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 4-04048**

Application		General Data		
Project Name: MUFFLEY PROPERTY		Date Accepted:	04/14/04	
		Planning Board Action Limit:	10/01/04	
		Plan Acreage:	6.99	
Location:		Zone:	R-R	
	Orive, south side of oximately 2,500 feet east of	Lots:	11	
Dangerfield Road.		Parcel:	0	
Applicant/Address:		Planning Area:	81A	
Vendemia & Decesaris 16000 Trade Zone Ave		Tier:	Developing	
Upper Marlboro, MD.	Upper Marlboro, MD. 20774		09	
		Municipality:	N/A	
		200-Scale Base Map:	211SE08	
Purpose of Applicatio	n	Notice Dates		
RESIDENTIAL SUBDIVISION		Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003)	02/20/04	
		Sign(s) Posted on Site:	08/23/04	
Staff Recommendation		Staff Reviewer: Del Balzo		
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL DISCUSS		
	X			

# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

#### PRINCE GEORGE'S COUNTY PLANNING BOARD

## STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-04048

Muffley Property, Lots 1–11

#### **OVERVIEW**

The subject property consists of approximately 6.99 acres of land in the R-R Zone. Although it is improved with a single-family dwelling, most of the land is wooded. The applicant proposes to subdivide the property into 11 lots for single-family, detached residential development. Access will be provided by an internal public street that will connect to Sweeney Drive. No direct access to Woodyard Road is proposed.

## **SETTING**

The subject property is located on the east side of Sweeney Drive, the south side of Woodyard Road, and approximately 2,500 feet east of the Woodyard Road/Dangerfield Road intersection. A few single-family dwellings on large lots abut the property to the east and west. Woodyard Road is to the north and a single-family dwelling in the R-R Zone abuts the property to the south.

## FINDINGS AND REASONS FOR STAFF RECOMMENDATION

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

	EXISTING	PROPOSED
Zone	R-R	R-R
Use(s)	Single-family	Single-family dwellings
	dwelling	
Acreage	6.99	6.99
Lots	0	11
Parcels	2	0
Detached Dwelling Units	1	11

2. **Environmental**—The site is characterized by gradually rolling terrain with elevations ranging from 224 feet to 258 feet mean sea level. Runoff drains into Piscataway Creek in the Potomac Watershed. There are no streams or 100-year floodplain on the site. A small portion of a wetland exists on the site. Current aerial photos indicate that about 90 percent of the site is forested. Based on the most recent Air Installation Compatible Use Zone (AICUZ) study released to the public in August 1998 by the Andrews Air Force Base, aircraft-related noise is significant. The proposal is not expected to be a noise generator. No scenic or historic roads are affected by the application. According to information obtained from the Maryland Department of Natural Resources Natural Heritage Program publication titled "Ecologically Significant Areas in Anne Arundel and Prince George's Counties," December 1997, there are no rare, threatened, or

endangered species found to occur in the vicinity of this property. According to the *Prince George's County Soils Survey* the predominant soil types on site are in the Beltsville, Chillum, Matapeake and Rumford series. The site is in the Developing Tier according to the General Plan.

#### **Woodland Conservation**

The forest stand delineation (FSD) has been reviewed. The FSD, based upon five sample points, describes a single forest stand containing 6.72 acres and five specimen trees. The FSD meets the requirements of the Woodland Conservation Ordinance. No additional information with regard to the Forest Stand Delineation is required.

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

The revised Type I Tree Conservation Plan, TCPI/37/04, has been reviewed. The plan proposes clearing 5.35 acres of the existing 6.72 acres of woodland. The woodland conservation requirement has been correctly calculated as 2.75 acres. The plan proposes to meet the requirement by providing 0.93 acres of on-site preservation, 0.62 acres of on-site planting, and 1.20 acres of off-site conservation for a total of 2.75 acres with the one-site threshold being 1.39 acres. In addition, the plan proposes retaining 0.44 acres of woodland on-site that is not part of any requirement. The plan notes that all on-site planting will use one-inch or larger caliper stock and be protected by a permanent fence.

This site contains wetlands associated with Piscataway Creek in the Potomac River watershed. These natural features are required to be protected under Section 24-130 of the Subdivision Regulations. All disturbance not essential to the development of the site as a whole is prohibited within wetland buffers. Although the plan shows a minor disturbance into the wetland buffer, no impacts are actually proposed. Prior to signature approval, the plan needs to be revised to correct this error. A conservation easement should contain the wetlands and wetland buffer and be reviewed by the Environmental Planning Section prior to final plat approval.

#### Noise

Based on the most recent AICUZ study released to the public in August 1998 by the Andrews Air Force Base, aircraft generated noise is significant. The study indicates that the noise threshold is within the 70-75 dBA (Ldn) noise contour. This noise level is above State Acceptable Noise Level for residential land uses. It will not be possible to mitigate noise in the outdoor activity areas; however, the use of proper construction materials must be used to ensure that the noise inside of the residential structures does not exceed 45dBA. A professional engineer with competency in acoustical analysis should certify on the building permits that building structures have been designed to reduce interior noise levels to 45dBA or less. In addition, a note should be placed on the final plat indicating that high noise levels associated with Andrews Air Force Base may affect the property.

#### Soils

According to the *Prince George's County Soils Survey* the predominant soil types on site are in the Beltsville, Chillum, Matapeake and Rumford series. Beltsville soils are highly erodible, may have impeded drainage, and may have a high water table. Chillum soils are highly erodible, but pose no special problems for roads or foundations. Matapeake and Rumford soils pose no special

problems for development. The Department of Environmental Resources may require a soil study at the time of building permit.

# Water and Sewer Categories

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

3. **Community Planning**—The property is in Planning Area 81A/Clinton. It is in the Developing Tier as defined by the 2002 General Plan. The vision for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities, distinct commercial Centers, and employment areas that are increasingly transit serviceable. This application is not inconsistent with the 2002 *General Plan* Development Pattern policies for the Developing Tier.

The 1993 Subregion V master plan recommends residential land use at the Low-Suburban density of up to 2.6 dwelling units per acre. The 1993 Subregion V sectional map amendment classified this property in the R-R Zone. This application conforms to the recommendations of the master plan for Low-Suburban residential land use.

The master plan text references Andrews Air Force Base as a major source of nonpoint noise. It notes that the AICUZ study identifies Accident Potential Zones(APZ) and noise Compatible Use Districts (CUD) and recommends suitable land uses (p. 135). The perceptual analysis identifies noise intrusion as a perceptual liability having negative qualities that call for corrective action (p. 137). The Environmental Guidelines (p. 140) state:

"12. Developers shall be encouraged to include careful site planning and construction techniques, which are designed to reduce the adverse impact of point and nonpoint source noise that exceeds the State's current maximum allowable levels for receiving land uses."

This site is located under the flight path for aircraft at Andrews Air Force Base, approximately one and three-quarter miles from the south end of the runway, within an area encompassed by AICUZ studies. The 1989 AICUZ study reference in the master plan text (pp. 70, 75) has been updated to reflect changing operations at Andrews Air Force Base. The current AICUZ study is dated 1998 and identifies the subject property as in both Accident Potential Zone One (APZ I, in the northern portion) and Two (APZ II, in the southern portion), and within the boundary of the 70-75 dBA Ldn noise contour.

According to Table 4-2 in the 1998 AICUZ study (p. 4-10), single-family, detached residential development is not a compatible land use within APZ I and should be prohibited. The master plan generally indicates that no residential uses are recommended within APZ I (p. 74). However, the subject property is privately owned and classified in a low-density residential zone. In absence of a public program for acquisition, it may be developed consistent with the existing zoning.

Master plan recommendations pertaining to residential development in airport environments that may apply to review of this application, include:

• "Regulations should be adopted to require that subdivision plats and deeds of sale for any residential property located in areas around airports include language informing any buyer about areas identified as having increased accident potential or areas that exceed noise levels of 65 Ldn due to aircraft operations." (Living Areas Recommendations, p. 51).

• "New homes in areas around airports that are subject to higher than desirable noise levels for residential areas (generally over 65 Ldn) should be developed at as low a density as is practical; should be planned utilizing cluster development techniques to move homes away from noise impact areas; and units should be acoustically buffered to reduce interior noise to acceptable standards." (Living Areas Recommendations, p. 52).

The applicant should note Master Plan Living Area Design Guideline 18 (plan text, p. 54) that reads: "Residential structures should be designed in harmonious relationships to one another, to the terrain, to adjacent roadways, and should be situated to create interesting, useable spaces."

- 4. **Parks and Recreation**—In accordance with Section 24-134(a) of the Prince George's County Subdivision Regulations, the Park Planning and Development Division recommends that the Prince George's County Planning Board require a payment of a fee-in-lieu of dedication as applicable from the subject subdivision because land available for dedication is unsuitable due to its inadequate size and location.
- 5. **Trails**—There are no master plan trails issues identified in the adopted and approved Subregion V master plan. MD 223 is used by on-road bicycle traffic, and the provision of a paved asphalt shoulder or wide curb lane is recommended along the subject site's frontage to safely accommodate bicycle movement, per the concurrence of State Highway Administration.

The existing portion of Sweeney Road is open section with no sidewalks. The majority of the roads in the vicinity of the subject site are open section, with no sidewalks. Existing roads in Mount Airy Estates include sidewalks on both sides. Due to the relatively large size of the proposed lots and the lack of existing sidewalks in the area, no sidewalk construction is recommended for the subject site.

6. **Transportation**—The applicant proposes 11 single-family dwelling units. Some of the proposed lots would have direct access to Sweeny Drive, while others would access a proposed cul-de-sac road to be built by the applicant. The property will have no direct access to Woodyard Road (MD 223).

The applicant's proposed development would generate fewer than 50 trips in any peak hour; hence a traffic study was not required. Instead, staff will make a finding relating to adequacy based on traffic data on file for a recent adjacent development. The findings and recommendations outlined below are based upon a review of these materials and analyses conducted by staff of the Transportation Planning Section, consistent with the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*.

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

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

Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better. Mitigation, as defined by Section 24-124(a)(6) of the Subdivision Ordinance, is permitted at signalized intersections within any tier subject to meeting the geographical criteria in the guidelines.

**Unsignalized intersections:** The *Highway Capacity Manual* procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational

studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed to be an unacceptable operating condition at unsignalized intersections. In response to such a finding, the Planning Board has generally recommended that the applicant provide a traffic signal warrant study and install the signal (or other less costly warranted traffic controls) if deemed warranted by the appropriate operating agency.

## **Staff Analysis of Traffic Impacts**

The critical intersection on which the proposed development would have an impact would be:

Woodyard Road/Old Alexandria Ferry Road (signalized). The most recent traffic analysis of that intersection yielded the following results:

EXISTING TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (AM & PM)	
Woodyard Road/Old Alexandria Ferry Road **	1,914	1,447	F	D

<sup>\*\*</sup>This existing traffic condition represents an average of two traffic counts taken on April 3, 2003, and May 18, 2003. Staff feels that this is more representative of existing traffic conditions at the intersection.

Background developments included 259 single-family units and a business park (40,000 square feet of office and 80,000 square feet of warehouse). Background traffic along the study area roads was also increased by one percent each year to account for overall growth up to the design year 2008. This is the expected year of full build-out. Given these assumptions, background conditions are summarized below:

BACKGROUND TRAFFIC CONDITIONS				
Critical Lane Volume Level of S			Service	
Intersection	(AM & PM)		(AM & PM)	
Woodyard Road/Old Alexandria Ferry Road	2,368	1,671	F	F

The applicant proposes applicant proposes 11 single-family dwelling units. Based on trip rates from the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*, the resulting site trip generation would be 8 AM peak-hour trips (1 in, 7 out), and 9 PM peak-hour trips (6 in, 3 out). With site traffic, the following operating conditions were determined:

TOTAL TRAFFIC CONDITIONS				
Critical Lane Volume Level of Service				Service
Intersection	(AM & PM)		(AM & PM)	
Woodyard Road/Old Alexandria Ferry Road	2,373	1,677	F	F

Under total traffic and without any improvements, the critical intersection would operate unacceptably. However, there have been two preliminary plan approvals by the Planning

Board—Chesterfield Estates Cluster (PGCPB No.03-226) and Bellefonte (PGCPB No.04-63), which required the following improvements:

## At Woodyard Road (MD 223) and Old Alexandria Ferry Road:

- Lengthen the right turn lane on westbound Woodyard Road to three hundred feet.
- Provide a two hundred foot northbound left turn lane on Dangerfield Road.
- Widen the southbound approach of Old Alexandria Ferry Road to accommodate a double left turn lane, a through lane, and a right turn lane.
- Modify the receiving lanes on the east leg of Woodyard Road to accommodate the double left turn lanes from southbound Old Alexandria Ferry Road.

TOTAL TRAFFIC CONDITIONS WITH IMPROVEMENTS				
	CLV (AM & PM) Level of Service			Service
Intersection	(AM & PI		PM)	
Woodyard Road/Old Alexandria Ferry Road	1,228	1,439	C	D

The table above shows that adequacy would be met if a similar set of improvements were provided at the intersection of MD 223 and Old Alexandria Ferry Road/Dangerfield Road.

#### **Plan Comments**

Regarding the site access and overall circulation, staff has no issues.

## **Master Plan Comments**

The Subregion V Study Area Master Plan (1993) designates Woodyard Road as an arterial roadway (A-53). The section between MD 5 and MD 4 is listed as a four- to eight-lane roadway with 120 to 150 feet of right-of-way width. The Subregion V master plan recommends the upgrading of Woodyard Road to four lanes as an early need associated with development in the Clinton area as well as the neighboring areas of Melwood and Rosaryville.

## **Transportation Conclusions**

Based on these findings, adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved with conditions requiring the noted roadway improvements.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003.

Impact on Affected Public School Clusters

Affected School	Elementary School	Middle School	High School
Clusters #	Cluster 5	Cluster 3	Cluster 3
Dwelling Units	11 sfd	11 sfd	11 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	2.64	0.66	1.32
Actual Enrollment	4096	4689	8654
Completion Enrollment	180.48	86.22	158.07
Cumulative Enrollment	135.36	39.12	78.24
Total Enrollment	4414.48	4815	8891.63
State Rated Capacity	4214	5114	7752
Percent Capacity	104.76	94.15	114.70

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

These figures were correct on the day the referral memorandum was written. Other projects that are approved prior to the public hearing on this project will cause changes to these figures. The numbers that will be used in the resolution will be the ones that will apply to this project.

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

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

- 8. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public fire and rescue facilities.
  - a. The existing fire engine service at Clinton Fire Station, Company 25, located at 9025 Woodyard Road, has a service travel time of 3.51 minutes, which is within the 5.25-minute travel time guideline.
  - b. The existing ambulance service at Clinton Fire Station, Company 25, has a service travel time of 3.51 minutes, which is within the 6.25-minute travel time guideline.
  - c. The existing paramedic service at Clinton Fire Station, Company 25, has a service travel time of 3.51 minutes, which is within the 7.25-minute travel time guideline.

These findings are in conformance with the standards and guidelines contained in the *Approved Public Safety Master Plan* (1990) and the *Guidelines for the Analysis of Development Impact on Fire and Rescue Facilities*. The proposed subdivision will be within the adequate coverage area of the nearest existing fire/rescue facilities for fire engine, ambulance and paramedic services.

- 9. **Police Facilities**—The proposed development is within the service area for Police District V-Clinton. The Planning Board's current test for police adequacy is based on a standard for square footage in police stations relative to the number of sworn duty staff assigned. The standard is 115 square feet per officer. As of January 2, 2004, the County had 823 sworn staff and a total of 101,303 square feet of station space. Based on available space, there is capacity for an additional 57 sworn personnel. This police facility will adequately serve the population generated by the proposed subdivision.
- 10. **Health Department**—The Health Department noted the presence of domestic trash and scrap tires on the property. The trash and debris must be disposed of properly. The tires must be hauled by a licensed scrap tire hauler to a licensed scrap tire disposal/recycling facility. A receipt must be turned in to the Health Department. The Health Department reminds the applicant that raze permits are required prior to demolition of any structure on the site. The Health Department also noted that wells and septic systems to be abandoned must be pumped, backfilled, and/or sealed in accordance with COMAR 26.04.04.
- 11. **Stormwater Management**—The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. A Stormwater Management Concept Plan, Concept 13513-2004-00, has been filed but not yet been approved. To ensure that development of this site does not result in on-site or downstream flooding, a Stormwater Management Concept Plan must be approved prior to signature approval of the preliminary plan. Development must be in accordance with this approved plan, or any revisions thereto.
- 12. **Cemeteries**—There are no known cemeteries on or adjoining the subject property, nor is it likely that archaeological investigation would reveal any evidence of antebellum artifacts or burials. However, the applicant should be aware that if burials are found during any phase of the development process, development activity must cease in accordance with state law.
  - 14. **Public Utility Easement**—The preliminary plan includes the required ten-foot-wide public utility easement parallel and contiguous to all public rights-of-way. The easement will be shown on the final plat.
- 14. **Internal Public Street**—The proposed internal public street is set back ten feet from the adjoining property. This creates two problems. First, it creates a "spite" strip that prevents access from adjoining properties to the public street. Second, it creates an artificially long frontage for proposed Lot 6. To avoid these problems, the street should be either moved ten feet to the east so that it abuts the adjoining property or it should simply be widened to 60 feet of right-of-way at this point.

## RECOMMENDATION

APPROVAL, subject to the following conditions:

- 1. Prior to signature approval of the preliminary plan, the plan shall be revised as follows:
  - a. The internal road shall be moved or widened to a 60-foot-wide right-of-way so that the right-of-way abuts the property to the east.
  - b. The internal road shall be moved to avoid impacts to the wetland buffer.

- 2. At time of final plat, a conservation easement shall be described by bearings and distances. The conservation easement shall contain the wetlands and wetland buffer and be reviewed by the Environmental Planning Section prior to certification.
- 3. The following notes shall be placed on the Final Plat of Subdivision:
  - "Development is subject to restrictions shown on the approved Type I Tree Conservation Plan (TCPI/37/04), or as modified by the Type II Tree Conservation Plan, and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland Conservation/Tree Preservation Policy."
  - "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."
  - "Due to the proximity of Andrews Air Force Base, properties within this subdivision have been identified as possibly having noise levels that exceed 70 dBA Ldn due to military aircraft overflights."
- 4. Prior to the approval of building permits, a certification by a professional engineer with competency in acoustical analysis shall be placed on the building permits stating that building shells of structures have been designed to reduce interior noise levels to 45dBA or less.
- 5. At the time of final plat, the applicant, his heirs, successors and/or assignees shall pay a fee-in-lieu of mandatory park dedication.
- 6. The applicant, his heirs, successors and/or assignees shall construct a wide asphalt shoulder or wide curb lane along the subject property's frontage of Woodyard Road to safely accommodate neighborhood pedestrian and bicycle traffic, to be constructed under a permit from the State Highway Administration (SHA), per the concurrence of SHA.
- 7. A Type II Tree Conservation Plan shall be approved prior to the issuance of permits.
- 8. Prior to the issuance of permits, the applicant, his heirs, successors and/or assignees shall have the scrap tires hauled by a licensed scrap tire hauler to a licensed scrap tire disposal/recycling facility. A receipt shall be turned in to the Health Department.
- 9. Prior to the issuance of any building permits within the subject property, the following road improvements shall (a) have full financial assurances, (b) have been permitted for construction, and (c) have an agreed-upon timetable for construction with SHA:

At the intersection of MD 223 (Woodyard Road) and Old Alexandria Ferry Road the applicant shall widen the southbound approach from the existing one left turn lane and one through/right turn lane to two left turn lanes, one through lane, and one right turn lane. The applicant shall also widen the east leg of MD 223 to receive the double left turns from southbound Old Alexandria Ferry Road and widen northbound Dangerfield Road to create an exclusive left turn lane.

STAFF RECOMMENDS APPROVAL OF THE TYPE I TREE CONSERVATION PLAN, TCPI/37/04.