

# FREDERICK COUNTY, MD HYPERSCALE CAMPUS

## Overview

With industrial zoning, access to significant power capacity, and close proximity to Ashburn's internet ecosystem, Frederick County, MD is an attractive and strategic alternative to Northern Virginia. Master-planned for four multi-story data center facilities, Aligned's Frederick County hyperscale campus is part of Quantum Loophole's 2,100-acre, environmentally friendly "clean cloud community." The campus offers efficient design for sustainable power and water use, investments in robust fiber connectivity, and ample availability for future development.

75

BUILDING ACRES



~3.3M

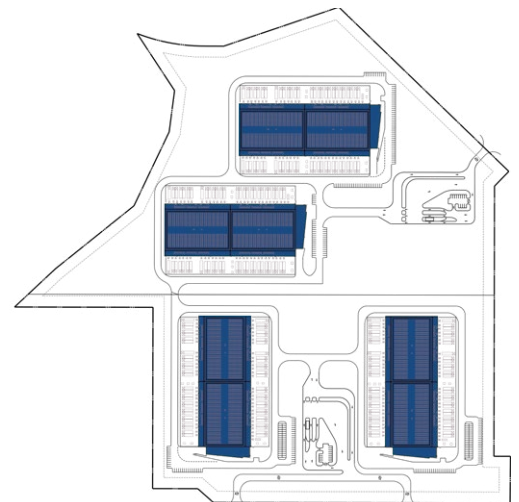
 SQUARE FEET  
 ~325K SQ. FT. PER FACILITY


264

 MEGAWATTS  
 ~48MW PER FACILITY


## Campus Specifications

- 75 acres
- Master-planned for four multi-story data center facilities
- ~25 miles North of Ashburn, VA (equivalent distance as Manassas, VA)
- Campus, Build-to-Scale, Powered Shell and Scale Data Center options available
- 100% uptime service level agreement (SLA)
- Initial capacity delivery: 18 months from commitment
- Subsequent capacity delivery: +12 months
- Latency to key hubs: <1 ms from core Ashburn
- Incentives available: Sales and Use tax exemption
- Strategic benefits to a fast-growing hyperscale tenant base focused on speed of delivery



# Data Center Specifications

## POWER

- 1+GW utility power available to campus, from diverse 230kV substations
- Power cost: \$.065c/kWh
- Utility provider: FirstEnergy/Potomac Edison
- Concurrently maintainable UPS
- N+2 power generation
- Redundant A+B distribution
- Revenue-grade metering

## NETWORK

- Access to QLoop Fiber Network, a 43-mile fiber ring that will connect Quantum Frederick and Ashburn, VA
- Network ring will offer capacity for more than 200,000 strands of fiber connecting to the Ashburn Internet ecosystem in under one half millisecond Round Trip Time (RTT)
- Diverse meet-me-rooms and fiber entrances

## DESIGN

- Tier III Design
- Concrete slab-on-grade and structured steel
- ASCE 7 occupancy category IV, data hall FM-120 and office FM-90 roof lift ratings
- Wind importance factor of 1.15
- Two bays with delivery platform and equipment trap
- 24x7x365 accessibility

## SUPPLY CHAIN

- Pre-purchased, replenishable Vendor Managed Inventory (VMI)
- Prefabricated, factory-built and tested power & cooling equipment
- Accelerated project timelines & lower cost
- Strong partner MSAs / robust supplier performance management

## SECURITY

- 8' Impasse steel security fencing with laser intrusion detection
- Multi-layer security design
- Card reader access
- 24x7x365 on-site security guards
- Multiple checkpoints: mantraps, dual authentication (biometrics and RFID badge readers)
- Event-driven IP video surveillance and visual light-based alerts

## SUSTAINABILITY

- Aligned is 100% sustainability financed
- Waterless data centers
- 100% renewable energy available
- 100% of IT load matched with renewable energy sources
- Industry-leading PUE, WUE, and CUE
- Reclaimed water for mechanical plant
- Embodied carbon tracking
- Supply chain decarbonization

## FIRE PROTECTION

- Separately zoned data halls
- Very Early Smoke Detection Apparatus (VESDA)
- Dual interlock pre-action system

## COOLING

- Our hot aisle containment strategy absorbs heat at its source - supporting standard and high power densities and allowing you to scale vertically and horizontally - without stranding capacity.
- Configurable to client needs (i.e., N, N+1, 2N)

## COMPLIANCE

- System and Organization Control (SOC) 2 Type 2 and SOC 1 Type 2, PCI DSS, HIPAA, HITECH, FISMA / NIST 800-53, and ISO 27001:2013



## COMMUNITY

- Campus closely aligned with Livable Frederick Master Plan (LFMP)
- Increased tax revenue with incremental growth year-over-year for Frederick Country
- Addition of well-paying jobs to the community
- Local business partnership opportunities
- Commitment to preserving existing historical sites
- Commitment to sustainable and environmentally friendly development
- Nature-first design aesthetic to protect views and reduce visibility from public roadways



## CONTACT ALIGNED TO LEARN MORE

sales@aligneddc.com  
+1.833.425.4463

## Corporate Headquarters

2800 Summit Avenue  
Plano, TX 75074

## ABOUT ALIGNED

Aligned is an infrastructure technology company that offers adaptable colocation and build-to-scale solutions to cloud, enterprise, and managed service providers. Our intelligent infrastructure allows densification and vertical growth within the same footprint, enabling customers to scale up without disruption, all while maintaining industry-leading Power Usage Effectiveness (PUE). By reducing the energy, water and space needed to operate, our data center solutions, combined with our patented cooling technology, offer businesses a competitive advantage by improving sustainability, reliability and their bottom line.

For more information, visit [www.aligneddc.com](http://www.aligneddc.com) and connect with us on [Twitter](#), [LinkedIn](#) and [Facebook](#).

## CLIENT PORTAL

- Fully integrated user experience that spans asset monitoring, ticketing, business intelligence, and capacity forecasting
- Broad transparency and control from a convenient and singular entry point