

§27-802.4.I. Data Center, in accordance with §27-2806.

§27-2806. Data Center Standards and Criteria

1. **Date Center Use.** Data center(s) shall be permitted by conditional use in IMU – Industrial Mixed Use District when approved by Conditional Use and in compliance with the procedures, standards, and criteria contained in this Section 27-2806.
2. **Definitions.** For purposes of this §27-2806, the following definitions shall apply:

DATA CENTER

A facility used primarily for or intended to be used primarily for the housing, operation, and/or co-location of computer and communications equipment and for handling, storing, and backing up the data necessary for the operation of a business or organizational entity. Data center may also include data center equipment or DCE and/or data center accessory uses when located on the same tract or assemblage of adjacent parcels developed as a unified development.

DATA CENTER ACCESSORY USES:

Data center accessory uses generally include utilities, utility lines, electrical substations, pump stations, water towers, mechanical equipment and environmental controls (air conditioning or cooling towers, fire suppression, etc.), redundant/backup power supplies, redundant data communications connections, and high security when located on the same tract or assemblage of adjacent parcels developed as a unified development for a data center. Data center accessory uses shall comply with the height limits specified in this §27-2806.

DATA CENTER EQUIPMENT ("DCE"):

Data center equipment or DCE includes any data center accessory uses which in an unmuffled state generate noise in excess of the permitted maximum dB(A) in this §27-2806 at the point of generation. DCE shall be accessory to the data center and be located on the same tract or assemblage of adjacent parcels developed as a unified development for a data center.

3. **Area and Bulk Regulations.** The area and bulk regulations set forth in §27-2803 shall apply except as follows:

A Minimum tract size: 20 acres.

B Maximum impervious coverage: 60% of tract area

C Maximum building coverage: 35% of tract area, subject to the maximum building size, below.

D Maximum building height (feet) for a building housing a data center shall be 120 feet.

E Minimum lot width at the building line (feet): 250

F Maximum building size (gross – all buildings, in total): 300,000 square feet

- (1) The maximum building size may be increased up to the maximum allowable building coverage for the tract by receipt of 1 TDR for every 4,000 square feet of building size. For example, a 40 acre tract has a maximum allowable building coverage of 609,840 square feet which would require the receipt of 78 TDRs ($609,840 \text{ sq ft} - 300,000 \text{ sq ft} = 309,840 \text{ sq ft} / 400 \text{ sq ft} = 77.46 \text{ TDRs}$, rounded up to 78 TDRs),

G Building Setbacks:

- (1) Building setbacks (feet) shall be 50 feet or the height of the building, whichever is greater, from an ultimate right-of-way and shall be 30 feet or the height of the building, whichever is greater, from any other lot line for adjoining tracts of nonresidential uses. Parking, loading and driveway setbacks (feet) shall be 30 feet from an ultimate right-of-way and 15 feet from any other lot line for adjoining tracts of nonresidential uses.
- (2) The minimum building setback and minimum loading, truck parking, and truck idling setbacks shall be 400 feet from a residential district or adjoining tract with existing occupied residential uses.
 - (a) In the alternative, the minimum building setback and minimum loading, truck parking, and truck idling setbacks are permitted to be 200 feet from a residential district or adjoining tract with an existing occupied residential uses provided it is demonstrated through the required sound studies prepared in accordance with the noise standards of this § _____ that the sound associated with the use does not exceed limits or the installation of one or more sound reducing materials or systems effectively reduced the sound to the aforesaid sound limits.

4. Traffic impact analysis. A traffic impact analysis meeting the following standards of this section shall apply:

- (a) A professional traffic engineer shall prepare the analysis.

(b) Potential traffic hazards and/or congestion identified by the analysis shall be avoided and/or mitigated in compliance with accepted traffic engineering principles, subject to approval by the Board of Supervisors, upon recommendation of the Township Engineer and Planning Commission.

(c) The traffic impact analysis shall include the following elements:

- 1) Traffic impact on all roadways, intersections and interchanges within a one-half-mile radius of the site.
- 2) Description of traffic characteristics of the proposed development.
- 3) Traffic volumes for average daily traffic at peak hours, before and after proposed development.
- 4) Source of trip generation rates used.
- 5) Origin and destination analysis of projected traffic.
- 6) Documentation of on-site and off-site improvements proposed to mitigate any adverse impacts.
- 7) All other information, findings, conclusions and recommendations necessary to produce a complete analysis in compliance with accepted traffic engineering principles and practice.

B Public central water and sewer facilities shall be provided. If existing public capacity is insufficient, augmentation of the public central water and sewer facilities may be required as a condition of conditional use approval.

C The tract or assemblage of adjacent parcels developed as a unified development must have direct access to an arterial or a collector street. Tracts divided by a public roadway or land owned by a public utility but owned in common or otherwise developed as a unified development are deemed to be contiguous for the purpose of all area and land mass calculation.

D Woodland standards.

- (1) Up to 100% of the woodlands is permitted to be cleared or developed if the following conditions are met:

- (a) The first 50% of the woodlands on the tract or assemblage of adjacent parcels developed as a unified development can be cleared or developed.
- (b) The total caliper of the portion of disturbed woodlands in excess of the first 50% shall be replaced. For example, the removal of one twelve-inch caliper tree could be replaced with three four-inch replacement trees.
- (c) Replacement trees shall be planted on the tract or assemblage of adjacent parcels developed as a unified development and can be counted towards satisfying the required landscaping standards of Chapter _____, Subdivision and Land Development Ordinance.

E An adequate second means of ingress and egress suitable for emergency access to the site must be provided.

F Development standards for a data center shall be in accordance with the following:

- (1) Data center equipment (DCE).
 - (a) DCE shall not be located between the building and the street of an arterial or a collector street.
 - (b) DCE shall be separated from any adjacent residential uses by a principal building.
 - (c) Ground-mounted DCE shall not be located in any front yard.
- (2) Environmental impacts associated with a data center shall be mitigated by:
 - (a) demonstrating compliance **this § _____ and**
- (3) Wireless telecommunications facilities as accessory to the data center shall be in accordance with Article _____
- (4) Data center accessory uses shall comply with principal building setback standards.
- (5) For data center uses, it shall be demonstrated through a sound study conducted by a professional acoustical expert that the installation of one or more sound reducing materials or systems, approved by the Township professional acoustical expert, will effectively reduce the sound generated by the data center and

associated DCE during normal operations, emergency operations (time of power loss) and testing and maintenance operations (i.e., all standby emergency equipment, including but not limited to generators running) to a maximum daytime (7:00 AM to 8:00 PM Monday to Friday) decibel level of 65 dB(A) and a maximum nighttime (8:00 PM to 7:00 AM, Monday to Friday and all day Saturday and all day Sunday) decibel level of 50 dB(A) as measured from the property line of the data center use. Such sound study or studies shall be conducted using sound level meters described in ANSI S1.4-2014 and using generally accepted criteria. Maximum decibel level specified herein is exempt during a time of power outage conditioned that the sound study shall also evaluate and report anticipated decibel levels when all DCE is running. A sound study shall be conducted at the following phases:

- (a) A preliminary sound study for the data center and associated DCE shall be conducted as part of the conditional use process. The preliminary sound study shall recommend the sound reducing materials or systems to meet the aforesaid sound limits using generally accepted criteria.
 - (b) An interim sound study shall be conducted during the building permit process based upon the proposed user or users of the data center and associated DCE depicted on the building plans. The sound reducing materials or systems recommended by the interim sound study shall be incorporated into the construction plans for the data center.
 - (c) An as-built sound study shall be conducted six months after issuance of the certificate of occupancy for any data center and associated DCE prior to the final escrow release for any data center land development phase. An as-built sound study may also be required thereafter by the Township upon request. If it is determined by the as-built sound study that there is a violation of the aforesaid sound limits, then the owner or occupant of the data center shall promptly remediate the violation into compliance with the aforesaid sound limits.
- (6) To measure the above noise levels, a sound level meter shall be used that is capable of measuring A-weighted decibels and that

should have been designed in a manner consistent with applicable standards of the American National Standards Institute or other similar standards organization.

G The provisions and requirements of this data center standard shall be additional and supplemental to the underlying Mixed Use Industrial Zoning District standards set forth in §27-2804; where data center standard provisions differ from the Mixed Use Industrial Zoning District standard provisions, and if a tract is proposed to be developed as a data center, the data center standard provisions and requirements shall control.

H Air pollution controls. All uses shall comply with the standards of the Air Pollution Control Act, 35 P.S. §§ 4001 through 4015, as amended, and the following standards:

- (1) Visible emissions. Visible air contaminants shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 20% for a period or periods aggregating more than three minutes in any one hour, or equal to or greater than 60% at any time, and shall comply with Pennsylvania Code Title 25, Chapter 127A(7), or its most recent update.
- (2) Particulate, vaporous and gaseous emissions. No person shall cause, suffer or permit the emission of fugitive particulate, vaporous or gaseous matter from any source in such a manner that the emission is visible or detectable outside the property of the person where the source is being generated.
- (3) Hazardous air emission. All emissions shall comply with National Emissions Standards for Hazardous Air Pollutants promulgated by the United States Environmental Protection Agency under the Federal Clean Air Act (42 U.S.C. § 7412) as promulgated in 40 CFR 61, or its most recent update.
- (4) Odor.
 - (a) No person shall cause, suffer or permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person where the source is being generated.
 - (b) The prohibition on odors shall not apply to odor emissions arising from the premise of a farm operation.

(c) Any process which causes an odor emission shall be operated in a manner such that escaping odors are eliminated. Backup odor reduction equipment shall be maintained to support primary odor reduction equipment.

I Vibration control. No vibration which is discernible to the human sense of feeling shall be perceptible without instruments at any point beyond the lot line.

J Glare or heat control. Any operation producing intense glare or heat shall be performed within an enclosed building or behind a solid fence in such manner as to be completely imperceptible from any point beyond the lot lines.

K Control of radioactivity or electrical disturbance. There shall be no activities which emit dangerous or harmful radioactivity. There shall be no electrical disturbance (except from domestic household appliances) adversely affecting the operation of any equipment located beyond the property boundary of the creator of such disturbance.

L Fire and explosive hazards. Flammable and explosive materials shall be stored, used and transported in accordance with the applicable state and federal regulations regarding such materials and associated storage vessels.

M Outdoor storage.

- (1) All outdoor storage facilities for fuel, flammable or explosive materials and raw materials shall be enclosed by a fence adequate to prevent the access of children and other members of the general public.
- (2) No materials or wastes shall be deposited upon a lot in such form or manner that they may be transferred off the lot by natural causes or forces.
- (3) All material or wastes which might cause fumes or dust or which constitute a fire hazard or which may be edible or otherwise be attractive to rodents or insects shall be stored outdoors only in closed, sealed containers.

N Waste disposal. No use shall be conducted in such a way as to discharge any treated or untreated sewage except as shall be approved by the Department of Environmental Protection and/or the Township Sewage Enforcement Officer, as appropriate; nor shall industrial wastes be stored,

discharged, incinerated or otherwise disposed of except in conformance with the applicable state and federal regulations regarding solid and hazardous wastes.

- O Electrical power. Every use shall be designed and operated so that the service lines, substation, etc., shall conform to the most acceptable safety requirements recognized by the Pennsylvania Bureau of Labor and Industry, shall be so constructed, installed, etc., as to be an integral part of the architectural features of the plant or, if visible from abutting residential properties, shall be concealed in accordance with the landscaping requirements herein.
- P Public water service. Industrial uses shall be served by public water, where available. No highly flammable or explosive liquids, solids or gases shall be stored in bulk above ground, except tanks or drums of fuel directly connecting with energy devices, heating devices or appliances located and operated on the same lot as the tanks or drums of fuel.
- Q All outdoor storage areas shall comply with the setback requirements for parking, driveways and loading areas.
- R All uses shall provide landscaped buffers and site element screens as required by the landscaping standards of §_____, Subdivision and Land Development Ordinance

Façade and Screening Standards.

1. Principal Façade. Principal façades of a building must incorporate the following standards at horizontal linear intervals that may vary in frequency but must be no less frequent than every 150 horizontal linear feet or no less frequent than 3 times the average height of the building:

- a. Fenestration or Fenestration and (Optional) Green Wall; and
- b. A change in 1 of the following design elements:
 - A. Building material;
 - B. Pattern;
 - C. Texture;
 - D. Color; or
 - E. Accent materials.

2. Consistent Design. When a development is comprised of more than one building, all of the Principal Façades of such buildings must be consistent in terms of design, materials, details, and treatment.

3. Fenestration. Each Principal Façade of a building must include Fenestration as follows:

a. Fenestration Surface Coverage of the Façade. Fenestration must comprise at least 30% of the total surface coverage area of the Principal Façade.

b. Distributed Fenestration Coverage. Fenestration provided to meet the following:

A. Each placement or bay may count towards no more than 7.5% of such total surface coverage area.

B. Required 30% total surface coverage area of the Principal Façade must be located in separated, individual placements or clustered bays; and

c. Fenestration Coverage Pattern. The placement pattern of individual or clustered bays of Fenestration must be distributed horizontally and vertically across the Principal Façade; and

d. Fenestration Consistent Design with Principal Façade. The Fenestration must be compatible with the other design, materials, details, and treatment used on the same Principal Façade.

2. Green-Wall Treatment.

a. Applicability. A Green-Wall Treatment may be provided in lieu of up to half of the Fenestration Surface Coverage of the façade requirement of Section 3.a.

b. Requirements. Green-Wall Treatments must provide the following:

1. Maintenance. The owner, or the owner's agent, is responsible for the repair, replacement, and maintenance of the Green-Wall for the duration of the use;

2. Distributed Green-Wall Surface Coverage. Green-Wall areas must be provided to meet up to half of the required 30% total surface coverage area of the Principal Façade of a building; and

3. Green-Wall Coverage Pattern. The Green-Wall areas must be distributed horizontally and

vertically across the Principal Façade.

4. Data Center Mechanical Equipment.

a. Data Center Mechanical Equipment must be shown on any proposed Site Plan and screened such that the screening is constructed with a design, materials, details, and treatment compatible with those used on the nearest Principal Façade of a building

b. Partial or Full Visual Screening of Data Center Mechanical Equipment. Data Center Mechanical Equipment attached to or mounted on the building façade must be partially or fully visually screened from view at the ground level from all existing and planned public roads and adjoining parcels using mesh, lattice, cladding, or grillwork or a combination of these methods, or similar methods so as to ensure that the Data Center Mechanical Equipment is partially or fully screened to the maximum extent that permits necessary ventilation for any equipment; and

c. Differentiated Surfaces. The Data Center Mechanical Equipment Façade, including any provided screening methods, must incorporate a change in at least one of the following design elements at horizontal linear intervals that may vary in frequency but must be no less frequent than every 150 horizontal linear feet or no less frequent than 3 times the average height of the building:

A. Building material;

B. Pattern;

C. Texture;

D. Color; or

E. Accent materials

5. Refuse Collection and Loading Bay Area Screening.

a. Refuse collection areas must be fully screened on all sides and loading bays must be screened from view at the ground level from all adjacent parcels and existing or planned public roads.