

**TOWNSHIP OF SOUTH HANOVER
DAUPHIN COUNTY, PENNSYLVANIA**

ORDINANCE NO. 2026 - _____

AN ORDINANCE OF THE TOWNSHIP OF SOUTH HANOVER, DAUPHIN COUNTY, PENNSYLVANIA, AMENDING ARTICLE 2 (DEFINITIONS), ARTICLE 3 (ZONING DISTRICTS), ESTABLISHING ARTICLE 22 (DATA CENTER OVERLAY) TO CREATE A DATA CENTER OVERLAY DISTRICT, AND AMENDING THE ZONING MAP TO INCLUDE CERTAIN LANDS WITHIN THE DATA CENTER OVERLAY DISTRICT

WHEREAS, Article I, Section 27 of the Pennsylvania Constitution guarantees the people's right to clean air, pure water, and the preservation of the natural, scenic, historic, and aesthetic values of the environment;

WHEREAS, the Governor of the Commonwealth of Pennsylvania has issued Executive Order 2026-05 Protecting Pennsylvania Consumers from Data Center Impacts which requires demonstration that any data center project is consistent with the local comprehensive plan;

WHEREAS, the Board of Supervisors seeks to protect its rural, agricultural, and residential character and its clean water, air, and natural resources **as outlined in the adopted 2019 Comprehensive Plan**;

WHEREAS, the Pennsylvania Municipalities Planning Code (MPC) authorizes municipalities to regulate land uses for the health, safety, and general welfare of their citizens;

WHEREAS, the Board of Supervisors of the Township of South Hanover, Dauphin County, Pennsylvania, having adopted a Zoning Ordinance at Chapter 27 of the Township of South Hanover Code of Ordinances to, inter alia, promote coordinated and practical community development within the Township; and set forth the definitions, uses, requirements, and regulations for zoning in the township; and

WHEREAS, the Board of Supervisors finds it necessary to amend the Zoning Ordinance to include definitions of terms and conditional uses of Data Center Facilities, and

WHEREAS, the Board of Supervisors finds it necessary to establish within the Zoning Ordinance an Article providing regulations pertaining to Data Center Facilities.

WHEREAS, data centers and other industrial uses may place significant burdens on local water, energy, air quality, roads, and natural areas, and must be carefully regulated;

WHEREAS, the Board of Supervisors recognizes that excessive artificial heat, concentrated exhaust, other thermal nuisances, and noise can pose risks to public health and safety, exacerbate heat stress, damage vegetation and property, contribute to the urban heat island effect, and cause other adverse health impacts thereby diminishing the quality of life for Township residents.

NOW, THEREFORE, IT IS HEREBY ORDAINED AND ENACTED, by the Board of Supervisors of the Township of South Hanover, Dauphin County, Pennsylvania, that the Code of Ordinances of the Township of South Hanover, Chapter 27 (Zoning) Article 2 (Definitions) and Article 11 (Industrial Park District: IP) section 27-1104 (Conditional Uses), be amended in accordance with the changes described herein.; and that Article 22 (Data Centers) be established.

SECTION 1. The Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning, Article 2, Definitions is hereby amended as follows:

DATA CENTER: A facility used for the housing, operation, and/or co-location of computer and communication equipment for the purpose of storage, management, processing, and/or transmission of digital information necessary for the operation of one or more business, commercial, or governmental entities. Typical supporting equipment includes back-up batteries and power generators, cooling units, fire suppression systems, water storage and enhanced security features.

DATA CENTER ACCESSORY USE:

Those uses and structures customarily incidental to a Data Center, including administrative buildings and offices, utilities, utility lines, pump stations, water towers, mechanical equipment and environmental controls (air conditioning or cooling towers, fire suppression, etc.), redundant/backup power supplies (gensets and associated fuel storage tanks), redundant communications connections, antenna (microwave tower or commercial), and high security (including guardhouses, crash-rated fencing, roadways, parking lots and controlled access equipment and structures).

EMERGENCY POWER OUTAGE : “Emergency,” as used herein, is defined as an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power. Such events may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected “entity” to prevent.

For the purposes of this Ordinance, an emergency does not occur from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory action which prohibits the use of certain electric power supply facilities. Extended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities does not qualify as an emergency herein.

Situations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions or other economic factors relating to service, will not be considered as emergencies

PEAK SHAVING: An energy management strategy that involves reducing electricity use by using alternative power sources during periods of highest demand to avoid peak charges or alleviate stress on the grid.

SENSITIVE RECEPTOR: Shall include: Residential Dwellings,,Schools, Day Care Facilities, Churches, Hospitals, Nursing Homes, Community Centers, Recreational Parks, Nature Preserves, Campgrounds, And Similar Residential, Institutional, Recreational Or Ecological Uses.

WASTE HEAT: Heat generated as a byproduct of data center operations.

CLOSED-LOOP SYSTEM: For cooling data-center equipment is a cooling arrangement in which the coolant (air or liquid) circulates within a sealed circuit that does not exchange process fluid with the ambient environment. Closed loop systems should be designed to avoid the use of hazardous chemicals including glycol, PFAS or other potential contaminants if possible.

AREA OF INFLUENCE (AOI): For ground/well water monitoring shall mean the greater of the horizontal extent of the production well(s)' cone of depression, as determined by the hydrogeologic report, or the area within 3,000 feet of the data center overlay district boundary.

SECTION 2: The Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning, Article 3, Designation of Districts, Section 27-301, Zoning Districts, is hereby amended to include the following new overlay zoning district:

DCO	Data Center Overlay District
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SECTION 3: The Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning, Article 3, Designation of Districts, Section 27-302, Zoning Map, Subsection 1, is hereby amended to include the following changes:

The boundaries of the R-A, ESC, R-S, R-U, R-M, R-MH, V, IP, OP, CH, and DCO Districts shall be as shown upon the map attached to and made a part of this chapter, which shall be designated "Zoning Map." The said map and all the notations, references and other data shown thereon are hereby incorporated by reference into this chapter as if all were fully described herein.

SECTION 4: The Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning,

Article 3, Designation of Districts, Section 27-303, Boundaries between the R-A, ESC, R-S, RU, R-M, R-MH, V, IP, OP, and CH Districts, is hereby amended to be entitled:

Boundaries between the R-A, ESC, R-S, R-U, R-M, R-MH, V, IP, OP, CH, and DCO Districts

SECTION 5: The Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning, is hereby amended to Establish in its entirety Article XXII, Data Center Overlay, as follows:

§ 2201. Establishment of Data Center Overlay District.

1. Purpose. The purpose of the Data Center Overlay District (DCO District) is to **provide for the reasonable use of Data Centers**, Data Center Accessory Uses and **associated Electric Transmission And Distribution Facilities** subject to the requirements of this Article XXII.
2. The standards are intended to ensure compatibility with surrounding land uses, to protect public health, safety, and welfare, and to preserve environmental resources, while maintaining reasonable opportunities for siting within designated zoning districts.
3. Boundaries of District. The boundaries of the DCO District shall be the Industrial Park District (IP) as delineated on the Zoning Map specified in Section 27-302 of this Chapter.
3. Applicability. The DCO District shall be an optional overlay district for certain land as depicted on the Zoning Map. With the exception of the standards of Article XIV (Floodplain District: FP), which shall prevail and apply over the standards of Article XXII, the standards of Article XXII shall supersede **only the specifically identified standards** set forth in the **overlay district**. In the event of a conflict between the provisions and standards of Article XXII and any other provision or standard of this Chapter, **the more restrictive provision shall prevail**.

§ 2202. Conditional Uses. The Data Center Overlay and all the uses contained therein shall be subject to review and approval as a conditional use. The conditional uses in the Data Center Overlay shall be:

1. **Data Center**
2. **Data Center Accessory Use**
3. **Electric Transmission and Distribution Facilities**

Electric Transmission And Distribution Facilities, including substations may require additional planning submission if not included in the application. Electric Transmission and Distribution Facilities shall be contained **within the overlay boundary and** shall adhere to all provisions of this ordinance.

§2203. Lot Area, Width and Yard Regulations.

1. Lot Area and Width Regulations

- A. The minimum lot area shall not be less than 20 contiguous acres.
- B. The width of any lot shall not be less than 200 feet at the right of way line or the building setback line.
- C. The total overall tract area for the development of a data center shall be contained to the Industrial Park District (IP).

2. Yard Regulations

- A. Front Yard: 100 feet
- B. Side Yard: 75 feet
- C. Rear Yard: 75 feet
- D. Corner lots shall be provided two (2) front yards, one (1) side yard, and one (1) rear yard.
- E. Data Center accessory uses, except stormwater management facilities, shall not be placed in the required yard setbacks.
- F. Any plan shall include a setback of **250** feet **except that,**
 - a. **Data Centers and Data Center Accessory Uses shall maintain a minimum setback of one thousand (1,000) feet from any Sensitive Receptor.**
 - i. **Adjustment Clause: Where strict application of the above setbacks would result in de facto exclusion of data centers from the Overlay District, the Board of Supervisors may authorize a reduction of up to 50% of any setback, provided that such reduction does not compromise public health, safety, or welfare. Any request for a setback reduction must be in writing and accompanied by acceptable documentation prepared by a qualified professional.**
 - ii. **This distance from Sensitive Receptors may be reduced to a range of 500-999 feet if the applicant can successfully demonstrate through**

competent professional evidence how it will exceed other environmental performance standards including:

- noise levels that do not exceed ambient noise for that area,
- air quality standards,
- visual screening and/or aesthetic improvements that mask the data center use,
- thermal impacts are mitigated
- Public health, safety and welfare are protected

b. Electric Transmission and Distribution Facilities shall maintain a minimum setback of eight hundred (800) feet from any Sensitive Receptor.

c. Greater setbacks shall apply if otherwise required by the buffer, environmental, or nuisance control provisions of this Ordinance. The Township may, as a condition of approval, require engineered noise mitigation plans, including barriers, enclosures, baffling, or alternative cooling technologies (e.g., liquid immersion cooling), to ensure compliance with the noise standards established herein.

§2204. Coverage Regulations.

1. Coverage shall not be more than 60% of the total lot area, including parking areas.
2. No less than 35% of the lot shall remain green or open space, not including stormwater management facilities.
3. Maximum gross building coverage: 50% of overlay area

§2205. Height Regulations and Building Façade Standards.

1. No principal building or structure shall exceed 40 feet in height. Building height shall be calculated from ground to the top edge of the main roofline and exclude any mechanical or accessory equipment, screen walls, and/or parapets.
 - A. No accessory structure or uses, except public utility structures or facilities, shall exceed 40 feet in height.
 - B. No mechanical or accessory equipment mounted on the roof shall exceed 20 feet in height from the top edge of the roof. All roof mounted equipment will be screened to minimize noise and visual impacts.

4. Building Standards:

- A. Facades shall be consistent in terms of design, material, detail, and treatments.
- B. Facades shall avoid the use of undifferentiated surfaces that result in a monolithic appearance by including at least two of the following design elements:
 - 1. Fenestrations
 - 2. Change in material, pattern, texture, color, or accents.
 - 3. Building step-backs or recesses, projections, or avant-corps.

§2206. Buffer and Screening Regulations.

- 1. Buffer yards shall be required to meet the requirements of Section 27-1508, Subsection 1.F, except as otherwise provided in this Section 27-2206.
- 2. For property lines that are shared with a **Sensitive Receptor**, the depth of the buffer yard shall be increased to a minimum of 400 feet and shall include an earthen berm having a maximum slope of three feet of run to one foot of rise and a minimum height of 25 feet above grade. The top of the berm shall consist of a flat area having a minimum depth of 15 feet.

An alternative earthen berm structure may be proposed in writing, if it can be demonstrated that the impact of visual screening and reduction of noise levels from the above berm structure can be met or exceeded by the proposed earthen berm. Such proposal must include a report by a qualified, licensed engineer demonstrating that the intent of this section will be met.

- A. The berm shall be planted with a variety of drought-resistant native species in order to prevent monocultural plantings. The berm shall include evergreen trees with a minimum planting height of 10'. American arborvitae and similar weak-stem plants shall not be used to meet the buffer yard requirements.
- B. No more than 50% of plants shall be of one species.
- C. In addition, a landscaping plan must include at least one canopy tree and three evergreen trees per 25 linear feet of buffer, supplemented with native shrubs and groundcover.

- D. Any required screening plantings shall be arranged on the outside and top of the berm.

Notwithstanding the foregoing:

Where existing trees and/or an existing berm is adequate to meet the intent of the required screening and are located within an area where such a buffer yard is required, then in connection with the review of a land development plan the Board of Supervisors may (i) require that such existing trees and/or existing berm may be maintained in lieu of the requirements of this Subsection 2, provided that the Board of Supervisors determines that such existing trees and/or berm provides screening that is equally or more effective than the requirements of this Subsection 2 or (ii) require that such additional berm and/or trees be installed as may be accommodated outside of existing trees and/or existing berm.

Where wetlands, ponds, streams or other waterways or natural features interfere with the installation of the required berm between the property line and proposed buildings or structures, a soundwall may be substituted for the berm or may be used to supplement a berm that is less than 25 feet in height, provided that (i) such soundwall is limited to the areas where the required berm at the required height is not installed, (ii) the minimum depth of the buffer yard remains at 400 feet, and-(iii) the soundwall has a minimum height of either (a) 25 feet if the soundwall is not located on a berm or (b) a lesser height such that the sum of the height of the soundwall plus the height of any berm upon which the soundwall is to be located is a minimum of 25 feet. Sound wall panels shall be constructed of masonry materials.

- E. All buffer yard plantings shall be perpetually maintained by the property owner. Any plant material that dies, is removed, is diseased, or is severely damaged shall be replaced by the current property owner, on a one-to-one basis, as soon as is practical considering growing seasons, within a maximum of 150 days.
- F. Disturbance of existing trees shall be at a minimum. Under no circumstances shall more than 50% of any existing tree mass, tree line, hedgerow or group of freestanding trees with a diameter of (6) six inches or greater DBH be removed as part of this development. Disturbance of existing

§2207. Noise & Vibration Regulations.

1. No Data Center or Data Center Accessory Use, or any combination of Data Center and Data Center Accessory Uses developed as part of a unified

development, shall cause or contribute to sound levels in violation of the standards established by this section. Where there is a conflict between this section and any other section of this chapter, the provisions of this section shall apply.

2. As part of any land development plan submission, the applicant shall submit a pre- and post construction **acoustical study(s)** providing:

- a) Estimates of pre-construction **ambient** sound **and vibration** levels
- b) Establishes post construction sound **and vibration** levels at the time of operation **of all proposed uses** in compliance with the applicable provisions of this Section 27-2207.
- c) **Acoustical Study Measurement**
 - i. **Terminology and measurement practices shall follow applicable ANSI S1 & S12 standards.**
 - ii. **The contribution of wind noise to each compliance measurement shall not exceed 5 dBA (or dB). Measurements shall be made with properly installed windscreens, and any measurement influenced by wind noise exceeding this limit shall be discarded or repeated under acceptable conditions.**
 - iii. **Measurements shall exclude significant effects of Natural Environmental Sounds and Normal Community Sounds. The signal-to-noise ratio of the combined effect of Natural Environmental Sounds and Normal Community Sounds shall be at least 5 dBA (or dB) and preferably at least 10 dBA (or dB).**

Definitions:

Natural Environmental Sounds: Environmental sounds that are inherent to the area and due to naturally occurring sounds such as insects, rustling leaves, wind, wild birds, wild animals, frogs, rain, lightning, or weather.

Normal Community Sound: Sound that is inherent to and consistent with the norms of the local community and which the average resident would reasonably expect to occur in their community. Including, but not limited to: children playing, occasional dog barks, domestic power tools, residential HVAC equipment, and transportation sounds, including trains.

- iv. **Impact or impulse-type sounds shall be measured with the un-**

weighted Peak Sound Pressure Level (LPK) using a meter specifically designed for peak measurements and conforming to the applicable ANSI S1 standards. RMS (root mean square) measurements using the “fast” response setting or any legacy “impulse” function shall not be used.

d) All acoustical studies shall include full spectrum modeling to address low-frequency noise including:

- Equivalent continuous sound level ((L_{EQ}) measurements
- Statistical Noise Levels L90 measurements;
- dBA and dBC measurements;
- Identification of transient events and their impact on ambient sound measurements

Maximum Sound Levels for All Uses				
Affected Zoning District(s)	Daytime Maximum dBA	Nighttime Maximum dBA	Daytime Maximum dBC	Nighttime Maximum dBC
Residential (R-A, ESC, R-S, R-U, R-M, V, R-MH, R-MT and R-C)	55	45	55	45

e) The report shall include proposed methods and materials to mitigate excess noise levels and limit the dBA and dBC levels at the property line to the levels stated in the table in paragraph 2 below.

f) The Township may retain an independent acoustical consultant selected by the Township and funded by the Applicant to review all acoustical studies, assumptions, methodologies, analyses, and conclusions.

g) Where competing acoustical analyses are submitted, the Township may rely upon the opinion of its independent acoustical consultant for purposes of ordinance compliance.

3. Sound levels shall not exceed the following dBA and dBC levels. Measurements shall be at the property line, at both ground level and 20 feet above ground level.

4. For the purposes of this section: “Daytime” means 7 a.m. to 7 p.m. and “Nighttime” means 7 p.m. to 7 a.m. for the 24-hour period in question.

5. If the pre-construction Acoustical Study establishes a baseline ambient noise level in excess of the maximum sound level permitted under this Chapter, the Post-Construction Study shall demonstrate that operations of the proposed use do not materially increase the baseline ambient noise level as measured at the property line.

6. Auxiliary Power

- a. Permitted generators used in any data center project shall be Tier 4 or above.
- b. Testing of auxiliary power generating systems, including generators, shall occur between the hours of 9:00 AM and 3:00 PM EST, provided that such testing shall (i) occur only on non-holiday weekdays, (ii) not produce sound levels that exceeds pre-construction ambient levels at the property line, (iii) be limited to a maximum time period of two hours, one time per week and not exceed 30 hours per calendar year per unit. Total facility wide testing may not exceed 300 hours per calendar year, regardless of the number of units installed.
- c. Auxiliary energy generation that uses diesel, gasoline, or another fossil fuel shall be used only when the primary source of energy is not available due to an Emergency Power Outage.

Auxiliary power generating systems shall not be used to augment the primary power system for purposes of increased data processing capacity or for normal data center operations.

Use for **PEAK SHAVING** or supplying power to the grid is prohibited.

- d. Where pre-construction ambient conditions exceed ordinance thresholds, operation of the auxiliary power shall not materially increase baseline ambient sound levels at adjoining Sensitive Receptors.
- e. The applicant shall design and locate emergency energy generation systems to limit noise and visual impacts as much as possible.
- f. For any fossil fuel powered generators located less than 1,000 feet from Sensitive Receptors, use of Selective Catalytic Reduction (SCR) and/or other systems to further lower emissions to Tier 4 Final or better standards shall be used.

Fossil fuel generators shall undergo annual testing and reports shall be provided to the municipality to ensure that the equipment is performing as designed and that emissions do not exceed National Ambient Air Quality Standards as defined by the Clean Air Act and PA Ambient Air Quality Standards.

6. Annual Noise Monitoring

- a. Independent acoustical monitoring, at the owner's expense, shall be conducted annually during the first five (5) years following commencement of operations of any data center building and every three (3) years thereafter. This schedule may be modified by the Board of Supervisors in the event of noise violations.

Monitoring shall include:

- dBA;
- dBC;
- Low-frequency analysis;
- Property-line measurements;
- Comparison to baseline ambient conditions.

Reports shall be submitted to the Township and made publicly available.

If it is determined that there is a violation of the aforesaid noise limits, corrective action shall occur within sixty (60) days of any confirmed exceedance. Failure to correct within 60 days shall be considered a violation of this Ordinance.

Noise mitigation measures may be required by the zoning officer when acoustical studies show that the use is generating noise approaching established limits.

7. Cooling Equipment Placement

- a. Cooling towers, chillers, fans, and other major noise-producing mechanical equipment shall be located on portions of site or structures furthest from Sensitive Receptors whenever feasible.
- b. Where site conditions permit, placement at grade or below grade shall be preferred.
- c. The Applicant shall evaluate cooling equipment placement alternatives as part of the Conditional Use application.

8. Vibration Standards

- a. No vibration that exceeds an acceptable level per ISO 2631-2:2026 should occur.
- b. Vibration/Electromagnetic Study: A Vibration/Electromagnetic Study shall be provided that demonstrates: 1) that the proposed use will not create ground vibration that is perceptible, without instruments, at any point of any property line of the overlay district (vibrations from temporary construction and vehicles are excluded); and 2) The Applicant shall demonstrate compliance

with all applicable FCC, IEEE, and Federal electromagnetic interference and exposure standards. This study shall be prepared by an independent qualified professional. Prior to building permit issuance, the applicant shall establish a baseline seismograph readings at property lines consistent with reasonable industry standards and submit certification that installed equipment complies with FCC Part 15 or equivalent EMI standards. Within (90) days after issuance of the certificate of occupancy (COI), the owner or operator shall file a post-commissioning compliance report. Any exceedances shall be corrected within (60) days.

- c. The Township may require vibration monitoring where warranted as per §2210 (9) below.

§2208. Lighting and Glare Regulations.

1. Lighting shall be designed so as to not produce objectionable or nuisance glare onto neighboring properties and conform to all provisions of § 27- 1512 Performance Standards.
2. A photometric plan shall be provided showing all exterior lighting shall be designed so as to not produce more than 0.0 foot-candles, measured both horizontally and vertically, at any abutting property line. Any intersection of an access drive to a public road where the lighting is required for public safety shall be designed such that direct light or lighting elements are not visible beyond the right of way. In addition, a report or plan shall be provided that includes details on the type of lighting fixtures, poles, and other pertinent materials and equipment upon which the photometric plan is based.
3. Exterior lighting shall not be mounted higher than 38 feet on a standard or other freestanding support or the exterior of a structure from the lowest adjacent grade. The fixture shall be fully shielded or cutoff so as to direct light at a downward angle and towards the interior of the lot and not equal to or higher than the horizontal plane of the bulb, bulb enclosure, or light shielding.
4. LED light sources shall have a correlated color temperature that does not exceed 3000k.

§2209. Signs.

1. Signs shall be provided in accordance with Article XVII, "signs," of this chapter.

§ 2210. Environmental Requirements.

1. Water use

- A. No groundwater shall be used for heat mitigation or to cool a data center or accessory use. For purposes of this ordinance, groundwater refers to water found under the earth's surface and/or water which feeds the quarry.
- B. No data center shall use direct withdrawals from surface watercourses as its primary source of water for cooling purposes if a public water source is available.

- C. Cooling System Source and Use Assessment: A report shall be provided to the Township for review and approval or rejection within 30 days of any Data Center development plan submission stating what source(s) of cooling is proposed for the data processing equipment and heat mitigation needs along with a water needs and usage analysis for the project.

a. Data centers shall be designed to include a Closed Loop System to cool data center processing equipment. An applicant may propose an alternative cooling system that can be demonstrated to use less water and energy than closed-loop systems to the satisfaction of the municipal engineer.

Closed loop systems should be designed to avoid the use of hazardous chemicals including glycol, PFAS or other potential contaminants if feasible. If hazardous materials are used, the applicant must provide spill prevention, secondary containment (sized for the full system volume), and a hazardous materials response plan. The discharge, release, migration, or leakage of hazardous cooling compounds into groundwater, surface waters, stormwater systems, or soils is expressly prohibited.

Routine testing for fluid leaks and an annual certification of containment integrity are required.

b. If surface water is proposed as a cooling source, a groundwater monitoring program shall be planned and submitted to the Township for approval and if approved, implemented to ensure any adverse effects to residential wells are documented and subsequently addressed by the data center owner(s) and/or operators.

c. Baseline groundwater conditions shall be determined as part of the initial part of the Groundwater Monitoring Program. The planned program shall be submitted as part of any land development plan for approval by the Township.

Groundwater Monitoring Program:

The applicant shall submit a Groundwater Monitoring Program prepared by a professional licensed hydrogeologist with expertise in groundwater resource planning and management or another qualified professional approved by the Township.

The Groundwater Monitoring Program shall include:

1. An inventory of existing wells, springs, and other groundwater resources within the AOI, including information on the location, ownership, depth to water, and usage for all wells;
2. Description of a groundwater monitoring system that ensures accurate characterization of groundwater flow, groundwater quantity and quality, and flow systems within the AOI.
3. Benchmark data collected prior to commencement of operation against which the impact may be compared in the future.
4. A method of monitoring ground water for adverse impacts on quantity and quality
5. Quarterly reports on the quality and quantity submitted to the Township and made publicly available
6. A running comparison of monitoring data comparing the data for the recording period to the data for the same period in each of the previous five years;
7. Any additional information the Township deems necessary to effectively assess the impact of the proposed development on groundwater quality and supply
8. Procedure for Groundwater Related Complaints.
 - a) Any owner of a well or other person who believes a Data Center has caused an adverse impact to such person's water rights or water supply may file a complaint in writing with the Township on a form prescribed by the Township.
 - b) Upon receiving a complaint pursuant to paragraph (a), the Township shall notify the Data Center Operator in writing within five (5) business days.
 - c) Within 30 days from the date of receipt of the complaint, the Township shall decide whether the Data Center has caused the alleged adverse impact unless the complainant has agreed in writing to an extension of time or a hearing has been requested.

D. WATER FEASIBILITY STUDY

Applicant shall demonstrate that sufficient water is available. A Water Feasibility Study prepared by a qualified professional licensed in the Commonwealth of PA shall be submitted and include:

1. Calculations of the projected water needs, including seasonal fluctuations;
2. Source(s) of water;
3. Description of use **and flows** for cooling, domestic, fire suppression, etc.;
4. A geologic map of the proposed project area within a radius of at least one mile from the overlay boundary and including the **location of all existing and proposed wells within the AOI.**
5. All surface waters within 1,000 feet of the overlay boundary
6. The location of all faults, lineaments and fracture traces on-site and within 0.5 miles of the DCO.

For applications using Public Water:

1. Applicant shall provide a will serve letter from the public utility confirming that the required quantities will be supplied and shall supply a water needs analysis confirming required quantities.

For Surface Water Withdrawals:

The Data Center shall not cause an adverse impact to the water rights or water supply of others, including, but not limited to, by reducing the existing rate of flow of wells, causing contamination of wells or surface waters, or depleting surface water resources of surrounding properties.

1. A hydrogeologic report shall be prepared by a Pennsylvania licensed geologist;
2. The report shall include aquifer testing and long term sustainable yield analysis;
3. Baseline groundwater conditions shall be documented
4. A determination that the proposed water supply system poses no adverse impacts on the quantity and quality of water in nearby wells, streams, and the groundwater table

5. Pre-Construction Well Testing

The Applicant shall notify all property owners within the AOI and offer, at its sole cost, baseline testing of all water wells, including: water quality; static water level; well depth and yield. Results shall be included in the Water Feasibility Study.

6. The Board of Supervisors may require other tests and/or documentation as necessary to ensure surface water use will negatively impact the surrounding area.

7. Well Water Financial Security Fund

- a. Applicant shall post additional financial security at the time of land development approval for financial security in an amount determined by multiplying \$5,000 by the number of all groundwater wells within the for residential well water protection in an amount determined by the Township based on the number of wells within the AOI.
- b. Said security shall remain in effect for a minimum of ten (10) years after commencement of operations. If any adverse effects are demonstrated within the ten (10) year period, said security shall remain in effect the entire duration of site operation through decommissioning.
- c. The Township may draw upon the well water financial security fund to complete remediation of residential wells if the impact is deemed to have occurred by the data center and the data center has not remediated.

- E. The applicant shall provide a drought response plan to demonstrate compliance with state, water supplier, and local drought declaration requirements.
- F. To the extent required by state or federal law, Applicant shall provide proof of review and approval from the Susquehanna River Basin Commission (SRBC) for all projects that have surface water consumption of 20,000 gpd or more and supply a raw water needs analysis showing required quantities from any private or public source.
- G. Any cooling system use where water is taken directly from a surface water source shall be designed and installed in accordance with all Federal and State regulatory and permitting requirements and the area and components be secured from access by fencing of at least 6 feet in height.

H. Wastewater:

1) The applicant shall demonstrate to the Township that adequate means of wastewater disposal have been provided for and approved by the all relevant authorities including, the Township Engineer, DEP and the Derry Township Municipal Authority. Wastewater shall include sewage and water discharged as part of the data center's operation.

a. Evidence must be provided that the receiving wastewater collection system and wastewater treatment plan have the means to handle the additional flow and to adequately treat the discharged water.

b. The applicant shall provide the Township with proof in the form of a will-serve letter. The appropriate authority may require metering of water being discharged into its system.

c. Any wastewater transported to an off-site processor, such actions will comply with all Commonwealth of Pennsylvania, DEP and Federal standards. A contamination abatement plan will also be required in the event of release to the environment.

2) Any wastewater generated is prohibited to be discharged to stormwater systems, surface waters, private wastewater systems or to the ground.

2. Public water and sewer shall be provided for all sanitary facilities.
3. Any emissions of exhaust, gases, noxious odor or similar shall adhere to applicable State and Federal emission standards.
4. If Lithium-ion batteries are used for energy storage (BESS), design and operation of the storage should comply with the most recent NFPA and Underwriters Laboratory standards.

Note: If BESS is allowed, more related information must be added to the ordinance.

5. Hazardous Materials: A Hazardous Material Plan shall be required to include the following at a minimum:

a. No tank for the storage of flammable or otherwise hazardous material may be located less than 500 feet from any property line

b. Any storage of hazardous materials must demonstrate compliance with all applicable Pennsylvania Department of Environmental Protection (DEP) standards and shall implement all necessary spill containment systems and environmental protection measures to prevent groundwater or soil contamination.

c. Evidence must be provided that the Township emergency management coordinator and local fire company have been made aware of the potential for hazardous materials on the site and any concerns addressed as part of the plan.

6. A decommissioning plan prepared by a qualified professional shall be submitted as part of any Land Development submission showing the handling of any hazardous material and protection of any water sources upon closure of the facility, the handling and removal of any Electronic Waste (also known as “E-Waste”) and/or any other hazardous material that may be present on the site.
 - a.. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration.
 - b. Decommissioning shall begin within 1 year of cessation of data center operations, or upon notice of abandonment by the operator, whichever occurs first. An extension of 1 year may be granted by the municipality if the property owner can demonstrate that they are actively marketing the site for a compatible replacement use. Decommissioning shall be completed within 18 months thereafter, unless extended by the municipality for good cause.
 - c. Standards for Decommissioning:
 - i. All above-ground structures, equipment, and accessory facilities shall be removed.
 - ii. Hazardous materials, including batteries, fuel, or refrigerants, shall be disposed of in compliance with state and federal law.
 - iii. Disturbed soils shall be stabilized and re-vegetated with native plants.
 - iv. Any utility connections shall be safely disconnected and capped.
 - v. The site shall be restored to a condition compatible with surrounding land uses or consistent with the most restrictive adjacent zoning district.
 - d. Such decommissioning plan shall include the requirement as set forth in Section 2212 (Bond Required for Data Centers).

7. Energy Use:

Projects shall be designed and constructed to meet the current USGBC LEED BD+C: Data Centers rating system, or equivalent design standard, as approved by the municipal engineer.

Prior to approval of a land development plan, a report shall be submitted showing the estimated electrical energy needs and use and the proposed sources as well as maximum power requested.

The Applicant shall provide documentation from the applicable electric service provider certifying that capacity is available on the applicable supply lines and substation to ensure that the capacity available to serve the other needs of the service area is consistent with the normal projected growth envisioned by the provider. And that utility supply equipment and related electrical infrastructure are sufficiently sized and can safely accommodate the proposed use.

The report shall also include an analysis of any renewable energy source(s) proposed with design details, a decommissioning plan and cost estimate for decommissioning any onsite solar and wind energy sources proposed along with the proposed bonding source to cover the estimated decommissioning cost.

An exhibit showing the estimated routing of the electric power and data transmission lines to the site shall be included as part of the concept presentation for a subdivision and land development plan for a proposed data center. **Underground distribution infrastructure is required where feasible. Above-ground utility boxes and other equipment must be co-located and screened.**

8. Utilities – Applicant shall provide proof that the amount of anticipated utility use is feasible with the source from which the utilities are derived. Applicant shall also provide an exhibit demonstrating how energy will be delivered to any data center project and the location of any fiber optic or power lines as well as all relevant documents from any Commonwealth regulatory agency regarding the method of power supply or manner of running fiber/optic cable.
9. Emergency Management: A response **plan** shall be submitted with an analysis of emergency situations and occurrences which could be expected in a data center operation along with response plans and procedures for handling each situation. **The Emergency Management Plan shall:**
 - a. **Be reviewed by and acceptable to the local fire department and emergency management services as part of the conditional use process.**
 - b. **Include detailed procedures for fire suppression, containment, ventilation, and evacuation.**
 - c. **Ensure that the Township is in possession of equipment and supplies necessary for adequate fire suppression and containment.**
 - c. **Ensure that all first responders receive adequate training specific to the installed system at the expense of the applicant.**
 - d. **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.**

No Data Center shall be approved unless the applicant demonstrates that procedures and equipment for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare.

Upon occupancy, an annual report shall be submitted by January 1st of each year and shall address fire suppression, evacuation procedures, on-site hazardous materials and include access routes and hydrant locations.

10. **Geologic Impact Study and Protection Program**

- a. Applicant shall complete and submit to the Township a study showing the geological impact of any proposed use as a data center **including**:
 - i. Sinkhole susceptibility evaluation.
 - ii. Subsidence evaluation.
 - iii. Settlement analysis.
 - iv. Groundwater influence assessment.
 - v. Construction vibration assessment.
 - vi. Monitoring and remediation procedures.
- b. Applicant shall submit a Geotechnical Protection Program prepared by a Pennsylvania licensed geotechnical engineer which includes at a minimum:
 - i. Baseline home condition assessments surveys at their sole cost.
 - ii. Complaint submission program.
 - iii. Monitoring shall continue for not less than ten (10) years following commencement of operations.
- c. Geotechnical Financial Security

The Applicant shall establish financial security in an amount determined by the Township Engineer sufficient to remediate verified damages caused by:

- i. Subsidence;
- ii. Sinkhole formation;
- iii. Settlement;
- iv. Quarry-related geotechnical impacts;
- v. Construction vibration impacts.

Such security shall remain in effect for a minimum period of ten (10) years following commencement of operations and may be extended by the Township where continuing impacts are demonstrated.

11. **A Thermal Impact Mitigation Plan shall be submitted with the application, including, at a minimum:**

- a. Identification of primary sources of waste heat (air- and water-based).
- b. Evaluation of potential off-site thermal impacts (including plume/ heat discharge and localized heat islands) under representative seasonal conditions.
- c. Description of design measures to minimize heat impacts (e.g., equipment siting, shielding, landscaping, cool roofs/paving where applicable).

- d. Evaluation of feasible opportunities for waste heat reuse. Where reuse is not feasible, the reason(s) why should be given, in which case alternative mitigation shall be identified (e.g., vegetative or green roof and/or site design modifications).
- e. Inclusion of a monitoring/verification approach if required by conditions of approval based on proximity to sensitive receptors or site constraints.
- f. The Plan shall be prepared and certified by a professional engineer.
- g. The Thermal Impact Mitigation Plan shall be subject to review and comment by the municipality. The municipality shall have the right to require supplemental or amended plans prior to any zoning approval.
- h. Procedures for long term monitoring of potential thermal impacts

12. Blasting Protection Standards

- a) Applicants must receive blasting permits from both from the Township and DEP, including detailed plans for blasting and following all DEP regulations.
- b) Applicants must commission a report from a licensed geologist to determine whether properties over 1,000 feet from the blasting location will be affected by blasting.
- c) Applicants must notify all property owners within 1,000 feet or a range dictated by a geologist (whichever is greater) of blasting and, at their own expense, provide inspections to all properties within this radius requested by property owners. Inspections to include at a minimum:
 - i. Foundations
 - ii. Driveways
 - iii. Pools
 - iv. Patios
 - v. Decks
 - vi. Retaining walls
 - vii. Other major improvements
 - viii. The Township will, by video, inspect parts of the sanitary sewer system within 500 feet of blasting before blasting begins

Financial security shall be maintained to address verified damage claims as per section §2210. Environmental Requirements (10).

12. Threatened, Endangered and Protected Species

- a. A Pennsylvania Natural Heritage Program study (PNHI receipt) dated within (2) years of the submission of an application, as well as any county or state agency clearance letters required thereby, shall be provided to the Township.
- b. The applicant shall comply with all measures directed by the clearance letters to avoid, minimize, or mitigate impacts to endangered, threatened and special concern species and their habitat.

13. **Green Building Techniques:** Provided that such practices do not conflict with other sections of this Chapter, proposals are encouraged to implement low-impact development practices in site design and energy efficiency.

14. **Annual operating Compliance Report (AOCR).** On or before March 31 of each year, the owner shall submit an AOCR documenting compliance with water use including an updated water supply feasibility study and copies of any DEP filings, if applicable. The report shall also demonstrate compliance with all sections of this Ordinance including noise, vibration, thermal impact, air quality and electromagnetic requirements.

§ 2211. Off-Street Parking and Loading.

1. Except as provided herein below, off-street parking and loading shall be provided in accordance with the following and meet all other applicable requirements of Chapter 27, Article XVIII, Off- Street Parking.
2. For each Data Center principal building, 1.5 off-street parking spaces per onsite employee on the largest shift shall be provided.
3. For each Data Center principal building, the greater of (i) 1 off-street loading space per 125,000 square feet of gross floor area or (ii) 2 off-street loading spaces shall be provided.

§ 2212. Bond Required for Data Centers.

1. The Data Center facility owner must post a bond when the application for such a system is filed with the Township in an amount determined by the Township's Engineer, to ensure the proper decommissioning of the handling and removal of any Electronic Waste (also known as "E-Waste") and/or any other hazardous material that may be present on the site of Data Center. The applicant for a zoning permit for a Data Center shall execute an agreement with the Township providing financial security in an amount equal to one hundred twenty-five percent (125%) of the estimated cost to decommission the handling and removal of any Electronic Waste (also known as "E-Waste") and/or any other hazardous material that may be present on the site of the Data Center. The estimated cost shall be prepared by the Applicant and shall be in writing itemizing the costs. The estimated costs shall be subject to the approval of the Township. The financial security shall be in the form of one of the following:
 - A. funds deposited with the Township; or
 - B. a bond from an entity acceptable to the Township.
2. The agreement and financial security shall remain in effect until the decommissioning process has concluded and any Electronic Waste (also known as "E-Waste") and/or any other hazardous material that may be present on the site have been removed or remediated at the

discretion of the Township. The financial security may be utilized by the Township to pay the costs of repair, replacement, dismantling, removal and/or restoration of the Data Center or the land as provided herein.

Every five (5) years, a new estimate of the said costs shall be submitted to the Township in writing by the owner of the Data Center. The said estimate shall be subject to the approval of the Township. The said financial security shall be adjusted to remain equal to one hundred twenty-five percent (125%) of the said estimated costs. In the event the Township utilizes the said financial security as herein provided, the owner of the Data Center shall, immediately, replace the funds so utilized to the extent necessary to provide financial security in the amount of the said one hundred twenty-five percent (125%). The Township shall be entitled to an administrative fee of ten percent (10%) of the cost of any work done by it pursuant hereto. The same may be deducted from the financial security.

Should the financial security not be sufficient to pay the costs and fees, the owner of the Data Center (or successors) and landowner shall be held jointly and severally liable for the costs and fees not paid from the financial security. The agreement referred to herein shall be prepared by the Applicant and reviewed by the Township's Solicitor. All costs, expenses and fees incurred by the Township in reviewing the estimates or enforcing the said agreement shall be paid by the Applicant within ten (10) days of receiving a bill for the same. The Township is granted the right to seek injunctive relief, seek reimbursement and to file a lien against any real estate owned by the owner or owner successor, or in which they have an interest, for the amount of the excess and to take all steps allowed by law to enforce the lien.

§ 2213. Energy Generation

Any renewable energy generation facility intended to supply power to a Data Center during normal or emergency operations shall be considered a separate conditional use and shall not be permitted as an accessory use.

§ 2214 Access and Security.

1. Site areas shall not be developed so as to establish direct or indirect access corridors passing through residential development.
2. Any gated emergency access shall be fitted with a "knox-box" type device as approved by the local fire company.
3. All fencing, including security fencing, may not exceed ten (10) feet in height at the highest point of the fencing.
4. A traffic control plan showing the planned construction routes shall be submitted as part of the Conditional Use submission for review. No construction traffic may pass through residential development.
5. Each data center direct, indirect or emergency access point shall provide signage detailing the (24) hour emergency contact for the site, including the name and phone number. Additionally, the company name, owner or representative's name

and phone number, and the name and emergency phone number of the utility company.

§ 2215 New Approval Triggers

In the event of any of the following, a new conditional use application must be submitted for approval:

1. Expansion which includes additional DATA CENTER BUILDINGS, DATA CENTER ACCESSORY USES or ELECTRIC TRANSMISSION AND DISTRIBUTION FACILITIES
2. Changes to site plan
3. Operating system changes including changes to power or cooling systems greater than 10%
4. Operating changes due to new technology
5. Any increase of greater than 10% over the written approved level of resources consumed, including power demand, water use and auxiliary power capacity.
6. Unmitigated violations occurring longer than 60 days after notice

§ 2216 Community Impact Statement

Applicants shall submit a Community Impact Statement as part of their Conditional Use application, addressing:

1. Projected electrical demand and power source(s);
2. Estimated water consumption;
3. Emissions and noise levels;
4. Backup power systems and testing schedules;
5. Construction and operational traffic impacts;
6. Potential effects on farmland, wells, streams, and wetlands;
7. Proposed mitigation measures.
8. Emergency Response Plan, including coordination with local EMS, fire, and hazmat teams.
9. Potential negative effects of both short and long term property values of residential properties within a one mile radius of the overlay boundaries and proposed mitigation measures to ensure negative impacts are not absorbed by homeowners.

§ 2217 Public Engagement

1. The applicant shall hold a public meeting prior to the first planning commission meeting when the proposed land development or conditional use proposal is discussed. The purpose of the meeting shall be to inform the public about the nature of the proposed

development, including the location, scale, and general characteristics. A representative(s) of the applicant with knowledge of the project and the ability to answer general questions from the public about the project's general location, scale, and parameters shall participate in the meeting. The public meeting shall be advertised consistent with Data Center Ordinance Guide 25 "public notice" as defined by the Pennsylvania Municipalities Planning Code (PA Act 247).

2. The applicant shall create and maintain a project website for viewing by the general public.

- a. The site shall explain the project parameters, including maps and elevations/renderings, beginning at least two weeks prior to the meeting discussed above, and until the time of final land development approval.
- b. The site shall provide a description of the proposed use, construction timelines and phasing plans, dates of public meetings with municipal bodies, and status of permits.
- c. The site shall maintain current environmental compliance reports pertaining to: water quality, noise, thermal impact and any other monitoring reports as required for application approval.
- d. Contact information

§2218 Property Value Protection Program

Applicant shall establish and fund a Property Value Protection Program for owner-occupied residential properties located within a one mile radius of the overlay boundaries.

Program shall include:

- Independent baseline appraisals.
- Independent post-construction appraisals.
- Compensation for demonstrated loss in fair market value attributable to the project.

Program duration shall be not less than ten (10) years.

In the event of a dispute between appraisals, the Township may require review by a mutually agreed independent MAI-certified appraiser whose determination shall be final.

§2219 PERIODIC REVIEW

The Township Planning Commission shall review this Ordinance annually for the first five years of operation following each certificate of occupancy and at least every five (5) years thereafter. Such review shall consider:

- Resident complaints.
- Noise monitoring results.
- Water monitoring results.
- Technological changes.
- Best practices from comparable municipalities.
- Public safety impacts.

The Township Planning Commission may initiate recommendations to the Board for amendments based upon findings.

§2220 TOWNSHIP DECISION AUTHORITY

The Township may retain an independent acoustical consultant selected by the Township and funded by the Applicant to review any required studies, assumptions, methodologies, analyses, and conclusions.

Where competing professional studies are submitted under this Ordinance or Land Development review, including acoustical, traffic, hydrogeological, geotechnical, thermal, environmental, or engineering analyses, the Township may rely upon the opinion of consultants retained by the Township at the Applicant's expense for purposes of determining compliance with Township regulations.

SECTION 6. The Zoning Map of the Code of Ordinances of the Township of South Hanover, Chapter 27, Zoning, is hereby amended by adding and applying the limits of the Data Center Overlay District to include certain lands that are known as the Industrial Park Zone and identified as Dauphin County Parcel Id. No. 56-016-058-000-0000.

SECTION 7. All Ordinances or parts of Ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance. Except only as amended, modified, and changed herein, Chapter 27 of the Township of South Hanover Code of Ordinances as originally enacted and as previously amended shall remain in all other respects in full force and effect. The Township does hereby reserve the right, from time to time, to adopt modifications of, supplements to, or amendments of its ordinances, including this chapter.

SECTION 8. If any section, sub-section, provision, regulation, limitation, restriction, sentence, clause, phrase or word in this Ordinance is declared by any reason to be illegal, unconstitutional, or invalid by any court of competent jurisdiction, such decision shall not

affect or impair the validity of this Ordinance or Chapter 27 of the Code as a whole, or any other section, subsection, provision, regulation, limitation, restriction, sentence, clause, phrase, word or remaining portion of this Ordinance or Chapter 27 of the Code. The Township Board of Supervisors hereby declares that it would have adopted this Ordinance and each section, sub-section, phrase, and word thereof, irrespective of the fact that any one or more of the sections, sub-sections, provisions, regulations, limitations, restrictions, sentences, clauses, phrases, or words may be declared illegal, unconstitutional or invalid.

SECTION 9. This Ordinance shall become effective in accordance with applicable law.

DULY ORDAINED this ____ day of _____, 2026, by the Board of Supervisors of South Hanover Township, Dauphin County, Pennsylvania, in lawful session duly assembled.

ATTEST:

SOUTH HANOVER TOWNSHIP
BOARD OF SUPERVISORS

Secretary

By: _____

Note: Sources Used:

1. Chester County and Montgomery County Planning Commissions
<https://www.chescoplanning.org/UandI/DataCenters/pdf/DataCenterOrdinanceGuide.pdf>
2. PennFuture:
[https://pennfuture.org/files/galleries/Model-Data-Center-Ordinance-v_-2_0-\(cmts-as-footnotes\).pdf](https://pennfuture.org/files/galleries/Model-Data-Center-Ordinance-v_-2_0-(cmts-as-footnotes).pdf)
3. Physicians for Social Responsibility Model Quality of Life Ordinance:
<https://docs.google.com/document/d/18U8PVKVOhXEtbJLoVuAyGRmbL7n19c2lnh2du1Nk5M/edit?tab=t.0>
4. East Hanover Township Data Center Ordinance
<https://www.easthanovertpdcpa.org/DocumentCenter/View/1365/Proposed-Data-Center-Amendment-to-Zoning-Ordinance>
5. Tri County Regional Planning Commission Data Center Ordinance
https://www.tcrpc-pa.org/_files/ugd/1c086c_715ce755195a424f83bcb8d0830dbfe0.pdf