

DRAFT

WEST NANTMEAL TOWNSHIP

CHESTER COUNTY, PENNSYLVANIA

ORDINANCE NO. ____

AN ORDINANCE OF THE TOWNSHIP OF WEST NANTMEAL, CHESTER COUNTY, PENNSYLVANIA, AMENDING THE WEST NANTMEAL TOWNSHIP CODE, CHAPTER 215 TITLED, "ZONING", TO ADD DEFINITIONS RELATED TO DATA CENTERS TO SECTION 215-7; TO AMEND SECTION 215-17 TO ALLOW A DATA CENTER IN THE I-1 LIMITED INDUSTRIAL DISTRICT BY CONDITIONAL USE; TO ADD A NEW SECTION 215-123.1 TO PROVIDE REGULATIONS FOR DATA CENTERS; TO AMEND MATRIX CHART 5 TO ADD AREA AND BULK REQUIREMENTS FOR DATA CENTERS; TO AMEND SECTION 215-152.R TO ADD A PARKING REQUIREMENT FOR A DATA CENTER AND TO ADD SEVERABILITY, REPEALER AND EFFECTIVE DATE PROVISIONS.

BE IT ENACTED AND ORDAINED by the Board of Supervisors of West Nantmeal Township that Chapter 215 of the West Nantmeal Township Code, titled, "Zoning" shall be amended as follows:

SECTION 1. The following definitions shall be added to Section 215-7 titled, "Specific Terms" as follows:

"DATA CENTER — A facility primarily used for housing computer systems and associated components, including servers, data storage and processing systems, and auxiliary infrastructure such as cooling systems and network hardware.

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; 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."

SECTION 2. A new subsection shall be added under Section 215-17 to allow for Data Centers by conditional use in the I-1 Limited Industrial District as follows:

""C.(9). Data Centers subject to the provisions of Section §215-123.1."

SECTION 3. A new Section 215-123.1 under Article VII. Nonresidential Land Use and Development Requirements shall be added to provide specific regulations for Data Centers as follows:

“§215-123.1. Data Centers. The following standards shall apply to all Data Centers as permitted by conditional use in the I-1 Limited Industrial District:

A. **Lot Size and Setbacks.** Notwithstanding the yard requirements in Matrix Chart 5, Data Centers and Data Center Accessory Uses that are built on a lot which abuts a lot zoned residential or a lot developed with a residential use, shall be setback a minimum of ~~500~~⁴⁰⁰ feet from any property boundary. The minimum net lot area shall be 10 acres and the maximum net lot area shall be 40 acres.

B. **Land Development Plans.** Consistent with the conditional use requirements set forth in Section 215-179.C, a preliminary land development plan shall be submitted with the conditional use application.

C. **Screening, Facades and Design Requirements.**

(1) Screening of mechanical equipment. Data Center Accessory Uses, including ground level and roof top mechanical equipment used for cooling, ventilating, or otherwise operating the facility, shall be screened from view on all sides or setback adequately from the building edge so as to not be visible from adjoining properties. Such screen may incorporate perforated surfaces as necessary to permit ventilation of the equipment.

(2) Principal building façades. Principal building façades shall include all building façades that face adjacent public roads, adjacent residentially zoned land or land with a residential use. Each principal building façade (which may include multiple façades) shall include a change in building material, pattern, texture, color, or accent materials. Elevations/renderings of all principal building facades shall be submitted with the conditional use application.

(3) Fencing. Any fencing shall be located within the required setbacks and the view of the fencing from neighboring properties shall be sufficiently screened with landscaping. ~~Fencing shall not include barbed or razor wire.~~

(4) Main entrance feature. At least one main entrance feature shall be provided to accent the main entrance - such as a double doored entrance way with overhang.

D. **Noise and Vibration.**

(1) The applicant shall submit a pre-construction noise and vibration study with the conditional use application prepared and sealed by a qualified professional. Such qualified professional shall be an engineer licensed in the Commonwealth of Pennsylvania or other environmental or technical professional with demonstrated education, training and experience in acoustical noise or vibration

analysis applicable to the scope of work being performed (defined herein as “Qualified Professional”) to include the predicted noise and vibration levels from the operation of the Data Center.

- (2) Simultaneous Operation Assumption. All noise evaluations, studies, modeling, and compliance determinations shall assume the concurrent operation of all generators, cooling systems, mechanical equipment, and other noise-producing devices operating at maximum rated capacity, unless a more restrictive operating condition is required by approval.
- (3) Within 180 days following issuance of a use and occupancy certificate and commencement of operations at the Data Center, the applicant shall submit to the Township an as-built post-construction noise and vibration study.

The study shall:

- (a) Be conducted by a Qualified Professional using applicable ANSI standards and generally accepted criteria.
- (b) Demonstrate compliance with all applicable noise regulations set forth in the Data Center Noise Standards Tables at the end of this section. Compliance shall be demonstrated using objective sound level limits expressed in A-weighted decibels (dBA), measured and evaluated in accordance with standardized methodologies acceptable to the Township.
- (c) Include sound measurements taken at all property lines.
- (d) Include measurements taken during normal operations, peak cooling load, and during operation of emergency generators under load.
- (e) Address low-frequency noise impacts, including compliance with applicable dBC limits set forth in the Data Center Noise Standards Tables.
- (f) Vibration Standards to be used in the study. Vibration shall be evaluated using two distinct criteria: (a) Building Damage: Ground vibration shall not exceed 0.2 to 0.5 inches per second peak particle velocity (PPV), measured in accordance with USBM RI 8507 or successor standard; and (b) Human Perception: Vibration levels shall not exceed 65 VdB, measured in accordance with ISO 2631-1 or successor standard.
- (g) Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.
- (h) The timing of the post construction noise and vibration study shall not preclude enforcement by the Township at any time upon identification of a violation. The applicant shall provide reasonable access to monitoring data,

equipment specifications, and operating conditions to the Township Engineer, designee or other consultant acting on behalf of the Township.

- (4) If the post construction study demonstrates non-compliance with any applicable noise or vibration standard, the applicant shall, within 30 days of written notice from the Township, submit a corrective action plan prepared by a Qualified Professional. All violations shall be fully remediated within a timeframe approved by the Township, but in no event later than 90 days following Township notice of non-compliance, unless extended by the Township for good cause shown.
- (5) If the pre-construction noise study establishes a baseline sound level in excess of the maximum sound level permitted under Data Center Noise Standards Tables, the post-construction study shall demonstrate that operations of the proposed use do not increase baseline ambient sound levels. Sound levels within 1 dBA of ambient sound levels will meet this requirement.
- (6) Objective Noise Standards. Noise limits shall be established by land use category, measurement location, time-of-day, and averaging period, and shall include provisions for instrumentation and low-frequency noise evaluation.
- (7) The Township may require additional noise and vibration testing upon receipt of substantiated complaints or following material modification, replacement, or addition of mechanical equipment, cooling systems, generators, or other vibration-generating equipment.
- (8) If initial monitoring or complaints indicate a probable violation, the Township may require interim mitigation measures, which may include operational modifications, equipment limitations, or temporary curtailment of specific noise producing activities until compliance is demonstrated.
- (9) Data Center Noise Standards Tables

Data Center Noise Standards Tables

The following tables establish objective noise limits, modeling requirements, and enforcement procedures applicable to Data Center use. These standards shall supersede noise standards set forth in any noise chapters or noise provisions of the Code for Data Centers only.

Table 1: Data Center Noise Limits, Measurement, and Compliance Requirements

Category	Requirement
Applicable Uses	Data Centers, including all accessory mechanical equipment, generators, cooling systems, and substations
Measurement Basis	A-weighted sound levels (dBA), unless noted otherwise for low-frequency noise

Receptor Locations	Measurements and modeling shall be conducted at the nearest property line
Operating Condition Assumption	All compliance evaluations shall assume simultaneous operation of all generators, cooling equipment, and other noise-producing devices at maximum rated capacity

Table 2: Numeric Noise Limits by Zoning Use

Receiving Land Use	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
Residential	55 dBA Leq (1-hour)	45 dBA Leq (1-hour)
Mixed-Use / Commercial	60 dBA Leq (1-hour)	50 dBA Leq (1-hour)
Industrial	65 dBA Leq (1-hour)	55 dBA Leq (1-hour)

Short-term tonal or impulsive noise exceeding the above limits by 5 dBA or more shall constitute a violation.

Table 3: Low-Frequency Noise Criteria

Parameter	Requirement
Frequency Sensitivity	C-weighted sound levels (dBC), capturing enhanced sensitivity to low-frequency noise
Measurement Metric	Equivalent continuous sound level (Leq, 1-hour) in dBC
Measurement Locations	At the nearest property line
Daytime Limit (7:00 AM – 10:00 PM)	70 dBC Leq (1-hour)
Nighttime Limit (10:00 PM – 7:00 AM)	60 dBC Leq (1-hour)
Tonal / Narrowband Noise	Clearly perceptible low-frequency tonal noise shall require mitigation regardless of overall dBC compliance, as determined by the Qualified Professional or the Township based on clearly perceptible tonal characteristics
Applicability	Limits apply under simultaneous operation of all generators, cooling systems, and mechanical equipment

Table 4: Modeling and Study Requirements

Requirement	Standard
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Pre-construction Study	Required with conditional use application
Post-construction Verification	Required within 180 days of commencement of operations
Prepared By	Qualified Professional with demonstrated noise expertise
Modeling Methodology	ISO 9613-2, CadnaA, SoundPLAN, or equivalent accepted industry model
Meteorological Assumptions	Downwind propagation, ISO-conservative conditions
Equipment Data	Manufacturer sound power levels and octave-band spectra
Low-Frequency Evaluation	Required where large generators or cooling systems are used

Table 5: Measurement Procedures

Element	Requirement
Instrumentation	Type 1 or Type 2 ANSI-certified sound level meter
Calibration	Pre- and post-measurement field calibration required
Measurement Duration	Minimum 15 minutes per location unless otherwise specified. Sound level limits expressed as hourly equivalent levels (Leq, 1-hour) may be evaluated using shorter-duration measurements, including the minimum durations identified in this table, where such measurements are conducted under steady-state operating conditions and are representative of normal operations.
Operating Conditions	Measurements shall include peak cooling load and generator operation under load
Background Noise	Baseline ambient levels documented prior to construction

Table 6: Compliance

Item	Requirement
Material Increase Definition	An increase of ≥ 3 dBA above baseline ambient sound level
Violation Determination	Exceedance of numeric limits or material increase
Retesting Authority	Township may require additional testing following substantiated complaints or equipment changes

E. Water.

- (1) A Data Center shall be connected to public water.
- (2) The applicant shall provide detailed estimates of daily and annual water usage.
- (3) The applicant shall provide documentation from the public water provider that there is sufficient water available to serve the Data Center without impacting water pressure or availability of water to other users in Township. No Data Center shall be approved unless the applicant demonstrates that the anticipated water supply yield is sufficient for the Data Center and will not adversely impact water pressure or availability of water to other users in the Township.
- (4) The Data Center shall not use public water, groundwater or direct withdrawals from surface watercourses as ~~a its primary~~ source of water for cooling purposes.
- (5) The Data Center shall be designed to include air-cooled or closed-loop water circulation systems to cool processing equipment. An applicant may propose an alternative cooling system that is demonstrated to use less water and energy than closed loop systems which alternative cooling system must be approved by the Township.
- (6) The applicant shall submit a drought response plan to demonstrate compliance with state, water supplier and local drought declaration requirements.

F. Wastewater Disposal.

- (1) A Data Center shall be connected to public sewer.
- (2) The applicant shall submit an analysis of wastewater disposal needs with the conditional use application which indicates the quantity of wastewater generation expected from sewage and water discharge as part of the Data Center's HVAC system.
- (3) Any ~~untreated~~ discharge of wastewater generated at the Data Center may not be discharged to stormwater systems or surface waters.
- (4) The applicant shall submit documentation certified by the public sewer provider that the provider can support the conveyance and treatment needed.

G. Energy supply.

- (1) The applicant for a Data Center shall provide with the conditional use application an energy usage plan which shall provide or identify, at a minimum:
 - (a) Annual electricity demand.
 - (b) Energy supply sources that will be utilized.

- (c) Energy storage capacity (if applicable).
 - (d) Proposed sources of back-up power.
 - (e) Documentation of efforts to maximize use of renewable and/or clean energy for all electrical and cooling needs, including those to reduce the need for new electric generation by incorporating the best available energy efficiency into the design of data center servers, cooling units, and the building structure. If solar energy systems are implemented, solar energy panels shall only be permitted to be installed upon the roof of the Data Center.
 - (f) If interconnecting to the energy grid, documentation of the energy utility interconnection approval process, and provide the following:
 - (i) Documentation that an application for the project has been filed with the electric utility provider, and the required fee has been paid.
 - (ii) Documentation that a transmission security agreement has been signed by all necessary parties.
 - ~~(iii)~~ The date that the electric utility provider provided for the proposed energization of the data center.
 - ~~(iii)~~(iv) Documentation that the Data Center has the authority and capability to go offline to support energy use for the community in cases of emergencies such as power outages, brown outs, storms or excessive heat/cold.
- (2) If the Data Center intends to use backup generators (or other types of backup power generation systems), the following criteria shall apply.
- (a) Diesel generators shall meet Tier 4 emission standards of the U.S. Environmental Protection Agency.
 - (b) Diesel generators shall undergo annual testing and reports shall be provided to the Township to ensure that the generators are performing as designed and that emissions do not exceed permitted limits.
 - (c) Emergency energy generation that is diesel, gasoline, or similarly fueled shall be used only at the following times:
 - (i) When the primary source of energy is not available due to an emergency outage.

- (ii) During routine maintenance, or readiness testing for a short duration of time and capped at 100 hours per year.
- (iii) Routine maintenance testing of back-up ~~fossil—fuel-powered~~ generators shall be restricted to the hours of 10:00 am through 4:00 pm Monday through Friday.
- (iv) Use for peak shaving or supplying power to the grid is prohibited.
- (d) The applicant shall design and locate the emergency energy generation systems to limit noise and visual impacts and in compliance with the setbacks applicable to the Data Center. ~~as much as possible.~~
- (e) The operator shall maintain a public website announcing the times when the generators will be in operation. Any operation of the backup generators for testing purposes shall be announced on the website at least 24 hours in advance. The operator shall also notify the Township at least 24 hours in advance of a test. The operator shall provide the address of the website where the notices required by this Section are published.

H. **Private Utilities** (Alternative Independent Water and Energy Generation Systems). Any independent, energy generation system designed or used to supply water and power directly to the Data Center during normal operations, including natural gas, closed-loop, geothermal, solar, ~~fossil-fuel~~, or other energy generating systems, shall be deemed a Private Utility as defined under this Chapter and subject to the provisions of Section 215-117 – which permit Private Utilities upon special exception in the Limited Industrial District. Provided however, if the area and bulk regulations in Section 215-117 conflict with provisions applicable to Data Centers set forth herein, the area and bulk criteria for a Data Center ~~provisions are shall be held~~ applicable. Such systems shall require an independent review by Township consultants to ensure the safety of such systems and compliance with the applicable standards of this Chapter, all other applicable chapters of the Township Code, and all applicable federal, state, and local regulations, at the applicant's expense. In addition to whatever requirements are to be satisfied as part of the special exception approval, the following additional requirements shall apply as part of the conditional use process:

- (1) The aApplicant shall select, design and locate the energy generation systems to limit noise, emissions, and visual impacts to adjacent and nearby uses ~~as much as possible.~~
- (2) Electric Utility Substations on the same property as the Data Center they serve must be located on the side or rear of a Data Center principal building so they are screened from public view and shall not be located in a required yard.

(3) Data Center electric utility substations visible from an arterial roadway must include a combination of year-round opaque landscaping and screening walls to minimize visual impact.

~~(4) Burying power lines serving the property is required. ~~strongly encouraged~~. ~~On-site power lines of 34.5 kV and below must be buried.~~~~

~~(5) Energy generation systems shall be required to comply with the most current safety and environmental standards as set forth by federal and state regulatory agencies.~~

~~(4)(6) If deemed feasible by the Applicant, a commitment on the part of the Data Center to offer the Data Center's back up power generators or main generation system to supply power to the local grid in times of emergency or prolonged power outages for the community that are highly detrimental to the health, welfare and safety of the community.~~

I. Emergency Management Plan and Related Fire & Safety Requirements.

(1) The applicant shall submit with the conditional use application an emergency response plan (ERP) prepared by a qualified professional. The ERP shall:

(a) Be reviewed and accepted by the local fire department, emergency management services and Township emergency management coordinator (the "Emergency Management Team") as part of the conditional use process.

(b) Include detailed procedures for fire suppression, containment, proper removal and disposal of contaminated water and fire suppression liquids, 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) The ERP shall be reviewed semi-annually by the Township for the duration of the Data Center's operations. All costs for such semi-annual reviews shall be paid by the applicant. The applicant shall be responsible for all costs for specialized training for fire and EMS personnel that is necessary to respond to emergencies at the Data Center inclusive of any additional training needed due to required updates to the ERP.

- (3) Any Data Center 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 (including most recent editions), or similar and most updated standards and must include fire suppression systems designed specifically for battery storage. The design, location and configuration of the battery storage shall be specifically reviewed and approved as part of this ERP and any upgrades or changes following initial approval shall also be reviewed and subject to approval by the Township's Emergency Management Team. The battery storage shall include self-contained weather-resistant enclosures with automated fire detection and suppression systems and a battery protection unit designed to provide 24/7 redundant active monitoring. The battery storage shall include a modular design to mitigate the risk of propagation across modules.
- (4) No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficient to protect public health, safety and welfare including the safety of the fire and EMS personnel responding to onsite emergencies.

J. **Construction Plans, Groundwater Protection, and Decommissioning.**

- (1) (1)—Construction Plans. Applicant shall coordinate with the Township and develop a construction plan which shall be adhered to by all vehicles and equipment involved in the construction of the Data Center including construction deliveries, equipment and contractors, to minimize disruption to the traffic in the vicinity of the subject property. This plan shall include appropriate times and locations for access by construction vehicles and anticipated delivery of large equipment. This construction plan must be approved by the Township as part of final land development plan approval. The Township shall have the authority to require more detailed information be added to the plans as well as consistent updates as the project progresses.
- (2) Groundwater Monitoring Wells ("GM Wells"). As part of any land development submission, the applicant shall submit a plan to the Township detailing the proposed location of a minimum of three (3) GM Wells upon the property as well as a sampling and testing schedule. Prior to commencement of operations, the applicant shall install the proposed GM Wells on the property, positioned downgradient of all hazardous material storage, battery storage, and fuel storage areas. The GM Well plan, sampling and testing schedule, and installation shall be subject to review and approval by the Township which may include reviews by consultants hired by the Township. The Township shall require baseline groundwater sampling and testing prior to any site disturbance and continued testing as set forth in the plan as approved by the Township. If any groundwater monitoring result exceeds Pennsylvania Department of Environmental

Protection (DEP) residential Medium Specific Concentration (MSC) standards, or shows a statistically significant increasing trend over any four consecutive sampling events, the applicant shall submit a remediation plan to the Township within 60 days; cease or modify operations as directed by the Township pending remediation if the Township determines continued operations pose a risk to public health or the water supply; and bear all costs of investigation, remediation, and any required restoration of affected private wells or public water supplies.

(32) Decommissioning. The Applicant shall submit with the conditional use application a decommissioning plan prepared by a qualified professional. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration. Decommissioning must begin within one year of cessation of Data Center operations and be completed within 18 months. The Township ~~shall~~ may require financial security (with related agreements) to be posted to cover the full cost of decommissioning and site restoration if not done in a timely fashion by the operator/owner of the Data Center.

K. **Community and Environmental Impact Statement.** Upon submission of a conditional use application, the applicant shall provide a community and environmental impact statement to be reviewed by the Township and its consultants. The statement shall include:

~~(1)~~(3) A narrative description of the nature of the proposed on-site activities and operations, anticipated hours of operations, anticipated frequencies and types of vehicle trips generated, and anticipated types of materials/equipment stored on site. Information obtained from any required Transportation Impact Statements/Analyses may be summarized here.

~~(2)~~(4) An evaluation of potential impacts of the proposed use, both positive and negative, upon the following: Emergency services and fire protection; water supply; sewage disposal; solid waste disposal; school facilities and school district budget; and municipal revenues and expenses.

(3) An evaluation of possible environmental impacts and proposed mitigation strategies if necessary relevant to the following: air quality; soil quality; water quality; groundwater sources; and wildlife habitat.”

SECTION 4. Matrix Chart 5, as referenced in Section 215-117. E, is amended to add the area and bulk regulations for a Data Center as follows:

Use	Procedural Requirements	Utility Requirements		Min. & Max Net Lot Area	Min. Lot Width (feet)	Min. Yard Requirements*			Max Height (feet)	Max Coverage	
		Sewer	Water			Front (feet)	Side (each) (feet)	Rear (feet)		Building (percent)	Lot (percent)
Data Center	Conditional Use	Public	Public	10 acres min 40 acre max	200	200	200	200	50 ft	30%	50%
						*See § 215-123.1 for residential setbacks.					

SECTION 5. Section §215-152.R shall be amended to include Data Center use as a listed use in Matrix Chart 12 and to require one (1) parking space per two (2) employees on the two (2) largest shifts combined plus one (1) space for each vehicle stored on site for such Data Center use.

SECTION 6. 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 hereof. It is hereby declared as the intent of the Board of Supervisors of West Nantmeal Township that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

SECTION 7. Repealer. All Ordinances or parts of Ordinances conflicting with any provisions of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

SECTION 8. Effective Date. This Ordinance shall be effective upon enactment as provided by law.

ENACTED AND ORDAINED this ____ day of _____, 2026.

BOARD OF SUPERVISORS
WEST NANTMEAL TOWNSHIP

ATTEST:

 Deborah M. Kolpak, Secretary

BY: _____
 Gary C. Elston, Chair

 Nelson R. Beam, Vice Chair

 Barclay Hargreaves, Member