



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
STATE PLANNING COORDINATION

March 23, 2006

Mr. Gary Cuppels
ECI, Inc.
P.O. Box 820
Rehoboth Beach, DE 19971

RE: PLUS review – PLUS 2006-02-07; Hastings Hollow

Dear Mr. Cuppels:

Thank you for meeting with State agency planners on March 1, 2006 to discuss the proposed plans for the Hastings Hollow project to be located on the east side of Route 30, between SCR 241 and 251.

According to the information received, you are seeking site plan approval for 276 residential units on 204 acres located in level 4.

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

The following are a complete list of comments received by State agencies:

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

This project represents a major land development that will result in 276 residential units in an Investment Level 4 area according to the *2004 Strategies for State Policies and*

Spending. This project is also located outside of a designated growth area in relevant municipal and county certified comprehensive plans. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 690 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

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

The DHCA office is not in favor of this development in Level IV. It will disrupt the historic agricultural landscape, changing the historic setting of several late-19th- and early-20th-century properties in the area. It will lead to the loss of two historic-period archaeological sites. The areas of highest potential for prehistoric-period archaeological sites have already been destroyed, but there may be some remnants remaining in the nearby field area.

One c. 1930 dwelling complex (S-3549) did exist within the parcel, but appears to have been demolished. There are probably archaeological remains associated with this property, as well as with an earlier house that once existed in the remaining wooded area, as shown on the USGS 15' Millsboro 1917 and Cedar Creek 1918 maps. Beers Atlas of 1868 shows the F. Willy House in the northwestern corner of the area, but this may be represented by the surviving c. 1880 agricultural complex (S-3448) which is on an out-parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Willy House, usually a good distance behind or to the side of the house. The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out. Prior to construction, the developer may want to hire an archaeological consultant to determine whether such a cemetery exists on the parcel or not. Please refer to the following sections of the Delaware State Code: (1) Title 11 Sub-Chapter 1340, entitled Desecration of Burial Places; and (2) Title 7 Chapter 54, known as the Delaware Unmarked Human Remains Act. We will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

If this development proceeds, they request that there is sufficient landscaping to block the view of this development from the neighboring historic properties. In addition, we would like the opportunity to see if any archaeological sites in fact survive on the property and to learn something about their location, size, and nature before any ground-disturbing activities take place.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Gravel Hill Properties, LLC seeks to develop 276 single-family detached houses on an approximately 204-acre parcel (Tax Parcel 2-35-25.00-11.00). The subject land is located southwest of Milton, and more specifically on the east side of Delaware Route 30 more or less opposite Neptune Road (Sussex Road 251). The land is zoned AR-1 in Sussex County and it would be developed under the County's cluster development option.

This development is proposed for an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies for State Policies and Spending* has deemed the type of development being proposed inappropriate for this area. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments.

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

Investment Level 4 Policy Statement

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and county certified comprehensive plans. According to the *Strategies* this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are the project's potential impacts on the Ingram Branch Natural Area. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding

negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

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 Sussex County soil survey Klej-Galloway complex, Klej, Mullica, and Mullica-Berryland complex were mapped on subject parcel. Klej-Galloway complex is a moderately well-drained to somewhat poorly drained soil that contains both upland and transitional wetland/upland soil components; limitations for development are considered moderate to somewhat severe. Klej is a somewhat poorly-drained transitional soil that is likely to contain both upland and wetland soil (hydric) components, Mullica and Mullica-Berryland complex are very poorly-drained wetland associated (hydric) soil that have the highest severity level for development.

It should also be noted that a majority of the soils on this parcel are likely to have a seasonal high water table within one-foot of the soil surface. Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to

future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or “nor’easters.” This is in addition to increased flooding likely from surface water runoff emanating from future created forms of structural imperviousness (roof tops, roads, and sidewalks).

Impervious Cover

Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. Based on analyses of 2002 aerial photography by the University of Delaware, the Broadkill River watershed, at that time, had about 7.9 percent impervious cover. Although this data is almost 4 years old and likely an underestimate, it illustrates the importance of a proactive strategy to mitigate for predictable and cumulative environmental impacts. Since the amount of imperviousness generated by this project (reported as 15%, but likely to be much higher) will significantly exceed the desirable watershed threshold of 10 percent, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the most likely adverse impacts. Using pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with a significant effort to protect more of the existing forest cover are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

Based on a review of the submitted PLUS application, the applicant projects that only about 9% of this parcel will be rendered impervious following this parcel’s development; however, given the scope and density of this project, this figure is obviously a significant underestimate. The applicant should be made aware that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks and roads) should be included in the impervious surface calculation; otherwise, an inaccurate assessment of this project’s actual environmental impacts will be made. It is strongly advised, therefore, that the applicant recalculate this project’s surface imperviousness using the aforementioned considerations.

TMDLs

A Total Maximum Daily Load (TMDL) is the maximum level of pollution for which a water quality limited water body can assimilate without compromising use and recreational goals such as swimming, fishing, drinking water, and shell fish harvesting. Compliance with TMDL nutrient loading reduction requirements will ultimately be assessed via nutrient budget protocol, a computer-based model that quantifies post-development nutrient loading under a variety of land use scenarios in combination with a variety (or absence) of BMP types and intensities. This post-development loading rate is

then compared with the pre-development loading rate as a means to assess whether the project meets the acceptable TMDL reduction levels. Since impervious cover is an important variable for assessing the environmental impacts from nutrient runoff, the applicant, as mentioned previously, should attempt to recalculate it more comprehensively. All forms of created surface imperviousness (rooftops, sidewalks, and roads) should be considered when calculating surface imperviousness, otherwise; the nutrient budget protocol will not reflect the project's true environmental impacts. Although TMDLs have not yet been finalized for the Broadkill River watershed to date, the applicant should be made aware that they will be available in the near future (before December 2006), and may be applicable to this project given the large backlog of developments pending County review. It is strongly advised, therefore, that the applicant be proactive and employ best management practices (BMPs) and Best Available Technologies (BATs) as methodological mitigative strategies to reduce the likely degradative impacts associated with this development. Examples of BMPs or BATs that should be used to significantly reduce nutrient loading from this project, include practices that prevent or mitigate or minimize created surface imperviousness, maintenance of recommended wetland buffer widths, use of innovative "green-technology" stormwater methodologies rather than conventional open-water stormwater management structures, and utilization of performance-based wastewater disposal systems or, better yet, connection to public sewer (if available). We suggest that the applicant periodically contact our office regarding the status of the nutrient budget protocol and obtain it as soon as possible. When it becomes available, we suggest that the applicant then verify their project's compliance with the specified TMDL loading rates by running the model themselves. The contact person for obtaining the protocol is Lyle Jones at 739-9939.

Water Supply

The project information sheets state that water will be provided to the project by a Publicly Licensed Utility. DNREC and PSC records indicate that the project site is not located in an area where public water service is available. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well be needed, it must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

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.

Potential Contamination Sources do exist in the area, and any well permit applications will undergo a detailed review that may increase turnaround time and may require site specific conditions/recommendations. In this case, there is a Groundwater Management Zone (GMZ) Zone A for Draper Canning Corp.

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

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. The plan review and approval as well as construction inspection will be coordinated through Sussex Conservation District. Contact Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, and limit the reliance on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique. Green Technology BMPs must be given first consideration for stormwater quality management before traditional ponds. Because the site contains a borrow pit it is likely that the site will have good soils for recharge, making the use of Green Technology BMPs a good fit for the site.

If the existing borrow pit “lake” will accept any stormwater it will be considered a stormwater pond and must comply with all of the safety requirements set forth in the Pond Code 378. If the stormwater from the site can be managed without using the borrow pit, that water body will not be considered part of the stormwater management system for the site and will not be required to meet the Pond Code; however, the developer and designer are encouraged to incorporate safety features into the design as outlined in the Department’s June 28, 2000 Policy Memo “Health and Safety Issues Related to SWM Ponds”.

Each stormwater management facility should have an adequate outlet for release of stormwater.

It is strongly recommended that you contact the reviewing agency, Sussex Conservation District, to schedule a preliminary 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.

Floodplains

Portions of the property are within the 100-year floodplain. No base flood elevations have been determined by FEMA. National Flood Insurance Program requires that either development activities be kept outside of the floodplain or submit a detailed flood study to FEMA determining base flood elevations.

Forest Preservation

The forest in the southern area of the property (extends down from the main portion of the parcel) serves as a buffer for wetlands which contain the rare plants listed above. In addition, the forest here serves as a wildlife corridor which allows travel between points north and south. Some wildlife species also depend on forested riparian habitat for part or all of their life cycle. In order to preserve wetlands, rare plants, and maintain a forested corridor for wildlife, we recommend that the lots and road in the southern quadrant of the property be eliminated. This includes a roadway leading to a cul-de-sac and about 20 lots.

Forest fragmentation separates wildlife populations, and increases “edge effects” that leave many forest-dwelling species vulnerable to predation and allows the infiltration of invasive species. This also can lead to an increase in human/animal conflicts, including interactions on the roadways. This type of forest loss can also put pressure on nearby State protected lands such as wildlife areas, State forests and other public-owned properties.

The Department acknowledges and appreciates the proposed reforestation plan. We recommend that you consult with the Department of Agriculture's Urban Forestry Program in developing your plan (locations for reforestation, appropriate plant selection, etc.).

Rare Species

According to our database, there are records of the following rare species associated with Ingram Branch and Dutton Ditch Branch which lie along the eastern and southern boundaries respectively:

Enneacanthus chaetodon (blackbanded sunfish), *Alnus maritima* (seaside alder), *Sarracenia purpurea* (purple pitcher plant) and *Helonias bullata* (swamp pink)

Helonias bullata is a federally listed plant that typically occurs in Atlantic white cedar and maple/gum swamps in the Coastal Plain and appears to be very sensitive to sedimentation. Field surveys need to be conducted to confirm the presence of this plant and to determine its boundaries. Then appropriate measures can be taken to ensure impacts to this federally protected plant are minimized. Please contact our program botanist, Bill McAvoy, at (302) 653-2880 to set up a site visit.

In addition, there are Atlantic White Cedar wetlands in the project area. This rare plant community is susceptible to changes in water quality and sedimentation. In fact, all of the species listed above could be detrimentally affected by run-off. Diamond Pond is downstream of this project and has had an on-going problem with excess nutrients and resultant overgrowth of weeds and aquatic algae. Controlling aquatic weeds for the health of a pond and continued access by anglers is both time consuming and costly. Therefore, it is extremely important that an adequate buffer along the stream and associated wetlands be maintained. Also, the stream system should not be used as a stormwater outlet.

The current buffer along Ingram Branch is inadequate for protection of water quality and should be restored so that there is at least a 100-foot buffer of vegetation between the wetlands and the gravel pit/pond. This would entail reducing the size of the current gravel pit/pond and conducting plantings to increase the buffer width. Our program botanist, Bill McAvoy, can assist with developing a plant list and in habitat restoration efforts.

Nuisance Waterfowl

Stormwater management ponds that remain in the site plan may attract waterfowl like resident Canada geese and mute swans. 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 grasses around ponds provide an attractive habitat for these species. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, property managers or owners 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 proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Natural Areas Inventory

This project contains land currently proposed for the Delaware Natural Areas Inventory. Natural Areas contain lands of statewide significance identified by the Natural Area Advisory Council as the highest quality and most important natural lands remaining in Delaware. Consideration should be given to protecting these resources during design and construction of this project.

The Office of Nature Preserves appreciates the effort to keep the forested area intact. However, we respectfully request the removal of the cul-de-sac from the southern portion of the site to maintain the integrity of the proposed Natural Area along Ingram Branch.

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 21.2 tons (42,363.1 pounds) per year of VOC (volatile organic compounds), 17.5 tons (35,073.8 pounds) per year of NO_x (nitrogen oxides), 12.9 tons (25,878.1 pounds) per year of SO₂ (sulfur dioxide), 1.2 ton (2,303.6 pounds) per year of fine particulates and 1,771.8 tons (3,543,621.0 pounds) per year of CO₂ (carbon dioxide).

However, because this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NO_x; and by 2 pounds for particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NO_x emissions and 1 ton per year of particulate emissions versus the same development built in a growth area (level 1,2 or 3).

Emissions from area sources associated with this project are estimated to be 8.5 tons (17,087.0 pounds) per year of VOC (volatile organic compounds), 0.9 ton (1,880.1 pounds) per year of NO_x (nitrogen oxides), 0.8 ton (1,560.2 pounds) per year of SO₂ (sulfur dioxide), 1.0 ton (2,013.4 pounds) per year of fine particulates and 34.6 tons (69,266.8 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 3.4 tons (6,772.0 pounds) per year of NO_x (nitrogen oxides), 11.8 tons (23,554.9 pounds) per year of SO₂ (sulfur dioxide) and 1,737.2 tons (3,474,354.2 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	21.2	17.5	12.9	1.2	1771.8
Residential	8.5	0.9	0.8	1.0	34.6
Electrical Power		3.4	11.8		1737.2
TOTAL	29.7	21.8	25.5	2.2	3543.6

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 3.4 tons of nitrogen oxides per year and 11.8 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment.”

The Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

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 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Treatment)

- 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 sqft, 3-stories of 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 Gravel Hill Road 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 proposed development is in an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* and the Sussex County Comprehensive Plan do not support this type of isolated development in this area. The intent of these plans is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes the proposed development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

More importantly, the Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support. Often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation. This site is also designated as a "Good Recharge" area, meaning that the area has valuable ground water recharge qualities. Additionally, this site overlaps with the State's Green Infrastructure Investment Strategy Plan. The Crop Lands layer is present in this site; this designation identifies areas that possess unique natural features that are valuable for preservation.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, we will support these efforts and work with developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries. This site is a part of a "good recharge" area. DNREC has mapped all ground water potential recharge areas. A "good" rating is the second highest rating and designates an area as having important groundwater recharge qualities. Maintaining pervious cover in "Excellent" and "Good" recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure a safe drinking water supply for future generations. Retention of pervious cover to ensure an adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as "excellent" and "good" recharge areas adversely impacts the future prospects for agriculture in Delaware.

Public Service Commission - Contact: Andrea Maucher 739-4247

This project is not in a certificated area for water or wastewater services. The selected utility will need to apply to the Commission for a CPCN. Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines.

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 276 single-family homes on 204 acres located in Level 4 southwest of Milton. As a general planning practice, DSHA encourages residential development only in areas where residents will have proximity to services, markets, and employment opportunities, such as Investment Level 1 and 2 areas, outlined in the State Strategies Map. Since, the proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development, DSHA does not support this proposal.

Sussex County – Contact: Richard Kautz 855-7878

The active recreation area should be more centrally located.

Because this project is an AR-1 Cluster subdivision, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). These issues can be addressed by including in the application an explanation of how the developer plans to mitigate the issues raised by the State agencies.

This year Sussex County will be considering implementation of a Source Water Protection Program required by the State. Depending on the requirements adopted by the County Council this project might be affected. Any well location should insure that the wellhead protection area is entirely on site.

The Sussex County Engineer Comments:

The project proposes to develop using a private central community wastewater system. We recommend that the wastewater system be operated under a long-term contract with a capable wastewater utility. In addition, we recommend they have a wastewater utility provider prior to approving the project. The proposed project is located outside of the Inland Bays Planning area where Sussex County expects to provide sewer service. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required and plan review fees may apply. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots.

If Sussex County ever provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developers and/or owners expense.

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: Sussex County