



**STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION**

August 22, 2022  
October 3, 2022

Alan Decktor  
Pennoni Associates, Inc.  
18072 Davidson Drive  
Milton, DE 19968

Mr. David L. Edgell, AICP  
Director, Office of State Planning Coordination  
122 Martin Luther King, Jr. Blvd. South – Haslet Armory  
Dover, Delaware 19901

RE: PLUS review – 2022-07-11; Route 13 Self-Storage - Bridgeville  
RE: PLUS review responses for Route 13 Self Storage

Dear Mr. Decktor:

Thank you for meeting with State agency planners on July 27, 2022 to discuss the proposed plans for the Route 13 Self-Storage in Bridgeville. According to the information received, you are seeking review of a site plan for 25 self-storage buildings and a main office building on 13.41 acres zone C-1.

We are in receipt of your comments dated August 22, 2022, as it pertained to our presentation of the above referenced project on July 27, 2022. We thank you for the opportunity to present our client's project on property located on the corner of Passwaters Farm Road and Rt. 13, Town of Bridgeville, Sussex County, Delaware. The project presented was for a 26-warehouse building facility for self-storage. The entrance is located on Passwaters Farm Road.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as the Town of Bridgeville is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.**

## **Strategies for State Policies and Spending**

This project is located in Level 1 and 2 investment area, which is consistent with the 2020 Strategies for State Policies and Spending. This site is also located in the Town of Bridgeville.

Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near-term future.

The proposed facility is on a parcel of land that is in an Investment Level 1 according to the 2020 Strategies for State Policies and Spending. We recognize the State's comment above that Level 1 is consistent with 2020 Strategies for State Policies and Spending, and that the OSPC supports this site plan.

## **Code Requirements/Agency Permitting Requirements**

Department of Transportation – Contact Stephen Bayer 302-760-4834

- The site access on Passwaters Farm Road (SCR 5B) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.  
Noted.
- Each segment of State maintained road is assigned a Functional Classification in accordance with the States Functional Classification Map. Definitions of these classifications are found in Sections 1.6.4 to 1.6.8 of the Manual. The existing design of the road is not required to meet the design standards of the functional classification at the time the classification is assigned. All access designs shall meet the standards set forth in the Manual for the assigned functional class of the frontage road and/or affected segment of road. The developer is responsible for improving the segment of road along their site's frontage to meet the design standards of the road's functional class.
  - Questions regarding the requirement to improve the site frontage should be directed to the Subdivision Engineer, Ms. Wendy Polasko. Ms. Polasko may be reached at [Wendy.Polasko@delaware.gov](mailto:Wendy.Polasko@delaware.gov) or (302) 760-2542.

Noted. We have had a pre-submittal meeting to discuss roadway improvements.

- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at [https://www.deldot.gov/Business/subdivisions/pdfs/Meeting\\_Request\\_Form.pdf?08022017](https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017). A Pre-Submittal Meeting was held on June 10, 2021 for 88,000 square foot of mini warehousing space.

- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

Noted.

- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Using the 11th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates that the subject development, consisting of 102,500 square feet of mini warehousing space, would generate 149 vehicle trip ends per day and estimates the weekday morning and evening peak hour trip ends at 9 and 15, respectively. Therefore, a TIS would not be required. However, a new trip generation diagram for the record plan would need to be approved for the updated use.

Noted.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on the frontage roads. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline of Passwaters Farm Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the outmost edge of the through lanes on Sussex Highway (US Route 13). The following right-of-way dedication note is required, **"An X-foot wide strip of right-of-way from the centerline is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation."**

Noted.

- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation."**

Noted.

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
  - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
  - Depiction of all existing entrances within 300 feet of the proposed entrance on Passwaters Farm Road.

- Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required.  
**Noted.** We are proposing a SUP along the Rt. 13 property frontage.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Passwaters Farm Road and US Route 13.  
**Noted.**
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.  
**Noted.**
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.  
**Noted.**
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.  
**Noted.**
- In accordance with Sections 5.2.7 and 5.2.8 of the Manual, the site entrances must follow the design guidelines for the Horizontal and Vertical Alignment to the road. There is a significant amount of fall between Passwaters Farm Road and the Site. The entrance is additionally located on or near the curve on Passwaters Farm Road.  
**Noted.**
- The potential parcel of 1.54 acres at the corner of US Route 13 and Passwaters Farm Road is not exempt from any required easement. Additionally, the potential parcel will not be allowed access onto US Route 13 or Passwaters Farm Road due to proximity to the intersection of US Route 13 and Passwaters Farm Road, the site entrance per Section 5.2.2 of the Manual, and restriction of access onto US Route 13 due to the Coastal Corridor Preservation Program (CCPP). The parcel will be allowed access through the

site. DelDOT would suggest the connection from the site to the potential parcel have a separate connection than through the main office parking lot.

**Noted.**

Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480

**Disclaimer Clause:** Staff from the Delaware Department of Natural Resources and Environmental Control (DNREC) reviewed the project submitted for PLUS review. The absence of comments regarding specific resources does not indicate that there are not additional constraints or environmental issues on site, nor does it indicate DNREC support of a project.

### **Concerns Identified Within the Development Footprint**

#### **Wetlands and Subaqueous Lands**

Maps from the Statewide Wetlands Mapping Project indicate the potential presence of non-tidal riverine wetlands along the northwestern boundary of the site. The application indicates that wetlands have not been delineated.

**The indication is the result of the existing ditch running down the property line, but the ditch is located on the adjacent property. The property consists of active farmland and no wetlands were found on the site.**

#### **Requirements:**

- A delineation of waterways and wetlands may be required, to be completed by a qualified professional hired by the landowner. For a list of consultants and engineers who can conduct wetland delineations, please visit the DNREC Wetlands and Subaqueous Lands Section link:  
<http://www.dnrec.delaware.gov/wr/Documents/WSLS/Consultant%20List.pdf>
- If dredge or fill of wetlands or subaqueous lands becomes necessary, permitting and/or authorization requirements may apply.

Federal Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278.

Website: <https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/>

State Contact: DNREC Wetlands and Subaqueous Lands Section at (302) 739-9943.

Website: <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

#### **Vegetated Buffer Zones**

Site plans do not show a vegetated buffer along potential non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help prevent

encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

**Noted.** The existing ditch that may or may not have wetlands on the adjacent property is located in woods and the woods acting as a buffer won't be disturbed.

Requirements:

- The applicant must comply with minimum vegetated buffer widths as identified within county and municipal codes.

**Noted.**

- Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600. Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/contact-information/>

### **Stormwater Management**

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's *Sediment and Stormwater Regulations*.

Requirements:

A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is the Sussex Conservation-District.

The project will propose a large stormwater management facility to handle water quality and quantity requirements for stormwater runoff management. The proposed BMP's will treat urban stormwater runoff by incorporating storage and slow release into the existing ditch network. Runoff first passes through multiple pretreatment mechanisms to trap sediment and organic matter before it reaches the BMP. As the runoff penetrates the underlying soil, chemical and physical absorption processes remove pollutants. The system allows for Total Nitrogen (TN) and Phosphorus (TP) reduction along with Total Suspended Solids (TSS).

- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (<https://apps.dnrec.delaware.gov/enoi/>, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the \$195 fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

**Noted. We have had a pre-application meeting with SCD to discuss the project.**

Plan review agency contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219.

Website: <https://www.sussexconservation.org/>

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.

E-mail: [DNREC.Stormwater@delaware.gov](mailto:DNREC.Stormwater@delaware.gov).

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

### **Hydrologic Soils Group**

Hydrologic Soil Group B/D soils (poorly drained) have been identified in the northern portion of the site. These soil types are typically not conducive to utilizing infiltration stormwater Best Management Practices such as bioretention and infiltration basins, which must meet minimum infiltration requirements.

Requirements:

- Any stormwater Best Management Practices that propose the use of infiltration or natural recharge shall include a soils investigation.

**Noted, we have conducted a soils test and infiltration is not feasible in specific areas of the site so we are utilizing other BMP options for stormwater management.**

Contact: DNREC Sediment and Stormwater Program at (302) 739-9921.

E-mail: [DNREC.Stormwater@delaware.gov](mailto:DNREC.Stormwater@delaware.gov).

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

### **Wastewater permits – Large Systems**

Sussex County holds existing permits with the DNREC Groundwater Discharges Section's Large Systems Branch for wastewater disposal.

Requirements:

- If additional flows to Sussex County's system will require capacity updates, it is the responsibility of the permittee (Sussex County) to notify the Large Systems Branch.

**Noted. We will be tying into Sussex County Sewer System.**

Contact: DNREC Large Systems Branch at (302) 739-9948.

Website: <https://dnrec.alpha.delaware.gov/water/groundwater/>

Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325

**Proposed Project Parcel Flood Concern (1000 Years or Greater)**

- This parcel(s) is/are located within an area of **Area of Minimal Flood Hazard** for 1000 years or greater.

State Historic Preservation Office – Contact Carlton Hall 302-736-7400

- Probability for precontact archaeological sites in the project area is low.
- One previously recorded historic archaeological site has been noted within the parcel (S01692, 7S-E-198); however, additional archaeological survey regarding this site has determined that no intact archaeological features or resources are likely present, and that any additional archaeological fieldwork would not be recommended.
- Additionally, as the project area has seen considerable amounts of disturbance, this office has no archaeological concerns.

Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394

This document is for information purposes only and does not constitute any type of approval from the Delaware State Fire Marshal's Office

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

**Fire Protection Water Requirements**

- Water distribution system capable of delivering at least 1,500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.  
**Noted. We will be extending Town water to the site.**
- Where a water distribution system is proposed for business occupancy sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.  
**Noted.**

**Fire Protection Features**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.  
**Noted. The larger building will have sprinkles.**
- Buildings greater than 10,000 Sq. Ft., 3-stories or more, over 35 feet in height, or classified as High Hazard are required to meet fire lane marking requirements.  
**Noted.**



- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.

**Noted.**

Show Fire Lanes and Sign Detail as shown in DSFPR.

**Noted. A minimum 24' wide paved roadway (in accordance with the Town of Bridgeville Code) will be constructed to the proposed facility.**

- All mini-storage buildings greater than 2,500 square feet in area and where any of the individual storage units are separated by less than a 1-hour fire resistance-rated barrier shall require an automatic sprinkler system be installed throughout.

**Noted. All smaller mini storage building are sized at 2,400 SF and wont have sprinklers but will meet the individual fire wall requirements for the units.**

*Mini-Storage Building is defined as a storage occupancy partitioned into individual storage units, with a majority of the individual units not greater than 750 square feet in area, and that are rented or leased for the purposes of storing personal or business items where all of the following apply:*

*(1) the storage units are separated from each other by less than a 1-hour fire resistance rated barrier,*

*(2) the owner of the facility does not have unrestricted access to the storage units, and*

*(3) the items being stored are concealed from view from outside the storage unit.*

### **Accessibility**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the site must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance road, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the site.

**Noted.**

- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet.

**Noted.**

- The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.  
**Noted.**

### **Gas Piping and System Information**

- Provide type of fuel proposed and show locations of bulk containers on plan.  
**Noted.**

### **Required Notes**

- Provide a note on the final plans submitted for review to read “All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

### **Recommendations/Additional Information**

This section includes a list of site-specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

### **Department of Transportation – Contact Stephen Bayer 302-760-4834**

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Passwaters Farm Road and US Route 13.

- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision dates of March 21, 2019 and March 16, 2022. The notes can be found at <https://www.deldot.gov/Business/subdivisions/>  
**Noted**

Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480

### **Wetlands and Subaqueous Lands**

- Do not disturb wetland areas. Wetlands are a critical part of our natural environment. They reduce the impacts of flooding, absorb pollutants, and improve water quality. Wetlands provide habitat for animals and plants and many contain a wide diversity of life, supporting plants and animals that are found nowhere else.

**Noted**

Federal Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278.

Website: <https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/>

State Contact: DNREC Wetlands and Subaqueous Lands Section at (302) 739-9943.

Website: <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

### **Vegetated Buffer Zones**

- If a wetland delineation confirms the presence of non-tidal wetlands on the site, incorporate a 100-foot vegetated buffer zone from the edge of wetlands and all waterways to protect water quality and to provide an additional margin of safety for flooding.
- Vegetated buffer zones should be left undisturbed during construction and should be identified outside of the Limit of Disturbance on the engineering plans. In some instances, stormwater outfalls, conveyances, and emergency spillways may cross through these zones, and will require temporary disturbance during construction.
- Maintain vegetated buffer zones as either grasslands/meadows or forest. Buffer zones should be planted exclusively with native trees and plants. Native plants are well-suited to our climate and require limited maintenance. They also provide an increasingly important role in the survival of native birds and beneficial insects whose habitat is shrinking due to development and climate change.

- Grass cutting for vegetated buffer zones if maintained as meadow should not occur between April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize meadows and grasslands for breeding habitat.

Noted

- Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600. Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/contact-information/>

## Stormwater Management

- Where the site and soil conditions allow, integrate runoff reduction techniques including infiltration basins, bioretention (rain gardens), filter strips, and pavers to encourage on-site stormwater infiltration and reduce runoff.

The project will propose a large stormwater management facility to handle water quality and quantity requirements for stormwater runoff management. The proposed BMP's will treat urban stormwater runoff by incorporating storage and slow release into the existing ditch network. Runoff first passes through multiple pretreatment mechanisms to trap sediment and organic matter before it reaches the BMP. As the runoff penetrates the underlying soil, chemical and physical absorption processes remove pollutants. The system allows for Total Nitrogen (TN) and Phosphorus (TP) reduction along with Total Suspended Solids (TSS).

- For improved stormwater management, preserve existing trees, wetlands, and passive open space.

Noted.

Plan review agency contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219.

Website: <https://www.sussexconservation.org/>

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.

E-mail: [DNREC.Stormwater@delaware.gov](mailto:DNREC.Stormwater@delaware.gov).

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

## Drainage

- All existing drainage ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.
- Environmental permits or exemptions may be required by the County Conservation District (Standard Plan), the DNREC Sediment and Stormwater Program (eNOI/NOT), Army Corp of Engineers, and/or DNREC Wetlands and Subaqueous Lands Section prior to clearing and/or excavating ditch channels.

- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.

Noted.

- Any drainage/utility easement should not possess structures such as decks, buildings, sheds, kennels, or fences within the drainage easement to allow for future drainage maintenance. Trees and shrubs planted within a drainage/utility easement should be spaced to allow for drainage maintenance at maturity.

Noted.

- Contact: DNREC Drainage Program at (302) 855-1930.  
Website: <https://dnrec.alpha.delaware.gov/drainage-stormwater/>

### **Water Quality (Pollution Control Strategies)**

This site lies within the Nanticoke River Watershed. Surface water quality in this watershed does not meet Federal and/or State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.

- Implement vegetated buffers with a width of at least 100 feet around all water features on or adjacent to the site.
- Reduce impervious surfaces on the project site by eliminating areas of impervious pavement and/or using pervious pavement where practicable. Break up large parking lots with planted islands.
- Reduce stormwater runoff by integrating infiltration basins, bioretention (rain gardens), filter strips, and by preserving existing trees, wetlands, and passive open space.
- Reduce the necessity for nutrient application by maintaining open space as meadow or forest planted exclusively with native plants. Native plants are well-suited to our climate and require limited maintenance.

We are utilizing the BMP that fits with the soil and groundwater investigations we have performed, as noted above, most of the site is not feasible for infiltration so we will be using a different BMP option to provide pretreatment, storage and slow release into the tax ditch network matching the pre-development drainage pattern.

Contact: DNREC Division of Watershed Stewardship's Watershed Assessment Section at (302) 739-9939.

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/>

### **Additional Sustainable Practices**

- Consider using renewable energy infrastructure such as solar or geothermal to reduce energy costs and further reduce pollution created from offsite generation. Grant funds and incentives are available for Delmarva Power customers through the DNREC Green Energy Fund, which includes several funding types through the state's major electric utilities (<https://dnrec.alpha.delaware.gov/climate-coastal-energy/renewable/assistance/>).
- On large expanses of impervious surfaces and asphalt, design parking areas to include trees for shading.
- Include space for recycling dumpsters within the preliminary site design stage. These can be placed adjacent to trash dumpsters.
- Incorporate nonmotorized connectivity and install bicycle racks where feasible to help facilitate non-vehicular travel modes.
- Use efficient Energy Star rated products and materials in construction and redevelopment. Energy efficient appliances use less energy over time. This saves consumers and businesses money, while also helping to reduce pollution from power generation.
- Use structural paint coatings that are low in Volatile Organic Compounds to help protect air quality. Air pollution from new construction is generated through the use of maintenance equipment, paints, and consumer products like roof coatings and primers.
- Use recycled materials, such as reclaimed asphalt pavement, to reduce heat island effects on paved surfaces, prevent landfill waste, and lower material costs.

Contact: DNREC Division of Climate, Coastal & Energy at (302) 735-3480.

Website: <https://dnrec.alpha.delaware.gov/climate-coastal-energy/>

**Noted, we will discuss with ownership to determine feasibility within the proposed facility.**

Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325

### **First Street Foundation Community Risk Level**

- The First Street Foundation Community Risk Level considers a Flood Factor, which stems from rain, rivers, tidal, and storm surge to determine the risk of water reaching the building over a 30-year period.
- Community Risk levels represent risk as Minimal (0), Minor (1), Moderate (2), Major (3), Severe (4) and Extreme (5). Overall Community Risk accounts for combined flood risk to residential properties, commercial properties, critical infrastructure facilities, social infrastructure facilities, and roads
- The First Street Foundation rates the community risk level of **(1)** for that immediate area of **Bridgeville**, which suggests a **minor** risk from flooding, and is expected to increase between now and the next 30 years.

### **Population**

- The county has a population density of **265.60** per square mile based on the US 2020 Census report, an increase from 2010 at **208.90** persons per square mile.
- The specific census block(s) the project is located on has a total population of **39**, though, with development, this will undoubtedly change.
- The adjacent blocks aggregate brings the area to a total population of **49**.

### **FEMA National Risk Index**

- The FEMA National Risk Index is an online mapping application that identifies communities most at risk of 18 natural hazards. The FEMA National Risk Index is calculated by multiplying the Expected Annual Loss times the Social Vulnerability and dividing that by the Community Resilience.

$$\begin{array}{rcl} \text{Expected Annual Loss} & & \\ \times \text{ Social Vulnerability} & & \\ \div \text{ Community Resilience} & & \\ \hline = \text{Risk Index} & & \end{array}$$

- According to FEMA's National Risk Index, the parcel(s) is considered **relatively low** for overall natural hazards risks.
- Community Resilience is a consequence reduction risk component and a community risk factor that represents the ability of a community to prepare for anticipated natural hazards, adapt to changing conditions and withstand/recover rapidly from disruptions. Social Vulnerability is a consequence-enhancing risk factor that represents the susceptibility of social groups to the adverse impacts of natural hazards.
- Its community resilience is rated **relatively moderate**, while its social vulnerability is rated **relatively moderate**.

### Potential Parcel Solar Panel Capabilities

- Regarding energy use and consumption, the parcel utilizes **Natural Gas** as the predominant fuel type for heating purposes. However, for electricity generation via solar panels, the parcels have an average photovoltaic power potential of **1490 kWh/kWp**. As such, should solar panels be utilized, we recommend an optimum tilt of the photovoltaic modules at approximately (**35°**), which could provide a potential of **1807 kWh/m<sup>2</sup>**.

### Renewable Energy Commitment

- DEMA strongly encourages the use of renewable energies and high-efficiency appliances and utilities.
- Regarding utilities, DEMA suggests incorporating 90% series furnaces/HVAC systems; the closer to 99%, the better, and A/C units of 20 Seer or greater. DEMA recommends using tankless water heaters, and battery backup systems for sump pumps to reduce potential water damage from power failure.
- Lastly, DEMA encourages the integration of modern and emerging technologies, such as the potential for electric vehicles in garages/parking lots, green roofs where applicable and allowable, and the like.

### Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for an appointment.
- Applications and brochures can be downloaded from our website: [www.statefiremarshal.delaware.gov](http://www.statefiremarshal.delaware.gov), technical services link, plan review, applications or brochures.



**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason, therefore.**

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

David L. Edgell, AICP  
Director, Office of State Planning Coordination

CC: Town of Bridgeville

Attached:  
Sussex County Engineering Comments



Alan M. Decktor, PE, ENV SP  
Senior Engineer