



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION

December 23, 2014

February 3, 2015 Response to PLUS Comments  
*Prepared By: Mark H. Davidson, Principal Land Planner*

Mr. Mark Davidson  
Pennoni Associates LLC  
10872 Davidson Drive  
Milton, DE 19968

RE: PLUS review 2014-11-01, Villas at Lewes Crossing

Dear Mr. Davidson,

Thank you for meeting with State agency planners on November 26, 2014 to discuss the proposed plans for the Villas at Lewes Crossing. According to the information received, you are seeking review of a rezoning from AR-1 to HR-1/ RPC and site plan for 100 multi-family residential units on 19.52 acres in Sussex County.

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 Sussex 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.**

An application for rezoning was submitted to Sussex County Planning & Zoning on October 28, 2014. The first public hearing before the Planning commission is on February 26, 2015.

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

- This project is located in Investment Level 1 according to the *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. **Noted and Concur.**

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

State Historic Preservation Office – Contact Terrence Burns 736-7404

122 Martin Luther King Blvd. South · Dover, DE 19901  
Phone (302)739-3090 · Fax (302) 739-5661 · [www.stateplanning.delaware.gov](http://www.stateplanning.delaware.gov)

- There are no known cultural or historic resources, such as an Archaeological Site or National Register-listed property, on this parcel. However, if there is going to be any construction or development project on this parcel, the developer should still be aware of the Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7, of the Delaware Code.

Pennoni performed a search and found that no known cultural or historic resources are found on this property. Pennoni also performed a Phase One Environmental Site Assessment of the property.

Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Delaware Code Title 7, Chapter 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you would like to know more information pertaining to unmarked human remains or cemeteries, please check the following websites for additional information: [www.history.delaware.gov/preservation/umhr.shtml](http://www.history.delaware.gov/preservation/umhr.shtml) and [www.history.delaware.gov/preservation/cemeteries.shtml](http://www.history.delaware.gov/preservation/cemeteries.shtml).

Prior to any demolition or ground-disturbing activities, the developer may want to hire an archaeological consultant to examine the parcel for any potential archaeological site (historic or pre-historic), historic cemetery or unmarked human remains.

- If there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These

stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role, please review the Advisory Council's website at [www.achp.gov](http://www.achp.gov).

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Beaver Dam Road and any subdivision streets to be built for State maintenance must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, which is available at [http://www.deldot.gov/information/pubs\\_forms/manuals/subdivisions/pdf/Subdivision\\_Manual\\_Revision\\_1\\_proposed\\_060110.pdf](http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf).
- Please be advised that DelDOT has advertised for comment a comprehensive revision of the Standards and Regulations. The comment period ran through June 30 and DelDOT could adopt this revision as soon as January 2015. Implementation guidance has not been developed but DelDOT recommends that the developer's engineer become familiar with the proposed changes and assess whether any of them could be relevant to this project. Information on the proposed revision is available in the Register of Regulations and at [http://www.deldot.gov/information/pubs\\_forms/revisions\\_to\\_ASR/index.shtml](http://www.deldot.gov/information/pubs_forms/revisions_to_ASR/index.shtml).
- As necessary, in accordance with Section 3.6.5 and Figure 3-3 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require dedication of right-of-way along the site's frontage on Beaver Dam Road to provide a minimum of 40 feet of right-of-way from the road centerline. The right-of-way dedication note has been revised to the following, **“An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.”**
- In accordance with Section 3.6.5 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Beaver Dam 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 established to the State of Delaware, as per this plat.”**
- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Initial Stage review fee shall be assessed to this project.
- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Construction Stage review fee shall be assessed to this project.

- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, any off-site improvements and when those improvements are warranted need to be noted on the record plan.
  - In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a site plan shall be prepared prior to issuing “Letter of No Objection”. The following information will be required for the “Letter of No Objection” review:
    - Copy of the Initial Stage Fee Calculation Form
    - Copy of the Initial Stage Review Fee
    - Gate-Keeping Checklist – Site Plan
    - Sight Distance Spreadsheet
    - Design Checklist – Record Plan\*
    - Owners and Engineer’s name and e-mail address
    - Three (3) paper sets of the Record Plan
    - Conceptual Entrance Plan
    - CD with a pdf of the Site Plan
    - Submission of the Area-Wide Study Fee (if applicable)
- \*For the design checklist for the site plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, pages D-2 and D-3.
- As specified in Section 3.4.1.1 of the Standards and Regulations for Subdivision Streets and State Highway Access, a traffic generation diagram is required on the record plan.
  - In accordance with Section 3.4.1.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, all existing entrances (residential/commercial) within 400 feet of the proposed entrances should be shown on the record plan.
  - In accordance with Section 3.10.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require improvement of Beaver Dam Road along the site frontage to provide 12-foot wide travel lanes, 8-foot wide paved shoulders, and an overlay of the existing pavement. The thickness of the overlay shall be determined at a later date.
  - Referring to Section 4.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Entrance Plan review:
    - Copy of the Construction Stage Fee Calculation Form
    - Copy of the Construction Review Fee
    - Gate-Keeping Checklist – Entrance Plan
    - Auxiliary Lane Spreadsheet
    - Design Checklist – Entrance Plan\*\*
    - Three (3) paper sets of the Entrance Plan
    - SWM Report and Calculations (if applicable)

○ CD with a pdf of the Entrance Plan

\*\*For the design checklist for the entrance plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, pages D-9 and D-13.

- In accordance with Section 4.8 of the Standards and Regulations for Subdivision Streets and State Highway Access, stormwater facilities, excluding bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.
- In accordance with Section 5.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a sight distance triangle is required for the site access on Beaver Dam Road 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/information/business/subdivisions/Intersection-Sight-Distance.xls>.
- Metes and bounds and total areas need to be shown for any drainage easements. Section 5.7.2.5 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access requires, in part, a minimum 20-foot wide drainage easement for storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. These easements must be shown and noted on the record plan.

Pennoni and the Developer met with Del DOT on June 26, 2014 to discuss the shared access through Phase 7 of Lewes Crossing and the right-out only for this project onto Beaverdam Road. A Service Level Evaluation Request was submitted to Del DOT on July 10, 2014 and a response was received by Del DOT on October 27, 2014. The Support Facilities Report addressed the criteria for requiring a Traffic Impact Study for the project. Since the proposed project will generate less than 2,000 trips per day but more than 200 trips per day (643+/-) the developers have agreed to pay an Area-Wide Study fee in the amount of approximately \$6,430.00 in lieu of conducting a TIS. Improvements along the frontage of the subject property will also be improved to meet current minimum Del DOT criteria.

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold 735-3495

### **TMDLs**

- The project is located in the low nutrient reduction zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited waterbody” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and

phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions. Please view the following weblink for further information on TMDLs:

<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>

- A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements or, view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

It is the stated goal of the project to provide in general, all Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Best Management Practices (BMPs) which will comply with DNREC standards and specifications in accordance with current guidance documents and policies. Green Technologies and Pollution Control Strategies will be implemented to reduce nitrogen and phosphorus loads to their mandated levels. A detailed Nutrient Protocol and management plan will be implemented as part of the project open space program.

### **Water Supply**

- The project information sheets state water will be provided to the project by Tidewater Utilities via a central water system. DNREC records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity 83-W-15.
- Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

The property is within Tidewater Utilities Inc. Certificate of Public Convenience and Necessity. A 16" diameter water main is currently located along the frontage of the property within an easement dedicated to Tidewater for the placement of the water line. Existing taps currently are located for the project connection to the water main. DNREC Water Supply Permits will be executed if dewatering is necessary to install the infrastructure within the project area. Irrigation Wells will also be permitted and installed for the landscaping of the project.

**Sediment and Stormwater Program**

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre and post development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101).

As stated above, it is the stated goal of the project to provide in general, all Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Best Management Practices (BMPs) which will comply with DNREC standards and specifications in accordance with current guidance documents and policies. Green Technologies and Pollution Control Strategies will be implemented to reduce nitrogen and phosphorus loads to their mandated levels.

**Air Quality**

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1 – Potential Regulatory Requirements may apply to your project:

<b>Table 1: Potential Regulatory Requirements</b>	
<b>Regulation</b>	<b>Requirements</b>
<b>7 DE Admin. Code 1106 -</b> Particulate Emissions from Construction and Materials Handling	Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. Use covers on trucks that transport material to and from site to prevent visible emissions.
<b>7 DE Admin. Code 1113 –</b> Open Burning	Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. Prohibit the burning of land clearing debris. Prohibit the burning of trash or building materials/debris.
<b>7 DE Admin. Code 1135 –</b> Conformity of General Federal Actions to the State Implementation Plan	Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
<b>7 DE Admin. Code 1141 –</b> Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.

<b>7 DE Admin. Code 1144 –</b> Control of Stationary Generator Emissions	Ensure that emissions of nitrogen oxides (NO <sub>x</sub> ), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO <sub>2</sub> ), carbon monoxide (CO), and carbon dioxide (CO <sub>2</sub> ) from emergency generators meet the emissions limits established. (See section 3.2). Maintain recordkeeping and reporting requirements.
<b>7 DE Admin. Code 1145 –</b> Excessive Idling of Heavy Duty Vehicles	Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at the website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

Noted.

### Hazardous Waste Sites

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C., Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.
- There are no SIRS sites or salvage yards found within a ½-mile radius of the proposed project.

According to the POESA completed by Pennoni, no hazardous substance was observed as part of our investigation.

### Tank Management Section

- If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 Del.C., Chapter 60, 7 Del.C., Chapter 74 and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.
- There are no confirmed leaking underground storage tank (LUST) projects located within a quarter mile from the proposed project area.
- Per the **UST Regulations: Part E, § 1. Reporting Requirements:**
  - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
    - The Department's 24-hour Release Hot Line by calling 800-662-8802; and
    - The DNREC Tank Management Section by calling 302-395-2500.

According to the POESA completed by Pennoni, no Underground Storage Tanks were discovered as part of our investigation.

Delaware State Fire Marshall's Office – Contact R.T. Leicht 739-4394

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:

#### **Fire Protection Water Requirements**

- Water distribution system capable of delivering at least 1000 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 townhouse type dwelling sites, the infrastructure for fire protection water shall be provided, including the size of water mains.

#### **Fire Protection Features**

- 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 Beaver Dam Road must be constructed so fire department apparatus may negotiate it. The “center island” placed at an entrance into the subdivision, shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision. Additionally, each separate path of the roadway represented by the extension of Frances Ann Street shall be of sufficient width so as to not impede travel through or hamper operations of fire apparatus setting up in either of the two paths.
- 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.
- 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.

Chesapeake Utilities has installed a natural gas line across the frontage of the property. A Contract with the utility company will be executed prior to connection to their supply line.

#### **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
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Townhouse 2-hr separation wall details shall be shown on site plans
- Provide Road Names, even for County Roads.

Noted and will be implemented on the plans prior to submission to the State Fire Marshals Office.

### **Recommendations/Additional Information**

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

Department of Transportation – Contact Bill Brockenbrough 760-2109

- A Pre-Submittal Meeting was held for this project on June 26, 2014, at which time DelDOT determined the following things:
  - Based on the 100-unit plan and a previous entrance approval, and in accordance with Section 2.3 of the Standards and Regulations for Subdivision Streets and State Highway Access, a Traffic Impact Study (TIS) is not required but an Area-Wide Study Fee will need to be submitted prior to DelDOT’s issuance of a Letter of No Objection to Recordation.

The Developers have agreed to pay an Area-Wide Study fee in the amount of approximately \$6,430.00 in lieu of conducting a TIS.

- An interconnection to Lewes Crossing will be required.

The plans show the main entrance to the proposed project will be through Phase 7 of Lewes Crossing. No new full access entrance will be needed for this project. A right-out only entrance will be proposed onto Beaverdam Road.

- Based on the 100-unit plan, no improvements to the left turn or right turn lane approved for Lewes Crossing will be required. This determination did not address the development potential of Tax Parcel 3-34-5.00-175.00, part of which is accessible only through Lewes Crossing by means of a different stub street. When it is developed, improvements may be required.

Noted and Agreed...Pennoni provided the supporting data to Del DOT for this determination.

- A right turn out of the site onto Beaver Dam Road, conceptually the same as that shown on the site plan attached to the PLUS application, will be permitted.

Shown on the plans.

- At the PLUS Meeting, the applicant's engineer mentioned that a stub street would be provided from the subject land to Tax Parcel 3-34-5.00-175.00. If so, DelDOT recommends that sidewalks be provided along the stub street. Section 5.1.4.2 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access addresses the design of stub streets being built for State maintenance. If the proposed streets are to be privately maintained, conformity to the section is not required but it is recommended as a good practice.

Curb & gutter and sidewalks are proposed throughout the entire project.

- As shown on the Investment Level map associated with *the Strategies for State Policies and Spending*, the subject development is located in a Level 1 area. DelDOT's Shared-Use Path and/or Sidewalk Process policy (available at [http://www.deldot.gov/information/business/subdivisions/SUP\\_Sidewalk\\_Process.pdf](http://www.deldot.gov/information/business/subdivisions/SUP_Sidewalk_Process.pdf)) requires that a path or sidewalk be installed along the State-maintained road frontage of any development in a Level 1 or 2 area. Therefore, the applicant should expect a requirement that a 10-foot wide shared-use path be installed along Beaver Dam Road to serve this development.

The project proposed to connect to the shared use path system along the frontage of the property.

- 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 date of May 21, 2014. The notes can be found at [http://www.deldot.gov/information/business/subdivisions/DelDOT\\_Development\\_Coordination\\_Plan\\_Sheet\\_Notes.doc](http://www.deldot.gov/information/business/subdivisions/DelDOT_Development_Coordination_Plan_Sheet_Notes.doc)
- The applicant should expect a requirement that all PLUS and/or TAC comments be addressed prior to submitting record, subdivision or entrance plans for review.
- The applicant should expect a requirement that a separate turning template plan be provided to verify that vehicles can safely enter/exit the entrance. Each entrance shall be designed for

the largest vehicle using that entrance.

- The applicant should expect a requirement that any substation, wastewater facility or other utility parcels serving the site have access from an internal subdivision street with no direct access to the State-maintained highway.

Nothing anticipated for this project.

- Please check to determine whether any utilities will need to be relocated as part of this project.

Possible relocation of power poles may need to be relocated and will be determined during final design.

- Please be advised DelDOT's check handling procedures changed in 2012. For specific information, see the letter available at <http://www.deldot.gov/information/business/subdivisions/PaymentProcedure.pdf>

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold 735-3495

#### **Soils Assessment**

- Based on the NRCS soils survey mapping update, Downer (DoA & DoB) is the predominant soil mapping unit mapped in the immediate vicinity of the proposed project (Figure 1).



Figure 1: NRCS soil survey update mapping in the immediate vicinity of the proposed project

### **Noted and Concur.**

#### **Nuisance Waterfowl**

- Please note that wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns surrounding ponds provide attractive habitat for these species.

To deter waterfowl from taking up residence in these ponds, DNREC recommends planting the surrounding open space with a mix of native wildflower plantings (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). It is best to mow the open space area surrounding the pond only once a year, either in February or March. If mowing must occur more often, it would be helpful to leave a minimum buffer of

15-30 feet in width to be mowed annually. This area would be necessary to adequately deter the waterfowl from inhabiting the area (when the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond). In addition to deterring nuisance waterfowl, the native wildflower mix will also serve to attract bees, butterflies, and other pollinators, and reduce run-off, which can contain oil and other pollutants that homeowners may use on their lawns and driveways. Program botanist Bill McAvoy would gladly assist in drafting a list of plants suitable for this site. Bill can be contacted at (302) 735-8668 or [William.McAvoy@state.de.us](mailto:William.McAvoy@state.de.us).

The developers currently are working with Envirotech within the Lewes Crossing Project to help mitigate nuisance waterfowl problems. This will most likely be carried over to this project after construction of the stormwater management ponds.

#### **Additional information on TMDLs and water quality**

- Compliance with the specified TMDL nutrient and bacterial reduction requirements specified for the Inland Bays watershed can be facilitated by the strategies and requirements described in the Inland Bays PCS, and the implementation/adherence to the following recommended BMPs:
  - Calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.
  - Use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as a BMP(s) to mitigate or reduce nutrient and bacterial pollutant impacts via runoff/discharges from impervious surfaces. Please contact Lara Allison at 739-9939 for further information about the possibility for installing a raingarden(s) on this parcel.
  - Wherever practicable, the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate the impacts from surface imperviousness (e.g., flooding, pollutant load runoff).
  - Use of green-technology storm water management (in lieu of open-water management structures) and raingardens as BMPs to reduce nutrient pollutant impacts. Please contact Lara Allison at 739-9939 for further information about siting a raingarden(s) in this parcel.
  - Including open-water management structures as part of the County's total open space requirements - as currently proposed - is not considered an acceptable best management practice. DNREC strongly encourages the applicant to exclude these structures from the calculation for surface imperviousness.
  - Voluntarily assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the "Nutrient Load Assessment protocol." The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their project's impact(s) on baseline water quality. DNREC strongly encourages the applicant/developer use this

protocol to help them design and implement the most effective BMPs. Please contact John Martin or Jen Walls at 302-739-9939 for more information on the protocol.

#### **Additional information on tank management**

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.
- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.

#### **Additional information on hazardous waste sites**

- Site Investigation Restoration Section (SIRS) strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.
- Additional remediation may be required if the project property or site is re-zoned by the county.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.

#### **Additional information on air quality**

- New homes may emit, or cause to be emitted, additional air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
  - Emissions that form ozone and fine particulate matter; Delaware currently violates federal health-based air quality standards for ozone,
  - The emission of greenhouse gases which are associated with climate change, and
  - The emission of air toxics.
- Air emissions generated from new homes include emissions from the following activities:
  - Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
  - The generation of electricity, and
  - All transportation activity.

- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) were quantified. Table 2 – Projected Air Quality Emissions represents the actual impact The Villas at Lewes Crossing may have on air quality.

Emissions Attributable to The Villas at Lewes Crossing (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO <sub>2</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )	Carbon Dioxide (CO <sub>2</sub> )
Area source emissions	3.1	0.3	0.3	0.4	12.5
Power emissions	*	1.2	4.3	*	629.4
Mobile emissions	4.6	4.8	0.1	0.1	2955.5
Total emissions	7.7	6.3	4.7	0.5	3597.4

(\*) Indicates data is not available.

- Note that emissions associated with the actual construction of the residential community, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.
- DNREC encourages sustainable growth practices that:
  - Control sprawl;
  - Preserve rural and forested areas;
  - Identify conflicting land use priorities;
  - Encourage growth on previously developed sites and denser communities while at the same time protect our diminishing land base;
  - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and
  - Demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.
- Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:
  - Constructing with only energy efficient products. Energy Star qualified products are up to 30% more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.

- Offering geothermal and/or photo voltaic energy options. These systems can significantly reduce emissions from electrical generation and from the use of oil or gas heating equipment.
- Constructing with high albedo, high solar reflectance materials. This includes roofing and hardscape. These materials help to reduce heat island impacts and, by extension, help to minimize the potential for localized ground-level ozone formation. These materials also help reduce demands on air conditioning systems and save on energy costs.
- Providing shade for parking lot areas. Approaches may include architectural devices, vegetation, or solar panels. Providing shade for parking areas helps to reduce heat island impacts, and, by extension, helps to minimize the potential for localized ground-level ozone formation. Such measures can also have the additional benefit of channeling or infiltrating stormwater.
- Encouraging the use of safe multimodal transportation. This measure can significantly reduce mobile source emissions. For every vehicle trip that is replaced by the use of a sidewalk, bike path, or mass transit, 7 pounds of VOC and 11.5 pounds of NOx are reduced each year.
- Using retrofitted diesel engines during construction. This includes equipment that is on-site as well as equipment used to transport materials to and from site.
- Using pre-painted/pre-coated flooring, cabinets, fencing, etc. These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- Planting trees in vegetative buffer areas, particularly those between the site and adjacent residential areas. Trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

The project is proposing a landscape plan for the required buffers and throughout the site that will meet the goals mentioned above.

This is a partial list, and there are additional things that can be done to reduce the impact of the development. The applicant should submit a plan to the DNREC DAQ which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Villas at Lewes Crossing project.

Delaware State Fire Marshall's Office – Contact Duane Fox 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 the website: [www.statefiremarshal.delaware.gov](http://www.statefiremarshal.delaware.gov), technical services link, plan review, applications or brochures.

Pennoni will schedule a pre-application meeting prior to beginning the design of the project.

Delaware State Housing Authority- Contact Karen Horton 739-4263

- **DSHA supports the request to rezone 19.52 acres**, located on Beaverdam Road near Plantations Road, from an Agriculture Residential District (AR-1) to a High Density Residential/Residential Planned Community District (HR-1/RPC) to allow 100 duplexes and townhomes. **It is important to note that the PLUS application erroneously listed DSHA as the owner of this parcel. DSHA did own the parcel until recently, however are not currently and are no longer associated with this parcel. Regardless, DSHA supports the proposal for the following reasons:**
  - As noted in the application, the market segment targeted includes first-time homebuyers and is located in the coastal resort area of Sussex County. As such, this proposal provides an excellent opportunity to support the local workforce in an area that lacks affordable homes. In addition, this particular site is in close proximity to existing services, markets, and employment opportunities.
- Finally, DSHA submits the following information for both the applicant and Sussex County:
  - While large suburban homes have dominated development in Delaware for several decades, a growing body of research indicates that a significant market shift. The baby boomers that once drove suburban development are now aging and are looking to downsize into something more manageable. The Delaware Population Consortium (DPC) projections for the next ten years indicate that not only will there be a large amount of suburban homes placed on the market by baby boomers, but that there will be a *decline* in households in age ranges that typically seek large homes. These same DPC projections show growth in the younger age ranges most likely at stages in their life and income to support apartments, condominiums and entry level homes.
  - The combination of excess suburban housing supply currently on the market, additional supply being added by aging baby boomers, more stringent lending standards, along with a changing market indicate that it is *critical* that communities move away from large lot single family-detached housing and *proactively* provide a variety of housing options to meet market demand.

**This application proposed by the owners of the adjacent Lewes Crossing project provides for the variety of housing choices and market pricing as stated and supported by the Housing Authority.**

Division of Public Health – Contact Laura Saperstein 744-1011

The Delaware Division of Public Health (DPH) is pleased to be able to participate in the PLUS application process. In keeping with its mission to protect and promote the health of all people in Delaware, DPH looks for opportunities to encourage and enhance our population's health behaviors that will result in healthy people and healthy communities.

Community design can impact the health of a population. Studies show that persons in lower-income communities, the elderly, and children often suffer more from consequences of inadequate land-use and transportation. Additionally, physical activity has a direct correlation to many chronic diseases, including hypertension, diabetes and obesity. In 2012, 39.1% of Delawareans reported a BMI of “overweight,” and 26.9% reported a BMI as “obese.” To that end, DPH looks to make recommendations for land-use that can empower Delawareans to make good health behaviors a part of their daily lives.

- **DPH is pleased to see the inclusion of multi-use pathways and bike lanes** alongside The Villas at Lewes Crossing on Beaverdam Road. Additionally, because the location of the development is within a reasonable distance to entertainment, restaurants, and local transit options, residents have the opportunity to incorporate physical activity into daily routines through active transportation. Finally, **the proposed inclusion of “community recreation areas” aligns with the SCORP regional priorities,** and will further engage residents with opportunities for active recreation.
- DPH feels The Villas at Lewes Crossing has the opportunity to increase positive health behaviors for its residents by incorporating the following recommendations into its land development proposal:
  - Include pedestrian lighting on all paths and walkways to enhance the usability of active transportation options.
  - Include crosswalks at all key intersections
  - Include bicycle facilities, such as bike lanes, signage and parking to enhance non-motorized options.

**Sidewalks and key crosswalks within the project are proposed and will be designed for the project.**

Sussex County-Contact Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County’s “Affordable Housing Support Policy”. The policy, along with other resources, is available on the County’s Affordable & Fair Housing Resource Center website: [www.sussexcountyde.gov/affordable-and-fair-housing-resource-center](http://www.sussexcountyde.gov/affordable-and-fair-housing-resource-center). The County’s Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.

- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County. Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

**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 PLUS process, noting whether comments were incorporated into the project design or not and the reason therefore.**

In addition to our response to the above PLUS comments I offer the following for your record:

***From:*** Michael Izzo [<mailto:mizzo@sussexcountyde.gov>]

***Sent:*** Thursday, August 07, 2014 1:30 PM

***To:*** Carlton Savage; Rob Davis

***Cc:*** 'Vincent G. Robertson Esq. ([robertson@griffinhackettlaw.com](mailto:robertson@griffinhackettlaw.com))'; John J. Ashman

***Subject:*** RE: Delaware State Housing Property

Carlton,

*Sussex County allocated 100 EDU of sewer capacity for the DSHA project on the parcel in 1999. That capacity continues to exist and is included in current evaluations and planning. There were planned upgrades required in parts of the system, but they may no longer be an issue. Please coordinate with Utility Planning to resolve said upgrades as part of the concept plan process.*

*Regards,*

*MAI*

The rezoning being requested provides the means of creating a superior living environment through the development of a single-family attached project that is in harmony with the community by creating a cohesive look of the surrounding neighborhoods. This project will add to the character of the community instead of intruding into it by providing new housing opportunities and creating a convenient road connection with the adjacent Lewes Crossing project. The RPC overlay allows a means to produce a development that is based on rational site planning, and forward-thinking design. This land planning technique illustrates how to incorporate open space and traditional design elements into new settings. The Residential Planned Community concept for this project allows for street trees that will be planted to eventually provide a canopy of shade over streets as well as provides for a landscape buffer around the entire perimeter of the property. Street lighting will meet a design standard that is similar to the adjacent projects. Sidewalks will be provide an orientation to pedestrians with an

ability to walk and exercise as well as provide a safe mode of transportation for the community. Open spaces and trails will be coordinated across the entire property and will promote future linkages on adjacent existing and future developments. Open space has been provided along Beaverdam Road to maintain some of the rural character and to reduce noise conflicts between homes and traffic. Additional parking spaces throughout the neighborhood is provided to prevent overcrowding of residential driveways in front of dwellings. The owners and their consultant gave genuine consideration to points of view expressed in the comments given above. The issues raised during PLUS process have or will be addressed in detail during the construction plan process of the project. The land use planning of the Villas at Lewes Crossing interrelates with the County's strategies for preserving the rural environment, conserving more open space, and providing for design ingenuity while protecting existing and future developments.

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

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland". The signature is written in black ink and is positioned below the word "Sincerely,".

Constance C. Holland, AICP  
Director, Office of State Planning Coordination

CC: Sussex County