



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

August 17, 2005

Mr. Ring Lardner
Davis, Bowen & Friedel
23 North Walnut Street
Milford, DE 19963

RE: PLUS review – PLUS 2005-07-19; Sloan Property

Dear Mr. Lardner:

Thank you for meeting with State agency planners on July 27, 2005 to discuss the proposed plans for the Sloan Property/Erb Farm project to be located on the south side of Frederica, west of Market Street.

The developers are proposing to annex the balance of a 146 acre parcel into the Town of Frederica. Upon annexation the entire parcel is to be zoned R-2 and be developed as a 385 unit cluster development utilizing condominium ownership. At the July 27, 2005 meeting you stated that this property has been annexed into the Town of Frederica in June 2005; however, this office has not received a Plan of Services form which is required to be submitted to this office before the Town takes action on any annexation. Please contact David Edgell of this office to discuss this issue.

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 until the annexation is finalized, Kent County is the governing authority over this land, and any development proposal will need to be brought to the County for approval and will need to comply with any and all regulations/restrictions set forth by the County.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

State Strategies/Project Location

This project is in Investment Level 2, which is where the State supports infill, redevelopment, and new development projects such as this one. It is expected that this project will be annexed into the Town of Frederica and developed under their codes and ordinances.

The applicant and the town are advised that the Plan of Service issue must be resolved as soon as possible for the annexation to proceed as specified in Delaware Code.

Street Design and Transportation

- DelDOT will also require that a sidewalk or a paved multi-modal path be provided across the frontage of the site.
- DelDOT suggest additional connections to the surrounding town streets to connect this development to the rest of the town.
- DelDOT recommends that the developer contact the school district, determine whether a path that would allow children in the development to walk to school can be built and, if so, build it.
- DelDOT will require a traffic impact study (TIS) for this development
- It is recommended that you provide for pedestrian access to Market Street and to provide a transit stop there to connect to the existing Dart route 303.

Natural and Cultural Resources

- This is the seventh development proposed along the Murderkill since April 2004. The approval of these developments will add an additional 2,765 homes along the Murderkill River. The presence of these residential units will bring negative cumulative impacts to the River and adjoining water bodies unless proper buffers and best management practices are employed to protect water quality and habitat.
- The developers are to be commended for meeting and exceeding the buffer requirements found in the Frederica Land Development Ordinance. The current subdivision plan preserves the wetlands and woodlands on the site, and provides a

buffer well in excess of 100' in many cases. This buffer should be comprised of native trees, shrubs or no-mow grasses.

- In order for the applicant to verify compliance with the TMDL mandate, a full nutrient accounting process known as nutrient budget should be prepared.
- The DNREC Water Supply Section has determined that the northern edge of the proposed construction area is in an excellent ground-water recharge area (see following map and attached map). New development in WRPA's may exceed the 20% impervious cover threshold, but be no more than 50% impervious, provided the applicant submits an environmental assessment report recommending a climatic water budget and facilities to augment recharge.

The following are a complete list of comments received by State agencies. Most State agency comments will focus on the proposed development as if the annexation and rezoning is approved.

Office of State Planning Coordination – Contact: David Edgell 739-3090

This project is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is located partially in the Town of Frederica and partially in Kent County (inside the Growth Zone). Annexation of the entire parcel into Frederica is expected. 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. Our office has no objections to the proposed annexation and development of this project in accordance with the relevant Town codes and ordinances.

A Plan of Services must be submitted to our office by the Town at least 20 working days prior to annexation. Our office must accept the Plan of Services as complete for the annexation to proceed under the provisions found in Title 22, Section 101 of the Del. C. Please be advised that our office has received correspondence from the Delaware Office of Drinking Water which details some concerns regarding the Town's water utility, and an offer to work with the Town to develop a plan to address these concerns. These issues must be resolved prior to our acceptance of the Plan of Services.

Due to the unusual ownership arrangement proposed by the developer, we recommend that Frederica's solicitor review and approve all legal documents relating to the proposed condominium association, maintenance corporation, deed restrictions and other legal aspects prior to final approval of the subdivision. These legal documents should be referenced on the record plat, and recorded with the plat at the Kent County Recorder of Deeds.

Division of Historic and Cultural Affairs – Contact: Alice Guerrant 739-5685

The project parcel contains three prehistoric archaeological sites (K-636, K-766, & K-767) and is adjacent to the Frederica Historic District (K-322) which is listed in the National Register of Historic Places. The development plans show a sufficient buffer and landscaping to block any visual or noise effects this development could have on the historic district. One site is within the protected wetlands area. However, the other two sites will be adversely affected by this project. The DHCA requests that the owner/developer allow them the opportunity to examine these sites prior to any construction activities and perhaps to do some testing to give us a better idea of the nature of these sites.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) Market Street is classified as a local road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. DelDOT's policy is to require dedication of sufficient land to provide minimum right-of-way widths of 30 feet from the centerline on local roads. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.
- 2) DelDOT will also require that a sidewalk or a paved multi-modal path be provided across the frontage of the site. Their specific requirement will be determined by the project manager for Kent County, Mr. Brad Herb. He can be reached at (302) 266-9600.
- 3) Jackson Street is only one of five Town streets that stub into the subject land. From east to west, they are Jackson Street, Purnell Avenue, Hillside Avenue, Fourth Street and Fifth Street. In terms of transportation, Jackson Street is an important connection because only it connects through to Delaware Route 12. However, connecting some or all of the other four streets to the proposed development is suggested also as that would connect the development to the rest of the town.
- 4) The rear property line of the Lake Forest East Elementary School abuts the proposed development. The school property in that area is wooded, which might mean that it is wet, or otherwise unusable. However, DelDOT recommends that the developer contact the school district, determine whether a path that would allow children in the development to walk to school can be built and, if so, build it.
- 5) Along the west edge of the development, a proposed street would have houses along only one side and relatively few houses there. For efficiency, It is recommended that the plan be rearranged, either by moving the street east, so that this developer can build houses on both sides, or by eliminating the 30-foot buffer

between the right-of-way and the property line so that the frontage is available to the adjoining property owner. If the 30-foot buffer is needed to avoid creating setbacks on the adjacent property, one solution might be for the developer to keep the buffer as one or more wide shallow parcels that could then be sold to the adjacent property owner.

- 6) DelDOT will require a traffic impact study (TIS) for this development. The scope of work for that study was established in a meeting on July 19, 2005. It is recommended that the Town and/or the County not act on the proposed rezoning or the site plan for the proposed development without the results of that study.
- 7) If the proposed rezoning is approved, the developer's site engineer should contact Mr. Herb, regarding DelDOT's specific requirements for access on Market Street. Mr. Herb may be reached at (302) 266-9600.
- 8) DART First State presently provides transit service to Frederica by means of a stop on Route 303 (Dover-Georgetown) at the intersection of Front Street and Frederica Road, but that service could be shifted a block farther west, from Frederica Road to Market Street to serve this development. It is recommended that the developer be required to provide for pedestrian access to Market Street and to provide a transit stop there. More information concerning Route 303 and the desired access and transit stop is available from Mr. Wayne Henderson, a Service Development Planner for the Delaware Transit Corporation. Mr. Henderson may be reached at (302) 577-3278, extension 3553.

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

General Comment

This proposed development is within a mapped State Resource Area and is adjacent to Milford Neck Wildlife Area. Due to the amount of developing pressure on the Murderkill River, another residential development can cause permanent effects to this already degrading ecosystem. This "over" development can destroy qualities that make it a desirable location.

This is the seventh development proposed along the Murderkill since April 2004:

2004-06-08	2004-11-05	2004-09-05
2004-04-07	2004-11-12	2005-01-07
2005-07-19		

The approval of these developments will add an additional 2,765 homes along the Murderkill River. The presence of these residential units will bring negative cumulative

impacts to the River and adjoining water bodies unless proper buffers and best management practices are employed to protect water quality and habitat.

Green Infrastructure

Portions or all of the lands associated with this proposal are within the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61 that represents a network of ecologically important natural resource lands of special state conservation interest.

Green infrastructure is defined as Delaware's natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value. Preserving Delaware's Green Infrastructure network will support and enhance biodiversity and functional ecosystems, protect native plant and animal species, improve air and water quality, prevent flooding, lessen the disruption to natural landscapes, provide opportunities for profitable farming and forestry enterprises, limit invasive species, and foster ecotourism.

Voluntary stewardship by private landowners is essential to green infrastructure conservation in Delaware, since approximately 80 percent of the State's land base is in private hands. It is in that spirit of stewardship that the Department appeals to the landowner and development team to protect sensitive resources through an appropriate site design.

Soils

According to the Kent County soil survey, wetland associated (hydric) soils - Tidal Marsh, Swamp, and Johnston – were also mapped over the southern one-third of this parcel. All of these soils have very severe limitations for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine tidal wetlands on this parcel.

Lots should be removed in their entirety from the wetland complex. Vegetated buffers comprised of native trees, shrubs or no-mow grasses, of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

Wetland Permitting Information

Although the developer does not anticipate any impacts to wetlands; please note that impacts to these wetlands and drainage ditches are regulated by both the DNREC Wetlands and Subaqueous Lands Section and the Army Corps of Engineers through the Delaware Subaqueous Lands Act and Section 404 of the Federal Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

Riparian and Wetland Buffers

Adequate riparian and wetland buffers are especially important in this case as there are several other developments within the general area and also because this project has 385 units (and associated infrastructure) on just 146 acres. Run-off from this development and others in the area could negatively affect the Murderkill River and associated wetlands. Therefore, the existing forested buffer should be maintained or at the very least a 100-foot buffer should be in place between the edge of the wetlands and any lot lines or infrastructure. This buffer zone should be designated as preserved open space so that future landowner activities (clearing, construction, lawn fertilizer) do not reduce the width and function of the buffer.

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. Forested 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.

Impervious Cover

The Department feels that applicant should reduce imperviousness to the greatest degree practicable. Use of pervious paving materials in lieu of asphalt or concrete and significant efforts to increase forest cover via tree plantings - are examples of practical BMPs that could easily be implemented to reduce surface imperviousness. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.

TMDLs

With the adoption of Total Maximum Daily Loads (TMDLs) as a “nutrient-runoff-mitigation strategy” for reducing nutrients in the Murderkill River subwatershed, reduction of nitrogen and phosphorus loading will be mandatory. 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 water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Nutrient reductions prescribed under TMDLs are assigned to those watersheds or subwatersheds on the basis of recognized water quality impairments. In the Murderkill subwatershed, the primary source of water quality impairment is associated with nutrient runoff from agricultural and/or residential development. In order to mitigate the aforementioned impairments, a TMDL reduction level of 50 and 30 percent will be required for nitrogen and phosphorus, respectively.

In order for the applicant to verify compliance with the TMDL mandate, a full nutrient accounting process known as nutrient budget should be prepared. The developer/consultant should contact Lyle Jones (739-4590) in the Department’s Watershed Assessment Section for further information regarding the acceptable protocol.

The impacts from this project is likely to impact surface and groundwater quality of the headwater tributaries bordering this parcel, making it potentially difficult to achieve TMDL reductions for the Murderkill subwatershed.

Nitrogen and Phosphorus loading reductions to the Murderkill River subwatershed can also realized through the implementation of practicable best management practices (BMPs) that minimize surface imperviousness (pervious pavers) and/or maximize the perviousness of existing pervious surfaces and increase forested acreage via tree native tree plantings. Further nutrient reductions can also be realized through efforts to maximize the upland buffer distance between wetlands/water bodies and parcel lot lines. As mentioned previously, the currently accepted minimum upland buffer width necessary to maintain water and habitat quality is 100 feet.

Water Resource Protection Areas

The DNREC Water Supply Section has determined that the northern edge of the proposed construction area is in an excellent ground-water recharge area (see following map and attached map).

According to the State law that created the Source Water Protection Program, county and municipal governments with more than 2,000 residents will be required to enact ordinances to protect Water Resource Protection Areas. Municipalities with fewer than 2,000 residents are encouraged to enact such ordinances. The following language has been excerpted from the Source Water Protection Guidance Manual for Local Governments, Supplement 1 - Ground-Water Recharge Design Methodology. While the

local ordinances may not yet be in place, the developer may find the language useful in modifying the site plan to protect water resources.

Water Resource Protection Areas (WRPAs) are defined as (1) surface water areas such as floodplains, limestone aquifers, and reservoir watersheds, (2) wellhead areas, or (3) excellent recharge areas. The purpose of an impervious cover threshold is to minimize loss of recharge and protect the quality and quantity of ground and surface water supplies in WRPAs.

New development in WRPAs may exceed the 20% impervious cover threshold, but be no more than 50% impervious, provided the applicant submits an environmental assessment report recommending a climatic water budget and facilities to augment recharge. The environmental assessment must document that post-development recharge will be no less than predevelopment recharge when computed on an annual basis.

Commonly, the applicant offsets the loss of recharge due to impervious cover by constructing recharge basins that convey relatively pure rooftop runoff for infiltration to ground water.

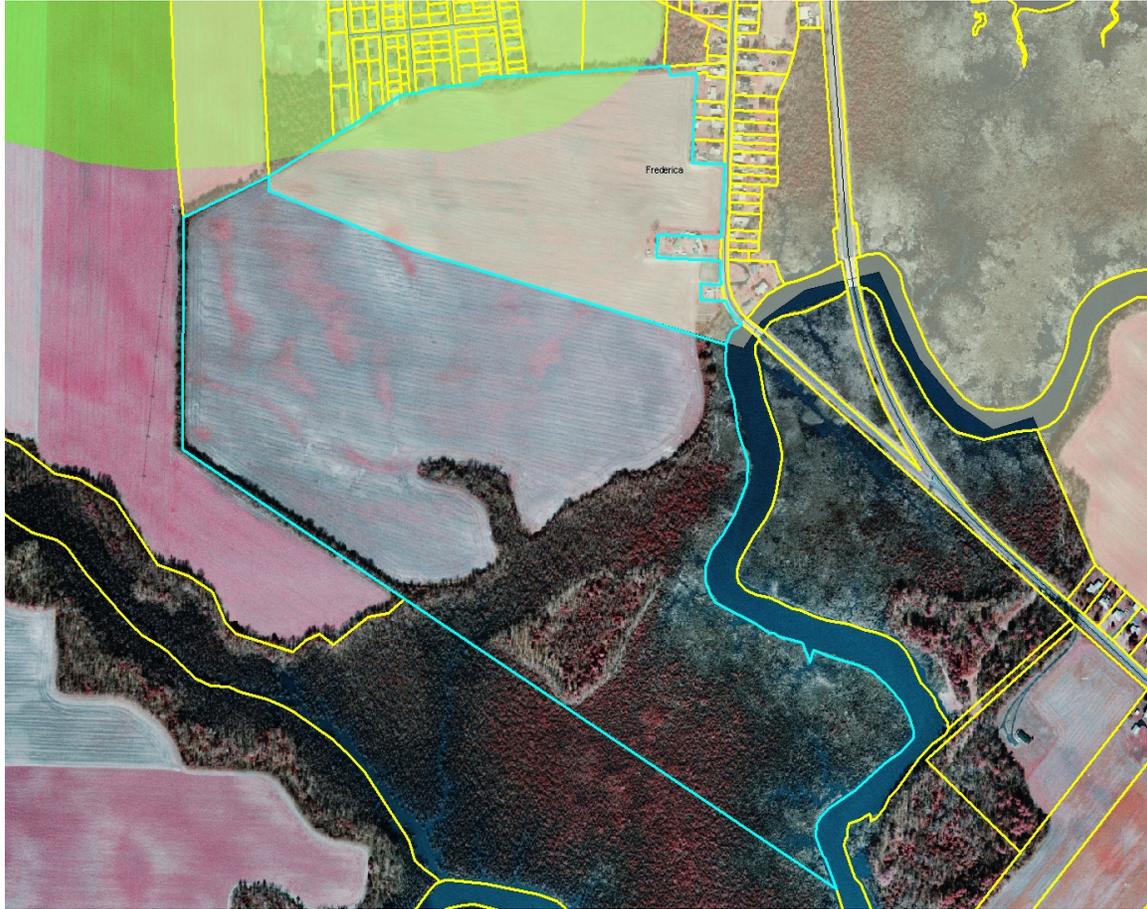
The Department recommends the following (ranked in order of preference):

- 1) Preserve WRPAs as open space and parks by acquisition or conservation easement.
- 2) Limit impervious cover of new development to 20% by right within WRPAs.
- 3) Allow impervious cover of new development to exceed 20% within WRPAs (but no more than 50% impervious) provided the applicant develops recharge facilities that directly infiltrates rooftop runoff.
- 4) Allow impervious cover of new development to exceed 20% within WRPAs (but no more than 50% impervious) provided the applicant develops recharge facilities that infiltrate stormwater runoff from forested and/or grassed surfaces with pretreatment.

For more information, refer to:

Source Water Protection Guidance Manual for the Local Governments of Delaware at <http://www.wr.udel.edu/swaphome/phase2/SWPguidancemanual.html>
and

Ground-Water Recharge Design Methodology at http://www.wr.udel.edu/swaphome/phase2/Publications/swapp_manual_final/swapp_guidance_manual_supp_1_2005_05_02.pdf



Sloan Property Erb Farm showing excellent recharge in green and the tax parcel impacted in light blue.

State Fire Marshal's Office – Contact: John Rossiter 739-4394

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. 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):

- a. **Fire Protection Water Requirements:**
 - Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
 - Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at

20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)

- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq.ft., 3-stories or more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Market Street must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**

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

e. **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

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.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Milton Melendez 698-4500

The Delaware Department of Agriculture and the Delaware Forest Service have no objections to the Sloan Property application. The site is located within a designated controlled development area which is supportive of the *Strategies for State Policies and Spending* encouraging responsible development in areas within a Growth Level 1 Zone; the Delaware Department of Agriculture and the Delaware Forest Service supports growth in these areas.

Improved Landscape Design

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat

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corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

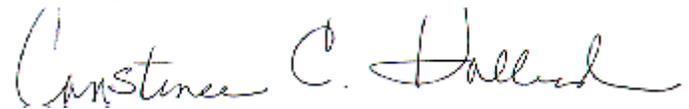
Delaware State Housing Authority – Contact Karen Horton 739-4263

According to the *State Strategies Map*, the proposal is located in an Investment Level 2 area and inside the growth zone. As a general planning practice, DSHA encourages residential development in these areas where residents will have proximity to services, markets, and employment opportunities. Furthermore, the proposal targets units for first time homebuyers, which will help to create affordable housing opportunities for low- and moderate-income families.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

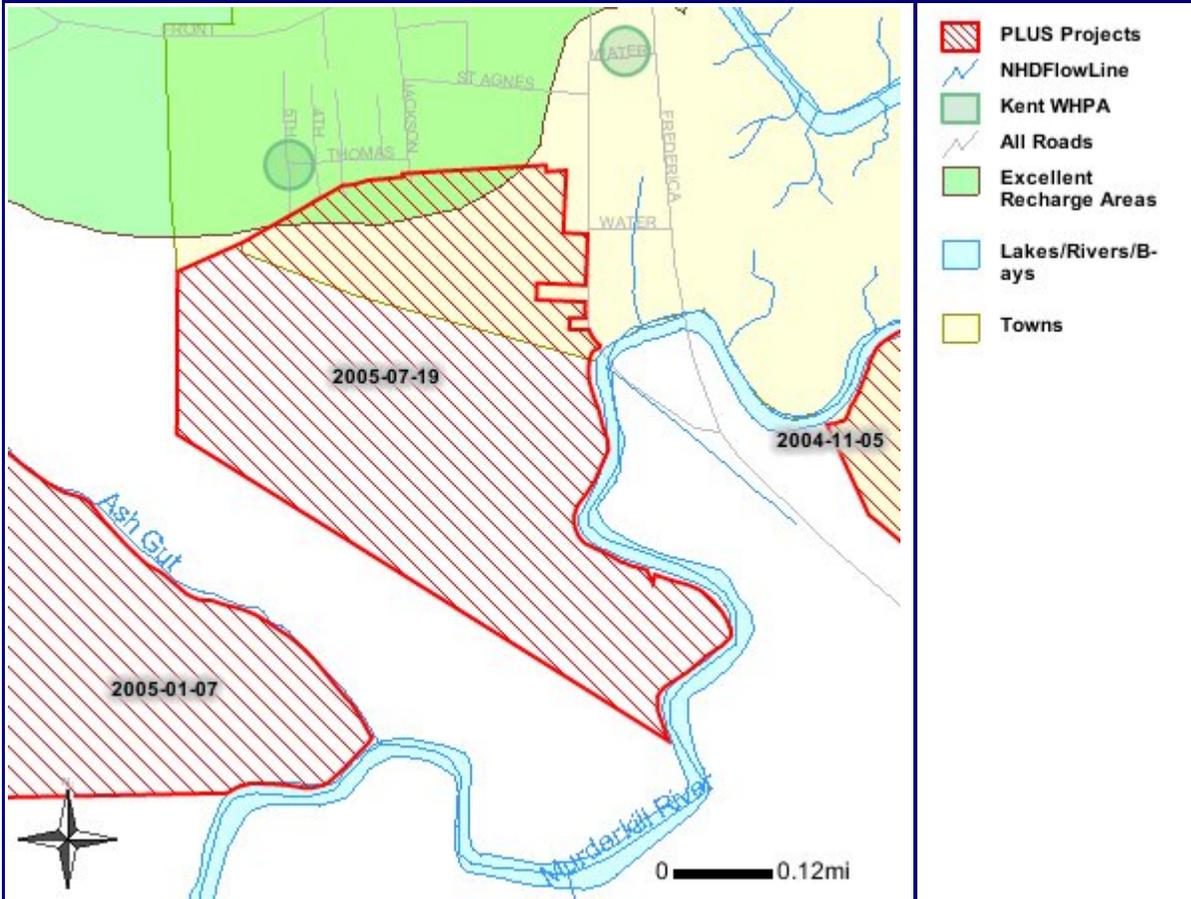
Constance C. Holland, AICP
Director

CC: Kent County
Town of Frederica



Sloan Property - Erb Farm

2005-07-19



This map was produced by the Delaware Department of Natural Resources and Environmental Control.

