



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET  
STATE PLANNING COORDINATION

September 19, 2005

Colmcille DeAscanis, P.E.  
Apex Engineering, Inc.  
27 W. Market Street  
Newport, DE 19804

RE: PLUS review – PLUS 2005-08-02; Smyrna Middle School Expansion

Dear Mr. De Ascanis:

Thank you for meeting with State agency planners on August 31, 2005 to discuss the proposed plans for the Smyrna Middle School Expansion.

According to the information received, you are planning to expand the existing middle school, located at 700 Duck Creek Parkway, by adding 50,625 square feet of classroom space.

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 the Town of Smyrna is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.

**Office of State Planning Coordination – Contact: David Edgell 739-3090**

This project is located in Investment Level 1 according to the *State Strategies for Policies and Spending*. This site is also located in the Town of Smyrna. 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. State investments will support the construction of critical public facilities, such as schools, in these areas. Our office has no objections to the proposed construction of this necessary educational facility in accordance with the relevant Town codes and ordinances.

**Division of Historic and Cultural Affairs – Contact: Alice Guerrant 739-5685**

The proposed expansion will have no effect on cultural resources.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

No permits will be necessary from DeIDOT and they have no further comments on this project.

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

**Soils**

According to the Kent County soil survey *Sassafras*, *Woodstown*, and *Johnston* were mapped on subject parcel. *Sassafras* is a well-drained upland soil that has few limitations for development. *Woodstown* is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. *Johnston* is a very poorly-drained wetland associated (hydric) soil that has severe limitations for development.

**Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands. Because there is strong evidence that federally regulated wetlands exist on site, a wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted, if one has not already been done. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process. The applicant is strongly encouraged to avoid any construction activities which may impact these sensitive areas and to maintain forested buffers of no less than 100' feet from all water bodies and wetlands.

If impacts are anticipated please note that the creek is regulated by the Division of Water Resource, Wetlands and Subaqueous Lands Section and in some cases, the U.S. Army Corps of Engineers. Activities which may impact the forested wetlands on this parcel are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by

federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

### **Impervious Cover**

Since large-scale construction projects often generate large amounts of impervious cover - often leading to large volumes of contaminant-laden runoff which ultimately drain into streams or waterways - the applicant is strongly urged to pursue both natural and constructed Best Management Practices (BMPs) that reduce such impacts. Reducing the amount of impervious surfaces and/or using pervious pavers in lieu of asphalt or concrete (where practicable), and the planting of trees are examples of ways to reduce such impacts. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.

### **TMDLs**

A Total Maximum Daily Load (TMDL) is the maximum level of pollution for which a water quality limited water body can assimilate without compromising use and recreational goals such as swimming, fishing, drinking water, and shell fish harvesting. Although TMDLs as a "pollution runoff mitigation strategy" to reduce nutrient loading have not yet been developed for the Smyrna River subwatershed to date, work is continuing on their development and they should be completed by December 2006.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATS) and/or best management practices (BMPs) as "methodological mitigative strategies" to reduce degradative impacts that might be associated with this project. Reducing imperviousness and tree plantings are some examples of proactive mitigative strategies that will help reduce nutrient runoff and its likely impacts on the Smyrna River subwatershed's water quality, while ensuring State compliance with imminent Federal TMDL nutrient-reduction regulatory requirements

### **Water Supply**

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.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

### **Sediment and Erosion Control/Stormwater Management**

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through DNREC Sediment and Stormwater Program. The consultant has already had a pre-application meeting and submitted the concept plan to our office for review. The contact for plan review and construction inspection is Elaine Webb, Engineer III, and can be reached at (302) 739-9921.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

A Certified Construction Reviewer (CCR) will be required for the site throughout construction.

### **Floodplains**

Portions of the site appear to be located within the 100-year floodplain, where the subdivision of land is restricted by Kent County.

### **Underground Storage Tanks**

There is one inactive and one active LUST site(s) located near the proposed project:

Metal Masters, Facility # 1-000470, Project # K9507152  
Earl's Mini Mart, Facility # 1-000113, Project # K8601001

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel in the contaminated areas.

### **State Fire Marshal's Office – Contact: John Rossiter 739-4394**

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. 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):

- a. **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.
  
- b. **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 or 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
  
- c. **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 subdivision from Duck Creek Road must be constructed so fire department apparatus may negotiate it.
  - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
  - 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 minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
  - 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.

d. **Gas Piping and System Information**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **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

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.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Milton Melendez 698-4500**

Neither the Delaware Department of Agriculture nor the Delaware Forest Service opposes the proposed expansion by the Smyrna School District. The site is located in a designated controlled development area. The *Strategies for State Policies and Spending* encourage responsible development in areas within a Growth Level 1 Zone; the Delaware Department of Agriculture and the Delaware Forest Service supports growth within these areas, and encourages the applicant to contact our offices so we may be of service. Finally, as the project develops the Delaware Forest Service recommends the following to further develop forest resources within the project:

*Right Tree for the Right Place*

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

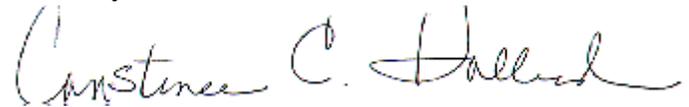
*Native Landscapes*

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

**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

CC: Smyrna School District  
Town of Smyrna