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Preliminary Plan 4-04035

Application	General Data
Project Name: KARINGTON Location: Southwest corner of the intersection of Central Avenue and Crain Highway. Applicant/Address: Karington, LLC. 8181 Professional Place Hyattsville, MD. 20785	Date Accepted: 05/6/04
	Planning Board Action Limit: 10/24/04
	Plan Acreage: 381.52
	Zone: E-I-A
	Lots: 463
	Parcels: 86
	Planning Area: 74A
	Tier: Developing
	Council District: 04
	Municipality: N/A
	200-Scale Base Map: 201NE14

Purpose of Application		Notice Dates	
Mixed-Use Development		Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003)	02/06/04
		Sign(s) Posted on Site:	06/29/04
Staff Recommendation		Staff Reviewer: Del Balzo	
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 4-04035
Karington

OVERVIEW

The property consists of approximately 381.52 acres of land in the E-I-A Zone. The property was formerly known as Collington Corporate Center. It is currently undeveloped and densely wooded. The applicant proposes a mixed-use, planned community including single-family detached homes, townhouses, multifamily, commercial, office, hotel, school, park, open space, and a lake. The property is being developed under the M-X-T zoning requirements, as allowed by CB-13-2002.

Conceptual Site Plan CSP-02004 was approved by the Planning Board on June 12, 2003. The Planning Board's decision was affirmed by the District Council on January 27, 2004. The Preliminary Plan must be in conformance with this prior approval.

This case was originally scheduled for hearing on July 15, 2004. Revised plans were expected by June 15, 2004. In an attempt to address concerns raised by staff in April 2004, the applicant submitted revised plans on June 29, 2004. At that time, the case was rescheduled for July 29, 2004, and the applicant was allowed to post signs on the property notifying the public of the hearing date. (The property was not posted for the original July 15 hearing date.) However, the plans submitted on June 29 were still deficient and did not sufficiently address the most compelling issues regarding Marlboro clay and unsafe lands. The applicant submitted further revised plans on July 19, 2004. Unfortunately, as discussed in the environmental finding of this report, the plans still do not provide enough information to make a determination that many of the lots are buildable.

Although the Preliminary Plan is in general conformance with the approved Conceptual Site Plan, several issues required to be addressed at the Preliminary Plan stage remain unresolved. Staff recommends DISAPPROVAL of this application based on unresolved environmental issues. Staff suggested to the applicant that a continuance might be in order, but the applicant decided not to request a continuance and press forward at this time. Prior to staff being able to recommend approval of this application, the applicant will need to:

1. Identify all off-site woodland impacts including those associated with stormwater management outfalls, sewer and water outfalls, road improvements, and other off-site grading impacts.
2. Revise the Type I Tree Conservation Plan to eliminate the portion of PMA Impact #5 associated with the construction of the clubhouse and swimming pool. Also, revise PMA Impact #6 to further minimize and/or eliminate the proposed impact by the use of retaining walls.
3. Submit a revised Geotechnical Report showing the unmitigated and mitigated 1.5 safety factor lines as prepared in accordance with the Prince George's County "Criteria for Soil Investigations and Reports on the Presence and Effect of Marlboro Clay upon Proposed Developments."

4. Revise the Preliminary Plan of Subdivision and the Type I Tree Conservation Plan to eliminate all lots located within the limits of the mitigated 1.5 safety factor line.
5. Revise the Type I Tree Conservation Plan, TCPI/48/02-01 as follows:
 - a. Revise the alignment of the Neighborhood Trails so that they are located at the top of the slopes or the bottom of the slopes, not midway up the slopes where significant grading and woodland clearing will be required.
 - b. Provide information on the TCPI that identifies off-site road improvements that will be required and indicate which of those improvements may require the clearing of woodlands.
 - c. Revise the layout as needed to eliminate all lots that are located within the limits of the 1.5 safety factor line.
6. Submit revised plans, Type I Tree Conservation Plan, and Stormwater Management Plan that are consistent with each other.

SETTING

The property is located in the southwest quadrant of Central Avenue and US 301. The site is bounded on the west by the Collington Branch; to the north by MD 214; to the east by US 301; and to the south by Collington Center, an employment park in the E-I-A 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.

Zone	EXISTING	PROPOSED
Uses	E-I-A Vacant	E-I-A Mixed Use Development: Single-family detached and attached homes; commercial and institutional uses.
Acreage	381.52	381.52
Lots	0	463
Parcels	2	86
Square-footage:		
Retail Commercial	0	300,000
Employment Space	0	700,000
School	0	25,000
Hotel Rooms	0	300
Total Dwelling Units:	0	1,294
Detached	0	170
Attached	0	272
Multifamily Rental	0	600
Condominium	0	112
High Rise	0	120
Live-Work	0	20

2. **Environmental**—The Environmental Planning Section has reviewed the above-referenced Preliminary Plan of Subdivision, application date stamped as accepted for processing on July 19, 2004 and date stamped as received by the Environmental Planning Section on July 19, 2004. The plans as submitted lack sufficient information to make all the necessary findings with respect to the approval of this application. Therefore, the Environmental Planning Section **cannot** make a recommendation for approval of Preliminary Plan of Subdivision 4-04035 or Type I Tree Conservation Plan TCPI/48/02-01.

Background

A review of the available information indicates that streams, wetlands, 100-year floodplain, severe slopes, and areas of steep slopes with highly erodible soils are found to occur on the property. Transportation-related noise impacts have been found to impact this site. The soils found to occur according to the Prince George's County Soil Survey include Adelphia fine sandy loams, Bibb silt loam, Keyport silt loam, Sandy land steep, and Westphalia fine sandy loams. Some of these existing soils have limitations that will have an impact during the building phase of the development. According to available information, Marlboro clay is found to occur on this property. According to information obtained from the Maryland Department of Natural Resources Natural Heritage Program publication entitled "Ecologically Significant Areas in Anne Arundel and Prince George's Counties," December 1997, there are no rare, threatened, or endangered species found to occur in the vicinity of this property. There are no designated scenic and historic roads in the vicinity of this property. This property is located in the Collington Branch watershed of the Patuxent River basin and in the Developing Tier as reflected in the adopted General Plan.

SUMMARY OF PRIOR ENVIRONMENTAL CONDITIONS OF APPROVAL

The approval of the Conceptual Site Plan included numerous conditions, several of which dealt with environmental issues that were to be addressed during subsequent reviews. The environmental conditions to be addressed during the review of the Detailed Site Plan are addressed below. The respective conditions are in **bold** typeface.

CONCEPTUAL SITE PLAN, CSP-02004; PGCPB NO. 03-135

The conditions noted below will be addressed in detail after the required information has been submitted.

15. **All future plan submittals shall include a single tree line as shown on the FSD revision stamped as received by the Environmental Planning Section on May 23, 2003.**

This condition has been addressed, the revised Type I Tree Conservation Plan, TCPI/48/02-01, date stamped as received by the Environmental Planning Section on July 19, 2004, reflects the correct tree line in accordance with the FSD revision date stamped on May 23, 2003.

17. **The Woodland Conservation Threshold portion of the requirement (47.52 acres) shall be satisfied as on-site preservation. The balance of the requirements may be**

satisfied by additional on-site preservation, on-site reforestation, or at an approved off-site mitigation bank.

This condition has been addressed, the revised Type I Tree Conservation Plan, TCPI/48/02-01, date stamped as received by the Environmental Planning Section on July 19, 2004, proposes 47.52 acres of on-site preservation with the balance of the requirement proposed to be satisfied by 50.97 acres of off-site mitigation at a location to be determined.

18. The revised TCPI submitted with the Preliminary Plan of Subdivision shall include the following:

a. Show conceptual grading, structure locations, and the limit of disturbance.

This condition has been satisfied by the revised Type I Tree Conservation Plan, TCPI/48/02-01, date stamped as received by the Environmental Planning Section on July 19, 2004. The conceptual grading, the residential structure locations, and the conceptual grading are shown on the plans as revised.

b. An attempt shall be made to eliminate isolated Woodland Conservation Areas by adjusting the layout and providing larger contiguous forest areas in the vicinity of the PMA and thus further minimizing proposed PMA impacts.

This condition has been satisfied by the revised TCPI. The 48.37 acres of on-site Woodland Conservation Preservation Areas are located adjacent to areas of forested floodplain on the site and are disconnected only by the entrance road from MD 214. All other Woodland Conservation Areas are part of a larger contiguous forest area associated with Collington Branch

c. Show the location of all anticipated stormdrain, sewer and water outfalls including those connecting to existing facilities located outside the limits of this application.

This condition has been satisfied by the revised TCPI. The sewer and storm drain outfalls have been shown.

d. Any clearing for off-site infrastructure connections shall be mitigated at a 1:1 ratio for all woodlands cleared as part of TCPI/48/02.

This condition appears to have been satisfied by the revised TCPI, which reflects 0.62 acre of off-site clearing on the worksheet. However, there is no clear indication as to the need for additional off-site infrastructure associated with the construction of off-site road improvements. Therefore, this condition should be carried over to any subsequent plans that shall identify all off-site infrastructure impacts including road construction.

However, all off-site woodland impacts should be identified, including those associated with stormwater management outfalls, sewer and water outfalls, road improvements, and other off-site grading impacts.

- 19. At the time of the Preliminary Plan of Subdivision, the Type I Tree Conservation Plan shall be revised at a scale of no less than 1"=100'. Those plans shall clearly identify each component of the PMA and the ultimate limit of the PMA.**

This condition was addressed by the revised TCPI, date stamped as received by the Environmental Planning Section on July 19, 2004.

- 20. The Preliminary Plan of Subdivision shall be designed to preserve the PMA to the fullest extent possible. If impacts are proposed a Letter of Justification shall be submitted with the Preliminary Plan application. It shall include a description and justification of each proposed area of impact. The impacts to each feature of the PMA shall be quantified and shown on 8½- x 11-inch sheets.**

This application proposes nine distinct Patuxent River Primary Management Area (PMA) impacts totaling 18.35 acres, or 15.6 percent of the total 117.4 acres of PMA found on this site. The revised Letter of Justification, date stamped as received by the Environmental Planning Section on July 19, 2004, was reviewed and was found to adequately address some of the proposed impacts but failed to justify how other impacts were minimized to the fullest extent possible. Below is a summary of the proposed PMA impacts.

Patuxent River Primary Management Area Proposed Impacts

Impact Number	Justification and Recommendation
1	This 12.70-acre impact is associated with the construction of the proposed lake which is an integral park of the concept approved for this site. Because of the size of the lake and its location as a central feature of the project, the impacts are justified and have been minimized to the fullest extent possible. Staff supports proposed impact #1.
2a	This 1.37-acre impact is necessary to provide access from MD 214 and cannot be avoided. The location and extent of the proposed impact has been minimized.
2b	This 0.19-acre impact is necessary for the construction of the sewer outfall that will serve the northern end of this site. The outfall has been located to minimize the distance traversed within the PMA. This impact has been minimized.
3a	This 1.20-acre impact is associated with the construction of a stormwater management facility that is necessary to serve the southwestern portion of the site. Because of the topography of this site and the presence of Marlboro clays, the placement of the pond further outside the PMA is not practical without creating other environmental impacts. Therefore, this proposed impact has been minimized.
3b	This 0.04-acre impact is associated with the construction of a sewer outfall to serve the southern end of the property. The proposed impact has been minimized
3c	This 0.45-acre impact is associated with the construction of a sewer outfall to serve the north central portion of this site. Although the alignment of this outfall is indirect, that alignment is dictated by the presence of an Archeology Site. During subsequent reviews it may be possible to provide a more direct route for the outfall connection after a full archeology review has been completed. This proposed impact has been minimized.
4	This 0.34-acre impact is for the construction of a stormwater management outfall necessary to safely convey stormwater through the PMA to the existing stream. This impact has been minimized.

5	This 1.10-acre impact is associated with the construction of a road to access the southwestern portion of the site and for the construction of the clubhouse and swimming pool. The impact associated with the road construction has generally been minimized but could be further minimized. However, the impacts for the clubhouse and swimming pool can be avoided by placing these amenities elsewhere. It must also be noted that this same area has been identified by staff as a potential slope failure area associated with the Marlboro clay found on this site. Therefore, the impact associated with the road construction is supported subject to further minimization during the review of the Detailed Site Plan. The impacts associated with the clubhouse and the swimming pool are not supported and these amenities should be relocated.
6	This 0.96-acre impact is associated with the construction of parking compounds for a proposed office building. The PMA that is being impacted includes a slope area where further minimization of the proposed impacts is practical and avoidance is possible. This proposed impact has not been minimized and is not supported.

The Type I Tree Conservation Plan should be revised to eliminate the portion of PMA Impact #5 associated with the construction of the clubhouse and swimming pool. Also, revise PMA Impact #6 to further minimize and/or eliminate the proposed impact by the use of retaining walls.

The Detailed Site Plan for the area that includes proposed Street 'K' should address the further minimization of the proposed PMA impacts associated with that road layout and construction.

- 21. Prior to the issuance of any grading permits which impact the Waters of the U.S., nontidal wetlands, or the 25-foot wetland buffer, a copy of all appropriate federal and/or State of Maryland permits shall be submitted.**

This condition is to be satisfied prior to the issuance of permits but should be carried forward with this application.

- 22. The proposed PMA impacts shall be further evaluated with each subsequent plan review.**

The PMA impacts proposed by this application have been addressed by staff comments in item 20 above.

- 23. The submittal of the Preliminary Plan of Subdivision shall include a Marlboro Clay Geotechnical Report prepared in accordance with the Prince George's County "Criteria for Soil Investigations and Reports on the Presence and Effect of Marlboro Clay upon Proposed Developments."**

The Geotechnical Study submitted with this application provides information on the location of the Marlboro clay found on this site but does **not** show the location of the unmitigated and mitigated 1.5 safety factor lines on the Type I Tree Conservation Plan or the Preliminary Plan of Subdivision. However, a separate drawing identified as "Marlboro Clay Safety Factor Exhibit A" includes several cross-sections and a line identified as 1.5 safety factor line. That exhibit and other supporting documentation submitted by the applicant has been reviewed. The accepted methodologies used to determine the location of the unmitigated and mitigated 1.5 safety factor lines was not

used in the preparation of these documents. Therefore, the required findings with respect to Section 24-131(a) of the Subdivision Ordinance cannot be made.

Section 24-131(a)

The Planning Board shall restrict or prohibit the subdivision of land found to be unsafe for development. The restriction or prohibition may be due to natural conditions, such as but not confined to, flooding, erosive stream action, high water table, unstable soils, or severe slopes, or to man-made conditions on the property, such as, but not confined to, unstable fills or slopes.

Staff has reviewed the information submitted by the applicant to address the CSP condition of approval and Section 24-131(a) of the Subdivision Ordinance. Based on that information, the applicant identified what appears to be a mitigated 1.5 safety factor line. However, staff has concluded that the methodology used to determine the 1.5 safety factor line is faulty. The standard methodology used to determine the correct 1.5 safety factor line requires the use of Bishop's Curve analysis that factors in the location of the Marlboro clay with respect to the slopes, the grade of the slopes, the physical properties of the clay, the existing topography, and the proposed topography. An alternative method, the Rational Method, may be used to provide a rough estimate of the location of the potential slope failure area and the associated 1.5 safety factor line. The analysis done by the applicant did not use either of these methods to determine the location of the 1.5 safety factor line.

Based on the information submitted with this application staff **cannot** evaluate the layout of the proposed lots located in the vicinity of proposed Lots 1-8, 155-160 and 220-246, Block A; Lots 1-11, 40-41 and 175-187, Block B; and Parcels 71-74 and 79. The exact location of the 1.5 safety factor could affect not only the lots noted above but other adjacent lots. Therefore, it is unreasonable to proceed forward with this application without the information required by Condition 23 of the Conceptual Site Plan. The number of lots, the proposed limit of disturbance, the proposed grading, the number and extent of potential PMA impacts, and the Woodland Conservation requirements could change significantly once the unmitigated and mitigated 1.5 safety factor lines are accurately shown on the plans.

The required findings cannot be made with respect to unsafe land, the number of lots and parcels, the minimization of PMA impacts, or satisfying the requirements of the Prince George's County Woodland Conservation Ordinance until the extent and location of the 1.5 safety factor line is accurately determined. Therefore, the Environmental Planning Section must recommended disapproval of Preliminary Plan 4-04035 and Type I Tree Conservation Plan TCPI/48/02-01.

Before a recommendation of approval can be made, the applicant should submit a revised Geotechnical Report showing the unmitigated and mitigated 1.5 safety factor lines as prepared in accordance with the Prince George's County "Criteria for Soil Investigations and Reports on the Presence and Effect of Marlboro Clay upon Proposed Developments." The applicant should also revise the Preliminary Plan and the Type I Tree Conservation Plan to eliminate all lots located within the limits of the mitigated 1.5 safety factor line.

24. Prior to certification of the Conceptual Site Plan and the Type I Tree Conservation Plan, the following note shall be placed on both plans in large bold type.

“This plan provides a conceptual layout for the proposed development of this site which contains Marlboro clay. The location and characteristics of this clay may affect the developable area of this site.”

This condition has been addressed by the revised TCPI.

- 25. The projected 65 dBA Ldn noise contours for MD 214 and US 301 shall be shown on the Preliminary Plan of Subdivision and the Detailed Site Plans for this site at 311 feet and 409 feet from the centerline, respectively. In the event the Environmental Planning Section noise projections are not used, a Phase I Noise Report shall be prepared and submitted with the Preliminary Plan of Subdivision. If residential lots are located within the limits of the 65 dBA Ldn noise contour appropriate mitigation measures shall be identified by a Phase II Noise Study at the time of Detailed Site Plan.**

This condition has been addressed by the revised TCPI and Preliminary Plan of Subdivision which reflect the location of the unmitigated 65 dBA Ldn noise contours for MD 214 and US 301.

Woodland Conservation

A Detailed Forest Stand Delineation (FSD) was previously reviewed in conjunction with the approval of the Conceptual Site Plan, CSP-02004. At that time the Forest Stand Delineation was found to address the requirements of a Detailed Forest Stand Delineation in accordance with the Prince George's County Woodland Conservation Ordinance. Because the prior approval occurred within the last two years and no significant changes have occurred, a revised FSD is not required. No further information is required with respect to the Forest Stand Delineation.

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, there are more than 10,000 square feet of existing woodland on-site, and there are no previously approved Tree Conservation Plans for this site.

The revised Type I Tree Conservation Plan, TCPI/48/02-01, date stamped as received by the Environmental Planning Section on July 19, 2004, was reviewed and was found to address the requirements of the Prince George's County Woodland Conservation Ordinance. However, because of the Marlboro clay on this site and the fact that the unmitigated and mitigated 1.5 safety factor lines have not been accurately shown on the plans, it is impossible to determine if the plan as submitted adequately addresses the overall site requirements.

This 381.52-acre property has a net tract area of 316.80 acres and a Woodland Conservation Threshold (WCT) of 15 percent, or 47.52 acres. There are additional ¼:1, 1:1 and 2:1 replacement requirements totaling 49.24 acres associated with the clearing of woodlands above the WCT, clearing woodlands in the 100-year floodplain, and clearing woodlands for off-site infrastructure improvements. The plans as currently submitted propose to satisfy the 96.76-acre requirement with 48.37 acres of on-site preservation in priority retention areas and 48.39 acres of off-site mitigation at a location to be determined. Because of the presence of the Marlboro clay and plan revisions that may be required once the 1.5 safety factor line is accurately located, these requirements could change.

Patuxent River Primary Management Area

Streams, wetlands, 100-year floodplain, severe slopes in excess of 25 percent, and steep slopes between 15 and 25 percent with high erodible soils are found on this property. These features along with their respective buffers compose the Patuxent River Primary Management Area or PMA. Each of these features and the associated buffers are clearly shown on the plans along with the ultimate limit of the PMA. Although a copy of the wetland study was submitted for review, a copy of the 100-year floodplain study was not submitted with this application. The Environmental Planning Section concurs with the conclusions of the wetland study with respect to the presence and extent of the wetlands on this site. Although a 100-year floodplain study was not submitted, the information available to the Environmental Planning Section indicates that the 100-year floodplain as shown on the plans is generally accurate and is contained within the limits of the 50-foot stream buffer.

The Subdivision Ordinance, Section 24-130(b)(5) requires that the PMA be preserved in a natural state to the fullest extent possible. A Letter of Justification, date stamped as received by the Environmental Planning Section on July 19, 2004, was reviewed and found to address each of the proposed PMA impacts. The TCPI and Letter of Justification propose a total of nine PMA impacts including two impacts for stormwater management outfalls, three impacts for sewer outfalls, one for road construction, one for the proposed lake, one for a parking lot, and one that includes a road, swimming pool and clubhouse. Each of the proposed impacts was addressed in detail with Conceptual Site Plan Condition 20 above. It must be noted that the impacts associated with the construction of the swimming pool and clubhouse could easily be avoided by relocating these facilities elsewhere. The proposed impacts associated with the parking compound can be further minimized or avoided and the impacts associated with proposed Street 'K' can be further minimized.

Water and Sewer Categories

The Water and Sewer Categories are W-3 and S-3 according to water and sewer maps dated June 2003 obtained from the Department of Environmental Resources. The property will be served by public systems.

3. **Community Planning**—The property is in Planning Area 74A/Employment Area. It is in the Developing Tier as described by 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. This preliminary subdivision plan for the development of a mixed-use planned community is generally consistent with the 2002 General Plan Development Pattern goals and policies for land use in the Developing Tier.

The Bowie-Collington-Mitchellville & Vicinity Master Plan (1991) designates this property as part of Employment Area 6. It was formerly known as the Collington Corporate Center and has an approved Basic Plan and Comprehensive Design Plan. The Basic Plan approved a maximum potential of 4.5 million square feet of development. The master plan shows private open space areas surrounding the property in the northern, western, central, and southern portion of the property. Also, the plan recommends a trail connecting the internal road network to a trail along Collington Branch Stream Valley Park. The Bowie-Collington-Mitchellville & Vicinity Sectional Map Amendment (1991) retained the E-I-A Zone. Subsequently, Council Bill CB-13-2002 defined and permitted a Mixed-Use Planned Community in the E-I-A Zone. This preliminary subdivision plan does not conform to the Bowie-Collington-Mitchellville & Vicinity

Master Plan, which recommends employment land use for the subject property. However, Council Bill CB-13-2002 defined a mixed-use planned community as a permitted use for employment areas classified in the E-I-A Zone. Subsequently, Conceptual Site Plan CSP-02004 approved this type of development for the site.

4. **Parks and Recreation**—The proposed subdivision is subject to the mandatory park dedication requirements of Section 24-134 of the Subdivision Regulations. To meet this requirement, the applicant proposes a significant amount of land dedication and on-site private recreational facilities. The locations and amounts of facilities will be determined at the Detailed Site Plan stage.
5. **Trails**—Two master plan trails impact the subject site. The Adopted and Approved Bowie-Collington-Mitchellville and Vicinity Master Plan recommends that a multiuse trail be constructed along the length of the subject property's frontage of Collington Branch. The Department of Parks and Recreation has acquired land for the construction of this trail in other segments of the stream valley, and a portion of the trail has been approved for construction as part of the Beech Tree subdivision to the south of the subject site. This trail is reflected on the submitted preliminary plans along most of the length of the Collington Branch, with several connections into the community. The preliminary plan reflects the extension of the master plan trail to MD 214, as suggested in Condition 28 of the approved CSP. Conditions related to this trail were included in the resolution for the CSP and are reiterated below.

The master plan also recommends a connector trail from the stream valley trail into the subject site. Numerous connector trails are shown, with major connections shown to the lake and along the southern edge of the subject site. These connections meet the intent of the master plan. It is recommended that the major connector trails (from the stream valley trail to the lake and along the southern edge of the subject site) be a minimum of eight feet wide and asphalt.

In-road bicycle facilities (such as designated bicycle lanes or wide outside curb lanes) were recommended along the site's primary loop road at the time of CSP and have been reflected on the preliminary plan by the applicant. The exact nature of these facilities should be determined at the time of DSP. The CSP condition regarding these facilities has been reiterated below.

Staff is particularly concerned about some of the road cross sections reflecting on-street parking. Street Sections C and E both reflect 36 feet of pavement for two travel lanes (one each way) and on-street parking on both sides. Assuming that 11-foot-wide travel lanes are used, this only allows seven feet of space for the parked vehicles and bicycle traffic. Similarly, Street Section D (a two-way street with parking on one side) appears to allow for only six feet for the parking lane. The *1999 AASHTO Guide for the Development of Bicycle Facilities* recommends a minimum of 11 feet for on-street parking with bicycle traffic. This allows for sufficient space for bicycle movement outside of the travel lane, while minimizing conflict with people getting into and out of the parked cars. Street Section I allows an additional four feet for the outside curb lane (or parking lane), which appears to be more adequate to accommodate all users and allows for a wider parking lane. Roads intended for use as bicycle facilities should include adequate space to accommodate bicycle traffic, in keeping with the guidelines contained in AASHTO.

It is also recommended that the subject site be developed in a manner that is pedestrian and bicycle compatible. Discussion involving this occurred during the CSP phase of the proposal. This can be accomplished through a comprehensive network of sidewalks and trails linking all portions of the development to the master plan trail, recreation facilities, retail areas, and the lake. The applicant has proposed the construction of the master plan trail, a network of neighborhood

trail connectors, and in-road bicycle facilities. Standard and wide sidewalks will further enhance this network. These facilities are reflected on the subject application and meet the requirements for the approved resolution for CSP-02004.

The network of proposed trails is comprehensive and links all of the areas of open space within the subject site. All of the main corridors of open space (greenways) are utilized as trail corridors and all portions of the subject site have access to the trail along the stream valley. The exact location, surface type, and width of all trails should be indicated at the time of Detailed Site Plan. Additional neighborhood trail connections shown on the Pedestrian Path Diagram (at the time of CSP) were not included on the preliminary plan. Staff recommends that these connections be added to the preliminary plan, as they will provide important connections from the residential community to the trail network, including the master plan trail. At the time of detailed site plan for the area around the lake, numerous pedestrian connections to the trail around the lake should be shown, whether these are sidewalk connections or neighborhood connector trails.

Sidewalk Connectivity

The sidewalk network proposed at the time of CSP is comprehensive and will facilitate safe pedestrian movement throughout the subject site. Wide sidewalks are shown along Main Street and Restaurant Road. The partial grid street pattern will also serve to make a pedestrian- and bicycle-friendly environment by creating direct connections and dispersing motor vehicles somewhat throughout the site. Additional pedestrian safety measures such as pavement markings, signage, raised crosswalks, and curb bump-outs should also be considered at the time of Detailed Site Plan. A detailed analysis of the pedestrian network and pedestrian safety measures will occur at the time of DSP.

6. **Transportation**—The transportation staff determined that a traffic study detailing weekday analyses was needed. In response, the applicant submitted a traffic study dated July 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) were received on the same study during review of Conceptual Site Plan CSP-02004 and were addressed at that time.

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, and other facilities: 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 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 the conceptual site plan examined the site impact at seven intersections in the area:

- MD 214/Church Road
- MD 214/Hall Road/site entrance (unsignalized)
- MD 214 SB/Old Central Avenue (unsignalized)
- MD 214 NB/Old Central Avenue (unsignalized)
- US 301 SB/median break/site entrance (unsignalized)
- US 301 NB/median break/site entrance (unsignalized)
- US 301/Trade Zone Avenue

The City of Bowie expressed a concern during review of the Conceptual Site Plan about the two left-hand merges onto US 301 from MD 214. Staff did communicate this concern to the applicant, but the analyses of these merges were not included in the traffic study. The staff analysis includes service levels for these two merges (from EB MD 214 onto NB US 301 and from WB MD 214 onto SB US 301).

Also, the traffic study did not include traffic information at the location where the main site access onto US 301 is proposed. The study merely assumes that the through trips along US 301 and the applicant's trips are the only trips at that location. However, that location currently exists as a median break that serves as access to a large gas station and convenience store. Based on older counts at this location, the staff analysis includes this use as a base case.

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 214 and Church Road	1,196	924	C	A
MD 214 and Hall Road/site entrance	562.8*	49.5*	--	--
MD 214 SB and Old Central Avenue	70.2*	73.6*	--	--
MD 214 NB and Old Central Avenue	107.0*	170.0*	--	--
US 301 SB and site entrance/existing median break	20.4*	23.5*	--	--
US 301 NB and site entrance/existing median break	25.2*	30.5*	--	--
US 301 and Trade Zone Avenue	1,075	1,259	B	C
Merge of MD 214 EB onto US 301 NB	No CLV		B	B
Merge of MD 214 WB onto US 301 SB	No CLV		B	B
*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 approximately 2.7 million square feet of nonretail space as well as over 1,500 residences. Background conditions also assume the widening of US 301 between MD 214 and MD 725, which is shown in the current county Capital Improvement Program (CIP) with 100 percent funding within six years. Full funding in this circumstance includes an assumption that the majority of funding would come from developer contributions and from the State of Maryland. The widening of US 301 is assumed with the provision that area developments would contribute to the funding of the improvements.

Background conditions, with the US 301 CIP improvement in place, are summarized below:

BACKGROUND TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 214 and Church Road	1,618	1,471	F	E
MD 214 and Hall Road/site entrance	+999*	496.5*	--	--
MD 214 SB and Old Central Avenue	+999*	+999*	--	--
MD 214 NB and Old Central Avenue	+999*	+999*	--	--
US 301 SB and site entrance/existing median break	46.2*	34.2*	--	--
US 301 NB and site entrance/existing median break	35.7*	123.0*	--	--
US 301 and Trade Zone Avenue	1,008	1,322	B	D
Merge of MD 214 EB onto US 301 NB	No CLV		B	C
Merge of MD 214 WB onto US 301 SB	No CLV		C	C
*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 mixed-use community. The proposal described in the submitted traffic study is as follows:

Phase I/Phase II/Total (2009/2013)

- 110/60/170 single family detached residences
- 177/95/272 townhouse residences
- 554/298/852 high-rise apartment/condo residences
- 200,000/100,000/300,000 square feet retail
- 455,000/245,000/700,000 square feet “office”
- 200/100/300 hotel rooms
- 0/250/250 student school

To a small degree, the quantities in the traffic study do not match those shown on the preliminary plan. The preliminary plan shows 161 single-family detached residences and 302 townhouses. Nonetheless, the Conceptual Site Plan is approved with a firm trip cap, meaning that the various uses can change in quantity but the total trip generation of the site must remain within the cap. With slightly more trips generated by the lotted residential component, one of the other components of the site must decrease slightly in order to meet the mandated trip cap.

Therefore, site trip generation shown in the traffic study is determined to be acceptable and takes into account rates of internal trip satisfaction (due to the fact that the site is proposed for mixed-use development) as well as pass-by trips for retail. The site trip generation is 1,313 AM peak-hour trips (669 in, 644 out) and 1,925 PM peak-hour trips (954 in, 971 out). The site trip distribution and assignment used in the traffic study has been reviewed, and it should be revised to reflect the following:

- a. The assignment did not specifically include the assignment of pass-by trips. While these types of trips do not have an impact on intersections far away from the site, they could have a significant impact on intersections adjacent to the site.
- b. The retail assignment used the same trip distribution as was used for office. This is not appropriate, as the potential retail market is within the immediate area, while employees are likely to come from farther away. A greater portion of the retail assignment should have been directed toward Hall Road and toward Church Road, with less from the south and east of the site.
- c. A portion of potential employees on the site and potential students on the site could come from south Bowie via Hall Road. Similarly, there are services in south Bowie that residents within the community would access via Hall Road. There is a strong justification for a small assignment of three percent of site trips for these uses to be oriented toward Hall Road to the north of the site.

It should be noted that the traffic study utilizes “industrial park” trip rates from the guidelines rather than general office trip rates. This is acceptable, and the site will be capped on the trips rather than the square footage. A number of minor errors have also been observed in the total traffic assignment shown in the traffic study. With the revised trip distributions and assignments, the following results are obtained under total traffic for each phase of development:

TOTAL TRAFFIC CONDITIONS – Phase I				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 214 and Church Road	1,618	1,471	F	E
MD 214 and Hall Road/site entrance	+999*	+999*	--	--
MD 214 SB and Old Central Avenue	+999*	+999*	--	--
MD 214 NB and Old Central Avenue	+999*	+999*	--	--
US 301 SB and site entrance/existing median break	+999*	+999*	--	--
US 301 NB and site entrance/existing median break	+999*	+999*	--	--
US 301 and Trade Zone Avenue	1,038	1,393	B	D

Merge of MD 214 EB onto US 301 NB	No CLV	C	C
Merge of MD 214 WB onto US 301 SB	No CLV	C	C
*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.			

TOTAL TRAFFIC CONDITIONS – Phase II				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 214 and Church Road	1,767	1,471	F	E
MD 214 and Hall Road/site entrance	+999*	+999*	--	--
MD 214 SB and Old Central Avenue	+999*	+999*	--	--
MD 214 NB and Old Central Avenue	+999*	+999*	--	--
US 301 SB and site entrance/existing median break	+999*	+999*	--	--
US 301 NB and site entrance/existing median break	+999*	+999*	--	--
US 301 and Trade Zone Avenue	1,084	1,447	B	D
Merge of MD 214 EB onto US 301 NB	No CLV		D	D
Merge of MD 214 WB onto US 301 SB	No CLV		C	C
*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, several intersections within the study area would operate unacceptably in one or both peak hours. Each of these intersections is discussed in a separate section below.

MD 214/Church Road

In response to the inadequacy at the MD 214/Church Road intersection, the applicant has proffered mitigation in accordance with the Guidelines for Mitigation Action and the requirements of that portion of Section 24-124. The applicant proposes to employ mitigation by means of the fifth criterion in the Guidelines for Mitigation Action, which were approved by the District Council as CR-29-1994. Criterion (e) is very complex and is restated below:

The development is located in an area in which public water and sewer is currently available, which meets all adequate public facilities findings (except those for transportation) with existing facilities or facilities having 100 percent construction funding in the county or state programs,

and which is within ½ mile of a bus stop having 15-minute headways or better and load factors of 100 percent or less.

Each element of that requirement is discussed below:

- a. The development is in an area where public water and sewer is currently available. This is clear from all information provided.
- b. In accordance with the District Council's action on CDP-9902 and CDP-9903 approving Oak Creek Club, it was determined that the acceptance by an applicant of conditions that would provide adequacy for public facilities was an acceptable basis for approving the use of mitigation. Therefore, regardless of any determination of the adequacy of schools for the subject case, as long as appropriate conditions for adequacy are imposed, mitigation can be employed.
- c. The entire site must be within ½ mile of bus services having quality and capacity. The quality of service is defined by a 15-minute headway—in other words, a bus must operate every 15 minutes during peak hours. Also, the bus service must operate with a load factor of 100 percent or less, wherein a load factor of exactly 100 percent means that every seat on the bus, on average, is full (which leaves all standing room available for additional patrons). In this case, the applicant has provided a statement of intent to (a) seek service of the site by existing public bus services that currently operate at the periphery of the site; or (b) to provide services that will meet the requirements to utilize mitigation. This is somewhat similar to Oak Creek Club, and the District Council's action on CDP-9902 and CDP-9903 approving Oak Creek Club serves as a determination that this type of proffer is an acceptable basis for approving the use of mitigation.

In this circumstance, the applicant's proffer carries as much credibility as that for Oak Creek Club—if not more—for the following reasons:

- (1) The services at the intersection of MD 214 and Hall Road operate every 15 minutes, meaning that a portion of the site is already within the ½-mile distance required by the guidelines.
- (2) The mixed-use nature of the development, along with the density of residential development, would make the site a good candidate for extending existing bus services. Likewise, these same features could also make private bus services more viable.
- (3) The layout of the site makes it very easy to serve with either a through route or a route that circulates through the site.

Given the determinations above, and particularly given the District Council's approval of a case having a similar situation, the site is deemed eligible to employ mitigation at the MD 214/Church Road intersection.

The applicant recommends the improvements described below to mitigate the impact of the applicant's development in accordance with the provisions of Section 24-124(a)(6). The improvements include:

- a. The addition of a northbound left-turn lane along Church Road.

- b. The addition of an eastbound left-turn lane along MD 214.
- c. The addition of a westbound left-turn lane along MD 214.
- d. Restriping the eastbound right-turn lane along MD 214 to operate as a shared through/right-turn lane, thereby resulting in a third eastbound through lane.

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 214/Church Road				
Background Conditions	F/1657	E/1500		
Total Traffic Conditions—Phase I and II	F/1767	F/1679	+110	+179
Total Traffic Conditions w/Mitigation	E/1598	C/1293	-169	-386

There are options for improving this intersection to LOS D, the policy level of service at this location. Providing a third westbound through lane along MD 214 through the intersection would result in LOS D in the AM peak hour. While this action would pose operational problems to the west of the intersection where three lanes would merge back to two, it would appear that the operational problems would be no greater than those posed by providing the third eastbound through lane, as proffered above.

As the CLV at MD 214/Church is between 1,450 and 1,813 during either peak hour, the proposed action must mitigate at least 150 percent of the trips generated by the subject property, according to the guidelines. The above table indicates that the proposed action would mitigate at least 150 percent of site-generated trips during each peak hour, and it would provide LOS D during the PM peak hour. Therefore, the proposed mitigation at MD 214 and Church Road meets the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.

The mitigation plan was reviewed by DPW&T and SHA. DPW&T had no comments. SHA did review these improvements in connection with a previous application and deemed them to be acceptable.

MD 214/Hall Road and site entrance

The traffic study proffers signalization at this location, along with a lane configuration that includes three northbound approach lanes and turn lanes into the site on the eastbound and westbound approaches on MD 214. With a signal in place, the intersection would operate at LOS D, with a CLV of 1,422 during the AM peak hour. Similarly, the intersection would operate at LOS D, with a CLV of 1,417 during the PM peak hour. This is acceptable.

US 301/Old Central Avenue

The traffic study proffers signalization at this location, which is actually two separate intersections along the northbound and southbound lanes of US 301. With signals in place at

each location, the intersections would both operate at LOS B during the AM peak hour. Similarly, the intersections would operate at LOS A (the one along southbound US 301) and LOS C (the one along northbound US 301) during the PM peak hour. This is acceptable.

US 301/Site Entrance

The traffic study proffers signalization at this location, which is actually two separate intersections along the northbound and southbound lanes of US 301. The analysis also assumes a three-lane eastbound approach from the site, with one lane turning southbound along US 301 and the remaining two lanes continuing across southbound US 301 and continuing to dual northbound left-turn lanes at northbound US 301. With a signal in place, the southbound US 301 intersection would operate at LOS D, with a CLV of 1,307 during the AM peak hour. Similarly, the intersection would operate at LOS C, with a CLV of 1,267 during the PM peak hour. With a signal in place at the intersection along northbound US 301, the intersection would operate at LOS B, with a CLV of 1,030 during the AM peak hour. Similarly, the intersection would operate at LOS D, with a CLV of 1,418 during the PM peak hour. This is acceptable.

Merge of ramp from MD 214 eastbound onto US 301 northbound

During review of the Conceptual Site Plan, the Highway Capacity Manual analysis indicated that this merge would operate at LOS E during the PM peak hour under total traffic. The length of this merge lane was severely constrained. The merge has recently been lengthened, however, to a length of 400 feet with an extended taper, and per new computations does operate acceptably given future traffic volumes. Therefore, recent construction has satisfied this condition, and it will not be carried forward.

US 301 between MD 214 and MD 725

As noted earlier, background conditions also assume the widening of US 301 between MD 214 and MD 4, which is shown in the current county Capital Improvement Program (CIP) with 100 percent funding within six years. Full funding in this circumstance includes an assumption that the majority of funding would come from developer contributions and from the state. The widening of US 301 is assumed with the provision that area developments would contribute to the funding of the improvements.

CIP Project FD669161 (US 301 Improvements) provides that \$21,550,000 in construction funds will be provided by “other” sources, which is further described as being developer contributions and the State of Maryland. Another \$2.5 million is specifically proposed to come from developer funding. The current CIP makes no reference regarding what portion of the \$21.55 million will come from the State of Maryland versus the development community. However, in a February 1998 letter to the Planning Board, the Deputy Chief Administrative Officer of Prince George’s County advised that it was, at that time, still the intent of the county to obtain \$2.5 million in developer contributions. The cost estimate used for this project was based on 2nd quarter 1989 data. Based on the county’s letter, staff has identified participating developments and the associated share of project contributions along the US 301 corridor. To date, the following developments have made financial commitments towards the aforementioned CIP improvements through Planning Board resolutions:

Collington South	4-97044	PB97-214(C)	\$456,000.00
Marlboro Square	4-96084	PB96-342	\$30,880.00
Meadowbrook	4-89227	PB90-102	\$106,948.31
Beech Tree	CDP-9706	PB98-50	\$1,194,805.08

TOTAL			\$1,788,633.39
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Under CDP-9706 for Beech Tree, the application generated an average of 1,600 vehicle trips per peak hour along US 301. That property was required to pay \$1,194,805, or \$746.75 per trip.

The subject application would generate an average of 971 vehicle trips per peak hour along US 301. Using the same dollar payment per trip, the Conceptual Site Plan was approved with a requirement to pay \$725,094.25 toward the CIP project. However, the Conceptual Site Plan was approved by the Planning Board and affirmed by the District Council with permission to install a number of improvements that could be credited against the amount paid, with the pro rata to be paid only if the necessary right-of-way is not available. The improvements included in that list are:

- a. **The traffic signal warrant studies and potential signalizations at the US 301/Old Central Avenue intersections.** It is currently unclear whether signals will be warranted due to the low side street traffic volumes. As this is an operational issue and not an improvement for which right-of-way would generally be needed, this should not be included in the list of improvements that can be credited against a pro-rata payment.
- b. **The proposed improvements at the merge of MD 214 eastbound onto northbound US 301.** This memorandum determines that this improvement has been constructed and need not be carried over. Therefore, this certainly will not be credited against a pro-rata payment.
- c. **The addition of a third through lane southbound along US 301 between the MD 214 ramp and Trade Zone Avenue.** It should be noted that SHA can require (as they have in many cases around the county), as a part of access approval, a third through lane along the 3,800 feet that composes the subject property's frontage along US 301. In other words—pro rata or not—this applicant would have to build most of the third lane along this frontage. It is clearly not supportable to allow a credit against off-site responsibilities the costs that would be needed to provide access to the site.

Therefore, it will be recommended at this stage of approval that the approved pro rata be strictly a payment toward off-site and unfunded widening of US 301. It must be noted that, while there are significant impacts along southbound US 301 that the applicant is helping to alleviate, the impacts along northbound US 301 are equal and opposite, and there are minimal improvements being done to alleviate those impacts. That is the purpose of the pro-rata payment.

Consistency With Conceptual Site Plan

Prior application CSP-02004 contains a number of transportation-related conditions. The status of the transportation-related conditions, as provided in the District Council's order affirming the Planning Board's decision on the case, is summarized below:

- Condition 3: This condition requires that rights-of-way for the master plan facilities be determined at the time of preliminary plan. This has been done.
- Condition 4: This condition requires roadway improvements at the MD 214/Church Road intersection. Identical conditions will be recommended for this plan, and they will be enforceable at the time of building permit.
- Condition 5: This condition requires the provision of a traffic signal warrant study at the MD 214/Hall Road/north site access intersection prior to Detailed Site Plan. This condition also requires roadway improvements at that location. Identical conditions will be recommended for this plan, and they will be enforceable at later approval stages.
- Condition 6: This condition requires the provision of a traffic signal warrant study at the US 301/Old Central Avenue intersections prior to Detailed Site Plan. Identical conditions will be recommended for this plan, and they will be enforceable at later approval stages.
- Condition 7: This condition requires the provision of a traffic signal warrant study at the US 301/east site access intersection prior to Detailed Site Plan. This condition also requires roadway improvements at that location. Identical conditions will be recommended for this plan, and they will be enforceable at later approval stages.
- Condition 8: This condition requires the modification and lengthening of the merge from eastbound MD 214 to northbound US 301. The merge area has recently been lengthened to 400 feet with an extended taper and found to be acceptable under total traffic. Therefore, this condition is deemed to be satisfied and will not be carried forward.
- Condition 9a: This condition requires provision of a third through lane of a length of 6,800 linear feet along southbound US 301. Approximately 3,800 feet of this lane is along the frontage of the subject property, and this portion can reasonably be requested of the applicant by SHA as a part of frontage/access-related improvements. An identical condition will be recommended for this plan, and it will be enforceable at the time of building permit.
- Condition 9b: This condition requires acceleration and deceleration lanes along northbound US 301 at the east site access. This improvement can reasonably be requested of the applicant by SHA as a part of frontage/access-related improvements. An identical condition will be recommended for this plan, and it will be enforceable at the time of building permit.
- Condition 9c: This condition allows the applicant to pay a pro-rata fee toward the widening of US 301. It allows this payment in the event that right-of-way for improvements listed in Conditions 6, 8, and 9a is not available. Furthermore, the condition

allows the costs of these improvements to be credited against the pro-rata fee. The condition finally states that the scope of improvements along US 301 shall be determined at the time of preliminary plan. The determination has been made, and the condition will be carried forward in amended form in accordance with the earlier discussion in this memorandum.

- Condition 10: This condition states that off-site traffic improvements may be altered or modified at the time of preliminary plan dependent upon phasing schedules. The applicant has forwarded no change in the phasing schedule, and no change is proposed herein.
- Condition 11: This condition sets trip caps for Phases I and II. This condition will be enforced with subsequent applications, and will be carried forward with this plan.
- Condition 12: This condition requires further review of proposed street sections. The portion of the development on the north and west sides of the proposed lake is proposed to be private streets, and the sections proposed in these areas are acceptable. However, the typical sections for street types B, C, E, F, and I are all proposed for public streets, and each type is slightly nonstandard. It does not appear that DPW&T approval of the revised typical sections has been received. This issue must be resolved prior to signature approval of the preliminary plan.
- Condition 13: This condition requires the provision of a street of type E along the north side of the lake. The current plan shows this street; therefore, the condition is met.
- Condition 14: This condition requires the provision of documentary evidence of service by public transportation. This evidence is required as a means of establishing the geographic applicability of the fifth criterion for the use of mitigation. This documentary evidence has not been received to date, but is required to be submitted and reviewed prior to signature approval of the subject plan.

Plan Comments

MD 214 is a master plan expressway, and existing southbound US 301 is a master plan arterial facility. Existing rights-of-way along both facilities is sufficient to accommodate future recommendations. It is noted that the master plan recommends a future interchange at MD 214 and Hall Road, and the preliminary plan makes no provision for right-of-way for the ramps and overpass associated with this interchange. The area where the interchange is planned is shown on the plan as green space adjacent to a possible hotel site. Since no development is intended at this location by either the conceptual or the preliminary plan, it could be purchased by SHA (or some other public agency) at the time that an interchange becomes needed. Because there is no current need for adequacy nor is there any conceptual plan for the interchange, dedication is not required.

Additionally, the master plan shows an extension of Prince George's Center Boulevard (I-2) onto the subject property. This facility and connection were not reflected on the approved conceptual site plan. In general, sub-collector roadways are shown on master plans as a means of addressing specific land and access needs of the plan. The I-2 facility is viewed as a roadway that was intended to link the employment-oriented land uses of Collington Corporate Center to the larger Collington Center development. It was not intended as an alternate route for trucks to access Collington Center; MD 214 is not a commercial corridor outside of the Capital Beltway, and Collington Center already has other access points onto US 301, which is a more appropriate

facility for truck access. And while future peak-hour traffic could become very heavy at Trade Zone Avenue, there will be another access point onto US 301 between Trade Zone Avenue and Leeland Road. With the proposed site plan, the Collington Corporate Center property will change from a strictly employment/industrial site to a residential/mixed-use site. In general, master plan recommendations attempt to separate industrial traffic from communities. In considering the change that the subject plan presents, the extension of I-2, besides being unneeded, may actually be undesirable.

The general circulation plan is mostly acceptable. However, the subdivision plan indicates three public street access points onto the site from southbound US 301. It is also noted that the key map used for identifying proposed typical sections indicates the possibility of a driveway access to US 301 in the vicinity of Parcel 60. Any access point must be approved by SHA. However, given that southbound US 301 is identified as a future arterial facility, any driveways must be reviewed as a variation request from Section 24-121(a)(3). No such variation request has been filed or reviewed. Therefore, access onto US 301 southbound from the subject property shall be limited to proposed Streets B, G, and J, as labeled on the plan. Record plats shall indicate access denial for individual lots onto US 301 southbound (and MD 214).

Transportation Issue Conclusions

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

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003. (The following figures are without the Condo/High Rise Apartment units. Those units will be included in the findings at a later date.)

Impact on Affected Public School Clusters

Affected School Clusters #	Elementary School Cluster 3	Middle School Cluster 2	High School Cluster 2
Dwelling Units	463 sfd	463 sfd	463 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	111.12	27.78	55.56
Actual Enrollment	6,141	5,131	10,098
Completion Enrollment	198.24	217.62	398.97
Cumulative Enrollment	167.76	123.72	247.44
Total Enrollment	6,618.12	5,500.12	10,799.97
State Rated Capacity	5,858	4,688	8,770
Percent Capacity	112.98%	117.32%	123.15%

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

These figures were 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 that will be used 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 amounts of \$7,000 per dwelling if a building is located between I-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 an 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.

This project meets the adequate public facilities policies for school facilities contained in Section 24-122.02, CB-30-2003 and CB-31-2003, and CR-23-2003. The school surcharge may be used for the construction of additional or expanded school facilities and renovations to existing school buildings or other systemic changes.

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

Residential (single-family)

- a. The existing fire engine at Bowie Fire Station, Company 43, located at 16400 Pointer Ridge Drive, has a service travel time of 3.37 minutes, which is within the 5.25-minute travel time guideline.
- b. The existing ambulance at Bowie Fire Station, Company 43, has a service travel time of 3.37 minutes, which is within the 6.25-minute travel time guideline.
- c. The existing paramedic at Bowie Fire Station, Company 43, has a service travel time of 3.37 minutes, which is within the 7.25-minute travel time.

The residential portion of the proposed subdivision will be within the adequate coverage area of the nearest existing fire/rescue facilities for fire engine, ambulance and paramedic services.

Commercial (and multifamily residential)

- a. The existing fire engine service at Bowie Fire Station, Company 43, located at 16400 Pointer Ridge Drive, has a service travel time of 3.37 minutes, which is within the 3.25-minute travel time guideline.
- b. The existing ambulance service at Bowie Fire Station, Company 43, has a service travel time of 2.77 minutes, which is within the 4.25-minute travel time guideline.
- c. The existing paramedic service at Bowie Fire Station, Company 43, has a service travel time of 3.37 minutes, which is within the 7.25-minute travel time guideline.
- d. The existing ladder truck service at Bowie Fire Station, Company 39, located at 15454 Annapolis Road, has a service travel time of 11.55 minutes, which is beyond the 4.25-minute travel time guideline.

These findings are in conformance with the standards and guidelines contained in 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.

9. **Police Facilities**—The proposed development is within the service area for Police District II-Bowie. 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 January 2, 2004, the county had 823 sworn staff and a total of 101,303 square feet of station space. Based on available space, there is capacity for an additional 57 sworn personnel. This police facility will adequately serve the population generated by the proposed subdivision.
10. **Health Department**—The Health Department noted the presence of domestic trash, an abandoned truck and house trailer, and scrap tires on the property. The trash and debris must be disposed of properly. The tires must be hauled by a licensed scrap tire hauler to a licensed scrap tire disposal/recycling facility. A receipt must be turned in to the Health Department.
11. **Stormwater Management**—The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. A Stormwater Management Concept Plan, #26947-2002-00, has been approved with conditions to ensure that development of this site does not result in on-site or downstream flooding. This plan incorporates the Low Impact Development technique. The approval was valid through June 30, 2004. A new Stormwater Management Concept Plan must be approved prior to signature approval of the preliminary plan.
12. **Cemeteries**—The property is part of *Willow Brook*, the antebellum plantation of the Clarke family. The Clarke family cemetery on part of this property was previously moved to St. Barnabas' church. The applicant should be alert to possible additional burials. In addition, documentary and archeological investigation should be required to determine whether there exists physical evidence of slave dwellings or burials or other significant archeological resources.
13. **Public Utility Easement**—The preliminary plan does not include the required ten-foot-wide public utility easement parallel and contiguous to all public rights-of-way. Prior to signature approval the preliminary plan must be revised to show this easement. The easement will be included on the final plat.

RECOMMENDATION

DISAPPROVAL, based on unresolved environmental issues.