



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

August 21, 2013

Mr. Brian Bassett
Cape Henlopen School District
1270 Kings Highway
Lewes, DE 19958

RE: PLUS review – 2013-07-09; Cape Henlopen School District Elementary School

Dear Mr. Bassett:

Thank you for meeting with State agency planners on June 24, 2013 to discuss the feasibility of 20 acres located at John J. Williams Highway, Dorman Farm Road, and Mulberry Knoll Road for a future elementary school site.

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 parcel is located in Levels 1, 2, & 3 according to the 2010 *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. 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 will support growth in these areas.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There is a known archaeological site (S-7910, 7S-G-117) on this parcel, near Welch's Pond, and another known archaeological site (S-7906, 7S-G-113) near the parcel, between the stream called the Head of Fishers Glade and Dorman Farm Lane. There are also dwellings in the vicinity such as a late 19th or 20th-century dwelling (S-962) along Ward Road, a 20th-century dwelling (S-11557) along Dorman Farm Lane, and others along John J. Williams Hwy (Route 24), Mulberry Knoll Road, and Ritz Lane (S-10114; S-10115, S-10118; S-10120; S-10121).

According to the Pomeroy and Beers Atlas of 1868, there were structures on this parcel, associated with J. Welch and with M. Milby. In addition, the USGS Topographic Map of 1918 also shows that there were structures approximately in the same location, and there is a possibility that there may be archeological remains associated with those structures. With this in mind, the developer should 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 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 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 would like to know more information that pertains to unmarked human remains or cemeteries, please check 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. The developer should also include a barrier or sufficient landscaping between the proposed RV Resort-Campground and the dwellings mentioned above, in order to protect them from the various visual or sound effects that may adversely affect them. 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. 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site entrance must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, which is available at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf.
- The proposed school warrants a Traffic Impact Study (TIS) per Section 2.3.1 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access and we will require that one be done as part of the plan approval process. For any site selected, the road improvements needed to support it will be required in accordance with Section 3.10 of the Standards and Regulations. These improvements will be determined on the basis of the design standards in our Standards and Regulations and our review of the TIS.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

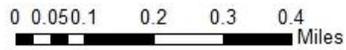
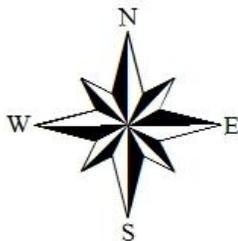
Wetlands

- State regulated wetlands **ARE** 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. Please refer to **State Wetland map number 84**. Any activity in State regulated wetlands may require a permit from

DNREC's Wetlands and Subaqueous Lands Section. **We recommend a Jurisdictional Determination be done for this site since there are planned impacts.** Please contact us for a JD to be applied for. 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** likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. Upon review of the GIS layers, Perennial Rivers/Streams are located on the property. 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 on 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. *Upon review of the GIS layer, a stream runs through the parcel and Love Creek runs adjacent to this parcel.* 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 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.
- 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 USGS topographic maps. 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 jurisdictional. 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>.

Sussex County Cape Henlopen School District PLUS 2013-07-09



Reviewed By: Kitty Bronson
DNREC, Wetlands and Subaqueous Lands
Data Source: DNREC GIS sources
2012 Orthos, Wetland maps, Swamp layers



Tank Management Branch. Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 Del.C. Chapter 60, 7 Del.C., Chapter 74 and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.
- There is one confirmed leaking underground storage tank (LUST) project located within a quarter mile of the project boundary:
 - Morris John W, Facility: 5-000470, Project: S9103046 (Inactive)
- Per the **UST Regulations: Part E, § 1. Reporting Requirements:**
 - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
 - The Department's 24-hour Release Hot Line by calling 800-662-8802; and
 - The DNREC Tank Management Section by calling 302-395-2500.

TMDLs

- The projects are partially located in the *low nutrient reduction zone* of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. 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 *low reduction zone* of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 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>

- The adopted Inland Bays Pollution Control Strategy regulation was published in the Delaware Register of Regulations on November 11, 2008 and is now an enforceable regulatory directive. A Pollution Control Strategy (PCS) is an implementation strategy that identifies the actions necessary (regulatory and non-regulatory) to systematically reduce the pollutant loading to a given water body, and meet the TMDL reduction requirements specified for that water body. These regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf> and background information, guidance documents, and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.

Water Supply

- The project information sheets state that the water provider is unknown at this time. DNREC records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity 83-W-15. DNREC recommends that the developer contact Tidewater Utilities to determine the availability of public water. Any public water utility providing water to the site must obtain a Certificate of Public Convenience and Necessity (CPCN) from the Public Service Commission. Information on CPCN's and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site 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 a septic tank and sewage disposal area, and it must also be located 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 Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.
- 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 complying with the requirements of the Delaware Sediment and Stormwater Regulations must be approved prior to any land disturbing activity taking place on the site. The plans will be reviewed and approved by DNREC Sediment and Stormwater Program. Contact Elaine Webb at

(302) 739-9921 for plan submittal requirements and to schedule a project application meeting.

The Sediment and Stormwater Regulations are in the process of being revised. The revised regulations are expected to be effective January 1, 2014. Any project submitted for review after the effective date of the regulations must comply with the revised regulations. The revised regulations and associated Technical Document can be viewed at the following link:
<http://www.dnrec.delaware.gov/swc/Drainage/Pages/RegRevisions.aspx>

- A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Watershed Stewardship along with the \$195 NOI fee prior to plan approval. Once the construction activity is complete, as-builts have been approved, and final stabilization is established on the site, a Notice of Termination (NOT) may be submitted to terminate permit coverage for the construction activity. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

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.

Air Quality

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1, Potential Regulatory Requirements, may apply:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibit the burning of land clearing debris. • Prohibit the burning of trash or building materials/debris.
7 DE Admin. Code 1135 – Conformity of General Federal Actions	<ul style="list-style-type: none"> • Require, for any “federal action,” a conformity determination for each pollutant where the

to the State Implementation Plan	total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> • Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> • Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). • Maintain recordkeeping and reporting requirements.
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> • Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at the DNREC website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

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

- The Delaware State Fire Marshall’s Office will make specific comments once a site has been chosen and a site plan has been completed. Once a site is chosen, the District or your engineer should work with the State Fire Marshall’s Office to determine the regulations for a school site.

Delaware Department of Education – Contact Despina Wilson 735-4199

Site Selection

- When seeking a school site, districts should consider several factors—size, shape, topography, conditions, safety and access.

State Strategies for Policies and Spending

- The Department of Education complies with the State Strategies for Policies and Spending and, as such, shall not support the construction of schools in areas identified as Level 4 unless extenuating circumstances apply. Districts shall seek to locate new schools in areas identified as Levels 1, 2 or 3 of the State Strategies for Policies and Spending.

Site Utilities and Public Facilities

- The Department of Education supports districts locating school facilities on parcels with existing or reasonable access to civil infrastructure to include but not limited to:
 - Roads, pedestrian walkways and shared use paths
 - Waste water/sewerage and domestic water
 - Electric, and telecommunications
 - Storm water drainage and conveyance
- Districts shall seek to locate schools on sites with public water and sewer utilities or access to public water and sewer utilities as a first choice with sites requiring on-site facilities only being considered when no reasonable alternative exists.
- The Department of Education considers proximity and access to basic support services as a high priority.
- The Department of Education supports locating school facilities strategically within the geographic region and/or community the facility is intended to serve in order to:
 - Encourage non-student pedestrian access to the school facility in an effort to reduce vehicle miles traveled to the extent practical
 - Encourage student pedestrian access to the school facility, in order to contain the school's life-cycle operating costs associated with student transportation, as practicable
 - Create education campuses by co-locating educational facilities and services in an effort to reduce life-cycle costs as a result of the co-located schools sharing common spaces, facilities and services.
 -
- Potential educational facility sites shall be reviewed through the State of Delaware PLUS process, and approved in accordance with 29 Del C. Chapter 75, Section 7525. Districts are encouraged to submit multiple potential sites for PLUS review prior to the CN request.

Site Review

- Districts shall engage regulatory agencies to include but not limited to DelDOT, DNREC, County, City/Town/Municipality code enforcement officials as early in the site selection stage as possible, in order to make a more informed decision about educational facility site selection.
- Challenging Sites, regarding the cost to develop them, the district shall engage the services of civil engineer prior to final CN issuance to perform necessary site analysis in sufficient detail as requested by the DOE to support increases to the standard school square foot construction formula in effect at the time. The cost of this site analysis may be reimbursed by the project once funds are appropriated to the project. In the absence of such detailed site analysis by a civil engineering firm, the DOE standard square foot construction formula shall apply.

- Specific information needed to support a challenging site square footage construction formula increase may include but not limited to:
 - AIA Geotechnical survey and report – possibly to include test borings
 - Phase I environmental analysis
 - Survey – both boundary and topographical
 - Infiltration test in natural drainage areas – possibly to include test borings
 - Wetlands Jurisdictional Delineation
 - 100 and 500 year flood planes
 - Other pertinent information such as historical survey, protected species survey etc. as warranted by the circumstances.

The cost of this site analysis may be reimbursed by the project once funds are appropriated to the project. Districts and/or their civil engineers must support the decision to select a challenging site if a more economical site is available. The final decision to allow the district to select a challenging site shall be vested with the Department of Education and shall be based on safety, economic and land availability criteria.

Safety:

- Hazards reduction shall be the emphasis in school site selection, site civil engineering work to include storm water management, utilities, vehicular and pedestrian traffic flow, as well as school lay-out on the site.
- Playground location and designs - age appropriate playground facilities with adequate fall attenuation surfacing shall be designed, constructed and maintained in accordance with CPSC PUB 325 and ASTM Designation F 1487.

Title 29, Chapter 75, § 7525. Use or acquisition of lands for school construction:

(a) Whenever a school district either proposes to use land that it currently owns for the carrying out of school construction, or to select and acquire land for the same purpose, the board of education of such school district is authorized to use or to select and acquire such land upon the approval of the Department of Education, the Office of Management and Budget and the Office of State Planning Coordination, pursuant to rules and regulations to be promulgated by the Department of Education. A school district may submit more than 1 prospective site for approval. If the Department of Education, the Office of Management and Budget and the Office of State Planning Coordination approve more than 1 site, the Department of Education shall work jointly and cooperatively with the school district to finally decide which site or sites shall be approved. The provisions of this subsection shall apply to any land that a school district desires to use for school construction purposes, whether acquired prior to or after July 19, 2004, and regardless of whether said land was or is to be acquired by the school district either by gift or for consideration, or where said land is proposed to be set aside in lieu of payment of the Voluntary School Assessment as provided in § 2661(c)(3) of Title 9 and § 842(c) of Title 22.

(b) The land may be acquired by contract with the owner or owners thereof at a fair value, or by condemnation proceedings instituted by the appropriate official body, but such condemnation proceedings shall not be instituted against any land, building,

franchise, easement or other property of a public utility used by it in providing its service to the public.

(c) The cost of such land shall be deemed to be part of the cost of such school construction.

(d) Title to any lands acquired shall be a fee simple title and shall be vested in the board of education of the school district.

(e) Condemnation proceedings to acquire land in any case where such land cannot for any reason be acquired by agreement with the owner or owners thereof for a fair or reasonable consideration may be instituted by the appropriate official body under § 2303 of Title 14 and Chapter 61 of Title 10.

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

- While the District could do a TIS examining multiple sites, because of the expense involved DelDOT recommends that the District narrow the number of sites under consideration as much as possible without doing that. They are willing to meet with the District to discuss potentially necessary off-site improvements in more detail. DelDOT Standards and Regulations require that TIS study areas be determined using a DelDOT travel demand model, so there is some effort required on our part to determine a study area. However, if differences in the off-site improvement costs are expected to be a deciding factor between otherwise comparable sites, they would be willing to determine study areas for two or more sites. As necessary, the District should have their engineer contact Mr. Troy Brestel of the DelDOT Planning office in that regard.
- While the specific off-site improvements to be required would depend in part on the site plan, the part of the parcel where development is proposed and the results of the TIS, the District should anticipate being required to make road improvements. If the District can better define the part of the parcel that is of interest, DelDOT can better determine for them where they would likely require improvements.
- The District should not assume that DelDOT will permit access at the signal on Route 24 serving the Beacon Middle School. If the school is proposed for the south part of the parcel, DelDOT will need to look at the relative merits of an access there compared to an access on Mulberry Knoll Road (Sussex Road 284).

- There is a DelDOT capital project to improve Route 24 in the area of this project. It begins at Love Creek and ends about 1,000 feet east of Mulberry Knoll Road. This project could, possibly, reduce the need for road improvements by the District. In that regard, timing is a concern. The project is not currently scheduled for advertisement in our six-year Capital Transportation Program.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

Soils Assessment

- The NRCS soil survey shows that a significant portion of this parcel is comprised of poorly and very poorly drained hydric soil mapping units. Poorly and very poorly drained hydric soils are indicative of wetland conditions; therefore, these soil mapping units are considered unsuitable for development.
- The high prevalence of hydric soils and SWMP mapped wetlands on this site makes this parcel one of the least feasible for siting the proposed school. In fact, this parcel is the least suitable of all the parcels evaluated for development.

Additional information on tank management.

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.
- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.

Additional information on water quality

- Compliance with the specified TMDL nutrient and bacterial reduction requirements specified for the Inland Bays watershed can be facilitated by the strategies and requirements described in the Inland Bays PCS, and the implementation/adherence to the following recommended BMPs:
 - A United States Corps of Engineers (USACE) approved wetlands delineation is recommended. The USACE can be reached by phone at 736-9763. It should also be noted that compliance with USACE regulations does not preclude compliance with State wetland-regulatory requirements.
 - 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).

- DNREC recommends that the applicant 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 project that will likely generate large amounts of impervious cover, we advise, wherever practicable, the use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP(s) to reduce the impacts from all forms of created surface imperviousness.
- DNREC encourages 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 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. DNREC strongly encourages the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact the Watershed Assessment Section at 302-739-9939 for more information on the protocol.

Additional information on hazardous waste

- DNREC 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 re-zoned 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.

Additional information on air quality

- DNREC encourages developers and builders to consider all sustainable growth practices in their design, but we believe, however, that the air quality impacts associated with the project should be completely considered. New homes, businesses, and schools may emit, or cause to be emitted, air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
 - Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
 - The emission of greenhouse gases which are associated with climate change, and
 - The emission of air toxics.
- Air emissions generated from new school include emissions from the following activities:
 - Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
 - The generation of electricity needed to support the school, and
 - All transportation activity.
- DNREC encourages sustainable growth practices that:
 - Control sprawl;
 - Preserve rural and forested areas;
 - Identify conflicting land use priorities;
 - Encourage growth on previously developed sites and denser communities;
 - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and
 - Demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.
- Additional measures may be taken to substantially reduce the air emissions which include:
 - **Constructing with only energy efficient products.** Energy Star qualified products are up to 30% more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.

- **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.
- **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions. **For every vehicle trip that is replaced by the use of a sidewalk, a bike path or mass transit, 7 pounds of VOC and 11.5 pounds of NOx are reduced each year.**
- **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.
- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- **Planting trees in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

This is a partial list, and there are additional things that can be done to reduce the impact of the project. The applicant should submit a plan to the DNREC Division of Air Quality (DAQ) which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Cape Henlopen School District project.

Delaware Department of Education – Contact Despina Wilson 735-4199

School sites must be approved by the Secretary of Education, the Director of OMB, and the Director of the Office of State Planning Coordination. The *Strategies for State Policies and Spending*, the information contained within this PLUS letter and other factors will be considered when the Secretary and the two Directors make the determination about whether or not to approve a school site.

Once the District decides on a school site or sites to pursue for approval, the district must submit a letter requesting approval of the site(s) to the Department of Education. The letter should be directed to the Education Associate responsible for School Plant Planning and Maintenance. The letter should contain a tax parcel ID #, PLUS review #, and all relevant information regarding the site and the proposed school.

Once a school site has been selected and approved, and the site plan for the school has been designed, a new PLUS review will be required prior to submission of the plan to the local government.

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

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland". The signature is written in black ink and is positioned above the typed name and title.

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

CC: Sussex County