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



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

# Preliminary Plan 4-08012

Application	General Data	
Project Name:	Date Accepted:	12/11/08
Walker Pontiac	Planning Board Action Limit:	03/06/09
	Plan Acreage:	5.5782
Location:	Zone:	C-M
1,650 feet north of the intersection of Crain Highway and Mitchellville Road. Applicant/Address: LIA Bowie, LLC 2501 NW Crain Highway Bowie, MD 20716 Property Owner: LIA Bowie, LLC	Gross Floor Area:	37,700 sq. ft.
	Lot:	1
	Parcels:	0
	Planning Area:	74B
	Tier:	Developing
	Council District:	04
	Municipality:	Bowie
	200-Scale Base Map:	203NE14

Purpose of Application	Notice Dates	
Commercial Subdivision	Informational Mailing:	10/14/08
	Acceptance Mailing:	12/05/08
	Sign Posting Deadline:	04/03/09

Staff Recommendatio	n	Staff Reviewer:Ray I	Jubicki
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, 4-08012 Walker Pontiac, Parcel 7

#### OVERVIEW

The subject property is located on Tax Map 63, Grid D2 and is known as Parcel 7 of the Walker Pontiac subdivision. The total site area is 5.58 acres and zoned Miscellaneous-Commercial (C-M). The applicant proposes to construct a 37,700-square-foot automobile dealership on the site.

The property has been the subject of two prior preliminary plans. Preliminary Plan of Subdivision 4-91054 created Lot 7 as "Outparcel A". This plan was adopted by PGCBC Resolution No. 91-393(C) on November 21, 1991, and recorded as plat REP 192 @ 37. Preliminary Plan of Subdivision 4-04046 removed the outparcel designation and approved the property for development of a 37,700-square-foot automobile dealership. The plan was adopted by resolution 04-210 on September 9, 2004 and recorded as plat PM 228 @ 82.

The site fronts on US 301 and access is provided by an existing driveway. The access is shared with the neighboring property to the north which has an existing driveway easement to cross this part of the site. This easement is recorded in the Prince George's County Land Records at Liber 15006, Folio 347. This easement does not constitute a street per the Zoning Ordinance as it has been created under Section 24-127(b)(9) of the Subdivision Regulations to avoid potentially hazardous or dangerous traffic situations. Review of all past preliminary plans did not reveal any prior variations or alternate authority for creating this easement. Section 24-121(a)(3) of the Subdivision Regulations requires lots adjacent to an existing or planned roadway of arterial or higher classification to be designed to front on either an interior street or service road. The property requires a variation. A variation was not applied for with this preliminary plan.

The property is adjacent to the City of Bowie. On April 20, 2009, the Bowie City Council conducted a public hearing on this preliminary plan. The City Council voted unanimously to recommend approval of the plan with conditions. The comments of the City are attached to this technical staff report.

The applicant proposes to use traffic mitigation measures to achieve adequate public road facilities. The Maryland State Highway Administration (SHA) in a memo dated March 27, 2009, requires additional analysis before it is able to accept or approve the proposed mitigation for the site. Based on this lack of information, the Transportation Planning Section cannot conclude that adequate access roads will exist as required by Section 24-124 of the Subdivision Regulations of the Prince George's County Code.

Traffic issues have been repeated at every prior approval for this site. Condition 5 of PGCPB Resolution No. 91-393(C) states:

Any development proposed for Outparcel A, as identified on the proposed Preliminary Plat, shall require an affirmative finding of the existence of adequate transportation facilities, specifically at the adjacent crossover intersection with US 301/Mitchellville-Queen Anne Bridge Road intersections, through the submission of a subsequent Preliminary Plat for Outparcel A.

The City of Bowie proposes four conditions based on changes to the traffic in the area, including the modifications to the traffic signal that are proposed in the mitigation. As such, staff is recommending disapproval of this plan for failure to provide adequate public facilities.

#### SETTING

The property is located on the west side of US 301, approximately 1,800 feet north of the US 301 Mitchellville Road intersection. To the west, the property abuts a single-family detached residential subdivision that is zoned R-R and is located within the City of Bowie. To the north, the property abuts parcels zoned C-M and used for automobile dealerships. To the south, the properties are also zoned C-M, but are vacant. To the east, across southbound US 301, the properties are zoned R-E and are vacant.

## 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	C-M	C-M
Use(s)	Undeveloped	Automobile Dealership
Acreage	5.57	5.57
Lots	0	0
Outparcels	1	0
Parcels	0	1
Square footage	0	37,700

2. **Environmental**—The Environmental Planning Section has reviewed the above referenced Preliminary Plan of Subdivision 4-08012 and Type I Tree Conservation Plan TCPI/033/08, stamped as received by the Environmental Planning Section on December 11, 2008. The Environmental Planning Section recommends approval of 4-08012 and TCPI/033/08 subject to conditions.

The Environmental Planning Section previously reviewed two Preliminary Plans of Subdivision, 4-91054 and 4-04046 for the subject property. Both preliminary plans were approved with conditions by the Planning Board. The Board's conditions of approval are found in PGCPB Resolution No. 91-393(C) and PGCPB Resolution No. 04-210, respectively.

A Type I Tree Conservation Plan, TCPI/40/91, was included in the approval of Preliminary Plan of Subdivision 4-91054. A Type II Tree Conservation Plan, TCPII/07/91, was signed subsequent to the approval of preliminary plan 4-91054. Both the TCPI and TCPII cover a larger area than Lot 7 at the Walker Pontiac site. A Detailed Site Plan, DSP-01009, was reviewed in 2001 for a portion of the overall 19.09-acre site for a second automobile dealership. The Planning Board's

4-08012

conditions of approval for DSP-01009 are found in PGCPB Resolution No. 01-62. A Detailed Site Plan, DSP-07016, and associated Type II Tree Conservation Plan TCPII/064/07, were reviewed in 2007 for Lot 7 for grading and infrastructure. The Planning Board's conditions of approval for DSP-07016 are found in PGCPB Resolution No. 07-162.

The scope of review for preliminary plan 4-08012 is only for Lot 7 for a proposed car dealership with 37,700 square feet of gross floor area and associated improvements. Because the previously approved TCPI was associated with older preliminary plans, and because Lot 7 was previously assigned a new TCPII number, a new TCPI number has been assigned and the site will no longer be a part of TCPI/07/91.

#### **Site Description**

This 5.58-acre site in the C-M zone is located on the west side of US 301, and approximately 1,800 feet north of Mitchellville Road. Regulated environmental features are not associated with this portion of the overall 19.09-acre Walker Pontiac site. US 301 is an existing major arterial and a traffic noise generator. Traffic noise impacts are not anticipated in relation to the proposed commercial use. One soil series is found to occur at the site according to the *Prince George's County Soil Survey*. This soil series is Monmouth fine sandy loam and at this location there are five soil types in this series. All five soils have K-factors of 0.43. Based on available information, Marlboro clay is not found at this location. There are no designated scenic or historic roads in vicinity of the site. According to available information from the Maryland Department of Natural Resources Natural Heritage Program staff, rare, threatened and endangered species are not found in the vicinity of the site. According to the 2002 Approved Countywide Green Infrastructure *Plan*, the site is not within the designated network. The site is located in the Mill Branch watershed of the Patuxent River Basin. The site is also in the February 2006 Approved Master *Plan for Bowie and Vicinity and Sectional Map Amendment for Planning Areas 71A, 71B, 74A, 74B* and the Developing Tier as reflected in the approved General Plan.

#### Master Plan Conformance

The master plan for this area is the approved Bowie and vicinity sectional map amendment (February 2006). In the approved master plan and sectional map amendment, the Environmental Infrastructure section contains goals, policies and strategies. The following guidelines have been determined to be applicable to the current project. The text in **BOLD** is the text from the master plan and the plain text provides comments on plan conformance.

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

#### **Strategies:**

1. Use designated green infrastructure network to identify opportunities for environmental preservation and restoration during development review process.

The preliminary plan will be reviewed later in this memorandum for conformance with the *Approved Countywide Green Infrastructure Plan*.

2. Protect primary corridors (Patuxent River and Collington Branch) during the review of development review process to ensure the highest level of

preservation and restoration possible, with limited impacts for essential development elements. Protect secondary corridors to restore and enhance environmental features and habitat. Protect secondary corridors (Horsepen Branch, Northeast Branch, Black Branch, Mill Branch, and District Branch) to restore and enhance environmental features and habitat.

No corridors or sensitive environmental features are located on this site.

3. Carefully evaluate land development and proposals in the vicinity of identified SCAs (the Beltsville Agricultural Research Center to the north, along with the Patuxent Research Refuge; Belt Woods in the western portion of the master plan area; and the Patuxent River) to ensure that the SCAs are not impacted and that connections are either maintained or restored.

This site is not located in the vicinity of any identified Special Conservation Area.

4. Target public land acquisition programs within the designated green infrastructure network in order to preserve, enhance or restore essential features and special habitat areas.

No public ownership is proposed for this site.

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

#### **Strategies:**

- 1. Implement the strategies contained in the Western Branch Watershed Restoration Action Strategy (WRAS).
- 2. Add identified mitigation sties from the WRAS to the countywide database of mitigation sites.
- 3. Encourage the location of necessary off-site mitigation for wetlands, streams and woodland within sites identified in the WRAS and within sensitive areas that are not currently wooded.

The Western Branch Watershed Restoration Action Strategy (WRAS) has identified no sites in need of restoration on or adjacent to the subject property.

## 4. Ensure the use of low-impact development techniques to the extent possible during the development process.

The approved stormwater concept plan and approval letter indicate the use of an underground sand filter and detention system.

5. During the development review process evaluate streams that are to receive stormwater discharge for water quality and stream stability. Unstable streams and streams with degraded water quality should be restored, and

4-08012

## this mitigation should be considered as part of the stormwater management requirements.

No streams are located on or adjacent to the site.

## 6. Encourage the use of conservation landscaping techniques that reduce water consumption and the need for fertilizers or chemical applications.

The use of native species for on-site planting should be encouraged to reduce water consumption and the need for fertilizers or chemical applications.

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

### **Strategies:**

## 1. Encourage the planting of trees in developed areas and established communities to increase the overall tree cover.

This is a commercial development located within the Developing Tier. Because the site is not fully wooded at this time, preservation of existing vegetation is limited. No tree planting has been shown on the TCPI. Landscaping materials will be required in accordance with the *Prince George's County Landscape Manual*.

- 2. Provide a minimum of ten percent tree cover on all development projects. This can be met through the provision of preserved areas or landscape trees.
- **3.** Establish street trees in planting strips designed to promote long-term growth and increase tree cover.
- 4. Establish tree planting adjacent to and within areas of impervious surfaces. Ensure an even distribution of tree planting to provide shade to the maximum amount of impervious areas possible.

Landscaping materials will be required in accordance with the *Prince George's County* Landscape Manual.

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

### **Strategies:**

- 1. Encourage the use of green building techniques that reduce energy consumption. New building designs should strive to incorporate the latest environmental technologies in project buildings and site design. As redevelopment occurs, the existing buildings should be reused and redesigned to incorporate energy and building material efficiencies.
- 2. Encourage the use of alternative energy sources such as solar, wind, and hydrogen power. Provide public examples of uses of alternative energy sources.

The use of green building techniques and energy conservation techniques should be encouraged as appropriate.

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

#### **Strategies:**

- 1. Encourage the use of alternative lighting technologies for athletic fields, shopping centers, gas stations and car lots so that light intrusion on adjacent properties is minimized. Limit the total amount of light output from these uses.
- 2. Require the use of full cut-off optic light fixtures should be used for all proposed uses.
- **3.** Discourage the use of streetlights and entrance lighting except where warranted by safety concerns.

The minimization of light intrusion from this commercial site onto adjacent residential properties is a special concern. At time of detailed site plan, the use of alternative lighting technologies and the limiting of total light output should be demonstrated. Full cut-off optic light fixtures should be used.

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

### **Strategies:**

- 1. Evaluate development proposals using Phase I noise studies and noise models.
- 2. Provide for adequate set backs for projects located adjacent to existing and proposed noise generators.
- **3.** Provide for the use of approved attenuation measures when noise issues are identified.

Transportation related noise impacts are not a concern on this site due to its commercial use; however, a common feature of automobile dealerships is a loud-speaker system which may affect surrounding properties. Should a loud-speaker system be proposed for the subject site, a Phase I noise study shall be conducted to demonstrate the affects of the proposed noise on the adjacent residential properties. A Phase II noise study may be required based on the findings of the Phase I noise study.

Should no loud speaker system be proposed on-site, a note to that affect should be placed on the final plat of subdivision as well as the tree conservation plan.

### Policy 7: Protect wellhead areas of public wells.

#### **Strategies:**

- 1. Retain land uses that currently exist within the wellhead areas of existing public wells.
- 2. Continue monitoring water quality.
- **3.** Consider the development of alternative public water provision strategies such as public water connections, to eventually eliminate public wells.

This site is not located within a wellhead protection area.

## **Countywide Green Infrastructure Plan Conformance**

Neither the subject property nor any adjacent properties are within the designated network of the *Approved Countywide Green Infrastructure Plan*.

## **Summary of Prior Plan Approvals**

PGCPB Resolution No. 07-162 for Detailed Site Plan DSP-07016 includes one environmentally-related condition relevant to the current review. The respective conditions are in **bold** typeface, the associated comments, additional information, plan revisions and recommended conditions are in standard typeface.

## Conformance with PGCPB Resolution No. 07-162 for Detailed Site Plan DSP-07016

2. At the time of acceptance of the Detailed Site Plan for buildings and parking, the acceptance package shall include a lighting study and layout plan showing no more than 0.5 foot candles at all commercial property lines adjacent to residential uses and the use of full cut-off optics. The package shall also include a description of any proposed noise intrusions or a statement that there will be none.

This condition has been discussed above and should be repeated in the present preliminary plan approval.

### **Environmental Review**

An approved Natural Resources Inventory, NRI/049/08, was submitted with the application. The NRI notes there are no streams, wetlands or 100-year floodplain on the subject property. The TCPI and the preliminary plan are in conformance with the NRI. The forest stand delineation (FSD) indicates one forest stand totaling 0.16 acres and no specimen trees. There are no priority preservation areas on the site. No revisions are required for conformance to the NRI.

This property is subject to the provisions of the Prince George's County Woodland Conservation and Tree Preservation Ordinance because it has approved plans associated with it; a Type I Tree Conservation Plan, TCPI/40/91, Type II Tree Conservation Plan, TCPII/07/91, and Type II Tree Conservation Plan, TCPII/064/07. Because the subject preliminary plan is only for Lot 7, not for the overall site, and because the site was previously assigned a new TCPII number, it has been given a new TCPI number.

The Woodland Conservation Threshold (WCT) for this 5.58-acre property is 15 percent of the net tract area or 0.84 acres. The total woodland conservation requirement based on the amount of clearing proposed is 1.00 acre. This requirement is proposed to be satisfied entirely with off-site mitigation.

The DSP and the TCPII have been reviewed for purposes of comparison. Both plans show the same proposed grading and infrastructure improvements with the same proposed limits of disturbance.

The plan requires some technical changes to be in conformance with the Woodland Conservation Ordinance. All proposed utilities and associated easements need to be shown on the plan, including but not limited to, the stormwater management structures, and the water and sewer structures.

An approved Stormwater Management Concept Plan Approval Letter, 8247-2004-00, was submitted with the subject application and shows the use of an underground sand filter and detention system. No further information pertaining to stormwater management is required.

The Environmental Planning Section recommends approval of Preliminary Plan of Subdivision 4-08012 and Type I Tree Conservation Plan TCPI/033/08 subject to conditions.

#### Water and Sewer Categories

The water and sewer categories are W-4 and S-4 according to water and sewer maps obtained from the Department of Environmental Resources (DER) dated June 2003, and will therefore be served by public systems.

3. **Community Planning**—This application is not inconsistent with the 2002 General Plan Development Pattern Policies for the Developing Tier. The vision for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities, distinct commercial centers, and employment areas that are increasingly transit serviceable. This application provides both an employment area, adds to the distinct commercial center for automobile uses that is forming in the area and is part of the low or moderate-density development nearby.

This application conforms to the land use recommendation of the 2006 approved master plan for Bowie and vicinity for commercial uses. The 2006 Bowie and vicinity sectional map amendment retained the property from the C-M Zone. Automobile dealerships and similar uses are permitted in the C-M Zone. Similar uses are located on neighboring sites.

The subject property is zoned C-M. While the subject application is not proposing any residential development, if legislation would permit such a land use, a new preliminary plan should be approved. Because there exist different adequate public facility tests and there are considerations for recreational components for residential subdivisions, a new preliminary plan should be required if residential development is considered.

4. **Department of Parks and Recreation**—In accordance with Section 24-134(a) of the Prince Georges County Subdivision Regulations, the proposed lot on the subject subdivision is exempt from Mandatory Dedication of Parkland requirements because it consists of nonresidential development.

5. **Transportation**—The Transportation Planning Section has reviewed the preliminary plan of the above-referenced property. The subject property consists of 5.57 acres, within the C-M Zone. The property is located on the west side of US 301, approximately 1,800 feet north of the US 301, Mitchellville Road intersection. The subject application proposes the construction of a building totaling 37,700 square feet of gross floor area. The building will be used as a car dealership. The applicant presented staff with a traffic study that was prepared in February 2009.

## **Traffic Study Analyses:**

The study identified the following intersections as the ones on which the proposed development would have the most impact:

EXISTING CONDITIONS		
Intersection	AM	PM
	(LOS/CLV)	(LOS/CLV)
US 301 SB @ Mitchellville Road (signalized)	C/1209	D/1389
US 301 NB @ Queen Anne Bridge Road (signalized)	B/1135	C/1256
US 301 SB @ Mt. Oak Road **	C/20.6	C/24.3
US 301 SB @ Median Break **	F/61.2	F/145.4
US 301 NB @ Median Break **	C/23.7	D/25.1
** Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service and the intersection delay measured in seconds/vehicle. A level-of-service "E" which is deemed acceptable corresponds to a maximum delay of 50 seconds/car. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the <i>Guidelines</i> .		

The traffic study, in collaboration with staff, identified seven (7) background developments whose impact would affect some or all of the study intersections. Additionally, a growth rate of three percent was applied to the existing traffic counts at the subject intersections. A second analysis was done to evaluate the impact of the background developments on existing infrastructure. The analysis revealed the following results:

BACKGROUND CONDITIONS		
Intersection	AM	PM
	(LOS/CLV)	(LOS/CLV)
US 301 SB @ Mitchellville Road (signalized)	C/1372	F/1622
US 301 NB @ Queen Anne Bridge Road (signalized)	D/1317	E/1550
US 301 SB @ Mt. Oak Road **	D/26.7	D/33.0
US 301 SB @ Median Break **	F/94.9	F/332.6
US 301 NB @ Median Break **	D/32.0	E/37.9
** Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level- of-service and the intersection delay measured in seconds/vehicle. A level-of-service "E" which is deemed acceptable corresponds to a maximum delay of 50 seconds/car. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the <i>Guidelines</i> .		

Using trip generation rates that were developed by averaging trip rates from three local car dealerships within close proximity to the proposed development, the study has indicated that the proposed car dealership with a GFA 37,700 square feet, would be adding 52 (34 in; 18 out) AM peak-hour trips and 63 (28 in; 35 out) PM peak-hour trips at the time of full build-out. A third analysis was done, whereby the impact of the proposed development was evaluated. The results of that analysis are as follows:

TOTAL CONDITIONS		
Intersection	AM	PM
	(LOS/CLV)	(LOS/CLV)
US 301 SB @ Mitchellville Road (signalized) With EB Free Right	D/1376 D/1308	<b>F/1628</b> <i>E/1581</i>
US 301 NB @ Queen Anne Bridge Road (signalized) With EB L, LT and split phasing	D/1335 <i>C/1296</i>	<b>E/1577</b> <i>E/1497</i>
US 301 SB @ Mt. Oak Road **	D/27.5	D/34.1
US 301 SB @ Median Break **	F/97.2	F/332.6
US 301 NB @ Median Break **	D/34.0	E/40.1

The proceeding results revealed that all of the study intersections would operate adequately with the exception of:

- US 301 SB @ Median Break \*\*
- US 301 SB @ Mitchellville Road (signalized)
- US 301 NB @ Queen Anne Bridge Road (signalized)

To ameliorate the inadequacies at the US 301/Mitchellville Road/Queen Anne Bridge Road intersection, the traffic study proposed the following improvements under the provisions of Mitigation pursuant to Section 24-124(a)(6) of the Subdivision Regulations:

- **Southbound US 301 at Mitchellville Road**—Construct eastbound Mitchellville Road free-flow right-turn lane.
- Northbound US 301 at Queen Anne Bridge Road—Widen eastbound Queen Anne Bridge approach from the existing one left/through lane –to one left-turn lane and one left/through lane. Modify eastbound/westbound Queen Anne Bridge Road signal approaches from concurrent signal phasing to split signal phasing

FINAL CONDITIONS [with mitigation improvements]		
Intersection	AM	PM
	(LOS/CLV)	(LOS/CLV)
US 301 SB @ Mitchellville Road (signalized) With EB Free Right	D/1308	E/1581
US 301 NB @ Queen Anne Bridge Road (signalized) With EB L, LT and split phasing	C/1296	E/1497

Based on the aforementioned improvements, the following results were obtained:

The results of the improvements pursuant to the mitigation guidelines indicated that, greater than 150 percent of the traffic being added to the respective intersections will be mitigated.

Regarding the US 301 SB @ Median Break intersection, the traffic study acknowledged that this intersection exceeds the allowable 50-second delay threshold under existing, background and total traffic. However, no improvement was offered by the applicant. The study concluded that no improvement to this unsignalized intersection is likely to improve its operation. It further concludes that with the implementation of these improvements proffered under mitigation, the area network will be able to accommodate the proposed development.

#### Staff review and comments

In response to staff's request, the traffic study was reviewed by two other agencies, the Maryland State Highway Administration (SHA) and the Department of Public and Transportation

(DPW&T). Since all of the studied intersections are under the control of SHA, the staff of DPW&T acknowledged that the final decisions on how to improve those facilities rest with the SHA. However, some of the salient points contained in a March 27, 2009 letter to staff from the DPW&T (Issayans to Burton) included the following:

- Provide an acceleration on US 301 at the site entrance
- Provide an acceleration on US 301 at the existing median break

Based on its review of the study, the SHA outlined its comments in a March 25, 2009 letter (Foster to Masog) to staff. Essentially, the SHA has one issue with the study findings, and that pertains to a split phasing of the traffic light at the US 301 NB @ Queen Anne Bridge Road intersection as part of the applicant's mitigation improvements. According to the SHA letter, that agency requires additional analyses in order to better evaluate the utility of the proposed phasing modification to the traffic light. In light of this requirement, as of this writing, the SHA has not officially concurred with the applicant's mitigation proposal. Page 41 of the *Guidelines* states the following: "If the applicant recommends a geometric improvement strategy as part of the TFMP, the proposed geometric improvements must be in accordance with the standards or requirements established by the appropriate operating agency."

By virtue of the contents of SHA's March 25, 2009 letter, staff concludes that the applicant's Transportation Facilities Mitigation Plan (TFMP) is unacceptable at this time. Staff further concludes that the applicant has not proposed any alternative improvement that will provide LOS D at the critical intersections. Consequently, staff concludes that this application will not meet the required transportation adequacy as required in Section 24-124 of the Subdivision Regulations.

### **Transportation Staff Findings**

The application is a preliminary plan of subdivision for a commercial development consisting of an auto dealership building totaling 37,700 square feet of gross floor area (GFA). The proposed development would generate 52 (34 in; 18 out) AM peak hour trips and 63 (28 in; 35 out) PM peak hour trips at the time of full build-out. These trip rates were determined by using an average trip rate from three similar dealerships within the immediate area.

The traffic generated by the proposed preliminary plan would impact the following intersections:

- US 301 SB @ Mt. Oak Road (unsignalized
- US 301 SB @ Median Break (unsignalized)
- US 301 NB @ Median Break (unsignalized)
- US 301 SB @ Mitchellville Road (signalized)
- US 301 NB @ Queen Anne Bridge Road (signalized)

None of the intersections identified above is programmed for improvement with 100% construction funding within the next six years in the current Maryland Department of Transportation Consolidated Transportation Program (CTP) or the Prince George's County Capital Improvement Program (CIP).

The subject property is located within the developing tier, as defined in the *Prince George's County Approved General Plan.* As such, the subject property is evaluated according to the following standards:

- Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better
- **Unsignalized intersections:** *The Highway Capacity Manual* procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed 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.

The following intersections identified above, when analyzed with the total future traffic as developed using the *Guidelines*, were not found to be operating at or better than the policy service level defined in number 4 above:

- US 301 SB @ Median Break (unsignalized)
- US 301 SB @ Mitchellville Road (signalized)
- US 301 NB @ Queen Anne Bridge Road (signalized)

The application meets the geographic eligibility criteria for a Transportation Facilities Mitigation Plan (TFMP) established by the Prince George's County Council in CR-29-1994, "Guidelines for Mitigation Actions".

Therefore, the applicant has agreed to provide the following improvements (as a TFMP) to following intersections:

- Southbound US 301 at Mitchellville Road–Construct eastbound Mitchellville Road freeflow right-turn lane.
- Northbound US 301 at Queen Anne Bridge Road–Widen eastbound Queen Anne Bridge approach from the existing one left/through lane–to one left-turn lane and one left/through lane. Modify eastbound/westbound Queen Anne Bridge Road signal approaches from concurrent signal phasing to split signal phasing

When analyzed with total future traffic and the applicant's TFMP, the projected traffic service (LOS) at the Southbound US 301 at Mitchellville Road intersection as well as the Northbound US 301 at Queen Anne Bridge Road intersection was found to be better than 125 percent of LOS D.

While the applicant's TFMP improvements would have met the required mathematical threshold for adequacy, the improvements were not found to be in accordance with the standards or requirements established by the SHA. The SHA is requiring additional studies to be done before that agency will render a decision, regarding its acceptance of the applicant's proffered improvements.

No additional improvements were offered by the applicant that would provide a LOS D at the intersections the applicant identified as eligible for TFMP above.

No additional improvements were offered by the applicant that would provide a delay less than 50 seconds at the unsignalized intersections identified by the applicant.

The Transportation Planning Section cannot conclude that adequate access roads will exist as required by Section 24-124 of the Subdivision Regulations.

- 6. Schools—There are no residential dwelling units proposed in the development. There are no anticipated impacts on schools.
- 7. Fire and Rescue—The Special Projects Section has reviewed this subdivision plan for adequacy of fire and rescue services in accordance with Section 24-122.01(d) and Section 24-122.01(e)(1)(B)-(E) of the Subdivision Regulations.

The existing engine service at Bowie Fire/EMS Station, Company 43, located at 16408 Pointer Ridge Drive, has a service travel time of 2.4 minutes, which is within the 3.25-minute travel time guideline.

The existing ambulance service at Bowie Fire/EMS Station, Company 43, located at 16408 Pointer Ridge Drive, has a service travel time of 2.4 minutes, which is within the 4.25-minute travel time guideline.

The existing paramedic service at Bowie Fire/EMS Station, Company 43, located at 16408 Pointer Ridge Drive, has a service travel time of 2.4 minutes, which is within the 7.25-minute travel time guideline.

The existing ladder truck service at Bowie Fire/EMS Station, Company 43, located at 16408 Pointer Ridge Drive, has a service travel time of 2.4 minutes, which is within the 4.25-minute travel time guideline.

- 8. Police Facilities—The proposed development is within the service area for Police District II, Bowie. The police facilities test for nonresidential applications is done on a countywide basis in accordance with the policies of the Planning Board. There is 267,660 square feet of space in all of the facilities used by the Prince George's County Police Department and the latest population estimate is 825,520. Using the 141 square feet per 1,000 residents, it calculates to 116,398 square feet of space for police. The current amount of space, 267,660 square feet is above the guideline.
- 9. Stormwater Management—The Department of Public Works and Transportation (DPW&T). Office of Engineering, has determined that on-site stormwater management is required. A Stormwater Management Concept Plan 8247-2004-00 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.
- 10. Historic—Phase I archeological survey is not recommended on the above-referenced 5.58-acre property located at 2250 Crain Highway in Bowie, Maryland. A search of current and historic photographs, topographic and historic maps, and locations of currently known archeological sites indicates the probability of archeological sites within the subject property is low. However, the applicant should be aware that there are 15 prehistoric and one historic archeological sites within a one-mile radius of the subject property. In addition, one National Register property (Hamilton House, 74B-7), two Historic Sites (Carroll Chapel, 74B-6 and Mitchellville Storekeeper's House and Store Site, 71B-7), and one Historic Resource (Mitchellville Cemetery, 71B-8) are located within a one-mile radius of the subject property.

Moreover, Section 106 review may require archeological survey for state or federal agencies. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take 4-08012 into account the effects of their undertakings on historic properties, to include archeological sites. This review is required when state or federal monies, or federal permits are required for a project.

## RECOMMENDATION

Staff recommends DISAPPROVAL of Preliminary Plan of Subdivision 4-08012 for inadequate transportation facilities and for lacking a sufficient variation request for access to the property.