

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Subdivision Plan 4-01025
Enterprise Estates, Lots 1 - 12

OVERVIEW

The subject property consists of approximately eight acres of land in the R-R Zone. The property is irregularly shaped and has been improved with a single-family home that has fallen into disrepair. The applicant proposes to subdivide the property into 12 single-family residential lots. Three of the proposed lots are flag lots. Access is provided to the site by a single proposed cul-de-sac from Enterprise Road.

Three previous applications have been filed for this site. Preliminary Plats 4-95036, 4-00032 and 4-00061 were all filed and withdrawn. The first proposed a church on the property; the other two were similar to the current proposal. The two previous applications were withdrawn because environmental issues were unresolved. These issues have been resolved and staff supports the current application.

SETTING

The property is located on the west side of Enterprise Road, approximately 150 feet south of its intersection with Chantilly Lane. It is surrounded by single-family homes in the R-R Zone.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. Environmental Issues and Variation Request - No streams or 100-year floodplain have been identified. The site is located in the Lottsford Branch watershed, which is a tributary to the Patuxent River. There are no slopes greater than 25 percent located on the site. There is a grassed hillside which falls away from the road to the west, with slopes between 15 percent and 25 percent, but the soils are not erodible. The soils on the site are in the Collington and Ochlockonee series, both of which pose no special problems to development. No Marlboro clay has been identified on this site. The site is in sewer and water categories W-3 and S-3. Public water and sewer are proposed. No rare, threatened, or endangered species have been identified. No scenic or historic roads, or greenway systems are affected by this proposal. According to State of Maryland Wetlands Guidance Maps and a previous examination of the site (Preliminary Plat 4-95036), a small area of nontidal wetlands was located at the western edge of the site by the existing inlet on proposed Lots 6 & 7.

A Stormwater Management Concept Approval Letter (8316208-2000-00) has been submitted. The conditions of approval require the retention of one-half inch of run-off from impervious area, and for the existing storm drain system to be analyzed for adequacy, and for the 100-year overflow path to be shown at the time of technical review. If the existing

storm drain system is found to be inadequate, additional on-site measures may be required, which would affect Lot 7, a proposed flag lot.

The TCP I Woodland Conservation Worksheet indicates that the minimum woodland conservation requirement for this site is 1.60 acres (20 percent of the Net Tract). An additional 0.06 acre was required due to removal of woodland, for a total requirement of 1.68 acres. The TCP I proposes to meet all woodland conservation requirements on-site through a combination of woodland preservation and afforestation.

The TCP I indicated the location of specimen trees, and includes a table of specimen trees indicating their species, size, condition, disposition. The TCP I should be revised to show the critical roots zones of the specimen trees so their potential for retention can be assessed. On lots larger than 10,000 square feet, a 40-foot wide active rear yard is needed, free from the encumbrance of woodland conservation.

Section 4.6 of the *Landscape Manual* requires that the rear yard of residential lots adjacent to an arterial have a minimum landscaped buffer of 50 feet in width, and specifies the amount of plant materials required. The TCP I and Preliminary Plan propose a 35-foot-wide ■woodland conservation easement• adjacent to Enterprise Road. The term ■woodland conservation easement• is incorrect, and should be removed from the plan. The areas should be re-labeled woodland preservation or afforestation/ reforestation.

A woodland conservation area in this location is compatible with a landscape buffer, as long as the buffer meets the more stringent requirements for minimum width and quantity and size of plant materials. Also, a structure, such as the proposed noise barrier cannot be placed in an area proposed for woodland conservation. This can be reviewed when the TCP II and Landscape Plan are reviewed at time of Limited Detailed Site Plan, which is indicated for this lots due to noise mitigation requirements for the site.

This property is located in the noise corridor for Enterprise Road (MD 193). The modeled 65 dBA contour, based on a four-lane undivided arterial, was projected to fall 560 feet from the centerline of the road, impacting all of the lots proposed on this site. A Phase I Noise Study was required prior to Preliminary Plan approval, showing the location of the 65 dBA noise contour, based on the proposed design of the roadway, projected traffic, and existing mitigation or shielding effects. A Noise Impact Analysis dated December 22, 2000, was prepared by Polysonics Corporation which determined that the location of the 65dBA Ldn contour was 246 feet from the currently shown centerline, and the 70 dBA Ldn noise contour was 65 feet from the currently shown centerline. The revised preliminary plan shows the location of the 65 and 70 dBA Ldn noise contours, which affect Lots 1, 2, 11 and 12.

The Noise Study submitted includes two mitigation proposal. To address noise impacts on active rear yards, construction of a noise barrier along the roadway was proposed to shield the backyard areas. The noise barrier is proposed to be seven feet above current grade, constructed of solid wood, and composed of nominal one-inch thick boards with butt joints covered with batten strips. The barrier is to be built upon 6" x 6" timbers buried in the ground to prevent leaks. The Noise Impact Analysis includes a detail for construction of this wall. The location of the Noise Barrier as shown on the revised preliminary plan and TCP I does not fully address the mitigation of noise impacts for the rear yards of Lots 1, 2 and 12.

The noise barrier is also shown in the public utility easement adjacent to Enterprise Road, which is not acceptable.

The proposed noise barrier height of 7 feet will require the setback necessary for the construction of a structure in the side yard of a corner lot, since no variation request has been made.

The Noise Impact Analysis submitted also includes recommendations for construction guidelines to mitigate to acceptable interior noise levels, because the barrier will not reduce noise impacts to the upper floors of the houses. The recommended Sound Transmission Classes are as follows:

Element Sound Transmission Class (STC)

Walls	39 STC
Windows	28 STC
Doors	28 STC

The analysis further states that ■these values apply to any house with the 65 dBA contour. Should window area in any room exceed 20 percent of the total surface area of the room, a refined acoustical analysis will be required. • As a result, a review of architecture will be necessary to ensure that the appropriate STC have been achieved, and to determine the extent of window area.

The Environmental Planning Section has reviewed the statement of justification for a variation request to reduce the required lot depth adjacent to an arterial from 150 feet to 130 feet and make the necessary findings to support this request.

Section 24-113 permits the Planning Board to grant variations from the strict compliance of this Subtitle where it finds that extraordinary hardship or practical difficulties may result and that substantial justice may be done and the public interest secured. The variation request to reduce the lot depth requirement by 20 feet has been reviewed by the Environmental Planning Section in accordance with the required findings of Section 24-113 of the Subdivision Ordinance.

- A. **The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property.** Comment: The granting of the variation request would not be detrimental to the public safety, health or welfare, or injurious to other property because the applicant proposes to construct noise barriers to mitigate noise impacts to the site, and landscape buffers in accordance with the *Landscape Manual* will be provided adjacent to the arterial.
- B. **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: The granting of the variation is required by conditions unique to this property, which is irregularly shaped and is surrounded on the north and west by existing platted lots in the Enterprise Estates Subdivision. Because the applicant is prohibited by Section 24-121(a)(3) from orienting the lots to front on Enterprise Road, orienting the side yards of the houses to the arterial is the only

method by which the property can be reasonably developed due to the limited frontage on Enterprise Road. Lot 12 as proposed exceeds the minimum lot area lot frontage requirements in the R-R zone

- C. **The variation does not constitute a violation of any other applicable law, ordinance, or regulation.** Comment: The lot depth variation request also does not constitute a violation of any other applicable law, ordinance or regulation.
- D. **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: Failure to grant the variation request would result in a particular hardship to the owner, due to the unusual expenses which will be incurred by this small development project to provide noise mitigation along an the arterial roadway.

Section 24-113 permits the Planning Board to grant variations from the strict compliance of this Subtitle where it finds that extraordinary hardship or practical difficulties may result and that substantial justice may be done and the public interest secured. The variation request submits that the variation requested to permit the disturbance of the non-tidal wetlands and the surrounding buffer satisfies these criteria. The variation request has been reviewed by the Environmental Planning Section in accordance with the required findings of Section 24-113 of the Subdivision Ordinance.

- A. **The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property.** Comment: The reason for disturbing wetlands is to connect storm drain facilities from the subject property into an existing storm drain line. The storm drain system located on the subject property appears to have been located to accommodate future development of the subject property. The Environmental Planning Section agrees that constructing a parallel storm drain system to avoid disturbance of this small area of isolated wetland would be wasteful and provide no additional protection of the public health, safety, or welfare. In addition, it is likely that the conditions which created the nontidal wetland area will remain, and that the wetlands will reestablish, so that no permanent disturbance of the wetlands will result.
- B. **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: The variation request submits that the condition on which this variation request is based is unique to the property for which the variation is requested. The adjoining Enterprise Estates Subdivision was developed in the early 1970s, when the stormdrain inlet and storm drain line were constructed on the subject property. The Environmental Planning Section agrees that the location of the storm drain on this property suggests that a future tie-in from the subject property was anticipated, and that it is unique for a storm drain inlet to be located more than 20 years prior to the development of the subject property on a property.

- C. **The variation does not constitute a violation of any other applicable law, ordinance, or regulation.** Comment: The variation request also does not constitute a violation of any other applicable law, ordinance or regulation, but instead allows for compliance with the Stormwater Management Ordinance.
- D. **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 variation request submits that failure to grant this request would result in a particular hardship to the owner since denial of the variation requested would require the construction of a parallel storm drain line, or the connection to the storm drain in another less suitable location. Construction of additional storm drainage would result in a waste of property, further encumbrance of property for future homeowners, and increase maintenance responsibilities for the County. The Environmental Planning Section agrees that construction of a new stormdrain system to avoid temporary disturbance of the nontidal wetlands would constitute a particular and unnecessary hardship for the property owner.
2. Community Planning - The 1990 *Approved Largo-Lottsford Master Plan* recommends residential land use in the low suburban density range. The 1990 Sectional Map Amendment (SMA) retained the property in the R-R Zone. The proposal is in conformance with the recommendations of the master plan and the zoning as established in the SMA. According to the Community Planning Division, gateway signs have been requested by many neighborhoods in this area of the county for identification and aesthetic purposes. The applicant does not propose such an entrance feature, but one may be considered. The desirability and location of such a sign should be determined at the time of Detailed Site Plan.
3. Parks and Recreation - The property is subject to the mandatory park dedication requirements of Section 24-135 of the Prince George's County Subdivision Regulations. Staff recommends the applicant provide a fee-in-lieu of mandatory dedication because the size and location of available land is not suitable for park purposes.
4. Trails - Enterprise Road is designated as a Class II Trail in the 1990 *Approved Largo-Lottsford Master Plan*. This trail will be constructed by the State Highway Administration as part of overall improvements along Enterprise Road. No applicant action is necessary.
5. Transportation - The proposed development of 12 single-family detached homes would generate **9 AM** (2 in, 7 out) and **11 PM** (7 in, 4 out) peak hour vehicle trips as determined using *Guidelines for the Analysis of the Traffic Impact of Development Proposals (Guidelines)*.
The traffic generated by the proposed preliminary plan would impact the intersection of Chantilly Lane and Enterprise Road (MD 193). This intersection is not 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 Prince George's County Planning Board, in the *Guidelines*, has defined level of service D (CLV - 1450) as the lowest acceptable operating condition for signalized intersections. For unsignalized intersections however, a delay of **50** seconds is considered the lowest acceptable operating condition. The Chantilly Lane/Enterprise Road intersection, when analyzed with total future traffic as developed using the *Guidelines*, was found to be operating with an average delay of **62.7** seconds.

In light of this finding, the applicant should be required to conduct a traffic signal warrant study for the intersection of Chantilly Lane and MD 193. Should the result of the study revealed that a signal is deemed to be warranted, the applicant shall install such signal in order to meet adequacy.

Therefore, staff concludes that adequate access roads will exist as required by Section 24-124 of the Prince George's County Code if the application is approved with the a condition requiring a signal warrant study and the installation of a traffic signal if warranted.

6. Schools - The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities in accordance with Section 24-122.01 and 24-122.02 of the Subdivision Regulations and the *Regulations to Analyze the Development Impact on Public School Facilities* (revised January 2001) (CR-4-1998).

Projected Impact on Affected Public Schools

Affected School Name	D.U. by Type	Pupil Yield Factor	Development Pupil Yield	5-Year Projection	Adjusted Enrollment	Total Projected Enrollment	State Rated Capacity	Projected % Capacity
Woodmore Elementary School	12 sfd	0.24	2.88	1139	1267.16	1270.04	589	215.63%
Benjamin Tasker Middle School	12 sfd	0.06	0.72	995	1027.04	1027.76	1089	94.38%
Bowie High School	12 sfd	0.12	1.44	2591	2655.08	2656.52	2048	129.71%

Source: Prince George's County Planning Department, M-NCPPC, January 2001

Since the affected Woodmore Elementary and Bowie High Schools projected percentages of capacity are greater than 105 percent, the Adequate Public Facilities fee is \$3,360.00 per dwelling unit.

Section 24-122.02 (a) (4) states that if any affected school's projected percentage of capacity exceeds 130 percent, no permits may be issued until (a) capacity exists below 130 percent in all affected schools; or (b) four (4) years have elapsed since the time of the approval of the preliminary plan of subdivision. However, the redevelopment of existing

homes is exempt. Therefore, while a four-year wait must be imposed for new construction, the rehabilitation or reconstruction of the existing home may proceed immediately.

7. Fire and Rescue - The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities and concluded that the proposed subdivision will be within the adequate coverage area of the nearest existing fire/rescue facilities for fire engine, ambulance and paramedic services.
 - a. The existing fire engine service at Glenn Dale Fire Station, Company 18, located at 11900 Glenn Dale Boulevard, has a service response time of 5.15 minutes, which is within the 5.25 minutes response time guideline.
 - b. The existing ambulance service at Glenn Dale Fire Station, Company 18, has a service response time of 5.15 minutes, which is within the 6.25 minutes response time guideline.
 - c. The existing paramedic service at Glenn Dale Fire Station, Company 18, has a service response time of 5.15 minutes, which is within the 7.25 minutes response time guideline.

These findings are in conformance with the *Adopted and Approved Public Safety Master Plan 1990* and the *Guidelines for the Analysis of Development Impact on Fire and Rescue Facilities*.

8. Police Facilities - The proposed development is within the service area for District II-Bowie. In accordance with Section 24-122.1(c) of the Subdivision Regulations of Prince George's County, existing county police facilities will be adequate to serve the proposed Enterprise Estates development. This police facility will adequately serve the population generated by the proposed subdivision.
9. Health Department - The Health Department noted that fuel storage tanks and abandoned well and septic systems were found on-site. The applicant will be required to remove and properly dispose of the fuel storage tanks prior to final plat approval. The Health Department must evaluate the soils for possible contamination once the tanks are removed. Any onsite sewage disposal system and well will need to be pumped, backfilled and sealed by a licensed scavenger. This must be accomplished prior to final plat.
10. 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, # 8316208-2000-00, has been approved with conditions to ensure that development of this site does not result in on-site or downstream flooding. The conditions of approval require the retention of one-half inch of run-off from impervious area, and for the existing storm drain system to be analyzed for adequacy, and for the 100-year overflow path to be shown at the time of technical review. If the existing storm drain system is found to be inadequate, additional on-site measures may

be required, which would most likely be located on proposed Lot 7. In this case, this lot will be lost for development.

11. Public Utility Easement - The required 10-foot-wide public utility easement is shown on the preliminary plan. It will be included on the final plat.
12. Flag Lots - The applicant proposes three flag lots in the subdivision. Flag lots are permitted pursuant to Section 24-138.01 of the Subdivision Regulations. Staff supports the use of flag lots
 - A. A maximum of two tiers is permitted. The proposed flag lots represent the second tier.
 - B. Each flag stem is a minimum width of 25 feet for the entire length of the stem.
 - C. At more than 26,000 square feet, the net lot area for proposed Lots 2 and 3 (exclusive of the flag stem) exceeds the minimum lot size in the of 20,000 square feet in the R-R Zone. Proposed Lot 7 may be more problematic. The preliminary plan identifies it as 22,000 square feet and the flag stem is 4,500 square feet. Prior to signature approval, the preliminary plan must be revised to identify the net lot area (exclusive of the flag stems) for all flag lots. Any lot with a net lot area of less than 20,000 square feet can not be included on the final plat.
 - D. A building envelope must be established at the time of preliminary plat. The applicant has not included a building envelop on the preliminary plat. This envelop must be included on the preliminary plan prior to signature approval.
 - E. Shared driveways are only permitted under certain circumstances. The proposal includes no shared driveways.
 - F. Where rear yards are oriented toward driveways, an ■A• bufferyard is required. This does not occur on the plan.
 - G. Where front yards are oriented toward rear yards, a ■C• bufferyard is required. In this case, two front yards are oriented toward rear yards; a ■C• bufferyard can be accommodated on these lots.

Prior to approval of a flag lot, the Planning Board must make the following findings of Section 24-138.01(f):

- A. **The design is clearly superior to what would have been achieved under conventional subdivision techniques.** The proposed flag lots yield a superior design to that which would be allowed conventionally. The property's odd shape makes development difficult. The use of three flag lots reduces the amount of public street paving, which in turn reduces runoff. To augment the existing storm drain system in the area, the

applicant proposes the use of bio-retention for stormwater management, under DER's Low Impact Development program. The reduction in impervious surface enhances the viability of the bio-retention feature.

- B. The transportation system will function safely and efficiently.** The flag lots add three driveways to a short cul-de-sac. No significant impact on the transportation system is expected.
- C. The use of flag lots will result in the creative design of a development that blends harmoniously with the site and the adjacent development.** The flag lots will blend harmoniously with the rest of the development. The Subdivision Regulations call for flag lots to be created in a ■court-like■ setting. These types of arrangements can be both functional and aesthetically pleasing. Staff notes that while the Subdivision Regulations do not *mandate* such a setting for flag lots, this type of setting begins to address the ■superior■ design requirement. The proposed flag lots will create a court-like setting and are superior.
- D. The privacy of property owners has been assured in accordance with the evaluation criteria.** Given the size of the net lot area, more than 20,000 square feet and the required bufferyards, the flag-style development of the lots will not impair the privacy of either the homeowner of this lot or the homeowners of other lots.

Given these findings, staff recommends approval of the use of flag lots provided all can include minimum net lot areas of more than 20,000 square feet.

- 13. Enterprise Road Corridor Commission - Staff referred this application to the Enterprise Road Corridor Commission on March 30, 2001. As of the staff report release date, no comments have been received.

RECOMMENDATION

APPROVAL, subject to the following conditions:

- 1. Prior to signature approval, the TCP I shall be revised as follows:
 - a. A minimum of a 40-foot-wide active rear yard shall be provided on all lots.
 - b. All woodland conservation areas shall be a minimum of 35-feet wide, with a contiguous area of more than 2,500 square feet.
 - c. Woodland conservation areas shall be free of utility easements.
 - d. The critical root zones of the specimen tree to be preserved shall be indicated.
 - e. The correct disposition of all specimen trees shall be indicated.

- f. The area of all forest retention and afforestation/reforestation areas shall be correctly labeled.
2. Approval of Technical Stormwater Management Plans shall be required at time of Detailed Site Plan to verify that Lot 8 is not needed for stormwater management purposes.
3. Development of this subdivision shall be in compliance with the approved Type I Tree Conservation Plan (TCP I/01/99). 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 (TCP I/01/99), 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."
4. Prior to the issuance of grading permits, or at time of Detailed Site Plan, whichever comes first, a Type II Tree Conservation Plan shall be approved.
5. Prior to final plat, a limited Detailed Site Plan shall be prepared for Lots 1, 2, 11 and 12 to address mitigation of interior and exterior noise impacts. The Limited Detailed Site Plan shall address, but not be limited to:
 - b. The location of noise barrier.
 - c. The appearance and construction of the noise barrier.
 - d. Architectural details to achieve the desired sound transmission class.
 - e. An evaluation of window area as a percentage of total external surface area. If window area exceed 20 percent of the total external surface area of a room, a refined acoustical analysis shall be provided to address adequate mitigation measures.
6. The desirability and location of any gateway signs.
6. At time of Limited Detailed Site Plan Approval, the TCP II and Landscape Plan shall demonstrate that the landscaped buffer/woodland conservation area adjacent to Enterprise Road meets the more stringent requirement.
7. Prior to the issuance of any building permit, the applicant shall conduct a traffic signal warrant study for the intersection of Chantilly Lane and MD 193. Should the result of the study revealed that a signal is deemed to be warranted, the applicant shall install such signal in order to meet adequacy.

8. Prior to final plat approval, any abandoned well and septic system shall be backfilled, pumped and/or sealed in accordance with COMAR 26.04.04.
9. Prior to final plat approval, the applicant shall satisfy the Health Department that the fuel storage tanks have been removed and that any contaminated soils have been cleaned and/or removed from the site.
10. Prior to signature approval, the preliminary plan shall be revised:
 - a. To show the net lot areas of all flag lots (exclusive of the flag stem). Any flag lot with a net lot area of less than 20,000 square feet shall be removed from the preliminary plan.
 - b. The building envelope on all flag lots.
11. Prior to the issuance of building permits, the applicant, his heirs, successors and/or assigns shall pay an Adequate Public Facilities fee of \$3,360.00 per dwelling unit for the schools, unless fully offset by a school facility surcharge payment. Any amount not offset shall be paid and divided among the schools at a rate determined by the guidelines. This adequate public facilities fee would be placed in an account to relieve overcrowding at Woodmore Elementary and Bowie High Schools.
12. No building permits, other than for the reconstruction of the existing home on the property, shall be issued for this subdivision until the projected percentage of capacities at all the affected schools are less than or equal to 130 percent or four years have elapsed since date of the adoption of the resolution of the approval of this preliminary plat of subdivision.

STAFF RECOMMENDS APPROVAL OF TYPE I TREE CONSERVATION PLAN 1/01/99 and
VARIATIONS TO SECTIONS 24-121 and 24-130 OF THE SUBDIVISION REGULATIONS