

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Subdivision Plat 4-00002
Brightseat Road Property, Lots 1 - 17 and Parcel A

OVERVIEW

The subject property consists of 4.6± acres of land in the R-55 Zone. It is currently identified as Parcel ■A• of the Chapel of the Holy Redeemer Subdivision, Record Plat NLP 125 @ 20. The applicant proposes to resubdivide the parcel into 17 lots for single-family detached housing and one parcel for a stormwater management pond. An internal street will provide access to the majority of the lots, with four lots fronting and accessing Brightseat Road directly.

Preliminary Plat 4-99020 was previously filed for this property. That application was ultimately withdrawn by the applicant. Staff had completed a report recommending denial of the application based on inadequate public transportation facilities. The applicant has filed a new application which was subsequently amended to include a Transportation Facilities Mitigation Plan to address the transportation facility inadequacies.

SETTING

The property is located on the west side of Brightseat Road, directly west of Continental Place, approximately 3,000 feet north of its intersection with MD 214. The Thomas Pullen Elementary and Middle School is to the north in the R-55 Zone. Townhomes in the R-T Zone are to the east, across Brightseat Road. To the south is a single-family home on a large lot in the R-55 Zone. To the west is the Summerfield development in the R-M Zone.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. Environmental - There are no streams or 100-year floodplain identified on the property. No nontidal wetlands have been identified on this site. This site is located in the Western Branch/Patuxent River watershed.

There are scattered fragments of steep slopes on the site, but the soils are not highly erodible, so this should pose no special difficulty to development. The soils on the site are in the Collington series and should pose no special difficulties for development. A soils report may be required at the discretion of the Department of Environmental Resources (DER). No Marlboro clay has been identified on this site.

This site is located in proximity to the Beltway, and noise was initially identified as a concern on this site. The noise model indicates that the noise corridor for the Beltway, a 6-lane freeway, will be located approximately 2,835 feet from the center line of the roadway. On-site observation indicates that between this property and the Beltway there are existing single-family attached dwellings which mitigate noise impacts. Sound barriers have been placed next to the roadway which shield the townhouses from noise intrusion. There is also a ridgeline which runs

longitudinally across this property, with the topography falling off to this east, providing a mitigation effect. Standard construction techniques will provide sufficient mitigation for these dwellings, and additional noise studies are unnecessary.

No rare, threatened or endangered species have been identified on this site at this time. There are no identified greenways associated with this site.

This site is subject to the provisions of the Woodland Conservation Ordinances. The entire site is more than 40,000 square feet and contains more than 10,000 square feet of woodland.

This site is the subject of previously approved TCP II/73/92 for Holy Redeemer Episcopal Church for part of the site, for which a permit was never issued. The FSD and TCP I now submitted will supercede the previous plan.

The Forest Stand Delineation is found to be satisfactory. A Tree Conservation Plan, TCPI/21/99, has been reviewed. The minimum requirement for this site is 0.92 acres (20 percent of the net tract) and additional acres due to removal of woodland, for a total minimum requirement of 1.64 acres. The applicant has proposed to meet the requirement with 0.65 acre of on-site preservation, 0.27 acre of on-site reforestation, and 0.72 acre of off-site mitigation. This proposal provides for the woodland conservation threshold on-site.

The applicant has made accommodation for the preservation of 5 of 20 specimen trees which are shown on the TCP. The preservation of a tree within the cul-de-sac/right-of-way will need to be reviewed by DPW&T. The green island within the cul-de-sac may need to be oversized to accommodate the canopy drip line of this tree. The applicant may also want to investigate using this area as a bioretention area under DER regulations, which might reduce the size of the stormwater management pond proposed.

The TCP has been revised to include a table listing specimen trees, their size, condition and proposed disposition. The applicant will be required to prepare a TCP II prior to the issuance of permits and provide easements for off-site woodland mitigation areas.

The reforestation area is proposed in conjunction with the stormwater management parcel. Any reforestation area proposed within the stormwater management easement limits must be approved in writing by the Department of Environmental Resources, and meet the minimum width and planting requirements of the Woodland Conservation Manual. At the time of TCP II approval, the applicant shall provide a copy of the approved stormwater management technical plan, clearing showing the delineation of the woodland conservation reforestation area.

The property is in Water and Sewer Category 3 and will be served by public systems.

2. Community Planning - The 1993 *Approved Master Plan for Landover and Vicinity* recommends a ■medium suburban■ land use for the property. Brightseat Road is shown as a collector road along the west side of the property. A major bikeway is shown along Brightseat Road. Where opportunity is provided, a three- to four-foot striped bike lane is recommended in addition to the standard sidewalk installation. The 1993 *Approved Sectional Map Amendment* placed the property in the R-55 Zone. The natural features map shows the property is wooded and has some steep slopes.

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 - The Adopted and Approved Landover and Vicinity Master Plan recommends that Brightseat Road be designated as a Class III bikeway with appropriate signage. Because Brightseat Road is a County right-of-way, the applicant and the applicant's heirs, successors and/or assigns shall provide a financial contribution of \$210 to the Department of Public Works and Transportation for the placement of this signage. A note shall be placed on the final record plat for payment to be received prior to the issuance of the first building permit.
5. Transportation - The proposed development would generate 14 AM and 16 PM peak hour vehicle trips as determined using *Guidelines for the Analysis of the Traffic Impact of Development Proposals (Guidelines)*. Based on the location of the proposed site, approximately 60 percent of the site generated trips will be oriented toward the south along Brightseat Road, while the other 40 percent will be northbound oriented. Because of the trip distribution, the intersection of MD 214 and Brightseat Road has been determined by staff to be the critical intersection. The number of site-generated trips that would impact this intersection would be 8 AM and 10 PM peak hour trips. Using the most recent traffic data that were collected on June 3, 1999, an analysis by staff indicated that the intersection operates at level of service/critical lane volume (LOS/CLV) of **F/1865** and **F/1685** during the AM and PM peak hours, respectively. The Prince George's County Planning Board, in the *Guidelines*, has defined LOS D (CLV:1450) as the lowest acceptable operating condition for signalized intersections in the transportation system.

Using staff's database for background development, four developments were identified as having an impact on the MD 214/Brightseat Road intersection. Those developments are:

- * Glenwood Hills
- * Norair Subdivision
- * Hillwood Plaza
- * Spectrum 95

Collectively, those background developments would add 990 AM peak hour trips and 1,036 PM peak hour trips. With the inclusion of background developments, the LOS/CLV was determined to be **F/2085** during the AM peak hour and **F/1838** for the PM peak hour.

In evaluating the impact of background development on existing facilities, it is prudent to utilize planned transportation improvements/facilities in the analyses, provided the improvements are determined to have an effect on the subject transportation facility being evaluated, and such future facilities are programmed for construction in either the County's Capital Improvement Program (CIP) or the MDOT's Consolidated Transportation Program (CTP). In the current CTP, there is funding provided for the construction of a full grade-separated interchange at the intersection of Ritchie-Marlboro Road and the Capital Beltway (I-95/495), approximately two (2) miles south and east of the MD 214/Brightseat Road intersection. As is typical for many Federally funded projects, a number of feasibility studies are generally required. In 1991, in the

Finding Of No Significant Impact, a report that was prepared by the Federal Highway Administration, it was projected that the future interchange, upon its completion, will divert up to approximately 20 percent of the traffic that currently uses the MD 214/Capital Beltway interchange. Within a mile from the subject intersection will be a terminal station for the proposed Metrorail Blue Line extension to the Largo Town Center. In the *Final Environmental Impact Statement* (December 1999) for that project, a finding [section 6.1.1 (c)] indicating that traffic volumes along MD 214 would decrease by nine (9) percent between MD 202 and Summerfield Boulevard was documented.

Given the close proximity of the subject intersection to the MD 214 interchange, staff finds that the projected 20 percent reduction would also affect some of the turning movements at the MD 214/Brightseat Road intersection. To that end, staff re-analyzed the intersection with the background traffic volumes but with a 20 percent reduction in some of the movements¹ combined with an additional 9 percent reduction in the through volumes along MD 214. The results of the re-analysis showed LOS/CLV **F/1659** during the AM peak and **E/1486** during the PM peak.

As stated earlier, the proposed subdivision would add 8 AM and 10 PM trips to the subject intersection during the peak hours. The remaining site-generated trips would be oriented to the north of the subject property. In computing the intersection capacity under the total traffic scenario, the 8 AM and 10 PM trips were added to the background scenario involving the diversion due to the planned Ritchie-Marlboro interchange and the Metrorail extension. That analysis showed LOS/CLV **F/1662** during the AM peak and **E/1491** during the PM peak.

On April 21, 2000, the applicant submitted to staff a *Transportation Facilities Mitigation Plan* (TFMP). Based on the TFMP, the applicant proposed a change in the lane use on the southbound approach of MD 214/Brightseat Road intersection. The existing lane use shows

- Two (2) left turn lanes
- One (1) through lane
- One (1) right lane

Under the applicant's TFMP, there would be

- One (1) left turn lane
- One (1) shared thru-and-left turn lane

¹Thru volumes along MD 214 and westbound left-turns on MD 214

- One (1) through lane
- One (1) left turn lane.

Because the intersection is comprised of roadways maintained by the Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA), copies of the TFMP were sent to both agencies for review and comments. In a May 9, 2000 memorandum (Issayans to Burton) from DPW&T to staff, it was determined by DPW&T that the proposed lane change was unacceptable. The agency cited queuing problems as the basis for their objection. DPW&T did state, however, that the lane change was not warranted, given the minimal volume of traffic that the proposed site would generate. As of this writing, staff has not received a written response from SHA regarding its review of the TFMP. Staff has received a copy of correspondence between SHA technical staff in which a queuing analysis was requested based on the proposed lane change.

Notwithstanding the comments of the DPW&T, and further analyses requested by the SHA, staff did re-analyze the intersection during both peak periods based on the new lane configuration. That analysis showed LOS/CLV **F/1592** during the AM peak and **E/1491** during the PM peak.

Under the provisions of the mitigation guidelines (CR-29-1994), when the total traffic is projected to have a Critical Lane Volume (CLV) within a range of 1451 to 1813, then a minimum of 150 percent of the CLVs that are added to the intersection must be mitigated by any proffered improvement. Based on this threshold, the previous CLV analysis showed that during the morning peak hour, the proposed development will add three (3) CLVs to the critical movement and five (5) CLVs during the evening peak hour. Consequently, the applicant's improvement would be required to remove at least **five** CLVs during the AM peak ($3 \times 1.3 = 4.5$ or 5) and **eight** CLV during the PM peak ($5 \times 1.5 = 7.5$ or 8). The analysis showed that while a reduction of 70 CLVs will be achieved during the AM peak hour, the applicant's improvement will have no effect on the CLV total during the evening peak hour. To date, the proposed lane change on the Brightseat Road approach to the intersection is the only mitigation improvement that has been offered by the applicant. One of the two operating agencies found that improvement to be unacceptable. From a technical perspective, the proffered improvement would have been acceptable pursuant to the provisions of CR-29-1994, but only during the AM peak hour. Staff's analyses indicate that those improvements would not meet the mathematical threshold during the PM peak hour.

In light of the fact the applicant's proposed lane change has been determined to be unacceptable by the Department of Public Works and Transportation, **and** the proposed improvements did not meet the mathematical thresholds during **both** peak hours, staff cannot make an affirmative finding of adequacy for the subject application.

6. Schools - The Countywide Planning Section has reviewed the proposed preliminary plat for adequacy of public school facilities in accordance with Section 24-122.02 of the Prince George's County Subdivision Regulations and the Regulations to Analyze the Development Impact on Public School Facilities (revised August 1999) (CR-4-1998). The proposed subdivision is exempt from the school adequacy test because it is less than 36 dwellings and in a Tax Revitalization District.

7. Fire and Rescue - The Countywide 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 engine, ambulance and medic service.
 - a. The existing fire engine service at Kentland Fire Station, Company 46, located at 10400 Campus Way South, has a service response time of 4.36 minutes, which is within the 5.25-minute response time guideline.
 - b. The existing ambulance service at Kentland Fire Station, Company 46, has a service response time of 4.36 minutes, which is within the 6.25-minute response time guideline.
 - c. The existing paramedic service at Kentland Fire Station, Company 46, has a service response time of 4.36 minutes, which is within the 7.25-minute 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 police service area of District III-Landover. In accordance with Section 24-122.01 (c) (1) (A) and (B) of the Subdivision Regulations of Prince George's County, existing County police facilities will be adequate to serve the proposed Brightseat Road development. This police facility will adequately serve the population generated by the proposed subdivision.
9. Health Department - The Health Department requested that all existing wells and septic systems be located on the preliminary plat. As is typical, the Health Department requires that all wells and septic systems that are to be abandoned be backfilled and/or sealed prior to grading. The applicant has added a note to the preliminary plat that there are no wells or septic systems on the property.
10. Stormwater Management - The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. The preliminary plat shows a large parcel for on-site stormwater management pond. A Stormwater Management Concept Plan has been submitted but is not yet approved. To ensure that development of this site does not result in on-site or downstream flooding, this concept plan must be approved prior to signature approval of the preliminary plat. Development must be in accordance with this approved plan.
11. Public Utility Easement - The preliminary plat includes the 10-foot wide public utility easement. This easement will be reflected on the final plat.

RECOMMENDATION

DENIAL, based on inadequate transportation facilities.