TEXT AMENDMENT – AS INTRODUCED 6/22/2026

Proposed Amendment to Chapter 158 (Zoning Code) City of Hopkinsville, Kentucky Code of Ordinances

Amend Chapter 158.002 to add the following definitions:

DATA. Any information, whether digital, electronic, optical or quantum, that can be collected, stored, processed, or transmitted.

DATA CENTER. A facility used primarily for the storage, management, processing, or transmission of data and includes, but is not limited to, buildings designed to accommodate computer servers, storage systems, or specialized computing hardware. A Data Center includes a Data Center principal use/structure(s), any Data Center accessory use/structure(s), and Data Center energy system(s). Examples of these facilities and uses include, but are not limited to, crypto processing, commercial cryptocurrency mining (bitcoin mining), artificial intelligence training and/or processing, and cloud-computing. This use does not include computers or telecommunications related equipment that is secondary and customarily incidental to an otherwise permitted use on a property, such as servers associated with an office building.

(1) **DATA CENTER, SMALL SCALE (SMALL-SCALE DATA CENTER).** A Data Center with 1) a connected electrical load of less than five (5) megawatts; and 2) a footprint of less than 20,000 square feet in area. Excluding indoor battery energy storage systems, this term does not include facilities that operate a Data Center Energy System. Small-Scale Data Centers are prohibited in the City of Hopkinsville, except in the B-4, I-1, and I-2 districts pursuant to an approved Conditional Use Permit.

(2) **DATA CENTER, MEDIUM SCALE (MEDIUM-SCALE DATA CENTER).** A Data Center, not constituting a Small-Scale Data Center, with 1) a connected electrical load of less than twenty (20) megawatts; and 2) a footprint of less than 100,000 square feet in area. Medium-Scale Data Centers are prohibited in the City of Hopkinsville, except in the I-1 and I-2 districts pursuant to an approved Conditional Use Permit.

(3) **DATA CENTER, LARGE SCALE (LARGE-SCALE DATA CENTER).** A Data Center, not constituting a Small or Medium-Scale Data Center, with 1) a connected electrical load of less than seventy-five (75) megawatts; and 2) a footprint less than 500,000 square feet in area. Large-Scale Data Centers are prohibited in the City of Hopkinsville, except in the I-2 District pursuant to an approved Conditional Use Permit.

(4) **DATA CENTER, HYPER SCALE (HYPER-SCALE DATA CENTER).** A Data Center with 1) a connected electrical load of seventy-five (75) megawatts or more; or 2) a footprint of 500,0000 square feet or greater in area. Hyper-scale Data Centers are prohibited within the City of Hopkinsville.

DATA CENTER ACCESSORY USE OR STRUCTURE. Any structure or building that supports the operation of a Data Center, is located on the same tract or assemblage of adjacent parcels and is developed either as a unified development of or in further support of a Data Center. The category includes, but is not limited to, administrative, logistical, fiber optic, storage, and

security buildings or structures; air handlers; process water and non-contact cooling water and wastewater management and treatment facilities; water holding facilities; pump stations; water towers; environmental controls (e.g., air conditioning or cooling towers, fire suppression, and related equipment), water cooling and storage facilities, security features, and any other associated electric, gas, water, wastewater, and stormwater infrastructure to support operations at the property.

DATA CENTER ENERGY SYSTEMS. Energy generation and storage systems, including electrical generators or engines, electric substations, back-up power generators, battery energy storage systems (BESS), used or intended to be used as sources of electrical power during normal operations, or as back-up temporary power when the main source of power is interrupted; electric transmission and distribution lines; and pipelines. The category shall not include utility service facilities exempted under KRS 100.324.

DATA CENTER FOOTPRINT. An area calculated by drawing a perimeter around the outer edge of all principal uses and structures, service center or non-service centers, accessory structures, and energy systems. The footprint does not include perimeter fencing or visual buffers, parking areas and drives, storm water basins neccessary to ensure compliance with Chapter 155 of the code, nor transmission lines or portions thereof that are required to connect the Data Center to a utility outside the Data Center's perimeter.

DATA CENTER PRINCIPAL USE OR STRUCTURE. Any structure or building whether a service center or non-service center, including server and network cabinets, trailers, and similar enclosures or encasements not attached to the footprint that is used primarily for the storage, management, processing, or transmission of data which includes, but is not limited to, any building designed or used to accommodate and house computer servers, storage systems, or specialized computing hardware.

PHYSICAL CONSTRUCTION (DATA CENTER FACILITY). The excavation or movement of earth, erection of forms or structures, or similar activities undertaken in the construction of a Data Center facility. This term does not include any activity or construction undertaken prior to the issuance of a zoning/building permit for a Data Center pursuant to this chapter and the issuance of all approvals and permits, if any, as may be required by applicable state or federal statutes.

Amend Chapter 158 (General District Regulations) to add a new section:

§158.048 REQUIREMENTS FOR DATA CENTERS.

(A) *Purpose.* The purpose of this section is to facilitate the siting, development, construction, and installation of Data Centers in the City of Hopkinsville in a predictable manner that promotes and protects the safety, health, and welfare of the community. This section encourages the appropriate siting of Data Centers to bolster local economic development and job creation, promote new technologies and innovation, preserve the city's energy grid and water resources, and reduce potential environmental impacts. This section also establishes standards and requirements to ensure that the use and enjoyment of lands located adjacent to and in the proximity of Data Centers are fully protected.

The requirements of this section are intended to be supplemental to any safety, health, or environmental requirements of federal, state, or local laws and regulations.

(B) *Applicability.* This section applies to the siting, construction, installation, and operation of Data Centers within the City of Hopkinsville on or after the effective date of these provisions. A Data Center in operation, or which has begun physical construction prior to this section's effective date, shall be considered to have legal nonconforming status in accordance with KRS 100.253 and §158.090 of this chapter.

(C) Permit Required. A zoning/building permit is required prior to the physical construction or siting of a Data Center in the City of Hopkinsville. Data Centers are subject to the site plan review requirements of §§158.255 through 158.261 and, where applicable, the conditional use permit requirements of §§158.110 through 158.118 of this chapter.

(D) *General Requirements Applicable to Data Centers.* Where permitted, Data Centers are subject to the following standards.

(1) Setbacks. A Data Center's principal use or structure, accessory use or structure, and energy system shall be setback from all lot lines as follows:

a) Small-Scale Data Centers shall be setback a minimum of 300 feet;
b) Medium-Scale Data Centers shall be setback a minimum of 500 feet, provided any emission point or exhaust stack shall be setback a minimum of 1,000 feet from the property boundary and 2,000 feet from the property boundary of any adjacent property containing a residential, public, or semi-public use or any property zoned EST-1, R-1, R-2, R-3, R-4, R-5, B-1 or P-1; and
c) Large-Scale Data Centers shall be setback a minimum of 1,500 feet, provided an emission point or exhaust stack shall be setback a minimum of 2,000 feet from any property boundary.
d) Exception. The setback provisions of this subsection do not apply to transmission and distribution powerlines, pipelines for delivering electricity or natural gas to the property, fencing, buffering, areas for vehicular parking, and ingress/egress for road and rail traffic.
e) In the approval of a conditional use permit, the Board of Zoning Adjustment may establish setbacks in addition to or more restrictive than the requirements of this subsection pursuant to the review criteria and accompanying findings required by §158.110 et seq. and this section.

(2) Energy Systems. Where permitted, Data Center Energy Systems shall be subject to the following requirements:

a) All energy systems, including but not limited to generators, fuel storage tanks, and utility substations, are prohibited from the front yard and shall be placed to the rear of the front most principal Data Center use or structure.

b) When a Data Center Energy System involves the use of Solar Energy Systems (SES), the SES shall, in addition to the standards of the section, conform to the requirements of §158.045.
c) Backup power generation using diesel fuel, natural gas, or battery energy storage systems are allowed for use at a Data Center. Gas or battery storage is preferred over diesel due to emissions concerns.
d) Backup diesel generators shall be a minimum of Tier IV (or the highest Environmental Protection Association industry standard available at the time of application) which meet all applicable local, state, and federal emission and performance standards to minimize adverse effects from the generator emissions.
e) Except for generator testing or commissioning activities, generator use shall be limited to backup and emergency use only when the primary source of electricity is interrupted or unavailable. Continuous generator use outside of power outages or interruptions is prohibited.
f) Generators shall be tested no more than once per week per unit, and only during the hours of 12 P.M. to 5 P.M. Monday through Friday.
g) If diesel fuel is used for a back-up generator, the application for permit shall include information demonstrating that the fuel will be delivered during non-peak daytime hours, that storage of the fuel will conform to all applicable fire and safety standards, and that the storage vessel is equipped with secondary containment to contain any release.

(3) Cooling Requirements. Data Center design, construction, and operation shall incorporate the following:

a) All liquid cooled equipment must be designed to utilize a closed-loop system.
b) Water used for liquid cooling systems must come from a public water system and not from any type of private well, river, or quarry intake system.
c) Water discharge from liquid cooling systems shall only occur after treatment (if required) and only in accordance with all applicable local, state, and federal water pretreatment, discharge permit requirements and in conformity with Chapter 52 of the Hopkinsville Code of Ordinances and state water quality standards.

(4) Waste Heat. Data Center design, construction, and operation shall incorporate the following:

a) No person, firm, or corporation shall cause, permit, allow, or maintain any artificial or mechanical source of heat, radiant energy, or exhaust that creates a condition of thermal discomfort, hazard, or damage to persons, animals, vegetation, or property beyond the external perimeter property lines of the Data Center.
b) Thermal discharge, venting, or exhaust from any equipment, machinery, or operation shall not raise the ambient temperature at any external perimeter property line above naturally occurring conditions when measured at a height of 4 feet above ground level.
c) Outdoor equipment and energy systems must be equipped with shielding, insulation, or dispersion devices to minimize radiant heat impacts.

d) Exhaust from heating, ventilation, air conditioning, or industrial equipment shall be directed and diffused in such a manner as to prevent concentrated heat exposure to anywhere outside of the Data Center, neighboring properties, or public rights-of-way.
e) Rooftop or wall-mounted heat exhaust systems shall be equipped with baffles, louvers, or dispersal devices to prevent heat plumes from causing discomfort or damage to adjacent buildings or damage to vegetation.

(5) Noise. The operation of a Data Center shall conform to the noise standards and limitations imposed by Chapter 96 of the Hopkinsville Code of Ordinances.

(6) Lighting. Where permitted, Data Center lighting shall be subject to the following requirements:

a) For the lighting of 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.
b) For the lighting of 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.
c) The illumination measured line-of-sight and from any point on any external perimeter property line shall at no time exceed 0.1 footcandle.
d) 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.
e) Luminaires shall not be mounted more than twenty (20) feet above the finished grade of the surface being illuminated. No pole-mounted lighting on the roof shall be permitted.

(7) Screening. In addition to the buffering and landscaping requirements of §§158.210 through 158.228, perimeter screening shall be provided. Screening shall:

a) Consist of an eight (8) foot tall fence and a double row of staggered evergreen trees (minimum five (5) feet in height at planting and maturing to a minimum of fifteen (15) feet in height);
b) Evergreen trees shall be planted exterior to the fence and shall be setback no less than fifteen (15) feet from any property line;
c) Screening shall achieve an opacity of 90% to a height of no less than eight (8) feet within three (3) years of planting;
d) Screening shall be installed within one hundred eighty (180) days of the start of physical construction and shall be maintained continuously; and
e) All unhealthy, dead, or noncompliant plantings shall be repaired or replaced within ninety (90) days of such occurrence.

Screening shall be placed along the entire perimeter of the Data Center property excluding perimeter areas designed for and limited to vehicle and rail access and clearance areas required for electric and gas line transmission.

(8) District Standards and Standards of General Applicability. Except as provided in this section, Data Centers shall conform to the requirements of the zoning district in which they are located and all other standards applicable thereto.

(9) Clustering Prohibited. No Data Center shall be located within 1,500 feet of another Data Center. This distance shall be measured from the nearest property line containing a Data Center to the nearest property line of an adjacent tract containing a Data Center.

(E) *Application Required; Supplemental Information and Exhibits.* In addition to the application requirements of §158.110 et seq. (Conditional Use Permit), §158.255 et seq. (Plan Review), and §158.275 et seq. (Zoning/Building Permit), an application to establish or enlarge a Data Center shall include:

(1) A site plan showing all structures and facilities to be used or constructed to support the Data Center operations, including all water, wastewater, electric, natural gas, and other infrastructure, and public utility service facilities.

(2) Identification and description of any existing or proposed transmission lines and other facilities that would be required in order to connect the proposed facilities to the grid, and any permits or other approvals needed to support such construction.

(3) Identification of any existing or proposed pipelines or gas transmission lines and other facilities that would be required in order to deliver natural gas or other gas or liquids to the facilities for use in heating or power generation.

(4) A description of any power sources proposed to be constructed or sited and operated, including emissions profile, noise, copies of applications for any required state or federal air permits. Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, shall be approved only in accordance with any zoning regulations that allow and are applicable to such use.

(5) Information concerning any proposed grid interconnection.

(6) Documentation, including written verification from the applicable service providers, demonstrating that:

a) Public utility capacity and related electrical infrastructure sufficient in size and capacity is or will be made available to ensure that the power requirements of the proposed project can safely be accommodated without adverse effect on the availability, reliability, quality, cost, or safety of the electric service to other customers;

b) Any system designed for cooling and operation of the facility (whether by electricity, water, or other means) will meet all applicable standards of this ordinance as well as state and federal law;
c) Water, stormwater, and wastewater management and treatment capacity sufficient in size and capacity is or will be made available to ensure that the requirements of the proposed project can be safely accommodated without adverse effects on the availability, reliability, quality, cost, or safety of the water, wastewater, and stormwater management and treatment services to other customers; and
d) Any enhancements or improvements required in order for such utility services to continue to be available without adverse effect or additional cost to existing customers will be in place before operation of the proposed project.

(7) A description of the processes that will be used for management of all water, wastewater including equipment cooling, humidity maintenance, process, and sanitary wastewater, and stormwater run-on and run-off, in accordance with all local state, and federal requirements.

(8) Demonstration that for any proposed battery storage or storage of any other device or group of devices capable of storing energy for supply at a later time, whether the energy is stored for use on-site or off-site, compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards, and include fire suppression systems designed specifically for battery storage.

Amend Chapter 158 Appendix A (Schedule of Uses) to add:

	EST 1	R 1	R 2	R 3	R 4	R 5	B 1	B 2	B 3	B 4	P 1	I 1	I 2
Data center, small-scale										CU		CU	CU
Data center, medium-scale												CU	CU
Data center, large-scale													CU
Data center, hyper-scale (prohibited use)													