# Appendix D Water Quality Standards and Criteria for Development

The quality of Little Seneca Creek, particularly the segment downstream of Lake Seneca, will be directly affected by development of the land area that drains to it. The quality and use of this stream will be directly affected by development that occurs on Analysis Areas KI-2 and NE-1.

The intent of the Master Plan is to establish a balance between two objectives in Germantown—first, to provide housing at appropriate Corridor City densities, and secondly, to protect the high water quality of selected streams. Environmental performance criteria have been established in response to both of these objectives. In Analysis Areas KI-2 and NE-1 these criteria require the use of extraordinary best management practices.

Without adherence to the performance criteria and extraordinary best management practices, the maximum residential density recommended for Analysis Area KI-2 would be one unit per two acres.

The intent of the performance criteria is to permit residential development to occur up to the density limit of the R-200 or PD-2 zoning classification (2.4 units per acre), if a package of environmental mitigation measures is implemented which meets the stated criteria. If the performance standards and criteria cannot be met, then the mitigation measures must be strengthened and/or the development intensity reduced to a level consistent with the criteria. This site-specific approach provides developers an opportunity to develop a package of mitigation measures that will allow more dwelling units than could be built without those mitigation

measures. The mitigation package would respond to the unique environmental characteristics of the property: soils, slopes, geology, extent and nature of vegetation, relationship to natural drainage courses, etc.

Development and other land disturbances in Analysis Areas KI-2 and NE-1, because of their proximity to and potential impact on the existing high water quality of Little Seneca Creek, deserve special attention and should be conducted in accordance with the guidelines and requirements set forth below.

These guidelines and requirements are organized in three sections:

- D-1 Those which are specific to the environmental situation of Analysis Areas KI-2 and NE-1.
- D-2 Proposed additions to the subdivision regulations and related "Guidelines for the Protection of Slopes and Stream Valleys," to be renamed "Guidelines for Environmental Management in Moratgomery County."
- D-3 Proposed amendments to the County's
  Stormwater Management and Sediment
  Control Regulations administered by the
  Department of Environmental Protection.

Sections D-2 and D-3 are incorporated in this Master Plan until such time as new regulations incorporating the substance of these amendments are officially adopted.

# D-1: Master Plan Specific Guidelines

### MASTER PLAN PERFORMANCE STANDARDS<sup>1</sup>

The following standards shall be met by the developer in Analysis Areas KI-2 and NE-1 to assist in maintaining the existing high water quality.

### **Imperviousness**

Overall, development shall not result in more than 20 percent total impervious surface (e.g., structures, roadways, parking areas, paths).

#### Stream Buffer

- a. A minimum stream buffer of 150 feet on each bank of a tributary perennial stream and a minimum stream buffer from each bank of the mainstem of Little Seneca Creek are required.
- Additional buffer width greater than the minimum set forth above may be required based on factors including:
  - protection of mature forest stands or other areas of environmental value such as wetlands;
  - types and density of vegetative cover and soil holding ability; and
  - slope of land adjacent to the stream or defining the stream valley.
- c. The stream buffer shall remain undisturbed, with the exception of reforestation, bank stabilization, stormwater management facilities, and road and utility crossings. Stream access should be carefully managed to protect water quality.

### Vegetation and Tree Cover

- a. All disturbed areas shall be revegetated as soon as possible as recommended by the Montgomery County Soil Conservation District. Emphasis should be placed on reforestation of disturbed areas.
- In cooperation with the M-NCPPC Environmental Planning Division and the forestry and fisheries divisions of the Maryland Department of Natural Resources, the devel-

oper shall prepare and implement a reforestation plan for the stream buffer area. The primary objectives of reforestation are to provide shade and cooler water temperature and additional sediment and mutrient removal from stormwater runoff. Standards for revegetation of the stream buffer are set forth in the Subdivision Regulations.

### Steep Slopes

- a. Physical development should avoi d areas where the slope equals or exceeds 15 percent. Steep slopes (i.e., 15 percent rore) should be incorporated into the site's open space. Wooded slopes equal to or reater than 15 percent should not be disturbed.
- b. Additional measures (as recommended by M-NCPPC in consultation with DEP) may be required where moderately or severely erodible soils exist.

### SUGGESTED BEST MANAGEMENT PRACTICES

Best management practices (BMPs) shall be utilized, as outlined in the "Guidelines for Environmental Management in Montgomery County," to reduce sediment and pollutant loading in receiving streams.

### IMPACT ASSESSMENT REQUIREMEENTS

### Performance Monitoring

Performance monitoring and reporting me ust be conducted by the developer or his agent to ensure that existing high water quality is maintained. The scope, location and timing of such monitoring and remorting is set forth in the proposed "Guidelines for Environmental Quality in Montgomery County."

### Environmental Impact Analysis

In order for the Montgomery County Plaraning Department to evaluate a development proposal, applicants for development in the KI-2 and NE-1 an alysis areas shall submit an environmental analysis of the natural features, the impact of the proposed development on water quality, and the proposed mitigation measures. The scope of the analysis is set forth in the environmental impact analysis requirements of the proposed "Guidelines for Environmental Quality in Montgomery County."

<sup>1</sup> Variances from the Master Plan Standards, Best Management Practices, and Impact Assessment Requirements nay be granted on a case-by-case basis by the Montgomery County Planning Board if it can be demonstrated that other measures, with innovative BMP's, would maintain the existing high water quality of Little Seneca Creek.

# D-2: Proposed Amendment and Guidelines

This section sets forth a proposed amendment to the Montgomery County Subdivision Regulation and the establishment of "Guidelines for Environmental Management in Montgomery County."

### SUBDIVISION REGULATIONS

The following paragraph is recommended by staff for inclusion in the Subdivision Regulations. Guidelines for achieving County-wide watershed objectives will be adopted by the Planning Board with specific reference in Section 50-32(e) of the Subdivision Regulations.

The Board may require environmental management measures that it finds necessary to protect the water quality of County streams in the context of the development density proposed or approved. Such measures may include the delineation and protection of slopes, stream buffers, and wetlands, as well as the utilization of best management practices. For areas designated in area or functional master plans as requiring special protection, or in other areas defined in the Guidelines as environmentally sensitive, additional measures such as environmental impact analysis, afforestation/ reforestation,<sup>2</sup> and performance monitoring may be required. Where appropriate, enforcement shall be through binding agreement between the applicant and M-NCPPC ensuring implementation of all required measures. The Board shall publish "Guidelines for Environmental Management in Montgomery County" to provide guidance for the implementation of these measures.

# GUIDELINES FOR ENVIRONMENTAL MANAGEMENT IN MONTGOMERY COUNTY

The current staff slope and stream buffer guidelines will be expanded and retitled, "Guidelines for Environmental Management in Montgomery County."

The following guidelines are divided into two sections based on the following criteria of applicability: Section I shall be required for all preliminary subdivision and site plans. Section II would only be required when an environmentally sensitive or special protection area has been identified in:

- A master plan, functional master plan, Comprehensive Ten-Year Water and Sewerage Plan, or watershed technical stucy;
- Areas that are within Class III watersheds and/or subwatersheds;
- Within the Little Seneca Creek Watershed;
   and
- 4) In proposed subdivision plans where field investigations have identified the presence or predominance of any of the following environmental features:
  - unique wetland, seeps, springs, bogs, recharge areas, or sole source a quifer.
  - tree coverage on more than 30% of the site and this environmentally sensitive area cannot be incorporated in to open space.
  - steep areas with erodible soil, including an area with 20% of the land having greater than 25% slope, and an area with 30% of the land being greater than 15% slope.
  - where dwellings are proposed on fill or floodplain soil.
  - proposal associated with high degree of imperviousness (greater than 30%) that will result in further deterioration of the receiving waters, especially where state's anti-degradation policy may apply.
  - subdivision proposals greater than 100 acres in size and with 400 feet of Class III and Class IV streams.
  - commercial, industrial, and institutional development dealing with hazardous substances.

### GUIDELINES FOR ALL AREAS

(Required for all subdivisions)

#### Performance Standards

The following standards shall be applied to all plans:

- Streams, springs, and seeps shall be maintained in a natural condition whenever possible so that the hydraulic regimen and State water quality standards for receiving waters can be maintained.
- Deposition of any material such as excavated rock, topsoil, stumps and shrubs, and buildirig material within the designated stream buffer on the preliminary/site plan is prohibited.

Afforestation means the establishment of a tree cover on an area from which it has always or very long been absent, or the planting of open areas which are not presently in tree cover. Reforestation means the replanting of trees on recently forested land.

### Best Management Practices

As required under, and to conform to, applicable County and State laws and regulations, the applicant shall identify best management practices (BMPs) to reduce sediment and pollutant loading in receiving streams. Additional BMPs may be recommended on a case-by-case basis. The BMPs shall be incorporated into the Stormwater Management Concept Plan required with the preliminary plan submission:

- A State waterway permit from the Water Resources Administration must be obtained before any construction or alteration:
  - (a) in Class III streams;
  - (b) in Class IV streams with watersheds greater than 100 acres; or
  - (c) in Class I streams with watersheds greater than 400 acres.

Any necessary permits from federal or state government (e.g., Section 401 or 404 permits) must be obtained before any disturbance of wetlands or waters.

- To maximize the potential use and success of infiltration techniques, buildings, parking lots and other development should be located on soils with a low infiltration capacity, to the extent feasible. Pervious soils should be maintained as open space, conservation easements, parkland, or stormwater facility sites to the greatest extent consistent with other land use and zoning objectives. Parking lots should not be located within the stream buffer or 100 year ultimate floodplain.
- When a development site consists of both cropland and forestland, it is preferable to develop the area of cropland.
- Road and public utility stream crossings and stream buffer encroachments should be minimized. Where stream crossings and buffer encroachments must occur, they should be placed away from environmentally sensitive areas, and combined to minimize disruption in the stream valley. Clear bridge spans should be used to cross watercourses whenever possible, particularly in Class III and IV watersheds. Culverts may be permitted on a case-by-case basis if it can be demonstrated that the benefits would outweigh any negative impacts.
- Sewer mains and pumping stations should be sited and constructed in such a manner as to protect ground and surface waters. Sewer lines and pumping stations should be located as far as practical from streams while still maintaining needed elevations and gradients to provide reliable service.
- Wherever possible, natural drainage systems should be utilized instead of hydraulically efficient structural drainage. No modification of existing natural drainage should occur except for bank stabilization,

- swales, habitat improvement measures, and unavoidable infrastructure improvements (roads, sewer lines, stormwater management, etc.).
- To the extent feasible, natural drainage ways should be shaded in Class III and IV streams to prevent high temperature stormwater from being discharged into the receiving streams.
- Additional erosion control measures (as recommended by M-NCPPC staff in consultation with DEP) may be utilized where moderately or severely eroded soils exist.
- Use of porous materials is encouraged in large parking areas to limit impervious surface, particularly in areas of occasional use.

#### **GUIDELINES FOR SENSITIVE AREAS**

(Required only under certain circumstances)

The items contained in this section would only be required when an environmentally sensitive or special protection area has been identified in a master plan, functional master plan, Comprehensive Ten-Year Water and Sewerage Plan, or watershed technical study; or

Any combination or all of the following items may be required depending on the specific property being evaluated.

### Evironmental Impact Analysis

In order for the planning staff to evaluate a development proposal, applicants for development may be required to submit an environmental analysis of the natural features, the impact of the proposed development, and the proposed mitigation measures. Appropriate analyses and models should be utilized to assess impacts and efficiency of mitigation measures. Depending on the location and type of development, the applicant may be required to provide information including but not limited to any or all of the following items:

### Analysis of Natural Features

- a. Topography:
  - natural terrain of the site; and
  - slopes that equal or exceed 15 percent.
- b. Soils/Geology:
  - soil types including drainage characteristics, susceptibility to erosion, and areas of moderate and severe erodibility, including erodibility factor (K);
    - depth of seasonal high water table (for individual water and sewerage systems);
    - geologic conditions; and
    - areas suitable for infiltration.
- c. Vegetation:
  - inventory of site vegetation emphasizing streamside vegetation; and
  - wetland areas, mature wooded areas, and areas demonstrating stress (erosion, poor soils, steep slopes, etc.).

- d. Physical Habitat (Stream Environment):
  - presence or absence of perennial/intermittent streams;
  - stream characteristics:
    - location and base flow of receiving stream;
    - stream gradient;
    - substrata;
    - habitat suitability for trout, other game fish, and their supporting organisms;
    - biological conditions, including existing macroinvertebrate populations (i.e., species composition and abundance) and phytoplankton populations;
    - stream bank condition; and
    - areas of channel or streambed erosion.
- e. Groundwater:
  - groundwater characteristics (e.g., depth, yield, and storage) for individual water systems;
  - location and characteristics of springs and recharge areas.
- f. Hydraulics:
  - existing drainage area and drainage characteristics of the site;
  - existing and future channel velocities; and
  - ultimate 100-year floodplain as defined by M-NCPPC/FEMA 1"=200' maps plus 25' building restriction line.
- g. Water Quality:
  - existing water quality data through baseline monitoring.

#### Analysis of Proposed Development

- a. Size and Location of Development:
  - proximity of physical development to the stream channels;
  - proximity to headwaters for perennial/ intermittent streams, springs and wetlands;
  - area of physical development (i.e., ground coverage including buildings, roads, parking areas, walks, and other transportation ways);
  - · estimate of impervious surface.
- b. Proposed Stormwater Management Plan:
  - stormwater management concept plan including the types of conveyance and measures to augment groundwater recharge to maintain sufficient base flow of streams.
- c. Proposed Sewerage and Water Systems:
  - proximity of water and sewer lines to the stream channels; and
  - location of pumping stations and force mains.
- d. Proposed Site Maintenance Plan:

- erosion and sediment control measures recommended for use during and after construction; and
- proposed management plans for land application of substances (e.g., fertilizers, pesticides, etc.) and the deposition of residuals (e.g., refuse, vegetative debris, etc.).
- e. Impact on Water Quality as Measured by the Following:
  - · temperature;
  - dissolved oxygen concentration;
  - · turbidity;
  - · fecal coliform density;
  - biological oxygen demand;
  - nutrients (soluble and insoluble);
  - pH
  - · toxics (including heavy metals); and
  - total residual chlorine.

In addition, the analysis should identify and describe proposed measures to mitigate or eliminate impacts of the above parameters due to the development.

### Afforestation/Reforestation

- At the direction of the Board, the applicant shall develop and implement an afforestation/reforestation plan for the stream buffer area, in cooperation with the M-NCPPC Environmental Planning Division, Montgomery County Department of Parks, and the Forestry, Park, and Wildlife Service of the Maryland Department of Natural Resources. The primary objectives of afforestation/reforestation are to provide shade and cooler water temperature, additional sediment and nutrient removal from stormwater runoff, and improved wildlife habitat. The emphasis shall be placed on locating larger caliper trees and dense shrubs within the buffer area closest to the stream. Other areas of the buffer shall be allowed to reforest naturally.
- Where development occurs on cropland, former croplands outside of the developed areas should be afforested. The type and extent of afforestation/reforestation would be reviewed on a case-by-case basis and during the preliminary/site plan stage.

### Performance Monitoring

Performance monitoring and reporting may be required of the applicant or his agent at the direction of the Planning Board to ensure that existing high water quality is maintained during and after development activity. The monitoring results shall be used to collect baseline data on existing water quality, to estimate the likely impact of development on water quality, and to assess actual impact on water quality during construction and at project completion. Monitoring data shall be reported to the M-NCPPC Environmental Planning Division. The scope, location and timing of monitoring

and reporting is provided below. The Board may at its discretion waive or add other requirements to the scope.

- The applicant (or the M-NCPPC as an agent of the applicant with applicant funding) shall provide bi-monthly (i.e., every two months) grab samples with field measurements of flow, pH, turbidity, temperature, and dissolved oxygen; and laboratory analyses of major pollutant constituents as specified by prior agreement in the approval of preliminary/site plans. Quarterly reports shall be provided to the M-NCPPC Environmental Planning Division.
- For projects constructed in the Class III and IV watersheds, monitoring and reporting shall begin at the initiation of grading and continue for a period of 18 months after the development is completed.
- Monitoring and reporting will be conducted in a manner to provide needed data on best management practices. A minimum of three samples will be collected during each sampling session, including one at the upper reaches of the development site, one at the development site, and one at the lower reaches of the development site. At least eight of the bi-monthly samples must be collected during storm flow resulting from rainfall events of 0.75 inches or greater.
- The applicant may be required to conduct biological monitoring in combination with physical monitoring. Biological monitoring shall be conducted for aquatic invertebrates to determine the overall impact of development on the stream system (indicator organisms can provide information of the extremes of pollution experienced by a stream system). Bio-assay testing shall be conducted prior to grading, during construction and at completion of the development project. Scheduling of testing during construction shall be determined as part of the subdivision/site plan approval.
- The analysis shall be conducted at the applicant's expense and in coordination with the M-NCPPC. The applicant will be responsible for selecting a state certified analytical laboratory and for using standard field sample collection methods.

### Sediment and Erosion Control Best Management Practices

All disturbed areas should be revegetated as soon as possible as recommended by the Montgomery County Soil Conservation District. Emphasis should be placed on reforestation of disturbed areas.

### Development Agreement

When required by the Planning Board, the applicant/owners of the property shall enter into a binding agreement with the M-NCPPC to ensure that the development is constructed in accordance with the appropriate standards and requirements contained herein and other County environmental standards, and the stormwater management facilities are properly constructed and maintained.

The monitoring, maintenance, and enforcement agreement is to be submitted for approval with the record plat submission. An executed copy is to be recorded with the first record plats. In addition, there is to be appropriate language included in the Homeowners Association documentation referencing the covenant and the obligations to be undertaken by the Homeowners Association. During construction, and for the first four years following of construction, the responsibility for compliance with the agreement will remain with the developer. Thereafter, the Homeowners Association shall assume responsibility.

As part of this agreement:

#### The applicant must:

- provide bi-weekly certification to M-NCPPC (with copy to DEP) during construction from an independent professional engineer that the clearing, grading and stabilization of the site are proceeding in accordance with the Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- establish and maintain a cash escrow fund to finance the inspection and maintenance of the stormwater management (SWM) facilities.
- initiate and pay for bi-annual inspection, maintenance, and certification to DEP, ensuring that the facilities remain in proper working condition in accordance with the approved design standards.
- ensure that the stormwater management facilities are constructed in accordance with State and County sediment control practices and with the performance criteria and standards listed herein.
- grant the necessary easements allowing the county access to the facility in order to inspect and/or repair the facilities and verify engineer's certification.

#### The homeowners association must:

maintain the stormwater maintenance fund at a predetermined level by assessing homeowners a portion of the association dues; measures to protect the water quality from misapplication of fertilizer and pesticide, improper refuse collection, vegetative debris, and animal wastes should be considered and adopted into the operating policies or covenants of the homeowner's association.

Both applicant and homeowners association must agree

to:

- conduct conveyance system cleaning as often as necessary so the catch basins and ditches perform according to design standards.
- maintain the facilities in accordance with the agree-

If not, the County may perform all necessary repair and maintenance work, and the County may assess the developer/homeowners association or the cash escrow fund for the costs of the work and any applicable penalties.

### D-3: Proposed Stormwater & Sediment Control Amendments

### RECOMMENDED CHANGES TO STORM-WATER REGULATIONS

Recommendation #1: Amend Section 1.8 to include the following definitions: (Definitions Apply to ALL WATERS)

Stream Buffer—An undisturbed strip of natural vegetation contiguous with and parallel to the bank of a perennial stream (base flow channel) which is intended to:

- Protect hydraulically adjacent slope areas;
- Maintain or improve the water temperature regimen/water quality of a stream;
- Protect wetlands;
- Complement regulations pertaining to the 100-year ultimate floodplain;
- Provide or maintain wildlife habitat, open space, or both;
- Complement on-site erosion/sediment control measures and stormwater management measures by serving as a backup natural filter/trap; and
- Provide for the esthetic enhancement of stream valley areas.

Nontidal Wetland—An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Recommendation #2: Amend Section 2.A.1.b to add a sentence at the end of the first paragraph (ending with the word "Manual") to read:

The Director may require applicants to submit soil boring information sufficient to demonstrate thorough analysis of the feasibility of stormwater management infiltration practices.

Recommendation #3: Amend Section 2.A.1. to add a new Subsection 2.A.1.c as follows:

- c. Protection of Stream Buffer Areas
- (1) Applicants are required to delineate stream buffer areas on stormwater management (SM) Concept Plans and

related SM structural design documents submitted to DEP. (ALL WATERS)

- (a) For those properties that go through M-NCPPC subdivision review and/or site plan review, the delineated stream buffer area shall be that approved by the Montgomery County Planning Board as part of subdivision or site plan approval.
- (b) For lots recorded prior to April 1983, applicants must delineate stream buffer areas on the SM Concept Plan. Applicant proposed stream buffer delineations must be based on and consistent with the County's adopted "Guidelines for the Protection of Stream Buffer Areas." The Director may, after opportunity for comment from the M-NCPPC, waive this requirement in cases where its imposition would eliminate opportunities for development of previously approved and recorded lots or when other circumstances warrant.<sup>3</sup>
- (2) The SM Concept Plan submission shall include information necessary to document compliance with the County's "Guidelines." (ALL WATERS)
- (3) Grading and construction work involving permanent disturbances to stream buffer vegetation is prohibited in stream buffers delineated pursuant to Section 2.A.1.c.(1).(b). Construction of roads, bridges, drainage and stormwater management facilities, sewer lines, other utilities, trails, bike paths, etc. is exempt from this restriction. The Director may also waive this restriction if unusual circumstances warrant and stream protection objectives will not be jeopardized. (ALL WATERS)
- (4) Reforestration, through natural succession, is required within stream buffers delineated pursuant to Section 2.A.1.c.(1).(b). As considerations of water quality, steep slopes, or other environmental conditions warrant, the Director may require additional plantings to accelerate reforestation within sensitive portions of the buffer area. Reforestation needs on M-NCPPC managed parkland will be determined by the Montgomery County Department of Parks. On other public lands, reforestation requirements for stream buffers, delineated in accordance with Section 2.A.1.c.(1).(b), will be determined by DEP upon consultation with the cognizant public agency.
- (5) DEP may require the applicant to install preventative and/or remedial stream channel protection measures, such as gabions and other stream bank stabilization techniques, upstream and downstream of stormwater manage-

<sup>3</sup> Criteria defining conditions for the granting of waivers to stream buffer requirements will be developed by DEP in consultation with M-NCPPC staff.

ment facilities. DEP will coordinate, with the Department of Parks, the review of stream channel protection measures proposed for location on or adjacent to M-NCPPC managed park property. For facilities proposed for location on M-NCPPC managed park property, the Department of Parks will review and approve SM facilities before final approval by DEP. (ALL WATERS)

(6) Stream buffer requirements in the adopted "Stream Buffer Guidelines" apply to all streams which either produce a perennial flow, have greater than 30-acre drainage areas, or are designated on the latest operative version of the 1": 200' scale topographic maps prepared by the M-NCPPC. In cases where more than one of these conditions exist, the most restrictive condition applies. (ALL WATERS)

### Recommendation #4: Amend Section 2.A.1 to add a new Subsection 2.A.1.d. as follows:

- d. Protection of Natural Springs and Seeps
- (1) Stormwater Management (SM) Concept Plans shall identify all natural surface springs and seeps on the development site. Surface springs and seeps will not be piped unless extraordinary circumstances warrant the granting of a waiver of this requirement by the Director. DEP will inform applicants and closely coordinate with the M-NCPPC in instances where pending decisions on waivers could affect an applicant's ability to meet applicable conditions of subdivision as approved by the Planning Board. (ALL WATERS)
- (2) Wherever feasible, surface springs and seeps should be diverted around SM structures and designs incorporated into SM Concept Plans that prevent temperature elevation of natural spring and seep discharges. (ALL WATERS)

#### e. Control of Runoff Velocities

Drainage systems shall be designed to reduce runoff velocities at outlets to non-erosive rates down to 4 feet/second or less as conditions warrant. Drainage systems may include: dutch drains; drainage swales with check dams; stonefilled ditches; use of log check dams in small streams; and parallel pipes. (ALL WATERS)

f. Protection of Habitat Access for Aquatic Life

Construction of SM structures in wetlands and/or construction of in-stream SM structures which may prevent or impede natural movement of aquatic life will be done in conformance with State and Federal statutes and regulations. (ALL WATERS)

g. Coordination of SM Facilities Impacting Public Park Lanes

DEP will coordinate, with the Department of Parks, the review of SM facilities proposed for location on or adjacent to M-NCPPC-managed park property. For SM facilities which have discharge outfalls on or within 50' of tributary drainage to M-NCPPC-managed park property, Department of Parks approval of the discharge outfall is required prior to final approval by DEP. For SM facilities proposed for location on M-NCPPC-managed park property, the Department of Parks

will review and approval SM facilities before final approval by DEP. (ALL WATERS)

Recommendation #5: Amend Section 4.B.2 to revise coverage of fee structure for water quality waivers. Revisions would be based upon the following concept:

(ALL WATERS)

- Revise regulations affecting water quality waivers to include fees covering all residential land use densities equal to or greater than 1.0 dwelling units/2.0 acres. (ALL WATERS)
- DEP will develop a new table for assessing waiver fees based upon zoning, related typical imperviousness, estimated runoff, and/or estimated pollutant loading (in lbs./acre/year).

Recommendation #6: Move Sections 5.B and 5.C to become new Sections 5.D and 5.E respectively. Create a new Section 5.B as follows:

- B. County Stormwater Management Objectives by Water Use Class
  - 1. General Water Use Protection Objectives

County water quality control requirements are designed to support water use classifications designated in State Water Quality Standards and the nutrient reduction goals of the 1987 Chesapeake Bay Agreement. This is accomplished through: (a) policies set forth in the Comprehensive Ten-Year Water Supply and Sewerage Systems Plan; (b) County approved and adopted master plans, functional master plans, and watershed studies; (c) stream valley park acquisition; (d) careful siting of development through application of zoning powers and subdivision regulations; and (e) implementation of County Stormwater Management and Sediment Control regulations. Maryland also exercises regulatory and programmatic responsibilities in some of these areas. (ALL WATERS)

#### 2. Class I Streams

Class I streams are protected to support general aquatic life, recreational opportunities, and agricultural, industrial and public water supply. County SM requirements seek to control peak runoff flows while removing nutrients, sediments, and other pollutants to the extent practicable. Infiltration measures, flow attenuation using swales and natural depressions, and "wet" ponds are the preferred order of SM controls. Where such measures are infeasible or impractical and wetlands protection considerations outweigh the benefits of wet ponds, "dry" SM ponds are generally acceptable. (CLASS I)

### 2a. Class I Watersheds Draining Public Water Supply Reservoirs

In watersheds which drain both to Class I streams and to public water supply (PWS) reservoirs, the primary concerns are the control of excessive sediment and nutrient discharges. Sedimentation reduces reservoir storage capacity. Excess nutrients accelerate reservoir eutrophication, increase drinking water treatment costs, and reduce sport fishery potential and general recreational appeal. Preferred solutions are infiltration practices, capable of maintaining high levels of sediment and nutrient removal over a long term, and wet ponds. (CLASS I Waters That Are Also Tributary to PWS Reservoirs)

#### 3. Class III and Class IV Trout Waters

Watersheds draining Class III and Class IV streams, require special SM approaches. In Class III streams, maintenance of high dissolved oxygen levels and cool temperatures is critical throughout the spring and summer seasons due to the permanent and reproducing nature of the trout fishery. Emphasis is on maximum use of on-site infiltration controls to remove pollutants and moderate temperatures before runoff is returned, as groundwater inflow, to streams. Other cooling techniques include reducing site impervious area and increasing shade area. (CLASS III)

Wet and dry ponds may not be located to discharge to Class III waters except as authorized by the Water Resources Administration of the Maryland Department of Natural Resources (DNR). The Director may further restrict the use of DNR-approved wet ponds unless the applicant can demonstrate that discharges will not adversely affect stream temperatures, significantly disturb wetlands, or impede fish migration and spawning. (CLASS III)

In Class IV streams, dissolved oxygen and temperature concerns are limited primarily to early spring when trout are annually restocked to support recreational fishing. SM control methods are similar to those used to protect Class III streams. Infiltration remains the preferred SM method. However, wet ponds or other control measures are not generally discouraged if designs and shading techniques provide a necessary level of temperature moderation. (CLASS IV)

The issuance of stormwater management waivers for areas tributary to Class III watersheds is strictly limited and, for Class IV watersheds, discouraged. (CLASS III AND IV)

3a. Watersheds Having Class III or Class IV
Designations Which Drain to Public Water
Supply Reservoirs

Where a Class III or Class IV watershed drains to both a trout stream and a PWS reservoir, the trout stream classification is applied in developing a SM Concept Plan. Infiltration is the preferred management method for temperature moderation and reduction of sediment and nutrient inputs. If acceptable to the state regulatory agencies, the Director may agree to the applicant's use of other alternate innovative SM controls (e.g., wet ponds with special discharge controls to moderate temperature). (CLASS III and IV Waters Which Are Also Tributary to PWS Reservoirs)

Recommendation #7: Create a new Section 5.c. as follows:

- C. Requirements and Criteria for Areas Tributary to Class III and Class IV Waters and to Public Water Supply (PWS) Reservoirs
  - (NOTE: A table would be used here that includes the specific requirements listed below and identifies the applicable water use class as noted here at the end of each proposed requirement here in the margin: III, IV, and PWS.)
- 1. The Stormwater Management (SM) Concept plan shall indicate the selection of infiltration or other appropriate SM measures leading to drainage conveyance systems. These measures shall be designed to infiltrate the "first flush" of runoff (initial 1/2" runoff) to capture and remove pollutants dissolved or suspended in runoff to the extent feasible. SM measures such a infiltration trenches, vegetated swales with check dams, vegetated filter strips, and oil and grit separators are acceptable to DEP. Infiltration measures acceptable to DEP are identified in Maryland's Standards and Specifications. (All CLASS III Waters Plus CLASS IV Waters in Little Seneca Watershed)
- 2. Wet or dry ponds cannot be located to discharge to Class III Waters unless specifically authorized by MD DNR. Temperature and dissolved oxygen content from proposed pond discharges may not cause violations to stream receiving water standards specified in Maryland Water Quality Standards. For DNR-approved wet ponds discharging to Class III waters and for all wet ponds discharging to Class IV Waters, the Director may further regulate the placement, design, and maximum drainage areas served as follows:
  - a. SM Concept Plans shall place emphasis on maximum use of on-site control options. (CLASS III)
  - b. Drainage areas seroing wet ponds shall not exceed 250 acres. (CLASS III and IV)
- 3. If wet ponds are proposed in the SM Concept Plan, they shall be designed, where feasible, to facilitate shading by tree canopy to help lower pond and discharge temperatures as needed to maintain downstream receiving water standards. DEP may also require mature tree preservation and/or reforestation with specified species, sizes, and densities. (CLASS III and IV)
- 4. Because of the high levels of nutrient and sediment control provided, the use of wet ponds and SM infiltration measures is encouraged in watersheds that drain to public water supply reservoirs and that are not also designated as Class III streams. (CLASS I and IV WATERS Tributary to PWS Reservoirs)
- 5. Extended detention times for SM impoundments without a permanent pool (e.g., "dry ponds") must not exceed 24 hours. (CLASS III and CLASS IV Waters in the Little Seneca Watershed)
- When dry pond structures are proposed for construction in open wetlands or in open stream valleys with

perennial base flows, special additional measures may be required to ensure the integrity of the natural ecosystem. These measures may include:

- leaving the existing land contours, natural vegetation, and base flow channels undisturbed wherever feasible;
- b. limiting land disturbance areas to construction of the embankment and release structures only; and
- c. shading of the base flow channel with special plantings. (CLASS III and IV)
- 7. The installation of any in-stream structures that will prevent or inhibit the natural movement of aquatic life is prohibited, unless it can be demonstrated that the benefits of such in-stream structures would significantly outweight any negative impacts.

(Applies to all CLASS III and CLASS IV Waters in the Little Seneca Watershed. On a case-by-case basis, the Director may also apply this requirement to other Class I or Class IV waters where severe impediments to unique spawning or aquatic life migration needs may result.)

8. Fines for violation of SM requirements in Class III or Class IV waters or in areas with drainage to public water supply reservoirs are double the fines for first time violations of these regulations. (CLASS III and IV Waters; ALL WATERS Tributary to PWS Reservoirs)

(NOTE: The County lacks authority, under the current County Code, to enforce this. A Code amendment would be needed.)

- 9. Use of maximum landscaping is encouraged, to the extent feasible, to reduce runoff and increase shading of impervious areas. For residential subdivisions having lot sizes of two (2) acres or greater, use of open section roads is also required. (All CLASS III Waters Plus CLASS IV Waters in Little Seneca Watershed)
- 10. Off-site SM structures must be dry ponds that include additional design features and/or facilities which protect or provide natural or man-made wetlands, shallow ponded areas, marsh, etc. (CLASS III)
- 11. When preferred SM practices are provided infeasible or impractical, DEP may require the applicant to install oil and grit separators as part of public storm drainage systems. If DEP requires this, the applicant will be required to sign a maintenance agreement which assigns all long-term maintenance responsibilities to an appropriate organization having a direct interest in the affected property. (CLASS III and IV Waters; ALL WATERS Tributary to PWS Reservoirs)

### RECOMMENDED CHANGES TO SEDIMENT CONTROL REGULATIONS

(NOTE: Amendments in these areas are under consideration. However, suggested phrasing of regulatory language has not yet been developed.)

- 1. Require that stream buffer areas, designated on Stormwater Management (SM) Concept Plans be also designated on sediment control (SC) plans submitted to DEP (ALL WATERS)
  - a. For those properties that go through M-NCPPC subdivision review and/or site plan review, the designated stream buffer area shall be that officially adopted by the Montgomery County Planning Board as part of subdivision or site plan approval.
  - b. For lots recorded prior to April, 1983, applicants must identify, on the sediment control plan, proposed stream buffer areas. Applicant proposed stream buffer delineations must be based upon and consistent with the County's adopted "Guidelines for the Protection of Stream Buffer Areas." The Director may, after opportunity for comment from the M-NCPPC, waive this requirement in cases where its imposition would eliminate opportunities for development of previously approved and recorded lots or when other circumstances warrant.
- 2. Temporary sediment control in stream buffer areas is discouraged. However, temporary SC controls may be acceptable to DEP when applicants clearly demonstrate that use of the buffer area represents the best method of sediment control and that reforestation provisions will be implemented. (ALL WATERS)
- 3. Indicate that DEP is responsible for enforcing the stream buffer areas as designated on the applicant's sediment control plan and SM Concept Plan. (ALL WATERS)
- 4. Increase trapping storage volume requirements to 3600 cu. ft./acre (1800 cu. ft./acre to be temporarily stored for 24 hours; 1800 cu. ft./acre to be permanently stored in pipe outlet traps, sediment basins, and rip-rap outlet traps with dewatering devices). (ALL WATERS)
- 5. Explore possible avenues for tripling of fines for violations in drainage to special waters. There would appear to be good environmental justification for this in Class III waters and economic justification as well in drainage up-

<sup>4</sup> Criteria defining conditions for the granting of waivers to stream buffer requirements will be developed by DEP in consultation with M-NCPPC staff.

stream of water supply reservoirs and County off-site SM facilities. (CLASS III and IV Waters; All WATERS Tributary to PWS Reservoirs)

(NOTE: County lacks authority, under the current County Code, to enforce this. A Code amendment would be needed.)

- 6. Add the below regulations to implement the recommendations previously stated in this Appendix concerning sediment control that are not already addressed in existing sediment control regulations, in draft floodplain and SM regulations (regarding stream buffer protection), or in M-NCPPC draft tree preservation legislation and regulations.
  - a. Clearing and grading shall be planned and phased to expose the minimum practicable land areas at any one time during development. (ALL WATERS)
  - b. Avoid unnecessary clearing. (ALL WA-TERS)
  - Require that topsoil temporarily removed from a construction site be stored and redistributed in accordance with practices

- approved by the Montgomery Soil Conservation District. (CLASS III and IV Waters; ALL WATERS Tributary to PSW Reservoirs)
- 7. Require special plantings on graded slopes in excess of 25%. Require use of graded slope benches for every 15 feet in elevation change, Review grading plans to limit concentrated flows and provide sheet flow drainage. (ALL WATERS)
- 8. Prohibit, except for road embankments, constructed slopes in excess of 3:1 located in or immediately adjacent to stream buffer areas (CLASS III and IV Waters; ALL WATERS Tributary to PWS Reservoirs)
- 9. Indicate that DEP will coordinate, with the Montgomery County Department of Parks, the review of sediment control devices proposed for location on or having drainage immediately adjacent to M-NCPPC managed parkland. The Department of Parks will review and approve SC devices proposed for location on M-NCPPC managed park property before final approval by DEP. (ALL WATERS)



### MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760

January 30, 2003

### **MEMORANDUM**

TO:

Michele Rosenfeld

Legal Department

FROM:

Cathy Conlon

Countywide Planning Division – Environmental Planning

SUBJECT:

Hoyles Mill Village Plan Approvals and Imperviousness

Per your request, the following is a summary of the plan approvals for the Hoyles Mill Village subdivision and the impervious surface calculations included in them.

### <u>Background</u>

### **Master Plan**

Hoyles Mill Village (formerly King-Hargett property) is located within the KI-2 analysis area identified in the Germantown Master Plan. This analysis area is subject to special environmental protection measures because of the sensitivity and high quality conditions of the portion of the Little Seneca Creek to which it drains. This section of Little Seneca Creek and its tributaries are classified as Use III-P waters (natural trout waters). The master plan performance standards set forth in Appendix D of the master plan to assist in maintaining the existing high water quality include the following provision concerning impervious surfaces:

"Overall, development shall not result in more than 20 percent total impervious surface (e.g., structures, road ways, parking areas, paths)."

The master plan also contains the following footnote:

"Variances from the Master Plan Standards, Best Management Practices, and Impact Assessment Requirements may be granted on a case-by-case basis by the Montgomery County Planning Board if it can be demonstrated that other measures, with innovative BMP's, would maintain the existing high water quality of Little Seneca Creek."

The original Planning Board recommendation for imperviousness in the analysis area was 15 percent. The level was increased to 20 percent during the County Council work sessions. These work sessions included presentation of proposed plans by several of the developers within the analysis area that demonstrated compliance with a 20 percent imperviousness level was possible. Plans for the King-Hargett property were included in these discussions.

### **Plan Approvals**

The King-Hargett property (Plan no. 1-88216) received preliminary plan approval on September 25, 1994 with the following condition regarding impervious surfaces:

"At site plan applicant shall conform with the requirements of Appendix "D" of the Germantown Master Plan. These measures to include, but not be limited to, an imperviousness restriction, water quality monitoring before, during and after construction, stream buffer criteria and suggested best management practices criteria. Use of best management practices shall be reviewed by M-NCPPC and MCDEP and approved by MCDEP."

The site plans for this property (Hoyles Mill Village Section 1, Plan no. 8-95027 and Hoyles Mill Village Section 2, Plan no. 8-95030) were approved on June 1, 1995. The site plan findings, as noted in the staff report, included the finding on imperviousness as required by the preliminary plan condition. The approved level of imperviousness for the property was 20.8%. The overage was due to additional sidewalks that were required by sidewalk legislation that post-dated the master plan adoption. The level of imperviousness for the subdivision using the master plan assumptions was 19.4%.

Site plan revisions for Hoyles Mill Village Sections 1 and 2 (Plan nos. 8-95027A and 8-95030A) were approved on January 21, 1999. The Section 1 amendment increased the number and changed the layout of single-family detached units. Section 2 was amended to add the MPDU's required by the Section 1 unit increase. Imperviousness levels were re-analyzed as part of these revisions and a level of 21.114% was approved. The level of imperviousness for the subdivision using the master plan assumptions for sidewalks was 19.7%.

Construction of Section 1 began in late 1999. To monitor compliance with the impervious limits during the construction, staff requested periodic reporting tied to building permit release. Unfortunately, there was disagreement on the necessity of the monitoring by the developer, Artery Hoyles Mill LLC, and the development was significantly underway before the first accurate imperviousness report was received. The report revealed that actual house construction in Section 1 did not conform to the required impervious limit. Further overage in impervious surface caused by builder

construction of full-length 20' driveways instead of the site plan approved driveways that flared from 20' in front of garages to 10' in the road right of way, was also identified. Artery was informed that the overage would have to be accounted for as part of Section 2 construction. The sale of Section 2 lots to a builder was already in process, and Artery also contested this requirement.

In early 2000, preliminary and site plan submissions were received from Artery for the Hargett tract, a property adjacent to Section 2 of Hoyles Mill Village. The submission also included a site plan amendment for Section 2 (Plan no. 8-95030B), which involved adding MPDU's to account for the requirements of the Hargett tract. At about the same time, discussions began with the purchasers of Section 2, Toll Brothers, Inc., regarding their plans for resubdivision and site plan amendment to accommodate their development plans. To allow the Toll Brothers plans to proceed, it was agreed that the Hargett tract would be placed in reservation pending resolution of the impervious issue.

Approval of the new preliminary plan (Plan no. 1-01063) and site plan revision (Plan no. 8-95030C) for Section 2 of Hoyles Mill Village was granted on September 13, 2001. As part of these plans, the lot configuration and road network within Section 2 were modified. A condition limiting the newly configured single-family lots and associated driveways to the same square footage of impervious surface approved as part of the overall 21.114% limit for the subdivision was included. Also included was a condition placing 20 lots in reservation pending staff approval of building permits to ensure that the impervious limit is not exceeded. The Hargett property plans are scheduled for Planning Board hearing on February 13, 2003.

Table 1 shows the approved impervious surfaces for Hoyles Mill Village Sections 1 and 2, and tracks the revisions that have been made.

### **Proposed Hargett Property Plans**

The Hargett property consists of 270,072 square feet, of land which will be incorporated into the Hoyles Mill Village subdivision. As a new development the property is technically subject to the 20% impervious limit specified by the master plan, however, since the plans are interconnected staff has agreed to allow the approved 21.114% limit approved for Hoyles Mill Village to apply. Applying that limit yields a total of 57,023 square feet impervious surface that could be constructed on the Hargett property.

The proposed development plan includes 50,825 square feet impervious surface, which falls below the permitted level. However, the matter of the 14,588 square feet impervious surface overage in Section 1 of Hoyles Mill Village (for which the Hargett tract was put into reservation) has not been resolved. The developer has not identified any acceptable measures or innovative BMP's that would offset the impacts of having

more impervious surface. Absent these, staff recommends that development of the Hargett property be limited to 14 lots (see calculations below) to account for the impervious surface overage. This is consistent with the enforcement of impervious limits for all other developments within the KI-2 planning analysis area.

### **Hargett Property Impervious Calculations**

Permitted Imperviousness (270072 x 21.114%) Impervious Overage from Section 1 (per Table 1) Adjusted Imperviousness (to meet 21.114% overall)	57,023 sq.ft. - 14,588 sq.ft. 42,435 sq.ft.
Proposed Imperviousness	50,825 sq.ft.
Impervious Required to meet overall 21.114%	- 42,435 sq.ft.
Adjusted Imperviousness Overage	8,390 sq.ft.
Adjusted Imperviousness Overage	8,390 sq.ft.
Average Square Feet per Lot	÷ 2,582 sq.ft.
Proposed Lots in Excess of Impervious Limit	3.2 lots

IMPERVIOUS CALCULATIONS - HOYLES MILL VILLAGE

		Office Private Drive	Offstreet Parking	MPDO@60 sq.ft.	additional TH@60 sq.ft.	SFD@90 sq.ft.	House walkways		TH@238 sq.ft.	SFD@645 sq.ft.	Driveways		Sidewalks	?	MPDU@576 sq.ft.	TH@792 sq.ft.	SFD@1792 sq.ft.	Impervious Surfaces	APPROVEDI
	GRAND TOTAL	TOTAL -		79_ TOTAL_	53	376 114		TOTAL	80	376		TOTAL	-	Į.	79	3 8 4 8	376	Number	APPROVED IMPERVIOUS LEVELS
	<b>2316869</b> 21.11%	39803 64949	25146	4740 M	3180	33840 S		261560	19040	242520 S	-	1139646	821220 S 318426	803824	45504 N	26928 T	673792	B	ELS
	G			4740 MPDU@60 sq.ft.		33840 SFD@90 sq.ft.	Olice walkways			242520   SFD@645 sq.ft.   Double-drive SFD@175 sq.ft.	Driveways		821220 Streets(minus A297 offsite and correction) 318426		45504 MPDU@558 sq.ft.	57600 TH@740 sq.ft.	SFD Section 1 As-built 673792 SFD Section 2@1792 sq.ft.	Impervious Surfaces	REVISIONS FOR AS-BUILT SECTION 1 AND AMENDED A-297 IMPERVIOUSNESS
	GRAND TOTAL	TOTAL		81 TOTAL		384	i	TOTAL		384 94		TOTAL	ition)	TOTAL	81	80	159 225	Number	S-BUILT SECTI
,	2335461 (+18592) Debit against Section 1	39803 64949	(+ <b>840)</b> 25146	4860 47730	3180	34560	(+21610)	283170	19040	247680 16450	(-25810)		795410 318426	825776 ( <b>+21952</b> )	45198			Surface Area (Sq.Ft.)	ON 1
	ection 1					34560 SFD@90 sq.ft.			SFD@700 sq.ft.	247680 SFD@645 sq.ft. 16450	Driveways		795410 Lose cul-de-sacs 318426				290502 403200 SFD Section 2 Max	Impervious Surfaces	REVISION FOR SECTION 2 SUBDIVISION AND SITE PLAN AMENDMENT (TOLL BROTHERS)
!	GRAND TOTAL	TOTAL		101AL		382	Ş		223	159		TOTAL -		TOTAL			223	Number S	TION 2 SUBDIVISION AND
on against 500	2335461 (+18592) Debit against Section 1	39803 64949	(+ <b>660)</b> 25146	4860 R	5130	34380	(+38805)		156100 19040	102555 16450	(-59150)	1080496	762070 F	842101 (+38277)	27676 45198 N	59200	290502 419525	Impervious Surface Area (Sq.Ft.)	N AND IERS)
	tion 1			4860 Reduce walkways		House walkways		MPDU with driveways		Опуста	rivous de la company de la com	080496	762070 Reduce roadways	•	27676; 45198;MPDU@540 sq.ft.			Impervious Surfaces	PROPOSED SECTION 2 SITE PLAN AMENDMENT TO ADD HARGETT TRACT MPDU'S
r	GRAND TOTAL	TOTAL -	Ş	TOTAL			TOTAL	30			i	TOTAL -		TOTAL	84			Number	SED SECTION 2 SITE PLAN AMEN TO ADD HARGETT TRACT MPDU'S
Debit against Section 1	2331457 (+14588)	39803 64949	40745 (- <b>145</b> ) 25146	3180 4055	5130	34380	307709 ( <b>+46149</b> )	7344	6220 156100 19040	102555 16450	(-69855)	316469 1069791	753322	842263	27676 45360	59200	290502 410525	Impervious Surface Area (So Ft.)	J'S



October 30, 2002

Mr. Bernie Rafferty Artery Development Company, LLC 7200 Wisconsin Avenue, Suite 1000 Bethesda, Maryland 20814

RE: Hargett Property Imperviousness

Dear Mr. Rafferty:

The Maryland-National Capital Park and Planning Commission has studied your request to apply the imperviousness "credit" from the Wildman subdivision (Plan No. 1-94024) to the Hargett Property. MNCPPC staff and legal counsel will not permit the Wildman impervious credit to be applied to the Hargett Property. Based on the plan submitted and "allowable credits" the imperviousness overage is 8,470 square feet. Staff also feels that the 1,792 square foot building footprint is too small and that the imperviousness for single-family units in the same watershed is more indicative of the current housing market. Staff recommends that a building footprint of 2,290 square feet per single-family dwelling, not including driveways, be applied to the Hargett Property. Please revise your preliminary plan to ensure compliance with the imperviousness limitations by removing credit for the Wildman property and by using a larger building footprint. This will result in at least a four lot reduction from the plan previously submitted.

If you have any questions please contact me at 301 495-4730 or Cathy Conlon at 301 495-4542.

Sincerely,

Mark Pfefferle

Countywide Planning Division

**Environmental Planning** 

cc: Cathy Conlon
Joe Davis
Robert Kronenberg
Steve Federline
Michele Rosenfeld



August 23, 2002

Mr. Bernie Rafferty Artery Development Company, LLC 7200 Wisconsin Avenue, Suite 1000 Bethesda, Maryland 20814

RE:

Hargett Property Imperviousness as part of the overall Hoyles Mill Village Plan

(8-95027 & 8-95030)

Dear Mr. Rafferty:

This letter is in response to your request for re-evaluation of the impervious surface numbers for the overall Hoyles Mill Village property based upon your proposed revision to the pending preliminary and site plan for the Hargett Property piece of the plan. As we have discussed, development of the Hargett Property must take into account the overage in allowed impervious surface that ensued from construction of Hoyles Mill Village, Phase I. Your recent proposal to accomplish this includes: revision of the Hargett Property plan to reduce the number of lots and the amount of road surface; revision of the MPDU's in Phase I of the overall Hoyles Mill Village plan; and use of imperviousness "credit" from the adjacent Wildman subdivision (Plan No. 1-94024).

We have evaluated your revised numbers and, by our calculations, they result in the following bottom line:

#### Addition of the Hargett Property to the Overall Calculations

Approved Plans Total Tract	10,972,764 s.f.
Hargett Property Addition to Tract	+ 270,072 s.f.
Adjusted Total Tract Area	11,242,836 s.f.
Existing Total Imperviousness	2,354,711 s.f.
Proposed Hargett Property Addition	+ 50,825 s.f.
Adjusted Total Tract Imperviousness	2,405,536 s.f.

### Calculation of Imperviousness Overage with the Hargett Property Included

Adjusted Total Tract Imperviousness	2,405,536 s.f.
Total Tract * Approved Imperviousness (21.114%)	- 2,373,812 s.f.
Imperviousness Overage	31,724 s.f.

### Calculation of Imperviousness Overage after Allowable "Credits"

Adjusted Imperviousness Overage		4,461 s.f.
Credit from Wildman Property <sup>1</sup>		4,009 s.f.
Credit for offsite A-297 impervious surface	-	19,250 s.f.
Credit for revising Phase I MPDU section	-	4,004 s.f.
Imperviousness Overage		31,724 s.f.

Based on your assumptions for the Hargett Property imperviousness, the standard lots (i.e., those not on pipestems with common driveways) would have a total impervious surface (house, lead walk, and driveway) of approximately 2,582 square feet. Using that number, the subdivision still exceeds the imperviousness cap by 1.7 lots.

We feel that the credit as outlined above is the maximum we can grant while still adhering to our policies for enforcing impervious surface caps. Therefore, if imperviousness on the Hargett property can not be otherwise further reduced, our recommendation to the Board would be to reduce the proposed plan by an additional 2 lots. We feel that it is appropriate to round the number of lots "up", because your assumption of only 1,792 square feet per lot for house footprints is very low based upon construction within the subdivision so far.

If you have any questions or wish to further discuss our calculations or conclusions, please contact me at (301)495-4542.

Sincerely,

Cathy Conlon

Countywide Planning Division Environmental Planning

cc: Mark Pfefferle
Robert Kronenberg
Steve Federline
Michele Rosenfeld

<sup>&</sup>lt;sup>1</sup> The Wildman Property credit is based upon the difference between the approved square footage of impervious surface for that subdivision, minus the actual constructed square footage of impervious surface. Staff does not agree with including the Wildman tract area in the total Hoyles Mill Village tract and allowing Hoyles Mill to benefit from the fact that the Wildman property was approved with a lower overall imperviousness cap. In order to use this credit, final confirmation of the Wildman numbers will have to be made by Park and Planning. Use of the Wildman credit is also contingent on the builder (Richmond American) either, being the builder of the Hargett Property plan, or signing over the credit to Artery.

### HARGETT PROPERTY

### (IMPERVIOUS CALCULATIONS)

STREET "A"	-	11,670	SF	
DRIVEWAYS	-	15,360	SF	
SIDEWALK	-	1,640	SF	
HOUSES (19) (1736 SF/EA)	-	32,984	SF	
EX. HOUSE W/GARAGE	•	N/A		
TOTAL	-	61,654	SF	(1.44 Ac)
TOTAL SITE AREA	-	270,072	SF	(6.20 Ac)
TOTAL IMPERVIOUS ARE (W/MPDU CORRECTION - $61,654 - 4634 = 5$	SEE ATTACHMI	57,020 ENT # 2)	SF	(21.11 %)

(ATTACHMENT 1)

# MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION DEVELOPMENT REVIEW COMMITTEE RECOMMENDATIONS

TO: <u>Ma</u>	lcolm Shaneman
Dev	relopment Review Division
SUBJECT:	Plan # <u>1-88216</u> , Name Hoyles Mill Village
	DRC date: December 2, 2002

The above-referenced plan has been reviewed to determine if it meets requirements of the Guidelines for Environmental Management of Development in Montgomery County, and other county regulations that may apply. The following recommendations are made for the DRC meeting:

SUBMITTAL ADEQUACY

Plan is complete.

### **EPD RECOMMENDATIONS:**

Disapproval of 3 lots and imperviousness not to exceed 43,954 square feet. See below:

- 1. DPS SWM concept approval necessary
- 2. Comply with the impervious computations as noted in the legal agreement dated December 6, 2000 from Michele Rosenfeld to Barbara Sears. The impervious limitations and credits are as follows:

Site Area: 5.7 acres (248, 292 sf) Permitted Impervious Coverage: (@21.114%) = 52,424 sfPhase I overage: 31,724 sf **Total** 20,700 sf Credits: 23,254 sf (MPDU revision: 4.004 sf(Richter Farm Road: 19,250 sf) Total Impervious Coverage Permitted: 43,954 sf

- 3. Delete 3 lots based on impervious coverage and revise site plan for new layout. Impervious coverage of 2,959 square feet per lot is based on information provided by applicant for individual house footprints, porches, lead walks, sidewalks and driveways.
- 4. Place 3 lots in reservation and enter into an agreement with Planning Board to ensure compliance with impervious cap. Lots placed in reservation are to be denoted on the plan.
- 5. All driveways must be designed as single car width (10 feet) from the edge of the road to the sidewalk and flared out to a double car width (20 feet) in front of the garage. Alternative driveway design may be approved by M-NCPPC Environmental Planning staff on a case-by-case basis provided any additional impervious surface is accounted for as part of the overall impervious limit. All sales contracts must disclose to buyers that these dimensions are imposed as a condition of the Planning Board approval.
- 6. The developer/builder must provide M-NCPPC Environmental Planning staff an estimate of the imperviousness for each lot, based on the actual structure to be constructed, prior to release of the building permits. The developer/builder must also submit surveyed 'as-builts' after the wall and final checks are complete for each lot.
- 7. The plan must comply with the impervious computations as set forth in the agreement from the Planning Board dated December 6, 2000 from Michele Rosenfeld to Barbara Sears.
- 8. A revised FCP needs to be submitted to reflect current lot configuration.

9. A tree save plan must be developed and submitted to Environmental Planning prior to any clearing and grading.

DATE: <u>November 27,2002</u>

SIGNATURE:

Mark Pfeffe

Environmental Planning Division

cc:

Bernie Raftery, Artery

December 6, 2000

Barbara A. Sears, Esquire Linowes and Blocher LLP 1010 Wayne Avenue, 10th Floor Silver Spring, Maryland 20910-5600

RE: Hoyles Mill Village, Phases 1 and 2; Site Plan Nos. 8-95027, 8-95030

Dear Ms. Sears:

I am writing in response to your November 28, 2000 letter to Charles Loehr, proposing a means to allow Toll Brothers, Inc. ("Toll") and Artery Hoyles Mill LLC ("Artery") to go to closing on December 1, 2000 (copy attached as <a href="Exhibit">Exhibit "A"</a>). The Commission is willing to agree to the terms of the letter subject to the following modifications:

- 1. To deal with any impervious area issues associated with Section 1, Artery agrees to execute and record a restrictive covenant for the Hargett Parcel, containing approximately 6 acres as shown on <a href="Exhibit" B" ("Hargett Parcel")</a>. The covenant shall be binding on successors and assigns and shall provide that no clearing, grading or construction shall be undertaken on the Hargett Parcel until the impervious issues on Section 1 of the above-referenced property are resolved between Artery and the Commission.
- 2. Toll Brothers must provide to the Commission monitoring reports for Section 2 development at stages that correspond to the release of the 56th, 112th and 168th building permits for Section 2 (225 single family lots owned by Toll). The reports must detail the (i) actual impervious area constructed in each stage at the date of the report [i.e., house footprints, roadways (excluding Schaeffer Road, Richter Farm Road, and Leaman Farm Road), driveways and sidewalks], (ii) estimated impervious area for lots for which building permits have been issued in each stage but not yet constructed, and (iii) impervious area proposed for future stages (as shown on the approved Section 2 Site Plan). The Commission will not release building permits for each of the stages until the reports are submitted to the Commission for the previous stage. If the impervious area for Section 2 calculated in this manner exceeds the impervious area limits applicable to Section 2 after release of the 112th building permit (50% completion of the Section 2 development), the Commission may require Toll to submit monitoring reports on a more frequent basis as determined by Staff but not more often than every 30th building permit. After release of the 200th building permit, Staff may further require review and approval of imperviousness as part of

Barbara A. Sears, Esq. December 5, 2000 Page 12

each remaining building permit or withholding release of a number of the remaining permits pending demonstration that the imperviousness requirement has been met. Toll agrees that the last 20 lots for which building permits will be sought shall consist of Lots 1-7, Block R, 13-23, Block U, and 7 and 8, Block Q, as shown in cross-hatch on Exhibit "B". The Commission may seek to require a restrictive covenant to preserve in perpetuity any impervious deficit in Section 2.

- 3. By executing this letter neither Artery nor Toll waives any of their legal or equitable remedies with respect to their ability to challenge the Commission's final impervious calculations and/or enforcement actions related thereto, for Section 1, Section 2, and/or the Hargett Parcel, as applicable.
- 4. The parties agree that any impervious area which exceeds the required impervious area attributable to each Section shall not be deemed a deficit against the other Section or the Hargett Property.
- 5. This letter must be countersigned by authorized representatives of Toll Brothers and Artery Hoyles Mill LLC, confirming acceptance of these terms.

If you have questions or need additional information, please call me at (301) 495-4646.

Sincerely,

Michele Rosenfeld

Associate General Counsel

G:\misc.mmr\letters\hoyles.mill.doc

cc: Charles Loehr, Director of Park and Planning Catherine Conlon, Environmental Planning Division

**COUNTER-SIGNATURE PAGE TO FOLLOW** 

Barbara A. Sears, Esq. December 5, 2000 Page 3

The undersigned authorized signatories accept the terms of this letter:

Name: Alan Stackman

Title: Sn. J. P

Artery Hoyles Mill LLC

Toll Brothers, Inc.

IMANAGE: 222635 v.3 01859 0007 Cre. 12/05/00 4:33 PM Orig. Typ.KHW Ed. 12/05/00 6:16 PM

## LINOWES AND BLOCHER

1010 Wayne Avenue, Tenth Roor Sälver Spring, MO 20910-5800 301-588,590 Fax 301-895,5044 Websita: www.linowes-law.com

November 28, 2000

Barbara A. Sears 301.650.7057 bas@linowes-law.com

### BY HAND DELIVERY

Mr. Charles Loehr Director of Planning Montgomery County Planning Board 8787 Georgia Avenue Silver Spring, Maryland 20910-3760

Re: Hoyles Mill Village, Phases 1 and 2; Site Plan Nos. 8-95027, 8-95030

Dear Mr. Loehr:

It is our understanding from your voice-mail message of yesterday that further investigation of matters contained in our letter to you dated November 15, 2000 needs to be undertaken by Staff in order to respond to the letter. As we discussed, the settlement of the Toll Brothers Artery litigation provides for closing on the sale of the Section 2 single-family detached lots to Toll Brothers ("Toll") on Friday, December 1, 2000. Your message further indicated that the Staff questions were of a nature that the December 1, 2000 date for a response from staff would probably not be met.

att spring on the contract of

In order to preserve the December 1, 2000 closing date, Artery suggests that, until the impervious issue can be resolved, Artery hereby agrees to withhold development on 15 lots in Section 2. Specifically, these lots would include: Lots 1 through 7, Block Z, Lots 1 through 4, Block AA, and Lots 51 through 54, Block B. The set-aside of these 15 lots would not only cover the 27,960 square feet of projected increased impervious area from the approved site plans, but an additional approximate 25% buffer above the 27,960 square feet. Both Park and Planning and Artery would retain their respective positions with regard to impervious area until the impervious area calculations can be confirmed by Staff.

In exchange for the set-aside, Park and Planning hereby agrees to consent to the issuance of building permits for the other Phase 2 lots not identified in this letter as the 15 set-aside lots. This agreement will not prevent Artery from contesting the final position of Park and Planning on the impervious issue if unfavorable to Artery, nor compromise any decision Park and Planning may make on the November 15, 2000 letter. This agreement will provide security to Park and Planning that the 21% impervious area viewed by Staff as a cap would not be exceeded if Park and Planning rejects Artery's November 15, 2000 proposal. Additionally, Artery agrees that Section 2 may be monitored as provided in the

We believe that this mechanism for proceeding is fair to all parties and allows the closing with Toll to proceed on December 1, 2000 and, hence, the major obstacle currently

Annapolis

Calumbia

Frederick

Greenbolt

Silver Spring

Washington, DC

EXHIBIT "A"

Mr. Charles Loehr November 28, 2000 Page 2

preventing the Development District from moving forward to be averted. Since Artery and Toll are currently meeting on the details of closing, we would ask that, if you agree with this interim method of proceeding, you indicate your agreement below.

Thank you for your continued cooperation in this matter.

Very truly yours,

LINOWES AND BLOCHER LLP

Barbara A. Sears

for Artery Hoyles Mill LL(

SEEN AND AGREED TO:

MONTGOMERY COUNTY PLANNING BOARD

By:

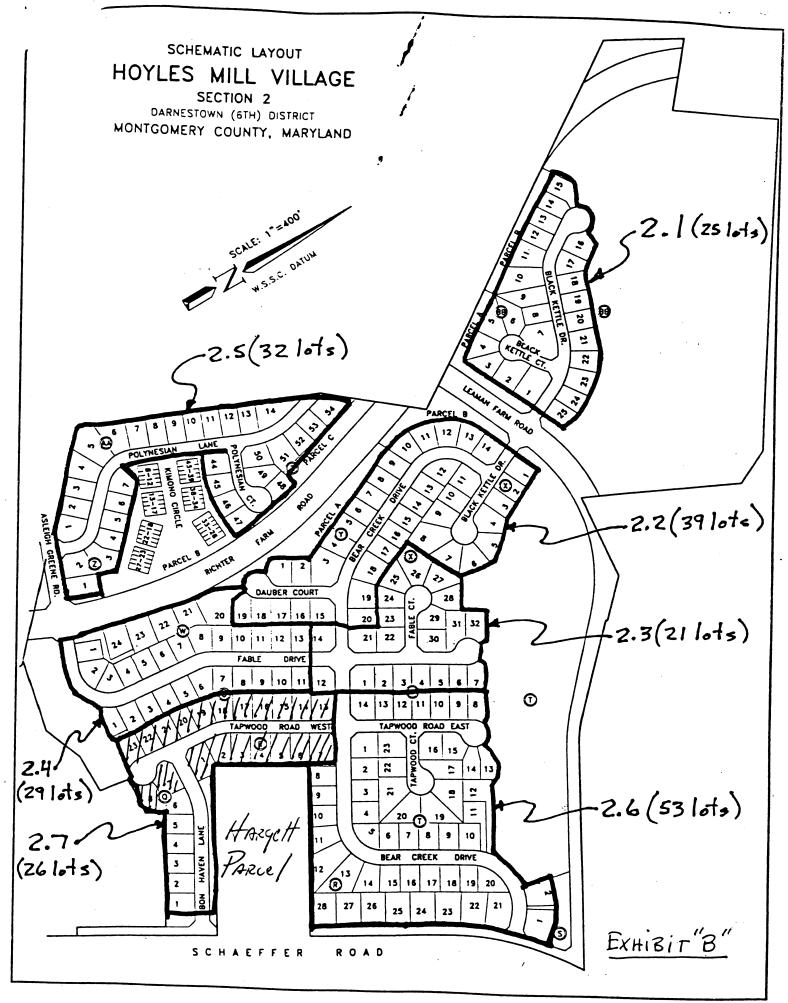
Charles Loehr

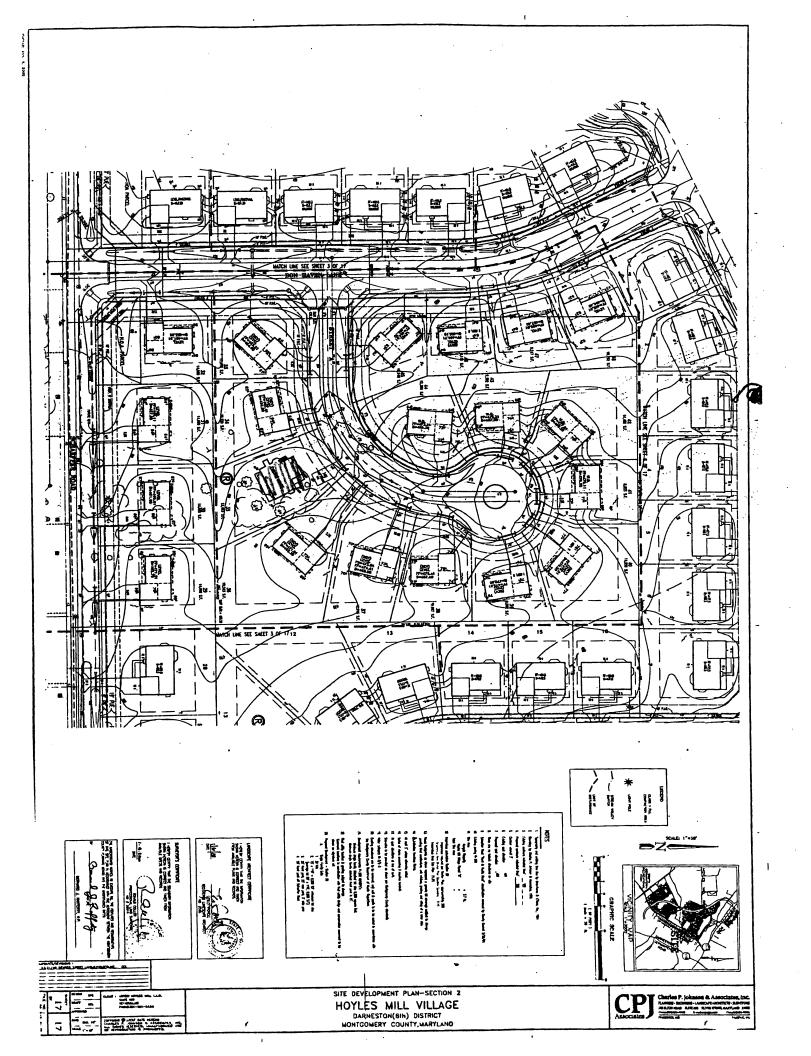
Director of Planning

cc: Michele M. Rosenfeld, Esq.

Ms. Catherine Conlon Mr. Hayes McCarty Mr. Alan Stackman Mr. Bernie Rafferty

IMANAGE: 222225 v.1 01859.0007 Cre. 11/28/00 4:49 PM Ong. Typ.KHW Ed. 11/28/00 5:29 PM







August 17, 2001

Linda Komas Maryland-National Capital Park and Planning Commission 8787 Georgia Avenue Silver Spring, MD 20910-3760 RE: Woodcliffe Park

Dear Ms. Komas,

In response to our previous discussions, I am submitting a revised list of 20 lots that correspond to the agreement between Toll Brothers, Inc. and MNCPPC dated December 6, 2000. I feel that the deletion of these lots, if required, would result in the most desirable finished community plan. The proposed lots are as follows (also see attached plan):

Lots 1, 2 Block S Lots 16-20 Block Y Lots 25-29 Block W Lot 1 Block W Lot 1 Block Z Lots 57-62 Block Z

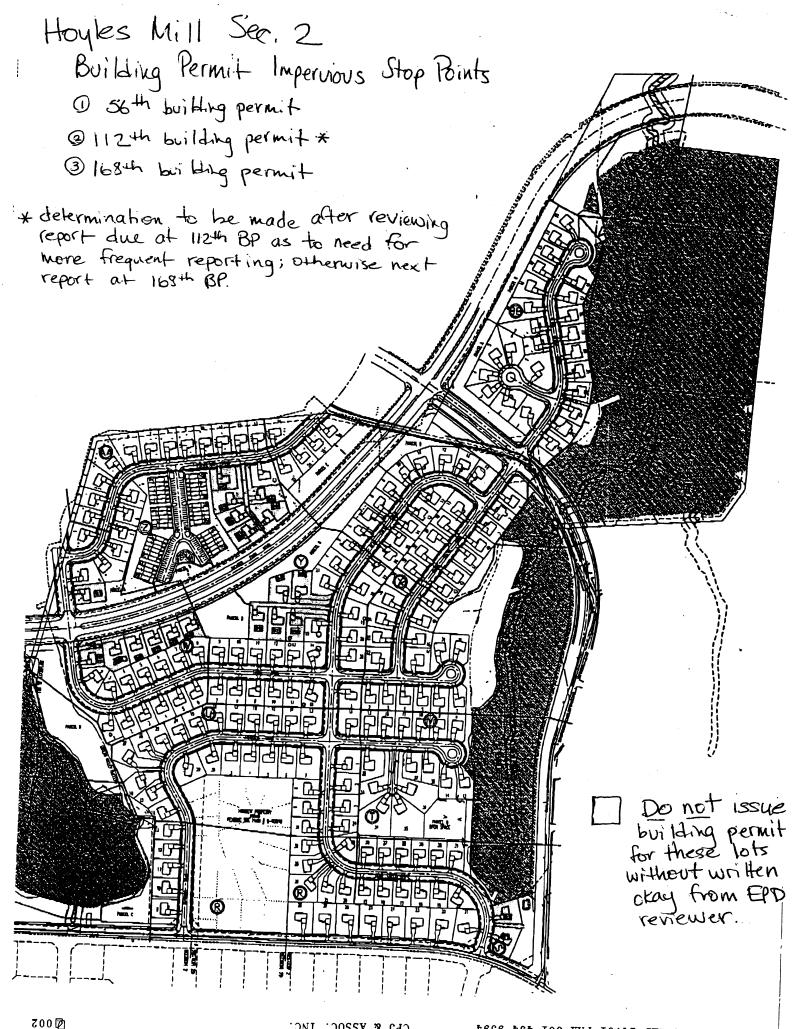
Please review these and call me to discuss @ (410) 872-9105. Also please forward any additional language that you want shown on the plan. As we discussed it is very important that we get on the September Planning Board Agenda.

Sincerely,

Dave Sadler

Assistant Vice President

Toll Brothers, Inc.



September 14, 2000

Barbara A. Sears Linowes and Blocher LLP 1010 Wayne Avenue Tenth Floor Silver Spring MD 20910-5600

RE:

Hoyles Mill Village - Preliminary Plan No. 1-88216 - Verification of Impervious limits

Dear Ms. Sears:

I am writing in follow-up to our meeting earlier this spring when we discussed enforcement of the impervious limitations for the Hoyles Mill Village project. As I stated in my April 7, 2000 letter to you, the 21-percent impervious cap placed on this project will be enforced. The Commission also will continue to release building permits for Phase I of the project until it is built out. No building permits will be released for Phase II until we have verification of the actual, as-built impervious surface coverage in Phase I, in recognition of the fact that the impervious surface in Phase I is projected to exceed 21 percent. Further, we will not submit to the Planning Board the pending revision to the Phase 2 site plan, or the new Phase 3 site plan, until we have actual impervious surface calculations for Phase 1. In particular, it appears that the driveway design as reflected on the preliminary plan, and a material part of the impervious surface calculations, is routinely being increased from a single-car width at the apron, to a double-car width. This change alone will have a significant negative impact on the overall impervious surface levels in Phase I.

In advance of the closeout of Phase I, please have an appropriate representative from Hoyles Mill Village contact Cathy Conlon to determine how this verification will be accomplished.

This letter also serves as formal notice that buildout of Phase II may be limited with respect to building sizes and/or denial of building permits once the impervious limits on the project reach 21%. Therefore, if impervious limits on Phase I exceed the cap, then construction on Phase II necessarily must be commensurately below 21% to achieve a 21% cap overall. In Phase II the Commission will require interim reporting to verify the impervious levels to ensure that the overall project does not exceed 21 percent. These reports will be required at 20, 40, 60 and 80 percent buildout before permits will be released for the subsequent stage of development.

In our last meeting, the applicant indicated an interest in using Best Management

Practices (BMPs) in exchange for a higher impervious cap. Any such change to the plan will require a preliminary plan amendment to be approved by the Planning Board. Be advised that staff is not inclined at this time to recommend such an approach.

Please call me if you have questions or need additional information.

Sincerely,

ADRIAN R. GARDNER GENERAL COUNSEL

Michele Rosenfeld Associate General Counsel

 $G: \verb|MISC.MMR| LETTERS \verb| hoylesmill.imp.wpd|$ 

cc: Charles Loehr, Director of Park and Planning Wayne Cornelius, DRD
Bernie Rafferty, Artery-Hoyles Mill, LLC

bcc:

Joseph Davis, Chief; DRD
Malcolm Shaneman, Supervisor, DRD
VSteve Cary, DRD