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COMPREHENSIVE DESIGN PLAN CDP-0506

Application	General Data
Project Name: Locust Hill Location: North and south side of Oak Grove Road, east of Church Road and east and west of Popes Creek Branch Applicant/Address: Mercantile Bank Real Estate Services 766 Old Hammonds Ferry Road Linthicum, MD 21090	Date Accepted: 3/8/2006
	Planning Board Action Limit: None
	Plan Acreage: 507.0
	Zone: R-L
	Dwelling Units: 552
	Square Footage: N/A
	Planning Area: 74A and 79
	Tier: Developing
	Council District: 06
	Municipality: N/A
	200-Scale Base Map: 202SE12

Purpose of Application	Notice Dates
Approval for a subdivision comprised of approximately 552 single-family attached and detached dwelling units.	Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-12-2003) 12/8/2005
	Sign(s) Posted on Site and Notice of Hearing Mailed: 11/7/2006

Staff Recommendation		Staff Reviewer: Ruth E. Grover, AICP	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	x		

November 20, 2006

MEMORANDUM

TO: Prince George's County Planning Board

VIA: Steve Adams, Urban Design Supervisor

FROM: Ruth Grover, Urban Design Section

SUBJECT: Comprehensive Design Plan CDP-0506 and Tree Conservation Plan TCPI/24/06
Locust Hill

PUBLIC HEARING

In accordance with the Comprehensive Design Plan provisions of Section 27-520 of the Prince George's County Code, a public hearing is scheduled before the Prince George's County Planning Board on December 7, 2006. The purpose of this hearing is to consider the Comprehensive Design Plan for Locust Hill, CDP-0506.

INTRODUCTION

The Development Review Division of the Prince George's County Planning Department has coordinated a review of the subject application with all offices having any planning activities that might be affected by the proposed development. This staff report documents that process and presents findings and a recommendation to be acted upon by the Prince George's County Planning Board.

RECOMMENDATION SUMMARY

The staff recommends **APPROVAL** of the Comprehensive Design Plan, with the conditions listed in the recommendation section of this report.

COMPREHENSIVE DESIGN ZONES

The Comprehensive Design Plan (CDP) phase of the three-phase Comprehensive Design Zone (CDZ) process requires the submittal of a plan that establishes the general location, distribution, and sizes of buildings and roads. The plan includes several drawings and a text, which includes the schedule for development of all or portions of the proposal and standards for height, open space, public improvements and other design features. The regulations for any of the CDZs are at the same time more flexible and more rigid than are those of other zones in Prince George's County. The zones are more flexible in terms of permitted uses, residential densities, and building intensities. They are more rigid because some of the commitments made by a developer carry the force and effect of law upon approval by the Planning Board.

The principal difference between CDZs and conventional zones is that the CDZ includes a list of public benefit features and density or intensity increment factors. If a development proposes to include a public benefit feature in a development, the Planning Board, at this stage of the process, may grant an increment factor that increases the dwelling unit density or building intensity. The value of the public benefit feature or density-intensity increment proposal determines the size of the increase. A public benefit feature is an item that will improve the environment or lessen the public cost of a development. The intent is to create a development, through the granting of incremental density increases that will result in a better quality residential, commercial and industrial environment.

EVALUATION CRITERIA

This CDP was reviewed and evaluated for compliance with the following criteria:

- (a) Conformance with Basic Plan A-9975.
- (b) The requirements of Section 27-441 (Uses Permitted) and Section 27-442 (Regulations) of the Zoning Ordinance in the R-L Zone.
- (c) The requirements of the Prince George’s County Woodland Conservation Ordinance.
- (d) Referral comments.

FINDINGS

Based upon the analysis of the subject application, the Urban Design Review Section recommends the following findings:

1. **Request:** The CDP proposes approximately 552 single-family detached and attached units on approximately 503.53 acres in the R-L Zone. Of the 503.53 acres, 68.56 acres are within the 100-year flood plain.
2. **Location:** The subject property is in the R-L Zone and is located north and south of Oak Grove Road, east of Church Road and east and west of Popes Creek Branch.
3. **Surroundings:** The site is surrounded by vacant land to the north; by the Brock Hall Manor, Brock Hall Gardens, and Rustic Ridge subdivisions to the south; by vacant land and large lot single-family detached dwellings to the east; by the Perrywood subdivision to the west and to the northwest by an existing church and school.
4. **Design Features:** The proposed 552-lot subdivision is located both north and south of a proposed-to-be realigned Oak Grove Road. The access points are lined up north to south on Oak Grove Road, making well defined and safe traffic movements in and out of the subdivision. The northern portion of the subdivision includes a combination of townhomes (called “carriage lots” in the application) and single-family detached lots north of what will be the realigned Oak Grove Road. Development to its south is uniformly single-family, though the developer distinguishes between three different types of single-family lots depending on lot size and width at the front property line. Single-family detached units include “Estate Lots” (18,700 square feet and larger, with a minimum lot width of 110 feet at the front building restriction line), “Executive Lots” (11,050 square feet and larger with an 85 foot minimum lot width at the front building restriction line), “Points Lots” (7,400–9,999 square feet with a 65-foot minimum at the front building restriction line). All estate lots measure 18,700 square feet or larger. The difference between the

regular estate and wide estate lots is the estate lots measure a minimum of 110 feet at the front building restriction line, and wide estate lots measure a minimum of 120 feet at that location. The proposed number of each type of lot is as follows:

Type of Lot	Number of Lots
Carriage Lots (townhomes)	90–110 (not to exceed 20 percent)
Point Lots	70–90
Executive Lots	200–225
Wide Estate Lots	30–40
Regular Estate Lots	70–90

Design of the subdivision is sensitive to wetlands, Patuxent Management Area, floodplain, a perennial stream and other sensitive environmental features on the site, concentrating the lots on double loaded streets. An area measuring approximately 66.70 acres is indicated to be donated to an existing adjacent church and a second 8.76-acre property is indicated as potentially being dedicated to a second church. Recreational facilities include a path or trail system through the development and an alternate recreational facility is included in the central part of the development. Stormwater management is handled by seven ponds dispersed throughout the site.

5. **Previous Approvals:** The property was zoned Residential-Suburban (R-L) by Zoning Ordinance No. 19-2006 granting conditional approval to the Basic Plan for the property—A-9975. Final approval by District Council will occur after receipt of a written acceptance or rejection of the land use classification and the conditions contained in the approval. The project is also the subject of Stormwater Management Concept /case #47462-2005-00 dated May 9, 2006, and in effect until May 9, 2009.

6. **Development Data—Locust Hill**

Zone	Residential-Limited (R-L)
Gross Tract Area	503.53 Acres
Area within the 100-year floodplain	68.56 Acres
Net tract area	434.97 Acres
Density Range (dwelling units per acre)	1.18 Dwelling Units per acre

7. **Public Benefit Features and Density Increment Factors:** The Comprehensive Design Zone encourages amenities and public facilities in conjunction with density increases. Section 27-513(b) of the Prince George’s County Zoning Ordinance provides the guidelines and criteria for calculating the density increases for the R-L Zone. The current Locust Hill application calculates the base density as 469 units (1.0 X469.25 acres), then lists the following potential density increase allowances:

Amenity/public facility	Size	Allowance	Calculation	Resultant density increment
Open space land (HOA)	151.56 acres	up to 25% increase in units	469 X .25=	117 units

Recreational development of open space (M-NCPPC park property)	47.5 acres	up to 10% increase in units	469 X .10=	46 units
Public facilities(existing adjacent church buffer)	66.70 acres	up to 30% increase in units	469 X.30 =	140 units
Activity Centers (Church site dedication)	8.76 acres	up to 10% increase in units	469 X .10 =	46 units

The basic plan condition set forth by the Zoning Ordinance was for the density range to be between 475 to 581 dwelling units per acre. The net CDZ area for the subject tract is 434.97 acres allowing for a base density of 469 units and a maximum of 703 units. Existing environmental conditions and the applicant’s design for the subdivision have resulted in the inclusion of only 552 units, 83 units above the base density, but 151 units below the maximum number of units allowed.

Staff finds that in accordance with Section 27-513(b) (Regulations-Public Benefit Features and Density Increment Factors) of the Zoning Ordinance that the density increment is earned and appropriate. Please note, however, that the donation of a church site (8.76 acres) is not appropriate in a calculation for density increment and therefore excluded. It will not, however, affect the density of the proposed development as it had already earned in excess of the needed density increment factors. Also, please note that open space, in order to be considered as a basis for a public benefit feature and density increment, must be provided at a ratio of at least 3.5 acres per 100 dwelling units, or for the subject application, approximately 19 acres. The provision of 151.56 acres of HOA open space in this application meets and exceeds this requirement.

Findings Required by Section 27-521 of the Zoning Ordinance (Findings 8-16 below)

8. The Comprehensive Design Plan is in conformance with the approved Basic Plan.

Comment: Basic Plan A-9975 was approved subject to 18 conditions and 5 considerations. Each relevant condition/condition is listed in bold face type below with staff’s comment following:

- 1. Total residential development shall be limited to no more than that which would produce 5,229 daily vehicle trips, or 581 dwelling units. Because of extensive environmental constraints, the final location of dwelling types should be decided at the time of Comprehensive Design Plan (“CDP”) review.**

Staff comment: The proposed project requests 552 dwelling units, well within the requirements of this condition. The final location of the dwelling types has been specified on the comprehensive design plan and if it is approved by the Planning Board will be decided at the time of CDP review.

- 3. Development shall preserve the Patuxent River Primary Management Area (PMA) to the fullest extent possible. Impacts to the PMA shall be minimized**

by limiting the number of road crossings, by making all necessary road crossings perpendicular to the streams, and by using existing road crossings to the extent possible.

Staff comment: In a memorandum dated November 17, 2006, the Environmental Planning Section confirmed that the PMA was preserved by the project's design to the fullest extent possible and that impacts to the PMA had been minimized. Please see Finding 8(h) for a more complete discussion.

- 4. Alignment of the master planned collector roadway (MC-600) shall be evaluated in detail to determine the location that results in the preservation of the existing natural resources to the fullest extent possible.**

Staff comment: Alignment of the master planned collector roadway (MC-600) has been evaluated in detail to determine the location that results in the preservation of the existing natural resources to the fullest extent possible. Please see Finding 8 (h) for a more complete discussion.

- 5. Natural Resources Inventory (NRI), signed by appropriate staff, shall be submitted with the CDP. All subsequent plan submittals shall clearly show the PMA as shown on the signed NRI.**

Staff comment: A signed NRI was submitted with the CDP. That all subsequent plan submittals will clearly show the PMA as shown on the signed NRI is ensured by a recommended condition below.

- 6. A protocol for surveying the locations of all rare, threatened and endangered species within the subject property shall be obtained from the Maryland Department of Natural Resources prior to acceptance of the CDP and this protocol shall be part of the submittal package. The completed surveys and required reports shall be submitted as part of any application for preliminary plans.**

Staff comment: A protocol, found acceptable by the Environmental Planning Section was submitted with the subject application package.

- 7. The Woodland Conservation Threshold (WCT) shall be 25 percent. The WCT requirements shall be met on-site. The Type I Tree Conservation Plan required with the CDP application shall focus on the creation of contiguous woodland. Priority areas for tree preservation shall be concentrated in areas within the framework of the approved Green Infrastructure Master Plan. No woodland conservation shall be provided on any residential lot.**

Staff comment: The WCT is 25 percent and is met on-site. The required Type I Tree Conservation Plan was submitted and focused on the creation of contiguous woodland. Priority areas for tree preservation were concentrated in within the framework of the approved Green Infrastructure Master Plan and no woodland conservation was provided on any residential lot. Please see Finding 8 (h) for additional discussion of compliance with this condition.

- 8. Woodland cleared within the PMA's Preservation Area shall be mitigated on-site at a ratio of 1:1 for all impacts associated with development of the subject parcels. Woodland cleared within the PMA for the construction of the master planned roadway shall be mitigated in conformance with the standards of the Woodland Conservation Ordinance. This note shall also be placed on all tree conservation plans.**

Staff comment: Woodland cleared within the PMA's Preservation Area has been mitigated on-site at a ratio of 1:1 for all impacts associated with development of the subject parcels and woodland cleared within the PMA for the construction of the master planned roadway has been mitigated in conformance with the standards of the Woodland Conservation Ordinance. The placing of the required note on all tree conservation plans is ensured by a recommended condition below.

- 9. A Marlboro Clay geotechnical report that identifies the location and elevation of the Marlboro Clay layer throughout the site shall be submitted as part of the CDP application package.**

Staff comment: Such report was submitted as part of the CDP application. Please see Finding 8 (h) for a more detailed discussion of the geotechnical report.

- 12. No residential lots shall be located within 150 feet of the centerline of the CSX Railroad tracks.**

Staff comment: No residential lots are indicated to be located within 150 feet of the centerline of the CSX Railroad tracks on the submitted Comprehensive Design Plan.

- 14. The Applicant and its heirs, successors, and/or assignees shall provide the following trail facilities:**

- a. Construct the 8-foot wide master plan hiker-biker trail along the subject property's portion of the Collington Branch Stream Valley and 6-foot-wide feeder trails to the development pods in Locust Hill. Trail alignments shall be determined by the Department of Parks and Recreation of the M-NCPPC.**
- b. Construct the 8-foot wide master plan hiker-biker trail (extension from Oak Creek development) along the Black Branch stream valley and 6-foot wide feeder trails to the development pods in Locust Hill. Trail alignments shall be determined by the Department of Parks and Recreation.**
- c. Construct a Class I master plan trail (or side path) along the subject property's entire frontage of both Oak Grove Road and Church Road.**

Staff comment: In reference to the above condition, the trails planner offered the following in his comments dated November 6, 2006:

Staff recognizes that extensive discussion will be necessary between the Environmental Planning Section, DPR, and the applicant to ensure that trails do not impact the

environmental buffers, stream valley corridors, water quality, and identified rare, threatened, and endangered species. A more detailed analysis of the master plan trails and the internal trail network will be completed at the time that specific design plans are reviewed for the site. Connections between neighborhoods will be a priority, in addition to the connections to the master plan trails. The sidewalk system will also be an integral part of the pedestrian network, and will be analyzed in more detail at later phases of review.

Five conditions were suggested by the trails planner in order to ensure compliance with Condition 14. Such conditions are included in the recommendation section of this report.

- 14. The Applicant shall submit for DPR’s approval, prior to the time of CDP approval, appropriate covenants that shall be recorded in the County Land Records at final plat for both the Locust Hill and Willowbrook properties. The covenants are to ensure that residents within both the Locust Hill and Willowbrook communities will have equal access to membership in and use of open space and recreational facilities in both developments.**

Staff comment: Such covenants have been submitted to DPR for approval.

- 15. At the time of CDP and Preliminary Plan of Subdivision submissions, the Applicant or its heirs, successors, and/or assignees shall provide a traffic study that analyses the following intersections:**

- US 301/MD 725
- US 301/Village Drive
- US301/Leeland Road
- US 301/Trade Zone Avenue
- Leeland Road/Safeway Access
- Oak Grove Road/Church Road
- Oak Grove Road/MD 193
- MD 202/MD 193
- Link of Leeland Road-Oak Grove Road, between US 301 and MD 202.

Applicant will be required to show that these transportation facilities will be adequate to carry the anticipated traffic generated by the development based on the maximum proposed density.

Staff comment: A traffic study, meeting the above requirements was submitted together with the subject comprehensive design application.

- 17. All stream and wetland mitigation for impacts to environmentally regulated site features shall be provided within the Collington Branch watershed, or, if mitigation sites cannot be found, within the Western Branch watershed.**

Staff comment: All mitigation for the project’s impacts is to be within the Collington and Western Branch watersheds. Please see Finding 8 (h) for further discussion.

Considerations:

- 2. At the time of CDP review, specific acreage of parkland dedications shall be determined. Such dedication should include the Collington Branch and Black Branch stream valleys and 10 acres of developable land for active recreation as provided in the January 27, 2006 memorandum from the Department of Parks and Recreation. (Exhibit 10(a). This area should include an approximately 1.7 acre parcel of land from the Willowbrook project area which was not previously committed for parkland dedication. The conditions of conveyance shall be determined by appropriate staff of M-NCPPC.**

Staff comment: The applicant proposed dedication of 48 acres of parkland includes the Collington and Black Branch stream valleys and 8.5 acres of developable land for active recreation. This area includes a 1.7± parcel of land from the Willowbrook project, which was not previously identified for parkland dedication.

- 3. At the time of CDP review the Applicant shall address its plan to grade a 10-acre developable portion of the dedicated parkland (including an approximately 1.7-acre parcel of land from the adjacent Willowbrook project area which was not previously committed for parkland dedication) on the northeast corner of the property next to the Pennsylvania Railroad right-of-way to accommodate ball fields and a parking lot. The parkland shall have direct frontage on proposed Oak Grove Road.**

Staff comment: The applicant's proposed dedication of 8.5 acres of developable parkland and construction of recreational facilities on dedicated parkland typical for a neighborhood park of this size, such as ball fields, playground picnic areas and a parking lot. The list of recreational facilities should be determined at the time of approval of the preliminary plan of subdivision.

- 4. At the time of CDP review the Applicant shall provide adequate, private recreational facilities to meet the future subdivision requirements for the proposed development. The private recreational facilities shall be constructed in accordance with the standards outlined in the Parks and Recreation Facilities Guidelines.**

Staff comment: Adequate, private recreational facilities are indicated on the plans. That these facilities will be constructed in accordance with the standards outlined in the Park and Recreation Facilities Guidelines is ensured by a recommended condition below.

- 5. The applicant shall obtain approval from the Planning Board for any transfer of recreation facilities/funds to be used at the Willowbrook property at time of CDP approval.**

Staff comment: If applicant gains approval of its recreation plan as presented, facilities would be shared and implicit approval of such transfer would be given.

- 9. The proposed plan would result in a development with a better environment than could be achieved under other regulations;**

Staff comment: The proposed design of the subdivision offers a better environment than could be achieved under other regulations by preserving natural features of the site, reinforcing neighborhood integrity by providing higher density (townhouses and the smaller single-family detached lots) near the two entrances from Oak Grove Road, and clustering various housing types in distinct individual neighborhoods.

10. Approval is warranted by the way in which the Comprehensive Design Plan includes design elements, facilities, and amenities, and satisfies the needs of the residents, employees or guests of the project;

Staff comment: Approval is warranted because the submitted comprehensive design application includes a design based on the considerations mentioned in Finding 9(2) above together with four open play areas, a community center including a pool, and hiker/biker trails that should satisfy the needs of residents, employees or guests of the project.

11. The proposed development will be compatible with existing land use, zoning, and facilities in the immediate surroundings;

Staff comment: A buffer has been maintained at the periphery of the development by a combination of land to be donated to M-NCPPC for parks, and to an existing adjacent church, for a proposed new church. Such buffer provides a reasonable transition from the proposed site to the adjacent land uses as well as protects proposed residents of the project from off site impacts. In short, the proposed development will be compatible with existing land use, zoning, and facilities in the immediate surroundings.

12. Land uses and facilities covered by the Comprehensive Design Plan will be compatible with each other in relation to:

- (A) Amounts of building coverage and open space;**
- (B) Building setbacks from streets and abutting land uses; and**
- (C) Circulation access points;**

Staff comment: Building coverage and open space are well distributed throughout the development so that environmental features are protected and resulting land use patterns are internally compatible. Building setbacks are established so that the land uses and facilities covered by the comprehensive design plan are compatible. The highest residential density is concentrated in the area north of Oak Grove Road, minimizing the amount of unnecessary travel through the larger, southern portion of the subdivision. Organizing the various types of residential uses into compact neighborhoods makes the land uses and facilities identified on the comprehensive design plan more internally compatible.

13. Each staged unit of the development (as well as the total development) can exist as a unit capable of sustaining an environment of continuing quality and stability;

Staff comment: The applicant has posited a development schedule that involves construction in phases of approximately 200 homes per year. It is expected that Oak

Grove Road will be realigned through the property first to provide convenient vehicular access to lots. Then, construction of units will begin, again at a rate of approximately 100 homes per year from the northern to the southern end of the property.

Applicant has asked for some flexibility in both the development schedule and staging plan, but committed to sustaining an environment of continuing quality and stability throughout the development process.

14 The staging of development will not be an unreasonable burden on available public facilities.

Staff comment: In a memorandum dated June 9, 2006, the Public Facilities Planning Section evaluates fire and rescue and police facilities in the vicinity of the subject site and concludes that the staging of the development will not pose an unreasonable burden on available public facilities.

15. The Plan incorporates the applicable design guidelines set forth in Section 27-274 of Part 3, Division 9, of this Subtitle, and where townhouses are proposed in the Plan, with the exception of the V-L and V-M Zones, the requirements set forth in Section 27-433(d); and

Staff comment: Staff has reviewed the subject project against the requirements of Section 27-274 (Design Guidelines) of the Zoning Ordinance and Section 27-433(d) regarding townhouses and found it to be substantially in compliance.

16. The Plan is in conformance with an approved Tree Conservation Plan.

Staff comment: In a memorandum dated November 16, 2006, the Environmental Planning Section analyzed the plan and the submitted Type I Tree Conservation Plan TCPI/24/06 and recommended approval, subject to conditions. If the tree conservation and comprehensive design plan are approved as recommended in said memorandum, then it may be said that the subject plan is in conformance with an approved tree conservation plan.

17. Referral Comments: The subject application was referred to the concerned agencies and divisions. The referral comments are summarized as follows:

Historic Preservation and Archeology—In a joint memorandum dated June 23, 2006, the Historic Preservation Section and staff archeologist stated that the property is adjacent to St. Barnabas' Church and Cemetery, Leeland (Historic Site 79-059). Further, they stated that St. Barnabas' Church and Cemetery, Leeland has been listed as an historic site in the *Historic Sites and Districts Plan* 1981 and 1992. Lastly, they stated that Church Road is a designated historic road. Further, they made the following findings:

1. Because the developing property was almost certainly part of the Bowieville plantation during the antebellum period, documentary and archeological investigation was required to determine whether there exists physical evidence of slave dwellings or burials, or other significant archeological resources. Bowieville was constructed by Mary Bowie ca. 1819–1820. When she died in 1825, her children inherited the property. In 1846, Bowieville was sold to William J. Berry, one of the county's wealthiest planters. The Berrys were among the largest landowners in Prince George's County. The Bowieville

land included some 850 acres in the early and mid-19th century. The subject property is approximately ½ mile to the south of Bowieville Mansion, and it almost certainly was once part of the Bowieville holdings.

2. Collington Branch and Black Branch, which runs into Collington Branch, are located on the property. Numerous prehistoric archeological sites have been found in similar settings, including along Collington Branch.
3. In accordance with Subtitle 24-104, Section 24-121 (18), and 24-135.01, the subject property was the subject of a Phase I archeological investigation to identify any archeological sites that may be significant to the understanding of the history of human settlement in Prince George's County, including the possible existence of slave quarters and slave graves, as well as archeological evidence of the presence of Native American peoples. Potential archeological sites must be considered in the review of development applications, and potential means for preservation of these resources should be considered. Completion of the Phase I archeological investigation will be required prior to the approval of the CDP.

A draft Phase I archeological investigations report, *Phase IB Archaeological Survey of the Locust Hill Property in Prince George's County, Maryland*, was received in the Historic Preservation office (May 22, 2006). The report documents the Phase I archeological investigations on the subject property, and is under review. In addition to the archeological excavations and walkover of the property, a ground-penetrating radar study was completed in an area to the east of St. Barnabas' Church-Leeland structure and graveyard. Three anomalies were identified that may be indicators of graves. No construction is planned for this area, however, according to the report.

4. The Subregion VI Master Plan also states that the design of public facilities in the vicinity of historic resources should be sensitive to their historic character. The widening of roads and choice of street trees are examples of design elements that either can reinforce or change the character of an area. Oak Grove Road is an historic road between Leeland Road and MD 202, it came into use in the first decade of the eighteenth century, before 1739 and is part of the road described in the 1828 Road Survey as #3:7. The Plan proposes to provide access from the proposed development to a new Master Plan Collector Road and not widen the existing road.

The Historic Preservation Planning Section then concluded that because the subject property shares a property boundary with the St. Barnabas Church and Cemetery Environmental Setting, the *Landscape Manual* requires that a 50-foot building setback and a 40-foot tree buffer be retained or planted on the developing property wherever it adjoins a Historic Site. The 65 acre buffer area appears to meet this requirement.

Based on their above findings and conclusions, the Historic Preservation Section and staff archeologist made several recommendations that have been included in the recommended conditions below.

Community Planning—In a memorandum dated June 22, 2006, the Community Planning Division stated that the application is consistent with the 2002 General Plan Development Pattern policies for the Developing Tier and is in conformance with the land use recommendations of the *Approved Subregion VI Study Area Master Plan and Sectional Map Amendment* (1994).

Research—The Research Section has verbally informed staff that they would have no comment on the subject project.

Transportation—In a memorandum dated November 3, 2006, the Transportation Planning Section stated the following:

On October 31, 2006, the District Council heard oral arguments for Basic Plan for Locust Hill under ZMA A-9975. The application was approved by the Council; however, as of this writing, the Council's *Final Order* has not been released, hence the conditions of approval are not known at this time.

On March 9, 2006, The Planning Board approved the rezoning application for the subject property (PGCPB No. 06-61 File No.A-9975) with 26 conditions, included the following pertaining to transportation:

22. At the time of the submission of a Comprehensive Design Plan/Preliminary Plan of Subdivision, the applicant (his heirs, successors and/or assignees) shall provide a traffic study that analyzes the following intersections:

- US 301/MD 725
- US 301/Village Drive
- US 301/Leeland Road
- US 301/Trade Zone Avenue
- Leeland Road/Safeway Access
- Oak Grove Road/Church Road
- Oak Grove Road/MD 193
- MD 202/MD 193
- Link of Leeland Road-Oak Grove Road, between US 301 and MD 202.

TRAFFIC STUDY ANALYSIS

On May 12, 2006, staff received a traffic study in support of the Comprehensive Design Plan phase of the subject property. Given the close proximity of the subject property to the Willowbrook property (CDP and preliminary plan applications pending), and the fact that both properties share a common ownership, all of the analyses presented in the traffic impact studies (original and revised) are based on the traffic generated by both the subject application and the proposed Willowbrook applications (CDP and Preliminary Plan). The analyses and findings presented in this memorandum are generally similar (with minor differences) for each site. The study identified the following link and intersections as the ones on which the proposed development would have the most impact:

EXISTING CONDITIONS		
Intersection/Link	(LOS/CLV) AM	(LOS/CLV) PM
Leeland Road (Church Road to US 301)	0.10-v/c ratio	0.08-v/c ratio
US 301/Trade Zone Avenue	D/1330	E/1533
US 301/Leeland Road	C/1216	D/1347
US 301/Village Drive	B/1096	D/1304
US 301/MD 725	D/1404	D/1357
MD 202/MD 193	D/1364	B/1077
MD 193/Oak Grove Road (Roundabout)	A/8.2 secs.	A/5.1 secs.
Oak Grove Road/Whistling Duck Drive **	C/15.2 secs.	B/12.2 secs.
Oak Grove Road/Church Road **	C/16.2 secs.	B/10.6 secs.
Leeland Road/Safeway Access **	B/12.3 secs.	B/11.3 secs.
<p>**Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service and the intersection delay measured in seconds/vehicle. A level-of-service "E" which is deemed acceptable corresponds to a maximum delay of 45 seconds/car. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the Guidelines.</p>		

The study cited 17 approved background developments that collectively, will impact the above intersections and link during the morning and evening peak hours. An analysis of the background developments was done based on a four-year (2010) build-out. Those analyses yielded the following results:

BACKGROUND CONDITIONS		
Intersection/Link	(LOS/CLV) AM	(LOS/CLV) PM
Leeland Road (Church Road to US 301)	0.30 – v/c ratio	0.31 – v/c ratio
US 301/Trade Zone Avnue.	F/2196	F/2665
US 301/Leeland Road	F/2186	F/2359
US 301/Village Drive	F/1715	F/2057
US 301/MD 725	F/2214	F/2170
MD 202/MD 193	F/1753	E/1490
MD 193/Oak Grove Road (Roundabout)	E/72.4 secs.	A/7.9 secs.
Oak Grove Road/Whistling Duck Drive **	F/58.9 secs.	D/29.0 secs.
Oak Grove Road/Church Road **	F/149.3 secs.	F/156.6 secs.
Leeland Road/Safeway Access **	F/66.4 secs.	F/62.0 secs.
<p>**Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service and the intersection delay measured in seconds/vehicle. A level-of-service “E” which is deemed acceptable corresponds to a maximum delay of 45 seconds/car. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the Guidelines.</p>		

Using the “Guidelines For The Analysis Of The Traffic Impact Of Development Proposals,” the study has indicated that the proposed development (550 dwelling units) will be adding 413 (83 in, and 330 out) AM peak-hour trips and 495 (322 in, 173 out) PM peak-hour trips at the time of full buildout.

The traffic study also included projected traffic from the proposed Willowbrook Preliminary Plan. There are 850 dwelling units being proposed generating 626 (125 in and 501 out) AM peak-hour trips and 743 (483 in, 260 out) PM peak-hour trips at the time of full buildout. As was the case for the background analyses, the study assumed full buildout up to the year 2010. Applying a growth rate of 3 percent per year for through traffic along US 301, and combining the site-generated traffic along with background developments, the following results were determined:

TOTAL CONDITIONS (Without Improvements)		
Intersection/Link	(LOS/CLV) AM	(LOS/CLV) PM
Leeland Road (Church Road to US 301)	0.43-v/c ratio	0.47-v/c ratio
US 301/Trade Zone Avenue	F/2316	F/2780
US 301/Leeland Road	F/2306	F/2663
US 301/Village Drive	F/1749	F/2190
US 301/MD 725	F/2333	F/2294
MD 202/MD 193	F/1853	E/1587
MD 193/Oak Grove Road (Roundabout)	E/132.6 secs.	B/19.8 secs.
Oak Grove Road/Whistling Duck Drive **	F/153.3 secs.	F/51.1 secs.
Oak Grove Road/Church Road **	F/419.1 secs.	F/482.1 secs.
Leeland Road/Site Access "A"	F/71.0 secs.	F/82.3 secs.
Leeland Road/Site Access "B"	F/93.3 secs.	F/108.0 secs.
Leeland Road/Safeway Access **	F/201.8 secs.	F/212.9 secs.
<p>**In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the guidelines, an average vehicle delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are outside of the normal range of the procedure and should be interpreted as a severe inadequacy</p>		

To provide adequate levels-of-service at the facilities mentioned above, the traffic study cited improvements along US 301 between MD 214 and MD 725 which are described in the current Prince George's County Capital Improvement Program (CIP) FY 2006–2011 (Project FD669161). Specifically, the CIP describes the improvements as "providing a third through lane north and south bound between MD 214 and MD 725 and further widening, as needed at Trade Zone Avenue, MD 214 and MD 725. Associated intersection improvements at Old Central Avenue, Trade Zone Avenue, Leeland Road and Village Drive West also will be undertaken."

The improvements that have been identified in the applicant's traffic impact study as needed to provide adequate levels of service for the 2010 build-out are as follows:

US 301/Trade Zone Avenue

1. Construct an additional northbound left turn lane along US 301
2. Construct a third eastbound left turn lane along Trade Zone Avenue
3. Construct three additional southbound through lanes along US 301
4. Construct two additional northbound through lanes along US 301

US 301/Leeland Road

1. Construct two additional northbound through lanes along US 301.
2. Construct an additional eastbound left turn lane along Leeland Road
3. Construct two additional southbound through lanes along US 301.

US 301/Village Drive

1. Construct two additional northbound through lanes along US 301
2. Construct two additional southbound through lanes along US 301

US 301/MD 725

1. Construct an additional northbound through lane along US 301
2. Construct two additional southbound through lane along US 301
3. Construct an additional eastbound left turn lane along MD 725
4. Construct an additional westbound through lane along MD 725
5. Construct an exclusive westbound right turn lane along MD 725.

Citing these improvements (along US 301), the traffic study projected the following levels of service:

TOTAL CONDITIONS—BOTH DEVELOPMENTS (With CIP Improvements)		
Intersections (All Signalized)	(LOS/CLV) AM	(LOS/CLV) PM
US 301/Trade Zone Avenue	C/1250	D/1370
US 301/Leeland Road	C/1290	D/1450
US 301/Village Drive	B/1077	D/1397
US 301/MD 725	D/1439	D/1422
MD 202/MD 193 (Not part of US 301 CIP)	D/1351	B/1053

Based on the results shown in the aforementioned table, all of the intersections along US 301 were shown to operate at adequate levels of service.

In addition to analyzing the projected levels of service for the intersections along US 301, the traffic study also identified the overall cost of the CIP improvements, the capacity created as a result of the improvements and the site’s proportion of the capacity created by the improvements. According to the applicant’s traffic study, the total cost of the CIP improvements as used in the analyses would be \$31 million. The study also indicated that approximately 7 percent of the capacity created by the CIP improvements would be needed for the proposed developments (subject property + Locust Hill). The study concludes therefore that a reasonable fair share contribution towards the CIP improvements would be $\$31,000,000.00 \times 7 \text{ percent} = \$2,170,000.00$. The study also suggested that in lieu of actual payment of cash, the pro rata payment should be applied to construction of improvements along the US 301 corridor, within the limits of the CIP project.

Currently, there are no funded CIP or CTP improvements along the MD 202 or Leeland Road-Oak Grove Road corridor. However, there are several intersections along these corridors that are projected to operate beyond acceptable levels of service.

At the signalized intersection of MD 202 and MD 193, the applicant has proffered the following improvements:

- Provide a left turn, a shared left/through lane, and a right turn lane on the southbound approach
- Provide a second left turn on the eastbound (towards Upper Marlboro) MD 202 approach

The improvements proposed for the MD 202/MD 193 intersection would provide acceptable levels of service.

All of the unsignalized intersections along Leeland Road-Oak Grove Road are projected to operate with delays greater than 50 seconds. Since no specific improvements were proffered by the applicant for these unsignalized intersections, staff will request that a signal warrant study be done for all of the unsignalized intersections along this corridor with the exception of the roundabout at the intersection of MD 193 and Oak Grove Road.

STAFF REVIEW AND COMMENTS

Upon review of the applicant's traffic study (including revisions) staff does not totally concur with its findings and conclusion. In addition to the planning staff, the May 12, 2006, study was reviewed by two other agencies, the State Highway Administration (SHA) and the Department of Public Works and Transportation (DPW&T). In a June 13, 2006, memorandum to staff (Issayans to Burton), all of the comments expressed by Mr. Issayans—the county's chief Traffic Engineer—were confined to issues relating to Leeland Road-Oak Grove Road, a county-maintained facility. While most of those issues are operational and engineering related, DPW&T did indicate that the future access points of the property will operate with failing levels of service, and should therefore conduct the appropriate signal warrant studies. Staff supports this request.

In several correspondences from SHA, including an October 4, 2006, memorandum to staff (Foster to Winters), the SHA has indicated that the financial contribution (\$2.17 million) proposed by the applicant will not result in adequate levels of service along the US 301 corridor. The memorandum recommended that improvements should be constructed along US 301, between MD 214 and MD 725 (a similar recommendation was made during the Specific Design Plan (SDP) phase of the Beech Tree development).

Staff is in general support of SHA's position regarding the fact that the applicant's contribution represents only 7 percent of the total cost of the improvements required to provide an acceptable level of service. However, there is a provision in the CIP project that allows for developers to make contributions towards the total cost of the CIP project. Previous actions by the Planning Board have established precedents for the use of developer contributions in the case of Beechtree (PGCPB 98-50) and other nearby subdivisions along the US 301 CIP project. To date, the Beechtree, Buck Property and Karington developments have all been conditioned to provide various improvements along US 301. The applicant provided staff with an exhibit that indicated how the various sets of improvements could be coordinated. Staff and SHA are fully supportive of this proposal.

TRANSPORTATION STAFF FINDINGS

1. The application is a CDP for a residential development consisting of 550 single-family dwelling units. For the purpose of determining adequacy, and given the fact that the subject application shares a common ownership with the adjacent Willowbrook development, and the fact that both developments are in close proximity to each other, the projected traffic from both developments are being combined. Willowbrook is a residential development proposing 623 single-family and 227 town homes. The combined developments (1,400 DU) would generate 1,039 AM (208 in, 831 out) and 1,238 PM (805 in, 433 out) peak-hour vehicle trips as determined using "Guidelines for the Analysis of the Traffic Impact of Development Proposals."
2. The traffic generated by the proposed developments would impact the following intersections and links:
 - Link – Leeland Road – Church Road to US 301
 - US 301/MD 725
 - US 301/Village Drive
 - US 301/Leeland Road
 - US 301/Trade Zone Avenue
 - MD 202/MD 193
 - Oak Grove Road/ MD 193

- Oak Grove Road/Whistling Duck Drive
- Oak Grove Road/Church Road
- Leeland Road/Safeway Access

3. Four of the intersections (along US 301) identified in number 2 above are programmed for improvement with 100 percent construction funding within the next six years in the current (FY 2007–2012) Prince George’s County Capital Improvement Program (CIP). While the CIP identifies this project as being fully funded, there is also a provision for developer contributions should funding from the State of Maryland be delayed. This applicant has proffered a contribution of \$2,170,000.00 or \$1,550/DU. To date the following developments have made financial commitments towards the aforementioned CIP improvements through Planning Board resolutions:

Collington (Safeway)	4-97044	PB97-214(C)	\$456,000.00
Marlboro Square	4-96084	PB96-342	\$30,880.00
Meadowbrook	4-89227	PB90-102	\$106,948.31
Karington	4-04035	PB04-247(C)	\$725,094.25
Beechtree	CDP-9706	PB98-50	\$1,194,805.08
Buck Property (Balmoral)	4-03100	PB04-21	\$172,252.64
	TOTAL		\$2,685,980.28

4. The subject property is located within the Developing Tier as defined in the General Plan for Prince George’s County. As such, the subject property is evaluated according to the following standards:

Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better

Unsignalized intersections: The Highway Capacity Manual procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed to be an unacceptable operating condition at unsignalized intersections. In response to such a finding, the Planning Board has generally recommended that the applicant provide a traffic signal warrant study and install the signal (or other less costly traffic controls) if deemed warranted by the appropriate operating agency.

5. The following intersections identified in number 2 above, when analyzed with the programmed improvements in number 3 above and total future traffic as developed using the Guidelines, were not found to be operating at LOS D or better:

- MD 193/MD 202

- MD 193/Oak Grove Road
 - Oak Grove Road/Whistling Duck Drive
 - Oak Grove Road/Church Road
 - Leeland Road/Safeway Access
6. The applicant has agreed to provide the following improvements to the intersections, in consideration of the findings in number 5 above:
- At the signalized intersection of MD 202 and MD 193,
- Provide a left turn, a shared left/through lane, and a right turn lane on the southbound MD 193 approach
 - Provide a second left turn on the eastbound (towards Upper Marlboro) approach
- At the unsignalized intersection of Oak Grove and MD 193 (roundabout);
- Provide an exclusive right turn lane at the westbound Oak Grove Road approach (towards MD 202)
7. The intersections identified in Finding 6 above will both operate acceptably as a result of the improvements proffered by the applicants. All of the remaining unsignalized intersections along Oak Grove Road-Leeland Road will operate with delays greater than 50 seconds in at least one movement. Consequently, those intersections will require signal warrant analyses.

TRANSPORTATION STAFF CONCLUSIONS

The Transportation Planning Section concludes that the staging of development will not be an unreasonable burden on available public facilities as required by Section 27-521 of the Prince George's County Code if the application is approved with the following conditions:

1. With the submission of each building permit, the applicant, his heirs, successors or assignees shall pay to Prince George's County a fee calculated as $\$1,550/\text{DU} \times (\text{FHWA Construction Cost Index at time of payment}) / (\text{FHWA Construction Cost Index for 2nd quarter, 1989})$ as its share of costs for improvements to US 301 between MD 725 and MD 214.
2. In lieu of the payment of fees required in Condition 1 above, and subject to approval by the Department of Public Works & Transportation (DPW&T) and the State Highway Administration (SHA), the applicant, his heirs, successors or assignees may be required to construct a third northbound through lane on US 301 from a point just north of Leeland Road to a point just north of Trade Zone Avenue. Additionally, the improvement may include a third eastbound left turn lane along Leeland Road at its intersection with US 301. The total cost of these improvements, or other variation determined by SHA shall not exceed an amount calculated as $\$2,170,000.00 \times (\text{FHWA Construction Cost Index at time of payment}) / (\text{FHWA Construction Cost Index for 2nd quarter, 1989})$.
3. At the time of preliminary plan, the applicant shall be conditioned to dedicate all rights-of-way for MC-600 (Leeland Road) as identified by the Planning Department.

4. Prior to the issuance of any building permit, the following improvements shall be in place, under construction, bonded (or letter of credit given to the appropriate agency for construction), 100 percent funded in a CIP/CTP or otherwise provided by the applicant, his heirs, successors or assignees:
 - a. Leeland Road
 - Construct Leeland Road-Oak Grove Road to provide a minimum of two lanes of the ultimate four-lane master plan alignment between US 301 and MD 193, in accordance with DPW&T standards.
 - b. MD 193/Oak Grove Road Intersection (roundabout)
 - The applicant shall provide an exclusive right turn lane at the westbound approach.
 - c. MD 202/MD 193 Intersection
 - Provide a left turn, a shared left/through lane, and a right turn lane on the southbound MD 193 approach
 - Provide a second left turn on the eastbound MD 202 (towards Upper Marlboro) approach
5. Prior to the issuance of any building permit, the applicant shall conduct signal warrant studies at the following intersections, and install said signal if deemed to be warranted, or provide an alternate improvement as deemed necessary by DPW&T;
 - Leeland Road/Safeway Access
 - Leeland Road/ Site Access B
 - Leeland Road/ Site Access A
 - Oak Grove Road/ Church Road
 - Oak Grove Road/Whistling Duck Drive.

Trails—In a memorandum dated November 6, 2006, the trails planner stated that the Approved Subregion VI Master Plan is applicable to the portion of the subject site that is south of Oak Grove and Leeland Roads and that north of Oak Grove and Leeland Roads, the subject site is included in the Approved Bowie and Vicinity Master Plan.

Further, he stated that the Subregion VI Master Plan recommends a stream valley trail along Collington Branch. The Department of Parks and Recreation (DPR) has had extensive discussions and field visits with the applicant regarding the alignment of this trail. Currently, in the immediate vicinity of the subject site, it appears that the trail will be located along the Collington Branch in both Locust Hill and the adjacent Willowbrook development. This trail will ultimately connect to residential developments both to the north and south of Locust Hill, including Karington and Beech Tree. Staff recommends that the stream valley trail be provided through the subject site per the

agreement/discussions between the applicant and DPR. The ultimate trail alignment will be approved by DPR. Significant issues remain to be resolved regarding the location of the trail, impacts to environmental buffers, and the preservation of water quality and rare, threatened and endangered species. Discussion will be necessary to resolve these outstanding issues.

The Bowie and Vicinity Master Plan also recommends a master plan trail along Black Branch. The trail along Black Branch has also been approved through the Oak Creek Club subdivision. The trail includes several stream crossings and various segments are along either the east or west side of the stream valley. The approved plan recommends that this stream valley trail be extended to the southeast to the area including the northern portion of Locust Hill. Staff recommends that this stream valley trail be constructed along the subject site's portion of the Black Branch Stream Valley. This trail should either be within land dedicated to M-NCPPC, or within a public use easement on HOA land. Similar discussion to those noted above will be required regarding the location of the trail.

The Bowie and Vicinity Master Plan designates both Oak Grove Road and Church Road as master plan trail/bikeway corridors. The trail along Oak Grove Road is being implemented through the Oak Creek Club subdivision (4-01032) as a side path along the north side of Oak Grove Road (west of Church Road). The trail along Church Road is being implemented as a side path along the east side of Church Road through Oak Creek Club. Staff recommends that these improvements be continued on the subject site's frontages of Church Road and Oak Grove Road.

The approved Basic Plan addressed this issues and required the construction of the master plan trails along the roads and adjacent to the stream valleys. Condition 15 of approved Basic Plan A-9975 requires the following:

The applicant and the applicant's heirs, successors, and/or assignees shall provide the following trail facilities:

- a. Construct the eight-foot-wide master plan hiker-biker trail along the subject property's portion of the Collington Branch Stream Valley and six-foot-wide feeder trails to the development pods in Locust Hill. Trail alignments shall be determined by the Department of Parks and Recreation.
- b. Construct the eight-foot-wide master plan hiker/biker trail (extension from Oak Creek development) along the Black Branch stream valley and six-foot-wide feeder trails to the development pods in Locust Hill. Trail alignments shall be determined by the Department of Parks and Recreation.
- c. Construct a Class I master plan trail (or side path) along the subject property's entire frontage of both Oak Grove Road and Church Road.

Staff recognizes that extensive discussions will be necessary between the Environmental Planning Section, DPR, and the applicant to ensure that trails do not impact the environmental buffers, stream valley corridors, water quality, and identified rare, threatened, and endangered species.

A more detailed analysis of the master plan trails and the internal trail network will be completed at the time of SDP. Connections between neighborhoods will be a priority, in addition to the connections to the master plan trails. The sidewalk system will also be an integral part of the pedestrian network, and will be analyzed in more detail at later phases of review.

In closing, the trails planner suggested that five conditions be attached to the approval. Staff has incorporated them into the recommended conditions below.

Parks—In a memorandum dated November 20, 2006, the Department of Parks and Recreation offered the following comments regarding the listed requirements with respect to the subject site:

Council Resolution No. CR-19-2006, Conditions 13 a, b, c, and 14 states:

13. The applicant and the applicant's heirs, successors, and/or assignees shall provide following trail facilities:
 - a. Construct the eight-foot wide master plan hiker-biker trails along the subject property's portion of Collington Branch Stream Valley and six-foot-wide feeder trails to the development pods in Locust Hill. Trail alignment shall be determined by the Department of Parks and Recreation of the M-NCPPC.
 - b. Construct the eight-foot wide master plan hiker-biker trail (extension from Oak Creek development) along the Black Branch stream valley and six-foot wide feeder trails to the developments pods in Locust Hill. Trail alignments shall be determined by the Department of Parks and Recreation.
 - c. Construct a Class 1 master plan trail (or side path) along the subject property's entire frontage of both Oak Grove Road and Church Road.

Parks and Recreation's Comments: The applicant shows the conceptual layout of the master plan trails along the Collington Branch and Black Branch. The master plan trail connection to the Beech Tree and to the Oak Creek Club developments will require stream crossings and possible bridge construction. The master planned trail then crosses the realigned Oak Grove Road and travels to the north side of the road to the future park. At this point, it is unclear how the trail will cross the road. At the time Oak Grove Road designed, a master plan trail crossing should be considered and designed to provide a safe pedestrian crossing.

14. The applicant shall submit for DPR's approval, prior to the time of CDP approval, appropriate covenants that shall be recorded in the County Land Records at final plat for both the Locust Hill and Willowbrook properties. The covenants are to ensure that residents within both the Locust Hill and Willowbrook communities will have equal access to membership in and use of open space and recreational facilities in both developments.

Parks and Recreation's Comments: DPR staff received the Declaration of Covenants on the day of drafting this memorandum and has not had opportunity to review it. This document had been recommended to ensure that the residents within both the Locust Hill and Willowbrook communities would have equal access to membership in and use of (Home Owners Association) open space and (Home Owners Association) recreational facilities in both developments. Since 1980, the Department of Parks and Recreation has only been involved in review of documents and agreements related to public parkland. While we will be happy to assist the Planning Department staff in review of the above-mentioned document related to the private recreational facilities, we believe that "Declaration of Covenant" should be reviewed and approved by the Planning Department staff. We have had no involvement with Home Owners Association or any related issues or agreements.

Council Resolution No. CR-19-2006, Consideration 1,2,3 and 4 states:

1. A detailed analysis of parkland, master plan trails, internal trail networks, sidewalks, and neighborhood connector trails should be completed at the time of Specific Design Plan review.

Department of Parks and Recreation's Comments: The applicant shows a concept plan for the trails network.

2. At the time of CDP-review, specific acreage of parkland dedications shall be determined. Such dedicated should include the Collington Branch and Black Branch stream valleys and 10 acres of developable land for active recreation as provided in January 27, 2006, memo from the Department of Parks and Recreation (DPR). (Exhibit 30(a)) This area includes a 1.7+/- acre parcel of land from Willowbrook project, which was not previously committed for parkland dedication. The conditions of conveyance shall be determined by appropriate staff of M-NCPPC.

Department of Parks and Recreation's Comments: The applicant proposed dedication of 48 acres of parkland, includes the Collington Branch and Black Branch stream valleys and 8.5 acres of developable land for active recreation. This area includes a 1.7+/- acre parcel of land from the Willowbrook project, which was not previously identified for parkland dedication.

3. At the time of CDP review, the applicant shall address its plan to grade a 10-acre developable portion of the dedicated parkland (including 1.7± acre parcel of land from Willowbrook project area which was not previously committed for parkland dedication) on the northeast corner of the property next to Railroad R-O-W to accommodate ball fields and parking lot. The parkland shall have a direct frontage on proposed Oak Grove Road.

Department of Parks and Recreation's Comments: The applicant's proposed dedication of 8.5 acres of developable parkland and construction of recreational facilities on dedicated parkland typical for a neighborhood park of this size, such as ball fields, playground, picnic areas, and a parking lot. The list of recreational facilities should be determined at the time of the approval of the preliminary plan of subdivision.

4. At the time of CDP review, the applicant shall provide adequate, private recreational facilities to meet the future subdivision requirements for the proposed development. The private recreational facilities shall be constructed in accordance with the standards outlined in the Parks and Recreation Facilities Guidelines.

Department of Parks and Recreation's Comments: The applicant should allocate appropriate and developable areas for the private recreational facilities on Home Owners Association (HOA) open space land. The private recreational facilities should be reviewed by the Urban Design Review Section of the DRD for adequacy and property siting. The private recreational package shall be approved by Planning Board at the time of CDP.

The subject property includes a 20-foot-wide access easement north of existing Leeland Road providing access to the Parcel 6 (13.7 acres) and another Parcel 2 to the north. In addition, the existing driveway is not built on the easement, which further increase impact on proposed parkland. This driveway crosses proposed parkland and may negatively impact the master plan trail and park construction. In addition, DPR staff has concerns about possible subdivision of the two mentioned parcels, and associated increases in traffic through the parkland, which would create a safety hazard. The applicant attempted to contact the owners of the parcels in order to

relocate the easement or provide alternative access but unsuccessfully. DPR staff believes that the applicant should continue the effort to addressing these issues and after relocate access to a new driveway that minimizes impacts to the planned park.

CONCLUSION

The Department of Parks and Recreation staff finds that submitted Comprehensive Design Plan in general conformance with the conditions and recommendations of the Basic Plan A-9975 application as related to parks and recreation, Bowie and Vicinity Master Plan and current zoning and subdivision regulations as they pertain to public parks and recreation in the planned community.

Urban Design Comment: The Department of Parks and Recreation has recommended that the project be approved, subject to ten conditions that have been included in the recommendation section of this report.

Public Facilities—In a memorandum dated June 9, 2006, the Historic Preservation and Public Facilities Planning Section stated that the subject project is within the required 7-minute response time for fire and rescue facilities and that adequate police facilities will be available. Therefore, existing facilities are adequate to serve the proposed use.

Environmental Planning—(Please note that the Environmental Planning Section’s reference to conditions of the Basic Plan differs from those utilized elsewhere in the staff report because they based their comments on the Planning Board’s approval and the numbering shifted due to changes to the approval as it was considered by District Council.)

In a memorandum dated November 16, 2006, the Environmental Planning Section offered the following:

Background

The Environmental Planning Section has previously reviewed a rezoning application (A-9975) for this site from the R-A and R-E Zones to the R-L Zone, which was approved with conditions by the Planning Board on March 9, 2006; however, a decision by the District Council is pending. The site is currently under review for a Preliminary Plan of Subdivision, 4-06075, and Type I Tree Conservation Plan, TCPI/24/06-01. The subject proposal is for the creation of 548 lots for single-family detached and attached dwelling units and approximately 20 parcels.

Site Description

This 503.53-acre site in the R-L Zone is located on the north and south side of Oak Grove Road near its intersection with Church Road. A review of the available information indicates that extensive areas of streams, 100-year floodplain, severe slopes, and areas of steep slopes with highly erodible soils are found to occur on the property. These features are within the Collington Branch watershed of Western Branch, a major watershed in the Patuxent River Basin. These features and their associated buffers are required to be protected to the fullest extent possible by Section 24-130(b)(5) of the Subdivision Regulations. According to the “Prince George’s County Soil Survey” the soils found to occur on this site are in the Adelpia, Bibb, Collington, Ochlockonee, Monmouth, Mixed Alluvial, Sandy Land, Shrewsbury, and Westphalia soil series. According to available information, Marlboro clay occurs on this site. One significant source of noise is from the CSX Railroad tracks, which bisect the eastern portion of the site on the south

side of Oak Grove Road. According to information obtained from the Maryland Department of Natural Resources Natural Heritage Program, rare, threatened, and endangered species are known to occur on this property. Oak Grove Road is a designated historic road. The site contains regulated areas, evaluation areas, and network gaps within the green infrastructure network of the Countywide Green Infrastructure Plan. The site is in the Developing Tier as reflected in the 2002 General Plan.

The following are the conditions of approval of the Basic Plan, A-9975. These conditions are pending a decision by the District Council. The text in bold reflects the actual text from the conditions.

BASIC PLAN, A-9975, PGCPB. No. 06-61

- 6. A staff signed natural resources inventory (NRI) shall be submitted with the CDP. All subsequent plan submittals shall clearly show the PMA as shown on the signed NRI.**

The site has a signed natural resources inventory (NRI/47/06) that was submitted with this application.

The FSD describes five forest stands totaling 346.42 acres. Stands A, B, C, and E are all immature hardwoods, while Stand D is a successional hardwood forest. Some of the dominant tree species found to occur on this site include sweetgum, red maple, yellow poplar, green ash, river birch, hickory, American beech, southern red oak, white oak, tree of heaven, black cherry, and black locust. Forest stands A and B are considered high priority for retention because they abut sensitive environmental features such as streams and wetlands. Stand C is part of the on-site Forest Interior Dwelling Species (FIDS) habitat and is a high priority for preservation. According to the FSD text, Stand D contains a significant amount of invasive plant species in the herbaceous layer and is not associated with FIDS habitat or sensitive environmental features, and Stand E contains a limited area of FIDS habitat but is not adjacent to any regulated features; however, a review of the NRI shows that both of these stands are associated with regulated features in several areas. Both stands should have a moderate to high priority for retention in areas adjacent to regulated features, and not a low priority as described in the text.

The site contain several rare, threatened and endangered species; however, the notes on the NRI do not adequately address these species, nor reference the most recent letter from the Department of Natural Resources Natural Heritage Program regarding the rare, threatened and endangered species on this site. The notes section of the NRI must be revised prior to approval of this application.

The site has a Jurisdictional Determination (JD) signed by the Army Corps of Engineers reflecting Waters of the US and wetlands. According to available records, wetlands exist on both the east and west sides of the CSX railroad tracks, which bisect the property; however, it appears that the wetlands on the east side of the railroad were not included in the original wetland survey that was used to prepare the JD. The site proposes impacts associated with a sewer line and master planned trail to be constructed within an area where additional wetlands may exist. Also, the wetlands are in the same vicinity as Coville's phacelia, which is a state-listed endangered plant species. The limits of the wetlands and their relation to the location of the proposed public utility line, trail, and endangered plant, must be evaluated at the time of preliminary plan. A revised wetland delineation report and wetland delineation map, identifying the limits of the wetlands on the east side of the railroad tracks, are required. The delineation must be conducted

and prepared by a qualified professional and be submitted to the Environmental Planning Section. Because no lot development is proposed in this area, this information is not needed for this review.

Recommended Condition: Prior to certification of the CDP, note five of the NRI shall be revised to correctly address all rare, threatened, and endangered species on the site. The NRI shall also be revised to include a wetland delineation that includes the area to the east of the railroad tracks.

- 7. A protocol for surveying the locations of all rare, threatened and endangered species within the subject property shall be obtained from the Maryland Department of Natural Resources prior to acceptance of the CDP and this protocol shall be part of the submittal package. The completed surveys and required reports shall be submitted as part of any application for preliminary plans.**

This condition has been addressed. Because the locations of the rare, threatened and endangered fish species are now known, a protocol or survey for fish species is not required at this time. The applicant has submitted a completed survey of RTE plant species as required. The protocol described in the survey was found to address the above condition. Discussion regarding RTE species is detailed in the Environmental Review section.

- 8. The woodland conservation threshold (WCT) shall be 25 percent. The WCT requirements shall be met on-site. The Type I tree conservation plan required with the CDP application shall focus on the creation of contiguous woodland. Priority areas for tree preservation shall be concentrated in areas within the framework of the approved Green Infrastructure Master Plan. No woodland conservation shall be provided on any residential lot.**

This condition has been addressed. The TCPI submitted with this application correctly shows the woodland conservation threshold as 25 percent.

The TCPI shows several isolated areas of woodland conservation; however, the plan primarily focuses on creating large tracts of contiguous woodland by preserving a significant amount of priority woodland within areas designated as Regulated Areas and Evaluation Areas within the green infrastructure network of the Countywide Green Infrastructure Plan. The proposed woodland conservation areas have been expanded to include a significant portion of the Evaluation Areas and Network Gaps that are associated with FIDS habitat and buffer on proposed Parcel R. According to the NRI, this area is predominately associated with Forest Stand B, which has a high habitat value and a high priority for retention. The overall design significantly protects the sensitive environmental features and the rare, threatened, and endangered species that are known to occur on this site. The TCPI has been found to be in conformance with the Countywide Green Infrastructure Plan.

Although woodland conservation has not been provided on any residential lot, the TCPI shows several lots with woodland to remain that are not counted as woodland conservation nor counted as cleared. The specific size of each lot is not shown on the TCPI. The CDP indicates that the proposed design will include single-family lots as small as 7,400 square feet. Woodlands that remain on small lots are frequently cleared by the subsequent homeowners to allow for useable yard areas. Lots less than 20,000 square feet must show all the woodlands as cleared in order to prevent future homeowners from being burdened with woodlands on such small lots. As such, the woodlands shown to remain on all lots less than 20,000 square feet in

size must be counted as cleared. The TCPI will also need to be revised to label each lot with its lot size and provide a table stating how much woodlands remains on lots that are counted as cleared and are not counted as cleared. A chart similar to the preservation and reforestation charts on sheet 1 should be added to the plan.

Comment: A recommended condition related to these calculations is included in the TCPI revisions condition stated below.

- 9. Woodland cleared within the PMA's Preservation Area shall be mitigated on-site at a ratio of 1:1 for all impacts associated with development of the subject parcels. Woodland cleared within the PMA for the construction of the master planned roadway shall be mitigated in conformance with the standards of the Woodland Conservation Ordinance. This note shall also be placed on all tree conservation plans.**

The CDP package includes a tree clearing plan, which shows all of the areas proposed for clearing. The plan does not distinguish between the specific clearing areas. Identifying the different types of clearing areas will be necessary in the evaluation of future TCPs for the site.

The TCPI submitted with the preliminary plan must identify each clearing area by type: Net Tract Clearing, PMA Clearing (Master Plan Road), PMA Clearing (includes floodplain), and Off-Site Clearing. Each of the clearing types should be identified using a different symbol. A chart indicating the type and size of each isolated clearing area in its respective category should also be added to the plan. The total acreage of PMA clearing, which also includes the 100-year floodplain, is correctly shown in the column of PMA clearing and off-site impacts. A recommended condition related to these calculations is included in the TCPI revisions condition stated below.

Recommended Condition: Prior to certification of the CDP, the TCPI shall be revised to add the following note below the TCPI worksheet: "The acreage of all clearing within the 100-year floodplain is reflected in the worksheet column for PMA clearing and off-site impacts. PMA clearing for the master planned roadways is included in the site clearing calculations."

Recommended Condition: The TCPI submitted with the preliminary plan shall identify each clearing area by type: Net Tract Clearing, PMA Clearing (Master Plan Road), PMA Clearing (includes floodplain), and Off-Site Clearing. Each of the clearing types shall be identified using a different symbol. A chart indicating the type and size of each isolated clearing area in its respective category shall also be added to the plan.

- 10. A Marlboro Clay geotechnical report that identifies the location and elevation of the Marlboro Clay layer throughout the site shall be submitted as part of the CDP application package.**

This condition has not been fully addressed. A geotechnical report for a preliminary subsurface exploration for the location of the Marlboro clays was submitted. The study shows the anticipated limits of the Marlboro clay based on an insufficient amount of soil borings on the site. Although the study is based on the existing conditions of the site, it does not address the slope stability and the unmitigated 1.5 safety factor line. This study was performed in July 2005 and the source and date of the topography used in that study is unknown. According to the NRI, the most recent topography for this site was field shot in February 2006. The geotechnical information should be based on the most current available topographical information of the site to

accurately determine the existing Marlboro clay limits, elevations, and outcrop pattern. The study should also address any areas of slope stability by providing a set of cross-sections where appropriate to delineate any existing areas of possible slope failure. The associated plans must show the unmitigated 1.5 safety factor lines.

This information could potentially result in necessary changes to the lot layout, and as such, is critical to the review of the preliminary plan.

Recommended Condition: At least 60 days prior to Planning Board hearing for the preliminary plan, a detailed geotechnical report based on the existing conditions of the site, including the most current topographical information (or as shown on the NRI) shall be submitted. It shall also address the existing outcrop pattern of Marlboro clays and areas of slope stability concerns with respect to the existing conditions. The study shall provide the appropriate plans and/or exhibits, showing the location of all slope stability cross-sections, and identify the unmitigated 1.5 safety factor lines. The unmitigated 1.5 safety factor lines based on that report shall then be placed on the TCPI and the preliminary plan.

Recommended Condition: At least 60 days prior to any Planning Board hearing on the preliminary plan application, the existing conditions and proposed 1.5 safety factor line shall be shown on the preliminary plan and Type I Tree Conservation Plan. No structures, septic fields, or lots less than 40,000 square feet in area shall be placed within the mitigated 1.5 safety factor line. All subsequent plans shall also show this information. If proposed engineering of the site will change the location of the existing 1.5 safety factor line, the proposed 1.5 safety factor line must also be shown on all plans.

11. A Phase I noise study shall be submitted with the preliminary plan application package. The noise study should address the location of the 65 dBA Ldn noise contour related to the CSX Railroad tracks, and what mitigation measures, if any, will be required to reduce noise impacts to 65 dBA Ldn in outdoor activity areas.

This condition has been addressed with this CDP application. A Phase I Noise Study addressing potential noise impacts from the CSX railroad has been submitted. The study reports that approximately four trains travel past the subject site within a 24-hour period. The horns of the train are sounded prior to crossing Leeland Road. Two samples were taken at specific locations to determine noise measurements with and without the associated horn. Point A was located closest to the horn post, while Point B was located further south of the horn post. Both sample points were approximately 200 feet from the edge of the CSX right-of-way. The study concludes that the noise levels at these specific locations were below the state standards for residential uses of 65 dBA Ldn. Based on 100 percent buildout, the study has predicted the 65 dBA Ldn noise contour to be approximately 60 feet from the centerline of the CSX railroad near the horn post. This contour decreases even further as distance from the horn post increases. The 65 dBA Ldn noise contour has been correctly shown on the TCPI and illustrative plans. Mitigation for the proposed rear outdoor activity areas and indoor living areas is not required.

12. If noise mitigation is required to reduce noise levels to below 65 dBA Ldn in outdoor activity areas, a Phase II noise study shall be submitted with the preliminary plan application package. The Phase II noise study shall address how noise has been mitigated to 65 dBA Ldn in outdoor activity areas and 45 dBA Ldn interior.

Based on the submitted Phase I noise study, a Phase II noise study will not be required because no lots will be impacted by noise above levels of the state standards. The study

also finds that special modifications are not necessary to reduce interior noise levels to 45 dBA Ldn or less. Staff concurs with these findings based on the proximity of the proposed structures to the railroad.

13. No residential lots shall be located within 150 feet of the centerline of the CSX Railroad tracks.

The condition has been addressed.

MASTER PLAN CONFORMANCE

In the Approved Master Plan and Sectional Map Amendment for Bowie and Vicinity (February 2006), the Environmental Infrastructure section contains goals, policies and strategies. The following policies have been determined to be applicable to the current project. The text in **BOLD** is the text from the master plan and the plain text provides comments on plan conformance.

Policy 1. Protect, preserve and enhance the identified green infrastructure network within the master plan area.

Collington Branch is designated in the Bowie and Vicinity Master Plan as a Primary Corridor, meaning that development within this watershed should seek to protect, enhance or restore the resource. It is located on the east side of the CSX Railroad tracks that run north-south in that area. The extensive stream network on the site feeds directly into Collington Branch. The Countywide Green Infrastructure Plan shows this site as containing significant amounts of regulated areas and almost the entire site is an evaluation area. Because of this site's prominent location in the network, and because it is directly adjacent to the Collington Branch system, every effort must be made to protect the high quality environmental resources on-site.

Comment: The preservation of the sensitive resources is discussed in detail later in this memorandum.

Policy 2: Restore and enhance water quality in areas that have been degraded and preserve water quality in areas not degraded.

The Western Branch Watershed Restoration Action Strategy (WRAS) has identified several sites in need of restoration upstream from the subject property. The problems identified on-site are related to erosion and trash dumping. These sites should be investigated for opportunities for restoration.

Comment: The areas of restoration within the Collington Branch system will be addressed with the review of the Willowbrook application. Additional recommended conditions in this memorandum address erosion and sediment control requirements to preserve water quality.

Policy 3: Protect and enhance tree cover within the master plan area.

The TCPI shows that approximately 97 percent of the woodland conservation requirement for this site is being met on-site. There are several areas where the Primary Management Area (the regulated areas adjacent to streams) is proposed to be planted where vegetation does not currently exist.

Policy 4: Reduce overall energy consumption and implement more environmentally sensitive building techniques.

The development is conceptual at the present time. In future applications, the use of these building techniques should be addressed.

Recommended Condition: At time of Specific Design Plan submission, each SDP shall include a statement regarding how the proposal uses green building techniques and alternative energy sources.

Policy 5: Reduce light pollution and intrusion into residential, rural and environmentally sensitive areas.

The site is adjacent to an environmentally sensitive area (Collington Branch and its tributaries). All street lights in the new subdivision should use full cut-off optics to ensure that light intrusion is minimized.

Recommended Condition: The following note shall be placed on the preliminary plan and all future Tree Conservation Plans: all community lighting shall use full cut-off optics and be directed downward to reduce glare and light spill-over.

Policy 6: Reduce adverse noise impacts to meet State of Maryland noise standards.

The CDP shows the placement of structures a considerable distance from the main noise generator: the CSX Railroad tracks to the east. The state noise standards have been met using this design.

Policy 7: Protect wellhead areas of public wells.

The site is not in a wellhead protection area and does not propose any public wells.

ENVIRONMENTAL REVIEW

1. In a letter dated September 6, 2006, the Department of Natural Resources Natural Heritage Program noted that rare, threatened, and endangered (RTE) species are known to occur on the subject property. The letter specifically addressed three fish species identified as the state-listed endangered Stripeback darter (*Percina notogramma*), the state-listed threatened American brook lamprey (*Lampetra appendix*), and the state-listed threatened Glassy darter (*Etheostoma vitreum*). Also identified on the site was one RTE plant species, **Coville's phacelia** (*Phacelia covillei*), which is listed as endangered by the State of Maryland, and is globally rare. These, along with several other RTE plant species, have been identified in Collington Branch of the Western Branch watershed in the Patuxent River basin, which runs north-south along the eastern portion of the subject site.

The Western Branch watershed is ranked eighth out of 84 watersheds in Maryland with respect to aquatic biological diversity and priority for conservation. Zekiah Swamp, which is partially located within Prince George's County, is ranked first. It should also be noted that the Willowbrook site, which is located on the east side of the CSX railroad, and adjacent to the northeast portion of this site, contains eight additional RTE plant species in addition to the fish species discussed in this section. Preservation and protection of the biological integrity of Western Branch is critical to the continued sustainability of this diverse and sensitive community of fish and plant species.

In order to protect and preserve the on-site habitat of the rare, threatened, and endangered species, DNR has provided several guidelines that should be addressed on the subject site before, during, and after the development of the site. These guidelines include the use of the following practices:

- Reduction of impervious surfaces
- Stormwater conveyance to streams via sheet flow and naturally vegetated channels
- Maximum retention of forest
- Disconnection of rooftop and non-rooftop runoff
- Improved sediment and erosion control
- 100 foot-wide buffer for all streams and non-tidal wetlands on the site
- Avoidance of in-stream work where possible

Although there will be significant limitations in reducing the proposed impervious areas based on the planned densities, the TCPI proposes large contiguous tracts of woodland conservation and pervious open space that are adequate enough to allow conveyance of stormwater to the streams via sheet flow. The stormwater management regulations require that the pre and post-development run-offs be similar and the project proposes several stormwater management ponds to address the requirements. Based on the proposed design, most of the impervious areas will be located approximately 90 feet or more from the sensitive habitat areas, except where necessary road crossings are proposed.

Forest retention is discussed in detail in the woodland conservation and green infrastructure sections of this memo. The plan proposes to clear approximately 50 percent of the on-site woodland and the plan proposes to meet 97 percent of the 167.31-acre woodland conservation requirement on-site. The majority of the proposed woodland conservation is focused on areas adjacent to the preserved sensitive habitat areas.

The TCPI does not address sediment and erosion control measures or the disconnection of rooftop and non-rooftop runoff. The plans submitted with this application do not reflect the final layout of the site. As part of the Specific Design Plan submittal, a plan and text shall be submitted that addresses a sediment and erosion control protocol that is more stringent than the minimum required. It shall include phasing of the site in such a way that the sediment basins stay in place until the last lot is built in the phase. The plan shall incorporate additional control measures and inspections to ensure maximum filtration of runoff and complete implementation of the plan. The package will be reviewed by the Environmental Planning Section staff in coordination with the staff of the Soil Conservation District.

Rooftop and non-rooftop disconnection will allow a significant amount of runoff to be filtered and infiltrate over natural and pervious areas before reaching the stream valley. All proposed structures adjacent to open areas must be designed with rooftop and non-rooftop disconnection and should be addressed prior to any Planning Board hearing for the preliminary plan. Because the stormwater concept plan approval is associated with the preliminary plan review, this is the appropriate mechanism to address these techniques.

Most of the impacts to the stream have been limited to necessary road crossings and infrastructure. In addition, the plan shows some impacts that are avoidable. All impacts will be addressed at the time of preliminary plan; however, it should be noted that impacts that are non-essential for development must be avoided. Impacts are discussed further in the following section of this memo.

The current TCPI does not show the 100 foot-wide habitat protection buffer as recommended by DNR, nor do the plans address its preservation. The definition of the Patuxent River Primary Management Area (PMA) includes the following text after it describes all other sensitive features that are regulated: “Specific areas of rare or sensitive wildlife habitat, as determined by the Planning Board.” Staff is recommending that when the TCPI is submitted with the preliminary plan, that the PMA include the 100-foot-wide buffer. Based on a review of the plans submitted, it appears as though the design has attempted to respect this buffer. Some buffers from the streams and wetlands are 200 feet. Some of the areas where the entire buffer is not preserved are due to lot grading and construction of stormwater management ponds. These impacts are not considered essential to the development of the site because the design can be changed to reduce or eliminate these impacts. To date, the plans have been revised multiple times to reduce the overall impacts to the 100-foot-wide buffer. The remaining impacts should be evaluated further during the review of the preliminary plan.

During development of the specific design plans, stormwater management plans, and the sediment and erosion control plan, protection of sensitive species habitat from sedimentation, pollutants and changes of hydrologic regimen must be considered. A Habitat Protection and Management Program for the rare, threatened and endangered species identified on the site should be developed by the applicant and the Environmental Planning Section, in consultation with the staff of the Maryland Department of Natural Resources Natural Heritage Program. The program should address baseline monitoring of the site prior to the commencement of construction, monitoring of hydrology, sediment, and protective mechanisms during construction, and long-term monitoring of the sensitive species habitat after construction in order to assess the success of the mechanism proposed. Prior to the signature approval of the preliminary plan, a conceptual Habitat Protection and Management Program shall be approved by the Environmental Planning Section. The Program shall include, but not be limited to:

Hydrologic monitoring for a minimum of a year prior to the issuance of the first grading permit to establish a baseline of data, during construction, and post construction for the following elements:

- Water quality
- Benthic macroinvertebrate
- Hydrologic flow
- Sedimentation

Monitoring during construction for the following:

- Sediment and Erosion Control measures
- Stormwater Management controls
- Special Protection Measures for RTE habitat

Monitoring of the RTE Species during and post-construction.

The details of the programs will be determined in future meetings with the applicant and in consultation with the Department of Natural Resources Natural Heritage Program, who will

continue to provide guidance and expertise with regard to the preservation and protection of RTE habitat, in coordination with stream and wetlands permits required for the development. The detailed Habitat Protection and Management Plan shall be approved by the Environmental Planning Section prior to the acceptance of the first Specific Design Plan.

Recommended Condition: At least 60 days prior to any Planning Board hearing for the preliminary plan, the TCPI shall be revised to show a 100-foot protection buffer for rare, threatened and endangered species with respect to all streams and wetlands on the site. The PMA shall be revised to include that 100-foot buffer. Impacts shown to the 100-foot buffer and PMA on the TCPI associated with the CDP shall be re-evaluated and reduced or eliminated during the review of the preliminary plan. Impacts should be limited to those that are essential for the development of the site.

Recommended Condition: Prior to signature approval of the preliminary plan, a copy of the stormwater management concept plan shall be submitted. The plan shall include the use of sheet flow buffers, vegetated channels, and rooftop and non-rooftop disconnection to the fullest extent possible in addition to other stormwater management techniques.

Recommended Condition: Prior to the signature approval of the preliminary plan, a conceptual Habitat Protection and Management Program shall be approved by the Environmental Planning Section. The Program shall include, but not be limited to:

- a. Hydrologic monitoring for a minimum of a year prior to the issuance of the first grading permit to establish a baseline of data, during construction, and post construction for the following elements: water quality, benthic macroinvertebrate, hydrologic flow, sedimentation.
- b. Monitoring during construction for the following: sediment and erosion control measures, stormwater management controls, special protection measures for RTE habitat.
- c. Monitoring of the RTE Species during and post-construction.

Recommended Condition: Prior to submittal of the first SDP, a detailed Habitat Protection and Management Plan shall be approved by the Environmental Planning Section, which addresses specific implementation methodologies for the long-term protection and assessment of the RTE habitat location on this site.

Recommended Condition: Prior to issuance of the first grading permit, a minimum of one year of hydrologic monitoring data, as determined by the program, shall be submitted, to establish a baseline for evaluation impacts to the RTE habitat resulting for construction activities, and post development.

Recommended Condition: As part of the submission package for the first SDP, a plan and text shall be submitted that addresses a sediment and erosion control protocol that is more stringent than the minimum required. It shall include phasing of the site in such a way that the sediment basins stay in place until the last lot is built in the phase. The plan shall incorporate additional control measures and inspections to ensure maximum filtration of runoff and complete implementation of the plan. The package will be reviewed by the Environmental Planning Section staff in coordination with the staff of the Soil Conservation District.

2. When a property is located within the Patuxent River watershed, certain designated features comprise the Patuxent River Primary Management Area Preservation Area (PMA). Section 24-130(b)(5) requires that the Planning Board find that the PMA is preserved in its natural state to the fullest extent possible. All disturbances not essential to the development of the site as a whole are prohibited within the PMA. Essential development includes such features as public utility lines [including sewer and stormwater outfalls], road crossings, and so forth, which are mandated for public health and safety; nonessential activities are those, such as grading for lots, stormwater management ponds, parking areas, and so forth, which do not relate directly to public health, safety or welfare. Because this site contains fish and plant species designated as threatened and/or endangered, it is very important that impacts be limited to only those areas necessary.

As discussed above, the TCPI and CDP show several impacts to the regulated areas within the PMA for the construction of road crossings, public utilities (water and sewer), and stormwater outfalls, which are essential for development. The plans also show impacts to the existing delineation of the PMA for grading near Lots 37 and 38 Block F; south of Lot 47 Block F; and east of Lots 24-34 Block B that are not essential. The grading near Lots 37 and 38 Block F will impact the headwaters of a tributary. The plans do not show any proposed development for these areas. Sheets 3 and 5 show an impact associated with grading for a stormwater management pond. This impact should also be eliminated because the pond can be designed to avoid impacts. All other proposed impacts will be addressed in detail with a Letter of Justification at the time of preliminary plan review.

The TCPI and CDP show master planned trails in accordance with Bowie and Vicinity Master Plan, and the Subregion VI Master Plan. Both plans also show very limited impacts for the master planned trails. Because of the sensitive nature of the site, no additional trails within the regulated areas or woodland conservation areas should be shown on any future plans. The proposed trails must be shown on the TCPI at the time of preliminary plan.

Recommended Condition: Prior to certificate approval of the CDP, the TCPI shall be revised as follows:

- a. Add the following note: “The limits of disturbance shown on this plan are conceptual and do not depict approval of any impacts to regulated features.”
- b. Clearly identify the proposed master planned trails and show the associated width.

Recommended Condition: Prior to the issuance of any permits which impact wetlands, wetland buffers, streams or Waters of the U.S., copies of all federal and state wetland permits, evidence that approval conditions have been complied with, and associated mitigation plans shall be submitted to the M-NCPPC, Planning Department.

3. This property is subject to the provisions of the Prince George’s County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet and there are more than 10,000 square feet of existing woodland on-site.

A Type I Tree Conservation Plan, TCPI/24/06, has been submitted for review. The site contains a total of 413.6 acres of existing woodland, of which 67.18 acres are in the floodplain. The Woodland Conservation Threshold (WCT) for this 503.53-acre site in the R-L Zone is 108.74 acres, or 25 percent of the net tract. The TCPI proposes to clear 209.03 acres of woodland on the net tract, and a total of 6.31 acres of woodland in the PMA preservation area and off-site.

The woodland conservation requirement has been correctly calculated as 167.31 acres. The plan proposes to meet the requirement by providing 115.84 acres of on-site preservation, 46.41 acres of reforestation/afforestation, and 5.06 acres of off-site mitigation. Overall this conceptual TCPI intends to meet 97 percent of the requirement on-site.

Several technical revisions are required. The TCPI shows a proposed tree line. This symbol should never be shown on any tree conservation plan because it tends to be confused with the limits of disturbance (LOD) and makes the plans less readable. The CDP and TCPI both show areas designated for a future church/school facility on proposed Parcel R in two locations (as shown on Sheets 3 and 4 of the TCPI). There is a note on the TCPI that states that Parcel T is to be dedicated to a possible future church; however, the TCPI proposes no woodland clearing in this area. In order for the woodland conservation calculations to be correct in the worksheet, an estimate of the amount of clearing proposed on Parcels R and T is necessary.

The submitted plan shows woodland conservation on land to be dedicated to the Department of Parks and Recreation. Woodland conservation may not be proposed on any land to be dedicated to the Department of Parks and Recreation unless written permission has been obtained. To date, permission has not been provided.

Sheets 3 through 7 show a discontinuous match-line with the respective sheets. The full limits of the match-line must be shown from one end of the site to the other as it relates to the associated sheets. The LOD for the master planned road located off-site just east of the subject site is discontinuous. This is also reflected on the cover sheet as well. For all areas proposed for disturbance, revise the TCPI to show one continuous LOD.

Sheet 3 shows a residential structure on what appears to be a parcel located north of Lot 1 Block G. The CDP indicates that this area is proposed for reforestation only and that the structure may have been shown on this parcel in error. Revise the TCPI to remove the proposed structure from the parcel north of Lot 1 Block G. All lots and parcels should be clearly identified with their respective acreages and the lot/parcel boundaries must be readable on the plan.

Extensive reforestation and afforestation is proposed in order to fulfill the woodland conservation requirements on this site. In order to protect the afforestation areas after planting, so that they may mature into perpetual woodlands, the afforestation must be completed prior to the issuance of building permits for areas adjacent to the planting sites; afforestation areas shall be protected by permanent tree protection devices, such as two-rail split fences or equivalent; and all afforestation must be placed in conservation easements at time of final plat. In addition, to ensure that the conservation easements don't change in the future, the final TCPII shall receive signature approval prior to the approval of the final plat.

At the time of Specific Design Plan, the sheet sections and sheet order of the TCPII must be consistent with that of the SDP. This will reduce confusion between both plans during the review.

Recommended Condition: Prior to certification of the CDP, the Type I Tree Conservation Plan, TCPI/24/06, shall be revised as follows:

- a. Add the following note: "Woodland cleared within the PMA Preservation Area shall be mitigated on-site at a ratio of 1:1 for all impacts associated with development of the subject parcels. Woodland cleared within the PMA for the construction of the master

planned roadway shall be mitigated in conformance with the standards of the Woodland Conservation Ordinance.”

- b. Revise note 1 as follows: “This plan is conceptual in nature and is submitted to fulfill the woodland conservation requirements of CDP-0506. The TCPI will be modified by a TCP I in conjunction with the review of the Preliminary Plan of Subdivision and subsequently by a Type II Tree Conservation Plan (TCPII) in conjunction with the approval of a SDP and/or a grading permit application.”
- c. Add the following note: “Reforestation and afforestation areas shall be delineated on-site through the use of two-rail split-rail fences or some other permanent device that is aesthetically compatible with the development. Fence locations and details shall be specified on the Type II TCP.”
- d. Calculate all woodland on lots less than 20,000 square feet as woodland cleared, add lot sizes to the plan, add a table calculating all woodland treatment areas, and label all areas appropriately.
- e. Eliminate the use of a “proposed tree line” and only use a limit of disturbance.
- f. Show a continuous match-line for each match-line boundary on each sheet.
- g. Show one continuous limit of disturbance for all areas proposed for development, particularly the master planned roadway located outside the eastern boundary of the site.
- h. Remove the proposed structure from the parcel located north of Lot 1 Block G.
- i. Show the conceptual clearing for Parcels R and T.
- j. Add the following note: “Prior to contract signing, the seller shall show the prospective buyer a copy of this Type I Tree Conservation Plan or the subsequent Type II Tree Conservation Plan, whichever plan is most current and has received signature approval, as required by CB-60-2005.”
- k. Revise the worksheet as necessary.
- l. Have the plans signed and dated by the qualified professional who prepared the plans.

Recommended Condition: At least 30 days prior to any Planning Board hearing for the preliminary plan, submit written authorization from the Department of Parks and Recreation for any woodland conservation provided on land to be dedicated.

Recommended Condition: At the time of Specific Design Plan, the SDP and TCPII shall have the same sheet sections, sheet key, and sheet order. The sheet key shall be placed on all sheets.

Recommended Condition: Prior to the issuance of the building permits for lots adjacent to planting areas, all afforestation and associated fencing shall be installed. A certification prepared by a qualified professional may be used to provide verification that the afforestation and fence installation have been completed. It must include, at a minimum, photos of the afforestation areas

and the associated fencing for each lot, with labels on the photos identifying the locations and a plan showing the locations where the photos were taken.

4. Oak Grove Road was designated as a Historic Road by the 1992 Historic Sites and Districts Plan and is subject to the “Guidelines for the Design of Scenic and Historic Roads.” Although the portion of Oak Grove Road associated with this site will be vacated for the master planned roadway, the scenic viewshed along the master planned road should be designed to be consistent with the existing historic road that is to remain.

Extensive woodlands characterize the vista along this portion of Oak Grove Road; however, there are other portions along this road characterized by open fields, and some narrow hedgerows. To ensure the scenic viewshed along the master planned road will be consistent with the character and viewshed of the existing historic road, a scenic easement, with a minimum width of 40 feet located outside of the ultimate right-of-way and exclusive of the public utility easement, must be delineated on all future plans. The current site layout has generally addressed potential visual impacts by limiting the number of access points to three entrances, by prohibiting individual lot access to the roads, and by providing parcels of land between the lots and the roadway.

The TCPI submitted with this application provides enough area for a 40-foot-wide scenic buffer outside the ultimate right-of-way, public utility easement; however, it is not delineated on the plan. The TCPI proposes afforestation and preservation within the entire buffer except where a stormwater management pond is proposed near the east end of the road. The plan shows that all proposed structures will have an adequate setback from the easement. The TCPI has been found to adequately satisfy the buffer requirements for the realigned Oak Grove Road; however, it will need to be revised to show the 40-foot wide scenic easement.

Recommended Condition: At least 30 days prior to Planning Board hearing for the preliminary plan, the TCPI associated with that plan shall be revised to show the scenic easement with a minimum width of 40 feet located outside of the ultimate right-of-way and exclusive of the public utility easement and proposed master planned trail adjacent to the realigned Oak Grove Road.

Recommended Condition: At the time of Specific Design Plan, all planting within the scenic easement shall be native plant material.

Recommended Condition: At time of final plat, a 40-foot-wide scenic easement shall be established adjacent to Oak Grove Road and a note shall be placed on the final plat as follows:

“Oak Grove Road is a designated Historic Road. The scenic easement described on this plat is an area where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches or trunks is allowed.”

The Environmental Planning Section’s suggestions have been incorporated in the recommendation section of this report.

Zoning—In a memorandum dated June 8, 2006, the Zoning Section stated that the Planning Board recommended approval of Zoning Map Amendment A-9975 (Locust Hill) for the R-L (Residential Low Development) Comprehensive Design Zone with conditions, on March 30, 2006 (PGCPB No 06-61). The Zoning Hearing Examiner (ZHE) recommended approval of the Basic Plan and R-L Zone, with conditions, on June 7, 2006. The application is scheduled for District Council Review on June 19, 2006, and the 30-day appeal period will end on July 7, 2006.

If there is a request to hear, the Council will have 150-days to render a decision, excluding August and December. Urban Design staff will wait until a final decision is rendered to provide an analysis of the specifics of the case.

Department of Environmental Resources (DER)—In updated comments, DER stated that the site plan for Locust Hill-CDP-0506 is consistent with approved stormwater concept #47462-2005.

The Department of Public Works and Transportation (DPW&T)—In a memorandum dated June 12, 2006, DPW&T stated that:

- Church Road is to be improved to a four-lane scenic and historic rural collector roadway with a 90-foot right-of-way.
- The relocated Oak Grove Road is to be constructed in accordance with DPW&T’s scenic and historic rural four-lane scenic and historic rural four-lane arterial roadway standards with a 120-foot right-of-way.
- Right-of-way dedication and frontage improvements in accordance with DPW&T’s scenic and historic rural four-lane arterial road standards are required for Leeland Road. Construction of a new 2-lane bridge over the Collington Branch adjacent to the existing bridge is required to carry half of the traffic on Leeland Road. Additionally, right-of-way dedication and frontage improvements in accordance with DPW&T’s Specifications and Standards are required for the proposed internal subdivision streets.
- All improvements within the public right-of-way as dedicated to the county are to be in accordance with the county Road Ordinance, DPW&T’s Specifications and Standards and the Americans with Disabilities Act.
- Any proposed master planned roadways that lie within the property limits must be addressed through coordination between The Maryland National Capital Park and Planning Commission and DPW&T and may involve right-of-way reservation, dedication and/or road construction in accordance with DPW&T’s standards.
- Full-width, 2-inch mill and overlay for all county roadway frontages would be required.
- Compliance with DPW&T’s utility policy would be required. Based upon the plans submitted, proper temporary and final patching and the related mill and overlay in accordance with “DPW&T’s Policy and Specification for Utility Installation and Maintenance Permits” is required.
- Conformance with DPW&T street tree and street lighting standards would be required.
- Culs-de-sac are required to allow, as a minimum, turning movement for a standard WB-40 vehicle and a standard length fire truck. When considering turning movement, it is assumed that parking is provided on the outside edge of the radius of the cul-de-sac.
- An access study shall be conducted by the applicant and reviewed to determine the adequacy of access point(s) and the need for acceleration/deceleration and turning lanes.
- All storm drainage systems and facilities are to be designed in accordance with DPW&T’s and the Department of Environmental Resources’ requirements.

- A soils investigation report which includes subsurface exploration and geotechnical engineering evaluation for public streets is required.

Please note the DPW&T's requirements are enforced through their separate permitting process.

The Washington Suburban Sanitary Commission (WSSC)—In comments dated June 14, 2006, WSSC stated water and sewer extension would be required and that the project engineer should submit Hydraulic Planning Analysis package for review. Further, they stated that all required rights-of-way easements must be delineated and labeled on the plan and minimum right of way widths must be adhered to. The WSSC noted that a minimum right-of-way width of 30 feet is required for both water and sewer lines installed in the same right-of-way at normal depth. They also noted that the minimum right-of-way width for one extension, either water or sewer, installed at normal depth, is 20 feet and that installation of deep water and/or sewer mains would require additional right-of-way width. Noting that the minimum clearance between a building and a WSSC pipeline is 15 feet, they stated that, based on their requirements, the absolute minimum spacing between adjacent buildings with both water and sewer lines between them is 40 feet with a preference of 45 to 50 feet. Further, they stated that balconies and other building appurtenances are not to be within the right-of-way and that the proposed sewer outfall impacts the PMA, stream, railroad and stormwater management pond. WSSC then asked the applicant to realign the proposed outfall sewer 50 feet from the stormwater management pond and to refer to a memorandum, dated June 9, 2006, from Ken Dixon of the CSSC Planning Unit for water and wastewater adequacy information.

State Highway Administration (SHA)—In a letter dated May 26, 2006, SHA stated that they are currently reviewing the traffic impact study submitted by M-NCPPC. Upon completion, they further stated, their office will provide recommendations and findings consistent with transportation needs to the Transportation Planning Section on or before June 20, 2006.

City of Bowie—In an email dated May 30, 2006, the City of Bowie stated that the city would not be holding hearings or providing comment on the subject comprehensive design plan since the project is over one mile from city limits. They mentioned, however, that they would continue to monitor the traffic improvement proposal and any future conditions of approval in case there are any traffic issues the city might want to comment on, since many of their residents use Oak Grove and Leeland Roads.

18. **The Prince George's Woodland Conservation Ordinance**—In a memorandum dated November 16, 2006, the Environmental Planning Section stated that the property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet and there are more than 10,000 square feet of existing woodland on-site. Also, in that memorandum, the Environmental Planning Section reviewed the contents of the submitted and required Type I Tree Conservation Plan and recommended its approval, with conditions. Therefore, it may be said that the subject application is in conformance with the requirements of the Prince George's Woodland Conservation Ordinance.
19. Recreational facilities for the development shall include four open play areas, community center with a pool, and a hiker/biker trail.

Such recreational facilities shall be bonded and constructed in accordance with the following schedule:

Type of Amenity	Bonding Trigger	Construction Completion
Open Play Area #1	Before issuance of the first building permit	55 th building permit
Open Play Area #2	Before issuance of the first building permit	110 th building permit
Open Play Area #3	Before issuance of the first building permit	165 th building permit
Open Play Area #4	Before issuance of the first building permit	220 th building permit
Community Building with Pool	Before issuance of the first building permit	276 th building permit
Hiker/Biker Trail	Before issuance of the first building permit	331 st building permit

In addition to private recreational facilities, the applicant proposes to construct a neighborhood park on 8.5 acres on the northeast corner of the Locust Hill development along its Oak Grove Road frontage and next to the railroad right-of-way. The park would be available for public use and would include facilities such as ball fields, a playground, tennis or basketball courts, shelters, restroom facilities and a parking lot.

RECOMMENDATION

Based upon the preceding evaluation, the Urban Design Review Section recommends that the Planning Board adopt the findings of this report and APPROVE Comprehensive Design Plan CDP-0506, and Type I Tree Conservation Plan TCPI/24/06 for Locust Hill subject to the following conditions:

1. If it is determined that potentially significant archaeological resources exist in the project area, prior to Planning Board approval of the preliminary plan of subdivision, the applicant shall provide a plan for:
 - a. Evaluating the resource at the Phase II level, or
 - b. Avoiding and preserving the resource in place
2. Prior to signature approval of the subject Comprehensive Design Plan, applicant shall respond adequately in the opinion of Historic Preservation Section staff, to further comments offered by the HPC regarding the Phase I Archeological Investigation Report.
3. Prior to issuance of any building permits for the subject project the applicant and the applicant's heirs, successors, and/or assignees shall provide the following:
 - a. Construct the master trail along the subject site's portion of the Collington Branch. Park dedication and the alignment of the trail shall be coordinated with the Department of Parks and Recreation.
 - b. Construct a Class I Master Plan Trail (or side path) along the subject site's entire frontage of Oak Grove Road.
 - c. Construct a Class I Master Plan Trail (or side path) along the subject site's entire frontage of Church Road.

- d. Construct the master plan trail along the subject site's portion of Black Branch. This trail shall either be within land dedicated to DPR or within a public use easement on HOA land.
4. A detailed analysis of the master plan trails, internal trail network, sidewalk network, and neighborhood connector trails will be completed at the time of specific design plan. Trail locations may be contingent upon the location of environmentally sensitive features and other constraints. Connector trails to the master plan trails, to other park and recreation facilities, and between neighborhoods should be provided.
5. All future submissions to the Development Review Division regarding Locust Hill, CDP-0506 shall indicate the PMA as shown on the NRI submitted with the subject application.
6. All private recreational facilities to be provided for the proposed development shall be constructed in accordance with the standards outlined in the Parks and Recreation Facilities Guidelines.
7. With the submission of each building permit, the applicant, his heirs, successors or assignees shall pay to Prince George's County a fee calculated as $\$1,550/\text{DU} \times (\text{FHWA Construction Cost Index at time of payment}) / (\text{FHWA Construction Cost Index for 2nd quarter, 1989})$ as its share of costs for improvements to US 301 between MD 725 and MD 214.
8. In lieu of the payment of fees which otherwise would be required above, and subject to approval by the Department of Public Works & Transportation (DPW&T) and the State Highway Administration (SHA), the applicant, his heirs, successors or assignees may be required to construct a third northbound through lane on US 301 from a point just north of Leeland Road to a point just north of Trade Zone Avenue. Additionally, the improvement may include a third eastbound left turn lane along Leeland Road at its intersection with US 301. The total cost of these improvements, or other variation determined by SHA shall not exceed an amount calculated as $\$2,170,000.00 \times (\text{FHWA Construction Cost Index at time of payment}) / (\text{FHWA Construction Cost Index for 2nd quarter, 1989})$.
9. At the time of preliminary plan, the applicant shall be conditioned to dedicate all rights-of-way for MC-600 (Leeland Road) as identified by the Planning Department.
10. Prior to the issuance of any building permit, the following improvements shall be in place, under construction, bonded (or letter of credit given to the appropriate agency for construction), 100 percent funded in a CIP/CTP or otherwise provided by the applicant, his heirs, successors or assignees:
 - a. Leeland Road
 - Construct Leeland Road-Oak Grove Road to provide a minimum of 2 lanes of the ultimate 4-lane master plan alignment between US 301 and MD 193, in accordance with DPW&T standards.
 - b. MD 193/Oak Grove Road Intersection (roundabout)
 - The applicant shall provide an exclusive right turn lane at the westbound

approach.

- c MD 202/MD 193 Intersection
 - Provide a left turn, a shared left/through lane, and a right turn lane on the southbound MD 193 approach
 - Provide a second left turn on the eastbound MD 202 (towards Upper Marlboro) approach
- 11. Prior to the issuance of any building permit, the applicant shall conduct signal warrant studies at the following intersections, and install said signal if deemed to be warranted, or provide an alternate improvement as deemed necessary by DPW&T;
 - Leeland Road/Safeway Access
 - Leeland Road/ Site Access B
 - Leeland Road/ Site Access A
 - Oak Grove Road/ Church Road
 - Oak Grove Road/Whistling Duck Drive.
- 12. At time of Specific Design Plan submission, each SDP shall include a statement regarding how the proposal uses green building techniques and alternative energy sources.
- 13. The following note shall be placed on the preliminary plan and all future Tree Conservation Plans: “All community lighting shall use full cut-off optics and be directed downward to reduce glare and light spill-over.”
- 14. Prior to certification of the CDP, note five of the NRI shall be revised to correctly address all rare, threatened, and endangered species on the site. The NRI shall also be revised to include a wetland delineation that includes the area to the east of the railroad tracks.
- 15. Prior to certification of the CDP, the TCPI shall be revised to add the following note below the TCPI worksheet: “The acreage of all clearing within the 100-floodplain is reflected in the worksheet column for PMA clearing and off-site impacts. PMA clearing for the master planned roadways is included in the site clearing calculations.”
- 16. The TCPI submitted with the preliminary plan shall identify each clearing area by type: Net Tract Clearing, PMA Clearing (Master Plan Road), PMA Clearing (includes floodplain), and Off-Site Clearing. Each of the clearing types shall be identified using a different symbol. A chart indicating the type and size of each isolated clearing area in its respective category shall also be added to the plan.
- 17. At least 60 days prior to Planning Board hearing for the preliminary plan, a detailed geotechnical report based on the existing conditions of the site, including the most current topographical information (or as shown on the NRI) shall be submitted. It shall also address the existing outcrop pattern of Marlboro clays and areas of slope stability concerns with respect to the existing conditions. The study shall provide the appropriate plans and/or exhibits, showing the location of

all slope stability cross-sections, and identify the unmitigated 1.5 safety factor lines. The unmitigated 1.5 safety factor lines based on that report shall then be placed on the TCPI and the preliminary plan.

18. At least 60 days prior to any Planning Board hearing on the preliminary plan application, the existing conditions and proposed 1.5 safety factor line shall be shown on the preliminary plan and Type I Tree Conservation Plan. No structures, septic fields, or lots less than 40,000 square feet in area shall be placed within the mitigated 1.5 safety factor line. All subsequent plans shall also show this information. If proposed engineering of the site will change the location of the existing 1.5 safety factor line, the proposed 1.5 safety factor line must also be shown on all plans.
19. At least 60 days prior to any Planning Board hearing for the preliminary plan, the associated TCPI shall be revised to show a 100-foot protection buffer for rare, threatened and endangered species with respect to all streams and wetlands on the site. The PMA shall be revised to include that 100-foot buffer. Impacts shown to the 100-foot buffer and PMA on the TCPI associated with the CDP shall be re-evaluated and reduced or eliminated during the review of the preliminary plan. Impacts should be limited to those that are essential for the development of the site.
20. Prior to signature approval of the preliminary plan, a copy of the stormwater management concept plan shall be submitted. The plan shall include the use of sheet flow buffers, vegetated channels, and rooftop and non-rooftop disconnection to the fullest extent possible in addition to other stormwater management techniques.
21. Prior to the signature approval of the preliminary plan, a conceptual Habitat Protection and Management Program shall be approved by the Environmental Planning Section. The program shall include, but not be limited to:
 - a. Hydrologic monitoring for a minimum of a year prior to the issuance of the first grading permit to establish a baseline of data, during construction, and post construction for the following elements: water quality, benthic macroinvertebrate, hydrologic flow, sedimentation.
 - b. Monitoring during construction for the following: sediment and erosion control measures, stormwater management controls, special protection measures for rare, threatened and endangered species habitat.
 - c. Monitoring of the rare, threatened and endangered species during and post-construction.
22. Prior to submittal of the first SDP, a detailed Habitat Protection and Management Program shall be approved by the Environmental Planning Section which addresses specific implementation methodologies for the long-term protection and assessment of the rare, threatened and endangered species habitat on this site. Prior to issuance of the first grading permit, a minimum of one year of hydrologic monitoring data, as determined by the program, shall be submitted, to establish a baseline for evaluation impacts to the RTE habitat resulting for construction activities, and post development.
23. As part of the submission package for the first SDP, a plan and text shall be submitted that addresses a sediment and erosion control protocol that is more stringent than the minimum required. It shall include phasing of the site in such a way that the sediment basins stay in place until the last lot is built in the phase. The plan shall incorporate additional control measures and inspections to ensure maximum filtration of runoff and complete implementation of the plan. The

package will be reviewed by the Environmental Planning Section staff in coordination with the staff of the Soil Conservation District.

24. Prior to certificate approval of the CDP, the TCPI shall be revised as follows:
 - a. Add the following note: “The limits of disturbance shown on this plan are conceptual and do not depict approval of any impacts to regulated features.”
 - b. Clearly identify the proposed master planned trails and show the associated width.
25. Prior to the issuance of any permits which impact wetlands, wetland buffers, streams or Waters of the U.S., copies of all federal and state wetland permits, evidence that approval conditions have been complied with, and associated mitigation plans shall be submitted to the Planning Department.
26. Prior to certification of the CDP, the Type I Tree Conservation Plan, TCPI/24/06, shall be revised as follows:
 - a. Add the following note: “Woodland cleared within the PMA Preservation Area shall be mitigated on-site at a ratio of 1:1 for all impacts associated with development of the subject parcels. Woodland cleared within the PMA for the construction of the master planned roadway shall be mitigated in conformance with the standards of the Woodland Conservation Ordinance.”
 - b. Revise note 1 as follows: “This plan is conceptual in nature and is submitted to fulfill the woodland conservation requirements of CDP-0506. The TCPI will be modified by a TCP I in conjunction with the review of the Preliminary Plan of Subdivision and subsequently by a Type II Tree Conservation Plan (TCPII) in conjunction with the approval of a SDP and/or a grading permit application.”
 - c. Add the following note: “Reforestation and afforestation areas shall be delineated on-site through the use of two-rail split-rail fences or some other permanent device that is aesthetically compatible with the development. Fence locations and details shall be specified on the Type II TCP.”
 - d. Calculate all woodland on lots less than 20,000 square feet as woodland cleared, add lot sizes to the plan, add a table calculating all woodland treatment areas, and label all areas appropriately.
 - e. Eliminate the use of a “proposed tree line” and only use a limit of disturbance.
 - f. Show a continuous match-line for each match-line boundary on each sheet.
 - g. Show one continuous limit of disturbance for all areas proposed for development, particularly the master planned roadway located outside the eastern boundary of the site.
 - h. Remove the proposed structure from the parcel located north of Lot 1 Block G.
 - i. Show the conceptual clearing for Parcels R and T.
 - j. Add the following note: “Prior to contract signing, the seller shall show the prospective

buyer a copy of this Type I Tree Conservation Plan or the subsequent Type II Tree Conservation Plan, whichever plan is most current and has received signature approval, as required by CB-60-2005.”

- k. Revise the worksheet as necessary.
 - l. Have the plans signed and dated by the qualified professional who prepared the plans.
27. At least 30 days prior to any Planning Board hearing for the preliminary plan, submit written authorization from the Department of Parks and Recreation for any woodland conservation provided on land to be dedicated.
 28. At the time of Specific Design Plan, the SDP and TCPII shall have the same sheet sections, sheet key, and sheet order. The sheet key shall be placed on all sheets.
 29. Prior to the issuance of the building permits for lots adjacent to planting areas, all afforestation and associated fencing shall be installed. A certification prepared by a qualified professional may be used to provide verification that the afforestation and fence installation have been completed. It must include, at a minimum, photos of the afforestation areas and the associated fencing for each lot, with labels on the photos identifying the locations and a plan showing the locations where the photos were taken.
 30. At least 30 days prior to Planning Board hearing for the preliminary plan, the TCPI associated with that plan shall be revised to show the scenic easement with a minimum width of 40 feet located outside of the ultimate right-of-way and exclusive of the public utility easement and proposed master planned trail adjacent to the realigned Oak Grove Road.
 31. At the time of Specific Design Plan, all planting within the scenic easement shall be native plant material.
 32. At time of final plat, a 40 foot-wide scenic easement shall be established adjacent to Oak Grove Road and a note shall be placed on the final plat as follows:

“Oak Grove Road is a designated Historic Road. The scenic easement described on this plat is an area where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches or trunks is allowed.”
 33. The applicant shall dedicate 48± acres of parkland to M-NCPPC, including the Collington Branch and Black Branch Stream Valleys and 8.5 acres of developable land for active recreation as shown on DPR Exhibit “A”.
 34. The land to be conveyed to the M-NCPPC shall be subject to the conditions of attached Exhibit “B”.
 35. The applicant shall construct recreational facilities on dedicated parkland typical for the neighborhood park. The applicant shall develop the park development concept plan and incorporate into the preliminary plan of the subdivision. The concept plan shall be reviewed and approved by DPR staff.
 36. The applicant shall construct an eight-foot wide master plan hiker/biker trail along Collington

Branch Stream Valley and six-foot wide feeder trails to the development pods. The applicant shall connect the section of the master planned trail in Locust Hill to the trails in the Beech Tree and Woodside Village developments. The applicant shall construct any needed structure to provide a dry passage.

37. The applicant shall construct an eight-foot wide hiker/biker trail (extension from Oak Creek) along Black Branch Stream Valley and six-foot wide feeder trails to the development pods. The applicant shall connect the master plan trail to the Oak Creek trail system. The applicant shall construct any needed structures to provide a dry passage.
38. Prior to submission of the Specific Design Plan (SDP), the applicant shall develop detailed construction drawings for park facilities and submit them to DPR for their review and approval, prior to submission of the SDP.
39. All trails shall be constructed to assure dry passage. If wet areas must be traversed, suitable structures shall be constructed. Designs for any needed structures shall be reviewed by DPR.
40. The handicapped accessibility of all trails shall be determined during SDP review.
41. The applicant shall allocate appropriate and developable areas for the private recreational facilities on Home Owners Association (HOA) open space land. The private recreational facilities shall be reviewed by the Urban Design Review Section of the DRD for adequacy and property siting. The private recreational package shall be approved by Planning Board at the time of sDP.
42. The applicant shall provide suitable vehicular access to the parkland from realigned Oak Grove Road at the location approved by DPR and DPW&T staff.