

Planning Staff Analysis

S25-0007 / Denton20

City Council District 3

REQUEST:

Specific Use Permit (SUP) to allow for a Modular Data Center use on approximately 4.064 acres of land, located approximately 3,800 feet south of Jim Christal Road and 1,200 feet east of South Western Boulevard in the City of Denton, Denton County, Texas.

APPLICANT:

Houston Aderhold of SPRE Denton TX, LLC

STAFF RECOMMENDATION:

Staff recommends **approval** of the SUP request with the following conditions:

1. Development of the site shall substantially comply with the attached Site Plan and Landscape Plan (attached as Exhibit 8). Administrative approval of changes that do not increase the size and number of the modular data center buildings and equipment, change the number of parking spaces, decrease the buffer and screening requirements, or result in a decrease of more than 5 percent in the landscape area for the whole site may be administratively approved, if such changes are permissible per the Denton Development Code. All other changes shall require a Specific Use Permit amendment in accordance with the Denton Development Code.
2. Notwithstanding the limited administrative approvals authorized in condition 1, the City reserves the right to require approval by ordinance of any amendments or alterations to the SUP, the attached site plan, and the attached landscape plan, including those referenced in condition 1. The attached site plan and landscape plan are incorporated as requirements of the SUP.
3. In accordance with DDC Subsection 5.3.6.I, the development shall not cause an increase in the ambient noise level in the area more than 3 dBA. The applicant shall be responsible for verifying compliance after installation of the modular structures.
4. Access to the site may be taken from an existing access easement situated within Lots 3 & 4, Block A, Westpark Addition Phase 2. These lots are to be used for the sole purpose of access and shall not contain modular data center buildings.
5. The zoning map shall reflect the Specific Use Permit on the property consistent with the DDC.

SITE DATA:

The subject property is located approximately 3,800 feet south of Jim Christal Road and 1,200 feet east of South Western Boulevard, and is currently developed with gravel paving and has no vertical structures on site. The subject property is immediately to the east of the RD Wells Denton Municipal Electric (DME) Substation and has previously been used as a storage area for DME equipment.

The subject property takes access from Jim Christal Road by way of an established access easement containing a gravel driveway. No additional roadway improvements are needed



to serve the site. Given the land-locked location of the subject property and based upon the preliminary trip generation estimates of only 3-4 trips per day, a design deviation request was approved to allow the proposed development to provide one point of vehicular access rather than require two full points of access.

There is no FEMA floodplain, floodway, or Environmentally Sensitive Area (ESA) on site.

The subject property is primarily zoned Public Facilities (PF) District, with the western portion zoned Heavy Industrial (HI) District (see Exhibit 5). The area surrounding the subject property is predominantly zoned HI and is developed with a variety of industrial and manufacturing land uses as further described in the table below.

SURROUNDING ZONING AND LAND USES:

Northwest: <ul style="list-style-type: none"> • Zoning: Heavy Industrial (HI) • Use: Undeveloped 	North: <ul style="list-style-type: none"> • Zoning: HI • Use: Undeveloped 	Northeast: <ul style="list-style-type: none"> • Zoning: HI • Use: Peterbilt Motors Manufacturing
West: <ul style="list-style-type: none"> • Zoning: Public Facilities (PF) • Use: DME Substation 	SUBJECT PROPERTY	East: <ul style="list-style-type: none"> • Zoning: HI • Use: Peterbilt Motors Manufacturing
Southwest: <ul style="list-style-type: none"> • Zoning: HI • Use: Custom Vehicle Solutions - Denton 	South: <ul style="list-style-type: none"> • Zoning: HI • Use: Tetra Pak INC. and Gas Well (active) 	Southeast: <ul style="list-style-type: none"> • Zoning: HI • Use: Peterbilt Motors Manufacturing

CONSIDERATIONS:

A. Section 2.4.5E of the Denton Development Code (DDC) provides approval criteria applicable to all applications.

1. General Criteria

a. Unless otherwise specified in this DDC, City review and decision-making bodies must review all development applications submitted pursuant to this subchapter for compliance with the general review criteria stated below.

The general criteria have been applied.

b. The application may also be subject to additional review criteria specific to the type of application, as set forth in sections 2.5 through 2.9.

Section 2.5.2D of the DDC applies to Specific Use Permit (SUP) requests. An analysis of this request per those criteria can be found below in Consideration B.

c. If there is a conflict between the general review criteria in this section and the specific review criteria in sections 2.5 through 2.9, the applicable review criteria in sections 2.5 through 2.9 controls.

There are no conflicts between the general criteria and the criteria specific for Specific Use Permit requests.

2. *Prior Approvals*

In 2022, DME issued a request for proposals (RFP) for available land and capacity adjacent to the RD Wells Substation. In 2024, following the RFP process, City Council voted to approve a power purchase agreement (PPA) between the City of Denton and SPRE Denton TX, LLC for the construction of a 20-megawatt Modular Data Center on the subject property. The Specific Use Permit is the next step in the process for the proposed Modular Data Center.

3. *Consistent with the Comprehensive Plan and Other Applicable Plans*

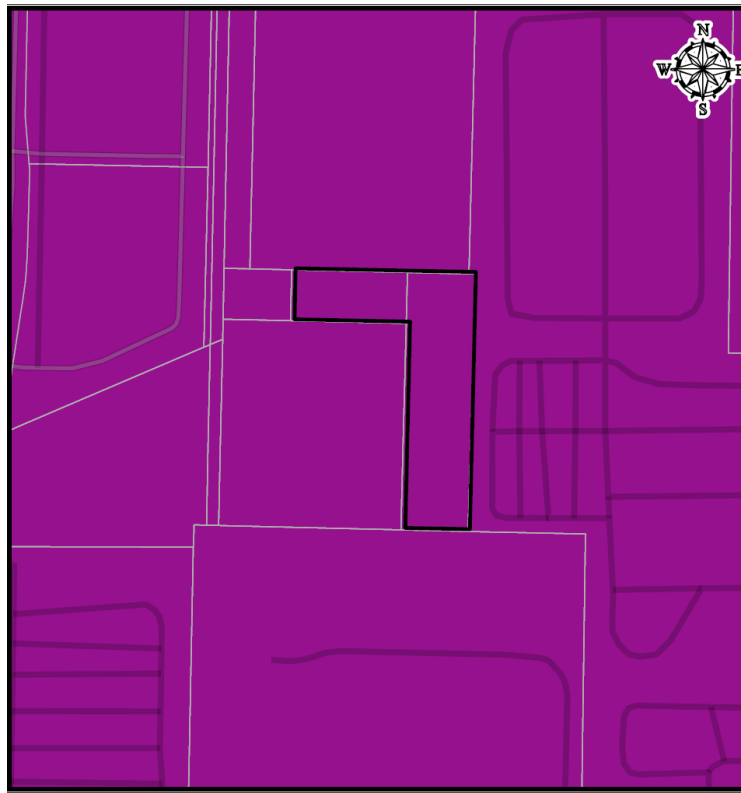
The decision-making authority:

a. *Shall weigh competing goals, policies, and strategies.*

There are no competing goals, policies nor strategies associated with the proposed request. As noted below, the request conforms to the Future Land Use Map and is designed to minimize adverse impacts to the maximum extent possible.

b. *May approve an application that furthers the overall goals of the Comprehensive Plan even if the development does not match the future land use designation in the Comprehensive Plan.*

The use and scale of the proposed Modular Data Center use conforms to the Future Land Use element of the Denton 2040 Comprehensive Plan. Per the Future Land Use



Map in the Denton 2040 Comprehensive Plan, the subject property and surrounding area is designated as Industrial Commerce (see inset map and provided as Exhibit 4). The Industrial Commerce designation applies to areas where the predominant uses include both light and heavy industrial uses, such as moderate to heavy manufacturing, assembly, fabrication, and wholesaling. Distribution warehouses may be included in this designation if used to replace underutilized and heavy industrial uses, or if

ultimately reused to house future industrial development. This designation is located primarily west of I-35W near the Denton Municipal Airport. It is important in future development that transitions to adjacent sensitive land uses are considered.

The subject property, situated generally west of I-35W and adjacent to the RD Wells Substation, is adequately spaced and buffered from sensitive land uses and located within a region of the City where industrial uses are prevalent. The proposed Modular Data Center use is compatible with the surrounding area, would have minimal visual and auditory impacts to more sensitive uses (such as residential) or to passing motorists given the land-locked location, and meets the intent of the Industrial Commerce Future Land Use designation.

4. *Compliance with this DDC*

- a. *The proposed development shall comply with all applicable standards in this DDC, unless the standard is to be lawfully modified.*

The attached site plan and landscape plan (Exhibit 8) reflect an intent to comply with the DDC requirements for setbacks, parking, minimum landscape and tree canopy coverage, and screening.

- b. *Compliance with these standards is applied at the level of detail required for the subject submittal.*

The review associated with an SUP submittal requires a detailed staff analysis of the proposal to ensure compliance with the development standards specific to the zoning district and non-residential development standards, including lot dimensions parking, landscaping, site design, and the use-specific standards for Modular Data Centers. Staff have reviewed the proposal for conformance with applicable design standards for public facilities and safety.

Pending approval of this SUP, additional review for full compliance with the DDC will also take place at submittal of the plat, civil engineering plans, and building permit applications.

5. *Compliance with Other Applicable Regulations*

This proposed request complies with all other applicable regulations.

6. *Consistent with Interlocal and Development Agreements*

In 2024, the City entered into a lease and PPA with SPRE Denton, LLC for the operation of a Modular Data Center use. The proposed SUP is consistent with these agreements.

7. *Minimizes Adverse Environmental Impacts*

The proposed Modular Data Center is designed to minimize potential adverse impacts. The subject property is strategically located adjacent to the RD Wells Substation and will utilize 20 megawatts to operate the data center. Additionally, the site is not extending connections to water or wastewater, minimizing use of resources. The Modular Data Center will operate a closed system which uses a dielectric cooling method. By using this method, the use is able to use alternative methods for cooling rather than use evaporative methods, eliminating the need for constant water supply. Additionally, locating the data center on this property, which is already paved and served with access, allows for reuse of

underutilized City property rather than clearing and developing a greenfield site. Therefore, no adverse environmental impacts are expected.

8. Minimizes Adverse Impacts on Surrounding Property

The proposed use is not expected to have any adverse impact on surrounding property. The existing land use pattern in the surrounding area is a mix of heavy industrial uses which include the electrical substation and uses that manufacture and repair products using machinery. The closest residential use is approximately 2,100 feet away from the proposed use, east of the subject property and in close proximity of I-35W. The landscape plan includes a buffer along the eastern perimeter of the site adjacent to Peterbilt Motors Manufacturing. As described in Criteria B3, the site complies with the use-specific standards required for Modular Data Centers and designed to minimize adverse impacts on surrounding properties.

9. Minimizes Adverse Fiscal Impacts

The proposed use is not expected to generate adverse fiscal impacts.

10. Complies with Utility, Service, and Improvement Standards

The proposed use does not require any changes to utilities existing on site.

11. Provides Adequate Road Systems

The site takes access from Jim Christal Road by way of an established access easement containing a gravel driveway. No additional roadway improvements are needed to serve the site. At build out, it is anticipated the site will generate approximately 3-4 trips a day.

12. Provides Adequate Public Services and Facilities

The proposed use will not affect public services and facilities within the area. Given the landlocked nature of the site, water and wastewater will not be provided to the development. The development will maintain a 5,000-gallon water tank on site, which has been approved by Fire as an alternative source of water for fire suppression purposes.

13. Rational Phasing Plan

The project does not have a phasing plan.

- B. Section 2.5.2D of the DDC states that in reviewing a proposed SUP, the Planning and Zoning Commission and City Council shall consider the general approval criteria in Subsection 2.4.5E and whether:

1. The specific use proposed is compatible with the surrounding area;

The proposed Modular Data Center use is compatible with the surrounding area containing an Electrical Substation, active Gas Well, Warehouse, and Manufacturing uses. The subject property's location adjacent to an electrical substation makes it a logical location for the situation of a data center by minimizing utility work needed to serve the site.

2. *The specific use proposed has negative impacts on future development of the area; and*

The proposed Modular Data Center Use is not anticipated to have negative impacts on future development of the area. The subject property is owned by the City of Denton and is in a land-locked location with limited roadway access. The subject property's zoning designation of Public Facilities combined with adjacency to an electrical substation limit the potential uses which could occur on this site. Furthermore, the surrounding area is developed with a variety of industrial land uses and has a Future Land Use designation of Industrial Commerce. The proposed Modular Data Center is anticipated to have minimal impact on the future development of the overall region and allows for the reuse of underutilized City property.

3. Any impacts associated with access, traffic, emergency services, utilities, parking, refuse areas, noise, glare, and odor have been adequately mitigated.

The proposed use is not anticipated to generate offensive odors, fumes, dust, or noise. A Trip Generation report was reviewed, and a Traffic Impact Analysis was not triggered, so there is no anticipated traffic, access, or parking impacts to the area. In addition, the proposed Modular Data Center is required to comply with the Use-Specific Standards specified DDC 5.3.6.I and are intended to minimize any adverse impacts associated with the use. Particularly, the Use-Specific Standards specify screening and noise mitigation requirements for the establishment of a Modular Data Center, including the following:

- Modular structures, on-site electrical equipment, and any associated outdoor storage shall be opaquely screened from view of the public right-of-way and any adjacent residential use or zoning district utilizing any combination of the allowed fence and wall materials for industrial uses identified in DDC Subsection 7.7.8.
 - *The subject property is accessed via a dedicated private access easement and is located approximately located 3,800 feet south of Jim Christal Road and 1,200 feet east of South Western Boulevard. The site is land-locked and is adjoined by HI and PF zoning districts.*
- Modular structures, on-site electrical equipment, and any associated outdoor storage area shall be setback no less than 100 feet from an adjacent residential zoning district or an existing residential use, measured from the property line.
 - *The subject property is approximately 2,100 feet away from the closest residential use, and there is no adjacent residentially zoned property.*
- At least two elements from Table 7.E: Landscape Area Point System, Section A Right-of-Way Elements shall be provided along all public rights-of-way, regardless of whether front parking or drive-aisles are proposed.
 - *Although there is no adjacent public right-of-way, the proposed landscape plan provides two elements from Table 7.E, Section A. These elements are located on the westernmost portion of subject property closest to Western Boulevard and adjacent to the private access easement, which is the sole point of access to the site.*
- An environmental noise and vibration assessment is required with the initial application, prepared by a professional qualified in the area of noise mitigation, detailing how the proposed use complies with the maximum permissible noise levels described below.
 - *The applicant submitted the required noise and vibration assessment (Exhibit 7), which demonstrated the development will comply with the maximum permissible noise levels as further detailed herein.*

- Data center operations, including on-site electrical equipment, shall not cause any noise measuring more than 60 dba on the A-weighting utilizing properly calibrated sound measuring instrumentation measured at the property line, or shall not cause an increase in the ambient noise level in the area more than 3 dba.
 - *The noise and vibration assessment submitted by the applicant demonstrates the proposed use will not generate more than a 3dba increase in ambient noise level once constructed. The applicant is responsible for verifying compliance upon completion of construction.*