

LUZERNE COUNTY, PENNSYLVANIA

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE OF THE LUZERNE COUNTY COUNCIL, PENNSYLVANIA, TO AMEND THE LUZERNE COUNTY ZONING ORDINANCE TO DEFINE AND ADD SPECIFIC REQUIREMENTS FOR DATA CENTERS AND DATA CENTER ACCESSORY USES WITHIN MUNICIPALITIES UNDER LUZERNE COUNTY'S ZONING ORDINANCE JURISDICTION.**

**WHEREAS**, Article VI of the Pennsylvania Municipalities Planning Code, 53 P.S. § 10601, *et seq.*, authorizes LUZERNE COUNTY to enact, amend and repeal Zoning Ordinances within the COUNTY and

**WHEREAS**, the LUZERNE COUNTY COUNCIL deems it to be in the best interest and general welfare of the residents of LUZERNE COUNTY to update and amend provisions of the LUZERNE COUNTY Zoning Ordinance to provide for Data Centers and Data Center Accessory Uses; and

**WHEREAS**, the LUZERNE COUNTY COUNCIL of LUZERNE COUNTY desires to add provisions to the Zoning Ordinance relating to Data Centers and Data Center Accessory Uses;

**NOW, THEREFORE, BE IT ORDAINED AND ENACTED**, by the LUZERNE COUNTY COUNCIL of LUZERNE COUNTY as follows:

**Section 1.** Section 203 of the Luzerne County Zoning Ordinance, entitled Definitions, is amended to add the following definitions:

**Data Center:** A building or buildings which are occupied primarily by computers and/or telecommunications and related equipment where digital information is processed, transferred and/or stored, primarily to and from offsite locations. This use does not include computers or telecommunications related equipment that is secondary and customarily incidental to an otherwise permitted use on the property, such as servers associated with an office building. This use shall also include cryptocurrency mining, blockchain transaction processing, and server farms. A Data Center may include Data Center Accessory Uses.

**Modular Data Center:** A mobile pre-engineered and/or prefabricated building, complete with power and cooling infrastructure, used to house computer servers and network equipment.

**Data Center Accessory Use:** Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; sources of electrical power such as generators used to provide temporary power when the main source of power is interrupted; electrical substations; utility lines; domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same tract or assemblage of adjacent

parcels developed as a unified development with a Data Center. The use shall not include energy generation systems used or intended to be used to supply power to the Data Center during normal operations.

**Data Centers can fall under the four categories below:**

- **Hyperscale Data Center:** Consists of a singular structure or a campus comprising of a minimum of 500,000 ft<sup>2</sup>.
- **Major Data Center:** Consists of a singular structure or campus comprising a minimum of 100,000 ft<sup>2</sup> to a maximum of 499,000 ft<sup>2</sup>.
- **Edge Data Center:** Consists of a singular structure up to 99,000 ft<sup>2</sup> (may include modular data centers)
- 

**Community Incentive Package:** Programs or contributions to public safety, health, education, community amenities, or infrastructure enhancements designed to offset project impacts and promote County welfare. Must be proportional to project scope and impact, and enforceable via Developer's Agreement.

**Sensitive Receptors:**

- Includes residential uses, schools, preschools, daycare centers, in-home daycares, long term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails), recreational facilities, agricultural lands, conservation lands, campgrounds, prisons, and dormitories

**Section 2.** Article 5 (Standards for Specific Uses) is amended to add Section 552, Data Centers and Data Center Accessory Uses:

**Data Centers and Data Center Accessory Uses**

- A. Hyperscale Data Centers/Major Data Centers shall be permitted by SPECIAL EXCEPTION in the HEAVY INDUSTRIAL (HI), LIGHT INDUSTRIAL (LI) and MINING (MI) Zoning Districts when approved in compliance with the procedures, standards, and criteria contained in this section.
- B. Edge Data Centers (including Edge data centers, Microdata centers, and Modular data centers) shall be permitted by SPECIAL EXCEPTION in the GENERAL BUSINESS (GB), HIGHWAY BUSINESS (HB), HEAVY INDUSTRIAL (HI), LIGHT INDUSTRIAL (LI) and MINING (MI) Zoning Districts when approved in compliance with the procedures, standards, and criteria contained in this section.
- C. For purposes of this section, sensitive receptors shall be defined as residential uses, schools, preschools, daycare centers, in-home daycares, long term care facilities, retirement and

nursing homes, community centers, places of worship, parks (excluding trails), recreational facilities, agricultural lands, conservation lands, campgrounds, prisons, and dormitories.

D. **Dimensional/Architectural Standards.** The dimensional standards of Data Centers and Data Center Accessory Uses shall be in accordance with [SECTION 308 (EXISTING STANDARDS APPLICABLE TO RELEVANT ZONING DISTRICT)], with the following exceptions:

1. The maximum building height for a Data Center shall be [60] feet, inclusive of roof-mounted equipment such as cooling and ventilation systems, HVAC units and cooling towers.
2. The maximum height of Data Center Accessory Uses shall be no greater than the height of the principal building.
3. Data Centers and Data Center Accessory Uses shall be set back [500] feet from the boundary of [RESIDENTIAL ZONING DISTRICT(S) INCLUDING AGRICULTURAL AND CONSERVATION ZONES WITH A RESIDENCE] or the lot line of any property developed with a sensitive receptor.
4. **Landscape Buffer.** A landscape buffer is required between Data Centers and Data Center Accessory uses and any adjoining [residential zoning districts including agricultural and conservation zones with a residence], sensitive receptor, or public roadway. The landscape buffer shall comply with the following requirements:
  1. The landscape buffer shall be at least [50] feet in width and may be part of the minimum setback distance.
  2. Buffer plantings shall consist of native species planted as follows:
    - a. One (1) large evergreen tree per 25 linear feet of buffer. The size of large evergreen trees shall be a minimum of eight (8) feet in height at the time of planting.
    - b. One (1) deciduous canopy (shade) tree per 75 linear feet of buffer. Size of canopy (shade) trees shall be a minimum of 2½ inch caliper at the time of planting.
    - c. One ornamental/flowering tree per 50 linear feet of buffer. The size of ornamental/flowering trees shall be a minimum of eight (8) feet in height for multi-stemmed varieties, or 2½ inch caliper at the time of planting for single-stemmed varieties.
    - d. Five (5) shrubs per 25 linear feet of buffer. Size of shrubs shall be fully branched and minimum of three feet in height at the time of planting. Shrubs shall be a combination of evergreen and deciduous species, with a minimum of 50% being evergreen.
  3. In the event that existing vegetation is adequate to meet the intent of the required buffer yard to screen the Data Center and Data Center Accessory Uses from adjoining [residential zoning districts], sensitive receptors, and public roadways, the [decision-making body], upon recommendation by the Township Engineer and Planning Commission, may determine that existing topography and/or vegetation constitutes all or part of the required buffer yard.
4. Landscape Bond

- a. The developer or landowner shall provide deposit with the County a sum of money equal to the amount necessary to cover the cost of purchasing, planting, maintaining, and replacing all vegetative materials for a period of (18) months.
  - b. Any tree or shrub planted as a part of the landscape buffer requirements within (18) months of planting or replanting is deemed, in the opinion of the County, not to have survived or to have grown in a manner uncharacteristic of its type shall be replaced. Substitutions for certain species of plants may be made only when approved by the County
5. In the case where berms are not feasible due to utilities, topography, or other valid constraints, the following alternative screening methods may be approved:
  - a. Decorative walls with integrated landscaping (minimum of six (6) feet in height).
  - b. Dense evergreen hedge planting (minimum of eight (8) feet in height at maturity).
  - c. Combination of existing vegetation preservation and supplemental planting.

**E. Screening and Fencing**

1. To provide visual screening and reduce noise levels, ground-mounted and roof-mounted equipment used for cooling, ventilating, or otherwise operating the facility, including power generation or other power supply equipment, that is located within [300] feet of a public roadway, [RESIDENTIAL ZONING DISTRICT(S) INCLUDING AGRICULTURAL AND CONSERVATION ZONES WITH A RESIDENCE], or the lot line of any sensitive receptor must be fully enclosed, except where not mechanically feasible based on the manufacturer's specifications. If it is not mechanically feasible to fully enclose the equipment, it must be fully screened from view using one or more of the following means:
  - a. The landscape buffer required by subsection (D) above.
  - b. By existing vegetation that will remain on the property.
  - c. By the principal Data Center building or an accessory building
  - d. A berm averaging a minimum of five (5) feet in height above the adjacent average ground level with a maximum side slope of 3:1, provided that the berm shall be covered by a well-maintained all season natural ground cover and any required screening plantings shall be arranged on the outside and top of the berm.
  - e. A visually solid fence, screen wall or panel, parapet wall, or other visually solid screen that shall be constructed of materials compatible with those used in the exterior construction of the principal building.
2. Fencing of the property is permitted, provided that fencing along public and private roadways is not chain-link, with or without slatted inserts, and does not include barbed wire or other similarly visibly intrusive deterrence device. An applicant shall not be required to comply with this requirement if fencing is fully screened from view by one

or more of the means identified in subparagraph 1 above. Fences shall be six (6) in height at a minimum (may not exceed ten (10) feet in height).

**F. Noise and Vibration** [Additionally, see section 808 (Environmental Impact Statement) and 808.10 (Noise)]

1. The applicant shall demonstrate through a sound study conducted by a professional acoustical expert that the sound generated by a Data Center and/or Data Center Accessory Uses during normal operations shall be limited to a maximum daytime (7:00 a.m. to 8:00 p.m. Monday-Friday) decibel level of 67 dB(A) and a maximum nighttime and weekend (8:00 p.m. to 7:00 a.m. Monday-Friday and all day Saturday and Sunday) decibel level of 57 dB(A) as measured from the property line of the use. Such sound study shall be conducted using Sound Level Meters described in ANSI S1.4-2104 and generally accepted methodology. A sound study shall be conducted at the following phases:
  - a. A preliminary study shall be conducted as part of the [conditional use/special exception/land development] process. The preliminary sound study shall include recommended sound reducing materials or systems as needed to meet the aforesaid sound limits.
  - b. An interim sound study shall be conducted during the building permit approval process based upon the proposed user or users of the Data Center and Data Center Accessory Uses depicted on the building plans. Any sound reducing materials or systems recommended by interim sound study shall be incorporated into the construction plans for the use.
  - c. An as-built sound study shall be conducted six months after issuance of the certificate of occupancy and prior to the final escrow release for any land development phase. An as-built sound study may also be required thereafter by the [municipality]. If it is determined by the as-built sound study that there is a violation of the aforesaid noise limits, it shall be considered a violation of this Ordinance.
2. Maximum decibel levels specified herein shall not apply during times of power outage, however the sound studies shall also evaluate and report anticipated decibel levels when all emergency power generation equipment is running, including backup generators.
3. The applicant shall provide a vibration study prepared by a qualified professional that demonstrates that no vibration from the Data Center, Data Center Accessory Uses, or associated equipment will be perceptible to the human sense of feeling beyond the property line.

**G. Water and Sewer**

1. The use may utilize a closed-loop cooling system.
  - a. The use shall deploy technologies for water conservation including, but not limited to, installing closed-loop or recirculation systems to reduce demands on the water supply.
2. If the use is served by a public water supply, the applicant shall submit documentation from the public authority certifying that the public authority will supply the water needed.

3. If the use is to rely upon non-public sources of water, the applicant shall provide a water feasibility study. The purpose of the study is to determine if there is an adequate supply of water for the proposed use and to estimate the impact of the use on all existing wells, groundwater, and surface waters in the vicinity. No Data Center shall be approved unless the water feasibility study demonstrates that the anticipated water supply yield is adequate for the project and that the proposed water withdrawals and discharges will not endanger or adversely affect the quantity or quality of groundwater supplies or surface waters in the vicinity. The water feasibility study shall include the following information at a minimum:
  - a. The projected water demands of the Data Center;
  - b. The source of water to be used;
  - c. A description of how water will be used, including the amount or proportion of water to be used for each purpose (e.g. cooling, humidity control, fire suppression, and domestic usage);
  - d. The long-term safe yield of the water source;
  - e. A description of the amount or portion of water withdrawn that will be recycled or discharged and by what means;
  - f. A geologic map of the area with a radius of at least one mile from the site;
  - g. The location of all existing and proposed wells within 1,000 feet of the property boundary, with a notation of the capacity of all high-yield wells, including residential and commercial wells not registered with the State of Pennsylvania;
  - h. The location of all surface waters, including perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, within 1,000 feet of the property boundary;
  - i. A determination of the effects of the proposed water supply system on the quantity and quality of water in nearby wells, surface waters, and the groundwater table;
  - j. A statement of the qualifications and the signature(s) of the person(s) preparing the study.
4. The applicant shall provide proof of review and approval from the Susquehanna River Basin Commission for projects proposing:
  - a. Water withdrawals of 100,000 gallons per day (gpd) or more over a 30-day average from any source or combination of sources within the Susquehanna River Basin; or
  - b. Any consumptive water use of 20,000 gpd or more over a 30-day average from any water source.
5. The applicant shall demonstrate that adequate means of wastewater disposal, including domestic wastewater and wastewater used for cooling or industrial purposes, have been provided and approved by the Sewage Enforcement Officer and/or the Pennsylvania Department of Environmental Protection.
6. The applicant shall provide for review by the Zoning Hearing Board, Planning Commission, Engineer, and/or other appropriate entity as applicable an Environmental

Impact Statement, as outlined in Section 808, to disclose the potential environmental consequences of the proposed project.

#### **H. Power Supply**

1. If the applicant proposes to connect the Data Center to the electric grid, the applicant shall provide documentation from the applicable electric service provider certifying that the necessary capacity is available, and that the electric service provider will serve the Data Center. Known impacts on electric rates or availability for other uses directly attributable to the Data Center project shall be noted.
2. All new electric lines, both transmission and distribution, must be located underground.
3. Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, wind, fossil fuel, or nuclear energy generating systems, shall not be considered part of the Data Center use. Such systems shall be considered a separate use and shall be approved according to the zoning regulations applicable to such use.
4. c. All generators, whether portable or fixed/permanent, shall be equipped with functioning mufflers and enclosures to comply with the noise limits in § 902.18 and all other applicable noise restrictions contained within the Luzerne County Zoning Ordinance. Furthermore, all generators shall be Tier IV diesel certified generators.
5. i. Non-residential or non-light commercial portable or backup generators shall not be operated between 8:00 p.m. and 8:00 a.m. except during declared emergencies as ordered by Luzerne County EMA.
6. Renewable energy sources are encouraged to be utilized to offset energy consumption from offsite sources. Rooftop solar and onsite windmills can be implemented to minimize power consumption from other sources and reduce strain on the power grid. See section XXs for all solar and wind zoning regulations, dimensional standards will be regulated by data center amendment.
7. Alternative energy sources, including, but not limited to, on-site nuclear and other technologies, may require further approval standards.
8. All Bulk Fuel Storage must comply to the supplemental land use regulations detailed in Section 508.

#### **I. Emergency Management**

1. The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional. The ERP shall:
  - a. Be reviewed and accepted by the local fire department and emergency management services as part of the [conditional use/special exception/land development] process;
  - b. Include detailed procedures for fire suppression, containment, ventilation, and evacuation;
  - c. Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;
  - d. Ensure that all first responders receive adequate training specific to the installed system;

- e. Include provisions for annual fire safety inspections demonstrating compliance with fire safety standards to be performed by a qualified professional on behalf of the Data Center.
2. Any Data Center use proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.
3. No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare.
4. A campus security plan should be prepared in consultation with police and local emergency officials.

**J. Aesthetics**

1. Any Data Center and Data Center Accessory Use building façade that faces a road, or existing residential use must incorporate at least two of the following design elements every 150 horizontal feet:
  - a. A change in building material, pattern, texture, or color;
  - b. A change in building height;
  - c. Building step-backs or recesses having a minimum depth of five (5) feet;
  - d. Uninterrupted blank wall façades shall be prohibited to the extent that they are visible from a public right-of-way or a residential area. Design variations on long exterior walls shall be employed in order to create visual interest. Examples of such design variations include, but are not limited to, banding, windows, scoring of building facades, color changes, texture or material changes, and a variety in building height across a single building.
  - e. Exterior walls shall incorporate elements that create patterns of façade recession, offsets, and extrusions along the entire length of the façade. For every 200 feet of building length, a recession, offset, and/or extrusion must be incorporated at a minimum of 20 feet in length and five (5) in depth.
  - f. On all four sides of each building, roof-mounted equipment shall be screened with materials that are consistent and harmonious with the building's façade and character. Such screening shall be provided in order to conceal the equipment from off-site view and to buffer sound generated by such equipment.
  - g.

**K. Parking**

1. Data Centers are to be provided with at least one parking space per 8,000 square feet of floor area designed and intended to be accessible regularly by employees, or one parking space for every one employee, based upon the maximum number of employees

on site during the largest shift, whichever is lesser. The number of ADA parking spaces is to be determined by the total number of parking spaces required for the facility.

**L. Decommissioning:**

1. A decommissioning plan shall be required at the time of application for all proposed data centers under the jurisdiction of this zoning ordinance that establishes detailed inventory, timelines, management and removal of physical equipment, disposal of recycling materials, and plans for future use or restoration of the site.
2. Decommissioning must begin within one (1) year of discontinuation of Data Center operations, or upon notice of abandonment by the operator, whichever occurs first. Decommissioning shall be completed within (18) months thereafter unless extended by the County in writing for good cause.
3. Standards for Decommissioning:
  - a. Hazardous materials, including, but not limited to, batteries, fuel, or refrigerants, shall be disposed of in compliance with state and federal law.
  - b. Disturbed soils shall be stabilized and revegetated.
  - c. All utility providers must be notified of the discontinuation of operations.

**M. Community Incentive Package:**

1. Any proposed Hyperscale or Major Data Center development under the jurisdiction of this zoning ordinance may include a community incentive package within the municipality(s) the development is located and/or localized area/vicinity of the development. The community incentive package must be provided, in writing, as part of the Developer's Agreement, if necessary

**Section 3: SPECIAL EXCEPTION Review.** In addition to all other requirements for Special Exception uses, the following supporting documents must be submitted as a part of the Special Exception application to the Zoning Hearing Board:

1. Site Plan of the proposed project
2. Documentation of required studies (noise, vibration, water, environmental, etc.)
3. Plans for electricity and water infrastructure
4. Emergency Response Plan
5. Decommissioning Plan
6. Developer's Agreement

**Section 4: Severability.** If any sentence, clause, section, or part of this Ordinance or of the Zoning Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts hereof. It is hereby declared as the intent of the LUZERNE COUNTY COUNCIL that this Ordinance and the Zoning Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

**Section 5. Repealer.** All Ordinances or parts of Ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

**Section 6 Codification.** Pursuant to the [APPLICABLE MUNICIPAL CODE] and the Pennsylvania Municipalities Planning Code, the Luzerne County Zoning Ordinance shall hereby be codified to incorporate the above-referenced amendments.

**Section 7. Effective Date.** This Ordinance shall take effect fifteen (15) days after its adoption.

DRAFT