



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

July 20, 2011

Mr. Stephen Davies
Apex Engineering, Inc.
27 West Market Street
Newport, DE 19804

RE: PLUS review – PLUS 2011-06-05; 20 Montchanin

Dear Mr. Davies:

Thank you for meeting with State agency planners on June 22, 2011 to discuss the proposed plans for 20 Montchanin project to be located at 20 Montchanin Road at the intersection with Route 141.

According to the information received, you are seeking a rezoning of 2 acres from a 19 acre parcel from OR to CN for a 6,000 sq. ft. retail commercial building.

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 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

Would hope that due to location in a scenic and historic area – St. Josephs' on the Brandywine, Tyler-McConnell bridge, Hagely Museum, ... that sensitive design and landscaping considerations be taken.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- This parcel is in the vicinity of some known historic properties that are listed on the National Register of Historic Places. The Brecks Mill-Henry Clay Village Historic District (N-333) is near the south and east end of the parcel, and just east of the parcel or across Montchain Road is the St. Joseph's on the Brandywine (N-1256). According to the Pomeroy and Beers Atlas of 1868 (an historic map) and USGS Topographical Map of 1904, it appears that there were dwelling in the same vicinity of the Brecks Mill-Henry Clay Village Historic District (N-333) as well as the St. Joseph's on the Brandywine (N-1256). With this in mind, it is important that the developer be aware of the Delaware Unmarked Human Remains Act of 1987, in Chapter 54 of Title 7 of the Delaware Code, which pertains to the discovery and disposition of such remains. Therefore, prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for archaeological sites, such as a cemetery or unmarked human remains.

Abandoned and unmarked family cemeteries are common on farms in Delaware. Disturbing unmarked burials triggers Delaware's Unmarked Human Burials and Human Skeletal Remains Law of 1987 (7 Del. Code Ch. 54). Such discoveries can result in substantial delays while the procedures required under this law are carried out. DHCA recommends that owners and/or developers have a qualified archaeological consultant investigate their project area for the presence of such a cemetery. If one is discovered and delineated, it is very costly to have it archaeologically excavated and the burials moved. DHCA recommends that in the event of such a discovery, the plans be redrawn to leave the cemetery on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with a homeowners association or development owner. For further information, please see following websites at: <http://history.delaware.gov/preservation/umhr.shtml> and <http://history.delaware.gov/preservation/cemeteries.shtml>

- 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 culture 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. 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. For further information on Section 106 and the Advisory Council's role, please review the Advisory Council's website at www.achp.gov.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- From discussion at the PLUS meeting and their reading of the proposed deed restrictions, DelDOT understands that the specific commercial use of the proposed 6,000 square foot building is undetermined but that certain uses (drive-through restaurant, gas station, convenience store, tavern, and “nuisance uses”) would be prohibited. Of the permitted uses that would fit in a 6,000 square foot building, the one that would generate the most traffic is a High-Turnover (Sit-Down) Restaurant. As defined by the Institute of Transportation Engineers (ITE), tables at such restaurants have an average turnover rate of less than one hour. The ITE Trip Generation report suggests that a 6,000 square foot High-Turnover (Sit-Down) Restaurant would generate 69 vehicle trips in the morning peak hour and 763 vehicle trips per day, thereby meeting DelDOT's peak hour and daily warrants for a Traffic Impact Study (TIS), as found in Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access.
- Given the lack of information about what the specific use of the site will be, we cannot presently determine whether a TIS will be needed or what off-site improvements, e.g. turning lanes at the site entrance onto Delaware Route 100, might be needed. TIS warrants can be found in Section 2.3 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. Warrants for turning lanes can be found in Section 5.2 of the same document. As specified in Section 3.4.1.1 of that document, the development's trip generation and trip distribution must be shown on the site plan. Therefore the proposed use of the building will need to be established and that information determined before DelDOT will issue a Letter of No Objection for recordation of the plan.

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

TMDLs

- Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the greater Christina River watershed. 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.

- TMDLs are required by federal law (Section 303(d) of the 1972 Clean Water Act), and the states are charged with developing and implementing specific land use practices that support these desired use goals. The project is located in the Piedmont drainage, specifically within the greater Christina River watershed (more specifically in the Brandywine Creek subwatershed). In the Christina River watershed, post-development nitrogen and phosphorus loading must be capped at the pre-development or baseline loading rate (or a 0% post-construction increase in N & P in Delaware's portion of the Christina River Basin) to meet the required TMDL for each nutrient. Moreover, bacteria must be reduced by 88.00% to meet the required TMDL. The specific required nutrient and bacterial requirements for various stream segments in the watershed and background information is in the report entitled "*Christina River Basin High-Flow TMDL*" by the EPA. This report can be retrieved from the following web link:
http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/ChristinaMeetingTMDL/index.htm

Water Supply

- The project information sheets state water will be provided to the project by City of Wilmington via a public water system. DNREC records indicate that the project is located within the public water service area granted to City of Wilmington under Certificate of Public Convenience and Necessity 94-CPCN-09.
- 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 revised 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 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.
- The following LUST projects with respective statuses are located within a quarter mile from the rezoning area:
 - Ed White Residence, Facility: 3-002058, Project: N0002018 (Inactive)
 - St Joseph On the Brandywine, Facility: 3-001379, Project: N9406135, N9506126 (Inactive)
 - Medical Center of Delaware, Facility: 3-001198, Project: N9010075 (Inactive)
 - Lassen Property, Facility: 3-002029, Project: N0107067 (Inactive)
 - Cawley Guest House, Facility: 3-002107, Project: N0011134 (Inactive)
 - Lanphear Property, Facility: 3-001616, Project: N9509221 (Inactive)
 - Kennett Pike Sub Station, Facility: 3-000591, Project: N9111259, N0702020 (Inactive)
 - Raskal Foundation, Facility: 3-001193, Project: N9011102 (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 Branch 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 to your project:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport

	material to and from site to prevent visible emissions.
7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> 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)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). Maintain recordkeeping and reporting requirements.
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

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

At this time, the Use and nature of the buildings have not been determined. Depending on the Occupancy Classification of the building proposed, the requirements may vary. 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:**
 - Where a water distribution system is proposed for Mercantile and Business type occupancies, it shall be capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.

- **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 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 Delaware State Fire Prevention Regulations
- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan .

- **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 public thoroughfares 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.

- **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 inaccordance 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
- Townhouse 2-hr separation wall details shall be shown on site plans
- 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/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.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- In order to minimize the noise or visual effects that may affect those historic properties in an adverse way, the developer should consider putting a sufficient landscape or barrier between the parcel and those historic properties, such as the Brecks Mill-Henry Clay Village Historic District (N-333) and the St. Joseph's on the Brandywine (N-1256), which are nearby.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT suggests that further attention be given to the prohibition of “nuisance” uses in the deed restrictions, as opinions can differ as to what constitutes a nuisance. Tattoo parlors and arcades are mentioned as examples, but consider a shop for the repair of automotive mufflers or a diner that is open 24 hours a day.

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

Additional information on TMDLs

- A pollution control strategy (PCS) is the regulatory directive requiring the implementation of various best management practices (BMPs) that help reduce transport of nutrient and bacterial pollutant runoff from all waters draining into a “greater” common watershed, with the ultimate objective of achieving the obligatory TMDL

reduction requirements for that watershed. However, the PCS for the Christina River watershed has not been formally completed to date. In absence of a finalized PCS, the applicant is strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs:

- The applicant should consider maintaining the passive open space with additional planting of native woody and herbaceous vegetation.
- 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.
- 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, is strongly encouraged.
- DNREC recommends 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 strongly 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 tanks

- 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 TMB. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMB.
- Should the municipality anticipate being more restrictive than Delaware’s Regulations Governing Underground Storage Tank Systems or Delaware’s Regulations Governing

Aboveground Storage Tanks, please be aware that the municipality shall be responsible for enforcing the more restrictive rules.

Additional information on air quality

- 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 retail space, and
 - Car and truck activity associated with a new business.

- Based on the information provided, the air emissions components (i.e., area, electric power generation, and mobile sources) for this project could not be quantified. The emissions in Table 2 represent the projected impact the mobile source component of the “20 Montchanin” project may have on air quality.

Table 2: Projected Air Emissions					
Emissions Attributable to the 20 Montchanin Project (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile	0.19	0.25	*	*	*
Total	0.19	0.25	*	*	*

(*) *Indicates data was not available to calculate emissions.*

Note that emissions associated with the actual construction of the retail space, 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.

- Additional measures may be taken to substantially reduce the air emissions identified above. These measures 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, 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 replenish 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 development. The applicant should submit a plan to the DNREC Division of Air Quality which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the 20 Montchanin 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, 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". The signature is written in black ink and is positioned above the printed name and title.

Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: New Castle County