STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

November 21, 2014

Mr. Jamie Sechler
Davis Bowen & Freidel
23 North Walnut Street
Milford, DE 19963

RE: PLUS review 2014-10-05, Truitt Property

Dear Mr. Sechler,

Thank you for meeting with State agency planners on October 22, 2014 to discuss the proposed plans for the Truitt Property. According to the information received, you are seeking review of a rezoning from AR1 to MR1 and review of a site plan for 90 residential units with 120 assisted living beds on 23 acres in Sussex 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 Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Strategies for State Policies and Spending

- This project is located in Investment Level 1 according to the *Strategies for State Policies and Spending.* Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

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

developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law, which is in Title 7, Chapter 54, 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 and
www.history.delaware.gov/preservation/cemeteries.shtml.

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.

- 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. 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 response to question 25 on the PLUS application indicates that the subject development would generate 612 vehicle trips on an average weekday. As shown in the table below, DelDOT would expect the development to generate 746 to 902 vehicle trips depending on activity level of the condominium tenants.

Land Use	ITE Code	Average Daily Traffic		Weekday AM Peak Hour		Weekday PM Peak Hour	
		In	Out	In	Out	In	Out
90 Condominiums	230	293	293	8	39	37	18
90 units Sr Adult Housing Detached	251	215	215	16	29	25	16
120-Bed Assisted Living	254	158	158	11	6	11	15

  Regardless, the daily and peak hour traffic would be high enough that the proposed development warrants a Traffic Impact Study (TIS) in accordance with the traffic volume warrants found in Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access,.

  However, in accordance with Section 2.3.2, DelDOT may accept a fee of $10 per daily trip in lieu of a TIS for developments generating fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips per hour in the peak hours of the day. Payment of the fee would not exempt the developer from contributing toward off-site improvements or count toward those improvements. Previous studies for other developments in the area have identified a need for improvements at the intersection of Shuttle Road and Delaware Route 1 but have not identified a specific improvement to be built. If one can be identified DelDOT may require the developer to contribute toward the cost of that improvement.

- The site entrance must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. A copy of the Standards and Regulations is available at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf.

- 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 January 2015. Implementation guidance has not been developed but DelDOT recommends 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.

- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Initial Stage review fee shall be assessed to this project.

- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Construction Stage review fee shall be assessed to this project.

- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, any off-site improvements and when those improvements are warranted need to be noted on the record plan.

- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a site 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
  - 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, pages D-2 and D-3.

- As specified in Section 3.4.1.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, the record plan should show all existing entrances (residential/commercial) within 400 feet of the proposed entrance.

- The developer's engineer should evaluate the criteria in Section 3.5.5.5 of the Standards and Regulations for Subdivision Streets and State Highway Access to determine whether a bus stop is required at the site entrance and the design of it if one is needed.

- In accordance with the minimum standards provided in Section 3.6.5 and Figure 3-3 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require dedication of right-of-way along the site's frontage on Shuttle Road. The proposed parking lot may be affected.

- In accordance with Section 3.6.5 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Shuttle Road. The location of the easement shall be outside the limits of the ultimate right-of-way. 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 to the State of Delaware, as per this plat."

- Referring to Section 4.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Entrance Plan review;
  - Copy of the Construction Stage Fee Calculation Form
  - Copy of the Construction Review Fee
  - Gate-Keeping Checklist – Entrance Plan
  - Design Checklist – Entrance Plan**
  - Three (3) paper sets of the Entrance Plan
  - Auxiliary Lane Worksheet
  - Sight Distance Worksheet
  - SWM Report and Calculations (if applicable)
  - CD with a pdf of the Entrance Plan

  **For the design checklist for the entrance plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, pages D-9 and D-13.

- In accordance with Section 4.8 of the Standards and Regulations for Subdivision Streets and State Highway Access, stormwater facilities, excluding bioswales, shall be located a minimum of 20 feet from the ultimate right-of-way line of Shuttle Road. See Section 3.6.5 and Figure 3-3 regarding the location of that line.

- In accordance with Section 5.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require the establishment of a sight distance triangle at the entrance in accordance with AASHTO standards. A worksheet has been developed to assist with this task and can be found at http://www.deldot.gov/information/business/subdivisions/Intersection-Sight-Distance.xls.

- Metes and bounds and total areas need to be shown for any drainage easements. Section 5.7.2.5 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access requires, in part, a minimum 20-foot wide drainage easement for storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. These easements must be shown and noted on the record plan.

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

Wetlands

- State regulated wetlands ARE NOT located on this property based on a review of the State wetland maps. State regulated subaqueous lands ARE NOT likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. Upon review of the GIS layers, Perennial River/Stream are located on the property.

- 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 USGS topographic maps. 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. Please check with the county to be sure appropriate buffers are adhered to around the wetland areas. A jurisdictional determination should be done by a consultant to be sure wetlands are not impacted.

TMDLs

- The project is located in the low nutrient reduction zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The TMDL for the low reduction zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. The PCS regulations can be reviewed at http://regulations.delaware.gov/documents/November2008c.pdf , and background information, guidance documents, and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.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. According to the submitted PLUS application, 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 web link for additional information: http://dda.delaware.gov/nutrients/index.shtml

Flood Management

- **Portions of the west end of this property are located in a FEMA – mapped floodplain. Laying out all individual lots to be completely outside of the floodplain will reduce the likelihood of flooding, reduce in price or completely eliminate the requirement for flood insurance, and eliminate the requirement for floor elevations surveys which are likely to be required for structures which are located on lots which contain floodplain.**

Water Supply

- The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. DNREC records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity 85-W-15.

- 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.

Source Water Protection Areas

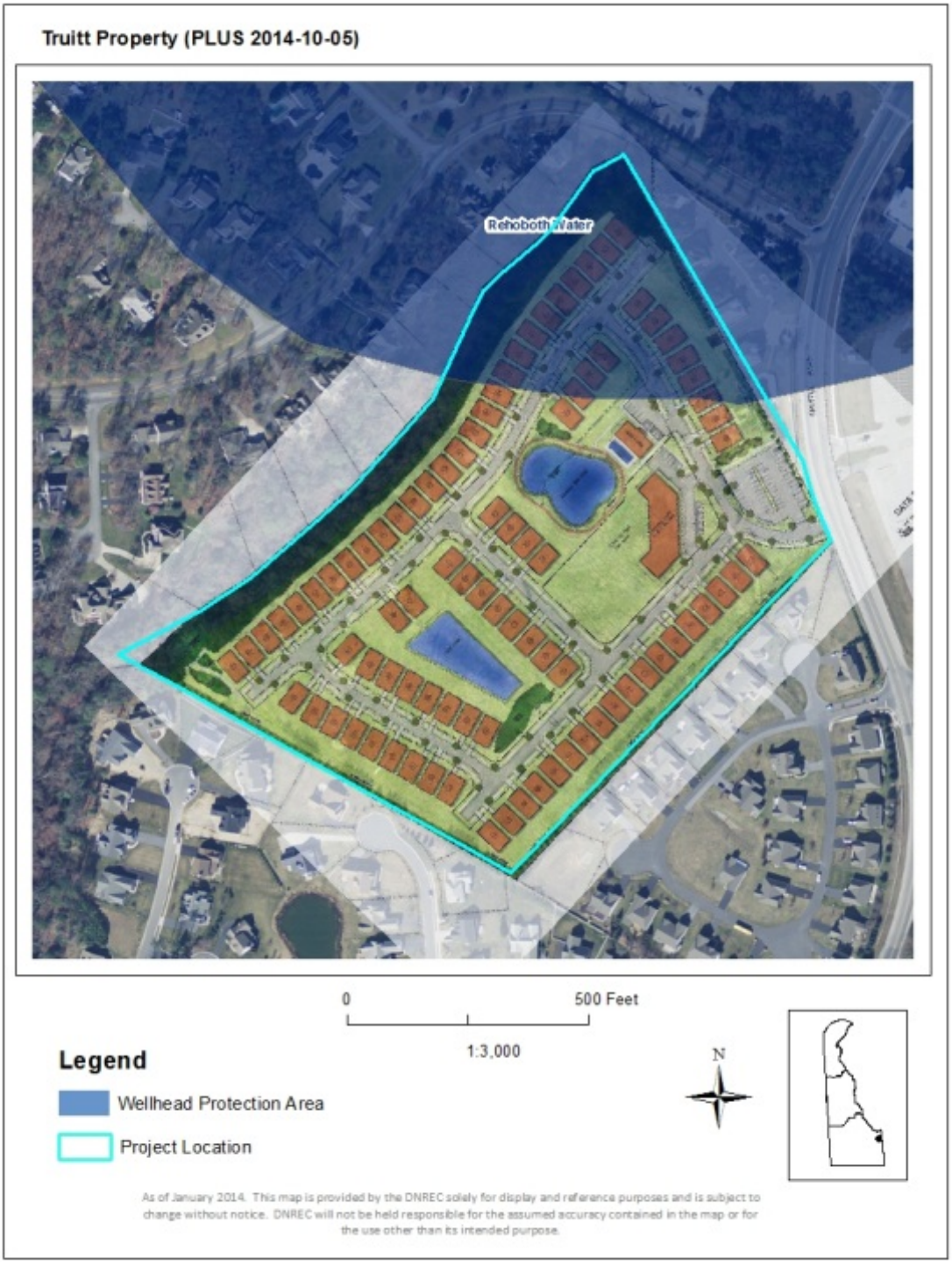
- The DNREC Water Supply Section, Ground-Water Protection Branch (GPB) has determined that a significant portion of the parcel falls within a wellhead protection area for Sussex County (see map). The wellhead protection area protects a wells owned by City of Rehoboth as delineated in the Source Water Assessment for Rehoboth Water dated July 17, 2013.

  Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where land use activities or impervious cover may adversely affect the quantity and quality of ground water moving toward such wells. Impervious cover prevents precipitation from infiltrating through the soil to the water table aquifer. Impervious cover refers to structures including but not limited to roads, sidewalks, parking lots, and buildings. Any impervious cover within this wellhead protection area has the potential to have a negative affect the quality and quantity of drinking water available to consumers.

  Chapter 115 Zoning Article IV §115-19 Of the Sussex County's Code states in part that agricultural districts are also intended for protection of water resources. This parcel is zoned

as an agricultural district and the drinking water supply would be afforded more protection if it remains agricultural.

In addition, because the project is located within a wellhead protection area and the wellhead is a source of public drinking water, the storage of hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.


Truitt Property (PLUS 2014-10-05)
Rehoboth Water
0
500 Feet
1:3,000
N
Legend
Wellhead Protection Area
Project Location
As of January 2014. This map is provided by the DNREC solely for display and reference purposes and is subject to change without notice. DNREC will not be held responsible for the assumed accuracy contained in the map or for the use other than its intended purpose.

Sediment and Stormwater Program

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on 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 practicable. 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 Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101).

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.
7 DE Admin. Code 1135 – 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)
7 DE Admin. Code 1141 – 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.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO_2), carbon monoxide (CO), and carbon dioxide (CO_2) 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	Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

Duty Vehicles	
Regulation 21 Section 10 – Emission Standards for Hazardous Air Pollutants, Asbestos	Ensure no visible residue of asbestos materials remains in the work area after all asbestos materials are removed in accordance with NESHAP. Display DANGER signs whenever airborne asbestos may be present in accordance with NESHAP and OSHA Use wet removal techniques. Dispose of all asbestos containing waste in clearly labeled sealed containers and store in a secure location awaiting transport to an authorized disposal facility, not to exceed a period of 45 days.

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.

Tank Management Section

- 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:
  - Boulevard Applicance Sales & Service, Facility: 5-000812, Project: S9502042 (Inactive)

- Per the **UST Regulations: Part E, § 1. Reporting Requirements**:
  - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
    - The Department's 24-hour Release Hot Line by calling 800-662-8802; and
      The DNREC Tank Management Section by calling 302-395-2500.

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

- Because the proposed development would generate more than 200 vehicle trips per day, a Pre-Submittal Meeting is required before plans are submitted for review. Guidance on what will be covered at this meeting and how to prepare for it is located at http://www.deldot.gov/information/business/subdivisions/Pre-Submittal_Meeting_Requirements.doc. The form needed to request this meeting is available at http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.doc.

- As shown on the Investment Level map associated with the *Strategies for State Policies and Spending*, the subject development is located in a Level 1 area. DelDOT's Shared-Use Path and/or Sidewalk Process policy (available at http://www.deldot.gov/information/business/subdivisions/SUP_Sidewalk_Process.pdf) provides that in Level 1 and 2 areas a path or sidewalk must be installed along the State-maintained road frontage. If a physical impossibility exists, and none is apparent here, then a fee in lieu of construction shall be paid.

- The site is separated from the cul-de-sac bulb on Ennis Lane in the Kinsale Glen subdivision by a small strip of land owned by the Home Owners Association (HOA). DelDOT recommends that the developer contact the HOA and offer to build a walking path to connect Ennis Lane to their street network to provide expanded opportunities for walking in both neighborhoods.

- Be advised that the standard general notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision date of May 21, 2014 for the Record/Site Plan and Construction Plan general notes and the Temporary Traffic Control general notes. The notes can be found at http://www.deldot.gov/information/business/subdivisions/DelDOT_Development_Coordination_Plan_Sheet_Notes.doc

- Please check to determine whether any utilities will need to be relocated as part of this project.

- Please use the Auxiliary Lane Worksheet to determine whether auxiliary lanes are warranted at the site entrance. The worksheet can be found at

http://www.deldot.gov/information/business/subdivisions/auxiliary_lane_worksheet.xls.

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

Sea Level Rise

- A portion of the planned development area, along the Johnson Branch, lies within an area that will be subject to direct and permanent inundation from sea level rise (http://de.gov/slrmap). Sea levels in Delaware have risen by about a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas and increased risk of flood damage during storms (DNREC, 2012).

  DNREC Preliminary Land Use Service maps depicting future inundation risk from sea level rise indicate that approximately 1.24 acres of this site out of 23.36 acres or 5 percent could be inundated by sea level rise of 1 meter. In the short-term, sea level rise on this parcel, combined with periodic coastal flooding events, may result in repetitive flood damage to homes within this neighborhood and significant difficulties maintaining storm water, drainage and other infrastructure. In the long-term, this increased flood and inundation risk could result in costly public and private flood abatement and drainage projects and an eventual abandonment of homes.

  Recommendations:
  - Lots within flood prone areas should be eliminated.
  - Any structures that are built within an area mapped as both floodplain and sea level rise zone should be constructed with 18" of freeboard plus additional freeboard to accommodate future sea levels.
  - Filling lots to elevate them to above base flood elevation is discouraged.
  - Access roads should be designed to be flood resilient for the entirety of its design life span. This includes ensuring that the roadway functions for the 1% chance flood plus anticipated future sea level rise.

  References:

NOAA (National Oceanic and Atmospheric Administration). (2014). Mean Sea Level Trend, Lewes, DE. Retrieved from http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8557380.
DNREC Delaware Coastal Programs. (2012). Preparing for Tomorrow's High Tide: Sea Level Rise Vulnerability Assessment for the State of Delaware. Dover, DE: Department of Natural Resources and Environmental Control. Retrieved from http://de.gov/slrva.

Drainage Program

- The Drainage Program recommends a dedicated area on the north-west side of the property for access to remove future blockages in Johnson Branch. The Drainage Program also recommends drainage easements to be 20 feet and for the pipes to be located in the center of the 20 foot wide open space. There needs to be an easement of adequate width from the sediment and stormwater ponds to the outfall along Johnson Branch. The submitted plan alludes to the outfall pipes going between 2 buildings. All drainage easements should have a responsible party listed (HOA, County) who has authority for future use within the easement.

Buffers

- The wetlands on the parcel are considered Key Wildlife Habitat according to the Delaware Wildlife Action Plan (DEWAP - http://www.dnrec.delaware.gov/fw/dwap/Pages/default.aspx) because they are part of a large complex that can support an array of plant and animal species. Instead of 25 feet, a minimum 100-foot buffer should be left intact around the perimeter of wetlands on the site to protect their function and integrity. 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.

Nuisance Waterfowl

- 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.

  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.

Soils Assessment

- Based on the NRCS soils survey mapping update, the Greenwich (GrA) mapping unit is the main mapping unit mapped in the immediate vicinity of the proposed project. However, the soil mapping unit with the most limitations for development is the Longmarsh and Indiantown soil mapping unit. The nearby Longmarsh Indiantown soil mapping unit is a wetland associated (hydric) soil mapping unit that considered to have severe limitations (i.e., unsuitable) for development (Figure 1).

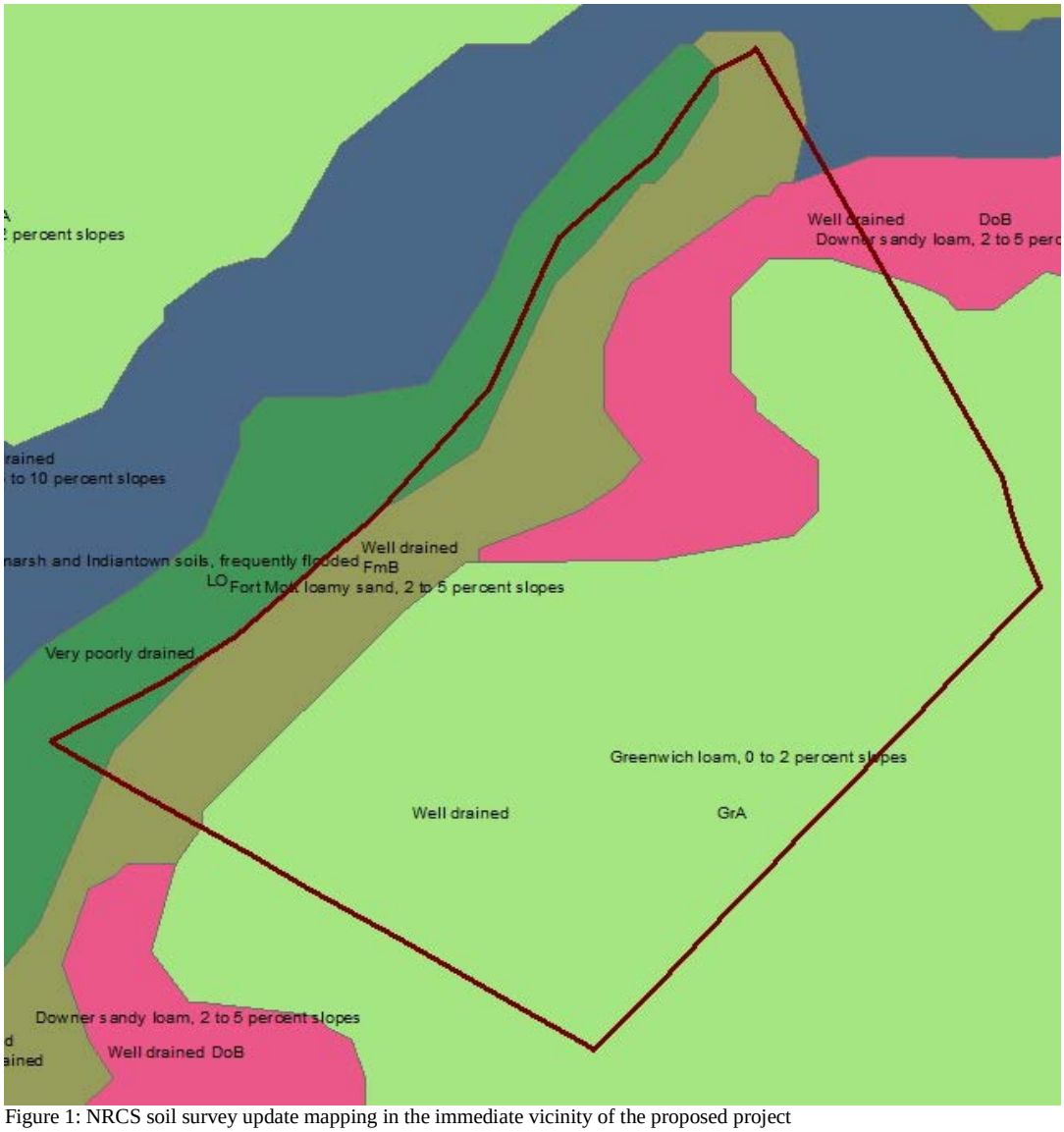


Figure 1: NRCS soil survey update mapping in the immediate vicinity of the proposed project

Additional information on TMDLs and water quality

- Compliance with the specified TMDL nutrient and bacterial reduction requirements specified for the Inland Bays watershed can be facilitated by the strategies and requirements described in the Inland Bays PCS, and the implementation/adherence to the following recommended BMPs:
  - DNREC strongly recommends a United States Army Corps of Engineers (USACE) approved wetlands delineation be conducted on this parcel before commencing any construction activities.
  - The maintenance or establishment of a minimum 100-foot buffer width from all delineated wetlands. 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 the water quality draining to 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 ponds) and delineated wetlands (i.e., USACE approved delineation). According to the PLUS application, the applicant is proposing a 25 foot buffer from a wetland/stream; well short of the recommended minimum 100 foot buffer width necessary for protecting water quality.

- Avoidance of all wetland associated hydric soil mapping units (e.g., Longmarsh and Indiantown).
- 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 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/discharges from impervious surfaces. Please contact Lara Allison at 739-9939 for further information about the possibility for installing a raingarden(s) on this parcel.
- Wherever practicable, the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate the aforementioned pollutant runoff impacts from new parking lots and roads.
- Use of green-technology storm water management (in lieu of open-water management structures) and raingardens as BMPs to reduce nutrient pollutant impacts. Please contact Lara Allison at 739-9939 for further information about siting a raingarden(s) in this parcel.
- 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 John Martin or Jen Walls at 302-739-9939 for more information on the protocol.

Additional information on tank management

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.

Additional information on hazardous waste sites

- Site Investigation Restoration Section (SIRS) strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Assessment 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.

- 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 air quality

- New homes may emit, or cause to be emitted, additional 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; Delaware currently violates federal health-based air quality standards for ozone,
  - The emission of greenhouse gases which are associated with climate change, and
  - The emission of air toxics.

- Air emissions generated from new homes 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) were quantified. Table 2 – Projected Air Quality Emissions represents the actual impact the Truitt Property may have on air quality.

Table 2: Projected Air Quality Emissions for Truitt Property

Emissions Attributable to Truitt Property (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO_2)	Fine Particulate Matter ($PM_{2.5}$)	Carbon Dioxide (CO_2)
Area source emissions	4.0	0.4	0.4	0.5	16.1
Power emissions	*	1.6	5.5	*	805.6
Mobile emissions	2.0	2.7	0.1	0.1	3783.0
Total emissions	6.0	4.7	6.0	0.6	4604.7

(*) *Indicates data is not available.*

Note that emissions associated with the actual construction of the residential community, 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.
  - Constructing with high albedo, high solar reflectance materials. This includes roofing and hardscape. These materials help to reduce heat island impacts and, by extension, help to minimize the potential for localized ground-level ozone formation. These materials also help reduce demands on air conditioning systems and save on energy costs.
  - Providing shade for parking areas. Approaches may include architectural devices, vegetation, or solar panels. Providing shade for parking areas helps to reduce heat island impacts, and, by extension, helps to minimize the potential for localized ground-level ozone formation. Such measures can also have the additional benefit of channeling or infiltrating stormwater.
  - Encouraging the use of safe multimodal transportation. This measure 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 is 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, particularly those between the site and adjacent residential areas. Tree reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

This is a partial list, and there are additional things that can be done to reduce the impact of the 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 Truitt Property project.

Division of Public Health-Contact Laura Saperstein 744-1011

The Delaware Division of Public Health (DPH) is pleased to be able to participate in the PLUS application process. In keeping with its mission to protect and promote the health of all people in Delaware, DPH looks for opportunities to encourage and enhance our population's health behaviors that will result in healthy people and healthy communities.

Community design can impact the health of a population. Studies show that persons in lower-income communities, the elderly, and children often suffer more from consequences of inadequate land-use and transportation. Additionally, physical activity has a direct correlation to many chronic diseases, including hypertension, diabetes and obesity. In 2012, 39.1% of Delawareans reported a BMI of "overweight," and 26.9% reported a BMI as "obese." To that end, DPH looks to make recommendations for land-use that can empower Delawareans to make good health behaviors a part of their daily lives.

- DPH is pleased to see the inclusion of internal sidewalks in the Truitt Property site plan. The inclusion of this pedestrian infrastructure will enable residents to choose walking as a recreational option. The Truitt Property is within a reasonable walking distance to several public facilities such as a park, a library and other mixed-use and commercial areas. Locating housing developments within a reasonable distance to active recreation facilities enables residents the option of incorporating physical activity as part of their everyday life. Additionally, DPH commends the use of proposed recreational facilities such as the internal club-house, as this provides another form of passive recreation for residents.

- DPH feels the Truitt Property has the opportunity to increase positive health behaviors for its residents by incorporating the following recommendations into its land development proposal:
  - Provide pedestrian connection and interconnectivity to the surrounding land developments to further active transportation (walking/Biking) among residents.

- Include pedestrian lighting on all paths and walkways to enhance the usability of active transportation options.
- Consider including bike facilities into the land use plan, such as bike lanes, bike signage bike parking, and a continued bike-lane with right-turn at the front entrance.
- Include crosswalks at all key intersections.

Department of Education-Conatact Despina Wilson 735-4040

The PLUS application states that the single family homes will be targeted to an older community however it does not say that there will be an age restriction on the home. Therefore, please DOE offers the following comments:

- The DOE requests that the developer work with the affected Cape Henlopen School District's transportation department to establish developer supplied bus stop shelter ROW.

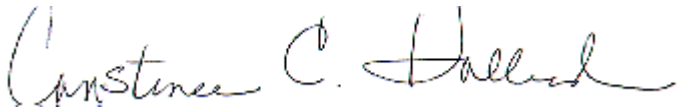
- The DOE recognizes the integral role of educational facilities within communities. As such, the DOE seeks to assure that residential growth, that generates additional demand on educational facilities, is managed with adequate educational infrastructure being made a part of sub-division plans as appropriate, such as adequate width of roads to accommodate school buses and designated pick up and drop off sites.

- As per DOE formula, this development would potentially add 44 students to the school district. DOE records indicate that the Cape Henlopen School Districts' schools are nearing or exceeding capacity based on the September 30, 2014 enrollment. As such, the DOE requests that the developer contact the affected School District administration to address the issue of school over-crowding that this development has the potential to cause.

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: Sussex County