



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION

June 20, 2018

Ted Williams, P.E.  
Landmark Science & Engineering  
200 Continental Drive, Suite 400  
Newark, DE 19713

RE: PLUS Review 2018-05-03; Appoquinimink School District – Olive B. Loss Campus Expansion

Dear Ted,

Thank you for meeting with State agency planners on May 23, 2018 to discuss the proposed plans for the Appoquinimink School District – Olive B. Loss Campus Expansion. According to the information received you are seeking review of a school site feasibility for a new 92,000 square foot elementary school along Brennan Drive in New Castle County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as 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 2 and 3 according to the *Strategies for State Policies and Spending*. 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. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

## **Code Requirements/Agency Permitting Requirements**

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

- The site access on Brennan Boulevard must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.delDOT.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review.
- Section P.5 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Consistent with Section 1.2.1 of the Manual, all access should be on Brennan Boulevard, with no access on Delaware Route 896.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Because the plan involves the repurposing of the existing school as an Early Childhood Center of unspecified size, DelDOT cannot presently determine whether a TIS will be necessary.

From DelDOT's perspective the primary purpose of a TIS is to identify needed off-site improvements. Previous studies in the area have identified a need to improve the intersection of Delaware Routes 71 and 896 and Brennan Boulevard so the District should expect a requirement to make improvements there. Depending on the increase in site traffic, the District may have to study, and possibly improve, additional intersections.

- Because the proposed development is to be constructed in the proximity of a road with a functional classification of principal arterial, freeway or interstate, specifically Delaware Route 896, the developer will be required to perform a noise analysis in accordance with DelDOT's Noise Policy, found in Section 3.6 of the Manual and may be required to provide noise abatement for the school based on that analysis.
- This project is located within the regulated airspace zones of Summit Airport (EVY), which is a public-use facility. Federal Aviation Regulation (FAR) Part 77 imposes height restrictions on any structures within these zones. DelDOT requires that the applicant for this project submits a "Proposed Construction/Alteration in Airport Zones Notification Form" in accordance with Delaware Code (2 Del. C. § 602).

This notification form can be submitted during the plan approval process with the local land use jurisdiction, but DelDOT's Office of Aeronautics is willing to test hypothetical height numbers to prevent any future project complications. Please contact Mr. Nate

Attard with the Office of Aeronautics at (302) 760-2174 or [Nathan.Attard@state.de.us](mailto:Nathan.Attard@state.de.us) with any questions or concerns. A copy of the notification form is available at [https://www.del.dot.gov/Programs/aviation\\_svcs/pdfs/aviation\\_obstruction\\_review\\_form.pdf?012913](https://www.del.dot.gov/Programs/aviation_svcs/pdfs/aviation_obstruction_review_form.pdf?012913)

**Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352**

Development of this parcel will result in increased impervious surface and new sources of greenhouse gas emissions. Opportunities exist to preserve natural resources while reducing the environmental impact on-site. As discussed at the May 23<sup>rd</sup> PLUS meeting, the Department recommends reduced impervious surface cover and protection of the excellent groundwater recharge area on which the parcel is located. Due to the groundwater protection concerns on this site, DNREC has outlined a number of best management practices to assist in protecting the resource and the overall health of the community.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development and re-development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. DNREC encourages the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting the buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations (funding assistance may be found at [www.de.gov/cleantransportation](http://www.de.gov/cleantransportation)). DNREC further recommend an abundant use of native vegetation and shade trees throughout the landscape, as well as other green infrastructure, where practicable, to absorb carbon dioxide, protect water quality and provide relief to students and staff on hot days.

The following pages provide information about applicable regulations and detailed recommendations associated with this project, from various DNREC Divisions. DNREC would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

**Source Water Protection.**

- A portion of the southeastern side of project falls within an area of excellent groundwater recharge (see map). No wellhead protection areas were identified.

New Castle County (NCC) refers to excellent ground-water recharge potential areas as ‘recharge areas.’ Recharge areas are characterized as deposits of coarser grained material that have the best ability to transmit water vertically through the unsaturated zone to the water table. The NCC recharge areas were mapped using the methods described in the Delaware Geological Survey Open File Report No. 34, "Methodology for Mapping

Ground-Water Recharge Areas in Delaware's Coastal Plain" (Andres, 1991), and depicted in a series of maps prepared by the Delaware Geological Survey (Butoryak and Talley, 1993).

This map category (excellent) is an indicator of how fast contaminants will move and how much water may become contaminated (Andres, 2004). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.

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

- *References:*

Andres, A. Scott, 1991, Methodology for Mapping Ground-Water Recharge Areas in Delaware's Coastal Plain: Delaware Geological Survey Open File Report No. 34, p. 18.

Butoryak, K. R., and Talley, J. H., 1993, Delineation of Ground-Water Recharge Resource Protection Areas in the Coastal Plain of New Castle County, Delaware: Delaware Geological Survey Project Report for the Water Resources Agency for New Castle County, p. 26.

Andres, A. Scott, 2004, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware: Delaware Geological Survey Report of Investigations No. 66, p. 14.

<http://www.udel.edu/dgs/Publications/pubform.html#investigations>

### **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 the Division of Soil and Water Conservation Sediment and Stormwater Program. Contact Elaine Webb with the Sediment and Stormwater Program at (302) 739-9921, for details regarding submittal requirements and fees. It is strongly recommended that you contact the reviewing agency to schedule a pre-application meeting with the Sediment and Stormwater Section to discuss the sediment and erosion control and stormwater management components of the plan. 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.

### **State Historic Preservation Office – Contact Carlton Hall 736-7404**

- There is a prehistoric archaeological site (N10282), known as the Brennan Site #2 located near the northeast corner in the project area. The site was identified in the 1980s for DelDOT's expansion of SR 896, and at that time was not recommended for further survey. It is not clear if the site remains intact. Our office recommends avoiding ground disturbance in the area.

- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law. Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant, to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.
- Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 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 unmarked graves, burials or a cemetery, the Division of Historical & Cultural Affairs 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 see more information, please review the following websites: [www.history.delaware.gov/preservation/umhr.shtml](http://www.history.delaware.gov/preservation/umhr.shtml) and [www.history.delaware.gov/preservation/cemeteries.shtml](http://www.history.delaware.gov/preservation/cemeteries.shtml)
- If there is federal involvement, 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). 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 the following: [www.achp.gov](http://www.achp.gov)

### **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 Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352**

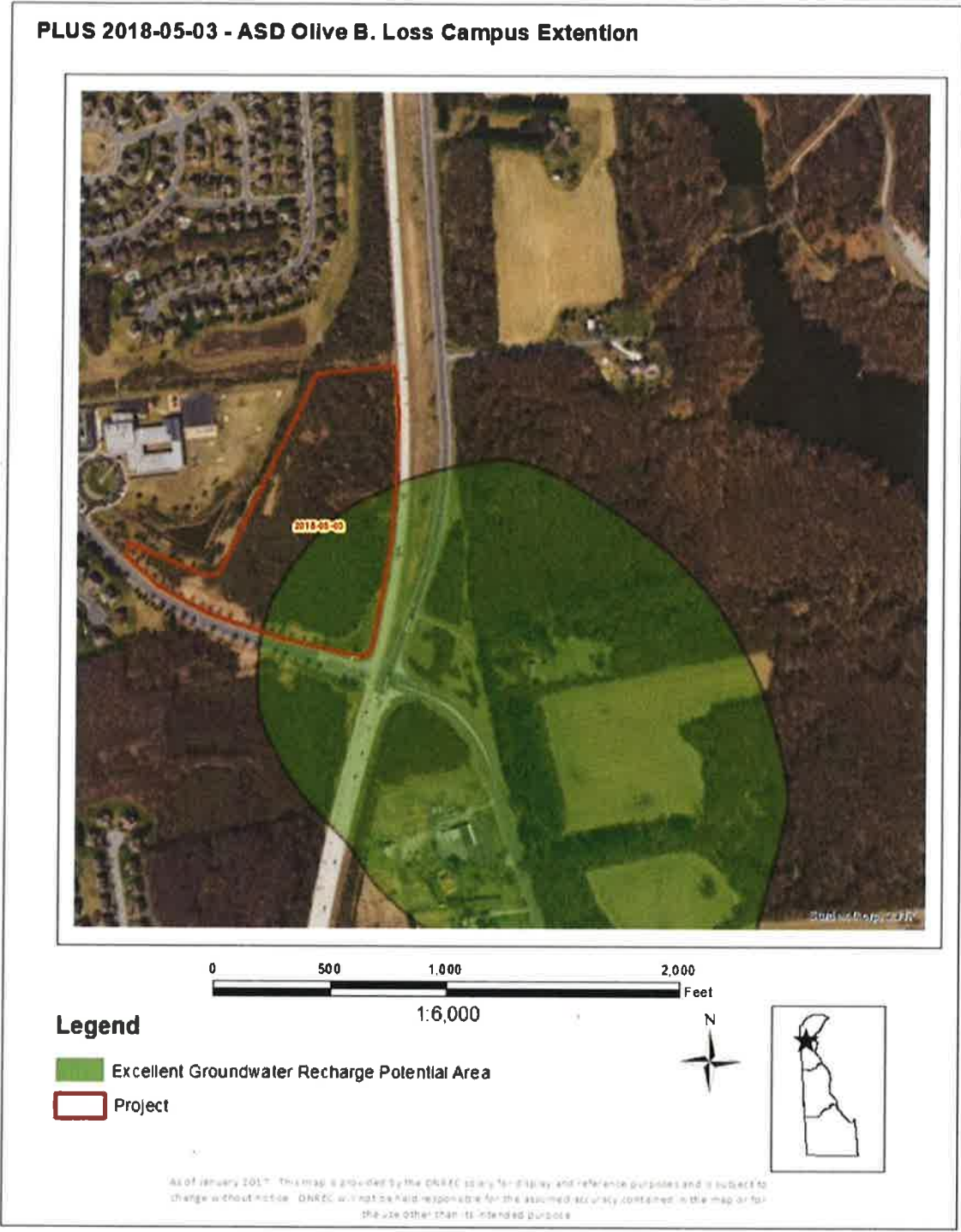
### **Air Quality.**

- DNREC recommends the following considerations for the ASD Olive Campus Expansion to mitigate potential air pollution impacts:
  - Preservation of open space where appropriate,

- Expansion of the current bicycle and pedestrian network,
  - Encouraging the use of alternative transportation modes,
  - Planting native trees and landscaping.
- 
- As an added component to address air quality concerns in the area, the applicant is encouraged to add electric vehicle supply equipment (EVSE) and charging where feasible in common areas to accommodate cleaner vehicular transportation through the area. DNREC's clean transportation website has more information about the various electric charging options and where they are best deployed. DNREC also offer rebates to lower the cost of electric vehicle charging stations at the workplace. For additional information on how the District can become involved with this growing and successful program, please visit the following link: [www.de.gov/cleantransportation](http://www.de.gov/cleantransportation).
  - DNREC encourages the expansion of alternative transportation modes such as walking and biking, including the use of sidewalks and bike paths. It is recommended that efforts be coordinated to maximize the availability of alternative travel modes such as walking and biking to the school. Bike racks could be included in common areas such as in front of the school expansion.
  - DNREC also recommend native trees in the school expansion plan. The planting of native tree species improves the ability to reduce air pollution by taking in carbon dioxide and converting it into oxygen and particulate matter through leaves surfaces. The ideal tree species to use are those with large leaf surface areas, high transpiration rates and have hairy or sticky leaves which are amenable to particle collection.

**Reference Map.**

- Excellent Groundwater Recharge Potential:



**Approval Process**

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 for the site(s) to the Department of Education. The letter should be directed to the DOE staff responsible for the Capital Program. The letter should contain a tax parcel ID number, PLUS review number, and all relevant information regarding the site and the proposed school.

**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.**

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

Sincerely,

  
Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: New Castle County

James Pennewell, Department of Education