

**EXHIBIT A**

**THE CITY OF FREDERICK  
CITY COUNCIL  
ORDINANCE NO: \_\_\_\_\_**

**AN ORDINANCE concerning Critical Digital Infrastructure.**

**FOR THE PURPOSE of amending the City of Frederick Land Management Code, 2005, as amended, by amending, Article 10, Section 1002, entitled “Definitions” to identify two new principal uses, Critical Digital Infrastructure and Critical Digital Infrastructure Electric Substations, and to establish the regulatory definitions for Critical Digital Infrastructure and Critical Digital Infrastructure Electric Substations;**

**FOR THE PURPOSE of amending the City of Frederick Land Management Code, 2005, as amended, by amending, Article 4, Section 404, Table 404-1, entitled “Use Matrix” to identify Critical Digital Infrastructure and Critical Digital Infrastructure Electric Substations as principal permitted uses in the M1 and M2 zoning districts;**

**FOR THE PURPOSE of amending the City of Frederick Land Management Code, 2005, as amended, by amending, Article 8, entitled “Supplemental Use Regulations” to create regulatory standards that govern the establishment and operation of Critical Digital Infrastructure and Critical Digital Infrastructure Electric Substations;**

**FOR THE PURPOSE of amending the City of Frederick Land Management Code, 2005, as amended, by amending, Article 6, Section 607, Table 607-1, entitled “Parking Schedule,” and Table 607-4, entitled “Minimum Off-Street Loading Spaces,” to establish the parking standards that shall apply to Critical Digital Infrastructure and Critical Digital Infrastructure Electric Substations;**

**BY AMENDING Section 404, Table 404-1 entitled the “Use Matrix;” Section 607, Table 607-1, entitled “Parking Schedule,” and Table 607- 4, entitled “Minimum Off-Street Loading Spaces;” and Section 1002 entitled “Definitions;” and**

**BY ENACTING Section 870, entitled “Critical Digital Infrastructure.”**

**NOW, THEREFORE, BE IT ENACTED AND ORDAINED BY THE CITY COUNCIL OF THE CITY OF FREDERICK:**

SECTION I. Article 10, Section 1002 of the City of Frederick Land Management Code is hereby amended as follows:

Sec. 1002 - DEFINITIONS

In this Code, the following specific terms are used as defined unless otherwise apparent from the context:

**CRITICAL DIGITAL INFRASTRUCTURE ELECTRIC SUBSTATION.** A high-voltage electric system facility used to switch generators, equipment, and circuits or lines in and out of a system, change AC voltages from one level to another, or change alternating current to direct current or direct current to alternating current. Critical digital infrastructure electric substations may only be constructed in conjunction with a critical digital infrastructure facility.

**Note:** Underlining indicates material added, and brackets indicated material deleted.

**CRITICAL DIGITAL INFRASTRUCTURE FACILITY.** A facility consisting of one or more buildings used primarily for the storage, management, processing, and transmission of digital data, and which houses computer or network equipment, systems, servers, appliances, and other associated components related to digital data operations. The facility may also include customary accessory uses such as an office use, air handlers, power generators and storage, water cooling and storage facilities, and associated utility infrastructure needed to support sustained operations of the digital infrastructure.

SECTION II. Article 4, Section 404, Table 404-1 of the City of Frederick Land Management Code is hereby amended as follows:

Table 404-1 Use Matrix

Use	RC	RO	R4	R6	R8	R12	R16	R20	PB	NC	GC	MO	M1	M2	DB	DR	DBO	MU	MXE	IST	PRK	LBCS Function	LBCS Structure	NAICS	
<b>Industrial &amp; Manufacturing Uses</b>																									
Aircraft, Industrial Assembly Production													P	P					P				3370	-	336411
Appliances, Assembly Production											P	P	P	P					P				3360	2621	334418
Automobile, Assembly Production													P	P					P				-	-	33611
Brick, Tile, Clay Products Manufacture													P	P					P				-	-	327121
Cement Manufacture														P									-	-	3272
Chemicals & Plastics Manufacturing and Processing													C	C					C				3320	-	325110— 325199
<u>Critical Digital Infrastructure Facility</u>													<u>P</u>	<u>P</u>									<u>4200</u>	<u>2700</u>	<u>518210</u>
<u>Critical Digital Infrastructure Electric Substation</u>													<u>P</u>	<u>P</u>									<u>4300</u>	<u>6000</u>	<u>237130,</u> <u>221122</u>

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SECTION III. Article 6, Section 607 of the City of Frederick Land Management Code is hereby amended as follows:

**Table 607-1 Parking Schedule**

Use	Parking		
	Minimum Parking Spaces	Maximum Parking Spaces	Minimum Bicycle Parking
<b>Industrial &amp; Manufacturing Uses</b>			
Aircraft, Industrial Assembly Production	1 per 1,500 sf	1 per 300 sf	Not applicable
Appliances, Assembly Production	1 per 1,500 sf	1 per 300 sf	Not applicable
Automobile, Assembly Production	1 per 1,500 sf	Not applicable	Not applicable
Brick, Tile, Clay Products Manufacture	1 per 1,500 sf	1 per 300 sf	Not applicable
Cement Manufacture	1 per 1,500 sf	Not applicable	Not applicable
Chemicals & Plastics Manufacturing and Processing	1 per 1,500 sf	1 per 300 sf	Not applicable
Clothing, Cloth Goods Manufacturing and Processing	1 per 1,500 sf	1 per 300 sf	Not applicable
Concrete, Asphalt Batching	1 per 1,500 sf	Not applicable	Not applicable
Construction Equipment, Assembly Production	1 per 1,500 sf	1 per 300 sf	Not applicable
<u>Critical Digital Infrastructure Electric Substation</u>	<u>Not Applicable</u>	<u>Not Applicable</u>	<u>Not Applicable</u>
<b>Warehousing and Storage Uses</b>			
Bulk Plants for Nonhazardous liquids & gases	1 per 1,000 sf	1 per 300 sf	Not applicable
Coal Storage	1 per 500 sf	1 per 150 sf	Not applicable
<u>Critical Digital Infrastructure Facility</u>	<u>1 per 7,500 sf</u>	<u>1 per 4,000</u>	<u>4 spaces per building excluding security buildings and other ancillary structures</u>
Distribution Center, Freight Terminal	1 per 1,000 sf	1 per 350 sf	Not applicable

**Table 607-4 Minimum Off-Street Loading Spaces**

Use Classification	Gross floor area (square feet)	Minimum Loading Space Requirements
Retail, office or industrial uses	>2000 but <5,000	1 small
Retail	5,000—40,000	1 large
Retail	over 40,000	1 large + 1 per each additional 40,000 square feet
Office	5,000—100,000	1 large
Office	over 100,000	1 large + 1 per each additional 40,000 square feet
Industrial and wholesale	5,000—40,000 square feet	1 large
Industrial and wholesale	40,000—100,000 square feet	2 large
Industrial and wholesale	100,000—160,000 square feet	3 large
Industrial and wholesale	160,000—240,000 square feet	4 large
Industrial and wholesale	240,000—320,000 square feet	5 large
Industrial and wholesale	320,000—400,000 square feet	6 large
Industrial and wholesale	Each 90,000—above 400,000 square feet	1 large
<u>Critical Digital Infrastructure Facility</u>	<u>Not Applicable</u>	<u>2 large</u>
<u>Critical Digital Infrastructure Electric Substation</u>	<u>Not Applicable</u>	<u>Not Applicable</u>

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SECTION IV. Article 8 of the City of Frederick Land Management Code is hereby amended to add a new Section 870, as follows:

Sec. 870 – CRITICAL DIGITAL INFRASTRUCTURE.

(a) Applicability. Critical Digital Infrastructure Facilities and Critical Digital Infrastructure Electric Substations are permitted in the M1 and M2 districts provided all of standards established in subsections (b) and (c) are met.

(b) Standards for CDI Facilities.

(1) Dimensional Regulations

(a)

(1)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
<u>Use</u>	<u>Minimum Lot Size (acres)</u>	<u>Minimum Frontage (feet)</u>	<u>Maximum Building Height (feet)</u>	<u>Minimum Street Setback (feet)</u>	<u>Minimum Interior Setback (feet)</u>	<u>Minimum Rear Setback (feet)</u>	<u>Impervious Surface Ratio</u>
<u>CDI Facility</u>	75	50	90	100	50	50	.9
<u>CDI Electric Substation</u>	<u>Not Applicable</u>	50	90	100	50	50	.9

(2) Critical Digital Infrastructure Facilities and Critical Digital Infrastructure Electric Substations shall be set back at least 500 feet from any structure devoted to residential use. This distance shall be measured in a straight line, without regard to intervening structures or objects, from the nearest portion of the building or structure used as a part of the operation of the Critical Digital Infrastructure Facility or Critical Digital Infrastructure Electric Substation, to the building wall of the nearest residential structure.

(b) Where two or more adjacent lots are proposed for critical digital infrastructure uses, the lot frontage requirement may be met by construction of a private street subject to Planning Commission approval and the following:

- (1) The private street connects directly to a public street.
- (2) The private street will not serve any uses that would be frequented by the general public.
- (3) For the purposes of establishing dimensional regulations (setbacks, lot frontage, etc.), the measurements along the portion of the lot(s) fronting a private street must be the same as established for public streets.
- (4) The design of the private street must comply with the Standard City Details.
- (5) Private streets may not create long, dead-end street networks and must serve a limited number of lots and sites, as determined by the Planning Commission.
- (6) Private streets must be maintained by a property owner association or similar organization.

(c) Modification Authority. The Planning Commission may approve a reduction to, but not elimination of, the required minimum interior and rear setbacks between adjoining critical digital infrastructure facilities and adjoining critical digital infrastructure electric substation ~~so long as all structures comply with applicable~~

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~~building code requirements~~, if the Planning Commission finds that reducing the setbacks:

- (1) Increases the size and usability of open space areas; or
- (2) Increases the landscape buffer areas along other adjacent property lines with different land uses; or
- (3) Provides additional buffer areas for environmentally sensitive areas or resources; or
- (4) Facilitates compliance with the design criteria set forth herein.

(2) Design requirements.

- (a) Refuse and recycling dumpsters, service doors, and mechanical equipment must face away from roadways, pedestrian routes, and public areas.
- (b) Pole mounted and building mounted lights must not exceed a height of 40 feet.
- (c) ~~Buildings must be designed and constructed to include finishes and materials of consistent quality and design on all sides. All building facades visible from public right-of-way and that exceed 250 feet in length shall include a combination of at least three (3) of the following design elements: change in building height, building step-backs or recesses, windows, doors, changes in building material, patterns, textures, colors, or use of accent materials, or vertical articulation elements.~~

(3) Performance standards. These performance standards are intended to mitigate potential detrimental effects on adjacent properties. All applications for site plan approval must be accompanied by a registered engineer's certification that the use complies with all of the performance standards.

(a) Noise.

- (1) The maximum levels permitted from any source, including but not limited to air handlers, generators, and other mechanical devices, measured within an adjacent property line, shall comply with the standards set forth in §15.21 of the City Code, with the exception that the residential receiving district shall be 55dBA for Daytime and Nighttime.
- (2) In addition to the exemptions set forth in Section 15.21.3, the noise standards set forth in §15.21 of the City Code shall not apply to the following:
  - a. Emergency operations, which shall specifically include the use of generators, as designed;
  - b. Routine maintenance of equipment and generators conducted during daytime hours;
  - c. Noise measured at property lines shared between Critical Digital Infrastructure uses;
  - d. Occasionally used safety signals, warning devices, and emergency pressure relief valves; and,
  - e. Temporary construction activity between 7:00 a.m. and 7:00 p.m.
- (3) All applications for site plan approval must include a sound study that is prepared by a qualified engineer with experience in environmental acoustics. The purpose of the detailed study is to assess the impact of

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all noise sources and determine the appropriate layout, design, and control measures. The study must include:

- (a) Details of assessment methodology.
- (b) Existing baseline noise levels along adjacent property lines.
- (c) Incorporation of sound studies for adjoining critical digital infrastructure that is not included in the existing baseline noise levels.
- (d) List of all air handlers, generators, and other mechanical devices that are included in the sound evaluation, including manufactures specifications.
- (e) Predicted sound levels for three scenarios:
  - (i) All mechanical and electrical equipment required for normal operation at 100% load.
  - (ii) Generator testing and maintenance.
  - (iii) Emergency scenario with all generators, mechanical equipment, and electrical equipment operating at 100%.
  - (iv) When multiple buildings are proposed, the study must include sound levels for each phase of development.
  - (v) Summary of the results and recommended control measures.

- (4) All applications for Certificates of Use and Occupancy shall include a post-construction sound study prepared by a qualified engineer with experience in environmental acoustics that demonstrates to the Zoning Administrator's satisfaction that the CDI operation complies with the standards set forth in §15.21 of the City Code.

(b) Generators.

- defined
- (1) Generators must meet Tier 4 or ~~exceed~~equivalent emission standards as by the United States Environmental Protection Agency.
  - (2) Generators must be installed at ground level.
  - (3) Generator testing shall be limited to Monday through Friday, 8:00 a.m. to 5:00 p.m. Only one generator per building, or the minimum number necessary to meet operational standards, may be tested at a time and for a period not to exceed 150 minutes.

(c) Fuel Storage Tanks:

- ~~(1) All fuel storage tanks must comply all applicable State of Maryland and Federal regulations for above ground storage tanks.~~
- ~~(2)~~ (1) Storage tanks shall have 100% catchment basin, or double-walled containment, and a spill protection overfill alarm.
- ~~(3)~~ (2) The storage tank must have a minimum setback of 100 feet from all property lines.

(c) Standards for CDI Electric Substation.

- (1) Application. A critical digital infrastructure electric substation may only be constructed for the purpose of providing power to critical digital infrastructure facilities, and when a critical digital infrastructure facility has received site plan approval from the Planning Commission. An application for a critical digital infrastructure electric substation may be processed concurrently

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with an application for a critical digital infrastructure facility. A critical digital infrastructure electric substation may be connected to another electrical system within the region. Any expansion of a critical digital infrastructure electric substation for the purpose of supporting other uses or users must follow the rules, regulations, and procedures applicable to electric substation use. An application for a critical digital infrastructure electric substation must include the following:

An assessment of the impact on nearby properties from electromagnetic fields to be generated by the critical digital infrastructure electric substation.

- (a) An assessment of safety and reliability, including provisions for emergency operations and shutdowns.
- (b) A description of methods to be utilized to mitigate any waste disposal, air quality, visual or noise impacts associated with the development or operation of the critical [ infrastructure electric substation.
- (c) A sound study that is prepared by a qualified engineer with experience in environmental acoustics. The purpose of the detailed study is to assess the impact of all noise sources and determine the appropriate layout, design, and control measures. The study must include:

- (1) Details of assessment methodology.
- (2) Existing baseline noise levels along adjacent property lines.
- (3) List of all devices that are included in the sound evaluation, including manufacturers specifications.
- (4) Predicted sound levels.
- (5) When multiple buildings are proposed, the study must include sound levels for each building within the site plan application.
- (6) Summary of the results and recommended control measures.

(2) Design requirements.

- (a) Light poles, if provided, shall not exceed a height of 40 feet.
- (b) Noise.
  - (1) The maximum sound pressure levels permitted from any source, including but not limited to air handlers, generators, and other mechanical devices, measured within an adjacent property line, shall comply with the standards set forth in §15.21 of the City Code.
  - (2) In addition to the exemptions set forth in § 15.21.3, the noise standards set forth in §15.21 of the Code shall not apply to the following:
    - a. Emergency operations, which shall specifically include the use of generators, as designed;
    - b. Routine maintenance of equipment and generators conducted during daytime hours;
    - c. Noise measured at property lines shared between Critical Digital Infrastructure uses;
    - d. Transportation vehicles not under the control of the CDI Facility;
    - e. Occasionally used safety signals, warning devices, and emergency pressure relief valves; and,

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- f. Temporary construction activity between 7:00 a.m. and 7:00 p.m.
- (3) All applications for Certificates of Use and Occupancy for a critical digital infrastructure electric substation shall include a post-construction sound study prepared by a qualified engineer with experience in environmental acoustics that demonstrates to the Zoning Administrator's satisfaction that the operation complies with the standards set forth in §15.21 of the City Code.

SECTION V. AND BE IT FURTHER ORDAINED BY THE CITY COUNCIL OF THE CITY OF FREDERICK, That this ordinance shall take effect on the date it is signed by the Mayor and that in the event of a conflict between this ordinance and any other ordinance or resolution previously adopted by the City of Frederick, this ordinance shall prevail.

APPROVED:

PASSED:

\_\_\_\_\_  
César Díaz, City Council President

\_\_\_\_\_  
Michael C. O'Connor, Mayor

Approved for Legal Sufficiency:

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City Attorney

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