## ← CyrusOne,

# **PHX**1 **- PHX**8

#### Phoenix - Chandler CyrusOne Data Center 2335 South Ellis Street Chandler, AZ 85286

The nation's largest data center campus sits on 85 acres slated to ultimately support nearly 2 million square feet of data center space in Chandler, Arizona. There is room for ten buildings on this campus, all built with leadingedge Massively Modular® Engineering, making this CyrusOne data center campus unique.

The Phoenix data center is well-suited for enterpise clients that require a robust data center infrastructure for mission-critical applications. This location is in an area considered one of the safest in the country: free from natural disasters including seismic activity, tornados and hurricanes.







## **Campus Overview**

- 85 acres, 10 building masterplan (5.5 completed 1-2nd story under contruction, 4 future)
- Onsite substation for utility power
  - Existing substation currently has (2) 56MVA transformers.
  - Existing substation is planned to expand to expand. Expansion will include a third 56MVA transformer
  - A future substation is planned south of the existing substation
  - $\circ~$  The future substation is planned to contain (4) 56MVA transformers
- Fully secured site perimeter fence with access control

### PHX1 - PHX8 Campus Overview

#### **Building 1**

- 101,470 GSF, one-story construction, single data hall w/ 60k GSF white floor
- Core & Shell completed 2017
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Steel framed EIFS and curtain wall office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure
   access turnstile at Lobby and customer areas
- · Secured and unsecured conference rooms available for meetings
- 9MW of IT load supported by the MEP systems.
- IT load is connected with a 4 to make 3 distributed redundant topology
- Air cooled chillers (ACC) are deployed within an equipment yard to condition the critical load

#### **Building 2**

- 182,944 GSF, two-story construction, two data halls w/ 55k GSF white floor each
- Core & Shell completed 2018
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Steel framed CMU and curtain wall office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure
   access turnstile at Lobby and customer areas
- Secured and unsecured conference rooms available for meetings
- Currently 9MW of IT load supported by the MEP systems.
- Building designed to contain 22.5MW of IT load
- IT load is connected with a 4 to make 3 distributed redundant topology.
- Air cooled chillers (ACC) are deployed on the roof to condition the critical load

#### **Building 3**

- 200,293 GSF, one-story data hall/three-story office construction, two data halls w/ 30k GSF white floor each
- Core & Shell completed 2012
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Steel framed metal panel and curtain wall office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure access turnstile at Lobby and customer areas
- Secured and unsecured conference rooms available for meetings
- 9MW of IT load supported by the MEP systems
- IT load is connected with a 4 to make 3 distributed redundant topology.
- A mixture of mechanical solutions are provided to condition the critical load. These solutions include air cooled chillers (ACC), Indirect-direct evaporate cooling (IDEC), and air handlers (AHU). All mechanical units conditioning critical load are located within equipment yards

#### **Building 4**

- 108,641 GSF, one-story construction, two data halls w/ 30k GSF white floor each
- Core & Shell completed 2015
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Metal panel and curtain wall over reinforced tilt-up concrete office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure
   access turnstile at Lobby and customer areas
- Secured and unsecured conference rooms available for meetings
- 9MW of IT load supported by the MEP systems
- IT load is connected with a 4 to make 3 distributed redundant topology
- Air cooled chillers are deployed within an equipment yard to condition the critical load

#### **Building 5**

- 105,224 GSF, one-story construction, two data halls w/ 30k GSF white floor each
- Core & Shell completed 2016
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Steel framed metal panel and curtain wall office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure
   access turnstile at Lobby and customer areas
- Secured conference rooms available for meetings
- 9MW of IT load supported by the MEP systems
- IT load is connected with a 4 to make 3 distributed redundant topology
- Air cooled chillers are deployed within an equipment yard to condition
  the critical load

#### Building 6

- Future Construction
- Electrical ductbanks and distribution currently provide provisions for an 18MW building

#### **Building 7**

- Future Construction
- Electrical ductbanks and distribution currently provide provisions for an 18MW building

#### Sustainability

- Energy Star Certified: Buildings 3 and 4 of the Chandler campus have achieved the Energy Star Data Center Certification from US EPA.
- Water Free Cooling: No water is used to cool this facility (such as water towers or evaporative cooling). Minimal amounts of water are used for humidification and facility maintenance.
- Water risk: Currently rated at Medium to High Risk, but expected to move to Extremely High Risk in 2030 and 2040 (based on WRI Aqueduct Tool).

#### **Building 8**

- 197,233 GSF, two-story construction, two data halls w/ 60k GSF white floor each
- Core & Shell completed 2017
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Steel framed metal panel and curtain wall with reinforced tilt-up concrete office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure access turnstile at Lobby and customer areas
- Secured and unsecured conference rooms available for meetings
- Currently 18MW of IT load supported by the MEP systems.
- Building designed to contain 22.5MW of IT load
- IT load is connected with a 4 to make 3 distributed redundant topology
- Air cooled chillers (ACC) are deployed on the roof to condition the critical load

#### **Building 9**

- Future Construction
- Electrical ductbanks and distribution currently provide provisions for a 36MW building

#### Building 10

- 269,736 GSF, two-story construction, four data halls w/ 40k GSF white floor each
- Currently under construction
- Reinforced tilt-up concrete structure surrounding mission critical Data Halls
- Metal panel and curtain wall over reinforced precast concrete office structure
- 36" raised floor Data Hall design
- On-site security guards, key card and biometric access control, secure access turnstile at Lobby and customer areas
- Secured and unsecured conference rooms available for meetings
- Currently 18MW of IT load supported by the MEP systems
- Building designed to contain 36MW of IT load
- IT load will be connected with a 4 to make 3 distributed redundant topology
- Air cooled chillers (ACC) will be deployed on the roof to condition the critical load
- Carbon Intensity: Carbon emissions of the local grid were 1,044 pounds CO2/MWh in 2016 (last year reported), a 17% improvement over 2004 (based on US EPA eGRID data).
- **Grid renewables:** The local grid gets 11.1% of its power from renewable sources (wind, solar, biomass, hydro, and geothermal; based on US EPA eGRID data).

