



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

April 2, 2008

Mr. Kevin Smith
Kercher Engineering
413 East Market Street
Georgetown, DE 19947

RE: PLUS review – 2008-01-13; Southpointe Crossing

Dear Mr. Smith:

Thank you for meeting with State agency planners on March 5, 2008 to discuss the proposed plans for the Southpointe Crossing project to be located on the north side of SCR 485, east of Route 13A.

According to the information received, you are seeking site plan approval through Sussex County for 28 residential units on 28.00 acres.

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

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

The proposed project is located within an Investment Level 3 and 4 as defined Strategies for Policy and Spending and is located near the intersection of Easter Lane and Business Route 13 (Laurel Road) north of Laurel.

Street Design and Transportation

- DelDOT anticipates requiring the developer to improve some portion of Easter Lane to meet local road standards. These standards include 11-foot wide travel lanes and 5-foot wide shoulders.
- The access to Easter Lane is not presently a right-of-way and converting it into one could create setbacks on the lots flanking it along Easter Lane.
- DelDOT recommends that the developer provide a stub street extending Fox Chase north to the Herman J. Ockels, Jr. parcel (Tax Parcel 1-32-7.00-5.02) and consider building Fox Chase as a 32-foot wide street in a 60-foot right-of-way.
- Lot 26 is more than twice the size of most of the proposed lots and would abut a mobile home park owned by Herbert L. and Linda E. Todd (Tax Parcel 1-32-7.00-7.00). DelDOT recommends that the developer consider splitting this lot and extend a pedestrian path between the two lots to connect to the mobile home park.

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact: Bryan Hall 739-3090

This office recognizes the proposed project is located within an Investment Level 3 and 4 as defined Strategies for Policy and Spending and is located near the intersection of Easter Lane and Business Route 13 (Laurel Road) north of Laurel. The Office of State Planning offers the following recommendations for consideration as the developer moves forward with the proposed:

- The developer should work with the Department of Transportation to address concerns with entrance and access to the proposed as well as the needed improvements to the local road identified as Easter Lane.
- The developer should work with the Sussex Conservation District and DNREC Drainage and Storm-water Section to develop an improve storm-water plan to allow for proper drainage of the site and minimize impacts to adjacent landowners.
- The developer should work with the Delaware Forest Service to develop a forest buffer plan to screen and lessen impacts to the proposed project from adjacent agricultural activities as well as the adjacent neighborhoods.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

The State Historic Preservation Office of the Delaware Division of Historic & Cultural Affairs, would like to advise the developer of the following historical observations and

information in reference to this project area. Here are the following historical observations:

- There did not appear to be any known historic or cultural resource site such as a known archaeological site or national register listed property on this project area, but there are two known historic and cultural resource sites nearby, and they also seem to be very close to the project area. In addition, each one of these historic and cultural resource sites are **early 20th-century structures**, and one of them is **agricultural complex (S-5950)**, and the other is **a dwelling/house (S-5951)**.
- Another historical aspect that the developer should be aware of is the historical background of the location of the project area. According to the **Beers Atlas of 1868**, this project area is within the vicinity of Broad Creek Hundred, and there is a variety of historical attributes within the vicinity of Broad Creek Hundred. **The Beers Atlas of 1868** also indicates that there were a few structures of some type very close to where the project area is located today. Those structures were associated to **W. Scott and H. W. Phillips**, and there is a possibility that there could probably be potential historic and cultural resources or archaeological resources affiliated with or related to those structures.
- Since this project area is located where there is a known historic or cultural resource site nearby, there is possibility that there could probably be a potential historic or cultural resource of some type within this project area. This historic or cultural resource could also be some type of archaeological resource such as cemetery, burial ground, unmarked human remains, or some other type of hidden contents or remains that has significant historical attributes or aspects. It is very important that the developer become familiar with the laws and regulations of the state of Delaware that pertains to the discovery and disposition of archaeological resources and unmarked human burials or skeletal remains.
- The State Historic Preservation Office of the Delaware Division of Historic & Cultural Affairs strongly recommends that the developer should read **Chapters 53 and 54, in Title 7, of the Delaware State Code** prior to or before any ground-disturbing activities, demolition, or construction starts or begins on this project area. **Chapter 53** pertains to the “Conservation of Archaeological Resources In or On State Lands”, and **Chapter 54 pertains to the Delaware Unmarked Human Remains Act of 1987**. The unexpected discovery archaeological resources or unmarked human remains during construction can result in significant delays.
- The State Historic Preservation Office of the Delaware Division of Historic & Cultural Affairs also recommends strongly that the developer should consider hiring an archaeological consultant to check and examine the project area thoroughly prior to or before any ground-disturbing activities, demolition, or construction starts or begins on this project area. The purpose for this is to make sure that there is no indication or evidence of a potential historic or cultural resource or archaeological

resource of some type such as a cemetery, burial ground, unmarked human remains, or some other type of hidden contents or remains with historical attributes.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) DelDOT anticipates requiring the developer to improve some portion of Easter Lane to meet local road standards. These standards include 11-foot wide travel lanes and 5-foot wide shoulders.
- 2) The access to Easter Lane is not presently a right-of-way and converting it into one could create setbacks on the lots flanking it along Easter Lane. This may not be the case if the lot is wide enough, but it appears that the developer will need to reach a settlement with the owner(s) of those lots.
- 3) The response to item 42 on the PLUS application mentions that this development physically could be connected to the lands to the north, but does not address the developer's willingness to make such a connection. DelDOT recommends that the developer provide a stub street extending Fox Chase north to the Herman J. Ockels, Jr. parcel (Tax Parcel 1-32-7.00-5.02) and consider building Fox Chase as a 32-foot wide street in a 60-foot right-of-way. Making Fox Chase a stub street would eliminate the long-term need for a cul-de-sac, so that feature could be shown as temporary, with the bulb outside the 6-foot right-of-way being contained in an easement. When the street is extended, the bulb would be removed and the easement released to the adjacent lot owners.
- 4) Lot 26 is more than twice the size of most of the proposed lots and would abut a mobile home park owned by Herbert L. and Linda E. Todd (Tax Parcel 1-32-7.00-7.00). DelDOT recommends that the developer consider splitting this lot and extend a pedestrian path between the two lots to connect to the mobile home park.
- 5) DNREC asks that the developer's site engineer maintain the contact they have initiated with our Subdivision Manager for western Sussex County, Mr. Derek Sapp, regarding our specific requirements for access and off-site improvements.

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

Soils

According to the Sussex County soil survey update, Pepperbox-Rosedale complex was mapped in the immediate vicinity of the proposed construction. Pepperbox-Rosedale complex is a moderately well to well-drained soil that has moderate to few limitations for development.

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Impervious Cover

Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach about 18 percent. However, it was not clear from the information submitted whether this was a realistic assessment or not (although it appears that surface imperviousness is greater than projected). When calculating surface imperviousness, it is important to consider all created forms of constructed surface imperviousness (i.e., rooftops, sidewalks, roads, and open-water stormwater management ponds) when calculating surface imperviousness; otherwise, an inaccurate assessment of this project's environmental impacts will result. Surface imperviousness should be recalculated if any of the above-mentioned forms of constructed surface imperviousness were excluded.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its 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 some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

ERES Waters

This project is located adjacent to receiving waters of the greater Nanticoke watershed, and designated as having waters of 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). Moreover, provisions defined in subsection 5.6.3.5 of same section, specially authorize the Department to mandate BMPs to meet 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 Nanticoke 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. In the greater Nanticoke

watershed, “target-rate-nutrient reductions” of 30 and 50 percent will be required for nitrogen and phosphorus, respectively. Additionally, “target-rate-reductions” of 2 percent will be required for bacteria.

TMDL compliance through the PCS

As indicated above, TMDLs for nitrogen and phosphorus have been proposed for the Nanticoke watershed. The TMDL calls for a 30 and 50 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 2 percent reduction in bacteria. A Pollution Control Strategy (PCS) will be used as a regulatory framework to ensure that these nutrient reduction targets are attained. The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as wider vegetated buffers along watercourses/wetlands, increasing the amount of passive, wooded open space, connection to a performance-based community wastewater disposal system (or central sewer, if available), use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Supply

The project information sheets state that individual on-site well(s) will be used to provide water for the proposed project. DNREC records indicate that the project is not located in an area where public water service is available. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the current Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing each and every well(s).

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

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 as soon as practicable. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

The Sediment and Stormwater Management Program ensures sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, we do not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

Drainage

1. The Drainage Program encourages the elevation of rear yards to direct water towards the streets where swales are accessible for maintenance. However, the Drainage Program recognizes the need for swales in yards in certain cases. Therefore, swales placed in rear and side yards will need to be clear of obstructions and be accessible for maintenance. Decks, sheds, fences, pools, and kennels can hinder drainage patterns as well as future maintenance to the swale. Deed restrictions, along with drainage easements recorded on deeds, should ensure adequate future maintenance access.
2. Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.
3. The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project. The Drainage Program recommends investigating a back-up plan to infiltrating stormwater on this site. Discuss alternatives with Sussex Conservation District, Sediment and Stormwater Program at the pre-application meeting.

Underground Storage Tanks

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

Fleetwood Property, Facility # 5-000861, Project # S9710164

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.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 2.1 tons (4,297.7 pounds) per year of VOC (volatile organic compounds), 1.8 tons (3,558.2 pounds) per year of NOx (nitrogen oxides), 1.3 tons (2,625.3 pounds) per year of SO2 (sulfur dioxide), 0.1 ton (233.7 pounds) per year of fine particulates and 179.7 tons (359,497.8 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 0.9 tons (1,733.5 pounds) per year of VOC (volatile organic compounds), 0.1 ton (190.7 pounds) per year of NOx (nitrogen oxides), 0.1 ton (158.3 pounds) per year of SO2 (sulfur dioxide), 0.1 ton (204.3 pounds) per year of fine particulates and 3.5 tons (7,027.1 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 0.3 tons (687.0 pounds) per year of NOx (nitrogen oxides), 1.2 tons (2,389.6 pounds) per year of SO2 (sulfur dioxide) and 176.2 tons (352,470.7 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO ₂	PM _{2.5}	CO ₂
Mobile	2.1	1.8	1.3	0.1	179.7
Residential	0.9	0.1	0.1	0.1	3.5
Electrical Power		0.3	1.2		176.2
TOTAL	3.0	2.2	2.6	0.2	359.4

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 0.3 tons of nitrogen oxides per year and 1.2 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 DNREC Energy Office 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):

Department of Agriculture - Contact: Scott Blaier 739-4811

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

Section 1, Chapter 99, Code of Sussex Section 99-6 may apply to this subdivision. The applicant should verify the applicability of this provision with Sussex County. This Section of the Code states:

G. Agricultural Use Protections.

- (1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:
 - (a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

“This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”

- (b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

The Department would also remind the developer to comply with the County’s forested buffer requirement. This buffer is essential for separating inherently disparate land uses (agriculture and residential) and mitigating the conflict that often arises as a result.

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. To further support this concept the Delaware Forest Service does not recommend the

planting of the following species due to the high risk of mortality from insects and disease:

Callery Pear

Ash Trees

Leyland Cypress

Red Oak (except for Willow Oak)

If you would like to learn more about the potential problems or impacts associated with these trees, please contact the Delaware Forest Service for more information at (302) 698-4500.

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 Vicki Powers 739-4263

This proposal is for a site plan review of 28 residential units on 28 acres located on the north side of SCR 458-A, east of Route 13A near Laurel. According to the *State Strategies Map*, the proposal is located in an Investment Level 3 area. As a general planning practice, DSHA encourages residential development only in areas where residents will have proximity to services, markets, and employment opportunities. DSHA supports the fact that this proposal targets first-time homebuyers. According to the most recent real estate data collected by DSHA, the average home price in Sussex County is \$280,000. However, families earning respectively 100% of Sussex County's median income only qualify for mortgages of \$164,791, thus creating an affordability gap of \$115,209. The provision of units within reach of families earning at least 100% of Sussex County's median income will ensure housing that is affordable to first-time homebuyers.

Department of Education – Contact: John Marinucci 735-4055

This proposed development is in the Seaford School District. DOE recognizes that this development is partially in level 4 of the State Strategies for Policies and Spending. DOE does not support the approval of the development of level 4 of the State Strategies for

Policies and Spending. DOE offers the following comments on behalf of the Seaford School District.

1. Using the DOE standard formula, this development will generate an estimated 14 students.
2. DOE records indicate that the Seaford School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2007 elementary enrollment.
3. DOE records indicate that the Seaford School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2007 secondary enrollment.
4. DOE requests the developer work with the Seaford 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 preliminary subdivision plat should provide details of how/when the required forested buffer will be planted.

Because this project is an AR-1 Cluster subdivision, the developer must comply with all ordinance amendments and include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). These issues can be addressed by including in the County application an explanation of how the developer plans to mitigate them and the issues raised by the State agencies during this review.

The Sussex County Engineer Comments:

The project proposes to develop using individual onsite septic systems.

The proposed project is in the Western Sussex Planning Area #3, but is not in an area where Sussex County expects to provide sewer service in the foreseeable future. If Sussex County ever provides sewer service, homeowners are required to connect to the system at their expense. Sussex County has no objection to the project being served by individual on-site systems.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of

the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

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

Sincerely,

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

Constance C. Holland, AICP

Director

CC: Sussex County