



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

June 25, 2014

Mr. Carmine Casper
Howard Robertson, Inc.
801 Brandywine Blvd.
Wilmington, DE 19809

RE: PLUS Review 2014-05-01, Lands of Stanlan 7

Dear Mr. Casper,

Thank you for meeting with State agency planners on May 28, 2014 to discuss the proposed plans for the Lands of Stanlan 7. According to the information received, you are seeking a rezoning and site plan review for the development of 17,833 sf of commercial space located near the intersection of Honeysuckle Drive and Route 7 in New Castle County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as New Castle County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Strategies for State Policies and Spending

- This project is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the New Castle County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There is no known archaeological site or National Register-listed property on this parcel. However, if there is going to be any construction or development project on this parcel, the developer should 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

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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 and www.history.delaware.gov/preservation/cemeteries.shtml.

Therefore, prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine or see whether the parcel any potential archaeological site, unmarked human remains, burials, or cemetery. 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The proposed development meets DelDOT's volume-based criteria, found in Section 2.3.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, for recommending that a Traffic Impact Study (TIS) be required (400 vehicle trips per day or 50 vehicle trips per hour). Specifically, DelDOT estimates that it would

generate about 801 vehicle trip ends per day and about 64 vehicle trip ends per hour. The applicant is presently seeking a TIS waiver from New Castle County. DelDOT does not object to the County issuing such a waiver. While DelDOT will not waive the TIS requirement, they would accept an Area Wide Study Fee, calculated as \$10 per daily trip or \$8,010, in lieu of the TIS.

- In accepting payment of the Area Wide Study Fee as described above, DelDOT would retain its ability to require a Traffic Operational Analysis (TOA) under Section 2.14 of the Standards and Regulations and may do so. A decision has not been reached in this regard. A TOA could identify a need for improvements at the intersection of Delaware Route 7 and Telegraph Road or changes to the signal there. At a minimum, the applicant should expect a requirement to enter a signal agreement for that intersection, pursuant to Section 2.15.1 of the Standards and Regulations. They could also be required to enter an off-site improvement agreement, pursuant to Section 2.15.2 of the Standards and Regulations.
- Please be advised that DelDOT has advertised for comment a comprehensive revision of the Standards and Regulations. The comment period runs through June 30 and DelDOT could adopt this revision as soon as August 2014. Implementation guidance has not been developed but it is recommended 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.

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold
735-3495

- **Wetlands**

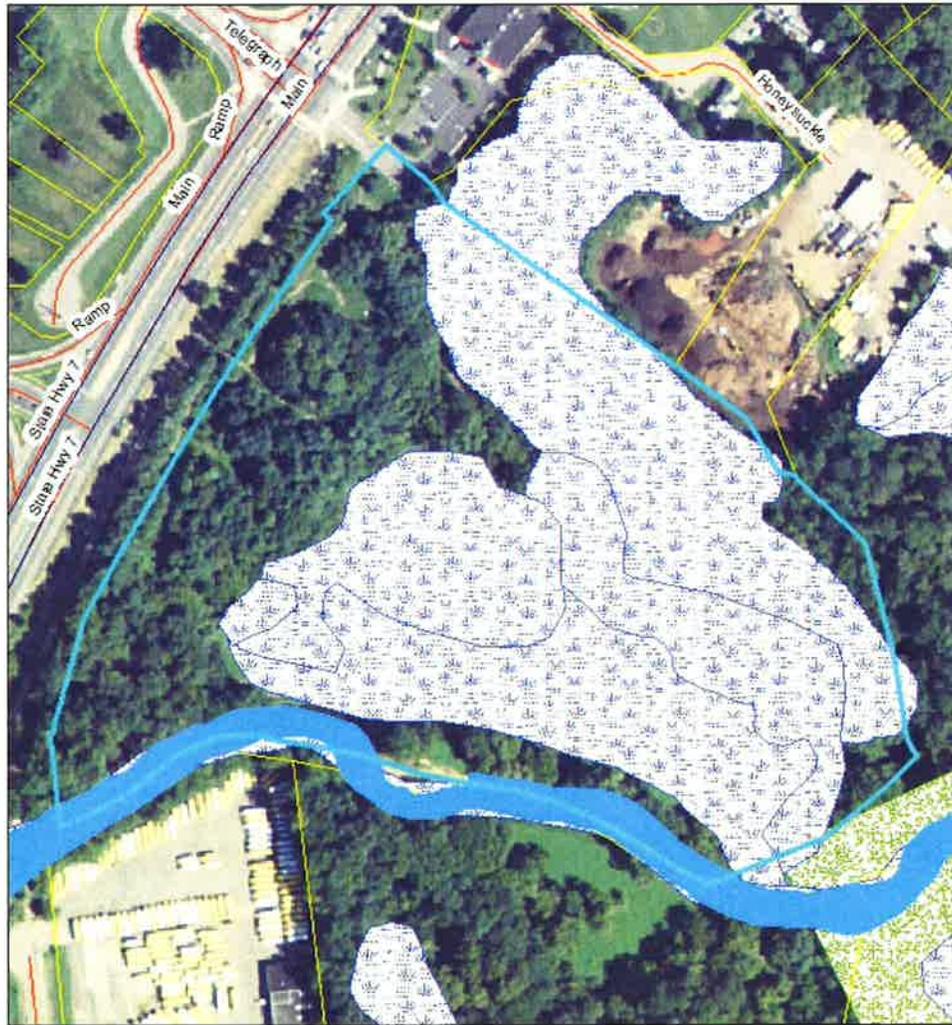
State regulated wetlands ARE located on this property based on a review of the State wetland maps. The Application states that the wetlands have been delineated and that there will be no direct impacts to them from the postposed project.

State regulated subaqueous lands ARE located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. There does not appear to be any direct impacts to the subaqueous lands located on this parcel from the proposed project.

Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. According to GIS SWMP maps, there are wetlands regulated by the U.S. Army Corps of Engineers. A delineation from the U.S. Army Corps should be acquired to make sure there are no impacts to the wetlands. Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands

and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce. The extent of Federal jurisdiction over Waters of the United States is determined by the U.S. Army Corps of Engineers and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the U.S. are located on the property and the limits of Federal jurisdictional. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at <http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm>.

County: New Castle
PLUS Review: 2014-05-01
Lands of Stanlan 7 LLC



0 65 130 260 390 520
Feet

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------|
|  | State Regulated Wetland Lines |
|  | Army Corps of Engineers Regulated Wetland Lines |

- **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

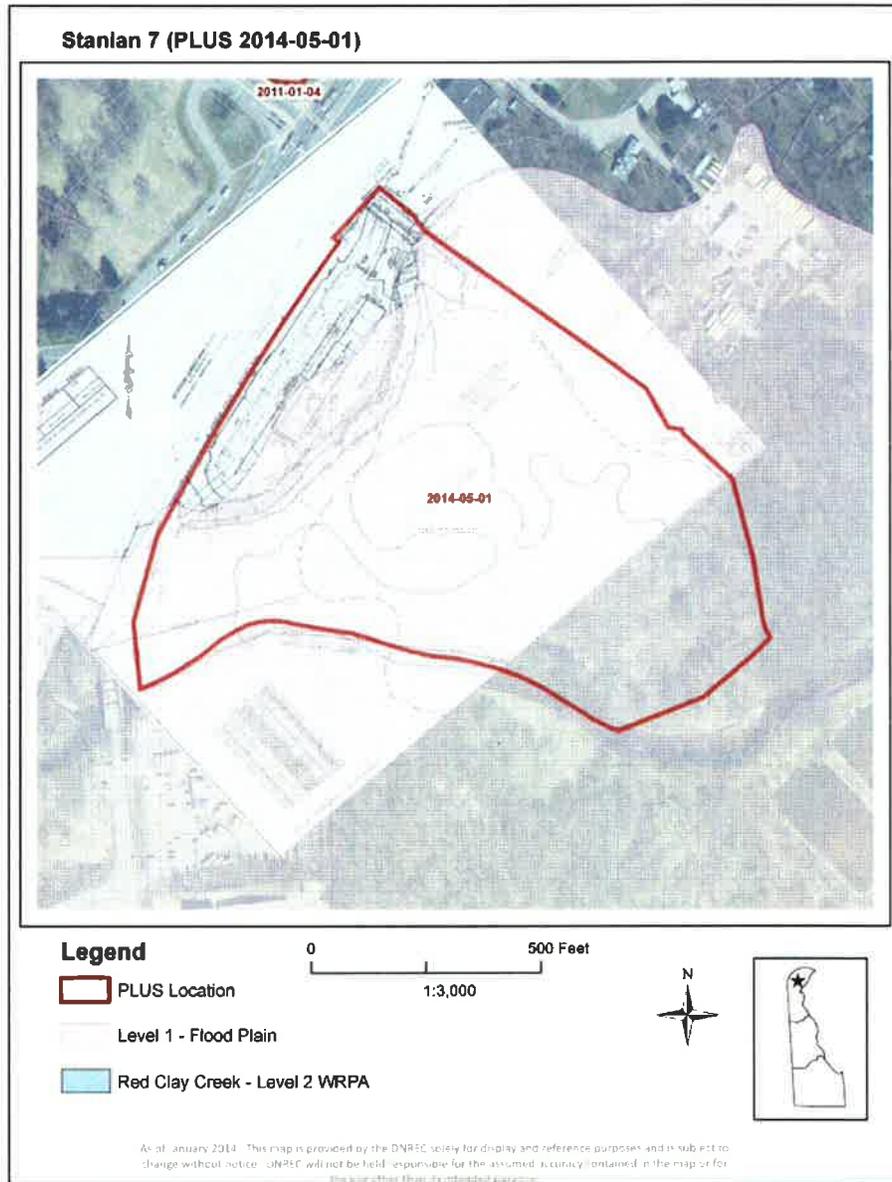
A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project’s open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements – or, view the following weblink for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

- **Water Resource Protection Areas**

The DNREC Water Supply Section, Groundwater Protection Branch (GPB) has determined that it does not fall within any wellhead protection or excellent groundwater recharge potential areas. However, the parcel falls entirely within the Red Clay Creek Drinking Water Watershed. This area is a Level 2 source water protection area for New Castle County (NCC). In addition, the project falls partially within a flood plain that is protected as Level 1 source water protection area for NCC (see map).

Level 2 Source Water Protection Areas are the delineated watershed upstream from public drinking water supply intakes. Land Use or Land Activity within these areas has the potential to influence water quality or quantity to the public drinking water systems. Level 1 Source Water Protection Areas are defined as flood plains. Land Use or Land Activity within this area has the potential to influence water quality or quantity to public drinking water systems.

DNREC recommends referring to the NCC Unified Development Code for regulations regarding development in these water resource protection areas.



- **Flood Plain**

The “Survey Determined Floodline” does not accurately depict where the current effective floodplain boundary is located on this property. The FEMA floodplain boundary from the FIRM dated Jan. 17, 2007 should be depicted on the site plan. The Base Flood Elevation must be taken from the stream profile for White Clay Creek in the

Flood Insurance Study (FIS). At the PLUS meeting, the applicant's consultant informed the PLUS reviewers that a FEMA letter of MAP Revisions (LOMR) had been obtained.

- **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)

- **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 two SIRS sites found within a ½-mile radius of the proposed project.

- United Water Supply (DE-0195) is located adjacent to the south of the project property. The facility pumps surface water from the Red Clay and White Clay Creeks for drinking water. The water is mixed with a ferric chloride solution and allowed to settle. The sludge was then pumped into lagoons. The lagoons would be excavated yearly and the sludge would be dried and used for construction or mixed with soil and used in landscaping. It was determined that No Further Action was needed based on the Division of Water Resources assurance of proper removal of sludge collected during current operations.
- Bread and Cheese Site (DE-0075) is located 0.30 miles east of the project property. The Site was undeveloped prior to becoming an industrial park. Some illegal dumping did occur in the 1970s but was removed during the development of the industrial park. A Preliminary Assessment was conducted and determined No Further Action was needed due to the lack of evidence of a release.

- **Tank Management**

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 confirmed leaking underground storage tank (LUST) projects are located within a quarter mile from the proposed project area:
 - First Group America, Facility: 3-000547, Project: N9805081 (Inactive)
 - Rock Bottom Stone and Landscape, Facility: 9-000149, Project: N1010091 (Inactive)
 - Red Clay School Facilities Center, Facility: 3-000887, Project: N9905111 (Inactive)
 - St Marks United Methodist, Facility: 3-001121, Project: N9303057 (Inactive)
 - Super Soda Center Stanton, Facility: 3-000212, Projects: N9704055, N0011131, N0907061 (Inactive)
 - SMO #295, Facility: 3-000350, Project: N8401001, N0606063, N0911091 (Inactive)
 - Bouden Buses Inc, Facility: 3-001805, Project: N9708125 (Inactive)
 - Wilmington Suburban Water, Facility: 3-000435, Project: N9112294 (Inactive)
 - 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 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	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 1113 – 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.

<p>7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan</p>	<p>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)</p>
<p>7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products</p>	<p>Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.</p>
<p>7 DE Admin. Code 1144 – Control of Stationary Generator Emissions</p>	<p>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.</p>
<p>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<p>Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.</p>

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

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 1500 gpm for 2-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 Mercantile 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**
 - 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 (It 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

- **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 site from Del Route 7 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 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/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

- The proposed development would be served by an existing extension of Telegraph Road that presently connects a pair of two-way driveways serving an existing Walgreens pharmacy to Delaware Route 7. The proposed development would intersect the Telegraph Road extension on a skew angle opposite the driveway closer to Route 7. This angle would create a situation where drivers exiting the proposed development could overlook a vehicle exiting the pharmacy on their right and drivers attempting to turn right out of the proposed development would have to turn more than 90 degrees. DelSOT anticipates requiring that the site driveway be aligned directly opposite the driveway closer to Route 7.
- Because the proposed development would generate more than 200 trips per day, the developer should anticipate a requirement for a Pre-Submittal Meeting. We recommend that the developer's site engineer request that meeting, using the form available at http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.pdf?05212014 and work with our Subdivision Manager for this part of New Castle County, Mr. Kevin Hickman, to determine the need for a TOA and off-site improvements and the proper design of the site entrance. As necessary, Mr. Hickman can be reached at (302) 760-2461.

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold 735-3495

• **Soils**

The soils in the Hatboro-Codorus complex (Hw) soil mapping unit are poorly-drained wetland associated (hydric) soils that are considered unsuitable for development and should be avoided (See figure 1).

The Urban land-Wheaton complex is a soil mapping unit that has been extensively modified by filling (native/nonnative soil and/or trash/building debris), grading or removal practices; soils in this mapping unit are likely to have inconsistent drainage characteristics with potential wetland conditions (See figure 1) Therefore, DNREC strongly recommends a certified and licensed (ARCPACS & Class D) soil scientist be contacted to map the soils on this site. A list of licensed soil scientists can be obtained from the Ground Water Discharges Branch; the Branch can be reached by phone at 739-9947.

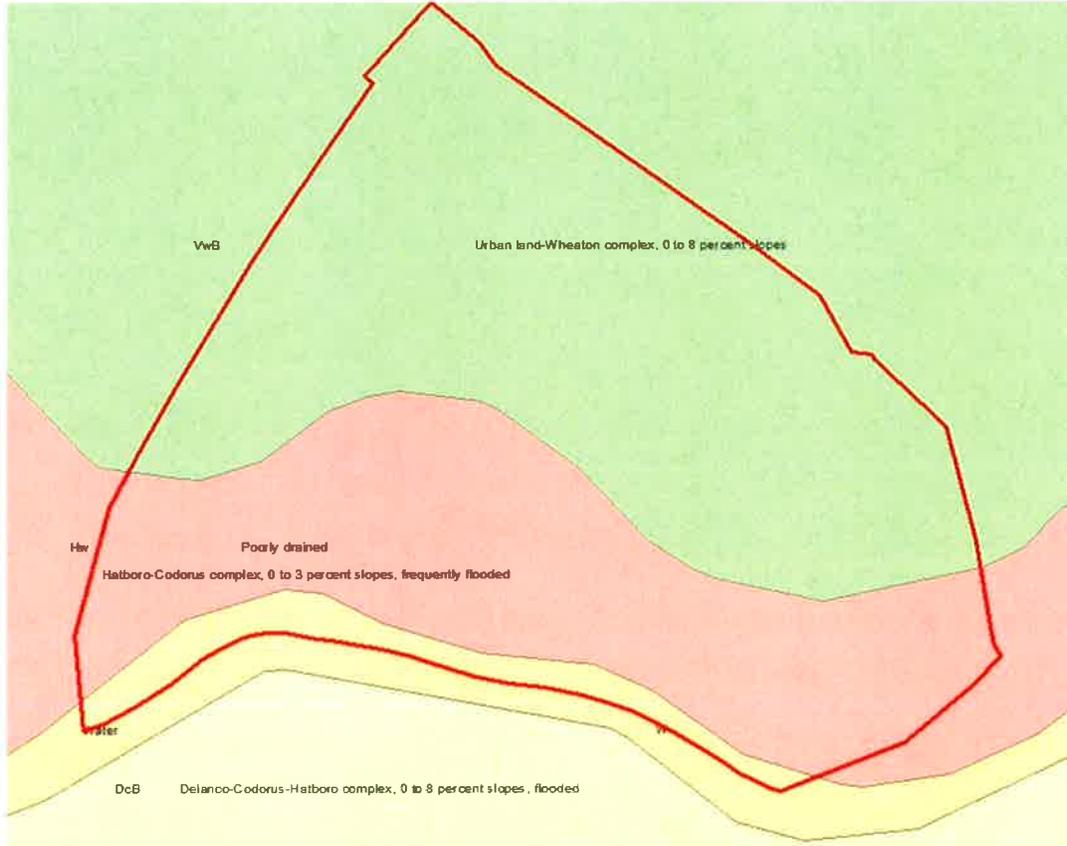


Figure 1: NRCS soil mapping in the immediate vicinity of the proposed project

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

A Pollution Control Strategy (PCS) to achieve the required TMDL nutrient and bacterial load reduction requirements has been established for the Christina watershed. The web link for the Christina watershed PCS strategies is as follows:

<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>

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

- A United States Army Corps of Engineers (USACE) approved wetlands delineation is strongly recommended before commencing any construction activities. According to the PLUS application, a wetlands delineation was conducted by not approved by the USACE.
- 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 waterbodies (including ditches) and all non-tidal and tidal wetlands (i.e., a USACE approved field wetlands delineation for non-tidal wetlands and a State approved wetlands delineation for tidal wetlands).

- 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 applicant's intention to site an open-water management structure(s) and include it as part of the County's total open space requirements is not considered an acceptable best management practice and is strongly discouraged.
- Wherever practicable, use pervious paving materials (instead of conventional asphalt and concrete) as a BMP to mitigate the impacts associated with surface imperviousness.
- Use 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.
- 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. DNREC strongly encourages the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Jen Walls or John Martin at 302-739-9939 for more information on the protocol.
- **Federally listed Species**
DNREC Division of Fish and Wildlife scientists have not surveyed the parcel and in order to provide more informed comments, we request the opportunity to conduct a survey to evaluate habitat and determine the potential for species of conservation concern. Please note that DNREC scientists have extensive knowledge of the flora and fauna of the state. The survey will be conducted at no expense to the landowner. In the event that authorizations will be needed from DNREC's Coastal Management Program and/or Wetlands and Subaqueous Lands Section, they will require complete and up to date info from the Wildlife Species Conservation and Research Program (WSCR) as part of their review. Therefore, allowing access to the site will increase the efficiency of the State authorization process. Please contact Kate Fleming at (302) 735-8658 or at Kate.Fleming@state.de.us if the landowner will grant a site visit.

- **Bog Turtle**

A review of DNRECs database has revealed that there may be suitable habitat for the federally listed bog turtle (*Glyptemys muhlenbergii*) within the proposed project area. Bog turtles typically occur in freshwater wetlands with open canopies, mucky soils, and tussock vegetation, however, they can occur in more marginal habitats as well. Because the bog turtle is a federally listed species, protected under the Endangered Species Act, its presence can affect the scope of work. Phase I surveys for bog turtle habitat should be conducted to ensure that the project will not impact bog turtles or their habitat.

Phase I surveys can be conducted any time of year when ice and/or snow cover is not present. If potential habitat is found, however, please note there is a time of year restriction during which Phase II surveys for bog turtles must be conducted. *A Delaware approved bog turtle surveyor must be used to conduct the surveys.* Please contact Holly Niederriter (302-735-8670) to obtain a list of contacts to conduct Phase I and, if necessary, Phase II surveys.

If potential bog turtle habitat is found during Phase I surveys, you are required to either:

- Completely avoid all direct and indirect project impacts to the wetland, in consultation with the U.S. Fish and Wildlife Service and Delaware Division of Fish and Wildlife;

OR

- Have Phase II surveys conducted to determine if bog turtles are present. In accordance with Delaware's bog turtle site survey procedures, surveys must be conducted by a State-approved bog turtle surveyor between April 15 and June 15.

- **White Clay Creek National Wild and Scenic River**

This project is within or near the area designated as the White Clay Creek National Wild and Scenic River as administered by the National Park Service (NPS). The Wild and Scenic Rivers Act states that designated rivers possess outstandingly remarkable natural, cultural and other values, that they are to be preserved in free-flowing condition, and that they and their immediate environments are to be protected. The White Clay Creek watershed was designated into the National Wild & Scenic Rivers system because of its exceptional hydro-geologic, botanic, fish and wildlife, and historical resources. The watershed is one of only a few relatively intact and ecologically functioning river systems remaining in the highly congested and developed corridor linking Philadelphia, Pennsylvania, with Newark, Delaware. Please contact the NPS Northeast Region office (200 Chestnut Street, 3rd Floor, Philadelphia, PA 19106; fax: 215-597-0932) to determine whether or not your project needs to be reviewed by the NPS:

Chuck Barszcz, Manager, NPS NER Wild & Scenic Rivers (phone: 215-597-6482, Charles_barszcz@nps.gov)

Julie Bell, River Manager, NPS NER Wild & Scenic Rivers (phone: 215-597-6473) julie_bell@nps.gov).

- **Habitat**

It is difficult to determine from the provided site plan the extent of impervious surfaces proposed at this site, as well as plans for stormwater management. Therefore, in an effort to limit negative impacts to the potential bog turtle habitat, key wildlife habitat, and White Clay Creek watershed, DNREC recommends keeping the development of new impervious surfaces to a minimum and developing an approved sediment and stormwater management plan. By reducing infiltration of rain and snow melt, impervious surfaces increase surface runoff, which can rapidly carry pollutants directly to streams and rivers, increase erosion and decrease water quality.

Additionally, it is difficult to determine the amount of buffered area between this development site and the wetlands on the parcel. Therefore, to protect the function and integrity of wetlands, a minimum 100- foot buffer should be left intact around the perimeter. This recommendation is based on peer reviewed scientific literature that shows an adequately-sized buffer that effectively protects wetlands and streams - in most circumstances - is about 100 feet in width. Upland buffers also serve as habitat for many terrestrial species that are dependent on aquatic and wetlands habitats for a portion of their annual life cycle. Lot lines, roadways, and infrastructure should not be placed within this buffer zone. Buffers are an integral component of aquatic and wetland habitats, reducing the amount of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of aquatic organisms.

- **Additional information on hazardous waste sites**

DNREC's Site Investigation and Restoration Section (SIRS) 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) and a Phase II or Facility Evaluation in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA) and the HSCA Guidance Section 2, part 2.3 (page 2-1). 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.

Additional remediation may be required if the project property or site is re-zoned by the county.

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). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.

- **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**

New homes 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 commercial spaces 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 the commercial space, 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 development were quantified. Table 2 represents the actual impact the Stanlan 7 development may have on air quality.

Emissions Attributable to Stanlan 7 (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 Source	2.7	3.5	*	*	*

(*) *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 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 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 energy emissions by cooling during the summer and by providing wind breaks in the winter, thereby 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 Stanlan 7 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,



Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: New Castle County