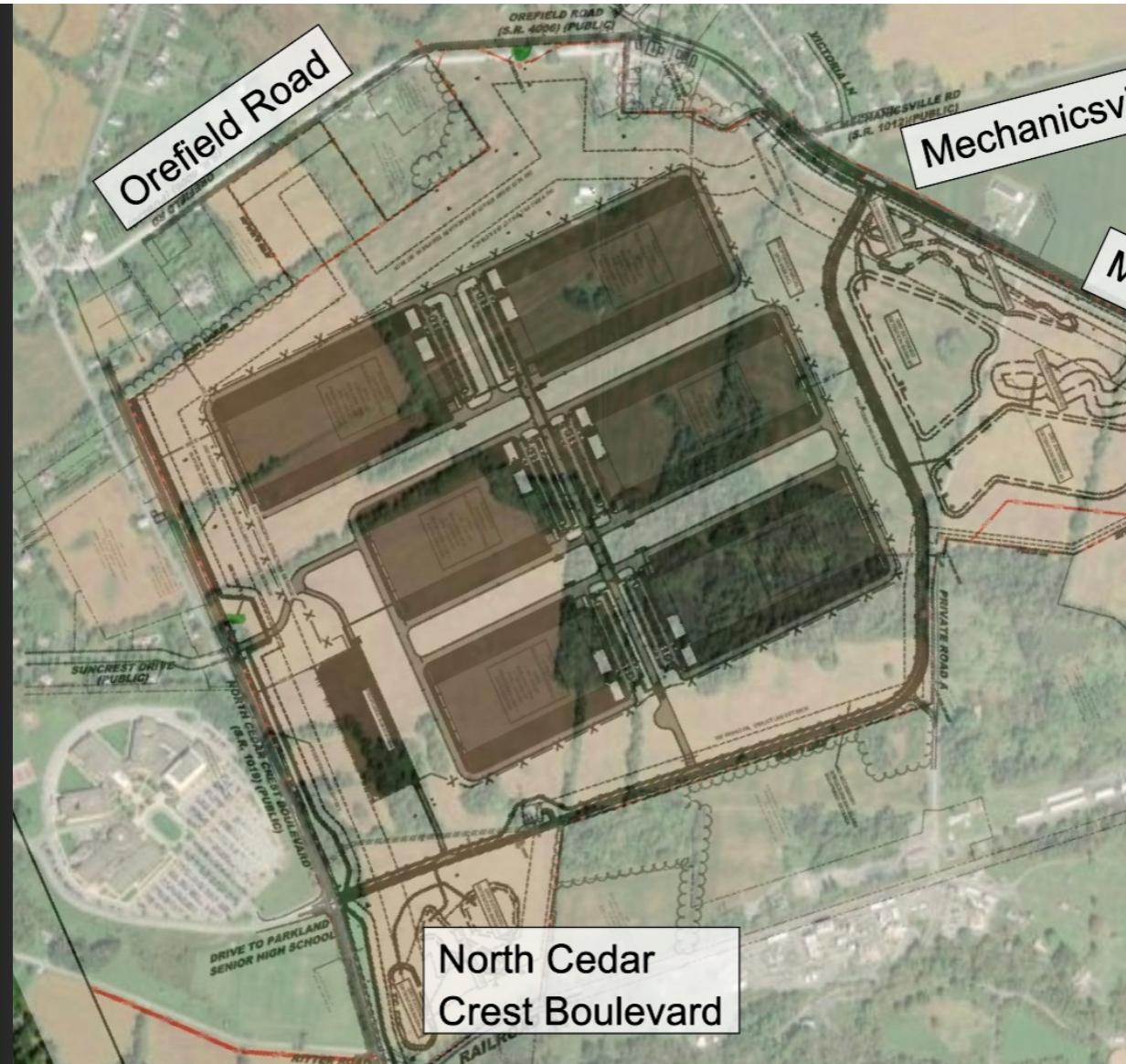


Putting the Atlas Datacenter in Context

The real impact of a
Hyperscale Datacenter
in our community

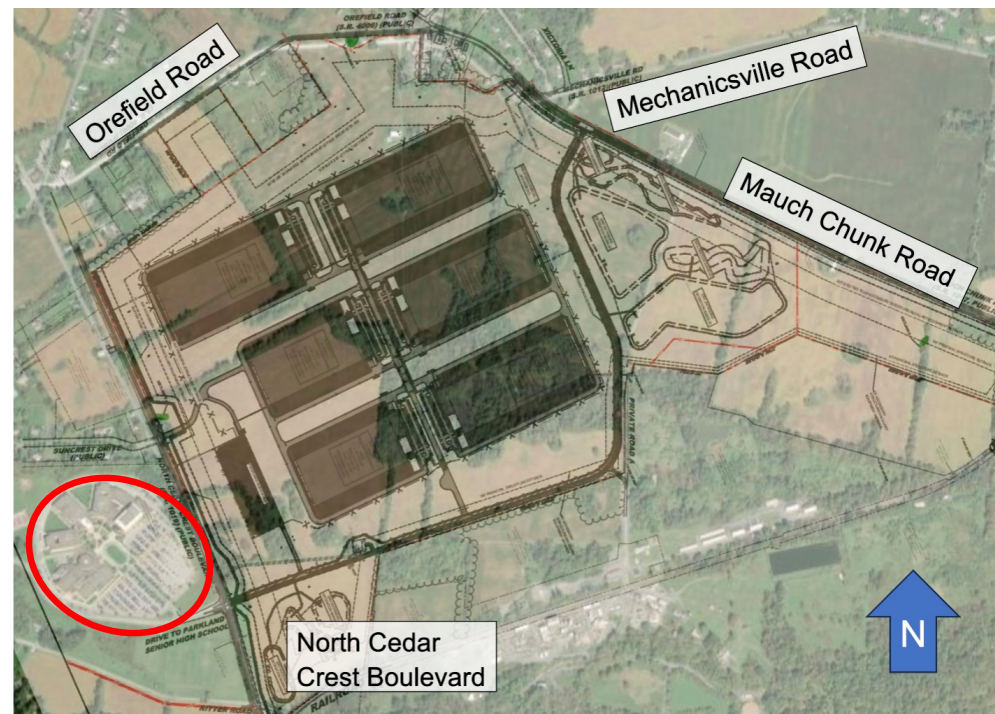
www.OpposeAtlasDC.org



The Proposal at a Glance

Aspect	Details
Size	5.1 million sq ft (6 buildings)
Land	410 acres of former farmland
Location	Directly across N. Cedar Crest Blvd. from Parkland HS
Power	300-400 MW substation + 356 diesel generators
Operations	24/7, hyperscale for AI/cloud computing
Jobs	Only ~440 permanent (mostly low-wage security/tech)

This is industrial-scale development next to our children.



Massive Scale – Bigger Than You Can Imagine

- **5 Parkland High Schools**
 - Parkland HS is ~494,000 sq ft; this is **10x larger** than the current building.
- **4.5 Lehigh Valley Malls**
 - LV Mall is 1.18M sq ft; this equals **over 4 full malls**.
- **88 Football Fields**
 - Side-by-side, it would cover the entire Parkland campus **plus** the football stadium **10 times over**.
- **10x larger than the largest warehouses in South Whitehall Township**
 - Black Creek complex

Power Consumption

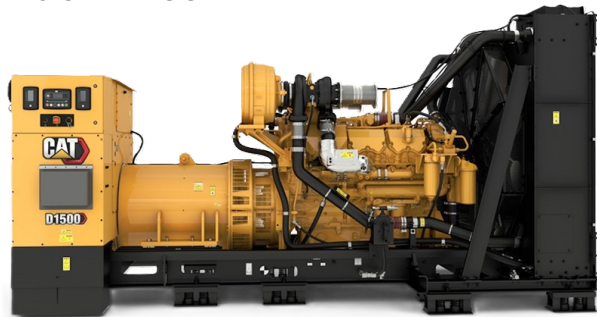
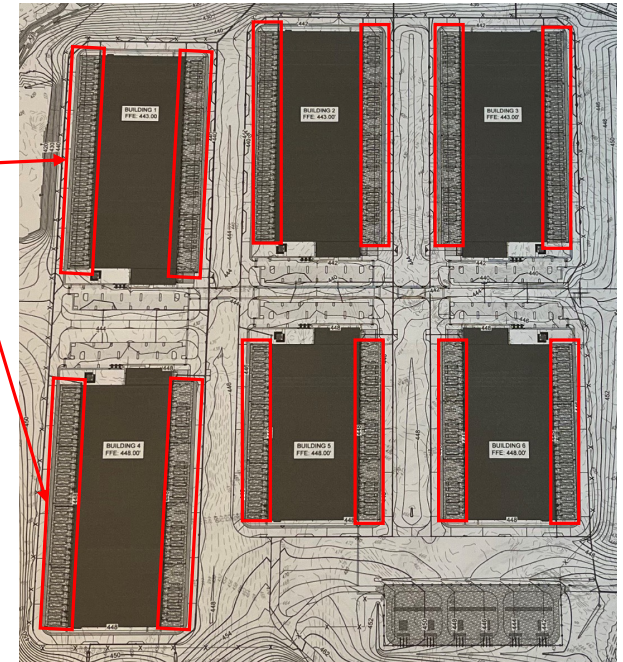
- Estimated power consumption **300-400 MW**
- A typical residential home averages 1250 continuous watts
 - Data center power consumption is equivalent to **240,000 to 320,000** homes.
 - South Whitehall Township only has **~ 9000 residences**
 - Data center will consume **~26.6x** more power than all residences in SWT combined.



Backup Diesel Generators

- **356 tier 2 generators** for backup power
 - **~1-2 MegaWatts Each**
 - Half the length of a **school bus**
 - **During each run hour** the site would generate **~9500 lbs of NOx**
 - This is the equivalent of nearly **29 Boeing 747s** at cruising speed.
- **Generators Create ~100 dBA of noise**
 - 7M distance per ISO 8528
 - Combined noise of all generators running will be unmistakably disruptive to classroom and learning activities.

Generators



Generator Run Time

- **Weekly run of 1-2 hours (~90 generators)**
 - Limited to 25% of all generators per PIRT
 - ~8 hours of continuous run time per week
- **Monthly fully loaded runs**
 - Likely all generators operational
 - Maintain Data Center load for 1-2 hours
- **Semi-Annual**
 - Fully loaded 2-4 hour run
- **These runs will be disruptive to any classes and activities at the high school due to the increased noise.**
- **3 days of fuel is typically stored onsite for emergencies**
 - Each generator consumes ~71 gallons/hr x 356 generators
 - Total onsite diesel storage volume likely (1.4 to 1.8 million gallons)



Department of Energy (DOE) emergency order (202-26-06) authorizes PJM (eastern PA electrical grid operator) to direct datacenters and other large load industrial sites to disconnect from the grid and operate their onsite diesel generators to provide grid unloading during periods of high energy usage. Compliance under this order would dramatically increase diesel run time, noise, and emissions above normal operating conditions. This additional run time is also not limited under the PIRT as it qualifies as an “emergency event”. (<https://www.energy.gov/documents/doe-order-no-202-26-06-pjm>)

Constant Never Ending Noise

- **24/7/365 Operation**
 - Cooling systems (fans, economizers) run non-stop
 - Generators run intermittently
- **Noise Source**
 - Fan noise from evaporators, exhaust fans, or air-side economizers creates a constant low-frequency droning hum.
 - Generators will add to HVAC noise during operation
- **Propagation**
 - Low-frequency noise travels farther with less attenuation over distance, impacting areas like nearby schools more significantly.



Relevant Scientific Studies on prolonged noise exposure

- [The impact of environmental noise on the cognitive functions and mental workload of high school students | Journal of Emerging Investigators](#)
- [Frontiers | The effects of classroom acoustic quality on student perception and wellbeing: a systematic review across educational levels](#)
- Cardiovascular effects of environmental noise exposure: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3971384>
- A Comprehensive Review of Auditory and Non-Auditory Effects of Noise on Human Health: https://journals.lww.com/nohe/fulltext/2024/26210/a_comprehensive_review_of_auditory_and.1.aspx