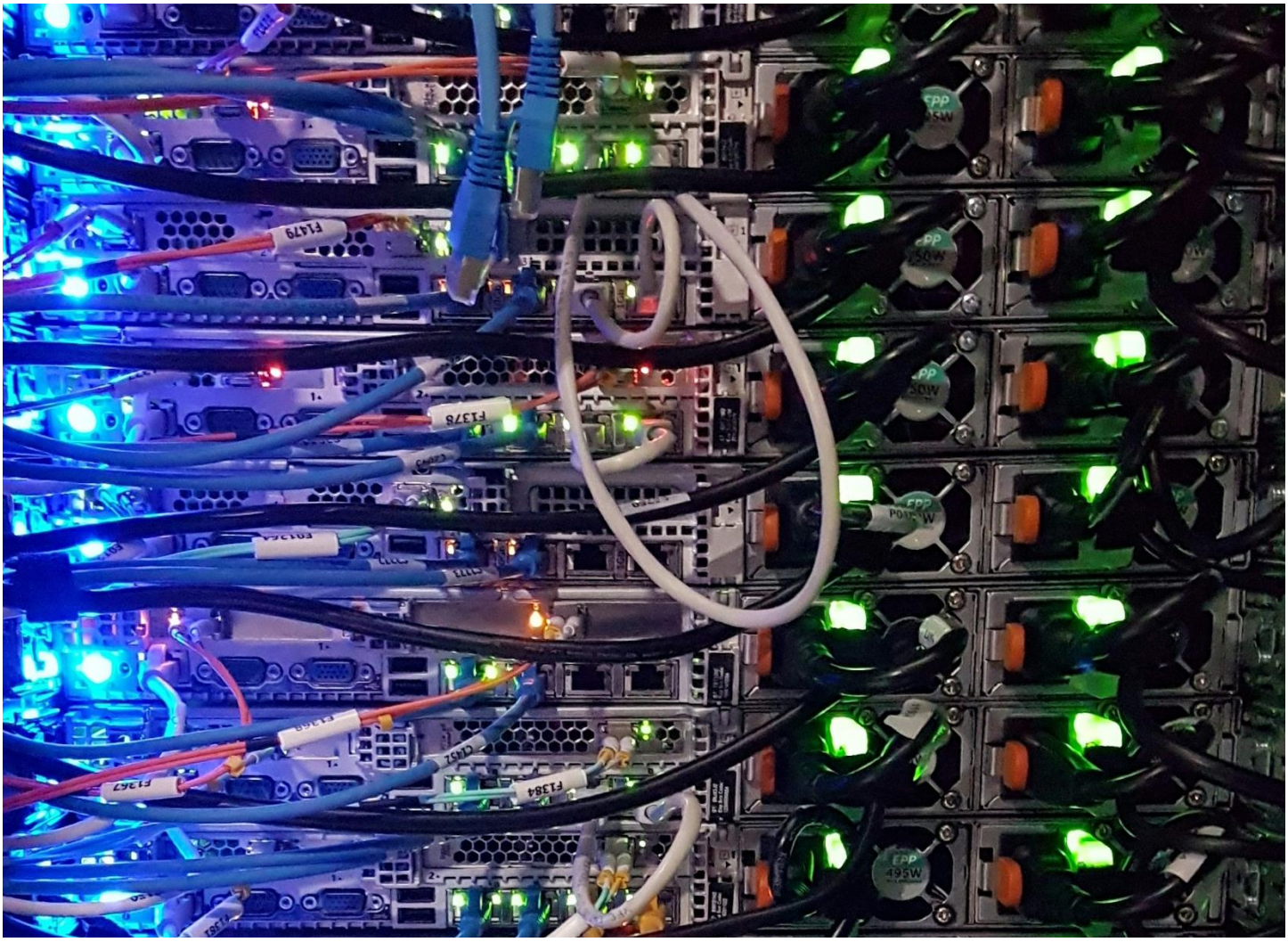
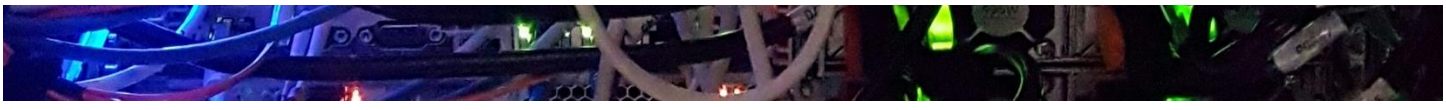


YORK COUNTY
YCPC
PLANNING
COMMISSION

Data Center Model Ordinance

August 2025



Overview

The following document is a model ordinance containing suggested language, including terminology and definitions commonly used in regulations for Data Centers.

This model ordinance serves as a summary document of the various components that the York County Planning Commission (YCPC) believes are necessary for a municipality to consider when evaluating the impacts of these uses on their municipalities. It should be the goal of the municipality to clearly articulate their expectations and requirements to any developers proposing these uses within their municipality, as well as to clearly address the concerns and interests of municipal residents.

Municipalities are encouraged to alter the text of this model ordinance to best suit their municipality, as what works best for one municipality may not provide the same results in another. There are suggested sizes, distances, and thresholds throughout this model ordinance that are recommendations, and should be thoroughly considered by municipal officials to determine if these requirements make sense for their municipality. Additional context has been provided for some topics in sidebars throughout the document.

As noted above, there are also sections of this model ordinance that, while important topics for consideration,

- May not be topics that municipalities currently want to address
- Are topics that municipalities have already addressed elsewhere in their ordinance
- Can be viewed as forward-thinking

Sections of this model ordinance that fall into these categories are presented in **blue text**. Municipalities are encouraged to review the language in these sections to determine if these are topics that make sense to address in their Zoning Ordinance currently.

Municipalities protect and promote the safety, health, and morals of their communities by following and enforcing proper planning procedures, ensuring that development within their borders has been thoroughly considered well in advance of the submittal of plans for development. When considering where to permit and how to regulate more intense uses (such as the ones discussed in this model ordinance), municipalities should conduct assessments to evaluate the social, environmental, and economic impacts that these types of uses could have on their communities, and to determine where in their municipalities these types of uses can safely function. This type of assessment should be conducted by municipalities during the planning stage, when municipalities are considering adding language to their ordinances. Early assessment of the potential social, environmental, and economic impacts of these more intense uses during the planning stage minimizes the potential for conflicts when a developer submits a land development proposal.

As Data Center standards continue to evolve, municipalities will be challenged to keep up with them, let alone prepare in advance of any changes. This model ordinance is presented based on technology and knowledge available at this time. As always, municipal staff and officials are encouraged to reach out to YCPC staff if questions arise regarding any of the content found within this model ordinance.

SECTION 100. DEFINITIONS

COMMUNITY NOISE EQUIVALENT LEVEL (CNEI) - The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7 PM to 10 PM and after the addition of 10 dB to sound levels occurring in the night between 10 PM and 7 AM.

DATA CENTER – A facility used primarily for the storage, management, processing, and transmission of digital data, which houses computer or network equipment, systems, servers, appliances and other associated components related to digital data operations.

The facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support sustained operations at the Data Center.

DATA CENTER ACCESSORY USE – Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; sources of electrical power such as generators used to provide temporary power when the main source of power is interrupted; electrical substations; utility lines, domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers; fire suppression, and related equipment), and security features, provided such Data Center Accessory Uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center. The use shall not include energy generation systems used or intended to be used to supply power to the Data Center during normal operations.

DATA CENTER ELECTRICAL SUBSTATION – A facility used for the transformation or transmission and/or switching of voltages to distribution voltages which switches circuits and distributes usable/consumable electric power, specifically for Data Center users on the same or adjacent site, or on a site immediately across a road right-of-way.

DATA CENTER PRINCIPAL BUILDING – A building that contains the office and/or data storage functions of a Data Center.

FOOTCANDLE – Enough light to saturate a one-foot square with one lumen of light.

SENSITIVE RECEPTORS – Schools, preschools, day care centers, in-home daycares, health facilities such as hospitals, long term care facilities, retirement and nursing homes, community centers, places of worship, playgrounds, parks (excluding trails), campgrounds, prisons, dormitories, and any residence where such residence is not located on a parcel with an existing industrial, commercial, or unpermitted use as determined by the zoning officer.

SECTION 200. SPECIFIC USE CRITERIA

Data Centers

The following requirements shall apply to all Data Centers. In the event that any of the following regulations are found to be in conflict with regulations found elsewhere in the (MUNICIPALITY) Zoning Ordinance, the most restrictive regulations shall be applied, unless otherwise stated.

A. Building Placement and Orientation

(1) All principal and accessory structures associated with a Data Center shall be arranged, designed, and constructed to be harmonious and compatible with the site and with the surrounding properties. In general, Data Centers that visually approximate commercial office buildings are encouraged.

(2) Buildings shall be sited and oriented to:

a. Minimize visual impacts of the bulk of the building when examined on a line-of-sight basis from adjacent public streets and Sensitive Receptor areas.

b. Provide safe and convenient vehicular access to the site, including sufficient on-site queuing areas at security gates.

c. Accommodate adequate parking.

d. Minimize impacts to natural resources.

e. Incorporate appropriate stormwater management practices.

(3) Data Center campuses containing more than one building are encouraged to provide a variety in building size, massing, siting, and appearance by transitioning from smaller or lower buildings along street frontages to larger and taller structures on the interior of the site. Consideration of topography shall be given to avoid placement of larger, taller, or more massive buildings in a prominent location on the property or along a public street.

(4) Connection to public water and public sewer is required.

B. Maximum Height

The maximum building height for Data Centers shall be __ feet.

C. Setbacks

(1) All principal buildings, accessory structures, and Data Center Electric Utility Substations must be set back at least (150 – 200) feet from all property lines.

(2) Parking lots for Data Centers shall be set back at least __ feet from public road rights-of-way, and __ feet from all property lines.

Building Height

Municipalities should determine if incorporating language that allows for an increase in building height with increased building setbacks is a viable option for their municipality.

D. Parking Requirements

A minimum of 1 parking space per employee on the largest shift is required, plus an additional 3 visitor spaces.

E. Off Street Loading

A minimum of one loading space is required. Loading spaces/bays are only permitted to be located on one façade of the Data Center Principal Building.

F. Noise/Vibration

(1) CNEI

a. The Community Noise Equivalent Level (CNEI) at the boundary of the property containing a Sensitive Receptor shall not exceed 60 dBA.

b. The CNEI at the boundary of any developed property not containing a Sensitive Receptor shall not exceed 70 dBA.

c. Sound that is produced for not more than a cumulative period of one (1) minute in any hour may exceed the standards above by up to ten (10) dBA.

d. The maximum sound levels listed above do not apply to emergency alerts, emergency work to provide electricity, water, or other public utilities when public health or safety is involved, snow removal, or road repair.

(2) A noise reduction barrier or device may be required at the discretion of the zoning officer when it is inconclusive that noise level tests do not conform to acceptable noise levels.

(3) The limitations of Section 200.1.F. herein shall not apply to any Sensitive Receptor that is established adjacent to the Data Center after the date of issuance of a certificate of completion or occupancy for the applicant's operation.

G. Negative Impacts

Any use or activity producing air, dust, smoke, glare, exhaust, heat, or humidity in any form shall be carried on in such a manner that it is not perceptible at or beyond the property line.

H. Safety

The equipment used in any Data Center operation shall be housed in a metered, electrically grounded, and pre-engineered metal-encased structure with a fire rating designed to resist an internal electrical fire for at least 30 minutes. The containment space shall contain baffles that automatically close in the event of fire, independent of a possible electric system failure.

Any Data Center use proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.

I. Power

Prior to approval of the certificate of completion or occupancy, the applicant shall provide written verification from the applicable service provider stating the following:

(1) Adequate 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 load growth envisioned by the provider,

(2) Utility supply equipment and related electrical infrastructure are sufficiently sized and can safely accommodate the proposed use,

(3) Any system designed for cooling and operation of the facility (electricity, water, or other means) will be adequate and will not negatively impact the surrounding region,

(4) The use will not cause electrical interference or fluctuations in line voltage on and off the operating premises, and

(5) Prior to approval of the certification of completion or occupancy, the applicant shall provide the municipality with written verification that the electrical work has passed a third-party final inspection.

J. Lighting

(1) Horizontal Surfaces

For the lighting of predominantly horizontal surfaces, such as, but not limited to, parking areas, roadways, vehicular and pedestrian passage areas, loading docks, building entrances, sidewalks, bicycle paths, and site entrances, luminaires shall be aimed down, and shall meet Illuminating Engineering Society of North America (IESNA) full cut-off/fully shielded criteria.

(2) Non-Horizontal Surfaces

For the lighting of predominantly non-horizontal surfaces, such as, but not limited to, facades, landscaping, and signs, luminaires shall be shielded and shall be installed and aimed to not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward, or onto a public roadway.

(3) Adjacent Residential Uses

The illumination projected onto a residential use shall at no time exceed 0.1 footcandle, measured line-of-sight and from any point on the receiving residential property.

(4) Adjacent Non-Residential Uses

The illumination projected from any property onto a non-residential use shall at no time exceed 0.5 initial footcandle, measured line-of-sight from any point on the receiving property.

(5) Glare

Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily using such means as cutoff luminaires, shields and baffles, and appropriate application of luminaire mounting height, wattage, aiming angle, and luminaire placement.

(6) LED Lights

LED light sources shall have a correlated color temperature that does not exceed 3000K.

(7) Luminaires

Luminaires shall not be mounted more than 20 feet above the finished grade of the surface being illuminated. No pole-mounted lighting on the roof shall be permitted.

(8) Lighting After Hours

Lighting for parking areas and vehicular traffic ways shall be automatically extinguished nightly within ½ hour of the close of the facility. On/off control shall be by an astronomic

Lighting Adjacent to Non-Residential Uses

Ordinances YCPC reviewed for sample language have shown light trespass maximums from 0.1 to 2.0 footcandles.

programmable controller with battery or capacitor power-outage reset. When after-hours site safety/security lighting is proposed, such lighting shall not exceed 25% of the number of fixtures required or permitted for illumination during regular business hours. Where there is reduced but continued onsite activity throughout the night that requires site-wide even illumination, the use of dimming circuitry to lower illumination levels by at least 50% after 11 PM or after regular business hours, or the use of motion sensor control, shall be permitted.

K. Perimeter Fencing/Security

Fences shall not exceed ___ feet in height above ground and shall be of high-quality design and materials.

L. Power Lines and Data Center Electric Utility Substations

(1) Data Center Electric Utility Substations must include year-round opaque landscaping or a screen wall a minimum of __ feet in height to minimize visual impact.

(2) Electric Utility Substations on the same property as the Data Center they serve must be located on the side or rear of a Data Center Principal Building so they are screened from public view and must not be located in a required front yard. On-site substations do not require a buffer or screening between the Data Center Principal Building and the substation.

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

(4) The Data Center Electric Utility Substation shall be subject to applicable zoning district setback requirements. Setbacks shall be measured from the edge of the compound containing the substation to the property boundary of the lot it occupies.

M. Emergency Contact Information

Each Data Center operation shall provide 24-hour emergency contact signage visible at the access entrance. Signs shall include the company name (if applicable), the owner/representative's name, the telephone number, and the corresponding local power company's name and telephone number.

N. Sensitive Receptors

(1) Unless physically impossible, loading docks, truck entries, and truck drive aisles shall be oriented away from abutting Sensitive Receptors.

(2) To the greatest extent feasible, loading docks, truck entries, and truck drive aisles shall be located away from nearby Sensitive Receptors. Screening as described in Section 200.1.K. shall be provided. When making feasibility decisions, the municipality must consider existing laws and regulations and balance public safety with the site development’s potential impacts on nearby Sensitive Receptors.

O. Buffer Yards and Screening

All Data Center operations shall provide buffer yards and screening along all property boundary lines, except for areas of ingress and egress into the site.

(1) Service Areas - Loading bays, refuse collection areas, and service entrances shall be screened from view from existing or planned public roads, Sensitive Receptors, and residential zoning districts. Screening may include year-round landscaping or a screen wall of an appropriate height to mitigate visual impacts as determined by a line-of-sight study submitted by the applicant.

(2) Mechanical/Electrical Equipment Screening.

a. Ground-Mounted

i. Ground-mounted equipment adjacent to and serving the Data Center Principal Building shall be completely screened behind an opaque wall or fence. When the equipment is located between buildings, a combination of walls and gates may be used at the openings between buildings.

ii. When in or adjacent to an industrial use or zoning district, ground-mounted equipment screening is only required from any existing or planned public road.

iii. Ground-mounted equipment is prohibited in any required setback.

b. Roof Top

i. All rooftop-mounted equipment shall be screened by a parapet wall, equipment penthouse, or visually solid screen on all four sides that is constructed of materials complementary to those used in the exterior construction of the Data Center Principal Building. This shall be accomplished by setting the penthouse or screened area back from the façade of the building such that the top of the penthouse or screen is below a 45-degree line drawn from the top of the parapet. Roof-top equipment to be screened includes, but is not limited to, the following: cooling, ventilation, and power supply machinery.

ii. Roof top equipment that is visible above the parapet wall shall be set back from the exterior or parapet wall a distance no less than the height of said equipment.

iii. Roof-top equipment may exceed the applicable maximum district building height when completely screened pursuant to this ordinance.

iv. Roof top equipment may occupy up to a maximum of __% of the roof area when screened per this ordinance and, when combined with the height of the Data Center building, does not exceed the maximum building height requirement.

Buffer Yards and Screening

Municipalities often already have buffer yard and screening requirements in place elsewhere in their zoning ordinance or SALDO.

If your municipality already has buffer yard and screening requirements, consider directing readers to those sections instead of duplicating requirements. If screening above and beyond what already is in place is required, this would be the section in which to address it.

(3) Buffering.

a. Data Center sites abutting Sensitive Receptors or collector/arterial roads must include an enhanced buffer yard with required plantings located on an earthen berm with a grade no steeper than 2:1. The minimum height of the berm abutting Sensitive Receptors is _____ feet, and abutting collector/arterial roads is ____ feet.

i. Where the combined footprint of the principal structure or structures is less than 100,000 square feet:

a. A minimum 100-foot buffer yard shall be provided along the entire length of any public street frontage of any property upon which the Data Center is located and along any property line which abuts or is within 500 feet of an existing residential property line or zone, school, daycare center, hospital, place of worship, designated park, or public open space.

b. A minimum 50-foot buffer yard shall be provided along any property line adjacent to a non-residential use or zone.

ii. Where the combined footprint of the principal structure or structures is between 100,000 square feet and 250,000 square feet:

   a. A minimum 150-foot buffer yard shall be provided along the entire length of any public street frontage of any property upon which the Data Center is located and along any property line which abuts or is within 500 feet of an existing residential property line or zone, school, daycare center, hospital, place of worship, designated park, or public open space.

   b. A minimum 50-foot buffer yard shall be provided along all other property lines.

iii. Where the combined footprint of the principal structure or structures exceeds 250,000 square feet:

   a. A minimum 300-foot buffer yard shall be provided along the entire length of any public street frontage of any property upon which the Data Center is located and along any property line which abuts or is within 500 feet of an existing residential property line or zone, school, daycare center, hospital, place of worship, designated park, or public open space.

   b. A minimum 50-foot buffer yard shall be provided along all other property lines.

iv. Utilities should be located outside of buffer yards to the maximum extent feasible to maintain a cohesive buffer yard, protect landscaping, and preserve open space. Utilities should be co-located when feasible to minimize the number of utility crossings through the required buffer yard, particularly when such crossings cannot be avoided.

v. Use of existing vegetation for landscaping and screening is strongly encouraged and may be substituted for new berms and plantings if approved by the (MUNICIPAL GOVERNING BODY).

vi. The required number of plant units shall be calculated in accordance with other municipal screening requirements.

vii. Buffer yards along roadways shall be measured from the street right-of-way line.

viii. Where a lot line drainage or utility easement is required, the buffer yard shall be measured from the inside edge of the easement.

ix. Buffer yards shall not include environmental encumbrances such as, but not limited to, wetlands, wetland transition areas, riparian buffers, and flood hazard areas as may be imposed by outside agencies.

x. The buffer yard shall include a dense landscape buffer consisting of the following:

   a. One (1) large evergreen tree per 25 linear feet of buffer. The size of large evergreen trees shall be a minimum of eight (8) feet in height at the time of planting. Narrow/upright evergreen species may also be used within buffers at a ratio of 3:1. No more than 25% of the total required large evergreen species can be substituted with narrow/upright species.

   b. One (1) canopy (shade) tree per 75 linear feet of buffer. The size of canopy (shade) trees shall be a minimum of 2 ½ inch caliper at the time of planting.

   c. One (1) ornamental/flowering tree per 50 linear feet of buffer. The size of ornamental/flowering trees shall be a minimum of eight (8) feet in height for multi-

stemmed varieties, or 2 ½ inch caliper at the time of planting for single-stemmed varieties.

d. Five (5) shrubs per 25 linear feet of buffer. Shrubs shall be fully branched and a minimum of three (3) feet in height at the time of planting. Shrubs shall be a combination of evergreen and deciduous species, with a minimum of 50% evergreen.

xi. The landscape buffer shall be located along the outer edge of the buffer yard.

xii. Plant material within buffer plantings shall meet the following requirements:

a. Be resistant to diesel exhaust.

b. Not identified on the most current DCNR invasive species or watch lists.

c. Be hardy within USDA hardiness Zones 6 and 7.

d. Shall be planted on the top and the exterior of any berm in order to provide effective screening.

e. Shall be arranged in groupings to allow for ease of maintenance and to provide a natural appearance.

f. Shall provide a diversity in plant species, such that no one species accounts for more than 25% of each plant type.

g. The plantings shall be arranged to provide a complete visual screen of the property at least 12 feet in height, measured in addition to the height of any required berm, within three (3) years.

xiii. The buffer yard may be located within the required building setback lines. No impervious surface is permitted within the buffer yard aside from access drives, sidewalks, and associated improvements.

P. Environmental and Community Impact Analysis

Prior to the commencement of the [conditional use/special exception] hearing, the applicant shall provide an environmental and community impact analysis. The environmental and community impact analysis shall include:

(1) A narrative description of the nature of the on-site activities and operations, including the market area served by the facility, the hours of operation of the facility, the total number of employees on each shift, the times, frequencies, and types of vehicle trips generated, the types of materials stored and the duration period of storage of materials.

(2) A site plan of the property indicating the location of proposed improvements, flood plains, wetlands, waters of the Commonwealth and cultural and historic resources on the property and within 500 feet of the boundaries of the property.

(3) Evidence that the disposal of materials will be accomplished in a manner that complies with state and federal regulations.

(4) An evaluation of the potential impacts of the proposed use, both positive and negative, upon:

a. Emergency services and fire protection,

b. Water supply,
c. Sewage disposal,
d. Solid waste disposal,
e. School facilities and school district budget, and
f. Municipal revenues and expenses.

(5) Any environmental impacts that are likely to be generated (e.g., odor, noise, smoke, dust, litter, glare, heat islands, vibration, electrical disturbance, wastewater, stormwater, solid waste, etc.) and specific measures employed to mitigate or eliminate any negative impacts. The applicant shall further furnish evidence that the impacts generated by the proposed use fall within acceptable levels, as regulated by applicable laws and ordinances.

Water Supply

Most Data Centers use large amounts of water to assist with equipment cooling and humidity maintenance within their operations. Water consumption can vary based on the size of the project. It is important for municipalities to require proposed Data Center development to clearly articulate water needs, use, availability, recycling and/or release procedures, and local and regional impacts on water resources.

Q. Building Colors

External building materials shall be of colors that are low-reflective, subtle, or earth tone. Fluorescent and metallic colors shall be prohibited as exterior wall colors.

R. Emergency Responders

The applicant shall coordinate with the (MUNICIPALITY) emergency management coordinator to ensure there is adequate radio coverage for emergency responders within the building based upon the existing coverage levels of the (MUNICIPALITY) Public Safety Radio Communications System at the exterior of the building, and shall install enhancement systems as needed to meet compliance.

S. Environmental Impact Assessment

An Environmental Impact Assessment shall be performed. The assessment shall be prepared by a professional engineer, ecologist, environmental planner, or other qualified individual. An assessment shall include a description of the proposed use, including location, relationship to other projects or proposals, with adequate data and detail for the (MUNICIPALITY) to assess the environmental impact. The assessment shall also include a comprehensive description of the existing environment and probable future effects of the proposal. The description shall focus on the elements of the environment most likely to be affected as well as potential regional effects and ecological interrelationships. At a minimum, the assessment shall include an analysis of the items listed below regarding the impact of the proposed use and the mitigation of any such impacts. The assessment shall also include a detailed examination of public resources most likely impacted by the development plan and include the following focus areas:

(1) Air pollution impacts emissions from vehicle operations, including from truck engines during idle time. The applicant shall identify all stationary and mobile sources of fine particulate matter (PM2.5), volatile organic compounds, and nitrogen oxides at the site. The applicant shall specify best management practices for preventing and reducing the concentration of air-polluting emissions at the site. The owner or operator of the facility shall have anti-idling signs prominently posted in areas where 15 or more trucks may park or congregate.

(2) The potential for public nuisance to residents resulting from operations and truck traffic, including noise, glare, light, and visual obstacles, exists.

(3) A stormwater management plan will be required.

(4) Consistency with the municipal and county comprehensive plan. The applicant shall submit an assessment report of the impact of the proposed use on the goals of the respective plans. Where the proposed use conflicts with the comprehensive plan, the assessment report shall identify mitigation measures that may be undertaken to offset any degradation, diminution, or depletion of public natural resources.

(5) Additional considerations. The following shall also be addressed:

a. Alternative analysis. A description of alternatives to the impacts.
b. Adverse impacts. A statement of any adverse impacts that cannot be avoided.
c. Impact minimization. Environmental protection measures, procedures, and schedules to minimize damage to critical impact areas during and after construction, including design considerations.
d. Mitigation steps. A listing of steps/structural controls proposed to minimize damage to the site before and after construction.

(6) Critical impact areas. In addition to the above, plans should include any area, condition, or feature that is environmentally sensitive or that, if disturbed during construction, would have an adverse impact on the environment.

a. Critical impact areas include, but are not limited to, floodplains, riparian buffers, streams, wetlands, slopes greater than 15%, highly acid or highly erodible soils, hydric soils, hydrologic soil groups, areas of high-water table, and mature stands of native vegetation and aquifer recharge and discharge areas.
b. A statement of impact upon critical areas and of adverse impacts that cannot be avoided.
c. Environmental protection measures, procedures, and schedules to minimize damage to critical impact areas during and after construction.

T. Green Building Techniques

Data Centers are encouraged to implement low-impact development practices in site design and energy efficiency, such as, but not limited to, the following:

(1) Site Design.

a. Select sites that avoid sensitive lands such as wetlands, floodplains, and steep slopes
b. Minimize land disturbance
c. Maximize tree preservation
d. Minimize impervious surfaces
e. Minimize potential nuisance impacts (noise, glare, vibration, etc.) on adjacent properties, public roadways, and the vicinity.

(2) Energy/Resource Efficiency.

a. Orient buildings to take advantage of passive cooling and daylight opportunities
b. Utilize alternative energy sources (solar, wind, hydro, etc.) as much as possible
c. Provide an energy storage system to monitor and regulate usage of alternative energy for usage during off-peak hours
d. Utilize reclaimed water for cooling, if available
e. Encourage systems that limit the use of finite natural resources and their disposal
f. Encourage fuel storage that limits impacts on the environment from potential spills
g. Install water-efficient landscape materials
h. Utilize LED exterior/interior lighting

i. Implement energy management best practices and carbon reduction techniques such as, but not limited to, those promoted through the U.S. Department of Energy's Better Buildings initiative and U.S. Green Building Council's LEED Certification system.

U. LEED Certification

LEED certification is strongly encouraged, as well as the installation of roof-mounted accessory solar energy systems.

V. Woodland Disturbance

Woodland disturbance, including alteration or removal of any hedgerows, shall be minimized. No portions of tree masses, tree lines, hedgerows, or individual freestanding trees measuring six (6) inches or greater in diameter at breast height (DBH) shall be removed unless it is clearly necessary to effectuate the proposed development. In no case shall more than 50% of any existing tree masses, tree lines, hedgerows, or individual freestanding trees with six (6)-inch or greater DBH be removed. For purposes of this subsection, a woodland is defined as a tree mass or plant community in which tree species are dominant or codominant and the branches of the trees form a complete, or nearly complete, aerial canopy. Any area, grove, or stand of mature or largely mature trees (i.e., six (6)-inch or greater DBH) covering an area of .25 of an acre or more, or consisting of more than 50 individual trees six (6) inches or greater DBH, shall be considered a woodland.

W. Threatened and Endangered Species

(1) PNDI
A Pennsylvania Natural Heritage Program study (PNDI Receipt) dated within two (2) years of the submission of an application for conditional use/special exception or subdivision and land development, whichever is first, as well as any state agency clearance letters required thereby, shall be provided to the municipality.

(2) Compliance
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.

X. Riparian Forest Buffer Area

Data Centers subject to the requirements of this Section must satisfy the stricter of the requirements of this Section, or of 25 Pa. Code 102.14, Riparian Buffer Requirements.

(1) For purposes of this Section, a riparian buffer is an area of permanent vegetation along a waterway that is left undisturbed to allow for the natural succession of native vegetation. A riparian forest buffer is a type of riparian buffer that consists predominantly of native trees, shrubs, and forbs, providing at least 60% uniform canopy cover.

(2) Where the project site contains, is along, or is within 150 feet of a perennial or intermittent river, stream, or creek, lake, wetland, floodplain, pond, or reservoir, whether natural or artificial, the use will be subject to the requirements of this Section and shall, in accordance with the requirements of this subsection, do one of the following:

a. Protect an existing riparian forest buffer.
b. Convert an existing riparian buffer to a riparian forest buffer.
c. Establish a new riparian forest buffer.

(3) Where a riparian forest buffer exists, it shall be left intact to meet the width requirements in subsections (6) and (7). An existing riparian forest buffer need not be altered to establish individual Zones 1 and 2 under subsection (9).

(4) Riparian buffers that consist predominantly of native woody vegetation that do not satisfy the composition requirements for a riparian forest buffer in subsection (1) or the width requirements in subsections (6) and (7) shall be enhanced or widened, or both, by additional plantings in open spaces around existing native trees and shrubs to provide at least 60% uniform canopy cover for the required width and shall be composed of zones in accordance with subsection (9).

(5) On sites without native woody vegetation, a riparian forest buffer providing at least 60% uniform canopy cover shall be established to meet the width requirements in subsections (6) and (7) and be composed of zones in accordance with subsection (9).

(6) The width of the riparian forest buffer shall be a minimum of 100 feet on each side of the water body as measured from the top of the bank. The boundary of the buffer shall follow the natural streambank or shoreline.

(7) Measured within the 100-foot buffer, the following additional distances shall be added to the minimum width of the riparian forest buffer:

a. 10 feet if the average slope is 10-15%,
b. 20 feet if the average slope is 16-17%,
c. 30 feet if the average slope is 18-20%,
d. 50 feet if the average slope is 21-23%,
e. 60 feet if the average slope is 24-25%, or
f. 70 feet if the average slope exceeds 25%.

(8) In the case of the presence of a nontidal wetland or vernal pond wholly or partially within the riparian buffer area, an additional 25 feet shall be added to the width of the riparian forest buffer area for that portion of the buffer area along the wetland, floodplain, or pond.

(9) A new riparian forest buffer or a converted riparian forest buffer shall be composed of zones as follows:

a. Zone 1 shall begin at the top of the streambank or normal pool elevation of a lake, pond, or reservoir and occupy a strip of land 50 feet in width, measured horizontally on a line perpendicular from the top of the streambank or normal pool elevation of a lake, pond, or reservoir. Predominant vegetation must be composed of a variety of native riparian tree species identified in Appendix C.1 of the PA Department of Environmental Protection Guidance Document 394-5600-001, entitled Riparian Forest Buffer Guidance.
b. Zone 2 shall begin at the landward edge of Zone 1 and occupy an additional strip of land a minimum of 50 feet in width, measured horizontally on a line perpendicular from the top of the streambank or normal pool elevation of a lake, pond, or reservoir. Predominant vegetation must be composed of a variety of native riparian trees and small tree/shrub species identified in Appendix C.1 of the PA Department of Environmental Protection Guidance Document, 394-5600-001, entitled Riparian Forest Buffer Guidance.

(10) No earth disturbance, land development, or storing or stockpiling of materials shall occur within the riparian forest buffer area.

(11) In the management of riparian buffers, noxious weeds and invasive species shall be removed or controlled to the greatest extent possible.

(12) Existing, converted, and newly established riparian buffers, including access easements, must be protected in perpetuity through deed description, conservation easement, permit conditions, or any other mechanisms that ensure the long-term functioning and integrity of the riparian buffer.

(13) The riparian buffer shall be designated on the final subdivision and/or land development plan.

Y. Solar

(1) All building roofs shall be solar-ready, which includes designing and constructing buildings in a manner that facilitates and optimizes the installation of a rooftop solar photovoltaic (PV) system at some point after the building has been constructed.

(2) Any portion of a building's rooftop that is not covered with solar panels or other utilities shall be constructed with light colored roofing material with a solar reflective index of not less than 78. This shall be the minimum solar reflective rating of the roof material for the life of the building.

(3) On buildings over 400,000 square feet, prior to the issuance of a certificate of occupancy, the (MUNICIPALITY) shall ensure rooftop solar panels are installed and operated in such a manner that they will supply as much power as needed to operate the facility as is feasible.