



DELAWARE DEPARTMENT OF
**NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

APPLICATION FOR A COASTAL ZONE ACT STATUS DECISION

**State of Delaware
Department of Natural Resources and Environmental Control
Division of Climate, Coastal, and Energy**

October 30, 2025
Project Washington
Starwood Digital Ventures

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CZA Status Decision Application Instructions

1. Complete all parts of the application. For questions which are not applicable to your project, do not leave blank; present a statement that clearly states why the section is not applicable to your project.
2. Because all applicants' projects are different, this word document template will provide you flexibility for needed space to answer the questions. Please insert additional lines for text where needed for your application. If appropriate, attach extra pages referencing each answer by the corresponding question number.
3. Include all attachments **required** by this application at the end of this application in an Appendix, labeling it "Appendix 1" Please provide these attachments in the order that they appear in this application.
4. Submit one electronic copy to CZA_Program@delaware.gov. If you are unable to submit electronically, send a hard copy, CD, or USB to:

Coastal Zone Act Program
Department of Natural Resources and Environmental Control
Division of Climate, Coastal and Energy
100 W Water Street, Suite 7B
Dover, DE 19904

5. Comply, if required, or as requested by the DNREC Secretary, with [7 Delaware Code, Chapter 79, Section 7902](#). If requested, but not completed, your application will not be considered administratively complete until this form is reviewed.
6. Be sure to include your permit application fee of \$3,000 with the mailed permit application. The application will not be considered administratively complete before payment is received. Make checks payable to the "State of Delaware."
7. Be advised that the application for a Delaware Coastal Zone Act Status Decision is a public document, which may be displayed at DNREC offices, public libraries, and the web, among others. If this application requires you to place confidential information or data in the application to make it administratively complete, note the Delaware Freedom of Information Act ([29 Delaware Code, Chapter 100](#)) and [DNREC's Freedom of Information Act Regulation](#), Section 6 (Requests for Confidentiality), for the proper procedure in requesting confidentiality.

PART 1

CERTIFICATION BY APPLICANT

Under the penalty of perjury pursuant to 11 Delaware Code §1221-1235, I hereby certify that all the information contained in this Delaware Coastal Zone Act Status Decision Application and in any attachments is true and complete to the best of my belief.

I hereby acknowledge that all information in this application will be public information subject to the Delaware Freedom of Information Act, except for clearly identified proprietary information agreed to by the Secretary of the Department of Natural Resources and Environmental Control.

Michael Perlman

Print Name of Applicant



Signature of Applicant

Senior Vice President

Title

Date

October 30, 2025

PART 2

APPLICANT INFORMATION AND SITE IDENTIFICATION

2.1 Identification of the applicant:

Company Name: **Starwood Digital Ventures**
Address: **1255 23rd Street NW, Suite 250**
Washington, DC 20037
Telephone: **332.219.2324**
Fax:

2.2 Primary contact: Please list the name, phone number and email of a preferred contact within your company in case the DNREC needs to contact you regarding this status decision.

Michael Perlman
mperlman@starwood.com
202-431-4303

2.3 Site of proposed project (if different than above):

0 River Road and 825 Governor Lea Road
New Castle, DE
Tax Parcels 10-049.00-073 and 12-002.00-025

2.4 Authorized agent/consultant (if any):

Name: **David Small**
Verdantas LLC
Address: **5400 Limestone Road**
Wilmington, DE 19808

Telephone: **(302) 238-6634**
Fax: **(302) 239-8485**

If you have an authorized agent for this status decision process, provide written authorization from client for being the authorized agent/consultant. Please see Attachment 1.

2.5 Is the applicant claiming confidentiality in any section of their application?

Yes ☐

No ☒

If yes, see instructions on page 3.

PART 3

PROJECT SUMMARY

Provide a one-page summary describing the proposed project or use. Include a brief quantitative description of any anticipated environmental impacts.

Starwood Digital Ventures is proposing to develop two contiguous New Castle County Tax Parcels into a data center campus that serves as critical infrastructure for the global economy, enabling digital services, connectivity and innovation across industries from healthcare to banking. Tax parcel 10-049.00-073 (also known as 4AN-1) is located at the southwest corner of River Road and Hamburg Road, and tax parcel 12-002.00-025 (also known as 4AN-2) is located on the north side of Governor Lea Road and east of State Route 1 near New Castle, Delaware (Please see Figure 1). Combined, the parcels constitute approximately 579 acres of land. The addresses of the two parcels are 0 River Road (4AN-1) and 825 Governor Lea Road (4AN-2) and are located within an industrial and commercial corridor along River Road. The north and south parcels are bisected by the Red Lion Creek and associated riparian wetlands (Please see Figure 2).

The Developers intend to construct a data center campus to include 11 two-story buildings (data centers) accessible from Hamburg Road and Governor Lea Road. Each building is estimated to range from 500,000 sq. ft. to 700,000 sq. ft. Additionally, the proposed development includes five substations (four substations at 6.9 acres each and one substation at 9.3 acres), one switch station (15.2 acres), equipment yards, parking lots, driveways, and stormwater management areas. Total campus is expected to be approximately 6.1 MM +/- building square feet. The Applicant expects to employ about 226 people with additional employees coming on-site as the data centers become operational, representing tenant companies.

The facility will provide functional support for customers that are expected to include businesses, healthcare and educational providers, and government agencies to conduct digital transactions worldwide with services to include:

- o Centralized, secure storage for data
- o Data hosting
- o Cloud services
- o Backup and recovery
- o Computing
- o Connectivity

The facility provides 24/7 access and networking for users and includes infrastructure redundancy with back-up systems in place so that the facility remains operational to avoid downtime. This will include onsite emergency/standby generators that will operate in the event of loss of power through utility providers or when required for maintenance or testing. The generators will not operate preemptively.

The proposed site provides proximity to power infrastructure, including high voltage transmission lines with approximately 22.6 GW of power generation located within 50 miles. The site is located roughly halfway between Northern Virginia, the world's largest data center market and New York City and provides connectivity to large population centers along the East Coast. The site is also located near important long-haul fiber lines and deep sea cable landing stations that extend across the Atlantic Ocean.

The project is intended to be constructed in two phases. Six data centers are expected to be constructed in Phase 1 and backed up by approximately 252, 3 MW generators and six, 1.5MW house generators. All generators will be for emergency use. Phase 1 is expected to begin operations in 2028 with another five data centers expected to be constructed in Phase 2 including 252, 3 MW generators and six, 1.5MW house generators. Both phases are expected to be generally equivalent in size, overall operations, energy requirements and capacity. Total energy use will ramp up gradually over an 8-10 year period and is expected to total 1.2 GW for both phases combined. Electricity will be provided through Delmarva Power's transmission and distribution system, with electric supply being acquired on the open market. The source(s) are not known at this time.

Environmental impacts are expected to be minimized due to infrastructure placement that avoids jurisdictional wetlands and subaqueous lands associated with Red Lion Creek. There will be no surface water discharges from the site. The conceptual site plan (Please see Figure 3) avoids habitat areas and is not located within a Critical Natural Area. The project also proposes to avoid disturbance of approximately 60 acres of water resource protection areas over and above the permitted disturbance limits. Air emissions from generators will be limited to those associated with required maintenance and testing purposes and any emergency use. Water is expected to be provided by a local water utility and sanitary wastewater services will be provided by New Castle County. The project will not seek any onsite well water sources or onsite sewage disposal.

Proposed activities at the site do not include manufacturing or transformation of substances into new products as defined under the Coastal Zone Act. Primary functions of the facility include: 1) storage of data 2) emergency generation of electricity to assure continuous industry access when outside power supply fails and 3) electrical infrastructure used in transmitting, distributing, transforming, switching and otherwise transporting and converting electrical energy. These three activities are identified as uses not regulated under the Coastal Zone Regulations.

PART 4

PROJECT INFORMATION

- 4.1 Is the proposed project entirely or partly a new, improved, or extended pier or other ship docking facility?

Yes ☐

No ☒

If yes, will it be used at least in part for bulk cargo transfers by the applicant?

Yes ☐

No ☒

N/A ☒

If no, please explain what it will handle:

- 4.2 Is this project entirely for pollution control purposes?

Yes ☐

No ☒

- 4.3 Is this project a new research and development facility?

Yes ☐

No ☒

- 4.4 Is this project a new or expanding (flow rate) public sewage wastewater treatment plant?

Yes ☐

No ☒

- 4.5 Will the proposed project meet the following definition of "Manufacturing" as found in the [Coastal Zone Act](#): "Manufacturing means the mechanical or chemical transformation of organic or inorganic substances into new products, characteristically using power driven machines and materials handling equipment, and including establishments engaged in assembling component parts of manufactured products, provided the new product is not a structure or other fixed improvement."

Yes ☐

No ☒

If no, explain what kind of activity will be carried out at this project site:

The proposed data center is a new, specialized technology facility that will not manufacture any products and there are currently no existing manufacturing operations at the location. There will be no mechanical or chemical transformation of organic or inorganic substances into new products at the data center and no assembly of component parts into manufactured products. Data that is stored in systems at the facility will be conveyed, securely and efficiently, through networks to businesses and organizations to support mission critical operations and various

applications within the digital economy. The proposed location is in close proximity to high voltage electricity servicing the facility that will be managed for on-site use through five substations and a switching yard. (Please see Figure 4) Emergency generators will be operated only in the case of required maintenance and testing and emergency to assure that operations are maintained during periods of power loss.

Core functions of the data center campus include data storage, emergency generation of power to assure 24/7 industry access when outside supply fails and electrical infrastructure used in transmitting, distributing, transforming, switching and otherwise transporting and converting electrical energy. All three of these activities are identified as “uses not regulated” per Section 5 of the Coastal Zone Act Regulations, as follows:

5.0 Uses Not Regulated

5.1 The construction and/or operation of the following types of facilities and activities shall be deemed not to constitute initiation, expansion or extension of heavy industry or manufacturing uses under these regulations:

5.1.2 Warehouses or other storage facilities, not including tank farms.

5.1.5 Facilities used in transmitting, distributing, transforming, switching, and otherwise transporting and converting electrical energy.

5.1.8 Back-up emergency and stand-by source of power generation to adequately accommodate emergency industry needs when outside supply fails.

4.6 Will the project have the following equipment or facilities?

- | | |
|-------------------------------------|---|
| a. Smoke stacks | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| b. Tanks* | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| c. Distillation or reaction columns | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| d. Chemical processing equipment | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| e. Scrubbing towers | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| f. Pickling equipment | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| g. Waste treatment lagoons | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| h. Smelters | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| i. Incinerators | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

*Tanks are 5,020-gallon diesel fuel belly tanks for emergency generators

4.7 Will the project use 20 acres or more?

Yes ☒

No ☐

How many acres will it use? _____

The total acreage of the parcels is approximately 579 acres. Phase 1 is expected to disturb 187 acres and Phase 2 is expected to disturb 135 acres. Open space on the site is expected to be two to three times greater than New Castle County code requirements.

- 4.8 Does this facility appear in Appendix B of the Coastal Zone Act Regulations (the list of the nonconforming uses)?

Yes ☐

No ☒

If no, proceed to question 4.11

- 4.9 Will the proposed activity described in this application occur entirely within the lines delineating the area of nonconformity for this site, as seen in the Appendices of the Regulations?

Yes ☐

No ☐

N/A ☒

- 4.10 Will the proposed activity or use straddle this line?

Yes ☐

No ☐

N/A ☒

If yes, describe what equipment, facilities, or machinery will be within the delineated area of nonconformity AND what will be outside of this area of nonconformity:

- 4.11 Is the proposed project or use part of a manufacturing use that was in operation prior to and on June 28, 1971?

Yes ☐

No ☒

- 4.12 Has this facility ever been granted a Coastal Zone Act Permit?

Yes ☐

No ☒

If yes, please provide the following information:

Applicant Name	Permit Number	Date Issued

- 4.13 Does the new or expanded use involve any change in existing:

a. processes? Yes ☐ No ☒

b. facilities? Yes ☒ No ☐

c. buildings? Yes ☒ No ☐

d. emissions discharge? Yes ☒ No ☐

If yes, please explain each in detail. Use the following tables to help describe any new, or changes to, air emission or water discharge:

Facilities that are required for the data center include buildings or data centers to house equipment, five substations for the management of electricity, one switch yard and an equipment yard. The facility is expected to be constructed in two phases with the initial phase including six data centers and two substations being constructed initially on the southern parcel, along with three substations and one switch station on the northern parcel, including 252, 3 MW emergency generators and six emergency house generators at 1.5 MW each. Another five data centers are expected to be constructed in Phase 2 including another 252, 3 MW generators and six emergency house generators at 1.5 MW each. Each data center is expected to be 500,000 to 700,000 square feet in size. Both phases are expected to be generally equivalent in overall operations, energy requirements and capacity. The schedule for the second phase of the project is not known at this time and is partially dependent on Delmarva Power's schedule for supplying the facility with electricity.

The electrical infrastructure and interface through the use of substations on site allows the step-down of electricity that reduces the utility transmission voltages down to distribution voltages which allows the power to be used by the data center buildings and the equipment housed in them. No measurable environmental impact is expected to the environment from electrical equipment on site.

Air Emissions

Air emissions from the facility will be primarily associated with the use of emergency generators needed to maintain operations in the event of a power outage. The generators are expected to be Tier IV diesel-fired units. Each generator will be equipped with a double-walled 5,020-gallon belly fuel tank. The following table summarizes the estimated annual air emissions for Phases I and II. An operating scenario of 20 hours per year is included below as the manufacturer recommended specifications for maintenance and testing.

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	
PM	0	0	2,000	0.99	2,000	0.99	-
SOx	0	0	540	0.27	540	0.27	-
NOx	0	0	49,000	25	49,000	25	-
CO	0	0	33,000	17	33,000	17	-
VOC	0	0	4,000	2	4,000	2	-

1. Emissions based on post-control manufacturer emission factors (Safety Power Inc.) for PM (0.020 g/hp*hr), NOx (0.50 g/hp*hr), CO (0.34 g/hp*hr) & VOC (0.04 g/hp*hr) + AP-42 factor for SOx (1.21E-05 lb/hp*hr).
2. Annual emissions based on 20 hours of maintenance and testing operations during one day for Phases 1 and 2 units. Actual emissions will be based on up to 20 hours of operation that will occur throughout the year.
3. Both daily and annual emissions numbers based on 504 data center emergency generator units and 12 house emergency generator units.
4. Emissions reported using significant figures from emission factors.
5. Calculations for emissions are preliminary based on the current site plan.
6. Changing the number of emergency generator units running or using different operating hours will change the reported emissions numbers.
7. Emissions for each emergency generator (both data center generators and house generators) were calculated by multiplying the respective emission

factors by the engine horsepower to result in a pound per hour emission rate for each pollutant. Those emission rates were then multiplied by the number of each type of emergency generator units (data center and house) running at 20 hours per year to obtain annual emissions. Daily emissions were calculated by multiplying the pound per hour emission rate by the number of each type of generator running at 20 hours in one day. Please see Attachment 2 for more detail including calculations and manufacture (Safety Power Inc.) specifications.

8. Actual model and emissions are subject to change based on equipment availability at time of purchase. The ultimate generator model to be utilized is not expected to create a material deviation from the listed emissions. Regardless of model, the manufacturer will provide a certificate for the emissions performance data.

The following table is included to represent EPA guidance for estimating potential emissions from emergency generators under worst-case conditions of operating 500 hours per year.

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	
PM	0	0	2,100	25	2,100	25	-
SOx	0	0	570	6.8	570	6.8	-
NOx	0	0	51,000	616	51,000	616	-
CO	0	0	35,000	419	35,000	419	-
VOC	0	0	4,000	49	4,000	49	-

1. Emissions based on post-control manufacturer emission factors (Safety Power Inc.) for PM (0.020 g/hp*hr), NOx (0.50 g/hp*hr), CO (0.34 g/hp*hr) & VOC (0.04 g/hp*hr) + AP-42 factor for SOx (1.21E-05 lb/hp*hr).
2. Annual emissions based on 500 hours of maintenance and testing operations for Phases 1 and 2 units.
3. Both daily and annual emissions numbers based on 504 data center emergency generator units and 12 house emergency generator units.
4. Emissions reported using significant figures from emission factors.
5. Calculations for emissions are preliminary based on the current site plan.
6. Changing the number of emergency generator units running or using different operating hours will change the reported emissions numbers.
7. Emissions for each emergency generator (both data center generators and house generators) were calculated by multiplying the respective emission factors by the engine horsepower to result in a pound per hour emission rate for each pollutant. Those emission rates were then multiplied by the number of each type of emergency generator units (data center and house) running at 500 hours per year to obtain annual emissions. Daily emissions were calculated by multiplying the pound per hour emission rate by the number of each type of generator running at 24 hours in one day. Please see Attachment 2 for more information including calculations and manufacturer (Safety Power Inc.) specifications.
8. Actual model and emissions are subject to change based on equipment availability at time of purchase. The ultimate generator model to be utilized is not expected to create a material deviation from the listed emissions. Regardless of model, the manufacturer will provide a certificate for the emissions performance data.

The following tables show estimated air emissions from the generator belly tanks using EPA Tanks 5.1 emission estimation software. The program estimates the emissions from standing and working losses. Standing losses (also known as breathing losses) are due to vapor losses caused by vapor expansion and contraction due to ambient temperature and barometric pressure changes. Working losses are due to evaporative losses associated with filling the tanks. The estimates are based on the projected fuel consumption based on 20 hours of operation annually as required by manufacturer specifications and 500 hours of operation consistent with EPA guidance for calculating generator emissions based on a worst-case scenario.

<u>Belly Tanks</u>	<u>Total TPY</u>
<u>516</u>	<u>0.12</u>

516 Double-walled 5,020-gallon diesel fuel belly tanks
 12-feet wide, 39.5 feet long, 2 feet high – tank specifications
 205 GPH fuel consumption at 100% load – tank specifications
 20 hours/year
 4,100 gallons per year turnover – calculated

<u>Belly Tanks</u>	<u>Total TPY</u>
<u>516</u>	<u>0.67</u>

516 Double-walled 5,020- gallon diesel fuel belly tanks
 12-feet wide, 39.5 feet long, 2 feet high – tank specifications
 205 GPH fuel consumption at 100% load – tank specifications
 500 hours/year
 102,500 gallons per year turnover – calculated

Water Discharges

There are no direct surface water discharges from the data center campus and no-on-site wastewater discharges. Sanitary wastewater is expected to be conveyed from the site to New Castle County sewer system and to a permitted facility for treatment and discharge.

The data centers are expected to generate a maximum of 30,000 gallons per day of wastewater discharge to the New Castle County sanitary system and approximately 2.7 million gallons per year with both Phase 1 and 2 constructed.

The following table summarizes the estimated water discharges:

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge Concentration (ppm)	Current Discharge		Net Increase/Decrease		New Total Discharges	
			Gals/day	Gals/year	Max Gals/day	Gals/year	Max Gals/day	Gals/year
Sanitary wastewater	N/A	Potable /Sanitary	0	0	30,000 GPD/	2,737,500 GPY	30,000 GPD	2,737,500 GPY

Stormwater management infrastructure will be designed and constructed according to State of Delaware's Sediment and Stormwater Regulations as reviewed and approved by New Castle County.

Water Use

Maintaining heating and cooling requirements for the data centers and equipment is vital to operations for the facility. Options for an advanced cooling system are being explored with one using a closed loop system with a water/glycol coolant. These estimates are based on 12 systems for the 11 proposed data center buildings in both Phase 1 and Phase 2. Current estimates indicate that each system will require a one-time charge of approximately 50,000 gallons prior to start-up with an estimated total of 600,000 gallons of water required for system charging. Once filled, the water circulates throughout the building going through heating and cooling cycles. Maintenance/repair work to the system may require some or all of the coolant system to be drained. Process wastewater from the system will be conveyed to, treated and disposed of by a permitted wastewater treatment facility.

A humidification system will also be utilized for climate control in the data centers. Each system is estimated to use a maximum of 4,536 gallons per day and maximum of 1,655,640 gallons per year. Actual usage is expected to be approximately 827,820 gallons per year for each system. Based on actual usage estimates, total water use for the system once Phases 1 and 2 are completed is estimated to be 9,933,840 gallons per year. No constituents are added to the condensate. Excess condensate water from the system will be discharged to the stormwater system per New Castle County Code.

Potable water use is expected to be approximately 228,125 gallons per year per system or 2,737,500 gallons per year once Phases 1 and 2 are constructed.

The table below summarizes estimated water use.

Purpose	Approximate Usage (gallons) per system	# of Systems	Total
Heating/Cooling	50,000 (one time)	12	600,000 gallons (one time)
Humidification	827,820	12	9,933,840 gallons per year
Potable Water	228,125	12	2,737,500 gallons per year
Estimated Total			12,671,340 gallons per year (Humidification system & Potable water)

4.14 Will this project directly or indirectly increase plant production over present capacity?

Yes ☐

No ☒

If yes, explain in what way and by how much:

4.15 Will this project result in the production of any new products, either directly or indirectly, at this facility?

Yes ☐

No ☒

If yes, list each new product:

4.16 List materials and/or ingredients to be utilized by this proposed project and how they will be transported to the site.

Building materials and equipment for site preparation and development will be utilized and transported to the site by commercial trucks. Post construction materials utilized by the proposed project include routine office/workplace supplies to support the employees and are also expected to be delivered by commercial carriers. Diesel fuel for emergency generators will be delivered to the facility on an as needed basis by licensed and certified commercial trucking services.

PART 5

PROJECT SITE AND ZONING

- 5.1 In a separate attachment, provide a map of appropriate scale to clearly show the site. Mark important natural features and project buildings and processing equipment of the proposed project such as roads, wetlands, railway sidings, drainage ways, tanks, sewer systems, water mains, wells, etc.

Please see Figure 3.

- 5.2 What is the current SIC code for the proposed use?

7374

- 5.3 What is the current zoning and planned land use of the proposed project site?

Tax Parcel No. 10-049.00-073 (Parcel 4AN-1) is zoned Suburban (S) and Tax Parcel No. 12-002.00-025 (Parcel 4AN-2) is primarily zoned Heavy Industrial (HI) with a small portion zoned Commercial Regional (CR). The New Castle County Comprehensive Plan 2050 Future Land Use maps show the Site within an area designated for future use as "Business Flex".

Data Centers are considered a light industry use pursuant to New Castle County's Unified Development Code and are a by-right use in the HI zone. There is a small portion of Parcel 4AN-2 which is zoned Commercial Regional. This portion of Parcel 4AN-2 will be used for employee parking only. Parcel 4AN-1 will require a rezoning to accommodate the proposed use. This parcel is currently used for agricultural purposes.

Please see Attachment 3 for New Castle County Zoning verification.

- 5.4 Will the proposed project require a zoning change?

Yes ☒

No ☐

If yes:

A. To what classification will it be changed?

Tax Parcel No. 10-049.00-073 (Parcel 4AN-1) will be rezoned to Industrial

B. What zoning authority is responsible for reviewing and approving the change?

New Castle County Department of Land Use

- 5.5 Will this project require new supporting facilities?

Yes ☒

No ☐

If yes, describe each facility, and how it will be used:

Water service – Water is expected to be supplied to the site by regional water utility Veolia which has confirmed it has adequate capacity to supply the site. This will require a pipeline to connect the facility to existing central water supply infrastructure.

Sewer Service – New Castle County is proposing to expand sewer service to the site. The facility is expected to connect to central sewer service when available for Phase 1 development.

Electrical infrastructure – Offsite enhancements to electrical infrastructure are expected but specific information from Delmarva Power is not available at time of submittal.

PART 6

PROJECT DESCRIPTION AND PROJECT IMPACTS

- 6.1 On a separate attachment labeled “**Project Description**,” provide a concise but complete description of the proposed project or use. Be sure to answer the following questions:
- How does the project relate to any existing manufacturing operations and facilities (if this is not for an entirely new manufacturing plant)?
 - What effects will there be, if any, on land use acreage, manufacturing production capacity, modification of current product line(s), and safety risks to the public and to company employees?
 - Is this project or use a complete, single project, or is it part of a long-term, large-scale project that has other components to it that may need approval under the Coastal Zone Act at a later date?
 - If it is part of a larger project, describe the entire project in detail and mention ALL major machinery, facilities, land, products, and processes involved.
- 6.2 On a separate attachment labeled “**Environmental Impacts**,” provide a detailed and accurate impact analysis that describes the proposed project’s impacts on:
- air quality
 - local surface and ground water quality
 - surface and groundwater withdrawals
 - habitat loss
 - solid and hazardous waste generation
 - noise
 - odors
 - local aesthetic quality
 - any other notable factors not listed above
 - Provide a detailed statement describing the proposed project’s potential to pollute should equipment malfunction or human error occur, including a description of backup controls, backup power, and safety provisions.
- 6.3 On a separate attachment labeled “**Other Project Impacts**,” provide a detailed and accurate analysis on how the proposed project will impact each of the following (include both positive and negative impacts):
- the economy (corporate, state, county)
 - county and municipal comprehensive plans/ zoning
 - effect upon neighboring land uses
 - the impacts, if any, that *supporting facilities* will have on: the environment; economics of the area; zoning; neighboring land uses; and aesthetic quality.

Project Description
(Refer to Question 6.1)

- a. How does the project relate to any existing manufacturing operations and facilities (if this is not for an entirely new manufacturing plant)?

The proposed data center will be a new, specialized technology facility that does not manufacture any products on site and there will be no existing manufacturing operations at the location. There is no mechanical or chemical transformation of organic or inorganic substances into new products at the data center. Data will be stored in systems at the facility and will be conveyed, securely and efficiently, through fiber networks to businesses and organizations to support mission critical operations and various applications within the digital economy.

- b. What effects will there be, if any, on land use acreage, manufacturing production capacity, modification of current product line(s), and safety risks to the public and to company employees?

The proposal is to develop approximately 579 acres of undeveloped land currently being used for agricultural purposes. There is no current or planned manufacturing at the site and no current product lines. Safety risks to the public and company employees will be minimized as there will be no mechanical equipment, chemicals or hazardous materials used in any manufacturing activity. Diesel fuel for use by the emergency generators will be stored in double-walled tanks that are incorporated in the casing for each of the units. Generators will utilize fuel directly from each unit's base-mounted tank. There will be no common fuel storage or distribution system. Operation and maintenance of on-site substation and electrical switching yard equipment will be performed by trained/certified electrical professionals.

- c. Is this project or use a complete, single project, or is it part of a long-term, large-scale project that has other components to it that may need approval under the Coastal Zone Act at a later date?

This is a single project that is expected to be developed in two phases. Phase 1 is comprised of the construction of six data centers and two substations being constructed initially on the southern parcel, along with three substations and one switch station on the northern parcel. The schedule for Phase 2 construction is not currently known and is partially dependent on the schedule of Delmarva Power to provide additional electricity to the site. Both phases are expected to be generally equivalent in size, overall operations, energy requirements and capacity. Six data centers are expected to be constructed in Phase 1 and backed up by approximately 252, 3 MW emergency generators and six house emergency generators at 1.5 MW each with another five data centers expected to be constructed in Phase 2 including another 252, 3 MW emergency backup generators and six emergency house generators at 1.5 MW each.

The critical backup generators maintain the operation of critical equipment (servers, networking devices, storage systems) during power outages. This load type is dedicated to the most critical loads and essential systems and often are part of a redundant power system with rapid transfer (within 10 secs) to backup power for uninterrupted power of critical operations.

The house generators provide backup power for non-critical loads (lighting, non-critical HVAC, etc.). This load type can include essential but non-mission critical loads such as non-information technology systems. These systems do not require redundancy and operate with slower transfer times (up to 60 secs).

An element of the uninterruptable power systems will include batteries utilizing lithium titanate technology. The number of batteries and power generation will be specific to tenant needs and are not known at this time. Preliminary estimates indicate that approximately 960, 1 MW batteries may be needed. The batteries have a warranted life of 12 years.

Total energy use is expected to be 1.2 GW for both phases. Core functions of the Center include data storage, emergency generation of power to assure always on access and facilities used in transmitting, distributing, transforming, switching and otherwise transporting and converting electrical energy.

- d. If it is part of a larger project, describe the entire project in detail and mention ALL major machinery, facilities, land, products, and processes involved.

Environmental Impacts
(Refer to Question 6.2)

a. Air Quality

Air quality impacts from the proposed project are expected from the limited use of emergency generators that are required in order to maintain “always run” status for the Center. The generators will be used exclusively for “back-up emergency and standby source of power generation to adequately accommodate emergency industry needs when outside supply fails.” The units will not be used for peak shaving or other normal operations. The generators are expected to be operated approximately 20 hours annually for testing and maintenance purposes, according to manufacturer specifications. EPA guidance for estimating potential emissions from emergency generators and their fuel tanks is based on units operating 500 hours per year for a worst-case scenario. Air emission estimates based on both 20 hours and 500 hours of operation are found in Section 4.13.

Mobile sources of air emissions will be generally limited to the operation of cars and light-duty trucks that serve as transportation for employees commuting to and from the facility. Few truck deliveries are expected. The data center campus is expected to employ approximately 226 people that will be operating the center on a continuous 24/7 year-round basis.

Additional employees will be added to the campus as buildings are leased to tenants. The facility will operate two 12-hour shifts daily which will reduce morning and evening peak hour traffic impact. Employees are generally expected to reside in Delaware, Pennsylvania, New Jersey and Maryland. Delaware’s ozone attainment status is not expected to be impacted by mobile source air emissions.

b. Local Surface and Ground Water Quality

Surface Water – Environmental impacts to surface and ground water are expected to be minimal as there will be no discharges from the project to surface waters or through any on-site treatment system.
Ground Water

The site is located within a Groundwater Management Zone established by DNREC and no on-site wells will be used to supply water for the facility.

Stormwater management (SWM) facilities will be designed and constructed according to Delaware’s Stormwater Regulations and Delaware Erosion and Sediment Control Handbook as applicable and approved by New Castle County.

c. Surface and Groundwater Withdrawals

No on-site withdrawals from surface water or groundwater resources are planned. Process cooling water and potable water will be supplied by a regional water utility.

d. Habitat Loss

Wetlands are identified on the property by the USFWS National Wetlands Inventory. Mapped tidal wetlands are limited to the flowline of the Red Lion Creek.

A Wetlands and Subaqueous Lands Permit would be required for potential impacts to the tidal wetlands and Red Lion Creek as a part of the proposed project. Construction of Phase 2 of the project will require installation of utility connections between Phase 1 and Phase 2 parcels. Subaqueous lands of Red Lion Creek and adjoining wetlands are not expected to be impacted as these connections will be made through the use of directional drilling under these resources.

New Castle County requires 100% protection of riparian buffers, which are defined as the areas within 100-feet on either side of tidal wetlands and the areas within 50 feet on either side of non-tidal wetlands greater than 20,000 square feet (0.45 acres).

Plans show appropriate 100/50-foot riparian buffers around delineated wetlands. Proposed buildings are located upland of these riparian buffers.

Tree clearing on the site will be limited as the majority of the upland portion of the property that will be used for infrastructure is already cleared as it is currently used for agricultural crops.

There is expected to be minimal habitat loss as a result of the project.

e. Solid And Hazardous Waste Generation

Construction debris will be generated from development of the site. Materials will be recycled to the extent practicable with the remainder of the materials disposed of at a permitted facility.

Solid waste generation associated with normal operations attributable to an office setting will be recycled as appropriate and disposed of at a permitted facility by a local permitted solid waste transporter.

Universal wastes – batteries, pesticides, mercury containing equipment, fluorescent lighting – will be handled and disposed of according to Delaware Regulations Governing Solid Waste.

The volume of electronic waste produced will be determined by the tenant(s) based on their product selections and refresh cycles and cannot be determined by the Applicant at this time.

f. Noise

The Facility will be designed and engineered to comply with all State and New Castle County regulations. A noise study confirming compliance will be conducted as part of the approval process. New Castle County regulation requires that all current and new projects are consistent with existing sound levels.

Site preparation and facility construction activities will generate noise

levels typical from the use of earth moving and construction equipment. Generators will be used only for emergency purposes when power from the utility provider is not available. The units are anticipated to operate approximately 20 hours annually for testing and maintenance purposes, according to manufacturer specifications. Operation of the units during testing and maintenance is expected to be staggered such that all of the units will not run simultaneously. The units are rated at 70 decibels from 23 feet at any point while operating under fully rated loads which is roughly comparable to a vacuum cleaner or a gasoline powered car operating at 60 miles per hour.

The proposed facility will be located approximately 0.5 miles from the nearest residential area.

g. Odors

The facility will not be utilizing materials or processes that are expected to produce an odor. Minimal and temporary odors may be produced as a result of the operation of diesel fuel combustion through the emergency generators.

Required and routine operation for testing purposes per manufacturer specifications will be staggered such that not all units will be operating concurrently, and units are not expected to run more than 20 hours per year for maintenance and testing purposes.

h. Local Aesthetic Quality

The proposed location is within a historically heavy industrial and commercial corridor that was first developed in the 1950s with the construction of the Delaware City Refinery. Much of the approximately 5,000 acres of land surrounding the refinery, including the acreage proposed for use as the Data Center, has remained under ownership of the refinery as parent companies have changed. The refinery has served as an anchor site for a number of other heavy industries in the area that manufactured petro-chemical products and that were identified as non-conforming pre-existing uses under the Coastal Zone Act. Several heavy industrial facilities remain in operation while others have ceased operations, including the former Metachem facility (currently being remediated under the Federal Superfund program), and remain vacant or have been converted to commercial uses. A Delmarva Power Substation and Bloom Energy electrical generating facility are located east of the proposed site off Route 9. The construction of SR 1, to the west of the proposed site, was completed in 2003 and transformed the area into a major transportation corridor. Route 13, also to the west of the property, continues to be a significant north-south transportation route and commercial corridor.

More recently, the area has experienced change with the development of the Blue Diamond Park which includes construction of a large Amazon warehouse/distribution center and United Parcel Service facility to the north, and DART Corporation, Solo Cup operation and Delaware Logistics warehouses and distribution center constructed south of the proposed site. Construction of the data center campus is not expected to significantly impact the aesthetic quality of the area, but, rather, will be consistent with surrounding uses (Please see Figure 5).

The proposed site is bordered by the following land uses:

North – Residential dwellings and commercial buildings, consisting of a warehouse, auto dealer and refueling station.

East – River Road, beyond which are agricultural fields, a utility substation, industrial businesses consisting of a waste management company, and a chlor-alkali plant.

South – Agricultural fields, railcar storage, and industrial land owned by the Delaware City Refinery utilized to process and manufacture petroleum and chemical products.

West – State Highway 13 beyond which are residential dwellings and commercial land consisting of storage facilities and the former Tybouts Corner Landfill.

- i. Any other notable factors not listed above.

This project integrates architectural, environmental, and operational strategies that collectively minimize potential adverse effects on the surrounding environment, enhance site aesthetics, and ensure compliance with all applicable local and state regulations.

Impacts on the Watershed of Site Preparation -- Site preparation will be done in accordance with all applicable New Castle County, State of Delaware and Federal requirements. Site preparation and grading will be performed in accordance with State of Delaware Sediment and Stormwater Regulations as approved by New Castle County and the New Castle County Drainage Code. Tree clearing on the site will be limited as the majority of the upland portion of the property that will be used for infrastructure is already cleared as it is currently used for agricultural crops.

Subaqueous lands of Red Lion Creek and adjoining wetlands are not expected to be impacted as these connections will be made through the use of directional drilling under these resources. Permits will be sought for directional drilling or any activity subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers or DNREC.

Site preparation for the project is expected to have minimal impacts on the watershed.

Glare – The project's buildings will be constructed using high-quality, durable materials compliant with Section 40.26.260 of the New Castle County Unified Development Code (UDC) governing large industrial structures. This section promotes the use of architectural articulation, varied massing, and material diversity—all of which are incorporated into the design to reduce glare, visual monotony, and overall environmental impact. The combination of precast concrete panels, metal cladding, and selective glazing provides both visual interest and functional performance while minimizing reflectivity. The limited curtain wall elements will employ high-performance glazing and anodized aluminum framing systems, which may generate minor reflections consistent with standard commercial office construction, but not to a level expected to cause off-site impacts.

Heat, Radiation and Electromagnetic Interference -- No unusual generation of heat, radiation, or electromagnetic interference is anticipated beyond normal operations, which will comply with all applicable federal and state and local standards.

Effect of the Proposed Project on Threatened and Endangered Species – The proposed project

was submitted to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system. In addition, agency consultation letters were submitted to National Oceanic and Atmospheric Administration, DNREC and USFWS as part of the permitting process with the U.S. Army Corps of Engineers (USACE) and DNREC Wetlands and Waterways Section. USFWS identified the tri-color bat and monarch butterfly as species that may occur on or adjacent to the property. Both species are proposed to be listed under the federal Endangered Species Act (ESA). USFWS recommended that, as a voluntary measure, any tree clearing be avoided between May 15 – July 31 to help minimize potential impacts to tri-color bats. DNREC Division of Fish and Wildlife responded that its database indicates that the northern long-eared bat may reside on or adjacent to the property. The species is listed as endangered under the under the ESA. Additional engagement with DNREC and USFWS is expected to occur through the USACE and DNREC permitting process. Any mitigation measures identified through the permitting process will be considered and implemented as appropriate.

Phase II and Phase III surveys were conducted on the property for bog turtles, a federally endangered species. No bog turtles, or signs of bog turtles were found. The surveys were conducted under a Delaware Scientific Collectors Permit approved by DNREC.

- j. Provide a detailed statement describing the proposed project's potential to pollute should equipment malfunction or human error occur, including a description of backup controls, backup power, and safety provisions.

There are no industrial or manufacturing processes or associated mechanical or chemical equipment that could discharge emissions to air or water. Emergency generators will be utilized to maintain operations in the event of power loss from electricity providers. The generator cabinetry includes double-walled belly tanks for storing diesel fuel to minimize potential releases and will be installed according to applicable local and state requirements.

Specific equipment for substations has not been identified at this time. Substation protection and control systems are expected to use batteries containing sulfuric acid. and transformers may utilize FR3 as a more environmentally friendly alternative to hydrocarbon or mineral fluids for cooling. Spill containment systems and pads for any equipment containing hazardous substances or hydrocarbon fluids will be utilized as appropriate and required.

Installation of electrical equipment will be performed according to national, local and state standards by certified personnel.

Other Project Impacts
(Refer to Question 6.3)

- a. The economy (corporate, state, county)

Economic benefits to Delaware and the region are expected to be significant arising from both the construction of the data center campus during two phases and the direct and indirect economic impacts from operations. Taxes to New Castle County and the State of Delaware are expected to result from employment income from construction jobs and data center employees who reside in Delaware. Other tax benefits to the State are unable to be identified at this time as Delaware's tax code does not include a classification for data centers. Other direct and indirect benefits are estimated and summarized below.

Economic impacts from construction are expected to result in approximately 3,800 construction jobs with labor income estimated at \$2.9 billion during construction and total output of more than \$10 billion reflecting purchase of raw materials, services from other industries, labor income, taxes on production and imports and other property income.

Economic impacts from annual operations is expected to result in 226 facility operator jobs with between 300 – 600 additional jobs created resulting in annual wages of more than \$30 million. Total economic output from year 1 of operation is expected to be approximately \$90 million and \$450 million over the first five years.

Employee classifications include a property management director, data center operations managers, engineers and janitorial support with the largest numbers of employees serving as engineers and security personnel. The average annual salary is anticipated to be approximately \$130,000 for high-skilled labor and \$69,000 for other labor. According to the U.S. Census, the estimated New Castle County per capita income in 2023 was \$46,903 annually.*

These estimated impacts are based on direct, indirect and induced impacts that include:

- **The spending in Delaware on the construction of the data center campus;**
- **The spending on goods and services in Delaware that data centers make during the ongoing operation of data centers;**
- **The spending on goods and services in Delaware made by data center vendors;**
- **The spending associated with the building and operation of the data center campus.**

* "U.S. Census Bureau, U.S. Department of Commerce. "Per Capita Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars)." *American Community Survey, ACS 1-Year Estimates Detailed Tables, Table B19301*, [https://data.census.gov/table/ACSDT1Y2023.B19301?q=%22Per+Capita%22&t=Earnings+\(Individuals\)&g=050XX00US10003](https://data.census.gov/table/ACSDT1Y2023.B19301?q=%22Per+Capita%22&t=Earnings+(Individuals)&g=050XX00US10003). Accessed on 4 Sep 2025."

- b. County and municipal comprehensive plans/zoning:

The proposed site is located within an area where industrial development exists and where further growth is proposed as identified in the New Castle County 2050 Comprehensive Land Use Plan. The Future Land Use Map identifies the area as “Business Flex” which includes the following zoning classifications:

- **Industrial District**
- **Business Park District**
- **Office Neighborhood**
- **Office Regional**
- **Economic Empowerment District**

The development of the proposed project is consistent with the goals and objectives of the New Castle County 2050 Comprehensive Plan.

- c. Effect upon neighboring land uses:

Surrounding land uses -- The proposed project is consistent with current and surrounding uses and as well as those uses identified in the County’s Comprehensive Plan.

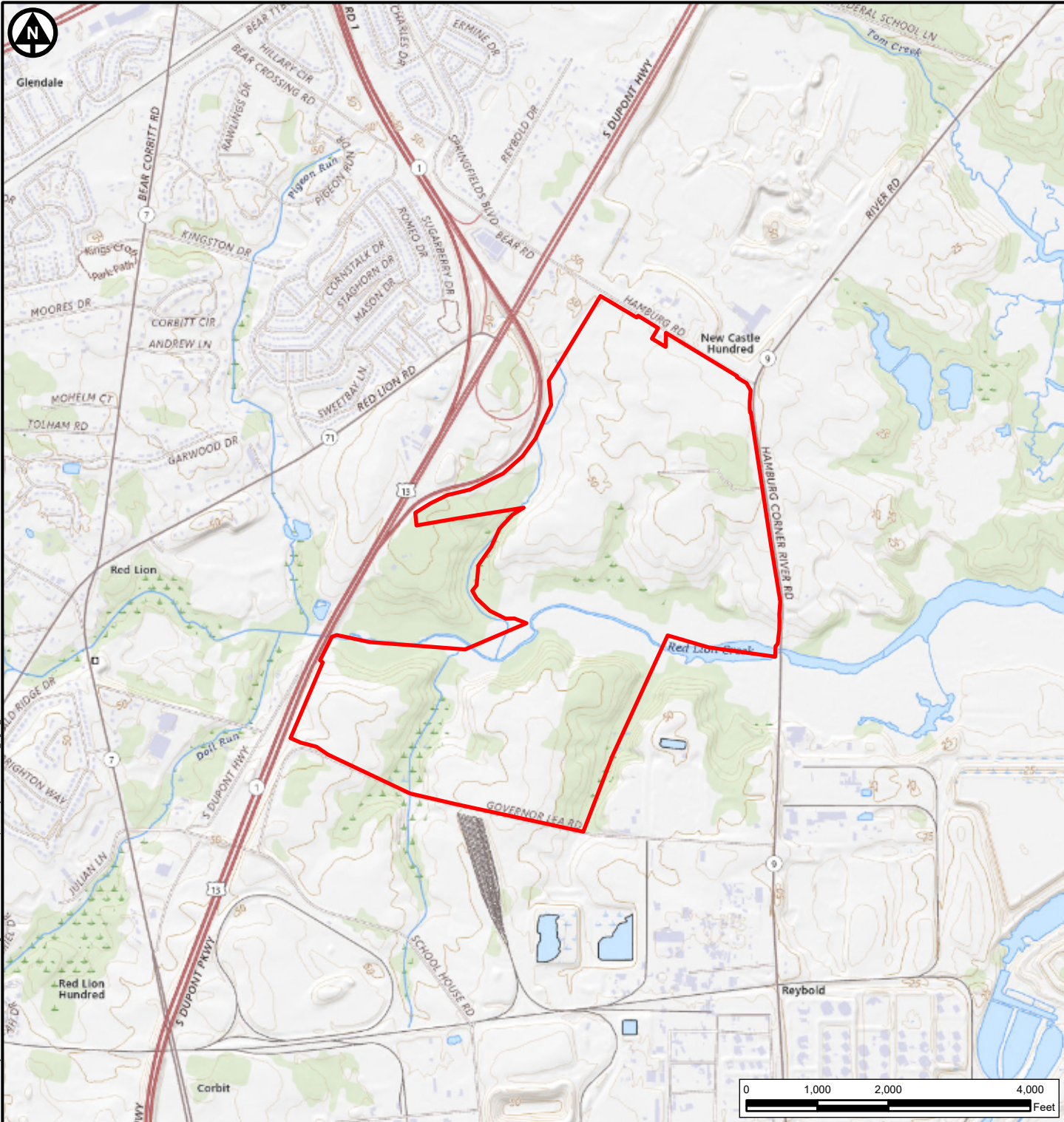
- d. The impacts, if any, that *supporting facilities* will have on the environment; economics of the area; zoning; neighboring land uses; and aesthetic quality.
Supporting facilities include a water supply pipeline, sanitary sewer service, upgrades to the electrical grid and the local fiber optic network:

Water supply and wastewater connections are expected to be constructed in existing utility rights of way, and aside from temporary impacts during construction, are expected to have minimal environmental, economic, zoning, land use and aesthetic impacts.

Specific details of expected required upgrades to the electrical grid are being developed by Delmarva Power in coordination with the Applicant and are not available at this time.

END OF APPLICATION

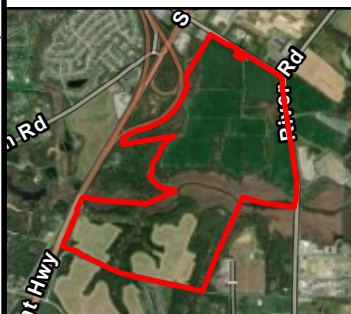
FIGURE 1



 Site Boundary

DISCLAIMER: Verdantas LLC has furnished this map to the Client for its sole and exclusive use as a preliminary planning and screening tool. This map is reproduced from geospatial information compiled from third-party sources which may change over time and are not accurate as to mapping, surveying or engineering standards. Verdantas LLC makes no representation or warranty as to the content, accuracy, timeliness or completeness of any information. In no event will Verdantas LLC, its owners, officers, employees or agents, be liable for damages of any kind arising out of the use of this map by Client or any other party.

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Sources:
Aerial Imagery: Esri Imagery Web Service dated December 2, 2019.
Topographic Map: USGS Topo Web Service.
Quadrangle: Saint Georges, Delaware

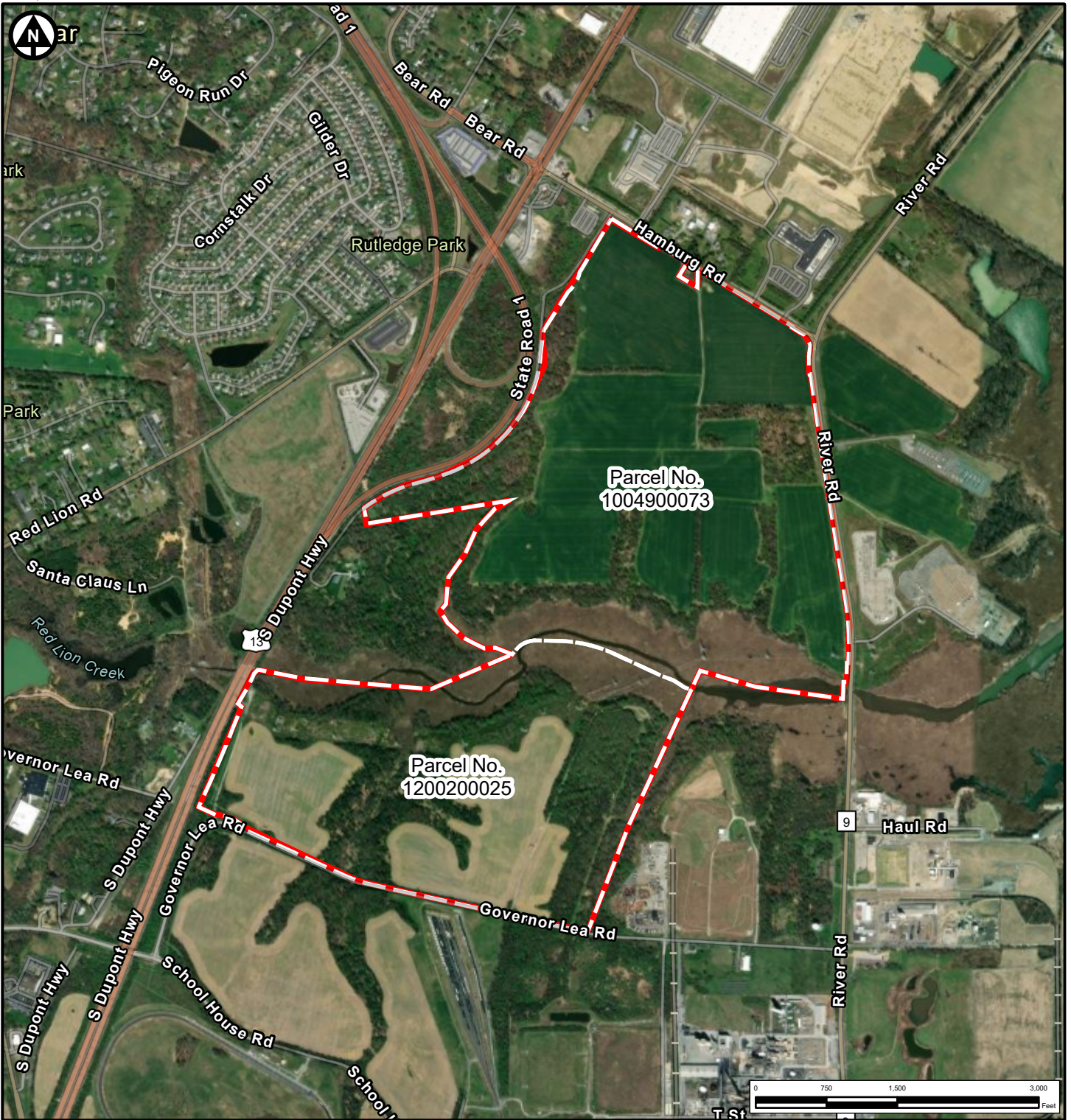
0 River Road/825 Governor Lea Road
New Castle, New Castle County, Delaware

Site Location Map

CZA Permit Status Decision Application

Project Number	33526
Date	06/2025
Author	jfedetz
Scale	1 in = 2,000 ft
Figure	1

FIGURE 2



- Parcel Boundary
- Site Boundary

Note:

1. The aerial photo was acquired through the Esri Imagery Web Service. Aerial photography dated April 9, 2023.
2. Parcels provided by Delaware FirstMap, and labeled by their parcel number.

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0 River Road/825 Governor Lea Road
New Castle, New Castle County, Delaware

Aerial Map

CZA Permit Status Decision Application

Project Number	33526
Date	06/2025
Author	jfedetz
Scale	1 in = 1,500 ft
Figure	2

FIGURE 3

[illegible]

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Date of issue:
mm/dd/yyyy

PROJECT WASHINGTON

0 River Rd, New Castle, DE 19720

PROJECT
WASHINGTON -
MASTERPLAN
PROPOSAL

JOB
DATE
SHEET



FIGURE 4

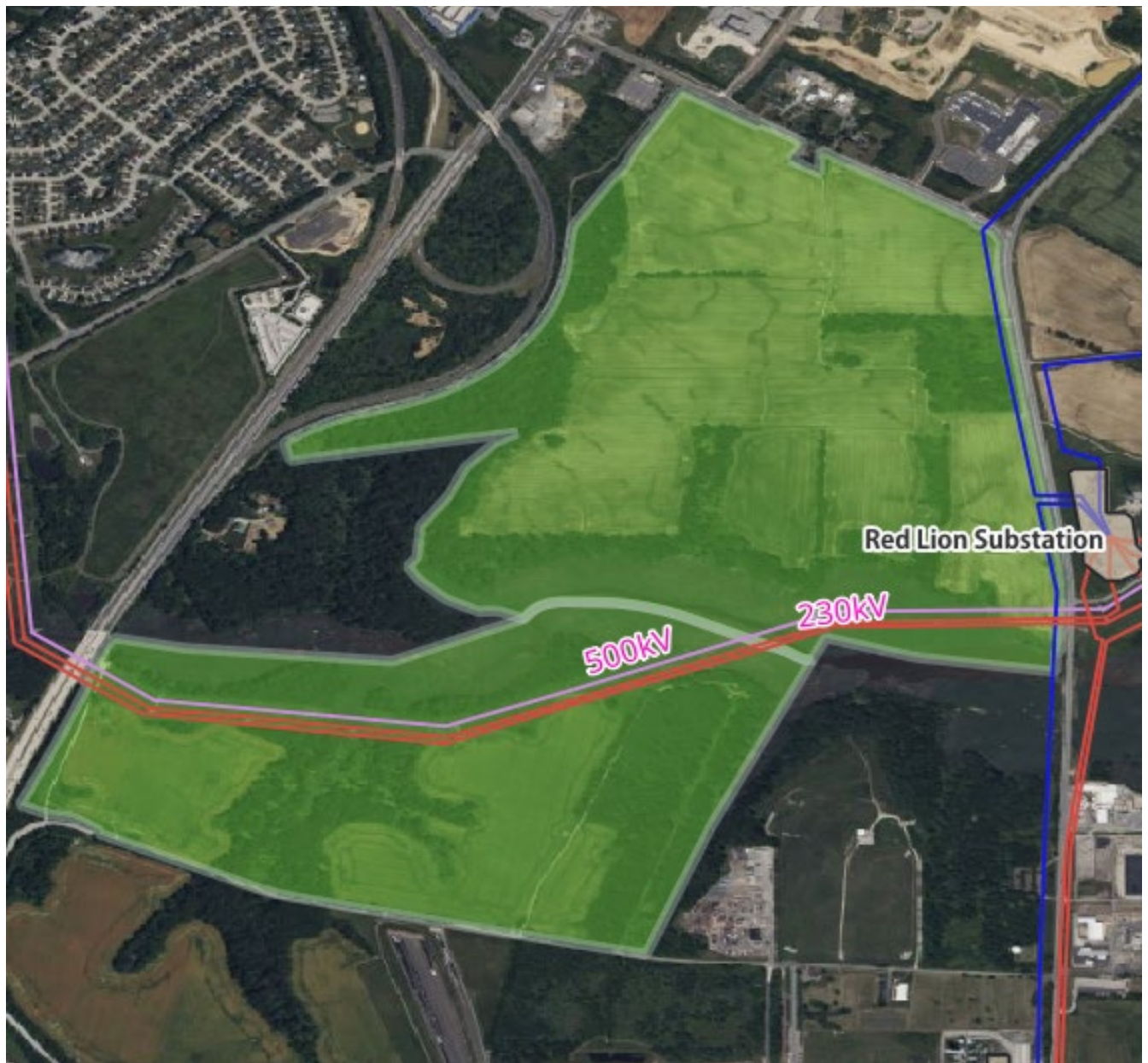


Figure 4 – Proposed Project Location Showing High Voltage Lines

FIGURE 5



Figure 5 – Showing Proposed Project Location and Surrounding Facilities

ATTACHMENT 1

September 8, 2025

Ms. Jennifer Holmes
Coastal Regulatory Programs Manager
Delaware Coastal Programs
Department of Natural Resources and Environmental Control
100 W. Water Street, Suite 7 B
Dover, DE 19901

Authority to Act as Agent

Dear Ms. Holmes:

I appoint Verdantas LLC to act as our agent in the preparation of Starwood Digital Venture's Coastal Zone Status Decision Application. I certify that the submitted documents properly describe Starwood Digital Venture's intent to construct a new data center at 0 River Road and 825 Governor Lea Road, New Castle, Delaware.

Tax Parcels 10-049.00-073 and 12-002.00-025.

As the authorized agent Verdantas LLC has Starwood Digital Venture's consent to represent the company, answer questions for the company and provide information on Starwood Digital Venture's behalf.

Date: September 5, 2025

Company Representative:



Signature



Printed Name

Title:



On Behalf of: Starwood Digital Ventures

ATTACHMENT 2

SCG Emergency Generator Emissions Calculations

Data Center Generator Power Rating	3,268 kW	* Calculated as 0.746 x HP
Data Center Generator HP	4,381 HP	Caterpillar specification performance data EM4717 (page 28)
House Unit Generator HP	2,191 HP*	* Estimated based on a house unit being half the size of a data center unit
House Unit Power Rating	1,634 kW*	* Estimated based on a house unit being half the size of a data center unit
Data Center Unit	Phase 1	252 units
Data Center Unit	Phase 2	252 units
House Unit	Phase 1	6 units
House Unit	Phase 2	6 units

Values indicated on CZA application

Data Center Unit emission factors (post SCR)			
PM	0.020 g/hp*hr	Safety Power design parameters, Table 2	
SOx	1.21E-05 lb/hp*hr	AP-42 Table 3.4-1	
NOx	0.50 g/hp*hr	Safety Power design parameters, Table 2	
CO	0.34 g/hp*hr	Safety Power design parameters, Table 2	
VOC	0.04 g/hp*hr	Safety Power design parameters, Table 2	

House Unit emission factors (post SCR)			
PM	0.020 g/hp*hr	Safety Power design parameters, Table 2	
SOx	1.21E-05 lb/hp*hr	AP-42 Table 3.4-1	
NOx	0.50 g/hp*hr	Safety Power design parameters, Table 2	
CO	0.34 g/hp*hr	Safety Power design parameters, Table 2	
VOC	0.04 g/hp*hr	Safety Power design parameters, Table 2	

Annual Emissions								
	1 Data Center unit	1 Data Center unit	1 House unit	1 Data Center unit	1 House unit	Phase 1 & 2 @ 20 hours	Phase 1 & 2 @ 500 hours	
PM	0.19 lb/hr	4.6 lb/day	0.10 lb/hr	0.00010 ton/hr	0.000048 ton/hr	0.99 ton/yr	25 ton/yr	
SOx	0.05 lb/hr	1.3 lb/day	0.03 lb/hr	0.000027 ton/hr	0.000013 ton/hr	0.27 ton/yr	6.8 ton/yr	
NOx	4.8 lb/hr	116 lb/day	2.4 lb/hr	0.0024 ton/hr	0.0012 ton/hr	25 ton/yr	616 ton/yr	
CO	3.3 lb/hr	79 lb/day	1.6 lb/hr	0.0016 ton/hr	0.00082 ton/hr	17 ton/yr	419 ton/yr	
VOC	0.4 lb/hr	9 lb/day	0.2 lb/hr	0.0002 ton/hr	0.0001 ton/hr	2 ton/yr	49 ton/yr	

Daily Emissions @20 hrs							
	1 DC unit @20 hrs	DC unit total	1 H unit @20 hrs	House unit total	Facility total	Phase 1 & 2 @ 20 hours	
PM	3.9 lb/hr	1,947 lb/day	1.9 lb/hr	23 lb/day	1,970 lb/day	2,000 lb/day	
SOx	1.1 lb/hr	536 lb/day	0.53 lb/hr	6.4 lb/day	542 lb/day	540 lb/day	
NOx	97 lb/hr	48,678 lb/day	48 lb/hr	579 lb/day	49,257 lb/day	49,000 lb/day	
CO	66 lb/hr	33,101 lb/day	33 lb/hr	394 lb/day	33,495 lb/day	33,000 lb/day	
VOC	8 lb/hr	3,894 lb/day	4 lb/hr	46 lb/day	3,941 lb/day	4,000 lb/day	

Daily Emissions @500 hrs							
	1 DC unit @500 hrs	DC unit total	1 H unit @500 hrs	House unit total	Facility total	Phase 1 & 2 @ 500 hours	
PM	97 lb/hr	48,678 lb/day	48 lb/hr	579 lb/day	2,052 lb/day	2,100 lb/day	
SOx	27 lb/hr	13,397 lb/day	13 lb/hr	159 lb/day	565 lb/day	570 lb/day	
NOx	2,415 lb/hr	1,216,944 lb/day	1,207 lb/hr	14,487 lb/day	51,310 lb/day	51,000 lb/day	
CO	1,642 lb/hr	827,522 lb/day	821 lb/hr	9,851 lb/day	34,891 lb/day	35,000 lb/day	
VOC	193 lb/hr	97,356 lb/day	97 lb/hr	1,159 lb/day	4,105 lb/day	4,000 lb/day	

PERFORMANCE DATA[EM4717]

January 15, 2025

PART MATTER	G/HP-HR	0.05	0.08	0.11	0.10	0.05
TOTAL NOX (AS NO2)	G/KW-HR	7.64	4.86	4.05	10.39	14.35
TOTAL CO	G/KW-HR	0.92	0.98	0.99	2.14	4.85
TOTAL HC	G/KW-HR	0.06	0.06	0.07	0.12	0.58
PART MATTER	G/KW-HR	0.06	0.10	0.15	0.14	0.07
TOTAL NOX (AS NO2)	LB/HR	53.94	25.86	14.48	18.83	10.46
TOTAL CO	LB/HR	6.49	5.21	3.53	3.88	3.53
TOTAL HC	LB/HR	0.41	0.31	0.25	0.21	0.42
TOTAL CO2	LB/HR	4,609	3,691	2,728	1,362	674
PART MATTER	LB/HR	0.45	0.55	0.53	0.25	0.05
OXYGEN IN EXH	%	8.9	9.5	9.5	8.9	13.2
DRY SMOKE OPACITY	%	2.1	2.6	3.0	3.2	0.0
BOSCH SMOKE NUMBER		0.87	0.97	1.04	1.06	0.68

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

GENSET POWER WITHOUT FAN	EKW	3,100.0	2,325.0	1,550.0	775.0	310.0
PERCENT LOAD	%	100	75	50	25	10
ENGINE POWER	BHP	4,381	3,299	2,211	1,118	451
TOTAL NOX (AS NO2)	G/HR	29,359	14,078	7,883	10,251	5,696
TOTAL CO	G/HR	5,297	4,253	2,881	3,166	2,886
TOTAL HC	G/HR	250	189	153	127	256
PART MATTER	G/HR	283.0	352.3	335.9	159.6	33.8
TOTAL NOX (AS NO2) (CORR 5% O2)	MG/NM3	3,124.4	1,866.8	1,414.5	3,710.8	3,928.1
TOTAL CO (CORR 5% O2)	MG/NM3	560.7	560.1	512.8	1,132.9	1,997.8
TOTAL HC (CORR 5% O2)	MG/NM3	22.9	21.6	23.6	39.5	153.8
PART MATTER (CORR 5% O2)	MG/NM3	24.9	38.8	50.1	47.3	21.1
TOTAL NOX (AS NO2) (CORR 15% O2)	MG/NM3	1,159.4	692.7	524.9	1,377.0	1,457.6
TOTAL CO (CORR 15% O2)	MG/NM3	208.1	207.8	190.3	420.4	741.3
TOTAL HC (CORR 15% O2)	MG/NM3	8.5	8.0	8.8	14.7	57.1
PART MATTER (CORR 15% O2)	MG/NM3	9.2	14.4	18.6	17.5	7.8
TOTAL NOX (AS NO2) (CORR 5% O2)	PPM	1,522	909	689	1,808	1,913
TOTAL CO (CORR 5% O2)	PPM	449	448	410	906	1,598
TOTAL HC (CORR 5% O2)	PPM	43	40	44	74	287
TOTAL NOX (AS NO2) (CORR 15% O2)	PPM	565	337	256	671	710
TOTAL CO (CORR 15% O2)	PPM	166	166	152	336	593
TOTAL HC (CORR 15% O2)	PPM	16	15	16	27	107
TOTAL NOX (AS NO2)	G/HP-HR	6.75	4.29	3.57	9.17	12.67
TOTAL CO	G/HP-HR	1.22	1.29	1.31	2.83	6.42
TOTAL HC	G/HP-HR	0.06	0.06	0.07	0.11	0.57
PART MATTER	G/HP-HR	0.07	0.11	0.15	0.14	0.08
TOTAL NOX (AS NO2)	G/KW-HR	9.17	5.83	4.86	12.47	17.22
TOTAL CO	G/KW-HR	1.66	1.76	1.78	3.85	8.72
TOTAL HC	G/KW-HR	0.08	0.08	0.09	0.15	0.77
PART MATTER	G/KW-HR	0.09	0.15	0.21	0.19	0.10
TOTAL NOX (AS NO2)	LB/HR	64.73	31.04	17.38	22.60	12.56
TOTAL CO	LB/HR	11.68	9.38	6.35	6.98	6.36
TOTAL HC	LB/HR	0.55	0.42	0.34	0.28	0.56
PART MATTER	LB/HR	0.62	0.78	0.74	0.35	0.07

Regulatory Information

EPA EMERGENCY STATIONARY			2011 - ----	
GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 60 SUBPART IIII AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE EMERGENCY STATIONARY REGULATIONS.				
Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
U.S. (INCL CALIF)	EPA	STATIONARY	EMERGENCY STATIONARY	CO: 3.5 NOx + HC: 6.4 PM: 0.20

Altitude Derate Data

A BLANK IN THE ALTITUDE DERATE TABLE SIGNIFIES THAT NO RATING IS AVAILABLE AT THAT SPECIFIED ALTITUDE AND AMBIENT TEMPERATURE.

THE TEMPERATURES LISTED IN THE CHART ARE AMBIENT TEMPERATURES. THE FOLLOWING DERATE CHART WAS CALCULATED ASSUMING A 5 DEG C RISE IN AIR TEMPERATURE BETWEEN AMBIENT AND THE TURBOCHARGER INLET.



clean essential energy

DESIGN PARAMETERS

The design of the Safety Power emissions reduction system is based on the following conditions.

Note: NO_x is calculated as NO₂.

Table 1 – Engine Data

Engine Type:	CAT C175-16 3000kw
Application	Stand-by
Engine Power	3,000 ekW
Exhaust Temperature	894 °F
Design Exhaust Flow Rate	24,561 (CFM)
Fuel Type	Diesel

Table 2 – Emissions Data at Full Engine Load

Engine Option	Emissions	Catalyst Inlet	Emissions Requirement	Catalyst Outlet
CAT C175-16 3000kw	NO _x (g/bhp-h)	6.07	0.50	0.50
	CO (g/bhp-h)	0.34	2.60	0.34
	VOC (g/bhp-h)	0.04	0.14	0.04
	PM (g/bhp-h)	0.03	0.020	0.020

Notes: (1) The EPA does not treat methane and ethane as VOC's. Safety Power can achieve a stated reduction of VOC's based on the EPA definition assuming that the VOC's manifest themselves as propene. (2) all emissions reductions are based on an average at steady state using SCAQMD method 100.1 for NO_x and SCAQMD/EPA methods 25.1/25.3 for CO and VOC's or mutually agreed test method approved in writing. (3) if NMHC/VOC data isn't provided 0.6 g/hp-hr is to be assumed (unless otherwise stated).

Table 3 – SCR System Data

Engine Option	CAT C175-16 3000kw
Max. Ammonia Slip @ 15% O₂	8 ppm
Urea Consumption - 32.5% solution (+/- 15%)	12.4 USG/hr
System Pressure Loss	21.5" WC
System Inlet/Outlet ANSI Flange Inches	26/30

Safety Power Inc
26-5155 Spectrum Way
Mississauga, On L4W 5A1
Canada
www.safetypower.com

Table 3.4-1. GASEOUS EMISSION FACTORS FOR LARGE STATIONARY DIESEL AND ALL STATIONARY DUAL-FUEL ENGINES^a

Pollutant	Diesel Fuel (SCC 20200401) Emission Factor (lb/hp-hr) (power output)	Diesel Fuel (SCC 20200401) Emission Factor (lb/MMBtu) (fuel input)	Diesel Fuel (SCC 20200401) Emission Factor Rating	Dual Fuel ^b (SCC 20200402) Emission Factor (lb/hp-hr) (power output)	Dual Fuel ^b (SCC 20200402) Emission Factor (lb/MMBtu) (fuel input)	Dual Fuel ^b (SCC 20200402) Emission Factor Rating
NO _x - Uncontrolled	0.024	3.2	B	0.018	2.7	D
NO _x - Controlled	0.013 ^c	1.9 ^c	B	ND	ND	NA
CO	5.5 E-03	0.85	C	7.5 E-03	1.16	D
SO _x	8.09 E-03S ₁	1.01S ₁	B	4.06 E-04S ₁ + 9.57E-03S ₂	0.05S ₁ + 0.895S ₂	B
CO ₂	1.16	165	B	0.772	110	B
PM	0.0007 ^c	0.1 ^c	B	ND	ND	NA
TOC (as CH ₄)	7.05 E-04	0.09	C	5.29 E-03	0.8	D
Methane	f	f	E	3.97 E-03	0.6	E
Nonmethane	f	f	E	1.32 E-03	0.2 ^g	E

^aBased on uncontrolled levels for each fuel, from References 2,6-7. When necessary, the average heating value of diesel was assumed to be 19,300 Btu/lb with a density of 7.1 lb/gallon. The power output and fuel input values were averaged independently from each other, because of the use of actual brake-specific fuel consumption (BSFC) values for each data point and of the use of data possibly sufficient to calculate only 1 of the 2 emission factors (e. g., enough information to calculate lb/MMBtu, but not lb/hp-hr). Factors are based on averages across all manufacturers and duty cycles. The actual emissions from a particular engine or manufacturer could vary considerably from these levels. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code.

^bDual fuel assumes 95% natural gas and 5% diesel fuel.

^cReferences 8-26. Controlled NO_x is by ignition timing retard.

^dAssumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil; S₂ = % sulfur in natural gas. For example, if sulfur content is 1.5%, then S = 1.5.

^eAssumes 100% conversion of carbon in fuel to CO₂ with 87 weight % carbon in diesel, 70 weight % carbon in natural gas, dual-fuel mixture of 5% diesel with 95% natural gas, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and natural gas heating value of 1050 Btu/scf.

^fBased on data from 1 engine, TOC is by weight 9% methane and 91% nonmethane.

^gAssumes that nonmethane organic compounds are 25% of TOC emissions from dual-fuel engines. Molecular weight of nonmethane gas stream is assumed to be that of methane.

$$\text{Sulfur content} = 0.0015\% \quad \text{Factor} = 8.09 \text{ E-03}(0.0015) = 1.21 \text{ E-05}$$

ATTACHMENT 3



New Castle County Department of Land Use

August 29, 2025

In reply, refer to:
2025-0473-V
825 Governor Lea Road
New Castle, DE 19720

Saul Ewing LLP
c/o: Jenifer Fitzgerald
1201 N. Market St.
Wilmington, DE 19801

Dear Ms. Fitzgerald:

The New Castle County Department of Land Use is in receipt of your request for verification of zoning and use for tax parcel number 12-002.00-025, which is located at 825 Governor Lea Road in New Castle, Delaware.

A review of the Official Zoning Map of New Castle County indicates the subject parcel is split zoned **Commercial Regional (CR) and Heavy Industry (HI)**.

In the HI zoning district, Data Centers (NAICS 518210) are classified as a Light Industry Use, (Information Industries, NAICS 51) and are allowed as a permitted use pursuant to Sections 40.33.270 and Table 40.03.110

In the CR zoning district Data Centers (NAICS 518210) are also classified as an Office Use (Information services and data processing, NAICS 518) and are allowed as a permitted use pursuant to Sections 40.33.240 and Table 40.03.110.

A Zoning Verification only addresses nonconforming situations (Section 40.08.310), permitted uses, zoning districts and standards within the Unified Development Code (Chapter 40) **at the time that the verification is issued** (Section 40.31.250). **A Zoning Verification is not a permit and does not offer any guarantee that any other required plans, applications, certifications, or variances for your project will be approved. A Zoning Verification does not verify that a use complies with State and Federal laws governing the use.**

Please be advised that this letter only verifies whether the type of use that exists or is proposed on the site to the extent you described it in your zoning verification application – is permitted, not permitted, or permitted under limited circumstances in the zoning district.

If your project involves an expansion of the existing use, a change of use, alterations to the building or site, demolition, or new construction, one or more permits may be needed before you can initiate the use. The following is a summary of Department of Land Use permits, certificates, and plans that may be required for your project.

Any new use or change of use in an existing building may require:

1. **Limited Use Permit.** If the existing or proposed use is identified as a “limited use” on the first page of this letter you will need to apply for a Limited Use Permit, it must be accompanied by a site plan, or other supporting documentation, demonstrating that the special standards for that use are met. Refer to Articles 3 and 31 of the Unified Development code for additional information.
2. **Special Use Permit.** If the existing or proposed use is identified as a “special use” on the first page of this letter you will need to apply for a Special Use Permit, it must be accompanied by a site plan, or other supporting documentation, demonstrating that the special standards for that use are met. Refer to Articles 3 and 31 of the Unified Development code for additional information. The New Castle County Board of Adjustment hears and renders decisions on all Special Use Permits (Section 40.31.140)
3. **Certificate of Use.** To either institute a new use, or expand an existing use, in an existing building you must obtain a Certificate of Use. The Department will determine whether the building meets the building code and parking requirements for such use. Refer to Chapter 6 of the New Castle County Code (Building Code) for additional information.

Any new construction, or alteration or expansion of existing buildings and features on the site may require:

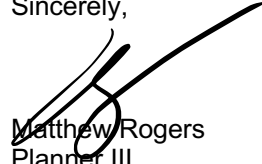
1. **Major or Minor Land Development Plan.** If your project will subdivide land or add more than 1,000 square feet of gross floor area (5,000 sf in OR, BP, I, HI, and P zoning districts), you must submit a major or minor land development plan. The plan will be reviewed for compliance with the land development criteria outlined in the Unified Development Code. During review of the plan, the Department may hold public hearings and may identify other applications, plans, studies, or permits that need to be submitted before development can commence. Refer to Article 31 of the Unified Development Code for general requirements.
2. **Parking Plan.** If your project requires installation, expansion, or reconfiguration of a parking lot, you will need to submit a parking plan. Refer to Articles 3 and 31 of the Unified Development Code for general requirements.
3. **Building Permit / Demolition Permit / Sign Permit.** If your project will involve altering or enlarging a building (including mechanical systems), demolishing all or part of a building, or installing new signs, you must obtain permits for those activities. During the review of these applications, the Department may identify other applications, plans, studies, or permits that need to be submitted before development can commence. Before the new or improved building can be inhabited, a **Certificate of Occupancy** must be secured from the Department. Refer to Chapter 6, Article 3 of the New Castle County Code (Building Code) for additional information.

This summary of Department of Land Use permit applications is intended only for general informational purposes and is not intended to be inclusive of the comprehensive requirements contained in the New Castle County Code. Please be advised that some of the review processes described above may also require recommendations or decisions from County boards (Planning Board, Historic Review Board, Board of Adjustment, and Resource Protection Area Technical Advisory Committee) or outside agencies. New Castle County must abide by regulations imposed on it by a variety of State and Federal agencies. Accordingly, any of the County permits described above may be subject to additional review processes that address environmental concerns; resource protection; public health, safety, and welfare; and a variety of other issues. In some cases, landowners may need to address the requirements of those agencies independently.

Landowners contemplating a change of use, future development, or alterations to buildings and land are encouraged to engage the services of an engineer, land surveyor, and/or attorney for advice on any physical constraints that may limit development of the property, and guidance on what permits may be needed to commence a new use or development.

General questions regarding the plan review process; building, demolition, and sign permits; and Certificates of Use/Occupancy, can be answered by the Department at 395-5400. Copies of documents such as certificates of occupancy or code violations may be obtained, where applicable and available, by submitting an Information Request Form (FOIA). The form is available online at www.newcastlede.gov. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew Rogers", is written over the printed name.

Matthew Rogers
Planner III
New Castle County
Department of Land Use