



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

August 23, 2023

Charlie Barnett
Morris & Ritchie Associates, Inc.
8 W Market Street
Georgetown, DE 19947

RE: PLUS Review – 2023-07-09; Windward Ridge

Dear Mr. Barnett:

Thank you for meeting with State agency planners on July 26, 2023 to discuss the Windward Ridge project. According to the information received, you are seeking review of a proposed site plan for the construction of 13 garden apartment buildings totaling 312 units on three parcels totaling 40.12 acres zoned RM-2 (Medium Density Residential).

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.**

Strategies for State Policies and Spending

The proposed project is located in investment Levels 1 and 2 according to 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, provided it meets all requirements of the City of Dover.

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 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 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.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Using the 11th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates that the subject development will not generate traffic volume sufficient to require a TIS. The traffic volume expected would require an Area Wide Study Fee (AWSF).
- 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, DelDOT may accept an AWSF in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip. AWS Fees are used to fund traffic studies, not to build improvements.
- 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 30 feet of right-of-way from the physical centerline of West Denneys Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from outmost edge of the through lanes of West Denneys 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 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.
 - 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.
- 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 all frontage roads.
- 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.

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

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

Concerns Identified Within the Development Footprint

Wetlands and Subaqueous Lands

Maps from the Statewide Wetlands Mapping Project indicate the potential presence of non-tidal wetlands on the site. The application indicates that wetlands have been delineated. The U.S. Army Corps of Engineers sign-off is completed. The application does not propose direct impacts to the wetlands. The forested wetlands on this property could support an array of plants and animals, most notably wetland dependent species such as amphibians.

Requirements:

- If the site design changes and dredge or fill of wetlands or subaqueous lands becomes necessary, permitting and/or authorization requirements may apply.

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

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

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

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

Vegetated Buffer Zones

Site plans show a 30-foot vegetated buffer along non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help prevent encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

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.alpha.delaware.gov/fish-wildlife/contact-information/>

Special Flood Hazard Area

According to the newest Flood Insurance Rate Maps (FIRM), the northern 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 A. 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. There are no structures or features proposed within the floodplain.

Requirements:

- 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.alpha.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*.

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/>

Hydrologic Soils Group

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

Requirements:

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

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/>

Excellent Groundwater Recharge Area

An Excellent Groundwater Recharge Area is located on the central portion 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.

Requirements:

- 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.alpha.delaware.gov/water/supply/ground-water-protection/>

Wildlife Displacement

Development of this site is anticipated to displace local wildlife. Delaware is home to a rich array of wildlife species, which greatly depend on forests and other habitat types for food, water and cover.

Requirements:

- Future residents are not permitted to discharge firearms within 100 yards (300 feet) of any occupied dwelling or building to hunt or remove nuisance wildlife.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912

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

Nutrient Management Plan

This project proposes open space of 26 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/>

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

Proposed Project Parcel Flood Concern

- The majority of this parcel is located within an area of **Minimal Flood Concern of 1,000 years or greater**. However, the northwestern part of the property appears to be in a Special Flood Hazard Area (SFHA) Flood Zone A, which is a 1% or 100-year flood plain. The properties themselves do not appear to actually be within a floodplain. No official requirements here from DEMA.

Parcel Status within County Evacuation Zone Location

- The parcel is not yet located within the 10-mile EPZ for the Salem Nuclear Power Plant. However, the sections to the southeast of W. Denneys Road are located within Kent Evacuation Zone D.

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 are no known archaeological sites or known historic or eligible properties in the project area.
- Wetland permitting may be required for northern portion of the parcel – in which case, this project should be properly initiated through Section 106 Regulations.
- Probability for precontact archaeological resources is high.

- Portions of the area have been archaeologically surveyed. The survey uncovered many archaeological sites and materials in analogous areas.
- An archaeological survey is recommended.

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 Regulations (DSFPR):

Fire Protection Water Requirements

- 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.
- Where a water distribution system is proposed for mixed occupancy use sites, 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 occupied as apartments (multi-family living units comprising of 3 or more units) will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq ft, 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.
- Standpipe systems may be required per 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 must be constructed so fire department apparatus may negotiate it.

- 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) if any buildings are to be sprinklered.
- Provide Road Names, even for County Roads

Please note that this project has not been reviewed for adequacy of emergency responder (fire, emergency medical services, law enforcement) response.

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

Wetlands and Subaqueous Lands

- As proposed for this project, 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.
- Maintain input to natural wetlands at the pre-construction level. Avoid causing an increase or decrease in the naturally occurring water level.
- Avoid diverting surface water from roadways and stormwater facilities into the wetlands on site. Water quality could be detrimentally affected by run-off, which can contain oil and other pollutants.
- Avoid installing sewers with grates, which can create a hazard for amphibians and reptiles.

- Design the development to exclude curbs. If road curbing is part of the design, curbing that allows small animals, such as turtles and salamanders, to climb out of the roadbed (such as Type 2 or Cape Cod curbing) is preferred over steep, vertical curbing.
- Use open bottom box culverts to allow for natural substrate to remain and in-water passage of aquatic life. Additionally, culverts should be left as wide as possible to ensure that salamanders can travel through them.

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

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

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

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

Vegetated Buffer Zones

- Expand the 30-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.
- 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/>

Delaware Ecological Network

Most of the project site lies within lands designated within the Delaware Ecological Network, a statewide network of interconnected lands of significant ecological value. This GIS data layer is based on principles of landscape ecology and conservation biology, providing a consistent framework to identify and prioritize areas for natural resource protection. Forest disturbances on this site will jeopardize habitat on the parcel and likely beyond the parcel's boundary.

- Removing forested areas within the Delaware Ecological Network should be avoided to the greatest extent possible. These areas provide wildlife habitat, uptake nutrients, infiltrate stormwater, and improve water quality. Forests also provide shading and cooling, while also reducing carbon that contributes to climate change.

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

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

Removal of Mature Forest

The preliminary plan proposes the elimination of approximately 18 of 37 acres of forest on the site. An analysis of historical data indicates that much of the forest area located on 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.

- Removing forested areas for development, especially mature forests, 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.
- 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.

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/>

Special Flood Hazard Area

- As proposed, locate all structures outside of the floodplain. If this is not possible, the developer should consider designing structures to a higher standard to avoid potential future flood damage and loss.

Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.

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

Key Wildlife Habitat

The non-tidal coastal plain stream directly adjacent to the property, is mapped as Key Wildlife Habitat in the Delaware Wildlife Action Plan.

- Key Wildlife Habitat should be conserved to the maximum extent practicable and negative impacts should be minimized.
- In the interest of water quality and wildlife habitat, we recommend maintaining an upland buffer of at least 100 ft along rivers, streams and wetlands. This buffer should not be a maintained lawn area and should not contain lot lines or infrastructure. We recommend the buffer area be comprised of the existing vegetation or planted with Delaware native species of trees, shrubs, grasses or wildflowers.
- Appropriate erosion and sediment control measures should be taken during construction activities to minimize potential impacts to the stream system. For erosion control, we recommend (if feasible) using materials that are biodegradable and that do not include plastic netting or have welded-joint poly-based matting. Wildlife entanglement in rolled erosion control products (RECP), especially those that contain plastic netting, is well documented.

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/>

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/>

Drainage

- All existing drainage ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.
- Environmental permits or exemptions may be required by the County Conservation District (Standard Plan), the DNREC Sediment and Stormwater Program (eNOI/NOT), Army Corp of Engineers, and/or DNREC Wetlands and Subaqueous Lands Section prior to clearing and/or excavating ditch channels.
- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.

Contact: DNREC Drainage Program at (302) 855-1930.

Website: <https://dnrec.alpha.delaware.gov/drainage-stormwater/>

Water Quality (Pollution Control Strategies)

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

- Implement vegetated buffers with a width of at least 100 feet around all water features on or adjacent to the site.
- Reduce impervious surfaces on the project site by eliminating areas of impervious pavement and/or using pervious pavement where practicable.
- 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/>

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 Source Water Assessment and Protection Program at (302) 739-9945.

Website: <https://dnrec.alpha.delaware.gov/water/supply/ground-water-protection/>

Wildlife Displacement

- Removing forested areas for development, especially mature forests, should be avoided to the greatest extent possible. Forests are a key habitat type for wildlife in Delaware.
- Deer, groundhogs, and rabbits will browse on gardens and ornamental landscaping. Reduce the potential for future conflicts between future residents and wildlife by maintaining large blocks of forest, as opposed to small pockets of wooded areas.

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

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

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/>

Nature Preserves

The proposed development is located near the Fork Branch Nature Preserve.

- While across the street, there should be an effort made by the developer to ensure encroachment into the Preserve does not occur. There shall be no staging of equipment

on Park property.

- While not currently registered as Natural Area, the property's proximity to Fork Branch Nature Preserve suggests that it may share some or all ecological, historical, cultural, or geologic value as the land within the Nature Preserve. Consider minimizing the development footprint and dedicating forested and wetland 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.alpha.delaware.gov/parks/natural-areas/> or

<https://dnrec.alpha.delaware.gov/parks/open-space/conservation-easements/>

Additional Sustainable Practices

- Install electric vehicle (EV) charging stations for your residents. Residents will increasingly expect options for 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://dnrec.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/>

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

Population

- The county has a population density of 310.20 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 77, though, with development, this will undoubtedly change.
- The adjacent blocks aggregate bring the area to a total population of 710.

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.

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

- According to FEMA's National Risk Index, the parcel 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 and social vulnerability are rated as **relatively high**.

Renewable Energy Commitment

- Regarding energy use and consumption, the parcel utilizes natural gas as the predominant fuel type for heating purposes with electric heat a close second.
- 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.

Delaware State Housing Authority (DSHA) - Contact Karen Horton 302-739-4263

- DSHA supports the proposal for 312 rental units on 40 acres of land near West Denney's Road in Dover. While this is a market-rate development, it provides a *more* affordable option for many residents.
- This site is also located within a DSHA-defined "Area of Opportunity" which are strong, high value markets, with close job proximity and economic opportunity, high performing schools, amenities and supportive infrastructure that help households succeed. Unfortunately, these same areas contain little affordable housing. DSHA recommends that local stakeholders provide resources to connect these residents to the high-quality services the area has to offer.
- Due to the large scale of this project (40 acres, 312 units), DSHA encourages that the developer utilizes thoughtful site layout and design measures. This includes measures that are human-scale and incorporates attractive streetscapes, community recreation areas, visually appealing façade treatments, and significant landscaping measures. These elements all serve to create desirable quality communities where families can thrive.

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

- Although not a requirement of the Delaware State Fire Prevention Regulations, the Office of the State Fire Marshal encourages home builders to install residential fire sprinkler systems in all residential dwellings.
- The Office of the State Fire Marshal reminds home builders that they are obligated to comply with requirements of Subchapter III of Chapter 36 of Title 6 of the Delaware Code which can be found at the following website:
<http://delcode.delaware.gov/title6/c036/sc03/index.shtml>
- 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

CC: City of Dover