



Note: Staff reports can be accessed at www.mncppc.org/pgco/planning/plan.htm.

Preliminary Plan 4-05056

Application	General Data
Project Name: MAGNOLIA COVE Location: Northeast side of Cross Road Trail, 4,000 feet northwest of North Keys Road. Applicant/Address: Shane Warren 6004 Stratmore Way Upper Marlboro, MD 20772	Date Accepted: 08/04/05
	Planning Board Action Limit: 11/03/05
	Plan Acreage: 85.94
	Zone: O-S
	Lots: 17
	Parcels: 0
	Planning Area: 86A
	Tier: Rural
	Council District: 09
	Municipality: N/A
	200-Scale Base Map: 216SE11

Purpose of Application	Notice Dates
RESIDENTIAL SUBDIVISION	Adjoining Property Owners Previous Parties of Record Registered Associations: 06/17/05 (CB-58-2003)
	Sign(s) Posted on Site and Notice of Hearing Mailed: 10/03/05

Staff Recommendation:		Staff Reviewer: Tom Lockard	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
		X	

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-05056
Magnolia Cove, Lots 1-17

OVERVIEW

The subject property is located on Tax Map 136 at Grid E-3. It consists of approximately 85.94 acres of land in the O-S Zone in the Rural Tier. One existing single-family dwelling is to remain on proposed Lot 12. There are also six existing buildings and a barn that are slated for removal; otherwise the site consists of undeveloped woodlands and agricultural fields. The applicant is proposing to subdivide the parcel into 17 lots.

SETTING

The site is located on the northeast side of Cross Road Trail, approximately 4,000 feet northwest of its intersection with North Keys Road. The surrounding properties are generally rural in character and zoned Open Space. Access is to be provided via an internal street from Cross Road Trail.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. **Development Data Summary**—The following information relates to the subject preliminary plan application and the proposed development.

	EXISTING	PROPOSED
Zone	O-S	O-S
Use(s)	Single Family Residence, Farmland	Single Family Residential
Acreage	85.94	85.94
Lots	0	17
Outlots	0	0
Parcels	1	1
Dwelling Units:	1	17 (16 new)

2. **Environmental**—Streams, nontidal wetlands, wetland buffers, areas of severe slopes, and areas of steep slopes with highly erodible soils are found to occur on the property. The site is partially wooded. Cross Road Trail is classified as a primary residential street, which is not generally regulated for transportation noise impacts. The soils series found to occur on this property, according to the Prince George's County Soil Survey, include Bibb, Beltsville, Chillum, Croom, Elkton, Gravel and borrow pits, Iuka, Keyport, Marr, Sandy land, Sassafra, and Westphalia. Some of these soils generally have limitations with respect to impeded drainage, seasonally high water tables, and erodibility on steep slopes that could affect development. Marlboro clays are not found in the vicinity of this property. According to information obtained from the Maryland Department of Natural Resources, Natural Heritage Program publication entitled "Ecologically Significant

Areas in Anne Arundel and Prince George's Counties," December 1997, no rare, threatened or endangered species are found to occur in the vicinity. The property is located in the Mattaponi Creek watershed of the Patuxent River basin, in the Rural Tier as reflected in the adopted General Plan, and in the designated Patuxent Rural Legacy Area. Cross Road Trail is not a designated historic road. A portion of the site may have been subject to sand and gravel mining under previous approval processes and may have required state permits. The site contains regulated areas, evaluation areas, and network gaps identified in the approved Green Infrastructure Plan.

Natural Resources Inventory

The site contains significant natural features that are required to be protected under Section 24-129 and/or 130 of the Subdivision Ordinance.

The site contains streams or wetland areas that may be impacted and may be regulated by federal and state requirements. The preliminary plan application has a signed Natural Resources Inventory (NRI057-05) that was included with the application package. The revised TCPI and the preliminary plan show the correct delineation of the Patuxent primary management area, as approved on the NRI, but there is a discrepancy between the area of the subject property and the amount of existing woodlands that affects a determination of the woodland conservation requirement for the site. Discrepancies between the NRI and the TCPI are discussed later in this memorandum. In general, the approved NRI overrides revised quantities proposed in the TCPI, unless additional justification is provided.

Woodland Conservation

This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the property is greater than 40,000 square feet gross tract area, there are more than 10,000 square feet of existing woodland, and more than 5,000 square feet of woodland clearing is proposed. A Type I Tree Conservation Plan (TCPI/21/00) was submitted with the preliminary plan application.

The revised Tree Conservation Plan (TCPI/21/00) has been reviewed. There are many discrepancies between the approved NRI and the revised TCPI that must be resolved. The FSD indicates that the site is 86.73 acres in area, but the area of the TCPI is 85.94 acres. The total amount of woodlands on the NRI and the TCPI is indicated to be 44.95 acres, but the quantity of woodlands on the net tract area has been reduced from 19.43 acres to 17.86 acres, while the amount of existing woodland in the 100-year floodplain has increased. The woodland conservation threshold for this site is dependent on the net tract area and cannot be determined because there is a discrepancy between the area of the NRI and the TCPI. In addition, because the amount of existing woodland on site is less than the threshold, the amount of existing woodlands on the site becomes the threshold requirement for the site. Until gross tract area, net tract area, and the quantity of existing woodlands on the net tract are verified, the woodland conservation requirement for the property cannot be determined.

The revised TCPI has proposed to meet the woodland conservation requirement with 16.39 acres of on-site preservation and 6.84 acres of on-site afforestation, for a total of 23.23 acres of woodland conservation to be provided on site. The quantity of preservation proposed exceeds the area of woodland not cleared, which is shown as 13.86 acres on the woodland conservation worksheet. A finding cannot be made that the woodland conservation requirements have been met, because the woodland conservation requirement has not yet been determined.

The TCPI requires revisions. All afforestation areas must be set back 40 feet from the rear and 20 feet from the sides from any existing or proposed structures, be a minimum of 35 feet in width, be connected to other woodlands, and be protected by permanent tree protection devices, as determined during the preparation of the TCPII.

The distribution of afforestation areas on the site should be evaluated to determine the level of encumbrance with woodland conservation proposed on all lots. This should be reflected in the woodland conservation lot-by-lot table. Additional afforestation areas should be placed where they complement and augment the protection of environmentally sensitive areas and the green infrastructure network. Extensive afforestation is proposed in order to fulfill 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 the sites; afforestation areas shall be protected by permanent tree protection devices, such as two-rail split-rail fences or equivalent, and all afforestation must be placed in conservation easements at time of final plat.

FIDS Habitat

Forest Interior Dwelling Species (FIDS) habitat is a high priority area for preservation, and the area within the 300 foot-wide FIDS buffer is considered moderate to high priority for woodland conservation. Within the 300-foot buffer, clearing should be minimized and fragmentation of the existing forest should be avoided. The FIDS habitat on this site falls entirely within the PMA, and will not be disturbed. Lots 5 and 8 propose minor intrusions into the FIDS buffer. The area of FIDS habitat present on the site has been increased by the placement of afforestation on Lot 10 to fill a gap in the existing woodlands.

Scenic Road—Cross Road Trail

The subject property is located in the Rural Tier, where the General Plan encourages the preservation of rural character. The property has a frontage on Cross Road Trail, and three lots front on Cross Road Trail. Access to Lot 14 has been provided off the proposed internal right-of-way, rather than Cross Road Trail, which is appropriate. The proposed dwellings on all three lots are set back over 150 feet from the right-of-way, which allows for the retention of existing woodlands on Lot 14 and afforestation on Lots 1 and 13, which will enhance the roadside viewshed in the Rural Tier. A continuous woodland conservation area, using afforestation with a minimum width of 40 feet, has been placed adjacent to Cross Road Trail.

Soils

The soils series found to occur on this property, according to the Prince George's County Soil Survey, include Bibb, Beltsville, Chillum, Croom, Elkton, Gravel and borrow pits, Iuka, Keyport, Marr, Sandy land, Sassafras, and Westphalia. Some of these soils generally have limitations with respect to impeded drainage, seasonally high water tables, and erodibility on steep slopes that could affect development. These issues may affect the proposed lot layout through the location of acceptable percolation sites and septic recovery areas for each lot. The Environmental Planning Section and the Health Department will work together to determine the optimum location for septic recovery areas while protecting priority woodland conservation areas.

A portion of the site may have been subject to prior sand and gravel mining, which predated enactment of the Woodland Conservation Ordinance. Due to the unknown nature of the soils and the limitations associated with these areas, a soils report addressing the soil structure, soil

characteristics, and foundation stability should be prepared prior to issuance of building permits. The study should clearly define the limits of past excavation and indicate all areas where fill has been placed. All fill areas should include borings, test pits, and logs of the materials found. Borings and test pits in fill areas should be deep enough to reach undisturbed ground.

Water and Sewer Categories

The water and sewer service categories are W-6 and S-6 according to water and sewer maps dated June 2003 obtained from the Department of Environmental Resources, and the site will, therefore, be served by private systems.

3. **Community Planning**—The subject property is located within the limits of the 1993 Subregion VI study area, Planning Area 86A/Baden. The land use recommendation for the property is low-rural residential densities. The 2002 General Plan locates this property in the Rural Tier. One of the visions of the Rural Tier is the protection of large amounts of land for woodland wildlife habitat, recreation, agricultural pursuits, and preservation of the rural character and vistas that now exist. The proposed preliminary plan is consistent with both the master plan and the General Plan.

Planning Issues

The 1993 Subregion VI Study Area approved master plan discusses the proposed type of large-lot residential development where a key planning objective is to preserve the rural character of this part of the county. The plan points out that “conventional low-density O-S development continues to erode the rural landscape” (plan, page 77). Rural community character will ultimately be subsumed into a suburban, albeit low-density, development pattern when the area is fully built-out under existing five-acre residential zoning.

To maintain the rural character of the rural planning areas, by preserving forested areas and minimizing the grading and clearing of the existing woodland, the principles embodied in the plan’s Rural Conservation chapter are important (plan, pp.61-82). On pages 80-82, the plan contains the following guidelines to further the objective of preserving rural character in this area:

- “2 The retention of woodlands for recreation and conservation should be encouraged. Any vacant, undeveloped land not wooded should be adequately stabilized by vegetative coverage.
- “3 Large-scale clearing and grading of land should be carefully controlled to prevent the unnecessary destruction of woodlands.
- “4 ...every effort should be made in order to preserve scenic roads during road improvements.
- “5 The special nature of scenic areas, historic sites, farmland, and woodlands should be enhanced through distinctive landscaping and site design.
- “6 Land developers should be encouraged to capitalize on natural assets by the retention and protection of trees, streams, and other ecological features. All development should be sensitive to the topography and should minimize the damage to natural vegetation cover....
- “7 Homes should be located to minimize site disturbance. Wherever possible, they should not be placed in the center of open fields and/or on ridgelines. They should be sited at the edges of fields and in wooded areas with minimum tree cutting to minimize visual

impact. Treed areas between the home and the street should be retained. The creation of extensive lawn areas should be discouraged.

- “9 The use of private gravel streets and common driveways is encouraged within a subdivision to minimize building and maintenance costs. There will be no cost to the County and the gravel streets will be in concert with the rural landscape. Streets should follow the natural contours to the extent possible, and homes should be sited as close to existing grade as possible.
- “10 Homes should be sufficiently set back from roads in order to preserve scenic viewsheds and to maintain the rural character. The views from the road should be protected through provision of landscaping where necessary.
- “11 A variety of setbacks are encouraged in order to prevent visual monotony typically found in suburban residential subdivisions.”

- 4. **Parks and Recreation**—Pursuant to Section 24-134(a) of the Subdivision Regulations, the development is exempt from the requirements of the mandatory dedication of parkland because each of the lots proposed exceeds one acre.
- 5. **Trails**—One master plan trail issue is identified in the adopted and approved Subregion VI master plan. Cross Road Trail is designated as a master plan bikeway. This can be accommodated through the provision of bikeway signage and a paved asphalt shoulder. There is also a hiker-equestrian trail recommended along the southeastern edge of the subject property. This hiker-equestrian trail is proposed along Mataponi creek as part of an existing and planned network of equestrian trails in the Croom area. The revised preliminary plan provided by the applicant shows a 20-foot public use hiker/equestrian easement in the location shown on the master plan.
- 6. **Transportation**—Due to the size of the application, staff has not required that a traffic study or a new traffic count be done. Instead staff decided to utilize the traffic count information that was submitted in March 2005 by the applicant as part of the their original plan (4-04189). Therefore, the findings and recommendations outlined below are based upon a review of these materials and analyses conducted by the staff of the Transportation Planning Section, consistent with the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*.

Growth Policy—Service Level Standards

The subject property is in the Rural 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) C, with signalized intersections operating at a critical lane volume (CLV) of 1,300 or better is required in the Rural Tier.

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 warranted traffic controls) if deemed warranted by the appropriate operating agency.

Staff Analysis of Traffic Impacts

The intersection of US 301 and Cross Road Trail is determined to be the critical intersection for the subject property. This intersection would serve most of the site-generated traffic. This intersection is currently unsignalized.

Using the provided information, staff has determined that the critical intersection of US 301 and Cross Road Trail currently operates with a maximum delay of 43.5 seconds during the AM peak hour. During the PM peak hour, the intersection operates with a maximum delay of 45 seconds.

There are no funded capital projects at this intersection in either the county Capital Improvement Program or the state Consolidated Transportation Program that would affect the critical intersection.

With the development of 17 single-family detached residences, the site would generate 13 AM and 16 PM peak-hour vehicle trips. Considering the projected number of additional trips, staff analyzed the impact of the proposal. With the site added, the critical intersection would operate as follows: AM peak hour—47 seconds of delay, PM peak hour—49 seconds of delay. Since vehicle delay in any movement exceeding 50.0 seconds is deemed to be unacceptable, it is determined that this intersection operates acceptably as an unsignalized intersection under existing, background, and total traffic.

Cross Road Trail is a designated as primary residential street. Dedication of 30 feet from the centerline along this facility is acceptable as shown on the submitted plan.

Transportation Staff Conclusions

Based on the preceding findings, the Transportation Planning Section concludes that adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003 and concluded the following:

Impact on Affected Public School Clusters

Affected School Clusters #	Elementary School Cluster 4	Middle School Cluster 2	High School Cluster 2
Dwelling Units	17 sfd	17 sfd	17 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	4.08	1.02	2.04
Actual Enrollment	4,395	5,307	10,580
Completion Enrollment	317.28	189.24	378.24
Cumulative Enrollment	18.72	11.76	23.52
Total Enrollment	4,735.08	5,509.02	10,983.80
State-Rated Capacity	5,858	4,688	8,770
Percent Capacity	87.95	117.51	125.24

Source: Prince George's County Planning Department, M-NCPPC, December 2004

These figures are correct on the day the referral memo was written. They are subject to change under the provisions of CB-30-2003 and CR-23-2003. Other projects that are approved prior to

the public hearing on this project will cause changes to these figures. The numbers shown in the resolution will be the ones that apply to this project.

County Council bill CB-31-2003 establishes a school facilities surcharge, as adjusted by the percentage change in the Consumer Price Index for all urban consumers in the amount of \$7,161 per dwelling if a building is located between I-495 and the District of Columbia; \$7,161 per dwelling if the building is included within a basic plan or conceptual site plan that abuts an existing or planned mass transit rail station site operated by the Washington Metropolitan Area Transit Authority; or \$12,276 per dwelling for all other buildings.

The school surcharge may be used for the construction of additional or expanded school facilities and renovations to existing school buildings or other systemic changes.

The Historic Preservation and Public Facilities Planning Section staff finds that this project meets the policies for school facilities contained in Section 24-122.02, CB-30-2003 and CB-31-2003, and CR-23-2003.

8. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of public facilities and concluded the following:

The Prince George's County Planning Department has determined that this preliminary plan is beyond the required seven-minute response time for the first due fire station, Brandywine, Company 40, using the seven-minute travel times and fire station locations map provided by the Prince George's County Fire Department.

The Fire Chief has reported that the current staff complement of the Fire Department is 98.99 percent, which is within the standards stated in CB-56-2005. The Fire Chief has reported by letter, dated August 1, 2005, that the department has adequate equipment to meet the standards stated in CB-56-2005.

CB-56-2005 provides for mitigation of fire, rescue and police inadequacies through approval of a mitigation plan. These mitigation plans are to be created in accordance with guidelines that have not yet been approved by the District Council. The applicant cannot, at this time, enter into a mitigation plan with the county and file such a plan with the Planning Board. The Planning Board may not approve this preliminary plan until either a mitigation plan is submitted and accepted by the county, or the applicant meets the response times pursuant to CB-56-2005. Because neither of these scenarios applies, staff is compelled to recommend disapproval due to inadequacy of fire and rescue facilities.

9. **Police Facilities**—The Prince George's County Planning Department has determined that this preliminary plan is located in District V. The Prince George's County Police Department reports that the average yearly response times for that district are 23.03 minutes for non-emergency calls, which meets the standard of 25.00 minutes, and 12.96 minutes for emergency calls, which does not meet the standard of 10.00 minutes.

The Police Chief reported that the current staff complement of the Police Department is 1,302 sworn officers and 43 student officers in the Academy, for a total of 1,345 personnel, which is within the standard of 1,278 officers.

CB-56-2005 provides for mitigation of fire, rescue and police inadequacies through approval of a mitigation plan. These mitigation plans are to be created in accordance with guidelines that have

not yet been approved by the District Council. The applicant cannot, at this time, enter into a mitigation plan with the county and file such a plan with the Planning Board. The Planning Board may not approve this preliminary plan until either a mitigation plan is submitted and accepted by the county, or the applicant meets the response times during the three subsequent months testing pursuant to CB-55-2005. Because neither of these scenarios applies, staff is compelled to recommend disapproval due to inadequacy of police facilities.

10. **Health Department**—The property is located in water and sewer service Category 6, which requires that the development be served by private water and sewer service. Section 24-104 of the Subdivision Regulations establishes that one of the purposes of the subdivision process is to ensure that adequate water and sewer facilities are available to serve the residents of the community. The Health Department has reviewed the perk tests and has approved the proposed septic recovery areas for each of the proposed lots.
11. **Stormwater Management**—The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. A stormwater management concept plan has been submitted but not yet approved. Prior to signature approval of the preliminary plan, the applicant should submit a copy of the concept approval letter and indicate the approval date on the preliminary plan. Development must be in accordance with that approved plan to ensure that development of this site does not result in on-site or downstream flooding.
12. **Varying Lot Size**—The applicant is proposing to use varying lot sizes as permitted by the Prince George's County Zoning Ordinance. Unlike the provision for the use of lot size averaging (R-55, R-80, R-R and R-E Zones), the use of varying lot sizes in the R-A and O-S Zones does not require specific findings for approval. However, the minimum standards outlined in the Zoning Ordinance must be met.

The applicant is proposing to subdivide the property into 17 lots for the construction of single-family dwellings. Section 27-442(b)(Table I) of the Zoning Ordinance sets the minimum standards for varying lot sizes in the O-S Zone as follows:

- a. **The minimum lot size for 60% of the lots is 5 acres,**

Comment: Of the 17 lots proposed, 11 meet or exceed five acres, or 64 percent.

- b. **One (1) two acre lot is permitted for each 50 acres of tract area,**

Comment: The site is 85.94 acres; one 2-acre lot is permitted. The applicant is proposing one 2-acre lot.

- c. **All remaining lots must be a minimum of 3 acres,**

Comment: The remaining five lots are each over three acres.

- d. **All lots created shall be restricted to single-family dwellings or agricultural uses, and**

Comment: The lots are proposed for the construction of single-family dwelling units.

- e. **No portion of the subdivided tract shall be resubdivided unless under certain circumstance.**

Comment: A new preliminary plan of subdivision would be required to divide the property, further ensuring conformance to this condition.

The applicant's proposal conforms to varying lot size standards.

13. **Historic Preservation**—The Planning Board has determined that the possible existence of slave quarters and slave graves on certain properties must be considered in the review of development applications, and that potential means for preservation of these resources should be considered. A final Phase IA (historical background and assessment) archeological assessment was completed on the site and the draft report was received on June 8, 2005. A Phase IB (archeological fieldwork and identification) is to be completed, as recommended by the Planning Department, because the project area is bisected by an unnamed branch of Mataponi Creek and includes the area where it meets the creek. Prehistoric sites are known to exist in similar settings in the area. It is also in the vicinity (or may include) the residence (no longer standing) of a Mrs. A. Turton, shown on the 1861 Martenet Map. A Phase I research design should be submitted and approved prior to archeological excavations.

Phase I archeological investigations should be conducted according to Maryland Historical Trust (MHT) guidelines, *The Standards and Guidelines for Archeological Investigations in Maryland* (Schaffer and Cole: 1994) and must be presented in a report following MHT guidelines and the *American Antiquity* or *Society of Historical Archeology* style guide. Archeological excavations shall be spaced along a regular 15-meter or 50-foot grid and excavations should be clearly identified on a map to be submitted as part of the report.

RECOMMENDATION:

DISAPPROVAL DUE TO INADEQUATE FIRE, RESCUE AND POLICE SERVICES
PURSUANT TO SECTION 24-122.01(e)(2) OF THE SUBDIVISION REGULATIONS.