5.09 – RENEWABLE ENERGY

5.09.01 - Purpose

The purpose of this ordinance is to promote clean and renewable energy while providing protection of public health, safety, welfare in the Township.

5.09.02 - Scope

All renewable energy systems must meet all applicable requirements of this chapter to be permitted for construction and operation in the Township.

Public Acts 229,230,233,234,and 235 of 2024 as amended, provide for administration of regulations regarding Renewable Energy Systems.

5.09.03 – Types of Renewable Energy Systems

A. Wind
B. Solar
C. Battery Storage

5.09.04 – Permitted in all Districts

Renewable energy systems (wind, solar, and battery storage) are permitted in all districts, in Helena Township when conforming to the following conditions:

5.09.05 – Accessory Renewable Energy Systems

Accessory renewable energy systems are permitted as a use by right in all districts. Accessory energy systems are of a type generally used by individual homeowners at their residences or accessory structures. Such energy systems are permitted after application with the Helena Township Zoning Administrator subject to the provisions of applicable sections of the Zoning Ordinance. Such systems do not fall under the provisions of the previously cited MCL.

Site-based and Utility Scale Renewable Energy Systems (wind, solar, and battery storage) are presumed to be subject to the provisions of the previously cited MCL and are permitted in Helena Township under the following descriptions and conditions:

Site-based renewable energy systems are systems that might be found in sub-divisions or between agreeable neighbors who might wish to construct a system of a scale capable of meeting multiple user dimensions. Approval of such systems require conformity to all applicable provisions of the MCL and compliance with the Helena Township Zoning Ordinance.

Utility Scale Renewable Energy Systems (solar farms) are extensive systems producing output of commercial benefit to the operator and are subject to the provisions of the previously cited MCL. Such systems require conformity to all applicable provisions of the MCL and compliance with the Helena Township Zoning Ordinance.

5.09.0_ – Accessory Wind Energy Systems

Accessory wind energy systems are permitted with a zoning permit, and subject to the standards and requirements in the Section:

A. Height: An accessory wind energy system may not be higher than the maximum height of the structure it is attached to, plus 10 feet.

B. Number: There shall be not more than one accessory wind energy system located on a structure.

C. Noise: An accessory wind energy system shall not cause a sound pressure level in excess of 55 dB(A) or in excess of five dBA above the background noise, as measured by the ambient dB(A), whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe windstorms.

D. Application: In addition to documentation normally required to apply for a zoning permit, an applicant for an accessory wind energy system shall submit any additional documentation that the zoning administrator determines is necessary to determine that the requirements of this Section are met.

5.09.0_ –Renewable Energy Systems

Renewable energy systems are permitted subject to approval of a Site Plan under Chapter 7, and subject to the standards and requirements in this Section:

A. Height: An on-site accessory energy system may not be higher than 100 feet

B. Number: In all zoning districts except agricultural, there shall be not more than one on-site wind energy system located on a parcel.

C. Noise: An on-site wind energy system shall not cause a sound pressure level in excess of 55 dB(A) or in excess of five dBA above the background noise, as measured by the ambient dB(A), whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe windstorms.

D. Set-back: On-site wind energy systems shall be set back from property lines a distance equal to the wind turbine generator total height. The Planning Commission may reduce this setback if adjacent property is owned or leased by the applicant, or permission is obtained from the adjacent property owner.

E. Guy Wires: Any guy wires shall be made with or covered with material that is visible to a height of at least six feet above the ground.

F. Ice Throw: Ice throw or shedding for an on-site wind energy system shall not have the potential to cross any property line nor impinge on any right-of-way or overhead utility line.

G. Application: In addition to documentation normally required to apply for a Special Use Permit, an applicant for an on-site wind energy system shall submit any additional documentation that the zoning administrator determines is necessary to determine that the requirements of this Section are met.

5.09.0_ – Anemometers

An anemometer shall be a permitted use in any zoning district where an on-site wind energy system is permitted. An anemometer shall be subject to the same approval standards, process, and requirements as an on-site wind energy system.

5.09.0_ –Site-based and Utility Scale Wind, Solar, and Battery Storage Renewable Energy Systems

_____ – WIND ENERGY

5._____ - Purpose

The purpose of this ordinance is to promote clean and renewable wind energy while providing protection of public health, safety, welfare in the Township.

5.09.02 - Scope

All wind energy systems must meet all applicable requirements of this chapter to be permitted for construction and operation in the Township. In the case of wind energy systems, documentation that the site has annual wind resources sufficient for the viable long-term operation of the wind energy system.

5._____ –Site-based Renewable Wind, Solar, and Battery Storage Renewable Energy Systems approval standards:

A. Utility-scale renewable energy systems are permitted only with a Special Use Permit, granted pursuant to Chapter 6, including approval of a Site Plan pursuant to Chapter 7, and subject to the standards and requirements in this Section.

B. Height: There is no maximum height limit for utility-scale wind energy systems. However, all systems must demonstrate compliance with the Michigan Tall Structures Act (PA 259 of 1959, as amended), Federal Aviation Administration (FAA) guidelines, and Michigan Aeronautics Commission guidelines as part of the approval process.

C. Blade Clearance: There shall be a minimum vertical blade tip clearance from the ground of 20 feet.

D. Noise: A utility-scale wind energy system shall not cause a sound pressure level in excess of 55 dB(A) or in excess of five dBA above the background noise, as measured by the ambient dB(A), whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe windstorms.

E. Set-back:

   1. A utility-scale wind energy system shall be set back from property lines and public roads a distance equal to the wind turbine generator total height.

   2. The Planning Commission may reduce this setback from property lines that do not border public roads if adjacent property is owned or leased by the applicant, or if permission is obtained from the adjacent property owner.

   3. If multiple properties are part of a single renewable energy lease unit, the set-backs shall be measured from the lease unit boundary rather than the property line between adjacent properties within the lease unit.

   4. Setbacks for buildings accessory to a wind turbine generator shall conform to the general setbacks of the zoning district.

F. Guy Wires: Any guy wires shall be made with or covered with material that is visible to a height of at least six feet above the ground.

G. Ice Throw: Ice throw or shedding for an on-site wind energy system shall not have the potential to cross any property line nor impinge on any right-of-way or overhead utility line.

H. Safety:

1. All wiring shall comply with all applicable safety and stray voltage standards.

2. Wind turbine towers shall not be climbable on the exterior.

3. All access doors to wind turbine towers and electrical equipment shall be locked.

4. Appropriate warning signs shall be placed on wind turbine towers, electrical equipment, and facility entrances.

5. All generators shall be equipped with controls to control the rotational speed of the blades within design limits for the specific wind turbine generator.

6. All utility-scale renewable energy systems shall comply with all applicable State construction and electrical codes, FAA requirements, Michigan Aeronautics commission requirements, Michigan Public Service Commission requirements, and Federal Energy Regulatory Commission standards.

I. Lighting: 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.

J. Signal Interference: No renewable energy system shall be installed in any location where its proximity with existing fixed broadcast retransmission, or reception antennas for radio, television, navigation, wireless phone or other personal communication systems would produce electro-magnetic interference with signal transmission or reception. No renewable energy system shall be installed in any location along the major axis of an existing microwave communications link where its operation likely to produce electromagnetic interference with the link’s operation unless the interference is insignificant.

K. Vibrations: No renewable energy system may produce humanly-perceptible ground vibrations beyond the property on which it is located.

L. Visual Impact of utility-scale wind energy systems:

1. Site-based and utility-scale wind energy systems shall be mounted on single vertical towers of tubular pole or monopole design. Towers shall have a galvanized steel finish, or be painted a neutral white, gray, or pale blue color, unless otherwise required by the FAA. The appearance of turbines, towers, and buildings shall be maintained throughout the life of the wind energy system consistent with industry standards.

2. Site-based and utility-scale wind energy systems shall not be used to display any advertising except the reasonable identification of the manufacturer or operator of the wind energy facility.

M. Separation: Utility-scale wind energy system separation distances shall be based on industry standards, manufacturer recommendation, and the characteristics of the particular site location, but at a minimum there shall be a separation between the towers of not less than three times the turbine rotor diameter. Documents shall be submitted by the developer/manufacturer confirming specifications of tower separation.

5._____ -- Site-based and Utility-scale Renewable Energy Systems - Application

Application: In addition to the general requirements for an application for Site Plan review and a Special Use Permit, an application for a renewable energy system shall include the following:

A. In the case of Wind Energy Systems, documentation that the site has annual wind resources sufficient for the viable long-term operation of the wind energy system.

B. All other renewable energy systems require approval from affected agencies. If approvals have not been obtained but are in process or applications are anticipated, the Township may condition its approval and the issuing of any zoning permit on subsequent receipt of documentation that all other required approvals were received.

C. A hazard prevention plan. The hazard prevention plan shall contain:

1. Certification that the electrical wiring between renewable energy systems components structures and the utility right-of-way does not pose a fire hazard. system.

2. Location of landscaping designed to avoid the spread of fire from any source on the renewable energy system.

3. A listing of any hazardous fluids that may be used on site, including Material Data Sheets.

4. Certification that the renewable energy system has been designed to contain any hazardous fluids.

5. A statement certifying that the renewable energy system shall be routinely inspected to ensure that no fluids are released from components.

D. The township may require the owner of the Utility-Scale renewable energy system to deposit a performance guarantee in the amount equal to the estimated costs associated with the removal and restoration of the site. The amount of the performance guarantee shall include an escalation clause equal to the Consumer Price Index. The performance guarantee shall be in the form of a cash deposit, certified check, irrevocable bank letter of credit, or a surety bond acceptable to the Township.

E. A decommissioning plan. The decommissioning plan shall include:

1. Anticipated life of the project.

2. Estimated decommissions costs in current dollars, not including salvage value.

3. Method of ensuring funds for decommissioning and restoration.

4. The anticipated manner in which the project will be de-commissioned, and the site restored.

F. An environmental impact statement assessing and providing for mitigation measures to minimize any potential impacts of the natural environment, including wetlands, fragile ecosystems, historical and cultural sites, and avian impacts.

G. A noise and analysis report. The noise modeling and report shall conform to IEC 61400 and ISO 9613. After installation, the renewable energy system sound

pressure measurements shall be done by a ;third parting qualified professional according to the procedures of the most current version of ANSI S12.18. All sound pressure levels shall be measured with s a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a TYPE II meter. Documentation of the sound pressure measurements shall be provided to the local government within 60 days of the commercial operation of the project.

H. A visual impact simulation showing the completed site as proposed on the submitted site pan. The visual impact simulations shall be from four viewable 90 degree angles.

I. Proof of the applicant's public liability insurance for the project.

5._____ --Repair or Replacement

Major components of a renewable energy system may be replaced without a modification of existing zoning approvals if regulations contained in the ordinance and all conditions attached to the approval are adhered to.

5._____ --Conflicts

In any case of conflicts between the requirements of this chapter and other chapters of the Helena Township Zoning Ordinance with respect to renewable energy systems, this chapter will control.

5._____ --Site-based, Utility-Scale (Solar Farm) Renewable Energy System Removal

A. Any utility-scale renewable energy system that is not operational for a continuous period of 12 months shall be considered abandoned, and the owner/licensed operator, or person responsible shall remove the system within 180 days of abandonment. Failure to remove the system within 180 days shall be grounds for the Township to remove it at the owner's expense.

B. In addition to removing the renewable energy system, the owner shall restore the site to its original condition subject to reasonable wear and tear. Any foundations associated with the renewable energy system shall be removed to a minimum *depth of ____ feet below the final grade and site vegetation shall be restored.

C. A decommissioning plan. The decommissioning plan shall include:
    1. Anticipated life of the project.
    2. Estimated decommissions costs in current dollars, not including salvage value.
    3. Method of ensuring funds for decommissioning and restoration.

4. The anticipated manner in which the project will be de-commissioned, and the site restored.

D. An environmental impact statement assessing and providing for mitigation measures to minimize any potential impacts of the natural environment, including wetlands, fragile ecosystems, historical and cultural sites, and avian impacts.

E. A noise and analysis report. The noise modeling and report shall conform to IEC 61400 and ISO 9613. After installation, the renewable energy system sound pressure measurements shall be done by a ;third parting qualified professional according to the procedures of the most current version of ANSI S12.18. All sound pressure levels shall be measured with s a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a TYPE II meter. Documentation of the sound pressure measurements shall be provided to the local government within 60 days of the commercial operation of the project.

F. A visual impact simulation showing the completed site as proposed on the submitted site pan. The visual impact simulations shall be from four viewable 90 degree angles.

G. Proof of the applicant's public liability insurance for the project.

5._____ --Wind and Solar Renewable Energy Storage Systems Batteries

Purpose
The purpose of this chapter is to allow Renewable Energy System Batteries that will not, by their purpose, size, placement, or construction endanger the public health, safety, and general welfare of citizens of Helena Township. This chapter shall regulate renewable energy system batteries in such a manner as to support and compliment the land use objectives set forth in this zoning ordinance.

All renewable energy system batteries shall conform to the cited MC> and be required to obtain all necessary permits required by the US government, State of Michigan, Antrim County, and Helena Township and comply with the standards of the State of Michigan ?? Construction Codes.
All site-based renewable energy system batteries and utility scale renewable energy system batteries are permitted only upon satisfactions of Chapters Six (6) Special Use Permits and Seven (7) Site Plan Review Regulations of the Helena Township Zoning Ordinance.

A. Height: There is no maximum height limit for renewable energy system batteries. However, all systems must demonstrate compliance with the Michigan Tall Structures Act (PA 259 of 1959, as amended), Federal Aviation Administration

(FAA) guidelines, and Michigan Aeronautics Commission guidelines as part of the approval process.

B. Noise: renewable energy system batteries shall not cause a sound pressure level in excess of 55 dB(A) or in excess of five dBA above the background noise, as measured by the ambient dB(A), whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe windstorms.

C. Renewable energy system batteries require approval of affected agencies. If approvals have not been obtained but are in process or applications are anticipated, the Township may condition its approval and issuing of any zoning permit on subsequent receipt of documentation that all other required approvals were received.

D. A hazard prevention plan. The hazard prevention plan shall contain:

1. Certification that the electrical wiring between renewable energy system batteries components structures and the utility right-of-way does not pose a fire hazard.

2. Location of landscaping designed to avoid the spread of fire from any source on the renewable energy system batteries.

3. A listing of any hazardous fluids that may be used on site, including Material Safety Data Sheets.

4. Certification that the renewable energy system batteries shall be routinely inspected to ensure that no fluids are released from components.

E. The township may require the owner of the Utility-Scale renewable energy system batteries to deposit a performance guarantee in the amount equal to the estimated costs associated with the removal and restoration of the site. The amount of the performance guarantee shall include an escalation clause equal to the Consumer Price Index. The performance guarantee shall be in the form of a cash deposit, certified check, irrevocable bank letter of credit, or a surety bond acceptable to the Township.

F. A decommissioning plan. The decommissioning plan shall include:

5. Anticipated life of the project.
6. Estimated decommissions costs in current dollars, not including salvage value.
7. Method of ensuring funds for de-commissioning and restoration.

8. The anticipated manner in which the project will be de-commissioned, and the site restored.

G. An environmental impact statement assessing and providing for mitigation measures to minimize any potential impacts of the natural environment, including wetlands, fragile ecosystems, historical and cultural sites, and avian impacts.

H. A noise and analysis report. The noise modeling and report shall conform to IEC 61400 and ISO 9613. After installation, the renewable energy system sound pressure measurements shall be done by a ;third parting qualified professional according to the procedures of the most current version of ANSI S12.18. All sound pressure levels shall be measured with s a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a TYPE II meter. Documentation of the sound pressure measurements shall be provided to the local government within 60 days of the commercial operation of the project.

I. A visual impact simulation showing the completed site as proposed on the submitted site pan. The visual impact simulations shall be from four viewable 90-degree angles.

J. Proof of the applicant's public liability insurance for the project.

5._____ --Repair or Replacement

Major components of a renewable energy system batteries may be replaced without a modification of existing zoning approvals if regulations contained in the ordinance and all conditions attached to the approval are adhered to.

5._____ --Conflicts

In any case of conflicts between the requirements of this chapter and other chapters of the Helena Township Zoning Ordinance with respect to renewable energy system batteries, this chapter will control.

G. 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.

H. Proof of the applicant's public liability insurance for the project.

5.09.08 – Utility-Scale Wind Energy Systems - Removal

A. Any utility-scale wind energy system that is not operational for a continuous period of 24 months shall be considered abandoned, and the owner shall remove the system within 180 days of abandonment. Failure to remove the system within 180 days shall be grounds for the Township to remove it at the owner's expense.

B. In addition to removing the wind energy system, the owner shall restore the site to its original condition, subject to reasonable wear and tear. Any foundations associated with the wind generator or anemometer tower shall be removed to a minimum depth of five feet below the final grade and site vegetation shall be restored.

A. The Township may require the owner of utility-scale wind energy system to deposit a performance guarantee in an amount equal to the estimated costs associated with the removal of the system and restoration of the site. The amount of the performance guarantee may include an escalation clause equal to the Consumer Price Index. The performance guarantee shall be in the form of a cash deposit, certified check, irrevocable bank letter of credit, or surety bond acceptable to the Township.

5.09.09 – Repair or Replacement

Major components of a wind energy system may be replaced without a modification of existing zoning approvals all regulations contained in this ordinance and all conditions attached to the approval are adhered to.

5.09.10 – Conflicts

In any case of conflict between the requirements of this Chapter and other Chapters of the Helena Township Zoning Ordinance with respect to a wind energy system, this Chapter will control.