

McCRONE

•Engineering
•Environmental Sciences
•Construction Services
•Land Planning & Surveying

January 8, 2007

Constance C. Holland, AICP
Director
Delaware Office of State Planning and Coordination
540 S DuPont Highway
Dover, DE 19901

RE: Response to PLUS Comments
Milton Project (PLUS 2006-10-03)
McCrone Project# D5060039

Dear Ms. Holland:

We are in receipt of State PLUS comments , dated November 17, 2006, for the above referenced project. Our point-by-point responses are as follows:

State Strategies/Project Location

- The Office of State Planning and Coordination acknowledges that this project is located within an Investment Level 1 and 2 and is adjacent to the town of Milton. In addition the developer is seeking annexation into the Town State investments will support growth in these areas. Our office has no objections to the proposed rezoning and development of this parcel in accordance with the relevant Town codes and ordinances. The State encourages the developer to work with the Town of Milton to address any concerns the community may have regarding the potential impact of this project. Our office further recognizes the Town of Milton does support this project and like the Town this office is pleased by the efforts taken by the developer to provide lands to support the future needs of the community.

However, this office would encourage the developer to work with the community to further improve the connectivity of this parcel to the town as part of the proposed annexation process of this parcel. This will only strengthen the project as a whole and further improve the existing relationship between the town and the developer. In addition, this site does present concerns regarding potential drainage of this project and may impact the adjacent communities. This office would encourage the developer to work with the PLUS partners to address their issues through improvements to the proposed designed community. If the developer would like additional information regarding improved design please contact this office.

The developer thanks the department for this information. The developer will coordinate with the Town of Milton on the project's design and any other issues that may impact the city. It is the intent of the developer to follow all applicable regulations regarding: protected lands, such as

wetlands; drainage and stormwater management; town zoning codes, and DelDOT requirements; for example.

Street Design and Transportation

- A traffic impact study (TIS) will be required for this development. When DelDOT receives the completed TIS they will review it and send recommendations to the Town regarding off-site improvements that should be required of the developer.

The developer will coordinate with DelDOT regarding the TIS and any resulting off-site improvements that will need to be completed to support this project.

- Cave Neck Road is a minor collector road and Sam Lucas Road is a local road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads and 30 feet from the centerline on local roads. There DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.

The developer will dedicate land sufficient to provide a 40 foot right-of-way from the centerline of Cave Neck Road and a 30 foot right-of-way from the centerline of Sam Lucas Road. This will be reflected in an updated site plan for the project.

- DelDOT will also require the construction of a 10-foot wide shared use path in a 15-foot wide permanent easement across the frontages of the site.

The shared use path and easement will be incorporated into the design of the site.

- Without prejudging the results of the TIS, the developer should anticipate being required to improve to Sam Lucas Road to meet DelDOT's local road standards.

The developer understands that improvements to Sam Lucas Road will most likely be required. The developer will work with DelDOT to assure that improvements are made to Sam Lucas Road so that it meets local road standards.

- From DelDOT maps, it appears that the subject land is contiguous to the current Town boundary only through a section of Sam Lucas Road about 25 feet long where a north corner of the parcel is opposite a south corner of the Town boundary. Because of that contiguity, this development would not be an enclave from a legal perspective. Functionally, however, a person traveling from the proposed development to any other place in Milton would have to travel through unincorporated Sussex County to do so. This situation creates inefficiencies in the delivery of goods and services and can be particularly problematic for law enforcement agencies. DelDOT recommends that the Town defer this annexation until they can annex additional lands along Cave Neck Road or Sam Lucas Road either first of at the same time.

A 20 acre portion of the subject property is planned to be conveyed to the Town of Milton to bolster future waste water treatment capabilities and capacity for the Town. It would appear prudent to annex the parcel for this purpose. In addition, Exhibit G of the 2003 Comprehensive Plan for the Town of Milton shows this parcel as residential use within the planned future growth area.

Natural and Cultural Resources

- Based on Statewide Wetland Mapping Project (SWMP) mapping, palustrine forested scrub-shrub and palustrine forested riparian wetlands associated with the headwater reaches of a headwater tributary (unnamed or name unknown), were mapped on subject parcel. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. The developer should maintain a 100-foot vegetated buffer from the wetlands. There should not be any buildings or associated infrastructure within the buffer.

Additional field studies of the subject property are in the process of being completed at this time. Accordingly, an updated review for wetlands and other protected lands is presently being completed for the subject parcel. These areas will be surveyed so their location and areas can be quantified. The developer is interested in providing for sufficient buffers and will modify the concept plan to accommodate this to the extent possible. The developer may also consider other alterations such as proposing a “no clear zone” of some distance for individual lots, if appropriate.

- A Certified Construction Reviewer (CCR) is required for this project.

The developer will secure a Certified Construction Reviewer to provide erosion, sediment and stormwater inspections for the project, as required by the Sussex Conservation District (SCD).

- The District will require a phased plan and sequence of construction for this project. DNREC regulations require no more than 20 acres to be disturbed at more time. Please address.

As required, a phased plan and sequence of construction will be created and submitted to the SCD for approval before construction commences.

- Please demonstrate to the District that this project has an adequate outfall. Due to a history of drainage problems, evaluate down stream.

The developer will evaluate all pre and post development watershed conditions, as well as downstream conditions. Additional survey data will be compiled to assure that this project has an adequate outfall. We anticipate that these issues will be addressed in a pre-application conference with the SCD.

- 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.

The developer will adhere to all requirements of the SCD. We anticipate that this will be covered in the pre-application meeting with the District.

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

Erosion and sediment control plans will be developed and utilized to reduce or eliminate the impact of this project on adjacent properties and waterways. We anticipate that this will be covered in the pre-application meeting with the District.

- Please provide a soil survey report for each SWM basin.

A soil survey report will be provided for each SWM basin as required by the District.

- Please incorporate “Green Technology BMPs” in the stormwater management design as stated in the section 10.3.5.1 of the regulations. The District recommends green technology practices such as bioswales between the rear lots to provide drainage and water quality.

The developer understands the department’s desire for implementing BMPs, and will consider the use of bioswales and other BMPs that may be utilized for this site. We anticipate that this will be covered in the pre-application meeting with the District.

- Please provide SCD with a copy of the AutoCAD drawings and HydroCAD files to expedite the review process.

AutoCAD drawings and HydroCAD files will be submitted to the Conservation District as requested. We anticipate that this will be covered in the pre-application meeting with the District.

- The Drainage Program is aware of drainage concerns to the east of the proposed project. It appears existing drainage ditches from the Cave Colony subdivision convey water either through this property or along the property line. 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 developer will account for adequate conveyance of existing through-site drainage in the overall stormwater design of the site. We anticipate that this will be covered in the pre-application meeting with the District.

- According to the application 10.91 out of 23.65 acres of forest will be removed, and the remaining forest will be largely fragmented by lots and infrastructure. A greater effort to preserve forest should be made.

The developer will make an effort to revise the design of this site to preserve more of the existing forested areas. This will depend on the findings of additional field studies currently under way.

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

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

The office of State Planning and Coordination acknowledges that this project is located within an Investment Level 1 and 2 and is adjacent to the town of Milton. In addition the developer is seeking annexation into the Town State investments will support growth in these areas. Our office has no objections to the proposed rezoning and development of this parcel in accordance with the relevant Town codes and ordinances. The State encourages the developer to work with the Town of Milton to address any concerns the community may have regarding the potential impact of this project. Our office further recognizes the Town of Milton does support this project and like the Town this office is pleased by the efforts taken by the developer to provide lands to support the future needs of the community.

However, this office would encourage the developer to work with the community to further improve the connectivity of this parcel to the town as part of the proposed annexation process of this parcel. This will only strengthen the project as a whole and further improve the existing relationship between the town and the developer. In addition, this site does present concerns regarding potential drainage of this project and may impact the adjacent communities. This office would encourage the developer to work with the PLUS partners to address their issues through improvements to the proposed designed community. If the developer would like additional information regarding improved design please contact this office.

The developer thanks the department for this information. The developer will coordinate with the Town of Milton on the project's design and any other issues that may impact the city. It is the intent of the developer to follow all applicable regulations regarding: protected lands, such as wetlands; drainage and stormwater management; town zoning codes, and DeDOT requirements; for example.

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

This parcel contains the S. Martin House (S-3491; shown on Beers Atlas of 1868). There are some areas of mid to high potential for prehistoric-period archaeological sites. There is an early-20th-c. agricultural complex across Sam Lucas Rd. from the Martin House, another one off the southwest corner of the parcel, and a mid-20th-c. house across Cave Neck Rd from the parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Martin 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, and the developer may want to hire an archaeological consultant to check for the possibility of a cemetery here. The DHCA would have to have a copy of any archaeological report done for this purpose. They will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

The DHCA urges the developer to consider keeping the historic farmstead on a larger lot with the development. If this is not possible, they would appreciate the opportunity to document the buildings before any demolition activities occur. The DHCA recommends sufficient landscaping around the development to block any adverse visual or noise effects on the nearby historic properties. They would appreciate the opportunity to examine the area for possible prehistoric-

period archaeological sites, to learn something about their location, nature, and extent prior to any ground-disturbing activities.

The developer understands the Department's concerns and would be willing to allow time for documentation of historic buildings and an archeological evaluation. The developer appreciates this information and will consider hiring an archeological consultant to check for the possibility of a cemetery on site.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) A traffic impact study (TIS) will be required for this development. When DelDOT receives the completed TIS they will review it and send recommendations to the Town regarding off-site improvements that should be required of the developer. DelDOT requests that the Town withhold plan approvals pending receipt of those recommendations. Because it presently takes 10 to 12 months from the scoping meeting for a TIS to the completion of the review of the final report, DelDOT recommends that the developer have their traffic engineer meet with them as soon as possible to determine the study scope and begin work. Mr. Todd Sammons of the DelDOT Planning Office may be contacted to arrange for a scoping meeting. Mr. Sammons may be reached at (302) 760-2134.

The developer thanks the Department for this information. The developer will consult with a traffic engineer in order to begin the TIS process.

- 2) Cave Neck Road is a minor collector road and Sam Lucas Road is a local road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads and 30 feet from the centerline on local roads. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.

The developer will dedicate land sufficient to provide a 40 foot right-of-way from the centerline of Cave Neck Road and a 30 foot right-of-way from the centerline of Sam Lucas Road. This will be reflected in an updated site plan for the project.

- 3) DelDOT will also require the construction of a 10-foot wide shared use path in a 15-foot wide permanent easement across the frontages of the site.

The shared use path and easement will be incorporated into the design of the site.

- 4) Without prejudging the results of the TIS, the developer should anticipate being required to improve to Sam Lucas Road to meet DelDOT's local road standards. Preliminarily, those improvements would include widening the road to 11-foot lanes and 5-foot shoulders, an overlay of the existing pavement and improvements to the geometry and drainage. While DelDOT did not mention it at the PLUS meeting, the developer should also anticipate being required to improve a portion of Cave Neck Road to meet DelDOT's collector road standards, which include 12-foot lanes and 8-foot shoulders. For both roads, the limits of the improvements will be determined in our review of the TIS and the details of the improvements,

such as the thickness of any required overlay, will be determined as part of the entrance plan review.

The developer understands that improvements to Sam Lucas Road as well as Cave Neck Road will most likely be required. The developer will work with DelDOT to assure that improvements are made to both roads so that they meet local road standards.

- 5) From DelDOT maps, it appears that the subject land is contiguous to the current Town boundary only through a section of Sam Lucas Road about 25 feet long where a north corner of the parcel is opposite a south corner of the Town boundary. Because of that contiguity, this development would not be an enclave from a legal perspective. Functionally, however, a person traveling from the proposed development to any other place in Milton would have to travel through unincorporated Sussex County to do so. This situation creates inefficiencies in the delivery of goods and services and can be particularly problematic for law enforcement agencies. DelDOT recommends that the Town defer this annexation until they can annex additional lands along Cave Neck Road or Sam Lucas Road either first or at the same time.

A 20 acre portion of the subject property is planned to be conveyed to the Town of Milton to bolster future waste water treatment capabilities and capacity for the Town. It would appear prudent to annex the parcel for this purpose. In addition, Exhibit G of the 2003 Comprehensive Plan for the Town of Milton shows this parcel as residential use within the planned future growth area.

- 6) The developer's site engineer should contact the DelDot Subdivision Manager for Sussex County, Mr. John Fiori, regarding specific requirements for road improvements and access. Mr. Fiori may be reached at (302) 760-2157.

The developer will coordinate with DelDOT regarding any requirements for road improvements and access.

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

Soils

According to the Sussex County soil survey, Rosedale, Hammonton, Klej, and Askecksy were mapped on subject parcel. Rosedale 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. Klej is a somewhat poorly-drained wetland associated transitional soil that contains both wetland and upland soil components. Askecksy is a poorly-drained wetland associated (hydric) soil that has severe limitations for development.

It should also be noted that a significant portion of subject parcel (estimated 50-55%) is likely to have a seasonal high water within one foot of the soil surface. These soils are mapped as Askecksy and are indicative of wetland conditions. Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to

future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or “nor’easters.” This is an addition to increased flooding likely from surface water runoff emanating from future created forms of structural imperviousness (roof tops, roads, and sidewalks).

Additional field evaluations to assess soil conditions and other potential site constraints will be completed. We anticipate discussing this with the SCD at the pre-application meeting.

Wetlands

Based on Statewide Wetland Mapping Project (SWMP) mapping, palustrine forested scrub-shrub and palustrine forested riparian wetlands associated with the headwater reaches of a headwater tributary (unnamed or name unknown), were mapped on subject parcel. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. The developer should maintain a 100-foot vegetated buffer from the wetlands. There should not be any buildings or associated infrastructure within the buffer.

Additional field studies of the subject property are in the process of being completed at this time. Accordingly, an updated review for wetlands and other protected lands is presently being completed for the subject parcel. These areas will be surveyed so their location and areas can be quantified. The developer is interested in providing for sufficient buffers and will modify the concept plan to accommodate this to the extent possible. The developer may also consider other alterations such as proposing a “no clear zone” of some distance for individual lots, if appropriate.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

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.

The developer will comply with all permitting regulations and procedures. Additional field studies underway will assist in evaluating the limit and extent of jurisdictional wetlands and other protected lands.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland field delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

A wetlands delineation will be conducted and verified with the Corps of Engineers as requested.

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 at (302) 739-9943 to schedule a meeting.

As noted previously, this parcel contains SWMP-mapped headwater riparian wetlands. Headwater riparian wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of a stream, including the floodplain system and/or water bodies further downstream. Since streams are a major avenue for nutrient-laden stormwater and sediment runoff their protection deserves the highest priority. In recognition of this concern, the Watershed Assessment Section strongly recommends the applicant preserve the existing riparian buffer(s) in their entirety.

The developer understands the departments concern and desire for the preservation of riparian buffers. Efforts will be made to design the site around the existing wetlands leaving riparian buffers as appropriate. Additional field studies underway will assist in evaluating the limit and extent of jurisdictional wetlands and other protected lands.

Impervious Cover

Use of the wetland and stormwater management acreage for the calculation of recreational open space, as surmised from the submitted PLUS application for this project, significantly underestimates this project's actual amount of created surface imperviousness, ultimately understating its environmental impacts. It is strongly recommended that the finalized open space calculation incorporate only areas of active recreation, not wetlands, natural areas or stormwater management areas. This was the purpose for which open space was originally intended.

It was not clear from the information submitted whether all forms of surface imperviousness were considered in the calculation for surface imperviousness. The applicant should also realize that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks, and roads) should be accounted for when calculating surface imperviousness.

Studies have shown a strong relationship between increased in impervious cover to decreases in a watershed's overall 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.

The developer will make an effort to include BMPs into the design of this project. Furthermore, alterations to the plans will be made as the design progresses to reduce impervious cover and protect environmentally sensitive areas. Once the site layout has been generated in AutoCAD, a more accurate and detailed calculation of open space and impervious cover can be carried out. It is the understanding of the developer that SWM areas, wetlands and natural areas are considered passive open space and are not included in calculations of active or recreational open space. Nevertheless, the required calculations will be in accordance with the Town of Milton requirements.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Broadkill 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 Broadkill watershed, in which this project is located, nutrient reductions" of 40 percent will be required for nitrogen and phosphorus.

An assessment of the anticipated TMDLs from this project will be performed.

TMDL Compliance through the Pollution Control Strategy (PCS)

As indicated above, Total Maximum Daily loads (TMDLs) for nitrogen and phosphorus have been proposed for the Broadkill watershed. The TMDL calls for a 40% reduction in nitrogen and phosphorous from baseline conditions. A pollution control strategy 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 Best Management Practices such as wider vegetated buffers along watercourses, increasing passive, wooded open space, using enhanced nutrient removal wastewater technologies, and the use of stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

The developer thanks the department for this information. This site will be designed in compliance with TMDL regulations as well as any and all other applicable codes and regulations.

Water Supply

The information provided indicates that the Town of Milton will provide water to the proposed projects through a central public water system. Our files reflect that The Town of Milton does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. According to SB 135 that was signed on June 30, 2003 by Governor Minner, the municipality is required to give notice to the Public Service Commission when the annexation is complete. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-739-4247.

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.

Water will be supplied by the Town of Milton, who will apply for a CPCN to provide water service in this area. If dewatering is necessary during the any phase of construction, the proper permits will be secured, and the pumping shall be metered to be sure pumping rates are not exceeding the 50,000 gallons per day threshold.

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

The developer will contact the Sussex Conservation District to schedule a pre-application meeting. A Sediment and Stormwater Management Plan (SSMP) will be prepared for the site in accordance with all current applicable laws and regulations. If any wetlands impact is anticipated, the proper permits will be secured with the appropriate State and Federal agencies.

Site-Specific Comments:

A Certified Construction Reviewer (CCR) is required for this project.

The developer will secure a Certified Construction Reviewer to provide erosion, sediment and stormwater inspections for the project, as required by the Sussex Conservation District (SCD).

The District will require a phased plan and sequence of construction for this project. DNREC regulations require no more that 20 acres to be disturbed at more time. Please address.

As required, a phased plan and sequence of construction will be created and submitted to the SCD for approval before construction commences.

Please demonstrate to the District that this project has an adequate outfall. Due to a history of drainage problems, evaluate down stream.

The developer will evaluate all pre and post development watershed conditions, as well as downstream conditions. Additional survey data will be compiled to assure that this project has an adequate outfall. We anticipate that these issues will be addressed in a pre-application conference with the SCD.

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.

The developer will adhere to all requirements of the SCD. We anticipate that this will be covered in the pre-application meeting with the District.

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

Erosion and sediment control plans will be developed and utilized to reduce or eliminate the impact of this project on adjacent properties and waterways. We anticipate that this will be covered in the pre-application meeting with the District.

Please provide a soil survey report for each SWM basin.

A soil survey report will be provided for each SWM basin as required by the District.

Please incorporate “Green Technology BMPs” in the stormwater management design as stated in the section 10.3.5.1 of the regulations. The District recommends green technology practices such as bioswales between the rear lots to provide drainage and water quality.

The developer understands the department’s desire for implementing BMPs, and will consider the use of bioswales and other BMPs that may be utilized for this site. We anticipate that this will be covered in the pre-application meeting with the District.

Please provide SCD with a copy of the AutoCAD drawings and HydroCAD files to expedite the review process.

AutoCAD drawings and HydroCAD files will be submitted to the Conservation District as requested. We anticipate that this will be covered in the pre-application meeting with the District.

Drainage

The Drainage Program is aware of drainage concerns to the east of the proposed project. It appears existing drainage ditches from the Cave Colony subdivision convey water either through this property or along the property line. 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 developer will account for adequate conveyance of existing through-site drainage in the overall stormwater design of the site. We anticipate that this will be covered in the pre-application meeting with the District.

The Drainage Program requests that the engineer take precautions to ensure the project does not create any off site drainage problems downstream of this project by the release of on site storm water. The Drainage Program requests that the engineer check existing ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.

The condition of existing ditches and pipes will be evaluated and any problems or blockages will be addressed as part of this project.

The Drainage Program does not support the removal of trees for the creation of stormwater management areas.

The placement of SWM areas will take into account impacting as few trees as possible.

The Drainage Program does not have a clear understanding how stormwater is to be conveyed to the stormwater management areas. The drainage Program requests that the routing of major stormwater pipes through yards be prohibited.

Road drainage will be conveyed through either curb and gutter or open swales. Between-lot drainage will include a combination of swales and yard

drains. All proposed drainage systems will be constructed in either open space, easements or right-of-way.

The Drainage Program encourages the elevation of rear yards to direct water towards the streets where storm drains are accessible for maintenance. However, the Drainage Program recognizes the need for catch basins in rear yards in certain cases. Therefore, catch basins placed in rear yards will need to be clear of obstructions and be accessible for maintenance. Decks, sheds, fences, kennels, and other structures placed along the storm drains, or within 10 feet of the catch basins, can hinder drainage patterns as well as future maintenance to the storm drains or catch basins. Deed restrictions, along with drainage easements recorded on deeds, should ensure adequate future maintenance access.

The developer thanks the department for this information, and will utilize deed restrictions and drainage easements to provide adequate maintenance access and proper drainage patterns.

The Drainage Program requests a 15-foot side yard setback on all lots with a drainage easement on the side. A 15-foot side yard setback will allow room for equipment to utilize the entire drainage easement and maneuver free of obstructions if the drainage conveyance requires periodic maintenance or future re-construction.

Proposed easement and side-yard setbacks will be selected to provide for adequate access and in conformance with the Town of Milton requirements.

The Drainage Program requests a 10-foot drainage easement around all catch basins located on private property to ensure adequate room for maintenance. The Drainage Program recommends restrictions on fences, sheds, and other structures within the easement to prevent obstructions from being placed within 10 feet of the catch basin.

The developer will utilize deed restrictions and drainage easements to ensure maintenance access and proper drainage patterns.

Record all drainage easements on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction.

All drainage easements will be recorded on deeds with restrictions on obstructions as requested.

For questions or clarifications, please contact Jim Sullivan at (302) 739-9921.

Rare Species

DNREC has never surveyed this site; therefore, it is unknown if there are state-rate or federally listed plants, animals or natural communities at this project site. They have records of Black Vulture (*Coragyps atratus*) and Red-headed Woodpecker (*Melanerpes erythrocephalus*) in forested areas in the vicinity and they may occur within the forest on-site as well. Black Vulture require forested areas away from human habitation for breeding. Red-Headed Woodpecker require open mature forests with some standing dead trees and could be extirpated from Delaware if habitat continues to be converted. DNREC recommends tree preservation, but if trees are to be cleared despite this recommendation, they should not be cleared from April 1st to August 30th to protect these and other wildlife species that utilize forests for breeding. This clearing

recommendation would only protect those species during one breeding season; once trees are cleared the result is an overall loss of habitat.

The developer will attempt to minimize the clearing of forested areas, and will practice selective/limited clearing to create wooded lots wherever possible. The developer assures the department that the project will be completed in accordance with current codes and regulations.

Forest Preservation

According to the application 10.91 out of 23.65 acres of forest will be removed, and the remaining forest will be largely fragmented by lots and infrastructure. Forest fragmentation separates wildlife populations, increases road mortality, and increases “edge effects” that leave many forest dwelling species, particularly songbirds, vulnerable to predation. Forest clearing causes wildlife to disperse into surrounding areas, often resulting in human/animal conflicts. It also puts greater pressure on nearby Wildlife Areas, Nature Preserves, and other protected lands. A greater effort to preserve forest should be made and this could be accomplished by:

1. Reducing the excessive number of stormwater management ponds being proposed. Relocating all stormwater management ponds that will require tree clearing to a non-forested portion of the project area or utilize an alternative method of stormwater management. Trees function in flood abatement and erosion control and it does not make sense to clear them for a pond with the same purpose. According to State Wetland Maps, the majority of the forested area on this property are wetlands and most of the proposed ponds are either within wetlands or are too close to wetlands. There should be at least a 100-foot buffer between ponds and wetland areas.
2. Reducing the number of lots and infrastructure and clustering the remaining Features primarily in non-forested portions of the project area.

The number of ponds and their location will be adjusted in an effort to reduce the impact on wetlands and forested areas. Once ponds have been eliminated, lots and infrastructure can be relocated into non-forested areas to further reduce the impact on forested areas.

Plant Rescue

Since forested wetlands are to be destroyed, filled, or disturbed, we recommend that the developer/landowner contact the Delaware Native Plant Society to initiate a plant rescue. Selected plants from the site of disturbance will be collected by Society members and transplanted to the Society’s annual native plant sale. This can be done at no expense or liability to the developer/landowner”. Please contact Lynn Redding at (302) 736-7726, (lynn_redding@ml.com) or William A. McAvoy at (302-653-2880, (william.mcavoy@state.de.us).

It is not the intent of the developer to arbitrarily fill or destroy wetlands or protected habitat. The developer intends to limit this impact. If impact to protected areas are unavoidable, the developer will consider implementing a Plant Rescue, as feasible.

Nuisance Geese

The ponds planned for the subdivision may attract waterfowl like resident Canada geese and mute swans. 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. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. 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 and/or size of the ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

The developer thanks the department for its comments. An open space management plan will be created which will describe proper landscaping to be used at the ponds.

Site Investigation and Restoration

There were 2 SIRB sites within a half-mile radius of the proposed site:

King Cole Cannery (DE-1252) is located southeast of the proposed site. The site had petroleum contaminants in the soil. The contaminated soil was remediated by excavation and a COCR was awarded to the owner. Groundwater is being monitored at the site. DNREC-SIRB foresees no negative impact on the proposed site.

The developer thanks the department for this information.

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.

The developer understands the departments concern and will attempt to minimize construction waste.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 29.9 tons (59,860.9 pounds) per year of VOC (volatile organic compounds), 24.8 tons (49,560.8 pounds) per year of NOx (nitrogen oxides), 18.3 tons (36,566.9 pounds) per year of SO2 (sulfur dioxide), 1.6 ton (3,255.1 pounds) per year of fine particulates and 2,503.6 tons (5,007,290.5 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 12.1 tons (24,144.6 pounds) per year of VOC (volatile organic compounds), 1.3 ton (2,656.6 pounds) per year of

NOx (nitrogen oxides), 1.1 ton (2,204.6 pounds) per year of SO2 (sulfur dioxide), 1.4 ton (3,086.4 pounds) per year of fine particulates and 48.9 tons (97,876.9 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 4.8 tons (9,569.2 pounds) per year of NOx (nitrogen oxides), 16.6 tons (33,284.2 pounds) per year of SO2 (sulfur dioxide) and 2,454.7 tons (4,909,413.6 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO2	PM2.5	CO2
Mobile	29.9	24.8	18.3	1.6	2503.6
Residential	12.1	1.3	1.1	1.4	48.9
Electrical Power		4.8	16.6		2454.7
TOTAL	42.0	30.9	36.0	3.0	5007.2

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 4.8 tons on nitrogen oxides per year and 16.6 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.

The developer will consider the department’s comments in evaluating and making decisions regarding the energy efficiency of the project.

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 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Apartments 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 Cave Neck Road and Sam Lucas 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 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) 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.

The project will be designed in accordance with all applicable codes and regulations, and in coordination with the State Fire Marshal's office in Sussex County.

Department of Agriculture – Contact: Scott Blaier 698-4500

The Delaware Department of Agriculture has no objections to the proposed application. The *Strategies for State Policies and Spending* encourages environmentally responsible development in areas in Investment Levels 1 and 2. The parcel will also be annexed into the Town of Milton.

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.

Tree Mitigation

The Delaware Forest Service encourages the developer to implement a tree mitigation program to replace trees at a 1:1 ratio within the site and throughout the community. This will help to meet the community's forestry goals and objectives and reduce the environmental impacts to the surrounding natural resources. To learn more, please contact our offices at (302) 349-5754.

The developer thanks the department for their comments and will take this information into consideration while developing a landscape plan for the project.

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.

The developer thanks the department for this information.

Delaware State Housing Authority – Contact: Karen Horton 739-4263

The proposal is for a site plan review of 71 acres for 390 residential units located southeast of the intersection of Martin Swamp Road and Cave Neck Road near Milton. According to the *State Strategies Map*, the proposal is located in Investment Level 1 and 2 areas. As a general planning practice, DSHA encourages residential development inside growth zones, such as this, where residents will have proximity to services, markets, and employment opportunities. Furthermore, the proposal targets units for first time homebuyers. According to the most recent real estate data collected by DSHA, the average home price in Sussex County is \$236,000. However, families earning respectively 100% of Sussex County's median income only qualify for mortgages of \$171,216, thus creating an affordability gap of \$64,784. The provision of units within reach of families earning at least 100% of Sussex County's median income will ensure housing that is affordable for first time homebuyers.

The developer thanks the department for this information and will keep this information in mind in an effort to create homes that will be affordable to first time home buyers.

Department of Education – Contact: John Marinucci 739-4658

1. This proposed development is in the Cape Henlopen School District.
2. DOE offers the following comments on behalf of the Cape Henlopen School District.
3. Using the DOE standard formula, this development will generate an estimated 195 students.
4. 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.
5. 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.
6. While the Cape Henlopen School District secondary and elementary schools are not currently beyond capacity, ***the district does NOT*** have adequate student capacity to accommodate the additional students likely to be generated from this

development given the number of planned and recorded residential sub divisions with district boundaries.

7. Continued development will cause significant burden to the Cape Henlopen School District without the provision for additional educational infrastructure.
8. The developer is strongly encouraged to contact the Cape Henlopen School District Administration to address the issue of school over-crowding that this development will exacerbate.
9. DOE requests the 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 school district.

The developer appreciates the department's comments, and will coordinate with the Cape Henlopen School District throughout the projects design and development.

Sussex County – Contact: Richard Kautz 855-7878

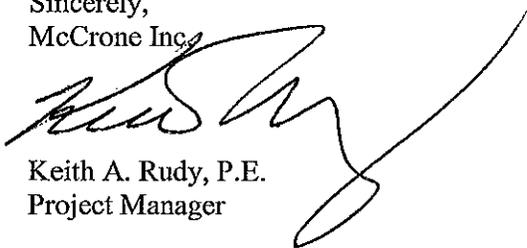
No comment. The site is to be entirely within the town limits and does not directly impact County services or properties outside the town limits. The town is encouraged to negotiation of the annexation agreement.

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.

The developer thanks the department for their comments.

We believe we have adequately addressed the PLUS comments for this project, and are excited to move forward. If you have any questions, please do not hesitate to contact me at 302-730-4600.

Sincerely,
McCrone Inc.


Keith A. Rudy, P.E.
Project Manager