



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

November 20, 2012

Mr. Mark Ziegler
McBride & Ziegler, Inc.
2607 Eastburn Center
Newark, DE 19711

RE: PLUS review – 2012-10-04; Odyssey School

Dear Mr. Ziegler:

Thank you for meeting with State agency planners on October 24, 2012 to discuss the proposed plans for the Odyssey School to be located at 65810 Lancaster Pike near Hockessin.

According to the information received, you are seeking approval through New Castle County for a school complex to consist of an elementary, middle and high school with related athletic fields and parking areas. The proposed school is proposed to be 225,692 sq. ft.

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 New Castle 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 Levels 1 & 2 according to *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. 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 National Register-listed property on this parcel, the Coffee Run Mission Site (N-272, 7NC-B-069), which includes the Episcopal Field Site/Cemetery (N-13553, 7NC-B-046), as a separate parcel within the parcel for the proposed charter school. The nomination indicates this Mission was the first Roman Catholic mission in Delaware, established in the 1790s. The Pomeroy and Beers Atlas of 1868 (which is a 19th-century historic map) does show the Coffee Run Mission Site as the J. Hollingsworth Farmstead, and Episcopal Field Site/Cemetery, which was nearby, was the historic Roman Catholic Church. In addition, the USGS Topographic Map of 1904 (West Chester Quad) also indicated that there were dwellings or structures in the same location as the Coffee Run Mission Site and Episcopal Field Site/Cemetery as well. Because the Coffee Run Mission Site was listed for its archaeological potential and because this development, including sport fields and parking lots, will completely destroy the site outside of the cemetery, we recommend that a full archaeological investigation be carried out before any ground-disturbing activities begin. With this information in mind, the developer should be aware the 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, and often they are either on or near a historic farm site, in rural areas or open space lands. Even marked cemeteries frequently have unmarked graves outside of the known limits of the cemetery. Disturbing unmarked 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. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area for the full extent of such a cemetery. If unmarked burials are discovered, it is very costly to have them archaeologically excavated and the burials moved. In the event of such a discovery, the Division of Historical & Cultural Affairs 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. If you need or would like to read more information in reference to cemeteries, burial grounds or unmarked human remains, 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 archaeological sites, including the home-lot, the church lot, and the cemetery area. 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 the 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 US Department of Education, 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. Furthermore, if you have any questions or concerns pertaining to these comments, please contact Alice Guerrant at 302-736-7412.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. This manual is available on-line at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf.
- In accordance with Section 2.3.1 of the Standards and Regulations, and New Castle County's Unified Development Code, DelDOT is requiring a Traffic Impact Study (TIS). The school's traffic engineer is preparing that study and we expect to receive it soon. We will do what we can to review it promptly.
- Presently DelDOT is waiting for the school's land development plan, which should be submitted in accordance with Section 3.3 of the Standards and Regulations. To ensure that the plan meets their requirements, DelDOT strongly recommends that the school's site engineer contact our Subdivision Manager for this area, Mr. Joshua Schwartz, to schedule a pre-submittal meeting. Mr. Schwartz may be reached at (302) 760-2768.

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, SWMP maps, Soil Surveys and 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>.

TMDLs

- The project is located in the greater Piedmont drainage, specifically within the Red Clay River watershed. The Red Clay Creek is not listed or does not have any specific required Total Maximum Daily Load (TMDL) pollutant reductions.
- 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>.

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 85-WS-03.
- 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.

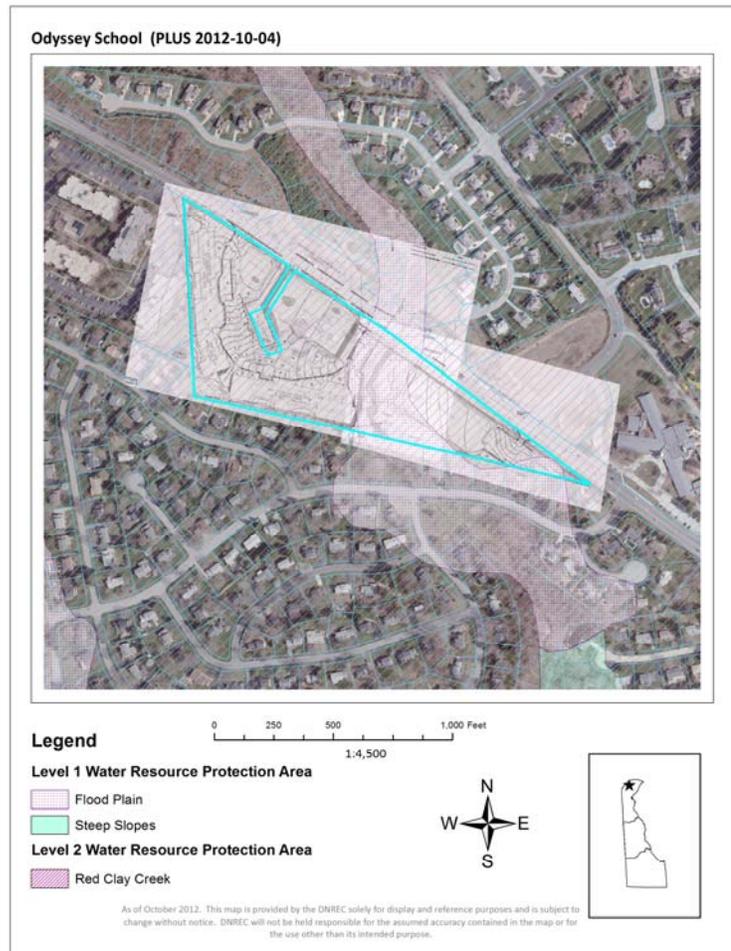
Water Resource Protection Areas

- The DNREC Ground-Water Protection Branch (GPB) has determined that it does not fall within any wellhead protection or excellent groundwater recharge potential areas. However, the parcel falls entirely within the Red Clay Creek Drinking Water Watershed. This area is s a Level 2 Source Water Protection Area for New Castle County. In addition, the parcel has Level 1 Source Water Protection Area running north and south through the center of the parcel (see map).

Level 1 Source Water Protection Areas are defined as flood plains. Land Use or Land Activity within this area has the potential to influence water quality or quantity to the system.

Level 2 Source Water Protection Areas are the delineated watershed upstream from a surface water intake that supplies water to a drinking water system. Land Use or Land Activity within this area has the potential to influence water quality or quantity to the system.

DNREC recommends referring to NCC Unified Development Code for regulations regarding development in these areas.



Sediment and Stormwater Program

- A sediment and stormwater plan will be required for 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 possible. 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 the New Castle County Department of Land Use Engineering Section. Contact the Department of Land Use at (302) 395-5470 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

Bog Turtle

- According to our GIS database, there may be suitable habitat for the federally listed bog turtle (*Glyptemys muhlenbergii*) upstream from the project area. Bog turtles typically occur in freshwater wetlands with open canopies, mucky soils, and tussock vegetation; however, they can occur in more marginal habitats as well. Because the bog turtle is a federally listed species, protected under the Endangered Species Act, its presence can affect the scope of work. Phase I surveys have not been conducted to determine if bog turtles are present. Although this project is downstream from the potential wetland habitat, efforts will have to be made to ensure that this project does not impact upstream hydrology and drainage.

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.

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.
- 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.

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 educational 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 sq. ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements
 - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
 - Show Fire Lanes and Sign Detail as shown in DSFPR

- **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 off of Lancaster Pike to the buildings 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 main 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

Delaware Department of Education – Contact Scott Kessel 735-4199

- The Department of Education has no objections to these plans as long as they meet the State and Local ordinances and regulations. Please note that according to 14 Del Code, Chapter 5 §511(L) you will need to receive your Certificate of Occupancy on or before June 15, 2013.

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

- The plan presented shows three access points on Lancaster Pike (Delaware Route 48), including one at the east end of the site frontage, opposite Old Wilmington Road, that would serve only a small parking lot associate with a proposed sports field. As evidenced by the fact that the road is in DelDOT’s Corridor Capacity Preservation Program, DelDOT would be reluctant to install a new signal anywhere on Lancaster Pike (Delaware Route 48) between Hercules Road and Newport Gap Pike (Delaware Route 41). However, absent the proposed school, the location on this road segment most likely to warrant a signal is the Old Wilmington Road intersection. Because signals are often desired at school entrances to address safety concerns, we recommend that the site be

reconfigured to allow for access to more of the site by way of the Old Wilmington Road intersection.

Recognizing that such a site design would require a significant stream crossing, it may be appropriate to defer construction of the internal driveway leading to the Old Wilmington Road intersection, but we recommend that site be designed to allow for such a connection in the future.

- Particularly given the school's short timeline for planning and construction, we recommend at the center site entrance be located and designed to avoid any impact on the stream crossing immediately east thereof.
- The subject land wraps around a Roman Catholic cemetery associated with St. Mary of the Assumption, a church located farther west on Lancaster Pike. If they have not already done so, we recommend that the school contact the church about the possibility of exchanging use of the Church's access road right-of-way for an easement to use the school entrance and some portion of the school parking lot. For the school, this would generate more usable space for their sports fields. For the church, it would provide better and safer access to their cemetery. For the public, there would be marginal improvements in safety and capacity in that a substandard but very low-volume entrance would be eliminated.

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

Soils Assessment

- Based on the NRCS soils survey mapping update, Hatboro (Hw) is the predominant soil type found on this parcel. Hatboro is a poorly-drained wetland associated hydric soil mapping unit; these soils have severe limitations and are considered unsuitable for development (See figure 1). Building on such soils is likely to increase the potential for on-site and off-site flooding potentials. We strongly recommend avoiding areas containing said soil mapping unit.



Figure 1: NRCS soil survey mapping update in the immediate vicinity of the proposed project.

Additional information on TMDLs and water quality

- According to the applicant's PLUS application a wetlands delineation has been conducted but not approved by the United States Army Corps of Engineers (USACE). We strongly recommend that the applicant conduct a USACE approved field wetlands delineation before commencing any development activities on this parcel(s). 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, 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.
- 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.

- We recommend 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. We 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.

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

Additional information on tank management.

- The following confirmed leaking underground storage tank (LUST) projects is located within a quarter mile from the proposed project area boundary:
 - Coffee Run Condominium, Facility: 3-000893, Project: N9511271 (Inactive)
- 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.

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,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: New Castle County