

Public Hearing: YES ☒ NO ☐

Department: Planning & Sustainability

SUBJECT:

COMMISSION DISTRICT(S): All Districts

Application of the Director of Planning and Sustainability to amend Chapter 27 to Establish a Definition, Regulatory Guidelines, and Development Standards for Data Centers in M (Industrial), M-2 (Heavy Industrial), O-I (Office-Institutional), and O-D (Office-Distribution) zoning districts. This text amendment is County-wide.

PETITION NO: D1-2025-0972 TA-25-1247647

PROPOSED USE: Data Centers in M, M-2 & O-I zoning districts.

LOCATION: County-wide.

PARCEL NO.: N/A

INFO. CONTACT: Eva Chauveau, Long Range Planner

PHONE NUMBER: 404-371-2155

PURPOSE:

Application of the Director of Planning and Sustainability to amend Chapter 27 to Establish a Definition, Regulatory Guidelines, and Development Standards for Data Centers in M (Industrial), M-2 (Heavy Industrial), O-I (Office-Institutional), and O-D (Office-Distribution) zoning districts. This text amendment is County-wide.

RECOMMENDATION:

COMMUNITY COUNCIL: (October 2025) CC-1: Approval; CC-2: Deferral; CC-3: Full-cycle deferral; CC-4: Full-cycle deferral; CC-5: Full-cycle deferral. (August 2025) CC-1: Full-cycle deferral; CC-2: Deferral; CC-3: Full-cycle deferral; CC-4: Denial; CC-5: Denial.

PLANNING COMMISSION: (Nov. 6, 2025) Approval. Sept. 9, 2025) Full-Cycle Deferral.

PLANNING STAFF: (November 2025) Deferral_11.12.205. (September 2025) Approval.

STAFF ANALYSIS: Planning Staff has collaborated with DeKalb County's Watershed Department to address water consumption concerns. Staff has also relied on key information from Georgia Power, Atlanta Regional Commission, Data Center developers, and the public, to ensure that regulations are conducive to the development goals of the County and the community. While the proposed ordinance may not address every potential issue at this time, it establishes a necessary regulatory framework to guide the location and operation of data centers within DeKalb County. In the absence of such regulations, these facilities could locate in areas where they may be incompatible with surrounding uses or community expectations. As the County gains experience administering these provisions, refinements can be made to address any emerging challenges or unforeseen impacts. Therefore, it is the recommendation of the Planning & Sustainability Department that the application be for **"Deferral"**.

PLANNING COMMISSION VOTE: (November 6, 2025) Approval 5-0-1. Commissioner Costello moved, Commissioner Patton seconded for approval, per Staff recommendation. Commissioner Cooper abstained. (September 9, 2025) Full-cycle deferral 9-0-0. Commissioner West moved, Commissioner Cooper seconded for a full-cycle deferral to the November 2025 zoning agenda.

COMMUNITY COUNCIL VOTE/RECOMMENDATION: (October 2025) CC-1: Approval 6-0-0; **CC-2:** Deferral 9-0-0; **CC-3:** Full-cycle deferral (5-3-0) due to the community council not having a final draft to review; **CC-4:** Full-cycle deferral 8-0-0; **CC-5:** Full-cycle deferral 6-0-0 until final report has been completed. **(August 2025) CC-1:** Full-cycle deferral 6-0-0; **CC-2:** Deferral 8-0-0; **CC-3:** Full-cycle deferral 10-0-0. Discussion included but not limited to that the text amendment needed to be tweaked to address potential noise concerns, should not allow near residential areas, consider requiring use of renewable resources such as solar and rainwater catchments, simplify distance calculation; **CC-4:** Denial 6-1-1. Council cited not enough regulation for proposed data centers; **CC-5:** Denial 8-0-0.

Planning Commission Hearing Date: November 6, 2025
Board of Commissioners Hearing Date: November 20, 2025

STAFF ANALYSIS

CASE NO.:	TA-25-1247647	File ID #: 2025-0972
Address:	County-Wide	Commission District: ALL Super District: ALL
Request:	Application of the Director of Planning and Sustainability to Amend Chapter 27 To Establish a Definition, Regulatory Guidelines, and Development Standards for Data Centers in M (Industrial), M-2 (Heavy Industrial), O-I (Office Institutional), and O-D (Office Development) zoning districts. This text amendment is County-wide.	
Applicant/Agent:	DeKalb County Planning & Sustainability Department	
Sections of the Zoning Ordinance Affected by the Amendment:	Chapter 27 of the Zoning Ordinance, to amend Section 4.1.3 (Use Table) to allow data centers in O-I, M, and M-2 zoning districts subject to certain supplemental regulations; and by adding to Article 9.1.3 – Defined Terms of <i>the Code of DeKalb County, as revised 1988</i> .	

STAFF RECOMMENDATION: Deferral_11.12.2025

The DeKalb County Planning & Sustainability Department is seeking to adopt an ordinance for regulations on data center developments, consisting of a physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting applications and services, or for storing and managing the data associated with those applications or service. The proposed ordinance defines data centers in four capacities of **minor, medium, major, and campus** - which is dependent on square footage, load capacity, and/or whether a substation is required for operation.

Major and campus data centers shall only be permitted in **Light Industrial (M)** and **Industrial (M-2)** zoning districts with a Special Land Use Permit due to their scale, limited employment generation, and lack of public accessibility. These facilities are not compatible with Activity Centers or residential neighborhoods.

Minor data centers will be permitted as accessory uses in **Office Institutional (O-I)** zoning districts and permitted outright in **Office-Development (OD)** zoning districts to accommodate small-scale operations in higher intensity areas. Minor data centers shall be permitted by right in **Light Industrial (M)** and **Industrial (M-2)** zoning districts.

Medium data centers will be permitted with a Special Land Use Permit in **Office Institutional (O-I)** and **Office-Development (OD)** zoning districts. Medium data centers shall be permitted by right in **Light Industrial (M)** and **Industrial (M-2)** zoning districts.

The proposed ordinance includes permitted locations, buffer requirements, architectural standards, operational requirements, noise and maintenance regulation, and supplemental assessments, such as water consumption, energy consumption, lighting design, stormwater management, sewer updates, transmission line impacts, and tree preservation.

The purpose for these regulations ensures that any new and/or existing developments do not impose upon the health, wellbeing, and welfare of DeKalb County Residents. The proposed ordinance considers the impacts of data center development on the economic, social, and environmental aspects of DeKalb County.

Background

Over the last 10 years, the United States has seen a dramatic increase in data center development. Atlanta has seen major changes in the real estate market to prepare for the incoming demand. A study done with CBRE Research for North America Data Center Trends H1 2024 showed that Atlanta led all the primary markets for data centers with a 26% year-over-year increase in pricing, based on strong demand from AI providers, such as Google, Amazon, Microsoft, and X (CBRE Report).

Due to the High-Tech Data Center Equipment Tax Exemption (O.C.G.A. § 48-8-3(68.1)) allowed under House Bill 696 in 2018, many companies have been incentivized to build new data centers in Georgia. More recently, however, House Bill 528 passed through Georgia legislation placing more restrictions on larger development, requiring that “high resource use facilities to provide disclosures regarding community impact and energy and water usage” prior to engaging with any local government or jurisdiction for tax incentives.

There are currently two data centers located within DeKalb County. The first is a data center owned by DC Blox Atlanta located at 6 West Druid Hills Dr. NE, Atlanta, GA 30329. The facility is 3,350 sq ft and has been occupied since 2010. The second is INAP Data Center owned by Lincoln Rackhouse located at 40 Perimeter Center East, Atlanta, GA 30338. The facility is 88,000 sq ft and has been occupied since 2019.

The primary community concerns regarding data centers are the energy and water consumption, environmental impacts, land-use impacts, and noise pollution, particularly for campus and hyperscale facilities (>500,000 sq ft). In 2023, data centers consumed about 4.4% of total US electricity and are expected to consume 6.7 to 12% of total US electricity by 2028 ([US Department of Energy](#)). In understanding the basic capacity necessary to support data centers in populated areas, it is important to evaluate their impact on the surrounding community. Municipalities worldwide will have to learn how to adapt to the significant intelligent investments and the pressure from cloud and AI providers for space.

Sustainability in the Data Center Industry

The integration of artificial intelligence (AI) into everyday processes has allowed for a rapid evolution of AI processing within a multitude of sectors, with Nvidia leading the charge for smaller, more efficient chip production. With the increase in the production of semiconductors, the ability to regularly process and cool the chips has become a concern. As more companies begin to focus on sustainable building and operation practices, it is imperative that regulation reflect these structural improvements.

Many of the pollutants from data centers come from diesel-powered backup generators. A diesel generator that operates with a load of 2kW to 5 kW can emit up to 4,456 kg of carbon dioxide per year ([Jakhiani et al., 2012](#)). An 80,000-square-foot data center can consume up to 150 watts per square foot to process information, resulting in a total power demand of 12 megawatts. To support this, backup diesel generators - typically four units handling a 2.5 MW load each - may be required. If not properly regulated, each generator can emit over 25,000 pounds of toxic emissions per hour. ([US EPA](#)). The US Environmental Protection Agency (EPA) has created four tiers to manage generators and reduce the emission of primary pollutants such as carbon dioxide, nitrogen oxide, particulate matter, sulfur oxides, carbon monoxide and hydrocarbons ([Power Secure](#)). Tier 4 is the current emissions standard for diesel generators, requiring the strictest regulations through intentional design using

diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), selective catalytic reduction (SCR) systems, and are optimized for fuel efficiency ([Worldwide Power Products](#)).

Water Consumption

An important site selection criterion for data center locations is access to water, primarily through municipal or regional water utilities. For ideal high-density and high-performance computing, data centers can request 100,000 gallons to 3 million gallons of water per day, depending on the type of cooling system in place. Water cooling, consisting of an evaporative and closed-loop cooling, is a preferred method among hyperscale facilities because it more efficient in absorbing and expelling heat from high-density centers. Hyperscale data centers can consume 550,000 gallons per day, while wholesale and retail data centers consume an average of 180,000 gallons per day ([Water Usage in DCs](#)). Although data centers can use a large amount of water daily many facilities have opted to find alternatives that consume less water, such as immersion cooling ([Yañez-Barnuevo, 2025](#)). Despite these efforts, data centers still require a lot of energy and water to function effectively - even more so at larger scales. To increase water-efficiency, data centers can employ three different methods based on air or liquid cooling: closed-loop cooling systems, free cooling, direct air cooling, or immersion cooling.

Closed-loop cooling systems are the most common systems in new builds, recycling wastewater and freshwater that is chemically treated to prevent corrosion, microbiological issues, and freezing. Closed-loop systems require a large initial fill that can range in volume depending on the size of the data, however, it can reduce water use by 70% ([Yañez-Barnuevo, 2025](#)). These systems typically require more energy to circulate the water continuously between servers and chillers. Despite this, many developers are working towards zero water use for cooling as the industry continues to evolve.

Free cooling is used when development is located in a specific environment that maintains consistent cooler temperatures as cold air is drawn from the outside into the building to circulate and cool the equipment.

Direct air cooling requires no water, but instead much more energy. This system pulls heat away from the chips and filters it through air conditioning vents and tubes. An example of an air-cooling system is computer room air conditioning (CRAC), which uses a single pass air flow design through a refrigerant and then is immediately returned to the room to cool the air. This type of cooling system is ideal for areas with minimal water resources and cheaper access to power ([Chang et al., 2024](#))

An immersion cooling system is much more complex, requiring servers, chips, and any other data equipment to be completely submerged in a specialized dielectric fluid that absorbs the heat from the chips. In this instance, the hardware must be specifically designed to withstand the submersion. Immersion cooling is a much more recent technique that few developers have implemented into data centers due to initial costs that are much higher than installing a closed-loop system. Albeit the steep initial cost, immersion cooling can lead to significant space-optimization benefits and may have significant energy-saving benefits ([Yañez-Barnuevo, 2025](#)).

Architectural and Safety Standards in Data Centers

Data centers are maintained with extremely strict standards in place due to sensitive data information, high-density equipment, and overall, extremely complex infrastructure ([Data Bank, 2024](#)). Data centers are susceptible to heat, electrical hazards, fire, air quality, and chemical exposure, often all regulated through appropriate on-site employee management, temperature and humidity regulation, air filtration systems, and data center design.

Data center design has become a concern for community members as more and more data centers spread to urban areas, specifically near densely populated cities or neighborhoods. As a result, it is important that data centers reflect similar architectural styles that remain relatively sustainable and are not incongruous with its surroundings. The basic design of these facilities should consider scalability and flexibility of building layout, power and cooling efficiency with equipment storage, high availability and redundancy of power, and 24/7 security and physical protection. Any kind of fenestration is typically discouraged in design as it presents an opportunity to physically access data center resources. Protocols, such as two-factor authentication, biometric screening, and video surveillance, must be put in place to ensure that any data within the building remains secure ([Pacheco, 2024](#)). Faux fenestration, applied decorative murals, or decorative windows can provide an alternative to the potential security risk that real windows present, while also maintaining a similar building envelope to the surrounding building environment.

The Atlanta Regional Commission is currently looking into releasing a Community Design Guide, in partnership with a noted design firm, to illustrate data center projects that can be integrated into local communities. This will help developers contribute to placemaking in building publicly accessible edges, shared amenities, and appealing facades. A key point is to lead developers away from green-fields and focus on regenerative redevelopment ([Atlanta Regional Commission](#)).

Data Center Clustering for Efficiency

The data center industry tends to grow in geographic clusters, often influenced by the cost and availability of land, power, and connectivity. Initially, data centers were typically located in remote areas to take advantage of lower land prices and cheaper energy. However, increasing customer expectations for low-latency services and the rising demand for bandwidth have driven a shift. Today, more data centers are being built closer to urban centers and along major transmission corridors to minimize latency and ensure faster, more reliable access to data.

For DeKalb County, which relies on a single water source, clustering could have more negative impacts on the existing water infrastructure. In implementing distance requirements, specifically from residentially zoned parcels, clustering of high-demand water users can be prevented in areas with limited infrastructure capacity, as well as reduces the risk of localized pressure drops in areas with older water infrastructure.

Although data centers can improve latency in closer proximity to each other, it is important to understand that clustering also concentrates water demand. As high demand users, data centers can place additional strain on DeKalb County's water infrastructure, potentially outpacing current capacity and impacting long-term sustainability.

Planning Staff has collaborated with DeKalb County's Watershed Department to address water consumption concerns. Staff has also relied on key information from Georgia Power, Atlanta Regional Commission, Data Center developers, and the public, to ensure that regulations are conducive to the development goals of the County and the community. While the proposed ordinance may not address every potential issue at this time, it establishes a necessary regulatory framework to guide the location and operation of data centers within DeKalb County. In the absence of such regulations, these facilities could locate in areas where they may be incompatible with surrounding uses or community expectations. As the County gains experience administering these provisions, refinements can be made to address any emerging challenges or unforeseen impacts. Therefore, it is the recommendation of the Planning & Sustainability Department that the application be for "Deferral".

**AN ORDINANCE TO AMEND CHAPTER 27, ARTICLE 4 AND ARTICLE 9 OF
THE CODE OF DEKALB COUNTY, GEORGIA, AS REVISED 1988 TO ADD
REGULATIONS FOR DATA CENTERS IN DEKALB COUNTY**

WHEREAS, to provide a definition for data centers as storage facilities housing servers for computing functions and their development in DeKalb County;

WHEREAS, to provide design and development standards for data centers to ensure that there is no discernable impact on adjacent properties or residential areas;

WHEREAS, to ensure that all data centers operate in compliance with applicable environmental standards and best practices within the O-D (Office Distribution), M (Light Industrial) and M-2 (Heavy Industrial) Districts, and to minimize any adverse impacts on neighboring residential, office, or commercial districts, including but not limited to acoustic waste, particle pollution, water usage, and energy consumption;

WHEREAS, to ensure that growth and density around high-capacity transit stops focuses on pedestrian orientation and is not hindered by development that does not generate increased pedestrian activity;

WHEREAS, in pursuit of a more sustainable and equitable future, it is critical to protect more at-risk communities, such as schools, daycares, senior care facilities etc., areas from intensive development that pose potential adverse health and environmental impacts;

WHEREAS, it is desirable to promote development that minimizes environmental impact and integrates seamlessly with existing and planned land use of DeKalb County;

WHEREAS, to recognize the rapid change within the data center industry and reflect the lifecycle of sites, ensuring that development can be adaptively reused and can be revitalized with possibility of future reuse;

WHEREAS, to ensure that development of data centers remains compatible with all character areas and that their use fits within the appropriate character area designated in the 2050 Comprehensive Unified Plan.

NOW THEREFORE, BE IT ORDAINED by the Governing Authority of DeKalb County, Georgia, and be it hereby ordained by the Authority of same, that Chapter 27 of the Code of DeKalb County, as revised 1988, is hereby amended as follows:

Part I. ENACTMENT

By amending Section 27-4.1.3 (Land Use Table) to allow data centers in O-I, O-D, M, and M-2 zoning districts subject to certain supplemental regulations of Section 27-4.2.64; and

By adding to Section 27. Article 9.1.3 – Defined Terms *of the Code of DeKalb County, as revised 1988, as follows:*

- a) **Closed loop system:** A system that constantly reuses and recycles an initial load of water within its operation, significantly reducing the draw on external water sources and minimizing wastewater discharge. A closed loop system shall not use evaporative cooling, and may consist of methods including, but not limited to, air-cooled (dry) cooling, rear-door heat exchanger cooling, hybrid dry economizer cooling, direct-to-chip cooling, or immersion cooling.
- b) **Data Center, Campus:** A singular development that has more than one (1) data center, or a physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting applications and services, or for storing and managing the data associated with those applications or services. A data center campus shall be a minimum of 500,000 square feet.
- c) **Data Center, Major:** A physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting applications and services, or for storing and managing the data associated with those applications or services. A major data center shall be between 100,000 square feet and 500,000 square feet.
- d) **Data Center, Medium:** A physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting applications and services, or for storing and managing the data associated with those applications or services. A medium data center shall be between 20,000 square feet and 100,000 square feet.
- e) **Data Center, Minor:** A physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting applications and services, or for storing and managing the data associated with those applications or services. Minor data centers shall be under 20,000 square feet and do not require a substation. A minor data center may include data centers as an accessory use if they are under 2,000 square feet.
- f) **High-Capacity Transit Stop:** A high-capacity transit stop is a designated location where transit vehicles designed to transport large volumes of passengers operate. These stops serve major public transportation modes such as Bus Rapid Transit (BRT), Arterial Rapid Transit (ART) Commuter Rail Transit (CRT), Light Rail Transit (LRT), and Heavy Rail Transit (HRT).
- g) **Load:** The total power consumed by servers, storage, and other networking devices that operate within a data center site.
- h) **Megawatt (MW):** The unit of measurement for electricity that is equivalent to one million watts. This is used to measure the total power consumption of data centers.

(Ex. 1 MW is equivalent to one million watts of power, which is enough to power 650 homes.)

- i) **Substations:** An electric system facility that converts higher voltages to lower voltages within or separate from a data center to generate sufficient power at maximum efficiency; can operate independently for dedicated site once directly connected to transmission line.

By creating Section 27-4.2.64 -Data Center Supplemental Regulations of the Code of DeKalb County, as revised 1988, as follows:

1) Permitted Locations

- a. Minor data centers shall be permitted on parcels zoned Office-Institutional (O-I) as an accessory use if under 2,000 square feet or smaller. Any other Minor data centers and Medium data centers shall be permitted by right on parcels zoned in Light Industrial (M) and Heavy Industrial (M-2) districts;
- b. Minor and Medium data centers shall be permitted on parcels zoned Office-Institutional (O-I) and Office-Distribution (O-D) with any Future Land Use Designation with a Special Land Use Permit;
- c. All Major data centers and Campus data centers shall be permitted in Light Industrial (M) and Heavy Industrial (M-2) zoning districts with a Special Land Use Permit if located within a Future Land Use designation of LIND (Light Industrial) or IND (Heavy Industrial);
- d. For campus development see Section 27-4.1 Use Table.

2) Buffer Requirements

- a. No new data center development in a light industrial (M) or industrial (M-2) land use shall be permitted within 500 feet of the property line from any residentially zoned parcel;
- b. If an interstate roadway, state highway, or major arterial road borders the property line, the required distance between a data center development and a residentially zoned property may be reduced to 300 feet along the property line where the roadway is located;
- c. Major or campus data centers shall not be allowed where any part of the property line is within 2,640 feet of a high-capacity transit stop;
- d. Major and Campus data centers shall maintain a minimum transitional buffer of 100 feet along all property lines abutting any properties used or zoned non-industrial and shall be enclosed by a freestanding wall with a minimum height of 8 feet and such a wall shall provide a five (5) to ten (10) dB sound attenuation if any supporting mechanical systems are located outside of a building;

- e. Major data centers and Campus data centers shall provide a 20-foot-wide landscaped buffer around any data center development with a minimum 10-foot-high wall with sound attenuation in compliance with the requirements of 2(d). One canopy tree shall be planted for every 30 feet of property frontage if the subject site abuts publicly accessible right-of-way or non-industrially zoned properties. These improvements shall be located within the required 100-foot transitional buffer described in (2d) if applicable;
- f. Screening requirements listed in this section beyond those otherwise required by the Zoning Ordinance shall not apply to Minor data centers or Medium data centers that are zoned in Office-Institutional (O-I) and Office-Distribution (O-D) zoned districts;
- g. Minor data centers and Medium data centers in Office-Institutional (O-I) or Office-Distribution (O-D) zoned districts shall comply with transitional buffer requirements for designated districts within Section 27-5.4.5;
- h. Distance shall be measured from the edge of any building, substation, private driver, or parking lot to the nearest property line;

3) Architectural and Design Requirements

- a. Where visible from a publicly accessible road or right-of-way, a Medium, Major, or Campus data center shall have a minimum of thirty (30) percent of the width of the front façade of any buildings at the ground level consist of fenestration. Decorative windows, architecturally glazed windows and painted or applied decorative murals shall be permitted to count towards fenestration requirements, while maintaining appropriate security and operational standards for data center use. Fenestration requirements listed in this section beyond those otherwise required by the Zoning Ordinance shall not apply to minor data centers;
- b. A minimum of ten percent (10%) of the width of side and rear facades shall incorporate decorative windows, architecturally glazed windows or murals, while maintaining appropriate security and operational standards for data center use;
- c. Where visible from a publicly accessible road, right-of-way, or adjacent residential properties, the following materials shall not be utilized on the building façade: aluminum siding; corrugated steel; vinyl siding; plywood; pressed wood products; synthetic stucco; or unfinished concrete block;
- d. A development operating as a data center campus shall have unified landscape and architectural elements;
- e. Building height shall not exceed seventy five (75) feet in Light Industrial (M) and Heavy Industrial (M2) zoning districts and shall be measured from average finished grade (determined by averaging the elevations of finished grade around the entire footprint of the structure) to the top of the highest

roof beams on a flat roof, to the deck level on a mansard roof, and to the average distance between the eaves and the ridge level for gable, hip, shed and gambrel roofs, not including any additional rooftop equipment, which may not exceed a maximum height of thirty (30) feet.

- f. Data center developments with any mechanical rooftop equipment, including but not limited to heating, air conditioning, ventilation, generators, and other similar equipment, shall be screened with a parapet wall, false roof, or other building element that shall provide one hundred percent (100%) screening of mechanical equipment from the adjacent roadways, adjacent properties, adjacent waterways, and the site itself;
 - i. The parapet wall, false roof, or building element shall be constructed of the same materials used in the construction of the principal building or structure and shall be designed to be architecturally integrated with the building's overall design;
 - ii. No screening shall be required for renewable energy infrastructure equipment, including but not limited to solar energy systems, wind energy systems, and other power generation equipment.
 - iii. No screening shall be required for any green infrastructure, including but not limited to green roofs, rooftop cisterns, and other bioretention equipment.
- g. All data centers shall comply with the transitional height plane standards from Section 27-5.2.4.

4) Operation Requirements

- a. Substations, electrical yards, mechanical yards, and any other exposed equipment shall not be located between the building and a publicly accessible road or right-of-way and shall be screened from any adjacent publicly accessible street, private street, trail, or park;
- b. All lighting other than street and pedestrian lighting shall have 'Dark Sky' design - there shall be no spillover from the fixture onto surrounding properties (including the street). All lights and poles shall have a permanent black finish.
- c. All cooling and ventilation equipment within property boundaries shall operate on a closed-loop system.
- d. All cooling, ventilation, and other exceptional equipment used to operate the facility shall not be located between building and publicly accessible rights-of-way.
- e. Mechanical and utility equipment shall comply with the screening requirements for site and parking area landscaping subject to Section 27-4.2.64.3 (e) and (f) and Article 5 of the DeKalb County Zoning Ordinance.

- f. In the M and M-2 zoning districts, substations associated with the operation of a data center shall be permitted subject to the following requirements:
 - i. The substation shall be at least fifty (50) feet from the public right-of-way;
 - ii. The substation shall be screened with a minimum eight (8) foot tall wall from any adjoining property or publicly accessible street;
 - iii. The substation shall not involve the storage of vehicles or service equipment.

5) Noise and Maintenance Requirements

- a. Maximum permissible sound levels shall not exceed sixty-five (65) decibels (DB) during the daytime and fifty-five (55) decibels (DB) during the nighttime as measured from any property line;
- b. Any generators on the property shall comply with U.S. Environmental Protection Agency (EPA) New Source Performance Standards (NSPS) of at least Tier 4 emissions. Testing for these generators shall not exceed 10 hours per month unless power outage occurs. Generators shall be enclosed by a sound attenuation for noise reduction and to reduce pollution;
- c. Except for generator testing or commissioning activities, generator use is limited to backup/emergency use only.

6) Application Requirements

- a. All applications for a data center shall, in addition to any other application requirements of this code, provide the following information:
 - i. Applicants shall provide a letter of intent to serve from the relevant utility provider(s), confirming that preliminary coordination has occurred and that service to the proposed facility is technically feasible subject to final engineering review;
 - ii. **Noise Impact Assessment:** A Noise Impact Assessment shall be required as part of the permitting process for any proposed data center development and assessed at a distance of 500 feet from the development. The Noise Impact Assessment shall:
 - 1. Define the scope of the assessment, including the geographic area, the noise sources to be studied, and the specific objectives of the assessment for the proposed development.
 - 2. Measure pre-operation ambient noise, or the existing background noise before any server equipment is installed and provide acoustic mitigation strategies if noise level exceeds 60 dB during any hours of the day or night once equipment for data center development is in operation.
 - iii. **Water Consumption and Sustainability Plan:** A Water Consumption and Sustainability Plan shall address conservation

and scarcity, outlining the total water requirement of the data center, including cooling needs, and any strategies to reduce or mitigate excessive water usage. The plan shall demonstrate that the water usage shall not significantly strain DeKalb County's water supply. The Water Consumption and Sustainability Plan shall specifically evaluate:

1. The vulnerability of the project and project site to water scarcity and drought;
2. Disturbance of public services (i.e., transport, communication, sanitation, fresh water, and electricity supply);
3. Identify any drought monitoring and forecasting systems that exist in the project area;
4. Proposed water scarcity/drought management measures to alleviate risk, including water storage, alternative sources, and reduced use of resources;
5. The adoption of advanced low-water or water-free cooling systems that align with the regional drought and water-scarcity planning from the Metropolitan North Georgia Water Planning District.

- iv. **Energy Consumption and Sustainability Plan: An Energy Consumption Sustainability Plan** shall contain the estimated energy load before construction and the daily operational load once constructed. This assessment shall outline:
1. Estimates of peak electricity demand and strategies for mitigating strain on local power infrastructure;
 2. Proposed improvements or alternatives to minimize the need for additional transmission lines and the designated power provider;
 3. The use of sustainable alternatives for on-site water or power generation, such as solar panels, rooftop cisterns, small-scale wind turbines, or other renewable energy sources which shall offset at least 10% of total power or water usage;
 4. A decommissioning plan, if data infrastructure is not sold or transferred, for recycling all on-site electronic infrastructure through certified recyclers that follow Responsible Recycling (R2) Standard for Electronics Recyclers and/or e-Stewards® Standard for Responsible Recycling and Reuse of Electronic Equipment;

5. Planned use of sustainable practices to limit or offset the center's use of power and water.
- v. **Lighting Plan: A Lighting Plan** shall show compliance with "Dark Sky design" principles, demonstrating that there shall be no spillover from the fixture onto surrounding properties. A conceptual lighting plan shall be submitted with the SLUP application. A complete lighting plan shall be submitted as part of a Land Development Permit application that demonstrates compliance with the requirements of Sec. 27-5.6.1.- Outdoor Lighting.
- vi. **Transmission Line Impact Assessment: A Transmission Line Impact Assessment** shall identify the need for new or upgraded transmission lines to meet the data center's electricity requirements. This assessment shall include the potential environmental impact on public land, including tree removal from county-owned land and rights-of-way. This plan shall also include information on the planned substation's location and shall show the screening mechanism(s), which shall include a minimum of an eight (8) foot tall decorative brick wall if potentially visible by the public. Screening shall comply with Section 27-4.2.64.2 (c).
- vii. **Tree Preservation and Reforestation Plan: A Tree Preservation and Reforestation Plan** shall outline efforts to minimize tree removal and enhance urban forestry efforts, especially when transmission lines cross public land or park areas.
- viii. **Stormwater Management Plan: A Stormwater Management Plan** shall address how the site's development and operation shall manage stormwater runoff, as well as any mitigation measures to prevent negative impacts on local water systems.
- ix. **Sewer Plan: A Sewer Plan** shall evaluate and include:
 1. Actual and expected daily sewerage flow;
 2. Identify potential or planned sanitary sewer capacity projects with the purpose of improving the DeKalb County water system;
 3. An on-site treatment plan, including any necessary equipment to conduct trace analyses and consistent monitoring of chemical use for on-site water preparation and treatment;
 4. An analysis of the community's treatment system, or a private treatment system, to determine whether either has adequate

- capacity to serve the forecasted growth, or has programmed improvements to add capacity to accommodate the forecasted growth;
5. Clear indication of pipe size, material type, percent grade, and length of all pipes;
 6. A utility plan with direction of sewer flow;
 7. Disclose pretreatment or discharge permit request if any effluent leaves the closed system to sanitary or storm sewers for the Department of Watershed Management Industrial Pretreatment Program Review;
 8. Submit a Closure and Disposal Plan at decommissioning covering treatment systems, chemical waste, and related infrastructure;
 9. Disclose Water Usage Effectiveness (WUE) target or performance metric.
- b. **Additional Information:** Any additional information requested by DeKalb County's Department of Watershed Management, Department of Fire Rescue, Department of Public Works, Code Compliance Administration, and Department of Planning & Sustainability shall be submitted;
- c. At the time of each business license renewal, the owner and/or operator is required to provide all application documentation demonstrating continual compliance and monitoring of all applications requirements and conditions of zoning.
- d. The burden of showing compliance with supplemental requirements and/or conditions of zoning is on the applicant and/or owner of the property or use.
- 7) Special Land Use Requirements:
- a. In addition to the submission requirements of Article 7, any application for a Special Land Use Permit (SLUP) related to all data centers shall provide the following information as applicable:
 - b. **Redevelopment of Existing Industrial Sites:** A Special Land Use Permit (SLUP) shall not be required for the redevelopment, reuse, renovation, or reconstruction of a site to allow a Medium, Major, or Campus data center located within the Light Industrial (M) or Heavy Industrial (M-2) zoning district and designated as Light Industrial (M) or Heavy Industrial (M-2) on the Future Land Use Map, provided that:
 - i. The site was previously developed and contains existing industrial, warehouse, or manufacturing improvements that have been in place prior to December 31, 2024;

- ii. The redevelopment replaces or repurposes obsolete or inactive industrial facilities with a Medium, Major, or Campus data center use that complies fully with the supplemental regulations in Section 27-4.2.64;
 - iii. The redevelopment does not expand the site's total impervious surface area or building footprint by more than twenty-five (25) percent beyond existing conditions;
 - iv. No portion of the site is within 500 feet of a residentially zoned property, unless separated by an interstate, state highway, or major arterial road as described in Section 27-4.2.64(1)(e); and
 - v. The applicant submits all required technical plans and studies listed under Section 27-4.2.64(6) (Application Requirements) with the Land Disturbance Permit application, to be reviewed administratively by County staff for compliance.
 - vi. Redevelopment proposals that do not meet these conditions shall require approval of a Special Land Use Permit (SLUP) prior to permitting.
- b. A Special Land Use Permit shall be required for any building alterations or expansion of all data centers;
- c. If an application includes the use of renewable energy sources to offset at least forty-five (45) percent of a Medium, Major, or Campus data center's total energy usage, the project shall be permitted an increase in building height up to one hundred fifty (150) feet, subject to compliance with any required transitional building height planes. Renewable energy sources may consist of solar panels, an on-site solar farm, small-scale wind turbines, or waste heat recovery.
- d. In addition to the standard Special Land Use Permit (SLUP) criteria listed in Chapter 27 Article 7.4.6., applications shall also be assessed on:
 - i. Adequacy of operation and infrastructure equipment that ensures the most sustainable use of resource, energy, and water consumption to serve the proposed use.
 - ii. Whether the proposed use demonstrates substantial compliance to all plans and assessments required under this code, including but not limited to: noise impact assessment, water consumption and sustainability plan, energy consumption plan, lighting plan, transmission line impact assessment, tree preservation and reforestation plan, stormwater management plan, and sewer update plan.
 - iii. Substantial compliance shall consider whether all plans and assessments have been properly submitted, identify potential

impacts, and propose feasible mitigation strategies, and minimize adverse impacts on public health, the surrounding environment, and infrastructure.

8) Parking Requirements

- a. See Use Table 6.2 for Off-street Parking Ratios, Exhibit 2.

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Exhibit 1. Use Table 4.1, *Data Centers*

KEY:	P - Permitted use		SA - Special administrative permit from director of planning												
	Pa - Permitted as an accessory use		SP - Special land use permit from BoC (SLUP)												
Use	RE	RLG	OI	OIT	NS	C-1	C-2	OD	M	M-2	MU-1	MU-2	MU-3	MU-4,5	See Section 4.2
INDUSTRIAL															
Data Centers															
Data Center, Minor			Pa					P	P	P					
Data Center, Medium			SP					SP	P	P					
Data Center, Major (in Industrial and Light Industrial Character Areas)			SP					SP	SP	SP					
Data Center, Campus (in Industrial and Light Industrial Character Areas)									SP	SP					
Data Centers, Major or Campus in all other Character Areas															

Exhibit 2. Use Table 6.2, *Off-street Parking Ratios***TABLE 6.2: Off-street Parking Ratios****Minimum and Maximum Parking Spaces**

Industrial		
Use	Minimum Parking Spaces Required	Maximum Parking Spaces Allowed
Heavy and light industrial, data centers		One (1) space for each two thousand five hundred (2,500) square feet of floor area.

ADOPTED by the DeKalb County Board of Commissioners, this _____ day of _____, **2025**

MICHELLE LONG SPEARS

Presiding Officer

Board of Commissioners DeKalb County, Georgia

APPROVED by the Chief Executive Officer of DeKalb County, this _____ day of _____, **2025**.

LORRAINE COCHRAN-JOHNSON

Chief Executive Officer

DeKalb County, Georgia

ATTEST:

BARBARA H. SANDERS-NORWOOD, CCC

Clerk to the Board of Commissioners and

Chief Executive Officer

DeKalb County, Georgia

APPROVED AS TO SUBSTANCE:

APPROVED AS TO FORM:

JULIANA A. NJOKU

Director, Planning and Sustainability

WILLIAM J. LINKOUS, III

County Attorney