

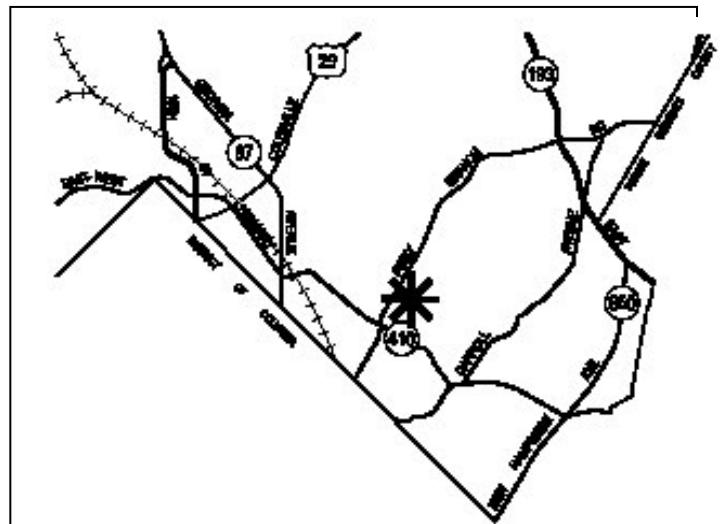
Takoma Park Middle School, Preliminary Forest Conservation Plan, MR2018036

- [TS] Tina Schneider, Area 1 Division, Tina.schneider@montgomeryplanning.org, 301.495.2101
[CA] Michael Brown, Planning Supervisor, Area 1 Division, Michael.Brown@montgomeryplanning.org, 301.495.4566
[] Mark Pfefferle, Interim Chief, Area 1 Division, Mark.pfefferle@montgomeryplanning.org, 301.495.4730

Description

Completed: 8/31/18

- Preliminary Forest Conservation Plan associated with the Takoma Park Middle School additions;
- Located at 7611 Piney Branch Road, Takoma Park, Maryland;
- 18.10-acre site zoned R-60 in the 2000 *Takoma Park Master Plan* area;
- Applicant: Montgomery County Public Schools;
- Acceptance Date: June 13, 2018.



Summary

- This Preliminary/Final Forest Conservation Plan accompanies Mandatory Referral MR2018017 discussed in a separate staff report.

Staff recommends approval with conditions.

The Applicant proposes to:

- Preserve 1.82 acres of forest; clear 0.21 acres of forest; re/afforestation required, 1.11 acres; onsite reforestation provided, 1.17 acres;
- Remove one specimen tree with impacts to the critical root zones of 5 specimen trees requiring a variance, per Section 22A-12(b)(3);
- Plant (4) 3-inch caliper canopy landscape trees as mitigation for the loss of one 49-inch specimen tree.

Pursuant to Chapter 22A of the County Code, the Board's actions on Forest Conservation Plans are regulatory and binding.

Recommendation and Conditions of Approval

Staff recommends approval of Preliminary/Final Forest Conservation Plan MR2018036, subject to the following conditions:

1. The Applicant must record a Category I Conservation Easement of 2.99 acres, as shown on the Approved Preliminary 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.
2. The Applicant must plant 1.17 acres of forest on the Takoma Park Middle School property to be included in the total area of the Category I Conservation Easement.
3. The Applicant must plant all reforestation and landscape credit areas within one year of construction completion.
4. The Applicant must prepare a Final Forest Conservation Plan, which must show the planting of four (4), 3-inch caliper native shade trees as mitigation for the loss of one 49-inch specimen tree requiring a variance. The trees must be planted within one year of construction completion. All trees must be planted outside of the Category I Conservation Easement. Adjustments to the planting locations of these trees is permitted with the approval of the M-NCPPC forest conservation inspector.
5. 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.
6. The Applicant must install permanent Conservation Easement signage along the perimeter of the conservation easements.
7. The Applicant must submit a forest conservation maintenance and management agreement and have it approved by the Planning Department prior to any demolition, clearing, or grading on site.
8. The Final Sediment Control Plan must depict the limits of disturbance (LOD) identical to the LOD on the approved Final Forest Conservation Plan.
9. The Final Forest Conservation Plan must be amended to address outstanding items and be consistent with the approved Preliminary Forest Conservation Plan.

PROJECT DESCRIPTION

Montgomery County Public Schools (MCPS) has submitted a mandatory referral for the expansion of the existing Takoma Park Middle School. The project will include the construction of two additions to be built in two phases. The project requires the removal of 0.21 acres of forest due to construction needs, stormdrain lines, and stormwater outfall repairs. One specimen tree will be removed for the phase II of the expansion of the school.

Site Description

The Takoma Park Middle School at 7611 Piney Branch Road is seated on 18.10-acres owned by the Montgomery County Board of Education. The site contains an existing school, associated parking lots, athletic fields, play areas, and a portion of a linear stream valley park and forest. The site is in a residential neighborhood with single family residential (R60) properties on three sides. Two connecting parks abut the school: to the south adjacent to the tennis courts the City of Takoma Park owns a 2.29-acre parcel called Hefner Park; to the southeast is Takoma-Piney Branch Park owned by the Maryland National Capital Park and Planning Commission. Access roads to the school are Piney Branch Road to the north and Grant Avenue to the southwest. Travis Drive, a paper road runs along the south side of the property.



Figure 1: Vicinity Map

The site is located in the Sligo Creek watershed with a Use I Water Category. A channelled unnamed tributary runs along the eastern border of the property and daylights approximately 120-feet before leaving the site.

ANALYSIS

Environmental Guidelines

Staff approved a Natural Resource Inventory/Forest Stand Delineation (NRI/FSD #420180710) (Attachment 1) for the school site on 12/1/2017. Of the 18.10 acres of land, 2.03 acres are contiguous forest associated with adjacent parkland. There is an unnamed channelized stream along the eastern side of the property that daylights approximately 120 feet prior to leaving the site. There are no wetlands on the site.

Forest Conservation

The site is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) and the Applicant has submitted a Preliminary Forest Conservation Plan (Attachment 2) in conjunction with the Mandatory Referral Plan. The site includes 2.03 acres of existing forest onsite containing a mix of deciduous hardwoods dominated by sycamore, silver maple, and tulip poplar. The forest is dappled with large specimen trees throughout. The forest is considered a moderate priority for retention. The Applicant proposes to clear 0.21 acres of forest and retain 1.82 acres of forest. Most of the forest removal is to accommodate the construction needs of the Phase II addition on the south-eastern side of the existing school. Additional clearing is needed for the repairs of the stormwater discharge facility along the eastern property border. As mitigation for forest removal the Applicant will plant 1.17 acres of forest which will sizably increase the size of the onsite and offsite linear contiguous forest associated with the adjacent parkland. The total forest area including the afforestation area to be put into a Forest Conservation Easement for protection is 2.99 acres.

Forest Conservation Variance

Section 22A-12(b) (3) of Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance to impact trees that: measure 30 inches or greater diameter at breast height (DBH); are part of a historic site or designated with a 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 these trees, including removal or disturbance within the 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 County Forest Conservation Law.

Variance Request

Pursuant to Section 22A-21 Variance provisions of the Montgomery County Forest Conservation Ordinance the Applicant submitted a variance request on June 6th, 2018, which was revised on August 21, 2018 for the impacts to specimen trees (Attachment 3). The revision requests removal of one specimen tree (49-inch mulberry) with impacts to the critical root zones of 5 specimen trees. The original application requested the removal of two specimen trees but impact reductions measures requested by the City of Takoma Park were taken allowing for the preservation of one additional

specimen tree. Details of the protected trees to be removed and impacted are provided in Figure 2 and Table 1.

Unwarranted Hardship for Variance Tree Impacts

Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state will result in unwarranted hardship. The requested variance is necessary due to the construction needs of the proposed middle school expansion and the repairs to the existing stormwater outfalls. The landscape grading has been minimized around the school to reduce impacts and save specimen trees. Forest impacts have been reduced to the extent possible while still providing the repairs and restoration needed for the stormwater outfalls. Leaving the requested trees in an undisturbed state would result in an unwarranted hardship because the Applicant would not be able to expand the school as needed nor repair and replace the stormwater management outfalls. One specimen tree is proposed for removal.

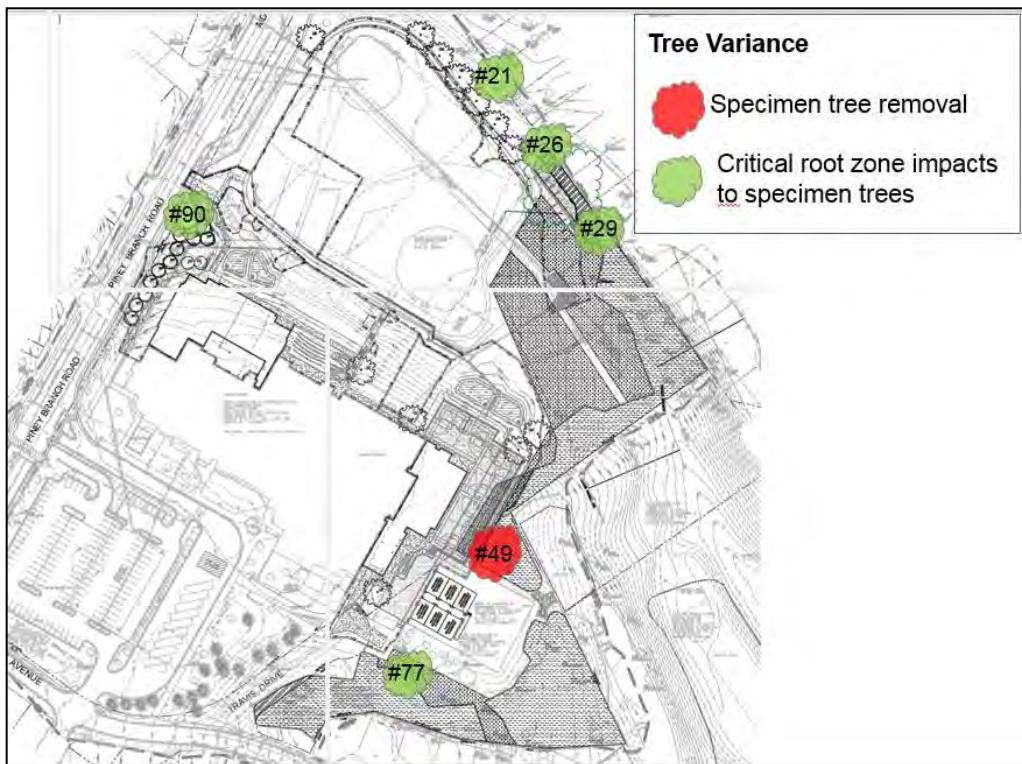


Figure 2: Variance Tree Impacts

Table 1: Variance Tree Table

ID	Species	Size	Condition	Notes
21	White oak	43"	Good	Impacts only
26	Locust	33"	Poor	Impacts only
29	White Oak	44"	Good	Impacts only
49	Mulberry	49"	Poor	Removal
77	Mulberry	32"	Poor	Impacts only
90	Tulip poplar	30"	Good	Impacts only

Variance Findings - Based on the review of the variance request and the proposed Preliminary Forest Conservation Plan, staff makes the following findings:

- 1. Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.*

Granting this variance will not confer a special privilege on the Applicant as disturbance of the specified trees is a result of the need to build a new school facility and associated stormwater management improvements. The size and configuration of the school preclude alternative site designs that would allow the variance trees to remain undisturbed. The Applicant has met with the City of Takoma Park arborist to consider alternatives to minimize impacts and provide maximum tree protection measures.

- 2. The need for the variance is not based on conditions or circumstances which are the result of the actions by the applicant.*

The requested variance is not based on conditions or circumstances that are the result of actions by the Applicant. The variance is necessary due to the constraints of site, the requirements of the construction for the new additions and necessities for circulation and stormwater management. The Applicant has designed the proposed school to minimize forest and removal.

- 3. The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The requested variance is a result of the impacts by the proposed layout of the school facility, and not a result of land or building use on a neighboring property. The impact to the trees is the minimum disturbance necessary to construct the proposed additions associated upgrades to meet the needs of the growing student population and curriculum.

- 4. Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.*

The site will be developed in accordance with the Maryland Department of the Environment criteria for stormwater management, including the provision of Environmental Site Design to protect natural resources to the maximum extent practicable. Water quality should improve with the proposed development and State water quality standards will not be violated. The proposed work will include the construction of two bioretention areas to treat the runoff from the new additions. Upgrades to the stormwater outfall will be made, and the planting of 1.17 acres of forest will occur. As replacement for the loss of the 49-inch Morus (mulberry) tree, the Applicant will plant 4 canopy trees 3-inches in diameter or greater. The intent is to replace the form and function of the variance tree proposed for removal. These measures are provided to improve water quality and the health of the associated community.

Mitigation for Trees Subject to the Variance Provisions

The Applicant is requesting a variance to remove one specimen tree with impacts to the critical root zones of 5 additional specimen trees. Mitigation is required at a rate of 1" caliper per 4" DBH removed,

using a minimum 3" caliper native shade tree. The Applicant will plant (4) 3" caliper trees, which will be shown on the Final Forest Conservation Plan.

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 County Arborist has reviewed the variance request and recommended approval with mitigation (Attachment 4).

Variance Recommendation

Staff recommends that the variance be granted.

CONCLUSION

Staff concludes that the proposed Preliminary Forest Conservation Plan meets the requirements of Chapter 22A Forest Conservation Law. Staff therefore recommends that the Planning Board approve the Preliminary Forest Conservation Plan and associated variance, with the above conditions.

Attachments

1. Approved Natural Resource Inventory
2. Preliminary Forest Conservation Plan
3. Variance request

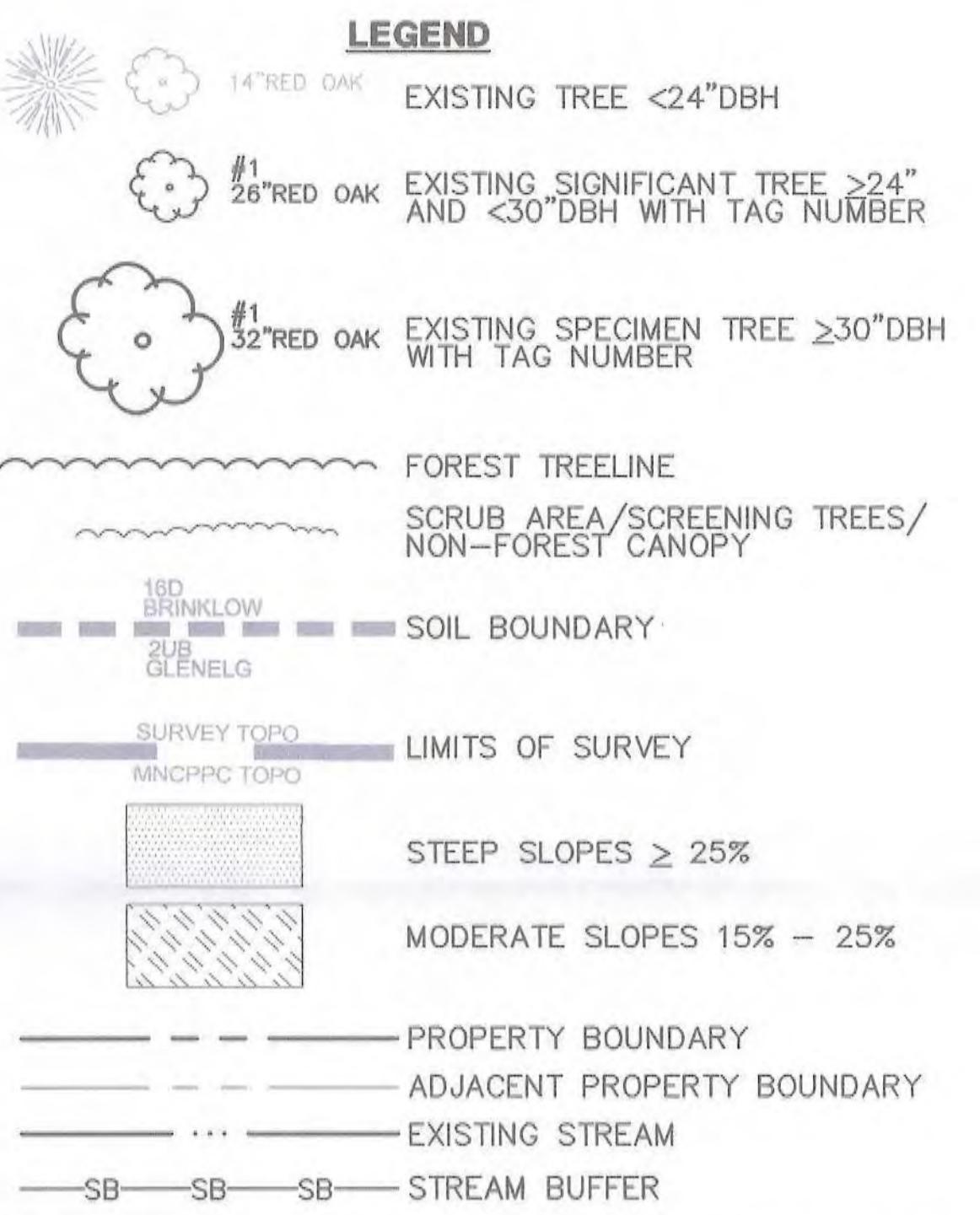


MATCHLINE SHEET L-0.2

MATCHLINE SHEET L-0.3

NRI/FSD TABULATION TABLE

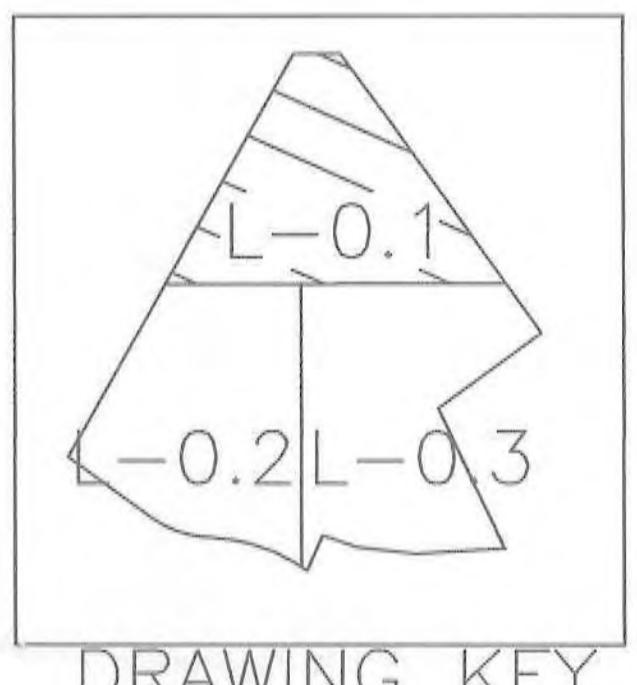
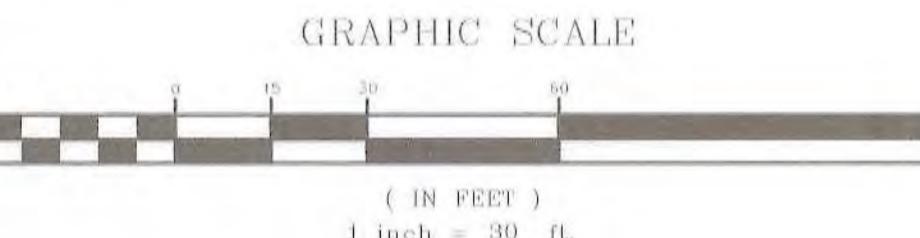
ACREAGE OF TRACT:	18.12
ACREAGE OF EX. FOREST:	2.03
ACREAGE OF EXISTING WETLANDS	0.00
ACREAGE OF FORESTED WETLANDS	0.00
ACREAGE OF WETLAND BUFFERS	0.00
ACREAGE OF STREAM BUFFERS	1.67
ACREAGE OF FORESTED STREAM BUFFER	0.62
ACREAGE OF 100 YEAR FLOODPLAIN	0.00
ACREAGE OF STEEP SLOPES	3.19
LINEAR EXTENT OF STREAMS	101'
AVERAGE WIDTH OF STREAM BUFFER	150'



CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNOP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

11/22/17

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL

TITLE	NATURAL RESOURCE INVENTORY/ FOREST STAND DELINEATION
PROJECT	TAKOMA PARK MIDDLE SCHOOL

PREPARED FOR/APPLICANT	MONTGOMERY COUNTY PUBLIC SCHOOLS 45 WEST GUDGE DRIVE, SUITE 4300 ROCKVILLE, MARYLAND 20850
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NORTON LAND DESIGN	LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING 5146 DORSEY HALL DRIVE, 2ND FLOOR BALT. 443.542.9199 DC 240.342.2329 WWW.NORTONLANDDESIGN.COM
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REVISIONS
11.22.17 PER MNOP&PC COMMENTS

Received

M-NOP&PC

NOV 27 2017

Montgomery County

Planning Department

VICINITY MAP	1:2000				
WATER CLASS	USE I,P	WATERSHED	SLIGO CREEK	FEMA FLOODPLAIN MAP PANEL #	24031C 0460D
TRIBUTARY	UNNAMED	TAX MAP	JN342	200 SHEET	209NW01
					ADC MAP PAGE 37
SCALE	AS SHOWN	DATE	NOVEMBER 2017	PROJ. NO.	16-140
					SHEET NO. L-0.1

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
NRI/FSD PLAN
Approved
NRIFSD NO. 420180710
Date Approved: January 1, 2017
Expiration Date: December 1, 2019
Signature: [Signature]

Significant/Specimen Tree Summary 24" +

Tree #	Species	Species	D.B.H.	Tree	Comments
Scientific Name	Common Name	(inches)		Condition	
1	QUERCUS ALBA	WHITE OAK	36	GOOD	
2	QUERCUS ALBA	WHITE OAK	33	GOOD	
3	QUERCUS PHELLOS	WILLOW OAK	24	FAIR	IVY, VINES, LOTS OF GROWTH
4	MORUS RUBRA	RED MULBERRY	24	FAIR	SPLITS AT 2'; 6 LEADERS(4,4,6,7,8,9)
5	MORUS RUBRA	RED MULBERRY	24	GOOD	SPLITS AT 1'; 8 LEADERS(10,8,6,12,14,4,8,3)
6	MORUS RUBRA	RED MULBERRY	30	FAIR	LIMB, DIE BACK, SPLITS AT 2'; 8 LEADERS
7	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
8	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	27	GOOD	
9	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
10	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	30	GOOD	
11	GLEDTIA SSP.	LOCUST	24	FAIR	IVY, VINES, LOTS OF GROWTH
12	ULMUS SSP.	ELM	40	GOOD	
13	QUERCUS ALBA	WHITE OAK	27	GOOD	
14	QUERCUS ALBA	WHITE OAK	28	GOOD	
15	QUERCUS ALBA	WHITE OAK	30	GOOD	
16	QUERCUS ALBA	WHITE OAK	26	GOOD	
17	QUERCUS ALBA	WHITE OAK	26	GOOD	
18	QUERCUS ALBA	WHITE OAK	24	GOOD	
19	QUERCUS ALBA	WHITE OAK	24	GOOD	
20	ULMUS SSP.	ELM	28	GOOD	SPLITS AT 2.5'
21	QUERCUS ALBA	WHITE OAK	43	GOOD	
22	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	GOOD	
23	QUERCUS ALBA	WHITE OAK	24	FAIR	BROKEN LEADER
24	GLEDTIA SSP.	LOCUST	25	FAIR	VINES, DEAD LIMBS
25	GLEDTIA SSP.	LOCUST	28	POOR	VINES, DEAD LIMBS, LEANS TOWARDS BALL FIELD
26	GLEDTIA SSP.	LOCUST	33	POOR	VINES, IVY, SPLIT TRUNK
27	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
28	GLEDTIA SSP.	LOCUST	28	POOR	VINES, IVY, TOTALLY CONSUMED
29	QUERCUS ALBA	WHITE OAK	44	GOOD	
30	QUERCUS ALBA	WHITE OAK	24	GOOD	IVY, DEAD LIMBS
31	QUERCUS ALBA	WHITE OAK	24	POOR	VINES
32	FAGUS GRANDIFLORA	BEECH	25	FAIR	
33	LIRIODENDRON TULIPIFERA	TULIP POPLAR	24	GOOD	
34	QUERCUS RUBRA	RED OAK	40	POOR	
35	QUERCUS RUBRA	RED OAK	47	FAIR	DEAD LIMBS
36	LIRIODENDRON TULIPIFERA	TULIP POPLAR	33	GOOD	
37	PRUNUS SEROTINA	BLACK CHERRY	26	FAIR	VINES
38	QUERCUS ALBA	WHITE OAK	28	GOOD	
39	QUERCUS RUBRA	RED OAK	24	GOOD	
40	QUERCUS ALBA	WHITE OAK	27	GOOD	VINES, IVY
41	QUERCUS ALBA	WHITE OAK	24	POOR	VINES, IVY
42	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	GOOD	
43	LIRIODENDRON TULIPIFERA	TULIP POPLAR	37	GOOD	
44	QUERCUS ALBA	WHITE OAK	35	GOOD	
45	QUERCUS ALBA	WHITE OAK	27	GOOD	
46	QUERCUS RUBRA	RED OAK	33	GOOD	
47	PLATANUS OCCIDENTALIS	SYCAMORE	24	FAIR	
48	QUERCUS ALBA	WHITE OAK	24	POOR	VINES, IVY
49	MORUS SSP.	MULBERRY	49	POOR	TWIN, IVY, VINES/SPLIT/FALLING
50	QUERCUS RUBRA	RED OAK	41	GOOD	
51	PLATANUS OCCIDENTALIS	SYCAMORE	26	GOOD	
52	LIRIODENDRON TULIPIFERA	TULIP POPLAR	24	GOOD	
53	LIRIODENDRON TULIPIFERA	TULIP POPLAR	27	GOOD	
54	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	GOOD	
55	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	GOOD	
56	PLATANUS OCCIDENTALIS	SYCAMORE	28	GOOD	
57	PLATANUS OCCIDENTALIS	SYCAMORE	36	GOOD	
58	PHAS STERICUS	WHITE PINE	24	GOOD	
59	PINUS STERICUS	WHITE PINE	24	GOOD	
60	ACER SACCHARUM	SILVER MAPLE	40	GOOD	
61	ACER SACCHARUM	SILVER MAPLE	30	FAIR	VINES, IVY
62	PLATANUS OCCIDENTALIS	SYCAMORE	28	DEAD	
63	MORUS SSP.	MULBERRY	40	POOR	SPLIT
64	ACER SACCHARUM	SILVER MAPLE	50	FAIR	DE BACK, VINES, IVY
65	MORUS SSP.	MULBERRY	26	FAIR	DE BACK, VINES, IVY
66	LIRIODENDRON TULIPIFERA	TULIP POPLAR	34	FAIR	IVY, VINES
67	FAGUS GRANDIFLORA	BEECH	30	GOOD	
68	ACER SACCHARUM	SILVER MAPLE	30	FAIR	IVY
69	ACER RUBRUM	RED MAPLE	24	FAIR	IVY
70	ACER RUBRUM	RED MAPLE	38	FAIR	VINES, TWIN
71	PRUNUS SSP.	CHERRY	18,18,18	POOR	DEAD LIMBS
72	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30,30,30	GOOD	SPLITS AT 2'
73	ACER SSP.	TULIP POPLAR	26	GOOD	
74	JUGLANS NIGRA	BLACK WALNUT	42	FAIR	VINE, IVY
75	GLEDTIA SSP.	LOCUST	25	FAIR	IVY
76	MORUS SSP.	MULBERRY	35,(21,17,12)	GOOD	SPLITS AT 2'
77	MORUS SSP.	MULBERRY	32	GOOD	IV, VINES, DIE BACK
78	MAGNOLIA GRANDIFLORA	MAGNOLIA	25	FAIR	VINES
79	ACER SACCHARUM	SILVER MAPLE	24	GOOD	SPLITS 3
80	PINUS STERICUS	WHITE OAK	28	POOR	VINES, DIE BACK
81	GLEDTIA TRIACANTHOS	HONEY LOCUST	25	FAIR	
82	GLEDTIA TRIACANTHOS	HONEY LOCUST	35	FAIR	VINES, IVY
83	GLEDTIA TRIACANTHOS	HONEY LOCUST	30	GOOD	
84	ACER RUBRUM	RED MAPLE	25	GOOD	TWIN
85	ZELKOVA SERRATA	ZELKOVA	26	GOOD	
86	QUERCUS PHELLOS	RED OAK	25	GOOD	
87	QUERCUS PHELLOS	WILLOW OAK	35	GOOD	
88	QUERCUS RUBRA	RED OAK	32	GOOD	
89	QUERCUS PHELLOS	WILLOW OAK	24	FAIR	PRUNED FOR POWER LINE
90	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	GOOD	
91	QUERCUS ALBA	WHITE OAK	24	GOOD	
92	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	GOOD	
93	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	GOOD	
94	MORUS SSP.	MULBERRY	45	POOR	SPLIT/LEANING

Condition Scoring System
No Apparent Problems Excellent
Minor Problems Good
Major Problems Fair
Extreme Problems Poor



Larry Hogan, Governor
Bard Rutherford, Lt. Governor
Mark Belton, Secretary
Joanne Threwes, Deputy Secretary

April 4, 2017
Mr. Michael Norton
Norton Land Design, LLC
5146 Dorsey Hall Drive
2nd Floor
Ellicott City, Maryland 21042
RE: Environmental Review for Takoma Park Middle School, 7611 Piney Branch Road, Silver Spring, MARYLAND #16-140, Montgomery County, Maryland.

Dear Mr. Norton:
The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation.

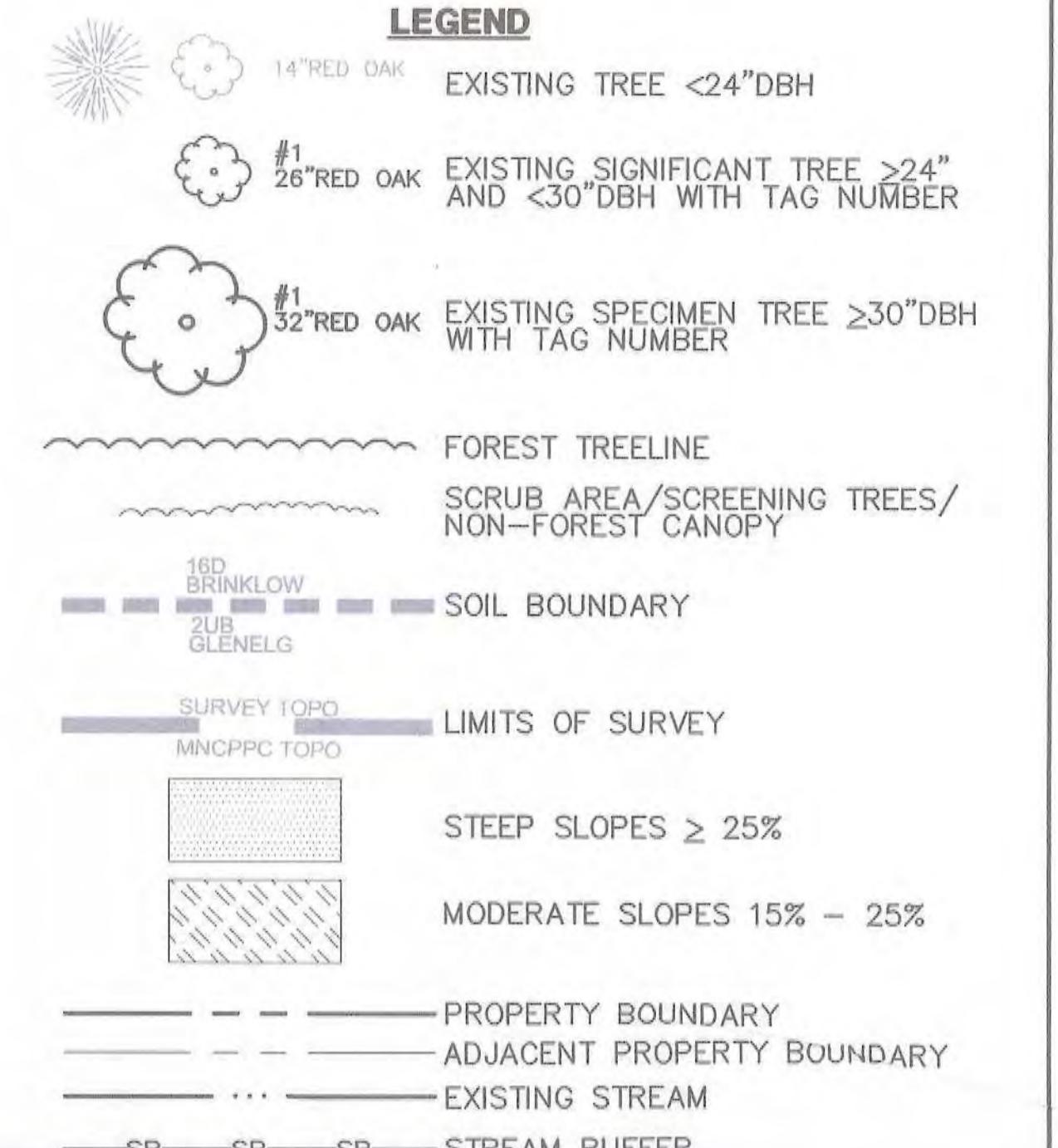
Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,
Lori A. Byrne

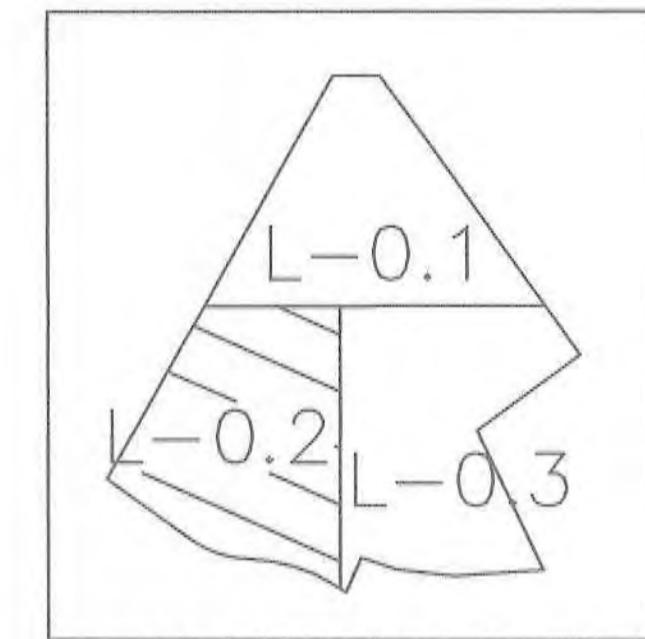
Lori A. Byrne
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 20170470.m0

Tawes State Office Building - 580 Taylor Avenue - Annapolis, Maryland 21401
410-767-8999 or toll free in Maryland 877-620-8999 - for Marylanders - TTY users Call via the Maryland Relay



CERTIFICATION OF QUALIFIED PROFESSIONAL
I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE
WITH MARYLAND STATE, MHCOPC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.
DATE: 12.27.17
MICHAEL A. NORTON
MDNR / COMAR 08.19.08.01
QUALIFIED PROFESSIONAL



NATIONAL RESOURCE INVENTORY/ FOREST STAND DELINEATION

PROJECT: TAKOMA PARK MIDDLE SCHOOL

PREPARED FOR/APPLICANT: MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDGE DRIVE, SUITE 4300
ROCKVILLE, MARYLAND 20850

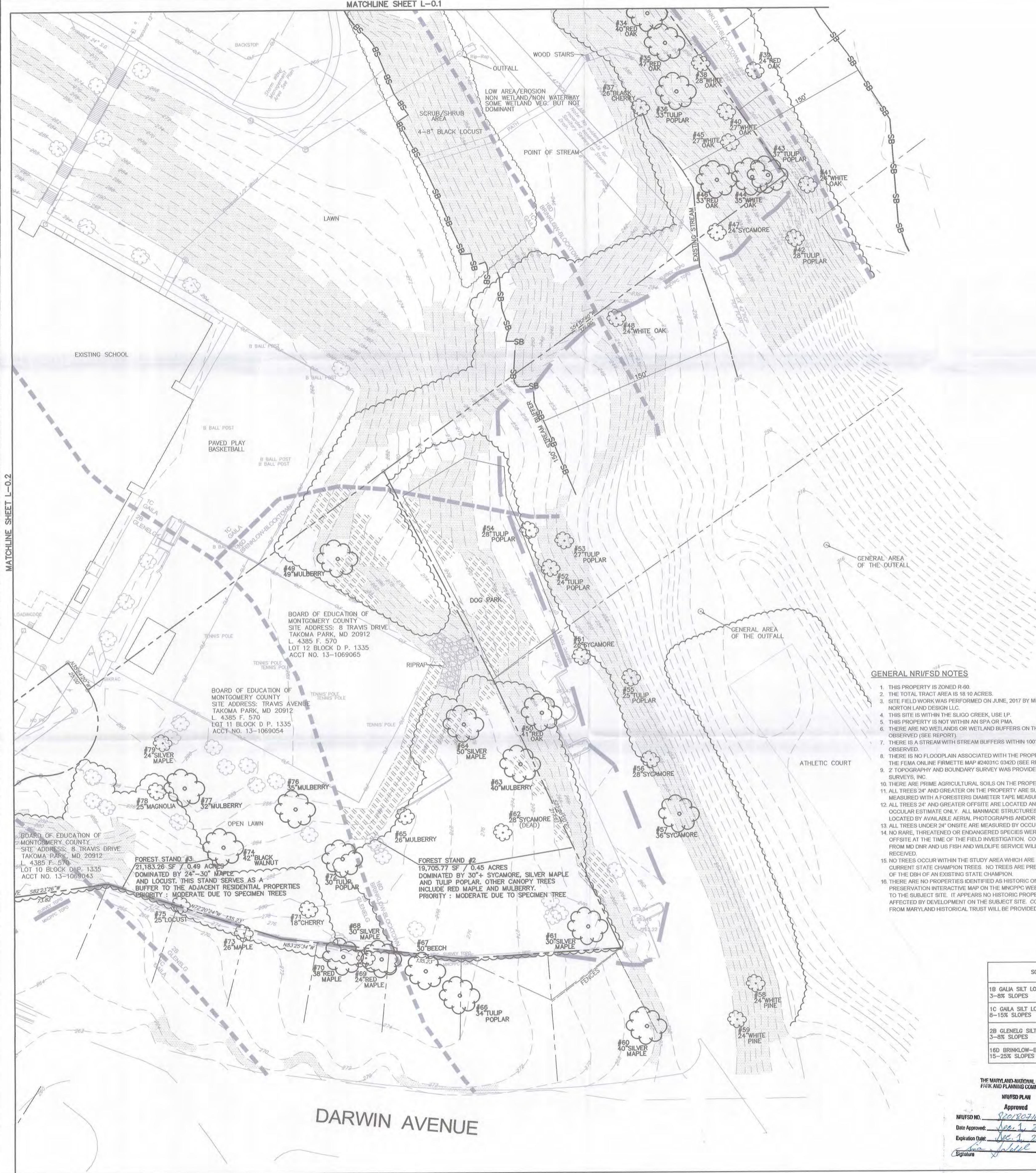
NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR
ELICOTT CITY, MD 21042
WWW.NORTONLANDDESIGN.COM

REVISIONS: 11.22.17 PER MNCPPC COMMENTS

1/2000 VICINITY MAP

Received M-NCPG NOV 27 2017
Montgomery County Planning Department

WATER CLASS	USE I, IP	WATERSHED	FEMA FLOODPLAIN
TRIBUTARY UNNAMED		SLIGO CREEK	MAP PANEL 24031C 0460D
TAX MAP JN342	200 SHEET 209NW01	ADC MAP PAGE 37	GRID C-11
AS SHOWN	DATE NOVEMBER 2017	PROJ. NO. 16-140	HEET NO. L-0.2



SITE NARRATIVE AND FOREST SUMMARY

INTRODUCTION

Norton Land Design completed a Natural Resource Inventory & Forest Stand Delineation for the project known as Takoma Park Middle School located in Silver Spring, Montgomery County, MD in June 2017. The delineation was conducted using the guidelines set forth in the MDNR State Forest Conservation Technical Manual and MNCPPC Trees, Approved Technical Manual.

GENERAL INFORMATION

This is a 16.10 acre site that owned by the Montgomery County Board of Education as shown on the plans. The site currently hosts the existing Takoma Park Middle School, tennis court, ball fields and associated parking and circulation. The site is bordered by residential properties on all sides. The site lies within the Sligo Creek Watershed, Use I, P.

ENVIRONMENTAL FEATURES

100 YEAR FLOOD PLAIN

There is no 100-yr floodplain associated with the property according to the FEMA flood map Community-Panel # 35055C 0484E. The primary tributary to the site is Sligo Creek.

SOILS

County. The Soil Survey of Montgomery Maryland describes the soil types that are present on the property as follows.

Soil type 1B-Gaia silt loam, 3 to 15 percent slopes. The suitability for Wild herbaceous plants, hardwood trees, and coniferous plants is good. The potential as habitat for openland wildlife and woodland wildlife is good. There are only slight limitations of the soils for dwellings with basements and lawns and landscapes.

Soil type 1C is the Gaia silt loam, 8 to 16 percent slopes, very deep and well drained. The potential productivity for trees on this soil is moderate. The restrictions to lawn and landscaping are moderate when steep slopes are encountered. The limitations for pond reservoir areas is severe due to seepage and when steep slopes are encountered. The potential for Wild herbaceous plants, hardwood trees, and coniferous trees is good. Potential for wetland plants and shallow water areas is very poor. Gaia soil is not listed on the Hydric soils list of Maryland.

Soil type 2B-Glenelg silt loam, 3 to 8 percent slopes. This soil is very deep and well drained. It is usually found on broad ridges in upland areas. The slopes are generally smooth, but some are affected by drainageways. This soil is well suited for dwellings and urban development. The only limitation is its moderate permeability which can limit the absorption of septic fields.

Soil type 1D-Brinklow-Blocktown Channery silt loam, 15 to 25 percent slopes. These are drained, moderately steep soils are usually located on soil slopes in the uplands. The suitability for Wild herbaceous plants, hardwood trees, and coniferous plants is good. The suitability to cultivate crops is very low due to the very low water capacity and severe hazard of erosion. The potential as habitat is good for woodland wildlife. The soil type 1D is classified as erodible soil.

NONTIDAL WETLANDS

There are no wetlands or swamps buffers observed on the property during the field investigations. The US Fish and Wildlife Service Wetlands Mapper shows no wetlands onsite.

STREAMS AND DRAINAGEWAYS

There are streams and associated stream buffers within 100' of the property observed. The site is within the Sligo Creek Watershed, Use I, P.

TOPOGRAPHY AND STEEP SLOPES

The site slopes primarily to the northeast and southwest. There are some areas of steep slopes where terracing was required in the construction of the school. There are no moderate slopes on erodible soils.

CRITICAL HABITATS

There appears to be no critical wildlife habitats from the field inspection. The MDNR and Fish & Wildlife Service have been notified of the project area and description. Copies of their correspondence will be provided when received.

CULTURAL FEATURES

Our research indicates there are no historic properties associated with the site. There are no historic sites found on the Historic Preservation Interactive Map on the MNCPPC website in proximity to the study area. It appears that development of the subject property will not have any effect on historic sites. The Maryland Historical Trust has been notified of the project area and description.

FOREST STAND INFORMATION

The forest stand samples were done in a random method as outlined in *Natural Resources Measurement*, Avery, T. E., 1975, and *Simplified Point Sample Crusing*, Ashley, B.D., 1991. The plot size was 1/10 acre. The forest stands were generally described when cruising the site. This method was conducted to inventory the most representative areas of the forest stand.

The site contains forest on the majority of the eastern half of the property. The total forest on the site is equal to 2.98 acres. There are significant/specimen trees located throughout the property. A list of the significant/specimen trees in the study area along with the visual health is within this document. The forest is summarized below.

FOREST STAND #1

Forest Stand 1 (129,911 sq ft. / 2.98 ac) is a lowland hardwood area. The stand is dominated by 18-20' Red Maple and Red Oak. The property also contains Black Walnut, the undergrowth consists of Tulip Poplar, Sycamore, and Sassafras. The ground layer contains Greenbrier and vines. There appears to be a small amount of herbaceous cover in the growing seasons. A substantial amount of downed woody material is present throughout the stand. The stand exhibits moderate amount of invasive plant cover (see data sheet) with a higher amount of invasive plant cover in the northern portion of the stand where there appears to be more human disturbance. The forest appears to be healthy and in good condition. Retention and regenerative potential are good. The Priority for this stand is 1: High Retention because of the presence of the stream, wetland and their associated buffers.

FOREST STAND #2

Forest Stand 2 (19,705.77 sq ft. / 0.45 ac). The stand is dominated by 30+ Sycamore, Silver Maple and Tulip Poplar. Other canopy trees include Red Maple and Mulberry. The forest serves as a buffer to the adjacent residential properties. The Priority for this stand is Moderate.

FOREST STAND #3

Forest Stand 3 (21,183.26 sq ft. / 0.49 ac). The stand is dominated by 24"-30" Maple and Locust. This stand serves as a buffer to the adjacent residential properties. The Priority for this stand is Moderate.

SOIL TABLE

SOILS	ERODIBLE	HYDRIC	CONTAINS 15-25% SLOPES	CONTAINS 25% SLOPES	CAPABILITY SYMBOL	PRIME AGRICULTURAL SOIL
1B GAILA SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	I/Ie	YES
1C GAILA SILT LOAM 8-15% SLOPES	NO	NO	N/A	YES	I/Ie	NO
2B GLENELG SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	I/Ie	YES
1D BRINKLOW-BLOCKTOWN CHANNERY SILT LOAM 15-25% SLOPES	YES	NO	YES	YES	I/Ie	NO

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCPPC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

NRFPS PLAN

Approved

Approved

Date Approved:

Dec 1, 2017

Expiration Date:

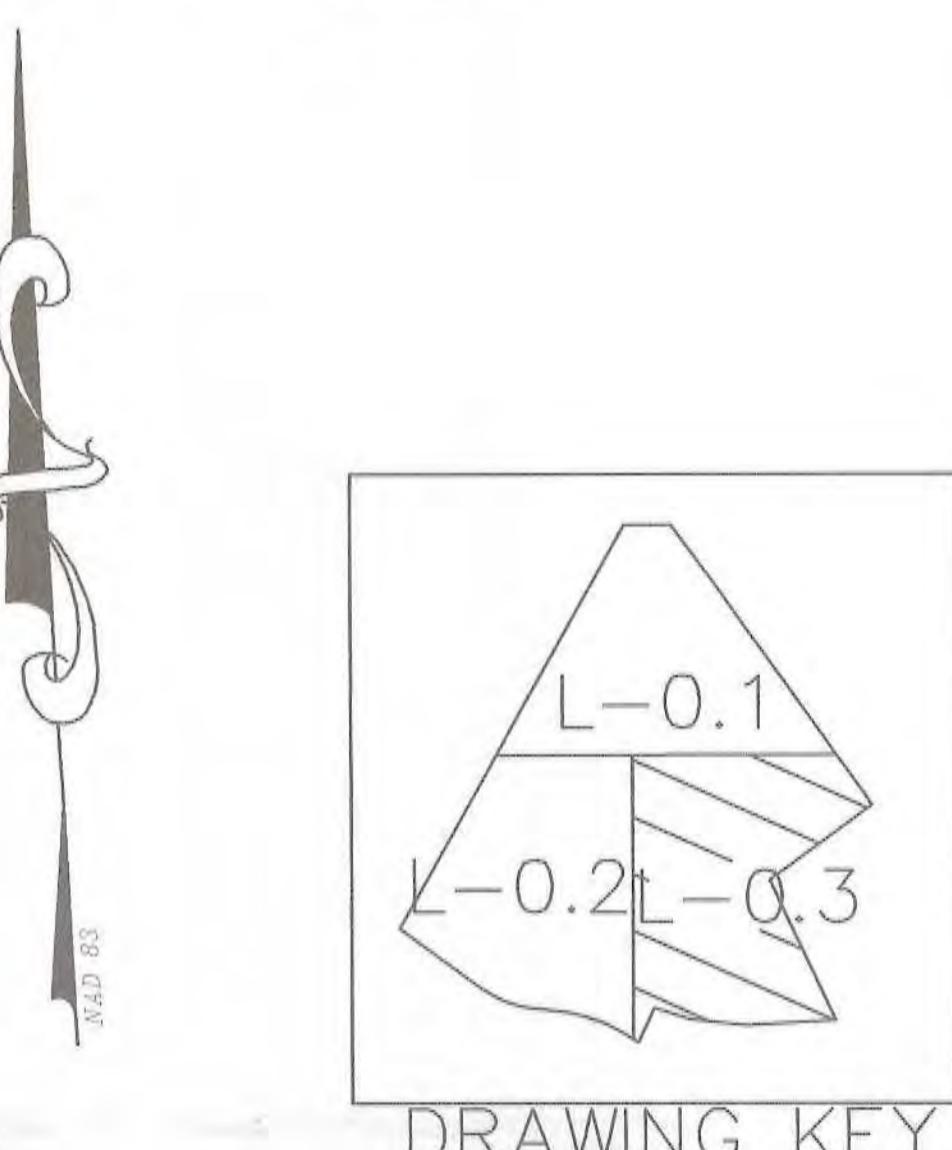
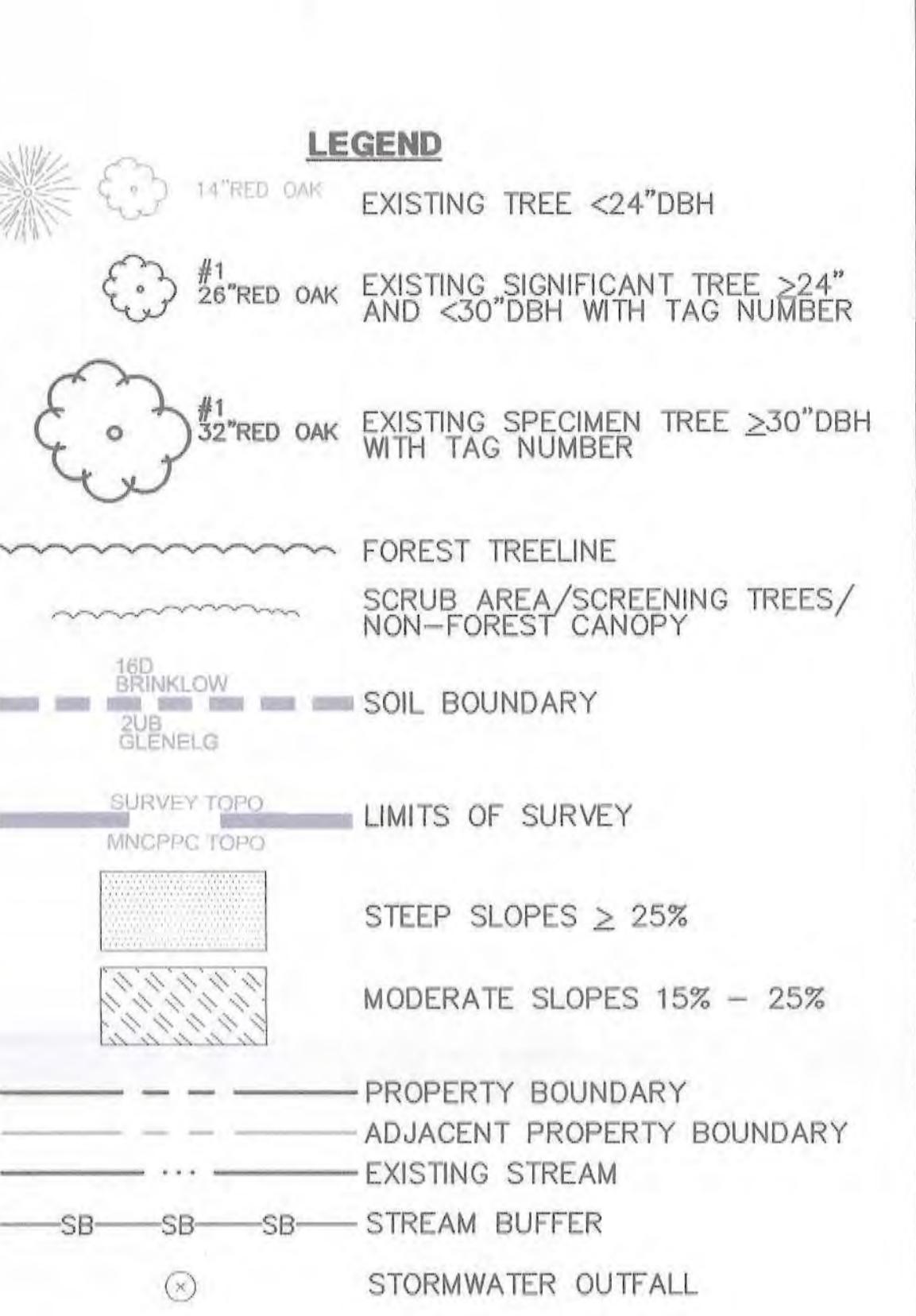
Dec 1, 2017

Signature:

Michael A. Norton

MDNR / COMAR 08.19.06.01

Qualified Professional



TITLE
NATURAL RESOURCE INVENTORY / FOREST STAND DELINEATION

PROJECT

TAKOMA PARK MIDDLE SCHOOL

PREPARED FOR/APPLICANT
MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDIE DRIVE, SUITE 4300
ROCKVILLE, MARYLAND 20850

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR
ELICOTT CITY, MD 21042
WWW.NORTONLANDDESIGN.COM

REVISIONS
11.22.17 PER MNCPPC COMMENTS

VICINITY MAP
1:2000

Received 11/27/2017
Montgomery County Planning Department

WATER CLASS USE I,P
TRIBUTARY UNNAMED

WATERSHED SLIGO CREEK
FEMA FLOODPLAIN MAP NO. II
24031C 0460D

TAX MAP JN342
200 SHEET 209NW01
ADC MAP PAGE 37 GRID C-11

SCALE AS SHOWN DATE NOVEMBER 2017 PROJ. NO. 16-140 SHEET NO. L-0.3

FOREST CONSERVATION WORKSHEET
TAKOMA PARK MIDDLE SCHOOL

5-Aug-02

NET TRACT AREA:

A. Total tract area	18.12
B. Land dedication acres (parks, county facility, etc.)	0.00
C. Land dedication for roads or utilities (not being constructed by this plan)	0.00
D. Area to remain in commercial agricultural production/use	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area	= 18.12

LAND USE CATEGORY: (from Trees Technical Manual)

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

G. Afforestation Threshold ... 15% x F = 2.72

H. Conservation Threshold ... 20% x F = 3.62

EXISTING FOREST COVER:

I. Existing forest cover ... = 2.03

J. Area of forest above afforestation threshold ... = 0.00

K. Area of forest above conservation threshold ... = 0.00

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation ... = 0.00

M. Clearing permitted without mitigation ... = 0.00

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared ... = 0.21

O. Total area of forest to be retained ... = 1.82

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold ... = 0.00

Q. Reforestation for clearing below conservation threshold ... = 0.42

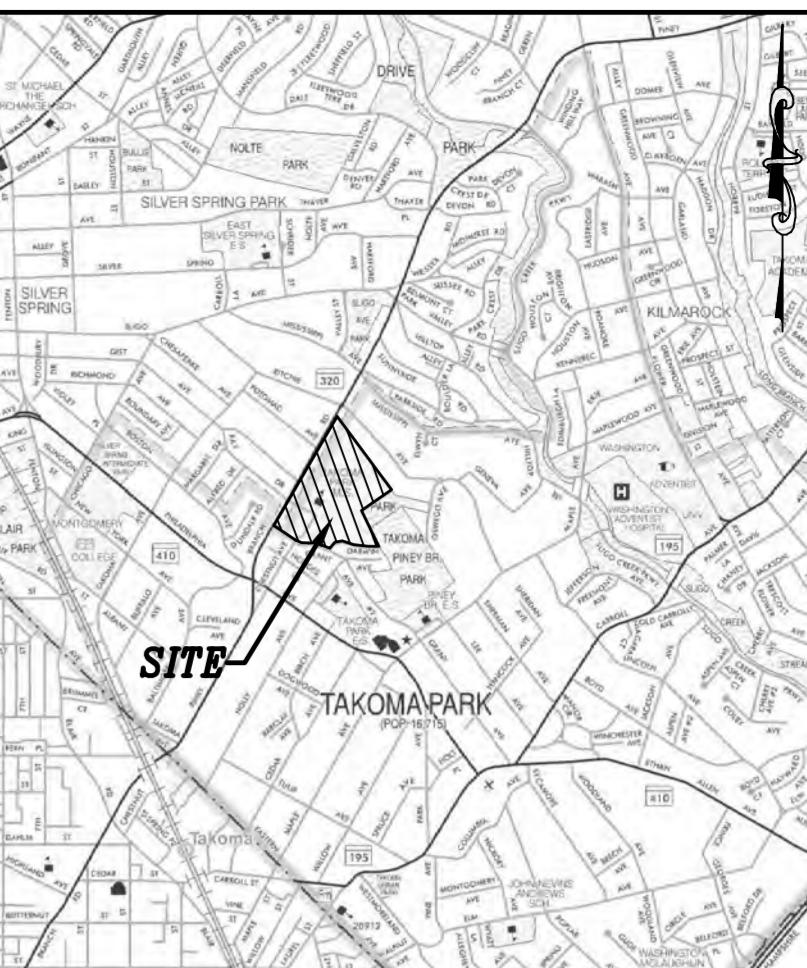
R. Credit for retention above conservation threshold ... = 0.00

S. Total reforestation required ... = 0.42

T. Total afforestation required ... = 0.69

U. Credit for landscaping (may not exceed 20% of "S") ... = 0.00

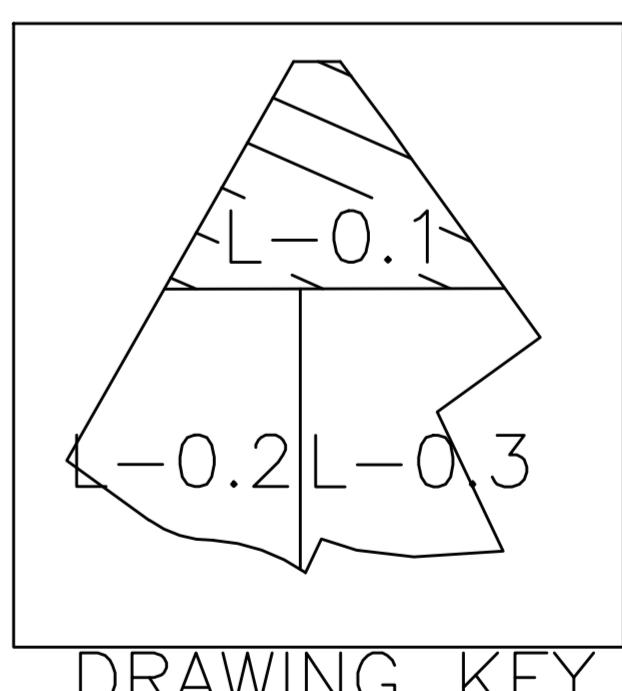
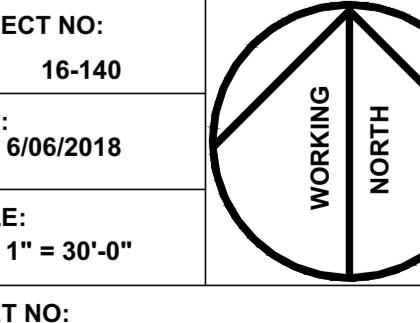
V. Total reforestation and afforestation required ... = 1.11



VICINITY MAP
SCALE 1:20,000
(WGS GRID: 209 NW 01)
MONTGOMERY COUNTY
ADC MAP PAGE: 5408
GRIDS: H & J - 3
(2008/39TH EDITION)

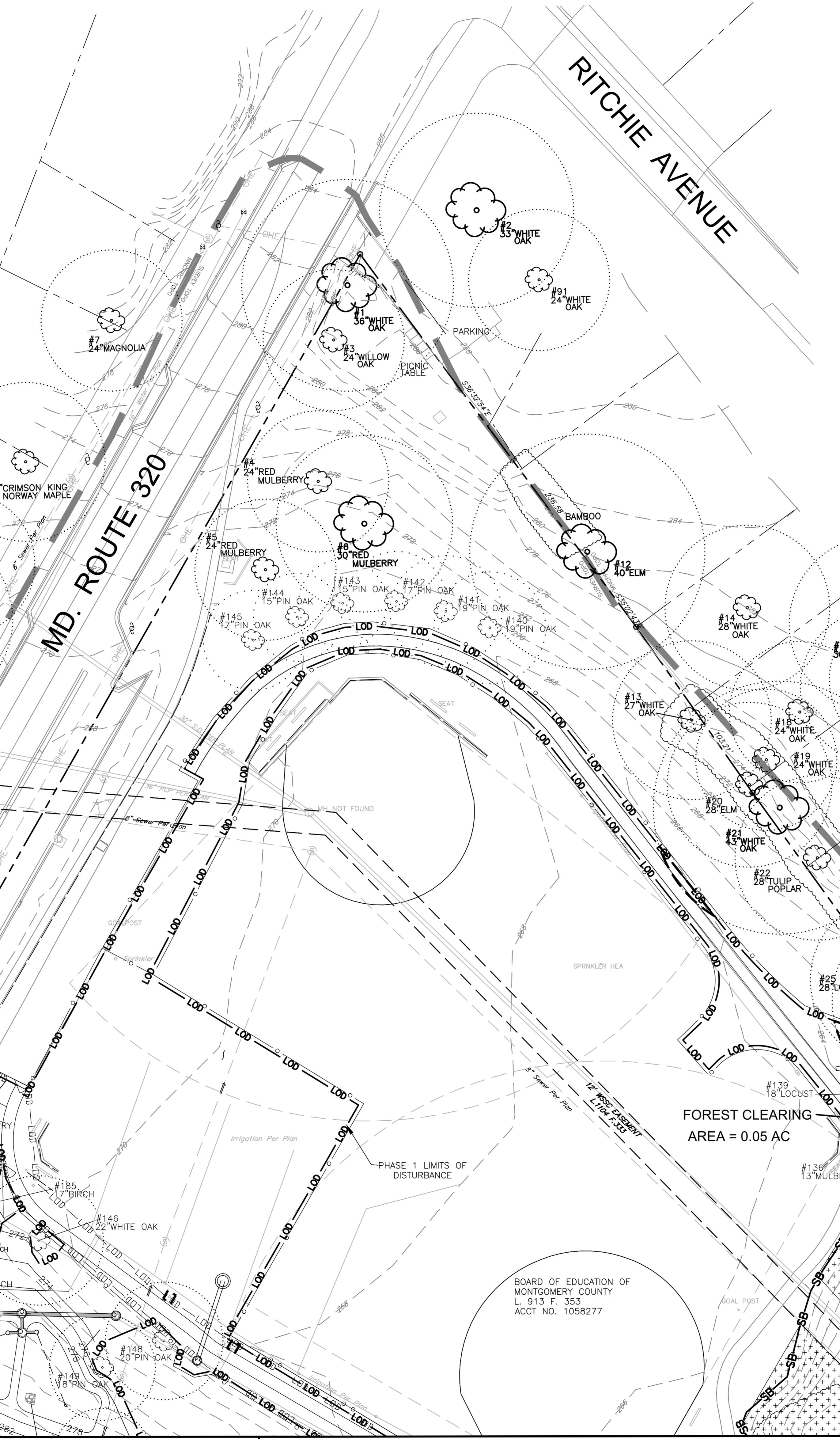
LEGEND

- 14" RED OAK EXISTING TREE >8" AND <24" DBH WITH TAG NUMBER
- #1 26" RED OAK EXISTING SIGNIFICANT TREE >24" AND <30" DBH WITH TAG NUMBER
- #2 32" RED OAK EXISTING SPECIMEN TREE >30" DBH WITH TAG NUMBER
- FOREST TREELINE
- SCRUB AREA/SCREENING TREES/ NON-FOREST CANOPY
- LOD LOD LOD LOD PHASE 1 LIMITS OF DISTURBANCE
- LOD LOD LOD LOD PHASE 2 LIMITS OF DISTURBANCE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- ... EXISTING STREAM
- SB SB SB STREAM BUFFER
- X TREE TO BE REMOVED
- - - CRZ IMPACT FOR SPECIMEN TREE
- - - EXISTING SEWER EASEMENT
- FOREST RETENTION AREA
- FOREST CLEARING AREA
- REFORESTATION/ FOREST PLANTING AREA
- TREE SAVE AREA COUNTED TOWARD FOREST CLEARING AREA >0.05 AC

TAKOMA PARK
MIDDLE SCHOOL
ADDITIONMONTGOMERY
COUNTY PUBLIC
SCHOOLSPRELIMINARY
FOREST
CONSERVATION
PLANPROJECT NO:
16-140DATE:
6/06/2018SCALE:
1" = 30'-0"SHEET NO:
L-1.1

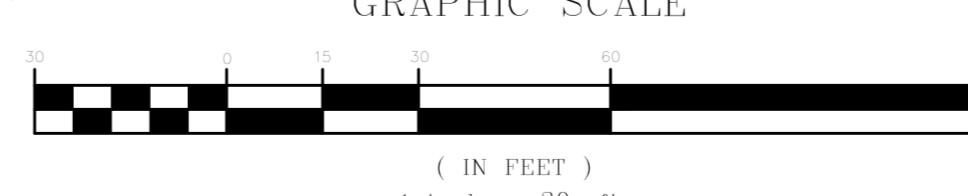
SITE TABULATIONS:

ACREAGE OF TRACT:	18.12
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	0
ACREAGE OF ROAD AND UTILITY R/W WHICH WILL NOT BE IMPROVED AS PART OF DEV. APPLICATION:	0.00
ACREAGE OF EX. FOREST:	2.03
ACREAGE OF TOTAL FOREST RETENTION:	1.79
ACREAGE OF TOTAL FOREST CLEARED:	0.21
LAND USE CATEGORY:	IDA
AFFORESTATION THRESHOLD	2.72
CONSERVATION THRESHOLD	3.62
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN STREAM BUFFERS	0.53/0.03/0.90
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN PRIORITY AREAS	0.00/0.15/0.16
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER	101'/150'
TOTAL DBH INCHES OF SPECIMEN TREES REMOVED (OUTSIDE FOREST)	
0 X 0.25 = 0 REQUIRED CALIPER INCHES MITIGATION	
TOTAL DBH INCHES OF SPECIMEN TREE REMOVED ÷ 3" CALIPER TREES	
= TOTAL TREES REQUIRED TO BE PLANTED	



MATCHLINE SHEET L-1.2

MATCHLINE SHEET L-1.3



CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE
WITH MARYLAND STATE, MCNCPC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

[Signature]
MICHAEL A. NORTON
MDNR / COMAR 05/19/06/01
QUALIFIED PROFESSIONAL

08-21-18 DATE

NORTON LAND DESIGN	
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING	
5146 DORSEY HALL DRIVE, 2ND FLOOR	
ELICOTT CITY, MD 21042	
BALTIMORE 443.542.9199 DC 240.342.2329	
WWW.NORTONLANDDESIGN.COM	
WATER CLASS	USE I.P.
TRIBUTARY	WATERSHED
UNNAMED	SLIGO CREEK
FEMA FLOODPLAIN	
MAP 24031C 0460D	
TAX MAP	JN342
200 SHEET 209NW01	
PAGE NO.	37
GRID C-11	
SHEET NO.	L-1.1

MICHAEL A. NORTON
MDNR / COMAR 05/19/06/01
QUALIFIED PROFESSIONAL

JN342

209NW01

37

C-11

L-1.1

L-1.1

ARCHITECT

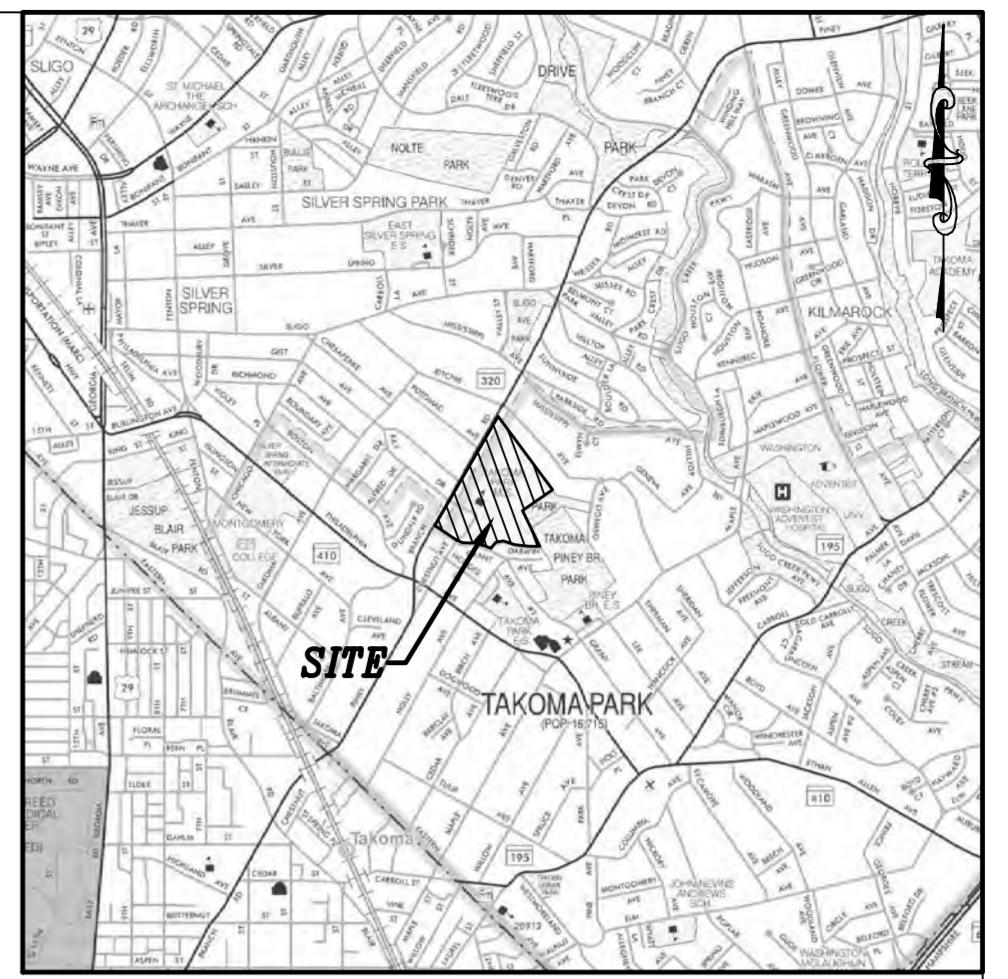
SET
SYKELIN, EMR & KOLOVITCH
ARCHITECTS
9211 CORPORATE BLVD., SUITE 340
ROCKVILLE, MD 20850
301-770-0177(P) 301-330-3224(F)

CIVIL
ADTEK ENGINEERS
97 MONOCACY BOULEVARD, UNIT H
FREDERICK, MD 21701
301-662-4408(P) 301-662-7484(F)

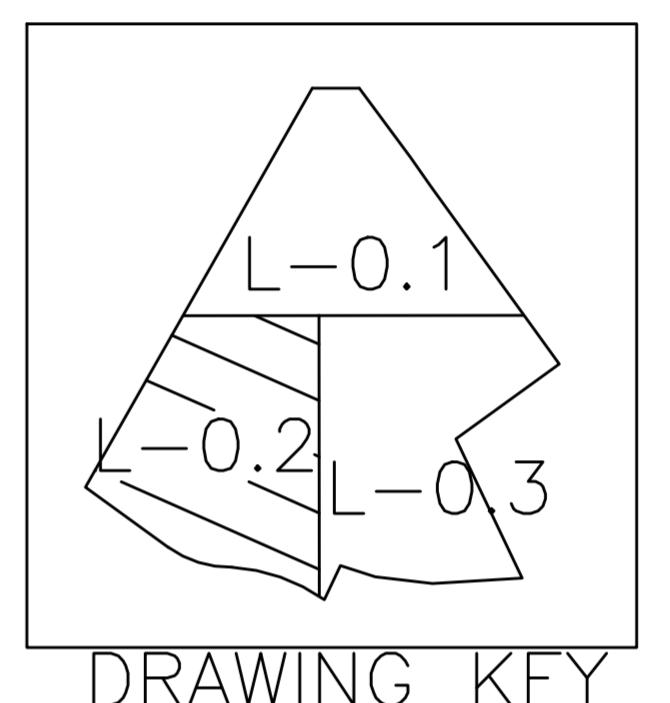
STRUCTURAL
ADTEK ENGINEERS
97 MONOCACY BOULEVARD, UNIT H
FREDERICK, MD 21701
301-662-4408(P) 301-662-7484(F)

MECH./ELECTRICAL/PLUMBING
JAMES POSEY ASSOCIATES
3112 LORD BALTIMORE DRIVE
BALTIMORE, MD 21244
301-265-6100(P) 301-298-9820(F)

CONSTRUCTION MANAGER



VICINITY MAP
SCALE 1:2,000
(WGS GRID: 209 NW 01)
MONTGOMERY COUNTY
ADC MAP PAGE: 5408
GRIDS: H & J - 3
(2008/39TH EDITION)



LEGEND

- 14" RED OAK EXISTING TREE $\geq 8"$ AND $<24"$ DBH WITH TAG NUMBER
- #1 26" RED OAK EXISTING SIGNIFICANT TREE $\geq 24"$ AND $<30"$ DBH WITH TAG NUMBER
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- LOD — LOD — LOD — LOD PHASE 1 LIMITS OF DISTURBANCE
- LOD — LOD — LOD — LOD PHASE 2 LIMITS OF DISTURBANCE
- PROPERTY BOUNDARY
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- ... EXISTING STREAM
- SB — SB — SB STREAM BUFFER
- X TREE TO BE REMOVED
- CRZ IMPACT FOR SPECIMEN TREE
- EXISTING SEWER EASEMENT
- FOREST RETENTION AREA
- FOREST CLEARING AREA
- REFORESTATION/ FOREST PLANTING AREA
- TREE SAVE AREA COUNTED TOWARD CLEARING FOR COMPUTATION ONLY

**TAKOMA PARK
MIDDLE SCHOOL
ADDITION**

**MONTGOMERY
COUNTY PUBLIC
SCHOOLS**

**SHEET TITLE:
PRELIMINARY
FOREST
CONSERVATION
PLAN**

PROJECT NO.: 16-140
DATE: 6/06/2018
SCALE: 1" = 30'-0"
SHEET NO.:

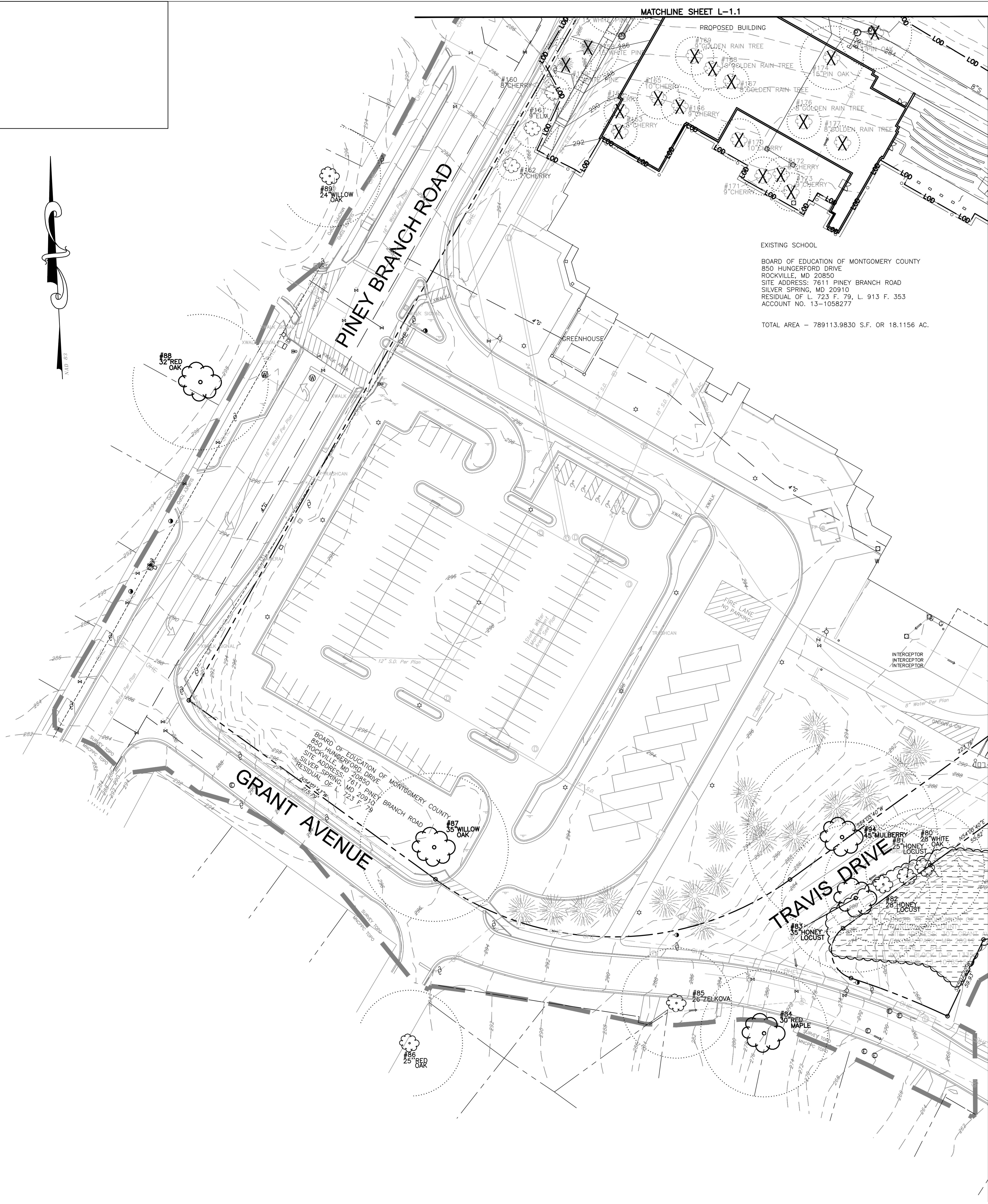
CERTIFICATION OF QUALIFIED PROFESSIONAL
I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE
WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.


08-21-18
DATE

MICHAEL A. NORTON
MINN. CONAR 08 19.06.01
QUALIFIED PROFESSIONAL

WATER CLASS	USE I.P.	WATERSHED	FEMA FLOODPLAIN
TRIBUTARY	UNNAMED	SLIGO CREEK	MAP PAGE # 24031C 0460D
TAX MAP	JN342	200 SHEET 209NW01	AOC MAP PAGE # 37 GRID C-11
SCALE	AS SHOWN	DATE JUNE 2018	PROJ. NO. 16-140 SHEET NO. L-1.2

L-1.2







VICINITY MAP
SCALE: 1:2,000
(WGS GRID: 209 WO 01)
MONTGOMERY COUNTY
ADC MAP PAGE: 5408
GRIDS: H & J - 3
(2008/39TH EDITION)

Tree Summary 8" +											
Tree #	Species	Species	D.B.H.	Critical Root	Critical Root Zone	Percent of CRZ	Tree	Comments	Status	Variance	Mitigation (Y/N)
	Scientific Name	Common Name	(inches)	Zone (Sq.Ft)	Impacts	Impacted (SF)	Condition				
1	QUERCUS ALBA	WHITE OAK	36	6161	0	0%	GOOD	SAVE AND PROTECT	NO	N	
2	QUERCUS ALBA	WHITE OAK	33	7698	0	0%	GOOD	SAVE AND PROTECT	NO	N	
3	QUERCUS PHELLOS	WILLOW OAK	24	4072	0	0%	FAIR	IVY, VINES, LOTS OF GROWTH	SAVE AND PROTECT	N/A	N
4	MORUS RUBRA	RED MULBERRY	24	4072	0	0%	FAIR	SPLITS AT 2, 6 LEADERS(4.6, 7.8, 8)	SAVE AND PROTECT	N/A	N
5	MORUS RUBRA	RED MULBERRY	24	4072	0	0%	GOOD	SPLITS AT 1, 8 LEADERS(10.8, 6, 12, 14, 8, 3)	SAVE AND PROTECT	N/A	N
6	MORUS RUBRA	RED MULBERRY	30	6362	0	0%	FAIR	LIMB, DIE BACK, SPLITS AT 2', 8 LEADERS	SAVE AND PROTECT	NO	N
7	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
8	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	27	5159	0	0%	GOOD	SAVE AND PROTECT	NO	N	
9	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
10	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	30	6362	0	0%	GOOD	SAVE AND PROTECT	NO	N	
11	GLEDTISIA SSP.	LOCUST	40	11310	0	0%	GOOD	SAVE AND PROTECT	NO	N	
12	ULMUS SSP.	ELM	27	5159	0	0%	GOOD	SAVE AND PROTECT	NO	N	
13	QUERCUS ALBA	WHITE OAK	26	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
14	QUERCUS ALBA	WHITE OAK	26	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
15	QUERCUS ALBA	WHITE OAK	30	6362	0	0%	GOOD	SAVE AND PROTECT	NO	N	
16	QUERCUS ALBA	WHITE OAK	26	4778	0	0%	GOOD	SAVE AND PROTECT	NO	N	
17	QUERCUS ALBA	WHITE OAK	26	4778	0	0%	GOOD	SAVE AND PROTECT	NO	N	
18	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
19	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
20	ULMUS SSP.	ELM	28	5542	0	0%	GOOD	SPLITS AT 2'	SAVE AND PROTECT	N/A	N
21	QUERCUS ALBA	WHITE OAK	43	13070	92	1%	GOOD	SAVE AND PROTECT	YES	N	
22	LIRIODENDRON TULIPIFERA	TULP POPLAR	28	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
23	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	FAIR	BROKEN LEADER	SAVE AND PROTECT	N/A	N
24	GLEDTISIA SSP.	LOCUST	25	4418	0	0%	FAIR	VINES, DEAD LIMBS	SAVE AND PROTECT	N/A	N
25	ULMUS SSP.	ELM	25	5542	738	10%	FAIR	VINES, DEAD LIMBS, LEANS TOWARDS BALL FIELD	SAVE AND PROTECT	N/A	N
26	GLEDTISIA SSP.	LOCUST	33	7698	746	10%	POOR	VINES, IVY, SPLIT TRUNK	SAVE AND PROTECT	YES	N
27	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
28	GLEDTISIA SSP.	LOCUST	28	5542	779	14%	POOR	VINES, IVY, TOTALLY CONSUMED	SAVE AND PROTECT	NO	N
29	QUERCUS ALBA	WHITE OAK	44	13685	2652	19%	GOOD	SAVE AND PROTECT	YES	N	
30	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
31	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	Poor	IVY, DEAD LIMBS	SAVE AND PROTECT	N/A	N
32	FAGUS GRANDIFOLIA	BEECH	24	4072	0	0%	POOR	IVY, DEAD LIMBS	SAVE AND PROTECT	N/A	N
33	LIRIODENDRON TULIPIFERA	TULP POPLAR	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
34	QUERCUS RUBRA	RED OAK	40	11310	0	0%	POOR	DEAD LIMBS	SAVE AND PROTECT	NO	N
35	QUERCUS RUBRA	RED OAK	47	15615	0	0%	FAIR	DEAD LIMBS	SAVE AND PROTECT	NO	N
36	LIRIODENDRON TULIPIFERA	TULP POPLAR	33	7698	0	0%	GOOD	SAVE AND PROTECT	NO	N	
37	PRUNUS SP.	SYCAMORE	29	4072	0	0%	FAIR	VINES	SAVE AND PROTECT	N/A	N
38	QUERCUS ALBA	WHITE OAK	28	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
39	QUERCUS RUBRA	RED OAK	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
40	QUERCUS ALBA	WHITE OAK	27	5153	0	0%	GOOD	SAVE AND PROTECT	NO	N	
41	QUERCUS ALBA	WHITE OAK	24	4072	0	0%	POOR	VINES, IVY	SAVE AND PROTECT	N/A	N
42	LIRIODENDRON TULIPIFERA	TULP POPLAR	28	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
43	LIRIODENDRON TULIPIFERA	TULP POPLAR	37	6677	0	0%	GOOD	SAVE AND PROTECT	NO	N	
44	QUERCUS ALBA	WHITE OAK	35	6659	0	0%	GOOD	SAVE AND PROTECT	NO	N	
45	QUERCUS ALBA	WHITE OAK	27	5153	0	0%	GOOD	SAVE AND PROTECT	NO	N	
46	QUERCUS RUBRA	RED OAK	33	7698	0	0%	GOOD	SAVE AND PROTECT	NO	N	
47	PLATANUS OCCIDENTALIS	SYCAMORE	24	4072	0	0%	FAIR	VINES, IVY	SAVE AND PROTECT	N/A	N
48	QUERCUS SEBBI	MULBERRY	49	15615	12121	36%	POOR	TWIN, IVY, VINES/SPLIT/FALLING	SAVE AND PROTECT	YES	N
49	QUERCUS RUBRA	RED OAK	41	11882	0	0%	GOOD	SAVE AND PROTECT	NO	N	
50	PLATANUS OCCIDENTALIS	SYCAMORE	26	4778	0	0%	GOOD	SAVE AND PROTECT	NO	N	
51	PLATANUS OCCIDENTALIS	SYCAMORE	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
52	LIRIODENDRON TULIPIFERA	TULP POPLAR	24	4072	0	0%	GOOD	SAVE AND PROTECT	NO	N	
53	LIRIODENDRON TULIPIFERA	TULP POPLAR	27	5153	0	0%	GOOD	SAVE AND PROTECT	NO	N	
54	LIRIODENDRON TULIPIFERA	TULP POPLAR	29	5542	0	0%	GOOD	SAVE AND PROTECT	NO	N	
55	LIRIODENDRON TULIPIFERA	TULP POPLAR	25	4418	0	0%	GOOD	SAVE AND PROTECT	NO	N	
56	JUGLANS NIGRA	BLACK WALNUT	42	12469	0	0%	FAIR	VINE, IVY	SAVE AND PROTECT	NO	N
57	QUERCUS ALBA	WHITE OAK	25	4418	0	0%	FAIR	VINE, IVY	SAVE AND PROTECT	N/A	N
58	ACER SACCHARUM	SILVER MAPLE	30	6362	0	0%	FAIR	IVY	SAVE AND PROTECT	NO	N
59	ACER RUBRUM	RED MAPLE	24	4072	0	0%	FAIR	IVY	SAVE AND PROTECT	NO	N
60	ACER RUBRUM	RED MAPLE	38	10207	0	0%	FAIR	VINES, TWIN	SAVE AND PROTECT	NO	N
61	PRUNUS SP.	MULBERRY	40	11310	0	0%	POOR	SPLIT	SAVE AND PROTECT	NO	N
62	ACER SACCHARUM	SILVER MAPLE	50	17671	0	0%	FAIR	DE BACK, VINES, IVY	SAVE AND PROTECT	NO	N
63	MORUS SSP.	MULBERRY	26	4778	0	0%	FAIR	DE BACK, VINES, IVY	SAVE AND PROTECT	N/A	N
64	ACER SACCHARUM	RED MAPLE	30	6362	0	0%	GOOD	SPLITS AT 2'	SAVE AND PROTECT	NO	N
65	LIRIODENDRON TULIPIFERA	TULP POPLAR	34	8171	0	0%	FAIR	VINE, IVY	SAVE AND PROTECT	NO	N
66	PRUNUS SP.	SYCAMORE	30	6052	0	0%	GOOD	IVY	SAVE AND PROTECT	NO	N
67	ACER SACCHARUM	SILVER MAPLE	30	6362	0	0%	FAIR	IVY	SAVE AND PROTECT	NO	N
68	ACER RUBRUM	RED MAPLE	24	4072	0	0%	FAIR	IVY	SAVE AND PROTECT	NO	N
69											



August 21, 2018

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

Re: Takoma Park Middle School
Request for Specimen Tree Variance
MNCPPC NRI# 420180710
MR# 2018036

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 existing Takoma Park Middle School is located at 7611 Piney Branch Rd in Silver Spring, Montgomery County, Maryland. This is a 18.10-acre site that 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 residential properties on all sides. The site has vehicle access from Piney Branch Rd and Grant Avenue.

Proposed construction consists of an addition, new hardcourt play surfaces, improved pedestrian circulation, stormwater management 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.

This work will require disturbance of the root zones of a total of six (6) specimen trees. One (1) of the six (6) impacted trees will be required to be removed. The removal of specimen trees are due to the proposed pathway and utilities in relationship to the narrow property.

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, parking and ballfield 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) is shown to be mitigated for on the Preliminary Forest Conservation Plan. Additional improvements to the property include control of erosion and outfall stabilization before entering the stream just offsite.

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 forest along the edges of the property that will be retained to the greatest extent possible. Additional reforestation is proposed within the designated stream valley buffer. 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 addition 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.

Significant/Specimen Tree Summary 24" +										
Tree #	Species	Species	D.B.H (inches)	Critical Root Zone (Sq.Ft.)	Critical Root Zone Impacts	Percent of CRZ Impacted (SF)	Tree	Comments	Status	Variance
21	SCIENTIFIC NAME: QUERCUS ALBA	COMMON NAME: WHITE OAK	43	13070	92	1%	GOOD		IMPACTS ONLY	YES
26	SCIENTIFIC NAME: GLEDITIA SSP. LOCUST	COMMON NAME: LOCUST	33	7698	746	10%	POOR	VINES, IVY, SPLIT TRUNK	IMPACTS ONLY	YES
29	SCIENTIFIC NAME: QUERCUS ALBA	COMMON NAME: WHITE OAK	44	13685	2652	19%	GOOD		IMPACTS ONLY	YES
49	SCIENTIFIC NAME: MORUS SSP.	COMMON NAME: MULBERRY	49	16972	6121	36%	POOR	TWIN, IVY, VINES/SPLIT/FALLING	TO BE REMOVED	YES
77	SCIENTIFIC NAME: MORUS SSP.	COMMON NAME: MULBERRY	32	7238	35	<1%	POOR	IVY, VINES, DIF BACK	IMPACTS ONLY	YES
90	SCIENTIFIC NAME: LIRIODENDRON TULIPIFERA	COMMON NAME: TULIP POPLAR	30	6362	1997	31%	GOOD		IMPACTS ONLY	YES

* BOLD TYPE DENOTES SPECIMEN TREES

Condition Scoring System	
No Apparent Problems	Excellent
Minor Problems	Good
Major Problems	Fair
Extreme Problems	Poor

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,

A handwritten signature in black ink, appearing to read "Michael Norton".

Michael Norton

City of Takoma Park

DEPARTMENT OF PUBLIC WORKS

Telephone: 301-891-7633
FAX: 301-585-2405



31 Oswego Avenue
Silver Spring, MD 20910

May 24, 2018

ADTEK Engineering Inc.
97 ManoClay Blvd. Unit H
Frederick MD 21710

Attn: Mr. Aron Jolin

RE: Takoma Park Middle School
Stormwater Management (SWM) Concept Application
SWMC 18-04-23

Gentlemen:

Our review of your Stormwater Management Concept application for the referenced project is completed. The SWM Concept submitted is deemed generally acceptable.

The following comments should be addressed and limits of disturbance finalized prior to permit application.

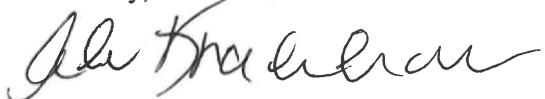
1. Available computations and details for existing SWM facilities (SW97-07) along with any inspection reports or maintenance records done by MGCPS or MGCDEP must be submitted for review. In the absence of such documents, the current system conditions must be evaluated to verify the adequacy and functionality of the existing system.
2. Please clearly delineate LOD for phases 1 and 2 of the project. Show the LOD for each phase separately tabulating the LOD area and the impervious area within LOD for each phase.
3. Please expand on the Reduced Curve Number (RCN) methodology description and computation of each component that are tabulated on page 8 of your narrative. Also, index references of relevant sections of MDE Stormwater Manual and TR55.
4. Please calculate the groundwater recharge (Rev) and channel protection (CPv) volumes and verify the adequacy of storage provided in the proposed bioretention storage volume.

Adtek Engineering Inc.
97 ManoClay Blvd. Unit H
Frederick, MD 21710

5. Please check the capacity of the SWM bioretentions to ensure that each bioretention pond holds 75% of ESDv as ponding volume and apply adjustment to all volume, if necessary.

Thank you for your diligent work on this project. Should you have any questions or if I can provide additional information, please call.

Sincerely,



Ali Khalilian, P.E.

cc: Montgomery County Public School
Construction Division
850 Hungerford Drive, Room #123
Rockville, MD 20850
Michael Horton
File