STATE OF DELAWARE
OFFICE OF MANAGEMENT AND BUDGET
OFFICE OF STATE PLANNING COORDINATION

July 24, 2024

Clifton Mumford
1 Park Ave
Milford, Delaware 19963

RE: PLUS review – 2024-06-07; Villages at Westowne

Dear Mr. Mumford:

Thank you for meeting with State agency planners on June 26th to discuss Villages at Westowne. According to the information received, you are seeking review of a proposed Site Plan for the construction of a Mixed-Use development on 333 acres zoned R-5 TND (Traditional Neighborhood Development). The project includes a total of 1,575 residential units, comprising single-family homes, multifamily residences, and duplex/townhouses. It also features 100,000 square feet of mixed commercial space.

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

Strategies for State Policies and Spending

This project is within the municipal limits of the Town of Frederica and is located in Level 1 and Level 2 investment areas, which is consistent with the 2020 Strategies for State Policies and Spending.

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. Because development in Levels 1 and 2 is consistent with the 2020 Strategies for State Policies and Spending, the Office of State Planning Coordination supports this site plan and mixed-use development proposal.

Code Requirements/Agency Permitting Requirements

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

- Any site access points onto State maintained roads 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.

- Pursuant to Section 1.3 of the Development Coordination 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.

- Section 1.7 of the Development Coordination 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.

- In terms of traffic analysis, based on the expected trip generation, this project will require a Traffic Impact Study (TIS). The developer for this project has already begun the TIS process. Please continue and complete this process to determine access and off-site improvements.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Development Coordination 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 30 feet of right-of-way from the physical centerline of Johnnycake Landing Road. 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 Development Coordination 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 Development Coordination 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.

    - 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 Development Coordination Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 1 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required.

- In accordance with Section 3.8 of the Development Coordination 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 all frontage roads.

- In accordance with Section 5.2.9 of the Development Coordination 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 Development Coordination 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 Development Coordination 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.

Department of Natural Resources and Environmental Control (DNREC) – Contact Beth Krumrine 302-735-3480

Nature Preserves/Conservation Easements
Forest on the northern portion of this parcel directly borders the Murderkill Nature Preserve, which is part of a larger conservation easement. Conservation easements are a preservation

mechanism by which the State of Delaware has acquired the development rights on a parcel in private ownership.
The applicant intends to leave a setback between the northern lots and the Murderkill Nature Preserve, estimated to be approximately 300 feet in width. However, no buffer appears to exist for the conservation easement located along the western edge of the development.

- Consider adding a buffer along the western edge of the development.

- Impacts to these protected conservation easement areas shall be avoided. The applicant should contact DNREC to discuss conservation easement requirements as these properties are legally protected and deed restricted.

Contact: DNREC Division of Parks and Recreation, Land Preservation Office at (302) 739-9239.
Website: https://dnrec.delaware.gov/parks/open-space/options-for-landowners/ or https://dnrec.delaware.gov/parks/open-space/conservation-easements/

Wetlands and Waterways
Maps from the Statewide Wetlands Mapping Project indicate the potential presence of both non-tidal and tidal wetlands on the site. The application indicates that wetlands have been delineated, with tidal wetlands estimated to be 11 acres and non-tidal wetlands estimated to be 9 acres. The application states no direct impacts to the wetlands; however, it appears that wetlands may exist within Lots 179-183, as well as possibly the cul-de-sac at Lot 139.

- State permits from the DNREC Wetlands and Waterways Section may be necessary if dredge, fill, or structures are proposed in tidal wetlands, streams, or State Subaqueous Lands.

- 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.

- The DNREC Wetlands and Waterways Section recommends that a wetland Jurisdictional Determination (JD) is conducted for this site. A consultant or a representative of the Wetlands and Waterways Section will conduct a JD to flag the wetland boundary and determine impacts to wetlands. Please contact the DNREC Wetlands and Waterways Section for more information.

State Contact: DNREC Wetlands and Waterways Section at (302) 739-9943.
Website: https://dnrec.delaware.gov/water/wetlands/
Federal Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278.
Website: https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/

Special Flood Hazard Area
According to the newest Flood Insurance Rate Maps (FIRM), a portion of this parcel is situated within a Special Flood Hazard Area, specifically within the mapped 100-year floodplain (1% annual chance of flooding). The Special Flood Hazard Area identified on the site lies within zone AE. In lands contained within the 100-year floodplain, the National Flood Insurance Program's floodplain management regulations must be enforced through the local floodplain ordinance, which can have higher standards. A portion of this site is also situated within the moderate risk floodplain, or 500-year floodplain (0.2% annual chance of flooding), identified as a shaded zone-X.

The preliminary plan proposes to avoid both the 100-year and the 500-year floodplain. However, homes located outside of the Special Flood Hazard Area (SFHA) might be required by lenders to purchase flood insurance, based on the proximity to the SFHA. This would pertain to the residences proposed clockwise along the north-to-southeast perimeter of the development.

- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the 100-year floodplain. In determining the boundary of the floodplain, use the most recent FIRM maps available, which can be found at https://floodplanning.dnrec.delaware.gov/

Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.
Website: https://dnrec.delaware.gov/watershed-stewardship/waterways/floodplains/

Stormwater Management
The project proposes greater than 5,000 square feet of land disturbing activities and will be subject to Delaware's *Sediment and Stormwater Regulations*.

- 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://enoi.dnrec.delaware.gov/, 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.delaware.gov/watershed-stewardship/sediment-stormwater/

Excellent Groundwater Recharge Area
An Excellent Groundwater Recharge Area is located on the southeastern third of the site. These areas have soils that are conducive to water infiltrating downward from surface water into groundwater. Preservation of these areas is important for replenishing groundwater supplies and ensuring drinking water for future generations.

- The applicant must comply with all county and municipal requirements for construction and uses in Excellent Groundwater Recharge Areas.

Contact: DNREC Source Water Assessment and Protection Program at (302) 739-9945.
Website: https://dnrec.delaware.gov/water/supply/ground-water-protection/

Wastewater Disposal Systems – Large Systems
For wastewater conveyance offsite by way of new sewer connection, flow rates exceeding 2,500 gallons of liquid waste per day will require a Wastewater Pollution Collection and Conveyance (WPCC) permit from the Commercial and Government Services section.

Contact: DNREC Commercial and Government Services section at (302) 739-9948.
Website: https://dnrec.delaware.gov/water/commercial-government/

Electric Vehicle Charging
Electric vehicle charging infrastructure is now required for all residential dwellings in Delaware (see 80 Del. Laws, c. 145 § 8001- § 8006) for which:

1. A building permit is issued on or after January 1, 2024 (single family), or
2. The final site plan is approved on or after January 1, 2025 (multi-family).

Requirements are summarized below. Consult the Delaware Code directly for further details.
Single-family Dwellings, effective 2024:

- The developer of a single-family residential dwelling shall install at least one electric vehicle capable parking space at each single-family residential dwelling constructed.

- If the single-family residential dwelling does not have an attached or detached garage, an electric vehicle capable parking space must be provided in the driveway, assigned parking space for the dwelling, or at an unassigned non-street residential parking space constructed as part of the project.

Multi-family Dwellings, effective 2025:

- The developer of a multi-family residential dwelling shall install electric vehicle parking spaces, where at least 5% of the total parking spaces for the multi-family residential dwelling must be electric vehicle capable parking spaces.
- In addition, a developer of a multi-family residential dwelling shall provide at least one electric vehicle charging infrastructure parking space in an area available for use by all residents of the multi-family residential dwelling (example: community centers).
- Construction documents must indicate the location of proposed electric vehicle charging infrastructure parking spaces and electric vehicle capable parking spaces.
- Parking space dimensions must comply with the county or municipal building code applicable to the multi-family residential dwelling.

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

- No Delaware Department of Agriculture code or regulations apply to this PLUS project.

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**. However, there are flood zones lying just outside of the parcel. Caution is advised.



Parcel Status within County Evacuation Zone Location

- The parcel is located within Kent County's Evacuation Zone C.



Parcel Status within the 10-mile Emergency Planning Zone (EPZ) for the Salem Nuclear Power Plant

- The parcel **is not** located within the 10-mile EPZ for the Salem Nuclear Power Plant.

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

There is a known pre-Contact archaeological site on the eastern portion of the parcel. The site was identified through surface survey, so the extent of the site boundaries is unknown. There is high potential for additional pre-Contact archaeological sites on the parcel due to the proximity of fresh water and well-drained soils. These are considered favorable environmental conditions for past human occupation. Historic maps and aerials do not show an occupation on the parcel, and therefore there is low potential for historic archaeological sites. Our Office recommends an archaeological survey prior to any ground disturbance. 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). If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400**.**

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. (Mercantile)
- Water distribution system capable of delivering at least 1,000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly and Townhouses)
- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 800 feet spacing on centers are required. (One & Two- Family Dwelling)
- One and Two-Family dwellings are required by law to offer the homeowner an automatic sprinkler system, therefore infrastructure should accommodate water needs.

- Where a water distribution system is proposed for the site, 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 square feet aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 square feet, 3-stories or more, over 35 feet, 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.
- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

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 subdivision from Johnny Cake Landing Rd must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door. Streets designed without parking need to develop a plan for enforcement once HOA takes charge. Fire apparatus still need to negotiate the streets.
- 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 use of open bridge or covered bridge shall be designed to DelDOT standards and accessible by all fire department apparatus.

- 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)
- Townhouse 2-hr separation wall details shall be shown on site plans
- Note indicating if building(s) is/are 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

The “stacked units” and “villas” will be reviewed as apartment occupancies and require fire lanes if applicable and automatic fire suppression systems.

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 (DelDOT) – Contact Stephen Bayer 302-760-4834

- 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, 2021. The notes can be found at https://www.deldot.gov/Business/subdivisions/

Department of Natural Resources and Environmental Control (DNREC) – Contact Beth Krumrine 302-735-3480

Sea Level Rise and Potential Impacts from Waves
A portion of the parcel is located just landward of the Limit of Moderate Wave Action (LiMWA) line. The LiMWA area approaches the property boundary from the east, nearly reaching the corner of the parcel at the location of the proposed restaurant.
A portion of this site is also vulnerable to permanent inundation from sea level rise. The inundation is anticipated to occur at as low as a 1-foot sea level rise. The water is expected to encroach further into the property, as the sea level continues to rise above 1 foot. By 2050, mean sea levels are projected to rise by 0.7 – 1.9 feet; by end of century sea levels are projected to increase by 1.7 – 5.0 feet. In addition to permanent inundation, as mean sea levels rise, the frequency and severity of tidal flooding events is expected to increase.

- Based on current modeling, the areas with the closest proximity to standing water would be the proposed restaurant site, Lots 460 and 461, and Lot 300.

- While the site is technically located outside of the LiMWA, where no state authority exists relative to LiMWA, please be aware this area may be subject to enhanced coastal hazards due to storm waves.

LiMWA Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.
Website: https://dnrec.delaware.gov/watershed-stewardship/waterways/floodplains/

Sea Level Rise Contact: DNREC Climate and Sustainability Section at (302) 735-3480.
Website: https://dnrec.delaware.gov/coastal-programs/planning-training/adapting-to-sea-level-rise/

State of Delaware Rare, Threatened, or Endangered Species
The following plants and animals are listed as State of Delaware rare, threatened, or endangered species, and have been documented within the project area.

- The Bronze Copper (*Lycaena hyllus*) is a butterfly listed as rare in the State of Delaware.
- The Marginal Woodfern (*Dryopteris marginalis*) is a plant listed as rare in the State of Delaware.

The following plants or animals are listed as State of Delaware rare, threatened, or endangered species, and have been documented near the project area within similar habitat which may also occur within the project area.

- The Coastal Plain swamp sparrow (*Melospiza georgiana nigrescens*) is a bird listed as rare in the State of Delaware.
- The King Rail (*Rallus elegans*) is a bird listed as rare in the State of Delaware.
- The Least Bittern (*Ixobrychus exilis*) is a bird listed as rare in the State of Delaware.

It is recommended to implement the recommendations as described below. In addition, scientists from the DNREC Division of Fish and Wildlife request a site visit to survey the project area and ensure wildlife and critical resources will not be impacted. Contact the Species Conservation and Research Program if the landowner will grant a site visit.

Contact: DNREC Division of Fish and Wildlife, Species Conservation and Research Program at (302) 735-3600.
Website: https://dnrec.delaware.gov/fish-wildlife/conservation/

Removal of Forest Considered to be Key Wildlife Habitat, land in the Delaware Ecological Network, and Forests within the Murderkill Natural Area
The preliminary plan proposes the elimination of approximately 24 of the 82 acres of mature forest on-site. This represents a 29% removal of forested areas. An analysis of historical data indicates that the forest area on-site 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. The forest proposed for removal is also located within the Murderkill Natural Area and the Delaware Ecological Network and is considered to be Key Wildlife Habitat according to the Delaware Wildlife Action Plan. 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.

- Maps from the Statewide Wetlands Mapping Project indicate the potential presence of forested wetlands on this site. The site plan appears to propose removal of forested wetland at Lots 179-183, as well as possibly the cul-de-sac at Lot 139. This habitat type is known to support an array of plants and animals, most notably wetland dependent species such as amphibians. There is a freshwater tidal shrub wetland on this property, mapped as a Key Wildlife Habitat in the Delaware Wildlife Action Plan because it is rare within the state and has the potential to harbor a high diversity of Species of Greatest Conservation Need.

- The following lots are contained within the Murderkill Natural Area where forest removal is proposed: 153-167, 175-238, 283-288, 293-306, 565-568, 576-581. Natural Areas contain lands of statewide significance identified by the Governor's Natural Areas Advisory Council as containing a high quality of natural features unique to Delaware.

- The following lots are additionally contained within the Delaware Ecological Network where forest removal is proposed: 32, 135-143, 147-176, 237-259, 266-296, 301-313, 316-318, 342, 354-363, 452-454, 457-476, 496-501, 523-526, 546-549, 560-573, 576-57; townhouse lots 115-120, 260-262, 254-259; and the restaurant. These areas are part of a statewide network of interconnected lands having significant ecological value. This GIS data layer helps to identify and prioritize areas for natural resource protection, including forests, wetlands, streams, and high-quality habitat for rare plants and animals.

- Avoid disturbance within the areas identified above to maintain the naturally occurring landscape and connectivity of priority wildlife habitats. Avoid development or destruction of sensitive natural features such as, but not limited to, wetlands, hardwood forests, or riparian buffers.

- In general, contiguous forest and connected areas of natural habitat are more beneficial to wildlife, allowing for safer movement from one area to another while reducing roadway mortality. Do not disturb forests, especially mature forests, forest identified as Key Wildlife Habitat, areas identified within the Delaware Ecological Network, forested wetlands, or areas within the Murderkill Natural Area.

- Consider dedicating forested areas as a Nature Preserve through a conservation easement or donation of land. For more information, please contact the DNREC Planning Preservation and Development Section.

- It is recommended to maintain a vegetated buffer zone at least 100 feet from the edge of wetlands, sensitive habitats, and waterways across the site.

- A forest assessment should be conducted to determine if mature forest resources exist on the property and to delineate their boundaries. Additionally, a forest assessment would include the identification of specimen trees and forest-dependent wildlife. If mature forests are found, these areas should be conserved to the maximum extent practicable.

- 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.

- Design the development to exclude curbs. If road curbing is part of the design, select curbing that allows small animals, such as turtles and salamanders, to climb out of the roadbed (Type 2 or Cape Cod curbing).

- Use wide, open bottom box culverts to allow for passage of amphibians.

Contact for Natural Areas and Nature Preserves: DNREC Division of Parks and Recreation, Office of Nature Preserves at (302) 739-9039.
Website: https://dnrec.delaware.gov/parks/natural-areas/

Contact for the Delaware Ecological Network and Key Wildlife Habitat: DNREC Division of Fish and Wildlife, Species Conservation and Research Program at (302) 735-3600.
Website: https://dnrec.delaware.gov/fish-wildlife/contact-information/

Recommendations for Vegetated Buffers Zones
Vegetated buffer zones placed adjacent to waterways, wetlands, and other ecologically sensitive natural resources help reduce sediment and pollutants loads. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

- 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 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.

- Vegetated buffer zones should be deeded as community open space and not contained within any lot lines. Signage should be installed at the edge and within the buffer zones to deter residents from encroaching into these common areas.

- 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 Division of Parks and Recreation, Office of Nature Preserves at (302) 739-9039.
Website: https://dnrec.delaware.gov/parks/natural-areas/
Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600.
Website: https://dnrec.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.

- 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/

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 Waterways 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.

- Any area designated as a drainage/utility easement should be open space and not owned by the individual landowners.

- 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.

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

Excellent Groundwater Recharge Area

- For Excellent Groundwater Recharge Areas, limit impervious surfaces to no more than 20% of the entire area designated as having excellent recharge.

Contact: DNREC Public Water Supply Protection Program at (302) 739-9948.
Website: https://dnrec.delaware.gov/water/commercial-government/public-water/

Sustainable Practices

- As described above, limit removal of forest located within the Murderkill Natural Area, within the Delaware Ecological Network, or areas that are considered to be Key Wildlife Habitat according to the Delaware Wildlife Natural Area.

- Consider installing electric vehicle charging stations for customers/employees of the commercial spaces, including the proposed restaurant. 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 80% 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://dnrec.delaware.gov/climate-coastal-energy/clean-transportation/).

- 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.delaware.gov/climate-coastal-energy/renewable/assistance/).

- Use efficient Energy Star rated products and materials. 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.delaware.gov/climate-coastal-energy/

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

Population

- The county has a population density of 310.20 persons per square mile 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 78 persons, though, with development, this will undoubtedly change. The 15 adjacent blocks aggregated bring the area to a total population of 852 persons.

FEMA National Risk Index

- The FEMA National Risk Index is an online mapping application that identifies communities most at risk to 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.



- According to FEMA's National Risk Index, the parcel **is** considered **relatively moderate** 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 and its social vulnerability are both rated at **relatively high**.

Renewable Energy Commitment

- Regarding energy use and consumption, the census tract utilizes **electricity** as the predominant fuel type for heating purposes, though oil and propane gas come in a close second and third respectively.

- 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 or solar panels where applicable and allowable, and the like.

- DEMA does not recommend construction within close proximity to a floodplain as water knows no bounds. Though not directly building within a flood zone, the parcel does border it; and therefore DEMA encourages additional mitigation measures be implemented to further help reduce potential damages from flooding. This could include, but isn't limited to, wet/dry floodproofing, elevating the home out of the flood plain, elevating mechanicals/HVAC/Electricity out of the flood waters, mass notification systems, large drainage systems (increased diameter pipes, ditches, basins, etc.) and other similar methods.

- Lastly, in reference to the evacuation zone, DEMA recommends the zone's designation and the information behind it be made readily available to all persons on the parcel, which can be done by simply placing a sign or having pamphlets readily accessible.

<u>Delaware State Housing Authority (DSHA) - Contact Alex Modeas 952-255-9579 ext. 251</u>

- DSHA supports the mixed-use construction of 1,575 residential units (581 Single Family, 562 Multi-Family, and 433 Duplex/Townhouse) and commercial development on 333 acres at Johnycake Landing Road in Frederica. The parcels are primarily in a Level 1 & 2 Investment zone, which means that efforts to create and sustain housing opportunities are promoted.
- The need for mixed-income communities with diverse housing types is high throughout Kent County. This proposal offers a variety of ownership and rental units at a wide

range of housing costs. With a high demand for housing in Kent County, these units will allow households across a wide range of incomes to capitalize on opportunities.

If you have questions or would like more information on the above recommendations, please feel free to call me at ext. 302-574-3656 or via e-mail at Alexander.Modeas@delaware.gov.

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 appointment. Applications and brochures can be downloaded from our website: 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