The Maryland-National Capital Park and Planning Commission Prince George's County Planning Department Development Review Division 301-952-3530



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

# **Preliminary Plan 4-03060**

Application	General Data	
<b>Project Name:</b> BELMONT CREST CLUSTER SUBDIVISION	Date Accepted:	06/27/03
BELMONT CREST CLUSTER SUBDIVISION	Planning Board Action Limit:	10/05/03
	Plan Acreage:	62.0
<b>Location:</b> South side of Old Marlboro Pike, approximately 400 feet west of its intersection with Woodyard Road.	Zone:	R-R
	Lots:	109
	Parcels:	9
Applicant/Address:	Planning Area:	77
Belmont Crest, LLC. 1600 Trade Zone Avenue, Suite #401A Upper Marlboro, MD. 20772-3650	Council District:	09
	Municipality:	N/A
	200-Scale Base Map:	208SE09

Purpose of Application	Notice Dates	
RESIDENTIAL CLUSTER SUBDIVISION	Adjoining Property Owners: N/A (CB-15-1998)	
	Previous Parties of Record: (CB-13-1997)	N/A
	Sign(s) Posted on Site:	08/29/03
	Variance(s): Adjoining Property Owners:	N/A

Staff Recommendation		Staff Reviewer: Del Balzo	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	Х		

# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

#### PRINCE GEORGE'S COUNTY PLANNING BOARD

#### STAFF REPORT

#### SUBJECT: Preliminary Plan of Subdivision 4-03060 Belmont Crest Cluster, 109 Lots and 9 Parcels

#### **OVERVIEW**

The property consists of approximately 62.00 acres of land in the R-R Zone. It is currently used as a horse farm with associated trailers. The applicant proposes to subdivide the property into 109 lots for single-family residential development using the Cluster Subdivision technique. Nine parcels are proposed for internal public open space.

Marlboro Pike Relocated bisects the property. The applicant proposes to dedicate and construct this road with 80 feet of dedication as recommended in the adopted and approved Melwood-Westphalia master plan. Access to the property would be from internal streets connecting to Marlboro Pike Relocated, with 12 lots having direct access to this collector facility.

With minor revisions, staff supports this cluster subdivision. It makes good use of the sole environmental feature of the site, a large stream and associated wetlands and buffers, by protecting it and allowing large views into it. Wooded buffers protect large lot development to the north and small, cluster lots abut similar lots in the cluster subdivision to the south.

#### SETTING

The property is located on the south side of Marlboro Pike, approximately 400 feet west of its intersection with Woodyard Road. Windsor Park Cluster Subdivision is to the south in the R-R Zone. To the north are three single-family detached homes on large deed parcels in the R-R Zone. To the west is open space in the developing Marwood Cluster Subdivision in the R-R Zone. To the east is a nursery in the R-R Zone.

#### 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	R-R	R-R
Use(s)	Horse Farm	Single-family detached homes
Acreage	62.00	62.00
Lots	0	109
Parcels	5	9
Detached dwelling units:	0	109

# 2. Cluster Development Data as proposed by Applicant

Zone Gross Tract Area	R-R 62.00 acres
Area with Slopes Greater than 25% Area within Preliminary 100-year Floodplain Cluster Net Tract Area	1.67 acres 0.63 acres 59.7 acres
Minimum Lot Size Permitted Minimum Lot Size Proposed	10,000 sq.ft. 10,000 sq.ft.
Number of Lots Permitted Number of Lots Proposed Flag Lots Proposed	119 109 0
Cluster Open Space Required	22.17 acres
2/3 of Required Open Space to be Located Outside of the 100-Year Floodplain and Stormwater Management Facilities	14.78 acres
Cluster Open Space Proposed Outside of the 100-Year Floodplain and Stormwater Management Facilities Cluster Open Space Provided	18.22 acres 26.53 acres
Mandatory Dedication RequiredMandatory Dedication ProposedFee-in-lieu or private recr	3.1 acres reation facilities
Total Open Space Required (Cluster plus Mandatory Dedication) Total Open Space Provided	25.27 acres 26.53 acres
Open Space to be Conveyed to Homeowners' Association Open Space to be Conveyed to M-NCPPC Open Space to be Conveyed to Prince George's County	26.53 acres 0 acres 0 acres
Slopes Exceeding 25% in grade25% of Steep SlopesArea of Steep Slopes to be Disturbed0.67 acres—Variation RequiredArea of Nontidal Wetlands and Waters of the U.S.	1.67 acres 0.41 acres I, See Finding 5 5.0 acres

Modification in Dimensional Standards Permitted in Cluster		Standard	Modification	
		in Zone	Allowed	Proposed
27-442(c)	Net Lot Coverage	25%	30%	30%
	Lot Width at Building Line	100'	75'	75'
27-442(d)	Lot Frontage Along Street Line	70'	50'	50'
	Lot Frontage Along Cul-de-sac	60'	50'	50'

- 3. **Cluster Findings**—The design for the proposed cluster subdivision meets the purposes and criteria for approval of cluster developments in the R-R Zone found in Subtitles 27-Zoning and 24-Subdivision of the Prince George's County Code. The following findings are required in accordance with Section 24-137 of the subdivision regulations:
  - a. Individual lots, streets, buildings and parking areas will be designed and situated in conformance with the provisions for woodland conservation and tree preservation set forth in Subtitle 25 of the Prince George's County Code, and in order to minimize alteration of the historic resources or natural site features to be preserved.

*Comment*: All of the priority woodland on this property is retained in woodland conservation. In addition, the stream and Primary Management Area are preserved to the fullest extent possible in this proposal. Lot layout and internal road configuration are designed to have minimal impact on the natural features of the site. The lone intrusion into these areas is for a master plan road realignment required as part of the subdivision approval.

# b. Cluster open space intended for a recreational or public use, conservation purposes, or as a buffer for a historic resource is appropriate, given its size, shape, topography and location, and is suitable for the particular purposes it is to serve on the site.

*Comment*: Some cluster open space is intended for recreational use. The main recreation area (Parcel "H") in the proposed subdivision is centrally located and nearly 3.5 acres in size. As this area is at the intersection of two internal streets, it is easily accessible to all in the neighborhood.

A second parcel is also indicated for recreational use. Parcel "F" is surrounded by the rear yards of 24 homes and by a 35-foot-wide strip of woodland afforestation. This area may not be suitable for active recreation as it is secluded and not visible from the internal roads. Perhaps this area may be better used as a landscaped garden with ornamental trees and shrubs to provide pleasing views from the rear yards. At the time of detailed site plan, a determination should be made as to the use of this parcel.

# c. Cluster open space will include irreplaceable natural features located on the tract (such as, but not limited to, stream beds, significant stands of trees, steep slopes, individual trees of significant size, and rock outcroppings).

*Comment*: The cluster open space does include irreplaceable natural features including a stream, wetlands, woodlands and the Patuxent River Primary Management Area.

# d. Cluster open space intended for recreational or public use will be easily accessible to pedestrians; and the means of access will meet the needs of the physically handicapped and elderly.

*Comment*: As noted, Parcel "H" is located at the intersection of two internal public streets and is easily accessible to the residents of the subdivision. Parcel "F," on the other hand, is more secluded and less accessible; therefore, it may be better used as a landscaped garden or some other aesthetically pleasing use, rather than an open play area, as it is currently described on the preliminary plan.

e. Cluster open space intended for scenic value will achieve this purpose through the retention of irreplaceable natural features described above; or where such natural features do not exist, such techniques as berms planted with trees and the use of landscaping material may be required to eliminate visual monotony of the landscape.

*Comment*: A long stretch of relocated Marlboro Pike and one of the internal public streets will have beautiful views of the stream, wetlands and woodlands preserved along the eastern boundary of the property. In addition, it provides a scenic backdrop for several of the lots in that area as well. The proposal maintains an open view of the PMA for much of its length.

# f. Diversity and originality of lot layout and individual building design, orientation, and location will achieve the best possible relationship between development and the land.

*Comment*: There is a great diversity in the lotting pattern, with some lots backing to open space and others backing to other lots in a more conventional pattern. The one flaw in the plan is that lots along Marlboro Pike Relocated are too small and do not present the best possible relationship between the land and the development. Enlarging these lots will provide for a subdivision that includes an appropriate array of lot sizes and orientations.

g. Individual lots, buildings, parking areas, and streets will be arranged, designed, situated, and oriented so as to harmoniously relate to surrounding properties, to improve the view from dwellings, and to lessen the area devoted to motor vehicle access and circulation.

*Comment*: With lots enlarged along Marlboro Pike, the proposal will be in harmony with the surrounding properties. To the south is a cluster subdivision with lots of similar size. Homes on large lots to the north will be buffered from the developed portion of this site with large areas of tree conservation. The layout will provide stunning views—from both front and rear yards —of the environmental features of the site. With regard to internal circulation, the development efficiently provides access to all lots while minimizing the area necessary for internal streets.

# h. Individual lots, buildings, parking areas, and streets will be so situated and oriented as to avoid the adverse effects of shadows, noise, and traffic on, and afford privacy to, the residents of this site.

*Comment*: With the exception of large areas of preserved open space, the subdivision layout is typical of a standard development. There will be no adverse impacts from noise or shadows. Traffic along Marlboro Pike will affect the homes fronting it. However, staff recommends that these lots be increased in size to decrease these impacts.

i. Not more than one-forth (1/4) of any of the land having slopes greater than twenty five percent (25%) will be removed or altered, and then only when the slopes are isolated, small, or otherwise occur as insignificant knolls, so that the design of the development or cluster open space will not be adversely affected.

*Comment*: As noted above, this proposal exceeds the 25 percent restriction for disturbance to steep slopes. A variation request was filed and staff supports the variation to allow the disturbance. A full discussion of the variation findings is found in Finding 5 of this report.

j. Appropriate landscape screening techniques will be employed at each entrance to the subdivision and along adjoining existing streets, so as to assure the compatibility of the appearance of the cluster subdivision with that of surrounding existing and planned residential development not approved for cluster development, and to provide an attractive appearance from streets. Individual lots shall also be appropriately landscaped in such a manner as to provide an attractive appearance. *Comment*: This will be fully examined at the detailed site plan stage.

4. **Environmental**—There is a stream and associated wetlands on the property that drain into Charles Branch in the Patuxent River watershed. Current air photos indicate that about onequarter of the site is forested. The Mellwood-Westphalia master plan does not show any Natural Reserve on the property. No scenic or historic roads are affected by this proposal. There are no nearby sources of traffic-generated noise. The proposed use is not expected to be a noise generator. 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, there are no rare, threatened, or endangered species found to occur in the vicinity of this property. The *Prince George's County Soils Survey* indicates that the principal soils on the site are in the Croom, Westphalia and Woodstown series. Marlboro Clay does not occur in this area. The site is in the Developing Tier according to the adopted General Plan.

# **Woodland Conservation**

This site is subject to the provisions of the Woodland Conservation Ordinance because the entire site is more than 40,000 square feet in size and it has more than 10,000 square feet of woodland.

A Forest Stand Delineation (FSD) showing 4 sample areas, 3 forest stands, and 70 specimen trees has been reviewed and meets the requirements of the Woodland Conservation Ordinance.

A Type II Tree Conservation Plan, TCPII/193/92, was previously approved for a portion of the subject property. That plan was required to allow clearing of woodland on the subject property as part of the grading needed to construct the Windsor Park Subdivision to the south. The Type II TCP provided an off-site easement to mitigate for all woodland cleared on the subject parcel and it remains valid. A Type I Tree Conservation Plan, TCPI/45/03, has been submitted with this application and it was found to require revisions.

The plan proposes clearing 9.00 acres of the existing 15.03 acres of upland woodland and the clearing of 0.25 acre of the existing 0.63 acre of floodplain woodland. The woodland conservation requirement for this proposal has been correctly calculated as 19.46 acres. The plan proposes to meet the requirement by providing 5.37 acres of on-site preservation, 10.96 acres of on-site planting, and 3.13 acres of off-site conservation for a total of 19.46 acres. An additional 0.66 acre of woodland is proposed to be preserved but not used to meet any requirement.

The layout of the woodland conservation areas is generally consistent with the Woodland Conservation Ordinance. It is apparent that the site has been designed to preserve all of the priority woodland on site to the extent practicable. Afforestation of unwooded portions of the Patuxent River Primary Management Area Preservation Area will provide added protection to the stream valley. The proposed plantings on the HOA parcels "A," "B," "I," and "J" that are adjacent to Marlboro Pike will serve to visually buffer the development from traffic.

The TCPI shows an area of proposed woodland planting 35 feet wide along the perimeter of Parcel "F" to establish screening from the back yards of adjacent lots. If landscaping is substituted for afforestation in this area, additional off-site woodland conservation would be required. The planting of all of this parcel would not meet the intent of the Woodland Conservation Ordinance because it is an isolated area that has no physical connection to other woodlands, and future homeowners will likely demand that it be mowed and maintained as a

landscaped area instead of afforestation. The 35-foot-wide buffer area is appropriate because it is a small area and will be planted with larger trees and will be fenced off from the adjacent lots.

#### **Patuxent River Primary Management Area**

This site contains natural features that are required to be protected under Section 24-130 of the Subdivision Regulations. Wetlands, minimum 25-foot wetland buffers, streams, minimum 50-foot stream buffers, all areas with severe slopes, and all areas with steep slopes containing highly erodible soils are shown on the Preliminary Plan and the Type I Tree Conservation Plan. The Patuxent River Primary Management Area Preservation Area (PMA) as defined in Section 24-110 of the Subdivision Regulations is correctly shown. A conservation easement, described by bearings and distances, should be included on the final plat, with an appropriate plat note.

Section 24-130(b)(5) requires that the Planning Board finds that the PMA is preserved in its natural state to the fullest extent possible. All disturbance not essential to the development of the site as a whole is prohibited within stream and wetland buffers. Essential development includes such features as public utility lines (including sewer and stormwater outfalls), streets, 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. The plan should be designed to minimize impacts.

A letter of justification for impacts to the PMA was submitted. The letter, dated August 29, 2003, indicates that of the total area of the PMA on the site, only those areas associated with the master plan realignment of Marlboro Pike and the stormwater management pond outfall approved by Stormwater Management Concept Plan #12974-2003-00 will be impacted. Even if approved by the Planning Board, the applicant will need to obtain federal and state permits prior to the issuance of any grading permit for these impacts. The additional permit review will assure that the impacts are minimized and that there will be no detrimental effects to public safety, health, or welfare, or be injurious to other property.

# Soils

The *Prince George's County Soils Survey* indicates that the principal soils on the site are in the Croom, Westphalia and Woodstown series. Croom and Westphalia soils are highly erodible and require special attention in the design of erosion/sediment control measures in areas with steep slopes. Woodstown soils can have impeded drainage and seasonally high water tables. A soils report may be required by the Department of Environmental Resources during the permit process review.

#### Water and Sewer Categories

The property is in water category W-4 and sewer category S-4; it will be served by public systems.

5. **Disturbance to Steep Slopes**—In cluster subdivisions, no more than 25 percent of the steep slope area may be disturbed. The applicant proposes disturbance to more than 41 percent of the steep slopes on the property. The slopes are within the Patuxent River PMA. Typically, disturbance to the PMA does not require variation approval, only a finding that the PMA has been preserved to the greatest extent possible. However, because the steep slope requirement is found in a section of the Code that does not address the PMA, a variation is required to Section 24-137(g)(9). A separate finding in this report addresses the impacts to the PMA. This finding addresses the variation to the steep slope requirement.

The applicant proposes impacting approximately 41 percent of the steep slopes to construct the master plan relocation of Marlboro Pike. Staff supports the variation request. Section 24-113(a) of the Subdivision Regulations sets forth the required findings for approval of variation requests. Section 24-113(a) reads:

Where the Planning Board finds that extraordinary hardship or practical difficulties may result from strict compliance with this Subtitle and/or that the purposes of this Subtitle may be served to a greater extent by an alternative proposal, it may approve variations from these Subdivision Regulations so that substantial justice may be done and the public interest secured, provided that such variation shall not have the effect of nullifying the intent and purpose of this Subtitle; and further provided that the Planning Board shall not approve variations unless it shall make findings based upon the evidence presented to it in each specific case that:

- A. **That the granting of the variation will not be detrimental to the public safety, health or welfare, or injurious to other property.** *Comment*: The variation will enhance public safety, health or welfare, and benefit other properties because it will allow the relocation of Marlboro Pike and enhance traffic circulation.
- B. The conditions of which the variation is based are unique to the property for which the variation is sought and are not applicable generally to other properties. *Comment*: The conditions associated with the variation are unique. The master plan recommends Marlboro Pike be located in the area on this property with steep slopes. That is unique to this property and not applicable to other properties in the area.
- C. **The variation does not constitute a violation of any other applicable law, ordinance, or regulation.** *Comment*: The granting of the variation request will not constitute a violation of any other law, ordinance, or regulation. In fact, it will enable the applicant to construct a county collector road facility, furthering county policy in this area.
- D. Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out. *Comment*: There is a hardship on the owner if the variation is not approved. Marlboro Pike could not be constructed and the application would be in conflict with the master plan recommendations. Conformance with the master plan is a requirement for preliminary plan approval.
- 6. **Community Planning**—Located in Planning Area 77/Melwood, the 2002 General Plan places the property in the Developing Tier. The vision for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities, distinct commercial Centers, and employment areas that are increasingly transit serviceable. The 1994 Melwood-Westphalia master plan recommends residential land use at the Low-Suburban density of 1.6–2.6 dwelling units per acre. The1994 sectional map amendment for the Melwood-Westphalia master plan recommend the subject property from the R-A Zone to the R-R Zone in accordance with plan recommendations.

In the plan concept for residential areas, the 1994 *Melwood-Westphalia Approved Master Plan and Sectional Map Amendment* designates this property for Low-Suburban residential land use to allow for development on 20,000-square-foot residential lots that are consistent with the surrounding development (plan, page 65). This concept was part of the justification for rezoning the undeveloped parcels south of Marlboro Pike (including the subject property) from the R-A to the R-R Zone in the 1994 sectional map amendment. Generally, the plan envisioned conventional R-R Zone development south of MD 4. However, the Windsor Park subdivision adjoining the subject property to the south is a cluster subdivision consisting of lots that are less than 20,000 square feet and the Marwood development, west of this site, consists of zero-lot line (small lot) development approved as a Planned Retirement Community special exception. A carefully designed cluster on the subject property could meet the intent of the plan for consistency with surrounding properties and the character of development set forth in the master plan.

One of the objectives in the Circulation and Transportation chapter of the plan is: "(T)o facilitate the safe and orderly movement of both local and through traffic by avoiding possible conflicts between them and by **reducing through traffic in residential areas**" (emphasis added). (plan, pg. 109) A plan guideline in this chapter concerning collector roads states: "(C)ollector roadways should function to accommodate limited volumes of through traffic, and to provide links between neighborhoods and continuity in the transportation network. These roadways should provide direct access to adjoining properties **via residential streets** (emphasis added) and commercial driveways." (plan, pg. 132) The proposed lotting pattern along C-629, Marlboro Pike, relocated, is a concern. Fourteen lots (10,125 to 10,500 square feet in size) are proposed to front on this new collector road, Marlboro Pike. To comply with this plan guideline, access to these lots should be from a residential side street as opposed to this collector road.

Given the environmental constraints of the property, this may not be feasible. Notwithstanding the master plan guideline, as a collector facility, the applicant may, in accordance with the Subdivision Regulations, create lots that have direct access to Marlboro Pike. However, Section 24-137(d) of the Subdivision Regulations is clear: lots along external streets in Cluster Subdivisions must adhere to the standard lot size requirements in the zone. In this case, the minimum standard lot size is 20,000 square feet. The applicant argues that Marlboro Pike is an internal street in the subdivision and, therefore, not subject to this requirement. While the street does bisect the property, it is a collector throughway that will be used by many motorists. The intent of requiring lots on external streets to meet the minimum standard is to present the appearance that the subdivision is a large lot subdivision, even though most of the lots are reduced in size. These 10,000-square-foot lots along Marlboro Pike Relocated do not give that appearance. Therefore, all lots fronting Marlboro Pike should be a minimum of 20,000 square feet.

The plan addresses the situation where a new road has a physical impact on development opportunities. Guideline 3 states: "(W)here the creation of small, isolated parcels of land is made unavoidable by the design of the surrounding transportation system, such parcels should be incorporated into a creative, aesthetic open space with either public or private maintenance." (plan, pg. 132) The lots proposed on the isolated parcel generally east of C-629 (Parcel 23) may be too many for this portion of the site; they will be subject to the adverse affects of traffic and will not afford residents privacy due to through traffic along Marlboro Pike, relocated. Attention should be paid to these lots at the time of detailed site plan to ensure that the siting of homes on the lots achieves the best possible relationship with the land.

7. **Parks and Recreation**—The site is subject to the requirements of Section 24-134 of the Subdivision Regulations for mandatory park dedication. However, the size and location of land available for dedication is unsuitable for park purposes. Therefore, staff recommends a fee-in-

lieu of park dedication or private recreation facilities in accordance with Section 24-135 be required.

8. **Trails**—The adopted and approved *Melwood-Westphalia Approved Master Plan and Sectional Map Amendment* recommends a hiker/equestrian trail through the subject site along the tributary of Charles Branch. This trail will connect to the designated 75-foot-wide trail easement immediately to the south of the subject application in the Windsor Park subdivision (plat book NLP 134, plat number 92). This hiker/equestrian trail will ultimately link to park properties to the south and to additional existing and planned equestrian trails. It will also ultimately provide pedestrian access to the nearby Melwood Elementary School and James Madison Middle School.

It is also recommended that standard sidewalks be provided along both sides of all internal roads, in keeping with approvals for adjoining subdivisions.

9. **Transportation**—Staff determined that a traffic study detailing weekday traffic was needed. In response, the applicant submitted a traffic study dated May 2003. 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*. Comments from the county Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA) are in the file.

### **Growth Policy—Service Level Standards**

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. Mitigation, as defined by Section 24-124(a)(6) of the Subdivision Ordinance, is permitted at signalized intersections within any tier subject to meeting the geographical criteria in the guidelines.

**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.

#### Analysis of Traffic Impacts

The traffic study examined the site impact at six intersections:

MD 223/Dower House Road (unsignalized) MD 223/Marlboro Pike MD 223/Old Marlboro Pike/MD 4 WB On-Ramp (unsignalized) MD 223/MD 4 WB Off-Ramp (unsignalized) MD 223/MD 4 EB Off-Ramp (unsignalized) Marlboro Pike/site entrance (unsignalized)

EXISTING TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 223 and Dower House Road	33.9*	270.1*		
MD 223 and Marlboro Pike	1,307	1,308	D	D
MD 223/Old Marlboro Pike/MD 4 WB On-Ramp	18.1*	11.9*		
MD 223/MD 4 WB Off-Ramp	16.8*	16.1*		
MD 223/MD 4 EB Off-Ramp	34.4*	27.7*		
Marlboro Pike/site entrance	Future			

The existing conditions at the study intersections are summarized below:

\*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.

The area of background development includes 20 properties in the vicinity of the subject property. Background conditions also assume through traffic growth of 1.5 percent annually along MD 223 and 1.0 percent annually along other roadways. There is also a CIP improvement that is assumed in the traffic study. This improvement would include signalization and geometric improvements at the MD 223/Dower House Road intersection and the MD 223/Rosaryville Road intersection. It should be noted that this improvement is shown to be fully funded; however, that full funding is heavily contingent upon developer contributions. Background conditions are summarized below:

BACKGROUND TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 223 and Dower House Road	1,297	1,385	С	D
MD 223 and Marlboro Pike	1,480	1,531	Е	Е
MD 223/Old Marlboro Pike/MD 4 WB On-Ramp	28.8*	13.5*		
MD 223/MD 4 WB Off-Ramp	21.7*	28.4*		
MD 223/MD 4 EB Off-Ramp	61.8*	117.9*		
Marlboro Pike/site entrance	Future			

\*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.

The site is proposed to be developed with 109 single family detached residences. The site trip generation would be 86 AM peak-hour trips (17 in, 69 out) and 104 PM peak-hour trips (68 in, 36 out). The site trip distribution and assignment used in the traffic study has been reviewed in light of the most recent site plan that does not include a connection to the adjacent Windsor Park community, and has been adjusted accordingly.

TOTAL TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 223 and Dower House Road	1,307	1,390	С	D
MD 223 and Marlboro Pike	1,480	1,543	E	Е
MD 223/Old Marlboro Pike/MD 4 WB On-Ramp	28.8*	13.5*		
MD 223/MD 4 WB Off-Ramp	25.7*	29.4*		
MD 223/MD 4 EB Off-Ramp	69.4*	123.5*		
Marlboro Pike/site entrance	13.8*	19.4*		

With the revised trip assignment, we obtain the following results under total traffic:

\*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.

Given these analyses, two intersections within the study area would operate unacceptably in both peak hours. Each of these intersections, plus the MD 223/Dower House Road intersection (which is to be improved under the county CIP) are discussed in separate sections below.

# MD 223/Marlboro Pike

In response to the inadequacy at the MD 223/Marlboro Pike intersection, the applicant has proffered improvements (these are described in the traffic study as mitigation, but they are not mitigation in accordance with the provisions of Sec. 24-124(a)(6) of the Subdivision Ordinance). The improvements include:

- 1. Widening of Marlboro Pike along the eastbound approach for 300 feet.
- 2. Restriping of the eastbound approach to provide an exclusive left-turn lane and a shared left-turn/through/right-turn lane.
- 3. Modification of the signal operations to provide split phasing for the east-west approaches.

With these improvements in place, the MD 223/Marlboro Pike intersection would operate at LOS C with a CLV of 1,285 during the PM peak hour.

The AM peak hour requires further discussion. In the AM peak hour, this intersection operates at LOS E with a CLV of 1,480 under both background and total traffic (and also with the above improvements in place). As the subject property would not add trips to the critical movements of the MD 223/Marlboro Pike intersection during the AM peak hour, it has no impact on the operations of the intersection. Because the impact of the subject property is zero during the AM peak hour, although the intersection operates worse than LOS D under total traffic during the AM peak hour, it would not be the responsibility of the developer of the subject property to make improvements that resolve the AM peak hour inadequacy.

# MD 223/MD 4 EB Off-Ramp

The analysis indicates that this intersection operates unacceptably as an unsignalized intersection. 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 if it is deemed warranted by the appropriate operating agency. The warrant study is a more detailed study of the adequacy of the existing unsignalized intersection. Although the traffic study dismisses the study of signal warrants as not "reasonable," there is considerable traffic using this location, and even SHA noted that fact. Furthermore, another application, Wood-Mar Corner (4-02117) has the same condition. Therefore, a traffic signal warrant study should be prepared in response to the inadequacy noted. This should occur prior to the time of building permit. If such a study is done, and the applicant is responsible for any warranted improvements, this intersection will operate adequately under future traffic.

# MD 223/Dower House Road

As noted earlier, an improvement is funded in the FY 2004 CIP. It is noted that this improvement is shown to be fully funded; however, that full funding is heavily contingent upon developer contributions. Of the \$2.75 million cost, developer contributions—either direct or via collections of smaller amounts by the county—make up \$2.25 million of the total. For that reason, and because the improvements at MD 223/Dower House Road are needed for adequacy for the subject property, the assumed improvements should occur concurrently with the development of the subject property. Therefore, this application should be conditioned on the improvements, which include signalization and construction of an exclusive right-turn lane along eastbound Dower House Road.

#### Comments—Operating Agencies

Both DPW&T and SHA have provided comments on the traffic study, and the comments are included in the file. DPW&T had several comments:

- 1. DPW&T notes that peak period counts should include three-hour turning movement counts in accordance with the guidelines. Two of the five counts done for the traffic study utilized the two-hour format. However, in each case the peak hour appeared to occur wholly within the time period counted. In no case did the peak hour start or end at the time the count started or ended. For that reason, the two-hour counts were accepted and used.
- 2. DPW&T notes that improvements are proposed at MD 223/Marlboro Pike without specifically indicating how they will be financed. In this case and generally, when a traffic study assumes transportation improvements for the purpose of making an intersection operate adequately, it is assumed that the improvements are a proffer by the

applicant. In response, a condition is written that requires that the improvements are designed, financially guaranteed, and scheduled for construction prior to the development being constructed. The same will be done in this circumstance.

3. DPW&T recommends particular improvements along Marlboro Pike at the access point. As the applicant is constructing a portion of the future relocated Marlboro Pike through the subject property, the scope of improvements at the site access to existing Marlboro Pike should be determined by DPW&T Office of Engineering under their Subtitle 23 authority.

SHA also had two comments:

- 1. SHA indicated that the applicant should proffer improvements at the MD 223/Marlboro Pike intersection that would result in acceptable traffic operations in both peak hours. As noted earlier, the development of the subject property does not have an impact on the intersection during the AM peak hour. The Planning Board measures the impact of a development using the critical lane volume, and because all trips generated by the development occur in noncritical movements, the critical lane volume does not change with the development of the subject property. For that reason, the recommendations correctly do not address the AM peak hour.
- 2. SHA indicated that the applicant did not address the inadequacy at the MD 223/MD 4 eastbound off-ramp intersection. Because the traffic volumes at that location are relatively large, there is a good reason to consider a traffic signal at this location, and it will be recommended as a condition of the development.

# **Plan Comments**

The relocation of Marlboro Pike is a master plan collector and is shown correctly within the subject plan. There is a concern about platting lots with driveway access on to a planned collector facility. This is acceptable, but the relocation of Marlboro Pike is a master plan collector facility. Due to the greater amount of traffic and the higher speeds, driveways accessing these lots should have a turnaround capability. This would minimize the need for vehicles accessing these lots to back onto the collector.

# **Transportation Conclusions**

Based on these findings, 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 with the five transportation-related conditions included in the staff recommendation.

10. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities in accordance with Section 24-122.02 of the Subdivision Regulations and the *Adequate Public Facilities Regulations for Schools* (CR-23-2001 and CR-38-2002).

Affected School Clusters #	Elementary School Cluster 5	Middle School Cluster 3	High School Cluster 3
Dwelling Units	109 sfd	109 sfd	109 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	26.16	6.54	13.08
Actual Enrollment	4452	4598	8393
Completion Enrollment	180	66	132
Wait Enrollment	20	15	29
Cumulative Enrollment	235.68	150.54	301.08
Total Enrollment	4913.84	4836.08	8868.16
State Rated Capacity	4175	5114	7752
Percent Capacity	117.70	94.57	114.40
Funded School	N/A	N/A	N/A

Impact on Affected Public School Clusters

Source: Prince George's County Planning Department, M-NCPPC, July 2003

These figures are correct on the day the referral memorandum was written. 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 will apply to this project.

County Council bill CB-31-2003 establishes a school facilities surcharge in the amount of: \$7,000 per dwelling if a building is located between Interstate Highway 495 and the District of Columbia; \$7,000 per dwelling if the building is included within a basic plan or conceptual site plan that abuts on existing or planned mass transit rail station site operated by the Washington Metropolitan Area Transit Authority; or \$12,000 per dwelling for all other buildings.

The school surcharge may be used for the construction of additional school facilities, which are expected to accommodate the new students that will be generated by this development proposal.

This project meets the adequate public facilities policies of Section 24-122.02, CB-30-2003 and CB-31-2003.

- 11. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public fire and rescue facilities.
  - a. The existing fire engine service Forestville Fire Station, Company 23, located at 8321 Old Marlboro Pike, has a service travel time of 5.25 minutes, which is within the 5.25minute travel time guideline for Block A Lots 14-16, 27-33; Block B Lots 1-18, Block C Lots 23-34; Block D Lots 12 and 13. All other lots are beyond.
  - b. The existing ambulance service at Forestville Fire Station, Company 23, has a service travel time of 5.72 minutes, which is within the 6.25-minute travel time guideline.

c. The existing paramedic service at Clinton Fire Station, Company 25, located at 9025 Woodyard Road, has a service travel time of 8.38 minutes, which is beyond the 7.25minute travel time guideline. The nearest fire station, ForestvilleCompany 23, is 5.72minutes from the development. This facility would be within the recommended travel time for paramedic service.

These findings are in conformance with the Adopted and Approved Public Safety Master Plan 1990 and the Guidelines for the Analysis of Development Impact on Fire and Rescue Facilities. To alleviate the negative impact on fire and rescue services due to the inadequate service discussed, an automatic fire suppression system shall be provided in all new buildings proposed in this subdivision, unless the Prince George's County Fire/EMS Department determines that an alternative method of fire suppression is appropriate. Because county law already requires all residential structures to be equipped with an automatic fire suppression system, no condition is required.

- 12. **Police Facilities** The proposed development is within the service area for Police District V-Clinton. In accordance with Section 24-122.1(c) of the Subdivision Regulations, existing county police facilities will be adequate to serve the proposed Belmont Crest cluster development. This police facility will adequately serve the population generated by the proposed subdivision. The Planning Board's current test for police adequacy is based on a standard for square footage in police stations relative to the number of sworn duty staff assigned. The standard is 115 square feet per officer. As of June 30, 2002, the county had 874 sworn staff and a total of 101,303 square feet of station space. Based on available space, there is capacity for additional 69 sworn personnel. This police facility will adequately serve the population generated by the proposed subdivision.
- 13. **Health Department**—The Prince George's County Health Department reviewed the application and offered four comments.

First, the Health Department noted that the property was in water and sewer categories W-5 and S-5. Preliminary plans proposing the use of public systems cannot be approved if the property is in Category 5 or 6 for water and sewer. Since the Health Department memorandum was written, the applicant has received approval of category changes to W-4 and S-4. Therefore, the application may proceed. The plan needs to be revised to indicate the correct categories.

Second, the Health Department notes that a raze permit is required prior to demolition of any existing structure on the property. Any hazardous material must be removed and properly disposed.

Third, all existing structures, wells and septic systems are required to be included on the preliminary plan. The revised plans include these structures and systems.

Finally, the Health Department notes that the abandoned wells and septic systems need to be pumped, backfilled and/or sealed in accordance with COMAR 26.04.04 prior to the release of the grading permit.

- 14. **Stormwater Management**—A Stormwater Management Concept Plan, # 12974-2003-00, has been approved with conditions to ensure that development of this site does not result in on-site or downstream flooding. The approval is valid through January 24, 2006. Development must be in accordance with this approved plan, or any revisions thereto.
- 15. **Cemeteries**—There are no known cemeteries on or adjoining the subject property.

- 16. **Public Utility Easement**—The preliminary plan correctly depicts the required ten-foot-wide public utility easement. This easement will be included on the final plat.
- 17. **Design Issues**—The Urban Design Section offered the following comments. The applicant should be aware that these issues must be addressed at the time of detailed site plan.

"The subject Preliminary Plan application is for 109 dwelling units in the R-R Zone on 62 acres of land. The proposal preserves some natural features like wetlands. Appropriate landscaping techniques are to be provided at the entrance to the subdivision. Appropriate landscaping techniques are to be provided to screen the rear and side yards of the proposed lots from the adjacent properties. The rear yards of the proposed lots must also be adequately screened from the proposed streets and the open space areas to be dedicated to the homeowners association.

"The proposal is subject to the requirements of Section 4.1, Section 4.6 and Section 4.7 of the *Landscape Manual*. There is no recreational open space provided. Passive recreational amenities like trails, picnic areas, etc., must be considered in the homeowners' open space to the rear (north) of the property. A private recreational facilities agreement is required for the recreational facilities on the HOA land. The location of the proposed SWM ponds must be shown and, to the extent possible, must be integrated with the natural features. Lots proposed on steep slopes must meet the requirements of Section 24-137.g (9) of the cluster subdivision regulations. If they do not meet these regulations, they must be eliminated and recreational open space must be provided in that area.

"The proposed lots must be consistent with the requirements of Section 27-428, R-R Zone (Rural Residential) and Section 27-442, Regulations of the Zoning Ordinance.

"The design concept and layout of the subdivision must be modified to 'open' up the lots to the large expanses of open space. The road layout leading to the large open spaces must be opened up to the extent possible so that the open spaces are visible from the entrance to the subdivision. The large open spaces must be integrated with the lot layout of this cluster subdivision."

# RECOMMENDATION

APPROVAL, subject to the following conditions:

- 1. Prior to signature approval of the preliminary plan:
  - a. The plan shall be revised so that all lots along Marlboro Pike Relocated are a minimum of 20,000 square feet.
  - b. The General Notes shall be revised to include the correct water and sewer categories.
  - c. The "Open Play Field" designation for Parcel "F" shall be removed from the plan. Parcel "F" shall be labeled "Use to be Determined at Detailed Site Plan."
- 2. At the time of final plat, the applicant, his heirs, successors and/or assignees shall pay a fee-inlieu of mandatory park dedication or provide private recreation facilities as determined at the Detailed Site Plan stage.
- 3. The following note shall be placed on the Final Plat of Subdivision:

"Development is subject to restrictions shown on the approved Type I Tree Conservation Plan (TCPI/45/03), or as modified by the Type II Tree Conservation Plan, and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland Conservation/Tree Preservation Policy."

- 4. At the time of the detailed site plan, a Type II Tree Conservation Plan shall be approved. The TCPII shall show the planting of the buffer around the perimeter of Parcel F with planting stock a minimum of one-inch caliper and the placement of a permanent split-rail fence or equal adjacent to the lots whose rear lots lines abut the afforestation areas on Parcel F.
- 5. At time of final plat, a conservation easement shall be described by bearings and distances. The conservation easement shall contain the Patuxent River Primary Management Area Preservation Area, excluding those areas where impact justification requests have been approved, and be reviewed by the Environmental Planning Section prior to certification. The following note shall be placed on the plat:

"Conservation easements described on this plat are areas 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."

- 6. Prior to the issuance of any permits that impact jurisdictional wetlands, wetland buffers, streams or Waters of the U.S., the applicant shall submit copies of all federal and state wetland permits, evidence that approval conditions have been complied with, and associated mitigation plans.
- 7. Prior to final plat approval, a detailed site plan shall be approved.
- 8. Development of this site shall be in conformance with the approved Stormwater Management Concept Plan #12974-2003-00, or any revisions thereto.
- 9. The applicant, the applicant's heirs, successors, and/or assigns shall provide the following:
  - a. A public use hiker/equestrian easement, 75 feet wide where feasible, from Crest Way at the proposed park property, through Parcels "D" and "E" to the southern property line, where it will connect to the existing trail easement in the Windsor Park subdivision. The easement may narrow where necessary. This easement shall be marked and labeled on the preliminary plan and final plat.
  - b. Standard sidewalks on both sides of all internal roads, per the concurrence of DPW&T.
- 10. Prior to the issuance of grading permits, the wells and septic systems on the property shall be pumped, backfilled and/or sealed in accordance with COMAR 26.04.04.
- 11. At the time of the Detailed Site Plan, a determination shall be made as to the use of Parcel "F."
- 12. *MD 223 at Marlboro Pike:* Prior to the issuance of any building permits within the subject property, the following road improvements shall (a) have full financial assurances, (b) have been permitted for construction through the operating agency's access permit process, and (c) have an agreed-upon timetable for construction with the appropriate operating agency; widening of Marlboro Pike along the eastbound approach for 300 feet; restriping of the eastbound approach to

provide an exclusive left-turn lane and a shared left-turn/through/right-turn lane; and modification of the signal operations to provide split phasing for the east-west approaches.

- 13. *MD 223 at Dower House Road:* Prior to the issuance of any building permits within the subject property, the following road improvements shall (a) have full financial assurances, (b) have been permitted for construction through the operating agency's access permit process, and (c) have an agreed-upon timetable for construction with the appropriate operating agency; signalization, if warranted; and provision of an exclusive right-turn lane along the eastbound Dower House Road approach to MD 223.
- 14. *MD 223 at MD 4 EB Off-Ramp:* Prior to the approval of the detailed site plan, the applicant shall submit an acceptable traffic signal warrant study to SHA and, if necessary, DPW&T for the intersection of MD 223 at the MD 4 EB Off-Ramp. The applicant should utilize a new 12-hour count and should analyze signal warrants under total future traffic as well as existing traffic at the direction of SHA. If a signal is deemed warranted by the responsible agency at that time, the applicant shall bond the signal prior to the release of any building permits within the subject property and install it at a time when directed by the appropriate permitting agency.
- 15. At the time of final plat approval, the applicant shall dedicate a right-of-way along the relocation of Marlboro Pike of 80 feet, as shown on the submitted plan.
- 16. For all lots fronting on the future Marlboro Pike, access to each lot shall either be directed to the minor street, or the applicant shall provide driveways with a turnaround capability in order to minimize the need for vehicles accessing each lot to back onto the future Marlboro Pike.

STAFF RECOMMENDS APPROVAL OF THE TYPE I TREE CONSERVATION PLAN, TCP I/45/03 AND THE VARIATION REQUEST TO SECTION 24-137(g)(9).