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June 2, 2009

Constance C. Holland, AICP
State of Delaware
Planning and Coordination
Haslet Armory – Third Floor
122 William Penn Street
Dover, DE 19901

RE: **PLUS 2008-09-05 Response Letter**
EVANS FARM
Sussex County, Delaware
2009014.00

Dear Ms. Holland:

Below you will find the required PLUS response to your PLUS comment letter dated September 24, 2008 in reference to the Evans Farm. Each State comment is listed with the associated response in bold italics below.

Office of State Planning Coordination – Contact: Bryan Hall 739-3090

The proposed project is located within Investment Levels 2 and 3 as defined by the State Strategies for Policy and Spending and is within the Environmental Sensitive Developing Area as defined by Sussex County’s 2003 Certified Comprehensive Land Use Plan. This plan calls for the construction of 200 condo units on 50 acres of land near the Town of Millville. Although this project is within a growth area as defined by both the State and County plans, the proposed design is not without challenges. The applicant should consider revising the plan to improve access to community amenities, traffic concerns within the community and the impact to the environmental features on or near the site.

The State has no objections to this project, provided it meets the rules and regulations of the County, however, the State would ask the applicant to review the enclosed “Better Models for Development in Delaware” design and pattern book to address concerns from this office and other PLUS Reviewers.

Addressed: The project will comply with Sussex County and State regulations. Design alternatives and recommendations will be considered during the preliminary design phase.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

No comments received.

No response required.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) Previously, the subject land was part of a proposal for a development of about 600 condominiums on Railway Road. A traffic impact study (TIS) was prepared for that proposal in 2005 and our consultant, McCormick Taylor, completed a review

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of that TIS in June 2006. In 2007, DelDOT learned that the development had been reduced to the present proposal and in March 2008 DelDOT sent Sussex County a revised review letter, reflecting the change in development size. A copy of the March 2008 letter is enclosed.

Addressed: Our design incorporates the offsite road improvements outlined in the March 2008 TIS letter.

- 2) DelDOT appreciates and supports the proposed future linkage road to other lands of the developer, but we recommend that the road south and west of it be realigned so that extending the road does not create an intersection on a curve.

Addressed: It is doubtful that a road would be constructed through the adjacent parcel due to environmental features, thereby negating the need for the future linkage road. In the event the future linkage road is required, Linder & Company will consider relocating the road so that an intersection on a curve is not created.

- 3) The placement of the garages across the internal street from the residences necessarily be significant pedestrian traffic crossing the street all along it. This arrangement, combined with the long, straight sections of street that are proposed could create a safety problem. DelDOT recommends that traffic calming, and perhaps street lights, be provided.

Addressed: Linder & Company will consider traffic calming devices during the preliminary design phase. Street lights will be provided.

- 4) Again for safety, DelDOT recommends that the site be redesigned to avoid placing parking spaces on curves.

Addressed: See our response to DelDOT comment #2.

- 5) The applicant's site engineer should contact the DelDOT Subdivision Manager for eastern Sussex County, Mr. John Fiori, for detailed comments on the proposed access on Old Mill Road. Mr. Fiori may be reached at (302) 760-2260.

Addressed: A meeting with Mr. Fiori will be scheduled to discuss the project in more detail.

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

Soils

Based on the NRCS soil survey update, Rosedale (RoA), Rumford (RuA), Fort Mott (FmA), Hambrook (HmA), Pepperbox-Rosedale complex (PsA), and Klej (KsA) were mapped in the immediate vicinity of the proposed construction (See figure 1). Rosedale, Rumford, Fort Mott and Hambrook are well-drained upland soils that, generally, have few limitations for development. Pepperbox-Rosedale complex is a moderately well to well-drained upland soil that has moderate to few limitations for development. Klej is a

somewhat poorly-drained transitional soil that is likely to have both wetland and upland soil components.

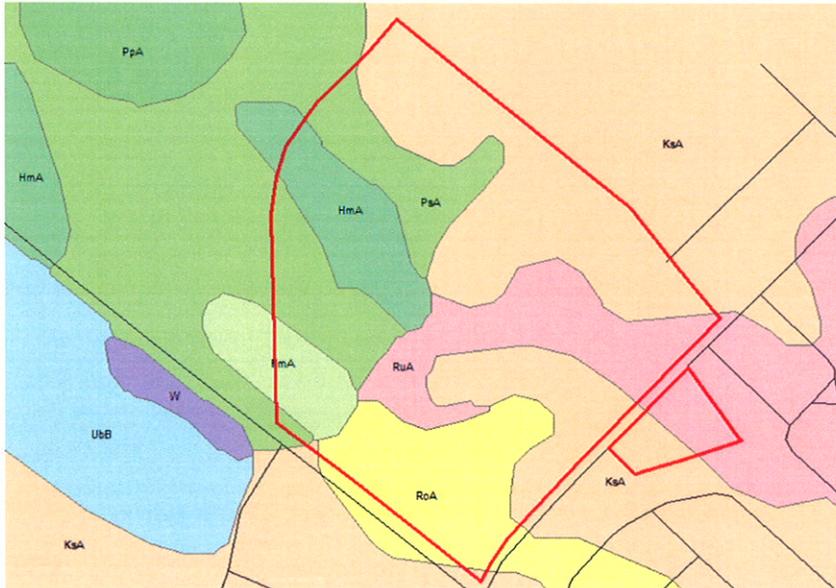


Figure 1: NRCS soil survey update mapping in the immediate vicinity of the Evans Farm

No response on the soils information provided is required.

Wetlands

Based on the Statewide Wetland Mapping Project (SWMP) maps, palustrine forested wetlands (PF01/4A) were mapped in the far northern portion of the area proposed for construction (See figure 2).

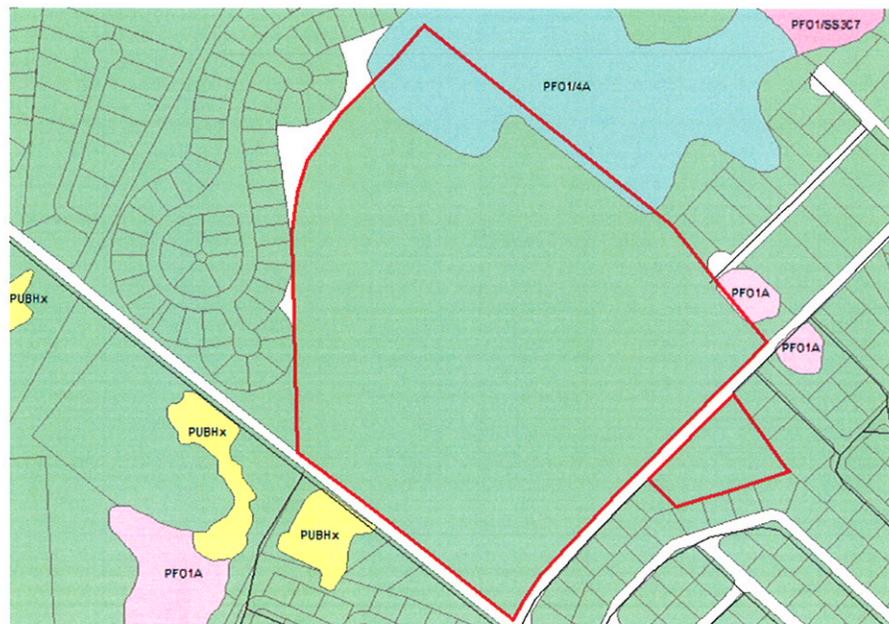


Figure 2: SWMP mapping in the immediate vicinity of the Evan Farm

Although there are no blue line features on the property, there are two drainages visible on the aerial photography that should be checked to see if they fall under the jurisdiction of the Subaqueous Lands Act. These two drainages flow to Collins Creek. The Wetlands and Subaqueous Lands office should be contacted to determine if the drainages are jurisdictional. Additionally, the SWMP map shows wetlands regulated by the Corps of Engineers on the north-northwest part of the property. The developer should contact the Corps of Engineers to get a jurisdictional determination for the property.

The applicant is responsible for determining whether any State-regulated wetlands (regulated pursuant to 7 Del.C. Chapter 66 and the Wetlands Regulations) are present on the property. This determination can only be made by contacting the Division of Water Resources' Wetlands and Subaqueous Lands Section at 302/739-9943 and consulting the State's official wetland regulatory maps, which depict the extent of State jurisdiction. The area regulated by State law may be very different from the area under federal authority. No activity may take place in State-regulated wetlands without a permit from DNREC's Wetlands Section.

In addition, most perennial streams and ditches and many intermittent streams and ditches are regulated pursuant to the Subaqueous Lands Act (7 Del.C. Chapter 72) and the Regulations Governing the Use of Subaqueous Lands. Ponds which are connected to other waters are also regulated, while isolated ponds are not. Any work in regulated streams, ditches or ponds requires a permit from the Wetlands and Subaqueous Lands Section. An on-site jurisdictional determination is recommended in order to determine whether any regulated watercourses exist on the property. Please contact the Wetlands and Subaqueous Lands Section at 302/739-9943 to schedule an on-site visit. Such appointments can usually be scheduled within 2 to 3 weeks.

The applicant should also be reminded that they must avoid construction/filling activities in those areas containing wetlands or wetland associated hydric soils as they are subject to regulatory jurisdiction under Federal 404 provisions of the Clean Water Act. A site-specific field wetlands delineation using the methodology described in the 1987 United States Army Corps of Engineers (USACE, or "the Corps") manual is the only acceptable basis for making a jurisdictional wetland determination for nontidal wetlands in Delaware. The applicant is forewarned that the Corps views the use of the National Wetlands Inventory (NWI) mapping or the Statewide Wetlands Mapping Project (SWMP) mapping as an unacceptable substitute for making such delineations. To ensure compliance with said Corps regulatory requirements, it is strongly recommended that a field wetlands delineation using the above-referenced methodology be performed on this parcel before commencing any construction activities. It is further recommended that the Corps be given the opportunity to officially approve the completed delineation. In circumstances where the applicant or applicant's consultant delineates what they believe are nonjurisdictional isolated (SWANCC) wetlands, the Corps must be contacted to evaluate and assess the jurisdictional validity of such a delineation. The final jurisdictional authority for making isolated wetlands determinations rests with the Corps; they can be reached by phone at 736-9763.

Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section

recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.

Addressed: Linder & Company has a jurisdictional determination from the US Army Corps of Engineers, dated June 4, 2007. The letter confirms the findings of White Oak Environmental that a small pocket of wetlands exist in the northeastern portion of the site. The wetlands are identified as Waters of the US. No other wetlands exist on the property. White Oak Environmental will coordinate with DNREC Wetlands and Subaqueous Lands Section. The State's recommendation of a 100-ft buffer from wetlands will be considered during the preliminary design phase.

Impervious Cover

The applicant estimates this project's post-construction surface imperviousness to reach only 17 percent. However, given the scope and density of this project this estimate appears to be a significant underestimate. When calculating surface imperviousness, it is important to include all forms of constructed surface imperviousness, such as all paved surfaces including rooftops, sidewalks, driveways, and roads; open-water stormwater management structures and/or ponds; and community wastewater systems. This will ensure a realistic assessment of this project's likely post-construction environmental impacts. Surface imperviousness should be recalculated to include all of the above-mentioned forms of surface imperviousness in the finalized calculation for surface imperviousness. Failure to do so will significantly understate this project's true environmental impacts. Therefore, the calculation for surface imperviousness should be corrected and/or recalculated to reflect all the above-mentioned concerns.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of this project's most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

Addressed: Linder & Company will consider recommendations to reduce impervious surfaces during the preliminary design phase.

ERES Waters

This project is located adjacent to receiving waters of the Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 5.6 of Delaware's "Surface Water Quality Standards" (as amended July 11, 2004), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of pollutants through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 5.6.3.5 of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree achievable and, where practicable, implementation of a standard requiring no discharge of pollutants.

Addressed: Evans Farm will comply with the Inland Bays Pollution Control Strategies.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. 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. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. This project is located in the low nutrient reduction area requiring a 40 percent reduction in nitrogen and phosphorus. Additionally, 40 percent reduction in bacteria is also required.

Evans Farm will comply with the Inland Bays Pollution Control Strategies.

Compliance with TMDLs through the PCS

As stated above, TMDLs for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. The TMDL calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. Additionally, a 40 percent reduction in bacteria will also be required from baseline conditions. A Pollution Control Strategy (PCS) will provide the regulatory framework for achieving them. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses (and wetlands), increasing passive, wooded open space, use of pervious paving materials to reduce surface imperviousness (i.e., pervious pavers), and the use of green-technology stormwater management technologies.

The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Evans Farm will comply with the Inland Bays Pollution Control Strategies.

Water Resource Protection Areas

The Water Supply Section determined that the lower portion of northeastern border of the proposed development falls within a wellhead protection area for Tidewater Bethany Bay District, Public Water Supply System DE0000221. The review did not find any excellent groundwater recharge areas, (see following map and attached map).

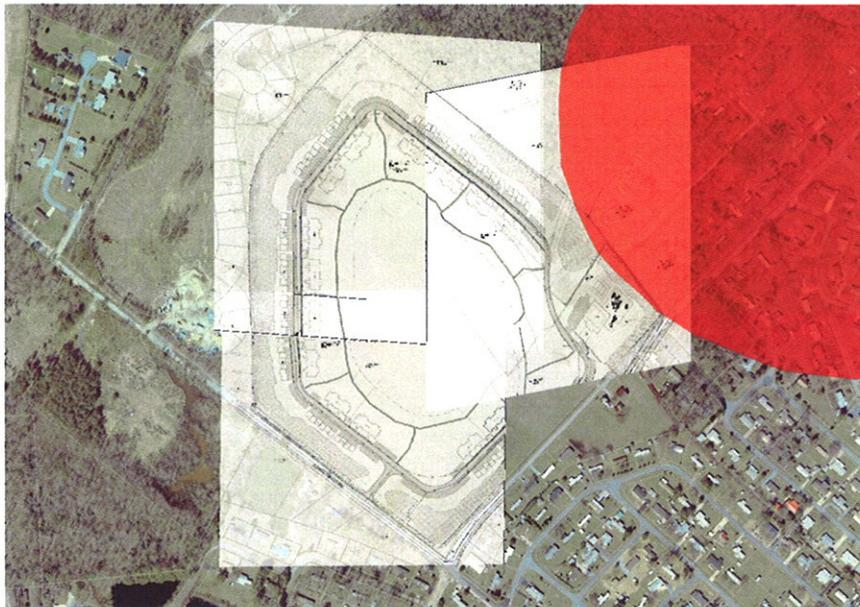
Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where land use activities or impervious cover may adversely affect the quantity and quality of ground water moving toward such wells.

The site plan shows that the portion of the development within the wellhead protection area is designated as a “Planted Perimeter Buffer”. GPB applauds the developer’s intentions to create this type of buffer.

GPB recommends:

- The developer plants species of plants that avoid intensive maintenance including but not limited to the application of pesticides, herbicides, and nutrients.

The site plan is overlain on the parcel under review. Wellhead Protection Areas are shown in red.



Addressed: Linder & Company will consider this recommendation during the preliminary design phase.

Water Supply

The project information sheets state water will be provided to the project by Tidewater Utilities via a central water system. Our records indicate that the project is located within the public water service area granted to Public Water Supply (a.k.a. Tidewater Utilities) under Certificate of Public Convenience and Necessity 83-W-6.

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.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Addressed: It is understood that Evans Farm is located within Tidewater Utilities service area. A dewatering well construction and a water allocation permit will be obtained if required. The timeframe for processing applications and other requirements to obtain a well permit are understood.

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 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.

Addressed: Erosion and sediment control / stormwater management plans and calculations will be prepared for submission to Sussex Conservation District.

- Because of the parcel's location in an impaired watershed and the amount of impervious surface, green technology BMPs and low impact development practices should be considered a priority to reduce stormwater flow and to meet water quality goals. The Sediment and Stormwater Management Program ensures that sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, we do not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

Addressed: Green technology BMPs and low impact development practices will be considered during the preliminary design phase.

Drainage

- The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.
- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage

easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

Addressed: There is no need to record easements on deeds since fee simple lots are not proposed. All open areas will be in a type of homeowners association. Linder & Company will comply with Delaware stormwater management regulations.

Floodplains

A portion of this property is located in the 0.2% annual chance floodplain (500 year). This is considered a low to moderate risk flood zone. Mitigation should be done to decrease the potential of flood damage to these proposed homes and their impact to adjoining properties.

Addressed: Linder & Company will comply with State and local requirements for residential building construction within the 500 year floodplain.

Rare Species/Forested Wetlands

DNREC has not surveyed this parcel; therefore, it is unknown if there are State-rare or federally listed plants, animals or natural communities at this project site. According to the GIS database and state wetland maps, there are forested wetlands on this parcel.

Forested wetlands can support an array of plant and animal species. According to the application, the forested wetlands are going to be left intact.

Recommendation:

1. Lot lines and infrastructure may be within 100 feet of wetlands. It is recommended that at least a 100-foot buffer be left intact between the wetlands and lot lines/infrastructure. Upland buffers around wetlands protect the function and integrity of the wetlands and provide critical habitat for wetland dependent species. Scientific research indicates that buffers need to be at least 100 feet in width to be effective at protecting water quality.

Addressed: Linder & Company will consider this recommendation during the preliminary design phase.

Stormwater Pond/Nuisance Geese

This plan includes a very large stormwater management pond that 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 around ponds provide an attractive habitat for these species.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified

wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the size/number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Recommendations:

1) Consider reducing the size of the pond.

Addressed: Linder & Company will consider this recommendation during the preliminary design phase.

2) It was indicated on the application that ‘native seed mixes, including taller grasses will be planted along the pond edge to reduce the desirability of Canada geese to use the pond as habitat’. This type of landscape modification is the most effective and environmentally sound method of deterrence. To ensure that the plantings are effective, they should be planted to a width of 15-30 feet around the pond. This buffer will restrict their ability to move between water and land and will block the view of the surrounding area. Geese typically avoid areas where the approach of predators can’t be seen and where it is difficult to reach foraging areas. The plantings should be conducted as soon as possible as it is easier to deter geese than to try and remove them once they become plentiful.

Fountains are not effective at deterring geese.

At this time, DNREC does not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the homeowners association or land manager.

Addressed: Linder & Company will consider planting a 15-30 ft wide buffer around the pond using native seed mixes that includes tall grasses. At this time, fountains and/or monofilament grids are not proposed for the pond.

Recreation

The site plan indicates a mulched walking trail that runs along the proposed pond edge with connector trails extending to the multifamily condominiums. A realignment of the trail and trail connectors is recommended to reduce the number of social trails from the condominiums to the pond. A simple redesign of the trail layout (bringing the trail closer to the back of the condominiums) will provide both safe and easy access to the proposed trail system.

Additionally, mulched trails are not accessible to all residents and are not sustainable. A packed earth surface of the trail is recommended. For more information on trail design, alignment or trail sustainability, please contact David Bartoo @ 302-739-9235.

Addressed: Linder & Company will consider the recommendations to realign the trail and trail connectors, and use a more sustainable and accessible material for the trail.

Site Investigation and Restoration

Two (2) Site Investigation & Restoration Branch (SIRB) sites were found within a half mile radius of the proposed site: Millville Dump (DE-1363) located 0.20 miles south-west and Quillen Pit (DE-1170) located 0.16 miles west of the proposed project. Millville Dump received a No Further Action designation in 2007, and Quillen Pit received a No Further Action designation in 2000.

Based on the previous agricultural use of the proposed project site, which may have involved the use of pesticides and herbicides, and the location of the SIRB site, SIRB recommends that a Phase I Environmental Site Assessment be performed prior to development. In addition, should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

Addressed: Linder & Company will consider having a Phase I Environmental Assessment completed for the proposed project site.

Air Quality

Housing developments may unnecessarily emit, or cause to be emitted, significant amounts of air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:

- Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
- The emission of greenhouse gases which are associated with climate change, and
- The emission of air toxics.

Air emissions generated from housing developments include emissions from:

- Area sources like painting, lawn and garden equipment and the use of consumer products like roof coatings and roof primers.
- The generation of electricity needed to support the homes in your development, and
- Car and truck activity associated with the homes in your new development.

These three air emissions components (i.e., area, electric power generation, and mobile sources) are quantified below, based on a per household/residential unit emission factor that was developed using 2002 Delaware data. These emissions in the table represent the actual impact the Evans Farm development may have.

Emissions Attributable to Evans Farm Subdivision (Tons per Year)

	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Direct Residential	6.2	0.7	0.6	0.7	25.1
Electrical Power Generation	ND*	2.5	8.5	ND*	1,258.8
Mobile	15.3	12.7	9.4	0.8	1,283.9
Total	21.5	15.9	18.5	1.5	2,567.8

(*) Indicates data is not available.

Note that emissions associated with the actual construction of the subdivision, 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.

Recommendations:

The applicant shall comply with all applicable Delaware air quality regulations. These regulations include:

Regulation 6 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Using dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Using covers on trucks that transport material to and from site to prevent visible emissions.
Regulation 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibiting open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibiting the burning of land clearing debris. • Prohibiting the burning of trash or building materials/debris.
Regulation 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> • Restricting idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:

- **Constructing only energy efficient homes.** Energy Star qualified homes are up to 30% more energy efficient than typical homes. These 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 increased energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.
- **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.

- **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions.
- **Funding a lawnmower exchange program.** New lawn and garden equipment emits significantly less than equipment as little as 7 years old, and may significantly reduce emissions from this new development. The builder could fund such a program for the new occupants.

Additionally, the following measures will reduce emissions associated with the actual construction phase of the development:

- **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.
- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- **Planting trees at residential units and in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and by 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 on air quality. The applicant should submit a plan to the DNREC Air Quality Management Section which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Evans Farm development. Air Quality Management Section points of contact are Phil Wheeler and Deanna Morozowich, and they may be reached at (302) 739-9402.

Addressed: Linder & Company will consider the above recommendations to offset air quality impacts.

State Fire Marshal's Office – Contact: Duane Fox 856-5298

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.
 - Where a water distribution system is proposed for multi-family sites, 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, 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 the main thoroughfares 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.statefiremarshal.delaware.gov technical services link, plan review, applications or brochures.

Addressed: Becker Morgan Group, Inc. will schedule a preliminary meeting w/ a fire protection specialist prior to making a formal submission. The site and building designs will comply with the Delaware State Fire Prevention Regulation.

Department of Agriculture - Contact: Scott Blaier 739-4811

The Delaware Department of Agriculture has no objections to the proposed development. The *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 2 and 3 areas.

Right Tree for the Right Place

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.

Do Not Plant List

Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear
Leyland Cypress
Red Oak (except for Willow Oak)
Ash Trees

Please contact the Delaware Forest Service for more information at (302) 698-4500.

Addressed: Linder & Company will not use any of the species listed above for Evans Farm.

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 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.

Addressed: Linder & Company will consider this recommendation during the preliminary design phase.

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.

Addressed: Any expansion of natural gas or installation of a closed propane system will meet the Pipeline Safety guidelines.

Delaware Division of Public Health- Health Promotion Bureau- contact Michelle Eichinger (302) 744-1011

Ensuring that new residential and commercial development incorporates pedestrian- and bicycle-friendly features allows people to travel by foot or by bicycle and promotes physical activity as part of daily routines. Regular physical activity offers a number of health benefits, including maintenance of weight and prevention of heart disease, type 2 diabetes and other chronic diseases.¹ Research shows that incorporating physical activity into daily routines has the potential to be a more effective and sustainable public health strategy than structured exercise programs.² This is particularly important considering about 65% of adult Delawareans are either overweight or obese.³ This current obesity crisis is also affecting children. Approximately 37% of Delaware's children are overweight or obese⁴, which places them at risk for a range of health consequences that include abnormal cholesterol, high blood pressure, type 2 diabetes, asthma, depression and anxiety.¹

In Delaware, as in other states across the nation, certain patterns of land use can act as a barrier to physical activity and healthy eating for children and adults alike. Examples of such barriers include neighborhoods constructed without sidewalks or parks and shopping centers with full-service grocery stores situated too far from residential areas to allow for walking or biking between them.

This proposed development is in a Level 2 area. Developing in such an area is consistent with the *Strategies for State Policies and Spending*. DPH is committed to the *Strategies* and therefore, does support development in the proposed area.

DPH supports new development in and around existing towns and municipalities where compact and mixed land use patterns facilitate physical activity. As a way to promote physical activity and access to healthy foods, we recommend that the following amenities be included in the Evans Farm:

Amenities to encourage active transportation

- Designate bike paths to supplement the sidewalks and walking trails that are already proposed in the plan so that residents can travel by foot or by bicycle. In addition, install bike racks in convenient locations throughout the development.
- Avoid mulch for walking trails, since they are not conducive for individuals with wheelchairs or those with physical disabilities that affect walking.

- Ensure there are sidewalks, crosswalks and walking and/or bike paths that facilitate connectivity to the larger multimodal trail proposed along Railway Road (CR 350) as well as the clubhouse.
- If feasible, consider including a walking path around the playground area so that adults and children can participate in recreational activities in the same space.

Increase opportunities for healthy eating

- Utilize some of the open space around the proposed clubhouse area to host a seasonal farm stand or mini farmer's market to promote the sale of fruits and vegetables.

¹ Nemours Health and Prevention Services (2005). *Delaware Children's Health Chartbook*, Newark, DE.

² Active Living by Design. *Transportation Fact Sheet*. Retrieved May 17, 2007, from http://www.activelivingbydesign.org/fileadmin/template/documents/factsheets/Transportation_Fact_sheet.pdf.

³ Delaware Health and Social Services (2008), *Division of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), 1990-2007*.

⁴ Nemours Health and Prevention Services (2007). *2006 Delaware Survey of Children's Health Descriptive Statistics Summary, Volume 1*.

Addressed: Linder & Company will consider the above recommendation to encourage active transportation and opportunities for healthy eating.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

This proposal is for a site plan review of 200 residential units on 50 acres located on the northwesterly corner of the intersection of Railway Road and Old Mill Road near Bethany. According to the *State Strategies Map*, the proposal is located in an Investment Level 2, 3, and an Environmentally Sensitive Developing area. DSHA supports this proposal because residents will have proximity to existing services, markets, and employment opportunities. Furthermore, the proposal targets units for first time homebuyers. For informational purposes, the most recent real estate data collected by DSHA shows the median home price in Sussex County to be \$260,000. However, households earning respectively 100% of Sussex County's median income only qualify for mortgages of \$164,791, thus creating an affordability gap of \$95,209. Households that cannot afford to live in the coastal resort area have been displaced to western Sussex County. The provision of units within reach of households earning at least 100% of Sussex County's median income would help increase their housing opportunities.

Addressed: No response to Delaware State Housing Authority comments is necessary.

Department of Education – Contact: John Marinucci 735-4055

No comments received.

No response required.

Sussex County – Contact: Richard Kautz 855-7878

The preliminary subdivision plat should provide details of how/when the required forested buffer will be planted.

Addressed: The preliminary subdivision plat will provide details of how/when to required forested buffer will be planted.

Page 3-17 of the Comprehensive Plan notes that developments in the Environmentally Sensitive Developing Area should "provide information that analyzes the development's potential environmental impacts, including effects on stormwater runoff, nitrogen and phosphorous loading, wetlands, woodlands, wastewater treatment, water systems, and other matters that affect the ecological sensitivity of the inland bays." Use of Low Impact Design principals and Green Technology could help address the environmental issues.

Addressed: Sussex County code requires preparation of an ENVIRONMENTAL ASSESSMENT & PUBLIC FACILITY EVALUATION REPORT & SKETCH PLAN as part of the rezoning / conditional application. This report will discuss environmental issues. Also, the project will comply with the Inland Bays Pollution Control Strategies for nitrogen and phosphorous reductions.

All sidewalks and trails within the development and any constructed at the request of DelDOT should tie together internally and with adjacent development or roads so that persons using wheelchairs or pushing strollers can navigate without hindrance.

Addressed: The mulch internal walking trail will connect to internal sidewalks. Internal sidewalks will connect to the multi-modal path along Railway Road and Old Mill Road.

The Sussex County Engineer Comments:

The project is within the boundary of the Millville Expansion of the Bethany Beach Sanitary Sewer District and connection to the sewer system is mandatory. The proposed project is in a recent expansion area and sanitary sewer service has been extended to the parcel. Sussex County has undertaken construction to provide sewer service to the area and the parcel's connection point is to the sewer main in Old Mill Road. The proposed project is within planning study assumptions for sewer service and there will be adequate capacity for the project as proposed.

Sussex County requires design and construction of the collection and transmission system to meet Sussex County Engineering Department's requirements and procedures. The Sussex County Engineer must approve the connection point. A sewer concept plan must be submitted for review and approval prior to any sewer construction. Attached is a checklist for preparing sewer concept plans. All costs associated with extending sewer service will be the sole responsibility of the developer. One-time system connection charges will apply. Please contact Ms. Denise Burns at 302 854-5017 for additional information on charges.

Sussex County recently adopted new road standards. The standard becomes affective January 1, 2009 and will apply to this project.

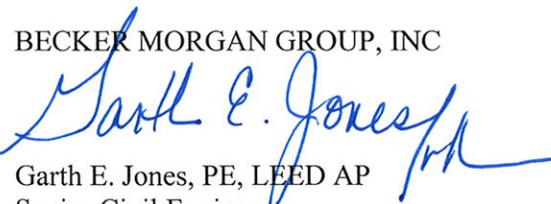


For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

Addressed: A sewer concept plan compliant with the county's checklist will be submitted to Sussex County Engineering Department for their review.

If you have any questions or require additional information, please contact me at (302) 734.7950.

Sincerely,

BECKER MORGAN GROUP, INC

Garth E. Jones, PE, LEED AP
Senior Civil Engineer

GEJ/rlh

CC: Andrea Finnerosky

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