



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

June 13, 2006

Mr. Kevin McBride
Morris & Ritchie Associates, Inc.
404 S. Bedford Street
Georgetown, DE 19947

RE: PLUS review – PLUS 2006-05-04; Graves Property

Dear Mr. McBride:

Thank you for meeting with State agency planners on May 24, 2006 to discuss the proposed plans for the Graves Property project to be located along the south side of Route 9, west of 5 points and Belltown.

According to the information received, you are seeking rezoning of 107 acres from AR-1 to MR/RPC for 526 residential units and 60,000 sq. ft. of commercial/office space.

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.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. *Our office*

notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.

State Strategies/Project Location

- This project is located in Investment Level 3 according to the Strategies for State Policies and Spending and in the Environmentally Sensitive Developing Area according to the Sussex County comprehensive plan. 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 will support growth in these areas, but please be advised that the State may have other priorities in the near term future. Also, in the Environmentally Sensitive Areas, State policies encourage growth that is sensitive to the natural resources on and surrounding the site.

With that said, it is encouraging to see a development proposal that incorporates a mix of uses and accommodates a wide ranges of housing options including affordable housing as envisioned by the Livable Delaware program. As such, we are supportive of this development.

Street Design and Transportation

- The plan for the proposed development shows it being divided into three phases, with a conceptual realignment of US Route 9 and Beaver Dam Road running through the third phase. The rights-of-way shown are DelDOT's best estimate of the location for a realignment that is contemplated as part of planned road improvements in the Five Points area. The primary purpose of the proposed phasing, from a DelDOT perspective, is to provide DelDOT with sufficient time to better determine the location of the realignment that will be built to accommodate both the Western Parkway and the need to improve operations at the Five Points intersection. DelDOT greatly appreciates the developer's willingness to work with us regarding this realignment.
- DelDOT made the following comments when this development was reviewed at PLUS in September 2004 but they are still relevant:
 - a) DelDOT will require that Beaver Dam Road be improved to meet DelDOT's minimum requirements for a Collector Road (two 12-foot lanes and two 8-foot shoulders) across the frontage of this development. They may not require improvements to the part of the road frontage that would

be affected by the road realignment but that will depend on the relative timing of the subject development and our realignment project.

- b) DelDOT will also require that a multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site on both Route 9 and Beaver Dam Road.
- c) The developer's site engineer should contact the DelDOT Subdivision Manager for Sussex County, Mr. John Fiori, regarding their requirements with regard to the design of the site entrances. Mr. Fiori may be reached at (302) 760-2260.

Natural and Cultural Resources

- Statewide Wetland Mapping Project (SWMP) maps indicate the presence of Palustrine Forested wetlands along the western edge of the project boundary. Site plans show that there will not be direct impacts to these wetlands through construction activities; however, secondary impacts of construction could be detrimental to the health of these wetlands and their associated streams. To mitigate these impacts DNREC recommends a vegetated buffer of no less than 100 feet from the edge of wetlands and water bodies. Lot lines should exclude all wetlands and buffer zones to ensure against potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.
- According to the application there is going to be a 100-foot (minimum) buffer from the Goslee Creek System; however, it appears from the site plan that both lots and infrastructure are much closer than 100 feet. DNREC recommend pulling both these lots and the two stormwater management ponds out of the buffer zone.
- It is recommended that the number of stormwater management ponds be reduced. Those that require tree removal should be relocated or removed from the site plan

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: Herb Inden 739-3090

This project is located in Investment Level 3 according to the Strategies for State Policies and Spending and in the Environmentally Sensitive Developing Area according to the Sussex County comprehensive plan. 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 will support growth in these areas, but please be advised that the State may have other priorities in the near term future. Also, in the Environmentally Sensitive Areas, State policies encourage growth that is sensitive to the natural resources on and surrounding the site.

With that said, it is encouraging to see a development proposal that incorporates a mix of uses and accommodates a wide ranges of housing options including affordable housing as envisioned by the Livable Delaware program. As such, we are supportive of this development.

Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685

This parcel has two known historic properties, both dwellings (S-899, S-900) on the south side of Beaver Dam Rd (Rt 23). S-900 appears to be in an out-parcel on the PLUS map, but the map as presented at the meeting will include this property. S-899 apparently was demolished some time ago. This parcel is immediately adjacent to the Belltown Historic District (S-8393), which is eligible for the National Register of Historic Places but not actually listed. There are also a number of early to mid-20th century dwellings on both Seashore and Beaver Dam roads adjacent to the project. Beers Atlas of 1868 shows the O. White House, directly across the road from S-900. There may be archaeological resources remaining associated with this house. There is also some moderate potential for prehistoric period archaeological sites here, especially along the western end of the parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the White House, usually a good distance behind or to the side of the house. The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out. We will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

The Division of Historical and Cultural Affairs recommends that the development include sufficient landscaping to protect the neighboring historic properties, particularly the Belltown Historic District, from visual and audible effects. They request the opportunity to document the remaining historic dwelling and any outbuildings prior to any demolition activities. They would also appreciate the opportunity to check the area for archaeological sites, to learn something about their location, nature, and extent prior to any ground-disturbing activities.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 2) The plan for the proposed development shows it being divided into three phases, with a conceptual realignment of US Route 9 and Beaver Dam Road running through the third phase. The rights-of-way shown are DelDOT's best estimate of the location for a realignment that is contemplated as part of planned road improvements in the Five Points area. The primary purpose of the proposed phasing, from a DelDOT perspective, is to provide DelDOT with sufficient time to better determine the location of the realignment that will be built to accommodate both the Western Parkway and the need to improve operations at the Five Points intersection. DelDOT greatly appreciates the developer's willingness to work with us regarding this realignment.
- 3) In April 2005, DelDOT received a traffic impact study from the developer's engineer, Orth-Rodgers and Associates, regarding the development of the subject property. At that time, the proposed development was to consist of 258 townhouses, 160 single-family detached houses, a 15,000 square foot office building and an 80,000 square foot shopping center. The current proposal, while different, is expected to generate virtually the same amount of traffic. Subsequently, a hold was placed on the review of that study. DelDOT has no record of why that hold was placed, but they typically do that only at the request of the engineer submitting the study. In any event, DelDOT sees no reason to continue that hold. Pursuant to the discussion at the PLUS meeting, they will resume review of the TIS. DelDOT would anticipate completing their review and commenting to Sussex County in August.
- 4) DelDOT made the following comments when this development was reviewed at PLUS in September 2004 but they are still relevant:
 - a) DelDOT will require that Beaver Dam Road be improved to meet DelDOT's minimum requirements for a Collector Road (two 12-foot lanes and two 8-foot shoulders) across the frontage of this development. They may not require improvements to the part of the road frontage that would be affected by the road realignment but that will depend on the relative timing of the subject development and our realignment project.
 - b) DelDOT will also require that a multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site on both Route 9 and Beaver Dam Road.

- c) The developer's site engineer should contact the DelDOT Subdivision Manager for Sussex County, Mr. John Fiori, regarding their requirements with regard to the design of the site entrances. Mr. Fiori may be reached at (302) 760-2260.

The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071

Soils

Based on the Sussex County soil survey update, Downer and Hammonton were mapped on subject parcel. Downer is a well-drained upland soil that, generally, has few limitations for development. Hammonton is a moderately well-drained soil of low-lying uplands that has moderate limitations for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of Palustrine Forested wetlands along the western edge of the project boundary. Site plans show that there will not be direct impacts to these wetlands through construction activities; however, secondary impacts of construction could be detrimental to the health of these wetlands and their associated streams. To mitigate these impacts DNREC recommends a vegetated buffer of no less than 100 feet from the edge of wetlands and water bodies. Lot lines should exclude all wetlands and buffer zones to ensure against potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

Forested Wetland Buffers

According to the application there is going to be a 100-foot (minimum) buffer from the Goslee Creek System; however, it appears from the site plan that both lots and infrastructure are much closer than 100 feet. DNREC recommends pulling both these lots and the two stormwater management ponds out of the buffer zone. Trees function in flood abatement and erosion control and it does not make sense to remove them to control stormwater, especially when tree removal can exasperate flooding problems. The ponds should be removed, relocated or alternate methods of stormwater containment should be utilized (such as bioswales, etc.).

It is important to maintain the forested buffer along Goslee Creek, not only for water quality protection but because of cumulative impacts from other developments in the general area. This forested buffer is a travel corridor for wildlife, serves as habitat for

many terrestrial species dependent on aquatic habitats for a portion of their life cycle, and is a foraging area for Bald Eagles which nest nearby. Forested buffers also reduce inputs of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of aquatic organisms.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

Impervious Cover

Based on a review of the submitted PLUS application, the applicant projects that only about 32% of this parcel will be rendered impervious following this parcel's development; however, this figure appears to be a significant underestimate given the scope and density of this project. The applicant should be made aware that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks and roads) should be included in the impervious surface calculation. It is strongly recommended that the applicant recalculate this figure to verify whether their post-development projections realistically reflect the actual amount of created post-development surface imperviousness.

Studies link increases in impervious cover to decreases in water quality. Based on analyses of 2002 aerial photography by the University of Delaware, the Inland Bays watershed (Indian River), at that time, had about 8.6 percent impervious cover. Although this data is about 4 years old and likely an underestimate, it underscores the importance of a proactive strategy to mitigate for predictable and likely cumulative environmental impacts. Since the amount of imperviousness generated by this project will be significantly higher than the desirable watershed threshold of 10 percent, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

ERES Waters

This project is located adjacent to receiving waters of the Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in

Section 5.6 of Delaware's "Surface Water Quality Standards" (as amended July 11, 2004), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of pollutants through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 5.6.3.5 of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree achievable and, where practicable, implementation of a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. 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 required by federal law, states are charged with developing and implementing standards to support these desired use goals. This project is located in the low nutrient reduction area requiring 40 percent reductions in nitrogen and phosphorus.

It should also be noted that this parcel contains a sensitive headwater riparian wetlands associated with Goslee Creek, greatly increasing the probability of harmful impacts to surface and groundwater quality of all waters within the greater Inland Bays watershed, ultimately reducing the probability that the State will achieve the required TMDL nutrient reductions. Headwater streams and their associated wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system downstream. In recognition of this concern, the Watershed Assessment Section strongly recommends the applicant consider preserving the existing forested buffer in its entirety. At least a 100-foot buffer is recommended from all wetlands and water bodies. Efforts to expand the buffer width beyond the recommended buffer width, is strongly encouraged.

TMDL Compliance through the PCS

The proposed pollution control strategy will require the completion of a nutrient budget to estimate nutrient load changes following development; documentation of these load changes will be assessed through a nutrient budget protocol. The nutrient budget protocol is a computer-based model that quantifies post-development nutrient loading under a variety of land use scenarios in combination with a variety (or absence) of BMP types and intensities. The post-development loading rate is then compared with the pre-

development loading rate to assess whether the project meets the prescribed TMDL nutrient load reductions. Based on a preliminary evaluation of this project using said model (with the applicant's assumptions as reported in the PLUS application), the development as currently conceived **does not** meet the Inland Bays watershed TMDL nutrient reduction requirements for nitrogen and phosphorus. The applicant is strongly advised to consider the use of appropriate BMPs and Best Available Technologies (BATS) to ensure compliance. Examples of BMPs or BATs that should be used to significantly reduce nutrient loading from this project, include practices that mitigate or minimize all created forms of surface imperviousness, maintenance/restoration of recommended wetland buffer widths, reductions in the overall amount of forest cover removal, and use of innovative "green-technology" stormwater methodologies rather than conventional open-water stormwater management structures. As mentioned previously, since impervious cover is a very important factor or variable for assessing the environmental impacts from development, the applicant should make sure that the projected surface imperviousness has been assessed in a comprehensive manner. All forms of created surface imperviousness (i.e., rooftops, sidewalks, and roads) should be assessed (excluding wetlands). Failure to do so will not reflect this project's true environmental impacts. We also suggest that the applicant verify their project's compliance with the specified TMDL loading rates by either contacting us or running the model themselves. Please contact Lyle Jones of Watershed Section at 739-9939 for the acceptable model protocol.

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.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/Stormwater Management

Standard Comments:

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 as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson, Program Manager, at (302) 856-7219 for details regarding submittal requirements and fees.

It is strongly recommended that you contact the Sussex Conservation District 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.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to the Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, 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.

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.

Clearly address how Stormwater Quality and Quantity Treatment will be provided. If this project is eligible for a Quantity Waiver, please make the request in the stormwater narrative citing the specific regulation.

Please indicate on the sediment and stormwater management plan who shall be responsible for maintenance of the stormwater management facilities both during construction and after. During the design of the sediment control and stormwater management plan, considerations should be made for maintenance (i.e. access, easements, etc.) of any structures or facilities.

If a stormwater management pond is going to be utilized as a sediment trap/basin during construction it must be designed to accommodate 3600 cubic feet of storage per acre of contributing drainage area until project stabilization is complete.

All ponds are required to be constructed per Pond Code 378.

Please note that if the stormwater facilities will impact wetlands, a permit must be provided to the District prior to receiving approval. Please address.

DNREC regulations require no more than 20 acres to be disturbed at more time. A phased erosion and sediment control plan and sequence of construction will be required.

Under the DNREC Health and Safety Memo of 2000, all wet ponds are required to have an open space depth of 3 feet or more that comprises 50-75 percent of the area of the pond.

Consideration should be made for any adjacent properties during the design of the project, including drainage and erosion/sediment control.

Please investigate Green Technology Practices for quality management.

Nuisance Geese

It is recommended that the number of stormwater management ponds be reduced. Those that require tree removal should be relocated or removed from the site plan. The ponds that remain will likely attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer area around ponds, are not as attractive to geese because they do not feel as safe from predators and other disturbance when their view of the area is blocked. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Underground Storage Tanks

There is one inactive LUST site(s) located near the proposed project:

Edgehill Pharmacy, Facility # 5-000661, Project # S9512290

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 40.4 tons (80,735.5 pounds) per year of VOC (volatile organic compounds), 33.4 tons (66,843.5 pounds) per year of NO_x (nitrogen oxides), 24.7 tons (49,318.4 pounds) per year of SO₂ (sulfur dioxide), 2.2 ton (4,390.2 pounds) per year of fine particulates and 3,376.7 tons (6,753,422.6 pounds) per year of CO₂ (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 16.3 tons (32,564.3 pounds) per year of VOC (volatile organic compounds), 1.8 ton (3,583.1 pounds) per year of NO_x (nitrogen oxides), 1.5 ton (2,973.4 pounds) per year of SO₂ (sulfur dioxide), 1.9 ton (3,837.1 pounds) per year of fine particulates and 66.0 tons (132,008.4 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 6.5 tons (12,906.1 pounds) per year of NO_x (nitrogen oxides), 22.4 tons (44,890.9

pounds) per year of SO₂ (sulfur dioxide) and 3,310.7 tons (6,621,414.2 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	40.4	33.4	24.7	2.2	3376.7
Residential	16.3	1.8	1.5	1.9	66.0
Electrical Power		6.5	22.4		3310.7
TOTAL	56.7	41.7	48.6	4.1	6753.4

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 6.5 tons of nitrogen oxides per year and 22.4 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into 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 Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction.

The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

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

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

- a. **Fire Protection Water Requirements:**
 - Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Mercantile)
 - 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. (Apartments, Assembly and Townhouses)
 - 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. (One & Two- Family Dwelling)
 - Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

- b. **Fire Protection Features:**
 - All structures over 10,000 sq.ft. aggregate will require automatic sprinkler protection installed.
 - Buildings greater than 10,000 sq.ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements
 - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
 - Show Fire Lanes and Sign Detail as shown in DSFPR
 - For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

- c. **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 Seashore Hwy and Beaver Dam 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.
- d. **Gas Piping and System Information:**
- Provide type of fuel proposed, and show locations of bulk containers on plan.
- e. **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 our website: www.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Milton Melendez 698-4500

This Delaware Department of Agriculture has no objections to the proposed application. The *Strategies for State Policies and Spending* encourages environmentally responsible development in areas within Investment Level 3.

A portion of this site is designated as a “good recharge” area. DNREC has mapped all ground-water recharge potential areas. A “good” rating is the second highest rating and designates an area as having important ground-water recharge qualities. Maintaining pervious cover in “Excellent” and “Good” recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure an adequate and safe drinking water supply for future generations. Retention of pervious cover to ensure an adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as “excellent” and “good” recharge areas adversely impacts the future prospects for agriculture in Delaware. The developer should make every attempt to minimize the impact on these important areas.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Native Landscapes

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

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is site plan review for 526 residential units and 60,000 sq. feet of commercial space located along south side of RT 9 west of 5 Points and Belltown, both sides of RT. 23. DSHA owns one of the parcels that is included in this development proposal. As a result, DSHA will ensure that 20% (80 units minimum) of the total units will be owner-occupied and affordable to households earning 100% of the area median income as defined by the U.S. Department of Housing and Urban Development. For example, a family of four earning \$55,100 would be considered a family earning 100% of the median income. The prices of the units will range from \$136,000 for a 2-bedroom unit to \$174,600 for a 4-bedroom unit and will have an affordability control period of 20 years. This proposal is also participating in the Sussex County Moderately Priced Housing Unit pilot program. The provision of these units will go a long way in provide affordable homeownership opportunities to persons who work in the Coastal Resort Area.

Department of Education – Contact: John Marinucci 739-4658

DOE offers the following comments on behalf of the Cape Henlopen School District.

1. Using the DOE standard formula, this development will generate an estimated 263 students.
2. DOE records indicate that the Cape Henlopen School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2005 elementary enrollment.
3. DOE records indicate that the Cape Henlopen School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2005 secondary enrollment.
4. DOE requests developer work with the Cape Henlopen School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district.

Sussex County – Contact: Richard Kautz 855-7878

The design of this site is very busy and difficult to follow. What is going on along the south side of Route 9??

Per page 15 of the Comprehensive Plan, "any increased density by rezoning should only be permitted with proper environmental safeguards." Because this project is situated in an Environmentally Sensitive Development Area, the required report should include how this requirement and the PLUS comments have been addressed and how the plan has been revised accordingly.

All sidewalks and trails within the development and any constructed at the request of DelDOT should tie together internally and with adjacent development so that persons using wheelchairs or pushing strollers can navigate without hindrance.

The State Wetlands map indicates the possibility of wetlands impacting the location of proposed subdivision lots and roads. Therefore a jurisdictional determination letter should be provided to support the proposed design for that area and that the lot layout does not contain any wetlands.

The PLUS application makes a reference to a "12% density bonus" (Question 24). This should be explained further, especially how it complies with or varies from the Sussex County Moderately Priced Housing Unit program.

The Sussex County Engineer Comments: The project proposes connection to a Sussex County operated central sewer system. Sussex County supports the project connecting to a County operated sewer system.

The project is in the Environmentally Sensitive Developing Zone (ESDZ) and adjoins the West Rehoboth Expansion of the Dewey Beach Sanitary Sewer District (WRX). Sewer service is not available to any of the parcels at this time however and it is uncertain how the project can receive sewer service. If and when it is determined that Sussex County can provide sewer service, and following approval of a concept plan, a request for annexation into the WRX will be considered. Attached is a listing of steps to be completed for annexation.

Sussex County previously signed a Memorandum of Understanding with the Delaware State Housing Authority to provide sewer service to one of the project's parcels (parcel 222.1), for up to 100 units so long as at least 80 units were moderately priced housing units. The three parcels proposed for development are within the Inland Bays Regional Planning Area study. The property was approved as a Priority Project by Sussex County as part of the North Coastal Planning Area (NCPA) study and Sussex County is

considering serving the entire project within the Inland Bays Planning Area for sewer service. The study will conclude approximately June 2006. The study will develop options for sewer service and make a recommendation. A technical memorandum that evaluates the impact of the proposed development to the existing infrastructure in the WRX is nearing completion and will identify options for sewer service and needed upgrades. The Technical Memorandum will be completed in the near future, following a review of alternatives for diverting flow from the WRX to address capacity needs. It can be anticipated that extensive regional improvements will need to be completed by the developer, at the developer's expense, in order to receive sewer service.

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 North Coastal Area planning study (NCPA), Technical Memorandum for the Graves Property and the approved concept plan will be required. It should be noted that studies currently underway have considered the project at 526 total Equivalent Dwelling Units (EDU). The PLUS application includes 60,000 square feet of office/commercial space (estimated to be approximately as much as 60 additional EDU) that has not been considered in the North Coastal Area planning study or the Technical Memorandum for the Graves Property. If commercial use is added to the project, additional evaluation by the Sussex County Engineering Department will be required to determine the additional upgrades that are necessary, prior to approval of a concept plan. Any additional evaluation and upgrades would also be at the developer's expense. The Sussex County Engineering Department recommends that the proposed alignment of the future Delaware Department of Transportation (DELDOT) right of way (shown in red highlight on the preliminary site plan attached to the PLUS application) be established now and adjusted as necessary at some future time. If the project connects to a Sussex County operated sewer district, System Connection Charges will apply as well. The current rate in the WRX for the period through June 30, 2006 is \$3716.00 per EDU.

For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7719.

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 2006-05-04

Page 20 of 20

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

CC: Sussex County