



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

July 22, 2013

Mr. Jeffery C. Williams, PE  
Kercher Engineering  
254 Chapman Road  
Newark, DE 19702

RE: PLUS review 2013-06-04, 743 Pulaski Highway

Dear Mr. Williams:

Thank you for meeting with State agency planners on June 26, 2013 to discuss the proposed plans for 743 Pulaski Highway in Bear.

According to the information received, you are seeking rezoning of a 0.26 acre parcel from NC6.5 to CR and a site plan review for a 2,000 square foot office.

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 Level 1 according to the *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.

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

### **State Historic Preservation Office – Contact Terrence Burns 736-7404**

- There are no known historic or cultural resources such as an archaeological site or National Register-listed property on this parcel. However, 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.
- 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](http://www.achp.gov)

### **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, which is available at [http://www.deldot.gov/information/pubs\\_forms/manuals/subdivisions/pdf/Subdivision\\_Manual\\_Revision\\_1\\_proposed\\_060110.pdf](http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf). Plan submissions to obtain a Letter of No Objection (LONO) and an entrance permit will be necessary.
- The proposed development does not generate enough traffic to warrant a Traffic Impact Study (TIS) per Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access (400 vehicles per day, 50 trips per hour).
- The proposed development also does not generate enough traffic to warrant a Traffic Operational Analysis (TOA) per Section 2.14 of the Standards and Regulations for Subdivision Streets and State Highway Access (200 vehicles per day).

- US Route 40 is classified as a Principal Arterial, which per Section 3.6.5 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access requires a 100-foot right-of-way (50-feet from inside edge of inside travel lane). With that said, DelDOT has adopted somewhat different standard typical sections for the US Route 40 Corridor as part of its 20-Year Plan for the Corridor. When adopted by WILMAPCO, this plan will become part of WILMAPCO's Long Range Transportation Plan. Between US Route 13 and Delaware Route 1, the standard typical section provides for a 12-foot shoulder and 17 feet of right-of-way from the outside edge of the right through lane. The plan provided does not mention the distance from the outside edge of the right through lane to the existing right-of-way line. As necessary, additional right-of-way must be dedicated to public use to obtain the required distance along the entire property frontage. The right-of-way dedication note, if needed, should read as follows, "**A 17' strip of right-of-way from the outside travel lane is hereby dedicated to public use as per this plat.**"
- Beyond the right-of-way lane, the standard typical section provides for a 10-foot sidepath centered in a 20-foot permanent easement adjoining the ultimate right-of-way for the road. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 20-foot wide permanent easement for a 10-foot wide multi-use path is hereby established, as per this plat.**" The dimensions just given assume the standard right-of-way described above. If a wider right-of-way exists, the permanent easement may be reduced accordingly. The right-of-way and permanent easement shall total 37 feet from the outside edge of the outside travel lane.
- In accordance with Section 4.8 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, ensure that the proposed storm water facility is located a minimum of 20 feet outside the ultimate right-of-way line.
- As currently proposed, the curb radius on the east side of the entrance is shown ending in front of the adjoining property. In accordance with Section 5.2 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, it should end at least five feet before the property line.

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

### **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>.

# New Castle County PLUS 2013-06-04 743 Pulaski Highway



0 0.01 0.02 0.04 Miles

Reviewed By: Kitty Bronson  
Source: New Castle County layers:  
Parcels, DelDOT Rds, Wetland  
and Swamp maps



TMDLs

- The project is located in the greater Delaware River and Bay drainage area; specifically, within the C & D Canal and Red Lion Creek watersheds. In the Red Lion Creek watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nutrients (e.g., nitrogen, phosphorus), and bacteria (under the auspices of Section 303(d) of the Federal Clean Water Act). 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 Red Lion Creek watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 38 percent reduction in bacteria from baseline conditions. Although a TMDL has not been developed for the C&D Canal watershed to date, the existing TMDL developed for the Red Lion Creek should apply to the entirety of the project area.

### **Water Supply**

- The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. DNREC 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.

### **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)

**Tank Management Branch**

Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance with 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.
- The following confirmed leaking underground storage tank (LUST) projects are located within a quarter mile from the proposed project area:
  - Fairwinds Baptist Church, Facility: 3-001409, Projects: N9409215 (Inactive)
  - Giles & Ransome Inc., Facility: 3-000066, Projects: N8707023 (Inactive)
  - Fairwinds Shopping Center, Facility: 3-001217, Project: N9604071 (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.

**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:

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

<b>7 DE Admin. Code 1135</b> – Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> <li>Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)</li> </ul>
<b>7 DE Admin. Code 1141</b> – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> <li>Use structural/ paint coatings that are low in Volatile Organic Compounds.</li> <li>Use covers on paint containers when paint containers are not in use.</li> </ul>
<b>7 DE Admin. Code 1144</b> – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> <li>Ensure that emissions of nitrogen oxides (NO<sub>x</sub>), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) from emergency generators meet the emissions limits established. (See section 3.2).</li> <li>Maintain recordkeeping and reporting requirements.</li> </ul>
<b>7 DE Admin. Code 1145</b> – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> <li>Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.</li> </ul>

For a complete listing of all Delaware applicable regulations, please look at our website:

<http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

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

### **Regulations/Code Requirements**

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 business 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:**
  - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the 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.
  - 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.
  - 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

## **Recommendations**

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site is served by a non-standard median crossover on US Route 40 that was built and striped to serve two offset side streets, Holly Avenue and Shorewind Road. Because the proposed right turn in would be opposite the west end of the crossover, more or less opposite Shorewind Road, there is the potential for it to create operational problems. While the project would not generate enough traffic to warrant a pre-submittal meeting, we recommend that the developer’s engineer contact our Subdivision Manager for this part of New Castle County, Mr. Joshua Schwartz, to discuss the site access before

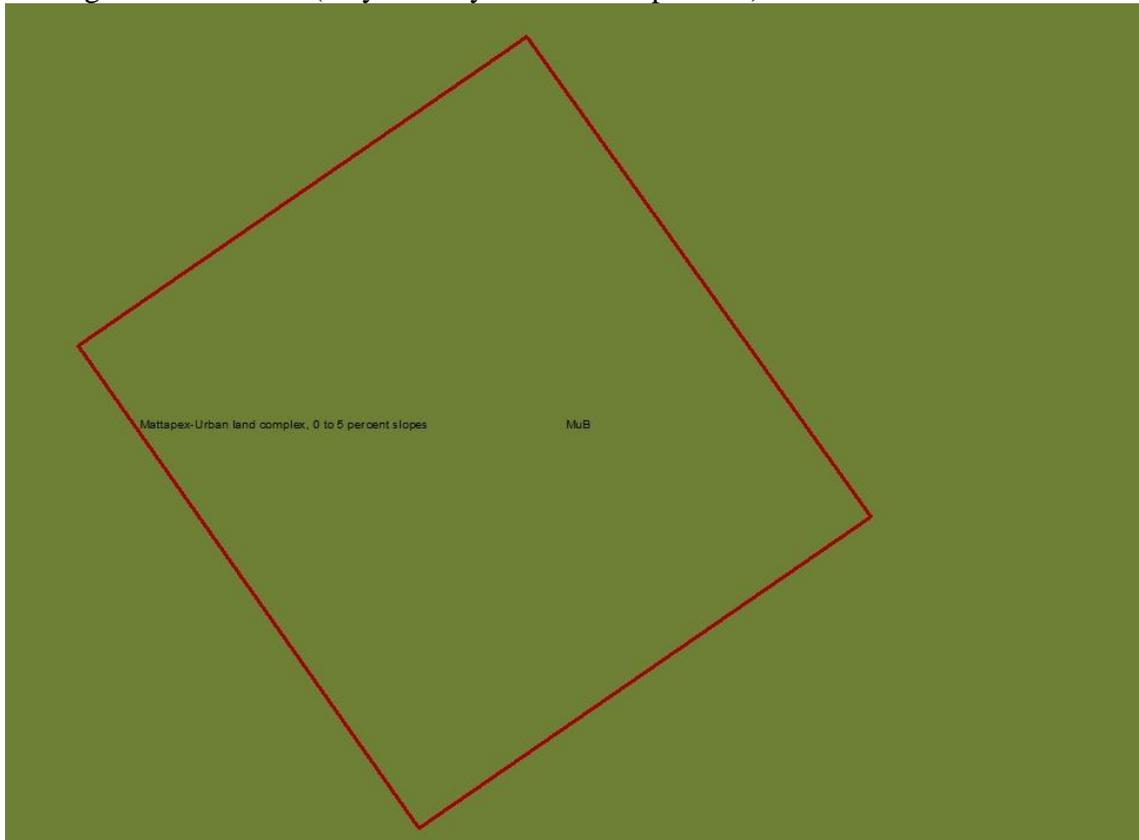
developing the plans further. A meeting may be appropriate. Mr Schwartz can be reached at (302) 760-2768.

- We recommend that five-foot wide internal sidewalks be provided to connect the proposed building to the pedestrian facility along the frontage and to provide for safe circulation within the site.

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

### **Soils Assessment**

The soil mapping unit mapped in the vicinity of this project is Mattapex Urban land complex (moderately well drained, not a well-drained Matapeake as indicated in the consultant's report in the PLUS application). Mattapex Urban-land complex is a soil mapping unit that has been extensively modified through filling and grading activities and is likely to have variable soil drainage characteristics (may have hydric soil components).



### **Additional information on water quality**

The applicant is strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs:

- Please maximize open space by retaining as much of the existing native tree cover as possible. DNREC also strongly recommends the planting of additional native trees and /or native herbaceous cover, wherever possible.
- A United States Corps of Engineers (USACE) approved wetlands delineation is recommended. According to information presented in the PLUS application, an approved wetlands delineation was conducted; however, it was not made available to DNREC at the time of review. 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. We strongly encourage 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 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 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 businesses 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 businesses 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 your business, and
- All transportation activity.
- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) could not be quantified. DAQ was able, however, to quantify the mobile emissions based on the proposed daily trip data presented in the application and data taken from the ITE Trip Generation Manual, 8<sup>th</sup> Edition. Table 1 – Projected Air Quality Emissions represents the actual impact the 743 Pulaski Highway project may have on air quality.

**Table 2: Projected Air Quality Emissions for 743 Pulaski Highway**

Emissions Attributable to 743 Pulaski Highway Center (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO <sub>2</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )	Carbon Dioxide (CO <sub>2</sub> )

Mobile Source emissions	0.1	0.1	*	*	*
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(\*) *Indicates data is not available.*

- Note that emissions associated with the actual construction of the road, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

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 743 Pulaski Highway project.

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](http://www.statefiremarshal.delaware.gov), technical services link, plan review, applications or brochures.
- Pest Control chemicals are considered by the fire service as a “hazardous material” in that a fire in a building containing these materials may cause application of non-traditional fire fighting tactics. In order to reduce the likelihood of needing to employ such tactics, strong considerations should be afforded to the concept of providing automatic sprinkler protection to the facility if there are plans to maintain a stockpile of these materials on location.

**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