



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

December 20, 2012

Mr. Kenneth Christenbury
Axiom Engineering
18 Chestnut Street
Georgetown, De 19947

RE: PLUS review – 2012-11-02; Chesapeake Agrisoil Facility

Dear Mr. Christenbury:

Thank you for meeting with State agency planners on November 28, 2012 to discuss the proposed site plan(s) to add a composting facility for poultry waste to the existing fertilizer production facility for the Chesapeake Agri-soil Facility to be located at 28338 Enviro Way near Seaford, Sussex County.

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.**

Strategies for State Policies and Spending

This project is located in Investment Level 3 according to the Strategies for State Policies and Spending. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. When considering the appropriate place for a composting facility, the State has no objections to this project, provided you meet all the State and local regulations.

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 archeological site or National Register listed property on this parcel. However, if there is going to be any kind of development or construction project on this parcel, the developer should definitely be aware of Delaware’s 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 areas or open space lands, near an historic farm site, within it, or very close it. Disturbing unmarked graves or burials triggers 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, in order 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 cemetery 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

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. Furthermore, 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. Any preconstruction activities without adherence to these stipulations may jeopardize the issuance of a permit or receipt of funding if it is determined that such opportunity to comment has been foreclosed. 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- In accordance with Section 8.6 of the Standards and Regulations for Subdivision Streets and State Highway Access, the addition of the proposed composting facility to the fertilizer plant constitutes a change in use, such that DelDOT will need to re-evaluate the currently approved entrance, where Enviro Way connects to Laurel Highway (Sussex Road 13). While DelDOT may require improvements there, preliminarily they anticipate that no improvements will be needed and that the existing entrance permit can remain in effect, with an adjustment to the traffic volumes included therein.

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

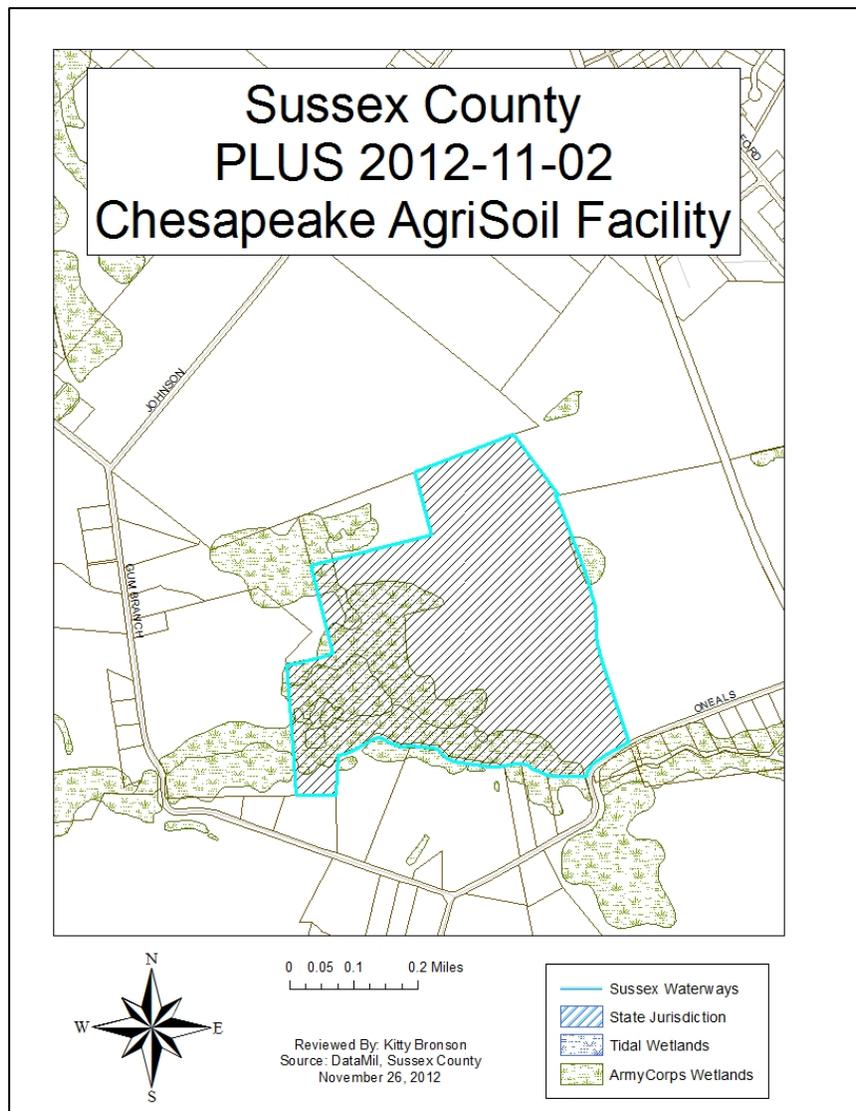
Wetlands

- State regulated wetlands ARE NOT located on this property based on a review of the State wetland maps. State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. 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 located on this property based on a review of aerial photographs, State Wetland Mapping Project (SWMP) maps, Soil Surveys and/or USGS topographic maps. 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. 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>.
- Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. According to our GIS SWMP maps, there are considerable wetlands regulated by the U.S. Army Corps of Engineers. We suggest contacting them for an on-site inspection. Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable

waters of the United States, including adjacent wetlands and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce.

- The extent of Federal jurisdiction over Waters of the United States is determined by the U.S. Army Corps of Engineers and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the U.S. are located on the property and the limits of Federal jurisdiction. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at:

<http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm>.



TMDLs

- The project is located in the greater Chesapeake drainage area, specifically within the Nanticoke 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 Nanticoke watershed 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 from baseline conditions.
- The applicant should be aware that the EPA required the State of Delaware to develop a Watershed Implementation Plan (WIP) and 2-year progress milestones for purposes of accelerating efforts to improve and restore waters of the Chesapeake Bay. The WIP and milestones identify specific pollution reduction practices and programs to reduce nitrogen, phosphorus, and sediment from a variety of sources within the watershed. More stringent TMDL reduction(s) may be developed by the EPA (in the near future) for the entire Chesapeake drainage, thus increasing the TMDL reduction targets for the Nanticoke watershed or supplanting the existing TMDL reduction targets developed by the State.

Water Supply

- The project information sheets state that individual on-site well(s) will be used to provide water for the proposed project. Our records indicate that the project is not located in an area where public water service is available. Should an on-site Industrial, Public/Miscellaneous Public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as central sewer lines, septic tank and sewage disposal area, and at least 150 feet from the outermost boundaries of the project. 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.

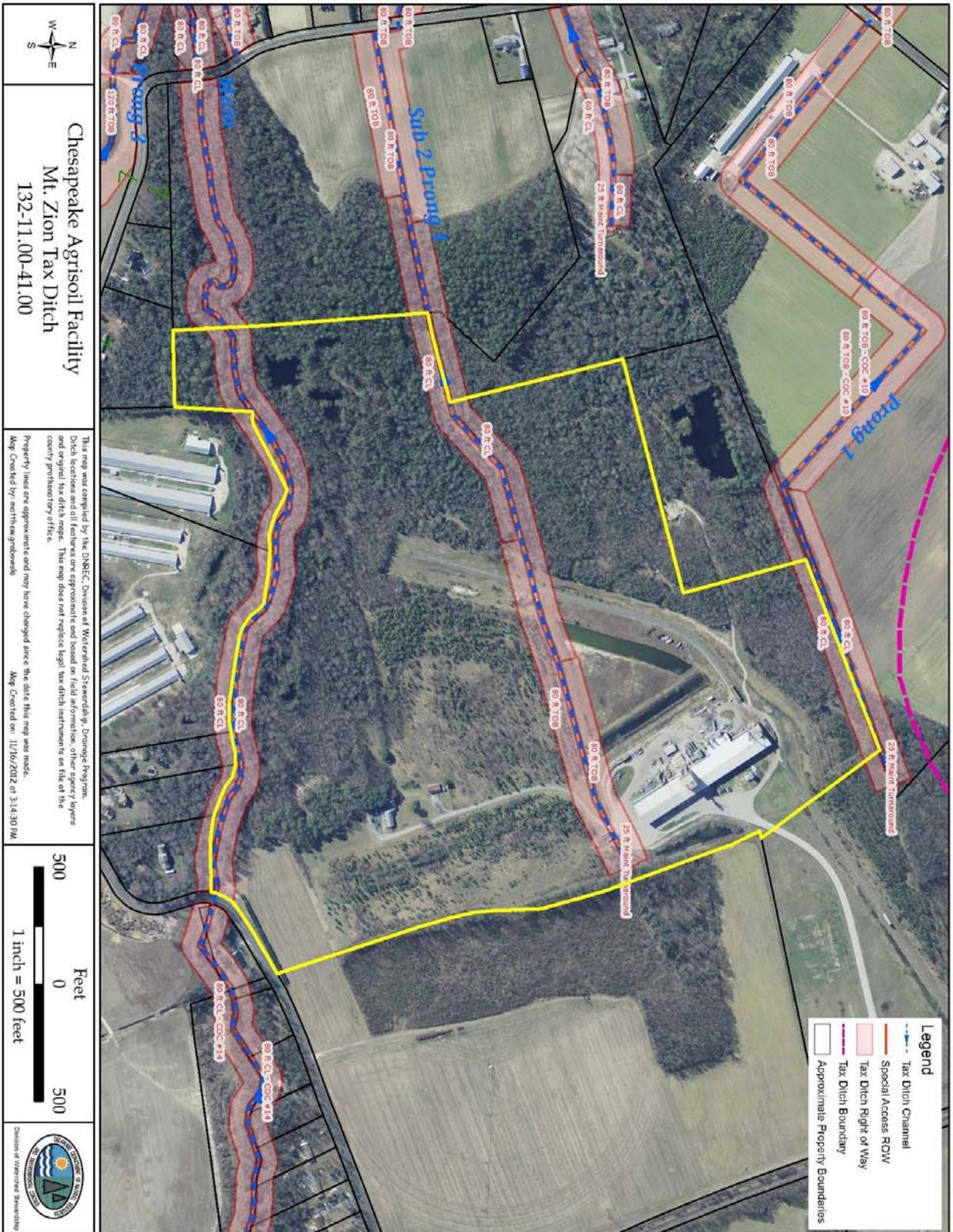
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Sediment and Stormwater Program

- 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 project 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 Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

Drainage Program

- This property is located in the **Mt. Zion Tax Ditch** and is affected by tax ditch rights-of-way. The proposed dry extended detention pond and the access road are along and across Sub 2 of Prong 1 of the Mt. Zion Tax Ditch. Any change to the location of the tax ditch or existing tax ditch rights-of-way will require a change to the Mt. Zion Tax Ditch court order. The placement of permanent obstructions within tax ditch rights-of-ways is prohibited. Please contact Matthew Grabowski, Environmental Program Manager with the Drainage Program in Georgetown at (302) 855-1930 to discuss the tax ditch rights-of-way on this property. (Delaware Code: Title 7 Chapter 41)



Delmarva Fox Squirrel

- This project lies within an area where Delmarva fox squirrel (*Sciurus niger cinereus*, DFS) are likely to occur. Delmarva fox squirrels are large-bodied tree squirrels that only inhabit mature forests on the Delmarva Peninsula. Threatened mainly by loss of its forested habitat, DFS have been protected as an endangered species since 1967. As required by the Endangered Species Act, the U.S. Fish and Wildlife Service reviews projects that may harm this species or their habitat. Based on past movement data, the Service only requires consultation on projects within 3 miles of known DFS populations. Please contact Trevor Clark of the U.S. Fish and Wildlife Service (410-573-4527) to learn how to avoid impacting the habitat. He may recommend simple alterations to your project or suggest you have surveys conducted to determine if Delmarva fox squirrels are present. If you have surveys conducted, they must be done by a federally approved fox squirrel surveyor, be conducted twice; once in the fall, and again between March 15 and May 30. A list of qualified surveyors is available upon request. Please note that surveys may confirm the presence of fox squirrels but cannot confirm absence.

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:

- **Fire Protection Water Requirements:**
 - Since the structures of the complex are proposed to be served by individual on-site wells (No Central or Public Water System within 1000' of property), set back and separation requirements will apply.
- **Fire Protection Features:**
 - For buildings classified as “high hazard”, an adequately supplied automatic sprinkler system shall be provided.
 - 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
- **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 facility from the main thoroughfare 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 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)
 - Provide Road Names, even for County Roads

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 recommend that the developer have their site engineer contact our Subdivision Manager for this part of Sussex County, Mr. Derek Sapp, to determine how to proceed with regard to the site entrance. Mr. Sapp can be reached at (302) 760-4803.

Soils Assessment

- Based on soils survey mapping update, Askecksy (AsA), Mullica (MmA), and Longmarsh /Indiantown (LO) are the most environmentally sensitive soil mapping units in the immediate vicinity of the proposed project (See figure 1). AsA, MmA, and LO are poorly to very poorly-drained wetland associated (hydric) soil mapping units; these soil mapping units have severe limitations for development and are generally considered unsuitable for development. Building on such soils is likely to result in a significantly higher probability of onsite and off-site flooding potentials. We strongly recommend avoiding areas containing said soil mapping units.

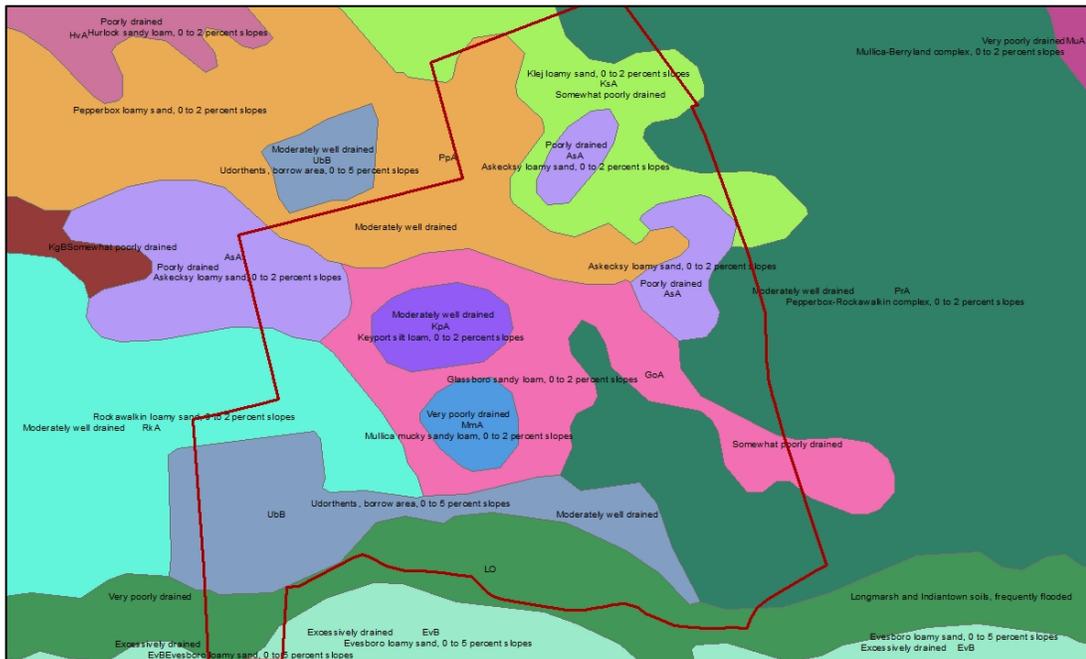


Figure 1: Soil mapping units (NRCS) in the immediate vicinity of the proposed project

Additional information on TMDLs and water quality

- A Pollution Control Strategy (PCS) is the regulatory directive requiring the implementation of various best management practices (BMPs) that help reduce transport of nutrient and bacterial pollutant runoff from all waters draining into a “greater” common watershed; with the ultimate objective of achieving the obligatory TMDL reduction requirements for that watershed. However, the PCS for the Nanticoke River watershed has not been formally completed to date. In absence of a finalized PCS, the

applicant is strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs:

- Maintain as much of the existing forest cover as possible. We further recommend additional native tree and native herbaceous planting wherever possible.
- Since a significant portion of the parcel contains poorly drained to very-poorly drained (hydric) soils and SWMP mapped wetlands, much of the area proposed for construction may be unsuitable for development. We strongly recommend that the applicant avoid those areas containing SWMP mapped wetlands and/or wetland associated hydric soils. Since there is no substitute for a field-based wetlands delineation, we suggest the applicant have a licensed class D soil scientist (with experience in wetland delineation) conduct a USACE approved wetlands delineation on this parcel. A list of licensed class D soil scientist can be obtained from the Division of Water Resources at the following phone number: (302) -856-4561.
- 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, DNREC recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.
- Maximize the amount and/or preservation of passive wooded open space. We further recommend additional planting of native trees or shrubs wherever possible.
- The applicant should calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.
- Since this is a large project that will likely generate a great amount of impervious cover, we strongly advise the use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP to reduce the impacts associated with surface imperviousness, wherever practicable.
- DNREC recommends the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff from impervious surfaces.
- 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 (e.g., nitrogen and phosphorus) and bacterial loading 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. DNREC encourages 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.

State-Rare Species

- A review of our database indicates that the following State rare, federally listed or Species of Greatest Conservation Need ¹(SGCN) occur at or adjacent to the project site:

Scientific Name	Common Name	Taxon	State Rank	State Status	SGCN Tier
<i>Pantherophis guttatus</i>	Red Cornsnake	Reptile	S1	E	Tier 1
<i>Acantharchus pomotis</i>	Mud Sunfish	Fish	S2		Tier 1
<i>Anodonta imbecilis</i>	Alewife Floater	Freshwater Mussel	S1		Tier 2

State Rank: S1- extremely rare within the State (typically 5 or fewer occurrences); **S2-** very rare within the State (6 to 20 occurrences);

State Status: E – endangered, i.e. designated by the Delaware Division of Fish and Wildlife as seriously threatened with extinction in the State;

SGCN Tiers: Tier 1 Species of Greatest Conservation Need (SGCN) are those that are most in need of conservation action in order to sustain or restore their populations. They are the focus of the Delaware Wildlife Action Plan (DEWAP), which is based on analyzing threats to their populations and their habitats, and on developing conservation actions to eliminate, minimize or compensate for these threats. **Tier 2** SGCN are also in need of conservation action, although not with the urgency of Tier 1 species. Their distribution across the landscape will help determine where DEWAP conservation actions will be implemented on the ground.

¹Species of greatest conservation need (SGCN) are indicative of the overall diversity and health of the State’s wildlife resources. Some may be rare or declining, others may be vital components of certain habitats, and still others may have a significant portion of their population in Delaware. SGCN are identified in the Delaware Wildlife Action Plan (DEWAP) which is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state’s natural resources. Congress challenged the states to demonstrate comprehensive wildlife conservation. Delaware, along with all of the other states and provinces throughout the country are working to implement their wildlife action plans. This document can be viewed via the Division of Fish and Wildlife’s website at <http://www.fw.delaware.gov/dwap/Pages/default.aspx>.

- **Red Cornsnake:** has been documented in the vicinity and could occur within the project area if suitable habitat is present. This state-endangered snake typically inhabits wooded areas but will also utilize open fields and buildings in search of prey. This species can be mistaken as a copper head because of similar markings; however, it is a docile, non-poisonous species which can reduce rodent populations. Eggs are laid in June or July under rotting stumps, logs, or other debris and typically hatch between August and September.
 - Because we have not surveyed this property to confirm presence or absence of this species, we recommend that efforts to minimize clearing of nesting habitat during the breeding and hatching season be made (June through September). If an individual is encountered during project activities, we request an effort is made to avoid impacts. In addition, where feasible, leaving woody debris piles and rotten logs on the forest floor could provide shelter and breeding habitat not only for this species but other forest dwelling species as well.
- **Mud Sunfish** and **Alewife floater** occur downstream from the project area. Water quality is important for the persistence of both species as run-off and siltation from upstream activities could be detrimental. Mud sunfish rely on slow moving bodies of water with abundant aquatic vegetation and a mud or silt bottom. Alewife floater are filter feeders and as such have a long lifespan and complex life cycle. They serve as excellent indicators of water quality and the Nanticoke River watershed is the most diverse in the State with regard to Freshwater mussels.
 - Impacts to these species can be minimized by taking stringent measures to decrease the potential for run-off into Gum Branch. Buffers are an effective way of protecting water quality and we recommend that the buffer width be *at least* 100 feet along Gum Branch. This recommendation is based on peer reviewed research that suggests that buffer values, and thus water quality protection, increase noticeably in most cases with widths of 100 or more feet.

General Comments about Habitat and Forest Preservation

- Forest loss and fragmentation can impact an array of forest dependent species and many rare species have been documented on the nearby Nanticoke Wildlife Area. From a landscape perspective, this area in general has experienced a fairly high level of forest fragmentation for agriculture and development. Interpretation of aerial imagery suggests that the portion of the forest to be cleared for this project has been previously harvested and is in an early stage of regeneration. According to the site plan, it is also in close proximity to the existing structures/farm operation. The surrounding forest, which provides a habitat connection to adjacent forest blocks and is a buffer for Gum Branch, is not going to be cleared by this project.

- Although forest dependent species are of primary concern, there are some birds and other wildlife species that utilize early successional and edge habitat for breeding/nesting. Therefore, if feasible, efforts could be made to minimize tree clearing when these species are most vulnerable, typically April 1st to July 31st.

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

- 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.

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,



Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County