



February 17, 2023

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

RE: Leander Lakes III – Dover, Delaware

Dear Mr. Edgell,

Please allow this letter to serve as our response to the PLUS review of the Leander Lakes III project. Answers to comments have been provided following each comment taken directly from your comment letter for ease of use. Our responses are in red and are in different font for ease in review.

Thank you for meeting with State agency planners on November 16, 2022 to discuss the proposed plans for Leander Lakes III. According to the information received, you are seeking review of a site plan for the construction of 200 multiplex dwelling units.

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 City of Dover is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the city.**

Response: The developer will comply with all Federal, State, and Local Regulations regarding the development of this property. The developer will comply with any and all regulations/restrictions set forth by the City of Dover.

Strategies for State Policies and Spending

This project is located in Level 1 and Level 2 investment areas within the municipal limits of Dover.

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.

Development in Levels 1 and 2 is consistent with the 2020 Strategies for State Policies and Spending; therefore, the Office of State Planning Coordination (OSPC) has no objections to this site plan, provided it meets the relevant codes and ordinances of the City of Dover.

Response: It is noted that this project is located within Level 1 and 2 investment areas where development is anticipated and encouraged by the State. The developer will comply with any and all regulations/restrictions set forth by the City of Dover.

Code Requirements/Agency Permitting Requirements

Department of Transportation (DeIDOT) - Contact Stephen Bayer 302-760-4834

- The site access on Forest Avenue (KCR 51) must be designed in accordance with DeIDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shunl?dc=changes>.
- 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](https://www.deldot.gov/Business/subdivisions/pdfs/Meeting%20Request%20Form.pdf)?080220 17.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DeIDOT 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.
- 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, DeIDOT estimates that the subject development, consisting of 200 multifamily low-rise homes, would generate 1,375 vehicle trip ends per day and estimates the weekday morning and evening peak hour trip ends at 85 and 107, respectively. Therefore, a TIS would normally be required.
 - Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2,000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DeIDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$13,750. AWS Fees are used to fund traffic studies, not to build improvements.
 - The purpose of a TIS, per DeIDOT regulations, is to determine the offsite improvements for which the developer should be responsible to build or contribute toward. DeIDOT anticipates requiring the developer to improve Forest Avenue, within the limits of their frontage, to meet DeIDOT's standards associated with its Functional Classification. Forest Avenue is a Minor Arterial, for which the standard includes 12-foot lanes and 8-

foot shoulders. DelDOT anticipates requiring the developer to improve Artis Drive (KCR 197), within the limits of their frontage; to meet DelDOT's standards associated with its Functional Classification. Artis Drive is a Local Road, for which the standard includes 11-foot lanes and 5-foot shoulders. Frontage, as defined in Section 1.8 of the Manual, includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway.

- Questions regarding the requirement to improve the site frontage should be directed to the Kent County Review Coordinator, Mr. Olayiwola Okesola. Mr. Okesola may be reached at Olayiwola.Okesola@delaware.gov or (302) 760-2409.
- 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. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of Forest Avenue. This dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline of Artis Drive. 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."
- 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."
- 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 Forest Avenue.
 - 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.
- Section 3.5.4.4 of the Manual addresses accessways, paved pathways connecting sidewalk or path along a road frontage to an internal sidewalk or path.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT anticipates recommending that the City require the proposed interconnections at the eastern side of the property to the parcel to the east, Tax Parcel 2- 05-07500-01-0501-00001.
- 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 Forest Avenue and Artis Drive.

- 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>.
- 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>.
- 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.

Response: The developer will continue to coordinate with DelDOT regarding the final frontage improvements, offsite improvements, final entrance locations, and cost sharing contributions. Record and Entrance Plans will be submitted to DelDOT in accordance with the latest DelDOT regulations.

Department of Natural Resources and Environmental Control (DNREC) - 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.

Developers and municipal officials are encouraged to reach out to Clare Quinlan at (302) 735- 3480 if they have any specific requests for information.

Concerns Identified Within the Development Footprint

Wetlands and Subaqueous Lands

Maps from the Statewide Wetlands Mapping Project indicate the potential presence of non-tidal wetlands on the site and an intermittent stream flowing through the project site. The application indicates that wetlands have been delineated. The application proposes road crossings over the wetlands and stream.

Requirements:

- A Subaqueous Lands Permit from the DNREC Wetlands and Subaqueous Lands Section may be required. To apply for a permit online, please visit their website at <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/permits/>.
- Federal permits from the U.S. Army Corps of Engineers may also be necessary if dredge or fill is proposed in non-tidal wetlands or streams. A delineation of waterways and wetlands may be required, to be completed by a qualified professional hired by the landowner. In certain cases, permits from the US Army Corps of Engineers may trigger additional certifications from DNREC

(Coastal Zone Federal Consistency Certification and 401 Water Quality Certification). Work with the U.S. Army Corps of Engineers to determine the appropriate permitting requirements if federal permits are required.

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/>

Response: A wetland delineation has been submitted to the Army Corp of Engineers for a jurisdictional determination. It is understood that the wetland crossings will require wetland permitting.

Vegetated Buffer Zones

Site plans show a 50-foot riparian buffer along non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutant 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.

Requirements:

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

Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600.

Website: <https://dnrec.alphadelaware.gov/fish-wildlife/contact-information/>

Response: The buffers will be compliant with City of Dover regulations.

Stormwater Management

This application proposes greater than 5,000 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 Kent Conservation District.

- 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.

Plan review agency contact: Kent Conservation District at (302) 608-5370.

Website: <http://kentcd.org/>

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

E-mail: DNREC.Stormwater@delaware.gov.

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

Response: It is noted that stormwater management approval will be required. The developer will meet all agency requirements.

Nutrient Management Plan

This project proposes open space of 17.5 acres.

Requirements:

- A nutrient management plan is required for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698- 4558.

Website: <https://agriculture.delaware.gov/nutrient-management/>

Response: It is noted that a nutrient management plan is required if nutrients are applied to areas of open space of 10 acres or more.

Delaware Emergency Management Agency (DEMA) - Contact Phillip Cane 302-659-2325

Proposed Project Parcel Flood Concern

- This parcel is located within an area of Minimal Flood Concern of 1,000 years or greater.

Parcel Status within County Evacuation Zone Location

- The parcel is not located within a Kent County Evacuation Zone.

Response: It is noted that the project is located in areas of minimal flood concern and is not within a Kent County Evacuation Zone.

Delaware Department of Agriculture (DDA) - Contact Milton Melendez 302-698-4500

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Roughley District K-97-10-185 Parcel#: 2-00-07500-01- 3200). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300-foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

- a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:
 - (1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."
 - (2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.
- b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims

under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

- In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:
 - (2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Response: An agricultural setback of 50' will be provided along the southern boundary. No buildings that require a certificate of occupancy will be provided within that setback. The deed restrictions will reflect the items described above.

State Historic Preservation Office (SHPO) - Contact Carlton Hall 302-736-7400

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel. The potential for precontact archaeological resources is medium to high based on several environmental factors conducive for human habitation, some of which being proximity to fresh water, well drained soils, and stable, raised landforms. The potential for historic archaeological resources is medium based on the proximity to historic Forest Ave and the preponderance of agricultural dwellings on the adjacent parcels. Furthermore, most of the project area has seen minimal disturbance, this is especially true for the wooded portion in the SW area of the parcel. Based on the minimal disturbance and potential for archaeological resources, an archaeological survey is recommended prior to any ground disturbing activity.
- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch.54).

Response: Noted. Developer will follow all required regulations.

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

This is a cursory review. Please contact the City of Dover's Fire Marshal Office for formal submission requirements.

Fire Protection Water Requirements

- Water distribution system capable of delivering at least 1,000 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- Where a water distribution system is proposed, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

Fire Protection Features

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- 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.
- Show Fire Department Connection location (must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR.
- Building shall comply with the Large Area Building requirements in DSFPR.
- Parking between the building and the fire lane shall comply with DSFPR.

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.
- 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.
- 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.

Gas Piping and System Information

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

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)
- Provide Road Names, even for County Roads

Response: Noted. Developer will follow all required regulations.

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.

Response: It is noted that these are recommendations and not requirements.

Department of Transportation (DelDOT) - 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 Forest Avenue or Artis Drive.
- 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/>

Response: Noted - The latest notes will be provided on all plan submittals. All pump station access will be provided from internal roads/drive aisles.

Department of Natural Resources and Environmental Control (DNREC)- 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.

Federal Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278. Website:
<https://vwww.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/>

Response: Wetland disturbance will be limited as feasible to provide the proposed crossings and other site improvements.

Vegetated Buffer Zones

- Expand the 50-foot buffer to no less than 100 feet from the edge of wetlands and all waterways to protect water quality and to provide an additional margin of safety for flooding.
- Establish a buffer zone-not a setback-from non-tidal wetlands. This buffer zone should be planted in native species and maintained as a natural area. Buffers should not be contained within any lot lines and should be marked to prevent homeowner encroachment.
- 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.
- Vegetated buffer zones should be deeded as community open space. Signage should be installed at the edge and within the buffer zones to deter residents from encroaching into these common areas.

- 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.

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

Response: Buffers will be provided in accordance with applicable regulations.

Removal of Forest

The preliminary plan proposes the elimination of approximately 0.4 of 1.9 acres of forest on the site. An analysis of historical data indicates that the forest area located in the southern corner of the parcel (outside of the area proposed for development) has likely maintained some degree of forest cover since 1937 and could be considered mature forest. Mature forests possess the potential for rare, threatened, or endangered species that rely on this type of habitat.

- Removing forested areas for development should be avoided to the greatest extent possible. Forests filter water for improved water quality, provide habitat for wildlife, absorb nutrients, infiltrate stormwater, moderate temperatures, and store atmospheric carbon which would otherwise contribute to climate change.
- To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, it is recommended that tree clearing not occur from April 1st to July 31st. Likewise, avoid mowing open space areas and grass filter strips during the same timeframe, as various species of birds utilize these areas for nesting sites.

Contact: DNREC Division of Fish and Wildlife, Species Conservation and Research Program at (302) 735-3600.

Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/conservation/>

Response: Forest removal will be limited as feasible to construct improvements.

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

Plan review agency contact: Kent Conservation District at (302) 608-5370. Website: <http://kentcd.org/>

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: DNREC.stormwater@delaware.gov.

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

Response: SWM will be designed in accordance with DNREC regulations.

Water Quality (Pollution Control Strategies)

This site lies within the St. Jones 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.
- 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.

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

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

Mosquitoes

The project is expected to be impacted by mosquitoes due to its location near large expanses of wetlands. Mosquito control issues are increasing as developments infringe on wetland areas, often

leading to increased demands for mosquito control services beyond what DNREC has the resources to provide.

- If necessary, arrange for long-term mosquito control services through a private company licensed in this area of specialty. In some cases, the DNREC Mosquito Control Section may be able to provide these services free of charge.

Contact: DNREC Division of Fish and Wildlife, Mosquito Control Section at (302) 739- 9917.

Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/mosquito-control/>

Additional Sustainable Practices

- Install electric vehicle (EV) charging stations for your residents. Increasingly, residents will expect EV charging. Installation costs can vary significantly depending on the parking and electricity distribution at a given location, so it is often easier and cheaper to plan for the installation at construction, rather than doing costly retrofits later. The DNREC Division of Climate, Coastal and Energy offers rebates of up to 90% of the cost of the charging station for commercial, multi-unit dwelling and other public properties. These programs address climate change goals of reducing greenhouse gas emissions and improving overall air quality (<https://dmec.alpha.delaware.gov/climate-coastal-energy/clean-transportation/>).
- Use 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/>).
- 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/>

Response: The developer will review the above comments and determine if they are applicable for this project.

Delaware Emergency Management Agency (DEMA) - Contact Philip Cane 302-659-2325

Population

- The county's population density of 310.20 per square mile is based on the US 2020 Census report, an increase from 2010 at 271.30 persons per square mile.
- The specific census block(s) the project is located on has a total population of 268, though, with development, this will undoubtedly change.
- The aggregated adjacent blocks bring the area to a total population of 2004.

FEMA National Risk Index

- The FEMA National Risk Index is an online mapping application that identifies communities most at risk of 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. The FEMA National Risk Index is calculated by multiplying the Expected Annual Loss times the Social Vulnerability and dividing that by the Community Resilience.

Expected Annual Loss

× Social Vulnerability

+ Community Resilience

= Risk Index

- According to FEMA's National Risk Index, the parcel(s) is considered very low for overall natural hazard 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, high, while its social vulnerability is relatively low.

Response: It is noted that this project is within an area considered very low for overall natural hazard risks.

Renewable Energy Commitment

- Regarding energy use and consumption, the parcel utilizes natural gas as the predominant fuel for heating purposes.
- 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 as well as 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.

Response: The developer will review the above comments and determine if they are applicable for this project

Other Recommendations/Information

- Though the property is not located within a flood zone, one does exist directly across the street so DEMA encourages caution and suggests flood mitigation measures are utilized in the construction of these homes including wet/dry floodproofing, raising utilities, and other applicable mitigation strategies as appropriate.

Response: The developer will review the above comments and determine if they are applicable for this project

Delaware Department of Agriculture (DDA)-Contact Milton Melendez 302-698-4500

- The Department of Agriculture strongly encourages the developer to work with the Department's Forestry Section during the design and implementation of the project to plant an effective forested buffer between the proposed residential development.

Response: Landscaping will be provided in accordance with the City of Dover's requirements.

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

- Preliminary meetings are encouraged prior to formal submittal. Please contact the City of Dover's Fire Marshal Office to schedule.

Response: Noted. The developer will have a preliminary meeting prior to submittal.

It should be noted that minor revisions are anticipated as the project goes through the entitlement process. However no major plan revisions are anticipated at this time.

This concludes our response. If you have any questions, please contact us at your convenience.

Sincerely,

Solutions IPEM

Jim Eriksen, PE