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

November 20, 2024

Morris & Ritchie Associates
Attn: Chris Flathers
8 W Market St,
Georgetown, DE 19947

RE: PLUS review – 2024-10-03; Creekside Reserve

Dear Mr. Flathers:

Thank you for meeting with State agency planners on October 23rd, 2024, to discuss Creekside Reserve. According to the information received, you are seeking review of a proposed residential subdivision with 301 detached single-family lots on 165.02 acres in Kent County AC (Agricultural Conservation) zoning within the Growth Zone Overlay District.

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

Strategies for State Policies and Spending

The proposed subdivision is located in unincorporated Kent County within the Growth Zone Overlay and is consistent with the future land-use designations in the certified comprehensive plan. It is near existing schools, commercial services, and nearby State Route 10 provides easy access to downtown Dover and the Dover Air Force Base. The parcel is within Level 2 and Level 3 investment areas, which are consistent with the 2020 Strategies for State Policies and Spending. There is a small portion of Out of Play area that corresponds to a floodplain present on the property.

Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near-term future. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer-term future, or areas that may have environmental or other constraints to development. Based on comments from State agencies below, this parcel

contains environmental concerns or other constraints to development, therefore the state requests that the applicant and the local jurisdiction work with state agencies to design the site with respect to those environmental features which will help create a more sustainable development.

Based on the information above, the Office of State Planning Coordination (OSPC) has no objections to this subdivision plan in its current form. However, OSPC notes that 3 dwelling units per acre are allowed in AC (Agricultural Conservation) zoning inside the Growth Zone Overlay. Per the 2023 Delaware Housing Needs Assessment, there is a statewide need for more affordable housing. More housing in this subdivision, if allowed under Kent County's ordinances, may reduce the overall cost per unit leading to more affordable options for home buyers.

The plan, as proposed, does not provide an entrance on Locust Grove Road which is a missed opportunity for connectivity and circulation. Notably, the parcel is located across Locust Grove Road from lands that are being considered for school construction (see PLUS 2024-06-01), making connectivity extremely important in this instance.

In addition, the parcel is in an area being considered for a Transportation Improvement District (TID). Depending on the developer's timeframe, it may be beneficial to participate in the Magnolia TID rather than pursue individual road improvements as per the TIS process. OSPC suggests the applicant should work with Kent County and the Delaware Department of Transportation (DelDOT) to discuss these comments.

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.

- In terms of traffic analysis, based on the expected trip generation, this project will require a Traffic Impact Study (TIS). A final TIS letter was issued on September 23, 2024. Please continue that process to address any necessary intersection improvements or offsite improvements identified in the TIS.

- This site is located in an area expected to be included with the future Magnolia Transportation Improvement District (TID). If the developer wishes to wait for the formulation and implementation of the TID they can satisfy their traffic analysis

requirements by participating in the TID rather than through the TIS.

- 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 Cypress Branch 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 on both Cypress Branch Road and Locust Grove Road. 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 2 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. As discussed in the PLUS meeting our office still needs this sheet as of the date of the meeting.

- 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

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.

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/

Wastewater Disposal Systems – Small Systems
An expired permit (permit # 160076) exists for this site in the Small Systems Branch database. The On-Site Regulations are listed within Section 5 (Small Systems) or Section 6 (Large Systems) of the Regulations Governing the Design, Installation and Operation of the On-site Wastewater Treatment and Disposal Systems at:
https://documents.dnrec.delaware.gov/Water/Septics/delaware-on-site-regulations-with-exhibits.pdf.
A list of licensed Class D soil scientists can be found at the following website:
https://data.delaware.gov/Energy-and-Environment/Class-D-Site-Evaluator-Licensees-Based-on-Licensed/s3gu-gt88/data_preview.

- The applicant must follow current regulations to properly abandon these systems.
- Contact the DNREC Commercial and Government Services Section to discuss requirements for properly abandoning these systems.

Contact: DNREC Commercial and Government Services Section at (302) 739-9947.
Website: https://dnrec.delaware.gov/water/groundwater/septic-systems/

Wastewater Disposal Systems – Large Systems
For wastewater conveyance offsite by way of a 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/

Special Flood Hazard Area

According to the newest Flood Insurance Rate Maps (FIRM), the southern 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. Although houses are proposed outside of the Special Flood Hazard Area (SFHA), some houses may still be required by lenders to purchase flood insurance, based on the proximity to the SFHA.

The southern 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 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) 608-5500.
Website: https://dnrec.delaware.gov/watershed-stewardship/waterways/floodplains/

Wetlands and Waterways

Maps from the Statewide Wetlands Mapping Project indicate the potential presence of non-tidal and tidal wetlands in the southern portion of the site, as well as a potential blue line stream located along the southern property boundary. The application indicates that wetlands have not been delineated. The application states that the project does not propose direct impacts to the wetlands/waterways.

State Requirements:

- If plans change and wetlands are disturbed, please contact the Wetlands and Waterways Section for more information on permitting requirements.

- The DNREC Wetlands and Waterways Sections recommends that a wetlands delineation is completed. For a list of consultants and engineers who can conduct wetland delineations, please call the DNREC Wetlands and Waterways Section.

State Contact: DNREC Wetlands and Waterways Section at (302) 739-9943.
Website: https://dnrec.delaware.gov/water/wetlands/

Natural Areas/Nature Preserves

The southern portion of the parcel is located within the St. Jones Natural Area. 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.

- Local codes and ordinances may apply to protect areas designated as Natural Areas. Please consult with local planning agencies to see how local codes and ordinances may impact the proposed development of this site.

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

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.

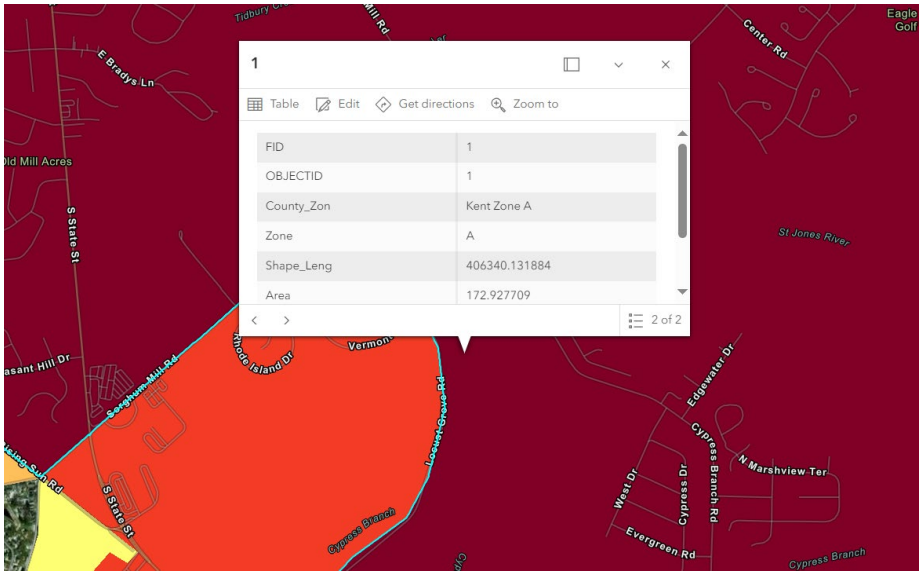
Delaware Emergency Management Agency (DEMA) – Contact Phillip Cane 302-659-2325

Proposed Project Parcel Flood Concern

- This parcel is located within an area of **Minimal Flood Concern of 1,000 years or greater**. Though it does appear the area is surrounded by flood zones. No construction appears to occur inside any flood zones themselves.

Parcel Status within County Evacuation Zone Location

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



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.

<u>State Historic Preservation Office (SHPO) – Contact Carlton Hall 302-736-7400</u>

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel. The southernmost section is Out of Play. They do seem to be avoiding it in the plans. The soil is all well drained. There are two archaeological sites nearby, both near bodies of water. The entire parcel has a high potential for precontact archaeological resources.

- There was a historic farmhouse to the north of the parcel that was demolished sometime after 2017. The parcel itself has been agricultural land for the majority of the 20th century. Our staff archaeologist determined that there is low to moderate potential for historic archaeological resources.

- The Delaware State Historic Preservation Office recommends an archaeological survey be performed before any ground disturbance, with particular focus on the southern portion of the parcel.

- 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:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for a 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.

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 Cypress Branch 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
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building(s) is/are to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- 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 (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.

- The plan, as proposed in the PLUS application and as discussed at the PLUS meeting, does not provide an entrance on Locust Grove Road. This is a missed opportunity for connectivity to adjacent parcels and general circulation within the area. Notably, the parcel is located across Locust Grove Road from lands that are being considered for school construction (see PLUS 2024-06-01), making connectivity extremely important in this instance.

- 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

Special Flood Hazard Areas and Sea Level Rise
The southern portion of this site is vulnerable to permanent inundation from sea level rise, specifically those areas that correspond with the 100-year floodplain. 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. Roadways, lots, and homes are proposed just outside of lands subject to inundation by sea level rise between 1 and 5 feet. In addition to permanent inundation, as mean sea levels rise, the frequency and severity of tidal flooding events is expected to increase.

- In areas within 5 feet of expected sea level rise, avoid construction of permanent structures and infrastructure. Since roadways, lots, and houses are proposed near areas of future sea level rise, houses in these areas should be relocated. Design structures and roadways to a higher standard to avoid potential future flood damage and loss.

- All infrastructure and structures on the site should incorporate designs that address future impacts of sea level rise throughout the expected lifespan of the structures. This may include increasing freeboard of structures, ensuring that critical infrastructure is

elevated to withstand future sea level rise, construction of flood control measures, and incorporating green infrastructure for flood control.

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

Removal of Mature Forest in Delaware Ecological Network

The preliminary plan proposes the elimination of approximately 14 of 32 acres forest on the site. An analysis of historical data indicates that the forest area located on the southern portion of the 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. 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.

- Removing forested areas for development, especially mature forests, should be avoided to the greatest extent possible.
- The forest on this site occurs within the Delaware Ecological Network, a statewide network of interconnected lands having significant ecological value. Avoid disturbance within these habitats.
- 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.
- 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.

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

Key Wildlife Habitat – Cypress Branch

Cypress Branch, the perennial stream on this property is mapped as a Key Wildlife Habitat in the Delaware Wildlife Action Plan because it is part of a large wetland complex/large forest block that can support an array of plant and animal species across the landscape.

- Key Wildlife Habitat should be conserved to the maximum extent practicable and negative impacts should be minimized.

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

Forested Wetlands and Vegetated Buffer Zones

Maps from the Statewide Wetlands Mapping Project indicate the potential presence of forested wetlands on the southern portion of the site. This habitat type is known to support an array of plants and animals, most notably wetland dependent species such as amphibians.

To reduce impacts to these species, the following is recommended:

- As proposed, do not disturb forested wetlands. Increase upland buffer to at least 100 feet along all wetlands, waterways, and sensitive habitats, including those containing existing forest or natural vegetative cover.

- Vegetated buffer zones should be identified outside of the Limit of Disturbance on the engineering plans.

- Maintain vegetated buffer zones as native species meadows or forest.

- 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.

- Maintain habitat connections to undeveloped open space, which are especially important for species movement across the landscape.

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

Natural Areas/Nature Preserves – St. Jones Natural Area

- Reduce environmental impacts in Natural Areas by avoiding development or destruction of sensitive natural features such as, but not limited to, wetlands, hardwood forests, or riparian buffers.

- 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.

Contact: DNREC Division of Parks and Recreation, Office of Nature Preserves at (302) 739-9039.
Website: https://dnrec.delaware.gov/parks/natural-areas/ or https://dnrec.delaware.gov/parks/open-space/conservation-easements/

State Wildlife Management Area – Ted Harvey Conservation Area

The proposed project lies within a half-mile radius of the Ted Harvey State Wildlife Management Area managed by the Division of Fish and Wildlife. Proposed development activities may negatively impact wildlife habitat connected to the State Wildlife Management Area.

Future residents may be affected by legal hunting activities, such as noise from firearms or dogs, as well as herbicides and prescribed burns that take place in Wildlife Management Areas.

- The developer should consult with the Regional Wildlife Biologist to minimize potential negative impacts to the State Wildlife Management Area.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912.
Website: https://dnrec.delaware.gov/fish-wildlife/conservation/

Water Quality

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. https://dnrec.alpha.delaware.gov/watershed-stewardship/

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.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 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.

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

Sustainable Practices

- Consider amending the design to allow all lots with homes to have a connection to and view of open space. As proposed, there are three pockets of housing on the site plan where there are no connections to or views of open space.

- Incorporate nonmotorized connectivity and install bicycle racks where feasible to help facilitate non-vehicular travel modes.

- Offer the option to install solar or geothermal systems for each home. This allows a purchaser to incorporate the cost into their mortgage, making it more affordable. 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/).

- Consider planting select areas with native trees. Native trees improve air, water, and soil quality. Planting and nurturing trees is also a nature-based solution to reducing the greenhouse gases that drive climate change. In addition, native trees have an increasingly important role in the survival of native birds and beneficial insects whose habitat is shrinking due to development and climate change.

- Consider planting select areas with meadow comprised of native species. Native plants are well-suited to our climate and require limited maintenance. Mowing in these areas 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.

- 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.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 99 persons, though, with development, this will undoubtedly change. The 12 adjacent blocks aggregated bring the area to a total population of 1471 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.

Expected Annual Loss
× Social Vulnerability
÷ Community Resilience
= Risk Index

- According to FEMA's National Risk Index, the parcel **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 as **relatively high** whereas its social vulnerability is rated as **relatively low.**

Renewable Energy Commitment

- Regarding energy use and consumption, the census tract utilizes **electricity** as the predominant fuel type 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 or solar panels where applicable and allowable, and the like.

- Lastly, in reference to the county evacuation zone, DEMA encourages this information be made readily available to any and all persons residing there. This can be done simply through pamphlets or a neighborhood sign.

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, 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

Attachments:

- Dover/Kent County MPO Comments

DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION

M E M O R A N D U M

TO: Delaware Office of State Planning Coordination

FROM: Malcolm Jacob

DATE: 10/23/2024

SUBJECT: PLUS Comments 10/2024

Dear Members of the OSPC,

Attached, please find comments submitted by Dover Kent MPO for each of the current Preliminary Land Use Service (PLUS) project reviews in Kent County. Projects were reviewed during the PLUS meeting of **Wednesday, October 23, 2024**, and comments are being submitted as a follow-up to this meeting.

Please reach out to the MPO if further input is needed.

Sincerely,

Malcolm Jacob
Transportation Planner
Dover/Kent County Metropolitan Planning Organization
Malcolm.Jacob@doverkentmpo.org
(302) 387-6030
https://doverkentmpo.delaware.gov/

1. **Creekside Reserve (2024-10-03)**

   Dover Kent MPO has several serious concerns about the transportation impacts of a large subdivision at this location. First, the only planned entrances are located on Cypress Branch Road. This could make emergency access more challenging for properties in the back of the development. A secondary access point via Locust Grove Road should be considered, and it would be easier to implement this while the property is being developed.

   Second, Locust Grove Road is a local road that has narrow shoulders and no striping. Even if there is no direct access to the road, it is likely to see an increased traffic volume, which in its current state it cannot handle. The new development, combined with the new Caesar Rodney high school on Locust Grove Road, will require that the road be upgraded to meet the changing needs.

   Finally, pedestrian connectivity via sidewalks or shared use paths will be needed along the frontage of both Cypress Branch Road and Locust Grove Road. This will be especially important when the new school is added, as students will be walking to and from the school. ADA-compliant pedestrian crossings at key locations will also be an important safety feature. It is worth noting that there are two existing schools not far from the property, but there is no planned connectivity to these facilities. If pedestrian connectivity is not added, there will likely be a higher volume of vehicles dropping off and picking up students on Locust Grove Road.

   The MPO would be happy to discuss these matters further, so that the development meets the area's transportation and safety needs.