Kimley»Horn

MEMORANDUM

To:	Coal City Village Board Coal City Planning Commission
From:	Christian Jones
	Kimley-Horn and Associates, Inc.
Date:	07/20/2026
Subject:	Coal City Planned Unit Development Public Hearing Narrative

Project Description and Community Impact Overview

The proposed project is a planned technology campus located on an approximately ±320-acre site at the southeast corner of East Reed Road and South Carbon Hill Road within the Village of Coal City. The campus is proposed to include multiple data center buildings, administrative areas, mechanical yards, generator yards, truck docks, parking areas, internal drive aisles, stormwater management facilities, utility infrastructure, perimeter screening, and associated electrical substation facilities. The current preliminary site, grading, utility, landscape, utility use memo, and various other documents outlining the overall campus have been included for your information and review.

The intent of this section is to provide additional plain-language information regarding the nature of the proposed use, how the campus is expected to operate, and the measures incorporated into the site design to promote compatibility with surrounding properties and the broader Coal City community. Data centers are sometimes misunderstood because they are large buildings with significant supporting electrical infrastructure; however, their day-to-day operation is substantially different and less impactful from many conventional industrial, manufacturing, warehouse, or distribution uses.

A data center is a technology facility designed to house computer servers, networking equipment, electrical systems, cooling equipment, and related support infrastructure. These facilities support digital services used by businesses, institutions, residents, public agencies, schools, healthcare providers, financial systems, and other users. The core function of the proposed campus is to provide secure, reliable space for digital infrastructure. The buildings are expected to contain data halls, administrative space, mechanical and electrical support areas, backup power infrastructure, loading areas for equipment delivery and maintenance, and parking for employees and service personnel.

A LOW-ACTIVITY OPERATIONAL USE

Although data centers operate continuously to support digital infrastructure, they typically do not generate the same level of daily activity as many other large commercial or industrial uses. Daily activity is anticipated to consist primarily of employees, operations staff, maintenance technicians, security personnel, contractors, and periodic vendors serving the facility.

The proposed use is not expected to generate public foot traffic, or high-volume truck activity. Traffic associated with the campus is anticipated to be primarily employee vehicles, security and maintenance personnel, tenant staff, occasional contractors, and periodic equipment deliveries. The technology-based use generates proportionally low traffic volumes and low impacts to Village services such as schools and emergency services, while providing significant financial benefits to these community services.

The truck docks shown as part of the proposed buildings are intended to support equipment delivery, replacement, and maintenance needs associated with the operation of the data center buildings. They are not intended to support a warehouse, freight transfer, fulfillment, or logistics operation. Internal drive aisles and off-street loading areas are incorporated into the campus so that necessary service activity can occur on-site rather than within the public right-of-way. Buildings within the development are accessed by drive aisles located throughout the site, and off-street parking and loading facilities will be provided as appropriate for the development's operations.

CLOSED LOOP DESIGN AND REDUCED WATER DEMAND

One of the most important characteristics of this proposed campus is that it has been designed to utilize a closed loop cooling system. This design approach significantly reduces water demand compared to other data center cooling systems.

This distinction is important for public understanding as some data centers use evaporative cooling systems that require substantially more water for cooling. The water demand for this campus is primarily associated with domestic and administrative functions, such as restrooms, sinks, breakroom areas, employee use, and limited mechanical system needs such as standard room humidification. Estimates for water consumption within the proposed campus are further identified and described in the utility use memo incorporated within this application.

The estimated total average water and wastewater demand for the campus is approximately 17,000 gallons per day. This utility demand will be substantially lower than many traditional manufacturing and industrial uses that are permitted within the Coal City I-1 zoning district.

As part of the proposed development, public utility extensions are planned to serve the site. A 16-inch water main extension along East Reed Road from South Broadway Road, and a 30-inch sanitary sewer main extension to the site along South Broadway Road and East Reed Road are proposed as part of the project. These improvements support the proposed campus while also extending public infrastructure in an area of the Village identified for future growth and development.

SITE DESIGN FOCUSED ON SETBACKS, SCREENING, AND COMPATIBILITY

The project has been designed as a campus rather than a collection of buildings pushed to the edges of the property. The preliminary site plan shows the primary data center buildings, mechanical yards, administrative areas, stormwater facilities, access drives, landscape berms, and substation areas distributed across the site. The landscape exhibit identifies green space, stormwater ponds, screen walls, security fencing, landscape setbacks, and berms located around portions of the campus perimeter.

This layout is intended to locate the campus's more active operational areas toward the interior of the site while creating separation from adjacent properties and public roadways. The site design incorporates a combination of screening and buffering elements, including minimum 5-foot-tall berms along rights-of-way, 10-foot-tall berms in certain perimeter areas adjacent to residential properties, landscape plantings, screen walls around mechanical yards, stormwater ponds, green space, and security fencing, all intended to reduce the development's visual and operational impacts.

These features are intended to help reduce views into the campus, soften the appearance of the development from surrounding roads and neighboring properties, and provide a landscaped transition between the proposed technology use and the surrounding semi-rural context. The development includes enhanced screening through berms and perimeter landscaping while protecting and maintaining many existing trees onsite along the outside perimeter of the property, where feasible. Architecturally enhanced administrative portions of the building are faced outward toward the public rights-of-way, providing a visually appealing frontage to the development.

The proposed campus also strategically located stormwater areas around the exterior portions of the site so that buffering from neighbors and public roadways are enhanced. The development has contained its operations to the interior of the site, surrounded by open space, stormwater ponds, landscaping, and berms to the north and west. This design approach is intended to reduce potential impacts on adjacent properties and support the project's compatibility with nearby agricultural, residential, roadways, and industrial uses.

SOUND AND MECHANICAL EQUIPMENT

Mechanical equipment sound levels have become a critical design parameter for modern data center operations. Aligned prioritizes acoustic performance and selects its equipment packages to maintain high-quality operations while respecting adjacent land uses. For the proposed campus, we have conducted a preliminary sound study based on the current conceptual site layout. This study evaluates sample equipment specifications and outlines potential sound mitigation strategies planned for the campus to ensure full compliance with local and state sound regulations. The preliminary modeling yielded favorable results, demonstrating that the campus can and will meet sound performance standards at both the local (Coal City) and state (Illinois Pollution Control Board) levels. Details regarding the modeled equipment and methodology are provided in an addendum to the study. This acoustic analysis will be continually refined as final building designs are completed, and mechanical equipment packages are procured. We will regularly share updated sound modeling with Coal City staff over the course of the project to ensure ongoing verification of compliance with all sound code parameters.

BACKUP POWER AND RELIABILITY

Each data center building is anticipated to include a dedicated diesel generator yard. These generators serve strictly as backup power systems and operate solely during emergency power outages or essential maintenance testing. The use of standby diesel generators is ubiquitous across the data center industry to ensure continuous, uninterrupted digital operations during grid reliability events.

Fuel for each unit will be stored safely within an integrated, UL 142-listed double-wall sub-base (belly) tank, providing built-in secondary containment that fully satisfies federal Spill Prevention, Control, and Countermeasure (SPCC) regulations and local fire safety codes. These assemblies incorporate interstitial leak detection, positive overfill protection, and dedicated spill containment to prevent accidental releases.

All operational limitations and restrictions regarding emergency and testing run times will be governed by the Illinois Environmental Protection Agency (IEPA) Bureau of Air. The IEPA air permit will establish explicit operating caps and require facility operations to maintain detailed run-time logs, ensuring generators operate exclusively for necessary maintenance testing or true emergency conditions. Aligned plans to deploy EPA Tier 4-compliant diesel generators across the site. These systems are accessory to the primary data center use and are installed to support reliability, life safety, business continuity, and critical equipment protection. Their design, placement, and operation will fully comply with all applicable local building, fire, life safety, environmental, and noise performance standards.

STORMWATER MANAGEMENT AND GRADING

The proposed development includes multiple stormwater management facilities integrated throughout the campus to provide rate attenuation for stormwater runoff in accordance with Village stormwater ordinance.

The site is predominately currently undeveloped agricultural land and has approximately 13 feet of surface elevation change across the site, sloping down to the northwest and southwest. The preliminary grading plan identifies finished floor elevations for the proposed buildings and shows the general grading concept for the campus. Stormwater facilities will be designed to manage runoff from the proposed development in accordance with applicable Village, county, state, and federal requirements. The project will provide surface stormwater features to treat and attenuate runoff.

The development also plans to improve stormwater management through improvements along the Maine Township ditch directly north of the subject site, along the south side of Reed Road. The ditch will be relocated and improved to a more gradual slope and robust section. Two existing culverts at the intersection of Reed Road and Carbon Hill Road will be replaced as part of the development.

SECURITY AND CONTROLLED ACCESS

The proposed technology campus will be a secured facility with controlled access. The landscape exhibit identifies security fencing and restricted access gates, and the site plan identifies technology campus site access points and ComEd site access points. Site security perimeter fencing and secured entrances will provide safety measures to both the development and the public.

Controlled access is an important feature of data center design because these facilities contain critical digital and electrical infrastructure. Restricting access to authorized personnel helps protect the facility, limits unauthorized entry, and separates private operational areas from public roadways and neighboring properties.

RELATIONSHIP TO COAL CITY AND SURROUNDING LAND USES

The proposed campus is located in an area that includes existing industrial zoning, agricultural land, public roadways, and residential properties. The parcels that make up the development are currently zoned or will be zoned for a certain smaller parcel being annexed, I-1 Industrial. The future technology campus is in alignment with the purpose and intent of the I-1 Industrial District, which is to provide primarily for low-nuisance industrial uses that are compatible with a residential community.

The project is intended to function as a transition between heavier industrial uses located to the east and agricultural and single-family uses located to the west. The design of the campus supports this transition by combining a large site area, internalized operations, perimeter stormwater ponds, extensive landscape berms, screen walls, green space, security fencing, and significant separation between operational areas and surrounding properties.

The proposed development is also expected to place a relatively low burden on public services compared to more intensive land uses. The technology-based use generates proportionally low traffic volumes and low impact on city services such as utility infrastructure, schools, and emergency services. The technology campus is also a proportionately low water and wastewater user due to its non-evaporative, air-cooled design and limited domestic and administrative water demands.

SITE ACCESS, TRAFFIC, AND ROADWAY IMPROVEMENTS

The campus is proposed to be served by one primary secured access point from East Reed Road and a separate emergency ingress/egress access point along South Carbon Hill Road near the southwest portion of the site.

As part of the proposed development, an off-site turn lane improvement is proposed along East Reed Road near the primary campus entrance. The preliminary site plan identifies this improvement as part of the overall access design for the campus. The dedicated turn lane will allow vehicles entering the site to move out of the through-travel lane, helping maintain traffic flow and reducing potential conflicts with passing vehicles.

In addition to roadway widening of Reed Road to facilitate traffic flow into and out of the site, roadway reconstruction will occur for the northern half of Reed Road and the entirety of Carbon Hill Road adjacent to the site boundary.

This improvement is intended to support safer and more predictable access for employees, service vehicles, contractors, and periodic deliveries. By separating turning movements from through traffic, the turn lane is expected to reduce the potential for rear-end conflicts, improve the function of the site access, and support the overall campus design approach of internalizing circulation and minimizing impacts to the public roadway network.

PUBLIC SERVICES AND COMMUNITY BENEFITS

The project provides public and regional benefits. The project promotes public interests by extending public utilities to the southwest of the Village, supporting future development opportunities, enlarging

and diversifying the Village tax base, and providing additional good-paying employment opportunities throughout construction and site operation.

The project also represents a significant private investment in the Village and includes an on-site public utility substation and related electrical infrastructure. This infrastructure will provide critical power service for the proposed technology campus and may also support broader electrical reliability and future development opportunities in the area.

SUMMARY

In summary, the proposed technology campus is a secured, low-traffic, low-water-use technology infrastructure project designed with substantial setbacks, stormwater facilities, landscape berms, perimeter screening, internal circulation, and controlled access. The campus is not a warehouse, freight terminal, manufacturing facility, or customer-facing commercial center. Its operational profile is expected to be quieter, less traffic-intensive, and less water-intensive than many other industrial uses that could otherwise be developed within the I-1 zoning district.

The project has been designed to support critical digital infrastructure while respecting the semi-rural context of the area, the Village's long-term development objectives, and the need to provide meaningful buffers near surrounding properties and public roadways. Through the Planned Unit Development process, the applicant is seeking to establish a predictable development framework that allows the Village, the applicant, and the public to understand how the campus will be designed, operated, screened, accessed, and regulated.