



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

June 29, 2005

Ms. Jessica Nichols
Meridian Architects and Engineers
26412 Broadkill Road
Milton, DE 19968

RE: PLUS Review 2005-05-08, Solitude on Whites Creek

Dear Ms. Nichols,

Thank you for meeting with State agency planners on June 8, 2005 to discuss the proposed plans for the Solitude on Whites Creek project to be located on 41 acres on SCR 351 in Sussex County. According to the information received, you are seeking to construct 159 residential units in the Level 2, Environmentally Sensitive Developing Area.

These comments reflect only issues that are the responsibility of the agencies represented at the PLUS review meeting. Note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. The developers must comply with any Federal, State and local regulations regarding this property. Specifically, Sussex County is the governing authority over this land and the developers will need to comply with any and all regulations/restrictions set forth by the County.

Executive Summary

This section includes some site-specific highlights from agency comments found in this letter and is provided for your convenience and reference. The full text of this letter represents the official state response to this project. *The applicants are responsible for reading and responding to this letter and all comments contained within it.*

Site Location/Strategies for State Policies and Spending

- The site is located within an Investment Level 2 area according to the *Strategies for State Policies and Spending* and the Environmentally Sensitive Developing Area according to the Sussex County Comprehensive Plan. In these areas, the State supports development activities that are in keeping with the character of the area and that respect the natural resources on and surrounding the site.

Streets & Roadways

- Right-of-way dedication will be required along the frontage of Clubhouse Road.
- A paved multi-modal path, located in a 15-foot wide permanent easement, will be required along the Clubhouse Road frontage of the site.
- The developer should work with the owner of the street system in Banks Harbor Retreat to attain access and tie the two developments together. If this connection can be achieved, specific design comments are included in the DelDOT comments in this letter.

Natural & Cultural Resources

- The amount of open space should be increased along the waterfront to protect the forested area and buffer the wetlands and creek.
 - A minimum 100-foot buffer is recommended from the edge of the wetland complex.
 - A population of *Apeltes quadracus* (fourspine stickleback) lives in Whites Creek in the vicinity of the site. This rare fish is dependent on calm, shallow and heavily vegetated waters. Development run-off may impact White's Creek and measures should be taken to decrease sedimentation during construction.
 - A rare bird species, Pied-Billed Grebe (*Podilymbus podiceps*), is known to nest in emergent wetland vegetation in the area. To protect nesting habitat for this state rare species, minimize disturbance to emergent wetland vegetation during project activities.
 - Lots should be reconfigured to avoid impact to forested area on site.
 - Portions of the site are within the 100-year floodplain. Dwellings should be located outside of this floodplain.
- Because of the sensitivity of the watershed, pervious alternatives to asphalt and concrete should be considered to reduce the amount of impervious cover.

Office of State Planning Coordination – Contact Ann Marie Townshend 739-3090

The site is located within an Investment Level 2 area according to the *Strategies for State Policies and Spending* and the Environmentally Sensitive Developing Area according to the Sussex County Comprehensive Plan. The State supports development activities in keeping with the character of these areas and that respect the natural resources on and surrounding the site.

We recommend that the design be modified to include more open space than is currently shown, particularly along the waterfront area of the site. We support DelDOT's recommendation that the developer work with the owners of the street system within Banks Harbor Retreat to connect the two neighborhoods.

State Historic Preservation Office (SHPO) – Contact Alice Guarrant 739-5685

SHPO does not object to this development in the Level 2 area. There are no historic properties known on the site. There are no National Register-listed properties in the

vicinity, and although there are two historic properties further north on Clubhouse Rd., they are screened from the site. The Beers Atlas of 1868 shows the T.R. Steele House here and Daiseys Landing nearby. The Steele House appears to have been in the general location of the current home on the property. The developer noted that this house dates to the 1940s or 1950s, but that the barn and outbuildings are probably earlier. In addition, he noted the presence of a 1950s fallout shelter. This area probably has archaeological remains associated with the Steele House and has a high potential for early historic-period archaeological sites, possibly dating to the 1680s into the 1700s, and medium potential for a prehistoric-period archaeological site. SHPO requests the opportunity to document the buildings on the property prior to demolition and would appreciate the opportunity to look for archaeological sites to learn something about their character prior to construction.

Department of Transportation – Contact Bill Brockenbrough 760-2109

Landlock, LLC seeks to develop 159 single-family detached houses on an approximately 41-acre parcel (Tax Parcel 1-34-12.00-170.00). The subject land is located on the east side of Clubhouse Road (Sussex Road 351) between the existing developments of Whites Creek Manor and Banks Harbor Retreat. The land is zoned MR in Sussex County and it would be developed by right.

- 1) Clubhouse Road is classified as a local road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. DeIDOT's policy is to require dedication of sufficient land to provide minimum right-of-way widths of 30 feet from the centerline on local roads. Therefore a right-of-way dedication along the frontage will be required to provide any additional width needed from this project.
- 2) A paved multi-modal path, located in a 15-foot wide permanent easement, will be required across the Clubhouse Road frontage of the site.
- 3) The response to Item 39 on the PLUS application states that "Adjacent sites are developed subdivisions and the developer does not wish to provide interconnection to the existing subdivisions." With regard to the Whites Creek Manor subdivision to the south, there is no opportunity for such a connection. With regard to the Banks Harbor Retreat subdivision to the north, however, much of the site boundary is also the right-of-way line for either Main Street or Banks Road, two of the streets in that development. The developer's statement is understood, but connecting the two developments is basic to good planning. The proposed plan creates double-frontage lots, making inefficient use of the land, and includes no interconnections, preventing residents of the two developments from traveling readily between them.

At the PLUS meeting, the developer explained that the streets in Banks Harbor Retreat are privately-owned and that they cannot access them without permission from their owner. The developer should make an effort to obtain that permission

and tie the two developments together. It was also mentioned that the streets in Banks Harbor Retreat have not been maintained. One way to obtain permission to connect might be to offer to repair or improve the streets being accessed. In terms of specific changes, it is recommended that the developer do three things if they can get the permission just mentioned:

- a. Create a row of lots along Main Street and Banks Road so that the residents of Banks Harbor Retreat are not left looking at back yards or screening. It may be reasonable to keep the double frontage lots along Main Street to preserve the trees along the edge of the property there, but along Banks Road, between Hope Street and River Drive, there appears to be little more than a hedgerow and the double frontage lots there should be eliminated.
 - b. Realign Godspeed Drive opposite Hope Street and connect it through to Banks Road. If the house numbering in Banks Harbor Retreat allows for it, rename Godspeed Drive as Hope Street and continue the numbering.
 - c. Extend River Drive to Peaceful Lane.
- 4) The developer's site engineer should contact the project manager for Sussex County, Mr. John Fiori, regarding specific requirements for access. Mr. Fiori may be reached at (302) 760-2260.

Department of Natural Resources and Environmental Control

Contact Kevin Coyle 739-3091

Soils

According to the soil survey update Runclint, Rosedale, Klej, and Broadkill mucky silt were mapped in the immediate vicinity of the proposed construction. Runclint and Rosedale are well to excessively well-drained soils that have moderate limitations on account of rapid permeability. Klej is a somewhat poorly-drained transitional soil that is likely to contain both upland and wetland soil (hydric) components that may or may not be suitable for development. Broadkill mucky silt is a very poorly-drained wetland associated (hydric) soil that has the highest severity level for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of estuarine wetlands and palustrine wetlands on site. Site plans show impacts to wetlands. The developer and County should note that impacts to wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process. To find out more about permitting

requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding, (302) 739-4691 to schedule a meeting.

There is strong evidence that federally-regulated wetlands exist on the site. A wetlands delineation should be conducted in accordance with methodology established by the Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1). The delineation should then be verified through the Jurisdictional Determination process.

Lots should be removed from the wetland complex entirely. It is noted that wetland delineations on the site plan provided differ from State wetland maps. Vegetated buffers comprised of coastal panic grasses or shrubs of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that DNREC and the Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

Impervious Cover

The amount of impervious cover to be constructed (approximately 35%) should be reduced. Given the environmentally sensitive nature of this watershed, the applicant should devote more effort to employing innovative efforts or BMPs to reduce impervious cover. Use of pervious materials in lieu of asphalt and concrete significantly reduces pollutant-laden surface runoff into wetlands and streams.

ERES Waters

The site is located adjacent to receiving waters of the Inland Bays designated as having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State. Section 11.5 of Delaware's "Surface Water Quality Standards" (as amended August 11, 1999), specifies that all designated ERES waters and receiving tributaries have a "pollution control strategy" to reduce non-point sources of nutrient runoff. Subsection 11.5(e) expressly authorizes the Department to provide standard Best Management Practices (BMPs) for controlling, reducing, or eliminating the discharge of pollutants to the greatest degree practicable or attainable.

TMDLs

Adoption of Total Maximum Daily Loads (TMDLs) as a nutrient-runoff-mitigation strategy for the Inland Bays Watershed makes reduction of nitrogen and phosphorus loading mandatory. 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 water quality standards to the extent necessary to support use goals such as swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are authorized under federal code, states are charged with developing and implementing standards to support these desired use goals. The jurisdictional authority for these use goals falls under

Section 11.5 of the Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as “pollution control strategies.”

Nutrient reductions are assigned on the basis of water quality concerns. Regions of greatest environmental concern will require higher levels of nutrient reduction than those deemed less environmentally sensitive. In this watershed, these regions are demarcated as high and low reduction zones. The high reduction zone corresponds to the western portion of the watershed and requires a reduction of nitrogen and phosphorus by 85 and 65 percent, respectively. The low reduction zone corresponds to the eastern portion of the watershed and requires a reduction of nitrogen and phosphorus by 40 percent. This project is proposed within the low nutrient reduction zone. It is strongly recommended that the applicant design the subdivision with greater emphasis on the retention of native forest cover. A large increase in sediment-bound phosphorus generally follows extensive forest clearing activities.

The inclusion of stormwater management and/or wastewater treatment areas in open space calculations may underestimate nutrient loading rates. In order to verify compliance, a full nutrient accounting process known as nutrient budget should be prepared by the applicant. Lyle Jones, Watershed Assessment Section can be contacted at (302) 739-4590 for further information regarding acceptable protocol for calculating a nutrient budget.

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. 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. Dewatering well permit applications typically take approximately four weeks to process. Questions concerning these comments can be directed to Rick Rios, (302)739-3665.

Sediment and Erosion Control/Stormwater Management

- 1) The Sussex Conservation District recommends a combination of Best Management Practices for this development such as bioretention and bioswales.
- 2) A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval and construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson, Program Manager, (302) 856-7219, for details regarding submittal requirements and fees.
- 3) It is strongly recommended that the applicant contact the Sussex Conservation District to schedule a pre-application meeting to discuss 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.

- 4) A Notice of Intent (NOI) for stormwater discharges associated with construction activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.
- 5) Applying practices to mimic pre-development hydrology, promote recharge, maximize the use of existing natural features, and limit the reliance on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique.
- 6) Each stormwater management facility should have an adequate outlet for release of stormwater. Any drainage conveyed onto this site from neighboring properties must be adequately conveyed through the site to the discharge point without interruption.
- 7) Clearly address how stormwater quality and quantity treatment will be provided. If the project is eligible for a Quantity Waiver, make the request in the stormwater narrative citing the specific regulation.
- 8) Indicate on the sediment and stormwater management plan who shall be responsible for maintenance of the stormwater management facilities both during and after construction. The design of the sediment control and stormwater management plan, considerations should consider maintenance of any structures or facilities.
- 9) If a stormwater management pond is going to be utilized as a sediment trap/basin during construction it must be designed to accommodate 3,600 cubic feet of storage per acre of contributing drainage area until project stabilization is complete.
- 10) All ponds are required to be constructed per pond code 378.

Drainage

All ditches on the property should be checked for function and cleaned if needed prior to construction. Wetland permits may be required before cleaning ditches. Precautions should be taken to ensure the project does not hinder any off-site drainage upstream or create problems downstream by the release of on-site storm water. The Drainage Section recommends any drainage/utility easements not have structures, decks, trees, sheds, and the like within them allow for future drainage maintenance.

Any drainage conveyance between two parcels within the subdivision should be dedicated as passive open space drainage easements and not owned by individual landowners. The easements should be of sufficient width to allow future drainage maintenance as follows.

- 1) Along an open ditch or swale, a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured

from top of bank on the non-maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.

- 2) Along stormwater pipe, a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffer to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

Floodplains

Portions of this site are within the 100-year floodplain. It is recommended that dwellings be located out of the floodplain. Buildings within the floodplain must be constructed to floodplain standards specified in the Sussex County Zoning Code.

Forests

There is a 7.39 acre forested area on the site which will be removed. This forest acts as a buffer to White Creek and is extremely beneficial to the region in providing important habitat, wildlife connectors, and air and water quality benefits. Fragmentation can have irreversible effects to the regional ecosystem, particularly to water quality.

Lot lines should be redesigned to avoid all impacts to the forested area. This includes removing lots 29-48 and 132-138 from forested/wetland areas. The developer is strongly encouraged to preserve and enhance forested resources on the site by minimizing clearing activities and removing lots and associated infrastructure, such as storm water management ponds, from forested areas. These areas should be viewed as community assets and managed appropriately. The developer should seriously consider making habitat improvements such as re-vegetating portions of the site. Providing a forested buffer of 100 feet or more would substantially benefit water quality and wildlife habitat.

Wooded areas set aside for conservation purposes should be placed into permanent conservation easements or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon them.

Open Space

The site plans show no consideration for open space or buffers. Efforts should be made to implement a buffer zone comprised of native shrubs and coastal grasses such as coastal panic grass. The developer should increase the amount of open space along the

waterfront. Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked so that residents understand their importance and homeowner activities do not infringe upon them.

Rare Species and Buffers

There is a population of *Apeltes quadracus* (fourspine stickleback) within Whites Creek in the vicinity of the site. This rare fish is dependent on calm, shallow, and heavily vegetated waters. Run-off from development may impact White's Creek and measures should be taken to decrease sedimentation during construction.

A rare bird species, Pied-Billed Grebe (*Podilymbus podiceps*), is known to nest in emergent wetland vegetation in the area. To protect nesting habitat for this state rare species, minimize disturbance to emergent wetland vegetation during project activities.

Due to the presence of these species the site lies within a State Natural Heritage Site. It does not lie within a Delaware National Estuarine Research Reserve, a criteria used to determine the presence of Critical Resource Waters. The final decision regarding Critical Resource Waters will be made by the U.S. Army Corps of Engineers (ACOE). The information above will aid the ACOE in making its determination.

Nuisance Geese

Ponds in the subdivision will likely attract waterfowl like resident Canada geese and mute swans. Native tall grasses, wildflowers, shrubs, and trees at the edge and within a 50-foot buffer area around the perimeter are recommended. Planting should be completed as soon as possible. Waterfowl do not feel safe when they cannot see predators in the surrounding area, and it is easier to control a few geese than to remove a plentiful population. Ponds should not be located adjacent to athletic fields, as the types of grass found in these areas are attractive to waterfowl. Subsequent droppings could interfere with activities and geese can become aggressive during the nesting season. The Division of Fish and Wildlife does not provide goose control services and residents will have to accept this burden (for example permit applications and fees, securing services of certified wildlife professionals). Solutions can be costly and labor intensive. Reducing the number size of ponds and providing proper landscaping and monitoring techniques will minimize nuisance geese.

Recreation

Sidewalks fronting every residence and stub streets are recommended. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities, 2) provide opportunities for neighbors to interact in the community, and 3) facilitate safe and convenient off-road access to neighboring communities, parks, public mass transit stops, schools, stores, work, etc.

The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences, as well as

other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments needed in outdoor recreation facilities. The high facility needs in Eastern Sussex County are Walking and Jogging, Bike Paths and Fishing Areas. The moderate facility needs are Picnic Areas, Skate Facilities, Canoe/Kayak Access, Hiking Trails, Swimming Pools, Playgrounds, Soccer Fields, Tennis Courts, Power Boat Access and Baseball/Softball Fields. Consideration should be given to incorporate some of these recreation opportunities in the project. For information about outdoor recreation priorities, contact Bob Ehemann (302) 739-9235.

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact it will have on existing landfill capacity, the applicant is requested to estimate the amount of solid waste that will be generated as a result of construction and occupancy of this development.

Air Quality

Annual vehicle emissions associated with this project at completion are estimated to be 12.2 tons (24,404.8 pounds) of VOC (volatile organic compounds), 10.1 tons (20,205.6 pounds) of NOx (nitrogen oxides), 7.5 tons (14,908.0 pounds) of SO2 (sulfur dioxide), 0.7 ton (1,327.1 pounds) of fine particulates and 1,020.7 tons (2,041,433.8 pounds) of CO2 (carbon dioxide).

Annual emissions from area sources associated with this project at completion are estimated to be 4.9 tons (9,843.6 pounds) of VOC (volatile organic compounds), 0.5 ton (1,083.1 pounds) of NOx (nitrogen oxides), 0.4 ton (898.8 pounds) of SO2 (sulfur dioxide), 0.6 ton (1,159.9 pounds) of fine particulates and 20.0 tons (39,903.7 pounds) of CO2 (carbon dioxide).

Annual emissions from electrical power generation associated with this project at completion are estimated to be 2.0 tons (3,901.3 pounds) of NOx (nitrogen oxides), 6.8 tons (13,569.7 pounds) of SO2 (sulfur dioxide) and 1,000.8 tons (2,001,530.2 pounds) of CO2 (carbon dioxide).

	VOC	NOx	SO ₂	PM _{2.5}	CO ₂
Mobile	12.2	10.1	7.5	0.7	1020.7
Residential	4.9	0.5	0.4	0.6	20.0
Electrical Power		2.0	6.8		1000.8
TOTAL	17.1	12.6	14.7	1.3	2041.5

Annual electrical usage via electric power plant generation will produce an additional 2.0 tons of nitrogen oxides per year and 6.8 tons of sulfur dioxide per year. A significant mitigation of this impact can be achieved through construction of Energy Star qualified

homes. Every percentage of increased energy efficiency achieves a percent reduction in pollution. Quoting from their webpage <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment.”

The DNREC Energy Office trains builders to make their structures more energy efficient. The Energy Star Program is an excellent way to save on energy costs and reduce air pollution. The project development team is strongly encouraged to increase the energy efficiency of its homes.

Delaware State Housing Authority – Contact Jimmy Atkins 739-4263

The proposal is to develop 159 units on 41 acres located on the southeast side of Clubhouse Road, north of Millville and adjacent to Whites Creek. According to the *Strategies for State Policies and Spending*, the site located in the Level 2 area and inside the growth zone. The proposal does not include units for first-time homebuyers. The 2003 Statewide Housing Needs Assessment indicates that much of the housing in the Selbyville/Frankford CCD is outside the affordability level for low- and moderate-income households. The median home price here is \$415,000, while the affordability price for low- and moderate-income households (earning 80 % of area median income) is estimated to be \$142,040. Moreover, of 10,527 units in this CCD, 726 are substandard and 3,261 are occupied by low-income households. Households that cannot afford to live in the coastal resort area have been displaced to western Sussex County. Providing moderately priced units for first-time homebuyers will help support the housing needs of low-and moderate-income families employed in the local retail, service, and tourism industries.

State Fire Marshal’s Office – Contact Duane Fox 856-5298

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

1) 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.

2) 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 Clubhouse Road 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.

3) Gas Piping and System Information

- Provide type of fuel proposed, and show size and location of bulk containers on plan.

4) Required Notes

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Townhouse 2-hr separation wall details shall be shown on site plans
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- 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 www.delawarestatefiremarshal.com.

Department of Agriculture - Contact Mark Davis 739-4811

The Delaware Department of Agriculture has no objections to the development of this site and encourages the developer to contact the office with any questions. The site is located in the Level 2 area where the state supports development by providing services in areas designated as appropriate for residential, commercial and industrial development.

Right Tree for the Right Place

The Department encourages the developer to use the “Right Tree for the Right Place” concept in any design considerations. This concept outlines the proper placement of trees to increase property value and reduce heating and cooling costs by an average of 20 to 35 dollars per month. A landscape design that uses this approach reduces maintenance costs to property owners and ensures a lasting forest resource.

Native Landscapes

The Department encourages the developer to use native trees and shrubs to buffer the property from adjacent land-use activities near the site. A properly designed forested buffer creates wildlife habitat corridors, cleans rivers and creeks of storm-water run-off pollutants, and improves air quality to the area by removing six to eight tons of carbon dioxide annually. To learn more about acceptable native trees and how to avoid plants considered invasive to local landscapes, contact the Plant Industry Section at (302) 698-4500.

Tree Preservation

The Department encourages the developer to implement tree preservation activities to ensure the health and vigor of the resource. Trees are affected by compaction of soils during the construction process; guidelines established by the International Society of Arboriculture (ISA) serve to lessen this impact and increase value to the site.

Tree Mitigation

It is acknowledged that tree removal will be necessary. The Forest Service encourages the tree mitigation at a 1:1 ratio within the site to replace trees lost in construction.

Department of Education – Contact Nick Vacirca 739-4658

It is estimated that 159 dwelling units will generate 80 additional students for the Indian River School District. Sussex County does not have school concurrence legislation at this time and it is recommended that the developer submit a package to the school district for informational purposes.

If the development is approved and built, use the following guidelines for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), the developers should provide streets wide enough for

large school buses to access and turn around without backing from the furthest areas within the development. Should there be no homes more than 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be made. The developer should work closely with the school district transportation supervisor.

Public Service Commission - Contact Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must comply with Federal Pipeline Safety guidelines.

Delaware Emergency Management Agency – Contact Don Knox 659-3362

Due to the large number of residential units being proposed and its location in an Environmentally Sensitive Area, a significant impact to public safety is foreseen by implementation of this project. The developer should notify the police, fire service, and emergency medical response organization serving this portion of Sussex County to keep them apprised of all development activities. Most of the site is located in the Special Flood Hazard Area inundated by the 100 and 500-year flood (FIRM Maps 511 and 515). This area could also experience flooding from a category 2 or greater hurricane. Routes 26 and 113 are coastal storm evacuation routes and this development will be affected by traffic volume on these routes during a coastal storm event.

Sussex County – Contact Richard Kautz 855-7878

This site is in an Environmentally Sensitive Development Area. The required report should include how the PLUS comments have been addressed and how the plan has been revised accordingly.

The site is also within the North Millville Expansion of the Bethany Beach Sanitary Sewer District (NMX). Service is scheduled to be provided by November 2008. The proposal is for 159 single-family lots on 41 acres, resulting in a gross density of 3.88 EDUs/acre. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications, as well as the South Coastal Area Planning Study (Update 2004). A sewer concept plan must be approved prior to the submission or review of any construction plans. System connection charges will be due prior to connection to the sanitary sewer. The NMX is currently under design and the connection point is not yet known. For questions regarding these comments, contact Chris Calio, Sussex County Engineering Department, (302) 855-7839.

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.

PLUS 2005-05-08 Solitude on Whites Creek

June 29, 2005

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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 above the printed name.

Constance C. Holland, AICP
Director

CC: Sussex County