



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

Preliminary Plan 4-03014

Application	General Data
Project Name: WHITE PROPERTY Location: At the dead end of Cushwa Drive, approximately 420 feet south of its intersection with Brooke Jane Drive. Applicant/Address: Westpoint, LLC 2200 Defense Highway Crofton, MD 21114	Date Accepted: 03/20/03
	Planning Board Action Limit: 05/28/03
	Plan Acreage: 91.78
	Zone: R-80
	Dwelling Units: 112
	Parcels: 7
	Planning Area: 81A
	Council District: 09
	Municipality: N/A
	200-Scale Base Map: 215SE05&06

Purpose of Application	Notice Dates
RESIDENTIAL SUBDIVISION	Adjoining Property Owners: N/A (CB-15-1998)
	Previous Parties of Record: N/A (CB-13-1997)
	Sign(s) Posted on Site: 05/07/03
	Variance(s): Adjoining Property Owners: N/A

Staff Recommendation		Staff Reviewer: Whitney Chellis	
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 4-03014
White Property Lots 1–112, Parcels A–G

OVERVIEW

The subject property is located on Tax Map 134 in Grid B-1 and is known as Parcel 58. It is an acreage parcel of land never having been the subject of a record plat of subdivision. The property is approximately 91.78 acres and is zoned R-80. Several existing structures are located on the property, including a single-family dwelling unit and accessory barns, all of which are to be removed.

The property is encumbered by two high-voltage, electric power transmission line rights-of-way that traverse the property. One, a 250-foot-wide Potomac Electric Power Company (PEPCO) right-of-way, crosses north to southwest and segments the property into two. The 250-foot-wide right-of-way is in the fee-simple ownership of PEPCO (Liber 3124, Folio 212). The second right-of-way is an 80-foot-wide easement (Liber 1319, Folio 208) running north to south on the property. Prior to the approval of final plats for those lots that depend on the crossing of the PEPCO property and easement for access, the applicant should secure approval for the construction of public streets on those portions of the property under the jurisdiction of PEPCO.

The applicant is proposing to subdivide the property into 112 lots for the construction of single-family dwelling units. All of the lots proposed meet or exceed the minimum standards for conventional development in the R-80 Zone. The original application proposed 141 lots. Due to staff concerns regarding proposed impacts to environmental features on the property, the applicant has revised the plan, resulting in a reduction of 29 lots. The applicant is proposing to dedicate Parcels A–F (27.11± acres) to a homeowners association for open space purposes and Parcel G (25± acres) to M-NCPPC for the fulfillment of the requirement of the mandatory dedication of parkland, as discussed further in Finding 4 of this report.

Access to this property is through existing or proposed residential subdivision streets that intersect Brandywine Road (C-513), approximately one-third mile to the east. The property has frontage on Cushwa Drive to the north, an existing 50-foot-wide dedicated public right-of-way that is proposed to extend into the proposed subdivision. Access to the subdivision is also proposed from an approved but unrecorded proposed public street, internal to the “Buckler Property” (4-02106) that will connect to Brandywine Road to the east, once constructed. The Buckler Property is a proposed 95-lot subdivision abutting the entire east property line, approved by the Planning Board on April 10, 2003. In addition to the extension of the proposed internal spine road from the Buckler Property, the Planning Board has approved the extension of Kaine Drive through the Buckler Property along the northwest property line, if appropriate for internal circulation of this property.

Final plats for the Buckler Property have not been submitted.

The applicant proposes to dedicate and construct internal public streets to serve the development. Road B is the extension of Cushwa Drive into the subdivision and is 50 feet wide. Road C and Road E are the primary internal circulation streets and are proposed as 60-foot-wide dedicated public streets. Road C

transitions to a 50-foot-wide public street south of Road E. Road A is proposed as a 60-foot-wide right-of-way that extends from the Buckler Property to the east and a transition to a 50-foot-wide right-of-way west of Road C. Additional circulation and transportation discussions are found in Finding 6 of this report.

SETTING

The property is located on the west side of Brandywine Road at the southern terminus of Cushwa Drive, which extends from the Brooke Jane subdivision to the north. The property straddles a 250-foot-wide PEPCO right-of-way. To the east is an undeveloped R-80-zoned, 95-lot subdivision approved in April 2003, as yet unrecorded. To the south is the Piscataway Stream Valley, zoned R-E. To the west is the Boniwood subdivision developed with a mix of single-family and attached dwelling units in the R-S Zone. To the north is the Brooke Jane Manor subdivision, developed with single-family dwelling units, also in the R-80 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-80	R-80
Use(s)	Residential	Residential
Acreage	91.78	91.78
Lots	0	112
Parcels	1	7
Dwelling Units:		
Detached	1	112

2. **Environmental** - 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 Forest Stand Delineation (FSD) has been reviewed. The FSD is based upon 15 sample areas, shows 8 specimen trees and 2 forest stands.

The Type I Tree Conservation Plan, TCPI/23/03, proposes clearing 22.48 acres of the existing 42.70 acres of upland woodland and the woodland conservation requirement has been calculated as 19.72 acres. The plan proposes to meet this requirement by providing 16.84 acres of on-site preservation and 2.88 acres of off-site conservation. The plan correctly avoids placing woodland conservation areas on lots less than 20,000 square feet in area or on land proposed for dedication to M-NCPPC.

The plan contains technical errors that need to be corrected before it can be certified. The legend does not include the symbol used for the limit-of-disturbance. The TCP improperly shows the individual forest areas indicated on the FSD. The limit-of-disturbance is on the wrong side of the proposed woodland preservation area on Parcel F and does not include clearing in the floodplain for the sanitary sewer connection from the cul-de-sac of Road F and the existing 30-inch sewer main.

At the present time it has not been determined if Kaine Drive will need to be extended onto the subject property. If this road connection is required, the TCP will need to be revised to show additional clearing and to account for clearing in the worksheet.

This site contains natural features that are required to be protected under Section 24-130 of the

Subdivision Regulations. The *Subregion V Master Plan* indicates that there are substantial areas designated as Natural Reserve on the site. For the purposes of this review, these areas include the entire expanded stream buffer and any isolated sensitive environmental features.

A wetland report, including waters of the United States as designated by the U.S. Army Corps of Engineers, was included in the review package. All wetland and stream buffers are correctly shown.

All disturbances not essential to the development of the site as a whole are 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. Impacts for essential development features require variations to the Subdivision Regulations. The variation requests are evaluated below.

Section 24-130 of the Subdivision Regulations restricts impacts to these buffers unless the Planning Board grants a variation to the Subdivision Regulations in accordance with Section 24-113. 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. Each variation is described individually below. However, for purposes of discussion relating to Section 24-113(a) of the Subdivision Regulations, the impacts were discussed collectively.

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 evidence presented to it in each specific case that:

- (1) The granting of the variation will not be detrimental to the public safety, health, or injurious to other property;*
- (2) The Conditions on which the variation is based are unique to the property for which the variation is sought and are not applicable generally to other properties;*
- (3) The variation does not constitute a violation of any other applicable law, ordinance, or regulation;*
- (4) 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 strict letter of these regulations is carried out;*

The Environmental Planning Section has reviewed the revised variation request received May 7, 2003. The specific square footages of the proposed impacts are not correct; however, the figures

stated are within the same order of magnitude as shown on the TCP. The following is a discussion of each impact and whether or not staff will support the variation request as proposed.

Variation Request #1 is for the construction of a portion of Kaine Drive and will impact the expanded stream buffer. This street connection may be requested by the M-NCPPC Transportation Planning Section to improve access and circulation for fire, police and emergency vehicles on the subject property. This connection will serve to improve public safety, health and welfare of the community and will not be injurious to other property. Because of the unique location of existing Kaine Drive and the location of the stream, there is no practicable alternative. A variation request to impact the stream buffer on the opposite side of this stream to extend Kaine Drive was approved by the Planning Board during the approval of 4-02106. The request is intended to fulfill existing regulations regarding adequate transportation facilities. The proposal is not a violation of any other applicable law, ordinance or regulation because state and federal permits are required prior to construction. Staff supports variation request #1 because the findings required by Section 24-113 of the Subdivision Regulations are made.

Variation requests #2, #3 and #4 are for the construction of Street "E." This street connection is required by the M-NCPPC Transportation Planning Section to provide access and circulation for fire, police and emergency vehicles on the subject property. This connection will serve to improve public safety, health and welfare of the community and will not be injurious to other property. Moving the proposed road further to the northwest in the area of impact #2 could further reduce impacts; however, the geometry required by the County Code may not make this a feasible alternative. This request will be supported if it is not feasible to move the road farther to the northwest. The requests are intended to fulfill existing regulations regarding adequate transportation facilities. The proposals are not a violation of any other applicable law, ordinance or regulation because state and federal permits are required prior to construction. Staff supports variation requests #2, #3 and #4 because the findings required by Section 24-113 of the Subdivision Regulations are made.

Variation #5: The plans show impacts that were not addressed in the variation requests submitted on May 7, 2003.

Sanitary Sewer Line: a proposed sanitary sewer line will impact wetlands and the 100-year floodplain between the cul-de-sac of Road F and the existing 30-inch sewer main. This connection has been shown on the plans and is required by regulation to provide for the health, safety and welfare of the community. The Washington Suburban Sanitary Commission has determined that this connection is required in this specific location to properly connect to the existing sewer line. There are no practicable alternatives for this alignment because of the location of the existing sewer line and the topography of the site for the proposed development. The proposal is not a violation of any other applicable law, ordinance or regulation because state and federal permits are required prior to construction. Staff supports variation request #5 because the findings required by Section 24-113 of the Subdivision Regulations are made.

Impact not requested for Stormwater Management Pond Outfall: No outfall is shown for pond #2. This outfall could impact the adjacent wetlands. The outfall can be designed to have no impact to the minimum 25-foot wetland buffer and no variation request would be necessary.

According to the Prince George's County Soils Survey the principal soils on this site are in the Adelphia, Beltsville, Bibb, Elkton, Galestown, Kleg, Marr, Matapeake, Othello, Sassafra, Westphalia and Woodstown soils series. Adelphia soils are in the B-hydric series and are subject to

a seasonally high water table and impeded drainage. Beltsville soils are in the C-hydric group, are highly erodible and may be subject to a perched water table and impeded drainage. Bibb soils are associated with floodplains. Elkton soils are in the D-hydric soils series and are subject to a high water table and poor drainage. Galestown soils are in the A-hydric series and pose no special problems for development. Kleg soils are in the B-hydric series and are subject to a seasonally high water table and impeded drainage. Marr and Matapeake soils are in the B-hydric series and pose no special problems for development. Othello soils are in the D-hydric soils series and are subject to a high water table and poor drainage. Sassafras soils are in the B-hydric series and pose no special problems for development. Westphalia soils are in the B-hydric series and are highly erodible. Woodstown soils are in the C-hydric series and are subject to a high water table and impeded drainage. This information is provided for the applicant's benefit. No further action is needed as it relates to this Preliminary Plan of Subdivision review. However, a soils report may be required by the Prince George's County Department of Environmental Resources during the permit process review.

An approved Stormwater Management Concept Plan, CSD #7543-2003-00, has been submitted. The plan provides for retention and extended detention using the two ponds as shown on the Preliminary Plan of Subdivision and the Type I Tree Conservation Plan.

3. **Community Planning**—The subject property is located within the limits of the 1993 Subregion V Master Plan, Planning Area 81A in the Clinton community. This application is located in the Developing Tier as identified in the 2002 General Plan. 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.

Suburban residential land use, at up to 3.5 dwelling units per acre, is recommended for the northern part of the property. An M-NCPPC stream valley park is recommended for the southern part of the property along Piscataway Creek.

The 1993 Natural Features and Environmental Facilities map indicates that the northeastern part of the site was cleared and the remainder of the site was mostly wooded in 1990. A Natural Reserve Area is indicated for the central and southern portions of the site, encompassing the floodplain and wetland areas indicated on the submitted site plan.

There are no master plan land use issues associated with this conventional preliminary subdivision application for 141 single-family, detached residential lots in the R-80 Zone. The proposed subdivision is consistent with the recommendations of the General Plan and the master plan.

4. **Parks and Recreation**—In accordance with Section 24-134 of the Subdivision Regulations, the Department of Parks and Recreation recommends the dedication of Parcel G, approximately 25± acres, for the fulfillment of the requirement of the mandatory dedication of parkland. Lots 69 and 70 are exempt from the calculation for the requirement of mandatory dedication because they exceed one acre.

Prior to signature approval of the TCPI, the plan should be revised to remove the tree conservation areas from the lands to be dedicated to M-NCPPC that are being counted toward the fulfillment of on-site tree conservation for this proposal, unless other arrangements are made with the Department of Parks and Recreation.

5. **Trails**— The *Adopted and Approved Subregion V Master Plan* recommends two master plan trails on the subject site. A trail is recommended along the PEPCO right-of-way. Due to liability concerns, however, no trail construction is recommended in conjunction with this preliminary plan. The master plan also recommends a stream valley trail along Piscataway Creek. The Department of Parks and Recreation is recommending dedication of the stream valley to accommodate this future master plan trail. Discussions are still underway regarding the ultimate alignment and location of this trail along Piscataway Creek, and no trail construction is required in conjunction with this preliminary plan.

Staff does recommend that the applicant provide standard sidewalks along both sides of all internal roads to safely accommodate pedestrians, per the concurrence of DPW&T. This recommendation would be consistent with sidewalk construction in adjoining developments.

6. **Transportation**—The transportation staff determined that a traffic study detailing weekday analyses was needed. In response, the applicant submitted a traffic study dated March 2003. There is also a supplement dated March 2003. Staff has also prepared a comprehensive analysis of the area and all pending applications dated May 2003; this will be completed and be placed into the file for this case prior to the Planning Board hearing. 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 included 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 for preliminary plan 4-03014 examined the site impact at six intersections in the area:

MD 5/Surratts Road
Brandywine Road/Surratts Road
Brandywine Road/Thrift Road

Brandywine Road/Brooke-Jane Drive/Northgate Parkway (unsignalized)
Brandywine Road/Buckler Property site access (unsignalized)
Brandywine Road/Burch Hill Road (unsignalized)

Staff observed traffic operations in the area between 6:45 a.m. and 8:15 a.m. on March 25, 2003, in connection with an earlier case. Consistent with findings made during review of the earlier case (Preliminary Plan of Subdivision 4-02106, Buckler Property), staff makes the following findings:

- a. Severe backups occurred along MD 5 from Surratts Road to a point beyond Brandywine Road. Over this entire four-mile section, traffic proceeds in a stop-and-go condition.
- b. Staff observed northbound traffic along Brandywine Road in a backup from MD 223 back through Surratts Road, and from Surratts Road back through Thrift Road. At its worst, the backup extended as far south as Symposium Way.
- c. Staff drove several routes as a means of comparing travel times from Brandywine Road/Groveton Drive to MD 5/Coventry Way. In the past, staff has consistently contended that, with a proposed widening of Surratts Road in place, traffic generated in neighborhoods along Brandywine Road would tend to use Surratts Road to access MD 5 and continue north. Staff believes that this presumption is no longer valid for the following reasons:
 - (1) This routing is longer in distance—by 20 percent or more—than routings using Brandywine Road up to MD 223.
 - (2) The timing of the signal on the eastbound approach to MD 5 has been adjusted to give more preference to through traffic along MD 5—so much so that average delays spent waiting for a green light exceed three minutes. This is a great deterrent to traffic from the local communities using Surratts Road, regardless of whether the CIP project to widen Surratts Road is implemented or not; and the delay at the MD 5 approach causes this route to be the slower than other routes in the area *despite the backups along Brandywine Road between MD 223 and Surratts Road*.
 - (3) The traffic backups along Brandywine Road at the Surratts Road and Thrift Road intersections are so severe that road users encounter considerable delay just getting to Surratts Road.

The Planning Board's *Guidelines* assume that each intersection in a traffic study operates independent of other adjacent intersections (unless the intersections are linked through signal progression or other means). In this circumstance, however, the Brandywine Road/Surratts Road intersection cannot operate independently of either the MD 223/Old Branch Avenue/Brandywine Road intersection or the Brandywine Road/Thrift Road intersection. Although the submitted traffic study did not review the MD 223/Old Branch Avenue/Brandywine Road intersection, staff has determined that this intersection must be considered critical for the subject property.

In accordance with analyses done for both the Buckler Property (4-02106) and Saddle Creek (4-02126), staff will also consider the MD 5/Brandywine Road intersection to be critical.

At the time of review of the study regarding the subject property, staff had three separate traffic studies with similar study areas, and each with their own set of counts. Because multiple counts are

multiple snapshots of traffic flows that naturally vary day by day, basing an analysis on multiple counts is technically superior to basing the analysis on a single count. Furthermore, it is preferable have a single basis to assist the Planning Board in making consistent findings for a group of cases. For that reason, staff has produced a comprehensive analysis of the area, using a single assumption for growth and a single set of approved developments with common assumptions of trip distributions for those developments. Also, staff has averaged the available traffic counts where multiple counts were available at the same intersection, with a couple of exceptions. Staff had two counts at the MD 223/Old Branch Avenue/Brandywine Road intersection, and one count was lower on all approaches than the other and was excluded. The lower count was also lower than available hourly state counts which were more than one year old. At MD 5/Surratts Road, staff had three counts. While two counts were relatively close numerically, the third count was inconsistent during the PM peak hour, particularly on the north and east approaches, and was excluded. All three counts were used during the AM peak hour.

The existing conditions at the study intersections are summarized below:

EXISTING TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 5 and Surratts Road	1,527	1,283	E	C
MD 5 and Brandywine Road	1,791	2,220	F	F
MD 223 and Old Branch Avenue/Brandywine Road	1,571	1,408	E	D
Surratts Road and Brandywine Road	1,585	1,567	E	E
Thrift Road and Brandywine Road	1,107	930	B	A
Brandywine Road and Brooke-Jane/Northgate	14.6*	17.7*	--	--
Brandywine Road and Buckler Property site entrance	Future			
Brandywine Road and Burch Hill Road	7.9*	7.7*	--	--
*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 the large industrially zoned area in Brandywine to the east of US 301/MD 5. This area has extensive approved preliminary plans that are 10 to 12 years old, but limited development has occurred in that area over the years and much of the development has occurred at density levels far short of those previously assumed. Therefore, the traffic study counts background development within this industrial area at about 10 percent of the level of development that was approved. This recognizes that an increase in the pace of development is unlikely to occur within the next six years, and that major improvements to eliminate the signalized intersections along MD 5 will likely need to be programmed before an increase in development occurs.

Background conditions also assume the widening of Surratts Road between Beverly Drive and

Brandywine Road. Given that the project is shown in the current county Capital Improvement Program (CIP) with 100 percent funding within six years, staff has allowed the traffic study to include this improvement as a part of the background condition. However, staff notes that this improvement has an unusually long history of full funding in the CIP without being constructed. Furthermore, DPW&T has indicated in their referral comments that this CIP item is not recommended to be fully funded for construction in the upcoming CIP.

This improvement is particularly important to traffic circulation in the area. Widening the link of Surratts Road eastward from Brandywine Road may provide an outlet for traffic using Brandywine Road. Also, the intersection improvements at Brandywine Road/Surratts Road that are a part of this CIP project are important because this intersection currently operates poorly, particularly in the AM peak hour.

Background conditions, with the Surratts Road CIP improvement in place and including both the Buckler Property (4-02106, approved) and Saddle Creek (4-02126, pending for hearing on 5/15/2003), are summarized below:

BACKGROUND TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 5 and Surratts Road	1,719	1,506	F	E
MD 5 and Brandywine Road	1,934	2,428	F	F
MD 223 and Old Branch Avenue/Brandywine Road	1,805	1,669	F	F
Surratts Road and Brandywine Road	1,281	1,337	C	D
Thrift Road and Brandywine Road	1,357	1,170	D	C
Brandywine Road and Brooke-Jane/Northgate	19.1*	24.0*	--	--
Brandywine Road and Buckler Property site entrance	12.6*	20.3*	--	--
Brandywine Road and Burch Hill Road	8.1*	29.2*	--	--
*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 for development as a residential subdivision. The site is proposed to be developed with 112 single-family detached residences, according to the most recent plan. The site trip generation would be 84 AM peak hour trips (17 in, 67 out) and 101 PM peak hour trips (67 in, 34 out). The site trip distribution and assignment used in the traffic study has been reviewed in light of the field observations done by staff. Staff wants the trip distributions used in this area to be roughly consistent and recommends that the trip distribution be revised to reflect the following:

- 5% - north along Brandywine Road and west on MD 223
- 25% - north along Brandywine Road and north on Old Branch Avenue
- 15% - north along Brandywine Road and east on MD 223

25% - north along Brandywine Road, east on Surratts Road, and north on MD 5
 9% - north along Brandywine Road, east on Surratts Road, and continuing east
 5% - southeast along Brandywine Road
 15% - south along Brandywine Road onto MD 5
 1% - west along Floral Park Road

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

TOTAL TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 5 and Surratts Road	1,728	1,511	F	E
MD 5 and Brandywine Road	1,935	2,433	F	F
MD 223 and Old Branch Avenue/Brandywine Road	1,833	1,688	F	F
Surratts Road and Brandywine Road	1,314	1,378	D	D
Thrift Road and Brandywine Road	1,410	1,222	D	C
Brandywine Road and Brooke-Jane/Northgate	19.9*	25.8*	--	--
Brandywine Road and Buckler Property site entrance	16.9*	27.6*	--	--
Brandywine Road and Burch Hill Road	13.8*	39.4*	--	--
*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, staff finds that several intersections within the study area would operate unacceptably in both peak hours. Each of these intersections, plus the Brandywine Road/Surratts Road intersection (which is part of the link of Surratts Road proposed for improvement by the CIP) is discussed in separate sections below.

MD 5/Surratts Road

In response to the inadequacy at the MD 5/Surratts Road intersection, the applicant has proffered mitigation. This intersection is eligible for mitigation under the fourth criterion in the *Guidelines for Mitigation Action* (approved as CR-29-1994). The applicant recommends that the eastbound approach of Surratts Road be restriped to provide two left-turn lanes, a shared through/left-turn lane, an exclusive through lane, and an exclusive right-turn lane. Staff determined that there was not sufficient volume eastbound during the PM peak hour to warrant the allowance for a third left-turn lane, and as a result, the proposal could not mitigate the applicant's traffic. The assessment was not based on the counts in the applicant's traffic study, but rather the averaged counts of the three studies that were done. Staff believes that the improvements described below would mitigate the impact of the applicant's development in accordance with the provisions of Sec. 24-124(a)(6). The improvements include:

- a. The addition of a northbound left-turn lane along MD 5.

- b. The addition of a southbound left-turn lane along MD 5.

The impact of the mitigation actions at this intersection is summarized as follows:

IMPACT OF MITIGATION				
Intersection	LOS and CLV (AM & PM)		CLV Difference (AM & PM)	
MD 5/Surratts Road				
Background Conditions	F/1,719	E/1,506		
Total Traffic Conditions	F/1,728	E/1,511	+9	+5
Total Traffic Conditions w/Mitigation	E/1,662	D/1,454	-66	-77

As the CLV at MD 5/Surratts is between 1,450 and 1,813 during both peak hours, the proposed mitigation action must mitigate at least 150 percent of the trips generated by the subject property during the PM peak hour, according to the Guidelines. The above table indicates that the proposed mitigation action would mitigate at least 150 percent of site-generated trips during each peak hour. **Therefore, staff's proposed mitigation at MD 5 and Surratts Road meets the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.**

The Planning Board should be aware that there are two other properties in the area that have subdivision applications pending at this time. These are:

- a. Walls Property, 4-03003: This development of 289 residences is located on the east side of Brandywine Road north of Brooke-Jane Drive. Staff estimates that this development would increase the CLV at the MD 5/Surratts Road intersection by 57 units in the AM peak hour and 20 units in the PM peak hour.
- b. Saddle Creek, 4-02126: This development of 389 residences is located south of Piscataway Creek and west of Brandywine Road. Staff has determined that this development would increase the CLV at the MD 5/Surratts Road intersection by 36 units in the AM peak hour and 56 units in the PM peak hour.

MD 5/Brandywine Road

The traffic study identifies inadequacies at MD 5/Brandywine Road. The Planning Board found in 1990 that future development will overwhelm this existing intersection and several others along US 301 and MD 5 in the Brandywine area, and little has changed to alter that finding. The improvements that are part of a Brandywine Road Club would provide adequacy in the area by widening the major facilities and by replacing the signalized intersections with interchanges. While the use of a pro rata share toward these interchanges was used to approve a number of major developments prior to 1993, staff has become aware that allowing applicants to "participate in" improvements which provide adequacy may not be consistent with a current reading of Section 24-124.

In response to the inadequacy at these intersections, staff would suggest mitigation as a means for approval. This intersection is eligible for mitigation under the fourth criterion in the *Guidelines for*

Mitigation Action (approved as CR-29-1994). The addition of an additional northbound and southbound through lane through this intersection and the adjacent MD 5/MD 373 intersection would mitigate the impact of the applicant's development in accordance with the provisions of Section 24-124(a)(6). Because of the limited spacing between the two intersections, the through lane cannot operate unless it is extended through both. The impact of the mitigation actions at this intersection is summarized as follows:

IMPACT OF MITIGATION				
Intersection	LOS and CLV (AM & PM)		CLV Difference (AM & PM)	
MD 5/Brandywine Road				
Background Conditions	F/1,934	F/2,428		
Total Traffic Conditions	F/1,935	F/2,433	+1	+5
Total Traffic Conditions w/Mitigation	E/1,528	D/1,635	-407	-798

The improvements at this intersection mitigate at least 150 percent of the trips generated by the subject property during each peak hour, and they bring the CLV to no greater than 1,813 during any peak hour. **Therefore, staff's proposed mitigation at MD 5/Brandywine Road meets the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.**

Brandywine Road/Surratts Road, MD 223/Old Branch/Brandywine Road, and the Adjacent Link of Surratts Road

As noted earlier, an improvement is funded in the FY 2003 CIP, but this improvement will no longer be funded for construction in the upcoming proposed CIP. This improvement would include improvements to the link of Surratts Road between Brandywine Road and Beverly Drive; also, the Brandywine Road/Surratts Road intersection would be improved. Although including this improvement is perfectly legal, staff has reservations about its inclusion given its status in the proposed CIP. As noted earlier, construction funding had not moved forward for several years, and the project has been deferred in succeeding documents.

In order to relieve the inadequacies at Brandywine Road/Surratts Road, staff recommends the following improvements on the approaches:

- a. Provide separate through and right-turn lanes along northbound Brandywine Road
- b. Provide two through lanes and an exclusive left-turn lane along southbound Brandywine Road.
- c. Provide an exclusive left-turn lane and a shared right-turn/left-turn lane along westbound Surratts Road.

In order to relieve the inadequacies at MD 223/Old Branch Avenue/Brandywine Road, staff recommends the following improvements on the approaches:

- a. Provide separate left-turn, through, and right-turn lanes along northbound Brandywine Road,

with a needed widening along Brandywine Road south of MD 223 to receive two through lanes.

- b. Reconfigure southbound Brandywine Road to provide an exclusive left-turn lane, an exclusive through lane, and a shared through/right-turn lane.
- c. Provide an exclusive left-turn lane, an exclusive through lane, and a shared through right-turn westbound MD 223.
- d. Provide an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane along eastbound MD 223.
- e. With the elimination of shared left-turn lanes along MD 223, convert the current split-phase signal operation along MD 223 to a shared phase operation.

With the listed improvements in place, adequate traffic operations would be provided at both locations with the approval of the current application and the two pending applications.

Comments – Operating Agencies

Both DPW&T and SHA have provided comments on the traffic study. DPW&T had several comments:

- a. DPW&T recommends that the applicant analyze the site entrance and provide for acceleration and deceleration lanes along southbound Brandywine Road, as well as a northbound left-turn bypass lane, at the site entrance. DPW&T also recommends a traffic signal warrant study. These requests are appropriate conditions, and while they would likely be required of the Buckler Property when it develops, these improvements are needed for the subject property as well. The site entrance was analyzed in the addendum. The analysis did not indicate excessive delay under total traffic, and so staff cannot recommend a study of signal warrants at this time.
- b. DPW&T notes the disparity in traffic volumes between the various studies. Regarding the disparity, staff is utilizing a common set of numbers to analyze the various current applications and has averaged the various counts where multiple counts exist, subject to the notes earlier in this memorandum.
- c. DPW&T has noted the funding issue with the Brandywine Road/Surratts Road intersection, and staff is addressing this concern.
- d. DPW&T requests a link analysis of Brandywine Road between MD 223 and Surratts Road, and an analysis between Surratts Road and MD 5. Particularly if a signal is studied and installed at the site access to Brandywine Road, the signals generally control the flow of traffic up and down the corridor. For that reason, the Guidelines do not recommend the study of a link less than two miles in length between signalized intersections. While the link between the subject property and Thrift Road is marginally two miles in length, no other portions of Brandywine Road would be eligible for a link analysis.
- e. DPW&T recommends that conditions consistent with other developments in the area be recommended for the subject property. By use of the common set of numbers, staff will do this.

SHA did not offer an approval of the applicant's proposed mitigation and expressed concern with the constructability and operations of a triple-left-turn movement. As staff's recommended mitigation plan at MD 5/Surratts Road has been approved by SHA with regard to a past case, and SHA has suggested that applicants mitigate their impacts at MD 5/Brandywine Road, staff believes that the recommendation at both locations can move forward.

Plan Comments

The plan shows this proposed community to receive access via Cushwa Drive, a secondary residential street, and via a planned primary residential street through the Buckler Property, which was approved as Preliminary Plan 4-02106. This is acceptable, but staff needs to make the following points:

- a. Secondary access is desirable to this site, and if access by Cushwa Drive were not to be approved for any reason, the plan must be revised to an extension of Kaine Drive. This extension was actually shown on the Buckler preliminary plan, but requires certain environmental approvals if it is to occur on the subject property. Transportation staff understands that the appropriate variations have been filed, and staff supports their approval as a contingency measure. If the plan is approved as currently submitted, however, the variation will not be needed and the extension of Kaine Drive will not be needed.
- b. The transportation staff cannot support the development of the subject site lacking access through the Buckler Property. For that reason, staff recommends that development of the subject property be limited to 21 residences until such time as the primary residential roadway through the Buckler Property is available and open to traffic.

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 Subdivision Regulations if the application is approved with conditions.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of school 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) and concluded the following:

Finding

Impact on Affected Public School Clusters

Affected School Clusters #	Elementary School Cluster 5	Middle School Cluster 3	High School Cluster 3
Dwelling Units	141 sfd	141 sfd	141 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	33.84	8.46	16.92
Actual Enrollment	4452	4598	8393
Completion Enrollment	180	66	132

Wait Enrollment	20	15	29
Cumulative Enrollment	20.40	13.98	27.96
Total Enrollment	4706.30	4701.44	8598.88
State Rated Capacity	4175	5114	7752
Percent Capacity	112.73	91.93	110.92
Funded School	N/a	N/a	Surrattsville addn.

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

This recommendation is based on the originally submitted preliminary plan that proposed 141 lots. These findings are subject to change in accordance with the provisions of CR-23-2001 and CR-38-2002 and will be revised to reflect the number of lots approved by the Planning Board in the Planning Board's preliminary plan resolution if the subdivision is approved.

The affected elementary and high school cluster capacities are greater than 105 percent. There is no funded school in the affected elementary school cluster. The Surrattsville addition is the funded school in the affected high school cluster. Therefore, this subdivision can be approved with a six-year waiting period.

Based on this information, staff finds that the subdivision may be approved subject to conditions, in accordance with Section 24-122.02.

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

- a. The existing fire engine service at Clinton Fire Station, Company 25, located at 9025 Woodyard Road has a service travel time of 6.25 minutes, which is beyond the 5.25-minute travel time guideline.
- b. The existing ambulance service at Clinton Fire Station, Company 25, located at 9025 Woodyard Road has a service travel time of 6.25 minutes, which is within the 6.25-minutes 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 6.25 minutes, which is within the 7.25-minute travel time guideline.

The above 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*.

In order 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. Since this is a matter of existing law, no condition is necessary.

9. **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, the existing county

police facilities will be adequate to serve the proposed White property development. This police facility will adequately serve the population generated by the proposed subdivision.

10. **Health Department**—The Health Department has found that the existing dwelling on the property is currently being serviced by a private well and septic system. Once the existing house is razed, any abandoned well and septic system must be properly removed by a licensed scavenger or witnessed by a representative of the Health Department prior to the approval of the final plat.
11. **Stormwater Management**—The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. According to the preliminary plan, Stormwater Management Concept Plan # 7543-2003-00 has been approved with conditions to ensure that development of this site does not result in on-site or downstream flooding. Development must be in accordance with this approved plan. A copy of the approval letter should be submitted prior to the signature approval of the preliminary plan.

RECOMMENDATION

APPROVAL, subject to the following conditions:

1. Prior to signature approval of the preliminary plan of subdivision, the plan shall be revised as follows:
 - a. Amend Development Standards Note 9 to reflect 27.11 acres of dedication to the HOA.
 - b. To dimension the 70-foot lot width at the front building line where the lot width setback is greater than the front building setback.
 - c. To conform to Park (Department of Parks and Recreation) Exhibit A for the requirement of mandatory dedication of parkland.
 - d. To dimension the width of both PEPCO rights-of-way.
 - e. To find the most appropriate location for the public street crossing the PEPCO property in the vicinity of Lots 61 and 62 to endeavor to reduce the impact to the expanded buffer. The relocation may result in a loss of two lots.
 - f. Clearly label the right-of-way width of all internal streets and connecting streets.
 - g. Provide a note that impacts to the expanded buffer on Parcel G to serve stormwater management pond #2 are not permitted without further review by the Subdivision Section for conformance to Section 24-130.
2. Prior to the signature approval of the preliminary plan, the applicant shall submit a copy of the conceptual stormwater management approval letter.
3. Prior to the issuance of permits, a Type II tree conservation plan shall be approved.
4. Prior to the approval of the final plats of subdivision for Lots 69–112, the applicant shall secure the approval of PEPCO for public street crossings that serve those lots.

5. Prior to building permits, the applicant, his heirs, successors and/or assignees shall demonstrate that a homeowners association has been established and that the common areas have been conveyed to the homeowners association.
6. At the time of final plat, the applicant, his heirs, successors and/or assignees shall convey to the homeowners association (HOA) 27.11± acres of open space land (Parcels A–F). Land to be conveyed shall be subject the following:
 - a. Conveyance shall take place prior to the issuance of building permits.
 - b. A copy of unrecorded, special warranty deed for the property to be conveyed shall be submitted to the Subdivision Section of the Development Review Division (DRD), Upper Marlboro, along with the final plat.
 - c. All waste matter of any kind shall be removed from the property, prior to conveyance, and all disturbed areas shall have a full stand of grass or other vegetation upon completion of any phase, section or the entire project.
 - d. The conveyed land shall not suffer the disposition of construction materials, soil filling, discarded plant materials, refuse or similar waste matter.
 - e. Any disturbance of land to be conveyed to a homeowners association shall be in accordance with an approved detailed site plan or shall require the written consent of DRD. This shall include, but not be limited to, the location of sediment control measures, tree removal, temporary or permanent stormwater management facilities, utility placement, and stormdrain outfalls. If such proposals are approved, a written agreement and financial guarantee shall be required to warrant restoration, repair or improvements, required by the approval process.
 - f. Stormdrain outfalls shall be designed to avoid adverse impacts on land to be conveyed to a homeowners association. The location and design of drainage outfalls that adversely impact property to be conveyed shall be reviewed and approved by DRD prior to the issuance of grading or building permits.
 - g. Temporary or permanent use of land to be conveyed to a homeowners association for stormwater management shall be approved by DRD.
 - h. Stormdrain outfalls shall be designed to avoid adverse impacts on adjacent land, owned by or to be conveyed to The Maryland-National Capital Park and Planning Commission (M-NCPPC). If the outfalls require drainage improvements on land to be conveyed to or owned by M-NCPPC, the Department of Parks and Recreation (DPR) shall review and approve the location and design of these facilities. DPR may require a performance bond and easement agreement prior to issuance of grading permits.
 - i. There shall be no disturbance of any adjacent land that is owned by, or to be conveyed to, M-NCPPC, without the review and approval of DPR.
 - j. The Planning Board or its designee shall be satisfied that there are adequate provisions to assure retention and future maintenance of the property to be conveyed.

7. At the time of final plat, the applicant, his heirs, successors and/or assignees shall dedicate to M-NCPPC 25± acres, in accordance with DPR Exhibit A. Lands to be dedicated shall be subject to the following:
- a. An original, special warranty deed for the property to be conveyed (signed by the Assessment Supervisor, Washington Suburban Sanitary Commission) shall be submitted to the Subdivision Section of the Development Review Division, M-NCPPC, along with the final plat.
 - b. M-NCPPC shall be held harmless for the cost of public improvements associated with land to be conveyed, including, but not limited to, sewer extensions, adjacent road improvements, drains, sidewalks, curbs and gutters, and front-foot benefit charges, prior to and subsequent to final plat.
 - c. The boundaries and acreage of land to be conveyed to M-NCPPC shall be indicated on all development plans and permits that include such property.
 - d. The land to be conveyed shall not be disturbed or filled in any way without the prior, written consent of the Department of Parks and Recreation (DPR). If the land is to be disturbed, DPR shall require that a performance bond be posted to warrant restoration, repair, or improvements made necessary or required by the M-NCPPC development approval process. The bond or other suitable financial guarantee (suitability to be judged by the General Counsel's Office, M-NCPPC) shall be submitted to DPR within two weeks prior to applying for permits.
 - e. Stormdrain outfalls shall be designed to avoid adverse impacts on land to be conveyed to or owned by M-NCPPC. DPR shall review and approve the location and design of these facilities. DPR may require a performance bond and easement agreement prior to the issuance of grading permits.
 - f. All waste matter of any kind shall be removed from the property to be conveyed. DPR shall inspect the site and verify that it is in acceptable condition for conveyance prior to final plat approval.
 - g. No stormwater management facilities or tree conservation or utility easements shall be proposed on lands owned by or to be conveyed to M-NCPPC without the prior written consent of DPR. DPR shall review and approve the location and/or design of these features. If such proposals are approved by DPR, a performance bond and an easement agreement may be required prior to the issuance of grading permits.
 - h. The applicant, his successors and/or assigns shall submit a letter to the Subdivision Section, DRD, prior to final plat indicating that the Department of Parks and Recreation has conducted a site inspection and found the land to be dedicated to M-NCPPC in acceptable condition for conveyance.
8. No building permits shall be issued for this subdivision until the capacities, as adjusted pursuant to the School Regulations, at all the affected school clusters are less than or equal to 105 percent or six years have elapsed since the time of the approval of the preliminary plan of subdivision; or, pursuant

to the terms of an executed school facilities agreement, whereby the subdivision applicant, to avoid a waiting period, agrees with the County Executive and County Council to construct or secure funding for construction of all or part of a school to advance capacity.

9. Any abandoned well or septic system shall be pumped, backfilled and/or sealed in accordance with COMAR 26.04.04 by a licensed well driller or witnessed by a representative of the Health Department prior to final plat approval.
10. Development of this property shall be in accordance with Stormwater Management Concept Plan #7543-2003-00, or any revisions thereto.
11. 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/16/03), 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.”
11. At time of final plat, a conservation easement shall be described by bearings and distances. The conservation easement shall contain all 100-year floodplain, stream buffers, wetlands and wetland buffers, except for areas with approved variation requests, and shall be reviewed by the Environmental Planning Section prior to certificate approval. In addition, 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 permitted."
12. Prior to the issuance of any permits which 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.
13. Prior to signature approval of the Preliminary Plan of Subdivision, the variation requests and exhibits shall be corrected. The text shall include accurate calculations of each proposed disturbance and the figures shall match the appropriate sections of the Type I Tree Conservation Plan.
14. Prior to signature approval of the Preliminary Plan of Subdivision, the Type I Tree Conservation Plan shall be revised to:
 - a. Add the symbol for the limit-of-disturbance to the legend and include within the limits all areas proposed to be disturbed
 - b. Remove the references to forest areas A-F
 - c. Revise the limit-of-disturbance to show the preservation of woodland on Parcel F and provide additional clearing for the sanitary sewer connection from the cul-de-sac of Road F and the existing 30-inch sewer main

- d. Revise the worksheet to include clearing of woodland in the 100-year floodplain for the sanitary sewer connection from the cul-de-sac of Road F and the existing 30-inch sewer main
 - e. Revise the worksheet to provide additional clearing of woodland for Kaine Drive, if necessary
 - f. Have the revised plan signed and dated by the qualified professional who prepared the plan
15. **MD 5 at Surratts 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: provision of dual left-turn lanes along the northbound and the southbound approaches of MD 5.
16. **MD 5 at Brandywine Road and MD 5 at MD 373:** 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: provision of an additional northbound and southbound through lane through both intersections.
17. **Brandywine Road at Buckler Property site access:** 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: provision of a northbound acceleration and deceleration lanes, along with a northbound left-turn bypass lane.
18. **MD 223 at Old Branch Avenue/Brandywine 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: provision of the following physical and operational improvements on the intersection approaches:
- a. Provide separate left-turn, through, and right-turn lanes along northbound Brandywine Road, with a needed widening along Brandywine Road south of MD 223 to receive two through lanes.
 - b. Reconfigure southbound Brandywine Road to provide an exclusive left-turn lane, an exclusive through lane, and a shared through/right-turn lane.
 - c. Provide an exclusive left-turn lane, an exclusive through lane, and a shared through right-turn westbound MD 223.
 - d. Provide an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane along eastbound MD 223.
 - e. With the elimination of shared left-turn lanes along MD 223, convert the current split-phase signal operation along MD 223 to shared phase operation.

19. **Brandywine Road at Surratts Road:** Prior to the issuance of any building permits within the subject property, the following road improvements shall (a) have full financial assurances through either private money or full funding in the county's capital program, (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: provision of the following physical and operational improvements on the intersection approaches:
- a. Provide separate through and right-turn lanes along northbound Brandywine Road
 - b. Provide two through lanes and an exclusive left-turn lane along southbound Brandywine Road.
 - c. Provide an exclusive left-turn lane and a shared right-turn/left-turn lane along westbound Surratts Road.
20. In the event that access from the subject property onto existing Cushwa Drive was not to be approved for any reason, the plan must be revised to an extension of Kaine Drive, consistent with its location on the Buckler Preliminary Plan, 4-02106. Otherwise, the extension of Kaine Drive will not be needed.
21. Development of the subject property shall be limited to 21 residences until such time as the primary residential roadway through the Buckler Property is available and open to traffic.
22. The applicant, his heirs, successors and/or assignees shall provide standard sidewalks along both sides of internal public streets unless modified by the Department of Public Works and Transportation at the time of issuance of street construction permits.

STAFF RECOMMENDS APPROVAL OF TREE CONSERVATION PLAN TCPI/23/03 AND THE VARIATION REQUESTS TO SECTION 24-130, WITH CONDITIONS.