

§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 Section 27-2804 and this Section 27-2806. In the event of a conflict or inconsistency between procedures, standards, and/or criteria contained in Section 27-2804 and any of those stated in this Section 27-2806, the more stringent procedures, standards, and/or criteria shall apply.
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 (i) computer and communications equipment, and equipment and for handling, storing, and backing up the data necessary for the operation of a business or organizational entity; (ii) data center accessory uses as defined below; (iii) data center equipment (“DCE”) as defined below; (iv) data center accessory uses and DCE when located on the same tract or assemblage of adjacent parcels developed as a unified development; (v) cogeneration equipment and related pumps, conduit, piping, and other equipment to be used for transporting heat or other power sources for use in heating or generating power for other buildings; and (vi) all other systems, equipment, piping, conduit and other ancillary equipment that are incidental to and/or needed for the operation, repair, maintenance, and/or protection of the data center and its environs. 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, fire suppression and control equipment, stormwater management equipment, energy generation facilities 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~~55% 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~~60 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 ($609,840 \text{ sq ft} - 300,000 \text{ sq ft} = 309,840 \text{ sq ft} / 4000 \text{ sq ft} = 77.46$ 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.

~~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 be conducted and submitted with the proposed Site Plan:
- (a) A professional traffic engineer suitable to the Township shall prepare the analysis.
 - (b) Potential traffic hazards and/or congestion identified by the analysis shall be avoided and/or mitigated in compliance with generally accepted traffic engineering principles and practices, subject to approval in writing 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 at least a one-half-mile radius of the site. The analysis radius may be expanded as a condition of conditional use approval by the Board of Supervisors
 - 2) Description of traffic characteristics of the proposed development.
 - 3) Traffic volumes for average daily traffic at peak hours, before and after proposed development, including through residential areas.
 - 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 generally accepted traffic engineering principles and practices.

5. Public Water and Sewer. 5.——Public central water and sewer facilities shall be ~~provided~~used. If existing ~~public~~ capacity of public central water and/or sewer facilities is insufficient to meet the expected needs of the data center, the Township may at its option either deny conditional use for the data center or impose augmentation of the public central water and sewer facilities at the expense of the developer and owner of the data center ~~may be required~~ as a condition of conditional use approval.

5.6. Tier 4 Design. The data center design must meet or exceed the Uptime Institute Tier 4 standards.

6. The tract or assemblage of adjacent parcels that are intended to be 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.

7. Woodland standards.

Up to ~~40~~50% 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 cleared woodland portion of the remaining 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 four three-inch caliper replacement trees, three four-inch caliper replacement trees, two six-inch caliper replacement trees, or a single 12-inch caliper replacement trees.
- (c) All trees under subsection (b) shall be replaced in kind by species or may be replaced with trees listed in Chapter _____, Subdivision and Land Development Ordinance

~~as and to the extent approved in writing by the Township arborist.~~ 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 in accordance with the~~ standards of Chapter _____, Subdivision and Land Development Ordinance.

~~(e)~~(d) The Board of Supervisors may require a forest management plan or reforestation plan as a condition of conditional use approval. Additionally, the Board of Supervisors may accept, at its discretion, a fee-in-lieu of replacement trees as a condition of conditional use approval.

8. An adequate second means of ingress and egress ~~suitable~~ for emergency access to the site, acceptable to the Township Engineer, must be provided.

9. Additional development standards for a data center DCE shall be in accordance with the following:

~~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.

(10) Environmental Impact Study. An environmental impact study in accordance with all the terms, conditions and provisions of Section 27-2804.10 through and including Section 27-2804.10.E shall be performed by an environmental engineer suitable to the Township and be submitted as part of the land development approval process. In addition to Section 27-2804.10 through and including Section 27-2804.10.E, the study shall likewise assess potential impacts of operation, maintenance, and/or repair or trouble-shooting of the data center (including, but not limited to, during periods of emergency power, fire, and fire suppression and control) on groundwater, nearby creeks and streams, the Schuylkill River, the air and the grounds of the data center and those adjacent to the data center; storage of oil-based or other combustible materials; and release of gasses and/or other contaminants into the air, ground, surface water or groundwater. Environmental impacts associated with a data center that are identified in

the study shall be prevented or, as the case may be, mitigated in accordance with a plan that is approved in writing by the Board of Supervisors upon recommendation of the Township Engineer and the Township Stormwater Engineer by:

demonstrating compliance ~~this § _____ and~~

(11) Wireless telecommunications facilities as accessory to the data center shall be in accordance with Article _____

Data center accessory uses shall comply with principal building setback standards.

(12) Sound Study. For data center uses, it shall be demonstrated through a sound study shall conducted by a professional acoustical expert engineer suitable to the Township. The study shall assess all noise, vibrations and other audible phenomena that may be created by operation of the data center and DCE (including, but not limited to, during periods of emergency power, testing and maintenance, fire, and fire suppression and control).

(a) Sound impacts that are identified in the study shall be prevented or, as the case may be, mitigated through use of sound attenuation and/or absorption panels, materials or systems on the interior and exterior of each building and on interior and exterior equipment (including, but not limited to, standby generators and related equipment) in accordance with a plan that is approved in writing by the Board of Supervisors upon recommendation of the Township Engineer and the Township Stormwater Engineer. the installation of one or more sound reducing materials or systems, approved by the Township professional acoustical expert, will effectively reduce t

(b) The sound generated by the data center and associated DCE shall in any instance 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) be limited to a maximum daytime decibel level of 65 dB(A) from (7:00 AM to 8:00 PM on Mondays through and including to Fridays) decibel level of 65 dB(A) and a maximum nighttime decibel level of 50 dB(A) from (8:00 PM to 7:00 AM on , Mondays through and including to Fridays and all day on Saturdays, and all day Sundays and holidays. Decibel levels shall be) decibel level of 50 dB(A) as measured from each of the property lines of the data center use.

(c) Such sound study or studies shall be conducted using sound level meters described in ANSI S1.4-2014 and using generally accepted criteria that are generally accepted by the professional acoustical engineering profession. To

measure the decibel levels stated 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 in accordance with applicable ANSI standards, of the American National Standards Institute or other similar standards organization.

~~-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.~~

(d) A sound study shall be conducted at the following phases:

- (i) 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 attenuation and/or absorption panels, materials or systems sound reducing materials or systems that will be needed to meet-comply with the ~~aforsaid~~ sound limits stated above using generally accepted criteria.
- (ii) 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 attenuation and/or absorption panels, materials or systems sound reducing materials or systems recommended by the interim sound study shall be incorporated into the construction plans for the data center.
- ~~iv.~~ (iii) 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~~ shows that decibel levels exceed those stated above, that there is a violation of the aforsaid sound limits, then the owner or occupant of the data center shall promptly add, and/or -improve the sound attenuation and/or absorption panels, materials or systems and take such other actions as are necessary to comply with all the required decibel levels stated above. remediate the violation into compliance with the aforsaid sound limits. Additional as-built sound studies shall be conducted to confirm compliance with all the required decibel levels stated above.

(iv) Vibration control. In addition to the foregoing, No vibration which that is discernible to the human sense of feeling shall be perceptible without instruments at any point beyond the lot property lines of the data center.

~~v.i. 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.~~

13. 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:

(a) 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.

(b) Particulate, vaporous and gaseous emissions. ~~No person~~ At no time shall there be any -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 beyond the outside the limits of the property lines of the data center. ~~of the person where the source is being generated.~~

(c) 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.

14. Odor.

(1) At no time shall there be any ~~No person shall cause, suffer or permit the~~ emission into the ~~outdoor~~ atmosphere of any odor or other malodorous air contaminants from any source ~~in such a manner that the~~ ~~malodorsthat~~ are detectable beyond the limits of the property lines of the

~~data center outside the property of the person where the source is being generated.~~

~~The prohibition on odors shall not apply to odor emissions arising from the premise of a farm operation.~~

(2) 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.

~~e.a. 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.~~

15. 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 property lines of the data center lot lines.

16. Control of radioactivity or electrical disturbance. There shall be no activities ~~which that~~ 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 lines of the data center property boundary of the creator of such disturbance.

17. Fuel, Flammable, Fire and ~~E~~explosive ~~hazards~~ Materials. ~~Fuel, 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. In addition, they shall be stored in such a way as to prevent access to children and other members of the general public.

18. Outdoor storage.

~~i. 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.~~

(1) ~~No All~~ materials ~~and or wastes~~ shall be properly stored and secured from transmission, release or spreading by wind, rain or other natural or human causes deposited upon a lot in such form or manner that they may be transferred off the lot by natural causes or forces.

(2) 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.

(3) All outdoor storage areas shall comply with the setback requirements for parking, driveways and loading areas.

19. Sewage and 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 it~~ Industrial wastes shall be stored and/or, ~~discharged, incinerated or otherwise~~ disposed of ~~except~~ in conformance with ~~the all~~ applicable state and federal laws and regulations regarding solid and hazardous wastes.

20. Electrical power. ~~The data center~~ Every use shall be designed and operated so that ~~the all~~ service lines, substations, and other electrical storage, generation, transfer and transmission equipment etc., shall (i) conform to the most ~~acceptable stringent~~ safety requirements recognized by the Pennsylvania Bureau of Labor and Industry, ~~(ii) are shall be so designed,~~ constructed, and installed, ~~etc.,~~ as ~~to be~~ an integral part of the architectural features of the data center, and ~~(iii) are concealed for view of plant or, if visible from abutting nearby~~ residential properties, ~~shall be concealed~~ in accordance with ~~the landscaping requirements herein~~ such conditions as the Board of Supervisors may impose as part of its conditional use approval.

~~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.~~

~~IA All outdoor storage areas shall comply with the setback requirements for parking, driveways and loading areas.~~

21. All uses shall provide landscaped buffers and site element screens as required by the landscaping standards of §_____, Subdivision and Land Development Ordinance