

Comments by division and program follow.

Fish and Wildlife

Our Division scientists have not surveyed this project area; therefore, it is unknown if State-rare or federally listed plants, animals or natural communities occur at this project site. However, according to our GIS database and aerial imagery, habitat that could support rare species is unlikely to occur on this property. *Edna Stetzar - (302) 653-2880, Edna.Stetzar@state.de.us*

Soil and Water

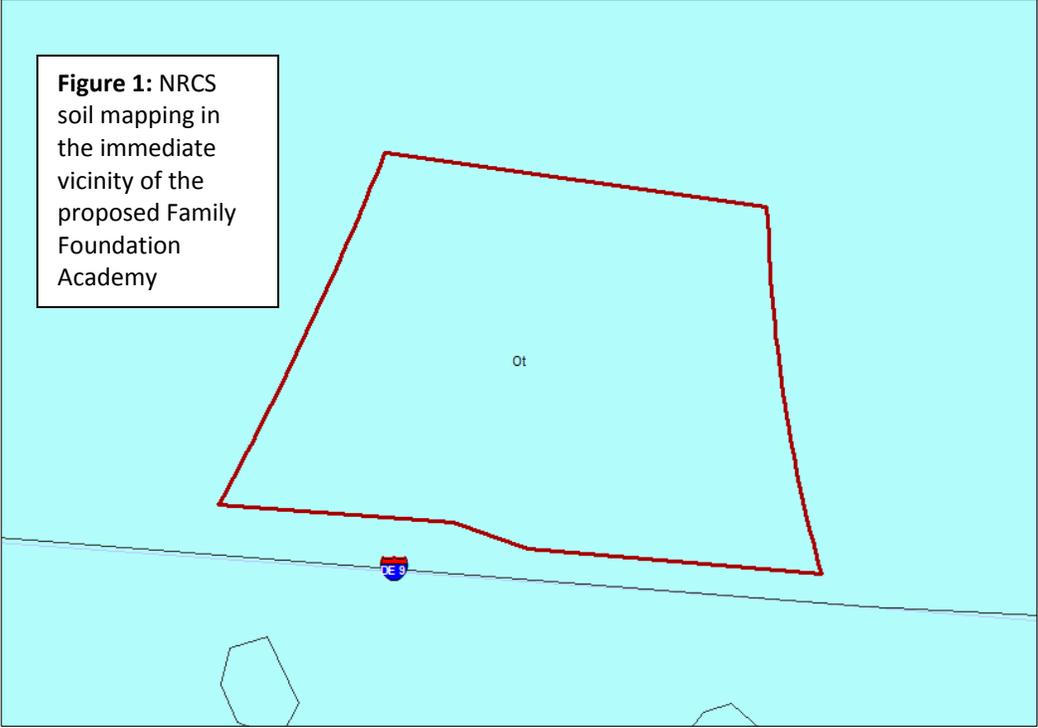
Sediment and Stormwater Program. A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a preliminary meeting to discuss the sediment and erosion control and stormwater management components of 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 New Castle Conservation District. Contact the New Castle Conservation District at (302) 832-3100, Ext. 3 for details regarding submittal requirements and fees.

James Sullivan - (302) 739-9921, James.Sullivan@state.de.us

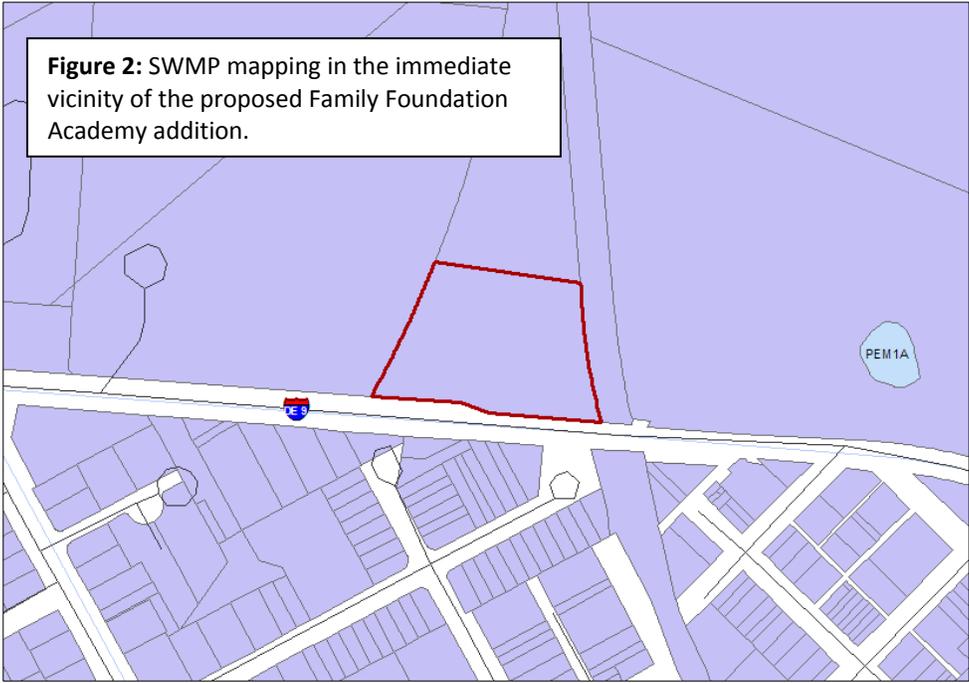
Flood Management. The site is not located in a Special Flood Hazard Area. We did notice that the site plan (under #7 of the Plan Data) references an old FEMA map. The current effective maps for New Castle County are dated January 17, 2007. The current effective map should be used for any new construction or a substantial improvement of an existing building. *Gregory Williams - (302) 739-9921, Gregory.Williams@state.de.us*

Water Resources

Soils Assessment. According to the New Castle County soil survey, Othello (Ot) was mapped over the entire parcel. Othello is a poorly-drained wetland associated (hydric) soil that has severe limitations for development and should be avoided (Figure 1).



Wetlands. Based on Statewide Wetlands Mapping Project (SWMP) mapping, no wetlands were mapped in the immediate vicinity of the proposed project (Figure 2).



Impervious Surfaces and Best Management Practices. Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness. A rain garden is another practical BMP that could be employed on this site to mitigate surface imperviousness.

Since post-construction impacts realized from this project are likely to render much, if not all, of land area proposed for construction mostly impervious, pervious paving materials are strongly recommended in lieu of conventional paving materials for at least 50% of the paved surface(s) area(s).

TMDLs. Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Red Lion Creek watershed. No TMDL has developed to date for the C&D canal. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the Red Lion Creek watershed, a post-development TMDL reduction level of 40 percent will be required for both nitrogen and phosphorus. Additionally, a 38% reduction in bacteria will also be required.

The Department developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional reductions may be possible through the implementation of Best Management Practices as, reducing surface imperviousness, increasing passive wooded open space, employing a rain garden(s), and the use of green-technology stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Soils, wetlands, subaqueous lands and TMDL comments provided by John Martin, Watershed Assessment Section, (302) 739-9939, John.Martin@state.de.us

Water Supply. The project information sheets state that public water will be provided to the project by the City of New Castle via a public water system. Our records indicate that the project is located within the public water service area granted to NCC Water & Light Company under Certificate of Public Convenience and Necessity (CPCN) 88-WS-05. We recommend that the Academy contact NCC Water & Light Company to determine the availability of public water. Any public water utility providing water to the site must obtain a CPCN from the Public Service Commission. Information on CPCNs 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. *Ricardo Rios - (302) 739-9944, Ricardo.Rios@state.de.us*

Air and Waste

Hazardous Waste Sites. DNREC's Site Investigation and Restoration Branch (SIRB) has reviewed the proposed project. Seven (7) SIRB sites were found within a ½-mile radius of the proposed development; Deemer Steel-OU1, OU2, OU3 (DE-1243,1244,1245) all located 0.20 miles south, Deemer Steel- 9th and Washington Site (DE-1087) located 0.13 miles south, Deemer Steel-New Castle Plant (DE-0045) located 0.26 miles south, New Castle Gas Company (DE-0167) located 0.44 miles south, and Abex Corp Landfill (DE-0065) located 0.41 miles south of the proposed project.

The contaminants of concern in the Deemer Steel area came from the operations of a foundry that was previously located in the area. Some of the contaminants found were TCE, PAH, and high levels of metals such as arsenic. The Deemer sites have since been remediated by excavating the soil and capping the property. There are currently town homes and apartments on the sites, and plans for development will begin soon for Deemer Steel-New Castle Plant Site. All of the Deemer sites were given Certification of Completion of Remedy (COCR) between 2002 and 2005. The sites are still undergoing yearly monitoring as part of the Operations and Maintenance plan. Abex Corp Landfill Site was closed in April of 1986. No information is available for New Castle Gas Company.

Based on the previous manufacturing and industrial use of the proposed project site, which may have involved the use of hazardous substances, SIRB recommends that a Phase I Environmental Site Assessment be performed prior to development. In addition, 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. *Krystal Stanley - (302) 395-2644, Krystal.Stanley@state.de.us*

Tank Management Branch. There are eight (8) inactive LUST project sites located within a quarter mile from the proposed project:

Name: Carrie Downie Elementary School (Inactive)
Facility ID: 3-000778
Project: N0402030

Name: Former Bantam Market (Inactive)
Facility ID: 3-000284
Project: N9807101

Name: Getty Service Station 08635 (Inactive)
Facility ID: 3-000403
Project: N9201002
Project: N9502054

Name: Wilsons Radiator Shop (Inactive)
Facility ID: 3-001123
Project: N9006042

Name: Deemer Steel Casting Co (Inactive)
Facility ID: 3-001557
Project: N9504086

Name: New Castle Middle School (Inactive)
Facility ID: 3-000781
Project: N0402029
Project: N9610172

Should any underground storage tanks or petroleum contaminated soil be discovered by any person during construction, the DNREC-TMB at (302) 395-2500 and the DNREC Emergency Response Hotline at (800) 662-8802 must be notified within 24 hours.

Should any contamination be encountered, PVC pipe materials will have to be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

Also, please note that if any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMB. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMB. *Elizabeth Wolff* - (302) 395-2500, Elizabeth.Wolff@state.de.us