



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

November 27, 2017

Mr. Steve Gorski
Duffield Associates, Inc.
5400 Limestone Road
Wilmington, DE 19808

RE: PLUS review 2017-01-06; Swann Cove Phase 9

Dear Steve:

Thank you for meeting with State agency planners on October 25, 2017 to discuss the proposed plans for the Swann Cove Phase 9 project. According to the information received you are seeking review of a rezoning of 7 acres from AR-1 to MR-RPC in anticipation of a 20 unit subdivision along Old Mill Bridge Road 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.**

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. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review if the proposed development will generate more than 200 vehicle trip ends per day. Such a meeting was held with the applicant's engineer on October 6, 2017.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, we see that the total daily trips are estimated at 200 vehicle trip ends per day. A TIS is not required.

Per Section 2.3.2 of the Manual, DelDOT may require a Traffic Operational Analysis (TOA) if a development would generate more than 200 vehicle trip ends per day and DelDOT it determines in the plan review process that a TOA is needed to address a concern about the proposed site entrance. The site entrance on Old Mill Bridge Road was reviewed previously when Swann Cove was proposed. A TOA is not required.

However, DelDOT has identified one off-site improvement in which the applicant would need to participate. Specifically, the applicant would need to improve the site frontage on Old Mill Bridge Road to provide 5-foot shoulders on their side of the road.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Old Mill Bridge Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of the road. The following right-of-way dedication note is required, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**" Even if some rights-of-way were dedicated previously, the functional classification of Old Mill Bridge Road may have changed since then, with the result that additional rights-of-way will be required now.
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Old Mill Bridge 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 for the State of Delaware, as per this plat.**" Even if some rights-of-way were dedicated previously, the functional classification of Old Mill Bridge Road may

have changed since then, with the result that additional rights-of-way will be required now.

- As per the Delaware Strategies for State Policies and Spending, this development is in Investment Level 3. Referring to Section 3.5.4.2.A of the Manual, developments in Level 3 and 4 Areas are required to install a sidewalk or Shared Use Path if the project abuts to an existing facility. If the project does not abut an existing facility, it is at the Subdivision Engineer's discretion. This project is in a Level 3 Area and DelDOT determined at the Pre-Submittal Meeting that it will require a Shared Use Path along the site frontage.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine what auxiliary lanes are warranted at the site entrance on Old Mill Bridge Road and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>. DelDOT anticipates requiring a right turn lane into the development from Old Mill Bridge Road.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Executive Summary

Development of this parcel will result in increased impervious surface and new sources of greenhouse gas emissions. Opportunities exist to preserve natural resources while reducing the environmental impact on-site. As discussed at the PLUS meeting, the Department recommends reducing the environmental impact on-site through appropriate consideration of the Pollution Control Strategies and hydric soils, to protect natural resources and the overall health of the community. Including waste reduction and resource conservation measures will also improve long term regional sustainability.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. DNREC encourages the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting the buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations (funding assistance may be found at www.de.gov/cleantransportation). They further recommend an abundant use of native vegetation and shade trees throughout the landscape, as well as green infrastructure, where practicable, to absorb carbon dioxide, protect water quality and provide relief to residents on hot days.

The following pages provide information about applicable regulations and detailed recommendations associated with this project, from various DNREC Divisions. DNREC would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

Water Quality: 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 web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs:
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>
- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. The PCS regulations can be reviewed here: <http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved here:
http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm

Water Supply

- 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 take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios, at (302) 739-9944.

Sediment and Stormwater Management

- 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 pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. 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 the Sussex Conservation District. Contact the Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

Air Quality

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following construction-phase 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 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 carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). • Maintain recordkeeping and reporting requirements.
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	<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>

Recycling

- The Universal Recycling Law (7 *Del.C.*, §6053) requires all waste service providers to provide recycling collection to their residential customers including providing a recycling cart. Though it may not be the case here, some higher density communities have expressed concerns about storage of trash and recycling containers. Those involved with the planning of new development should give consideration to space for collection of recyclables. For more information or assistance related to recycling requirements, benefits, tools, and assistance, please call Don Long at (302) 739-9403.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- This parcel has no known archaeological sites or National Register-listed property. There is a house (S02088) north of the parcel, and east of Old Mill Bridge Road. The house was probably built in the early to mid-20th century. If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law.
- Prior to demolition or ground-disturbing activities, the developer should hire an archaeological consultant, to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas. There should be sufficient landscaping between the house and the development, to block adverse noise or visual effects

Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, within or near the boundary, of a 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 (Del. C. Title 7, Ch. 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 see more information, please review the following websites: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- If there is federal involvement, 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 the following: www.achp.gov.

Delaware State Fire Marshall's Office – Contact John Rudd 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:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- Where a water distribution system is proposed for townhouse type dwellings it shall be capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 800 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

Accessibility:

- 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”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Townhouse 2-hr separation wall details shall be shown on site plans
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Recommendations/Additional Information

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

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Old Mill Bridge Road.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that as of August 1, 2015, all new plan submittals and re-submittals, including major, minor and commercial plans, shall now be uploaded via the PDCA (Planning Development Coordination Application) with any review fee paid online via credit card or electronic check. Guidance on how to do this is available on our website at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision date of

July 18, 2017. The notes can be found at
<http://www.deldot.gov/Business/subdivisions/index.shtml>

Department of Natural Resources and Environmental Control – Michael Tholstrup 735-3352

Flooding and Sea Level Rise:

- The planned development lies within an area that will be subject to direct and permanent inundation from sea level rise (<http://de.gov/slrmap>).

Sea levels in Delaware have risen by about a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas and increased risk of flood damage during storms (DNREC, 2012).

DNREC has identified the future inundation risk from sea level rise of approximately 6.18 acres, or 89 percent, of this site could be inundated by sea level rise of 1.5 meters. In the short-term, sea level rise on this parcel, combined with periodic coastal flooding events, may result in repetitive flood damage to buildings, roads and significant difficulties maintaining storm water, drainage and other infrastructure. In the long-term, this increased flood and inundation risk could result in costly public and private flood abatement and drainage projects and an eventual abandonment of structures.

- Recommendations:
 - Lots within flood prone areas should be eliminated.
 - Any structures that are built within an area mapped as both floodplain and sea level rise zone should be constructed with 18” of freeboard plus additional freeboard to accommodate future sea levels.
 - Access roads and foot bridges should be designed to be flood resilient for the entirety of your project’s design life span. This includes ensuring that the roadway functions for the 1 percent chance flood plus anticipated future sea level rise.
 - Filling lots to elevate them to above base flood elevation is discouraged.

References:

NOAA (National Oceanic and Atmospheric Administration). (2014). Mean Sea Level Trend, Lewes, DE. Retrieved from http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8557380.

DNREC Delaware Coastal Programs. (2012). Preparing for Tomorrow’s High Tide: Sea Level Rise Vulnerability Assessment for the State of Delaware. Dover, DE: Department of Natural Resources and Environmental Control. Retrieved from <http://www.dnrec.delaware.gov/coastal/Pages/SLR/DelawareSLRVulnerabilityAssessment.aspx>

Soils Assessment

- Based on NRCS soils survey mapping update, the soil mapping units of concern are Askecksy (AsA) and Klej (KsA). Askecky is a poorly-drained wetland associated hydric soil mapping unit that is considered to have severe limitations (unsuitable) for development. Klej is a somewhat poorly-drained (transitional between uplands and wetlands) soil mapping unit likely to contain hydric soil components as well. Limitations for development are likely to be moderate to severe (Figure 1).
- DNREC strongly discourages building on hydric soils because they are functionally important source of water storage (functions as a “natural sponge”); the loss of water storage through excavation, filling, or grading of intact native hydric soils increases the probability for more frequent and destructive flooding events. The probability for flooding is further compounded by increases in surface imperviousness as building density in the area increases over time. Moreover, destruction of hydric soils increases the amount pollutant runoff (i.e., hydric soils sequester and detoxify pollutants) which contributes to lower observed water quality in regional waterbodies and wetlands. We strongly recommend the applicant contact a licensed (Delaware Class D) soil scientist to make a site specific assessment (i.e., soil survey mapping) of the soils on this site. A list of licensed Class D soil scientists can be obtained here:
<http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargeSLicensesandLicensees.aspx>

Delaware State Fire Marshall’s Office – Contact John Rudd 739-4394

- Although not a requirement of the State Fire Prevention Regulations, the Office of the State Fire Marshal encourages home builders to consider the benefits of home sprinkler protection in dwellings. The Office of the State Fire Marshal also reminds home builders that they are obligated to comply with requirements of Subchapter III of Chapter 36 of Title 6 of the Delaware Code which can be found at the following website:
<http://delcode.delaware.gov/title6/c036/sc03/index.shtml>
- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Sussex County – Contact Jamie Whitehouse 855-7878

- The proposed rezoning is within the Sussex County Unified Sanitary Sewer District, Fenwick Island area and connection to the sewer system is mandatory. The anticipated 20-unit subdivision is within the area’s system design and planning study assumption of 4.0 equivalent dwelling units per acre and capacity can be assumed. Gravity sewer and potential points are located along the parcels western and southern boundaries. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A sewer concept plan must be submitted to the Sussex County Engineering Department for review and approval prior to

the design of the sewer system. A checklist for preparing concept plans is attached. Conformity to the South Coastal Area Planning Study, 2005 Update and the approved concept plan will be required.

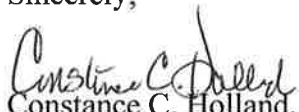
- Onetime System Connection Charges will apply. Please contact Mrs. Noell Warren at 302 855-7817 for additional information on charges

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

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,



Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: Sussex County

Enclosure

BRANDY BENNETT NAUMAN
HOUSING COORDINATOR &
FAIR HOUSING COMPLIANCE OFFICER
(302) 855-7777 T
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bnauman@sussexcountyde.gov



Sussex County
DELAWARE
sussexcountyde.gov

November 14, 2017

Mr. Ring Lardner
Davis, Bowen & Friedel, Inc.
1 Park Avenue
Milford, DE 19963

RE: PLUS Review (PLUS 2017-11-06)

Dear Mr. Lardner,

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 are available on the County's Affordable & Fair Housing Resource Center website: 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.

On behalf of Sussex County, we look forward to cooperating with you and your project as it moves forward.

Thank you,

Brandy B. Nauman
*Housing Coordinator &
Fair Housing Compliance Officer*



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