



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

September 22, 2016

Steve Martin
1973 Bay Road
Milford, DE 19963

RE: PLUS review 2016-08-07; Lands of Ching

Dear Steve,

Thank you for meeting with State agency planners on August 24, 2016 to discuss the Lands of Ching project. According to the information received, you are seeking a review of a rezoning of 19.47 acres from IG and AC to BG along Bay Road in Kent County. This rezoning is not consistent with the Kent County Comprehensive Plan. As such, this PLUS review is for both the rezoning and a comprehensive plan amendment. The comprehensive plan amendment will be required if Kent County chooses to move forward with this request.

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 Kent 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 3 according to the *Strategies for State Policies and Spending*. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

This rezoning is for a parcel located along the Route 1 corridor between two major transportation infrastructure investments, the South Frederica and Thompsonville grade separated intersections. In addition, this parcel is in the vicinity of "The Turf" sports

complex that is currently under construction and is intended to provide a positive economic development impact for Kent County. This request may be in response to the enhanced transportation infrastructure, perceived new economic opportunities, or a combination of both.

It is understood that the County will review this request on its merits in the context of the Comprehensive Plan. However, it is encouraged that the County carefully consider this corridor during the upcoming comprehensive plan update process. A well planned overall approach to the future development of this corridor which considers transportation infrastructure, environmental concerns, and economic potential is preferable to individual, incremental rezoning requests such as this one.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The subject property is adjacent to Delaware Route 1, and is therefore subject to the Department's Corridor Capacity Preservation Program. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The main goal of the Program is to maintain the capacity of the existing highway. Program policy states if a property has reasonable alternative access to a secondary road, no direct access to the corridor will be permitted. Therefore, expanding the site's existing direct access along Delaware Route 1 would not be permitted. However, given the site has ample frontage along a secondary road, the property owner can develop a full access along Old Cemetery Road. If a full access is developed on Old Cemetery Road, the site's existing access along Delaware Route 1 would have to be closed. The Corridor Capacity Preservation Program policy and the Delaware Route 1, Thompsonville Grade Separated Intersection Project can be viewed on Department's website at www.deldot.gov
- The site access on Old Cemetery Road must be designed in accordance with DelDOT's [Development Coordination Manual](#). A copy of the [Manual](#) is available at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>.
- Per Section 2.2.2.1 of the [Development Coordination Manual](#), Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. A development generating this much traffic certainly appears feasible on a parcel of this size. If the County approves this rezoning, we will revisit the need for a TIS when a site plan is presented.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Executive Summary.

The proposed rezoning will likely result in development of increased impervious surface and new sources of greenhouse gas emissions. Opportunities exist to preserve natural resources while reducing the environmental impact on-site. As discussed at the August 24th PLUS meeting, the

parcel has been identified as being entirely within an excellent ground water recharge area for Kent County. Land use activities on these areas may adversely affect ground water. Additionally, any existing wells may need to be reclassified and the septic system upgraded for their intended use.

The proposed development will result in increased impervious surface and new sources of greenhouse gas emissions. The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development and re-development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. We encourage the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations. We further recommend an abundant use of native vegetation and shade trees throughout the landscape, to absorb carbon dioxide, protect water quality and provide relief to residents on hot days.

The following pages provide information about applicable regulations and detailed recommendations associated with this project, from various DNREC Divisions. We would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

TMDLs.

- The project is located in the greater Delaware River and Bay drainage area, specifically within the Mispillion River watershed. In this watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nitrogen, phosphorus, and bacteria (under the auspices of Section 303(d) of the Clean Water Act). The TMDL for the Mispillion River watershed calls for a 57 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for an 87 percent reduction in bacteria from baseline conditions. 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.
- A nutrient management plan is required under the *Delaware Nutrient Management Law* (3 Del.C., 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 (302) 739-4811 for further information concerning compliance requirements or view additional information here: <http://dda.delaware.gov/nutrients/index.shtml>

Water Supply.

- The project application states that individual on-site well(s) will be used to provide water for the proposed project. Our records indicate that the project is not located in an area where public water service is available. Any existing wells (180881-w) that will supply water for a BG office will need to be re-classified to its intended use. Should an on-site Industrial, Public/Miscellaneous Public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as central sewer lines, septic tank and sewage disposal area, and at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction and/or reclassification of on-site wells provided the wells can or are to be constructed and located in compliance with all requirements of the current Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing each and every well.
- 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 take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios, at (302) 739-9944.

Source Water Protection.

- The DNREC Water Supply Section has reviewed the above referenced PLUS project and determined that it falls entirely within an excellent ground water recharge area for Kent County (see attached map). Excellent ground-water recharge areas are those areas mapped by the Delaware Geological Survey where the first 20 feet of subsurface soils and geologic materials are exceptionally sandy. These soils are able to transmit water very quickly from the land surface to the water table. This map category is an “indicator of how fast contaminants will move and how much water may become contaminated” (Andres, 2004, pg. 1). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect the quantity and quality of ground water in these areas.
- DNREC Water Supply Section recommends that the portion of the new development within an excellent ground-water recharge potential area not exceed 20 percent impervious cover (DNREC, 2005).
- In addition, because the excellent ground water recharge area can so quickly affect the underlying aquifer if contaminants are spilled or discharged across the area, the storage of

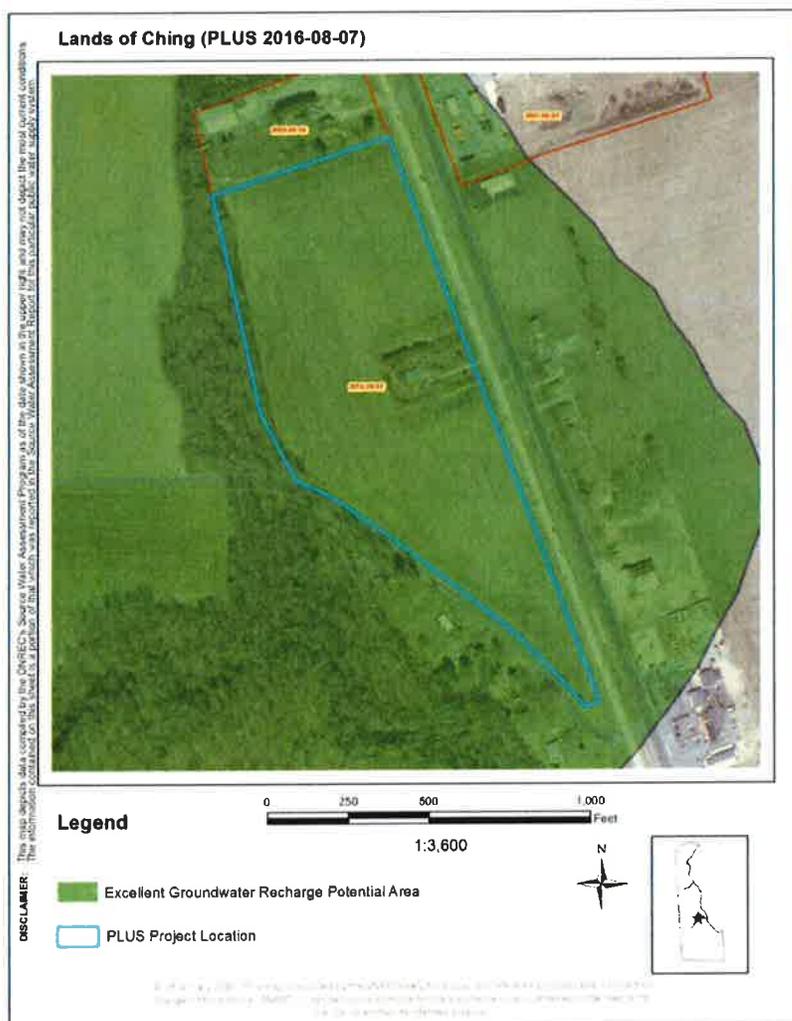
hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.

- **References:**

Andres, A. Scott, 2004, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware: Delaware Geological Survey Report of Investigations No. 66, p. 14. <http://www.udel.edu/dgs/Publications/pubform.html#investigations>

Delaware Department of Natural Resources and Environmental Control (2005): Source Water Protection Guidance Manual for the Local Governments of Delaware: Dover, DE., 144 p.

http://www.wr.udel.edu/publications/SWAPP/swapp_manual_final/swapp_guidance_manual_final.pdf



Sediment and Erosion Control/Stormwater Management

- 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 pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. 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 Kent Conservation District. Contact Jared Adkins, Program Manager, at (302) 741-2600, ext. 3, for details regarding submittal requirements and fees.

Tank Management.

- If a release of a Regulated Substance occurs at the proposed project site, compliance with 7 Del.C., Chapter 60; 7 Del.C., Chapter 74; and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.
- 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.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known archaeological sites or National Register listed property, on this parcel. However, on the adjacent parcel towards the west side is the Webb-Postles Family Cemetery (K-4823), and the adjacent parcel towards the north is the T. Short House (K-4951). With this in mind, the developer should be aware of the Unmarked Human Burials and Skeletal Remains Law, 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 (7 Del. C. Ch. 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 go to 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 should hire an archaeological consultant, to examine the parcel for archaeological resources and plan to avoid those areas. If there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency 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 Agriculture – Contact Scott Blaier 698-4532

- The proposed project is adjacent to a property permanently protected through the State's Agricultural Lands Preservation Program (West-Postles District K-98-08-203), (Parcel # 5-00-15100-01-2500). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in **Title 3, Del. C., Chapter 9**. These protections effect adjoining developing properties. The 300 foot notification requirement affects **all new deeds** in a subdivision located in whole or part within 300 feet of an Agricultural District. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure

and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

In addition, if any wells are to be installed, **Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells** will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

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 Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Soils Assessment.

- Based on NRCS soil survey mapping update, the soil mapping unit of most concern is Fallsington (FgA), on the western edge of this parcel. Fallsington is a poorly-drained wetland associated hydric soil that has severe limitations for development (Figure 1).

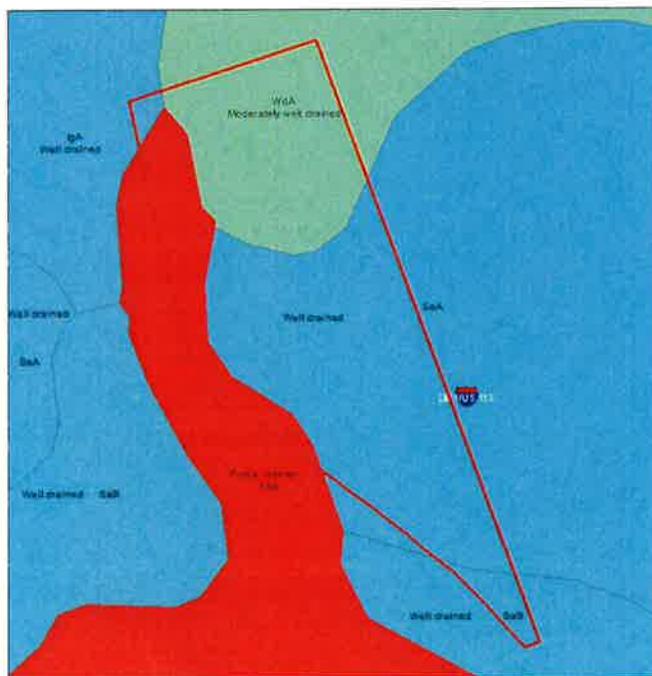
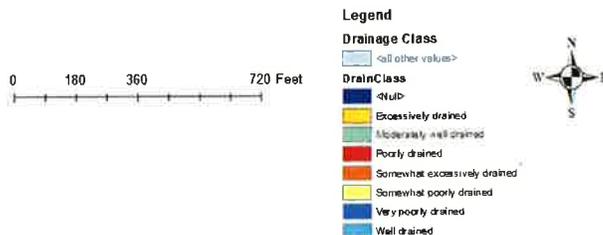


Figure 1 NRCS soil survey mapping update in the immediate vicinity of the proposed construction.



Additional information on TMDLs and water quality.

- In response to concerns about the need for reducing nonpoint source nutrient (nitrogen and phosphorus) and bacterial pollutants to levels sufficient to meet the prescribed TMDL reduction requirements in the Mispillion watershed, a multifaceted and comprehensive process known as a Pollution Control Strategy (PCS) has been developed to enable such reductions. Specifically, a PCS is a combination of best management practices (BMPs) and control technologies that reduce nutrient and bacterial pollutant runoff loading in waters of a given watershed to levels consistent with the TMDL reduction levels specified for that watershed. The PCS for the Mispillion River watershed consists of recommendations from the following three areas: agriculture, stormwater, and wastewater. Additional information about the Mispillion River PCS is available here: <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>.
- In further support of the PCS, the applicant is also strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs:
 - Preserve and/or maintain as much of the existing open space as possible; we further suggest additional native tree, shrub and/or native herbaceous vegetation plantings, wherever possible.
 - Conduct a field-based delineation of the hydric soils and/or wetlands on this site. We suggest hiring a licensed Class D soil scientist. A list of licensed soil scientists can be obtained from the Ground Water Discharges Branch; the Branch can be reached by phone at (302) 739-9947. We strongly discourage building on hydric soils as these soils provide benefits for water quality and flood protection.
 - Maintain a vegetated buffer of at least 100 feet from the adjoining wetlands and waterbodies. 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 100-foot buffer, planted in native vegetation, from all non-tidal and tidal wetlands (i.e., a USACE approved field wetlands delineation for non-tidal wetlands and State approved wetlands delineation for tidal wetlands) and all waterbodies, including ponds.
 - 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, ponds, and roads)

included in the calculation. Omission of any of the above-stated forms of surface imperviousness will result in an underestimate of the actual post-development surface imperviousness and the associated environmental impacts.

- Employ green-technology storm water management and a rain gardens (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant runoff. Please contact Lara Allison at (302) 739-9939 for further information about the possibility for installing rain gardens on this parcel.
- Use pervious paving materials (when compatible with concerns for the protection of excellent recharge areas and/or well-head protection areas via assessment by a DNREC hydrogeologist) instead of conventional paving materials, like asphalt or concrete. This serves to reduce the amount of water and pollutant runoff draining to adjoining streams and wetlands. Pervious pavers are especially recommended for areas designated for parking.
- 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) resulting from the conversion of individual or combined land parcels to a changed land use; thus providing applicants and governmental entities with quantitative information about the project’s impact(s) on baseline water quality. We strongly encourage the applicant/developer use this protocol to help design and implement the most effective BMPs. Please contact John Martin or Jen Walls in the Division of Watershed Stewardship, 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.
- The Tank Management Section encourages the use of BMPs in considering all environmental effects of activities and implementation and incorporating options to minimize the environmental footprints of activities.
- For more information, please visit online:
<http://www.dnrec.delaware.gov/tanks/Pages/default.aspx> or contact Ross D. Elliott at DNREC-TMS with further questions at (302) 395-2500, or Ross.Elliott@state.de.us

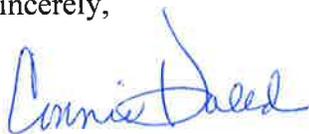
Information on air quality.

- Based on air quality projections, the rezoning of the abovementioned project is not forecasted to have a significant impact on Kent County's air quality levels. The Division of Air Quality (DAQ) has no additional commentary on this application at this time. If you have any questions or concerns, the DAQ point of contact is Lauren DeVore, and she may be reached at (302) 739-9437 or lauren.devore@state.de.us.

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: Kent County