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 4-04093**

Application	General Data	
Project Name: OWENS GLENN  Location: Northeast corner of the intersection of Lusby's Lane and Dyson Road.  Applicant/Address: Holly Ridge Development, Inc. 4700 Holly Ridge Road Rockville, MD. 20853	Date Accepted:	05/3/04
	Planning Board Action Limit:	07/11/04
	Plan Acreage:	6.3
	Zone:	R-R
	Lots:	9
	Election District:	11
	Planning Area:	85A
	Tier:	Developing
	Council District:	09
	Municipality:	N/A
	200-Scale Base Map:	216/7SE08

Purpose of Application	Notice Dates	
RESIDENTIAL SUBDIVISION	Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003)	03/23/04
	Sign(s) Posted on Site:	06/21/04

Staff Recommendation		Staff Reviewer: Tom	Staff Reviewer: Tom Lockard	
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 Subdivision Plat 4-04093

Owens Glen, Lots 1-9

#### **OVERVIEW**

The site contains approximately 6.29 acres of R-R zoned land. It is a combination of two deed parcels (sections of Parcel 96 and Parcel 174). The applicant is proposing to subdivide the site into nine lots. Access to three of the proposed lots would be from Dyson Road; the remaining six lots would access Lusby's Lane.

#### **SETTING**

The site is located at the northeast corner of the intersection of Lusby's Lane and Dyson Road. The site is undeveloped and largely cleared, although the northernmost section is wooded. The surrounding properties are zoned R-R and are either undeveloped or developed with single-family residences (to the north and west, along Lusby's Lane). A PEPCO powerline borders the site to the east, beyond which is a large parcel of land, part of the Piscataway Stream Valley Park (M-NCPPC).

#### 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
Uses	Undeveloped	Single-Family Residences
Acreage	6.29	6.29
Lots	0	9
Parcels	2	0

2. **Environmental**—There are no streams, wetlands or 100-year floodplain on the property. The site eventually drains into Piscataway Creek in the Potomac River watershed. According to the *Prince George's County Soils Survey*, the principal soils on this site are in the Beltsville and Leonardtown series. Marlboro clay does not occur in the area. According to information obtained from the Maryland Department of Natural Resources Natural Heritage Program publication entitled *Ecologically Significant Areas in Anne Arundel and Prince George's Counties*, December 1997, rare, threatened, or endangered species do not occur in the vicinity of this property. There are no designated scenic and historic roads in the vicinity of this property. There are no nearby sources of traffic-generated noise. The proposal is not expected to be a noise generator. This property is located in the Developing Tier as reflected in the adopted General Plan.

# **Woodland Conservation:**

The forest stand delineation (FSD) was submitted with this application uses three sample points to identify one forest stand totaling 0.95 acre. Two specimen trees were found on the site. The FSD meets the requirements of the Woodland Conservation Ordinance. This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area of the property is greater than 40,000 square feet and there are more than 10,000 square feet of existing woodland.

A revised Type I tree conservation plan, TCPI/6/04, was submitted for review. The plan proposes clearing 0.47 acre of the existing 0.95 acre of woodland. The woodland conservation requirement has been correctly calculated as 1.42 acres. The plan proposes to meet the requirement by providing 0.48 acre of on-site preservation and 0.94 acre of off-site conservation. The limited woodland on-site is an isolated forest fragment. The use of on-site reforestation or afforestation would not create a large woodland area and would not serve to protect sensitive environmental features. The use of off-site woodland conservation is appropriate.

There are several technical errors. The plan does not show proposed house locations, conceptual grading, or the proposed limit of disturbance. These must be added. Lots 1 and 2 appear to be more than one-half encumbered by woodland conservation. Without a proposed house location it is not possible to determine if there will be room to provide for reasonably sized, single-family detached residential structures and a 40-foot-wide cleared rear yard area on each lot.

#### Soils:

According to the Prince George's County Soils Survey the principal soils on this site are in the Beltsville and Leonardtown series. Beltsville and Leonardtown soils are highly erodible and may exhibit a perched water table.

# Water and Sewer Categories:

The property is in water category W-4 and sewer category S-4 according to water and sewer maps obtained from the Department of Environmental Resources dated June 2003. The site will be served by public systems.

- 3. **Community Planning**—The property is in Planning Area 85A/Brandywine. The 2002 General Plan places the property in the Developing Tier. The vision for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities, distinct commercial Centers, and employment areas that are increasingly transit serviceable. This application is not inconsistent with the 2002 General Plan Development Pattern policies for the Developing Tier. The 1993 Subregion V master plan recommends low-suburban density for single-family detached dwellings at up to 2.6 dwelling units per acre. This application conforms to the master plan recommendation.
- 4. **Parks and Recreation**—In accordance with Section 24-134 of the Subdivision Regulations, the Park Planning and Development Division recommends that the applicant pay a fee-in-lieu of parkland dedication because the land available for dedication is unsuitable due to its size and location. The proposed preliminary plan is consistent with the land use recommendations of the master plan and General Plan.

- 5. Trails—One master plan trail impacts the subject property. Dyson Road is designated as a master plan trail corridor in the 1993 Subregion V master plan. Upon its completion, this trail will provide bicycle and pedestrian access to numerous park sites, residential communities, and a proposed elementary school. Currently, much of Dyson Road is open section in the vicinity of the subject site, although sidewalks exist along some sections where road improvements have been made. The adjacent Heatherwick subdivision includes sidewalks along both sides of the major internal road (Heatherwick Drive) and along its frontage of Lusby's Lane. Sidewalks were not required along cul-de-sacs within this development. Staff recommends a standard sidewalk along the subject site's frontage of Lusby's Lane to facilitate safe pedestrian movement. The master plan trail will serve Dyson Road. Gwynn Park Middle School, Gwynn Park High School, and several M-NCPPC parks currently exist along Dyson Road in the vicinity of the subject site. Comprehensive sidewalks are not currently provided to these facilities.
- 6. **Transportation**—The transportation staff determined that a traffic study was not warranted by the size of the proposed development. However, a traffic count for the intersection of US 301 and Dyson Road was available to staff from a previous application (Tayman Property). The count was taken in April 2004 for both the northbound and southbound movements of the intersection and was used to determine adequacy. Therefore, the findings and recommendations outlined below are based upon a review of relevant materials and analyses conducted by the staff of the Transportation Planning Section, consistent with the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*.

#### **Growth Policy – Service Level Standards**

The site is 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.

**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 application is a plan for a residential development of nine single-family dwelling units. The proposed development would generate 7 AM (1 in, 6 out) and 8 PM (5 in, 3 out) peak-hour vehicle trips as determined using the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*. The site was analyzed using the following trip distribution:

25%—North along Lusby's Lane 25%—South along Dyson Road 50%—North along Dyson Road

The traffic generated by the proposed plan would primarily impact the northbound and southbound intersections of US 301 and Dyson Road, which are not signalized. The Prince

George's County Planning Board, in the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*, has defined an upper limit of 50.0 seconds of delay in any movement as the lowest acceptable operating condition on the transportation system. The following conditions exist at the critical intersection: AM peak hour, maximum average delay of 776.1 seconds at the northbound intersection and 99.5 seconds at the southbound intersection. In the PM peak hour, a maximum average delay of 51.0 seconds at the northbound intersection and 589.3 seconds at the southbound intersection.

An annual growth rate of 3.0 percent was assumed for through and background traffic along US 301. This includes the recently approved Tayman Property (4-03130) on the east side of US 301 and Dyson Road. The following background traffic conditions were determined: AM peak hour, maximum average delay of 1,349.0 seconds at the northbound intersection and 446.2 seconds at the southbound intersection. In the PM peak hour, a maximum average delay of 67.1 seconds at the northbound intersection and 702.6 seconds at the southbound intersection.

With site traffic, the following operating conditions were determined: AM peak hour, maximum average delay of 1,373.0 seconds at the northbound intersection and 725.0 seconds at the southbound intersection. In the PM peak hour, a maximum average delay of 67.8 seconds at the northbound intersection and 710.0 seconds at the southbound intersection.

In analyzing unsignalized intersections, average vehicle delay for various movements through an intersection is measured in seconds of vehicle delay. According to the guidelines, an average vehicle delay exceeding 50.0 seconds indicates inadequate traffic operations. Values above "+999" suggest that the parameters are outside of the normal range of the procedure and should be interpreted as a severe inadequacy. Staff has determined that the minimum delay exceeds 50.0 seconds during both the AM and PM peak hours at the intersection of US 301 and Dyson Road. Under these conditions the applicant would be required to provide a traffic signal warrant study and install the signal if it is deemed warranted by the State Highway Administration.

A traffic signal warrant study for the intersection of US 301 and Dyson Road was completed in May 2004. This was done as part of the traffic study for the Tayman Property on the east side of US 301 and Dyson Road. The applicant's traffic consultant concluded that traffic signal warrants were met on both the northbound and southbound approaches of US 301 and Dyson Road. This was based on existing traffic conditions. The Maryland State Highway Administration would make the final determination as to whether a traffic signal is installed at US 301 and Dyson Road.

# **Site Plan Comments**

It appears that Lots 1 to 6 will have driveway access to Lusby's Lane and that Lots 7 to 9 will access Dyson Road. The applicant should provide driveways to proposed Lots 7 to 9 with turnaround capability in order to minimize the need for vehicles accessing these lots to back onto Dyson Road, a collector roadway with a significant amount of higher speed traffic.

# **Master Plan Comments**

Dyson Road is shown in the Subregion V master plan as a four-lane collector road (C-528) with 80 feet of right-of-way. Dedication of 40 feet from the centerline of Dyson Road will be required. Dedication of 30 feet from the centerline of Lusby's Lane will also be required. These are shown correctly on the site plan. No further dedication is required.

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Based on the preceding findings, the Transportation Planning Section finds that adequate transportation facilities exist to service the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved subject to recommended conditions.

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 and concluded the following:

**Finding** 

Impact on Affected Public School Clusters

Affected School	Elementary School	Middle School	High School
Clusters #	Cluster 5	Cluster 3	Cluster 3
Dwelling Units	9 sfd	9 sfd	9 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	2.16	0.54	1.08
Actual Enrollment	4,096	4,689	8,654
Completion Enrollment	180.48	86.22	158.07
Cumulative Enrollment	154.56	44.04	88.08
Total Enrollment	4,433.2	4,819.8	8,901.23
State Rated Capacity	4,214	5,114	7,752
Percent Capacity	105.2	94.25	114.82

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

These figures are correct on the day the referral memo was written. They are subject to change under the provisions of CB-30-2003 and CR-23-2003. Other projects that are approved prior to the public hearing on this project will cause changes to these figures. The numbers shown in the resolution will be the ones that 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 on 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.

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.

The Historic Preservation and Public Facilities Planning Section staff finds that 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.

8. **Fire and Rescue**— The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of public facilities and concluded the following.

- a. The existing fire engine service at Brandywine Fire Station, Company 40, located at 14201 Brandywine Road has a service travel time of 5.1 minutes, which is within the 5.25-minute travel time guideline.
- b. The existing ambulance service Brandywine Fire Station, Company 40, located at 14201 Brandywine Road, has a service travel time of 5.1 minutes, which is within the 6.25-minute travel time guideline.
- c. The existing paramedic service at Brandywine Fire Station, Company 40, located at 14201 Brandywine Road, has a service travel time of 5.1 minutes, which is within the 7.25-minute travel time guideline.
- d. The proposed subdivision will be within the adequate coverage area of the nearest existing fire/rescue facilities for fire engine, ambulance and paramedic service.

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

- 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 reviewed the application and had no comments.
- 11. **Stormwater Management**—The applicant has not yet received stormwater concept approval from the Department of Environmental Resources. A copy of the concept approval letter is necessary prior to signature approval of the preliminary plan.
- 12. **Cemeteries**—There are no known cemeteries on the subject property.
- 13. **Public Utility Easement**—The preliminary plan shows a ten-foot-wide public utility easement adjacent to both Lusby's Lane and Dyson Road.

# RECOMMENDATION

APPROVAL, subject to the following conditions:

1. 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/6/04), 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."

- 2. Prior to signature approval of the preliminary plan, the stormwater management concept approval letter shall be submitted to the file and the approval number and date shall be noted on the preliminary plan.
- 3. Prior to signature approval of the preliminary plan, the TCPI shall be revised to:
  - a. Show conceptual house locations.
  - b. Show conceptual grading.
  - c. Show the proposed limit of disturbance.
  - d. If necessary, revise the limits of disturbance to allow for 40 feet of cleared area between the rear of the house and the woodland preservation.
  - e. Have the revised plan signed and dated by the qualified professional who prepared the plan.
- 4. The applicant shall construct the eight-foot-wide master plan trail along the subject property's entire frontage of Dyson Road (the ultimate 80-foot right-of-way).
- 5. The applicant shall provide standard sidewalks along the subject site's entire road frontage of Lusby's Lane, per the concurrence of DPW&T.
- 6. The applicant shall provide driveways to proposed Lots 7 through 9 with a turnaround capability in order to minimize the need for vehicles accessing each lot to back onto Dyson Road.
- 7. Prior to the issuance of any building permits within the subject property, the applicant shall conduct a traffic signal warrant study at the intersection of US 301 and Dyson Road. The performance of a new study may be waived by SHA in writing if SHA determines that an acceptable recent study has been conducted. If a traffic signal is deemed warranted by SHA, the applicant shall bond a pro-rata share of the cost of the signal, provided that full funding for the signal, through any combination of public funding and funding by other private parties, is available and provided that an equitable arrangement can be coordinated with SHA. Otherwise, the applicant shall bond the full cost of the signal prior to the release of any building permits within the subject property and install it at a time when directed by SHA. The applicant will be responsible for any additional pavement markings and signage at the intersections.
- 8. At the time of final plat approval, the applicant shall dedicate a right-of-way for Dyson Road as shown on the submitted plan.