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March 13, 2013

Ms. Constance C. Holland AICP
Director
Delaware Office of State Planning Coordination
122 William Penn Street, Suite 302
Haslet Building, Third Floor
Dover, DE 19901

RE: **PLUS review – 2013-02-04**
DELAWARE STATE POLICE TROOP 3
Kent County, Delaware
2011116.00

Dear Ms. Holland:

Thank you for meeting with our project team on February 27, 2013 to discuss the proposed plans for the Delaware State Police Troop 3 facility to be located on South State Street, south of Locust Grove Road and north of Banning Road. On March 11, 2013, comments, dated March 8, 2013, were received from your office in connection to the subject line project. As noted in your March 8th letter, . . . *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.* Following the format of your March 8th letter, we offer the following response in italics.

Strategies for State Policies and Spending

- This project is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the Kent County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas.

Acknowledged.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known historic or cultural resources such as an archaeological site or National Register-listed property on this parcel. However, there is a known cemetery right next to the parcel, towards the east side, and a known

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archaeological site (K-600, 7K-D-024) northeast of the parcel. According to the Pomeroy and Beers Atlas of 1868 (a 19th-century historic map), it appears that there were some type of structures associated with a C. Frear, on this parcel, near the road, which is now South State Street (Alt. Rt. 113). With this in mind, it is very important that the developer be aware of the Delaware Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Delaware Code Title 7, Chapter 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you need or would like to read more information in reference to unmarked human remains, burials or cemeteries, please go to the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- Prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for potential historic or cultural resources, such as a potential archaeological site, a cemetery or unmarked human remains. In addition, the developer should also include a barrier between the proposed development project and the known cemetery to protect it from the various construction activities that may adversely affect it, and sufficient landscaping to block the view of the development from the cemetery.
- If there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may

plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role, please review the Advisory Council's website at www.achp.gov.

We acknowledge the Delaware Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

A detailed title search and Phase 1 Environmental Site Assessment have been completed for the site. Additionally, available historical aerial photographs have been reviewed. The site has been in agriculture for at least the past 76 years without any apparent cemetery presence. The farmstead has been in the same location over the same time period. Additional investigation is not planned for at this time.

The southern corner of the site contains an existing area of woods varying in width from 125 to 200 feet. This existing wooded area provides a barrier between the proposed development project and the known cemetery, providing protection from the various construction activities that may adversely affect it and sufficient visual shielding of the development from the cemetery. No additional buffer is planned.

No federal involvement is expected.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The proposed development does not meet DelDOT's volume-based criteria, found in Section 2.3.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, for recommending that a TIS be required (400 vehicle trips per day or 50 vehicle trips per hour).
- The proposed development does meet DelDOT's volume-based criteria for possibly requiring a Traffic Operational Analysis (TOA, 200 vehicles per day) and we may require one as part of our review of the major subdivision

or land development plan. TOAs are addressed in Section 3.9 of the Standards and Regulations.

Acknowledged.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Wetlands

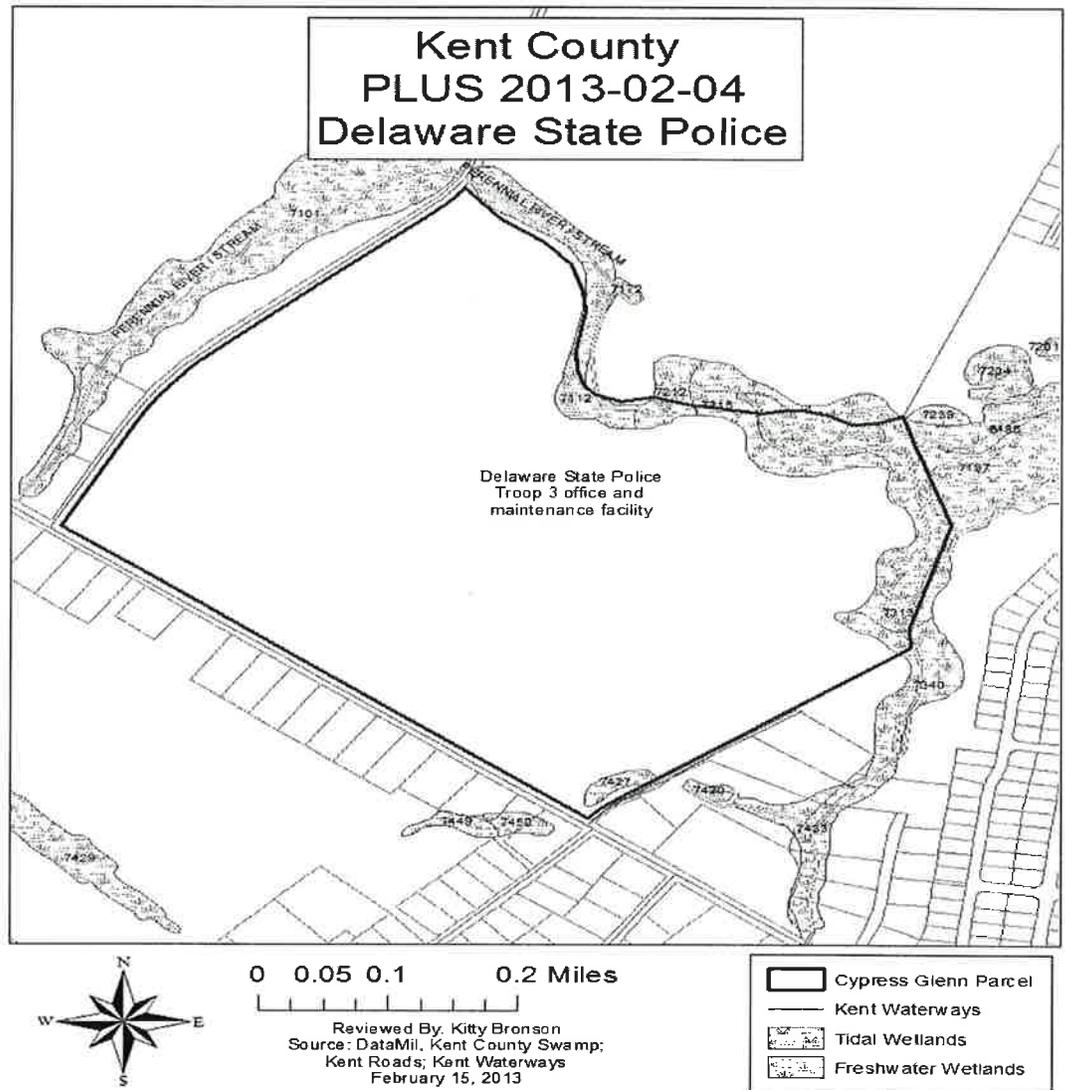
- State regulated wetlands **are** located **adjacent** to this property based on a review of the State wetland maps. Please refer to State Wetland map number 252. State regulated wetlands do not look to be directly impacted on this portion of the property based on a review of the State wetland maps. However, we recommend a Jurisdictional Determination to be sure wetlands are not physically impacted. Also, a review of County setback requirements regarding wetlands will be necessary.

State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. Any activity in State regulated wetlands may require a permit from DNREC's Wetlands and Subaqueous Lands Section. The area indicated for the building does not look to directly impact the wetlands; however any construction in this area should remain clear of impacting the wetlands. Additional information about State regulated wetlands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.

- State regulated subaqueous lands are not likely to be directly impacted on this portion of the property based on a review State Wetland Mapping Project (SWMP) maps and Kent County Waterway maps. Review of the GIS information shows a perennial river or stream is located directly adjacent to this property. Again, a review of County setbacks from the waterways and wetlands will be necessary.

State subaqueous lands include all tidal waters (up to the mean high water line), most non-tidal rivers, streams, lakes, ponds, bays and inlets (up to the ordinary high water line), most perennial streams and ditches and many intermittent streams and ditches. State regulated subaqueous lands **are** likely to be located **adjacent to** this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. An on-site inspection by a representative of the Wetlands and Subaqueous Lands Section or an environmental consultant is recommended to determine the limits of jurisdictional State subaqueous lands. Additional information about State regulated subaqueous lands is available by

contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.



Wetlands on the site have been delineated by a Professional Wetland Scientist, licensed in the State of Delaware. County required setbacks, 25 feet, are exceeded by the site plan design. No disturbance is planned within 75 feet of delineated wetlands. Based upon these facts, we do not plan to seek a JD.

We acknowledge State regulated subaqueous lands are likely to be located adjacent to this property. There are no plans to impact delineated

wetlands on this property or subaqueous lands on adjacent parcels. No additional wetland or subaqueous investigations are planned for.

TMDLs

- The project is located in the greater Delaware River and Bay drainage, specifically within the St. Jones River watershed. In this watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nitrogen, phosphorus, and bacteria (under the auspices of Section 303(d) of the Clean Water Act). 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 State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; State of Delaware Surface Water Quality Standards, as amended July 11, 2004) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The TMDL for the St. Jones River watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 90 percent reduction in bacteria from baseline conditions.
- A nutrient management plan is required under the Delaware Nutrient Management law (3 Del. Chapter 22) for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project’s open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements or view the following web link for additional information:
<http://dda.delaware.gov/nutrients/index.shtml>

We acknowledge the St Jones River TMDL and associated pollutant reductions. We will work with the Delaware Nutrient Management Program if plans are made to apply nutrients to lands or areas of open space in excess of 10 acres. There are no such plans at this time.

Water Supply

- The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. Our records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 04-CPCN-17.
- 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.

Acknowledged.

Sediment and Stormwater Program

- A detailed Sediment and Stormwater Management Plan must be approved prior to any land disturbing activity taking place on the site. The project will be reviewed for compliance with the Delaware Sediment and Stormwater Regulations by the DNREC Sediment and Stormwater Program. A Notice of Intent (NOI) for Discharge of Stormwater from Construction Activities and the \$195 NOI fee must be submitted prior to DNREC prior to Sediment and Stormwater Plan approval. A pre application meeting is strongly recommended prior to putting a lot of effort into a design. Contact Elaine Webb, DNREC Sediment and Stormwater Program, at (302) 739-9921 or Elaine.Webb@state.de.us to schedule a pre application meeting.
- The first preferred practices for management of stormwater quality are practices that mimic the pre development hydrology and promote recharge, including Green Technology BMPs. Other practices may only be considered for stormwater quality management when Green Technology BMPs have been ruled out for engineering reasons. The Sediment and Stormwater Regulations are currently undergoing a revision. It is anticipated that revised regulations will be effective in January 2014. Projects received for review after the effective date will be expected to comply with the revised regulations. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

Acknowledged. We have requested a pre application meeting with Elaine Webb, DNREC Sediment and Stormwater Program. We will utilize Green Technology BMPs to the maximum extent practical. Under the current project schedule, this project will be permitted under the existing regulations.

Hazardous Waste Sites

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C. Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.

Acknowledged.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

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

- **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.
 - Where a water distribution system is proposed for business sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.
- **Fire Protection Features:**
 - All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
 - Buildings greater than 10,000 square feet 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
- **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. Additionally, the access 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.
 - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
- **Gas Piping and System Information**
 - Provide type of fuel proposed, and show locations of bulk containers on plan.
- **Required Notes:**
 - Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
 - 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)
 - 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

Acknowledged.

Recommendations/Additional Information

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

Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT had a pre-submittal meeting with the applicant regarding their plan on January 8, 2013. They recommended that the applicant’s engineer maintain contact as necessary with Mr. Kevin Hickman, the DelDOT Subdivision Manager for this part of Kent County, as they proceed through the land development plan and entrance plan approval process. Mr. Kevin Hickman can be reached at (302) 760-2461.

- DelDOT supports the Dover/Kent County Metropolitan Planning Organization' comments regarding the 2005 South State Street Land Use and Transportation Study and the desirability of having bicycle and pedestrian facilities on South State Street. A copy of the Executive Summary from the study is attached. More information on the study is available from Mr. Bruce Allen in our Statewide and Regional Planning Section. Mr. Allen can be reached at (302) 760-2135.

Acknowledged.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Soils Assessment

- Based on soils survey mapping update, following soil mapping units were mapped on subject parcel (grouped on the basis of drainage class; see figure 1):
 - 1) Well drained – Downer (DnB &DnC), Ingleside (IeB), & Sassafras (SaA &SSD)
 - 2) Moderately well drained –Woodstown (WdA)
 - 3) Variable drainage – Ingleside-Hammonton-Fallsington complex(ImB); though listed as well drained in map, this soil mapping unit is likely to contain well-drained, moderately well drained & poorly drained (hydric) soil mapping components in same map unit.
 - 4) Poorly to very poorly drained (hydric) - Zakiah (Za) & Transquaking-Mispillion (TP)
- It is recommended that Sassafras (SSD) be avoided because of steeply-sloping topography (10-15% slopes). DNREC also recommends that Zekiah & Transquaking be avoided because of severe limitations (hydric).
- Based on apparent soil variability, DNREC recommends a certified and licensed soil scientist (ARCPACs certified and Class D licensed) make a site-specific evaluation of the soils in this parcel. Please contact the Underground Discharges Branch at 739-9948 for a list of soil scientists.
- The Statewide Wetland Mapping Project (SWMP) often uses the soil survey as the basis for mapping and delineating wetlands. The presence of a hydric soil is one of three parameters that must be met in order to meet jurisdictional wetland requirements (as specified by the USACOE). The other parameters are hydrophytic vegetation and hydrology. Thus the presence of hydric soils is a correlate with wetland presence. Building on hydric soils is likely to increase the potential for on-site and off-site

flooding potentials. DNREC strongly recommends avoiding those areas containing hydric or potentially hydric soil mapping units.

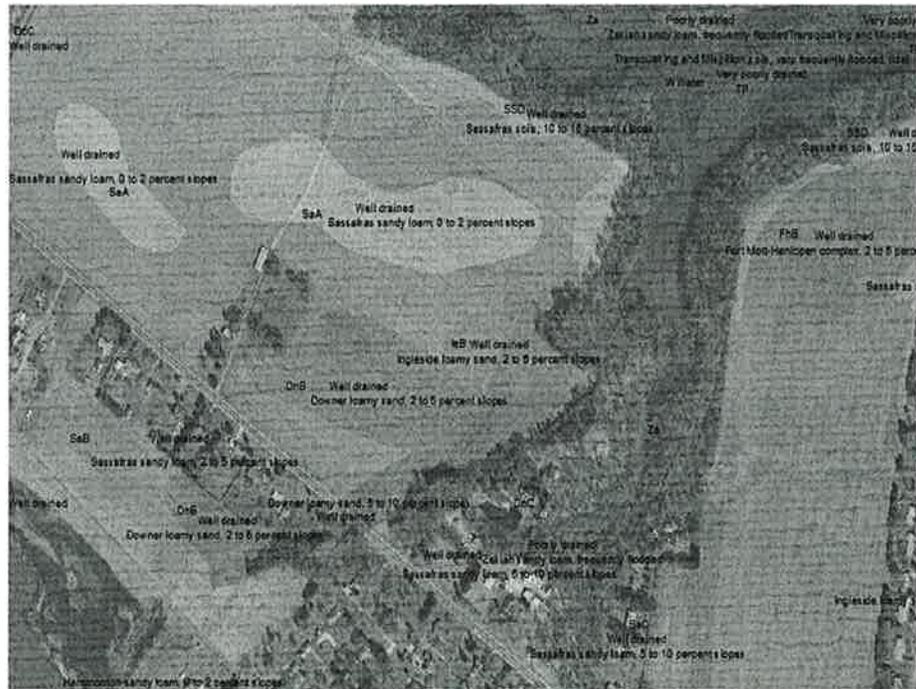


Figure 1: NRCS soil mapping in the vicinity of the proposed project

Acknowledged. No disturbance is planned in areas identified as SSD. A soil investigation is planned as part of this project. No building are planned in areas identified has hydric soils.

Additional information on hazardous waste sites

- SIRS strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.

Additional remediation may be required if the project property or site is rezoned by the county.

- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-

8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

Acknowledged. A Phase 1 Environmental Site Assessment has been completed for the site.

Additional information on TMDLs and water quality.

- A United States Army Corps of Engineers (USACE) approved field wetlands delineation is strongly recommended before commencing any development activities on this parcel(s). Based on the information submitted in the PLUS application, the ACOE has not approved the wetlands delineation. The USACE can be reached by phone at 736-9763.
- Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands (field delineated and approved by the USACE). The applicant's proposed 50-foot buffer is insufficiently protective of protect water quality
- DNREC encourages the applicant to preserve as much of the existing forest cover as possible, and consider additional native tree or herbaceous cover plantings.
- DNREC recommends that the applicant calculate post-construction surface imperviousness with all forms of created surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.
- Since this project will create additional impervious surface that will increase the probability for increased pollutant load runoff to the adjoining stream and wetlands, we strongly encourage the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate the negative impacts from pollutant runoff.
- Use of rain gardens and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to reduce nutrient pollutant impacts are highly encouraged for this project.

- The applicant should voluntarily assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the “Nutrient Load Assessment protocol.” The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their project’s impact(s) on baseline water quality. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Lyle Jones at 302-739-9939 for more information on the protocol.

As previously discussed, we do not plan to seek a JD. The existing wooded buffer provides substantial protection, in excess of County requirements, for the delineated wetland area. No tree clearing is planned, and additional plantings will be provided, which will include native tree or herbaceous cover plantings. Post construction impervious will be calculated as part of the Stormwater permitting process. Pervious paving materials are being considered for use in this project. Green Technology BMP’s will be utilized to the maximum extent practical. We will review the “Nutrient Load Assessment Protocol” for application on this project.

Delaware State Fire Marshall’s Office – Contact Duane Fox 739-4394

- It is further recommended that the structure(s) not over 10,000 square feet aggregate be provided with automatic sprinkler protection.
- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

We have a preliminary meeting scheduled for Friday, March 15 with the Fire Marshall’s office.

Dover/Kent MPO – Contact James Galvin 387-6030

- The project is located on the northeast corner of South State Street and Golden Oak Drive between Ponderosa Drive and Locust Grove Road, across from Banning Road. The Dover/Kent County MPO completed a study of the S. State Street Court corridor in May, 2002. The South State Street Area and Access Study made several recommendations for improvements to the corridor between US 13 and SR 1 at Little Heaven. The study cited several intersections that required improvements, though the golden oak Drive intersection was not included. It did provide a basis

for future road improvements that DelDOT should consider when becomes necessary to perform road upgrades. The 2005 functional classification map included the first mile of South State Street, south of US 13 to Webbs Lane, as an Other Principal Arterial. From that point south to SR 1, South State Street including Clapham Road, is classified as a Minor Arterial.

The South State Street Area and Access Study was completed prior to the adoption of significant policies and design preferences. The most significant policy is the requirement that the Department of Transportation design all new and substantially improved Streets considering Complete Streets. The policy requires the road segments to be built with bicycle access and sidewalks. The study was intended as a guide to DelDOT when making or requiring improvements.

The full study can be found on the Dover/Kent County MPO website at: <http://doverkentmpo.delaware.gov/publications/archived-reports/> under South State Street Study.

Acknowledged.

Thank you again for your assistance and timely meeting response in this matter.

If you have any questions, please do not hesitate to contact me.

Sincerely,

BECKER MORGAN GROUP, INC.



Dean E. Holden, P.E.
Senior Civil Engineer

DEH/rlh

Cc: Mark DeVore, P.E., State of Delaware OMB DFM