



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

December 13, 2004

Mr. Ronald H. Sutton, Jr.
McCrone, Inc.
111 South West Street, Ste. 6
Dover, DE 19904

RE: PLUS review – PLUS 2004-11-10; Silver Oak Farms

Dear Mr. Sutton

Thank you for meeting with State agency planners on November 23, 2004 to discuss the proposed plans for the Silver Oak Farms project to be located on Route 6, approximately .09 miles west of Route 15.

According to the information received, you are seeking a site plan approval through Kent County for 239 units on 239.79 acres located outside the Kent County growth area. This development will be served by a community septic system which will be linked to the 308 acre site across Route 6 also slated for development by Handler Investments

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

This office has received the following comments from State agencies:

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

This site is located in Investment Level 4 according to the State Strategies for Policies and Spending. This site is located outside of the Kent County Growth Zone, and is located in the midst of numerous agricultural preservation districts. 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. This proposed residential subdivision is inconsistent with the goals and intent of Investment Level 4, and appears to be inconsistent with the goals and intent of the Kent County Comprehensive Plan as well. Our office is opposed to this proposed land development project in this rural area, and notes that State investments to support this proposed use are not expected.

State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685

There is a high probability for prehistoric and historic archaeological sites within the subject property, with a known site located on the west side of the creek.

In addition, the 1868 Beers Atlas shows that there was a house located within the subject property, which indicates a high probability for historic archaeological sites. The State Historic Preservation Office encourages the applicant to contact Anne McCleave at 302-739-5685 to schedule a time their archaeologists can visit the site to gain a better understanding of the resources. There is a historic house east of the proposed development on the north side of Millington Road. It is suggested that landscaping be provided on the eastern edge of the development to lessen any visual effects. If there is federal involvement, as is indicated in Number 42 of the PLUS application, the federal agency is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800), which requires the agency to consider the effects their project will have on historic resources.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) Because the development is proposed for a Level 4 Area, it is inconsistent with the Strategies for State Policies and Spending. Therefore DelDOT will not participate in the cost of any road improvements needed to support this development. The comments that follow are technical, and are not intended to suggest that DelDOT supports this development proposal.
- 2) DelDOT knows this project as the Hill Property. A traffic impact study (TIS) was scoped for it on February 4, 2004, and DelDOT received the study on August 18, 2004. They expect to comment to Kent County on the results of that study next month.
- 3) DelDOT understands the need for some cul-de-sacs given the ditching and natural drainage courses in the area. However, they recommend changing the site design to eliminate some of the eight proposed cul-de-sacs, in order to enhance the grid street pattern and provide more of a sense of community.

- 4) DelDOT recognizes that two stub streets are proposed and while they do not support the development of the subject parcel or the adjoining parcels, the stub streets would be desirable if those parcels are developed.
- 5) Because of the shape and topography of the site, most of the development would be relatively isolated from the outside world. Residents at the rear of the development would have to travel more than a mile and cross three drainage courses to reach Route 6. This could be significant if a fire or medical emergency were to occur during a major storm.
- 6) The developer's engineer should contact the project manager for Kent County, Mr. Brad Herb of Johnson, Mirmiran & Thompson, regarding their requirements for streets and access. Mr. Herb may be reached at (302) 266-9080.

The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-3091

General Comment

Upon review of the site plan design for subject parcel, the Department has concluded that this submittal does not adequately address surface and subsurface sources of pollutant runoff. The Department does not believe that the applicant's proposed 25-foot buffer width from ditches and/or wetlands is sufficient to mitigate pollutant runoff into surface or subsurface waters – instead, the applicant is strongly recommended to adopt a more environmentally sensitive 100-foot buffer width into their final plan.

Secondly, the proposal to use a pre-existing pond (the long-linear pond near the centre of parcel) for discharge of stormwater in immediate proximity to a ditch (<25 feet), is likely to increase nutrient loading from surface and subsurface flows into that ditch. Research has shown that coastal plain ditches have a significant drawdown effect on surface and subsurface waters within a 100-foot radius of a surface and subsurface water source.

Therefore, it is recommended that the applicant consider siting a stormwater management pond in excess of a 100-foot radius from wetlands or a water body. Given that most stream segments of Mill Creek watershed are considered impaired by the State of Delaware, a proactive approach for the improvement of water quality, as outlined above, should be given some consideration.

It is strongly recommended that the applicant contact the Watershed Assessment office at 739-4590 to schedule a meeting to help resolve some of these issues.

Soils

The Kent County soil survey mapping indicates that Sassafras, Woodstown, Fallsington, Pocomoke, Bayboro and Johnston. Sassafras is a well-drained upland soil that has few

limitations for development. Woodstown is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. Fallsington is a poorly-drained wetland associated (**hydric**) soil that has severe limitations for development. Pocomoke and Bayboro are both very poorly-drained wetland associated (**hydric**) soils that have severe limitations for development. Johnston is a wetland associated (**hydric**) floodplain soil and has severe limitations for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine forested wetlands on this site. The site is adjacent to Providence Branch, and is bisected by a number of drainage ditches.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the 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.

Site plans indicate that a road crossing will run through the stream on site. Permits will be needed from the Subaqueous Land Section from DNREC Division of Water Resources and the Army Corps of Engineers.

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.

Although the developer maintains a 25 foot buffer from the wetland and a 100 foot buffer from the stream, it is recommended that vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex and other waterbodies on site. It is important to note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands and associated buffers, to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether any farmed lands on subject parcel meet the criteria for classification as "prior converted wetlands." Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous "fallow period" of five years or greater in that parcel's cropping history. Parcels converted after said date

regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel's cropping history is Sally Griffin at the USDA – she can be reached at 678-4182.

TMDLs

Although Total Maximum Daily Loads (TMDLs) as a “pollution runoff mitigation strategy” to reduce nutrient loading have not yet been developed for most of the tributaries or subwatersheds of the Mill Creek subwatershed to date, work is continuing on their development. TMDLs for the Mill have not been developed to date, but may be available in the near future.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATs) and/or best management practices (BMPs) as “methodological mitigative strategies” to reduce degradative impacts associated with development.

Water Supply

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 302-739-3665.

Stormwater Management

Stormwater management is an integral part of the site development infrastructure. The planning and design for stormwater management should begin early. The applicant is encouraged to contact the Kent Conservation District as soon in the planning process as possible in order to receive their preliminary comments. Contact Jared Adkins at (302) 741-2600, ext. 3, for plan submittal and review requirements.

Drainage

The Drainage Section is aware of an existing drainage problem downstream of this project on the north side of Millington Road. The Drainage Section is also aware of prior

beaver activity in the area of this project. The Drainage Section requests the stream, ponds, and ditches on this project be checked for beaver activity and blockages. All existing ditches on the property should be checked for function and cleaned if needed prior to the construction of homes. Wetland permits may be required before cleaning ditches.

The Drainage Section requests that all precautions be taken 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 Section further requests for any area designated as a drainage/utility easement be left as open space and not owned by the individual landowners. Structures, decks, buildings, sheds, kennels, or fences should not be placed or built within the drainage easement to allow for maintenance.

If trees are planted along an existing ditch the Drainage Section recommends tree planting on the south and west side of the ditch only. Tree planting in this manner will provide a shading effect promoting water quality while allowing future drainage maintenance from the clear side. If trees are planted on both sides of an existing ditch the Drainage Section recommends a maintenance buffer of 25 feet measured outward from the estimated mature drip line for future maintenance. Structures, decks, buildings, sheds, kennels, or fences should not be placed or built within the maintenance buffer.

Forests

The Department commends the developer for preserving the 22 acres of forest presently on-site. To the extent, where possible, those forested resources could be enhanced, the Department would be appreciative. The forested areas on-site should be viewed as a community asset and managed appropriately.

Forested areas on-site set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

Open Space

To maximize the existing buffering capacity and wildlife habitat on site, it is recommended that lot lines and other infrastructure (such as storm water management ponds) be pulled out of the forest and that areas of community open space be designated along the forested/riparian areas. Doing so will accomplish two things: it will preserve the buffers on site and its value for birds and wildlife and it will create recreational opportunities for residents by allowing them access to and views of the forest and stream.

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

Revegetation/Landscaping

DNREC requests that no invasive species be used in the revegetation of disturbed or landscaped areas. A list of species considered invasive in Delaware can be found on the DNHP web site, www.dnrec.state.de.us/fw/invasive.htm. They further encourage, where possible/feasible, the use of native plants for habitat restoration projects on-site and the DNREC Botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

Nuisance Species

The ponds scattered throughout the subdivision will likely attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. Although small numbers of these species are enjoyed by residents, geese and swans can quickly multiply and overwhelm the area. 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. Ponds that remain in the subdivision plan should be landscaped to deter nuisance species. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around ponds, are not as attractive to geese because they do not feel as safe from predators and other disturbance when their view of the area is blocked. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the homeowners 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 number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Air Quality

Air pollution threatens the health of human beings and other living things on our planet. While often invisible, pollutants in the air create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere, and contribute to the potential for world climate change. Breathing polluted air can have

numerous effects on human health, including respiratory problems, hospitalization for heart or lung disease, and even premature death. Some can also have effects on aquatic life, vegetation, and animals.

Once complete, vehicle emissions associated with this project are estimated to be 18.3 tons (36,684.0 pounds) per year of VOC (volatile organic compounds), 15.2 tons (30,371.9 pounds) per year of NO_x (nitrogen oxides), 11.2 tons (22,408.9 pounds) per year of SO₂ (sulfur dioxide), 1.0 ton (1,994.8 pounds) per year of fine particulates and 1,534.3 tons (3,068,570.4 pounds) per year of CO₂ (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 7.4 tons (14,796.3 pounds) per year of VOC (volatile organic compounds), 0.8 ton (1,628.0 pounds) per year of NO_x (nitrogen oxides), 0.7 ton (1,351.0 pounds) per year of SO₂ (sulfur dioxide), 0.9 ton (1,743.5 pounds) per year of fine particulates and 30.0 tons (59,981.0 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 2.9 tons (5,864.2 pounds) per year of NO_x (nitrogen oxides), 10.2 tons (20,397.2 pounds) per year of SO₂ (sulfur dioxide) and 1,504.3 tons (3,008,589.4 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	18.3	15.2	11.2	1.0	1534.3
Residential	7.4	0.8	0.7	0.9	30.0
Electrical Power		2.9	10.2		1504.3
TOTAL	25.7	18.9	22.1	1.9	3068.6

The Department of Natural Resources and Environmental Control is asking that local jurisdictions consider mitigation to help resolve this issue. Mitigation might involve limiting large new developments to growth zones, focusing development to urban areas capable of providing mass transit services, requiring more energy efficient homes which would lessen air quality impacts, and promoting walkability and bikability within and between developments and town centers.

This project is located outside the Kent County Growth Zone and within a Level 4 area according to the Strategies for State Policies and Spending. Development of this property will have a negative impact on air quality because the residents will be forced to use their vehicle to reach any services (shopping, schools, and recreation).

Recreation

It is recommended that sidewalks be built fronting every residence and stub streets. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities, 2) provide opportunities for neighbors to interact in the community, and 3) facilitate safe, convenient off-road access to neighboring communities, public mass transit stops, schools, stores, work, etc.

The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. The high and moderate facility needs in Kent County are listed below. Consideration should be given to incorporate some of these recreation opportunities into the project. For additional information about the outdoor recreation priorities, contact Bob Ehemann at 739-5285.

High priorities are Walking or Jogging Paths, Bike Paths, Swimming Pools, Picnic Areas, Playgrounds and Fishing Areas. Moderate priorities are Skate Facilities, Hiking Trails,

Baseball/Softball Fields, Campgrounds, Soccer Fields, Volleyball Courts, Basketball Courts and Canoe/Kayak Access.

State Fire Marshal's Office – Contact: John Rossiter 734-4394

a. Fire Protection Water Requirements:

- 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.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

b. 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 Millington 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.

- If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

c. Gas Piping and System Information:

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

d. 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”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- 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.

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):

Department of Agriculture - Contact: Mark Davis 739-4811

The Department of Agriculture strongly opposes the development of this property. The Site is located in an Investment Level 4 area which are areas designated as most suitable for agricultural operations and environmental protection. The site is also located outside the County’s growth zone. This site is surrounded by active, viable agricultural operations and agricultural preservation districts.

Public Service Commission - Contact: Andrea Maucher 739-4247

The information provided indicates that Artesian Water Company will provide water to the proposed projects through a central public water system. Our files reflect that Artesian Water Company does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so

already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-739-4247.

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.

If wastewater services are provided by a non-governmental entity, and there are more than 50 customers served, the wastewater service provider will need to apply to the PSC for a Certificate of Public Convenience and Necessity (CPCN). Additional requirements may apply if the provider has not previously been awarded a CPCN by the Commission. *Contact: Andrea Maucher at (302) 739-4247*

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 239 residential units on 239 acres on the south side of Route 6, west of Clayton and located in Investment Level 4, according to the *State Strategies Map*. As a general rule, DSHA would like to see any residential development 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 Strategy Map*. The proposal is located in an area targeted for agricultural activities and natural resource protection, and therefore inconsistent with where the State would like to see new residential development.

Delaware Emergency Management Agency – Contact: Don Knox 659-3362

Due to the large number of residential units being proposed, a significant impact to public safety is foreseen by implementation of this project. The developer should notify the police, fire service, and emergency medical response organization serving this portion of Kent County, to keep them apprised of all development activities.

Department of Education – Contact: Nick Vacirca 739-4658

239 dwelling units could generate an estimated 120 additional students for the Smyrna School District.

Kent County does not have school concurrence legislation at this time. It is recommended that the developer submit a package to the school district for informational purposes.

If the development is approved and build, please use the following information for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), developers should plan wide enough streets so that large school buses can access and turn around (without backing) from the furthest areas within the development while picking up and dropping off students. Should there not be any sites more than 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be included. The developer should work closely with the school district transportation supervisor.

In addition this project is planned outside the growth zone for Kent County. Planning outside the growth zone will cause additional burdens on the student transportation system of the district.

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 Clayton