) become inoperable or non-functional.
16. The applicant will submit a decommissioning plan that will be carried out at the end of the [Large](#) Electric Grid Class WET(s) useful life, and any agreement with the landowner(s) that regarding equipment removal upon termination of the lease.
17. Tuscola Township reserves the right to review all maintenance plans and bonds under this ordinance to ensure that all conditions of the conditional use permit are being followed.
18. A completed application for an Electric Class WET(s) zoning permit.
19. In addition to the Site Plan Requirements of Section 10.03 of this ordinance, the LGWET(s) (D2-19) will be subject to the following:

Chapter 9 – Alternative Energy Systems Wind

- a. A site grading, erosion control, and storm water drainage plan will be submitted along with the site plan to the Planning Commission prior to issuing a Conditional use permit for a LGWET. At the township's discretion the township's engineering firm may review these plans. The cost of this review will be the responsibility of the applicant.
- b. A description of the routes to be used by construction and delivery vehicles and any road improvements (D2-9) that will be necessary to accommodate construction vehicles, equipment or other deliveries, and an agreement or bond that guarantees the repair of damage to public roads and other areas caused by construction of the LGWET(s) (D2-19).
- c. A statement indicating what hazardous materials will be used and stored on the site, including all Material Safety Data Sheets (MSDS).
- d. A study assessing any potential impacts on the natural environment, (including, but not limited to, assessing the potential impact on endangered species, eagles, birds, bats, and/or other wildlife, wetlands, and fragile ecosystems. The study must conform to County, State, and ~~federal wildlife~~ Federal wildlife and natural resources agency recommendations based on local conditions.

SECTION 9.14–13 WIND ENERGY SYSTEMS: CERTIFICATION AND COMPLIANCE

- A. Tuscola Township must be notified of a change in ownership of a Large Electric Grid Class WET or change in the ownership of the property on which the WET (D2-21) is located within 90 days of the change.
- B. The township reserves the right to inspect any and all Large Electric Grid Class WETs, in order to ensure compliance with this ordinance. Any cost associated with the inspections will be paid by the owner/operator (D2-20) of the WET. In addition to the above Certification and Compliance requirements, Large Electric Grid Class WETs will be subject to the following:
 - ~~1. A sound pressure level analysis shall be conducted from a reasonable number of sampled locations at the perimeter and interior of the property containing any Electric Grid Class WETs to demonstrate compliance with the requirements of this ordinance. Proof of compliance with the noise standards is required within 90 days of the date the Electric Grid Class WET becomes operational. Sound shall be measured by a third-party, qualified professional.~~
 - 2.1. The Large Electric Grid Class WET owner(s) and operator(s) must provide the Township Clerk with a copy of the yearly maintenance inspection.

Chapter 9 – Alternative Energy Systems (DRAFT)

SECTION 9.15–14 WIND ENERGY SYSTEMS: LARGE ELECTRIC GRID CLASS WET INQUIRIES AND COMPLAINTS

- A) Aggrieved property owners that allege that a Large Electric Grid WET is not in compliance with the noise requirements ~~must follow the procedure listed in Section 9.05 of this chapter of this ordinance, the following procedure must be followed:-~~
1. Notify Tuscola Township Zoning Administrator in writing regarding concerns about the noise level.
 2. If the complaint is deemed sufficient to warrant an investigation by Tuscola Township, the Township will notify the aggrieved property owner to deposit funds in an amount sufficient to pay for a noise level test conducted by a certified acoustic technician to determine compliance with the requirements stated in section 9.04.B3.
 3. If the test indicates that the noise level is within ordinance noise requirements, Tuscola Township will use the deposit to pay for the test.
 4. If the WET owner(s) is in violation of the ordinance noise requirements, the owner(s) must reimburse Tuscola Township for the noise level test and take immediate action to bring the WET into compliance that may include ceasing operation of the WET until ordinance violations are corrected. Tuscola Township will refund the deposit to the aggrieved property owner.
- B) Aggrieved property owners that allege a Large Electric Grid Class WET is not in compliance with the shadow flicker (D2-20) requirements of this ordinance should:
1. Notify Tuscola Township in writing regarding concerns about the amount of shadow flicker.
 2. If the complaint is deemed sufficient by the township to warrant an investigation, the township will request the owner(s) (D2-20) to provide an independent engineer's shadow flicker analysis of the WET as constructed to determine compliance with the requirements of this ordinance.
 3. If the Large Electric Grid Class WET owner(s) is in violation of ordinance shadow flicker requirements, the owner(s) must take immediate action to bring the WET into compliance that may include ceasing operation until the ordinance violation is corrected.

Chapter 9 – *Alternative Energy Systems* Wind

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Chapter 9 – Alternative Energy Systems (DRAFT)

~~SECTION 9.30-15 RESIDENTIAL GENERAL SOLAR ENERGY SYSTEMS: INTENT AND PURPOSE~~

1. Intent and Purpose.

General solar energy systems come in a variety of sizes and designs. General solar energy systems are typically designed as a single solar panel, or a set of solar panels, which can be either freestanding structures (*D2-20*) or structurally attached panels. Such panels contain an interconnected assembly of photovoltaic cells, including associated inverters, batteries, and interconnection wiring. This technology harnesses sunlight and converts it into energy which can be used directly on-site.

Because of the variety of available solar energy system designs, the purpose of this section is to establish minimum siting requirements for general solar energy systems in the Township. These requirements balance the development of a clean renewable energy resource while minimizing potential adverse impacts between land uses. The overall intent of this section regulation is to ensure that general solar energy systems are compatible for private use in agricultural, residential, and business settings.

~~SECTION 9.31 RESIDENTIAL GENERAL SOLAR ENERGY SYSTEMS: ACCESSORY STRUCTURES~~

2. General Solar Energy Systems as Accessory Structures.

- a. A general solar energy system shall be considered an accessory structure in all zoning districts and shall not be erected (*D2-7*), constructed, installed, or modified as provided in this ordinance, including conformance to Section 3.23, unless a zoning permit has been issued to the Owner(s) or Operator(s). A general solar energy system also requires approved mechanical, electrical, and building permits.
- b. An exception to the requirements of Section 3.23 may be granted when a yard (*D2-22*) has a privacy fence. Yards with a privacy fence may be allowed to install ground-mounted solar panels within the setback area, only when approved by the Zoning Administrator. When the solar panel is directly adjacent to the privacy fence, the height of the solar panel shall not exceed the height of the privacy fence. However, for every 3 feet the solar panel is separated from the privacy fence, the solar panel may have an additional foot of height. In no case shall the ground-mounted solar panel exceed eight 8 feet in height.

Chapter 9 – Alternative Energy Systems

~~SECTION 9.32 RESIDENTIAL GENERAL SOLAR ENERGY SYSTEMS: SITING AND DESIGN REQUIREMENTS~~

3. Siting and Design Requirements.

- a. A general solar energy system exceeding 2 square feet in area is not permitted in any front yard (*D2-22*), on any face of a building (*D2-2*) or structure (*D2-20*) facing a street (*D2-18*) unless integrated with the construction of said building or structure, or in view of any adjacent street, except roof-mounted solar panels as set forth below.
- b. A general solar energy system is limited to a maximum generating capacity of up to 30 kilowatts (kW) in residential districts and up to 150 kilowatts (kW) in all other zoning districts. These limits do not apply to solar energy systems that are integrated into the design of a building or structure, such as, though not limited to, flexible photovoltaic solar cells packaged in the form of roofing shingles.
- c. The reflection angles of solar energy systems should be oriented away from neighboring windows and, to the extent possible, away from public areas, to minimize glare on adjacent properties and roadways. As such, solar panels shall be finished with non-reflective coatings and exposed frames and components shall have a non-reflective surface.
- d. Any power transmission line for a general solar energy system shall be located underground.
- e. If a general solar energy system ceases to perform its intended function for more than twelve (12) consecutive months, the property owner shall remove it and all associated materials, equipment, and facilities no later than ninety (90) days after the end of the twelve (12) month period.
- d.f. A ground-mounted general solar energy system shall:
 - 1) Be located in a rear yard (*D2-22*) only,
 - 2) Not exceed the allowed maximum lot (*D2-10*) coverage for accessory structures,
 - 3) Not exceed 8 feet in height above the ground.
- e.g. Roof-mounted general solar energy systems:
 - 1) Permitted roof-mounted solar panels shall include integrated solar panels as the surface layer of the roof structure with no additional apparent change in relief or projection (the preferred installation), or separate flush-mounted solar panels attached to the roof surface. A flush-mounted solar panel is anchored directly against the roof. It is parallel to the surface of the roof and does not stick up and away from the roof.

Chapter 9 – Alternative Energy Systems (DRAFT)

- 2) Separate flush-mounted solar panels shall be located on a rear- or side-facing roof, as viewed from any adjacent street (*D2-18*), unless such installation is proven to be ineffective or impossible. The removal of potential obstructions such as interceding vegetation shall not be sufficient cause for permitting a front-facing roof installation.
- 3) Separate flush-mounted solar panels installed on a building or structure (*D2-20*) with a sloped roof surface shall not project vertically above the peak of the roof to which it is attached, or project vertically more than 5 feet above a flat roof installation.

Chapter 9 – Alternative Energy Systems

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Chapter 9 – Alternative Energy Systems (DRAFT)

SECTION 9.50–16 COMMERCIAL SOLAR ENERGY SYSTEMS

1. **CONDITIONAL USE PERMIT REQUIREMENTS.** The solar energy regulations and standards described in this section pertain to the creation of large-scale ground-mounted solar photovoltaic installations that primarily sell electricity to be used off-site. The regulations set forth below apply to the construction, operation, and/or repair of large-scale ground-mounted Commercial Solar Energy Systems and shall ~~only~~ be allowed as a Conditional Use in the Agricultural (A) District and the Industrial (I) District, pursuant to Chapter 11 as to Conditional Use Permit approvals and the following requirements:
 - a. **Procedure.** The Planning Commission review of a Conditional Use Permit application for a Commercial Solar Energy System is a two-step process. The first step is the public hearing and decision by the Planning Commission, per the procedures for review in Chapter 11. The second step, which may occur at a separate meeting for a Commercial Solar Energy System, is the site plan review process by the Planning Commission as described in Chapter 10. A decision on the Conditional Use Permit application by the Planning Commission is inclusive of all proposed Commercial Solar Energy Systems, underground electrical lines, sub-station(s), junction boxes, laydown yard(s), and any operations/maintenance building(s).
 - b. **Applicant Identification.** Applicant name and address in full, a statement that the applicant is the owner involved or is acting on the owner's behalf, the address of the property involved in the application (substitution may include a legal description or parcel identifications number(s)), and any additional contact information. Each application for a Commercial Solar Energy System shall also be dated to indicate the date the application is submitted to Tuscola Township.
 - c. **Fee.** An applicant shall remit an application fee and an escrow deposit, in the amount specified by Township policy. This schedule shall be based on the cost of the application review and may be adjusted from time to time. If professional review of plans is required, then such costs shall be paid from the escrow deposit.
 - d. **Project Description.** A general description of the proposed project including a legal description of the property or properties on which the project would be located and an anticipated construction schedule.
 - e. **Project Design.** A description and drawing of the proposed technology to include type of solar panel and system, fixed mounted compared to solar tracking, number of panels, and angles of orientation.
 - f. **Insurance.** Proof of the applicant's public liability insurance with at least \$3,000,000 per occurrence to cover the Commercial Solar Energy System, the Township, and the landowner.

Chapter 9 – Alternative Energy Systems

- g. **Certification.** Certifications that the applicant has complied or will comply with all applicable county, state, and federal laws, regulations, and ordinances, including compliance with the Farmland and Open Space Preservation Program (Part 361 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994 as amended, more commonly known as PA 116).
 - h. **Manufacturers' Data Sheet(s).** Documentation shall include the type and quantity of all materials used in the operation of all equipment.
 - i. **Visual Simulations.** Photo exhibits visualizing the proposed solar energy system, with emphasis on visualizing the location of any required fences, landscaping, access roads, and setbacks from adjacent non-participating property.
 - j. **Maintenance Plan.** Applicant shall submit a maintenance plan that describes the following:
 - 1) Demonstrates the Commercial Solar Energy System will be designed, constructed, and operated to minimize dust generation, including provision of sufficient watering of excavated or graded soil during construction to prevent excessive dust.
 - 2) States the manner how unpaved access roads will be treated and maintained, either with a dust palliative or graveled or treated by another approved dust control method to prevent excessive dust.
 - 3) Provisions that will be employed to ~~maintain and promote native vegetation while minimizing~~minimize the proliferation of weeds during and following construction.
 - k. **Emergency Services.** The Commercial Solar Energy System owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the local fire chief. The owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar photovoltaic installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
 - l. **Decommissioning.** Copy of the decommissioning plans and a description of how any surety bond is applied to the decommissioning process.
 - m. **Complaint Resolution.** Description of the complaint resolution process.
2. **SITE PLAN REQUIREMENTS.** The applicant shall submit a site plan in full compliance with Chapter 10 of this zoning ordinance for each Commercial Solar Energy System and other solar energy appurtenances, including the following requirements:
- a. The project area boundaries,
 - b. The location, height, and dimensions of all existing and proposed structures and fencing,
 - c. The location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state-maintained road,

Chapter 9 – Alternative Energy Systems (DRAFT)

- d. Existing topography,
- e. Water bodies, waterways, wetlands, drainage channels, and drain easements, and
- f. A site grading, erosion control and storm water drainage plan. At the Township's discretion, these plans may be reviewed by the Township's engineering firm.
- g. All comments from the Tuscola County Drain Commissioner's office pertaining to the proposed Commercial Solar Energy System shall be submitted to the Planning Commission.

h. All new infrastructure, both above and below ground, related to the project. This includes inverters and batteries.

h.i. Location of the project's interconnection to the electric power transmission infrastructure.

h.j. Identification of a construction/set-up/laydown area.

3. **STANDARDS AND REQUIREMENTS.** Commercial Solar Energy Systems shall meet the following standards and requirements:

a. **Location of Commercial Solar Energy Systems.**

- i. All Commercial Solar Energy Systems must comply with the requirements established in the Tuscola Township Zoning Ordinance.
- ii. All fences and improved areas located on the site shall comply with Section 9.50 (3)(f) below.

~~Furthermore, any Solar panels and any associated structures or other improved areas located within the fenced/improved area~~ shall be located at least ~~30-60~~ feet from the ~~fence line/improved area~~ nearest non-participating property line.

~~Project design and layout will ensure any structures or other improved areas located within the fenced/improved area shall be located a minimum of 125 feet from any residential structure, church, school, family or group child day care home, and any bed and breakfast establishment.~~

- iii. Solar panels and associated racking is limited in height to ~~18-20~~ feet. All other structures shall comply with the height requirements of Section 8.04.
- iv. The applicant shall include information about project-wide lot coverage calculations. The Tuscola Township zoning ordinance does not specify any maximum lot coverage requirement.

Chapter 9 – Alternative Energy Systems

b. Design and Installation Standards

- i. All proposed facilities shall comply with all applicable local, state, and federal standards and requirements, including electrical, building, and drain codes.
- ii. A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the Planning Commission.
- iii. All electrical connection systems and lines from the Commercial Solar Energy System to the electrical grid connection shall be located and maintained at a minimum depth of six feet underground.
- iv. The design and construction of Commercial Solar Energy Systems shall not produce electrical emissions that would interfere with aircraft communications systems or navigation equipment.
- v. If the Commercial Solar Energy System consists of batteries or storage of batteries, adequate design must be provided to ensure all local, state and federal requirements regulating outdoor battery storage have been met.
- vi. The applicant must obtain a driveway permit from the Tuscola County Road Commission or MDOT, as applicable.
- vii. The applicant must obtain any drain permits from the Tuscola County Drain Commission or [the Michigan Department of Environment, Great Lakes, and Energy \(EGLE\) MDEQ](#), as applicable.
- viii. The design of landscape buffers for Commercial Solar Energy Systems shall use materials, colors, textures, screening and landscaping that will blend the facility into the natural setting and existing environment.
- ix. Lighting shall be consistent with local, state, and federal law, and shall be limited to that required for safety and operational purposes. Lighting shall be reasonably shielded from abutting properties.
- x. Compliance with any applicable airport overlay zoning requirements and the ability to comply with FAA regulations pertaining to hazards to air navigation must be demonstrated.
- xi. If a Commercial Solar Energy System ownership changes, the new owner/operator must meet with the Tuscola Township Planning Commission to review the conditions of the Conditional Use Permit within 60 days of the change in ownership. [Such meeting shall also encompass reviews of the decommissioning bond, Township-approved permits, and other related project documents, as necessary.](#)

Chapter 9 – Alternative Energy Systems (DRAFT)

- c. **Noise.** Commercial Solar Energy Systems shall not exceed 40 dB(A) at the property line closest to the solar energy system. If the ambient sound pressure level exceeds 40 dB(A), the standard shall be ambient dB(A) plus 5 dB(A). ~~No additional noise over the existing ambient level shall be heard at the property lines of the project. If noise complaints occur, the owner/operator may be required to complete a noise study and mitigate any additional noise that is found.~~

d. **Light and Glare**

- i. All Commercial Solar Energy Systems shall be placed such that solar glare does not project onto nearby inhabited structures or roadways and be considered a nuisance.
- ii. The applicant has the burden of proof that any glare produced does not have an adverse effect on neighboring or adjacent uses through siting and mitigation. If the solar panel systems do produce a glare, the applicant shall be responsible for mitigation, and will provide a mitigation plan.
- iii. The design and construction of a Commercial Solar Energy System shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and/or traffic control operations.

e. **Landscaping**

- i. Applicant shall submit a landscape plan detailing all proposed changes to the landscape of the site, including temporary or permanent roads or driveways, grading, vegetation clearing, and planting.
- ii. All Commercial Solar Energy Systems shall have a minimum landscape buffer depth of 20 feet located around the perimeter of the project.

If a proposed Commercial Solar Energy System is located on a single parcel, the location of the landscape buffer shall conform to the setbacks described in the Schedule of Regulations in Section 8.04.

If a proposed Commercial Solar Energy System is planned to be located across several parcels, then the location of the landscape buffer shall not be placed closer than ~~20~~40 feet from the shared boundary of adjacent non-participating property lines, and no closer than 40 feet from the edge of road right of ways.

The buffer shall contain evergreen trees or bushes planted no more than eight feet apart and at least four feet tall at time of planting. Trees and bushes planted in the buffer shall obtain a height of 10 feet within three growing seasons. The trees or bushes may be trimmed but can be no lower than a height of 10 feet.

Chapter 9 – Alternative Energy Systems

To enhance the appearance of the project from nearby sightlines, the landscape buffer shall be placed around the exterior of any perimeter fence, if required by Section 9.50(3)(f)(ii) below.

- iii. Land clearing of natural vegetation shall be limited to that which is necessary for the construction, operation, and maintenance of the Commercial Solar Energy System pursuant to practices of best management of natural areas or good husbandry of the land or forest ~~other as~~ prescribed by applicable laws, regulations, and bylaws.
- iv. Each owner/operator of a Commercial Solar Energy System shall utilize good husbandry techniques with respect to said vegetation, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of landscaping shall be maintained by the facility operator ~~not to exceed twelve inches in height~~ in accordance with Tuscola Township ordinances.
- v. Applicant must provide a detailed maintenance plan for the proposed solar energy system, and surrounding area, including provisions that will be employed to maintain and promote native vegetation while ~~minimizing the proliferation of weeds during and following construction~~ demonstrating compliance with all applicable Tuscola Township ordinances.
- v-vi. The landscaping requirements in this section (Section 9.50(3)(e)) ~~govern~~ supersede and the landscaping standards described in Section 15.01 ~~do not apply to Commercial Solar Energy Systems.~~

f. Security

- i. The manufacturers or installer's identification and appropriate warning sign shall be posted on or near the panels in a clearly visible manner; furthermore, an information sign shall be posted and maintained at the entrance(s), which shall list the name and phone number of the operator
- ii. Commercial Solar Energy Systems may be surrounded by a chain link fence. Fencing shall not exceed 8 feet ~~and shall not obstruct vision.~~ The fence shall be designed to restrict unauthorized access. See Section 3.15 for other options that may apply to Commercial Solar Energy Systems.
- iii. No portion of the Commercial Solar Energy System shall contain or be used to display advertising. The manufacturers' name and equipment information or

Chapter 9 – Alternative Energy Systems (DRAFT)

dedication of ownership shall be allowed on any equipment of the solar energy system provided they comply with the prevailing sign regulation.

[g. Annual Reporting: Energy production summary reports by month shall be provided annually for the Commercial Solar Energy System, to be submitted to the Zoning Administrator by February 1 of each year, for the preceding year.](#)

4. ABANDONMENT AND DECOMMISSIONING

- a. Abandonment: A Commercial Solar Energy System that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current responsible party (or parties) with ownership interest in the Commercial Solar Energy System provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Planning Commission or its designee of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and completely restore the property to its condition prior to development of the Commercial Solar Energy System.
 - i. Upon determination of abandonment, the Zoning Administrator shall notify the party (or parties) responsible that they must remove the Commercial Solar Energy System and restore the site to its condition prior to development of the Commercial Solar Energy System within six months of notice by the Planning Commission or its designee.
 - ii. If the responsible party (or parties) fails to comply, the Township or its designee, may remove the Commercial Solar Energy System, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the Commercial Solar Energy System and restore the site to a nonhazardous predevelopment condition.
- b. Decommissioning: A decommissioning plan signed by the party responsible for decommissioning and the landowner addressing the following shall be submitted prior to the issuance of the zoning permit, which shall include:
 - i. The anticipated life of the project;
 - ii. The estimated total decommissioning costs in current dollars (decommissioning costs net of salvage value shall not be considered by the Planning Commission);
 - iii. The method of ensuring that funds will be available for decommissioning and restoration, to include but not limited to:

Chapter 9 – Alternative Energy Systems

1. Complete removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations, and
 2. Complete restoration of property to condition prior to development of the Commercial Solar Energy System;
- iv. The anticipated manner in which the project will be decommissioned and the site restored.
1. Decommissioning shall include the removal of each Photovoltaic Panel, all electrical components including all electrical connection systems, and associated facilities within the footprint of the Commercial Solar Energy System, ~~to~~ regardless of depth.
 2. All access roads/driveways to the Commercial Solar Energy System shall be removed, cleared, and graded by the facility owner, unless the property owner requests, in writing, a desire to maintain the access road/driveway. The Township will not be assumed to take ownership of any access road and such remaining roads will not be considered public roads.
 3. The site and any disturbed earth shall be stabilized, graded, and cleared of any debris by the owner of the Commercial Solar Energy System or its ~~assigns~~assignees. If the site is not to be used for agricultural purposes following removal, the site shall be seeded to prevent soil erosion, and restored to its condition existing prior to any construction activities, unless the property owner(s) requests, in writing, the land surface areas not be restored.
- v. A provision to give notice to the Township one year in advance of decommissioning.
- vi. A surety bond to assure payment of the cost of decommissioning shall be required. To ensure proper removal of the structure when it ceases to be used for a period of one year or more, any application for a new Commercial Solar Energy System shall include a description of the financial security guaranteeing removal of the Commercial Solar Energy System which will be posted prior to receiving a ~~building permit~~Zoning Permit for the facility. The security shall be a: 1) ~~cash bond~~; 2) irrevocable bank letter of credit; or ~~3~~2) performance bond in a form approved by the Township Board of Trustees. The amount of such guarantee shall be no less than the estimated cost of removal and may include a provision for inflationary cost adjustments. When determining the amount of such required security, the Township Board of Trustees may also require future meetings at pre-set intervals, to establish corrected values for decommissioning. The financial security instrument shall be adjusted to each determined corrected value.

Chapter 9 – Alternative Energy Systems (DRAFT)

- vii. The estimate shall be prepared by the engineer for the developer and shall be approved by the Township Board of Trustees.
- viii. The timeframe for completion of decommissioning activities.
- ix. A condition of the surety bond shall be notification by the surety company to the Township Zoning Administrator 30 days prior to its expiration or termination.

5. COMPLAINT RESOLUTION

- a. The Commercial Solar Energy System ~~operator/owner~~applicant shall submit a detailed, written complaint resolution process developed by the Commercial Solar Energy System ~~operator/owner~~applicant to resolve complaints concerning the construction or operation of the Commercial Solar Energy System. The complaint resolution process must be approved by the Planning Commission as a condition of approval of the Conditional Use permit application.
- b. The Planning Commission shall be kept apprised of all complaints and shall receive a report outlining the issues, the progress, and the resolution of each such complaint. Such report shall be presented every six months by the ~~applicant~~operator/owner to the Planning Commission.

- 6. CONFLICTING PROVISIONS.** In the event of a conflict between any provision in this section and any other section of this Zoning Ordinance with regard to Commercial Solar Energy Systems, the provisions of this section shall control.