



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

Preliminary Plan 4-09006

Application	General Data	
Project Name: Temple of Praise International Church Location: North of US 301, approximately 1,435 feet from its intersection with Queen Anne Bridge Road. Applicant/Address: Alpha Omega Systems, LLC 9225 Hampton Overlook Capitol Heights, MD 20743 Property Owner: Temple of Praise International Church 11301 Rhode Island Avenue Beltsville, MD 20705	Staff Report Date:	09/03/09
	Date Accepted:	03/31/09
	Planning Board Action Limit:	09/18/09
	Plan Acreage:	22.60
	Zone:	R-A
	Gross Floor Area:	27,000 sq. ft.
	Lots:	0
	Parcels:	2
	Planning Area:	74B
	Tier:	Rural
	Council District:	04
	Election District:	07
	Municipality:	N/A
	200-Scale Base Map:	203NE14/15

Purpose of Application	Notice Dates	
Continued from Planning Board July 16, 2009. Residential Subdivision (Church)	Informational Mailing	02/06/09
	Acceptance Mailing:	03/31/09
	Sign Posting Deadline:	06/16/09

Staff Recommendation		Staff Reviewer: Ray Dubicki	
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 4-09006
Temple of Praise International Church
Parcel A

OVERVIEW

The subject property is located on Tax Map 63, Grid E3 and is known as Parcel A and Parcel 148. The property consists of 22.60 acres in the Residential-Agricultural (R-A) Zone. It is currently undeveloped. The applicant proposes to construct a 650-seat, 27,000-square-foot church and parish hall.

Access to the site is provided via driveway across a 107-foot-wide, 350-foot-long stem between the highway and the bulk of the property. A variation has been filed with this application for access directly onto US 301. A statement of justification has also been filed, as this driveway crosses wetlands and primary management area (PMA). Staff supports both the variation and encroachment into the PMA, as there are no alternative accesses for the property.

The site presented several archeological and geological challenges. The prevalence of historic resources in the area and the composition of the site required the applicant to conduct a Phase I archeological survey. No archeological resources were found. Marlboro clay was identified on the site. Previous designs for the church and parking lot required significant retaining walls to be constructed on top of Marlboro clay. Geotechnical reports have further quantified the impact on Marlboro clay and revisions to the plan have reduced these impacts.

While the site itself is in the Rural Tier, US 301 is in the Developing Tier and, at this location, is eligible for mitigation. The applicant proposes to use traffic mitigation to achieve adequate public road facilities. This is a case of first impression for the Planning Board to consider the use of mitigation for a property in the Rural Tier. The transportation discussion below thoroughly outlines the unique situation presented by this application.

A traffic study prepared by The Traffic Group dated July 22, 2009 was submitted on August 4, 2009. Copies were sent to the Prince George's County Department of Public Works and Transportation (DPW&T) and the Maryland State Highway Administration (SHA). No responses have been received from these agencies. Given the analysis outlined in this report, the Transportation Planning Section is unable to conclude that adequate access roads will exist as required by Section 24-124 of the Prince George's County Code if the application is approved.

As such, staff is recommending DISAPPROVAL of this application based on insufficient information to be able to determine that adequate public facilities will exist if the application is approved.

SETTING

The property is located on the east side of US 301, approximately 1,435 feet north of its intersection with Queen Anne Bridge Road. The property is zoned R-A along with neighboring properties on the east side of the highway. The property to the north is developed with a wholesale nursery. Properties to the south and east are developed with single-family dwellings. The two properties to the west of the bulk of the property, surrounding the driveway stem, are undeveloped. Property in the island of US 301, immediately across from the driveway, is zoned R-A and is undeveloped. Property fully across US 301 is zoned Miscellaneous Commercial (C-M) and is also undeveloped, but approved for two automobile dealerships.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

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

	EXISTING	PROPOSED
Zone	R-A	R-A
Use(s)	Vacant	Church and parish hall
Acreage	22.60	22.60
Lots	0	0
Outlots	0	0
Parcels	2	1
Dwelling Units	0	0

Pursuant to Section 24-199(d)(2) of the Subdivision Regulations, this case and variation were heard before the Subdivision Review Committee (SRC) meeting on April 17, 2009.

2. **Environmental**—This 22.60-acre property in the R-A Zone is located on the east side of US 301, approximately 1,435 feet north of its intersection with Queen Anne Bridge Road. The site is entirely wooded. According to the *Prince George's County Soil Survey*, the principal soils on this site are in the Collington, Mixed Alluvial Land, Monmouth, Sandy Land, and Westphalia soil series. A significant area of Marlboro clay occurs on the site. Streams, wetlands, 100-year floodplain, and primary management areas associated with Mill Branch occur on the property. Mill Branch is designated as a secondary corridor in the *Approved Master Plan for Bowie and Vicinity and Sectional Map Amendment for Planning Areas 71A, 71B, 74A, 74B*. The site is separated from US 301, a source of transportation-generated noise, by more than 500 feet of vegetation, so noise impacts are not anticipated to be a concern. The proposal is not expected to be a noise generator. The site is in the Rural Tier according to the *Prince George's County Approved General Plan*. There are regulated areas, evaluation areas, and network gaps identified on this property in the *Approved Countywide Green Infrastructure Plan*.

The current master plan for this area is the Bowie and vicinity approved master plan and sectional map amendment (February 2006). The 2006 sectional map amendment retained the subject property in the R-A Zone. In the approved 2006 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 the designated green infrastructure network to identify opportunities for environmental preservation and restoration during the development review process.**

The revised Type I tree conservation plan (TCPI) proposes preservation and reforestation/afforestation areas and a greatly reduced amount of off-site woodland conservation. The woodland conservation requirements have now been provided on-site through preservation and afforestation/reforestation to the greatest extent possible.

Because the site is within the designated network of the Green Infrastructure Plan and the Rural Tier, and it contains high-quality woodlands, maximizing the on-site woodland conservation is critical to a finding of conformance with the Green Infrastructure Plan.

2. **Protect primary corridors (Patuxent River and Collington Branch) during the development review process to ensure the highest level of preservation and restoration possible, with limited impacts for essential development elements. Protect secondary corridors (Horsepen Branch, Northeast Branch, Black Branch, Mill Branch, and District Branch) to restore and enhance environmental features and habitat.**

Mill Branch is designated in the approved master plan as a secondary corridor, meaning that development within this watershed should seek to protect, enhance, or restore the resource. The TCPI shows a tributary of Mill Branch and an associated floodplain along the western boundary of the site. The protection of the woodlands associated with a designated stream corridor is a vital element to the protection of water quality. The revised TCPI shows that the woodland conservation requirements for this project have been provided on-site through preservation and afforestation/reforestation to the greatest extent possible.

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 strategies from the Western Branch WRAS to the countywide database of mitigation sites.**
3. **Encourage the location of necessary off-site mitigation for wetlands, streams, and woodlands within sites identified in the Western Branch 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.**

Low-impact development techniques will be reviewed later in the development review process. A condition is recommended to address this issue.

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

Mill Branch and tributaries adjacent to the western boundary of this property were evaluated during the Western Branch WRAS project. No additional investigation is needed at this time.

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

The landscape plan for this site shall be reviewed for the application of conservation landscaping techniques at the time of permit review.

7. **Minimize the number of parking spaces and provide for alternative parking methods that reduce the area of impervious surfaces.**

8. **Reduce the area of impervious surfaces during redevelopment projects.**

The proposed development is not redevelopment, and will adhere to current design criteria for green space, woodland conservation, stormwater management (SWM), and resource protection. The amount of paved area has been reduced as shown on the revised plans.

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.**
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.**

The TCPI proposes the retention of existing woodlands within the 100-year floodplain and within the Patuxent River PMA. As noted above, the project has been revised to better fit the site and provide additional woodland conservation on-site. The TCPI will be further evaluated in the Environmental Review Section of this report.

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 evaluated as part of any future development application.

Policy 5: Reduce light pollution and intrusion into residential, 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 for all proposed uses.**
- 3. Discourage the use of streetlights and entrance lighting except where warranted by safety concerns.**

The site proposes an institutional (church) use. Lighting in the new development should use full cut-off optics to ensure that light pollution is minimized because the site is in the Rural Tier and adjacent to a sensitive wildlife area. The use of lighting technologies that limit the total light output and reduce sky glow and off-site glare 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 adequate setbacks for projects located adjacent to existing and proposed noise generators.**
- 3. Provide the use of appropriate attenuation measures when noise issues are identified.**

For the proposed uses, noise impacts have not been identified.

CONFORMANCE WITH THE GREEN INFRASTRUCTURE PLAN

The following policies support the stated measurable objectives of the Countywide Green Infrastructure Plan, based on the policies of the Environmental Infrastructure Chapter of the General Plan.

Policy 1: Preserve, protect, enhance or restore the green infrastructure network and its ecological functions while supporting the desired development pattern of the 2002 General Plan.

The subject property contains regulated areas, evaluation areas, and network gap areas as identified in the Countywide Green Infrastructure Plan. Preservation and enhancement of these resources will be discussed in detail later in this memorandum.

Policy 2: Preserve, protect, and enhance surface and ground water features and restore lost ecological functions.

Preservation of water quality in this area will be provided through the protection of the Patuxent River primary management area and the application of best stormwater management practices for stormwater management. It is recommended that low-impact development stormwater management methods be applied on this site, to the fullest extent possible.

Policy 3: Preserve existing woodland resources and replant woodland, where possible, while implementing the desired development pattern of the 2002 General Plan.

Ninety-eight percent of the woodland conservation requirement will be provided on-site through preservation and replanting. The revised plans address this policy.

ENVIRONMENTAL REVIEW

The preliminary plan application has a signed Natural Resources Inventory (NRI/028/08), dated June 25, 2008. There is a primary management area (PMA) comprised of a stream, stream buffers, wetlands, wetland buffers, and 100-year floodplain and associated slopes on the subject property. The forest stand delineation (FSD) indicates four forest stands of high-priority woodlands totaling 22.19 acres and 24 specimen trees. Preservation of the woodlands and specimen trees on-site should be a priority in the review of this application.

The subject application consists of the 22.60-acre property that contains 18.56 acres of upland woodlands and 4.04 acres of woodland floodplain. The property is subject to the requirements of the Prince George's County Woodland Conservation and Tree Preservation Ordinance because the site is more than 40,000 square feet in size and contains more 10,000 square feet of existing woodland. A revised Type I Tree Conservation Plan, TCPI/027/08, has been submitted with the application. The plan proposes clearing 8.13 acres of the upland woodlands. The woodland conservation threshold for this property is 9.28 acres. Based upon the proposed clearing, the woodland conservation requirement for the development proposed is 11.31 acres. The plan proposes 10.02 acres of on-site preservation, 1.06 acres of afforestation and 0.23 acre of off-site mitigation in fulfillment of the woodland conservation requirements for the site.

The method with the highest priority for meeting the woodland conservation requirements is the preservation of high-quality woodlands. Preservation of woodlands within the designated network of the Green Infrastructure Plan is also the highest priority. The TCPI plan includes areas of woodland conservation, woodland replacement, and woodland preservation in priority areas.

The Type I tree conservation plan is not consistent with the preliminary plan, NRI, stormwater management concept plan, and wetlands delineation and needs to be revised to address the following issues: show all elements of the proposed development with associated grading; show all proposed SWM elements; show the location of all proposed retaining walls and provide a 10-foot-wide clear work and maintenance zone adjacent to retaining walls; show the location of the proposed private septic system; show the woodland conservation methodology proposed, correctly labeled in the legend, and clarify the graphics; and provide the appropriate TCPI standard notes.

Wetlands, streams, and 100-year floodplains are found to occur on this property. These features and their associated buffers including adjacent slopes in excess of 25 percent, and identified forest interior dwelling species (FIDS) habitat comprise the Patuxent River primary management area (PMA) on the subject property in accordance with Section 24-101(b)(10) of the Subdivision Regulations. The applicant's justification for impacting the PMA is addressed in Section 3.

The site contains significant regulated environmental features, which are required to be protected under Section 24-129 and/or Section 24-130 of the Subdivision Regulations. The applicant should delineate these areas at the time of final plat, with corresponding plat notes to address development within these areas.

The site contains streams or wetland areas which may be regulated by Federal and State requirements. The applicant should provide copies of appropriate federal and state wetland permits and evidence of compliance prior to the issuance of permits impacting wetlands.

According to the *Prince George's County Soil Survey*, the principal soils on the site are in the Collington, Mixed Alluvial, Monmouth, Sandy Land, and Westphalia soils series. Collington soils pose few difficulties to development. Mixed Alluvial soils may limit development due to high water tables, flooding hazards, and poor drainage. Monmouth, Sandy Land, and Westphalia soils pose few development difficulties. This property is located in an area with extensive amounts of Marlboro clay which is known as an unstable, problematic geologic formation when associated with steep and severe slopes. The presence of Marlboro clay is addressed in Finding 4, below.

3. **Primary Management Area (PMA)**—A statement of justification was submitted to address the impacts to the PMA and to provide justification that the PMA has been preserved to the fullest extent possible. The Subdivision Regulations state:

Section 24-130. Stream, wetland, and water quality protection and stormwater management

- (5) **Where a property is partially or totally within the Patuxent River Watershed, the plat shall demonstrate adequate protection to assure that the Primary Management Area Preservation Area is preserved in a natural state to the fullest extent possible.**

The applicant stated that "The subject project and property in question will be used as a place of worship and administrative building. The property is land locked due to the natural lay of the land, which is divided by an existing tributary. The owner has no other alternative to access where the proposed location of the building is placed, thus a modest impact to the PMA area occurs (approximately 250 linear feet, and 7,000 square feet). The design will include retaining walls (nature stone gabion design) to minimize impact and preserving and protecting the natural surroundings of the PMA areas. The subject project including the PMA impact in question will be in direct coordination with Corps of Engineering, State of Maryland and Prince George's County guidelines and codes and regulations to meet the required design and construction standards."

Comment: Staff generally recommends approval of PMA impacts for unavoidable impacts such as the installation of public road crossings and public utilities, if they are designed to preserve the PMA to the fullest extent possible. Staff generally does not recommend approval of PMA impacts for lots, structures or septic field clearing, or grading when alternative designs would reduce or eliminate the impacts.

The plan shows impacts to the PMA necessary to improve the access to the site along the existing driveway from US 301, which will result in 7,000 square feet of impacts to the PMA. These impacts must be coordinated with the U.S. Army Corps of Engineers and the Maryland Department of the Environment.

Staff recommends that the Planning Board find that the PMA has been preserved to the fullest extent possible. The impact cannot be avoided since there is only one access point to the property which crosses the PMA. Further, the impacts have been minimized to utilize an existing crossing and culvert. Because the impacts are limited on this property, no stream or wetlands mitigation is required.

4. **Marlboro Clay**—This property is located in an area with extensive amounts of Marlboro clay that is known as an unstable, problematic geologic formation when associated with steep and severe slopes. The presence of this formation raises concerns about slope stability and the potential for the placement of structures on unsafe land. Based on information available, the Environmental Planning Section projects that the top elevation of the Marlboro clay varies from an elevation of approximately 150 feet to approximately 135 feet. A geotechnical report is required for the subject property which is in conformance with the guidelines established by the Department of Environmental Resources (DER) and enforced through the review process by the Department of Public Works and Transportation and DER.

A subsurface investigation and geotechnical report prepared by Bota Consulting Engineers dated September 28, 2007 was submitted with this application, and was found to be insufficient because it did not address the criteria for a Marlboro clay study as determined by the Department of Environmental Resources, specifically it was not based on a determination of the 1.5 safety factor line, but used a lower standard for the safety factor.

A revision to the report dated September 10, 2008 was submitted with a previous Preliminary Plan of Subdivision 4-08029, that was and was evaluated to determine if it addressed the 1.5 safety factor line. The report contained sufficient information to delineate a 1.5 safety factor line, although it was not delineated on the plan. The location of the 1.5 safety factor line does not affect the configuration of the parcel, but it may affect the design of site elements since significant fill is proposed to be placed on this site. Specifically, on page 28 under 4.11.1 Slope Stability Analysis, analysis of two of the cross sections were found to “show that the graded slope and retaining wall are unstable, having a minimum factor of safety against slope failure” of less than the required 1.5 safety factor.

The amount of structural work needed to place these retaining walls is of concern. Under general circumstances, a ten-foot-wide clear work zone is required at the bottom or top of proposed retaining walls. In this circumstance, the clearing required to install the structures needed may be much larger.

A revision to the report dated May 12, 2009 was submitted, and preliminarily evaluated to determine if it addressed the 1.5 safety factor line correctly. The report states that the safety factor with the Marlboro clay area is greater than the county required 1.5, and as a result no 1.5 safety

factor line has been provided on the preliminary plan or TCP plan. The location of the 1.5 safety factor line does not affect the configuration of the parcel, but it may affect the design of site elements if significant fill was proposed to be placed on this site. The original report submittal included specific recommendations for the placement of caissons or drilled piers to support the extensive retaining walls and fill proposed, which will be the subject of a separate design report to be reviewed by the county. The preliminary plan should be revised to show the 1.5 safety factor line.

5. **Community Planning**—The application is located in the Rural Tier. The vision for the Rural Tier is the protection of large amounts of land for woodland, wildlife habitat, recreation and agriculture pursuits, and preservation of the rural character and vistas that now exist. This application is not inconsistent with the 2002 General Plan Development Pattern policies for the Rural Tier. Significant woodland, including priority woodland, is preserved onsite, the development is set back from the highway, and there is minimal impact to the primary management area.

The property is in Planning Area 74A and within the boundaries of the 2006 Bowie and vicinity master plan. The 2006 Bowie and vicinity sectional map amendment retained the property in the R-A Zone, where a church is a permitted use. The proposed development responds to the sector plan's recommendation for reduced environmental impact and rural residential use as specifically addressed in Finding 2 above.

6. **Department of Parks and Recreation (DPR)**—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.
7. **Trails**—Staff has identified no trail issues associated with this development.
8. **Variation**—The applicant requests a variation from Section 24-121(a)(3) of the Subdivision Regulations for the purpose of creating a driveway to access US 301.

Section 24-121(a)(3) of the Subdivision Regulations establishes design guidelines for lots that front on arterial roadways. This section requires that these lots be developed to provide direct vehicular access to either a service road or an interior driveway when feasible. This design guideline encourages an applicant to develop alternatives to direct access onto an arterial roadway.

The approval of the applicant's request does not have the effect of nullifying the intent and purpose of the Subdivision Regulations. In fact, strict compliance with the requirements of Section 24-121 could result in practical difficulties to the applicant that could result in the applicant not being able to develop this property.

Section 24-113(a) of the Subdivision Regulations sets forth the required findings for approval of variation requests. Section 24-113(a) reads:

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

variations unless it shall make findings based upon evidence presented to it in each specific case that:

- (1) The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property;**

Comment: The driveway is proposed at the only point where the property meets a public right-of-way. The driveway will be constructed with approvals from all requisite agencies for design standards. It is proposed to be right-in, right-out only and a deceleration lane is proposed. The driveway is positioned almost one-quarter mile north of Queen Anne Bridge Road, and several hundred feet from the next driveway on the east side of US 301.

- (2) The conditions on which the variation is based are unique to the property for which the variation is sought and are not applicable generally to other properties;**

Comment: This property is uniquely shaped with only one point of access to a public road. The bulk of the property sits behind two other parcels that are not part of this application. The portion of the property proposed to be used as a driveway is a narrow stem connecting the majority of the land to the highway, and limiting the options where a driveway can be constructed. Wetlands and PMA further constrain the possible position for the driveway.

- (3) The variation does not constitute a violation of any other applicable law, ordinance, or regulation; and**

Comment: The route of the driveway utilizes the path of an existing gravel driveway and culvert to cross PMA and wetlands at a single point, minimizing damage to those features. The driveway will be designed in direct coordination with DPW&T and SHA in order to meet all requisite requirements and design standards.

- (4) Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out;**

Comment: The proposed access to US 301 provides the sole access to this property. There are no nearby opportunities for sharing access or contact with another public street. Denial of access to US 301 would land lock the property and prevent any development from occurring.

Staff recommends that the Planning Board find that the applicant meets these criteria and approves the variation for access to US 301.

Given the current site configuration and the proximity of the two undeveloped parcels to the north and south of the subject property's connection to US 301 (Parcels 149 and 147, respectively), it is suggested that the applicant work with the adjoining property owners in designing the church's driveway entrance in such a way to accommodate, if permissible, the future development of those parcels with the potential of utilizing the driveway as shared access for all three properties.

9. **Schools**—There are no residential dwelling units proposed in the subject development. There are no anticipated impacts on schools.

10. **Fire and Rescue**—The Special Projects Section has reviewed this subdivision plan for adequacy of fire and rescue services and police 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 1.6 minutes, which is within the 3.25-minute travel time guideline.

The existing paramedic service at Bowie Fire Fire/EMS Station, Company 43, located at 16408 Pointer Ridge Drive, has a service travel time of 1.6 minutes, which is within the 7.25-minute travel time guideline.

The existing ladder truck service at Upper Marlboro Fire/EMS Station, Company 20, located at 14815 Pratt Street, has a service travel time of 12 minutes, which is beyond the 4.25-minute travel time guideline.

The Prince George’s County FY 2010–2015 Approved Capital Improvement Program budgets funding for the construction of a new fire/EMS Station at Northview Drive and Health Center Drive. This fire station site is three minutes from the subject development. This facility would be within the recommended travel time for ladder truck service if an operational decision to locate this service at the planned facility is made by the county.

The above findings are in conformance with the 2008 *Approved Public Safety Facilities Master Plan* and the “Guidelines for the Mitigation of Adequate Public Facilities: Public Safety Infrastructure.”

11. **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.
12. **Water and Sewer Categories**—Section 24-122.01(b)(1) of the Subdivision Regulations states that “the location of the property within the appropriate service area of the Ten-Year Water and Sewerage Plan is deemed sufficient evidence of the immediate or planned availability of public water and sewerage for preliminary or final plat approval.” As referenced on the 2008 *Water and Sewer Plan*. This property is in water and sewer Category 6, Individual Systems and will therefore be served by private systems.
13. **Health Department**—The Environmental Engineering Program has reviewed the preliminary plan of subdivision for Temple of Praise International Church. The development of the site is projected to utilize an individual sewage disposal system and an individual water supply system.

Records indicate the site has had satisfactory percolation tests conducted previously in 1978 and 1990. Further testing is required, as recommended by conditions below. The Health Department will determine the site location of the percolation tests, potentially requiring the applicant to redesign the proposed parking lot. Following testing, a revised plan is required to be submitted to the Health Department.

There are white goods, tires (approximately 12), and one abandoned vehicle found in the wetlands on the southwest section of the property which must be removed and properly disposed.

One unlabeled white plastic drum was found on the property on the overgrown path between the two wetland areas. The drum contained some type of liquid. The liquid must be evaluated and disposed of in an appropriate manner by a licensed hazardous waste company per conditions recommended below.

14. **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 has been submitted, but not yet approved. Prior to signature approval of the preliminary plan, the applicant should submit a copy of the concept approval letter and indicate the approval date on the preliminary plan. Development must be in accordance with that approved plan to ensure that development of this site does not result in on-site or downstream flooding.
15. **Cemeteries**—No cemeteries were found on the property.
16. **Historic**—The subject property is 22.60 acres in size and is located on the east side of US 301 between Queen Anne Bridge Road and Mill Branch Road in Mitchellville, Maryland.

A tributary of Mill Branch, a tributary of the Patuxent River, runs through the subject property. A prehistoric site was identified on the parcel to the north of the subject property. Prehistoric sites have been found in similar settings and the probability of identifying prehistoric archeological resources is moderate.

An examination of aerial photographs and tax records indicates that portions of the property were used for agricultural purposes throughout the early 20th century. By the 1960s, most of the property was covered in woodlands and was not being cultivated. The lot largely remains in woodlands today. Very little disturbance appears to have occurred on the property throughout the 20th century except for the construction of a gravel road through the property in the late 20th century. The two tracts that comprise the subject property were owned by African American families in the early to mid-20th century.

Twenty-one archeological sites have been identified within a one-mile radius of the subject property. Twelve sites date to the prehistoric period, six are historic sites, and three are multicomponent prehistoric and historic sites. In addition, there are three County historic sites, Hamilton House (74B-7), Carroll Chapel (74B-6), and the Site of the B.D. Mulliken House (74B-9), located within a one-mile radius of the subject property. The Hamilton House (74B-7) is listed in the National Register of Historic Places. The probability of the subject property containing significant archeological sites is moderate to high.

In accordance with the Planning Board's directives, as described in the *Guidelines for Archeological Review*, May 2005, and consistent with Subtitle 24-104, 121(a)(18), and 24-135.01 of the Subdivision Regulations, the subject property was the subject of a Phase I archeological investigation to identify any archeological sites that may be significant to the understanding of the history of human settlement in Prince George's County, including the possible existence of slave quarters and slave graves, as well as archeological evidence of the presence of Native American peoples.

Approximately eight acres of the property were identified for subsurface testing. The remaining portion of the property contained steep slopes or wetlands. The report provides a description of

the project location, geology, and soils, along with a prehistoric and historic context. Tables 1 and 2 provide lists of archeological sites and architectural resources located within a one-mile radius of the project area.

Field investigations were conducted in May 2008. A general reconnaissance survey was performed across the project area to identify locations that had a potential for the presence of previously unidentified prehistoric Native American and historic period archeological sites. A total of 148 shovel test pits (STPs) were excavated across the property. No archeological sites were identified. Due to the lack of cultural resources on the subject property, no further archeological work is recommended.

No further work is necessary on this site. No archeological sites were identified. Some modern material was identified in several of the STPs, but this did not constitute an archeological site. All archeological conditions for this property have been satisfied.

17. **The City of Bowie**—This site is in close proximity to the City of Bowie. Under the application number of a prior preliminary plan of subdivision, the City Council voted unanimously to support the proposal to create a developable lot for the purpose of construction of a church. The traffic study associated with the current application was submitted after the City Council’s action. The City may have further comment following review of the applicant’s traffic study by the Maryland State Highway Administration (SHA).
18. **Use Conversion**—The subject property is zoned R-A. While the subject application is not proposing any residential development, the R-A Zone does permit residential development and a new preliminary plan should be approved. Because there exist different adequate public facility tests, and there are considerations for recreational components for residential subdivision, a new preliminary plan should be required if residential development is to be considered.
19. **Non-Transportation Related Conditions**—As noted in the Overview Section of this report above and as more specifically detailed in Finding 19 below, staff is recommending disapproval of the subject application. Should there be a satisfactory resolution of the transportation related issues that would lead to a change in recommendation; staff offers the following prospective conditions based on non-transportation related findings contained in this report:

PROSPECTIVE CONDITIONS

1. Prior to signature approval of the preliminary plan of subdivision, the 1.5 safety factor line for Marlboro clay shall be identified on the plan.
2. Prior to the issuance of permits, a Type II tree conservation plan shall be approved.
3. Prior to signature approval of the preliminary plan, a copy of the stormwater management concept approval letter and associated plans shall be submitted, and revised if necessary, to show the layout of the proposed development as currently designed.
4. At time of permit application, the stormwater management technical plan and the landscape plan shall show the use of low-impact development stormwater management techniques, such as bioretention or french drains, applied on this site to the greatest extent possible.

5. The landscape plan submitted at the time of building permit shall demonstrate the use of conservation landscaping techniques that reduce water consumption and minimize run-off resulting from the use of fertilizers or chemical application to the greatest extent possible. The U.S. Fish and Wildlife Service publication “Native Plants for Wildlife Habitat and Conservation Landscaping—Chesapeake Bay Watershed” or the Chesapeake Conservation Landscaping Council publication “Conservation Landscaping Guidelines” shall be used as a guide in developing the landscaping for the entire site, and a minimum of 50 percent of the plant units shall be native species.
6. The permit plans for the development shall contain the following note:

“Full cut-off optic light fixtures shall be used throughout the development and shall be directed downward to reduce glare and light intrusion.”
7. Prior to signature approval of the preliminary plan, the tree conservation plan shall be revised as follows:
 - a. Show all elements of the proposed development with associated grading;
 - b. Show all proposed stormwater management elements and contain the elements within the limits of disturbance shown on the TCPI submitted;
 - c. Show the location of any proposed retaining walls and provide a 10-foot-wide clear work and maintenance zone adjacent to retaining walls;
 - d. Show the location of the proposed private septic system;
 - e. Identify the woodland conservation methodology proposed, correctly labeled in the legend, and clarify the graphics for all conservation areas;
 - f. Provide the appropriate TCPI standard notes; and
 - g. Have the TCPI signed and dated by the qualified professional who prepared it.
8. The following note shall be placed on the final plat of subdivision:

“Development is subject to restrictions shown on the approved Type I Tree Conservation Plan (TCPI/027/08), or as modified by the Type II Tree Conservation Plan, and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland Conservation Ordinance. This property is subject to the notification provisions of CB-60-2005. Copies of all approved Tree TCPI Tree Conservation Plans for the subject property are available in the offices of the Maryland-National Capital Park and Planning Commission, Prince Georges County, Planning Department.”
9. At the time of final plat, a conservation easement shall be described by bearings and distances. The conservation easement shall contain the delineated Patuxent River primary management area, except for approved impacts, and shall be reviewed by the Environmental Planning Section prior to approval of the final plat. The following note shall be placed on the plat:

“Conservation easements described on this plat are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed.”

10. Prior to the issuance of any permits which impact wetlands, wetland buffers, streams, or Waters of the U.S., the applicant shall provide the Environmental Planning Section with copies of all Federal and State wetland permits, evidence that approval conditions have been complied with, and associated mitigation plan.
11. Prior to the approval of the final plat, a detailed site plan shall be approved for the site. At the time of detailed site plan, an evaluation shall be made of the proposed development to identify potential impacts to the Marlboro clay, and delineate that the location of a 1.5 safety factor line if one is found to occur based on the design of the built structures proposed at that time.
12. At time of final plat, a 1.5 safety factor line shall be shown on the final plat, if found applicable, and the following note shall be placed on the plat:

“No structures or septic fields shall be placed within the 1.5 safety factor line.”
13. A water appropriation permit must be obtained through the Health Department from the Water Rights Division of the Maryland Department of the Environment for any facility that has an average daily flow of water greater than 10,000 gallons.
14. Prior to detailed site plan, the applicant will perform percolation tests pursuant to percolation test application 12008-2008. The applicant must contact the Health Department to schedule the witnessing of the new percolation testing. The Health Department will determine the site location of the percolation tests. This may require the applicant to redesign the proposed parking lot.
15. Following completion of the percolation testing, a revised site plan of a scale of at least 1-inch equals 50 feet must be submitted to the Health Department designating the following:
 - a. **Any/all** easements to include the public utility easement, PMA, or right-of-ways.
 - b. The projected church location.
 - c. Proposed driveway, parking lot, and associated grading.
 - d. The 10,000-square-foot or larger sewage disposal area.
 - e. Proposed well location.
 - f. Proposed stormwater management devices.
 - g. Accurate topography at a two-foot contour interval and proposed grading of the site.
 - h. All prior water table and percolation test holes from 1978 and 1990.

- i. All recent water table and percolation test holes.
16. Prior to signature approval of the preliminary plan, all white goods, tires (approximately 12), and one abandoned vehicle found in the wetlands on the southwest section of the property must be removed and properly disposed.
17. The one unlabeled white plastic drum found on the property The liquid must be evaluated and the drum and liquid disposed of in an appropriate manner by a licensed hazardous waste company. A copy of the manifest must be submitted to the Health Department prior to preliminary plan signature approval. If the drum is not removed the Health Department will contact the Hazardous Materials Section of the Prince George's County Fire Department for proper disposal.
18. Any residential development of the subject property shall require the approval of a new preliminary plan of subdivision prior to the approval of any building permits.
20. **Transportation**—This property is located on the east side of US 301, approximately 1,435 feet north of the US 301- Mitchellville Road intersection. The subject application proposes the construction of a 650-seat church, totaling 27,000 square feet of gross floor area. The applicant presented staff with a traffic study that was prepared in July 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	Sunday Peak
	LOS/CLV Delay(seconds)		
US 301 SB @ Mitchellville Road (signalized)	C/1209	D/1389	A/845
US 301 NB @ Queen Anne Bridge Road (signalized)	B/1135	C/1256	B/1021
US 301 SB @ Mt. Oak Road **	C/20.6	C/24.3	B/14.6
US 301 SB @ Median Break **	F/61.2	F/145.4	E/40.0
US 301 NB @ Median Break **	C/23.7	D/25.1	C/23.3
** Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service (LOS) 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 critical lane volume (CLV) of 1300 or less is deemed acceptable as per the <i>Guidelines</i> .			

The traffic study, in collaboration with staff, identified nine 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	Sunday Peak
	LOS/CLV Delay(seconds)		
US 301 SB @ Mitchellville Road (signalized)	D/1388	F/1691	C/1265
US 301 NB @ Queen Anne Bridge Road (signalized)	D/1373	F/1649	D/1323
US 301 SB @ Mt. Oak Road **	D/28.7	E/37.8	C/19.2
US 301 SB @ Median Break **	F/108	F/466	E/40.0
US 301 NB @ Median Break **	E/36.0	E/44.7	E/36.5
** Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service (LOS) 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 critical lane volume (CLV) of 1300 or less is deemed acceptable as per the <i>Guidelines</i> .			

Using trip generation rates that were obtained from the Institute of Transportation (ITE) *Trip Generation Manual*, the study has indicated that the proposed 650-seat church, would be adding 19 (12 in; 7 out) AM peak-hour trips, 19 (9 in; 10 out) PM peak-hour trips and 397 (198 in; 199 out) during the Sunday peak hour 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	Sunday Peak
	LOS/CLV Delay(seconds)		
US 301 SB @ Mitchellville Road (signalized)	D/1389	F/1692	C/1298
US 301 NB @ Queen Anne Bridge Road (signalized)	D/1383	F/1658	E/1507
US 301 SB @ Mt. Oak Road **	D/29.0	E/38.1	C/20.7
US 301 SB @ Median Break **	F/108.0	F/466.0	F/91.0
US 301 NB @ Median Break **	E/36.8	E/45.6	F/71.6
** Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service (LOS) 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 critical lane volume (CLV) of 1300 or less is deemed acceptable as per the <i>Guidelines</i> .			

The proceeding results revealed that all of the study intersections would operate inadequately with the exception of US 301 SB at Mount Oak Road.

Regarding the intersections of US 301 SB at Mitchellville Road and US 301 NB at Queen Anne Bridge Road, the analyses showed those intersections operating inadequately, during the PM peak hour as well as during the Sunday peak. To ameliorate the inadequacy, the study (and staff) evaluated the addition of a through lane on southbound and northbound US 301 through the intersection. The result indicated that the addition of a third through lane on US 301 will enhance the projected LOS to C or better during the weekday peak hours as well as during the Sunday peak hour.

Given the cost associated with the construction of additional through lanes along US 301 (northbound and southbound), 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 a free-flow right turn lane at the eastbound approach.
- Provide a shared through/left lane and an exclusive through lane on the westbound approach.
- Modify eastbound/westbound Queen Anne Bridge Road signal approaches as deemed necessary by SHA.

Based on the afore-mentioned improvements, the following results were obtained:

FINAL CONDITIONS with mitigation improvements				
Intersection	AM	PM		
	(LOS/CLV)	(LOS/CLV)	Required Mitigation	Actual Mitigated
US 301 SB @ Mitchellville Road (signal) <i>With EB Free Right + WB L & LT</i>	C/1276	E/1574	150%	11,300%
US 301 SB @ Mitchellville Road (signal) <i>With EB Free Right + WB L & LT</i>	C/1187 (Sunday Peak)		150%	336%

The results of the improvements pursuant to the mitigation guidelines indicated that, greater than 150 percent of the traffic being added to the US 301 SB at Mitchellville Road intersection will be mitigated.

It is worth noting that the above-mentioned improvements were proffered for the intersection of southbound US 301 at Mitchellville Road only. The applicant's Transportation Facilities Mitigation Plan (TFMP) did not identify any improvements that would mitigate 100 percent or 150 percent of the site trips through the intersection of US 301 NB at Queen Anne Bridge Road. Since no improvements are being proffered pursuant to the use of mitigation, transportation adequacy for this intersection can only be met by improvements that will bring the intersection level of service to the 2002 *Approved General Plan* policy service level of C. The only such improvement that has been identified by the traffic study is the provision of a third through lane along northbound US 301 at this intersection.

Regarding the US 301 SB at 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 three other agencies, the Maryland State Highway Administration (SHA), the Department of Public and Transportation (DPW&T) and the City of Bowie. Since all of the studied intersections are under the control of SHA, the staff of DPW&T acknowledged in a letter dated August 24, 2009, that the final decisions on how to improve those facilities rest with the SHA.

As of the writing of this technical staff report, staff has not received any written comments from either the SHA or the City of Bowie. One of the requirements in the *Guidelines for Mitigation Actions* (Prince George's County Council in CR-29-1994) regarding the use of mitigation is that the permitting agency must concur with any improvement that is being proffered. Since staff has no written comments from SHA, it cannot be determined if SHA concurs with the improvements. Consequently, the improvements proffered in the applicant's TFMP cannot be deemed acceptable.

TRANSPORTATION STAFF FINDINGS

The application is a preliminary plan of subdivision for the construction of a 650-seat church, totaling 27,000 square feet of gross floor area. The proposed development would generate 19 (12 in; 7 out) AM peak-hour trips, 19 (9 in; 10 out) PM peak-hour trips and 397 (198 in; 199 out) during the Sunday peak hour at the time of full build-out.

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

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

None of these intersections are programmed for improvement with 100 percent construction funding within the next six years in the current Maryland Department of Transportation Consolidated Transportation Program or the Prince George's County Capital Improvement Program.

The subject property is located within the rural tier, as defined in the 2002 *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) C, with signalized intersections operating at a critical lane volume (CLV) of 1,300 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.

Of the intersections identified above, the following intersections, when analyzed with the total future traffic as developed using the *Guidelines*, were **not** found to be operating at or better than these policy service levels:

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

Of these four intersections, the US 301 NB at Queen Anne Bridge intersection was **not** found to be operating at or better than the policy service level and no improvement was identified in the TFMP for mitigating this intersection.

No additional improvements were offered by the applicant that would provide a delay less than 50 seconds at these unsignalized intersections. It is typical however, to require a signal warrant study for unsignalized intersections, where the existing or projected delay exceeds 50 seconds.

For the remaining two intersections impacted by this development, the provision of an additional through lane along northbound and southbound US 301 at the intersections of US 301 SB at Mitchellville Road (signalized) and US 301 NB at Queen Anne Bridge Road (signalized) will allow these intersections to operate at or better than the identified policy service levels. There is a significant cost (in excess of \$1.5 million) associated with the provision of additional through lanes along a major transportation facility like US 301.

The portion of US 301 between US 50 and MD 5, is one of five transportation corridors that is eligible for the use of mitigation as established by the *Guidelines for Mitigation Actions* (Prince George's County Council in CR-29-1994). Given the cost associated with improvements identified for these two intersections, and the fact that US 301 is eligible for the use of mitigation, the applicant has submitted to staff a Transportation Facilities Mitigation Plan (TFMP) pursuant to the "Guidelines for Mitigation Actions".

Considering the impact of an additional through lane at these intersections, the applicant has agreed to provide the following improvements (as a TFMP) to the intersection:

Southbound US 301 at Mitchellville Road

- a. Construct a free-flow right turn lane at the eastbound approach
- b. Provide a shared through/left lane and an exclusive through lane on the westbound approach.
- c. Modify eastbound/westbound Queen Anne Bridge Road signal approaches as deemed necessary by SHA.

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 was found to be better than 125 percent of LOS C. While this proposed improvement will satisfy the required mathematical threshold, it cannot be supported by staff, since no written concurrence has been provided by SHA as of this writing.

The property currently fronts on the east side of US 301. This dualized roadway currently functions as an expressway, with partial control of access. If this property were to be developed in the near term, its access would be limited to a right in, right out facility. The 2006 *Approved Master Plan for Bowie and Vicinity and Sectional Map Amendment for Planning Areas 71A, 71B, 74A, 74B*, recommends an upgrade of US 301 to a freeway (F-10). In order for US 301 to function as a freeway, a parallel service road (A-61) is also being recommended. The 1999 *US 301 Access Control Study from MD 5 at TB to US 50*, recommends that the service road be located on the west side of the proposed F-10 freeway. When that construction occurs, this property will no longer have direct access to F-10 or to the proposed access road.

In light of these transportation findings above, staff is compelled to recommend disapproval of this preliminary plan of subdivision due to inadequate transportation facilities and lack of information to find adequate transportation facilities. The Planning Board should find that adequate access roads will not exist as required by Section 24-124 of the Prince George's County Code if the application is approved.

RECOMMENDATION

Staff recommends DISAPPROVAL of Preliminary Plan of Subdivision 4-09006, based on insufficient information to be able to determine that adequate public facilities will exist if the application is approved.