MCPB Item# June 10, 2010

#### MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Mark Pfefferle, Acting Chief, Environmental Planning

Stephen D. Federline, Master Planner, Environmental Planning

FROM:

Doug Johnsen, Planner Coordinator, Environmental Planning

DATE:

May 18, 2010

REVIEW:

Goddard School: Special Protection Area (SPA) Preliminary Water Quality

Plan and Preliminary Forest Conservation Plan

TYPE:

Special Exception # S-2759

LOCATION: 22010 and 22014 Frederick Road, Clarksburg, MD

APPLICANT: Mr. Ross Flax, Goddard School

## RECOMMENDATION

This recommendation for the above referenced special exception is based upon review of the SPA Preliminary Water Quality Plan submitted to MNCPPC on December 18, 2009 and review of the Preliminary Forest Conservation Plan submitted to MNCPPC on March 12, 2010. Staff recommends:

APPROVAL of the SPA Preliminary/Final Water Quality Plan, subject to the following conditions:

- 1. Impervious surface is limited to no more than 1.40 acres as shown on the Impervious Area Exhibit Plan dated February 16, 2010.
- 2. Use of alternative surfaces, including but not limited to porous pavers and turf filters as may be approved by Montgomery County, Department of Permitting Services (MCDPS), are required per Impervious Area Exhibit Plan to minimize the storm water effects of imperiousness on receiving waters.

3. Compliance with all conditions of the MCDPS Water Quality Plan approval letter dated May 4, 2010.

APPROVAL of the Preliminary Forest Conservation Plan (PFCP) subject to the following conditions:

- 1. Applicant to comply with the conditions of approval of the Preliminary Forest Conservation Plan.
- 2. Applicant to submit a Final Forest Conservation Plan in accordance with Forest Conservation Regulations 22A.00.01.09(B).
- 3. Applicant to record a Category I Forest Conservation Easement(s) over all areas of retained and planted forest prior to any land clearing activities occurring on-site.
- 4. Applicant to install permanent forest conservation fencing and signage along the FCE line contained within the property boundaries as shown on the Final Forest Conservation Plan.
- 5. Applicant to install the required reforestation material by the first planting season following the release of the first grading permit.
- 6. Applicant to install the required landscape planting material being used for reforestation credit by first growing season following building completion.
- 7. Applicant to remove all existing structures, fencing, play equipment and debris from the proposed Category I Forest Conservation Easements.



Figure 1: Vicinity Map

#### BACKGROUND

The 4.70 acre property consists of two lots located at 22010 and 22014 Frederick Road, located on the west side of Frederick Road (State Route 355) approximately 1000 feet north of the intersection of Frederick Road and W. Old Baltimore Road (*Figure 1*). The property is zoned R-200. The subject property is bounded on the north and east by Frederick Road with single family residential located across Frederick Road; on the southeast by a vacant forested lot, and on the south, southwest and northwest by single family detached residential dwellings. The property is located entirely within the Clarksburg Special Protection Area (SPA).

The applicant is seeking a special exception to construct a child day care center for approximately 283 children as allowed under Section 59-G-2.13.1 of the Montgomery County Zoning Ordinance.

There are three items for Planning Board review for the special exception project: the special exception; the Special Protection Area (SPA) Preliminary Water Quality Plan; and the Preliminary Forest Conservation Plan. This memorandum covers staff's review and recommendations on the SPA Preliminary Water Quality Plan and the Preliminary Forest Conservation Plan.

The Board's actions on the SPA Water Quality Plan and Forest Conservation Plan are regulatory and binding. The Planning Board must act on the SPA Water Quality Plan and Forest Conservation Plan before it can act on the special exception application.

## **Environmental Inventory**

A Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) for the 4.70 acre site was approved by Environmental Planning staff in August 2009. This property is located within the Clarksburg Special Protection Area.

The topography of the property is considered gently sloping with the high point located in the eastern corner of the site and a small ridge running east to west from that point. The site gently slopes at approximately an 8 to 9 percent slope from the ridge to both the northern and southern corners of the site.

The eastern portion of the site sheet flows to Frederick Road, and the west side drains towards the existing residential development: both are handled by a storm drain system. There are no streams or environmental buffers on the subject property. The site lies within the Upper Little Seneca Creek subwatershed within the Little Seneca Creek watershed designated as Use IV-P waters. The upper Little Seneca Creek within is classified as being in excellent condition in the 1998 version of the Department of Environmental Protection's County Stream Protection Strategy (CSPS).

The vegetation on the subject property consists of 4.21 acres of existing mature forest. There are 68 specimen sized trees 24" DBH and greater, with 23 of these being 30" DBH and greater. There are also two rare, threatened and endangered species of American Chestnut (*Castanea dentate*) located on the property. The applicant is proposing to hand remove the American Chestnuts and donate them to the American Chestnut Society.

# SPA PRELIMINARY WATER QUALITY PLAN REVIEW

The applicant has submitted a preliminary water quality plan for review by both Montgomery County Department of Permitting Services (DPS) and M-NCPPC. As part of the requirements of the Special Protection Area law, a SPA Water Quality Plan should be reviewed in conjunction with a special exception<sup>1</sup>. Under the provision of the law, DPS and the Planning Board have different responsibilities in the review of a water quality plan. DPS has reviewed and

<sup>&</sup>lt;sup>1</sup> Section 19-62 (b) of the Montgomery County Code states that "...the requirements for a water quality inventory and a preliminary and final water quality plan apply in any area designated as a special protection area to a person proposing land disturbing activity on privately owned property: (1) who is required by law to obtain approval of a ...special exception..."

conditionally approved the elements of the Preliminary Water Quality Plan under its purview. The Planning Board's responsibility is to determine if environmental buffer protection, site imperviousness minimization goals and SPA forest conservation and planting requirements have been satisfied.

Environmental Planning Staff has reviewed and recommends Planning Board approval of the elements of the SPA water quality plan under its purview:

# **Compliance with Environmental Guidelines**

Full compliance with the Environmental Guidelines, particularly Chapter V – Guidelines for Special Protection Areas – is accomplished through compliance with proposed conditions. There are no environmental or stream buffers on this site.

# Site Imperviousness

There is no overlay zone or master plan recommendation that sets an impervious cap for developments in this portion of the Clarksburg Special Protection Area. However, Section 19-63(a)(4) of the County SPA Law requires a plan to minimize impervious area for a proposed project.

In reviews of imperviousness for other projects in this SPA, Environmental Planning compares a proposed project's imperviousness with the range of expected imperviousness that would result in a typical development allowed in the underlying zoning of the property. Staff uses studies that have calculated countywide impervious surface averages for different zones as the basis for comparison. Staff also assesses the proposed development to look for ways to attempt to reduce the amount of impervious surfaces in the subdivision consistent with SPA and the new SWM Environmental Site Design (ESD) requirements.

According to the Preliminary Water Quality Plan dated December 18, 2009 and the Impervious Area Exhibit Plan dated February 16, 2010, the applicant proposes approximately 1.49 acres of impervious surface on the 5.30 acre property which incorporates the original 4.70 acre site plus 0.60 acres of off-site improvements. This represents a proposed total impervious surface coverage of approximately 28.1 percent (1.49 acres/5.30 acres) for the site. The R-200 zone has a countywide average of 22 percent to 29 percent impervious surface. This project falls within the countywide average.

Staff's calculations of impervious surfaces closely follows the methodology applied by the State Department of Natural Resources (MD DNR) in Maryland's Critical Areas, and reflects the consensus definition of County agencies. Specific to this project, staff counts all pavement, rooftop, and pedestrian surfaces as impervious, including the proposed porous surfaces used for motor vehicle parking or driving. Although considered impervious, we do note and support the use of alternative surfaces and methods, where appropriate to mitigate the effects of imperviousness and to meet stormwater management requirements. It is important to note, however, that although traditional stormwater management is based on infiltration and runoff volume calculations, overall watershed protection and Environmental Site Design (ESD) (now required by new State regulations) are based on additional considerations including minimizing

grading, soil compaction and imperviousness, and maximizing protection of natural vegetated areas.

Further, staff supports the waiver of the 29 parking spaces for the benefits of reduced imperviousness it provides. Staff suggests employee carpooling, peak time pickup and drop-off lanes (using proposed drive aisles) and other feasible operational options, in lieu of the additional spaces.

# Expanded and Accelerated Forest Conservation

Forest has been protected, and reforestation/landscaping will be planted on the site to meet all forest conservation requirements onsite. No priority areas for planting exists onsite, but reforestation does adjoin existing forest.

# **County DPS Special Protection Area Review Elements**

DPS has reviewed and conditionally approved the elements of the SPA preliminary water quality plan under its purview with a synopsis provided below (see Attachment X).

## Site Performance Goals

As part of the preliminary water quality plan, the following performance goals were established for the site:

- 1. Minimize storm flow run off increases.
- 2. Minimize sediment loading.
- 3. Minimize nutrient loading.
- 4. Control insecticides, pesticides and toxic substances.

#### Stormwater Management Concept

DPS is requiring channel protection, quality control and recharge to be provided on-site via a combination of pretreatment biofilters, turf filters, porous pavement and non-rooftop disconnections. Each turf filter will be designed with an infiltration reservoir below the organic and sand filter that will sized for full treatment thereby providing redundancy for water quality.

## Sediment and Erosion Control

DPS is requiring the use of redundant sediment controls to be used throughout the site, sediment traps with forebays that provide 125% of the normally required storage volume and the use of super silt fence for small areas of disturbance.

# Monitoring of Best Management Practices

The monitoring will be in accordance with the BMP monitoring protocols established by the Department of Environmental Protection (DEP) as based in the DPS conditional approval letter dated May 4, 2010.

#### PRELIMINARY FOREST CONSERVATION PLAN REVIEW

#### **Forest Conservation**

There are 4.21-acres of existing forest on this property. The on-site forest consists of overstory hardwoods including Black Oak (*Quercus velutina*), White Oak (*Quercus alba*) and Red Oak (*Quercus rubra*) with a mix of Tulip Tree (*Liridendron tulipifera*) and Pignut Hickory (*Carya glabra*). The understory trees consist of Red Maple (*Acer rubrum*) and some Black Gum (*Nyssa sylvatica*). Typical tree sizes range from saplings to 44" diameter breast height (DBH).

There are sixty-eight (68) trees 24" DBH or greater in size identified on the NRI/FSD with twenty-three (23) of these trees 30" DBH or greater. These trees are about evenly scattered throughout the site. Fifty-four (54) of these trees (sixteen (16) of which are 30" DBH and greater) lie within the limits of disturbance (LOD) of the project and are proposed to be removed.

The preliminary forest conservation plan indicates the removal of 3.03 acres of forest and the preservation of 1.20 acres of forest which generates a reforestation requirement of 0.62 acres. This requirement shall be met onsite with 0.54 acres of on-site forest planting and 0.08 acres of landscape credit. All retained forest and planted will be protected in a category I forest conservation easement (*Figure 2*).

The preliminary forest conservation plan shows building footprints, sport courts, play equipment and play fields within 30 feet of forest conservation easements. The proximity encourages encroachments into the conservation easement areas. In order to demarcate the forest conservation easement (FCE) Environmental Planning recommends a preliminary forest conservation plan condition requiring the applicant to install permanent forest conservation fencing and signage along the FCE line contained within the property boundaries.



Figure 2: Location of Proposed Forest Conservation Easements

# Forest Conservation Variance

Section 1607(c) of the Natural Resources Article, MD Ann. Code, identifies certain individual trees as high priority for retention and protection. Any impact to these trees, including removal or any disturbance within a tree's critical root zone (CRZ), requires a variance. An Applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the Montgomery County Code. The law requires no impact to, and the retention and protection to the greatest extent possible of all trees that measure 30" diameter at breast height (DBH) or greater; any tree designated as the county champion tree; trees with a DBH 75% or greater than the diameter of the current State champion for that species; trees associated with a historical site or structure; and rare, threatened and endangered species,. Since this project did not obtain approval of a Preliminary Forest Conservation Plan (PFCP) prior to October 1, 2009 and the applicant is proposing to affect/impact eighteen (18) trees, the applicant must request a variance to impact those 18 trees as shown on the submitted PFCP.

In accordance with Montgomery County Code, Section 22A-21(c) the Planning Board referred a copy of the variance request to the County Arborist in the Montgomery County Department of

Environmental Protection for a written recommendation prior to acting on the request. The County Arborist has 30 days to comment. In this case, the variance request was referred to the Montgomery County Arborist on November 18, 2009. The County Arborist responded to the variance request on November 19, 2009 by stating that their office had no recommendations (Attachment A).

In accordance with Section 22A-21(e), Environmental Planning staff recommends a finding by the Planning Board that the Applicant has met all criteria required to grant the variance.

1). Will confer on the applicant a special privilege that would be denied to other applicants.

The requested variance will not confer on the applicant any special privileges that would be denied to other applicants. The loss of certain large trees, and need for a variance, is often a necessary and unavoidable consequence of development and redevelopment to realize master plan objectives, housing goals, and the application of other land use policies and regulations affecting site development. Staff consistently applies a review of reasonable and feasible avoidance and minimization options to each unique site situation. Therefore, staff believes that granting this variance is not a special privilege that would be denied to other applicants.

2). Is based on conditions or circumstances which are the result of the actions by the applicant.

The requested variance is based on site layout and design for a day care center within an R-200 zone. The site layout and design necessitates the removal of the 18 trees for the day care center, associated parking and open play areas. The special exception land use does provide some clustering of disturbance that may not have occurred with development under the existing zoning. Further, the applicant has worked to reduce the impact of the development by decreasing the parking area and using porous pavement where possible.

3). Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property.

The requested variance is a result of the proposed site design and layout on the subject property and not as a result of land or building use on a neighboring property.

4). Will violate State water quality standards or cause measurable degradation in water quality.

The requested variance will not violate State water quality standards or cause measurable degradation in water quality. The subject property is located within the upper reaches of the Little Seneca Creek watershed which has a use IV-P designation. Use IV-P have water quality standards set that if met make them suitable for water contact recreation, recreational trout and public water supply. Readily available information on Total

Maximum Daily Loads (TMDLs) from MDE and EPA indicate that there is no approved sediment or other TMDLs established for Little Seneca Creek or this portion of the Great Seneca Creek watershed.

The trees in question are located in an upland area on relatively flat ground far removed from any stream or associated buffer. Therefore, removal of the specimen trees does not directly impact stream temperature or stream quality. The subject property is being designed under new stormwater management regulations required by the Stormwater Management Act of 2007. Environmental Site Design (ESD) will be used to limit the runoff from the site after development to the equivalent of "woods in good condition". The conceptual Soil Erosion and Sediment Control Plan proposes a two-stage Sediment Control Trap as well as Super Silt Fence and Inlet Protection in series. Additional sediment controls include double rows of super silt fence will be added to the final plan where appropriate to control sediment runoff from the site during construction. Silt socks may also be used in certain areas to limit tree root impacts.

Staff finds that the development impacts will not cause measurable degradation in water quality because: 1) the removal of the requested trees will not directly impact the stream; 2) the site runoff will be designed to mimic that from the existing wooded condition; 3) there are no stated TMDLs for this portion of the Little Seneca Creek; and 4) additional soil erosion and sediment control measures will be used during construction which include the use of redundant sediment control measures throughout the site and the use of sediment traps with forebays that provide 125% of the normal required storage volume.

As a result of the above findings, staff recommends approval of the applicant's request for a variance from Forest Conservation Law to remove or otherwise impact specimen (and/or certain other specified) trees on-site. The variance approval is assumed into the Planning Board's approval of the final forest conservation plan.

#### **CONCLUSION**

Environmental Planning recommends the Planning Board approval of the Preliminary Water Quality Plan and approval with conditions of the Preliminary Forest Conservation Plan (PFCP) which shall be reviewed concurrently with the above referenced special exception.

# **ATTACHMENT A**

County Arborist's Forest Conservation Variance Recommendations



#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Robert Hoyt Director

November 19, 2009

Royce Hanson, Chairman Montgomery County Planning Board Maryland National Capital Park & Planning Commission 8787 Georgia Avenue Silver Spring, Maryland 20910

RE: Victory Oaks at St. Camillus, S-2751 (NRI/FSD approved on 5/22/2009)
Farmland Elementary School, MR09709 (NRI/FSD applied for on 9/24/08)
Brooke Park, DAIC 120100030 (NRI/FSD applied for on 4/24/2009)
Montgomery Knolls Elementary School, MR2009743 (NRI/FSD applied for on 10/23/08)
New Hampshire Gardens, S-1424A (NRI/FSD approved on 9/3/2009)
Piedmont Road, DAIC 120090330, (NRI/FSD applied for on 7/24/2006)
Goddard School – Clarksburg, S-2759, (NRI/FSD applied for on 6/22/09)

Dear Dr. Hanson:

As stated in a letter to you from Bob Hoyt, dated October 27, 2009, the County Attorney's Office has advised me that the new provisions of the Forest Conservation Act do not apply to any application required by Chapter 22A of the Montgomery County Code submitted before October 1, 2009. Since the applications for the above referenced requests were submitted before this date, I will not provide a recommendation pertaining to these requests for variances.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Laura Miller County Arborist

cc: Robert Hoyt, Director

Walter Wilson, Associate County Attorney

Mark Pfefferle, Acting Chief