

[MUNICIPALITY]

ERIE COUNTY, PENNSYLVANIA

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

**AN ORDINANCE OF THE [GOVERNING BODY] OF [MUNICIPALITY], PENNSYLVANIA, TO AMEND THE [MUNICIPALITY] ZONING ORDINANCE TO DEFINE AND ADD SPECIFIC REQUIREMENTS FOR DATA CENTERS AND DATA CENTER ACCESSORY USES.**

**WHEREAS**, Article VI of the Pennsylvania Municipalities Planning Code, 53 P.S. § 10601, *et seq.*, authorizes the [MUNICIPALITY] to enact, amend, and repeal Zoning Ordinances within the [TOWNSHIP/BOROUGH/CITY]; and

**WHEREAS**, the [GOVERNING BODY] deems it to be in the best interest and general welfare of the residents of the [TOWNSHIP/BOROUGH/CITY] to update and amend provisions of the [MUNICIPALITY] Zoning Ordinance to provide for Data Centers and Data Center Accessory Uses; and

**WHEREAS**, Data Centers warrant special consideration related to energy and water utilization as well as noise and air pollution; and

**WHEREAS**, the [GOVERNING BODY] of the [TOWNSHIP/BOROUGH/CITY] 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 [GOVERNING BODY] of [MUNICIPALITY] as follows:

**Section 1.** Section XXX of the [MUNICIPALITY] Code of Ordinances, entitled Definitions, is amended to add the following definitions:

**Consumptive Use:** The loss of water from a groundwater or surface water source through a manmade conveyance system, including such water that is purveyed through a public water supply system, due to transpiration by vegetation, incorporation into products during their manufacture, evaporation, diversion out of a basin or any other process to the extent that the water withdrawn is not returned to the waters of a basin.

**Data Center:** A facility used for the housing, operation, and/ or co-location of computers and/or telecommunications equipment for the purpose of processing, transferring, disseminating, storing, and transmitting digital information or applications. This use shall also include cryptocurrency mining, blockchain transaction processing, and server farms. A Data Center may include Data Center Accessory Uses.

**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.

**Diversion:** A transfer of water from the basin into another watershed or from the watershed of the Great Lakes into that of another by means of transfer, including but not limited to a pipeline, canal, tunnel, aqueduct, channel, modification of the direction of a water course, a tanker ship, tanker truck, or rail tanker.

**Safe Yield:** The amount of water that can be withdrawn from a water resource over a period of time without impairing the long-term utility of a water resource, such as dewatering of an aquifer, impairing the long-term water quality of a water resource, inducing a health threat, or causing irreparable or unmitigated impact upon reasonable and beneficial uses of a water resource. Safe yield of a particular water source is primarily to be determined based on upon the predictable rate of natural and artificial replenishment of the water resource over a reasonable period of time.

**Sensitive Receptor:** Residential uses, schools, preschools, daycare centers, in-home centers, long-term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails), campgrounds, prisons, and dormitories.

**Withdrawal:** The removal or taking of water from any source water resource, whether or not returned to the water source.

**Section 2.** Data Centers shall be added to the following zoning districts as a Special exception: [LANGUAGE INDICATING ZONING DISTRICTS WHERE USES WILL BE PERMITTED]

**Section 3.** Section XXX (Standards for Specific Uses) is amended to add Section XXX, Data Centers and Data Center Accessory Uses:

**XXX-XX – Data Centers and Data Center Accessory Uses**

- A. Data Centers shall be permitted by [SPECIAL EXCEPTION] in the XXX Zoning District when approved in compliance with the procedures, standards, and criteria contained in this section.
- B. Additional considerations are included in the following sections when within proximity to sensitive receptors.
- C. **Dimensional Standards.** The dimensional standards of Data Centers and Data Center Accessory Uses shall be in accordance with [SECTION XXX (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 have a setback of **[200]** feet from the boundary of **[RESIDENTIAL ZONING DISTRICT(S)]** or the lot line of any property developed with a sensitive receptor.
  4. The minimum front setback for a Data Center and Data Center Accessory Use shall be **[20 feet]**, the minimum rear setback shall be **[30 feet]**, and the minimum side setback shall be **[8 feet]** when the Data Center and Data Center Accessory Use is adjoining the lot line of any industrial district.
- D. **Lot Coverage.** The Data Center and Data Center Accessory Use shall not have a lot coverage exceeding **[70%]**.
- E. **Landscape Buffer.** A landscape buffer is required between Data Centers and Data Center Accessory uses and any adjoining [residential zoning district], sensitive receptor, or public roadway. The landscape buffer shall comply with the following requirements **[ALTERNATIVELY, CROSS-REFERENCE EXISTING LANDSCAPE BUFFER REQUIREMENTS IN ZONING ORDINANCE OR SALDO]**:
1. The landscape buffer shall be at least [20] 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. The 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 20 linear feet of buffer. The size of shrubs shall be fully branched and a 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.
- F. **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 [40] feet of a public roadway, **[RESIDENTIAL ZONING DISTRICT(S)]**, 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 devices. 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.

**G. Noise and Vibration [ALTERNATIVELY, CROSS-REFERENCE EXISTING NOISE REQUIREMENTS]**

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 sustained daytime (7:00 a.m. to 8:00 p.m. Monday-Friday) decibel level of [67] dB(A) and a maximum sustained 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 special exception process. The preliminary 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 the interim sound study shall be incorporated into the construction plans for 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.
4. Data Centers and Data Center Accessory Uses shall not exceed a maximum sustained noise level of [57] dB(A) at the boundary of [RESIDENTIAL ZONING DISTRICT(S)] or the lot line of any property developed with a sensitive receptor.

#### H. Stormwater, Water Supply, Water Use, and Wastewater

1. **Stormwater Management** – The applicant shall meet all provisions of the municipal stormwater management ordinance and associated requirements for post-construction stormwater management, as well as:
  - a. Identify the impacts of proposed impervious surfaces associated with the Data Center and Data Center Accessories on local groundwater recharge characteristics.
  - b. Identify the impacts of proposed changes of stormwater runoff characteristics associated with the Data Center and Data Center Accessories.
2. **Water Supply**
  - a. If the use will be supplied by a public water supply, the applicant shall submit written documentation from the public water authority certifying that the public water authority has the capacity and the capability to supply the proposed amount of water usage.
  - b. If the use is to rely upon nonpublic 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 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:

- i. The projected water demands of the Data Center;
- ii. The source of water to be used;
- iii. 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);

- iv. The long-term safe yield of the water source;
- v. A description of the amount or portion of water withdrawn that will be recycled or discharged and by what means;
- vi. A geologic map of the area with a radius of at least one mile from the site;
- vii. 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;
- viii. 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;
- ix. 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;
- x. A statement of documentation of the qualifications and the signature(s) of the person(s) preparing the study.
- xi. Require documentation of conservation practices and efficiency measures that are designed to accomplish any of the following:
  - 1. Reduce the demand for water
  - 2. Improve efficiency in water use and reduce losses and waste of water;
  - 3. Improve reuse and recycling of water;
  - 4. Improve land management practices to conserve water or to preserve or increase water recharge

3. **State Water Use Regulatory Approvals** - The applicant shall apply for an application and provide confirmation of registration and/or permit approval from the Pennsylvania Department of Environmental Protection for projects proposing one or more of the following:

a. Great Lakes Basin:

- i. Any new or increased diversion.
- ii. Any new or increased consumptive use average of 5,000,000 gallons per day (gpd) or more in any 90-day period.
- iii. Any withdrawal of water of 10,000 gallons per day (gpd) or greater in any 30-day period from any source or combination of sources within the Great Lakes Basin.

b. Ohio River Basin

- i. Any withdrawal of water of 10,000 gallons per day (gpd) or greater in any 30-day period from any source or combination of sources within the Ohio River Basin.

- ii. Any water obtained through interconnection with another party in an amount that exceeds an average rate of 100,000 gallons per day (gpd) in any 30-day period.

## **5. Wastewater**

- a. 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. Power Supply**

- a. 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.
- b. 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 by a separate permit according to the zoning regulations and federal and state regulations applicable to such use.

## **7. Emergency Management**

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

- c. 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.

## **8. Aesthetics**

- a. 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:
  - i. A change in building material, pattern, texture, or color;
    - 1. A change in building height;
  - ii. Building step-backs or recesses having a minimum depth of five (5) feet;

## **9. Parking**

- a. 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.
- b. Parking lot impervious surfaces shall be considered to be included in the maximum allowed lot coverage.

**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 [GOVERNING BODY] 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 [APPPLICABLE MUNICIPAL CODE] and the Pennsylvania Municipalities Planning Code, the [MUNICIPALITY] Zoning Ordinance shall hereby be codified to incorporate the above-referenced amendments.

**Section 7. Effective Date.** This Ordinance shall take effect five (5) days after its adoption.