

PROJECT NARRATIVE - EdgeConneX PHX-II Data Center 3261 S. Hawes Road, Mesa, AZ 85212

November 7, 2023

This project is the combination of eight parcels east of, and fronting, S Hawes Rd and is the planned phased construction of three proposed data hall buildings and one electrical substation by the utility. This project is within, and opted in to, the Elliot Road Technology Corridor. The property owner is **Loop 202 & Elliot Road, LLC** and is anticipated to be EdgeConneX data center solutions – data centers designed for a range of clients from colocation to single client tenants.

The EdgeConneX site consists of 93.04 acres in its entirety with Building 1 and its adjacent site being developed as part of phases one through four. The phase one and two area consists of 32.61 acres and includes building 1, adjacent parking and access roads, future equipment yards and future roof equipment dunnage platforms. Screening will be provided at the equipment yard and surrounding the roof mounted mechanical equipment as constructed in phases three through four.

Building 1 consists of an administrative core, a north and a south wing shell space (anticipated to mirror the north wing). The data hall wings are single story spaces, and the administrative core is a two-story space. The phases one through three build consists of two electrical power blocks, each consisting of 7-2750kW diesel emergency generators, enclosed within acoustical enclosures (14 total) and one 600kW emergency generator serving the office/loading dock area. HVAC will be provided by 12-555 Ton roof-mounted air-cooled chillers (6,665 Ton total) serving the North data halls.

The fourth phase is completing the build-out within the shell of the south wing shell space, including supporting mechanical and electrical equipment. The South portion of the building is a shell space similar to the North portion of the building and is programmed for 4 future data halls and mechanical/electrical support space.

The future phase includes Buildings 2 and 3 and the affiliated site work adjacent to those two planned buildings. Buildings 2 and 3 emulate the aesthetics and function of Building 1, each oriented differently on the site and with varying data halls in their respective data hall wings. Buildings 2 and 3 will utilize the same single-story data hall layout, with supporting mechanical and electrical equipment space, roof-mounted mechanical equipment, and exterior equipment yards, loading docks and parking.

The entire project, phases one through four and future, are being submitted for the Design Review and the Site Plan Review. Below approximates the square footages anticipated by phase:

PHASE 1-2

BUILDING 1 FOOTPRINT	392,236 SF GROSS
BUILDING 1 NORTH DATA HALL SHELL SPACE	180,108 SF GROSS INTERIOR
BUILDING 1 ADMINISTRATIVE AREA LEVEL 1	33,426 SF
BUILDING 1 ADMINISTRATIVE AREA LEVEL 2	19,696 SF
BUILDING 1 SOUTH DATA HALL SHELL SPACE	178,702 SF GROSS INTERIOR

PHASE 3-4

BUILDING 1 NORTH DATA HALL BUILD-OUT	180,108 SF GROSS INTERIOR
BUILDING 1 SOUTH DATA HALL BUILD-OUT	178,702 SF GROSS INTERIOR

PHASE FUTURE

BLDG 2 FOOTPRINT
BLDG 3 FOOTPRINT

301,072 SF GROSS
481,017 SF GROSS

SPECIAL USE PERMIT – PARKING REDUCTION

We are requesting a parking reduction from the calculated required parking of 1,230 parking spaces to 287 parking spaces. This is a right-sized parking solution and does not add excessive heat-island paving where it is not needed. This is based on historical reductions generally applied to data halls and shift counts provided by EdgeConneX.

AREA BY PHASE, PARKING REQUIRED, and PARKING PROVIDED are all charts provided on 2A100, ARCHITECTURAL SITE PLAN. By parking required per CHAPTER 32, TABLE 11-32-3.A, the total number of required parking spaces for all three buildings is 1,230. This site plan provides the capacity for 287 parking spaces.

Per the Monday, September 25, 2023 meeting between this design team and the City of Mesa, we were apprised that we may forego a parking study by a combination of: Clarification within the project narrative, Provision of employee shift counts from the owner, EdgeConneX, and By provision of an example from the design team that calculation/reduction is common practice for such use types.

We have updated this, the project narrative; the employee shift count from the owner’s representative, Bryan McCann, is as follows:

Matthew, below is the expected shift count for full build out (all 3 buildings). As the site builds-out, the expected workers at the site will build to this number. I provided a table for full build-outs plus individual buildings. These are rough and subject to change, but not likely drastically one way or the other. Customer techs is estimated based on an assumed increase based on an existing site with less power.

ALL BUILDINGS

Worker	Day Shift	Night Shift
ECX Ops	5	2
ECX All Hands	5	3
Security	2	2
Vendor Tech	5	3
Customer Tech	44	22
Total	61	32

BUILDING 1

Worker (BLDG1)	Day Shift	Night Shift
ECX Ops	3	1
ECX All Hands	3	1
Security	1	1
Vendor Tech	3	1
Customer Tech	16	8
Total	26	12

BUILDING 2

Worker (BLDG2)	Day Shift	Night Shift
ECX Ops	1	1
ECX All Hands	1	1
Security	1	1
Vendor Tech	1	1
Customer Tech	12	6
Total	16	10

BUILDING 3

Worker (BLDG3)	Day Shift	Night Shift
ECX Ops	1	0
ECX All Hands	1	1
Security	0	0
Vendor Tech	1	1
Customer Tech	16	8
Total	19	10

HKS can make available to the City of Mesa the full written exchange and contact information between Matthew Hake of HKS, Inc., Debra Oliver, City of Phoenix, Principal Engineering Technician, Traffic Review, Site Development, and the owner's representative for another Data Hall project.

Here is the exchange, edited for privacy for the original client, that Debra Oliver agreed to and accepted:

From: Debra Oliver <debra.oliver@phoenix.gov>
Sent: Thursday, June 30, 2022 8:06 AM
To: Hake, Matthew <mhake@hksinc.com>
Subject: RE: AMND 18 - REDACTED Minor Site Plan Amendment

Good morning Matthew,

Yes, you were on the correct path with your calculations. Based on the numbers provided below, I see no issue with spacing requirements.

Thank you,



PLANNING & DEVELOPMENT
**PRESERVE
SHAPE
BUILD**

Debra Oliver
Principal Engineering Technician
Traffic Review, Site Development
602.256.3386
debra.oliver@phoenix.gov

Our client conveyed to us the following data on staffing at this existing facility:

Subject: Re: AMND 18 - Bldg A-D shift count for parking

Ops
IT
Security
Porter
Sales
Customers
Today roughly 60-70 individuals a day.

Could see 50 more with expansions
There are 20 Reserved spots
Zero Electric Vehicle parking.

CLIENT SIGNATURE BLOCK REMOVED

HKS NOTE TO DEBRA OLIVER BASED ON THE ABOVE CLIENT PROVIDED SHIFT COUNT INFORMATION:

Taking a conservative count based on his data, this would be 120 at the largest shift. 120/1.5 spaces per warehouse workers = 80 spaces.

This facility has Office space at 17,681 SF / 1 space for 300 SF = 59 spaces
The 120 workers includes folks working with the office portions of the overall facility – these people sometime work in office spaces, sometime venture to the computer server spaces.

If we are, by these counts, required to have a total of 139 required spaces, this should be no problem. There exist 602 standard spaces and 15 accessible spaces with the site configuration submitted as AMND 18.

I wanted to run the overall space counts the personnel shift count by you and get your opinion. We may adjust some peripheral spaces adjacent to the historic facility's main entry and maintain more of the existing main entry's landscape accoutrements. Please let me know if I am on the correct path.

Thank you.

Matthew Hake, LEED AP, AIA
Sr. Project Architect
Vice President

HKS

END OF SECTION ON PARKING REDUCTION FOR THE SPECIAL USE PERMIT

Per the Monday, September 25, 2023, meeting between this design team and the City of Mesa, we were apprised that we may request "alternate compliance" within this project narrative and the response with an explanation about the nature of the precast concrete sandwich panels and why a cornice, molding, or trim would not be practical. **We are providing a metal coping cap that does extend down the face of the panels.**

The panels, being cast in a factory (Coreslab) and erected on site, disallow for variation that would affect their structural integrity – thus a recessed feature near the panel tops would create a weakness with a propensity for cracking. Having a molding or trim surface applied is not an option as the large faces of the panels generally are required to be flat. The formwork for such panels is the negative of the final product. We are providing variation to the overall panel heights, and three panel styles (smooth, embossed, and with metal panel bands and glazing). This would be alternate compliance similar to the concrete parapets at the south elevation of the approved and constructed AWS Distribution center directly south of this parcel/project.

END.