

**VILLAGE OF BELLEVUE**  
**EATON COUNTY, MICHIGAN**  
**ORDINANCE NO. 2009-002**

**PREAMBLE**

AN ORDINANCE OF THE VILLAGE OF BELLEVUE, MICHIGAN, PROVIDING THAT ORDINANCE #2007-001, THE ZONING ORDINANCE OF THE VILLAGE OF BELLEVUE, MICHIGAN, BE AMENDED BY AMENDING SECTION 2.02 (“DEFINITIONS”) OF ARTICLE 2 (“CONSTRUCTION OF TERMS AND DEFINITIONS”) BY ADDING CERTAIN TERMS AND RELATED DEFINITIONS; BY AMENDING SECTION 4.03 (“SPECIAL USES”) OF ARTICLE 4 (“AG – AGRICULTURAL DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 5.03 (“SPECIAL USES”) OF ARTICLE 5 (“RA – SINGLE FAMILY DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 6.03 (“SPECIAL USES”) OF ARTICLE 6 (“RB – SINGLE AND TWO FAMILY DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 7.03 (“SPECIAL USES”) OF ARTICLE 7 (“RC – SINGLE AND TWO FAMILY DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 8.03 (“SPECIAL USES”) OF ARTICLE 8 (“RD – MULTIPLE FAMILY DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 9.03 (“SPECIAL USES”) OF ARTICLE 9 (“(BOS) BUSINESS, OFFICE, SERVICE DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 10.03 (“SPECIAL USES”) OF ARTICLE 10 (“CBD CENTRAL BUSINESS DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 11.03 (“SPECIAL USES”) OF ARTICLE 11 (“G-B GENERAL BUSINESS DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 12.03 (“SPECIAL USES”) OF ARTICLE 12 (“I-1 LIGHT INDUSTRIAL DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING SECTION 13.03 (“SPECIAL USES”) OF ARTICLE 13 (“I-2 HEAVY INDUSTRIAL DISTRICT”) BY ADDING CERTAIN ADDITIONAL PERMITTED SPECIAL USES; BY AMENDING ARTICLE 17 (“SPECIAL LAND USES”) BY ADDING SECTION 17.45 (“UTILITY GRID WIND ENERGY SYSTEM, ON-SITE WIND ENERGY SYSTEM OVER 20 METERS HIGH, AND ANEMOMETER TOWERS OVER 20 METERS HIGH”); BY AMENDING ARTICLE 22 (“SITE PLAN & PLOT PLAN REVIEW”) BY ADDING SECTION 22.07 (“SITE PLANS FOR ANEMOMETER TOWER, UTILITY GRID WIND ENERGY SYSTEM, AND ON-SITE USE WIND ENERGY SYSTEM”); BY AMENDING ARTICLE 23 (“GENERAL PROVISIONS”) BY ADDING SECTION 23.06 (“ON-SITE USE WIND ENERGY SYSTEMS AND ANEMOMETER TOWERS”); TO REPEAL ORDINANCES AND PORTIONS OF

ORDINANCES INCONSISTENT WITH THIS ORDINANCE; AND TO PROVIDE AN EFFECTIVE DATE HEREOF.

The Village of Bellevue, Eaton County, Michigan, hereby ordains:

1. Subsection A of Section 2.02 (“Definitions”) of Article 2 (“Construction of Terms and Definitions”) is hereby amended by adding the following terms and related definitions:

**Anemometer 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.

**Ambient:** The sound pressure level exceeded 90% of the time or  $L_{90}$ .

**ANSI:** The American National Standards Institute.

**dB(A):** The sound pressure level in decibels. It refers to the “a” weighted scale defined by ANSI. A method for weighting the frequency spectrum to mimic the human ear.

**Decibel:** The unit of measure used to express the magnitude of sound pressure and sound intensity.

2. Subsection B of Section 2.02 (“Definitions”) of Article 2 (“Construction of Terms and Definitions”) is hereby amended by adding the following terms and related definitions:

**IEC:** The International Electrotechnical Commission.

**ISO:** The International Organization for Standardization.

3. Subsection C of Section 2.02 (“Definitions”) of Article 2 (“Construction of Terms and Definitions”) is hereby amended by adding the following terms and related definitions:

**Lease Unit Boundary:** Boundary around property leased for purposes of a Wind Energy System, including adjacent parcels to the parcel on which the Wind Energy System tower or equipment is located. For purposes of setback, the Lease Unit Boundary shall not cross road right-of-ways.

**On Site Wind Energy System:** A land use for generating electric power from wind that is intended to primarily serve the needs of the consumer at that site.

4. Subsection D of Section 2.02 (“Definitions”) of Article 2 (“Construction of Terms and Definitions”) is hereby amended by adding the following terms and related definitions:

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

**Shadow Flicker:** Alternating changes in light intensity caused by the moving blade of a wind energy system casting shadows on the ground and stationary objects, such as but not limited to a window at a dwelling.

**Sound Pressure:** An average rate at which sound energy is transmitted through a unit area in a specified direction. The pressure of the sound as measured at a receiver.

**Sound Pressure Level:** The sound pressure mapped to a logarithmic scale and reported in decibels (dB).

5. Subsection E of Section 2.02 (“Definitions”) of Article 2 (“Construction of Terms and Definitions”) is hereby amended by adding the following terms and related definitions:

**Utility Grid Wind Energy System:** A land use for generating power by use of wind at multiple tower locations in a community and includes accessory uses such as but not limited to a SCADA TOWER, electric substation. A Utility Grid Wind Energy System is designed and built to provide electricity to the electric utility grid.

**Wind Energy System:** A land use for generating power by use of wind; utilizing use of a wind turbine generator and may include the turbine, blades, and tower as well as related electrical equipment. This does not include wiring to connect the wind energy system to the grid. See also On Site Wind Energy System and Utility Grid Wind Energy System.

**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 system.

6. Article 4 (“AG – Agricultural District”) is hereby amended by amending Section 4.03 (“Special Uses”) as follows:

**SECTION 4.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

1. Agricultural business (Sec.17.05)
2. Archery and gun ranges (Sec. 17.26)
3. Camping facilities (Sec.17.27)
4. Cemeteries (Sec.17.09)
5. Communication towers (Sec. 17.11)
6. Extraction operations (Sec. 17.13)
7. Group homes (Sec. 17.14)
8. Home businesses (Sec. 17.15)
9. Junk Yards (Sec. 17.16)
10. Kennels (Sec. 17.17)
11. Private landing strips (Sec. 17.22)
12. Bed and Breakfast (Sec. 17.08)
13. Satellite dish antenna over thirty-nine (39) inches in diameter (Sec. 17.38)
14. Home occupations as provided for in Sec. 4.02.i (Sec. 17.37)
15. Mobile home (Sec. 17.35)
16. Functional equivalent family (Sec. 17.39)
17. Reasonable accommodation use (Sec. 17.40)
18. Day care group homes and foster care family homes (Sec. 17.14)
19. Planned unit developments (Art. 14 & 25)
20. Single family cluster and open space (Art. 16)
21. Anemometer Tower over 20 meters high
22. Utility Grid Wind Energy System
23. On-site Use Wind Energy System over 20 meters high

7. Article 5 (“RA – Single Family District”) is hereby amended by amending Section 5.03 (“Special Uses”) as follows:

**SECTION 5.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. Day care group homes and foster care family homes (Sec. 17.14)
- B. Home occupations as provided for in Section 5.02F.4. (Sec. 17.37)
- C. Functional equivalent family (Sec. 17.39)
- D. Reasonable accommodation use (Sec. 17.40)

- E. Satellite dish antenna over thirty-nine (39) inches in diameter (Sec. 17.38)
- F. Churches and places of worship (Sec. 17.10)
- G. Cemeteries (Sec. 17.09)
- H. Country Clubs and golf courses (Sec. 17.28)
- I. Funeral homes (Sec. 17.43)
- J. Two family dwellings (Sec. 17.31)
- K. Planned unit developments (Art. 14)
- L. One-Family Cluster and Open Space (Art. 16)
- M. Anemometer Tower over 20 meters high
- N. Utility Grid Wind Energy System
- O. On-site Use Wind Energy System over 20 meters high

8. Article 6 (“RB – Single and Two Family District”) is hereby amended by amending Section 6.03 (“Special Uses”) as follows:

**SECTION 6.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. All special uses of the RA District Section 5.03
- B. Two family dwellings (Sec. 17.31)
- C. Anemometer Tower over 20 meters high
- D. Utility Grid Wind Energy System
- E. On-site Use Wind Energy System over 20 meters high

9. Article 7 (“RC – Single and Two Family District”) is hereby amended by amending Section 7.03 (“Special Uses”) as follows:

**SECTION 7.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. All special uses of the RB District Section 6.03
- B. Mobile home parks (Sec. 17.34)
- C. Anemometer Tower over 20 meters high
- D. Utility Grid Wind Energy System
- E. On-site Use Wind Energy System over 20 meters high

10. Article 8 (“RD – Multiple Family District”) is hereby amended by amending Section 8.03 (“Special Uses”) as follows:

**SECTION 8.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. Subject to the requirements of the RB \District, all special uses of the RB District Section 6.03 except mobile home parks and one-family clusters and open spaces.
- B. General hospitals (17.41)
- C. Anemometer Tower over 20 meters high
- D. Utility Grid Wind Energy System
- E. On-site Use Wind Energy System over 20 meters high

11. Article 9 (“BOS) Business, Office, Service District”) is hereby amended by amending Section 9.03 (“Special Uses”) as follows:

**SECTION 9.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. Bed and Breakfast (Sec. 17.08)
- B. Functional equivalent family (Sec. 17.39)
- C. Reasonable accommodation use (Sec. 17.40)
- D. Group day care and group foster care facilities (Sec. 17.14)
- E. Churches and religious institutions (Sec. 17.10)
- F. Schools, Institutional and Public Uses (Sec. 17.25)
- G. Planned unit developments (Art. 14)
- H. Anemometer Tower over 20 meters high
- I. Utility Grid Wind Energy System
- J. On-site Use Wind Energy System over 20 meters high

12. Article 10 (“CBD Central Business District”) is hereby amended by amending Section 10.03 (“Special Uses”) as follows:

**SECTION 10.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. All special uses of the BOS District, Section 9.03, subject to requirements of the BOS District.
- B. Apartments above stores (Sec. 17.30)
- C. Sidewalk cafes (Sec. 17.29)
- D. Motels and hotels (Sec. 17.19)
- E. Group day care and foster care facilities
- F. Satellite dish antenna over thirty-nine (39) inches in diameter

- G. Churches and religious institutions
- H. Anemometer Tower over 20 meters high
- I. Utility Grid Wind Energy System
- J. On-site Use Wind Energy System over 20 meters high

13. Article 11 (“G-B General Business District”) is hereby amended by amending Section 11.03 (“Special Uses”) as follows:

**SECTION 11.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. All special uses of the BOS District, Section 9.03, subject to requirements of the BOS District.
- B. Apartments above stores (Sec. 17.30)
- C. Sidewalk cafes (Sec. 17.29)
- D. Motels and hotels (Sec. 17.19)
- E. Gasoline service stations and minor automobile repair (Sec. 17.07)
- F. Drive-in establishments (Sec. 17.12)
- G. Communication towers (Sec. 17.11)
- H. Outdoor commercial recreation (Sec. 17.21)
- I. Mini Storage (Sec. 17.18)
- J. Outdoor sales space for new or used automobiles, recreational vehicles, mobile homes and boats (Sec. 17.32)
- K. Planned Commercial Center (Sec. 17.36)
- L. Planned unit developments (Art. 14)
- M. Anemometer Tower over 20 meters high
- N. Utility Grid Wind Energy System
- O. On-site Use Wind Energy System over 20 meters high

14. Article 12 (“I-1 Light Industrial District”) is hereby amended by amending Section 12.03 (“Special Uses”) as follows:

**SECTION 12.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. Outdoor sales space (Sec. 17.32)
- B. Towers and antennae for wireless communication facilities (Sec. 17.11)
- C. Major automobile service and repair station (Sec. 17.06)
- D. Adult entertainment facilities (Sec. 17.04)
- E. Satellite dish antenna over thirty-nine (39) inches in diameter (Sec. 17.38)
- F. Kennels (Sec. 17.17)

- G. Mini storage (Sec. 17.18)
- H. Public Uses (Sec. 17.24)
- I. Service station and minor auto repair (Sec. 17.07)
- J. Non-accessory signs (Sec. 17-42)
- K. Anemometer Tower over 20 meters high
- N. Utility Grid Wind Energy System
- O. On-site Use Wind Energy System over 20 meters high

15. Article 13 (“I-2 Heavy Industrial District”) is hereby amended by amending Section 13.03 (“Special Land Uses”) as follows:

**SECTION 13.03 SPECIAL USES**

The following uses may be permitted by the Village Council as provided for in Article 17:

- A. All special uses of the I-1 District, Section 12.04, subject to the requirements of the I-1 District
- B. Extraction Operations (Sec. 17.13)
- C. Junk Yards (Sec. 17.16)
- D. Anemometer Tower over 20 meters high
- E. Utility Grid Wind Energy System
- F. On-site Use Wind Energy System over 20 meters high

16. Article 17 (“Special Land Uses”) is hereby amended by adding Section 17.45 (“Utility Grid Wind Energy System, On-site Wind Energy System Over 20 Meters High, and Anemometer Towers Over 20 Meters High”) as follows:

**SECTION 17.45 – UTILITY GRID WIND ENERGY SYSTEM, ON-SITE WIND ENERGY SYSTEM OVER 20 METERS HIGH, AND ANEMOMETER TOWERS OVER 20 METERS HIGH**

An Utility Grid Wind Energy System, On-site Use Wind Energy System over 20 meters high, and Anemometer Towers over 20 meters high shall be a special land use and shall meet the following standards in addition to the general special land use standards (Section 17.02):

- A. Property Set-Back:
  - 1. Anemometer Tower setback shall be the greater distance of the following:
    - a. The setback from property lines of the respective zoning district;
    - b. The setback from the road right-of-way; and
    - c. A distance equal to one and one half (1½) times the height of the tower from property lines or from the lease unit boundary, which ever is less.



2. Utility Grid and On-site Use Wind Energy System setback shall be greater distance the following:
    - a. The setback from property lines of the respective zoning district;
    - b. The setback from the road right-of-way; and
    - c. A distance equal to one and one half (1½) times the height of the tower including the top of the blade in its vertical position from property lines or from the lease unit boundary, which ever is less.
  3. An Operations and Maintenance Office building, a sub-station, or ancillary equipment shall comply with any property set-back requirement of the respective zoning district. Overhead transmission lines and power poles shall comply with the set-back and placement requirements applicable to public utilities.
- A. Sound Pressure Level: The sound pressure level shall not exceed 55 dB(A) measured at the property lines or the lease unit boundary, whichever is farther from the source of the noise. This sound pressure level shall not be exceeded for more than three total minutes in any hour of the day. However if the ambient sound pressure level exceeds 55 dB(A), the sound pressure level that shall not be exceeded shall be ambient dB(A) plus 5 dB(A).
- B. Safety: 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. All spent lubricants and cooling fluids shall be properly and safely removed in a timely manner from the site of the wind energy system. 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. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.
- C. Post -Construction Permits: Construction Codes, Towers, and Interconnection Standards: Shall comply with all applicable state construction and electrical codes and local building permit requirements.
- D. Pre-Application Permits:
1. Utility Infrastructure: Shall comply with Federal Aviation Administration (FAA) requirements, the Michigan Airport Zoning Act (Public Act 23 of 1950 as amended, M.C.L. 259.431 *et seq.*), the Michigan Tall Structures Act (Public Act 259 of 1959 as amended, M.C.L. 259.481 *et seq.*), and local jurisdiction airport overlay zone regulations. 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. Utility Grid wind energy systems shall comply with applicable

utility, Michigan Public Service Commission, and Federal Energy Regulatory Commission interconnection standards.

2. Environment:

- a. The site plan and other documents and drawings shall show mitigation measures to minimize potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, historical and cultural sites, and antiquities, as identified in the Environmental Analysis.
- b. Comply with applicable parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, M.C.L. 324.101 *et seq.*) (including but not limited to:
  - i. Part 31 Water Resources Protection (M.C.L. 324.3101 *et seq.*),
  - ii. Part 91 Soil Erosion and Sedimentation Control (M.C.L. 324.9101 *et seq.*)
  - iii. Part 301 Inland Lakes and Streams (M.C.L. 324.30101 *et seq.*),
  - iv. Part 303 Wetlands (M.C.L. 324.30301 *et seq.*),
  - v. Part 323 Shoreland Protection and Management (M.C.L. 324.32301 *et seq.*),
  - vi. Part 325 Great Lakes Submerged Lands (M.C.L. 324.32501 *et seq.*), and
  - vii. Part 353 Sand Dunes Protection and Management (M.C.L. 324.35301 *et seq.*)) as shown by having obtained each respective permit with requirements and limitations of those permits reflected on the site plan.

E. Performance Security: Performance Security, pursuant to Article 31 Section 31.06 Performance Bonds of this Ordinance, shall be provided for the applicant making repairs to public roads damaged by the construction of the wind energy system.

F. Utilities: 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.

G. The following standards apply only to Utility Grid Wind Energy Systems:

1. Visual Impact: 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, nonreflective matte finished color. A project shall be constructed using wind energy systems of similar design, size, operation, and appearance throughout the project. 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. The applicant shall avoid state or federal scenic

areas and significant visual resources listed in the local unit of government's Plan.

2. Avian and Wildlife Impact: Site plan and other documents and drawings shall show mitigation measures to minimize potential impacts on avian and wildlife, as identified in the Avian and Wildlife Impact analysis.
3. Shadow Flicker: Site plan and other documents and drawings shall show mitigation measures to minimize potential impacts from shadow flicker, as identified in the Shadow Flicker Impact Analysis.
4. Decommissioning: A planning commission approved decommissioning plan indicating 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, and 4) the anticipated manner in which the project will be decommissioned and the site restored.
5. Complaint Resolution: A planning commission approved process to resolve complaints from nearby residents concerning the construction or operation of the project
6. Electromagnetic Interference: No Utility Grid wind energy system 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 wind energy system. No Utility Grid wind energy system 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.

17. Article 22 ("Site Plan & Plot Plan Review") is hereby amended by adding Section 22.07 ("Site Plans for Anemometer Tower, Utility Grid Wind Energy System, and On-Site Use Wind Energy System") as follows:

**SECTION 22.07 - SITE PLANS FOR ANEMOMETER TOWER, UTILITY GRID WIND ENERGY SYSTEM, AND ON-SITE USE WIND ENERGY SYSTEM**

In addition to the requirements for a site plan found in Section 22.02 of this Ordinance, site plans and supporting documents for Anemometer Tower, Utility Grid Wind Energy System, and On-site Use Wind Energy Systems which are over 20 meters high shall include the following additional information:

- A. Documentation that sound pressure level, construction code, tower, interconnection (if applicable), and safety requirements have been reviewed and the submitted site plan is prepared to show compliance with these issues.

- B. Proof of the applicant's public liability insurance for the project.
- C. A copy of that portion of all the applicant's lease(s) with the land owner(s) granting authority to install the Anemometer Tower and/or Utility Grid Wind Energy System; legal description of the property(ies), Lease Unit(s); and the site plan shows the boundaries of the leases as well as the boundaries of the Lease Unit Boundary.
- D. The phases, or parts of construction, with a construction schedule.
- E. The project area boundaries.
- F. The location, height, and dimensions of all existing and proposed structures and fencing.
- G. The location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road.
- H. All new infrastructure above ground related to the project.
- I. A copy of Manufacturers' Material Safety Data Sheet(s) which 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.
- J. For Utility Grid Wind Energy Systems only:
  - 1. A copy of a noise modeling and analysis report and the site plan shall show locations of equipment identified as a source of noise which is placed, based on the analysis, so that the wind energy system will not exceed the maximum permitted sound pressure levels. The noise modeling and analysis shall conform to IEC 61400 and ISO 9613. 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. Documentation of the sound pressure level measurements shall be provided to the local government within 60 days of the commercial operation of the project.
  - 2. A visual impact simulation showing the completed site as proposed on the submitted site plan. The visual impact simulation shall be from four viewable angles.
  - 3. A copy of an Environment Analysis by a third party qualified professional 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, and shall show those measures on the site plan. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.
  - 4. A copy of an Avian and Wildlife Impact Analysis by a third party qualified professional 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, and shall show those measures on the site plan. The applicant shall

identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

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

(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.)

5. A copy of a shadow flicker analysis at occupied structures to 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 site plan shall identify problem areas where shadow flicker may affect the occupants of the structures and show measures that shall be taken to eliminate or mitigate the problems.
6. A second site plan, which includes all the information found in Article 22 of this Ordinance, and shows the restoration plan for the site after completion of the project which includes the following supporting documentation:
  - a. The anticipated life of the project.
  - b. The estimated decommissioning costs net of salvage value in current dollars.
  - c. The method of ensuring that funds will be available for decommissioning and restoration.
  - d. The anticipated manner in which the project will be decommissioned and the site restored.
7. A description of the complaint resolution process developed by the applicant to resolve complaints from nearby residents concerning the construction or operation of the project. The process may use an independent mediator or arbitrator and shall include a time limit for acting on a complaint. The process shall not preclude the local government from acting on a complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where a project representative can be reached during normal business hours.

18. Article 23 ("General Provisions") is hereby amended by adding Section 23.06 ("On-site Use Wind Energy Systems and Anemometer Towers") as follows:

## **SECTION 23.06 – ON-SITE USE WIND ENERGY SYSTEMS AND ANEMOMETER TOWERS**

An On-site Use Wind Energy System and an Anemometer are an accessory use which shall meet the following standards:

- B. Designed to primarily serve the needs of a home, farm, or small business.
- C. Shall have a tower height of 20 meters or less.
- D. Property Set-back: The distance between an On-site Use Wind Energy System and the site's property lines shall be equal to or greater than one and one half (1½) times the height of the wind energy system tower including the top of the blade in its vertical position. The distance between an anemometer tower and the site's property lines shall be equal to or greater than one and one half (1½) times the height of the tower. No part of the wind energy system structure, including guy wire anchors, may extend closer than ten feet to the owner's property lines, or the distance of the required setback in the respective zoning district, whichever results in the greater setback.
- E. Sound Pressure Level: On-site Use Wind Energy Systems shall not exceed 55 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. However if the ambient sound pressure level exceeds 55 dB(A), the sound pressure level that shall not be exceeded shall be ambient dB(A) plus 5 dB(A).
- F. Construction Codes, Towers, & Interconnection Standards: On-site Use wind energy systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements. On-site Use wind energy systems including towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (Public Act 23 of 1950, MCL 259.431 *et seq.*), the Michigan Tall Structures Act (Public Act 259 of 1959, MCL 259.481 *et seq.*), and local jurisdiction airport overlay zone regulations. An interconnected On-site Use wind energy system shall comply with Michigan Public Service Commission and Federal Energy Regulatory Commission standards. Off-grid systems are exempt from this requirement.
- G. Safety: An On-site Use wind energy system shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding. All wind towers shall have lightning protection. If a tower is supported by guy wires, the wires shall be clearly visible to a height of at least six feet above the guy wire anchors. The minimum vertical blade tip

clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.

19. **Severability.** If any clause, sentence, paragraph, or part of this Ordinance shall for any reason be finally adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of this Ordinance but shall be confined in its operation to the clause, sentence, paragraph or part thereof directly involved in the controversy in which such judgment is rendered.

20. **Repeal.** All ordinances and resolutions, or parts of ordinances and resolutions, of the Village of Bellevue inconsistent herewith are hereby repealed so far as they may be inconsistent with the provisions of this Ordinance.

21. **Effective Date.** This Ordinance shall take effect following the date of its publication.

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Denise Poyer, President  
Village of Bellevue

I, Travis Brininstool, Clerk of the Village of Bellevue, hereby certify that the foregoing is a true copy of the original of Ordinance No. 2009-002, enacted by the Village Council of the Village of Bellevue at a regular meeting on Tuesday, October 27, 2009.

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Travis Brininstool, Clerk  
Village of Bellevue