

**BOROUGH OF MARCUS HOOK
DELAWARE COUNTY, PA
ORDINANCE NO. O-26-3**

**AN ORDINANCE AMENDING CHAPTER 196, ZONING, OF THE CODE OF THE
BOROUGH OF MARCUS HOOK TO PROVIDE REGULATIONS OF DATA CENTER
AND RELATED USES WITHIN THE HI – HEAVY INDUSTRIAL ZONING DISTRICT**

Be It Ordained by the Borough Council of the Borough of Marcus Hook,
Delaware County, Pennsylvania, as follows:

SECTION 1. Article II Definitions, Section 196-9 Definitions, is hereby amended
to include the following:

DATA CENTER A facility or group of buildings or structures located on the same tract or on contiguous parcels under common ownership or control and developed and operated as a unified development, the principal use of which is to house, operate, manage, process, store, transmit, or provide access to computer servers, data-storage systems, networking equipment, telecommunications equipment, or other information-technology equipment for the processing, storage, management, or transmission of electronic data. A Data Center may include Data Center Accessory Uses and Structures as defined herein. A power-generation facility designed or operated to provide primary, supplemental, or continuous electric power to a Data Center shall not be considered part of the Data Center use or a Data Center Accessory Use and shall be regulated as a separate use in accordance with the applicable provisions of this chapter. Emergency generators, uninterruptible power supply systems, and other backup power equipment that are customarily incidental and subordinate to the Data Center shall be considered Data Center Accessory Uses and Structures. A structure or facility shall not be classified as a Data Center where the primary purpose of the facility is to provide consumer telecommunication services, such as wireline, wireless, broadband or network interconnection services, or emergency communications infrastructure and where the building associated with the same is less than 10,000 square feet of building footprint.

DATA CENTER ACCESSORY USES AND STRUCTURES Uses, structures, equipment, and facilities that are customarily incidental and subordinate to the operation of a Data Center and that are located on the same tract or on contiguous parcels under common ownership or control that are developed and operated as a unified Data Center development. Such uses, structures, equipment, and facilities may include, but are not limited to, uninterruptible power supply (UPS) systems; emergency or backup generators; electrical distribution equipment; transformers; internal utility lines and connections; mechanical equipment and environmental-control systems, including air-conditioning and cooling systems and cooling towers; fire-suppression systems; redundant data-communications connections; security buildings, fencing, gates, and related security equipment; and other similar equipment, facilities, and structures customarily incidental and subordinate to the Data Center. A power-generation facility designed or operated to provide primary, supplemental, or continuous electric power to a Data Center shall not be considered a Data Center Accessory Use or Structure and shall be regulated as a separate use in accordance with the applicable provisions of this chapter. A Substation shall not be considered a Data Center Accessory Use or Structure unless expressly permitted as such by the applicable provisions of this chapter.

SUBSTATION A facility, structure, or assemblage of electrical equipment used for the switching, transforming, regulating, controlling, or distributing electric power, including associated transformers, circuit breakers, switches, control equipment, protective equipment, and related structures and equipment. A Substation may serve transmission, distribution, generation, or customer-load interconnection functions.

SECTION 2. Article XIV Heavy Industrial District, Section 196-84 Conditional Uses is hereby amended to include the following:

- G. Data Centers and Data Center Accessory Uses and Structures, subject to **Section 196-144-A.**

SECTION 3. Article XVIII Procedure and Standards for Conditional Uses is hereby amended to include the following:

Section 196-144-A Data centers and data center accessory uses and structures

- A. Data Centers shall be permitted as a conditional use in the HI-Heavy Industrial zoning district subject to the following requirements:

(1) The proposed facility shall operate using a closed loop water system, an air cooled water system, reclaimed or recycled water, fully treated wastewater, stormwater runoff, or similar methodology that minimize reliance on potable water supplied by Chester Water Authority or other public water source. The facility shall be designed and operated to avoid or minimize large volume or continuous withdrawals from Chester Water Authority or other public water sources and shall incorporate water-reuse, recycling, and conservation measures sufficient to reduce its demand on the Borough's available water supply and distribution-system capacity.

(2) Building Guidelines for Data Centers:

- a. Tract Size. The minimum lot size or assemblage of adjacent parcels developed as a Data Center (the "Tract") shall not be less than 20 acres.
- b. Maximum Building Square Footage. A Data Center building may be a maximum of 250,000 square feet.
- c. Minimum Building Square Footage. A Data Center building may be a minimum of 25,000 square feet.
- d. Maximum Building Height. A Data Center building may be a maximum of 60 feet in height.
- e. Proximity to Residential Uses:
 - No Data Center or Data Center Accessory Use or Structure shall be 500 feet or less from the property line of an existing residential zoning district, provided all sound level maximums are met (as set forth herein this Section).

(3) A building or structure housing a Data Center may not be located within 200 feet of another building on the same property, or within 1,000 feet of another Data Center on another property in the Borough.

(4) 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.

- (5) Any Accessory Bulk Fuel Storage associated with a Data Center shall only be permitted in the least visible portion of the property and shall be set back from all public rights-of-way and adjoining property lines in accordance with the applicable design guidelines of this Chapter.
- (6) Where gates, guard shacks or checkpoints are proposed, adequate queuing space shall be provided within the property boundaries to prevent stacking of vehicles on or along public roads and streets.
- (7) The applicant shall establish a riparian buffer extending a minimum of 50 feet from either side of the top-of-bank of the channel associated with a perennial or intermittent stream, water body (i.e., river, pond, or wetland) and/or the boundary of the 100 year floodplain, and shall comply with the Borough of Marcus Hook's regulations of Section 174 pertaining to riparian buffers.
- (8) Design Guidelines:
- a. Principal building facades: Principal building facades shall avoid the use of undifferentiated surfaces by including at least two of the following design elements: change in building height, building step-backs or recesses, fenestration, change in building material, pattern, texture, color, or use of accent materials. When a building has more than one principal façade, such principal building facades shall be consistent in terms of design, materials, details, and treatment. Architectural building elevations shall be provided by the applicant to identify compliance with this section.
 - b. Screening of mechanical and electrical equipment: In order to minimize visibility from adjacent roads and properties, ground level and roof top mechanical, electrical, and fuel storage/generator location shall be screened and noise mitigation efforts shall be incorporated in such areas. This screening may be provided by a principal building or existing vegetation that will remain on the property or is within a landscaping/buffer easement on an adjacent property. Mechanical, electrical, and fuel/generator storage not screened by a principal building or existing vegetation shall be screened by 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.
 - c. Landscaping and Buffering: Landscaping and screening shall be provided to meet the Screening requirements of Section 196-96 and Landscaping requirements of Section 196-121. Vegetated landscape berms shall be implemented wherever feasible to assist screening of the proposed facility from adjacent properties and roadways. Unless physically restricted by existing utilities, healthy mature vegetation to be preserved, or similar constraint, a berm averaging a minimum of eight (8) feet in height above the adjacent average ground level, with a maximum slope of 3:1, shall be installed to screen the Data Center from any adjacent residentially zoned or residentially used parcels. Fencing, including sound walls to minimize potential visual and noise impacts on adjacent roadways and properties, may be used to supplement the landscape berms and required vegetative screening.
 - d. Minimum Parking: The minimum number of parking spaces shall be twice the maximum number of employees on site during the largest shift. A reserve parking area shall be provided sufficient to provide for off-street parking equivalent to 1 space per 4,000 square feet of building area, with such areas to be counted as

impervious coverage for the purpose of stormwater management facility planning. Such reserve parking (or portion thereof) shall be installed to the extent that it is determined by the Borough Zoning Officer that an applicant's use of the property results in insufficient on-site parking. Parking and loading areas shall not be permitted between the building and any public roads without proper Screening and landscaping requirements as contained in Section 196-96.

- e. Exterior Lighting: Exterior lighting shall comply with Section 196-119 and shall be designed to prevent glare onto adjacent properties and roadways. All exterior lighting including but not limited to lighting of buildings, security lighting, building entrances, parking areas, and loading areas shall be full cut-off and fully shielded, directed downward. Illumination levels at the property line shall not exceed 0.2 foot candles where the lot abuts a residentially zoned or used property, and 1.0 foot candles elsewhere. Exterior lighting shall be reduced to the minimum required security levels outside of normal operating hours.

(9) Impact Statement. The applicant for a Data Center shall provide an impact statement documenting all perceived, potential, and/or anticipated impacts as identified in Section 196-162 pertaining to Performance Standards, including but not limited to the following supplemental standards:

- a. Utilities: The applicant for a Data Center shall provide documentation from all public utilities serving the facility, indicating the application for service is feasible and approved and that any potential rate increase or capital expenditure directly related to additional capacity required by the applicant, from the utility, will be the sole responsible of the applicant and not passed onto existing ratepayers.
- b. Air Quality: Air quality and emissions controls for the Data Center, Data Center Accessory Uses, and Substation will meet the requirements applicable to data centers and stand-by generator usage established by the state and local regulations and will not materially degrade existing ambient air quality. All stand-by diesel generators shall be high efficiency models and at a minimum, meet the criteria for EPA Tier 4 certification. Approvals of all necessary air quality permits shall be obtained from the EPA and DEP, as required.
- c. Fire and Explosive Hazards: An Emergency Response Plan shall be prepared by a qualified professional to be reviewed and approved by the Borough Fire Marshal, Chief of Police, and Emergency Management Coordinator serving the Borough. Such Plan shall include detailed information regarding fire suppression, containment, ventilation and evacuation, as well as access and hydrant locations, as applicable. In reviewing the adequacy of a Fire Safety and Emergency Response Plan, the following shall be considered, in addition to Building Code Requirements:

- Use of fire-resistant rated construction materials;
- Location of IT equipment and restricted access to it;
- Openings and penetrations;
- Aisle containment and hot air systems;
- Limitation of materials in and around IT equipment;
- Construction of IT materials;
- Design and installation of automatic fire protection systems, such as sprinkler systems or gaseous extinguishment systems;
- Automatic detection systems;

- Portable extinguishers and hose lines;
- Staff training;
- Any on-site battery storage systems;
- Emergency and recovery procedures;
- Maintenance and auditing plan for fire safety, and;
- An assessment of Borough equipment and resources available to adequately serve the facility.

Identification of all security measures and controls to be implemented at the facility shall be provided including but not limited to: exterior security fencing and location of gates for personal and vehicular access; building access controls; on and off-site security monitoring systems; and emergency contact information for on-site personnel.

Fire lanes shall be provided where required by state or federal regulations or other local ordinances. The specific locations of these lanes are subject to review by the Borough Fire Marshal or Police Chief, or other duly designated emergency services officials serving the Borough.

The applicant shall provide training to the Marcus Hook Trainer Fire Department.

- d. Glare and Heat: Glare and heat controls for the Data Center, Data Center Accessory Uses, and Substation shall be identified to eliminate impacts on adjacent properties and roadways.
- e. Liquid and solid waste: The applicant shall demonstrate to the Borough that adequate means of wastewater disposal have been provided for and approved by the PA DEP. This would include wastewater management from any domestic wastewater as well as any wastewater used for cooling or industrial purposes.

The applicant shall demonstrate how any waste from the operation of the Data Center, Data Center Accessory Uses, and Substation will be disposed. No on-site storage or disposal of the same shall be permitted. Waste management practices must comply with Borough of Marcus Hook regulations as well as federal laws, including the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA). Outdoor storage of waste materials prior to its off-site disposal is not permitted on sides of the building fronting a public roadway.

- f. Noise: The applicant shall provide information indicating the Data Center, Data Center Accessory Uses, and Substation uses will comply with the noise regulations identified in 196-162 E. A study shall be conducted by someone with a relevant background in data center noise emissions to confirm compliance with the noise standards, and/or recommend sound reducing materials or systems to meet these standards. The noise study shall account for cumulative sound from all mechanical equipment including but not limited to cooling systems, rooftop units, and transformers operating concurrently under normal operating conditions and generators operating during routing testing.

An as-built sound study will be conducted six (6) months following the issuance of a Certificate of Occupancy for any Data Center building to assure ongoing compliance.

Emergency back-up generator testing or recharge shall not occur during nighttime hours or on holidays, and shall only be conducted on weekdays between the hours of 10:00 AM and 4:00 PM. An applicant's protocols and parameters for testing shall be subject to the review and approval of the Borough to minimize potential impacts on neighboring properties.

- g. Odors: The applicant shall provide information indicating the Data Center, Data Center Accessory Uses, and Substation shall not emit odorous gases, fumes, matter, or odors so as to be noticeable at any point beyond its lot lines as regulated in Section 196-162 F.
- h. Vibration Study: A Vibration Study shall be provided that demonstrates that vibration resulting from sources of the Data Center, Data Center Accessory Uses, and Substation does not extend past the property line. This study shall be prepared by a qualified professional. No sustained or recurring vibration shall be perceptible to the human sense of feeling at or beyond the property line. Additionally, vibration shall be measured as particle velocity in any one-third octave band and shall not exceed 200 $\mu\text{m/s}$ RMS in any band. An applicant shall conduct pre-construction baseline testing of ambient vibration levels prior to submitting its special exception application.
- i. Water Supply: A water supply feasibility study shall be prepared to demonstrate that sufficient water resources are available to serve the proposed use if the use involves the use of any water resources. The water feasibility study shall include the following minimum information:
 - Calculations of the projected water needs for the Data Center and surrounding uses;
 - A geologic map of the area with a radius of at least one mile from the site of the Data Center;
 - The location of all existing and proposed wells within 2,500 feet of the site of the Data Center, with a notation of the capacity and condition of all existing and proposed wells;
 - The location of all streams within 2,500 feet of the site of the Data Center and its water source;
 - The long-term yield of the on-site water source shall be determined based on the geological formations underlying the site of the Data Center;
 - An analysis and determination of the effects of the proposed water supply system on the quantity and quality of water in nearby wells, streams and the groundwater table;
 - Known impacts on utility rates or availability for other uses directly attributable to the Data Center project shall be noted;
 - Identification of how water will be recycled, disposed of or released from the Data Center; and
 - A statement of the qualification(s) and the signature(s) of the person(s) preparing the study.
- j. Radioactivity and/or electrical disturbances: The applicant shall provide information indicating the Data Center, Data Center Accessory Uses, and Substation will not emit dangerous radioactivity at any point. There shall be no radio or electrical disturbances adversely affecting the operation of equipment

belonging to someone other than the Data Center. All uses, equipment, and use of materials shall be in strict conformity with the Pennsylvania Department of Environmental Protection, Rules and Regulations.

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 and Data Center Accessory Uses. Perceived, potential, and/or anticipated impacts on electric rates or availability for other nearby users directly attributable to the Data Center shall be noted and fully absorbed by the applicant.

The applicant shall also identify sustainability and energy efficiency controls describing measures to reduce overall energy consumption, including but not limited to high-efficiency equipment, waste-heat recovery, demand management, and integration of renewable energy where feasible.

- k. Traffic Study: A traffic impact study must be prepared to address both daily operational traffic and emergency response access, to demonstrate that the facility will not adversely affect local road capacity or residential areas, nor increase impacts beyond what is expected of other uses permitted in the underlying zoning district.
- l. Environmental Impacts: The applicant shall provide an Environmental Impact Statement to:
 - Assess potential impacts of operation, maintenance, and/or repair or trouble-shooting of the Data Center (including, but not limited to, during periods of emergency power, fire, and fire suppression and control) on groundwater, nearby creeks and streams, the air and the grounds of the Data Center and those adjacent to the Data Center; storage of oil-based or other combustible materials; and release of gasses, emissions, or other contaminants into the air, ground, surface water or groundwater;
 - Identify all potential stationary and mobile sources of fine particulate matter, volatile organic compounds, and nitrogen oxides to be located on the property housing the Data Center;
 - Identify potential environmental impacts that are likely to be generated (e.g., odor, noise, smoke, dust, litter, glare, heat islands, vibration, electrical disturbance/interference, etc.); and
 - Identify proposed measures to prevent or, as the case may be, mitigate negative environmental impacts.
- (10) Compliance Reporting. Every three (3) years following issuance of a Certificate of Occupancy for a Data Center building, the facility owner shall submit to the Borough a compliance report documenting continued adherence to applicable performance standards identified in the Impact Statements and design controls. The report shall include any and all identified deficiencies and measures implemented to mitigate impacts.
- (11) Modifications. Conditional use approval shall be required for the expansion of an existing Data Center, Data Center Accessory Uses, and Substation use including alterations to parking areas, loading areas, and/or exterior equipment to identify compliance with the standards of Section 196-144A.

(12) Decommissioning. It is the facility owner's responsibility that, at the end of the project life or active use of the facility as a Data Center, the site must be restored in a manner that will allow for a beneficial reuse of the property. This would involve the removal of all equipment and/or equipment-related structures, etc. that are no longer in use or cannot be reasonable reused. Prior to receipt of a zoning permit for the construction of a Data Center, Data Center Accessory Uses, and Substation, a decommissioning agreement shall be executed between the Borough and the facility owner to ensure the requirements within this section are met within twelve (12) months of the date at which the facility ceases to operate as a Data Center, and for the provision of financial security in an amount equal to 110% of the Borough approved decommissioning costs to remain in place until the facility is decommissioned.

(13) Battery Energy Storage Systems ("BESS")

Any Data Center using BESS must demonstrate total compliance with NFPA 855 - Standard for the Installation of Stationary Energy Storage Systems. All battery enclosures must be equipped with dedicated, automated fire suppression systems designed specifically for chemical fires, subject to review and approval of the Fire Marshal and/or Building Code Official. All BESS units must be equipped with off-gas detection and an automated "clean agent" suppression system (e.g., Novec 1230 or FM-200). Water-only sprinkler systems shall not be deemed sufficient unless demonstrated, through a fire protection engineering analysis, to provide equal or greater protection, and subject to approval of the Fire Marshal and/or Building Code Official.

Explosion Control: All BESS enclosures shall be equipped with explosion prevention or deflagration venting in accordance with NFPA 68 or NFPA 69 to prevent structural failure of the enclosure and protect first responders from blast overpressure during a thermal runaway event.

(14) During the subdivision and land development process, an Applicant for a Data Center shall pursue in good faith a Community Benefits Agreement with the Borough, by which to memorialize and address:

- a. The particular means and measures by which the Applicant will comply with the provisions of this Section and the Borough Zoning Ordinance generally;
- b. Goals for workforce engagement and local hiring in the construction and operation of the facility;
- c. The needs and engagement with local emergency services responders;
- d. Any proposed contributions to a community support fund related to future municipal needs and impacts; and
- e. Efforts to reduce the impact of any particular aspects of the operations on the immediate surrounding community.

Section 4. Severability. If any sentence, clause, section or part of this 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 of this Ordinance. It

is hereby declared as the intent of the Borough that this Ordinance would have been adopted has such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

Section 5. All ordinances or parts of ordinances conflicting with the provisions of this Ordinance are hereby repealed insofar as they are inconsistent with this Ordinance.

Section 6. This ordinance shall become effective upon adoption.

ADOPTED this ____ day of _____, 2026.

BOROUGH OF MARCUS HOOK

ATTEST: _____
Courtney Sendek
Borough Secretary

Cheryl Evernham
Council President

APPROVED this ____ day of _____, 2026.

Gene Taylor
Mayor