Potomac Elementary School, Preliminary/Final Forest Conservation Plan, MR2018017

Joshua Penn, Planner Coordinator, Area 3 Joshua.Penn@montgomeryplanning.org, 301-495-4546
Frederick V. Boyd, Supervisor, Area 3 Fred.Boyd@montgomeryplanning.org, 301-495-4654
Richard Weaver, Chief, Area 3 Richard.Weaver@montgomeryplanning.org

Completed: 08-31-18

Description
- 10311 River Road, Potomac
- 9.64 acres, RE-2 zone
- 2002 Potomac Subregion Master Plan
- Applicant: Montgomery County Public Schools
- Submitted: January 17, 2018
- Part A - Forest Conservation Plan: Modernization of Potomac Elementary School

Staff Recommendation: Approval with conditions

- The review of this Mandatory Referral is in two parts:
  Part A – Preliminary/Final Forest Conservation Plan MR2018017, and
  Part B - Mandatory Referral MR2018017, discussed in a separate staff report.
- Construction of a new 86,500 square foot energy efficient Elementary School.
- The project proposes daylighting of a natural stream channel and enhanced planting.
- The forest conservation requirement will be met through an offsite forest conservation mitigation bank.
**Recommendation:** Approval with conditions of the Preliminary/Final Forest Conservation Plan and variance request

1. Amend the submitted FFCP to show 71 caliper inches of mitigation and where trees will be planted.
2. Amend the submitted FFCP to show the revised limits of the modified Category II easement final delineation. The final delineation to be determined prior to approval of Certified FFCP.
3. The Applicant must record a modified Category II Conservation Easement over all areas specified on the approved Forest Conservation Plan. The Conservation Easement approved by the M-NCPPC Office of the General Counsel must be recorded in the Montgomery County Land Records by deed prior to the start of any demolition, clearing, or grading on the Subject Property, and the Liber Folio for the easement must be referenced on the record plat.
4. Mitigation for the removal of eight (8) trees subject to the variance provision must be provided in the form of planting native canopy trees totaling 71 caliper inches, with a minimum size of three (3) caliper inches. The trees must be planted in final locations to be shown on the Final Forest Conservation Plan, outside of any rights-of-way, or utility easements, including stormwater management easements. Adjustments to the planting locations of these trees is permitted with the approval of the M-NCPPC forest conservation inspector.
5. The Applicant must record an M-NCPPC approved Certificate of Compliance in an M-NCPPC approved forest bank for the total afforestation/reforestation requirement prior to any clearing, grading or demolition on the project site.
6. The Applicant must install permanent Conservation Easement signage along the perimeter of the conservation easements.
7. The Final Sediment Control Plan must depict the limits of disturbance (LOD) identical to the LOD on the approved Final Forest Conservation Plan.
8. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the approved Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector.
SITE DESCRIPTION

The Potomac Elementary School Site consists of 9.64 acres, Parcel 937, on Tax Map FP343 at 10311 River Road, Potomac (“Site”) and zoned RE-2. The Site is generally flat with the low flat spot (elevation) located in the middle of the Site. The Site contains some individual trees, a wooded area in the northeast corner, Stream Valley Buffer (SVB), and 100-year floodplain. The neighboring properties are mostly residential except for a religious institution to the southeast. The Site is bounded on the southwest by River Road. The Site is within the boundaries of the 2002 Potomac Subregion Master Plan and is part of the Potomac area of the Subregion.

Figure 1: Aerial Photograph of the Vicinity
PROJECT DESCRIPTION

Montgomery County Public Schools (MCPS or Applicant) is proposing to tear down and rebuild the Potomac Elementary School. When completed the new facility will have an increased capacity of 472 students, with core spaces designed for 740 students. The proposed work includes traffic circulation improvements along River Road, a new entrance to accommodate a separate bus loop, improved parent drop-off queuing, and improved pedestrian circulation. Site development will also include development of standard MCPS site amenities for elementary schools.

FOREST CONSERVATION PLAN ANALYSIS AND FINDINGS

The Forest Conservation Plan Application meets all applicable requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

Review for Conformance to the Forest Conservation Law

The Application is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) under Section 22A-4(d) as a project by “a government entity subject to a mandatory referral on a tract of land 40,000 square feet or larger...” The Site included in the Application is 9.64 acres in size, Parcel 937 on Tax Map FP343.
Environmental Guidelines

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420160980 was approved by Staff on February 9, 2016 (Attachment A). The Site is within the Rock Run watershed, a Use I-P designation. The Countywide Stream Protection Strategy rates the water quality in this watershed as poor. The Site contains Stream Valley Buffer (SVB) and 100-year Floodplain. The 100-year Floodplain is not shown on the NRI/FSD because there are no mapped floodplains on the Site. At time of the submission of the stormwater management concept MCDPS required the Applicant to provide a more accurate floodplain delineation based on hydrologic/hydraulic computations and detailed topography or field survey.

Daylighting of the Stream

This project deftly balances two competing objectives. The combined goals of restoring/daylighting a natural channel and the gaining additional buildable area for the building envelope only works when both the environmental reviewers and the developer recognize the mutual benefits and work together toward those goals.

There is an adjoining unnamed paper street (ROW) located at the approximate center of the Site on the northwest side. The unnamed paper street contains a stream channel which enters an existing storm drain system once it reaches the MCPS Site. The channel flows are conveyed through the Site by the storm drain system. Analysis revealed that the drainage area generating the ephemeral flows to the channel was larger than 30 acres; therefore, by Montgomery County Code, a floodplain delineation study (FPDS) was required.

Development of the original Potomac Elementary School was completed prior to FPDS requirements, in the 1950’s. That development included grading, installation of the storm drain (pipe) system, parking areas and playgrounds, and resulted in complete filling of the natural stream channel and floodplain that likely traversed the Site at that time. The floodplain delineation for the piped stream covers a considerably larger area than would be expected of a similar channel in natural conditions. The existing floodplain delineation also makes redevelopment of the Site very difficult without some level of flexibility and mitigation since the stream buffer must include the entire 100-year floodplain per the Environmental Guidelines.

The project will daylight a large portion of the existing storm drain and reestablish the channel and some buffer. With reestablishment of the existing channel and stream buffers, overland flood paths are also restored to a more natural and improved environmental state. Daylighting of the existing channel, providing riparian buffers and replanting with native species will provide environmental benefits both ecologically and from aesthetic perspective, some example listed below:

**Ecological**
- Daylight underground channeled stream
- Provide natural meandering channel and streambed
- Reduce untreated stormwater runoff
✓ Improve water quality by exposing water to air, sunlight, vegetation, & soil which helps bind and transform pollutants
✓ Recreate aquatic habitat
✓ Recreate valuable riparian habitat

Aesthetics
✓ Create green link
✓ Provide recreational amenities: seating, play, etc.
✓ Use as outdoor laboratory for school
✓ Serve as focal point
✓ Create new amenity
✓ Reconnect children to nature
✓ Opportunity to correct the wrongs of the past

Figure 2: Initial Concept Sketch of Channel Daylighting

According to the Guidelines for Environmental Management of Development in Montgomery County, clearing and grading within the stream buffer may be recommended for approval on a case-by-case basis so long as the modification is consistent with a comprehensive approach to protecting areas that are critical to preserving or enhancing streams, wetlands, and their ecosystems. The Applicant must
provide a rationale for stream buffer modifications addressing at a minimum the factors below. The extent to which the proposal meets the following factors will form the basis for staff recommendations.

1. *Reasonable alternatives for avoidance of the buffer are not available.*

   The proposed impacts are the result of a stream restoration/daylighting and the work must be conducted in the SVB so there are no alternatives for avoidance.

2. *Encroachment into the buffer has been minimized.*

   The amount of proposed encroachment into the standard SVB beyond what is necessary to daylight the stream has been minimized without precluding the public goals of a functioning elementary school.

3. *Existing sensitive areas have been avoided (forest, wetlands and their state designated buffers, floodplain, steep slopes, and habitat for rare, threatened, and endangered species and their associated protection buffers).*

   The existing sensitive features, except for the calculated FPDS floodplain area have been avoided and the daylighting of the natural channel planted with native species adds a whole new set of environmental features.

4. *The proposed use is consistent with the preferred use of the buffer (e.g., pervious areas such as tie outs to existing grades, slope stabilizing BMPs, etc.)*

   The primary use for buffer area to be impacted is a natural/restored stream channel providing additional stream and ecosystem enhancement that would not otherwise been achieved on this site.

5. *The plan design provides compensation for the loss of buffer function.*

   The entire design was predicated around the daylighting and restoration of a naturally occurring stream channel and provides water quality benefits that greatly exceed the current piped configuration on Site. Additionally, the existing piped conditions created a barrier between the stream and the buffer so the buffer was not able to function as it should. The stream restoration will allow the buffer to interact with the stream and function. Although the proposed stream buffer is not as large as required per the Guidelines, the compromise results in a stream channel that is restored to a natural condition and a stream buffer that is allowed to function as a natural filter, meeting the intent of the Guidelines.

The proposed the daylighting and restoration of the naturally occurring stream channel is consistent with the Guidelines and can be approved as designed.

**Modified Conservation Easement**

The unique circumstance of this Application-- a Public School and the daylighting and restoration of a piped stream channel--prompted a discussion about environmental protection and the safety of the students who attend the school. The location of the historic channel bisects the Site and a full width
SVB as defined in the Environmental Guidelines would have made redevelopment of the Site to suit the needs of MCPS, very difficult. In that scenario, the stream would never have been restored.

In conjunction with MCPS and Staff, a compromise solution was discussed that would protect and incorporate this new environmental feature. MCPS needed to maintain the safety and aesthetic elements of a feature in the middle of a school campus and Staff wanted to ensure the new stream channel received protection to help ensure the environmental benefits associated with daylighting a stream. The existing development on the Site as well as the proposed redevelopment of the school prohibit the establishment of a stream buffer to the extent typically preferred in the Guidelines. A compromise of a variable width buffer, as shown on plans, in conjunction with a Modified Category II conservation easement would provide protection of the soils and plantings and would ensure that the most sensitive areas would not be redeveloped. The Category II easement also would provide MCPS some liberty in maintaining the vegetation on-site to help ensure student safety.

Forest Conservation Plan

A Forest Conservation Plan (“FCP”) for the Site was submitted as part of the Mandatory Referral Application (Attachment B).

The FCP proposes no forest clearing and no forest retention. The net tract area for the Application, for purposes of Chapter 22A is 9.64 acres. The proposed development on the Site generates a 1.45-acre afforestation planting requirement. The afforestation planting requirement is generated because the Site contains no existing forest and, under the “Institutional Development Areas” land use category, the Site has a 15 percent afforestation threshold for the net tract area. The Applicant proposes to meet the planting requirement through Mitigation Credit in an offsite forest conservation bank.

Forest Conservation Variance

Section 22A-12(b)(3) of the Montgomery County Forest Conservation Law provides criteria that identify certain individual trees and other vegetation as high priority for retention and protection. The law requires that there be no impact to: trees that measure 30 inches or greater DBH; are part of an historic site or designated with an historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species. Any impact to high priority vegetation, including disturbance to the 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 County Forest Conservation Law. Staff determined that development of the Site requires impact to trees identified as high priority for retention and protection (Protected Trees). The Applicant has submitted a variance request for these impacts.

Variance Request – The Applicant submitted a variance request in a letter dated January 18, 2018, for the removal and impact of variance trees (Attachment C). The Applicant proposes to remove eight and impact seventeen protected trees that are 30 inches or greater, DBH, and are considered a high priority for
retention under Section 22A-12(b)(3) of the County Forest Conservation Law. Details of the protected trees to be removed and impacted are provided in Table 1 and shown graphically in Figure 2.

<table>
<thead>
<tr>
<th>Tree #</th>
<th>Species</th>
<th>Species Common Name</th>
<th>D.B.H</th>
<th>Critical Root Zone (Sq. Ft.)</th>
<th>Critical Root Impacts</th>
<th>Percent of CRZ</th>
<th>Tree Comments</th>
<th>Tree Condition</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>30</td>
<td>6362</td>
<td>6362</td>
<td>100%</td>
<td>GOOD</td>
<td>INC.BARK/GIRDLED ROOTS</td>
<td>REMOVE</td>
</tr>
<tr>
<td>4</td>
<td>ULMUS RUBRA</td>
<td>RED ELM</td>
<td>30</td>
<td>6362</td>
<td>6362</td>
<td>100%</td>
<td>GOOD</td>
<td>SPLIT@9'/MULBERRY CLOSE TO BASE</td>
<td>REMOVE</td>
</tr>
<tr>
<td>7</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>34,14</td>
<td>8171</td>
<td>3734</td>
<td>46%</td>
<td>GOOD</td>
<td>INC.BARK/PRUNED/SOME DAMAGED BARK+SPLITS@5'/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>9</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>45</td>
<td>14314</td>
<td>5524</td>
<td>39%</td>
<td>GOOD</td>
<td>INC.BARK/SPLIT@6,6,8'/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>14</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>40</td>
<td>11310</td>
<td>11310</td>
<td>100%</td>
<td>GOOD</td>
<td>INC.BARK/SPLIT@15'</td>
<td>REMOVE</td>
</tr>
<tr>
<td>15</td>
<td>PINUS STROBUS</td>
<td>WHITE PINE</td>
<td>32</td>
<td>7238</td>
<td>3055</td>
<td>42%</td>
<td>GOOD</td>
<td>VINES/DEAD/BROKEN BRANCHES/LIMBS/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>19</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>36</td>
<td>9161</td>
<td>9161</td>
<td>100%</td>
<td>FAIR</td>
<td>VINES</td>
<td>REMOVE</td>
</tr>
<tr>
<td>22</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>33</td>
<td>7698</td>
<td>7698</td>
<td>100%</td>
<td>FAIR</td>
<td>VINES/SPLIT@6.5' AND 10'</td>
<td>REMOVE</td>
</tr>
<tr>
<td>23</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>33</td>
<td>7698</td>
<td>1226</td>
<td>16%</td>
<td>GOOD</td>
<td>BROKEN LEADER/SPLIT@4'/VINES/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>28</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>53</td>
<td>19856</td>
<td>92</td>
<td>1%</td>
<td>GOOD</td>
<td>BROKEN LEADER, SPLIT@4'/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>31</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30,22,24</td>
<td>6362</td>
<td>1733</td>
<td>27%</td>
<td>GOOD</td>
<td>SPLIT@6'/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>32</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30</td>
<td>6362</td>
<td>90</td>
<td>1%</td>
<td>FAIR</td>
<td>LEAN/MONITOR/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>33</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>36</td>
<td>9161</td>
<td>9161</td>
<td>100%</td>
<td>GOOD</td>
<td>VINES/DEAD/BROKEN BRANCHES/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>67</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>YELLOW POPLAR</td>
<td>32</td>
<td>7238</td>
<td>7238</td>
<td>100%</td>
<td>POOR</td>
<td>SEVERE LEAN, POTENTIAL HAZARD TO PORTABLES</td>
<td>REMOVE</td>
</tr>
<tr>
<td>68</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>47</td>
<td>15615</td>
<td>15615</td>
<td>100%</td>
<td>GOOD</td>
<td>VINES/SPLIT@9'/OFFSITE</td>
<td>REMOVE</td>
</tr>
<tr>
<td>70</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30</td>
<td>6362</td>
<td>2583</td>
<td>41%</td>
<td>GOOD</td>
<td>INC.BARK/WOUNDS/BROKEN/DEAD BRANCHES/LEADER/OFFSITE</td>
<td>SAVE</td>
</tr>
<tr>
<td>71</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>52</td>
<td>19113</td>
<td>10540</td>
<td>55%</td>
<td>FAIR/Poor</td>
<td>INC.BARK/BARK WOUNDS/BROKEN/DEAD BRANCHES/DEAD LEADER/OFFSITE</td>
<td>SAVE</td>
</tr>
</tbody>
</table>
Unwarranted Hardship Basis – Pursuant to Section 22A-21, a variance may only be considered if the Planning Board finds that leaving the Protected Trees in an undisturbed state would result in an unwarranted hardship, denying an applicant reasonable and significant use of the Site. The Applicant contends that an unwarranted hardship would be created due to existing conditions on the Site and the development requirements for the Site. The Site contains eleven trees subject to the variance provision, of which eight will be removed and nine impacted by this Application.

If a variance were not considered and MCPS was not allowed to disturb the trees the development proposal would not be possible; this is an existing elementary school in need of modernization. As such, this would cause an unwarranted hardship to the community that it serves. Staff has reviewed this Application and finds that there would be an unwarranted hardship if a variance were not considered.

Variance Findings – Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board or Planning Director, as appropriate, for a variance to be granted. Staff has made the following determination based on the required findings in the review of the variance request and the PFCP:

Granting of the requested variance:

1. Will not confer on the applicant a special privilege that would be denied to other applicants.
Granting the variance will not confer a special privilege on the Applicant as the disturbance to the Protected Trees is due to the reasonable development of the Site and the unique slope conditions. The Protected Trees are in the developable area of the Site. Granting a variance to allow land disturbance within the developable portion of the Site is not unique to this Applicant. Staff believes that the granting of this variance is not a special privilege that would be denied to other applicants.

2. *Is not based on conditions or circumstances which are the result of the actions by the applicant.*

The need for the variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based on existing site conditions, including the location of the Protected Trees within the developable area of the Site.

3. *Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The surrounding land uses do not have any inherent characteristics or conditions that have created or contributed to this need for a variance.

4. *Will not violate State water quality standards or cause measurable degradation in water quality.*

The variance will not violate State water quality standards or cause measurable degradation in water quality. The Protected Trees removed will be mitigated for by planting new trees as well as the trees that are proposed next to the daylighted and restored stream will provide water quality benefits offsetting those trees removed.

In addition, the Montgomery County Department of Permitting Services (MCDPS) is reviewing a stormwater management concept for the proposed project. The stormwater management concept incorporates Environmental Site Design standards.

**Mitigation for Protected Trees** – All the Protected Trees subject to the variance provision and proposed to be removed are located outside of existing forest. Mitigation for the removal of these eight (8) trees is recommended at a rate that approximates the form and function of the trees removed. Therefore, Staff is recommending that replacement occur at a ratio of approximately 1-inch caliper for every 4 inches removed, using trees that are a minimum of 3 caliper inches in size. This Application proposed to remove 284 inches in DBH, resulting in a mitigation requirement of 71 caliper inches of planted, native, canopy trees with a minimum size of 3-inch caliper. While these trees will not be as large as the trees lost, they will provide some immediate benefit and ultimately replace the canopy lost by the removal of these trees.

**County Arborist’s Recommendation on the variance** – In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a
recommendation prior to acting on the request. The request was forwarded to the County Arborist on February 22, 2018, the County Arborist has not provided a recommendation as of the posting of this Staff Report.

Variance Recommendation – Staff recommends that the variance be Approved.

CONCLUSION
Staff recommends the Planning Board Approve with conditions the Forest Conservation Plan and the variance request.

ATTACHMENTS

A. Approved Natural Resource Inventory/Forest Stand Delineation
B. Preliminary/Final forest Conservation Plan (FCP)
C. Variance Request
### Significant/Exceeding Species - 24" +

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Common Name</th>
<th>Size</th>
<th>Form</th>
<th>Species</th>
<th>Taxonomy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer saccharinum</td>
<td>Sugar Maple</td>
<td>2.5</td>
<td>Upr</td>
<td>1</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Acer rubrum</td>
<td>Red Maple</td>
<td>2</td>
<td>Upr</td>
<td>1</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Carya bituminosa</td>
<td>Black Walnut</td>
<td>3.5</td>
<td>Upr</td>
<td>1</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Fraxinus americana</td>
<td>American Ash</td>
<td>4</td>
<td>Upr</td>
<td>1</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Pinus virginiana</td>
<td>Eastern White Pine</td>
<td>5.5</td>
<td>Upr</td>
<td>1</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Quercus prinus</td>
<td>White Oak</td>
<td>6</td>
<td>Upr</td>
<td>1</td>
<td>85%</td>
<td>85%</td>
</tr>
</tbody>
</table>

### Planting Requirements

- All new trees shall be planted in accordance with the approved planting plan.
- Trees shall be watered as necessary to ensure establishment.
- Trees shall be staked and braced as necessary to ensure stability.
- Trees shall be protected from mechanical damage.

### Site Surveys

- All existing site surveys shall be provided to the engineer.
- All site surveys shall be verified by the engineer.

### Planting Area

- All planting area shall be cleared of all existing vegetation.
- All planting area shall be prepared according to the approved planting plan.

### Project Status

- Project Status: 530275
- Date: 11-14-17

### Tax Map

- Tax Map: FP343; Parcel: 937; Liber 1519 Folio 355

### Contact Information

- Mosey Architects
- 8001 Braddock Road, Suite 400, Springfield, VA 22151
- Phone: (703) 426-9057, Fax: (703) 426-9280

- Montgomery County Public Schools
- Potomac Elementary School
- Modernization
- 10311 River Rd, Potomac, MD 20854

- Adtek Engineers
- Patrick East Business Center, 97 Monocacy Blvd., Unit H, Frederick, Maryland 21701

- Norton Land Design
- 5146 Dorsey Hall Drive, 2nd Floor
- Ellicott City, MD 21042
- Phone: 443.542.9199, www.nortonlanddesign.com

### Certification

- Certification of Qualified Professional
- Date: 10-30-17

- Norton Land Design
- Landscape Architecture - Environmental Planning
- Land Use Planning - Urban Design - Transportation Planning - Urban Design
- 5146 Dorsey Hall Drive, Suite 200
- Ellicott City, MD 21042
- Phone: 443.542.9199, Fax: 410.480.0801, www.nortonlanddesign.com

- Mosey Architects
- 8001 Braddock Road, Suite 400
- Springfield, VA 22151
- Phone: (703) 426-9057, Fax: (703) 426-9280

- Montgomery County Public Schools
- Potomac Elementary School
- Modernization
- 10311 River Rd, Potomac, MD 20854
January 18, 2018

Maryland National Capital Park and Planning Commission (M-NCPPC)
8787 Georgia Avenue
Silver Spring, Maryland 20910

Re: Potomac Elementary School
Request for Specimen Tree Variance
NORTON #13-029

Dear Josh Penn,

On behalf of the Montgomery County Public Schools and pursuant to Section 22A-21 Variance provisions of the Montgomery County Forest Conservation Ordinance and recent revisions to the State Forest Conservation Law enacted by S.B. 666, we are writing to request a variance(s) to allow impacts to or the removal of the following trees identified on the approved Natural Resource Inventory/Forest Stand Delineation for the above-named County construction project:

**Project Description:**

The existing Potomac Elementary School is located at 10311 River Road in Potomac, Montgomery County, Maryland. This is a 9.64-acre site that consists of one parcel owned by the Montgomery County Board of Education. The site currently hosts the existing school, associated parking, athletic fields and play areas. The site is bordered by public road to the west along with single family residential to the north, east and a portion to the south. A portion of the south property is bordered by a Church parking lot.

Proposed construction consists of a new school, improved circulation and parking, athletic areas and updates for ADA accessibility.

**Requirements for Justification of Variance:**

Section 22A-21(b) Application requirements states that the applicant must:

1. Describe the special conditions peculiar to the property which would cause the unwarranted hardship;
2. Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;
3. Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance; and
4. Provide any other information appropriate to support the request.
Justification of Variance:

(1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship;

Response: As part of the program, the task is to provide the community with an updated school facility that can accommodate a growing number of students as well as a modernized, safe and healthy environment for young students to learn.

The property is narrow east to west with a stormdrain pipe that runs almost perpendicular north-south through the middle of the site. Because the pipe has a drainage area greater than 30 acres, a floodplain delineation was required. This floodplain superimposed on the site takes almost 1/3 of the property. There are also two points of access that are provided onsite to have proper separation of buses and parent dropoff.

This work will require disturbance of the root zones of a total of seventeen (17) specimen trees. Eight (8) of the impacted trees will be required to be removed. The removal of specimen trees are due to the proposed building and drive aisles in relationship to the narrow property. Also, included in the design, is ultimate dedication of River Road to State Highway along with sidewalk and utility upgrades as required. The impacted trees are for those area around the edge of forest that are associated with grading.

If MCPS is not allowed to impact the trees, the school will not be able to be updated due to the close proximity of specimen trees to the school parking, amenities and stormwater facilities. As such, this would cause an unwarranted hardship to the community that it serves.

(2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;

Response: If the County were required to keep all improvements outside the root zones of the specimen trees, the building, safe access drive aisles and parking would fail to be rebuilt due to the close proximity of specimen trees.

(3) Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance;

Response: Tree removals have been minimized by compact design of the layout ensuring the preservation of as many specimen trees as possible. In addition, this property will be developed in accordance with the latest Maryland Department of the Environment criteria for stormwater management. This includes Environmental Site Design to provide for protecting the natural resources to the Maximum Extent Practicable. This includes limiting the impervious areas and providing on-site stormwater management systems. A Stormwater Management Concept is currently under review by the Montgomery County
Department of Permitting Services to ensure that this criterion is enforced. Specimen trees within the open space (outside of forest) will be mitigated onsite at the time of the Final Forest Conservation Plan. Therefore, the proposed activity will not degrade the water quality of the downstream areas and will not result in *measurable degradation in water quality*.

(4) Provide any other information appropriate to support the request.

Response: Presently there is no forest onsite, however landscape planting is proposed throughout the site. Additional canopy planting will serve to create greater ecological quality while establishing further buffering of adjacent land uses (residential).

As further basis for its variance request, the applicant can demonstrate that it meets the Section 22A-21(d) *Minimum criteria*, which states that a variance must not be granted if granting the request:

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

   Response: The school modernization is in conformance with the County’s General plan. As such, this is not a *special privilege* to be conferred on the applicant.

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

   Response: Montgomery County Public Schools has taken no actions leading to the conditions or circumstances that are the subject of this variance request.

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

   Response: The surrounding land uses (residences) do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance.

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

   Response: Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.
## Variance Tree Summary

<table>
<thead>
<tr>
<th>Tree #</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>D.B.H</th>
<th>Critical Root</th>
<th>Critical Root Zone</th>
<th>Percent of CRZ</th>
<th>Tree Comments</th>
<th>Condition</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>30</td>
<td>6362</td>
<td>6362</td>
<td>100%</td>
<td>GOOD</td>
<td>INC.BARK/GIRDLED ROOTS</td>
<td>REMOVE</td>
</tr>
<tr>
<td>4</td>
<td>ULMUS RUBRA</td>
<td>RED ELM</td>
<td>30</td>
<td>6362</td>
<td>6362</td>
<td>100%</td>
<td>GOOD</td>
<td>SPLIT@9'/MULBERRY CLOSE TO BASE</td>
<td>REMOVE</td>
</tr>
<tr>
<td>7</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>34.14</td>
<td>8171</td>
<td>3774</td>
<td>40%</td>
<td>GOOD</td>
<td>INC.BARK/GIRDLED SOME DRAWN BACK SPLIT@SF</td>
<td>SAVE</td>
</tr>
<tr>
<td>9</td>
<td>ACER RUBRUM</td>
<td>RED MAPLE</td>
<td>45</td>
<td>14314</td>
<td>5524</td>
<td>39%</td>
<td>GOOD</td>
<td>INC.BARK+SPLIT S. OF OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>14</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>40</td>
<td>11310</td>
<td>11310</td>
<td>100%</td>
<td>GOOD</td>
<td>INC.BARK+SPLIT@15'</td>
<td>REMOVE</td>
</tr>
<tr>
<td>15</td>
<td>PINE STRIGULUS</td>
<td>WHITE PINE</td>
<td>32</td>
<td>7239</td>
<td>3055</td>
<td>42%</td>
<td>GOOD</td>
<td>VINE/SPLITS BRANCH/LEAVES OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>19</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>36</td>
<td>9161</td>
<td>9161</td>
<td>100%</td>
<td>FAIR</td>
<td>VINES</td>
<td>REMOVE</td>
</tr>
<tr>
<td>22</td>
<td>PRUNUS SEROTINA</td>
<td>BLACK CHERRY</td>
<td>33</td>
<td>7698</td>
<td>7698</td>
<td>100%</td>
<td>FAIR</td>
<td>VINES SPLIT 15'</td>
<td>REMOVE</td>
</tr>
<tr>
<td>28</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>53</td>
<td>19855</td>
<td>92</td>
<td>1%</td>
<td>GOOD</td>
<td>BROKEN LEADER SPLIT+OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>31</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30,22,24</td>
<td>6362</td>
<td>1733</td>
<td>27%</td>
<td>GOOD</td>
<td>OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>32</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30</td>
<td>6362</td>
<td>90</td>
<td>1%</td>
<td>FAIR</td>
<td>LEAN/MONITOR OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>33</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>36</td>
<td>9161</td>
<td>9161</td>
<td>100%</td>
<td>GOOD</td>
<td>REMOVE</td>
<td>REMOVE</td>
</tr>
<tr>
<td>67</td>
<td>LIRIODENDRON TULIPER</td>
<td>YELLOW POPLAR</td>
<td>32</td>
<td>7238</td>
<td>7238</td>
<td>100%</td>
<td>POOR</td>
<td>SEVERE LEAN, POTENTIAL HAZARD TO PORTABLES</td>
<td>REMOVE</td>
</tr>
<tr>
<td>68</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>47</td>
<td>15615</td>
<td>15615</td>
<td>100%</td>
<td>GOOD</td>
<td>VINES SPLIT OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>70</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>30</td>
<td>6362</td>
<td>2563</td>
<td>41%</td>
<td>GOOD</td>
<td>VINES SPLIT OFFSF</td>
<td>SAVE</td>
</tr>
<tr>
<td>71</td>
<td>ACER SACCHARINUM</td>
<td>SILVER MAPLE</td>
<td>52</td>
<td>13113</td>
<td>10540</td>
<td>55%</td>
<td>FAIR/POOR</td>
<td>INC.BARK/LEAVES BROKEN/DEAD BRANCHES/LEAD.OFFSF</td>
<td>SAVE</td>
</tr>
</tbody>
</table>

### Conclusion:

For the above reasons, the applicant respectfully requests that the Planning Board APPROVE its request for a variance from the provisions of Section 22A of the Montgomery County Forest Conservation Ordinance, and thereby, GRANTS permission to impact/remove the specimen trees in order to allow the construction of this vital project.

The recommendations in this report are based on tree conditions noted at the time the NRI/FSD field work was conducted. Tree condition can be influenced by many environmental factors, such as wind, ice and heavy snow, drought conditions, heavy rainfall, rapid or prolonged freezing temperatures, and insect/disease infestation. Therefore, tree conditions are subject to change without notice.

The site plans and plotting of tree locations were furnished for the purpose of creating a detailed Tree Protection Plan. All information is true and accurate to the best of my knowledge and experience. All conclusions are based on professional opinion and were not influenced by any other party.

Sincerely,

Michael Norton