Article 2. Zoning Districts and Map

Section 2.05 Schedule of Permitted Uses

Industrial Uses	R-1	R-2	MXD-1	MXD-2	CBD	I-1	I-2
Contractor's Yard / Office	–	–	–	–	–	P	P
Data Center (2.1, 2.2, 2.3)	–	–	–	–	–	–	S*
Distribution Center	–	–	–	–	–	P	P
Manufacturing – Light Intensity	–	–	–	–	–	P	P
Manufacturing – Heavy Intensity	–	–	–	–	–	S	P
Freight Connection	–	–	–	–	–	S	P
Outdoor Storage (Only as an accessory use)	–	–	–	–	–	P*	P*
Research and Development	–	–	–	–	–	P	P
Self-Storage Facility (Indoor)	–	–	–	–	–	S*	S*
Solvent Recovery Centers (and Facilities Handling, Manufacturing, Blending, Refining, Using or Storing Chemicals Deemed Hazardous by State/Federal Regulations)	–	–	–	–	–	–	S
Warehouse or Wholesale Facility	–	–	–	–	–	P	P

P Permitted Land Use S Special Land Use * Additional Use Standards – Not Permitted

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Article 5. Specific Uses Standards

Section 5.03 Data Center

A. The purpose of this Section is to establish supplemental standards for Data Centers to protect the public health, safety, and welfare; preserve the capacity and reliability of public infrastructure and utility systems; and prevent or mitigate adverse impacts associated with continuous operations, high electrical demand, water use, cooling systems, emergency generators, fuel storage, mechanical equipment, noise, vibration, heat, emissions, security infrastructure, and large-scale buildings. (4.1, 5.1)

B. Applicability: A Data Center shall be permitted only as a Special Land Use within the I-2 Industrial District and shall comply with the standards of this Section in addition to all other applicable provisions of this Ordinance. Where a conflict exists, the more restrictive standard shall apply. (2.2, 2.3, 5.1)

C. Use Classification: A use primarily engaged in digital data processing, server operations, cloud computing, data storage, hosting, or transmission of digital information shall be classified as a Data Center regardless of the amount of accessory office, administrative, research, warehouse, or utility space provided. Accessory office areas shall not cause the use to be classified as an office use. (5.2, 5.5)

An accessory server room, information technology closet, or similar equipment area that exclusively serves another lawful principal use on the same site and does not provide data processing, hosting, storage, cloud computing, or related services to off-site parties shall not be classified as a Data Center. (5.2, 20.1)

D. Separation and Site Design:

a A Data Center building, outdoor generator yard, cooling plant, substation, switchyard, fuel storage area, or other principal mechanical or utility compound shall be located at least five hundred (500) feet from any residential zoning district or residential use, public or private school, licensed childcare facility, hospital, medical clinic, nursing facility, other healthcare institution, public park, or place of religious assembly.

b All Data Center buildings and exterior operational equipment shall be located at least one hundred (100) feet from any other property line unless a greater setback is required elsewhere in this Ordinance.

c Separation distances shall be measured in a straight line from the nearest property line of the Data Center site to the nearest property line of the protected district or use.

d The Planning Commission may require greater separation, increased setbacks, enhanced buffering, relocation of equipment, or other mitigation where site conditions, equipment placement, cumulative impacts, acoustical analysis, or adjacent land uses warrant additional protection. No reduction from the minimum five hundred (500) foot separation shall be permitted. (TA 5.12; PC Separation Comment)

E. Building and Site Design

a Building and Site Design shall comply with Architectural and Design Standards in Article 4. Additionally, buildings shall be designed to reduce their apparent scale and visual

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prominence as viewed from public rights-of-way and adjoining properties. Building facades greater than one hundred (100) feet in length shall incorporate changes in wall plane, materials, texture, architectural bays, recesses, projections, pilasters, or similar architectural features at intervals not exceeding fifty (50) feet.

b Each facade visible from a public right-of-way or adjoining property shall incorporate changes in wall plane, roofline, materials, texture, color, structural bays, pilasters, recesses, projections, or equivalent architectural elements at intervals sufficient to create a coherent and articulated facade.

c Blank walls shall be screened with a combination of architectural treatment and landscaping. Applied graphics, paint changes alone, or landscaping alone shall not satisfy this requirement.

d Multiple buildings within a Data Center campus shall use coordinated forms, materials, colors, and architectural elements.

e Primary employee and visitor entrances shall be clearly identifiable through canopies, recesses, changes in materials, glazing, landscaping, or similar design features.

f Rooftop equipment shall be fully screened by parapets or architecturally integrated enclosures. Ground-mounted equipment shall be located behind the principal building where practicable and enclosed by architecturally compatible solid walls. (4.1, 5.8)

F. Accessory Infrastructure and Equipment:

a Emergency generators, substations, transformers, switchgear, cooling systems, mechanical equipment, fuel storage, telecommunications infrastructure, and Battery Energy Storage Systems may be approved only as accessory components of an approved Data Center and shall be shown as part of the Special Land Use and Site Plan application. Approval of the Data Center shall not constitute approval of any accessory infrastructure omitted from the approved plans. (5.3)

b Battery Energy Storage Systems shall comply with all applicable requirements of Section 5.18. An accessory Battery Energy Storage System shall require separate Special Land Use approval under Section 5.18 in addition to approval of the Data Center Special Land Use. Where the standards of this Section are more restrictive, this Section shall govern.

c Exterior mechanical and electrical equipment shall be fully enclosed within a building unless the applicant demonstrates, through written documentation prepared by the equipment manufacturer or a qualified professional engineer, that full enclosure is mechanically infeasible or would prevent the equipment from complying with applicable safety or operational requirements. Equipment not enclosed within a building shall be surrounded by solid, noncombustible, architecturally compatible screening that fully obscures the equipment from adjoining properties and public rights-of-way. The screening design shall provide any ventilation, clearance, access, and fire separation required by the equipment manufacturer and applicable codes.

d Substations, switchyards, transformers, fuel storage, and generator compounds shall not be located within a required front yard and shall be placed to maximize separation from residentially zoned or used property.

e All fuel tanks and oil-containing equipment shall include secondary containment meeting applicable fire, environmental, and engineering requirements. (5.3, 5.4, 5.8)

G. Emergency Generators and Fuel Storage:

a Routine generator testing and maintenance shall occur only between 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding legal holidays. Testing outside these hours is

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prohibited except during an actual utility outage or emergency, for a legally required test witnessed or directed by the applicable utility provider or governmental agency, or for testing required by the facility's insurer.

b Routine testing shall be limited to the minimum frequency and duration required by the manufacturer, insurer, utility provider, or applicable governmental regulation. The Special Land Use and Site Plan application shall include the anticipated testing schedule and the maximum monthly testing hours for all emergency generators.

c Generators shall be equipped with critical-grade exhaust silencers, acoustical enclosures, vibration isolation, and other measures necessary to comply with the noise and vibration requirements of this Section.

d New stationary generators shall use the best available emissions-control technology applicable to the generator type and capacity, as demonstrated through manufacturer specifications and applicable federal or state air permits. All generators shall comply with current United States Environmental Protection Agency and Michigan Department of Environment, Great Lakes, and Energy requirements.

e Fuel storage shall be limited to the minimum quantity reasonably necessary for emergency operations and shall be shown on the approved Site Plan. Aboveground tanks shall be located within a secured and screened compound and shall include spill containment and leak detection.

f Generator operation shall be limited to actual emergencies, utility outages, testing and maintenance authorized under this subsection, or other operation expressly required by an applicable governmental agency. Generators shall not be used for routine peak shaving, economic dispatch, participation in voluntary demand-response programs, or the regular supply of electrical power to the Data Center. (TA 5.6, 5.7, 5.12)

H. Noise, Vibration, Heat, Glare, and Other Performance Standards:

a Prior to Special Land Use approval, the applicant shall submit a predictive acoustical study prepared by a qualified acoustical engineer. The study shall evaluate normal operations, maximum cooling demand, routine generator testing, simultaneous equipment operation, tonal noise, low-frequency sound, and potential cumulative impacts.

b The facility and all associated mechanical, electrical, cooling, generator, and utility equipment shall comply with Section 3.13 and all other applicable performance standards at every property line. Compliance shall be evaluated using the measurement procedures required by Section 3.13 and generally accepted acoustical practices. Where applicable, measured or predicted sound levels shall be adjusted to account for prominent discrete tones, impulsive sound, and low-frequency characteristics using recognized ANSI/ASA methods.

c Normal operations shall not exceed fifty (50) dBA Leq at any property line. Between 10:00 p.m. and 7:00 a.m., sound measured at a property line adjoining or across a street from residentially zoned or residentially used property shall not exceed forty (40) dBA Leq. Where Section 3.13 establishes a lower applicable sound limit, the lower limit shall govern.

d Prior to issuance of a Certificate of Occupancy, the applicant shall submit a post-construction acoustical verification study demonstrating compliance under representative operating conditions. The City may require additional testing following a substantiated complaint or material equipment change.

e Operations shall not create perceptible vibration, glare, electromagnetic interference, or concentrated heat at or beyond the property line. Thermal exhaust shall not create fogging, icing, unsafe pavement conditions, or a sustained temperature increase that adversely affects adjoining property or the public right-of-way. (5.7)

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I. Utility Capacity, Energy, Water, and Cooling

a ~~a.~~ The applicant shall submit written documentation from each affected electric, water, sanitary sewer, stormwater, and telecommunications provider confirming whether the provider can serve the proposed facility at full build-out, identifying required system improvements and service phasing, and identifying the party responsible for all associated costs.

b The applicant shall submit a utility impact analysis demonstrating that the proposed facility, including all reasonably foreseeable buildings, phases, mechanical systems, and accessory infrastructure, will not unreasonably reduce service reliability, displace existing or planned users, require unplanned public investment, or create stranded or oversized public infrastructure if the facility closes.

c The Special Land Use approval shall establish maximum approved peak electrical demand, annual electrical consumption, peak-day and annual water demand, and peak-day and annual sanitary discharge for the facility at full build-out. The approved limits shall include all phases, buildings, mechanical systems, generators, cooling systems, and accessory infrastructure under common ownership or control on the site or contiguous property. Exceeding an approved maximum shall constitute a material modification requiring Planning Commission approval.

d Cooling shall use a closed-loop or closed-cycle system. Once-through cooling is prohibited. Routine discharge of noncontact cooling water to the sanitary sewer, stormwater system, groundwater, or surface waters is prohibited, except for limited blowdown, maintenance, or emergency discharge expressly authorized by the applicable utility provider and governmental regulatory agencies.

e The applicant shall submit a Water Conservation and Management Plan identifying projected annual and peak-day consumption, cooling technology, water source, anticipated discharge, leak-detection systems, reuse and recycling opportunities, drought-response measures, and emergency operating conditions.

f The applicant shall submit an Energy Efficiency and Sustainability Plan identifying projected peak and annual energy demand, design Power Usage Effectiveness, demand-management strategies, renewable or low-carbon energy procurement, and a feasibility analysis for beneficial reuse of waste heat or district-energy interconnection.

g All major utility easements, utility corridors, substations, transmission connections, and related utility infrastructure serving the facility shall be identified on the approved Site Plan.

h Approval of a Data Center shall not be construed as a commitment by the City or any public or private utility provider to construct, finance, reserve, or guarantee utility capacity for the facility. (TA 5.10; PC Closed-Loop, Water, Electricity, and Heat-Reuse Comments)

J. Security, Fire Protection, and Emergency Response:

a A Security and Emergency Response Plan shall be submitted with the Special Land Use application and reviewed by the Police Department, Fire Department, Building Official, and other agencies determined necessary by the City.

b The plan shall identify perimeter security, access controls, surveillance, emergency contacts, utility shutoffs, hazardous materials, batteries, fuel storage, fire suppression systems, emergency access routes, evacuation procedures, incident notification, and continuity of operations.

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c At least two independent emergency access points shall be provided unless the Fire Chief determines that an alternative design provides equivalent access and safety. Fire lanes and access routes shall remain unobstructed at all times.

d All fire detection and suppression systems shall comply with applicable codes and standards and shall be approved by the Fire Department. The City may require specialized fire suppression, gas detection, thermal monitoring, spill response equipment, or emergency training based on the equipment and materials proposed.

e Prior to occupancy, the operator shall conduct an emergency coordination meeting and site orientation with City emergency responders. Updated plans and contact information shall be provided annually and following any material change. (5.9, 5.12)

K. Landscaping, Screening, and Lighting:

a Landscaping and screening shall comply with Article 6. In addition, the perimeter of all outdoor mechanical, generator, cooling, substation, switchyard, fuel storage, and loading areas shall include a continuous opaque screen consisting of a masonry wall, architecturally compatible enclosure, evergreen landscaping, berming, or a combination approved by the Planning Commission.

b Screening shall be designed to remain effective throughout the year and shall fully obscure equipment from public rights-of-way and adjacent properties at the time of installation or within a period approved by the Planning Commission.

c Security fencing shall be located behind required landscaping where visible from a public right-of-way or residentially zoned or used property. Razor wire, concertina wire, and similar materials are prohibited.

d Lighting shall comply with the applicable lighting standards of this Ordinance and shall use full-cutoff fixtures. Site and security lighting shall be the minimum necessary for safe operation and shall not illuminate adjoining property, public rights-of-way, or the night sky. (5.8, 5.9; Article 6 Cross-Reference)

L. Traffic and Construction Management:

a The applicant shall submit a Construction Logistics and Traffic Management Plan identifying construction phases, truck routes, delivery windows, staging areas, employee parking, roadway protection, dust control, mud tracking, noise control, and procedures for repairing damage to public streets.

b The Planning Commission may require a Traffic Impact Study where the scale, phasing, construction activity, employment, or equipment deliveries may affect roadway operations or public safety.

c Loading, deliveries, fuel service, and equipment replacement shall be designed and scheduled to avoid conflicts with adjoining properties, public streets, pedestrians, and emergency access.

d Construction hours shall comply with applicable City ordinances and may be further limited as a condition of approval when necessary to protect nearby uses.

M. Monitoring, Reporting, and Continuing Compliance:

a Prior to issuance of a Certificate of Occupancy, the operator shall submit commissioning documentation for mechanical, electrical, cooling, emergency power, fire protection, and acoustical systems.

b On or before March 31 of each year, the operator shall submit an annual compliance report identifying actual annual electricity consumption and peak demand; annual and peak-day

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water use; sanitary discharge; cooling method; generator testing and operating hours; the status of applicable air and environmental permits; sound monitoring, verified complaints, and corrective actions; emergency-response updates; and material changes to equipment or operations. The annual compliance report shall be certified as accurate and complete by an authorized representative of the facility owner or operator.

c The City may retain qualified independent consultants to review required studies, inspect the facility, or verify compliance. The applicant or operator shall reimburse the City for reasonable review and inspection costs in accordance with the City's adopted fee and escrow requirements.

d Failure to submit a required report, maintain required permits, correct a violation, or comply with an approved plan or condition shall constitute a violation of this Ordinance and may result in enforcement, suspension, or revocation as authorized by law.

e Information identified by the operator as proprietary or security-sensitive shall be handled in accordance with applicable law. The operator's designation of information as proprietary, confidential, or security-sensitive shall not control whether the information is subject to disclosure under applicable law. (5.7, 5.10, 5.12)

N. Expansion and Material Modification:

The following shall constitute a material modification requiring Planning Commission review and approval in the same manner as the original Special Land Use:

a An increase in maximum electrical demand, water demand, sanitary discharge, cooling capacity, generator capacity, fuel storage, or Battery Energy Storage System capacity.

b An increase in maximum electrical demand, water demand, sanitary discharge, cooling capacity, generator capacity, fuel storage, or Battery Energy Storage System capacity.

c The addition or relocation of a substation, switchyard, generator yard, cooling plant, fuel storage area, or other major exterior equipment.

d A change in cooling technology, hours or character of operation, or other operational characteristic that may increase off-site impacts.

e Any modification determined by the Community and Economic Development Director to have a material effect on noise, utilities, traffic, emissions, emergency response, visual impacts, or surrounding property.

O. Decommissioning and Site Restoration:

a As a condition of Special Land Use approval, the applicant shall submit a Decommissioning and Site Restoration Plan addressing cessation of operations, removal of structures and equipment, disconnection and removal of utility infrastructure, recycling and disposal of hazardous materials, demolition, grading, soil stabilization, and restoration or redevelopment of the site.

b A Data Center shall be considered abandoned when the principal data processing operation has ceased for twelve (12) consecutive months, unless the operator demonstrates to the Community and Economic Development Director that the interruption is temporary and provides a binding schedule for resumption of operations.

c Decommissioning shall begin within six (6) months after abandonment and shall be completed within twelve (12) months unless the City approves a written extension for demonstrated good cause.

d Prior to issuance of a building permit, the applicant shall provide financial assurance in a form acceptable to the City and in an amount equal to one hundred twenty-five percent

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(125%) of the estimated cost of decommissioning and site restoration, as certified by an independent qualified professional. The estimate shall account for removal of structures, mechanical and electrical equipment, generators, fuel tanks, batteries, substations, utility infrastructure, impervious surfaces, hazardous materials, demolition, disposal, grading, stabilization, and site restoration. The estimate shall be updated at least once every five (5) years, and the financial assurance shall be adjusted accordingly. The decommissioning cost estimate shall be reviewed and recertified by an independent qualified professional at least once every five (5) years, and the financial assurance shall be adjusted as necessary to maintain compliance with this subsection.

e If the owner or operator fails to complete decommissioning, the City may use the financial assurance to complete the work, and any costs exceeding the assurance shall remain the responsibility of the property owner.

f Financial assurance shall be maintained for the life of the facility and shall be in the form of cash escrow, an irrevocable letter of credit, a surety bond, or another form approved by the City Attorney. The financial assurance shall be issued by an institution authorized to conduct business in the State of Michigan and shall be structured so that it may not be revoked, terminated, or materially modified without prior written notice to and approval by the City.

g As a condition of approval, the property owner shall execute an agreement, in a form approved by the City Attorney, granting the City the right to enter the property and complete decommissioning if the owner or operator fails to perform the required work after notice and a reasonable opportunity to cure. The agreement shall authorize the City to use the financial assurance for the purposes of decommissioning, site stabilization, environmental remediation, and restoration.

h Decommissioning and site-restoration obligations shall run with the land and shall be binding upon all subsequent property owners, facility owners, operators, successors, and assigns. The City may require the agreement to be recorded with the Oakland County Register of Deeds. (TA 5.11)

Section 5.04~~3~~ Drive-Thru Facilities

Drive-Thru Facilities must provide adequate off-street stacking spaces and drive-thru service lanes that do not conflict with pedestrian and/or bike lanes and best practices in access management. These requirements can be waived by the Approving Body, provided the applicant provides a study indicating that fewer stacking spaces are not necessary for the use and will not adversely impact the operations of the establishment or negatively impact neighboring properties and the traffic flow in the area, or that an alternative site / dimensional configuration can still provide a safe environment for all users and promote pedestrian and vehicular safety. Any waiver granted for a specific Special Land Use approval will expire once the business it was approved for ceases operations.

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Article 20. Glossary

Definitions C-D

Density. The number of dwelling units on or to be developed per gross acre of land.

Dental Clinic. A facility where dentists and dental staff provide oral health treatments and dental procedures.

Data Center. A building, portion of a building, group of buildings, or site used primarily for the processing, storage, hosting, management, or transmission of digital data through computer servers, cloud-computing systems, telecommunications equipment, or related electronic information systems. The term includes colocation facilities, cloud-computing facilities, hyperscale computing facilities, server farms, and similar digital infrastructure operations, together with associated accessory generators, substations, transformers, switchgear, cooling systems, Battery Energy Storage Systems, fuel storage, telecommunications infrastructure, and support facilities.

A Data Center is a distinct principal land use and shall not be classified as an office, warehouse, research and development facility, manufacturing use, utility, or similar use.

Data Center Campus is two or more Data Center buildings, structures, phases, or facilities located on the same parcel, contiguous parcels, parcels under common ownership or control that function as a coordinated data processing operation

The term does not include an accessory server room, information technology closet, or similar equipment area that exclusively serves another lawful principal use on the same site and does not provide data processing, hosting, storage, cloud computing, or related services to off-site parties. (5.2, 5.3, 5.5, 20.1)

Development. The construction of a new building or structure (or portion thereof), the relocation of an existing building, or a new use of land.

Development Proposal. Application to the CED Department, including but not limited to: site plans, special land uses, Planned Unit Developments (PUD), map amendments (rezonings), and Class A nonconformities.

Distributed Energy Resource (DER). Technologies and equipment for generating, managing, and storing energy or electrical capacity at the place of consumption.

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