



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

September 25, 2014

Mr. Steve Gorski  
Duffield Associates  
5400 Limestone Road  
Wilmington, DE 19810

RE: PLUS review 2014-08-01, Newtown Square

Dear Mr. Gorski,

Thank you for meeting with State agency planners on August 27, 2014 to discuss the proposed plans for Newtown Square. According to the information received, you are seeking review of a rezoning of 3.2 acres from NC 10 to CN and site plan review for 22,700 sf of commercial 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 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*. This site is also located in the New Castle County Growth Zone. 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 archaeological sites or National Register-listed property on this parcel. However, if there will be any development or construction project on this parcel, the developer should still be aware of 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. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the 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. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also 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 know more information pertaining to unmarked human remains or cemeteries, please check the following websites for additional information:

[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).

Therefore, prior to any demolition or ground-disturbing activities, the developer may want to hire an archaeological consultant to examine the parcel for any potential archaeological site (historic or pre-historic), historic cemetery or unmarked human remains. 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 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).

No archaeological or historical artifacts or remains are anticipated as determined by the State Historical Preservation Office. Furthermore, our wetlands scientist has determined that no wetlands are present on-site.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Per Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access, Traffic Impact Studies (TIS) are warranted for developments generating more than 400 vehicle trip ends per day or 50 vehicle trip ends per hour.

Because this development's traffic would exceed those warrants, a TIS scoping meeting was held with the applicant's representatives on July 10, 2014. The established scope includes 15 intersections, eight of which are required by both DeIDOT and New Castle County, five of which are required only by New Castle County and two of which are required only by DeIDOT. At a subsequent meeting, on July 30, 2014, DeIDOT clarified that for the intersections required by DeIDOT, i.e. the intersection of Delaware Route 7 and US Route 40 and the intersection of Delaware Route 7 and Delaware Route 273, DeIDOT will not require the developer to improve them to maintain Level of Service D. Instead, DeIDOT will require contributions toward future improvements by DeIDOT.

The TIS has been submitted to DeIDOT for review in November 2014.

- The site access must be designed in accordance with DeIDOT'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).

The two proposed entrances will meet DeIDOT Standards as noted.

- In accordance with Section 3.6.5 and Figure 3-3 of the Standards and Regulations for Subdivision Streets and State Highway Access, DeIDOT will require dedication of right-of-way along the site's frontage on Route 7 to provide a minimum of 40 feet of right-of-way from the road centerline. The right-of-way dedication note has been revised to the following, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**" Preliminarily, it appears that the sketch plan already meets this requirement.

The minimum right of way as described has been previously dedicated.

- In accordance with Section 3.6.5 of the Standards and Regulations for Subdivision Streets and State Highway Access, DeIDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Route 7. The location of the easement shall be outside the limits of the ultimate right-of-way and can be reduced by the amount that the right-of-way is in excess of the minimum. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**"

The right of way half section varies from 52' to 64', which exceeds the minimum 40' from centerline required. Therefore, no additional easement should be needed.

- In accordance with Section 4.8 of the Standards and Regulations for Subdivision Streets and State Highway Access, a 20-foot wide buffer will be required from the edge of any stormwater management pond to the ultimate right-of-way of the nearest State-maintained road. The ultimate right-of-way is based on the functional classification of the road.

No ponds are proposed. Bioretention areas proposed near the right of way, will be offset 20' from the right of way line.

- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a record plan shall be prepared prior to issuing "Letter of No

Objection”. The following information will be required for the “Letter of No Objection” review:

- Copy of the Initial Stage Fee Calculation Form
- Copy of the Initial Stage Review Fee
- Gate-Keeping Checklist – Site Plan
- Design Checklist – Record Plan\*
- Owners and Engineer’s name and e-mail address
- Sight Distance Spreadsheet
- Auxiliary Lane Spreadsheet
- Three (3) paper sets of the Record Plan
- Conceptual Entrance Plan
- CD with a pdf of the Site Plan
- Submission of the Area-Wide Study Fee (if applicable)

\*For the design checklist for the site plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, page D-2 and D-3.

This submittal will be provided as requested to DeIDOT.

- The entrance must be designed consistent with Section 5.2 of the Standards and Regulations for Subdivision Streets and State Highway Access. In that regard, turning templates should be provided for any proposed entrances. Further guidance is provided in the Top Ten Errors document available at [http://www.deldot.gov/information/business/subdivisions/Top\\_Ten\\_most\\_frequently\\_seen\\_errors.doc?07-01-13](http://www.deldot.gov/information/business/subdivisions/Top_Ten_most_frequently_seen_errors.doc?07-01-13).
- Route 7 is served by DART First State. Therefore, in accordance with Section 3.5.5.5 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Delaware Transit Corporation (DTC) will need to determine whether a bus stop will be required for this project and, if so, what if any amenities it may need to have. As necessary, the developer may contact Mr. Wayne Henderson, a Senior Planner at DTC in this regard. Mr. Henderson may be reached at (302) 576-6063.
- A pre-submittal meeting was held for this project on June 19, 2014. The developer’s engineer should submit the site plan for an initial stage review in accordance with Section 3.4 of the Standards and Regulations when they are ready to do so. As necessary, they may contact Mr. Kevin Hickman at (302) 760-2461 with questions regarding the submission and review of plans.

Truck turning templates will be submitted with the Entrance Plans as requested.

DART will be contacted as requested.

Initial Stage Plans will be submitted as requested to DeIDOT.

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 waterbody” 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 greater Christina River watershed. 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 reductions that range from 29% to 95% are also required (depending upon location). The specific required nutrient and bacterial requirements for the various stream segments in the watershed, and background information is outlined in the report entitled “*Christina River Basin High-Flow TMDL*” by the EPA. This report can be retrieved from the following weblink:

[http://www.epa.gov/reg3wapd/tmdl/pa\\_tmdl/ChristinaMeetingTMDL/index.htm](http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/ChristinaMeetingTMDL/index.htm)

Phosphorus and nitrogen removal will be met in accordance with DURMM Version 2 and new Stormwater Management regulations codified on January 1, 2014.

### **Water Supply**

- The information provided indicates that 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.

Public water is provided by Artesian Water Company as noted. No wells are proposed.

### **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).

We met with NCCDLU and DNREC in August 28, 2014 to discuss project goals and proposed design.

**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:

<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	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.
<b>7 DE Admin. Code 1113 –</b> Open Burning	Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. Prohibit the burning of land clearing debris. Prohibit the burning of trash or building materials/debris.
<b>7 DE Admin. Code 1135 –</b> Conformity of General Federal Actions to the State Implementation Plan	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)
<b>7 DE Admin. Code 1141 –</b> Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.
<b>7 DE Admin. Code 1144 –</b> Control of Stationary Generator Emissions	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). Maintain recordkeeping and reporting requirements.

<b>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</b>	Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.
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For a complete listing of all Delaware applicable regulations, please look at the website:  
<http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

### **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.”
- There are no SIRS sites or salvage yards found within a ½-mile radius of the proposed project.

Noted.

### **Tank Management Section**

- 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.
- There are no confirmed leaking underground storage tank (LUST) projects located within a quarter mile from the proposed project area.
- No environmental impacts are anticipated; however, 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.

Duly noted.

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

- **Fire Protection Water Requirements**
  - Water distribution system capable of delivering at least 1500 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 commercial sites that include mercantile uses, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

A hydrant will be located on site to meet the commercial requirements.

- **Fire Protection Features**

- All structures over 10,000 Sq. Ft. aggregate will require the installation of automatic sprinkler protection. Additionally, many restaurants (Places of Assembly) require automatic sprinkler protection
- Buildings greater than 10,000 sqft, or 3-stories or more in height, or over 35 feet in height, 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

A sprinkler system will be provided for the 14,000 Square foot retail center. Fire Lanes will be marked in accordance with 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 into the site from the main thoroughfare 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.
- 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 the agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

No gates are proposed. An FDC will be provided on the Street side of the retail building.

- **Gas Piping and System Information**

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

No gas tanks are proposed.

- **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

All items as listed will be provided.

### **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

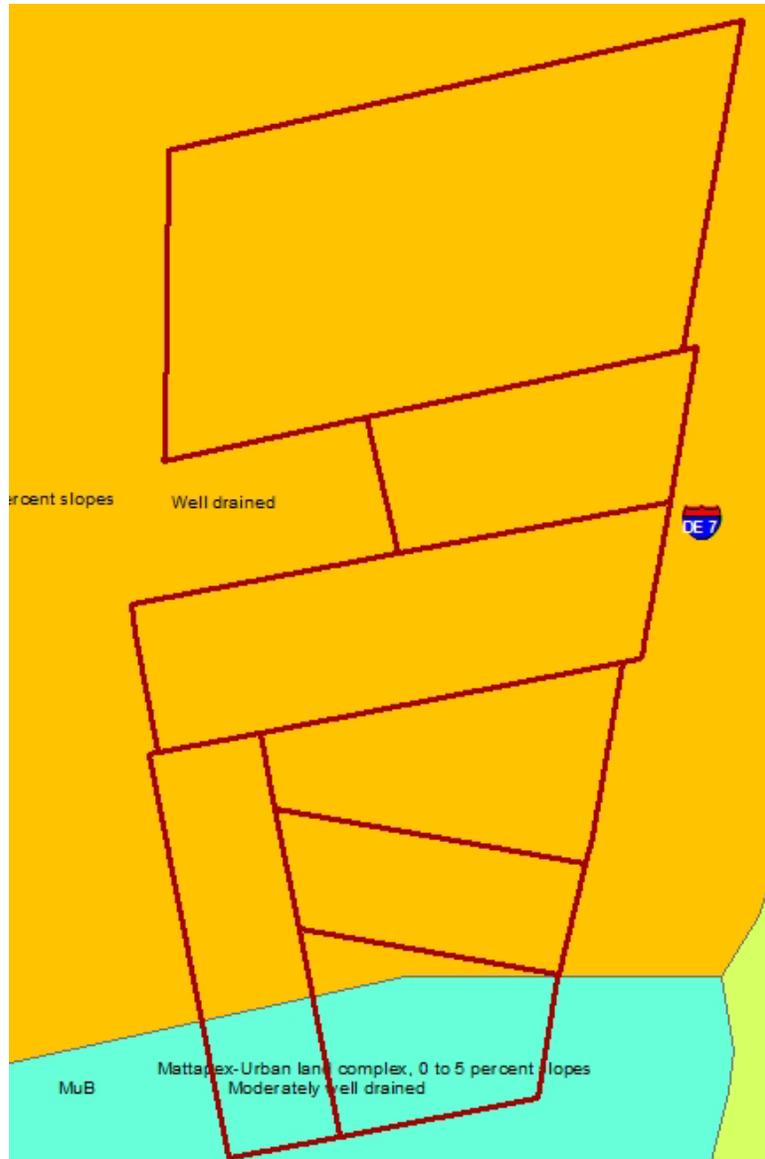
- Please be advised that DelDOT has advertised for comment a comprehensive revision of the Standards and Regulations. The comment period ran through June 30 and DelDOT could adopt this revision as soon as November 2014. Implementation guidance has not been developed but we recommend that the developer's engineer become familiar with the proposed changes and assess whether any of them could be relevant to this project. Information on the proposed revision is available in the Register of Regulations and at [http://www.deldot.gov/information/pubs\\_forms/revisions\\_to\\_ASR/index.shtml](http://www.deldot.gov/information/pubs_forms/revisions_to_ASR/index.shtml).  
We will review the proposed changes for potential impacts to this project.
- Because the proposed development seems likely to draw pedestrian traffic from Newtown Village II and Crossings at Christiana, DelDOT recommends that the developer work with the homeowner's associations to develop mutually acceptable paths from streets in these developments, through the community's private open space and the shopping center's open space to the shopping center's parking lot.  
After discussions with the local communities did not desire a trail entrance from their private Open Space for security reasons.
- Please check to determine if any utilities will need to be relocated as part of this project.  
Storm drain inlets will need to be converted to manhole boxes at the new entrance locations.
- All PLUS comments should be addressed prior to submitting record, subdivision or entrance plans for review.  
Understood.

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

### **Soils Assessment**

- According the soil survey mapping update, the soil mapping units in the immediate vicinity of the proposed project are Greenwich-Urban land complex and Mattapex-Urban land complex. These soil mapping units generally have few to moderate limitations for development.

Noted.



### Nuisance Waterfowl

- The following comments apply if there is a stormwater management pond proposed in the study area. Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns surrounding ponds provide attractive habitat for these species.

No wet ponds are proposed with this project.

- To deter waterfowl from taking up residence in these ponds, DNREC recommends planting the surrounding open space with a mix of native wildflower plantings (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). It is best to mow the open space area surrounding the pond only once a year, either in March or November. If mowing must occur more often, it would be helpful to leave a minimum buffer of 15-30 feet in width to be mowed annually. This area would be necessary to adequately deter the waterfowl from inhabiting the area (when the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond). In addition to deterring nuisance waterfowl, the native wildflower mix will also serve to attract bees, butterflies, and other pollinators, and reduce run-off, which can contain oil and other pollutants that homeowners may use on their lawns and driveways.
- Program botanist Bill McAvoy would gladly assist in drafting a list of plants suitable for this site. Bill can be contacted at (302) 735-8668 or [William.McAvoy@state.de.us](mailto:William.McAvoy@state.de.us).

### **Bat surveys**

- According to the information provided there are buildings to be demolished within the project area. If these buildings have been abandoned or unoccupied, the Division of Fish and Wildlife (DFW) requests an opportunity to survey for the presence of bats. DFW has been monitoring bats for White Nose Syndrome, a disease that has been killing large numbers of cave bat species in the northeastern United States. Division scientists have been conducting surveys throughout the state at various maternal and hibernation colonies, but there are many areas in which we have minimal data. In Delaware, cave dwelling bats have been known to utilize man-made structures so an opportunity to survey these structures prior to demolition could be helpful.
- If the buildings are accessible, the survey can be conducted anytime as it simply involves a visual survey for bats or signs of bat presence. If the buildings are not accessible, acoustic surveys during late April or early May would be best. This type of survey could be conducted during a few hours over one or two nights. If bats are located, DNREC can provide best management practices that would minimize impacts when the structures are removed. This request is non-regulatory but is part of an effort to collect data throughout the state on the dwindling bat populations and gain a better understanding of WNS. Please get in touch with Holly Niederriter at 302-735-8670 or [Holly.Niederriter@state.de.us](mailto:Holly.Niederriter@state.de.us) if we may survey for the presence of bats. For more information on White Nose Syndrome, see: <http://www.fw.delaware.gov/bats/Pages/BatsWNS.aspx> and <http://www.fws.gov/WhiteNoseSyndrome/>.

Access for surveys of vacant structures will be permitted, however, demolition is scheduled for March 2015, so timing is not ideal.

### **Additional information on TMDLs and water quality**

- DNREC strongly encourages the applicant reduce nutrient and bacterial pollutants on their parcel through voluntary implementation of the following recommended BMPs:

- Maintain as much of the existing open space as possible; we further suggest additional native tree and native herbaceous planting, wherever possible.
- 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.
- Use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP to mitigate the impacts associated with surface imperviousness.
- Use of green-technology storm water management (in lieu of open-water management structures) and raingardens as BMPs for mitigating nutrient and bacterial pollutant runoff from increases in surface imperviousness. Please contact Lara Allison at 739-9939 for further information about the possibility for installing a raingarden(s) on this parcel.
- 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. DNREC strongly encourages the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact John Martin or Jen Walls at 302-739-9939 for more information on the protocol.  
Current 2014 Stormwater management will be employed for WQ, RPv, Cv and Fv requirements. Bioretention facilities will be designed to meet local requirements.

#### **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.

No above ground storage tanks (ASTs) are proposed.

#### **Additional information on hazardous waste sites**

- DNREC 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.

A Phase One Environmental Site Assessment has been performed.

- Additional remediation may be required if the project property or site is re-zoned by the county or state.  
*No remediation is required to the best of our knowledge.*
- 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). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.  
*This information will be conveyed to the site contractor.*

**Additional information on air quality**

- New homes and 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 homes and 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, and
  - All transportation activity.
- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) for the project 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 2 represents the actual impact the Newtown Square project may have on air quality.

Emissions Attributable to Newtown Square (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	1.7	2.2	*	*	*

(\*) Indicates data is not available.

- Note that emissions associated with the actual construction of the homes and 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.

- 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 while at the same time protect our diminishing land base;
  - 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 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, a bike path or mass transit, 7 pounds of VOC and 11.5 pounds of NO<sub>x</sub> 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 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 DAQ which

address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Newtown Square project.

Parts of this request will be taken into consideration and coordinated through the contractor.

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.

**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