Prince George's County Planning Department Development Review Division 301-952-3530

Comment [COMMENT1]: WHEN INSERTING INFORMATION AT THE @ SIGN REMEMBER TO USE INDENT FOR SECOND LINE - NOT TAB. ALSO, IT WILL LOOK LIKE THE TEXT IS GOING WACKO, BUT DON'T WORRY - IT IS FINE.

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

# PRELIMINARY PLAN

4-02052

Application	General Data			
Project Name:	Date Accepted	06/17/02		
SAINT JAMES PROPERTY	Planning Board Action Limit	09/25/02		
Location:	Tax Map & Grid	142/B-02		
East and west sides of Livingston Road, approximately	Plan Acreage	400.07		
1,000 feet north of Farmington Road and Berry Road.	Zone	V-M		
Applicant/Address:	Lots	181		
Haverford Homes, Inc.	Parcels	6		
6525 Belcrest Road, #380 Hyattsville, MD 20782	Planning Area	84		
,,,	Council District	09		
	Municipality	N/A		
	200-Scale Base Map	218SE02		

Purpose of Application		Notice Dates				
Residential Su	bdivision		Adjoining Property O (CB-15-1998)	wners N/A		
		Previous Parties of Ro (CB-13-1994)	ecord N/A			
			Sign(s) Posted on Site 07/10/02			
		Variance(s): Adjoinin Property Owners	g N/A			
Staff Recommendation		Staff Reviewer: Del	Balzo			
APPROVAL	APPROVAL WITH CONDITIONS		DISAPPROVAL	DISCUSSION		
	X					

# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

#### PRINCE GEORGE'S COUNTY PLANNING BOARD

#### STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-02052

Saint James Property

#### **OVERVIEW**

The subject property consists of approximately 400.07 acres of land in the V-M Zone. It is undeveloped and generally wooded. Some land has been cleared. While the land is in the V-M Zone, the applicant proposes to develop the site under the provisions of the R-A Zone, pursuant to CB-11-2000.

Applications on this property were previously reviewed as CDP-9401, SDP-9807, and 4-95131, which proposed development in accordance with the V-M Zone for the subject property. Preliminary Plan 4-02003, which proposed development following R-A standards, was withdrawn. The current plan is generally similar to 4-02003.

Under the provisions of the V-M Zone, CDP 9401 and 4-95131, the property could be developed with as many as 800 dwelling units on small lots in a village-type setting. Also, a limited amount of commercial uses could be allowed. The applicant has chosen to abandon those plans and pursue a large-lot estate-type development. This proposal is far superior to the original proposals in that it better preserves environmental features and produces less strain on public facilities. It also presents the large-lot estate development sought by the county at this time.

# SETTING

The property is located along both the north and south sides of Livingston Road north, east of Farmington Road and Berry Road, and extending northward to MD 210. The area is generally rural in nature. Eugene Burroughs Middle School and Henry G. Ferguson Elementary School abut the property to the west. The surrounding properties include very large-lot residential uses.

#### FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. Environmental Issues and Variation Requests The property is bounded to the north by Piscataway Creek Park and contains a small portion of Chesapeake Bay Critical Area along the northwest perimeter. The undulating topography supports both nonwooded plateaus and steep forested slopes where drainage is conveyed to the stream valleys. Topographic relief ranges from 210 feet along the southeastern terminus to 40 feet above sea level along the northwest perimeter. The site is situated within the Mount Vernon viewshed. The streams, wetlands and floodplain on the property are part of the Potomac River Watershed. Current air photos indicate that 75 percent of the site is wooded. Marlboro clays and associated outcrops have been noted on the property. Livingston Road is a historic road. Indian Head Highway is a nearby noise source. The proposed use is not expected to be a noise generator. No species listed by the State of Maryland as rare, threatened or endangered are known to occur in the general region. According to the Water Service and Sewer Service maps produced by DER, the property is in categories W-3 and S-3. The major soils comprising the upland areas belong

to the highly erodible Beltsville and Leonardtown series, while the steep slopes predominantly support the sandy and very highly erodible Aura series.

#### Woodland Conservation

The site is subject to the Woodland Conservation Ordinances because it is more than 40,000 square feet in size and contains more than 10,000 square feet of woodland. A Tree Conservation Plan is required.

A Forest Stand Delineation has been reviewed and determined to meet the requirements of the Woodland Conservation Ordinance. The tree line shown on the FSD matches that on current air photos and the stands conform to those observed in a field visit made on January 25, 2002.

A Type I Tree Conservation Plan, TCPI/66/95, was approved with 4-95131. The plan must be revised because of the proposed changes in the lotting pattern from that approved by 4-95131.

The site is situated within the Mount Vernon viewshed; therefore, special care must be taken to address the visibility concerns of the Historic Mount Vernon Association. St. James Hill should be adequately buffered from the development to ensure attenuation of visibility and noise. The Historic Preservation Section of M-NCPPC points out that two additional historic sites abut the subject property. Additionally, Livingston Road is identified as a historic thoroughfare in the Subregion V Master Plan. The site also contains extensive woodlands in floodplain, in stream buffers, in wetland buffers, and on steep slopes which are designated as priority preservation areas by the Woodland Conservation Ordinance.

A Tree Conservation Plan, TCPI/66/95-01, has been reviewed. The portion of the site within the Chesapeake Bay Critical Area is not subject to the Woodland Conservation Ordinance and has been deducted from the gross tract.

The worksheet indicates 243.99 acres of existing upland woodland and 41.43 acres of woodland within the 100-year floodplain. The plan proposes clearing 90.62 acres of upland woodland and clearing 0.33 acre of woodland within the 100-year floodplain. The worksheet correctly indicates that the Woodland Conservation Ordinance requires a minimum of 217.04 acres of woodland conservation.

The plan proposes to meet the minimum requirement of the Woodland Conservation Ordinance by preserving 150.38 acres of woodland on-site, planting 37.51 acres on-site, and by providing 29.15 acres off-site. No off-site location has been proposed. Except for impacts as noted in the variation requests, all priority woodlands on-site are to be placed in woodland conservation areas.

The plan proposes afforestation of 2.73 acres and preservation of 1.34 acres on land to be dedicated to the Department of Parks and Recreation. This appears to be all of the land in the proposed dedication which is above the 100-year floodplain. The Department of Parks and Recreation should indicate acceptance of the woodland conservation before it becomes part of the plan. The Subregion V Master Plan shows a community park in this area; afforestation of the existing fields may be counterproductive.

The Technical Manual states:

To address concern about usable yard area, the following guidelines will be used when reviewing all plans which propose woodland conservation on lots. Lots and parcels with a net tract area larger than 10,000 sq. ft. should not have woodland conservation areas closer than 40 feet from the rear of a house.

An analysis of the edge of the proposed woodland conservation areas and the building restriction lines shown on the plan indicates that this criterion is met with the exception of Lot 30, Block B. A more detailed review will occur when the Type II Tree Conservation Plan is submitted to ensure that this requirement is met.

Given this discussion, the Type I Tree Conservation Plan, TCPI/66/95-01, can be approved with appropriate revisions included as conditions in this report.

# **Environmental Features**

The site contains significant natural features, which are required to be protected under Section 24-130 of the Subdivision Regulations. A Jurisdictional Determination regarding the extent of regulated streams and wetlands has been obtained from the U.S. Army Corps of Engineers. Wetlands are correctly shown on the preliminary plan and the revised Type I Tree Conservation Plan. A minimum 25-foot wetland buffer required by Section 24-130(b)(7) is shown on the plans. A minimum 50-foot buffer for all streams required by Section 24-130(b)(6) is shown on the plans. The Preliminary Plan of Subdivision and the revised Type I Tree Conservation Plan show all areas of severe and steep slopes and the extent of a 100-year floodplain. The Preliminary Plan of Subdivision and the revised Type I Tree Conservation Plan show stream and wetland buffers expanded to include adjacent severe or steep slopes. At time of final plat, a conservation easement should be described by bearings and distances. The conservation easement should contain all 100-year floodplain, stream buffers, wetlands and wetland buffers, except for areas with approved variation requests, and should be reviewed by the Environmental Planning Section prior to certificate approval. In addition, an appropriate note should be placed on the plat.

### Variation Requests

A set of variation requests, 1 through 17, dated June 3, 2002, have been reviewed. All variation requests needed to develop the site as shown on the plans have been requested. The variation requests concern impacts to minimum 50-foot stream buffers required by Section 24-130(b)(6) of the Subdivision Regulations and minimum 25-foot wetland buffers required by Section 24-130(b)(7) of the Subdivision Regulations.

Section 24-113 of the Subdivision Regulations sets forth the following required findings for approval of variation requests.

- a. That the granting of the variation will not be detrimental to the public safety, health or welfare, or injurious to other property.
- b. The conditions of which the variation is based are unique to the property for which the variation is sought and are not applicable generally to other properties.

- The variation 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.

These findings are made below for each of the variation requests. Based on the following findings, staff supports variation requests 1 - 14. Variation requests 15 - 17 are not needed since none of the proposed grading will impact the minimum buffers required by Section 24-130(b)(6) or Section 24-130(b)(7).

Variation requests 1, 5, 6, 9 and 10 are for the construction of the sanitary sewer. Sanitary sewer is required for development of this property. Variation requests 1, 5 and 6 are unavoidable because they are connections to the existing sanitary sewer located within a stream valley. Variation requests 9 and 10 are required to construct the new sewer main to service a substantial portion of the development. The new sewer main has been located to avoid impacts to the extent possible to streams and wetlands while maintaining gravity flow. The proposed impacts are minimal and have been combined, when possible, with other necessary infrastructure improvements (e.g., stormwater outfalls, roads) to further minimize impacts. The Washington Suburban Sanitary Commission will further review the final design to further minimize impacts to streams and wetlands. Impacts to streams, wetlands, and wetlands buffers will be carefully reviewed during the combined federal/state permit process to ensure that the impacts will not be injurious to public health, safety, or welfare, or injurious to other property.

Variation requests 2, 3, 7, 9, 10 and 13 are for the construction of stormwater management structures. Due to the extensive stream system on the property and retention of streams on lots, stormwater management required by County Code is a major concern. Additional flows in the wrong stream segments could result in severe erosion. The conceptual grading on the TCP reflects this concern by minimizing the use of stormdrain outfalls in the upper reaches of the stream valleys. The Prince George's County Department of Environmental Resources will further review the final design to further minimize impacts to streams and wetlands. Impacts to streams, wetlands, and wetlands buffers will be carefully reviewed during the combined federal/state permit process to ensure that the impacts will not be injurious to public health, safety, or welfare, or injurious to other property.

Variation requests 4, 8, 11, 12 and 14 are for road construction. Variation request 4 is to permit a road crossing for access to 27 of the 53 lots in the northern portion of the site. A separate access point off of Farmington Road East could alleviate the need for this crossing, but the only possible location has been determined to be at an unsafe location because of the proximity to the intersection with Livingston Road. Variation request 8 is required to access the northern section of the south parcel and serve 40 lots. Any access to this area from Livingston Road would require a stream crossing and the location has been chosen to minimize the area of impact. Variation request 14 is required to access the southern portion of the south parcel and serve 77 lots. Any access to this area from Berry Road would require a stream crossing and the location has been chosen to minimize the area of impact. Variation request 12 is to create an internal road crossing to connect the main streets noted in 8 and 14. This internal connection provides an essential access point for fire, police and ambulance services to the community. Impacts to streams, wetlands, and wetlands buffers will be carefully reviewed during the

combined federal/state permit process to ensure that the impacts will not be injurious to public health, safety, or welfare, or injurious to other property.

Variation request 11 is for a minor disturbance to the required 50-foot stream buffer to create an access to 4 lots. This access follows an existing farm road and has been located to avoid impact to the actual stream to the north and the wetlands buffer to the south.

Topographic relief ranges from 210 feet along the southeastern terminus to 40 feet above sea level along the northwest perimeter. There are several streams which have the effect of fragmenting the property. The features combine to create hardships for reasonable development of the site if Section 24-130(b)(6) and Section 24-130(b)(7) are strictly applied. Impacts to streams, wetlands, and wetlands buffers will be carefully reviewed during the combined federal/state permit process to ensure that the impacts will not be injurious to public health, safety, or welfare, or injurious to other property. The proposed impacts are necessary for the development to conform to other sections of county.

With regard to the variation requests, the following note should be placed on the final plat:

Prior to the issuance of any permits which impact wetlands, wetland buffers, streams or Waters of the U.S., copies of all federal and state wetland permits, evidence that approval conditions have been complied with, and associated mitigation plans shall be submitted to the M-NCPPC Planning Department.

#### Soils

The major soils comprising the upland areas belong to the highly erodible Beltsville and Leonardtown series, while the steep slopes predominantly support the sandy and very highly erodible Aura series. Much of the upland soils characteristically contain perched water above an impermeable silt layer. As such, more restrictive building foundation design considerations such as walk-out basements, above-ground basements, or slabs on grade are warranted. The prevalent soils found in the low-lying areas consist of alluvial material associated with the Bibb series, as well as the more pedogenically developed Elkton, Othello and Fallsington soils. Two site visits were conducted during the summer of 1994. Excluding the steep slopes and adjacent stream valleys, much of the property has been in agricultural use. Best management practices for the intensive farming activities were not apparent during the field visits. Further, topsoil was notably absent in some fields where compaction within the plow layer appeared to be high. As a result, it can be inferred that erosion rates have been greatly enhanced by the current traditional agricultural practices.

#### Marlboro Clay

Marlboro Clay and associated outcrops have been noted on the property. No information has been submitted as part of this application. Additionally, severe slope areas adjacent to streams may be unstable. Marlboro Clay is estimated to occur from 45 feet to 60 feet mean sea level. Because of the local topography, slope failure associated with Marlboro Clay is not expected to be a significant issue. However, foundations and road base considerations may be an issue with regard to Marlboro Clay in Block A and the eastern half of Block B.

Prior to the issuance of any building permit, a soils report addressing specific remedies and their locations in all areas where Marlboro Clay presents development problems should be reviewed and approved by M-NCPPC\*s Environmental Planning Section and the Prince George\*s County

Department of Environmental Resources. The report should include a map showing all borehole locations, logs of all of the boreholes and identify individual lots where Marlboro Clay poses a problem.

Although Marlboro Clay is not a factor in slope stability, erosion by the streams on the site has produced some areas with severe slopes and the potential for slope failure. A field visit was made on January 25, 2002, to examine the slopes along the stream valleys. An old slope failure is located on the west side of the stream at the rear of Lot 17, Block D. A problem area is on the west side of the stream at the rear of Lot 19, Block D. A small failing area is located on the west side of the stream at the rear of Lots 23-24, Block C. Problem areas are located on the east side of the stream on Lot 26, Block C. Problem areas are located on the west side of the stream on Lots 29, 30, 32, and 35, Block C. The potential for more small-scale slope failure is high. Section 24-131 of the Subdivision Regulations restricts the subdivision of land found to be unsafe for development.

A slope stability study for a portion of the site, dated June 3, 2002, was received in the review package. The study includes a map with 13 cross-sections and the calculations used to estimate a 1.5 Safety Factor Line. An amended study, dated July 9, 2002, includes three additional cross-sections. The Preliminary Plan of Subdivision shows the estimated 1.5 Safety Factor Line and a building restriction line at the rear of the lots noted above.

At the time of final plat, a building restriction line should be described by bearings and distances following the 1.5 Safety Factor Line. The following note should be placed on the final plat:

Because of slope stability, residential structures are prohibited beyond the building restriction line without prior written consent from the M-NCPPC Planning Director or designee.

# Historic Road

Livingston Road is identified as a historic thoroughfare in the Subregion V Master Plan. Applications on or adjacent to scenic and historic roads are reviewed for conformance with *Design Guidelines and Standards for Scenic and Historic Roads* prepared by the Prince George\*s County Department of Public Works and Transportation.

A visual inventory and description of proposed treatments of the view to the site from Livingston Road was accepted for review on April 22, 2002. The treatments proposed along Livingston Road meet the *Design Guidelines and Standards for Scenic and Historic Roads*.

#### Noise

The preliminary plan shows a 65 dBA (Ldn) noise contour from the centerline of MD 210 based upon a study prepared by the applicant. The Environmental Planning Section has reviewed the study and agrees with the conclusion that none of the proposed houses will be impacted by noise from Indian Head Highway.

# Critical Area

The Chesapeake Bay Critical Area (CBCA) line has been appropriately depicted on the Preliminary Plan. A Chesapeake Bay Critical Area Plan, CP-02003, was reviewed by the Subdivision Review

Committee on April 26, 2002. No impacts are proposed to the CBCA portion of the property. The entire area is within the 100-year floodplain and is proposed to be dedicated to M-NCPPC. The Conservation Plan is in conformance with the R-A Zone, the R-C-O Zone, and the Conservation Manual. Staff recommends approval of CP-02003.

Community Planning ●The 2000 Interim General Plan places this property in the Developing Tier.
 The subject property is one of two large projects in the Accokeek area that is specifically designated in the 1993 Master Plan for Subregion V for neo-traditional village development. Alternatively, the master plan text (p.100) states:

Although these two projects propose much higher development densities than normally envisioned for Rural Living Areas, the designation of the new willages• should complement that of the historic area and will function as a transition from suburban areas along the MD 223 highway corridor to the rural living areas farther south and east. If development of these projects according to willage• concepts proves infeasible, the land use policies and lower development densities recommended for Semi-rural areas should again become the guide for development of these areas. Contemporary, small-lot residential subdivisions are not considered appropriate.

The 1993 plan map of Natural Features and Environmental Facilities indicates the site was mostly wooded in 1990; several cleared areas (fields) are shown in the northern and central parts of the property. A Natural Reserve area is shown along the tributaries of Piscataway Creek which flow through the site; these streams are shown on the proposed site plan. Also, an existing sewer line is shown on the 1993 plan map crossing the northwestern part of the property.

The 1993 *SMA for Subregion V* classified this property in the V-M, Village-Medium, Zone via Comprehensive Design Zone Amendment 4 in CR-60-1993. Previously, this property had been classified in the R-A Zone by the 1979 Accokeek-Piscataway-Tippett SMA. A Comprehensive Design Plan, CDP-9401, and a Preliminary Plan of Subdivision, 4-95131, were approved in 1996 and Specific Design Plan SDP-9801 was approved in 1998. Approximately 800 residential units and a limited amount of local commercial development in a traditional village design would be allowed according to the regulations of the V-M, Village-Medium, Zone for this property.

The 1993 *Master Plan for Subregion V* concepts for Rural Living Areas recommends residential densities up to 0.5 dwelling unit per acre. According the plan text (p.46):

The primary design concept for land use in rural area is to maintain large parcels of undeveloped land to preserve rural character. Residential subdivisions dividing large parcels into equal minimum sized house lots are not encouraged, but cannot be prohibited. When residential development does occur, techniques that maintain large areas of woodland, meadow, or cultivated fields should be considered.

With respect to the Semi-Rural Living Area classification, such as that alternatively pertaining to the subject property, the master plan text states (p.47):

These are areas where a mixture of semi-rural, large-lot residential or rural hamlet lifestyles may evolve with or without the use of public sewer services that already exist around and through the area . . . When public sewer is utilized, the design of residential development in accordance with rural living concepts should be required. On larger

properties, especially, there are opportunities to preserve rural characteristics along with residential development if appropriate regulations can be formulated to allow low-density cluster/open space or rural mamlet designs.

To date, regulations that would allow open space or rural cluster (hamlet) subdivisions have not been adopted. Lot size variations permitted in the R-A Zone per Section 27-442 of the zoning regulations, as can be utilized for this application, allow some flexibility in subdivision design, although not to the degree recommended by the master plan to achieve rural living area design concepts.

- Parks and Recreation ●The proposed subdivision is exempt from the mandatory park dedication requirements of Section 24-134 of the Subdivision Regulations because all lots are greater than one acre in size.
- Trails ●In accordance with the Adopted and Approved Subregion V Master Plan, 4-95131, and CDP-9401, the applicant, and the applicant's heirs, successors and/or assignees shall provide the following:

Livingston Road is designated as a master plan trail route in the *Adopted and Approved Subregion V Master Plan*. There are three possible options for this trail depending on the nature of the road improvements required along Livingston Road. The options are:

- a. If Livingston Road is to remain an open section, then seven- to ten-foot-wide shoulders shall be built along the subject property's frontage of both sides of the Livingston Road. Livingston Road shall also be designated as a Class III bikeway with appropriate signage. As Livingston Road is a county right-of-way, the applicant shall provide a financial contribution of \$420 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.
- b. If Livingston Road is to be an urban, closed section roadway, a Class II multiuse trail shall be constructed outside of the right-of-way along the subject property's entire frontage of the west side of Livingston Road.
- If no road improvements are required, a Class II multiuse trail shall be constructed outside of the right-of-way along the subject property's entire frontage of the west side of Livingston Road.

Standard sidewalks are recommended along one side of all internal roads. When sidewalks, trails and/or paths intersect with roadways or parking lots, they should connect to the street with the appropriate size access ramps. All sidewalks, trails and paths should be handicapped-accessible, where feasible. All sidewalks, trails and paths should be free of street trees and above-ground utilities.

No master plan trail facilities are recommended along Berry Road. However, a standard sidewalk is recommended along the subject property\*s entire frontage to accommodate pedestrian movement.

5. Transportation ◆The applicant prepared a traffic impact study dated December 2001 which was reviewed as a part of staff serview of preliminary plan 4-02003, which was eventually withdrawn by the applicant. The findings and recommendations outlined below are based upon a review of all analyses conducted by the staff of the Transportation Planning Section, consistent with the Guidelines for the Analysis of the Traffic Impact of Development Proposals. The study was referred when

previously reviewed to the County Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA), and comments from both agencies are attached.

# Staff Analysis of Traffic Impacts

The traffic impact study prepared and submitted on behalf of the applicant analyzed the following intersections:

- MD 210 and Livingston/Swan Creek Road (signalized)
- Livingston Road and Old Fort Road South (four-way stop)
- Livingston Road and Floral Park Road (unsignalized)
- Livingston/Farmington/Berry Roads (four-way stop)
- MD 223 and Floral Park Road (unsignalized)
- Livingston Road and site access (unsignalized)
- Berry Road and site access (unsignalized)

This is a lesser study scope than was done in 1995 for this property. The current application is much less dense ●about one-quarter the residential development originally proposed ●and all who reviewed the scope were in general agreement. The existing conditions as established in the traffic study are summarized below:

EXISTING CONDITIONS							
Intersection	Critical Lane (AM & I	Level of Service (LOS, AM & PM)					
MD 210 and Livingston/Swan Creek Road	1282	1524	C	E			
Livingston Road and Old Fort Road South	9.5*	11.6*					
Livingston Road and Floral Park Road	11.8*	43.5*					
Livingston/Farmington/Berry Roads	15.1*	44.7*					
MD 223 and Floral Park Road	14.3*	12.0*					
Livingston Road and site access	future						
Berry Road and site access	future						

\*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.

The background traffic conditions (existing plus growth in through traffic plus traffic generated by background developments) presented in the traffic study are acceptable as shown. It is key that a relocation of Piscataway Road through the Greens at Piscataway development is assumed to be in place for background traffic, with a roundabout at the Piscataway/Livingston intersection. It is staffs understanding that this facility is in advanced discussion with SHA; therefore, it is acceptable for the improvement to be part of the background situation.

Background traffic conditions are summarized below:

BACKGROUND CONDITIONS								
Intersection	Critical Lane (AM &		Level of Servic (LOS, AM & PN					
MD 210 and Livingston/Swan Creek Road	1838	1717	F	F				
Livingston Road and Old Fort Road South	80.4*	208.8*						
Livingston Road and Floral Park Road - roundabout	volume/capacity: AM - 0.83; PM - 0.84							
Livingston/Farmington/Berry Roads	19.1*	101.5*						
MD 223 and Floral Park Road	33.5*	42.9*						
Livingston Road and site access	future							
Berry Road and site access	future							

\*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movment within the intersection. According to the Guidelines, an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.

The application is a plan for a residential subdivision consisting of 181 lots. The proposed development would generate 136 AM (27 in, 109 out) and 163 PM (109 in, 54 out) peak hour vehicle trips as determined using *The Guidelines for the Analysis of the Traffic Impact of Development* 

*Proposals*. The trip distribution utilized in the traffic study is acceptable. Total traffic under future conditions is summarized below:

TOTAL TRAFFIC CONDITIONS								
Intersection	Critical Land		Level of Service (LOS, AM & PM)					
MD 210 and Livingston/Swan Creek Road	1906	1717	F	F				
Livingston Road and Old Fort Road South	123.1*	273.3*						
Livingston Road and Floral Park Road - roundabout	volume/capa	city: AM -	0.91; PM -	0.86				
Livingston/Farmington/Berry Roads	20.0*	117.5*						
MD 223 and Floral Park Road	35.8*	48.8*						
Livingston Road and site access	22.1*	31.2*						
Berry Road and site access	9.3*	10.2*						

\*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movment within the intersection. According to the Guidelines, an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.

A number of transportation improvements have been identified in the traffic study which would correct the transportation inadequacies which are noted above. These improvements are summarized below:

- a. MD 210 and Livingston/Swan Creek Road
  - Westbound free right-turn lane along Livingston Road
  - Fourth southbound shared right/through lane along MD 210 from 500 feet north to 2,800 feet south of Swan Creek Road
  - Second northbound left-turn lane
- b. Livingston Road and Floral Park Road
  - Install a roundabout, provided it is approved ●to be built by Greens at Piscataway
- c. Livingston Road and Farmington/Berry Road
  - Exclusive right-turn lane on southbound Livingston Road

With the improvements listed above, total traffic conditions at the six intersections proposed for improvement are as follow:

TOTAL TRAFFIC CONDITIONS with IMPROVEMENTS								
Intersection	Critical Lan (AM &		Level of Service (LOS, AM & PM)					
MD 210 and Livingston/Swan Creek Road	1485	1414	Е	D				
Livingston Road and Old Fort Road South	123.1*	273.3*						
Livingston Road and Floral Park Road - roundabout	volume/capacity: AM - 0.91; PM - 0.86							
Livingston/Farmington/Berry Roads	21.2*	97.4*						
MD 223 and Floral Park Road	35.8*	48.8*						
Livingston Road and site access	22.1*	31.2*						
Berry Road and site access	9.3*	10.2*						

\*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movment within the intersection. According to the Guidelines, an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.

Staff notes that the table above indicates that two unsignalized intersections, the Livingston/Old Fort Road South and the Livingston/Farmington/Berry intersections, still operate unacceptably as unsignalized intersections. The Prince George's County Planning Board, in the *Guidelines*, has defined vehicle delay in any movement exceeding 50.0 seconds as an unacceptable operating condition at unsignalized intersections. Both intersections operate unacceptably during at least one peak hour with the development of the subject property. 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 if it is deemed warranted by the appropriate operating agency. The warrant study is, in itself, a more detailed study of the adequacy of the existing unsignalized intersection. Therefore, a traffic signal warrant study should be prepared by this applicant at each location in response to the inadequacy noted. This should occur prior to the time of building permit. If such a study is done, and the applicant is responsible for signal installation, these intersections will operate adequately under future traffic.

With signal warrant studies at two locations, the table above indicates that all intersections in the study area, with the exception of the MD 210/Livingston/Swan Creek intersection, operate at LOS D during both peak hours with the improvements recommended by the transportation staff. In the case of MD 210/Livingston/Swan Creek, the applicant has recommended improvements to improve the service level at the intersection. This intersection is eligible for mitigation under the fourth criterion in the *Guidelines for Mitigation Action* (approved as CR-29-1994). The applicant recommends the three improvements described earlier to mitigate the impact of the applicant's development in accordance with the provisions of Section 24-124(a)(6). The impact of the mitigation actions at this intersection is summarized as follows:

IMPACT OF MITIGATION							
Intersection	CLV (AM M)	CLV Differer & PM					
MD 210/Livingston/Swan Creek:							
Background Conditions	F/1838	F/1717					
Total Traffic Conditions	F/1906	F/1717	+68	+0			
Total Traffic Conditions w/Mitigation	E/1485	D/1414	-421	-303			

As the CLV at MD 210/Livingston/Swan Creek is between 1,450 and 1,813 during the PM peak hour, the proposed mitigation action must mitigate at least 150 percent of the trips generated by the subject property during the PM peak hour, according to the *Guidelines*. Also, as the CLV is greater than 1,813 during the AM peak hour, the proposed mitigation action must mitigate at least 100 percent of the trips generated by the subject property during the AM peak hour. The above table indicates that the proposed mitigation action would mitigate at least 100 percent of site-generated trips during the AM peak hour, and provides adequate operations during the PM peak hour. **Therefore, the proposed mitigation at MD 210 and Livingston/Swan Creek meets the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.** 

DPW&T and SHA comments are in the file. DPW&T was concerned that the roundabout might be at the wrong intersection. However, since the extension of Piscataway Road across the Greens of Piscataway property is proposed to become a state highway, transportation staff deferred to SHA concerning the location or potential location of roundabouts, and SHA did not raise any objections. SHA comments were more substantial. SHA suggested that the mitigation at the MD 210/Livingston/Swan Creek intersection take the following form:

- a. MD 210 and Livingston/Swan Creek Road
  - (1) Westbound free right-turn lane along Livingston Road
  - (2) Addition of a through lane along westbound Livingston Road
  - (3) Eastbound free right-turn along along Swan Creek Road
  - (4) Conversion of existing eastbound through lane along Swan Creek Road to a shared through/left-turn lane
  - (5) Widening of westbound Swan Creek Road west of the intersection to accommodate the second through lane

Staff reviewed the improvements suggested by SHA, and determined that the proposed improvements to eastbound Swan Creek Road were not useful in mitigating the site impact. By recommending the first, second and fifth items above, staff obtains the following table showing the impact of SHA\*s recommended mitigation actions:

IMPACT OF MITIGATION							
LOS and CLV (AM CLV Difference ( & PM) & PM)							
MD 210/Livingston/Swan Creek:	•						
Background Conditions	F/1838	F/1717					
Total Traffic Conditions	F/1906	F/1717	+68	+0			
Total Traffic Conditions w/Mitigation	E/1494	D/1642	-412	-75			

As the CLV at MD 210/Livingston/Swan Creek is between 1,450 and 1,813 during the PM peak hour, the proposed mitigation action must mitigate at least 150 percent of the trips generated by the subject property during the PM peak hour, according to the *Guidelines*. Also, as the CLV is greater than 1,813 during the AM peak hour, the proposed mitigation action must mitigate at least 100 percent of the trips generated by the subject property during the AM peak hour. The above table indicates that the proposed mitigation action would mitigate at least 100 percent of site-generated trips during the AM peak hour, and at least 150 percent of site-generated trips during the PM peak hour (the site has virtually no PM peak hour impact because there is virtually no impact upon the critical movements in the intersection). Therefore, SHA-s proposed mitigation at MD 210 and Livingston/Swan Creek meets the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.

SHA has endorsed the above set of improvements over those in the traffic study as mitigation. For that reason, the transportation staff is inclined to accept SHA\*s recommendation over that of the applicant. The Subdivision Regulations require the support of the responsible operating agency before the Planning Board can approve a mitigation action.

# Site Access and Layout Issues

The proposed stub street to the east was added at the request of transportation staff to ensure access to the property to the east.

Livingston Road is a Master Plan arterial with right-of-way of 120 feet. Berry Road is a Master Plan collector with right-of-way of 80 feet, or 40 feet from center line. The plan reflects adequate dedication along both facilities. Frontage improvements along both facilities shall be determined by DPW&T.

Based on the preceding 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 the transportation-related conditions included in this report.

 Schools ●The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities in accordance with Section 24-122.02 of the Subdivision Regulations and the Adequate Public Facilities Regulations for Schools (CR-23-2001 and CR-38-2002).

Impact on Affected Public School Clusters

Affected School Clusters #	Dwelling Units	Pupil Yield Factor	Subdivision Enrollment	Actual En- rollment	Completion Enrollment	Wait Enroll- ment	Cumulative Enrollment	Total En- rollment	State Rated Capacity	Percent Capacity	Funded School
Elementary School Cluster 6	181 sfd	0.24	43.44	4549	122	10	20.16	4744.60	4512	105.16%	n/a
Middle School Cluster 3	181 sfd	0.06	10.86	4959	43	15	5.04	5032.90	5114	98.41%	n/a
High School Cluster 3	181 sfd	0.12	21.72	9317	172	30	10.08	9550.80	8767	108.94 %	Surrattsville Addn.

Source: Prince George's County Planning Department, M-NCPPC, July 2002

The affected elementary and high school cluster percent capacities are greater than 105 percent. There is no Funded School in the affected elementary cluster. The Surrattsville addition is the Funded School in the affected high school cluster. Based on this information, the subdivision may be approved subject to conditions, including a trhee year waiting period, in accordance with Section 24-122.02.

- Fire and Rescue The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public fire and rescue facilities.
  - a. The existing fire engine at Accokeek Fire Station, Company 24, located at 16111 Livingston Road, has a service response time of 5.25 minutes, which is within the 5.25-minute response time guideline for Block A, Lots 1-6; Block B, Lots 1-30, 37-47; Block C, Lots 1-15, and 53-58; Block D, Lots 1-8, 26, and 51-66. All other lots are beyond.
  - b. The existing ambulance at Accokeek Fire Station, Company 24, has a service response time of 6.25 minutes, which is within the 6.25-minute response time guideline for Block A, Lots 1-7; Block B, Lots 1-47; Block C, Lots 1-27, 33, and 39-61; Block D, Lots 1-66. All other lots are beyond.
  - c. The existing paramedic at Allentown Road Fire Station, Company 47, located at 10900 Old Fort Washington Road, has a service response time of 7.25 minutes, which is within the 7.25-minute response time guideline for Block A, Lots 1-7; Block B, Lots 1-14, and Lots 38-47; Block C, Lots 1-6; Block D, Lots 61-66. All other lots are beyond. The nearest fire station Accokeek, Company 24, is 6.34 minutes from the development. This facility would be within the recommended response time for paramedic service.

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. To alleviate the negative impact on fire and rescue services due to the inadequate service discussed, the Fire Department requires that a fire suppression system be installed in all residential structures in accordance with National Fire Protection Association Standard 13D and all applicable Prince George's County laws. Since this is a matter of law, no condition is necessary.

8. <u>Police Facilities</u> The proposed development is within the service area for District IV-Oxon Hill. In accordance with Section 24-122.1(c) of the Subdivision Regulations, existing county police facilities

will be adequate to serve the proposed St. James Property development. This police facility will adequately serve the population generated by the proposed subdivision.

9. Health Department The Health Department originally raised the issue of possible noise generation along Berry Road. Apparently there is significant truck traffic along Berry Road emanating from nearby rubblefills and sand and gravel sites. This traffic may or may not be legal given conditions attached to the approval of those uses. Nonetheless, it is there. The applicant prepared a noise study that locates the 65 dBA (Ldn) line on the plan. The proposed homes are outside this line and should not be negatively affected by noise.

The Health Department also raised a concern that there are shallow wells on the property that need to be backfilled and sealed. The Health Department has granted the applicant a waiver delaying the deadline for such compliance until the end of September. No further action is needed.

- 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 has been submitted but 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 plan. Development must be in accordance with this approved plan.
- Public Utility Easement The preliminary plan includes the required ten-foot-wide public utility easement. This easement will be reflected on the final plat.
- 12. Varying Lot Sizes The applicant is proposing to use varying lot sizes as permitted by the Prince George's County Zoning Ordinance. Unlike the provision for the use of Lot Size Averaging (R-55, R-80, R-R and R-E Zones), the use of varying lot sizes in the R-A and O-S Zones does not require specific findings for approval. Only the minimum standards outlined in the Zoning Ordinance must be met.

Section 27-442(b)(Table I) of the Zoning Ordinance sets the minimum standards for varying lot sizes. In the R-A Zone, the creation of varying lot sizes is permitted as long as the total tract being subdivided is at least 25 acres in size. In this case the total tract area is  $400\forall$  acres. Further, at least 60 percent of the lots created using varying lot sizes must meet or exceed the minimum lot size in the zone: two acres in the R-A Zone. This requirement has been met with the submitted preliminary plan. One hundred ten of the 182 lots (or 60.4 percent) are a minimum of 2 acres on this subdivision.

The Zoning Ordinance allows one, 1-acre lot for every 25 acres of land in the tract. With 400 acres of land in the R-A tract, a maximum of 16, one-acre lots is permitted. The remaining lots are required to exceed 50,000 square feet. The submitted preliminary plan includes 16 lots between one acre and 50,000 square feet in size, with the remaining 56 lots exceeding 50,000 square feet. This arrangement meets the minimum standards set forth in Section 27-442(b)(Table I) of the Zoning Ordinance for the use of varying lot sizes.

13. <u>Underlying Preliminary Plan</u> There is a valid preliminary plan already approved on this property. Preliminary Plan 4-95131 was approved in 1996 and has received approval of an extension. The approval of this new preliminary plan will render Preliminary Plan 4-95131 null and void.

#### RECOMMENDATION

#### APPROVAL, subject to the following conditions:

- At time of final plat, a conservation easement shall be described by bearings and distances. The
  conservation easement shall contain all 100-year floodplain, stream buffers, wetlands and wetland
  buffers, except for areas with approved variation requests, and shall be reviewed by the Environmental
  Planning Section prior to certificate approval. In addition, the following note shall be placed on the
  plat:
  - ■Conservation easements described on this plat are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is permitted. •
- 2. The following note shall be placed on the final plat:
  - ■Prior to the issuance of any permits which impact wetlands, wetland buffers, streams or Waters of the U.S., copies of all federal and state wetland permits, evidence that approval conditions have been complied with, and associated mitigation plans shall be submitted to the M-NCPPC Planning Department.
- 3. Prior to the issuance of any building permit, a soils report addressing specific remedies and their locations in all areas where Marlboro Clay presents development problems shall be reviewed and approved by M-NCPPC\*s Environmental Planning Section and the Prince George\*s County Department of Environmental Resources. The report shall include a map showing all borehole locations, logs of all of the boreholes and identify individual lots where Marlboro Clay poses a problem.
- 4. At time of final plat, a building restriction line shall be described by bearings and distances following the 1.5 Safety Factor Line. The following note shall be placed on the final plat:
  - ■Because of slope stability, residential structures are prohibited beyond the building restriction line without prior written consent from the M-NCPPC Planning Director or designee. •
- 5. Prior to signature approval of the Type I Tree Conservation Plan, TCPI/66/95-01, the TCPI shall be revised to differentiate with a pattern on the plan between those areas to be counted toward meeting the requirements and those areas saved but not part of any required woodland conservation area.
- 6. Prior to signature approval of the Type I Tree Conservation Plan, TCPI/66/95-01, the Department of Parks and Recreation shall indicate their acceptance of woodland conservation on land to be dedicated to M-NCPPC or the plan and worksheet shall be revised to delete the afforestation of 2.73 acres and preservation of 1.34 acres on the land to be dedicated and state how the requirements will be met.
- 7. Development of this subdivision shall be in compliance with the approved Type I Tree Conservation Plan (TCP I/66/95-01). 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/66/95-01), 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. •
- 8. Prior to the issuance of grading permits, a Type II Tree Conservation Plan shall be approved.
- 9. Prior to the issuance of any building permit on the subject property, except for model homes, the following improvements shall (a) have full financial assurances, (b) have been permitted for construction, and (c) have an agreed-upon timetable for construction with the SHA or the DPW&T:
  - a. MD 210 and Livingston/Swan Creek Road:
    - Provide a 200-foot westbound channelized right turn lane along Livingston Road.
    - Provide a widened section along the westbound Livingston Road approach to allow a shared through/left-turn lane (as currently exists) and an exclusive through lane.
    - Provide sufficient widening along westbound Swan Creek Road west of MD 210 to receive two through lanes.
  - b. Livingston Road and Old Fort Road:
    - Install a traffic signal, provided said signal is deemed warranted by the DPW&T
  - c. Livingston Road and Farmington/Berry Road:
    - Install a signal, provided it is deemed warranted by DPW&T.
    - Provide an exclusive right-turn lane along southbound Livingston Road.
  - d. Livingston Road and Floral Park Road:
    - Install a signal, provided it is deemed warranted by SHA and/or DPW&T.
    - In lieu of a signal, the applicant may participate in any improvements providing capacity and safety at this location, such as a roundabout, to the extent that such improvements are needed to serve the subject property or beyond the scope of improvements to be provided by the Greens of Piscataway.

All improvements shall be constructed in accordance with the design standards of the responsible highway agency. The applicant, the applicant's heirs, successors, and/or assignees shall submit acceptable signal warrant studies for any proposed signals prior to the approval of any detailed plan for any portion of the subject property (or prior to the initial building permit, if no site plans are required), with the signals to be installed by the applicant, the applicant's heirs, successors, and/or assignees at any time during this project that the responsible highway agency deems the signal to be

warranted. Any of the signal warrant studies may be waived by the responsible highway agency if it is determined that recent studies exist to assess the presence or lack of signal warrants.

- 10. At the time of final plat approval, the applicant shall dedicate a 120-foot right-of-way along Livingston Road and Farmington Road in accordance with the recommendations for the A-54 facility in the Subregion V Master Plan. The scope of improvements within the dedicated right-of-way shall be determined by DPW&T.
- At the time of final plat approval, the applicant shall dedicate 40 feet from the center line of Berry Road. The scope of improvements within the dedicated right-of-way shall be determined by DPW&T.
- 12. No building permits shall be issued for this subdivision until the percent capacity, as adjusted pursuant to the School Regulations, at all the affected school clusters are less than or equal to 105 percent, or 3 years have elapsed since the time of the approval of the preliminary plan of subdivision; or pursuant to the terms of an executed school facilities agreement where by the subdivision applicant, to avoid a waiting period, agrees with the County Executive and County Council to construct or secure funding for construction of all or part of a school to advance capacity.
- 13. Prior to signature approval of the preliminary plan, a stormwater management concept plan shall be approved. Development shall be in conformance with the approved concept plan.
- 14. Depending on the nature of the road improvements required along Livingston Road, one of the following three master plan trail options (or other option found acceptable to the Department of Public Works and Transportation and the Transportation Planning Section to account for the historic nature of the road) shall be required of the applicant, his heirs, successors, and/or assignees:
  - a. If Livingston Road is to remain an open section, then seven- to ten-foot-wide shoulders shall be built along the subject property's frontage of both sides of the Livingston Road. Livingston Road shall also be designated as a Class III bikeway with appropriate signage. As Livingston Road is a county right-of-way, the applicant shall provide a financial contribution of \$420 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.
  - If Livingston Road is to be an urban, closed section roadway, a Class II multiuse trail shall be constructed outside of the right-of-way along the subject property's entire frontage of the west side of Livingston Road.
  - c. If no road improvements are required, a Class II multiuse trail shall be constructed outside of the right-of-way along the subject property's entire frontage of the west side of Livingston Road.
- 15. When sidewalks, trails and/or paths intersect with roadways or parking lots, they shall connect to the street with the appropriate size access ramps.
- 16. All sidewalks, trails and paths shall be handicapped-accessible where feasible.
- 17. All sidewalks, trails, and paths shall be free of street trees and above-ground utilities.

STAFF RECOMMENDS APPROVAL OF TYPE I TREE CONSERVATION PLAN TCPI/66/95-01 AND VARIATIONS TO SECTION 24-130 OF THE SUBDIVISION REGULATIONS