



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

December 26, 2013

Mr. Zachary Crouch
Davis, Bowen & Friedel, Inc.
23 N. Walnut Street
Milford, DE 19963

RE: PLUS review 2013-11-02; Osprey Point

Dear Mr. Crouch:

Thank you for meeting with State agency planners on November 27, 2013 to discuss the proposed plans for the Osprey Point subdivision located on the West side of Old Landing Road, opposite the Seagrass Plantation subdivision.

According to the information received, you are seeking site plan approval through Sussex County for a 360 unit residential planned community on 135.24 acres.

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.**

Strategies for State Policies and Spending

- This project is located in Investment Level 3 according to the Strategies for State Policies and Spending. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. This particular parcel has several environmental features that should be considered when developing the parcel. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There is a known archeological site (S-7972, 7S-G-129) on this parcel. With this in mind, the developer should be aware of the Delaware's Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

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 that pertains to unmarked human remains or cemeteries, please check the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

Therefore, prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for potential historic or cultural resources, such as a potential archaeological site, a cemetery or unmarked human remains. Furthermore, 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 the 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Per Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access, Traffic Impact Studies (TIS) are warranted for developments generating more than 400 vehicle trip ends per day or 50 vehicle trip ends per hour. Preliminarily, we estimate that the subject development would generate 2,920 vehicle trip ends per day and 280 vehicle trip ends in the peak hour. To obtain a scope of work for a TIS, the developer may have their engineer contact Mr. Troy Brestel of the DeIDOT Planning office. Mr. Brestel may be reached at (302) 760-2167.

In accordance with Section 2.15.2 (formerly 3.10.2) of DeIDOT's Standards and Regulations for Subdivision Streets and State Highway Access, needed off-site improvements or contributions to DeIDOT capital projects, identified through the TIS process, would need to be shown on the record plan by illustration or note.

Further regarding off-site improvements, in accordance with Section 2.15.2 (formerly 3.10.2) of the Standards and Regulations, we anticipate requiring improvement of Old Landing Road to meet State standards for local roads. Local road standards include 11-foot lanes and five-foot paved shoulders. Preliminarily, the limit of these improvements would be from just north of Fairway Drive, where any needed intersection improvements would begin, to the south limits of the site frontage. While this is a significant distance, it appears that most of it has already been improved by others. A detailed field review will be needed to determine what, if any, work remains to be done there.

The TIS may identify intersections farther from the site where the developer would be obligated to make or participate in improvements. These intersections would certainly include the intersection of Old Landing Road and Warrington Road (Sussex Road 275) and would likely include the intersection of Old Landing Road with Airport Road (Sussex Road 278A) and the intersection of Warrington Road with Delaware Route 24.

- The site entrance must be designed in accordance with DeIDOT'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_Mannual_Revision_1_proposed_060110.pdf. If the subdivision streets are to be built for State maintenance, they too must be designed in accordance with DeIDOT's Standards and Regulations. DeIDOT anticipates requiring a right turn lane into the site.
- Section 3.5.7.2 of DeIDOT's Standards and Regulations for Subdivision Streets and State Highway Access provides that inter-connections be required to adjoining developments

that have street stubs abutting the subject property. Accordingly, DelDOT anticipates requiring street connections to Clubhouse Drive in Old Landing Woods and Arnell Road in Old Landing.

- 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 that fall outside the existing right-of-way or the drainage/utility easement. These easements must be shown on the record plan, not referenced by a note.
- In accordance with Section 3.4.1.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Record Plan should show all existing entrances (residential/commercial) within 400-feet of the proposed site entrance.
- In accordance with Section 2.15 (formerly Section 3.10) of the Standards and Regulations for Subdivision Streets and State Highway Access, the required off-site improvements and when they are warranted will need to be shown on the Record plan by note or illustration.
- 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 Old Landing Road (Sussex Road 274) to provide a minimum of 30 feet of right-of-way from the road centerline. The right-of-way dedication note should read as follows, "**A 30-foot wide strip of right-of-way from the centerline of 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 Old Landing 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.**"
- In accordance with Section 4.8 of the Standards and Regulations for Subdivision Streets and State Highway Access, a 20-foot wide buffer will be required from the edge of any stormwater management pond to the ultimate right-of-way of the nearest State-maintained road. The ultimate right-of-way is based on the functional classification of the road.
- 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.

- Refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D – Plan Review Checklist, pages D-2 through D-39, for checklists associated with various types of plan submittal. For each plan submittal, submission of the appropriate checklist with the plan is required.
- Referring to the Standards and Regulations for Subdivision Streets and State Highway Access, Chapter 1 – Introduction, Section 1.4: Review Fees, page 1-8, the Initial 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, a record 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
Design Checklist – Record Plan*
Owners and Engineer’s name and e-mail address
Sight Distance Spreadsheet
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, page D-2 and D-3.

- Referring to the Standards and Regulations for Subdivision Streets and State Highway Access, Chapter 1 – Introduction, Section 1.4: Review Fees, page 1-8, the Construction Stage review fee shall be assessed to this project.
- Referring to the Standards and Regulations for Subdivision Streets and State Highway Access, Chapter 4 – Construction Plans, Section 4.3: Subdivision Construction Plan Checklist or Section 4.4: Commercial Entrance Plan Checklist, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Subdivision/Entrance Plan review;

Copy of the Construction Stage Fee Calculation Form
Copy of the Construction Review Fee
Gate-Keeping Checklist – Entrance Plan
Design Checklist – Entrance Plan**
Auxiliary Lane Spreadsheet
Three (3) paper sets of the Entrance Plan

SWM Report and Calculations (If applicable)
Pipe Angle Spreadsheet (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, page D-9 and D-13.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

Wetlands

- State regulated wetlands ARE located on this property based on a review of the State wetland maps. State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. Any activity in State regulated wetlands may require a permit from DNREC's Wetlands and Subaqueous Lands Section. DNREC recommends that a wetland delineation be done by a licensed consultant to be sure no activity from building affects the wetlands. Additional information about State regulated wetlands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>
- State regulated subaqueous lands ARE located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. Upon review of the GIS layers, Perennial River/Streams are located on the property. State subaqueous lands include all tidal waters (up to the mean high water line), most non-tidal rivers, streams, lakes, ponds, bays and inlets (up to the ordinary high water line), most perennial streams and ditches and many intermittent streams and ditches. An on-site inspection by a representative of the Wetlands and Subaqueous Lands Section or an environmental consultant is recommended to determine the limits of jurisdictional State subaqueous lands. Additional information about State regulated subaqueous lands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.
- Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or

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 water body” 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.
- 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. This project’s open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>
- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. These regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf> and background information, guidance documents, and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.

Water Supply

- The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. Our 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.

- Potential Contamination Sources exist in the area, and any well permit applications will undergo a detailed review that may increase turnaround time and may require site specific conditions/recommendations. In this case, there is a Spray Irrigation Site associated with the Rehoboth Bay Mobile Home Park located within 1,000 feet of the proposed project.

Water Resource Protection Areas

- The DNREC Water Supply Section, Ground-Water Protection Branch (GPB) has determined that a wellhead protection area for the Sussex County falls within the proposed development (see map) and is subject to the County's source water protection ordinance. The wellhead protection area protects a well owned by the Old Landings Golf Course.
- Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where land use activities or impervious cover may adversely affect the quantity and quality of ground water moving toward such wells. Impervious cover prevents precipitation from infiltrating through the soil to the water table aquifer. Impervious cover refers to structures including but not limited to roads, sidewalks, parking lots, and buildings. Any impervious cover within this wellhead protection area has the potential to have a negative affect the quality and quantity of drinking water available to consumers.

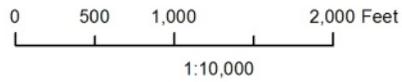
In addition, because the project is located within a wellhead protection area and the wellhead is a source of public drinking water, the storage of hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.

Osprey Point (PLUS 2013-11-02)



Legend

 Wellhead Protection Area



As of August 2013. This map is provided by the DNREC solely for display and reference purposes and is subject to change without notice. DNREC will not be held responsible for the assumed accuracy contained in the map or for the use other than its intended purpose.

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.

If existing ponds are going to be utilized as sediment & stormwater facilities they will need further review and will need to be accessed via open space.

Flood Management

- A significant portion of this property is located in the 1% annual chance floodplain. Any site plan showing the location the floodplain boundary must show the boundary as it is depicted on the effective FEMA Flood Insurance Rate Map. If the floodplain boundary is shown in any other location, documentation must be sent to FEMA to revise the floodplain boundary prior to development. A coastal study has been conducted which revises the current FEMA maps. The preliminary maps can be viewed at www.rampp-team.com/de.htm

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.
- This project property is a known golf course. Old Landing Golf Course began operations between 1961 and 1968. Historically, golf courses are known to use significant amounts of pesticides, herbicides and chemicals to maintain its performance and appearance.

Tank Management. Please be aware:

- 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.

- The following confirmed leaking underground storage tank (LUST) project is located within a quarter mile from the proposed project area:
 - Rehoboth Bay, Facility: 9-000141, Project: S0911097 (Inactive)
- No environmental impacts are anticipated; however, 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 Branch by calling 302-395-2500

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:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • 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.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • 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.
7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> • 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)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> • Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> • Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and

	<p>carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2).</p> <ul style="list-style-type: none"> • Maintain recordkeeping and reporting requirements.
<p>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<ul style="list-style-type: none"> • 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 our website:
<http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

Delaware State Fire Marshall’s Office – Contact Duane Fox 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. In the area of the single family dwellings, the spacing of the fire hydrants can be extended to 1000 feet spacing on centers.
 - Where a water distribution system is proposed for single family dwellings, townhouse type dwellings, and multi-family residential units, 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 County Road 274 must be constructed so fire department apparatus may negotiate it.
 - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
 - 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
 - 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.
- 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.

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

- Please refer to the DelDOT website for guidance as to whether a pre-submittal meeting is required and how to prepare for one. That guidance is available at <http://www.deldot.gov/information/business>.
- Be advised that the standard general notes have been updated and posted to the DelDOT website. Begin using the new versions and look for the revision date of June 28, 2013 for

the Record/Site Plan and Construction Plan general notes. The Temporary Traffic Control Notes (TTCN) still have the revision date of August 14, 2012. The notes can be found at http://www.deldot.gov/information/business/subdivisions/DelDOT_Development_Coordination_Plan_Sheet_Notes.doc

- In accordance with Section 3.6.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, we recommend that right-of-way monuments be placed along the subdivision streets.
- Please check to determine if any utilities will need to be relocated as part of this project.
- The developer should anticipate a requirement that any sub-station and/or wastewater facilities have access from the internal subdivision streets with no direct access to the State-maintained highway.
- The developer's engineer should anticipate a requirement that the sight distance triangles for the site entrance be shown on the record plan.
- The developer's engineer should anticipate a requirement that a turning template plan be provided to verify that vehicles can enter and exit the development safely. The minimum design vehicle that should be used for this development is SU30.
- The developer's engineer should anticipate a requirement that a label should be added within the right-of-way for each street, reading "Privately Maintained."
- On June 27, 2012, DelDOT announced changes in the way that we receive checks. A letter in this regard can be found at <http://www.deldot.gov/information/business/subdivisions/PaymentProcedure.pdf>
- The proposed development is located in a Level 3 Investment Area relative to the Strategies for State Policies and Spending. DelDOT's Shared Use Path/Sidewalk Process requires that developments in Level 3 areas install a shared use path or sidewalk if the development abuts an existing facility. As there are no existing shared use paths or sidewalks abutting this property, installation of such a facility is not required. The Process is available at http://www.deldot.gov/information/business/subdivisions/SUP_Sidewalk_Process.pdf.
- All PLUS comments should be addressed prior to submitting record, subdivision or entrance plans for review.
- The developer should anticipate additional comments once the entrance plans are submitted for review.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

Soils Assessment

- Based on soils survey mapping update, following soil mapping units were mapped on subject parcel (grouped on the basis of drainage class):
 - 1) Well drained – Fort Mott (FmB), Ingleside (IeA), and Greenwich (GrA)
 - 2) Moderately well drained – Pineyneck (PyA)
 - 3) Somewhat excessively well drained – (Henolopen (HpB)
 - 4) Poorly drained & very poorly-drained (hydric) – Fallsington (FgA), Broadkill (Br; tidally influenced), and Manahawkin (Ma)

- Based on review of the NRCS soils survey mapping update, the primary wetland associated hydric soil mapping units mapped in this parcel are Fallsington (FgA), Broadkill (Br), and Manahawkin (Ma). These soil mapping units have naturally-elevated water tables often prone to seasonal flooding, especially when accompanied by high-intensity precipitation events. Therefore, we strongly recommend that the applicant avoid these said soil mapping units. We further recommend that the applicant contact a certified (ARCPACs) and licensed soil scientist (State of Delaware Class D licensed) to conduct a more thorough site-specific field delineation of the hydric soils on this site. Please contact the Underground Discharges Branch at 739-9948 for a list of qualified soil scientists.

- The Statewide Wetland Mapping Project (SWMP) often uses the soil survey as the basis for mapping and delineating wetlands. The presence of a hydric soil is one of three key parameters that must be met in order to meet jurisdictional wetland requirements (as specified by the USACOE). The other parameters are hydrophytic vegetation and hydrology. Hence the presence of hydric soils is a correlate with wetland presence. Although removal of hydrophytic vegetation may change the jurisdictional status of a wetland to a non-wetland, the existing wetland conditions still persist. That is, relatively undisturbed native hydric soils (i.e., those soils not extensively filled and graded as usually associated with construction practices) still retain much of their “wetness” and their environmental/ecological values (i.e., retain water and pollutants). Thus, building on hydric soils (e.g., Fallsington, Broadkill, and Manahawkin) may increase the potential for future on-site and off-site flooding events (hydric soils act as nature’s “sponge” by retaining water and mitigating surface water runoff or flooding) along with concurrent increases in the volume of pollutant-laden surface water runoff and discharges to surface water bodies (streams, ponds, and ocean) and groundwater; such increases in water volume and pollutants may negatively impact both homeowner safety and water quality (or health). Therefore, we strongly recommend the applicant avoid building in the hydric Fallsington, Broadkill, and Manahawkin soil mapping units.

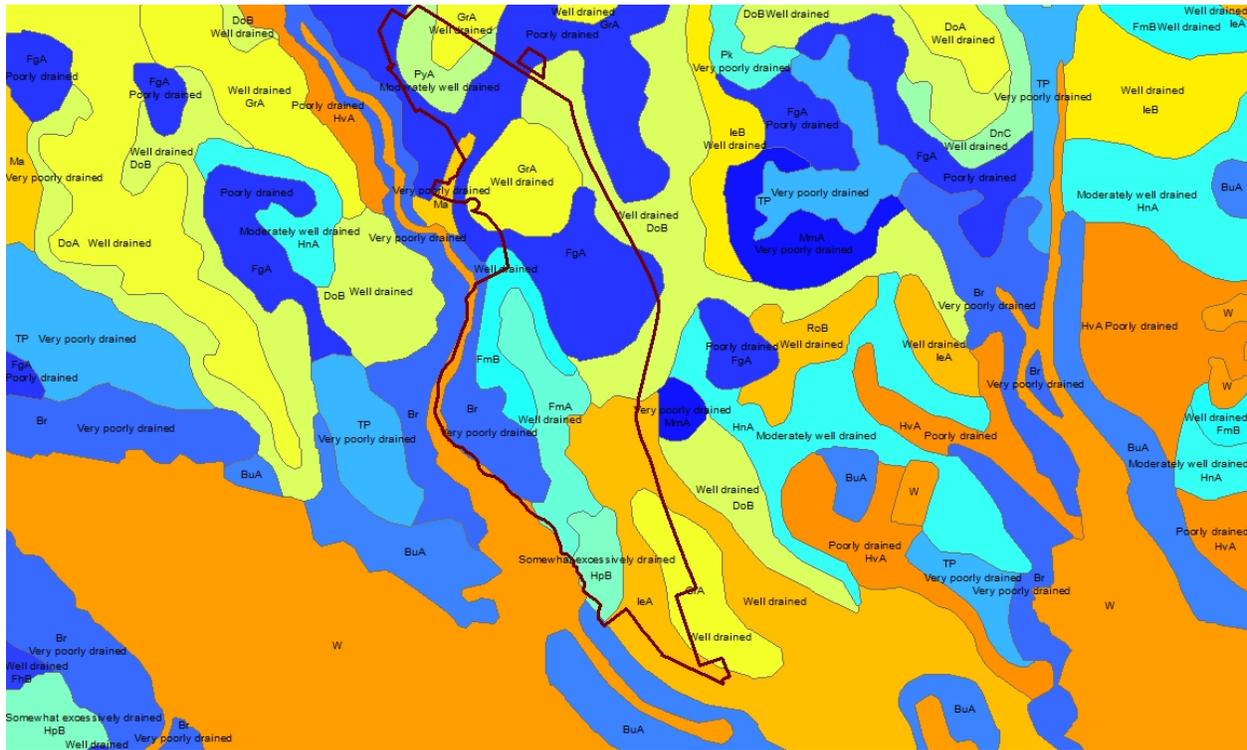


Figure 1: NRCS soil survey mapping update in the vicinity of the proposed construction.

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:
 - A United States Corps of Engineers (USACE) approved wetlands delineation is strongly recommended. According to information presented in the PLUS application, a wetlands delineation was conducted but not approved by the USACE.
 - Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands (field delineated and approved by the USACE). Based on the above-referenced research review, the 25-foot buffer proposed by the applicant in the PLUS application is not sufficiently protective of water quality.

- Applicant should 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. Avoid all hydric soil mapping units (e.g., Fallsington, Manahawkin, and Broadkil). Building on such soils is likely to contribute to an increased probability of future onsite and offsite flooding problems.
- Use rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff/discharges from impervious surfaces.
- 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, ponds, and roads) included in the calculation.
- Wherever practicable, we strongly advise the use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP(s) to reduce the impacts from all forms of created surface imperviousness.
- Applicant should 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) resulting from the conversion of individual or combined land parcels to a changed land use(s); thus providing applicants and governmental entities with quantitative information about the project’s impact(s) on baseline water quality. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Jen Walls or John Martin at (Division of Watershed Stewardship) 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

- DNREC's Site Investigation and Restoration Section (SIRS) strongly recommends that the land owner perform environmental due diligence of the property by performing a

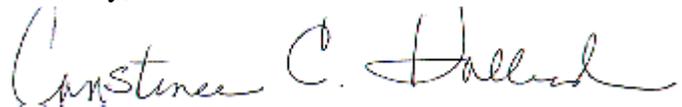
Phase I Environmental Site Assessment (including a title search to identify environmental covenants) and a Phase II or Facility Evaluation in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA) and the HSCA Guidance Section 2, part 2.3 (page 2-1). While this is not 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.

- The developer will receive a letter from SIRS concerning the development of the future residential homes on the former golf course.
- 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.

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,

A handwritten signature in cursive script that reads "Constance C. Holland".

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