

McCCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying

November 14, 2005

Ms. Constance C. Holland, AICP, Director
The Delaware Office of State Planning Coordination
540 S. Dupont Highway, Thomas Collins Building, 3rd Floor

RE: PLUS review – PLUS 2005-07-06; Burton Pond Communities

Dear Ms. Holland:

The following is a response to your September 15, 2005 PLUS comments letter. In addressing your comments, we have accomplished the following:

- Overall reduction from 410 to 367 housing units.
- Gross density reduction from 1.67 to 1.50 dwelling units per acre.
- Net density reduction from 2.61 to 2.34 dwelling units per acre (without wetlands, Burton's Pond, or road right-of-ways).
- Providing a 30 foot minimum buffer from the wetlands to the rear lot lines along Burton's pond. Rear lot lines are planned to be 50' from Burton's pond.
- A three phase environmental stewardship program will be implemented to evaluate and improve NPS pollution, water quality, wildlife habitat, invasive species and aesthetics in and around the Burton Pond watershed.
- Disturbance to the existing forested areas has been reduced from 3.3 acres to 0.25 acres.
- 30 acres of afforestation and tree plantings will take place to reduce air pollution, provide interconnecting greenways and allow for groundwater recharge.
- A 2.1 acre park was added near the club house at Burton's pond as suggested by DNREC.
- These improvements were accomplished without significantly changing our development concept layout for the site. Attached is the amended concept site plan for the Burton Pond Communities.

We have added our responses to the end of each of your PLUS comments below in ***BOLD ITALICIZED CAPITAL LETTERS.***

Executive Summary

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

State Strategies/Project Location

- This majority of this project site is located in an Investment Level 4 area according to the *2004 Strategies for State Policies and Spending*. This portion of the project is also located outside of a designated growth area in relevant municipal and county certified comprehensive plans. For this reason, the State cannot support the proposal. We have no objection to the portion of the project located east of Route 24, within the Environmentally Sensitive Developing Area.

Street Design and Transportation

- Right-of-way dedication will be required along the frontage of Pinewater Road. Where Pinewater Road is to be realigned, the minimum right-of-way width should be 60 feet.
- DelDOT anticipates asking the developer to reserve additional rights-of-way for purchase by DelDOT.
- A paved multi-modal path, located in a 15-foot wide permanent easement will be required along the frontage of Route 24.

Natural and Cultural Resources

- Portions of the property are located within the 100-year floodplain. It is recommended that development be kept outside the 100-year floodplain.
- DNREC recommends a 100-foot buffer between lot lines and wetlands/water bodies. This project maintains an average width buffer of 200 feet from the wetlands and water bodies. In cases where the lot lines intrude upon the buffer, they should be pulled out of the buffer.

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

RESPONSE:

OUR RESPONSE TO EXECUTIVE SUMMARY COMMENTS IS INCLUDED IN THE INDIVIDUAL LIST OF COMMENTS AS FOLLOWS AND AS STATED IN THE OPENING TO THIS LETTER.

Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

This majority of this project site is located in an Investment Level 4 area according to the 2004 Strategies for State Policies and Spending. This portion of the 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. 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 building outside designated growth areas will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

We understand that the Investment Level 4 portion of this is surrounded by existing and proposed development; however, we would prefer that if appropriate, comprehensive plans be updated if necessary to reflect the nature of the area rather than agreeing to development in an area where services and infrastructure are not planned. This would allow the State and other service providers to plan appropriately for the infrastructure and services that will be necessary to support this development.

Because most of the project is located outside of a designated growth area, the State cannot support this proposal. We have no objection to the portion of the project located east of Route 24, within the Environmentally Sensitive Developing Area.

RESPONSE:

ALL DEVELOPMENT IS WITHIN DESIGNATED GROWTH AREAS BY EITHER THE STATE OR THE COUNTY. SUSSEX COUNTY'S ENVIRONMENTALLY SENSITIVE DEVELOPING AREA ENCOMPASSES ALL PARCELS ON THE EAST SIDE OF ROUTE 24 AND 600' OF PARCELS ON THE WEST SIDE OF ROUTE 24. THIS AREA IS SHOWN ON THE REVISED DRAWINGS. THIS EQUATES TO APPROXIMATELY HALF (47 %) OF THE PROJECT LOCATED WITHIN THE DESIGNATED GROWTH AREA.

THE BALANCE OF THE DEVELOPMENT, ALTHOUGH DESIGNATED LEVEL 4 BY THE STATE, IS ZONED BY SUSSEX COUNTY AS AR-1 (TWO LOTS PER

ACRE). RECENTLY THE COUNTY HAS IMPLEMENTED PROVISIONS TO ALLOW THIS ZONE TO USE CLUSTERING TO PROMOTE OPEN SPACE AND OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

THIS PROJECT IS AN INFILL DEVELOPMENT AS SHOWN ON THE ATTACHED EXHIBIT. THE PROJECT IS CURRENTLY SURROUNDED ON ALL SIDES BY EXISTING, UNDER CONSTRUCTION AND APPROVED DEVELOPMENT. THESE DEVELOPMENTS SHOWN ON THE EXHIBIT CONSIST OF:

- *Greenbank Estates*
- *River Oaks*
- *Falcon Crest*
- *Herring Creek*
- *Lochwood*
- *Holly Lake Campground*
- *Pinewater Farms*
- *Angola communities*
- *Baywood communities*
- *Duneside*
- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

THE REVISED PLAN NOT ONLY TAKES INTO ACCOUNT THE WETLANDS AND WILDLIFE HABITATS, BUT PROVIDES ALONG THE NORTH EDGE OF BURTON'S POND A MINIMUM 30' BUFFER TO WETLANDS FROM THE REAR PROPERTY LINES, A MINIMUM 50' BUFFER TO THE EDGE OF THE POND WATERS, AND A 30' BUFFER TO ADJACENT DEVELOPMENTS AND ROAD RIGHT OF WAYS. ALONG THE SOUTH BOUNDARY OF THE PROPERTY, ALL DEVELOPMENT IS IN EXISTING FIELDS AND THE WETLAND BUFFERS RANGE FROM A MINIMUM OF 30 FEET TO OVER 300 FEET.

ALL PROPOSED DEVELOPMENT IN THE FORESTED AREAS HAS BEEN MOVED OUT OF THE WOODS WITH THE EXCEPTION OF 0.25 ACRES NEAR BURTON'S POND. THEREFORE, ANY WILDLIFE OR HABITAT SHOULD BE PRESERVED AS IT IS TODAY ON BOTH SIDES OF ROUTE 24.

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

The State Historic Preservation Office does not support the Burton Pond Communities proposed development because a large portion of it is in State Investment Level 4.

Delaware has a strong rural heritage and many historic resources, architectural and archaeological, exist in these areas. SHPO discourages development in Investment Level 4 because development could affect the historic context of Delaware's rural heritage by intruding on agricultural lands and open space; development could affect historic architectural resources that are historically associated with Delaware's agricultural areas and open space; development could affect prehistoric and historic archaeological sites, many of which have not been recorded or studied for the important information they can provide about Delaware's history and prehistory; and SHPO encourages preservation and redevelopment in existing communities, Investments Levels 1 and 2.

Based on the review of historic maps and other data in this office, the potential for both historic and pre-historic archeological sites to survive is significant. Historic buildings also survive on the property, all of which are demolished in this development scheme. Archaeological sites identified by your cultural resources consultant should continue to be avoided as the development of the concept for this project continues. The State Historic Preservation Office would like a copy of the prepared report as part of the review of this project.

Burials, both marked and unmarked, are protected by Delaware law. Please refer to the following sections of the Delaware State Code: (1) Title 11 Sub-Chapter 1340, titled "Desecration of Burial Places"; and (2) Title 7 Chapter 54, known as the "Delaware Unmarked Human Remains Act". For more information about these laws and the implications for the project, contact Craig Lukesic of this office at 302-736-7400.

RESPONSE:

HEITE CONSULTING, INC. HAS PREPARED A PHASE I ARCHEOLOGICAL SURVEY AND REPORT THAT IDENTIFIES AREAS OF POTENTIAL ARCHEOLOGICAL SIGNIFICANCE. THE AREAS OF CONCERN WERE SHOWN ON THE ORIGINAL PLUS SUBMITTAL. THE DEVELOPER HAS MADE AN ACTIVE DECISION TO PRESERVE, PROTECT AND AVOID DISTURBANCE IN THESE AREAS.

THE MOST SIGNIFICANT ARCHEOLOGICAL AREAS WERE NORTHEAST OF THE CURRENT INTERSECTION OF ROUTE 24 AND PINEWATER ROAD. THEREFORE, WE HAVE AVOIDED THIS AREA AND PROPOSE NO DEVELOPMENT THERE. ALSO, AN AREA WEST OF ROUTE 24 AT BURTON'S POND WAS LEFT AS A PARK AND NOT DISTURBED. RUINS OF INDIVIDUAL STRUCTURES, NOTED AS SITES 4 AND 5, WILL BE IDENTIFIED AND PRESERVED IF POSSIBLE.

FURTHERMORE, BASED ON THE REPORT, NO ABOVE GROUND STRUCTURES CURRENTLY EXIST ON SITE.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

The part of this development west (or north) of Route 24 is proposed for an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies for State Policies and Spending* have 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.

Recognizing that the smaller part of this development, east (or south) of Route 24, is in a Level 3 Area and an Environmentally Sensitive Developing Area, as designated by the *Strategies* and the Sussex County Comprehensive Plan, DelDOT is providing a technical review for that part. If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments on the part west (or north) of Route 24.

Their technical comments on the part east of Route 24 are as follows:

- 1) A traffic impact study (TIS) was scoped for this project on September 3, 2004. Part of the needed traffic counts were submitted by the developer's engineer and reviewed by DelDOT this summer and we understand that the rest of them will be submitted shortly. Therefore, assuming reasonable progress by the developer's engineer, DelDOT expects to receive the completed TIS by the end of 2005 and to comment to the County on the results early in 2006.
- 2) Pinewater Road is classified as a local road and Route 24 is classified as a major collector road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. Collector road rights-of-way also vary but are generally wider. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads and 40 feet from the centerline on collector roads. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width

needed from this project. Where Pinewater Road is to be realigned, the minimum right-of-way width should be 60 feet.

- 3) Beyond the right-of-way dedications mentioned above, DelDOT is developing plans to preserve additional rights-of-way in the Route 24 corridor. Accordingly, DelDOT anticipates asking the developer to reserve additional rights-of-way for purchase by DelDOT. For more information regarding the locations and amounts of land to be reserved, the developer should contact Mr. Donald Plows, in their Division of Transportation Solutions. Mr. Plows may be reached at (302) 760 2524.
- 4) DelDOT will also require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site. Preliminarily, paths should be provided along Route 24 and on both sides of Pinewater Road.
- 5) The developer's site engineer should contact the Subdivision Manager for Sussex County, Mr. John Fiori, regarding our requirements for access. Mr. Fiori may be reached at (302) 760-2260.

RESPONSE:

ALL DEVELOPMENT IS WITHIN DESIGNATED GROWTH AREAS BY EITHER THE STATE OR THE COUNTY. SUSSEX COUNTY'S ENVIRONMENTALLY SENSITIVE DEVELOPING AREA ENCOMPASSES ALL PARCELS ON THE EAST SIDE OF ROUTE 24 AND 600' OF PARCELS ON THE WEST SIDE OF ROUTE 24. THIS AREA IS SHOWN ON THE REVISED DRAWINGS. THIS EQUATES TO APPROXIMATELY HALF (47 %) OF THE PROJECT LOCATED WITHIN THE DESIGNATED GROWTH AREA.

THE BALANCE OF THE DEVELOPMENT, ALTHOUGH DESIGNATED LEVEL 4 BY THE STATE, IS ZONED BY SUSSEX COUNTY AS AR-1 (TWO LOTS PER ACRE). RECENTLY THE COUNTY HAS IMPLEMENTED PROVISIONS TO ALLOW THIS ZONE TO USE CLUSTERING TO PROMOTE OPEN SPACE AND OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

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- *Greenbank Estates*
- *River Oaks*
- *Falcon Crest*
- *Herring Creek*
- *Lochwood*

- *Holly Lake Campground*
- *Pinewater Farms*
- *Angola communities*
- *Baywood communities*
- *Dunaside*
- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

IT IS THE INTENT OF THE DEVELOPER TO RELOCATE PINEWATER ROAD AND HOLLYMOUNT ROAD TO FORM A FOUR WAY INTERSECTION AT ROUTE 24. THIS IS BEING PROPOSED TO IMPROVE THE TRAFFIC CONDITIONS OF TWO EXISTING INTERSECTIONS THAT ARE RECOGNIZED AS BEING UNSAFE DUE TO THEM BEING OFFSET AND NEAR EACH OTHER.

THE DEVELOPER WILL PROVIDE DELDOT WITH THE REQUESTED RIGHTS-OF-WAY AND EASEMENTS FOR THE PROPOSED IMPROVEMENTS.

THE PRELIMINARY TIS HAS BEEN REVIEWED AND A FINAL TIS IS EXPECTED TO BE COMPLETED BY THE END OF 2005. THE FINAL TIS WILL SHOW A REDUCTION IN THE TOTAL NUMBER OF HOMES FROM THE INITIALLY ESTIMATED 478 UNITS TO 367 UNITS. THIS WILL REDUCE THE TRAFFIC GENERATED BY APPROXIMATELY 1100 VEHICLE TRIPS PER DAY.

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

Investment Level 4 Policy Statement

A portion of this project (approximately 53%) 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.

The portion of this particular development in the Level 4 area certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. 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.

RESPONSE:

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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.

RESPONSE:

AS REQUESTED BY DNREC, WE HAVE DESIGNED THE PROJECT TO PROTECT SENSITIVE RESOURCES AND REDUCED THE FOREST DISTURBANCE FROM 3.3 TO 0.25 ACRES. NO DISTURBANCE OF ANY EXISTING WETLANDS, STEEP SLOPED AREAS AND CURRENTLY UNFARMED LANDS WILL OCCUR. THEY WILL ALL BE PRESERVED AS THEY ARE TODAY.

CURRENTLY, THE FARMED PORTIONS CONSIST OF 3BOUTIQUE FARM AREAS CONSISTING OF PASTURES FOR CATTLE AND BEAN/CORN ROTATIONS. AS PREVOIUSLY MENTIONED, DEVELOPMENT HAS ALREADY

SURROUNDED THE FARM AND THE PROPOSED USE IS AN INFILL PROJECT. LARGE ADJACENT ACREAGES OF CROPLANDS NO LONGER EXIST IN THIS AREA.

A THREE PHASE ENVIRONMENTAL STEWARDSHIP PROGRAM WHICH WILL ENHANCE AND PROTECT BURTON'S POND IS BEING DEVELOPED. THE POND IS A PART OF THE LANDS OF THIS PROJECT AND WILL BE MANAGED BEFORE DURING AND AFTER DEVELOPMENT. A QUALIFIED ENVIRONMENTAL CONSULTANT IS WORKING WITH THE DEVELOPER TO DEFINE THE MANAGEMENT PLAN.

Soils

According to the soil survey update, Fort Mott-Henlopen complex, Downer, and Zekiah – Longmarsh complex were mapped on subject parcel. Fort-Mott complex and Downer are well-drained soils that some limitations associated with rapidly permeable sandy subsoils that are likely to have little or no nutrient adsorptive capacity. Zekiah-Longmarsh complex is a very poorly-drained wetland associated (hydric) floodplain soil that that has the highest severity level for development.

RESPONSE:

AS REQUESTED BY DNREC, WE HAVE DESIGNED THE PROJECT TO PROTECT SENSITIVE RESOURCES BY NOT DISTURBING ANY EXISTING WETLANDS, STEEP SLOPED AREAS AND CURRENTLY UNFARMED LANDS. ADEQUATE SOILS HAVE BEEN FIELD IDENTIFIED AND PRELIMINARILY TESTED FOR RAPID INFILTRATION BASINS TO DISPOSE OF TREATED WASTEWATER. THESE RIB AREAS HAVE BEEN DESIGNATED ON THE ATTACHED DRAWING.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine tidal and forested wetlands. PLUS application materials indicate that wetlands have been delineated. This delineation should be verified by the Army Corps of Engineers through the Jurisdictional Determination process.

PLUS materials indicate that wetlands will not be directly impacted by construction activities. However, if impacts are anticipated please note that 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. Disturbance to wetlands should be avoided and vegetated buffers of no less than 100 feet should be employed from all wetlands and water bodies.

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.

It should be noted that this parcel borders or contains headwater or near headwater riparian wetlands (Unity and Phillips Branches) which eventually drain to the environmentally-sensitive Inland Bays watershed. Headwater riparian wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system and/or water bodies further downstream. Since such streams are a major avenue for nutrient-laden stormwater and sediment runoff, their protection deserves the highest priority. The Section recommends a 100-foot buffer between lot parcel lines and wetlands/water bodies. The project's conceptual plan does not have any lots within wetlands and maintains buffers along Unity Branch and Burton Pond. This project maintains an average width buffer of 200-foot from the wetlands and water bodies.

RESPONSE:

NO WETLAND DISTURBANCE IS PLANNED AS A RESULT OF THIS DEVELOPMENT WITH THE POSSIBLE EXCEPTION OF POST STORMWATER MANAGEMENT OUTFALL(S). IF THE ELEVATION OF THE OUTFALLS CAN BE UPSTREAM OF THE WETLANDS, THEY WILL BE. A FORMAL JD APPLICATION WILL BE SUBMITTED TO THE CORP OF ENGINEERS. SHOULD DISTURBANCE FOR OUTFALLS BECOME NECESSARY, WE WILL CONTACT DNREC FOR JOINT PERMIT PROCESSING OF THEM. ALL OTHER PROPOSED PROPERTY LINES AND AREAS OF DISTURBANCE WILL BE 30 TO 300 FEET FROM WETLANDS. REAR PROPERTY LINES ADJACENT TO BURTON'S POND ARE PLANNED TO BE NO CLOSER THAN 50 FEET TO THE WATER.

A THREE PHASE ENVIRONMENTAL STEWARDSHIP PROGRAM WHICH WILL ENHANCE AND PROTECT BURTON'S POND IS BEING DEVELOPED. THE POND IS A PART OF THE LANDS OF THIS PROJECT AND WILL BE MANAGED BEFORE DURING AND AFTER DEVELOPMENT. A QUALIFIED ENVIRONMENTAL CONSULTANT IS WORKING WITH THE DEVELOPER TO DEFINE THE MANAGEMENT PLAN.

ERES Waters

This project is located adjacent to receiving waters of 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 5.6.3.4 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 nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in section 5.6.3.5, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

RESPONSE:

BEST MANAGEMENT PRACTICES WILL BE DESIGNED INTO THE STORMWATER MANAGEMENT FACILITIES FOR THE PROJECT. IN ADDITION, GREENWAYS WILL BE IMPLEMENTED THROUGHOUT THE SITE TO PROMOTE INFILTRATION AND REDUCE STORMWATER RUNOFF. MCCRONE'S AND DNREC'S PRELIMINARY TMDL COMPUTATIONS INDICATE THE DEVELOPMENT CAN EXCEED THE 40% REQUIRED REDUCTION OF NUTRIENTS LEAVING THE SITE.

A STEWARDSHIP PROGRAM WHICH WILL ENHANCE AND PROTECT BURTON'S POND IS BEING DEVELOPED. THE POND IS A PART OF THE LANDS OF THIS PROJECT AND WILL BE MANAGED BEFORE DURING AND AFTER DEVELOPMENT. A QUALIFIED ENVIRONMENTAL CONSULTANT IS WORKING WITH THE DEVELOPER TO DEFINE THE MANAGEMENT PLAN.

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. This project is located in the low reduction area requiring a 40 percent reduction in both nitrogen and phosphorus. **R.D. M. Inc. through McCrone Inc. conceptually designed Burton Pond Communities as an environmentally sensitive subdivision that will meet the Total Maximum Daily Load nutrient reductions for nitrogen and phosphorus in the Inland Bays.**

Significant nitrogen and phosphorus loading reductions must be realized from all sources, including community onsite wastewater systems. The Department has developed

performance standards for on-site wastewater treatment and disposal systems that have been presented as a part of the proposed Pollution Control Strategy (PCS). Upon promulgation of the proposed PCS regulation, new and existing wastewater disposal systems will be required to significantly reduce nitrogen and phosphorus loading in the Inland Bays watershed. These proposed "Performance Standards" would require (where applicable) nitrogen and phosphorus loadings to not exceed certain average annual discharge concentration levels. For more information, please contact Lyle Jones, (302)739-9939.

RESPONSE:

BEST MANAGEMENT PRACTICES WILL BE DESIGNED INTO THE STORMWATER MANAGEMENT FACILITIES FOR THE PROJECT. IN ADDITION, GREENWAYS WILL BE IMPLEMENTED THROUGHOUT THE SITE TO PROMOTE INFILTRATION AND REDUCE STORMWATER RUNOFF. OURS AND DNREC'S PRELIMINARY TMDL COMPUTATIONS INDICATE THE DEVELOPMENT CAN EXCEED THE 40% REQUIRED REDUCTION OF NUTRIENTS LEAVING THE SITE.

Impervious Cover

Since residential development significantly increases the amount of impervious cover - leading to large volumes of contaminant-laden runoff which ultimately drain into streams or waterways - the applicant is strongly urged to pursue both natural and constructed Best Management Practices (BMPs) to reduce such impacts. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. As reported during the PLUS review, this project will plant additional 23 acres of trees on-site and designed to have 48 % open space thus minimizing imperviousness within the subdivision.

RESPONSE:

BEST MANAGEMENT PRACTICES WILL BE DESIGNED INTO THE STORMWATER MANAGEMENT FACILITIES FOR THE PROJECT. IN ADDITION, GREENWAYS WILL BE IMPLEMENTED THROUGHOUT THE SITE TO PROMOTE INFILTRATION AND REDUCE STORMWATER RUNOFF. OURS AND DNREC'S PRELIMINARY TMDL COMPUTATIONS INDICATE THE DEVELOPMENT CAN EXCEED THE 40% REQUIRED REDUCTION OF NUTRIENTS LEAVING THE SITE.

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 302-739-9944.

RESPONSE:

DEWATERING PERMITS WILL BE OBTAINED FOR CONSTRUCTION IF SOIL BORINGS INDICATE DEWATERING IS NEEDED DURING THE TIME OF YEAR THE UTILITIES ARE CONSTRUCTED.

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 Jessica Watson at (302) 856-7219 for details regarding submittal requirements and fees.

As of April 11, 2005, stormwater best management practices must also consider water quality as well as quantity in impaired water bodies.

RESPONSE:

STORMWATER MANAGEMENT WILL BE CONSTRUCTED FOR THE PROJECT AND UTILIZE BEST MANAGEMENT PRACTICES. BIOSWALES, FILTERS, AND STORMWATER MANAGEMENT PONDS ARE PLANNED. WE WILL MEET WITH SUSSEX COUNTY CONSERVATION DISTRICT TO SET UP A PREDESIGN MEETING.

Drainage

The Drainage Section requests all existing ditches on the property 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 strongly recommends any drainage conveyance between two parcels within a subdivision be dedicated as a drainage easement and such easement be designated as passive open space, not owned by individual landowners. The easement should be of sufficient width to allow for future drainage maintenance as described below.

- ③ Along an open ditch or swale, the Drainage Section recommends a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured from top of bank on the non-maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.
- ③ Along a stormwater pipe the Drainage Section recommends a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.
The Drainage Section recommends any drainage/utility easement owned by an individual landowner should not have structures, decks, buildings, sheds, kennels, fences or trees within the drainage easement to allow for future drainage maintenance.

RESPONSE:

NO EXISTING DRAINAGE DITCHES ARE ANTICIPATED TO BE IMPACTED. TAX DITCHES DO NOT EXIST ON THE SITE. DITCHES BETWEEN SUBDIVISIONS ARE NOT ANTICIPATED. A 30 FOOT VEGETATED BUFFER IS TO BE PLACED BETWEEN DEVELOPMENTS. INTERNAL GREENWAYS AND BIOSWALES WILL BE CREATED TO TREAT AND CONVEY RUNOFF. OTHER BMPS WILL BE USED WHERE NECESSARY.

Floodplains

Portions of the property are located within the 100-year floodplain. It is recommended that development be kept outside the 100-year floodplain. Mandatory flood insurance purchase requirements will apply to any buildings which are located in the floodplain.

RESPONSE:

DEVELOPMENT OF LOTS IS ANTICIPATED TO BE UPLAND OF THE "100" YEAR FLOODPLAIN. NO BUILDINGS ARE ANTICIPATED TO BE WITHIN THE FLOODPLAIN.

Dredge Materials

The State dredged Herring Creek back in the late 1970's and early 1980's. According to project plan drawings, a dredged material disposal site was located adjacent to Burton Prong in the northeast corner of the Burton Pond Communities site plan. However, based on project records, it is hard to determine whether the area was actually used for the project.

RESPONSE:

SOIL BORINGS WILL BE CONDUCTED FOR ANY STRUCTURES (HOMES OR CLUBHOUSE) ALONG BURTON'S POND. WE APPRECIATE YOUR ADVANCE INFORMATION.

Forests

According to 2002 aerial photos forested areas exist on this parcel; site plans show that lot lines will contain portions of the forest. PLUS materials indicate that 3.3 acres will be removed for development.

Although small, this forest is important to the regional ecosystem; by removing 3.3 acres it fragments the existing forest and provides edge habitat for invasive species. Invasive species become established quickly and create undesirable habitat. Therefore, the developer is strongly encouraged to preserve, and where possible, enhance forested resources on site, particularly mature trees. This includes minimizing the impact of development by designating open space along forested areas, which will create a buffer from homeowners and their activities. 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. The developer should seriously consider placing this forest into a permanent conservation easement or other binding protection.

RESPONSE:

AS REQUESTED, THE LAND DEVELOPMENT PLAN HAS BEEN MODIFIED TO REDUCE THE FOREST IMPACT FROM 3.3 ACRES TO 0.25 ACRES. THEY MAY BE PROTECTED BY A FOREST CONSERVATION EASEMENT IN ADDITION TO DEED RESTRICTIONS IN THE FUTURE HOMEOWNER'S ASSOCIATION. ADDITIONALLY, 30 ACRES OF GREENWAY TREES WILL BE PLANTED TO ENHANCE THE EXISTING FORESTED LANDS.

Open Space

To maximize the existing buffering capacity and wildlife habitat on site, it is recommended that the developer minimize the amount of forest removal by relocating infrastructure (such as storm water management ponds) to areas outside of the forest and designating community open space along the forested areas. Doing so will preserve and expand the existing buffers on site and its value for birds and wildlife and it will create recreational opportunities for residents.

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.

RESPONSE:

AS REQUESTED, THE LAND DEVELOPMENT PLAN HAS BEEN MODIFIED TO REDUCE THE FOREST IMPACT FROM 3.3 ACRES TO 0.25 ACRES. THEY MAY BE PROTECTED BY A FOREST CONSERVATION EASEMENT IN ADDITION TO DEED RESTRICTIONS IN THE FUTURE HOMEOWNER'S ASSOCIATION. ADDITIONALLY, 30 ACRES OF GREENWAY TREES WILL BE PLANTED TO ENHANCE THE EXISTING FORESTED LANDS.

Rare Species and Buffers

A review of our database indicates that the following species and/or communities at or adjacent to the project site:

| Scientific Name | Common Name | Taxon | State Rank | State Status | Global Rank | Federal Status |
|--|---------------------------------|-----------|------------|--------------|-------------|----------------|
| <i>Melanerpes erythrocephalus</i> | Red-Headed Woodpecker | Bird | S1 | E | G5 | |
| <i>Rhynchospora scirpoides</i> | Long-beaked bald-rush | Plant | S2 | | G4 | |
| <i>Eriocaulon parkeri</i> | Parker's pipewort | Plant | S2 | | G3 | |
| <i>Juncus pelocarpus</i> | Brown-fruited rush | Plant | S2 | | G5 | |
| <i>Drosera rotundifolia</i> | Roundleaf sundew | Plant | S2 | | G5 | |
| <i>Schoenoplectus subterminalis</i> | Water Bulrush | Plant | S2 | | G4G5 | |
| <i>Alnus maritime</i> | Seaside alder | Plant | S3 | | G3 | |
| <i>Notropis chalybaeus</i> | Ironcolor shiner | Fish | S2 | | G4 | |
| <i>Sacciolepis striata</i> | Gibbous grass | Plant | S1 | | G5 | |
| <i>Eryngium aquaticum var aquaticum</i> | Rattlesnake master | Plant | S2 | | G4G5 | |
| <i>Sabatia dodecandra</i> | Large marsh pink | Plant | S1 | | G5 | |
| <i>Carex mitchelliana</i> | Mitchell's sedge | Plant | S2 | | G4G5 | |
| <i>Eriocaulon compressum</i> | Flattened pipewort | Plant | S2 | | G5 | |
| <i>Alnus compressum</i> | Seaside alder | Plant | S3 | | G3 | |
| <i>Eriocaulon decangulare</i> | Ten-angled pipewort | Plant | S1 | | G5 | |
| <i>Eriocaulon aquaticum</i> | Seven-angled pipewort | Plant | S2 | | G5 | |
| <i>Drosera rotundifolia</i> | Rondleaf sundew | Plant | S2 | | G5 | |
| <i>Cladium mariscoides-ericaulon sp.</i> | Twig rush-pipewort-"acidic fen" | Community | S1 | | G1 | |

State Rank: S1 - extremely rare within the state (typically 5 or fewer occurrences); S2 - very rare within the state (6 to 20 occurrences); B - Breeding; N - Nonbreeding; SX - Extirpated or presumed extirpated from the state; All historical locations and/or potential habitat have been surveyed; SH - Historically known, but not verified for an extended period (usually 15+ years); there are expectations that the species may be rediscovered; SE - Non-native in the state (introduced through human influence); not a part of the native flora or fauna. **State Status:** E - endangered, i.e. designated by the Delaware Division of Fish and Wildlife as seriously threatened with extinction in the state; **Global Rank:** G1 - imperiled globally because of extreme rarity (5 or fewer occurrences worldwide); G2 - imperiled globally because of great rarity (6 to 20 occurrences); G3 - either very rare and local throughout its range (21 to 100 occurrences) or found only locally in a restricted range; G4 - apparently secure globally but uncommon in parts of its range; G5 - secure on a global basis but may be uncommon locally; T - variety or subspecies rank; Q - questionable taxonomy; **Federal Status:** LE - endangered, i.e. designated by the U.S. Fish and Wildlife Service as being in danger of extinction throughout its range; LT - threatened, i.e. designated by USFWS as being likely to become endangered in the foreseeable future throughout all or a significant portion of its range; Candidate - Taxa for which the U.S. Fish and Wildlife Service has on file enough substantial information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species.

The Red-Headed Woodpecker utilizes mature forest for breeding, roosting and foraging. According to the application 3.3 out of 38 acres of forest is going to be removed. In reality the amount may be higher once this site is built out and homes, driveways, sidewalks, roadways, and stormwater management ponds are constructed. Future landowner activities (construction of playgrounds, sheds, swimming pools, etc.) also result in further clearing. Efforts should be made to minimize clearing needed for the footprint of structures and infrastructure Areas that are left intact should be placed in permanent conservation to prevent future clearing.

Most of these rare plant species are associated with Burton's Pond, Burton's Prong, and

an acidic wetland associated with Unity Branch. Adequate vegetative buffers are extremely important in maintaining water quality and the conditions that allow these plants to persist. The acidic fen community relies on a specific hydrological regime in order to maintain required pH levels and could be detrimentally affected by sedimentary inputs. The application mentions buffers of at least 145ft and an average of 200ft along Unity Branch. However, there are lot lines within the forested buffer along Burton's Pond. These lot lines should be moved and the existing forested buffer remain intact in order to maintain water quality in the pond and reduce impacts to rare plant and fish species. This buffer zone should also not contain roadways or stormwater management ponds and be placed in permanent conservation so that future clearing is less likely to occur.

Because of the presence of these species this project lies within a State Natural Heritage Site. However, it does not lie within a Delaware National Estuarine Research Reserve. This is one of the criteria used to determine the presence of Critical Resource Waters. The final decision regarding Critical Resource Waters – if this is an issue – will be made by the U.S. Army Corps of Engineers (ACOE). The information above will aid the ACOE in their determination.

RESPONSE:

AS REQUESTED, THE LAND DEVELOPMENT PLAN HAS BEEN MODIFIED TO REDUCE THE FOREST IMPACT FROM 3.3ACRES TO 0.25 ACRES. THEY MAY BE PROTECTED BY A FOREST CONSERVATION EASEMENT IN ADDITION TO DEED RESTRICTIONS IN THE FUTURE HOMEOWNER'S ASSOCIATION. ADDITIONALLY, 30 ACRES OF GREENWAY TREES WILL BE PLANTED TO ENHANCE THE EXISTING FORESTED LANDS.

THE DEVELOPER INTENDS TO DESIGN THE PROJECT AS AN ENVIRONMENTALLY SENSITIVE PROJECT. SETBACKS HAVE BEEN ESTABLISHED TO PROVIDE 30 FEET BETWEEN THE REAR PROPERTY LINES TO THE WETLANDS ALONG BURTON'S POND. ALSO, WE HAVE ESTABLISHED A 50 FOOT SETBACK OF THE REAR PROPERTY LINES TO THE POND'S WATERS. LOTS ALONG THE POND HAVE BEEN REMOVED FROM THE WOODED AREAS.

ANY RARE OR THREATENED SPECIES STATED BY DNREC SHOULD NOT BE DISTURBED SINCE THE DEVELOPMENT WILL BE CONSTRUCTED IN THE FIELD AREAS. ALSO, HABITAT WILL BE CREATED BY THE ADDITION OF THE 30 ACRES OF AFFORESTED LANDS.

A THREE PHASE ENVIRONMENTAL STEWARDSHIP PROGRAM WHICH WILL ENHANCE AND PROTECT BURTON'S POND IS BEING DEVELOPED. THE POND IS A PART OF THE LANDS OF THIS PROJECT AND WILL BE MANAGED BEFORE DURING AND AFTER DEVELOPMENT. A QUALIFIED

ENVIRONMENTAL CONSULTANT IS WORKING WITH THE DEVELOPER TO DEFINE THE MANAGEMENT PLAN.

Recreation

We recommend that the developer reconsider question #31 on the PLUS Application Form and dedicate a portion of the development for community use (possibly a community park).

RESPONSE:

A LOCAL PARK HAS BEEN ADDED TO THE CONCEPT PLAN AND CONSISTS OF 2.1 ACRES. THE PARK CAN BE SEEN AT THE END OF A CUL-DE-SAC ON THE RECONFIGURED ROAD NEAR BURTON'S POND.

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.

RESPONSE:

WE ANTICIPATE CONSTRUCTION WILL BE CONDUCTED USING PREMANUFACTURED STRUCTURAL SYSTEMS WHICH MINIMIZE ON-SITE FABRICATION AND WASTE.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 31.5 tons (62,930.7 pounds) per year of VOC (volatile organic compounds), 26.1 tons (52,102.4 pounds) per year of NOx (nitrogen oxides), 19.2 tons (38,442.1 pounds) per year of SO2 (sulfur dioxide), 1.7 ton (3,422.0 pounds) per year of fine particulates and 2,632.0 tons (5,264,074.7 pounds) per year of CO2 (carbon dioxide).

However, because a significant portion of 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 NOx; 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 NOx 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 12.7 tons (25,382.8 pounds) per year of VOC (volatile organic compounds), 1.4 ton (2,792.9 pounds) per year of NOx (nitrogen oxides), 1.2 ton (2,317.7 pounds) per year of SO2 (sulfur dioxide), 1.5 ton (2,990.9 pounds) per year of fine particulates and 51.4 tons (102,896.3 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 5.0 tons (10,059.9 pounds) per year of NOx (nitrogen oxides), 17.5 tons (34,991.0 pounds) per year of SO2 (sulfur dioxide) and 2,580.6 tons (5,161,178.4 pounds) per year of CO2 (carbon dioxide).

| | VOC | NOx | SO2 | PM2.5 | CO2 |
|------------------|-------------|-------------|-------------|------------|---------------|
| Mobile | 31.5 | 26.1 | 19.2 | 1.7 | 2632.0 |
| Residential | 12.7 | 1.4 | 1.2 | 1.5 | 51.4 |
| Electrical Power | | 5.0 | 17.5 | | 2580.6 |
| TOTAL | 44.2 | 32.5 | 37.9 | 3.2 | 5264.0 |

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 5.0 tons of nitrogen oxides per year and 17.5 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. We highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

DNREC also recommends 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 and links to mass transport system, fund a lawnmower exchange program for their new occupants

RESPONSE:

ALL DEVELOPMENT IS WITHIN DESIGNATED GROWTH AREAS BY EITHER THE STATE OR THE COUNTY. SUSSEX COUNTY'S ENVIRONMENTALLY SENSITIVE DEVELOPING AREA ENCOMPASSES ALL PARCELS ON THE EAST SIDE OF ROUTE 24 AND 600' OF PARCELS ON THE WEST SIDE OF ROUTE 24. THIS AREA IS SHOWN ON THE REVISED DRAWINGS. THIS EQUATES TO APPROXIMATELY HALF (47 %) OF THE PROJECT LOCATED WITHIN THE DESIGNATED GROWTH AREA.

THE BALANCE OF THE DEVELOPMENT, ALTHOUGH DESIGNATED LEVEL 4 BY THE STATE, IS ZONED BY SUSSEX COUNTY AS AR-1 (TWO LOTS PER ACRE). RECENTLY THE COUNTY HAS IMPLEMENTED PROVISIONS TO ALLOW THIS ZONE TO USE CLUSTERING TO PROMOTE OPEN SPACE AND OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

THIS PROJECT IS AN INFILL DEVELOPMENT AS SHOWN ON THE ATTACHED EXHIBIT. THE PROJECT IS CURRENTLY SURROUNDED ON ALL SIDES BY EXISTING, UNDER CONSTRUCTION AND APPROVED DEVELOPMENT. THESE DEVELOPMENTS SHOWN ON THE EXHIBIT CONSIST OF:

- *Greenbank Estates*
- *River Oaks*
- *Falcon Crest*
- *Herring Creek*
- *Lochwood*
- *Holly Lake Campground*
- *Pinewater Farms*
- *Angola communities*
- *Baywood communities*
- *Duneside*
- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

THOUGH A PORTION OF THIS PROJECT IS LOCATED IN LEVEL 4, IT IS AN INFILL PROJECT; THEREFORE THERE SHOULD BE NO ADDITIONAL AIR QUALITY ISSUES. TO REDUCE THE AIR QUALITY IMPACT, 30 ACRES OF TREES ARE PROPOSED THROUGHOUT THE COMMUNITY AS WELL AS WALKING TRAILS.

THE PROJECT WILL BE CONNECTED TO THE OTHER COMMUNITIES BY

DELDOT BIKE PATHS ALONG ROUTE 24, PINEWATER ROAD AND HOLLYMOUNT ROAD.

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 1hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly and Apartments)
- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq.ft., 3-stories 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 John J Williams Road, Hollymount Road, and Pine Water 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

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 rural 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.

In addition, the majority of 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.

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.

RESPONSE:

ALL DEVELOPMENT IS WITHIN DESIGNATED GROWTH AREAS BY EITHER THE STATE OR THE COUNTY. SUSSEX COUNTY'S ENVIRONMENTALLY

SENSITIVE DEVELOPING AREA ENCOMPASSES ALL PARCELS ON THE EAST SIDE OF ROUTE 24 AND 600' OF PARCELS ON THE WEST SIDE OF ROUTE 24. THIS AREA IS SHOWN ON THE REVISED DRAWINGS. THIS EQUATES TO APPROXIMATELY HALF (47 %) OF THE PROJECT LOCATED WITHIN THE DESIGNATED GROWTH AREA.

THE BALANCE OF THE DEVELOPMENT, ALTHOUGH DESIGNATED LEVEL 4 BY THE STATE, IS ZONED BY SUSSEX COUNTY AS AR-1 (TWO LOTS PER ACRE). RECENTLY THE COUNTY HAS IMPLEMENTED PROVISIONS TO ALLOW THIS ZONE TO USE CLUSTERING TO PROMOTE OPEN SPACE AND OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

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- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

AS REQUESTED BY DNREC, WE HAVE DESIGNED THE PROJECT TO PROTECT SENSITIVE RESOURCES BY NOT DISTURBING ANY EXISTING, WETLANDS, STEEP SLOPED AREAS AND CURRENTLY UNFARMED LANDS. THEY WILL ALL BE PRESERVED.

CURRENTLY, THE FARMED PORTIONS CONSIST OF 3BOUTIQUE FARM AREAS CONSISTING OF PASTURES FOR CATTLE AND BEAN/CORN ROTATIONS. AS PREVOIUSLY MENTIONED, DEVELOPMENT HAS ALREADY SURROUNDED THE FARM AND THE PROPOSED USE IS AN INFILL PROJECT. LARGE ADJACENT ACREAGES OF CROPLANDS NO LONGER EXIST IN THIS AREA.

THIRTY ACRES OF WOODED GREENWAYS ARE PROPOSED THROUGHOUT THE COMMUNITY TO ENHANCE AND PROMOTE GROUNDWATER RECHARGE. IN ADDITION, WOODED AND ARCHEOLOGICAL AREAS WILL REMAIN UNDISTURBED TO PROVIDE GOOD RECHARGE. FURTHERMORE, THE WASTEWATER DISPOSAL IS PROPOSED TO BE THROUGH RIBS (RAPID INFILTRATION BASINS) WHICH WILL BE DESIGNED MEETING DNREC'S REQUIREMENTS FOR QUALITY AND RECHARGE THE GROUNDWATER.

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 410 units on 266 acres located on either side of Delaware Route 24 and on either side of Hollymount and Pinewater Roads at Angola. According to the *State Strategies Map*, the proposal is located in an Investment Level 3 Environmentally Sensitive Developing and Level 4 area. As a general planning practice, DSHA encourages residential development in areas where residents will have proximity to services, markets, and employment opportunities such as in Level 1 and 2 areas. The developer has indicated that the parcels located in Levels 3 and 4 will be developed in concert. Moreover, the parcel in the Level 3 area will include affordable housing units affordable to Sussex County residents earning 80-100 % of Area Median Income (i.e., \$125,000-165,000). While DSHA encourages the development of affordable housing for low- and moderate-income families in Sussex County, the majority of the proposal is located in an area targeted for agricultural preservation and natural resources protection. Therefore, DSHA does not support the proposal because it is inconsistent with the County's Comprehensive Plan and where the state would like to see residential development occur.

RESPONSE:

THE DEVELOPER PLANS TO CONSTRUCT 20 AFFORDABLE HOUSING UNITS ON THE MR-RPC SIDE OF ROUTE 24 WHICH CONTAINS 102 MULTI-FAMILY CONDOMINIUMS.

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OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

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- *Duneside*
- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

Delaware Economic Development Office – Contact: Gary Smith 739-4271

The Delaware Economic Development Office (DEDG) is not in favor of this project in a Level 4 area. Our office supports the *Delaware Strategies for State Policies and Spending* policy regarding Level 4 activities.

RESPONSE:

ALL DEVELOPMENT IS WITHIN DESIGNATED GROWTH AREAS BY EITHER THE STATE OR THE COUNTY. SUSSEX COUNTY'S ENVIRONMENTALLY SENSITIVE DEVELOPING AREA ENCOMPASSES ALL PARCELS ON THE EAST SIDE OF ROUTE 24 AND 600' OF PARCELS ON THE WEST SIDE OF ROUTE 24. THIS AREA IS SHOWN ON THE REVISED DRAWINGS. THIS EQUATES TO APPROXIMATELY HALF (47 %) OF THE PROJECT LOCATED WITHIN THE DESIGNATED GROWTH AREA.

THE BALANCE OF THE DEVELOPMENT, ALTHOUGH DESIGNATED LEVEL 4 BY THE STATE, IS ZONED BY SUSSEX COUNTY AS AR-1 (TWO LOTS PER ACRE). RECENTLY THE COUNTY HAS IMPLEMENTED PROVISIONS TO

ALLOW THIS ZONE TO USE CLUSTERING TO PROMOTE OPEN SPACE AND OTHER "GREEN" LAND PRESERVATION. OUR OVERALL GROSS DENSITY IS NOW 1.5 UNITS PER ACRE.

THIS PROJECT IS AN INFILL DEVELOPMENT AS SHOWN ON THE ATTACHED EXHIBIT. THE PROJECT IS CURRENTLY SURROUNDED ON ALL SIDES BY EXISTING, UNDER CONSTRUCTION AND APPROVED DEVELOPMENT. THESE DEVELOPMENTS SHOWN ON THE EXHIBIT CONSIST OF:

- *Greenbank Estates*
- *River Oaks*
- *Falcon Crest*
- *Herring Creek*
- *Lochwood*
- *Holly Lake Campground*
- *Pinewater Farms*
- *Angola communities*
- *Baywood communities*
- *Duneside*
- *Stonewater Creek*

DEVELOPMENT AND INFRASTRUCTURE HAS ALREADY BEEN PLANNED FOR THE ABOVE DEVELOPMENTS IN THIS SUSSEX COUNTY GROWTH AREA.

Public Service Commission – Contact: Andrea Maucher 739-3227

There are portions of the project not yet in Tidewater's certificated water service territory. Tidewater will need to apply to the Commission for a CPCN.

Project is not in a certificate wastewater service territory. Tidewater will need to apply to the Commission for a CPCN.

Any expansion of natural gas or installation of a closed propane system must comply with Federal Pipeline Safety guidelines.

RESPONSE:

THE ABOVE COMMENTS ARE NOTED. IT IS OUR UNDERSTANDING THAT TIDEWATER UTILITIES HAS ALREADY APPLIED FOR THE CPCN.

Sussex County – Contact: Richard Kautz 855-7878

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. Open space maintenance is of particular concern because the developer proposes to turnover responsibility for Burton Pond (including the dam) to the homeowners association. A long term capital program and budget should be included within the open space management plan so that purchasers of property within the development will have a reasonable expectation of the long term obligation and associated costs facing the association.

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. Please send an information copy of the Cultural Resources Report to Brian Page in the Sussex County Engineering Department.

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 that meets TMDL limits for Delaware's Inland Bays.

A significant portion of the project is in the Environmentally Sensitive Developing Zone (ESDZ) and Sussex County will consider serving the entire project within the Inland Bays Planning Area for sewer service. The study will conclude approximately May 2006. The study will develop options for sewer service and make a recommendation.

Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A sewer concept plan must be submitted to the Sussex County Engineering Department for review and approval prior to the design of the sewer system. A checklist for concept plans is attached. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots.

When Sussex County 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 homeowners association expense. For questions regarding the above comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

Sussex County Historic Preservation Comment: The potential for both pre-historic and historic archaeological sites in portions of this development is considered medium to high. A cultural resource assessment should be conducted on the site and an assessment for the potential for human remains on the site should be made. If sites are identified they should be clearly documented following the Delaware State Historic Preservation Office Standards and copies of reports should be delivered to Sussex County and the State Historic Preservation Office. Please direct inquires to Brian Page, Historic Preservation Planner, Sussex County; (302) 856-6138.

RESPONSE:

AN OPEN SPACE MANAGEMENT PLAN WILL BE PREPARED AND SUBMITTED ALONG WITH THE PRELIMINARY SUBDIVISION PLAT.

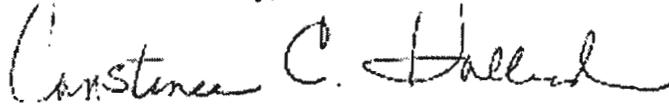
THE DEVELOPMENT TEAM WILL DOCUMENT TO THE PLANNING AND ZONING COMMISSION HOW THE PROPOSED CLUSTER DEVELOPMENT PROVIDES A TOTAL ENVIRONMENT AND DESIGN WHICH ARE SUPERIOR TO THAT WHICH WOULD BE ALLOWED UNDER THE STANDARD LOT OPTION. MANY OF THE ITEMS HAVE BEEN DOCUMENTED IN THE PLUS SUBMITTAL AND WILL BE PRESENTED IN FURTHER DETAIL.

IT IS OUR UNDERSTANDING THAT TIDEWATER UTILITIES WILL OPERATE THE WASTEWATER TREATMENT AND DISPOSAL SYSTEM. IT IS NOTED THAT IF THE COUNTY PROVIDES SEWER SERVICE IN THE FUTURE, IT IS REQUESTED THAT THE TREATMENT SYSTEM MAY BE ABANDONED AND A DIRECT CONNECTION MADE TO THE COUNTY SYSTEM AT DEVELOPER AND/OR HOMEOWNER ASSOCIATION EXPENSES. HOWEVER, DUE TO THE LEGAL ISSUES REGARDING THIS ITEM, WE DECLINE TO OFFER A COMMENT AT THIS TIME.

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

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

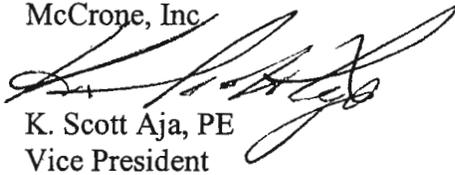
Sincerely,



Constance C. Holland, AICP
Director

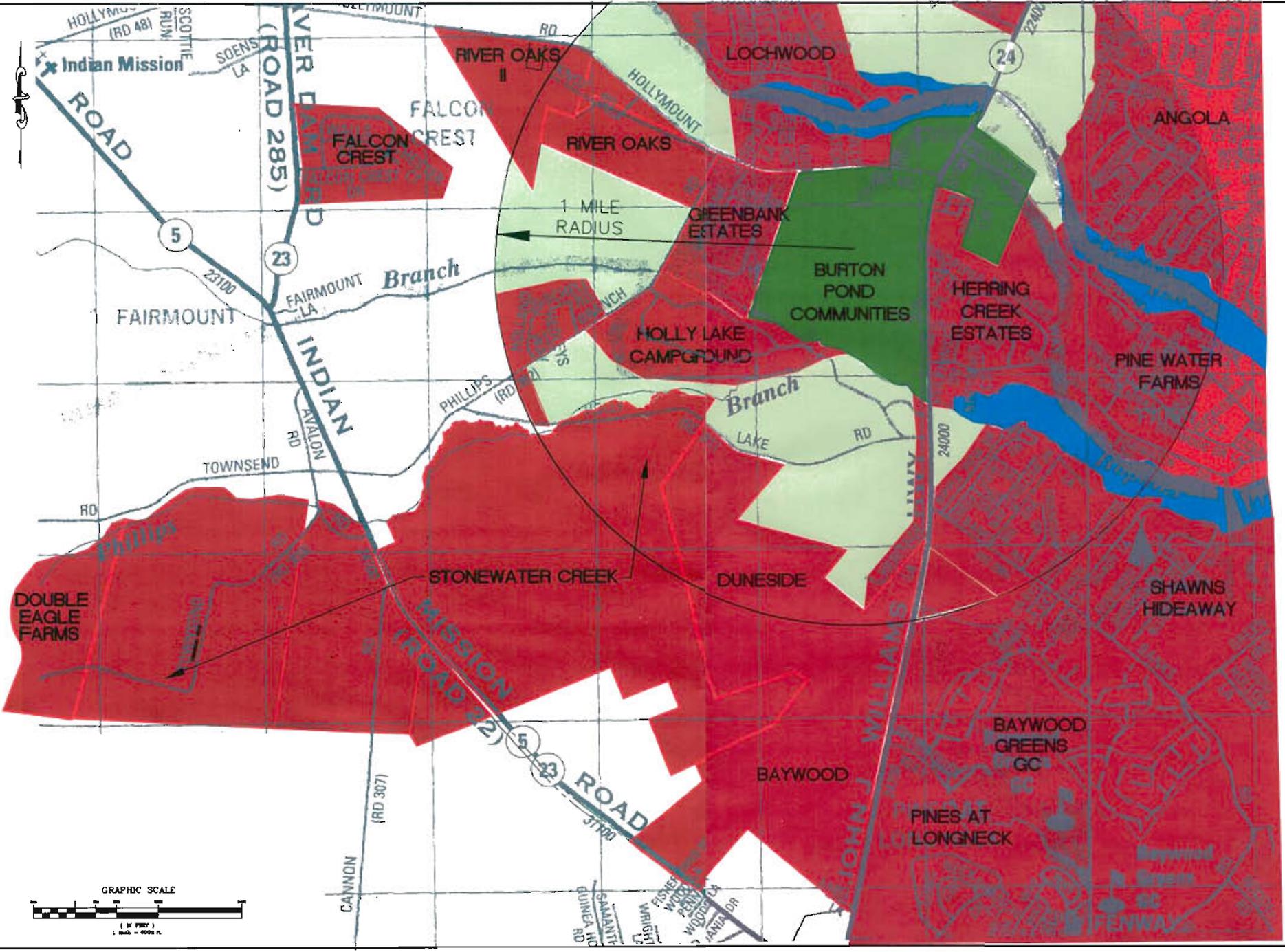
CC: Sussex County

Sincerely,
McCrone, Inc



K. Scott Aja, PE
Vice President

Q: 40072-111405.responsetoplus



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| | | ENGINEERING • ENVIRONMENTAL SCIENCES LAND PLANNING & SURVEYING • CONSTRUCTION SERVICES 11100 W. STATE ST. SUITE 100 CANTON, MISSISSIPPI 39001-3400 TEL: (601) 546-2000 FAX: (601) 546-2005 WWW.MCCRONE.COM | | SHEET NO. 1 CASE FILE |
| | | PROPOSED DEVELOPMENT FOR BURTON POND COMMUNITIES SHELBY COUNTY, MISSISSIPPI | | DATE: 11/14/05 SCALE: 1"=4000' JOB NO. 103040072 DRAWN BY: J.M. DESIGN BY: RSA APPROVED BY: JSA |
| REVISIONS | | DATE | | PER |