Cross-reference to Ordinance #2025-18 recorded as 2026000870

STATE OF INDIANA)
) SS:
COUNTY OF BOONE)

SCRIVENER'S AFFIDAVIT CORRECTING EXHIBIT

The undersigned, Beth A. Copeland, being duly sworn upon her oath, deposes and states as follows:

That the recorded copy of Boone County Ordinance 2025-18 ("Ordinance 2025-18") included a scrivener's error. On December 19, 2025, the Board of Commissioners of Boone County approved Ordinance 2025-18 with Exhibit A attached. When Ordinance 2025-18 was recorded on January 22, 2026, the incorrect exhibit was inadvertently included with Ordinance 2025-18. As such, Ordinance 2025-18, as recorded on January 22, 2026, inaccurately represents the version of the document the Board of Commissioners of Boone County approved. The correct draft of the Exhibit is attached hereto with Ordinance 2025-18 ("Correct Exhibit").

The undersigned scrivener makes the Affidavit for the purpose of correcting such error in the above-mentioned Ordinance and to show that the Correct Exhibit is and remains the correct exhibit to be attached to Ordinance 2025-18.

FURTHER AFFIANT SAITH NOT.

Subscribed and sworn to on the 15th day of April, 2026.

Beth A. Copeland

Beth A. Copeland

This instrument was prepared by and return to: Beth A. Copeland, Boone County Attorney, 127 W. Main Street, Lebanon, IN 46052

I affirm, under the penalties of perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law. *Beth A. Copeland*

ORDINANCE No. 2025 - 18

AN ORDINANCE TO AMEND THE TEXT OF THE BOONE COUNTY ZONING ORDINANCE REGARDING THE ESTABLISHMENT OF AN ENERGY OVERLAY DISTRICT

WHEREAS, the County Commissioners for Boone County, Indiana recognizes the need for orderly growth and development within its planning jurisdiction, and

WHEREAS, the Boone County Area Plan Commission has an existing Zoning Ordinance that regulates development within its jurisdictional areas, and

WHEREAS, the current Zoning Ordinance does not have standards for regulating solar energy development, wind energy development, and battery energy storage systems, and

WHEREAS, the Boone County Commissioners adopted Ordinance 2024-06 establishing a moratorium on commercial solar, wind, and storage systems until April 15, 2026, or such time as standards are adopted to regulate such systems, and

WHEREAS, the Boone County Area Plan Commission has drafted and held a properly noticed public hearing for an Energy Overlay District Ordinance establishing standards for regulating commercial solar, wind, and storage systems, and

WHEREAS, by a vote of 3 in favor and 0 opposed, the Commissioners hereby approve the amendment to the Zoning Ordinance to establish the Energy Overlay District Ordinance.

NOW, THEREFORE, BE IT ORDAINED as follows:

Section 1. The amendments are for the purpose of establishing an Energy Overlay District Ordinance in the attached Exhibit A.

Section 2. This Ordinance is effective upon adoption.

ADOPTED this 19 day of December, 2025.

BOARD OF COMMISSIONERS OF BOONE COUNTY, INDIANA.

Scott Pell, Commissioner

Donnie Lawson, Commissioner

Tim Beyer, Commissioner

Certification of Recommendation

Boone County Area Plan Commission

DATE: December 18, 2025

RE: AMENDMENT TO THE BOONE COUNTY ZONING ORDINANCE concerning the Energy Overlay District Ordinance (File 25ZO-16-253)

In accordance with IC 36-7-4-605(a)(2), the Boone County Area Plan Commission hereby certifies their recommendation to the Boone County Commissioners. At their public hearing on December 17, 2025, the Area Plan Commission gave a **FAVORABLE RECOMMENDATION** to change the text of the Boone County Zoning Ordinance as follows:

- Create an Energy Overlay District Ordinance to regulate solar development, wind development, and battery energy storate systems in the unincorporated areas of Boone County.

County Commissioner Action: Per IC 36-7-4-607(f), the legislative body shall vote and make the final decision on the proposed amendments within 90 days of the date of this notice (March 18, 2026).

- The legislative body can vote to adopt the amendment as presented; the proposal takes effect.
- The legislative body can vote to reject the amendment as presented; the proposal is defeated.
- If the legislative body amends a proposal to make the standards less restrictive, it shall be returned to the APC for its consideration, with a written statement of the reasons for the requested amendments.
- If the legislative body does not take action within 90 days, the amendment is automatically approved.

If you have any questions, please contact me at your earliest convenience.

Respectfully,

Deborah Luzier, AICP
Boone County Area Plan Commission
Interim Executive Director

COMMERCIAL ENERGY SYSTEMS

Add the following text to Chapter V. Overlay Districts of the Zoning Ordinance:

D. ENERGY OVERLAY DISTRICT

1. GENERAL

a. **Purpose and Intent.** To preserve the health, safety, and general welfare of Boone County residents and public, the intent of this article is to guide the development and operation of energy projects within the unincorporated areas under the jurisdiction of the Boone County APC, through reasonable standards and restrictions on the development, construction, operation, rehabilitation, decommissioning, and restoration of energy production and storage facilities. This ordinance is intended to:

1) Respect the County's historically strong rural farming communities and support the growth of agriculture as a vital element of economic development in Boone County by protecting prime farmland and encouraging the use of rooftops and non-productive land, including brownfields, for the siting of energy facilities.

2) Ensure that any energy production or storage facility in Boone County is safe.

3) Provide a regulatory scheme for the construction, operation, and decommissioning of energy facilities in Boone County to preserve the public health, safety, and general welfare.

4) Minimize the adverse visual, environmental, and property value effects of commercial energy systems through careful design and site standards.

2. COMMERCIAL SOLAR ENERGY SYSTEMS (SES)

a. **Applicability**

1) This section applies to Commercial Solar Energy Systems (SES) proposed to be constructed after the effective date of this Ordinance. For Accessory SES, refer to Section 4.Z.1 Accessory Solar Energy Systems of this Zoning Ordinance.

2) SES are regulated and permitted pursuant to this section and are not regulated or permitted as essential services, public utilities, or private utilities.

b. **Use Permissions**

1) SES requires rezoning into the Energy Overlay District, special exception approval, Development Plan approval, and building permit approval.

2) Concentrated Solar Thermal Power (CST) is prohibited within unincorporated areas under the jurisdiction of the Boone County APC.

3) Special exception approval of a petition lasts up to twenty-five (25) years. At the end of the approval period, a new special exception approval is required to continue the use.

c. **Overlay Rezone Prerequisites**

1) Underlying Zoning. Energy Overlay is permitted in the General Agricultural (AG), Light Industry (I1), and General Industry (I2) zoning districts, and prohibited in all other zoning districts, including a PUD district.

2) Minimum Project Acreage: five (5) acres.

3) Maximum Project Acreage: four hundred (400) acres.

d. **Design and Development Requirements**

1) Siting Requirements

a) **Prime Farmland.** No more than five percent (5%) of an SES may be located on Prime Farmland as designated on the Soil Data Access (SDA) Prime and other Important Farmlands report for Boone County in the "Farm Class" column as "All areas are prime farmland." A letter from the Boone County Soil and Water Conservation District or another qualified source stating that no more than five percent (5%) of the proposed project is on Prime Farmland must be included with the special exception application. Boone County reserves the right to use its own Geographic Information System mapping to verify the stated percentage.

b) **Easements and ROW**. Ground-mounted SES cannot be placed within any easement, right-of-way, or stormwater conveyance system except by written permission granted by the Boone County Drainage Board, property owner, easement holders, and the Highway Department for rights-of-way. This includes state, county, and/or privately owned waterways, ditches, drainage tiles, retention areas, and designated swales.

c) **Flood**. No SES structure may be placed in a Special Flood Hazard Area.

d) **Substation**. SES must be within two (2) miles of a regulated utility substation with a minimum thirty-three (33) kV grid connection and enough spare capacity to support the energy being generated.

e) **Non-Participating Property**. An SES project may not surround more than two (2) sides of a non-participating property.

f) **Aquifers**. No SES structure may be placed above the following unconsolidated aquifer systems:

i) Tipton Complex Aquifer System with less than forty (40) feet of surficial clay deposits.

ii) White River Outwash Aquifer System.

iii) Wabash River Aquifer System.

2) Setbacks & Separations

a) **Setbacks**

i) **Participating Property:**

(1) The minimum distance between an SES structure and any adjoining property lot line, road right-of-way, or railroad right-of-way is five hundred (500) feet.

(2) SES occupying multiple parcels may have internal property line setbacks waived by execution of a written document signed by all landowners sharing such a property line. All such documents must be recorded in the office of the Boone County Recorder within forty-five (45) days of the signing of each solar lease agreement, and must be cross-referenced to the current recorded deed. The Energy Developer cannot submit a memorandum of lease containing multiple lease contracts to the Recorder. Signed solar lease contracts not submitted to the Recorder's office within forty-five (45) days of signing are null and void in Boone County.

ii) **Non-Participating Property**. The minimum distance between an SES structure and any property lot line of a non-participating property is one thousand (1,000)

feet.

b) **Municipalities**. The minimum required separation from a corporate boundary is two (2) miles.

c) **Public Schools**. The minimum required separation from any public-school building to the SES project property line is ten thousand (10,000) feet. This separation requirement does not apply to the vacant properties owned by a public school corporation.

d) **Separation between SES projects.** No SES project may be placed within three (3) miles of another SES project, measured from the property lines of the projects.

3) Height:

a) Ground-mounted SES cannot exceed a height of ten (10) feet. The height is measured from the finished grade below the panel to the top of the panel at its highest tilt.

b) Building-mounted SES cannot exceed the height limits for buildings of an underlying zoning district.

4) Ingress/Egress and Perimeter Access

a) A minimum twenty-four (24)--foot-wide access easement containing a gravel or paved road at least twelve (12) feet wide must be provided from a public street or legally established access drive into the site. The design is approved by the Administrator after receiving written approval from the local Fire Department with primary jurisdiction. Approvals must meet all state and federal regulations.

b) A minimum twelve (12)-foot-wide access road must be provided around the perimeter of the SES between the solar arrays and the required fence to allow access for maintenance vehicles and emergency management vehicles, including fire apparatus and emergency vehicles. The local Fire Department and Highway Director must approve the design of the access road before the Administrator or the APC may approve the project.

5) Fence. If used, fencing must meet the following standards:

a) Minimum fence height: six (6) feet.

b) Permitted fence materials: coated chain link fence, welded wire fence (minimum eight (8)-gauge wire), metal, wood, masonry, cement, vinyl, and similar durable materials.

c) Prohibited fence materials: Razor wire, barbed wire, uncoated chain link fence, and woven wire fencing.

6) Foundations**.** A qualified engineer must certify that the foundation and design of the solar panel racking and support are within accepted professional standards, given local soil and climate conditions before application for building permits.

7) Screening and Buffering. A landscape buffer must be provided around the entire perimeter of the site to obscure the solar equipment from exterior view from rights-of-way and adjoining non-participating properties. The buffer must be of sufficient height to screen solar panels from view and achieve a minimum of eighty percent (80%) opacity year-round. The minimum required landscape buffer size and composition are:

a) Buffer width: fifty (50) feet

b) Minimum planting materials per one hundred (100) lineal feet of a buffer length measured along the property line:

i) Shade trees: five (5)

ii) Evergreen trees: five (5)

iii) Evergreen shrubs: twenty (20)

iv) Deciduous shrubs: fifteen (15)

v) Ornamental grasses: ornamental grasses, native to Indiana, that reach at least four (4) feet in height and two (2) feet in width at maturity, may be used to substitute up to twenty percent (20%) of the minimum required number of deciduous shrubs.

c) Berm/Fence:

i) A berm up to eight (8) feet in height is permitted. The berm may be undulating or straight. A fence is permitted to be used in the landscape buffer. The provision of a fence may not be construed as a substitute for the minimum required plantings.

ii) If a non-masonry fence with opaqueness of fifty percent (50%) or more is required or provided in landscape buffers, at least half of the required plantings shall be placed between the fence and the property line to soften the look of a fence and help blend the SES facility into the rural natural character of the county.

8) Color, Finish, and Glare

a) The Energy Developer has the burden of mitigating any glare produced to prevent significant adverse impact on adjacent uses. Solar energy panels, regardless of how they are mounted, must be oriented and/or screened year-round so glare is directed away from adjacent properties and streets. Mitigation is accomplished by siting, panel orientation, landscaping, and/or other means.

b) SES must be designed using such features as colors, materials, textures, screening, and landscaping to blend into their settings. The SES must remain painted or finished in the color or finish that was originally applied by the manufacturer. The exterior surface of any visible components is non-reflective, a neutral color like white, gray, or another non-obtrusive color. Finishes are matte or non-reflective.

9) Electrical Components

a) All electrical components of the SES must conform to applicable local, state, and national codes and relevant national and international standards.

b) All SES electrical collection cables between each SES must be located underground.

c) All transmission lines must be buried and have at least ten (10) feet of cover until they reach the property line or a regulated utility substation adjacent to the property line.

d) Inverters must be located toward the center of the site and encapsulated.

e) Underground wiring must be encased in conduit.

10) Signage. Signs must comply with the Sign Standards of the Boone County Zoning Ordinance unless otherwise provided in this section.

a) No portion of the SES may contain or be used to display advertising. The manufacturer's name and equipment information, or indication of ownership, is allowed on any equipment of the SES.

b) A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

c) Leased Parcel Notification Signs. A notification sign is required on each leased parcel within forty-five (45) days of signing a lease agreement or an option to lease agreement and six (6) months before submission of an application. A sign is required along each frontage where the leased parcel is visible from an adjacent street. The sign must be located outside the right-of-way and have a minimum sign area of thirty-two (32) square feet. A sign permit is required for each notification sign. The sign must name the property owner (if a trust, the name of the trustee), the owner's address, the Energy Developer's name, the Energy Developer's address, and the total project acreage.

11) Utility Interconnection. The SES, if interconnected to a utility system, must meet the requirements for interconnection and operate as outlined in the electrical utility's then-current service regulations applicable to SES.

12) Sewer and Water. This section is designed to prioritize the safety and protection of the water resources surrounding an SES. By implementing periodic well testing procedures, the County seeks to ensure the continued wellbeing of the community and environment. Any SES site must comply with the septic and well regulations of the Boone County Health Department and the State of Indiana Department of Health. Water from wells within the SES project boundary and all wells within one (1) mile of the SES site ("Regulated Wells") must be tested by an independent Drinking Water Laboratory certified by the State of Indiana as specified below. The results of each well test must be promptly reported to the Administrator and the Boone County Health Department. The Energy Developer is responsible for all expenses associated with these tests.

a) Water Quality Parameters. The testing must assess various water quality parameters, including: PH levels, turbidity, total dissolved solids (TDS), heavy metals, nitrates, coliform bacteria, zinc, aluminum, and RCRA 8 metals.

b) Timing. Water from the Regulated Wells must be tested as follows:

i) Pre-construction. Water must be tested once a month for a period of six (6) months before applying for Development Plan approval. The test results must be submitted as part of the Development Plan application. These tests create a baseline reading of pre-construction and pre-operational levels of pollutants.

ii) Post-construction. Water must be tested once after construction is complete and prior to issuance of a Certificate of Occupancy for the facility.

iii) Operational. During the operation of the SES, water must be tested once every six (6) months, and the results promptly submitted to the Administrator and the Boone County Health Department.

iv) Post-decommissioning. Water must be tested once within thirty (30) days of the completion of decommissioning work, and the results promptly submitted to the Administrator and the Boone County Health Department.

c) Contamination. In the event that a well test result indicates water quality issues exceeding the acceptable regulatory limits, the Energy Developer must promptly notify the Administrator and the Boone County Health Department and undertake necessary action to address the situation. The Energy Developer must provide an action plan to the Boone County Health Department to address the issue within ten (10) days of the lab results. This plan must specify the efforts that will be undertaken to remove the existing contamination and to prevent further contamination. The Energy Developer must provide commercial water tanks and potable water to

affected properties until an investigation is complete and the damage caused by SES construction, operation, or decommissioning is mitigated. The Energy Developer bears the responsibility and cost for implementing any remedial measures required to restore the water quality to acceptable standards.

13) Drainage and Erosion Control

a) A detailed drainage plan compliant with the requirements of the Boone County Stormwater Ordinance and the Boone County Stormwater Technical Standards Manual must be submitted and approved. In addition to the typical drainage plan requirements, the plan must include the verified location of all private tiles and legal drains.

b) If the project is required to comply with IDEM erosion control regulations, proper approvals must be submitted indicating that the plans have been approved.

c) If the project does not require IDEM approval, an erosion control plan showing how any disturbance will be controlled on site, as required under the Boone County Stormwater Ordinance and the Boone County Stormwater Technical Standards Manual, must be submitted. If an existing closed legal drain is located where an SES is proposed, the legal drain must be relocated and reconstructed so solar panels and other SES appurtenances do not block access to the legal drain.

d) All damages to waterways, drainage ditches, field tiles, or any other infrastructures caused by the construction or maintenance of the SES must be completely repaired to near original condition to not impede the natural flow of water. All repairs must be completed within a reasonable amount of time agreed upon by the Boone County Surveyor.

14) Maintenance of Soil Health. In an effort to prevent the contamination of the soil and underlying aquifers throughout the lifetime of the project and after decommissioning, the following standards apply before, during, and after construction of an SES.

a) Top soils must not be removed during development, except when necessary to remediate chemicals or hazardous substances from a prior use of the property.

b) Groundcover. Apart from the required footers used to secure solar panels and paved or gravel drives necessary to transport vehicles and equipment around the SES during regular maintenance work, all areas of soil that underly and surround clusters of solar arrays must be planted and maintained in vegetation to prevent erosion, manage stormwater runoff, and maintain overall soil health. The Energy Developer may use one or more methods of providing vegetative groundcover as outlined below:

i) To the maximum extent feasible for site conditions, perennial vegetation ground cover is based on a diverse seed mix of native species consistent with guidance specific to the local area provided by the Boone County Soil and Water Conservation District office or the Indiana Native Plant Society. Seeds should include a mix of grasses and wildflowers, ideally native to Indiana, resulting in a short-stature prairie surrounding the solar array clusters.

ii) If co-location of agricultural uses is proposed, then the Energy Developer must provide the plan for proposed activities and the extent of the co-located agricultural use on the property.

iii) SES that proposes to install, establish, and maintain pollinator-friendly vegetative cover must demonstrate the quality of their habitat by using guides such as

Purdue University 2020 Indiana Solar Site Pollinator Habitat Planning Scorecard, or other third-party solar-pollinator scorecards designed for Midwestern ecosystems, soils, and habitat.

iv) The Energy Developer must submit information on the chosen methods of plantings on site during the Development Plan review.

c) Pesticides

i) No pesticide use is permitted on the site. This provision does not apply to the pesticide use in on-site buildings, in and around electrical boxes, spot control of noxious weeds, or as otherwise necessary to protect public health and safety.

ii) Plant material must not have been treated with systemic pesticides, particularly neonicotinoids.

d) Panel Cleaning. During SES operations, all chemicals or solvents used to clean solar panels must minimize the use of volatile organic compounds, and the operator must use recyclable or biodegradable products to the greatest extent possible. The Operations and Maintenance Plan must include information on the types of cleaning solutions to be used during SES operation.

e) Soil Testing

i) Baseline Test. Baseline soil samples must be taken before the initial construction of the SES and used as a reference for future samples taken during its operation. A report detailing the results of the baseline sample must be provided to the Administrator, who will distribute it for review to the Technical Advisory Committee, before the approval of a Development Plan. Soil samples must be tested for the presence of any RCRA 8 Metals, zinc, and aluminum.

ii) Operational Test. Once the SES is operational, surface-level soil samples must be taken at regular intervals (no less than once every three (3) years), to test for the presence of any RCRA 8 Metals, zinc, and aluminum. The first operational test must be conducted within three (3) years of obtaining a Certificate of Occupancy. All subsequent tests must be conducted within three (3) years of the previous test. The final test is completed after decommissioning.

iii) To ensure sufficient testing and reflect the soil conditions of a particular site, samples are taken at a rate of one (1) sample for every ten (10) acres of land, evenly distributed throughout the SES. Where multiple soil types exist in close proximity, the Administrator may require additional tests in those locations.

iv) Soil sampling must be conducted in accordance with SW-846 ('Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium'), from the U.S. Environmental Protection Agency (EPA).

v) If contamination from any of the RCRA 8 Metals, zinc, or aluminum is identified in any test, and the amount exceeds the amounts found in the baseline test, the Energy Developer must notify the Administrator within ten (10) days of lab results via a certified mail letter. The Energy Developer must also provide an action plan to address the issue within thirty (30) days of the lab results. This plan must specify the efforts that will be undertaken to remove the existing contamination and to prevent further contamination from occurring in the future.

15) Wildlife and Environmental Impact Mitigation

a) SES development and operation must have minimal impact on wildlife.

b) SES design and operation must ensure that the connections between existing wildlife habitats remain unobstructed and open for wildlife movement through the project site.

c) Assessment Report. The Energy Developer must provide a third-party professional analysis that identifies and assesses potential impacts on wildlife and the natural environment both at the project site and within one (1) mile of the site and includes recommendations to incorporate into the project design. The scope of the study must include potential impacts on wooded areas, riparian buffers, wetlands, avian and wildlife (migratory bird patterns and bat population effects), other fragile ecosystems, historical/cultural sites, and antiquities.

d) Impact Mitigation Plan. The Energy Developer must prepare and submit a plan for how the negative impacts found at the assessment stage, if any, will be mitigated and how habitat corridors will be preserved and/or created. If mitigation recommendations include measures that require certain physical development features like special revegetation or creation of natural habitat corridors, the Energy Developer must provide a site plan and any supporting documents showing the location and design of those features. The level of detail in the analysis is determined during the pre-application meeting between the SES Developer and the Administrator, and is based on the level of potential impacts outlined in the Assessment Report.

16) Property Value Guarantee. A Property Value Guarantee must be offered by the Energy Developer to all residents and landowners within two (2) miles of a proposed SES project site. The APC will choose at least two (2) reputable appraisers to conduct a fair market evaluation of the property values and establish the baseline property values at the Energy Developer's expense. If a property owner is unable to sell their property, and the property's appraised value decreases in comparison to the baseline due to the constructed SES project, the Energy Developer must pay that landowner the difference or buy the property at the baseline fair market value determined before the construction of the solar project. Building permits cannot be issued until all property value guarantees have been filed with the Administrator. A surety bond in the amount of three percent (3%) of the assessed value of all properties must be provided and run for the life of the project. The surety bond may be used to pay for appraisals, cover value decreases of affected homes, buyouts, and other uses to achieve the intent of this guarantee.

17) Solar Easements. Solar easements may be provided as part of the SES development proposal. These easements must be in writing and are subject to the conveyance and instrument recording requirements prescribed in IC 32-23-2-5 or subsequent amendment. Any such easements must be appurtenant, run with the land benefited and burdened, and be defined and limited by conditions stated in the instrument of conveyance. If necessary, an Energy Developer must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreements with adjacent property owners. Copies of such easements must be submitted as part of the application process with proof of recording in the Boone County Recorder's Office.

e. **Construction Requirements**

1) Use of Roads. The SES Developer ensures that the construction traffic does not have

negative impacts on the existing traffic patterns and that the roads used to access the SES project site remain in good condition after the construction is complete. To ensure safe traffic patterns and road conditions during and after construction, the Energy Developer must provide certain information, plans, and enter into a Road Agreement with the County as outlined in this subsection.

a) Road Use Plan

i) An Energy Developer proposing to use any county roads to transport parts or equipment for construction, operation, or maintenance of the SES or substations must identify the roads to be used prior to commencing construction. The proposed route must be approved by the Highway Director. The Highway Director will conduct a pre-construction survey to determine the existing road conditions which will be used as a baseline to assess potential future damage.

ii) The location of all SES access roads must be approved by the Highway Director and may not be located closer than two thousand (2,000) feet from any residence as measured from the center of the access road to the corner of the residence.

iii) Newly constructed SES access roads cannot impede the flow of water.

b) Road Agreement

i) Any road damage caused by the construction of the SES project equipment, the SES installation, or its removal, must be repaired to the satisfaction of the Highway Director. The Highway Director may choose to require either remediation of road repair upon completion of the project or is authorized to collect fees for oversized load permits. Further, a surety bond in an amount to be fixed by a Professional Engineer may be required by the Highway Director to ensure that future repairs are completed to the satisfaction of the County. The Energy Developer pays for the surety.

ii) All repairs must be completed in the time agreed upon with the Highway Director.

iii) As repairs to SES are made throughout the project life, road repairs will be completed each time the company's equipment traverses Boone County roads if the Highway Director deems repairs to be necessary, at the Energy Developer's expense.

2) Dust Control. Reasonable dust control measures are required by the County during the construction of the SES.

3) Construction Work Time. Construction activities may happen only Monday through Friday between seven (7) am and seven (7) pm and cannot happen at any time on Saturdays and Sundays.

4) Soil. Topsoil must remain on the site. Soil compaction and stabilizers are prohibited.

f. **Operations and Maintenance**

1) Repair. The Energy Developer repairs, maintains, and replaces the SES and related solar equipment during the term of the permit in a manner consistent with industry standards as needed to keep the SES in good repair and operating condition.

2) Operations and Maintenance Plan. The Energy Developer must submit a plan for the operation and maintenance of the SES that includes measures for maintaining safe access

to the installation, stormwater controls, solar panels' cleaning procedures, control of noxious weeds and invasive species, and other typical procedures for operation and maintenance of the SES.

3) Physical Modifications. Any physical modification to any SES that materially alters the mechanical load, mechanical load path, or major electrical components requires recertification by all appropriate regulatory authorities. Like-kind replacements do not require recertification, unless required by a regulatory authority. Before making any material physical modification, other than a like-kind modification, the Energy Developer of the SES confers with the Administrator, County Surveyor, Highway Director, and any other appropriate regulatory authority as to whether the proposed physical modification requires re-certification of such SES.

4) Inspections. Inspections may be made or coordinated by the Administrator twice a year to certify the safety and maintenance of the SES and any accessory structures.

5) Coordination with Local Fire Department

   a) If requested, the Energy Developer must submit a digital copy of the as-built site plan to all emergency services providers serving the SES.

   b) Upon request by the local fire department, the Energy Developer must cooperate with the local fire department to develop the fire department's emergency response plan.

   c) Nothing in this section alleviates the need to comply with all other applicable fire laws and regulations.

6) Materials Handling, Storage, Recycling, and Disposal

   a) All solid waste related to the construction, operation, and maintenance of the SES must be removed from the site promptly and recycled according to all federal, state, and local laws.

   b) All hazardous materials or waste related to the construction, operation, and maintenance of the SES must be handled, stored, transported, and disposed of according to all applicable local, state, and federal laws.

7) Annual Maintenance Log Submission. An ongoing log of maintenance activities performed on all SES must be submitted to the Administrator on an annual basis.

8) Liability Insurance. The Energy Developer of the SES must maintain a current general liability policy covering bodily injury and property damage, naming Boone County as an additional insured, with limits of at least two million dollars ($2,000,000) per occurrence and five million dollars ($5,000,000) aggregate with a deductible of no more than five thousand dollars ($5,000).

9) Ownership Change. If ownership of the SES or property changes, the special exception approval remains in effect if the successor owner assumes in writing all of the approval obligations of the special exception, Development Plan, building permit, and decommissioning plan. The new owner must provide written notice of the ownership change to the Administrator within thirty (30) days of the change. The special exception and all other local approvals for the SES are void if a new owner fails to provide written notification to the Administrator in the required time frame. Reinstatement of a void special exception requires review and approval as a new application.

g. **Nuisance Prevention**

1) Noise. SES may not produce noise that exceeds forty-five decibels (45 dBA) measured at any point along the site's property line.

2) Illumination. Project site lighting and light trespass to any non-participating property line must comply with the Lighting Standards of this Ordinance.

3) Glare. SES may not create glare on any non-participating landowner's property.

4) Vibration. SES or associated features may not produce vibrations humanly perceptible beyond the property on which it is located or cause vibrations that could be detected in nearby structures or damage underground wells during construction or upon operation.

5) Signal Interference. Any solar arrays are constructed and operated so that they do not interfere with television, microwave, GPS for agricultural use, military defense radar, navigation, or radio reception to neighboring areas.

h. **Decommissioning Plan and Surety.** A decommissioning plan reviewed by the Boone County Technical Advisory Committee and approved by the Administrator is required. The Decommissioning Plan must include:

1) The physical removal of all solar energy systems, structures, and equipment from the site.

2) Recycling or disposal of all solid and hazardous waste in accordance with local, state, and federal recycling and waste disposal regulations.

3) Stabilization or revegetation of the site as necessary to minimize erosion. The Administrator may permit the owner to leave landscaping to minimize erosion and disruption to vegetation.

4) Written statement detailing the timeline for decommissioning, not exceeding six (6) months after the date of documented discontinued operations. The owner must notify the Administrator upon the discontinuation of the operations.

5) Written assurance that the SES will be properly decommissioned upon the expiration of its serviceable life or in the event of its discontinuation or abandonment.

6) Cost estimates for all SES include an estimate of the costs of decommissioning and removing the SES upon the expiration of its useful life or in the event of its discontinuance or abandonment. The cost estimates are made by a professional engineer, contractor, or other person with expertise or experience in decommissioning and removal of SES and must be updated every five (5) years for approval by the Administrator.

7) Surety. Financial assurance that the cost of removal and site restoration is the full responsibility of the Energy Developer. To provide the greatest possible financial assurance that there will be sufficient funds to remove the SES and to restore the site, the following steps must be followed:

a) For each SES, the Energy Developer must determine an amount of money equal to the estimated removal and restoration cost.

b) The County Commissioners, or their designated representative, may require independent verification of the adequacy of this amount. The estimated cost of decommissioning is determined by a third-party expert hired by the County at the expense of the Energy Developer.

c) This money must be secured in the form of a surety bond meeting the following standards:

i) *Favor*: Run to and be in favor of the County.

ii) *Amount*: Be at least one hundred fifty percent (150%) of the estimated cost of decommissioning.

iii) *Duration*: Run for the lifetime of the SES.

iv) *Transferable*: Be transferable to a new Energy Developer and/or County, where applicable.

v) *Right of Entry*: Permit the APC, County Commissioners, and County-authorized appointees the right to enter the SES property.

vi) *Recuperation*: Permit the APC, County Commissioners, or their designated representatives the right to recuperate funds from the County Commissioner-approved surety equal to the amount incurred by the County in the decommissioning of the commercial solar energy system.

vii) *Release*: The Energy Developer requests release of the surety in writing to the Administrator. The surety will be released by the County Commissioners upon receipt of approval from the Building Inspector, County Surveyor, Highway Director, Administrator, and any other department necessary, indicating that decommissioning is complete.

viii) *Provider:* The provider of the surety bond must be a company listed in the latest version of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reimbursing Companies."

d) If the Energy Developer defaults on the proper decommissioning, the County or its agent retains the right, after an appropriate court order, to enter the property and remove any abandoned, hazardous, or decommissioned solar energy system with funds from the surety on file.

i. **Discontinuation and Abandonment**

1) Discontinuation. Any SES that has reached the end of its useful life or has been abandoned must be removed by the Energy Developer. The Energy Developer must physically remove the installation within twelve (12) months of the date of documented discontinued operations. The Energy Developer must notify the Administrator upon the discontinuation of the operations. Decommissioning consists of:

a) Physical removal and recycling of all solar energy systems, structures, and equipment from the site. The Energy Developer will submit a detailed plan regarding the identification, removal, and recycling of all solar panels during the life of the project and at decommissioning. A certificate of recycle for each individual panel must be submitted to the Administrator within one month of the removal of the panels from the site.

b) Recycling and disposal of all solid and hazardous waste in accordance with local, state, and federal recycling and waste disposal regulations.

c) Stabilization or revegetation of the site as necessary to minimize erosion. The Administrator may permit the owner to leave landscaping to minimize erosion and disruption to vegetation.

2) Abandonment. A commercial SES is considered abandoned six (6) months after the date it last generated electricity, and there has been no preparation or action toward decommissioning the system.

3) Unsafe. Any SES or component found to be unsafe or not in compliance with the conditions of approval violates this Ordinance.

4) The Energy Developer of any SES that is abandoned or in violation of approvals must

remove the SES within six (6) months of receipt of notice from the Administrator of such abandonment or violation.

5) The Energy Developer must restore the site to its pre-development condition (excluding replanting of original vegetation and trees), subject to reasonable wear and tear, and stabilize soils through vegetative ground cover. All concrete and rebar must be removed from the soil.

6) Failure to remove an abandoned SES within the six (6)-month period is grounds for the Administrator and the County to pursue the violation as prescribed under *Chapter X. Administration and Enforcement* of this Ordinance.

7) Abandonment Verification. The Energy Developer must attest, under penalties for perjury, that all easements and/or leases for the SES contain terms that provide financial assurances to the property owners to ensure the SES are properly decommissioned within one (1) year of the expiration of its serviceable life or in the event of its discontinuance or abandonment. In the event of abandonment of a commercial SES, Boone County has the authority to use the surety and right of entry to perform the decommissioning of the SES. The Energy Developer is responsible for all attorney costs and associated fees in the enforcement of the terms of this ordinance.

j. **Nuisance**

1) Declaration of Public Nuisance. Any SES declared unsafe by the Administrator by being in breach of, or out of compliance with, its SES approvals may seek to be rehabilitated and declared safe by appropriate repairs and other essential steps necessary to eliminate the breach to comply with such SES approvals. An SES may be declared a public nuisance by the Administrator due to inadequate maintenance, dilapidation, obsolescence, fire hazard, damage, abandonment, or determined unsafe as provided by this Ordinance. The Energy Developer must submit a Rehabilitation Plan to the Administrator within sixty (60) days. This plan must provide procedures to rehabilitate the SES within twelve (12) months. In the event of force majeure (including unavailability of components or parts, strikes, and moratoriums), the time period is extended an additional six (6) months or a reasonable extension agreed to by the Administrator. In the absence of an approved Rehabilitation Plan, meeting the agreed-upon schedule, or failure to execute the required repairs, the SES will be demolished and removed in accordance with the Decommissioning Plan in a time determined reasonable by the Administrator.

2) Public Nuisance Waiver. In the instance that an unavoidable Act of God inhibits, damages, or destroys part of, or the majority of, the SES, the twelve (12) month public nuisance removal timeline may be waived if the Energy Developer provides a Rehabilitation Plan to remedy the damage and the plan is submitted to, and approved by, the Administrator. The plan must outline the protocol and schedule for returning the SES to energy production and be submitted to the Administrator within sixty (60) days of the date the damage was incurred, or a time determined reasonable by the Administrator.

3) Adverse Effects. The Energy Developer must minimize and mitigate adverse effects created by the development of an SES.

a) If the parties do not reach an agreement to remedy a known adverse effect within one hundred eighty (180) days from the date of the written complaint, or if they reach an agreement but the Energy Developer fails to fully implement the remedy within thirty (30) days of that agreement, the complainant may file a complaint with the Administrator—unless all parties agree in writing to a time extension. Upon

receiving the complaint, the Administrator will investigate and determine whether it has merit. If the complaint is meritorious, the Administrator will refer it to the BZA to determine what remedies to pursue, which may include fines and/or injunctive relief (temporary or permanent) that could result in an order prohibiting the offending SES from operating.

b) To make a valid complaint, specific evidence must be presented to the Administrator. This complaint cannot exceed the standards specified in the Design and Development, Operation and Maintenance, and Nuisance Prevention Standards of this ordinance. The Administrator will make this evidence part of the investigation of the complaint.

3. COMMERCIAL WIND ENERGY SYSTEMS (WES)

a. **Applicability.** This section applies to Commercial Wind Energy Systems (WES) proposed to be constructed after the effective date of this Ordinance. These systems are not regulated or permitted as essential services, public utilities, or private utilities.

b. **Use Permissions**

1) A Commercial WES is prohibited within unincorporated areas under the jurisdiction of the Boone County APC.

2) An Accessory WES is a permitted accessory use as prescribed and regulated under Section 4.Z.2 Accessory Wind Energy Systems of this Zoning Ordinance.

4. COMMERCIAL BATTERY ENERGY STORAGE SYSTEMS (BESS)

a. **Applicability.** This section applies to Commercial BESS proposed to be constructed after the effective date of this Ordinance. These systems are not regulated or permitted as essential services, public utilities, or private utilities.

b. **Use Permissions**.

1) Commercial BESS are only permitted as part of a regulated utility substation. As such, they are regulated by IC 22-14-8 and require approval by the Indiana Department of Homeland Security.

2) An Accessory BESS is a permitted accessory use as prescribed and regulated under Section 4.Z.3 Accessory Battery Energy Storage Systems of this Zoning Ordinance.

5. APPLICATION REQUIREMENTS

a. Before the construction of a commercial energy system regulated by this article, the Energy Developer must obtain approvals for:

- Change of Zoning (to apply the Energy Overlay District to the property),
- Special Exception (to review the appropriateness of the use of the site),
- Development Plan (to review the technical details of the site design),
- Building Permit (to review detailed construction plans), and
- Any other permits required from federal, state, and county departments.

b. **Pre-Application Notification**. Before meeting with landowners in Boone County to secure leases and holding private meetings with residents, the Energy Developer must notify every

household and landowner within five (5) miles of a planned project of their development intentions via certified letter. The Energy Developer must also contact the Administrator and inform the APC of their intent to develop an energy system in Boone County at least ninety (90) days before notice is sent to residents and landowners and before meeting with landowners to secure lease contracts in Boone County.

c. **Zone Map Change.** The Energy Developer may initiate a proposal to change the zoning map to establish the Energy Overlay District according to the requirements in *Chapter X. Administration and Enforcement* and this Section. If several property owners are participating in one project, these owners may be listed as co-applicants. In addition to the submittal requirements contained in the APC Application Packet for a Zone Map Change, the Energy Developer shall provide the following items:

   1) A general description of the project. For an SES, this includes the total generating capacity, the number of SES panels, the total nameplate showing generating capacity of each SES panel, the maximum height of the SES, the minimum spacing of the SES panels, and the specific location of the project.

   2) A description of substations, maintenance structures, storage yards, permanent meteorological towers and equipment, and other buildings that are a direct functional part of the project. These structures, within the proposed overlay district, are considered accessory uses.

   3) A topographic map with contours illustrating the project site and the area within a quarter mile of the site boundaries. Show contours at intervals no greater than five (5) feet for undisturbed areas of the site and no greater than two (2) feet for disturbed areas of the site.

   4) A map showing boundaries of incorporated communities within two point one (2.1) miles of the site property lines.

   5) A map showing the location of other commercial energy projects located within three point one (3.1) miles of the site property lines.

   6) The names, addresses, and phone numbers of the applicants/owners/operators, and all co-applicants.

   7) A description of the Energy Developer, applicant, owner, and operator, including their respective business structures.

   8) Disclosure of all public funding, grants, tax incentives, or other financial assistance from any government entity supporting the proposed project.

d. **Special Exception**. No commercial energy system may be constructed in Boone County unless a special exception approval is obtained for the facility per *Chapter X. Administration and Enforcement* and this Section. The special exception application cannot be filed until the Zone Map Change is approved by the County Commissioners. In addition to the submittal requirements contained in the BZA Application Packet for a Special Exception, the Energy Developer shall provide the following items:

   1) A project summary. For an SES, this includes every array's point location; SES name plate generating capacity; the make and model of the SES that will be installed; and the maximum height of the SES arrays.

   2) A topographic map with contours illustrating the project site and the area within a quarter mile of the site boundaries. Show contours at intervals no greater than five (5) feet for undisturbed areas of the site and no greater than two (2) feet for disturbed areas of the

site.

3) A site plan formatted for a 24" x 36" sheet at a scale of 1"=20' (unless otherwise approved by the Administrator) showing:
   a) The proposed location of the energy system, including planned locations of each solar array, BESS, access roads, substations, electrical cabling, and ancillary equipment.
   b) Primary structures within one (1) mile of any energy system.
   c) Property lines, including identification of adjoining properties.
   d) Setback lines.
   e) Public roads.
   f) Recognized historic or heritage sites as noted by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources.
   g) Delineated special flood hazard areas and any wetlands.
   h) Location of all existing underground utility lines within and near the project site.
4) Wildlife and Environmental Impact Assessment Report
5) The names, addresses, and phone numbers of the applicants/owners/operators, and all co-applicants.
6) A description of the Energy Developer, applicant, owner, and operator, including their respective business structures.
7) Disclosure of all public funding, grants, tax incentives, or other financial assistance from any government entity supporting the proposed project.

e. **Development Plan**. No commercial energy system, or addition to an existing commercial energy system, may be constructed in Boone County unless development plan approval of the facility is obtained under *Chapter VII. Review and Approval of Development Plans,* and this Section. The development plan application cannot be filed until the special exception is approved by the BZA, and proof of recording of any commitments shall be included, if applicable.
   1) Any new commercial energy system, physical modification to an existing and permitted commercial energy system that materially alters the size, type, and number of solar panels, number of BESS, and their individual and cumulative storage capacity, or other equipment by more than twenty percent (20%), or any change to required screening, requires a development plan approval under *Chapter VII. Review and Approval of Development Plans* and this Section. Like-kind replacements do not require approval.
   2) In addition to the submittal requirements contained in the APC Application Packet for a Development Plan, the Energy Developer shall provide the following items::
      a) Site plan showing the following:
         i) Identification of adjoining properties.
         ii) Setback lines.
         iii) Public roads.
         iv) County-regulated drains and private drain tiles.
         v) Open ditches.
         vi) All water bodies and streams.

vii) Location of all above-ground utility lines on the project site and within a quarter mile of the project boundary.

viii) Location of all existing underground utility lines associated with the project site.

ix) Recognized historic or heritage sites as noted by the Indiana Department of Natural Resources.

x) Delineated special flood hazard areas and any wetlands.

xi) Fencing and landscaping.

xii) For SES, the location of every solar panel, access roads, and turn-around locations, substations, electrical cabling from the SES to the substations, ancillary equipment, associated transmission lines, and any solar easements.

b) Copies of all secured leases of participating properties and other leases and agreements with non-participating properties that are related to the development and operation of the proposed project.

c) A copy of the letter that the applicant has approved grid access and that there is an offtaker for the power being generated.

d) A transportation plan showing how vehicles would access the site and describing the impacts of the proposed energy project on the local and regional road system during construction and operation.

e) A drainage and erosion control plan for construction and operation must be developed according to the standards of the Boone County Stormwater Ordinance and the Boone County Stormwater Technical Standards Manual.

f) Wildlife and Environmental Impact Mitigation Plan

g) Decommissioning Plan

h) Surety Estimates

i) Other relevant studies, reports, certifications, and approvals, as may be reasonably requested by Boone County to ensure compliance with this Zoning Ordinance.

f. **Building Permit.** No new commercial energy system, or the expansion or modifications to an existing system, may be installed or modified before obtaining a building permit. The building permit application cannot be filed until the development plan is approved by the APC.

1) In addition to the typically required application documents for a building permit, the Energy Developer provides the following information:

a) For SES:

i) Dimensional representation of the structural components of the array construction, including the base and footings, and all accessory structures.

ii) Schematic of electrical systems associated with the SES, including all existing and proposed electrical connections.

iii) Manufacturer's specifications and installation and operation instructions, and an un-redacted operations safety manual.

b) All easements (e.g. utility easements, access easements, solar easements, etc.) required for the project have been recorded and copies submitted to the Administrator.

c) A revegetation plan for restoring areas temporarily disturbed during construction.

d) **Fire Prevention and Emergency Response Plan**. The Energy Developer must provide a plan, including a project summary, electrical schematic, and site plan, to the appropriate local safety officials, including the Boone County Emergency Management, Sheriff Department, the corresponding Fire Department, and the Building Inspector. Upon request, the Energy Developer must cooperate with local safety officials in developing an emergency response plan. Any specialized training necessary will be provided at the Energy Developer's expense. Knox boxes and keys must be provided at locked entrances for emergency personnel access. All means of shutting down the solar photovoltaic installation must be clearly marked. The Energy Developer must identify a person responsible for public inquiries throughout the life of the installation. The plan also includes:

   i) Description of the potential fire and emergency scenarios that may require a response from fire, emergency medical services, police, or other emergency responders.

   ii) Designation of the specific agencies that would respond to potential fire or other emergencies.

   iii) Description of all emergency response training and equipment needed to respond to a fire or other emergency, including an assessment of the training.

e) **Operation and Maintenance Plan**. The Energy Developer must submit a plan for the operation and maintenance of the energy system, including: measures for maintaining safe access to the installation; operational soil testing procedures; general procedures for operation and maintenance of the facility; and maintenance of vegetation in the project area.

f) Proof of a surety guarantee in the amount approved during the Development Plan review and approval process.

6. DEFINITIONS

Administrator: The Executive Director of the Boone County Area Plan Commission or the Director's designee. In the event the Executive Director position is vacant, the President of the APC serves as the Administrator.

Battery Energy Storage System (BESS): A facility or equipment that stores electrical energy in electrochemical batteries for later use, including all associated equipment such as inverters, transformers, control systems, electrical cabling, and safety systems. BESS are classified as either Accessory BESS or Commercial BESS based on their primary function, capacity, and interconnection method.

Battery Energy Storage System, Accessory: A BESS that is subordinate and customarily incidental to a principal use on the same lot, designed primarily to store electrical energy generated on-site or from the electrical grid for use by the host property. Accessory BESS are connected behind the customer's utility meter and typically serve functions including backup power, load management, peak demand reduction, or storage of on-site renewable energy generation. Such systems may occasionally export stored energy to the electrical grid, but grid interaction is secondary to serving the on-site electrical load.

Battery Energy Storage System, Commercial: A BESS designed and operated for the primary purpose of storing electrical energy for delivery to the electrical grid. Commercial BESS are connected in front of the customer meter, operate as independent energy facilities, and generate

revenue primarily through wholesale energy markets, capacity payments, ancillary grid services, or similar utility functions. Such systems typically have nameplate capacity exceeding one (1) megawatt, but any BESS operated primarily for grid services rather than on-site consumption is classified as commercial regardless of capacity.

Concentrated Solar Thermal Power (CST): Solar energy systems that use lenses or mirrors to focus a large area of sunlight into a small area. The concentrated energy is absorbed by a transfer fluid or gas and used as a heat source for either a conventional power plant or a power conversion unit. The most developed types are the solar trough, parabolic dish, and solar power tower.

Energy Developer: Any person or entity that proposes, develops, constructs, owns, operates, maintains, or otherwise controls an SES, WES, or BESS, including the permit applicant, landowner, facility owner, facility operator, contractor, and their respective successors and assigns. For purposes of compliance with this Ordinance, all such parties are jointly and severally responsible for meeting the requirements applicable to Energy Developers.

Highway Director: The Director of the Boone County Highway Department.

Non-Participating Property: A parcel located within one thousand three hundred twenty (1,320) feet in any direction of a proposed energy facility, including properties separated by other parcels, private or public streets, waterbodies, drainage channels, railroad corridors, utility corridors, and other similar intervening features, where the parcel owner does not consent to having an energy facility on the parcel, nor enter into a lease or other agreement with the energy facility owner to use the parcel.

Participating Property: A parcel owned, leased, or otherwise controlled to be part of a proposed energy facility with the consent of the parcel owner.

Prime Farmland: Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management and acceptable farming methods, are applied.

RCRA 8 Metals: Any of the eight (8) metals identified by the Resource Conservation and Recovery Act (RCRA), including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

Solar Easement: An easement recorded pursuant to IC 32-23-4, obtained for the purpose of ensuring exposure of a solar energy device or a passive solar energy system to the direct rays of the sun.

Solar Energy System (SES): The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing, buffer yard, and landscaping. The term includes solar photovoltaic (PV) systems, solar thermal systems, and solar hot water systems. SES are classified as either Accessory SES or Commercial SES based on their primary function, capacity, and interconnection method.

Solar Energy System, Accessory: An SES that is subordinate and customarily incidental to a principal use, which is designed primarily to generate electrical or thermal energy for consumption by the host property. Accessory SES are connected behind the customer's utility meter and typically serve the on-site electrical or heating load. Such systems may export excess energy to the electrical grid through net metering or similar arrangements, but grid interaction is

secondary to serving the on-site energy demand. Accessory SES includes rooftop installations, ground-mounted arrays, building-integrated photovoltaics, solar canopies, and solar thermal systems serving individual properties.

Solar Energy System, Commercial: An SES designed and operated as a principal use for the primary purpose of generating electrical energy for delivery to the electrical grid. Commercial SES are connected in front of the customer meter, operate as independent power generation facilities, and sell electricity primarily through wholesale energy markets, power purchase agreements, or similar utility functions. Such systems typically have nameplate capacity exceeding one () megawatt alternating current (AC), but any SES operated primarily for grid sales rather than on-site consumption is classified as a Commercial SES regardless of capacity.

Solar Thermal System: A solar energy system that directly heats water or other liquid using a series of tubes that concentrate sunlight to heat the liquid for purposes such as space heating and cooling, domestic hot water, and heating pool water. Also known as solar hot water or solar heating systems.

Wind Energy System (WES): A conversion system designed to generate electricity from wind, consisting of a wind turbine, wind turbine tower or other mounting device, foundation, and other structural components. WES are classified as either Accessory WES or Commercial WES based on their primary function, capacity, and interconnection method.

Wind Energy System, Accessory: A WES with a nameplate capacity of up to one hundred kilowatt (100 kW) per turbine that is primarily used to produce energy for on-site consumption, with the maximum energy output of one (1) megawatt within the project site.

Wind Energy System, Commercial: A WES with a nameplate capacity of over one (1) megawatt that produces electricity with the primary purpose of wholesale or retail sales of generated electricity.

ACCESSORY ENERGY SYSTEMS

Add the following text to Chapter 4

Z. ACCESSORY ENERGY SYSTEMS. Accessory-scale energy systems are permitted in all zoning districts provided the requirements below have been met. For definitions of specific words used in this section, refer to Chapter V(D)(6) Energy Overlay District, Definitions.

1. ACCESSORY SOLAR ENERGY SYSTEMS (SES)

a. **Applicability**. These standards apply to Accessory SES.

b. **Use Permissions**. Accessory SES is a permitted accessory use in all zoning districts, subject to the requirements of this section. SES using a reflector to enhance solar production is prohibited.

c. An accessory SES does not count toward the maximum number or maximum square footage of accessory structures permitted.

d. **Application Requirements.** An accessory SES cannot be installed before obtaining a building permit. A site plan is required to be submitted with the permit application.

e. **Design and Development Requirements**

1) Roof-mounted SES and Wall-mounted SES

a) The collector surface and mounting devices for roof-mounted SES cannot extend beyond the exterior perimeter of the building where the system is mounted or built. Exterior piping for solar hot water systems is allowed to extend beyond the perimeter of the building in a side yard. Solar collectors mounted on the sides of buildings and serving as awnings are considered building-integrated systems and are regulated as awnings.

b) Solar carports in non-residential districts cannot exceed twenty (20) feet in height.

2) Ground-mounted SES

a) Minimum setbacks are:

i) Front setback:

- AG (General Agriculture): twenty (20) feet from the right-of-way or seventy (70) feet from the centerline of the road, whichever is greater.
- All other zoning districts: same as for a primary structure in the underlying district.

ii) Side and rear setbacks:

- AG (General Agriculture) zoning district: forty (40) feet
- All other zoning districts: twenty-five (25) feet

b) The maximum height of the SES cannot exceed ten (10) feet measured from the finished grade below the panel to the top of the panel at its highest tilt.

c) Accessory SES cannot be placed within any easement, right-of-way, or stormwater conveyance system except by written permission granted by the Boone County Drainage Board and the easement holder.

d) Accessory SES cannot be placed within a Special Flood Hazard Area.

3) Aesthetics. Accessory SES in Residential Districts must minimize visual impacts from the public rights-of-way without adversely affecting the cost or efficacy of the system,

consistent with IC 36-7-2-8.

a) Building-Integrated Photovoltaic Systems. Building-integrated photovoltaic SES are allowed even if the system is visible from the public right-of-way, if the building component where the system is integrated meets all required setbacks, land use, or performance standards for the district where the building is located.

b) Aesthetic Restrictions. Roof-mounted or ground-mounted SES cannot be restricted for aesthetic reasons if:

i) The system is not visible from the closest edge of any public right-of-way other than an alley.

ii) Roof-mounted systems on pitched roofs visible from the right-of-way have the same pitch as the roof and are no more than ten (10) inches above the roof.

iii) Roof-mounted systems on flat roofs visible from the right-of-way are not more than five (5) feet above the finished roof. Such systems are exempt from any rooftop equipment or mechanical system screening requirements.

4) Utility Interconnections. For grid-tied accessory SES, the interconnection application must be submitted to the utility prior to applying for required permits. Off-grid systems are exempt from this interconnection application requirement.

5) Signage. Signs must comply with the Sign Standards of the Zoning Ordinance, except as otherwise permitted in this section. Safety and warning signage that comes with the SES system is permitted on SES. No portion of the SES may contain or be used to display advertising. The manufacturer's name and equipment information, or indication of ownership, is allowed on SES equipment.

6) Electric SES components must have an Underwriters Laboratory (UL), or equivalent listing, and solar hot water systems must have a Solar Rating and Certification Corporation (SRCC) or equivalent rating.

7) Other Codes. Accessory SES require approval of local building code officials, consistent with the State of Indiana Building Code. Solar thermal systems must comply with HVAC-related requirements of the Energy Code and applicable Indiana State Plumbing Code requirements. Photovoltaic systems must comply with the Indiana State Electric Code.

2. ACCESSORY WIND ENERGY SYSTEMS (WES)

a. **Applicability.** These standards apply to Accessory WES.

b. **Use Permissions.** Accessory WES is a permitted accessory use in all zoning districts, subject to the requirements of this section. Roof-mounted wind turbines are prohibited.

c. Accessory WES does not count toward the maximum number of accessory structures permitted.

d. **Application Requirements.** An Accessory WES cannot be installed before obtaining a building permit. In addition to the submittal requirements contained in the Building Permit Application Packet for Accessory Structures, the applicant shall provide the following items: .

1) The following information must be submitted as part of the permit application: the number and type of turbines, generating capacity, tower design and height, blade arc diameter, total height, means of connection with the electrical grid, potential equipment manufacturers, and all related accessory structures.

2) The manufacturer's engineer or another qualified professional engineer must certify that the turbine, foundation, and tower design are within accepted professional standards, given local soil and climate conditions.

e. **Design and Development Requirements:**

1) An accessory WES must be:
   a) Installed on a certified tubular free-standing tower, a lattice tower, or a monopole tower. Towers may be guyed or self-supporting.
   b) Filtered, shielded, or otherwise designed and constructed not to cause electro-magnetic interference.
   c) Grounded to protect against lightning strikes.
   d) Designed with automatic overspeed control to render the system inoperable when winds are blowing at higher speeds than the machine's capability.
   e) Equipped with a redundant braking system, including both aerodynamic overspeed controls and mechanical brakes. Mechanical brakes must be operated in a fail-safe mode. Stall regulation is not a sufficient braking system for overspeed protection.

2) Minimum setbacks are one hundred twenty-five percent (125%) of the maximum height of a primary structure in the underlying zoning district.

3) The maximum permitted height for a self-supporting wind turbine, including blades and supporting structure, is the same as the maximum height of a primary structure in the underlying zoning district.

4) Accessory WES cannot be placed within any easement, right-of-way, or stormwater conveyance system except by written permission granted by the Boone County Drainage Board and the easement holder. Accessory WES cannot be placed within a Special Flood Hazard Area.

5) The minimum distance between the ground and any protruding blades utilized on a WES is fifteen (15) feet, measured from the lowest point of the arc of the blades to the finished grade.

6) Shadow flicker into any occupied building on a non-participating landowner's property is prohibited.

7) Electric components must have an Underwriters Laboratory (UL) or equivalent listing.

8) Accessory WES must be white, light gray, or another non-obtrusive color. Blades may be black to facilitate deicing. Finishes must be matte or non-reflective and meet Federal Aviation Administration color requirements.

9) For grid-tied accessory WES, the interconnection application must be submitted to the utility prior to applying for required permits. The WES must be designed to meet the utility's requirements for interconnection and operation. Automatic and manual controls that render the system inoperable in case of loss of utility power are required. Off-grid systems are exempt from this interconnection application requirement.

10) Signs must comply with the Sign Standards of the Zoning Ordinance, except as otherwise permitted in this section. Safety and warning signage that comes with the WES system is permitted on WES. No portion of the WES may contain or be used to display advertising. The manufacturer's name and equipment information, or indication of ownership, is allowed on any equipment of the WES.

3. ACCESSORY BATTERY ENERGY STORAGE SYSTEMS (BESS)

a. **Applicability**

1) These standards apply to Accessory BESS.

2) Modifications, retrofits, or replacements of an existing BESS that increase the total designed discharge duration or power rating are subject to this Ordinance.

b. **Use Permissions.** Accessory BESS is a permitted accessory use in all zoning districts, subject to the requirements of this section.

c. Accessory BESS does not count toward the maximum number of accessory structures permitted.

d. **Application Requirements.** Accessory BESS cannot be installed before obtaining a building permit. A site plan is required with the permit application for a BESS installed outside a principal building.

1) Building / Electric Permit. A building permit and/or an electrical permit is required for the installation of any BESS, including modifications that increase the total storage capacity of the BESS.

2) Routine maintenance and repairs that do not increase storage capacity do not require a permit.

e. **Design and Development Requirements**

1) If located outside, the maximum height of a BESS is seven (7) feet.

2) Minimum setbacks are:

a) Front setback:

i) AG (General Agriculture): twenty (20) feet from the right-of-way or seventy (70) feet from the centerline of the road, whichever is greater.

ii) All other zoning districts: same as for a primary structure in the underlying district.

b) Side and rear setbacks:

i) AG (General Agriculture) zoning district: forty (40) feet

ii) All other zoning districts: twenty-five (25) feet

3) Accessory BESS cannot be placed within any easement, right-of-way, or stormwater conveyance system except by written permission granted by the Boone County Drainage Board and the easement holder. Accessory BESS cannot be placed within a Special Flood Hazard Area.

4) When located outside, a BESS, including all mechanical equipment, must be screened by an opaque fence or wall around the entire perimeter and have a self-locking gate to prevent unauthorized access. The fence/wall must be at least seven (7) feet tall.

5) **Vegetation Clearing**. Areas within ten (10) feet of BESS must be cleared of combustible vegetation. BESS must be placed at least ten (10) feet away from the tree trunks to minimize tree removal.

6) **Noise.** The one (1)-hour average noise generated from an Accessory BESS cannot exceed forty-five decibels (45 dBA) measured at the property lines.

EXHIBIT A. BOONE COUNTY, IN, UNCONSOLIDATED AQUIFER MAP

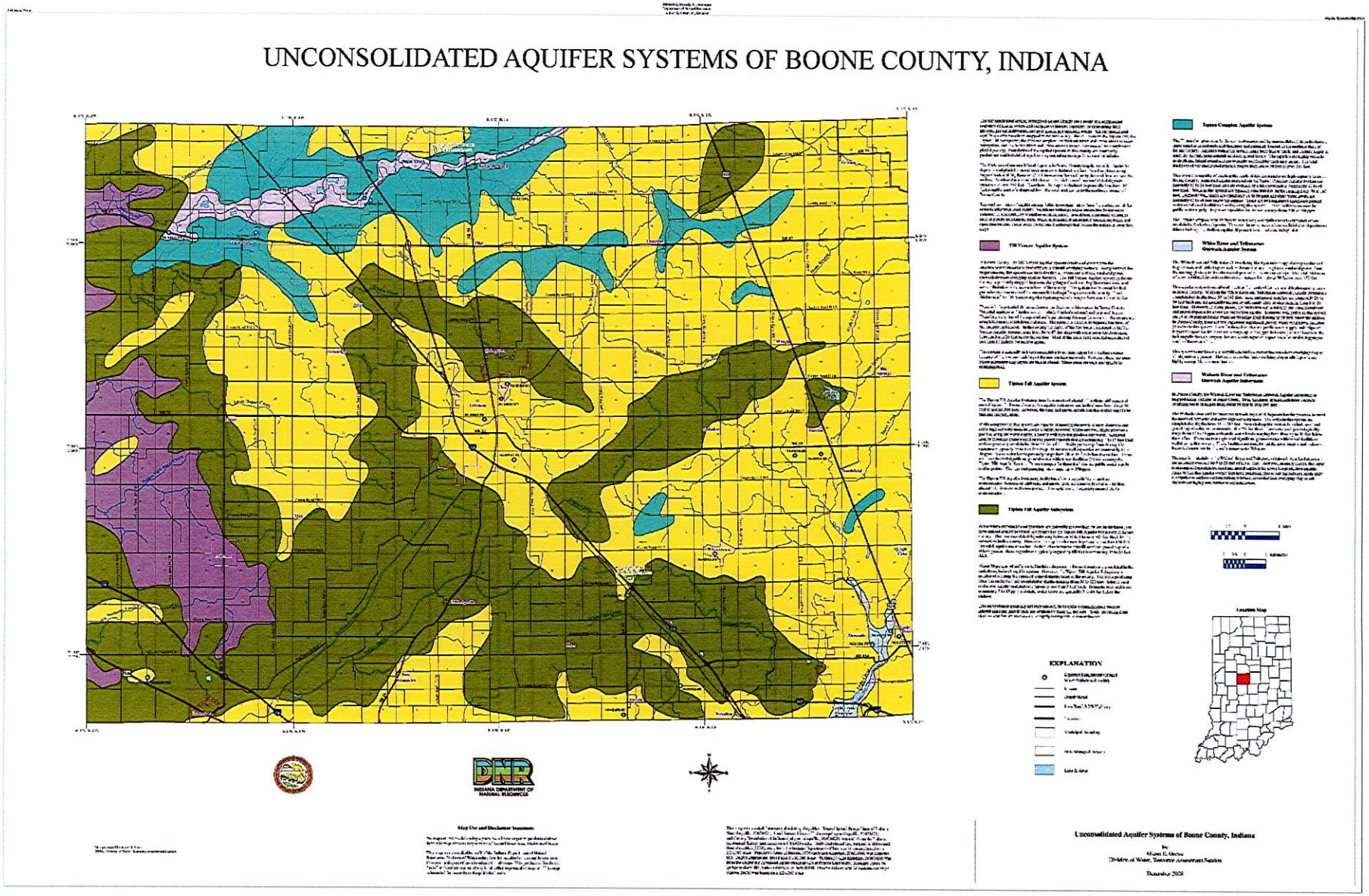
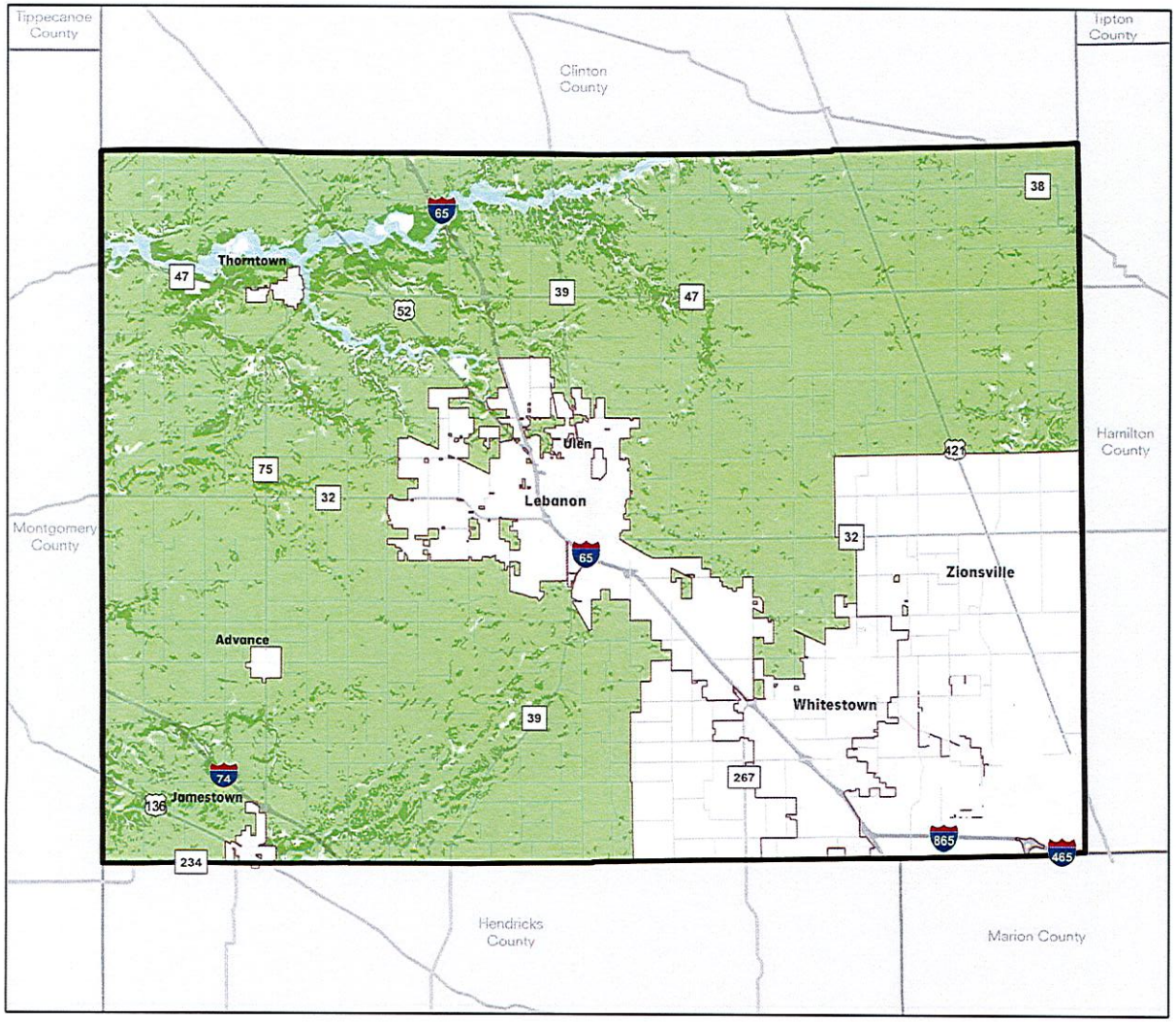


EXHIBIT B. BOONE COUNTY, IN, PRIME FARMLAND MAP



LEGEND

- Incorporated Towns and Cities

Soils Farmland Classifications in Unincorporated Areas

- 13% — All areas are prime farmland
- 83% — Prime farmland if drained
- 0% — Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- 1% — Prime farmland if protected from flooding or not frequently flooded during the growing season
- 3% — Not prime farmland

BOONE COUNTY COMPREHENSIVE, THOROUGHFARE, AND LOCAL ROAD SAFETY PLAN

SOILS - FARMLAND CLASSIFICATIONS IN UNINCOROPRATED AREAS

SCALE: 1" =18,705'

NORTH

BOONE COUNTY, IN

MAP DRAFT: 11/19/2025

HWC ENGINEERING

DRAFT C
05 Dec 2025