

ORDINANCE 36A-13

The Board of Trustees of the Charter Township of Hampton, Bay County, Michigan, ordains:

That Ordinance 36A of the Charter Township of Hampton, being the Charter Township of Hampton Zoning Ordinance, be amended as follows:

SECTION A

The Charter Township of Hampton Ordinance No. 36A and all prior amendments thereto, designated as Charter Township of Hampton Zoning Ordinance, adopted June 8, 1992, and effective July 11, 1992, is hereby amended, in part, as follows:

Note: Proposed new text is bolded blue and deletions look like this. Only the proposed amendment to the Ordinance is shown below.

CHAPTER VI

"A" – AGRICULTURAL DISTRICT

SECTION 6.0'1 DESCRIPTION AND PURPOSE

Section 6.01 remains unchanged.

SECTION 6.02 PERMITTED USES

Section 6.02 remains unchanged.

SECTION 6.03 PERMITTED PRINCIPAL USES SUBJECT TO THE ISSUANCE OF A SPECIAL USE PERMIT IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER XIX:

Section 6.03 and subparts (a) – (i) remain unchanged.

(j) Utility-Grid Wind Energy System

1. Wind Site Assessment

- a.** Prior to construction of a Utility-Grid Wind Energy System, a wind site assessment is conducted to determine the wind speeds and the feasibility of using the site. Installation of anemometer ("Met") towers shall be considered a special use.
- b.** Prior to the installation of the tower, applications for Site Plan Review and a Special Use permit shall be filed with the Hampton Charter Township Clerk according to the procedure set forth in Section 14.02(b) of this zoning ordinance for Type II site plans. An

application for a building permit shall be completed and submitted to the Building Inspector, as described in Chapter XXI, and shall include the following information in addition to the information requested on the zoning permit application:

- (1) Applicant identification
 - (2) Site plan
 - (3) Copy of that portion of the applicant's lease, easement, or other agreement with the land owner granting authority to install the Met tower and requiring the applicant to remove all equipment and restore the site after completion of the wind site assessment
- c. The distance from the center of a Met tower and the property lines between the leased property and the non-leased property shall be at least the height of the Met tower. Leased property can include more than one piece of property and the requirement shall apply to the combined properties. Exceptions for adjacent property are allowed with the written consent of those property owners.

2. Utility-Grid Wind Energy System Special Use Permit Application

A Utility-Grid Wind Energy System is designed and built to provide electricity to the electric utility grid. Prior to the installation of a Utility-Grid Wind Energy System, applications for Type II Site Plan Review and a Special Use permit must be filed and approved by the Hampton Charter Township Planning Commission and shall include the following:

- a. Applicant Identification: Applicant name, address, and contact information.
- b. Project Description: A general description of the proposed project including a legal description of the properties on which the project would be located.
- c. Site Plan: The site plan shall include maps showing the physical features and land uses of the project area, both before and after construction of the proposed project. The site plan shall include all required information noted in Section 14.03(b) of the Hampton Charter Township zoning ordinance. In addition, the site plan shall include the following information:
 - (1) Project area boundaries,
 - (2) The location, height, and dimensions of all existing and proposed structures and fencing,
 - (3) Storage location of all equipment and materials associated with the construction and maintenance of a Utility-Grid Wind Energy System,

- (4) The location, grades, and dimensions of all temporary and permanent on-site and access roads, including width and surface material, from the nearest county or state maintained road,
- (5) Water bodies, **waterways**, wetlands, and drainage channels,
- (6) Existing infrastructure and utilities that is located underground and above-ground, and
- (7) All new infrastructure that is located underground and above-ground related to the project.

Fees: An applicant shall remit an application fee in the amount specified in the fee schedule adopted by the Hampton Charter Township Board of Trustees. This schedule shall be based on the cost of the application review and may be adjusted from time to time.

- e. Engineering Data: Engineering data concerning construction of the tower and its base or foundation, which must be engineered and constructed in such a manner that upon removal of said tower, the soil will be restored to its original condition to a depth of 3 feet.

Maintenance Schedule: Anticipated construction schedule, and description of operations, including anticipated regular and unscheduled maintenance.

- g. Consent Documents: Copies of any written waivers from adjacent property owners.

- h. Sound Pressure Level: Copy of the modeling and analysis report.

- i. Certifications: Certification that the applicant has complied or will comply with all applicable state and federal laws and regulations. Copies of all such permits and approvals that have been obtained or applied for at time of the application.

Visual Impact: Visual simulations of how the completed project will look from four viewable angles.

- k. Environmental Impact: Copy of the Environmental Impact analysis.

- l. Avian and Wildlife Impact: Copy of the Avian and Wildlife Impact analysis.

- m. Shadow Flicker: Copy of the Shadow Flicker analysis.

- n. Manufacturers' Material Safety Data Sheet: Documentation shall include the type and quantity of all materials used in the operation of all equipment including, but not limited to, all lubricants and coolants.

Decommissioning: Copy of the decommissioning plan.

p. Complaint Resolution: Description of the complaint resolution process.

q. Map of Electromagnetic Interference.

3. The Utility-Grid Wind Energy system project shall meet the following standards and requirements:

a. Property Setback:

- (1) The distance between a wind turbine within a Utility-Grid Wind Energy System and the property lines of adjacent non-leased properties shall be 1,320 feet, measured from the centerline of the base of the wind energy tower to the property line of adjacent non-leased properties.
- (2) The distance between a wind turbine within a Utility Grid Wind Energy System and internal property lines of leased property lines shall be at least 1.50 times the height of the wind energy system tower including the top of the blade in its vertical position.
- (3) The distance between a wind turbine within a Utility-Grid Wind Energy System and public rights-of-ways and roads shall be at least 1.50 times the height of the wind turbine, measured from the top of the blade in its vertical position to the centerline of its base, to the nearest edge of the public right-of-way or road.
- (4) Where property is leased on both sides of a public right of way, excluding roads, a wind energy system may be placed no closer than one rotor radius from the closest edge of the right of way. Leased property can include more than one piece of property and the requirement shall apply to the combined properties.
- (5) SCADA (supervisory control and data acquisition) or meteorological (Met) towers shall also comply with the property setback requirement. The setback shall be at least the height of the SCADA or Met tower.
- (6) An Operations and Maintenance Office building, a sub-station, and/or ancillary equipment shall comply with any property set-back requirement that may be applicable to that type of building or equipment.

- (7) Overhead transmission lines and power poles shall comply **with** the setback requirements applicable to public utilities.
- (8) Exceptions for adjacent property or public rights of way are allowed with the written consent of those property owners. Written consent letters must be submitted at the time of the public hearing for the special use permit.

b. Other Required Setbacks:

- (1) The distance between a wind turbine within a Utility-Grid Wind Energy System and a habitable structure on leased property shall be at least 1.5 times the height of the wind energy system tower including the top of the blade in its vertical position, measured from the centerline of the base of the wind energy tower to the nearest edge of the habitable structure. Exceptions for adjacent property owners are allowed with the written consent of those property owners. In these cases, the distance between a wind turbine within a Utility Grid Wind Energy System and a habitable structure on leased property shall be at least the height of the wind energy system tower including the top of the blade in its vertical position, measured from the centerline of the base of the wind energy tower to the nearest edge of the habitable structure. Written consent letters must be submitted at the time of the public hearing for the special use permit.
- (2) **Turbine/tower** separation shall be based on: Industry standards, manufacturer recommendation, and the characteristics of the particular site location. At a minimum, there shall be a separation between towers of not less than three (3) times the rotor diameter, and Utility Grid wind energy system shall be designed to minimize disruption to farmland activity. Separation between turbines with different rotor sizes shall be not less than three (3) times the diameter of the smaller rotor. Documents shall be submitted by the applicant confirming specifications for **turbine/tower** separation.
- (3) A wind turbine in a Utility-Grid Wind Energy System that is proposed to be located upon a shared property boundary **may** be exempt from the side and rear setbacks requirements of Section 6.04 if the site plan submittal contains appropriate documentation demonstrating that a legally-binding easement agreement between the owners of the property with the shared boundary has been recorded **with** the Bay County Register of Deeds. This exemption applies only to leased property that is part of a Utility-Grid **Wind** Energy System. Distances from habitable structures

as required under "Other Required Setbacks" (Section 6.03(j)3.b.(1) from above) shall be maintained.

Sound Pressure Level:

- (1) The sound pressure level generated by a Utility Grid wind energy system shall not exceed 55 dB(A) measured at the property lines between leased and non-leased property. Exceptions to this requirement are allowed with the written consent of property owners. This sound pressure level shall not be exceeded for more than 3 minutes in any hour of the day. If the ambient sound pressure level exceeds 55 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).
- (2) As part of the application and prior to installation, the applicant shall provide modeling and analysis that will confirm that the Utility Grid wind energy system will not exceed the maximum permitted sound pressure levels.
- (3) Modeling and analysis shall conform to IEC 61400 and ISO 9613.
- (4) After installation of the Utility Grid wind energy system, sound pressure level measurements shall be done by a third party, qualified professional according to the procedures in the most current version of ANSI S12.18. All sound pressure levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type II sound meter.
- (5) Documentation of the sound pressure level measurements shall be provided to the local government within 60 days after construction is completed on the wind energy system project.

d. Construction Codes, Towers, and Interconnection Standards:

- (1) Utility Grid wind energy systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements.
- (2) Utility Grid wind energy systems including towers shall comply with Federal Aviation Administration requirements, the Michigan Zoning Enabling Act (Public Act 110 of 2006), the Michigan Tall Structures Act (Public Act 259 of 1959), and local jurisdiction airport overlay zone regulations.
- (3) The minimum FAA lighting standards shall not be exceeded. All tower lighting required by the FAA shall be shielded to the

extent possible to reduce glare and visibility from the ground. The tower shaft shall not be illuminated unless required by the FAA.

- (4) Utility Grid wind energy systems shall comply with applicable utility, Michigan Public Service Commission, and Federal Energy Regulatory Commission interconnection standards.

Safety:

- (1) All Utility Grid wind energy systems shall be designed to prevent unauthorized access to electrical and mechanical components and shall have access doors that are kept securely locked at all times when service personnel are not present.
- (2) All spent lubricants and cooling fluids shall be properly and safely removed in a timely manner from the site of the wind energy system.
- (3) A sign shall be posted near the tower or Operations and Maintenance Office building that will contain emergency contact information. Signage placed at the road access shall be used to warn visitors about the potential danger of falling ice.
- (4) The minimum vertical blade tip clearance from grade shall be 35 feet for a wind energy system employing a horizontal axis rotor.

Visual Impact:

- (1) Utility Grid wind energy system projects shall use tubular towers and all Utility Grid wind energy systems in a project shall be finished in a single, non-reflective matte finished color.
- (2) A project shall be constructed using wind energy systems of similar design, size, operation, and appearance throughout the project.
- (3) No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades. Nacelles may have lettering that exhibits the manufacturer's and/or owner's identification.
- (4) The applicant shall avoid state or federal scenic areas and significant visual resources listed in the comprehensive plan.

g. Environmental Impact:

- (1) The applicant shall have a third party, qualified professional conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, historical and cultural sites, and antiquities. The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis. **The** applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.
- (2) The applicant shall comply with applicable parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.) including but not limited to Part 31 Water Resources Protection (MCL 324.3101 et seq.), Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.) , Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.), and Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).
- (3) The applicant shall be responsible for making repairs to any public roads damaged by the construction of the Utility Grid wind energy system. In addition, the applicant shall submit to Hampton Charter Township and the appropriate Bay County office(s):
 - i. A description of the routes to be used by construction and delivery vehicles
 - ii. Any road improvements that will be necessary in Hampton Charter Township to accommodate construction vehicles, equipment or other deliveries
 - iii. An agreement or bond which guarantees the repair of damage to public roads and other areas caused by construction of the Utility Grid wind energy system

h. Avian and Wildlife Impact:

- (1) The applicant shall have a third party, qualified professional conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any

net effects or concerns that will remain **after** mitigation efforts.

- (2) Sites requiring special scrutiny include bird refuges and other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally listed endangered species **of** birds and bats, significant bird migration pathways, and areas that have landscape features known to attract **large** numbers of raptors.

At a minimum, the analysis shall include a thorough **review** of existing information regarding species and potential habitats in the vicinity of the project area. Where **appropriate**, surveys for bats, **raptors**, and general avian use should **be** conducted. The analysis shall include the potential **effects on** species listed under the federal Endangered Species **Act** and Michigan's Endangered Species Protection Law

The analysis shall indicate whether a post construction wildlife mortality study will be conducted and, if not, the reasons why such a study does not need to be **conducted**. Power lines should be placed underground, when **feasible**, to prevent avian collisions and electrocutions. All **above-**ground lines, transformers, or conductors should comply with the Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) published standards to prevent **avian** mortality.

Electromagnetic Interference:

- (1) No Utility Grid wind energy system shall be installed in **any** location where its proximity with existing fixed **broadcast**, retransmission, or reception antenna 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 the level present before operation of the **wind** energy system.
- (2) No Utility Grid wind energy system shall be installed in **any** location within the line of sight of an existing microwave communications link where its operation is likely to **produce** electromagnetic interference in the link's operation **unless** the interference is insignificant.

- j. Shadow Flicker:
- (1) The applicant shall conduct an analysis on potential shadow flicker at occupied structures.
 - (2) The analysis shall 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.
 - (3) The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the problems.
- k. Decommissioning. The applicant shall submit a decommissioning plan. The plan shall include:
- (1) The anticipated life of the project.
 - (2) The estimated decommissioning costs net of salvage value in current dollars.
 - (3) The method of ensuring that funds will be available for decommissioning and restoration.
 - (4) The anticipated manner in which the project will be decommissioned and the site restored.
- l. Storage of Equipment: All materials and equipment associated with construction and maintenance of a Utility Grid wind energy system shall be stored in an enclosed structure designated for the purposes of storing said equipment.
- m. Performance Guarantee: To ensure compliance with the provisions of the Hampton Charter Township zoning ordinance and any conditions imposed, a cash deposit, certified check, irrevocable bank letter of credit, or surety bond acceptable to the Township covering the estimated cost of improvements associated with a Utility-Grid Wind Energy System project shall be deposited with the clerk of the Township to ensure faithful completion of the improvements. The performance guarantee shall be deposited at the time of the issuance of the permit authorizing the project. Deposit of the performance guarantee is not required prior to the issuance of said permit. The Township may return any unused portion of the cash deposit to the applicant in reasonable proportion to the ratio of work completed on the required improvements as work progresses.

n. Complaint Resolution:

- (1) The applicant shall develop a process to resolve complaints from nearby residents concerning the construction or operation of the project and submit for review to Hampton Township.
- (2) The process shall not preclude the local government from acting on a complaint.
- (3) During **construction** the applicant shall maintain a telephone number during business hours where nearby residents can reach a project representative.

SECTION 6.04 AREA REGULATIONS

Section 6.04 remains unchanged.

CHAPTER VII

RESIDENTIAL ZONED DISTRICTS

Chapter VII Table 2 amended as follows:

CHAPTER VII

PERMITTED & SPECIAL USES WITHIN RESIDENTIAL DISTRICTS TABLE 2

USE	APPROVAL STANDARDS	ZONE DISTRICT								
		R-1	R-2	R-3	R-3A	R-4	R-5	R-6	R-7	
PERMITTED USES										
Single Family Dwellings		X	X	X	X	X	X	X	X	X
Accessory Buildings (Sec. 3.07-3.09)		X	X	X	X	X	X	X	X	X
Signs (Chapter 18)		X	X	X	X	X	X	X	X	X
Family Day Care Homes		X	X	X	X	X	X	X	X	X
Adult Foster Care Family Homes		X	X	X	X	X	X	X	X	X
Foster Family Homes		X	X	X	X	X	X	X	X	X
Family Day Care Homes		X	X	X	X	X	X	X	X	X
Foster Family Group Homes		X	X	X	X	X	X	X	X	X
Two Family Dwellings			X	X	X	X	X	X	X	X
Multiple Family Dwellings				X	X	X	X			X
Mobile Home Parks					X	X	X			
Agricultural Buildings	1	X	X	X	X	X	X	X	X	X
Garden Markets	Sec. 6.02(f)	X	X	X	X	X	X	X	X	X
PERMITTED USES SUBJECT TO THE ISSUANCE OF A SPECIAL USE PERMIT (CHAPTER 19)										
Home Occupations (Sections 30-91)	2	X	X	X	X	X	X	X	X	X
Group Day Care Homes	3	X	X	X	X	X	X	X	X	X
Churches	4	X	X	X	X	X	X	X	X	X
Public, Private & Parochial Schools & Colleges	4	X	X	X	X	X	X	X	X	X
Libraries	4	X	X	X	X	X	X	X	X	X
Museums	4	X	X	X	X	X	X	X	X	X
High Density Multiple Family Dwellings	10				X					
Parks, Playgrounds, Community Centers	4	X	X	X	X	X	X	X	X	X
Governmental Administration or Service Buildings	4	X	X	X	X	X	X	X	X	X
Municipal, Denominational & Private Cemeteries	4	X	X	X	X	X	X	X	X	X
Funeral Homes	5			X	X	X	X	X	X	X
Nursing Homes	5			X	X	X	X	X	X	X
Homes for the Aged	5			X	X	X	X	X	X	X
Institutions for the Mentally Ill or Developmentally Disabled	5			X	X	X	X	X	X	X
Child Caring Institutions	5			X	X	X	X	X	X	X
Adult Foster Care Small Group Homes	5			X	X	X	X	X	X	X
Adult Foster Care Large Group Homes	5			X	X	X	X	X	X	X
Adult Foster Care Congregate Facilities	5			X	X	X	X	X	X	X
Veterans Facilities	5			X	X	X	X	X	X	X
Mini-storage Rental Facilities	6			X	X	X	X			X
Adult Foster Care Facilities for Persons Released from or assigned to Adult Correctional Institutions	7				X	X	X	X		
Hospitals & Maternity Homes	7						X	X		
County Infirmarys	7						X	X		
Alcohol & Substance Abuse Rehabilitation Centers	7						X	X		
Apothecary Shops	8							X		
Drugstores, Pharmacies Or orthopedic Supply Stores	8							X		
Optical Stores	8								X	
Professional Offices & Clinics for Physicians & Dentists	8								X	
Marinas & Boat Launching Facilities	9									X
Campgrounds or Recreational Vehicle Parks	9									X
Golf Courses	9									X
Miniature Golf Courses	9									X
Exhibition Halls	9									X
Motels	9									X
Country Clubs	9									X
Restaurants	9									X
Horse Riding Stables or Clubs	9									X
Farm Markets	Sec. 9.02(b)	X	X	X	X	X	X	X	X	X
Ponds	Sec. 3.35	X	X	X	X	X	X	X	X	X

CHAPTER XII

“I-2” – HEAVY INDUSTRIAL DISTRICT

SECTION 12.01 remains unchanged.

SECTION 12.02 USE REGULATIONS

Subparts (a) through (gg) remain changed.

(hh) Uses by Special Use Permit ~~–Commercial enterprises for the operation of recreational facilities to include, by way of example and not limitation, snowmobiles, motorcycles, and racetracks.~~

1. Commercial enterprises for the operation of recreational facilities to include, by way of example and not limitation, snowmobiles, motorcycles, and racetracks.
2. Utility-Grid Wind Energy System, developed per the Special Use Permit requirements of Section 6.03(j).

(ii) remains unchanged.

CHAPTER XXVII

REGULATIONS FOR SMALL WIND

CHAPTER XXVII is added in its entirety:

SECTION 27.01 PURPOSE AND INTENT

The purpose of this Chapter is to establish siting guidelines for small wind energy turbines in Hampton Charter Township that:

- 1) Promotes the development of a clean renewable energy resource,
- 2) Establishes safe, effective, and efficient use of small wind energy turbines,
- 3) Minimizes potential adverse impacts between land uses, and
- 4) Establishes standards and procedures for the siting, design, engineering, installation, operation, and maintenance of small wind energy turbines.

SECTION 27.02 PERMITTED USES

A Building-Mounted Wind Turbine (Building Mounted) and a Small Tower Wind Turbine (Small Tower) shall be considered a permitted use in all zoning districts and shall not be erected, constructed, installed, or modified as provided in this Ordinance unless a building permit has been issued to the Owner(s) or Operator(s).

All Building Mounted and Small Tower turbines are subject to the following minimum requirements:

A. Siting and Design Requirements:

1 Visual Appearance

- (a) A Building Mounted or Small Tower turbine, including accessory buildings and related structures shall be a non-reflective, non-obtrusive color (e.g. white, gray, black). The appearance of the turbine, tower, and any ancillary facility shall be maintained throughout the life of the Building Mounted or Small Tower turbine.
- (b) A Building Mounted or Small Tower turbine shall not be artificially lighted, except to the extent required by the FAA or other applicable authority, or otherwise necessary for the reasonable safety and security thereof.
- (c) Building Mounted or Small Tower turbine shall not be used for displaying any advertising (including flags, streamers, or decorative items), except for identification of the turbine manufacturer.

2. **Ground Clearance:** The lowest extension of any blade or other exposed moving component of a Building Mounted or Small Tower turbine shall be at least twenty (20) feet above the ground (at the highest point of the natural

grade within thirty (30) feet of the base of the tower) and, in addition, at least twenty (20) feet above any outdoor surfaces intended for human use, such as balconies or roof gardens, that are located directly below the Building Mounted or Small Tower turbine.

3. Noise: Noise emanating from the operation of a Building Mounted or Small Tower turbine shall not exceed, at any time, the lowest ambient sound level that is present between the hours of 9:00 p.m. and 9:00 a.m. at any property line of a residential or agricultural use parcel or from the property line of parks, schools, hospitals, and churches. Noise emanating from the operation of a Building Mounted (s) or Small Tower turbine shall not exceed, at any time, the lowest ambient noise level plus 5 dBA that is present between the hours of 9:00 p.m. and 9:00 a.m at any property line of a non-residential or non-agricultural use parcel.
4. Vibration: Vibrations shall not be produced which are humanly perceptible beyond the property on which a Building Mounted or Small Tower turbine is located.
5. Guy Wires: Guy wires shall not be permitted as part of the Building Mounted or Small Tower turbine.
6. **Building Mounted Turbines.** In addition to the Siting and Design Requirements listed previously, the Building Mounted turbine shall also be subject to the following:
 - (a) Height: The height of a Building Mounted turbine shall not exceed 15 feet as measured from the highest point of the roof, excluding chimneys, antennae, and other similar protuberances.
 - (b) Setback: The setback of the Building Mounted turbine shall be a minimum of forty (40) feet from the property line, public right-of-way, public easement, or overhead utility lines if mounted directly on a roof or other elevated surface of a structure. If the Building Mounted turbine is affixed by any extension to the side, roof, or other elevated surface, then the setback from the property line or public right-of-way shall be a minimum of forty (40) feet. The setback shall be measured from the furthest outward extension of all moving parts.
 - (c) Location: The Building Mounted turbine shall not be affixed to the wall on the side of a structure facing a road.
 - (d) Quantity:
 - i. In the Agricultural (A) district, no more than one (1) Building Mounted turbine is allowed to be affixed to each principal building and accessory building.

- ii. For one-family homes, two-family homes, and multiple-family dwellings in any zoning district except the Agricultural (A) district, no more than one Building Mounted turbine shall be installed on any parcel of property.
 - iii. In all other zoning districts except the Agricultural (A) district, no more than three (3) Building Mounted turbines shall be installed on any parcel of property.
- (e) Separation: If more than one Building Mounted turbine is installed, a distance equal to the height of the highest Building Mounted turbine must be maintained between the base of each Building Mounted turbine.

7. **Small Tower Turbines.** In addition to the Siting and Design Requirements listed previously, the Small Tower turbine shall also be subject to the following:

- (a) Height: The Total Height of a Small Tower turbine shall be equal to the distance from the location of the Small Tower turbine to the nearest property line, or up to one hundred (100) feet, whichever is smaller.
- (b) Location: Small Tower turbines shall only be located in a rear yard of a property that has an occupied building.
- (c) Occupied Building Setback: The setback from all occupied buildings on the applicant's parcel shall be a minimum of twenty (20) feet measured from the base of the Tower.
- (d) Other Setbacks: The setback shall be equal to the Total Height of the Small Tower turbine, as measured from the base of the Tower, from the property line, public right-of-way, public easement, or overhead public utility lines. This setback may be reduced if the applicant provides a registered engineer's certification that the wind turbine is designed to collapse, fall, curl, or bend within a distance or zone shorter than the height of the wind turbine.
- (e) Quantity:
 - . In the Agricultural (A) district, no more than five (5) Small Tower turbines shall be installed on any parcel of property.
 - i. For one-family homes, two-family homes, and multiple-family dwellings in any zoning district except the Agricultural (A) district, no more than one (1) Small Tower turbine shall be installed on any parcel of property.
 - iii. In all other zoning districts except the Agricultural (A) district, no more than three (3) Small Tower turbines shall be installed on any parcel of property.

- (f) Separation: If more than one Small Tower turbine is installed on a parcel of property, a distance equal to the height of the highest Small Tower turbine must be maintained between the bases of each Small Tower turbine.
- (g) Electrical System: All electrical controls, control wiring, grounding wires, power lines, and system components shall 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 necessary to connect the wind generator to the tower wiring are exempt from this requirement.
- (h) Rotor Diameter: A Small Tower turbine may have a rotor diameter that does not exceed fifteen (15) feet.

SECTION 27.03 ANEMOMETERS

The following is permitted in all zoning districts as a temporary use, in compliance with the provisions contained herein, and the applicable small wind turbine regulations.

- A. The construction, installation, or modification of an anemometer tower shall require a building permit and shall conform to all applicable local, state, and federal applicable safety, construction, environmental, electrical, communications, and FAA requirements.
- B. An anemometer shall be subject to the minimum requirements for height, setback, separation, location, safety requirements, and decommissioning that correspond to the size of the WET that is proposed to be constructed on the site.
- C. An anemometer shall be permitted for no more than thirteen (13) months for a Building Mounted or a Small Tower wind turbine.

SECTION 27.04 PERMIT APPLICATION REQUIREMENTS

- A. Name of property **owner(s)**, address, and parcel number.
- B. A site plan shall include maps (drawn to scale) showing the proposed location of all components and ancillary equipment of the Building Mounted or Small Tower turbines, property lines, physical dimensions of the property, existing **building(s)**, setback lines, right-of-way lines, public easements, overhead utility lines, sidewalks, non-motorized pathways, roads and contours. The site plan must also include adjoining properties as well as the location and use of all structures.
- C. The proposed type and height of the Building Mounted or Small Tower turbine to **be** constructed; including the manufacturer and model, product specifications including maximum noise output (measured in decibels), total rated generating capacity, dimensions, rotor diameter, and a description of ancillary facilities.
- D. Documented compliance **with** the noise requirements set forth in this Ordinance.

E. Documented compliance with applicable local, state and federal regulations including, but not limited to, all applicable safety, construction, environmental, electrical, communications, and FAA requirements.

F. Proof of applicant's liability insurance.

G. 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 shall be exempt from this requirement.

H. Other relevant information as may be reasonably requested.

I. Signature of the Applicant.

J. In addition to the Permit Application Requirements previously listed, the Application shall also include the total proposed number of Building Mounted turbines, if applicable, or in the case of a Small Tower turbine, a description of the methods that will be used to perform maintenance on the Small Tower turbine and the procedures for lowering or removing the Small Tower turbine in order to conduct maintenance.

SECTION 27.05 SAFETY REQUIREMENTS

A. If the Building Mounted or Small Tower turbine is connected to a public utility system for net-metering purposes, it shall 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.

B. The Building Mounted or Small Tower turbine shall be equipped with an automatic braking, governing or feathering system to prevent uncontrolled rotation, over-speeding, and excessive pressure on the tower structure, rotor blades and other wind energy components unless the manufacturer certifies that a braking system is not necessary.

C. A clearly visible warning sign regarding voltage shall be placed at the base of the Building Mounted or Small Tower turbine.

D. The structural integrity of the Building Mounted or Small Tower turbine shall conform to the design standards of the International Electrical Commission, specifically IEC 61400-1, "Wind Turbine Safety and Design" and/or IEC 61400-2, "Small Wind Turbine Safety," IEC 61400-22 "Wind Turbine Certification," and IEC 61400-23 "Blade Structural Testing," or any similar successor standards.

SECTION 27.06 SIGNAL INTERFERENCE

The Building Mounted or Small Tower turbine shall not interfere with communication systems such as, but not limited to, radio, telephone, television, satellite, or emergency communication systems.

SECTION 27.07 DECOMMISSIONING

A. The Building Mounted or Small Tower turbine **Owner(s)** or **Operator(s)** shall complete decommissioning within twelve (12) months after the end of the useful life. Upon request of the **owner(s)** or assigns of the Building Mounted or Small Tower turbine, and for a good cause, the Hampton Charter Township Board of Trustees may grant a reasonable extension of time. The Building Mounted or Small Tower turbine will presume to be at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months as evidenced by the appearance of missing turbine parts, poor aesthetics, or a deteriorated condition. All decommissioning expenses are the responsibility of the **Owner(s)** or **Operator(s)**.

B. If the Building Mounted or Small Tower turbine **Owner(s)** or **Operator(s)** fails to complete decommissioning within the period prescribed above, the Hampton Charter Township Board of Trustees 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.

C. In addition to the Decommissioning Requirements listed previously, the Small Tower turbine shall also be subject to the following:

1. Decommissioning shall include the removal of each Small Tower turbine, buildings, electrical components, and any other associated facilities. Any foundation shall be removed to a minimum depth of sixty (60) inches below grade, or to the level of the bedrock if less than sixty (60) inches below grade.
2. The site and any disturbed earth shall be stabilized, graded, and cleared of any debris by the **owner(s)** of the facility or its assigns. If the site is not to be used for agricultural practices following removal, the site shall be seeded to prevent soil erosion, unless the property **owner(s)** requests in writing that the land surface areas not be restored.

CHAPTER XXX

DEFINITIONS

30.140.1 Habitable Structure

Any structure usable for living or business purposes, which includes but is not limited to working, sleeping, eating, cooking, recreation, office, **office** storage, or any combination thereof. An area used only for storage incidental to a residential use, is not included in this definition.

30.91.1 Hub Height

When referring to a wind turbine, the distance measured from ground level to the center of a wind turbine hub.

30.91.2 IEC – International Electrotechnical Commission.

The IEC is the leading global organization that prepares and publishes international standards for all electrical, electronic and related technologies.

30.91.3 ISO – International Organization for Standardization.

ISO is a network of the national standards institutes of 156 countries.

30.112.1 Nacelle

The protective casing of a wind turbine, covering the gearbox, generator, blade hub, and other parts.

30.118.1 Occupied Building

A building that has people within its premises or within the structure daily or from time to time. An occupied building may include a home, a business, a pole building, or a building similar in nature.

30.127.1 Rotor

An element of a wind energy turbine that acts as a **multi-bladed** airfoil assembly, thereby extracting through rotation, kinetic energy directly from the wind.

30.127.2 SCADA Tower

A freestanding tower containing instrumentation such as anemometers that is designed to provide present moment wind data for use by the supervisory control and data acquisition (SCADA) system.

30.127.3 Shadow Flicker

Alternating changes in light intensity caused by the moving blade of a wind energy turbine casting shadows on the ground and stationary objects, such as a window at a dwelling.

30.127.4 Small Tower Wind Turbine

A type of wind turbine that converts wind energy into electricity through the use of equipment that includes any base, blade, foundation, generator, nacelle, rotor, transformer, vane, wire, inverter, batteries, or other components. The total height does not exceed 120 feet.

30.127.5 Sound Pressure

Average rate at which sound energy is transmitted through a unit area in a specified direction. The pressure of the sound measured at a receiver.

30.127.6 Sound Pressure Level

The sound pressure mapped to a logarithmic scale and reported in decibels (dB).

30.142.1 Tip Height

When referring to a wind turbine, the distance measured from ground level to the furthest vertical extension of the rotor.

30.147.1 Utility-Grid Wind Energy System

A system of wind turbines that is designed and built to provide electricity to the electric utility grid.

30.140.2 Structure-Mounted Wind Turbine

Equipment that converts wind energy into electricity that includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries, or other components used in the system. A Structure-Mounted Wind Turbine is attached to a structure's roof, walls, or other elevated surface. The total height of a Structure-Mounted Wind Turbine must not exceed 15 feet as measured from the highest point of the roof, excluding chimneys, antennae, and other similar protuberances.

30.147.2 Wind Site Assessment

An assessment to determine the wind speeds at a specific site and the feasibility of using that site for construction of a wind energy turbine.

SECTION B

PENALTY

The penalty for violation of this ordinance shall be the same as set forth in Chapter XXIV of the Charter Township of Hampton Zoning Ordinance, being Ordinance No. 36A, as amended.

SECTION C

PUBLICATION AND EFFECTIVE DATE

After adoption by the Township Board, this ordinance shall be published in a newspaper circulated within the Township of Hampton, Bay County, Michigan, and shall take effect on the 7th day after the date of such publication.

SECTION D

REPEAL

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION E

SEVERABILITY AND SAVINGS CLAUSE

Should any section, clause or provision of this ordinance be declared by the courts to be invalid, the same shall not affect the validity of this ordinance as a whole or any part thereof, other than the part declared to be invalid.

CERTIFICATION

I, PAMELA WRIGHT, as Clerk for the Charter Township of Hampton, Bay County, Michigan, hereby certify the following relative to the foregoing Ordinance:

1. That the same was introduced by the Charter Township of Hampton Board on the _____ day of _____, 2009.

2. That the same was published in the Bay City Democrat on the _____ day of _____, and on the _____ day of _____, 2009.

3. That the same was adopted by the Charter Township of Hampton Board on the _____ day of _____, 2009.

4. That the same was published in the Bay City Democrat on the _____ day of _____, 2009.

DATED: _____ 2009. _____
PAMELA WRIGHT, Township Clerk

AUTHENTICATION OF RECORD

WE, TERRENCE SPEGEL, Supervisor, and PAMELA WRIGHT, Clerk, for the Charter Township of Hampton, Bay County, Michigan, hereby authenticate the following relative to the foregoing ordinance:

1. That the same was adopted by the Charter Township of Hampton Board on the _____ day of _____, 2009.

2. That the following members of the Township Board voted "yes" in favor of said Ordinance: _____

3. That the following members of the Township Board voted "no" against said Ordinance: _____

4. That the following members of the Township Board were absent: _____

DATED this _____ day of _____, 2009.

TERRENCE SPEGEL
Township Supervisor

PAMELA WRIGHT
Township Clerk