



Dufief Elementary School, Preliminary Forest Conservation Plan, MR2020034

Doug Johnsen, Senior Planner, Area 3, douglas.johnsen@montgomeryplanning.org 301-495-4546

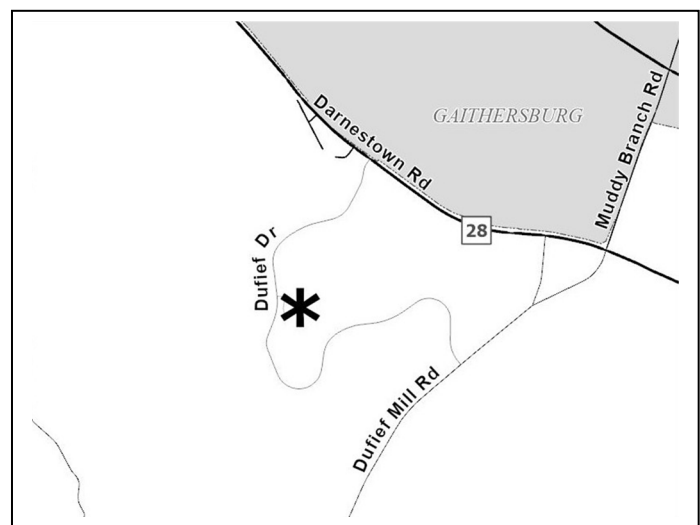
Richard Weaver, Chief, Area 3 Richard.Weaver@montgomeryplanning.org 301-495-4544

Completed: 07-02-20

Description

- 15001 Dufief Drive, North Potomac
- 9.99 acres, R-200 zone
- 2002 Potomac Subregion Master Plan
- Applicant: Montgomery County Public Schools
- Submitted: May 21, 2020
- Part A - Forest Conservation Plan: Demolition and reconstruction of Dufief Elementary School
- Review Basis: Chapter 22A

Staff Recommendation: Approval with conditions



Summary

- The review of this Mandatory Referral is in two parts:
 - Part A – Preliminary Forest Conservation Plan MR2020034**, and
 - Part B - Mandatory Referral MR2020034**, discussed in a separate staff report.
- The proposal includes demolition of the existing elementary school structure and construction of a new Dufief Elementary School building with associated parking, bus drop off, grass play fields, and hard and soft surface play areas.
- The forest conservation requirement will be met through a combination of onsite afforestation, onsite landscape credit and offsite forest banking.

RECOMMENDATIONS:

Approval of the Preliminary Forest Conservation Plan ("PFCP") and variance request with the following conditions:

1. Applicant must submit a Final Forest Conservation Plan ("FFCP") that is consistent with the approved Preliminary Forest Conservation Plan for review and approval prior to the issuance of the Sediment and Erosion Control Permit from the Montgomery County Department of Permitting Services ("DPS") for the Subject Property.
2. Prior to the start of any demolition, clearing, grading, or construction for this development Application, the Applicant must record a Category I Conservation Easement over all areas of forest planting as specified on the approved Preliminary Forest Conservation Plan. The Category I Conservation Easement must be in a form approved by the M-NCPPC Office of the General Counsel and must be recorded in the Montgomery County Land Records by deed.
3. Prior to the start of any demolition, clearing, grading, or construction for this development Application, the Applicant must record a Category II Conservation Easement over the 0.21-acre area of tree cover planting as specified on the approved Preliminary Forest Conservation Plan. The Category II Conservation Easement must be in a form approved by the M-NCPPC Office of the General Counsel and must be recorded in the Montgomery County Land Records by deed.
4. Prior to any demolition, clearing, grading or construction for this development Application, the Applicant must record an M-NCPPC approved Certificate of Compliance in an M-NCPPC approved off-site forest bank within the Muddy Branch watershed to satisfy the afforestation requirement for a total of 0.66 acres of mitigation credit. The offsite requirement may be met by purchasing from a mitigation bank elsewhere in the County, subject to Staff approval, if forest is unavailable for purchase within the Muddy Branch watershed.
5. Prior to the initial planting acceptance inspection by the M-NCPPC Forest Conservation Inspection Staff, the Applicant must install permanent conservation easement signage along the perimeter of the conservation easements.
6. Prior to the initial planting acceptance inspection by the M-NCPPC Forest Conservation Inspection Staff, the Applicant must install the permanent conservation easement fencing along the perimeter of the conservation easements.
7. The limits of disturbance ("LOD") shown on the Sediment and Erosion Control Plan must be consistent with the LOD shown on the FFCP for the Subject Property.

SITE AND PROJECT DESCRIPTION

The Dufief Elementary School Site consists of 9.99 acres, located at 15001 Dufief Drive, North Potomac, MD ("Subject Property"), zoned R-200 within the Potomac Subregion 2002 Master Plan Area (**Figure 1**). The Subject Property is generally flat and open where the current elementary school building is located and slopes away toward the south and east property lines. The Subject Property currently contains the existing school building and play fields and is ringed with individual trees screening the school from the surrounding residential development on the north, east and south (**Figure 2**). The Subject Property is bounded on the west and north by Dufief Drive, on the south and southeast by Dufief Local Park and surrounded by established residential development.

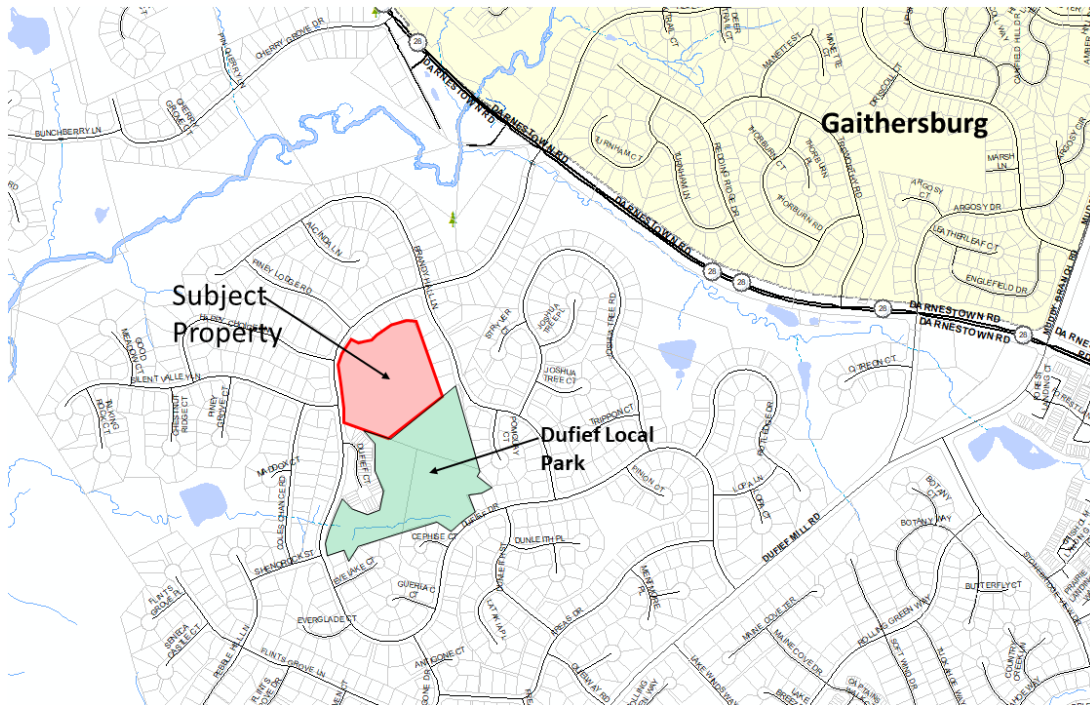


Figure 1: Project Vicinity



Figure 2: Aerial Photograph of the Site

Montgomery County Public Schools (MCPS or Applicant) is proposing to tear down and rebuild the Dufief Elementary School. When completed the new facility will have an increased capacity of 753 students. The proposed work includes traffic circulation improvements, 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 9.99 acres in size, 15001 Dufief Drive, North Potomac, MD.

Environmental Guidelines

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420201070 was approved by Staff on February 19, 2020 (Attachment A). The Site is within the Muddy Branch watershed, a Use I-P designation. The Site contains no Stream Valley Buffer (SVB), 100-year Floodplains or other environmentally sensitive elements. The Subject Property is not located within a Special Protection area or the Patuxent Management Area.

Forest Conservation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law (“FCL”). As required by Chapter 22A, a Preliminary Forest Conservation Plan (“PFCP”) was submitted with this Mandatory Referral Application. The total net tract area for forest conservation purposes is 10.19 acres which includes the Subject Property of 9.99 acres, plus off-site work of 0.20 acres for the installation of crosswalks and three sections of sidewalk. The property is zoned R-200 and is classified as Institutional Development Area (“IDA”) as defined in Section 22A-3 of the FCL and specified in the Trees Technical Manual. The Subject Property contains 0.00 acres of forest. This results in a total afforestation requirement of 1.53 acres as calculated in the Forest Conservation Worksheet. The Applicant is proposing to meet this afforestation requirement by planting 0.21 acres of tree canopy as landscape credit and protecting it with a Category II Conservation Easement, the Applicant is also proposing to afforest 0.66 acres on-site and protecting this with a Category I Conservation Easement, and finally the Applicant is proposing to take the remaining 0.66 acres to an M-NCPPC approved off-site forest bank (**Figure 3**).



Figure 3: Forest Conservation Easements

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 diameter breast height ("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 May 5, 2020, for the impact to six variance trees (Attachment C). The Applicant proposes to impact six 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 impacted are provided in Table 1 and shown graphically in **Figure 4**.

Tree	Scientific Name	Common Name	DBH inches	Tree Condition	Percent Impact to CRZ	Remarks
1	<i>Quercus alba</i>	White Oak	68	Good	12	Impacts only, save
2	<i>Quercus alba</i>	White Oak	51	Good	2	Impacts only, save
4	<i>Quercus alba</i>	White Oak	58	Good	7	Impacts only, save
5	<i>Quercus rubra</i>	Red Oak	44	Fair	2	Impacts only, save
8	<i>Quercus phellos</i>	Willow Oak	43	Good	12	Impacts only, save
9	<i>Prunus serotina</i>	Black Cherry	33	Good	6	Impacts only, save

Table 1: Impacted Variance Tree Table

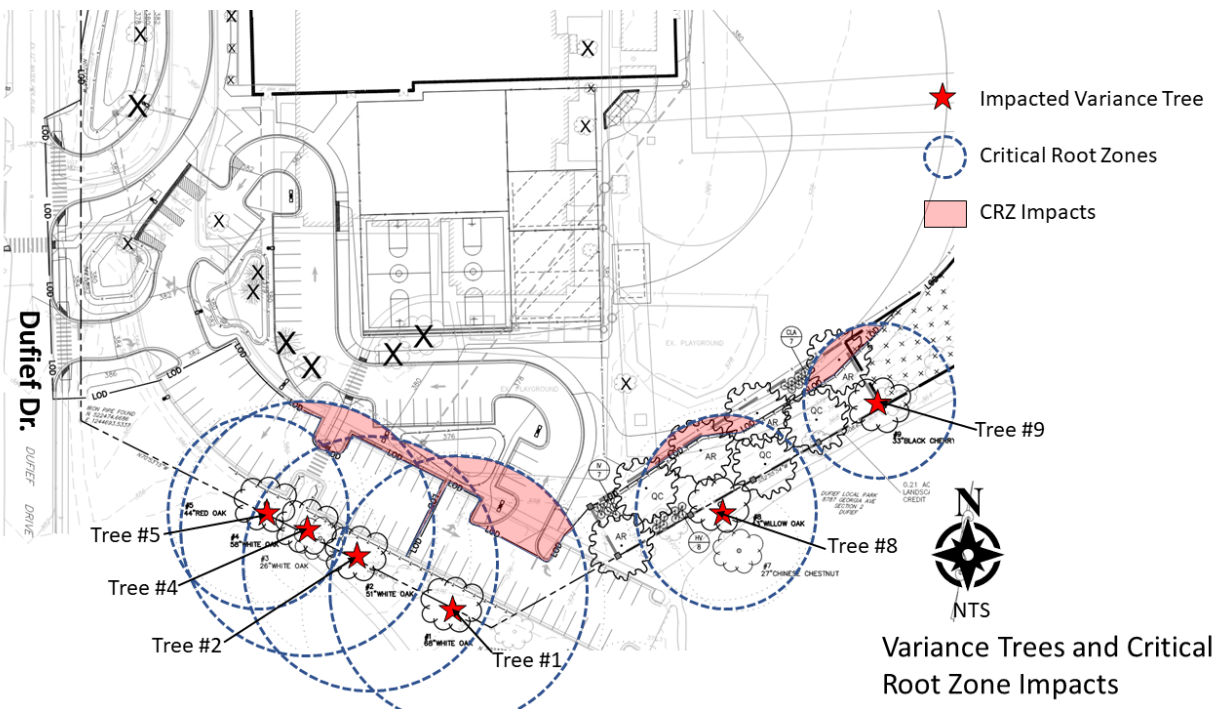


Figure 4: Variance Tree Distribution and Impacts

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 Subject Property. 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 six trees subject to the variance provision which will be impacted by this Application.

If a variance were not considered and MCPS was not allowed to disturb the trees it would not be possible to create a safe and efficient traffic circulation pattern for incoming cars to park or for the drop-off of students. This would create an unwarranted hardship for MCPS and not allow for the separation of bus and vehicle traffic ensuring the safety of the students of Dufief Elementary School. There would be an unwarranted hardship by not granting a variance.

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:

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 Subject Property. The Protected Trees are located outside of the developable area of the Subject Property, but their Critical Root Zones (“CRZs”) extend into the LOD of the project. Granting a variance to allow land disturbance within the developable portion of the Subject Property 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 on the perimeter of the developable area of the Subject Property.
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 are only being minimally impacted and will not be 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

There is no mitigation required for the Protected Trees subject to the variance provision because no variance trees are being removed.

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 June 1, 2020; the County Arborist has complete her review on June 6, 2020 with a recommendation of approval.

Variance Recommendation

Staff recommends Approval of the requested tree variance.

CONCLUSION

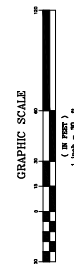
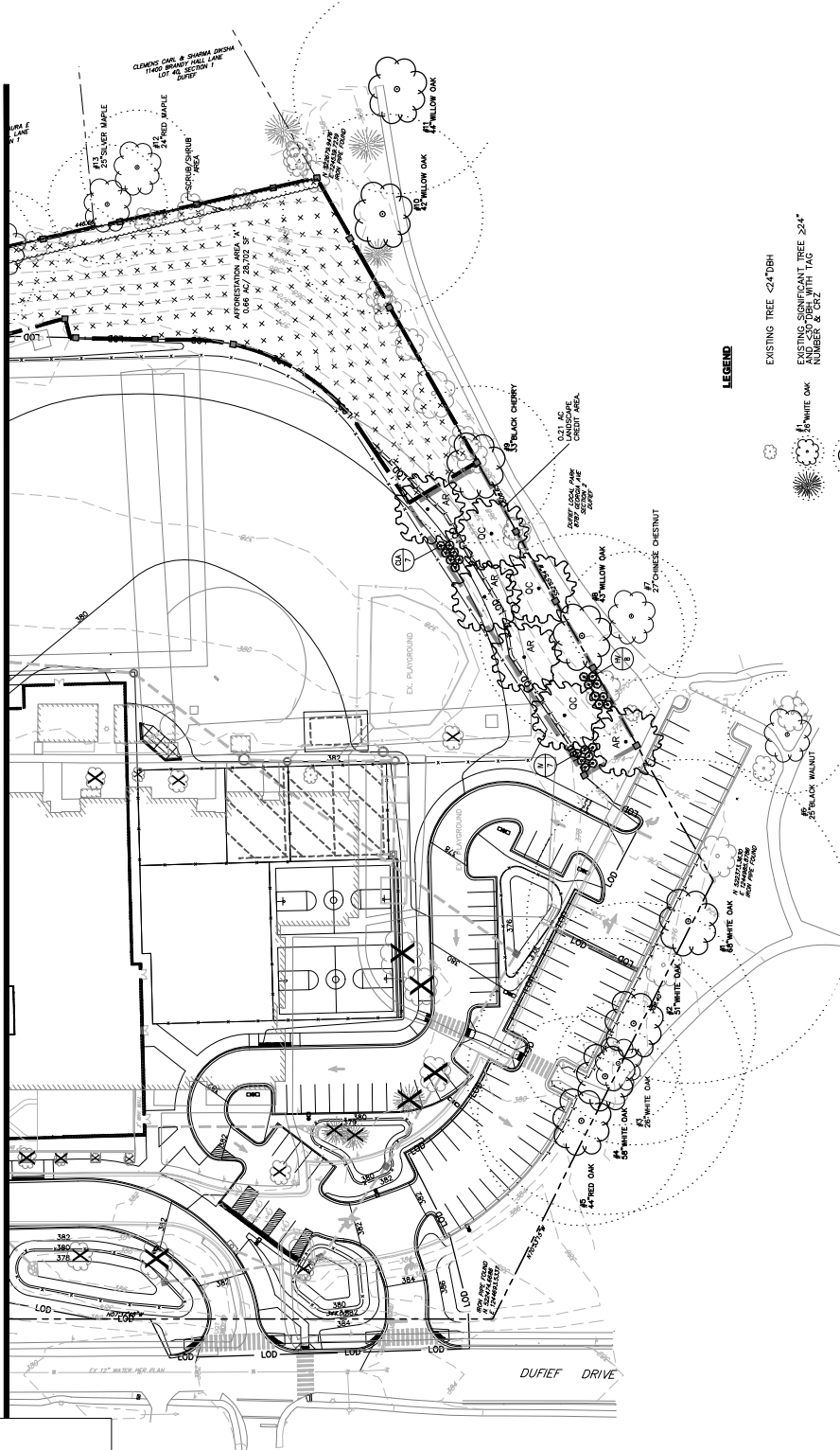
Staff recommends Approval of the Preliminary Forest Conservation Plan and the tree variance request with the above stated conditions.

ATTACHMENTS

- A. Preliminary Forest Conservation Plan ("PFCP")
- B. Variance Request

DUFFIE ELEMENTARY SCHOOL
15001 DUFFIE DR, NORTH POTOMAC, MD 20878
MONTGOMERY COUNTY, MARYLAND

MATCHLINE SHEET L-1.2



CERTIFICATION OF QUALIFIED PROFESSIONAL
I, the undersigned, being a duly licensed Professional Landscape Architect in the State of Maryland, do hereby certify that I am the author of the design shown on this plan, and that I am a duly licensed Professional Landscape Architect in the State of Maryland.

5.11.2020
DATE

ANORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
9000 GREENHILL DRIVE, 2ND FLOOR
FARMERS MARKET, MONTGOMERY COUNTY, MD 20878
WWW.ANORTONLANDDESIGN.COM

PROJECT: DUFFIE ELEMENTARY SCHOOL
SHEET: L-1.3
DATE: 5.11.2020
SCALE: AS SHOWN
DRAWN BY: J. P. JONES
CHECKED BY: J. P. JONES
APPROVED BY: J. P. JONES

LEGEND

- EXISTING TREE >24" DBH
- EXISTING SUBSTANTIAL TREE >24" DBH WITH TAG NUMBER & CRZ
- EXISTING SPECIMEN TREE >30" DBH WITH TAG NUMBER & CRZ
- PROPERTY BOUNDARY
- ADJ. PROPERTY BOUNDARY
- SCRUB/SHRUB LINE
- EX. CONTOUR
- LIMITS OF DISTURBANCE
- PROPOSED GRADING
- PROPOSED CATEGORY 1 CONSERVATION EASEMENT
- PROPOSED AFFORESTATION AREA
- PROPOSED CATEGORY 2 CONSERVATION EASEMENT & LANDSCAPE CREDIT AREA
- PERMANENT FOREST SIGNAGE
- TREE TO BE REMOVED
- TREE PROTECTION FENCE
- ROOTPRUNE TRENCH
- PROPOSED CANOPY TREE
- PROPOSED SHRUB

AFFORESTATION PLANT MATERIALS					
TABLE 1	TOTAL	BOTANICAL NAME	COMMON NAME	SIZE	UNIT/ROOT
1	13	Acer rubrum	Red Maple	3" Caliper, B&B	Randomly 15.9 O.C. Free
2	4	Aster racemosa	Starflower	3" Caliper, B&B	Randomly 33 O.C. Free
3	4	Chamaecyparis thyoides	White Cedar	3" Caliper, B&B	Randomly 15.9 O.C. Free
4	10	Quercus prinus	Prickly Pear	3" Caliper, B&B	Randomly 15.9 O.C. Free
5	8	Juniperus horizontalis	Creeping Juniper	3" Caliper, B&B	Randomly 15.9 O.C. Free
6	8	Ulmus americana	European Elm	3" Caliper, B&B	Randomly 15.9 O.C. Free
7	8	Liriodendron tulipifera	Yellow Poplar	3" Caliper, B&B	Randomly 15.9 O.C. Free
8	8	Nyssa sylvatica	Black Gum	3" Caliper, B&B	Randomly 15.9 O.C. Free
9	8	Platanus occidentalis	American Sycamore	3" Caliper, B&B	Randomly 15.9 O.C. Free
10	8	Quercus rubra	Red Oak	3" Caliper, B&B	Randomly 15.9 O.C. Free
11	8	Vaccinium corymbosum	Highbush Blueberry	18" Height, Cont.	Randomly 33 O.C. Free
12	8	Silene alba	White Field and Forest	18" Height, Cont.	Randomly 33 O.C. Free
13	8	Wittrockia virginica	Wildflower	18" Height, Cont.	Randomly 33 O.C. Free
14	8	Quercus prinus	Prickly Pear	3" Caliper, B&B	Randomly 15.9 O.C. Free
15	8	Juniperus horizontalis	Creeping Juniper	3" Caliper, B&B	Randomly 15.9 O.C. Free
16	8	Ulmus americana	European Elm	3" Caliper, B&B	Randomly 15.9 O.C. Free
17	8	Liriodendron tulipifera	Yellow Poplar	3" Caliper, B&B	Randomly 15.9 O.C. Free
18	8	Nyssa sylvatica	Black Gum	3" Caliper, B&B	Randomly 15.9 O.C. Free
19	8	Platanus occidentalis	American Sycamore	3" Caliper, B&B	Randomly 15.9 O.C. Free
20	8	Quercus rubra	Red Oak	3" Caliper, B&B	Randomly 15.9 O.C. Free
21	8	Vaccinium corymbosum	Highbush Blueberry	18" Height, Cont.	Randomly 33 O.C. Free
22	8	Silene alba	White Field and Forest	18" Height, Cont.	Randomly 33 O.C. Free
23	8	Wittrockia virginica	Wildflower	18" Height, Cont.	Randomly 33 O.C. Free

LANDSCAPE CREDIT PLANT SCHEDULE					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	QUANTITY
1	Acer rubrum	Red Maple	3" cal.	AS SHOWN	4
2	Quercus prinus	Prickly Pear	3" cal.	AS SHOWN	3
3	Juniperus horizontalis	Creeping Juniper	3" cal.	AS SHOWN	3
4	Ulmus americana	European Elm	3" cal.	AS SHOWN	3
5	Liriodendron tulipifera	Yellow Poplar	3" cal.	AS SHOWN	3
6	Nyssa sylvatica	Black Gum	3" cal.	AS SHOWN	3
7	Platanus occidentalis	American Sycamore	3" cal.	AS SHOWN	3
8	Quercus rubra	Red Oak	3" cal.	AS SHOWN	3
9	Vaccinium corymbosum	Highbush Blueberry	3" cal.	AS SHOWN	3
10	Silene alba	White Field and Forest	3" cal.	AS SHOWN	3
11	Wittrockia virginica	Wildflower	3" cal.	AS SHOWN	3

PRELIMINARY FOREST CONSERVATION PLAN
NO. 35% DD SET
REVISIONS

Client: MONTGOMERY COUNTY PUBLIC SCHOOLS
Project: DUFFIE ELEMENTARY SCHOOL
Address: 15001 DUFFIE DRIVE, SUITE 400, NORTH POTOMAC, MD 20878
Phone: (301) 491-1000
Email: j.p.jones@anortonlanddesign.com

Designer: J. P. JONES
Date: 5.11.2020
Scale: 1" = 30'

May 5, 2020

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

Re: Dufief Elementary School
Request for Specimen Tree Variance
MR# -
NRI# - 420201070
Norton# 19-129

Dear Intake Division,

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 proposed school is going to replace the existing school in the same location onsite, located at 15001 Dufief Drive, North Potomac, Montgomery County, Maryland. This is a 9.99-acre site that owned by the Montgomery County Board of Education. The site currently hosts an existing school, associated parking, open play fields and playgrounds. The site is bordered by residential properties on north, east, and west sides, as well as park property on south side. The site has vehicle access from Dufief Drive.

Proposed construction consists of a new building to replace the existing, new parking circulation, new athletic fields, and stormwater management.

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 includes safe access to school by way of updated vehicle circulation. The school must be large enough to handle growing student capacity. Stormwater management is designed to ensure environmental quality following the construction of the new building and parking areas.

This work will require disturbance of the root zones of a total of six (6) specimen trees. None of the impacted trees will be required to be removed.

If MCPS is not allowed to impact the trees, the school will not be able to be constructed due to the close proximity of specimen trees to the proposed parking, site grading, and updated stormwater utilities. 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 safe access drive aisles, stormwater facilities, and parking would fail to be built 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. Additional improvements to the property include control of erosion and outfall stabilization.

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: Zero specimen trees will be removed onsite, only small amounts of impacts. These impacts will not lead to the decline in health of the. Onsite afforestation will provide additional canopy coverage and will serve to create greater ecological quality.

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 proposed school 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.

SPECIMEN TREE VARIANCE 30"+							
Tree #	Species (Scientific Name)	Species (Common Name)	D.B.H (inches)	Tree Condition	Comments	Status	Variance
1	QUERCUS ALBA	WHITE OAK	68	GOOD	SPLIT @ 7'	SAVE/PROTECT	YES
2	QUERCUS ALBA	WHITE OAK	51	GOOD	SPLIT @ 7'	SAVE/PROTECT	YES
4	QUERCUS ALBA	WHITE OAK	58	GOOD		SAVE/PROTECT	YES
5	QUERCUS RUBRA	RED OAK	44	FAIR	DEAD LIMBS	SAVE/PROTECT	YES
8	QUERCUS PHELLOS	WILLOW OAK	43	GOOD		SAVE/PROTECT	YES
9	PRUNUS SEROTINA	BLACK CHERRY	33	GOOD		SAVE/PROTECT	YES

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