AN ORDINANCE AMENDING THE TEXT OF THE CLINTON COUNTY ZONING ORDINANCE

1. Amend Section 4.2.16 **Commercial WECS (C-WECS)**, by deleting it in its entirety and replacing it with the following:

   The purpose of this ordinance is to establish minimum requirements and regulations of Applicant/Developer/Owner/Operator engaged in the construction, erection, placement, location, maintenance, modification, and operation of large-scale industrial wind energy projects in Clinton County. The intent of this ordinance is to ensure wind development sites are appropriately located to preserve and protect the following: the general welfare of the public; the county's important and sensitive environmental and ecological assets and areas, and wetlands. All Commercial Wind Energy Conversion Systems (C-WECS), Industrial Wind Turbines (IWTs), turbines, turbine projects, project substations, meteorological towers (MET tower), and any upgrades to existing turbines or turbine projects and any C-WECS, IWTs, turbines, MET tower, or turbine projects, planned, permitted or not permitted, not erected, not placed, or uncompleted, and any existing or future easements shall observe this Wind Energy Conversion Systems ordinance. From henceforth, the terms C-WECS or turbines, shall be used to encapsulate all potential wind energy conversion systems, such as, but not limited to: Commercial Wind Energy Conversion System, Industrial Wind Turbines, wind turbines, turbines, turbine projects.

   C-WECS for which a required permit has been properly issued prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; provided that any such pre-existing C-WECS, which does not provide energy for a continuous period of twelve (12) months, shall meet the requirements of this Ordinance prior to recommencing production of energy. Also, no modification or alteration to an existing C-WECS shall be allowed without full compliance with this Ordinance.

   The requirements of this Ordinance shall apply to all Commercial Wind Energy Conversion Systems (C-WECS) proposed after the effective date of the Ordinance. A proposed C-WECS is any C-WECS that has not been issued the necessary permits to commence construction under the existing Zoning Ordinance or for which no rezoning has occurred applying the renewable energy overlay district pursuant to 3.6.10 of the Clinton County Ordinances.

Review and Approval Procedures

a) Pre-Application Meeting. Whenever a CWECS is proposed in the jurisdiction of Clinton County, the applicant is required to hold a public informational meeting on the proposed development no less than ninety (90) days prior to submitting an application for an alternative energy overlay district. Public notice of the meeting shall be published in a newspaper(s) of general circulation within the vicinity(ies)

of the proposed project site as well as posted in the Clinton County courthouse and on the current Clinton County website no less than four (4) and no more than twenty (20) days prior to the meeting. The public notice shall include at a minimum the name of the proposed project, a contact person for the project, the location of the project, the time and place of the meeting, and a description of the project activities, to include the number of proposed turbines. The applicant shall also give notice by ordinary U.S. mail to all properly owners within five hundred (500) feet from any of the wind turbines (measured from the base of the proposed turbine to the parcel boundary of the property owner). Written notice of the pre-application meeting shall be postmarked not less than five (5) days prior to the: pre-application meeting. The applicant is responsible for meeting all of these requirements and shall provide documentation to the Zoning Administrator that these public notice requirements have been satisfied prior to submitting an application for an alternative energy overlay district.

(i) The Board of Supervisors may waive or reduce the ninety (90) day pre-application meeting requirements if the Board of Supervisors finds that information relative to a proposed project has been publicly disclosed and has been the subject of public meetings and in view of the fact that the Application must come before the Planning and Zoning Commission in a public hearing at which the details of any project must be reviewed and a recommendation made to the Board of Supervisors.

b) County Review. The Zoning Administrator shall have up to sixty (60) calendar days to review the application and provide comments to the applicant. The Board of Supervisors may choose to utilize the services of a third-party consultant to review any of the technical documents submitted along with the application. Such a consultant may also assist with on-site inspections and other work as necessary to assist the County in its review of the application. The applicant shall be responsible for all fees associated with such consultant activities. Upon confirmation the application complies with the procedures described above and contains the required documents, the Administrator shall present the application to the Planning and Zoning Commission.

c) Public Hearing. The Zoning Director shall schedule the Planning and Zoning Commission public hearings. Public notice of each hearing shall be published in a newspaper{s) of general circulation within the vicinity(ies) of the proposed project site as well as posted in the Clinton County courthouse and on the current Clinton County website no less than four (4) and no more than twenty (20) days prior to the meeting. All property owners within the five hundred (500) feet radius shall be notified.

d) The Planning and Zoning Commission shall submit its recommendations in writing to the Board of Supervisors. The recommendation may be for approval, disapproval, or conditional approval of the application.

e) Within thirty (30) days of receipt of the recommendation of the Planning and Zoning Commission the Board of Supervisors shall conduct the first public hearing to consider the application. Following the conclusion of the final public hearing, the Board of Supervisors may approve, deny or conditionally approve the application.

f) To aid in covering county cost associated with the permitting process a nonrefundable fee of $8,000.00 shall be paid upon submission of the application for permit to cover the cost of application and review by the County.

2. Amend Section 4.2.16.A.2 **Tower Configuration**, by deleting it in its entirety and replacing it with the following:

Tower configuration. All wind turbines, which are part of a C-WECS, shall be installed with a tubular, monopole type tower. Reinforced concrete towers shall not be permitted in Clinton County. Alternate designs may be considered if the county supervisors determine them to be an improvement and more desirable. Meteorological towers may be guyed.

3. Amend Section 4.2.16.A.3 **Lighting**, by deleting it in its entirety and replacing it with the following:

Lighting. C-WECS sites shall not be artificially lit, except to the extent required by the FAA or other applicable authority. An application with the FAA for Aircraft Detection Lighting System (ADLS) shall be required, and a copy of the application shall be included in the application for C-WECS. Each project shall be designed, constructed and operated with operational Aircraft Detection Lighting Systems (ADLS) unless ADLS is not approved, in which case ADLS shall not be required. If required by the FAA the ADLS system shall be in accordance with the guidance set forth in the current edition of the Federal Aviation Administrative Circular AC 70-7460, Obstruction Marking and Lighting. Lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration permits and regulations. Red strobe lights are preferred for night-time illumination to reduce impacts on migrating birds. Red pulsating incandescent or flashing lights should be avoided. Exceptions may be made for meteorological towers, where concerns exist relative to aerial spray applicators.

4. Amend Section 4.2.16.A.4 **Signage**, by deleting it in its entirety and replacing it with the following:

All signage on site shall comply with Chapter 8, Signs, of this Ordinance. The manufacturer or owner's company name and/or logo may be placed upon the nacelle, of the C-WECS. Wind turbines shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the C-WECS sites. Signs indicating the 9-1-1 address of each C-WECS, or grouping of multiple C-WECS, shall be placed at each device site and/or the entry points of access roads per the Clinton County Zoning Ordinance chapter VIII and require a signage fee.

5. Amend Section 4.2.16.A.5 **Feeder Lines**, by deleting it in its entirety and replacing it with the following:

   All feeder lines shall be buried to a depth of at least 4 feet (48 inches) and shall meet or exceed the current standards of the State or national electrical code (NEC), whichever is more restrictive.

6. Amend Section 4.2.16.A.6 **Waste Disposal**, by deleting it in its entirety and replacing it with the following:

   Operation and maintenance plan. The C-WECS facility Applicant/Developer/Owner/Operator shall submit an operation and maintenance plan including all necessary services, frequency of service, preventative maintenance measures, and monitoring. The operation and maintenance plan should include at a minimum:

   a) Preventative maintenance practices and schedules for all on-site equipment including but not limited to: turbine blades, inverters, equipment pads, transformers, access entrances, internal roads, gates, fencing, security systems, grounding equipment and storm water management installations

   b) Annual reporting and verification to county on the status or changes to ongoing service schedule

   c) Schedule of all other monthly, annual, or semiannual reporting requirements for other submittals including: agricultural impact mitigation plan and decommissioning plan.

   d) Issue resolution protocols. Contact information for responsible party to address issues that may arise (damaged equipment, excessive noise, or other similar issues).

   e) Disposal/recycling plan for damaged or obsolete facility equipment or hazardous waste. No storage of inoperable, damaged or otherwise obsolete equipment shall be allowed to remain on property within the approved project site and shall comply with Exhibit 4.2.3. The current C-WECS Developer/Owner/Operator and all successor Developer/Owner/Operator shall be responsible for debris cleanup, removal and property restoration to all participating, and non-participating property, resulting from natural disaster, severe weather event, mechanical failure, fire or act of vandalism to any project property and equipment.

   f) Chemicals and solvents. During operation of the proposed installation, all chemicals or solvents used for the cleaning, de-icing or general operation of a wind turbine should be low in volatile organic compounds. The Applicant/Developer/Owner/Operator should use recyclable, environmentally friendly, or biodegradable products to the extent possible. Any on-site storage of chemicals or solvents shall be referenced.

   g) Maintenance or repair. Maintenance or repair shall include, but is not limited to, tower repair, painting, nacelle refurbishment or replacement, rotor repair or replacement, and integrity of security measures. Site access shall be maintained to a level acceptable to emergency response officials. Any maintenance, repair, retrofit, replacement, or

refurbishment of equipment shall adhere to all applicable local, state and federal requirements. Any maintenance, repair, retrofit, replacement or refurbishment of a C-WECS that increases height of previous approved turbine shall, at a minimum, require a Board of Supervisors review and approval.

h) Repowering. An Applicant/Developer/Owner/Operator of a C-WECS project may engage in repowering existing wind turbine sites. Repowering means existing wind turbine with upgraded technology or replacing existing at the end of its useful life. Repowering does not include maintenance or repairs of existing technology during its useful life.

(i) An Applicant/Developer/Owner/Operator seeking to repower more than 10% of its existing C-WECS project must file a new application under the rules described above. A repowering plan must include all of the relevant information provided for in the rules for a new C-WECS projects in order to allow review of facts such as environmental impact, road use, shadow flicker, noise and the other policy considerations set forth in the remainder of this ordinance.

(ii) Changes in Height of Turbines over 500 feet in height. Any action, whether maintenance, repair or repowering, that would increase the height of an existing turbine that already has a tip height over 500 feet in either requires an application for a variance with the Board of Adjustments. The Board of Supervisors exercises its authority to review any such Board of Adjustments decision under Iowa Code Section 335.10(2).

i) Any solvents, paint, oils, or lubricants that are involved in the regular maintenance procedures and shall be stored in an onsite operating and maintenance facility.

j) Waste shall include any material, substance, solvent, paint, oil, or lubricants eliminated or discarded as no longer useful or required. All waste shall comply with Exhibit 4.2.3.

Waste Disposal standards. All waste disposal standards of C-WECS shall follow the timeline established in Exhibit 4.2.3.

Exhibit 4.2.3. Waste Disposal Standards

	Days to remove waste materials before Penalties are enforced	Days after penalties are enforced where C-WECS shall be considered a Discontinued Use
During Construction	Forty-five (45)	N/A
After Construction	Forty-five (45)	Sixty (60)
Maintenance	Forty-five (45)	Sixty (60)
Major Repairs	Forty-five (45)	Sixty (60)

Penalty enforcement. Any penalties enforced shall follow the standards set forth in section ten (X) of the Clinton County Zoning ordinance.

7. Amend Section 4.2.16.A.11 **Setbacks**, by deleting it in its entirety and replacing it with the following:

Setbacks. A commercial wind energy conversion system (C-WECS) setback distance shall be measured from the exterior edge of a turbine base to the occupied structure of non-participating landowner parcel, to occupied structures on a participating landowners parcel, to the property line of public parks or parcels containing occupied community buildings, to public road right-of-way or active railroad right-of-way, and to the edge of identified riparian corridors, wetland areas, public cemeteries, and any wooded, grassland, wetland habitats 40 acres or larger.

Other structure setbacks. All other structures within the wind turbine project area shall meet principal setbacks for that zoning district.

Other Setbacks. All setback standards shall comply with Exhibit 4.2.4

Exhibit 4.2.4. C-WECS setback standards.

	Setbacks	Waivers
Non-Participating Property Owner	Three (3.0) times the total height of C-WECS to occupied structure	With written approval, no closer than 1.2 times C-WECS height to the property line
Participating Property Owner	Two (2) times tower height or one thousand two hundred (1200) feet, whichever is greater, to an occupied structure	No closer than 1.2 times C-WECS to occupied structure
Public ROW / Railroad ROW Power lines and telephone lines	(1.2) times C-WECS height	No Waiver Permitted
Riparian Corridors and Identified Wetlands	One (1) mile	No Waiver Permitted
Wooded, grassland, and wetland habitats 40 acres or larger.	One half (1/2) mile	No Waiver Permitted
Mississippi River	Ten (10) miles from west bank of river	No Waiver Permitted
Wapsipinicon River	Five (5) miles from north bank of river	No Waiver Permitted
Conservation	One (1) mile from any mapped Federal, State, or local park or conservation area.	No Waiver Permitted
Active Eagles nest (registered)	Five (5) miles from nest	No Waiver Permitted

Inactive Eagles nest (registered)	Three (3) miles from nest	No Waiver Permitted
Dopler Radar	See Section 4.2.16.A.13.h	No Waiver Permitted
Clinton Municipal Airport	Five (5) nautical miles from the center of the Airport	No Waiver Permitted
Maquoketa Municipal Airport and private registered Neimann landing Strip	Thirty thousand (30,000) feet at a 30° angle from the end of the landing strip	No Waiver Permitted
Private Airstrips registered with the FAA and Clinton County at the time of filing a rezoning application with Clinton County	Fifteen thousand eight hundred and forty (15,840) feet at a 30° angle from the end of the landing strip	No Waiver Permitted
Incorporated City Limits	Two (2) miles	No Waiver Permitted
Public Cemeteries	2,640 feet from the perimeter	No Waiver Permitted

8. Amend Section 4.2.16.A.12 **Noise**, by deleting it in its entirety and replacing it with the following:

   Noise. Audible noise due to C-WECS sites operation shall not exceed the 10-minute Leq. sound level of forty-seven (47) dBA per hour on average when measured at any residential dwelling, school, hospital, church, or public library existing on the date of approval of any permit.

   a) A pre-construction base-line noise evaluation conducted prior to commencement of construction under the direction of a qualified professional, that is a member of the Institute of Noise Control Engineering (INCE) to verify compliance with County standards at the Applicant/Developer/Owner/Operator expense.

   b) A post-construction noise evaluation shall be completed under the direction of a qualified professional, that is a member of the Institute of Noise Control Engineering (INCE) within one (1) year of commercial operation of the C-WECS to verify compliance with the required Ordinance standard. The Applicant/Developer/Owner/Operator will timely furnish this evaluation to the County.

   c) Every three (3) years a noise evaluation shall be completed, at the Developer/Owner/Operator expense, by a qualified third-party professional. The Developer/Owner/Operator will furnish the results of the evaluation to the County Zoning Administrator.

   d) In the event the ambient noise level (exclusive of the development in question) exceeds the applicable standard given above, the applicable standard shall be adjusted so as to equal the ambient noise level. The ambient noise level shall be expressed in terms of a 10-minute Leq. Ambient noise levels shall be measured at the exterior of potentially affected existing residences, schools, hospitals, churches and public libraries. Ambient noise level measurement techniques shall employ all practical means of reducing the

effect of wind generated noise at the microphone. Ambient noise level measurements may be performed when wind velocities at the proposed project site are sufficient to allow wind turbine operation, provided that the wind velocity does not exceed thirty (30) mph at the ambient noise measurement location. C-WECS turbines shall be shut down during ambient noise measurements.

e) In the event the noise levels resulting from the C-WECS exceed the criteria listed above, a waiver to said levels may be granted by the Board of Supervisors provided that the following has been accomplished:

(i) Written consent from the affected property owners has been obtained stating that they are aware of the C-WECS and the noise limitations imposed by this Ordinance, and that consent is granted to allow noise levels to exceed the maximum limits otherwise allowed; and

(ii) If the Applicant/Developer/Owner/Operator wishes the waiver to apply to succeeding owners of the property, a permanent noise impact easement shall be recorded in the Office of the Clinton County Recorder which describes the burdened properties and which advises all subsequent owners of the burdened property that noise levels in excess of those permitted by this Ordinance may exist on or at the burdened property.

9. Amend Section 4.2.16.A.13 **Safety**, by deleting it in its entirety and replacing it with the following:

Safety

a) All wiring, including feeder lines, between Wind Turbines and the C-WECS substation shall be underground. If the Applicant/Developer/Owner/Operator can demonstrate the need for an overhead line and the acceptance of landowners for this line, such option may be approved conditionally by the Clinton County Board of Supervisors.

b) Wind Turbine and meteorological towers shall not be climbable up to 15 feet above ground level.

c) All access doors to Wind Turbine and meteorological towers and electrical equipment shall be locked when not being serviced.

d) Appropriate warning signage shall be placed on Wind Turbine towers, electrical equipment, and C-WECS entrances.

e) For all C-WECS, the manufacturer's engineer or another qualified engineer shall certify that the turbine, foundation and tower design of the C-WECS is within accepted professional standards, given local soil and climate conditions.

f) For all guyed towers, visible and reflective objects, such as plastic sleeves, reflectors or tape, shall be placed on the guy wire anchor points and along the outer and innermost guy wires up to a height of eight (8) feet above the ground. Visible fencing shall be installed around anchor points of guy wires. The property owner must sign a notarized acknowledgement and consent form allowing construction of the turbine and guyed wires without fencing as required in this Ordinance to be presented to the Board of Supervisors.

g) The Applicant/Developer/Owner/Operator shall coordinate with emergency services staff to provide materials, education, and/or training to the departments serving the property with emergency services. Applicant/Developer/Owner/Operator shall work with the county agencies responsible for emergency responses for all area encompassed by the proposed C-WECS project to ensure that authorities have sufficient knowledge, training, and equipment to respond to any incident occurring during construction or operation of the C-WECS. All new or refresher training or equipment specifically required to meet the unique needs associated with C-WECS shall be paid for by the Applicant/Developer/Owner/Operator. Any emergency fire/rescue response to C-WECS facilities will be chargeable to and paid by the Applicant/Developer/Owner/Operator.

h) Dopler Radar. No C-WECS shall unduly impair Dopler Radar which is Clinton County's only method of monitoring severe weather alerts. The Applicant/Developer/Owner/Operator shall work with the National Weather Service and any other regulating agency to assure all C-WECS are in compliance with all Federal and State Standards and regulations relating to structures potentially impacting Dopler Radar. All C-WECS situated within Clinton County subject to extreme weather; tornado warnings, severe thunderstorm warnings, extreme high winds, or other extreme weather events shall be shut down during these events so as not to interfere with Dopler radar. Any non-compliance with shutting down a C-WECS during extreme weather conditions shall result in a penalty.

i) Fire Suppression systems shall be installed in all C-WECS. The Applicant/Developer/Owner/Operator shall work with local first responders on the type of fire suppression system which is being installed.

j) Signal Interference. The Applicant/Developer/Owner/Operator shall minimize and mitigate any potential interference with electromagnetic communications, including, but not limited to Global Positioning Satellite reception, weather radar or navigation radar, radio, cell phone, or television signals caused by any C-WECS. There shall be no interference with 9-11 ISICS communications. The Applicant/Developer/Owner/Operator shall be responsible for resolution of any interference caused by operation of the C-WECS.

10. Amend Section 4.2.16.A.14 by changing it to section 4.2.16.A.17.

11. Amend Section 4.2.16.A. by adding section 4.2.16.A.14 **Emergency Response Plan,** with the following:

    Emergency Response Plan. The applicant shall submit a final emergency response plan prior to any ground disturbances at the project site detailing the planned response actions that will be taken by the Applicant/Developer/Owner/Operator of the C-WECS site in the event of an emergency. These actions are intended to minimize health risks to personnel and people in the surrounding community, as well as minimize adverse impacts to the environment.

    a) The plan shall include, but not be limited to, a detailed narrative of response procedures and the facility representatives responsible for management of the following plausible contingencies that could occur at the facility; natural disaster/severe weather, fire, security incident, capacity/transmission, environmental, chemical, pipeline (if applicable), and medical. It shall include procedures for a site evacuation, designated egress routes, and emergency staging areas.

    b) The plan shall be developed in coordination with local first responders, Clinton County fire and rescue personnel, Clinton County Emergency Management, Clinton County Communications, and Clinton County Public Health personnel.

12. Amend Section 4.2.16.A by adding the section 4.2.16.A.15 **Shadow Flicker,** with the following:

    Shadow Flicker. The applicant/developer/owner/operator of the C-WECS site shall operate the site in such a manner that does not create more than thirty (30) hours of shadow flicker per calendar year on non-participating dwellings, schools, hospitals, churches or public libraries. After eight (8) hours of shadow flicker occurs on any non-participating dwelling, school, hospital, church, or public library the applicate/developer/owner/operator shall take measures to mitigate any further shadow flicker to any non-participating dwelling, school, hospital, church, or public library. Any measures to mitigate shadow flicker shall be approved by the Board of Supervisors. The Applicant/Developer/Owner/Operator shall perform a shadow flicker modeling analysis demonstrating compliance with these requirements.

    A maximum of eight (8) hours per calendar year before mitigation shall be allowed on any dwelling, school, hospital, church, or public library from any surrounding C-WECS. The maximum of eight (8) hours per calendar year before mitigation and thirty (30) hours total per calendar year shall not mean per C-WECS turbine, but shall mean total hours occurred on any occupied dwelling, school, hospital, church, or public library.

    More than thirty (30) hours of shadow flicker from a C-WECS shall be allowed on a non-

participating dwelling only upon agreement with an affected property owner. Such agreement shall be in the form of a shadow flicker waiver easement agreement and officially recorded in the Clinton County Recorder's Office.

13. Amend Section 4.2.16.A by adding section 4.2.16.A.16 **Catastrophic Event,** with the following:

Catastrophic Event. A catastrophic event shall be when a C-WECS is considered to be inoperable due to fire, natural disaster, severe weather event, or other serious structural or mechanical failure that causes the C-WECS unit to become inoperable. The Applicant/Developer/Owner/Operator shall post 10% of the estimated cost of decommissioning determined in section 4.2.16.B.d to held by the Clinton County Treasurer in an institution approved by the Clinton County Board of Supervisors , in order to allow the County to act to correct or mitigate damages/clean up etc. that may occur from a catastrophic event which is not timely or adequately addressed by the Developer/Owner/Operator. These funds shall be available to the County without restriction after providing the Developer/Owner/Operator five (5) days advance written notice of non-compliance and the nature of the deficiencies. The funds held in case of a catastrophic event or line of credit shall be maintained during the duration of the C-WECS project. If a catastrophic event occurs and the fund is reduced or depleted it shall be replenished immediately, so funds are available in case of another catastrophic event.

a) In case of a Catastrophic event a representative of the developer/owner/operating company shall be on site with 12 hours of the event to assess the situation and begin a plan of action.

b) A plan of action shall be established, and approved by the Clinton County Board of Supervisors, within 7 days of the Catastrophic event. The Plan of action shall include, but not be limited to the following:

   (i) Mitigation of damages to the C-WECS, and the property it sits on.

   (ii) Mitigation of damages to any surrounding properties.

   (iii) An estimated timeline for the cleanup shall be established after the catastrophic event.

c) Within 90 days of the Catastrophic event, the C-WECS site along with affected surrounding properties shall be cleaned up. The extent of the property's cleanup shall be approved by the Clinton County Board of Supervisors. An extension of the cleanup may be granted by resolution from the Clinton County Board of Supervisors.

   (i) After 90 days the C-WECS shall be considered inoperable, and decommissioning shall commence.

d) The estimated cost, as well as the plan of action for the cleanup of the C-WECS site after a catastrophic event, shall be revisited every three (3) years. The developer/owner/operator shall provide any new cost for the decommissioning of the C-WECS in case of a catastrophic event, and any new information regarding the plan of action in case of a catastrophic event.

14. Amend Section 4.2.16.B **Discontinuation and De-commissioning**, by deleting it in its entirety and replacing it with the following:

Discontinuation and De-commissioning

1. The C-WECS facility Applicant/Developer/Owner/Operator shall submit a decommissioning plan that describes the following:

    a) The anticipated life of the C-WECS facility.

    b) The anticipated manner in which the facility will be decommissioned includes plans to recycle components and dispose of any hazardous materials.

    c) The anticipated site restoration activities.

    d) The estimated decommissioning costs in current dollars.

    e) The method for ensuring that funds will be available for decommissioning and restoration of the site.

    f) Anticipated timeline to complete decommissioning activities and site restoration.

2. Decommissioning cost considerations. The Applicant/Developer/Owner/Operator shall provide the basis for estimates of net costs for decommissioning the site. Site restoration activities as described later in this section.

    a) Removal of any hazardous materials at the facility, as determined by a Toxic Characteristic Leaching Procedure (TCLP) or other similar test approved by Clinton County and as described in the facility's Operations and Maintenance Plan. TCLP testing shall be performed prior to any ground disturbance at the project site.

    b) Salvage value shall not be included in the cost estimate.

    c) The cost basis shall include a mechanism for calculating adjusted costs over the life of the project.

3. Site restoration activities. Restoration activities shall include, but not be limited to, the following:

a) Removal of all C-WECS related equipment, power lines, and footings to a minimum depth of six (6) feet.

b) Soil in project area shall be de-compacted and seeded with a cover crop, unless otherwise specified in the approved agricultural impact mitigation plan.

c) For any part of the energy project on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates or repurposed buildings in place or regarding restoration of agricultural crops or forest resource land. Any use of remaining structures must be in conformance with the regulations in effect at that time.

4. Performance agreement and proof financial surety. At the time of permitting, the Applicant/Developer/Owner/Operator shall provide a Performance Agreement and accompanying financial surety instrument to cover the cost of decommissioning in accordance with the following:

a) Decommissioning funds shall be an amount equal to the total costs for decommissioning the site, plus a ten percent (10%) contingency.
b) Decommissioning funds shall be maintained in the form of a performance bond, surety bond, bank letter of credit, or other form of financial assurance which must be approved by the County. Any financial document or performance guarantee as above mentioned shall provide for release of all funds necessary for the cost of decommissioning which the Applicant/Developer/Owner/Operator has not completed within 180 days of discontinuation. The release of these funds under the guarantee must be available solely upon the demand of the County with no restrictions.
c) Financial surety shall be maintained for the life of the project.
d) Proof of recertification of the financial surety instrument must be submitted to the County annually.
e) Every three (3) years, the facility Developer/Owner/Operator shall retain an independent Licensed Iowa Engineer approved by the County to re-estimate the total cost of decommissioning and attest that the value of the financial surety instrument is appropriate. This report shall be filed with the County and shall incorporate any new industry information learned since the last cost determination.
f) The required amount of decommissioning funds shall match the re-estimated cost of decommissioning. Within ninety decommissioning (90) days of filing the re-estimation report with the County, the facility Developer/Owner/Operator shall cause the fund balance of the financial surety instrument to be adjusted to ensure that it matches the re-estimated decommissioning cost.

5. Commencement of site decommissioning. Decommissioning of the site shall commence at the time identified in the project decommissioning plan or performance agreement, or when the facility is determined to have been abandoned. The facility shall be considered non-productive after 1 year (12 months) of producing no power.

a) Decommissioning shall be completed within 1 year (12 months) of the facility being considered non-productive. An extension for decommissioning may be granted by resolution of the Clinton County Board of Supervisors.
b) The landowner or tenant shall notify the Zoning Director both when the project is discontinued and when decommissioning is complete
c) Third-party verification, as well as County verification of completed decommissioning will be required before the financial surety may be released.
d) The facility will be considered non-productive in the following circumstances:
e) Upon termination or expiration of the wind energy system leases/easements or
f) After 1 year (12 months) without production, storage of energy, or use as a backup facility.
g) Exceptions could be made for:

(i) A force majeure event that has occurred or is occurring, which will prevent the facility from resuming operation within 12 months.
(ii) If the facility is in the process of being repowered.
(iii) The project is pending completion of construction of the facility due to a backlog of cases or service requests in the MISO queue.
(iv) A situation in which the project owner can provide evidence to the county board of supervisors, that the facility's period of continuous inactivity is due to circumstances beyond the project owner's control and that the facility has not been abandoned.
(v) Appeal of the notice of abandonment from the county within a set time of the project owner's receipt of the notice in which the project owner explains the reasons for operational difficulty and provides a timeframe for corrective action that the county deems reasonable.

15. Amend Section 4.2.16.C Avoidance and Mitigation of Damages to Public Infrastructure, by deleting it in its entirety and replacing it with the following:

1. **Roads.** Applicants shall identify all roads to be used for the purpose of transporting C-WECS, substation parts, cement, and/or equipment for construction, operation or maintenance of the C-WECS and obtain applicable weight and size permits from the impacted road authority(ies) prior to construction. All roads shall be identified at least 60 days prior to the start of construction.

2. **Existing Road Conditions.** Applicants shall conduct a pre-construction survey, at least 60 days in advance, and shall coordinate with the County Engineer and the impacted local road authority(ies) to determine the condition of existing road and drainage structures and determine all required intersection modifications and roadway width modifications. The survey shall include photographs and a written agreement to document the condition of the public facility. The Applicant/Developer/Owner/Operator is responsible for on-going road maintenance and dust control measures identified by the Clinton County Engineer during all phases of construction. The Applicant/Developer/Owner/Operator shall enter into a Road Use and Repair Agreement with the impacted local road authority(ies) and Clinton

County at least 14 days prior to the start of construction satisfactory to the Clinton County Engineer.

3. **Drainage System.** The Applicant/Developer/Owner/Operator shall be responsible for immediate repair of damage to public drainage systems and private driveway entrance drainage structures stemming from construction, operation or maintenance of the C-WECS.

4. **Required Financial Security.** The Applicant/Developer/Owner/Operator shall be responsible for restoring or paying damages as agreed to by the County Engineer and the applicable road authority(ies) sufficient to restore the road(s) and bridges to preconstruction conditions within 1 year of construction completion. Financial security in a manner approved by the Board of Supervisors shall be submitted before construction, covering 110% of the costs of all required repairs and improvements. This requirement may be waived by the Board of Supervisors by recommendation from the Clinton County Engineer. An additional emergency road repair escrow account or bond shall be required in the Road Use and Repair Agreement.

5. The Applicant/Developer/Owner/Operator shall reimburse the County for all labor and materials associated with periodic road inspections and administration as stipulated in the Road Use and Repair Agreement.

16. Amend Section 4.2.16.D **Submittal Requirements,** by deleting it in its entirety and changing it to the following section 4.2.16.D **Submittal Requirements:**

    1. In addition to the submittal requirements defined for the Ordinance Map Amendment Applications, section 9.3.2.B.2. All applications for C-WECS must submit the following information as applicable:

        a) The names of project applicant.

        b) The name of the project owner.

        c) The legal description and address of the project.

        d) A description of the project including Number, type, name plate generating capacity, tower height, rotor diameter, and total height of all wind turbines and means of interconnecting with the electrical grid.

        e) Site layout, including the location of property lines, wind turbines, electrical wires, interconnection points with the electrical grid, and all related accessory structures. The site layout shall include distances and be drawn to scale.

        f) Engineer's certification(s) as required in these supplemental standards.

        g) Documentation of land ownership or legal control of the property.

h) The latitude and longitude of individual wind turbines.

i) A USGS topographical map, or map with similar data, of the property and surrounding area, including any other C-WECS within 10 rotor diameters of the Proposed C-WECS.

j) Location of wetlands, scenic, and natural areas [including bluffs] within one half (1/2) mile of the proposed C-WECS.

k) An Acoustical modeling analysis conducted to the ANSI/ACP

l) Wind Turbine Sound Modeling Standard.

m) FAA Permit Application.

n) Location of all known communications towers/facilities within 2 miles of the proposed C-WECS.

o) An Environmental Permitting and Conservation Plan within the proposed C-WECS site. A draft of Emergency Response Plan in accordance with section 4.2.16.A.14

p) A shadow flicker analysis for all receptors within 1.5 miles of a wind turbine, in accordance with section 4.2.16.A.15.

q) A draft Catastrophic Event Plan in accordance with section 4.2.16.A.16.

r) A draft Wildlife Monitoring and Mitigation Plan (WMMP) in accordance with section 4.2.16.D

s) A draft Agricultural Impact Assessment Plan (AIMP) in accordance with section 4.2.16.E

17. Amend Section 4.2.16. by adding section 4.2.16.E **Wildlife Monitoring and Mitigation Plan (WMMP)**, with the following:

Wildlife Monitoring and Mitigation Plan (WMMP)

The C-WECS facility Applicant/Developer/Owner/Operator shall submit a WMMP to mitigate risk to avian and bat populations during the construction and operation phases of the project. The purpose and procedures shall be designed to ensure:

a) Avian and bat fatalities and secondary effects on wildlife are minimized;
b) Project-related actions comply with federal and state wildlife regulations;

c) Adequate implementation training is provided for the construction contractor and operations and maintenance staff;

d) Coordination between the project Applicant/Developer/Owner/Operator, wildlife agencies including Iowa Dept. of Natural Resources (IDNR), and the Iowa Utilities Board (IUB) is effective and continuous.

1. The WMMP shall include, at a minimum, a narrative including the following:

a) Local, state and federal regulatory framework

b) Site characterization

c) Field studies documenting C-WECS project area wildlife conditions and predict project impact

(i) A baseline study of the avian and bat habitat within the project boundary and a 2-mile perimeter outside the project boundary. It shall be conducted by third- party licensed professional.

d) Preconstruction/construction avoidance and minimization measures

e) Operation and maintenance procedures

f) Post construction avian and bat fatality monitoring conducted by third party licensed professional for three years following completion of the project construction phase.

g) Upgrades or retrofits to existing C-WECS should not result in increased avian/bat collisions. The 3-year monitoring timeline shall restart after 12 months of discontinued operation of any C-WECS following a repair, retrofit, or repowering event.

h) Quality control and mitigation procedures

2. The Applicant/Developer/Owner/Operator shall follow all existing federal and state laws pertaining to environmental resources, such as wildlife, water resources, and conservation areas. Applicable laws include, but are not limited to the following:

a) Federal Endangered Species Act

b) Iowa State Wildlife Conservation and Endangered Plants and Wildlife Codes

c) Migratory Bird Treaty Act

d) Bald and Golden Eagle Protection Act

e) Section 404/401 Clean Water Act

18. Amend Section 4.2.16. by adding section 4.2.16.F **Agricultural Impact Mitigation Plan (AIMP)**, with the following:

Agricultural Impact Mitigation Plan (AIMP)

1. The C-WECS facility Applicant/Developer/Owner/Operator shall submit an AIMP detailing strategies to avoid or mitigate detrimental impact to agricultural land resulting from the construction, operation, maintenance and/or decommissioning of the wind energy system project. The primary goals of the AIMP are long-term protection of soil health and farming feasibility within the project area. An emphasis is placed on minimizing the area of project disturbance and limiting impact to surface and subsurface drainage, during both construction and decommissioning.
2. The AIMP shall include, but not limited to:

a) Project overview. Provide general background, list of project components, and construction timeline.

b) Environmental/agricultural monitoring

c) On-site monitoring is to be conducted by third party environmental/agricultural professional during construction.

d) Report of findings to be submitted to county monthly during construction.

e) Third party professional responsible for verification and monitoring of:

(i) Soil segregation, stockpiling, backfilling, respreading methods

(ii) Trenching, directional boring & foundation installation

(iii) Compaction avoidance and decompaction practices

(iv) Grading plan adherence

(v) Wet weather conditions planning

(vi) Drain tile system

(vii) Erosion and sediment control measures

(viii) Karst topography/ground water impacts

3. Best Management Practices During Construction and Decommissioning

   a) Best Management Practices (BMPs) shall be included that demonstrate Low Impact Development (LID) measures the Applicant/Developer/Owner/Operator will take during construction or decommissioning. These measures should identify top-soil type and depth for preservation and reapplication, reduce or mediate compacted soils, utilize trenchless technologies, minimize soil disturbance.

4. Subsurface Drain Tile Survey, Avoidance & Mitigation Plan

   a) Documentation and mapping of existing drain tile systems within the entire project area including elevation, location, and size of tile inlet and outlets. Mapping should include current and proposed underground conduit locations/easements.

   b) Plan for relocation, removal or restoration of tile damaged during construction.

   c) Description of long-term maintenance and plan for ongoing review of existing and newly constructed tile systems (if applicable).

5. Pre-construction and Decommissioning Soil Health Analysis

   a) Prior to construction, a soil analysis shall be conducted and assessed by a third-party professional to establish baseline soil health.

   b) Required sampling protocol:

      (i) Pre-Construction Baseline Survey

         a. One sampling location per turbine site, drop zones (if distinct from turbine site), and representative sample of access roads based on soil mapping unit as identified in the USDA Soil Survey

      (ii) Two samples shall be collected from each sampling location (for example, the plow layer from O to 8 inches and subsoil from 8 to 16 inches).

      (iii) Each sample shall consist of a minimum of ten (1O) subsamples collected from disparate locations surrounding the sample location in each zone. Samples shall be analyzed for soil health and soil chemical parameters during the same seasonal period and at the same sampling locations, prior to construction, to establish a baseline.

      (iv) In-field assessment resource evaluations shall be performed in conjunction with soil health testing for the purpose of tracking compaction, soil organic matter and aggregate stability indicators.

(v) Soil sample analyses shall utilize a laboratory testing program that includes standard chemical analysis for Phosphorous, Potassium, Calcium, Sulfur, pH, Cation Exchange Capacity (CEC), base saturation, and organic matter, and soil health analyses for soil respiration, wet aggregate stability, and active (permanganate oxidizable) carbon.

c) Decommissioning or Project Modification survey

(i) Same sampling protocols as preconstruction baseline survey.

(ii) Third-party evaluation and report on soil condition changes against baseline data.

6. Soil Protection and Compaction Avoidance

a) Plans should include, at a minimum, a narrative or plan for LID construction practices and methods to be used during each stage of construction for protecting and preserving topsoil. Practices and methods should address, at a minimum, topsoil removal, segregation, stockpiling, replacement during backfill, and respreading, grading minimization, compaction prevention, wet weather conditions, and post-construction decompaction.

(i) All project areas in agricultural production at the time of permit issuance, that will not remain in agricultural production, shall be seeded with temporary cover within three months of commencement of pre- construction/civil activities (mobilization) if disturbance is not intended to occur within two months.

7. Erosion and Sediment Control

a) The Applicant/Developer/Owner/Operator agrees to conduct all roadwork and other site development work in compliance with a national pollutant discharge elimination system (NPDES) permit as required by the state department of natural resources and comply with requirements as detailed by local jurisdiction authorities during the plan submittal. If subject to NPDES requirements, the Applicant/Developer/Owner/Operator must submit the permit for review and comment, and an erosion and sediment control plan before beginning construction. The plan must include both general "best management practices" for temporary erosion and sediment control both during and after construction and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to prevent sediment-laden run-off into waterways.

8. Karst Topography/ground water impacts.

a) At the Applicant/Developer/Owner/Operator expense prior to construction soil testing by an independent qualified engineer to include Borings shall be made at each proposed C-WECS site to determine the suitability of the location for placement of the C-WECS. This testing shall identify the depth of rock, the

location of any Karst in the area and whether there are springs or other features, including sink holes which may be impacted by the construction. If the engineering report identifies features including Karst that maybe affected by the construction a Construction Management Plan outlining necessary procedures to satisfactorily mitigate any consequences of the construction shall be prepared by a qualified third-party professional and submitted to the Clinton County Environmental Health Department. The Plan as submitted must be approved by the Clinton County Board of Supervisors.

19. Amend Section 4.2.16 by adding section 4.2.16.G **Future Operators**, with the following:

Future Operators. Future operators, successors, assignees, or heirs shall agree in writing to accept and to conform to all conditions of approval in the staff report. Prior notice to the County of the intent to sell or transfer ownership shall be done within 180 days prior to. Such agreement shall be filed with and accepted by the County before the transfer to a new operator, successor, assignees, or heirs shall be effective. Future operators, successors, assignees, or heirs shall come before the Clinton County Board of Supervisors to provide proof that all aspects of the Clinton County Zoning ordinance are met.

20. Amend Section 4.2.16. by adding section 4.2.16.H **Liability**, with the following:

Liability insurance: The Applicant/Developer/Owner/Operator of the Project and subsequent Assignees shall maintain a current general liability policy covering bodily injury and property damage with limits of at least (5) million dollars per claim. This policy shall be maintained for the lifetime of the project. The Applicant/Developer/Owner/Operator shall submit on an annual basis a copy of the same to the County Zoning Administrator. Clinton County and its officials shall be named as an additional insured.

1. Indemnification and Liability.
   The Applicant/Developer/Owner/Operator of the CWECS project shall defend, indemnify, and hold harmless the County of Clinton and its officials from and against any and all claims, demands, losses, suites, causes of action, damages, injuries. costs, expenses, and liabilities whatsoever, including attorney's fees, without limitation, arising out of acts or omissions of the Applicant/Developer/Owner/Operator associated with the construction and/or operations of the CWECS project.

2. All claims and litigation regarding the ordinance will originate and be heard in the venue of Clinton County, Iowa

21. Amend Section 4.2.16. by adding section 4.2.16.I **Violations**, with the following:

Violations: The Applicant/Developer/Owner/Operator of the C-WECS are responsible for compliance with all provisions of this Ordinance. Violation of any provision of this Ordinance shall in addition to all other allowable penalties be subject to a fine of $1,000.00 per incident. Each day a violation is un-remedied shall subject the violator to a fine of $1,000.00. In the event Clinton County takes action to enforce the Ordinance against the Applicant/Developer/Owner/Operator all expenses incurred by the County, including but not limited to attorney's fees, engineering experts and other costs, shall be reimbursed by the Applicant/Developer/Owner/Operator. Nothing herein contained shall prevent Clinton County from taking such other and further lawful action as necessary to enforce or remedy any non-compliance with this Ordinance.

22. Amend Section 4.2.16. by adding section 4.2.16.J **Limitations**, with the following:

Limitations: There shall be no more wind turbines than the number capable of producing 250 Megawatts built in Clinton County so as to preserve the agricultural and pastoral nature of the unincorporated portions of the County.

23. Amend Section 4.2.16. by adding section 4.2.16.K **Property Value Assessment**, with the following:

Property Value Assessment: At the Applicant/Developer/Owner/Operator expense prior to construction of the C-WECS project there shall be a property value assessment of all properties within one and one-half (1 and ½) of any C-WECS. The property value assessment shall be offered to all property owners within one and one-half (1 and ½) miles, but it shall only be completed with the property owners' consent.

24. Amend Section 4.2.16. by adding section 4.2.16.L **Definitions**, with the following:

Definitions.

Applicant: The owner, operator or developer of C-WECS.

Catastrophic Event: Any event that damages a portion of the C-WECS by act of fire, severe weather, structural or mechanical failure that causes the WECS unit to be inoperable.

Commercial Wind Energy Conversion System (C-WECS): A WECS equal to or greater than (100/40) kW in total name plate generating capacity or greater than 100' in height.

Director: Clinton County Zoning Director or other person(s) designated by the Clinton County Board of Supervisors.

Easement: A legal interest in land, as defined in a document recorded in the office of the Clinton County Recorder, granted by the landowner to another person or entity, which allows that person(s) or entity(ies) the use of all or a portion of the landowner's land, generally for a stated purpose and duration, including, but not limited to, access or placement of utilities.

Electromagnetic Interference (EMI): The interference to communication systems created by scattering of electromagnetic signals.

Feeder Line: Any power line that carries electrical power from one or more wind turbines or individual transformers associated with individual wind turbines to the point of interconnection with the electrical power grid. In the case of interconnection with the high voltage transmission systems, the point of interconnection shall be the substation serving the WECS.

Federal Aviation Administration (FAA): In the service of its regulatory responsibilities, the FAA sets safety and efficiency standards for all U.S. airports and oversees domestic aviation through its Flight Standards District Offices. The FAA is primarily responsible for civil aviation.

Meteorological Tower (MET): For the purpose of this ordinance, meteorological towers are those towers which are erected primarily to measure wind speed and direction plus other data relevant to siting WECS.

Non-Commercial WECS (Non-C-WECS): A WECS consisting of a wind turbine, a tower, and associated control or conversion electronics, has a rated capacity of less than 100 kW, a height limit not to exceed 100', and is intended to primarily reduce on-site consumption of utility power.

Non-participating property owner: All persons, or entities with a deeded or contracted interest in property in which the C-WECS applicant/owner/developer/operator has not obtained an easement or lease from, to use the property for the intent of accessing, installing, or maintaining C-WECS related equipment.

Operator: The entity responsible for the day-to-day operation and maintenance of the WECS, including third party subcontractors.

Owner/Developer: Entity or entities with an equity interest in WECS, including their respective successors and assigns. Owner does not mean the property owner from whom the land is leased for locating the WECS (unless the landowner has an equity interest in the WECS); or (ii) any person holding a security interest in the WECS solely to secure an extension of credit, or a person foreclosing on such security interest provided that after foreclosure, such person seeks to sell the WECS at the earliest practical date.

Professional Engineer: A qualified individual who is licensed in the state of Iowa as a professional engineer.

Participating property owner(s): All persons, or entities with a deeded or contracted interest in the property in which the C-WECS applicant/owner/developer/operator has obtained an easement, or a lease form, to use the property for the intent of accessing, installing, or maintaining C-WECS related equipment.

Public Lands: Lands that are managed by federal government, state government, local government or sovereign tribals nations.

Residence/dwelling/occupied structure: A house, apartment or other shelter that is the abode of a person, family, or household.

Rotor Diameter: The diameter of the circle is described by the moving rotor blades of a WECS.

Setback: The minimum required distance from the property line or other point of reference.

Shadow Flicker: The shadow caused by the alternating pattern of sun and shade due to the rotation of the blades of the WECS casting a shadow.

Structure: Anything constructed or erected on the ground or attached to the ground, including but not limited to, antenna(s), buildings, sheds, cabins, dwellings (built on-site or factory-built homes), signs, storage tanks, towers, windmills, and other similar uses.

Substation: The apparatus that connects the electrical connection system of the WECS and increases the voltage for connection with the utility companies' transmission lines.

Total Height (C-WECS): The highest point, above ground level, reached by the rotor tip or any other part of the WECS.

Tower: The vertical structure that supports the electrical generator, nacelle, rotor blades, or meteorological equipment.

Transmission Line: Those electrical power lines that carry voltages of at least 69,000 volts (69 kV) and are primarily used to carry electrical energy over medium to long distances rather than directly interconnecting and supplying electrical energy to retail customers.

Wind Energy Conversion System (WECS): All necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WECS tower, electrical components, WECS foundation, transformers, electrical cabling, and meteorological towers from the WECS tower to the substation(s).

WECS Project: The collection of WECS and substations as specified in the siting approval application pursuant to Section 3 of this ordinance.

Wind Turbine: A wind turbine is any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy using airfoils or similar devices to capture the wind.