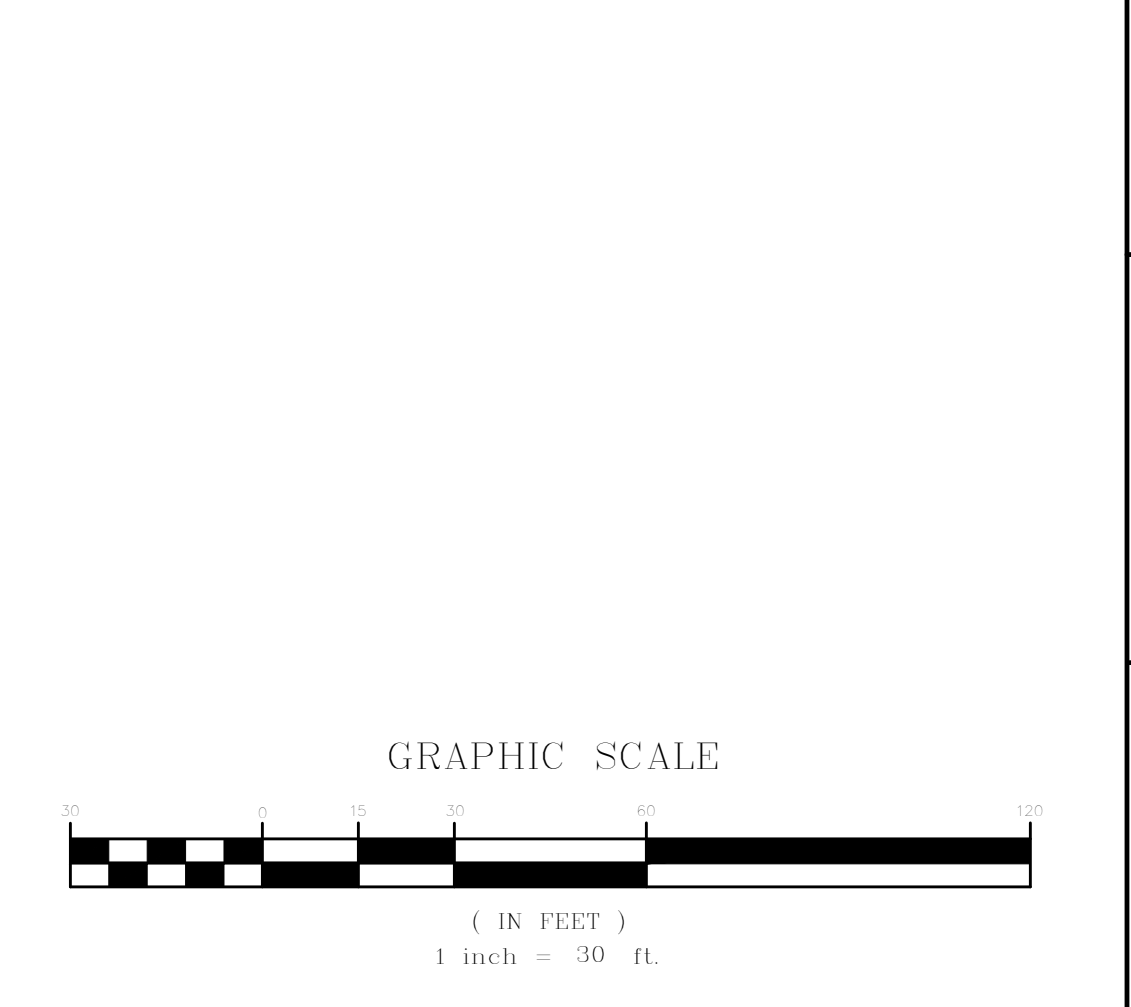


KEY PLAN:
KEYNOTES LISTED ON THIS SHEET ARE FOR CONVENIENCE ONLY. REFER TO SHEET CS.2 FOR COMPLETE LIST

Norton Land Design
Landscape Architecture + Environmental Planning
Arlington, Maryland, 20851
17850 New Hampshire Avenue
P. 240.342.2225 F. 240.342.2552
www.nortonlanddesign.com

- LEGEND**
- EXISTING TREE <24"DBH
 - EXISTING SIGNIFICANT TREE >24" AND <30"DBH WITH TAG NUMBER
 - EXISTING SPECIMEN TREE ≥30"DBH WITH TAG NUMBER
 - EXISTING TREE TO BE REMOVED
 - SURVEY TOPO
MNCPPC TOPO
 - COMBINED ROOT PRUNE TRENCH/TREE PROTECTION FENCE (TEMPORARY)
 - TREE PROTECTION FENCE (TEMPORARY)
 - TEMPORARY TREE PROTECTION SIGNAGE (APPROX. 50' O.C.)
 - LOD
 - LIMITS OF SURVEY
 - PROPERTY BOUNDARY
 - PROPOSED CANOPY TREE
 - PROPOSED ORNAMENTAL TREE
 - PLANT TYPE AND QUANTITY



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

DATE: _____
MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL
ISA CERTIFIED ARBORIST: MA-4724A
LTE NUMBER: 1756

DEVELOPER'S CERTIFICATE
The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. _____ including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS
Printed Company Name: _____
Contact Person or Owner: MR. R. CRAIG SHUMAN JR.
DIRECTOR, DIVISION OF CONSTRUCTION, MCPS
Printed Name: _____
Address: 45 WEST GUIDE DRIVE, SUITE 4300
ROCKVILLE, MD 20850
Phone and Email: 240-314-1000
richard_c_shumanjr@mcpsmd.org
Signature: _____

Nobis
Engineering a Sustainable Future
Nobis Engineering, Inc.
20410 Century Blvd Suite 230
Germantown, MD 20874
T301.528.2010
www.nobiseng.com
Client - Focused, Employee - Owned

G|W|O
GWOW
100 WYMAN PARK DRIVE, SUITE 300
BALTIMORE, MARYLAND 21211-1492 (USA)
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| Revisions: | No. | Date | Description |
|------------|-----|------------|-----------------------------------------|
| | 1 | 03/16/2015 | DESIGN DEVELOPMENT NOT FOR CONSTRUCTION |

WWES MODERNIZATION
Montgomery County Public Schools

Job No. 1308 Author _____ Drawn _____
Scale AS SHOWN Checker _____
Date 16 MARCH 2015 Approver _____
Drawing Title PRELIMINARY FOREST CONSERVATION PLAN Drawing Number _____
Sheet L-1.1

| FOREST CONSERVATION WORKSHEET | |
|------------------------------------------------------------------------------------|----------|
| WHEATON WOODS ELEMENTARY SCHOOL | |
| NET TRACT AREA: | 5-Aug-02 |
| A. Total tract area ... | 8.26 |
| 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 | 8.26 |

| LAND USE CATEGORY: (from Trees Technical Manual) | | | | | | |
|-------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|
| Input the number "1" under the appropriate land use, limit to only one entry. | | | | | | |
| | ARA | MDR | IDA | HDR | MPD | CIA |
| G. Afforestation Threshold ... | 0 | 0 | 1 | 0 | 0 | 0 |
| H. Conservation Threshold ... | | | | | | |

| EXISTING FOREST COVER: | |
|-------------------------------------------------|------|
| I. Existing forest cover | 0.00 |
| 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 | 0.00 |
| O. Total area of forest to be retained | 0.00 |

| PLANTING REQUIREMENTS: | |
|------------------------------------------------------------|------|
| P. Reforestation for clearing above conservation threshold | 0.00 |
| Q. Reforestation for clearing below conservation threshold | 0.00 |
| R. Credit for retention above conservation threshold | 0.00 |
| S. Total reforestation required | 0.00 |
| T. Total afforestation required | 1.24 |
| U. Credit for landscaping (may not exceed 20% of "S") | 0.00 |
| V. Total reforestation and afforestation required | 1.24 |

| |
|---------------------------------------------------|
| 8.03 ACRES OF PROPERTY AREA |
| 0.23 ACRES OF OFFSITE LOD AREA |
| * 8.26 ACRES OF TOTAL TRACT AREA |
| * 1.24 ACRES OF FOREST BANKING IS REQUIRED |

| GENERAL FCP NOTES: | |
|----------------------------------------------------------------------------------------------|--|
| 1. ROOT PRUNE TRENCH IS NOT TO IMPACT UTILITIES. | |
| 2. THE EXTENT OF ROOT PRUNING IS TO BE DETERMINED AT THE PRECONSTRUCTION MEETING. | |
| 3. NO CLEARING IS TO TAKE PLACE OUTSIDE OF THE LIMITS OF DISTURBANCE. | |
| 4. AREAS SHOWN TO BE CLEARED OUTSIDE OF THE LIMITS OF DISTURBANCE ARE FOR CALCULATIONS ONLY. | |

| SITE PLANTING NOTE: | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. TREES AND SHRUBS TO BE PLANTED OUTSIDE OF L.O.D. ARE TO BE DUG WITH HAND EQUIPMENT ONLY. NO MACHINERY IS TO GO OUTSIDE OF L.O.D. PLANTS ARE TO BE INSTALLED AND STABILIZED SAME DAY. | |

| SITE TABULATIONS: | |
|-----------------------------------------------------------------------------------------|----------------|
| ACREAGE OF TRACT: | 8.26 |
| 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 |
| ACREAGE OF EX. FOREST: | 0.00 |
| ACREAGE OF TOTAL FOREST RETENTION: | 0.00 |
| ACREAGE OF TOTAL FOREST CLEARED: | 0.00 |
| LAND USE CATEGORY: | IDA |
| AFFORESTATION THRESHOLD | 1.24 |
| CONSERVATION THRESHOLD | 1.65 |
| 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 | 0.00/0.00/0.00 |
| ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITH PRIORITY AREAS | 0.00/0.00/0.00 |
| LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER | 0'/0' |
| TOTAL DBH INCHES OF SPECIMEN TREES REMOVED | 390 |
| X 0.25 = REQUIRED CALIPER INCHES MITIGATION | 98 |
| TOTAL CALIPER INCHES OF SPECIMEN TREE MITIGATION | 33 |

| INSPECTIONS | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| All field inspections must be requested by the applicant. Inspections must be conducted as follows: | |
| Tree Save Plans and Forest Conservation Plans without Planting Requirements | |
| 1. After the limits of disturbance have been staked and flagged, but before any clearing or grading begins | |
| 2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin. | |
| 3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation. | |
| Additional Requirements for Plans with Planting Requirements | |
| 4. Before the start of any required reforestation and afforestation planting | |
| 5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period. | |
| 6. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond. | |

| Significant/Specimen Tree Summary 24" + | | | | | | | | | |
|-----------------------------------------|-------------------------|-------------------|---------------|---------------|----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------|--------------|--|
| Tree Species | Species | D.B.H | Critical Root | % CRZ | Tree | Comments | Status | | |
| # | (Scientific Name) | (Common Name) | (inches) | Zone (C.R.Z.) | Impacted | Condition | | | |
| 1 | FRAXINUS PENNSYLVANICA | GREEN ASH | 28 | 5542 | 41% | GOOD | OFFSITE-ROW/CUT&BROKEN LIMBS/INCLUDED BARK | REMOVE | |
| 2 | ACER SACCHARINUM | SILVER MAPLE | 32 | 7238 | 10% | GOOD | OFFSITE-ROW/BROKEN LIMBS | SAVE&PROTECT | |
| 3 | ACER RUBRUM | RED MAPLE | 31 | 6793 | 4% | GOOD | OFFSITE-ROW/CUT&BROKEN LIMBS/INCLUDED BARK | SAVE&PROTECT | |
| 4 | FRAXINUS PENNSYLVANICA | GREEN ASH | 26 | 4778 | 100% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/SPLIT AT 14/CUT&BROKEN LIMBS | REMOVE | |
| 5 | ACER SACCHARINUM | SILVER MAPLE | 26 | 4778 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/WATERSPROUTS&BROKEN/CUT LIMBS/DEBACK | SAVE&PROTECT | |
| 6 | ACER SACCHARINUM | SILVER MAPLE | 31 | 6793 | 8% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/IRREGULAR BARK/BARK DAMAGED/BROKEN&CUT LIMBS | SAVE&PROTECT | |
| 7 | ACER SACCHARINUM | SILVER MAPLE | 32 | 7238 | 14% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/IRREGULAR BARK/DEAD&BROKEN/CUT LIMBS | SAVE&PROTECT | |
| 8 | ACER SACCHARINUM | SILVER MAPLE | 43 | 13070 | 16% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/SWOLLEN ROOT COLLAR/SUNKEN&SWOLLEN TRUNK/CONKS/DEAD&BROKEN LIMBS | SAVE&PROTECT | |
| 9 | ACER RUBRUM | RED MAPLE | 26 | 4778 | 0% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/IRREGULAR BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 10 | ACER SACCHARINUM | SILVER MAPLE | 27 | 5153 | 0% | GOOD | OFFSITE-ROW/EXPOSED ROOTS/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 11 | ACER SACCHARINUM | SILVER MAPLE | 34 | 8171 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/WATERSPROUTS/BROKEN&CUT LIMBS | SAVE&PROTECT | |
| 12 | ACER SACCHARINUM | SILVER MAPLE | 33 | 7698 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT ROT/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 13 | ACER SACCHARINUM | SILVER MAPLE | 29 | 5945 | 0% | FAIR | OFFSITE-ROW/CAVITY/INCLUDED BARK/HEART ROT/BROKEN LIMBS/WATERSPROUTS | SAVE&PROTECT | |
| 14 | FRAXINUS PENNSYLVANICA | GREEN ASH | 30 | 6322 | 34% | GOOD | OFFSITE-ROW/INCLUDED BARK/CUT&BROKEN LIMBS | REMOVE | |
| 15 | ACER SACCHARINUM | SILVER MAPLE | 36 | 9161 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/BROKEN LIMBS | SAVE&PROTECT | |
| 16 | ACER SACCHARINUM | SILVER MAPLE | 26 | 4778 | 0% | FAIR | OFFSITE-ROW/INCLUDED BARK/BROKEN LEA DER/BROKEN LIMBS | SAVE&PROTECT | |
| 17 | ACER SACCHARINUM | SILVER MAPLE | 33 | 7698 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT ROT/SPLIT AT 6/INCLUDED BARK/BROKEN LIMBS | SAVE&PROTECT | |
| 18 | ACER SACCHARINUM | SILVER MAPLE | 30 | 6362 | 0% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT ROT/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 19 | ACER SACCHARINUM | SILVER MAPLE | 38 | 10207 | 7% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT ROT/INCLUDED BARK/CAVITY/DECAY | SAVE&PROTECT | |
| 20 | ACER RUBRUM | RED MAPLE | 35 | 8659 | 100% | POOR | EXPOSED&DAMAGED ROOTS/TRUNK DAMAGED/LARGE CAVITY/HOLLOW/HEART ROT/DEAD&BROKEN LEA DER/WEAK ATTACHMENTS/BROKEN LIMBS/POTENTIAL HAZARD | REMOVE | |
| 21 | ROBINIA PSEUDOACACIA | BLACK LOCUST | 27 | 5153 | 100% | FAIR | GIRDLED ROOTS/CUT LEA DER/INCLUDED BARK/BROKEN LIMBS/POTENTIAL HAZARD | REMOVE | |
| 22A | ROBINIA PSEUDOACACIA | BLACK LOCUST | 27 | 5153 | 100% | POOR | SPLIT AT 3/1 FELL LEA DER/LARGE CAVITY/HEART ROT/HOLLOW/EXPOSED&DAMAGED ROOTS/DEAD&BROKEN LIMBS | REMOVE | |
| 22B | ROBINIA PSEUDOACACIA | BLACK LOCUST | 28 | 5542 | 100% | POOR | ROOTS/DEAD&BROKEN LIMBS | REMOVE | |
| 23 | QUERCUS RUBRA | RED OAK | 32 | 7238 | 100% | FAIR | EXPOSED&DAMAGED ROOTS/LEAN/BROKEN LIMBS/CUT SCAFFOLD | REMOVE | |
| 24 | LIRIODENDRON TULIPIFERA | YELLOW POPLAR | 40 | 11310 | 100% | GOOD | VINES/BROKEN LIMBS | REMOVE | |
| 25 | QUERCUS ALBA | WHITE OAK | 28 | 5542 | 100% | GOOD | GIRDLED ROOTS/LEAN TOWARD BALL/FELL/DEAD&BROKEN LIMBS/VINES/DEBACK | REMOVE | |
| 26 | QUERCUS ALBA | WHITE OAK | 31 | 6793 | 100% | GOOD | EXPOSED&DAMAGED ROOTS/DEAD&BROKEN LIMBS | REMOVE | |
| 27 | QUERCUS ALBA | WHITE OAK | 24 | 4072 | 100% | GOOD | LEAN TOWARD ROAD/DEAD&BROKEN LIMBS | REMOVE | |
| 28 | QUERCUS ALBA | WHITE OAK | 30 | 6362 | 100% | GOOD | DEAD&BROKEN LIMBS | REMOVE | |
| 29 | QUERCUS ALBA | WHITE OAK | 30 | 6362 | 100% | GOOD | EXPOSED&DAMAGED ROOTS/DEAD&BROKEN LIMBS | REMOVE | |
| 30 | QUERCUS ALBA | WHITE OAK | 34 | 8171 | 100% | GOOD | GIRDLED ROOTS/DEAD&BROKEN LIMBS/VINES/DEBACK | REMOVE | |
| 31 | CARYA TOMENTOSA | MOCKERNUT HICKORY | 33 | 7698 | 100% | GOOD | 75% COUNTY CHAMPI/EXPOSED&DAMAGED ROOTS/DEAD&BROKEN&CUT LIMBS/VINES | REMOVE | |
| 32 | ACER SACCHARINUM | SILVER MAPLE | 34 | 8171 | 1% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/BROKEN LIMBS | SAVE&PROTECT | |
| 33 | ACER RUBRUM | RED MAPLE | 38 | 10207 | 2% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT COLLAR/DAMAGED/ROT/INCLUDED BARK/BROKEN LIMBS/WATERSPROUTS/TRUNK DAMAGE | SAVE&PROTECT | |
| 34 | ACER SACCHARINUM | SILVER MAPLE | 28 | 5542 | 14% | GOOD | OFFSITE-ROW/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 35 | ACER RUBRUM | RED MAPLE | 28 | 5542 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/BROKEN LIMBS/CAVITY/HEART ROT | SAVE&PROTECT | |
| 36 | VOID | VOID | VOID | VOID | VOID | VOID | REMOVED DUE TO HAZARDOUS CONDITION | VOID | |
| 37 | ACER SACCHARINUM | SILVER MAPLE | 32 | 7238 | 0% | FAIR | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/ROOT ROT/INCLUDED BARK/BROKEN LIMBS/CONKS | SAVE&PROTECT | |
| 38 | ACER SACCHARINUM | SILVER MAPLE | 29 | 5945 | 0% | FAIR | OFFSITE-ROW/INCLUDED BARK/WATERSPROUTS/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 39 | ACER SACCHARINUM | SILVER MAPLE | 36 | 9161 | 14% | FAIR | OFFSITE-ROW/INCLUDED BARK/BROKEN LIMBS/CAVITY/DECAY | SAVE&PROTECT | |
| 40 | ACER SACCHARINUM | SILVER MAPLE | 34 | 8171 | 6% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 41 | ACER SACCHARINUM | SILVER MAPLE | 40 | 11310 | 2% | FAIR | OFFSITE-ROW/INCLUDED BARK/CAVITY/DECAY/BROKEN LIMBS | SAVE&PROTECT | |
| 42 | VOID | VOID | VOID | VOID | VOID | VOID | REMOVED DUE TO HAZARDOUS CONDITION | VOID | |
| 43 | ACER SACCHARINUM | SILVER MAPLE | 47 | 15615 | 8% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/CUT&BROKEN LIMBS | SAVE&PROTECT | |
| 44 | ACER SACCHARINUM | SILVER MAPLE | 26 | 4778 | 0% | GOOD | OFFSITE-ROW/EXPOSED&DAMAGED ROOTS/INCLUDED BARK/CUT&BROKEN LIMBS | REMOVE | |
| 45 | ULMUS PUMILA | SIBERIAN ELM | 31 | 6793 | 100% | POOR | EXPOSED&DAMAGED ROOTS/ROOT ROT/INCLUDED BARK/DEAD&BROKEN LIMBS/BARK PEELING/DECAY IN LIMBS/HAZARD | REMOVE | |
| 46 | VOID | VOID | VOID | VOID | VOID | VOID | REMOVED DUE TO HAZARDOUS CONDITION | REMOVE | |
| 47 | ACER RUBRUM | RED MAPLE | 26 | 4778 | 100% | POOR | EXPOSED&DAMAGED ROOTS/DEAD&BROKEN&CUT LIMBS/HEART ROT/DECAY IN LIMBS | REMOVE | |
| 48 | ULMUS PUMILA | SIBERIAN ELM | 26 | 4778 | 100% | FAIR | EXPOSED&DAMAGED ROOTS/GIRDLED ROOTS/ROOT ROT/DEAD&BROKEN&CUT LIMBS/BARK PEELING/INCLUDED BARK/POTENTIAL HAZARD | REMOVE | |
| 49 | LIQUIDAMBAR STYRACIFLUA | SWEETGUM | 26 | 4778 | 100% | FAIR | EXPOSED&DAMAGED ROOTS/DEAD&BROKEN&CUT LIMBS/WATERSPROUTS | REMOVE | |
| 50 | ACER RUBRUM | RED MAPLE | 33 | 7698 | 100% | GOOD | EXPOSED&DAMAGED ROOTS/INCLUDED BARK/CAVITIES/DEAD&BROKEN LIMBS | REMOVE | |
| 51 | ULMUS PUMILA | SIBERIAN ELM | 31 | 6793 | 100% | FAIR | TRUNK DAMAGED/AGED LEADER/WATERSPROUTS/DEAD&BROKEN LIMBS | REMOVE | |
| 52 | LIQUIDAMBAR STYRACIFLUA | SWEETGUM | 26 | 4778 | 100% | FAIR | TRUNK DAMAGED/SWOLLEN TRUNK/HEART ROT | REMOVE | |
| 53 | ACER SACCHARINUM | SILVER MAPLE | 27.19 | 5153 | 100% | GOOD | SPLIT AT 3/EXPOSED&DAMAGED ROOTS/ROOT ROT/PRUNED/BROKEN LIMBS/DEBACK | REMOVE | |

| BOLD TYPE DENOTES SPECIMEN TREES | |
|----------------------------------|-----------|
| Condition Scoring System | |
| No Apparent Problems | Excellent |
| Minor Problems | Good |
| Major Problems | Fair |
| Extreme Problems | Poor |

| Sequence of Events for Properties Required to Comply with Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Pre-Construction | |
| 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance. The property owner shall contact the Montgomery County Planning Department inspection staff before any land disturbing activities occur to verify the limits of disturbance and discuss tree protection and tree care measures. The property owner's representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist or Maryland licensed tree expert that will implement the tree protection measures, Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector must attend this pre-construction meeting. | |
| 2. No land disturbance shall begin before stress-reduction measures have been implemented. Appropriate stress-reduction measures may include, but are not limited to: a. Root pruning b. Crown reduction or pruning c. Watering d. Fertilizing e. Vertical mulching f. Root aeration matting Measures not specified on the plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist. | |
| 3. A Maryland licensed tree expert, or an ISA certified arborist must perform all stress reduction measures. Implementation of the stress reduction measures must be observed by the Forest Conservation Inspector or written documentation must be sent to the Forest Conservation Inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The Forest Conservation Inspector will determine the exact method to convey the implementation of all stress reduction measures during the pre-construction meeting. | |
| 4. Temporary tree protection devices shall be installed per the approved Forest Conservation Plan, exemption from submitting a Forest Conservation Plan, or Tree Save Plan and prior to any land disturbance. Tree protection fencing locations must be staked and flagged prior to the pre-construction meeting. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. Temporary tree protection devices may include: a. Chain link fence (four feet high) b. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging. c. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging. | |

| During Construction | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 5. Temporary protection devices must be maintained and installed by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No vehicle or equipment access to the fenced area is permitted. Tree protection must not be removed without prior approval of Forest Conservation Inspector. | |
| 6. Forest retention area signs must be installed as required by the Forest Conservation Inspector, or as shown on the approved plan. | |
| 7. Long-term protection devices must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed. | |

| Post-Construction | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 8. Periodic inspections by the Forest Conservation Inspector will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the Forest Conservation Inspector, must be made within the timeframe established by the Forest Conservation Inspector. | |
| 9. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions to restore these areas will be determined by the Forest Conservation Inspector and those corrective actions must be made within the timeframe established by the Forest Conservation Inspector. | |

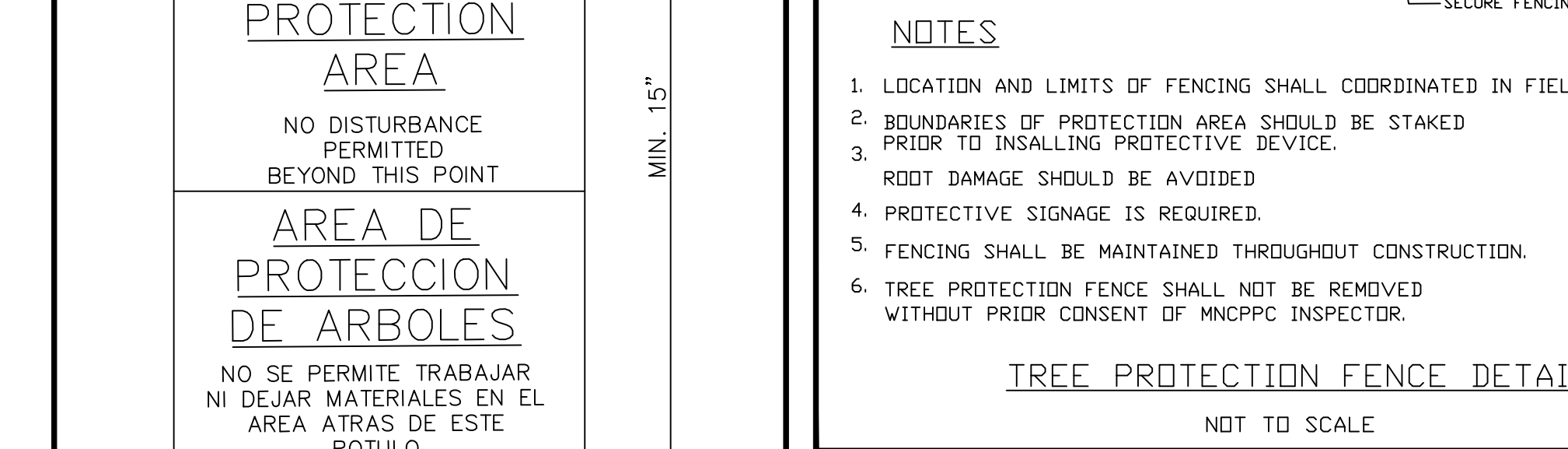
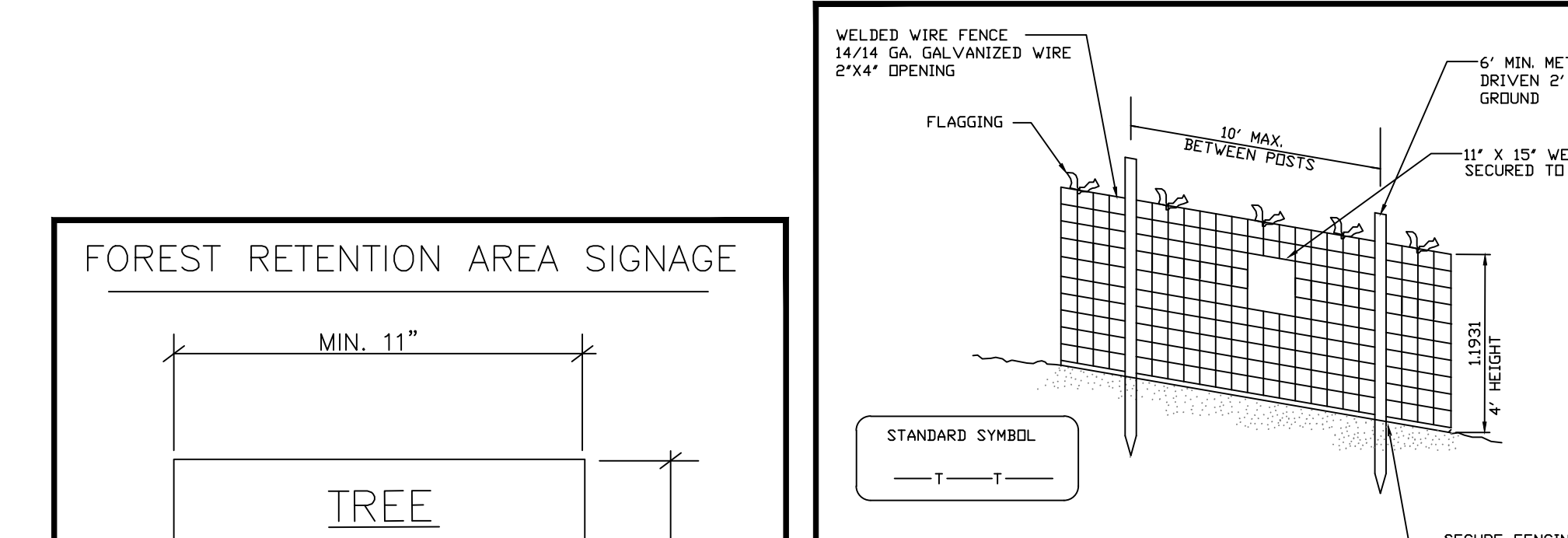
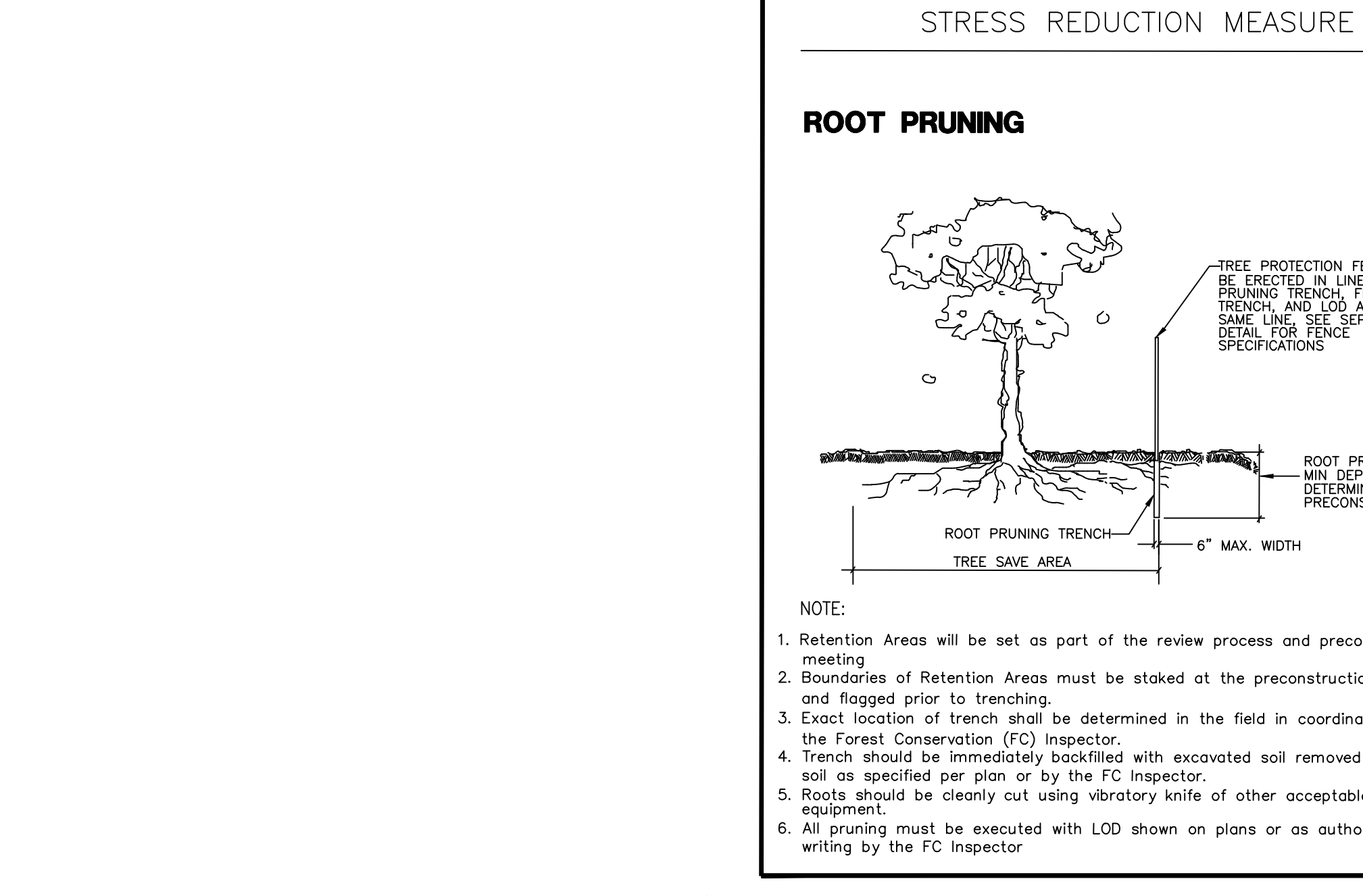
| 11. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed. | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|



| PROPOSED SPECIMEN TREE MITIGATION PLANT SCHEDULE | | | | | | |
|--------------------------------------------------|---------------------------------------|---------------------|--------|------|---------|----------|
| KEY | BOTANICAL NAME | COMMON NAME | SIZE | FORM | SPACING | QUANTITY |
| TREES | | | | | | |
| AS | ACER SACCHARINUM | SUGAR MAPLE | 3" CAL | B&B | SHOWN | 12 |
| CL | CLADASTIS LUTEA | YELLOWWOOD | 3" CAL | B&B | SHOWN | 6 |
| LS | LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA' | FRUITLESS SWEET GUM | 3" CAL | B&B | SHOWN | 7 |
| PO | PLATANUS OCCIDENTALIS | AMERICAN SYCAMORE | 3" CAL | B&B | SHOWN | 4 |
| OR | QUERCUS RUBRA | RED OAK | 3" CAL | B&B | SHOWN | 4 |

*INDIVIDUAL TREE LOCATION TO BE SHOWN ON FINAL FOREST CONSERVATION PLAN

NOTES:
- TREES ARE TO BE GUARANTEED FOR TWO YEARS.
- ALL PLANTS SHALL BE WATERED FOR A TWO YEAR PERIOD AS REQUIRED.



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

| DATE | SIGNATURE |
|------|---------------------------------------------------------------------------------------------------|
| | MICHAEL A. NORTON MONTGOMERY COUNTY PUBLIC SCHOOLS DIRECTOR, DIVISION OF CONSTRUCTION, MCPS |

| DEVELOPER'S CERTIFICATE | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. _____ including financial bonding, forest planting, maintenance, and all other applicable agreements. | |
| Developer's Name: | MONTGOMERY COUNTY PUBLIC SCHOOLS |
| Contact Person or Owner: | MR. R. CRAIG SHUMAN JR. DIRECTOR, DIVISION OF CONSTRUCTION, MCPS |
| Address: | 45 WEST GUYE DRIVE, SUITE 4300 ROCKVILLE, MD 20850 |
| Phone and Email: | 240-314-1000 richard_c_shumanjr@mcpsmd.org |
| Signature: | |

| WATER CLASS | USE | WATERSHED | FEMA FLOODPLAIN |
|-------------|-------|-------------------|--------------------------|
| TRIBUTARY | USE 1 | LOWER ROCK CREEK | MAP PANEL # 24031C 0355D |
| TAX MAP | HR341 | ZOO SHEET 217NW04 | ADC MAP # 30 GRID B-9 |
| ZONING | R-60 | LAND USE INST | PROPERTY SIZE 8.30 ACRES |

KEY PLAN:

KEYNOTES LISTED ON THIS SHEET ARE FOR CONVENIENCE ONLY. REFER TO SHEET CS-2 FOR COMPLETE LIST

Norton Land Design
Landscape Architecture + Environmental Planning
Ashburn, Maryland, 20861
www.nortonlanddesign.com
17830 New Hampshire Avenue
P-240-342-2225 F-240-342-2052

Nobis
Engineering a Sustainable Future
Nobis Engineering, Inc.
20410 Century Blvd Suite 230
Germantown, MD 20874
T301.528.2010
www.nobiseng.com
Client - Focused, Employee - Owned

Seal: _____

G|W|O
GUYE WEST
180 WYMAN PARK DRIVE, SUITE 300
BETHESDA, MARYLAND 20814-1089
2013 GWVO INC.

Seal: _____

| No. | Date | Description |
|-----|------------|-----------------------------------------|
| 1 | 03/16/2015 | DESIGN DEVELOPMENT NOT FOR CONSTRUCTION |

WWES MODERNIZATION
Montgomery County Public Schools

Job No. 1308 Author _____ Drawn _____
Scale AS SHOWN Checker _____ Checked _____
Date 16 MARCH 2015 Approver _____ Approved _____

Drawing Title: PRELIMINARY FOREST CONSERVATION PLAN
Drawing Number: L-1.2

Attachment 2



July 10, 2015
REVISED July 24, 2015

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

Re: Wheaton Woods Elementary School Modernization
Request for Specimen Tree Variance
MNCPPC NRI# 420151340

Dear Ms. Lindsey:

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 and proposed Preliminary Forest Conservation Plan for the above-named County construction project:

Project Description:

The proposed Wheaton Woods Elementary School is located at 4510 Faroe Place in Rockville, Montgomery County, Maryland. The site is approximately 8.03 acres and is comprised of one parcel owned by The Board of Education. The site currently hosts ballfields, play areas and associated parking. There is no forest onsite. The site is within a residential neighborhood.

Proposed construction consists of a new school, improved circulation and parking, ball fields additional play 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 was to provide the community with an area elementary 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 impacts and/or removal of a total of twenty four (24) specimen trees. Several designs were studied as part of the feasibility period with the specimen trees mapped to work at minimizing the impacts. At the end of the study period, it was determined to compact the parking and drive aisles with retaining walls and multi-story building

If MCPS is not allowed to remove the trees as requested, the school will not be able to be constructed the school and facilities 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 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: 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. 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: A substantial native landscape planting plan 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 new 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.

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 "M. Norton", written in a cursive style.

Michael Norton

Attachment 3



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Lisa Feldt
Director

August 14, 2015

Casey Anderson, Chair
Montgomery County Planning Board
Maryland National Capital Park & Planning Commission
8787 Georgia Avenue
Silver Spring, Maryland 20910

RE: Wheaton Woods ES, MR 2016001, sediment control permit application accepted on 1/28/2015

Dear Mr. Anderson:

All applications for a variance from the requirements of Chapter 22A of the County Code submitted after October 1, 2009 are subject to Section 22A-12(b)(3). Accordingly, given that the application for the above referenced request was submitted after that date and must comply with Chapter 22A, and the Montgomery County Planning Department ("Planning Department") has completed all review required under applicable law, I am providing the following recommendation pertaining to this request for a variance.

Section 22A-21(d) of the Forest Conservation Law 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;
2. Is based on conditions or circumstances which are the result of the actions by the applicant;
3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
4. Will violate State water quality standards or cause measurable degradation in water quality.

Applying the above conditions to the plan submitted by the applicant, I make the following findings as the result of my review:

1. The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance can be granted under this criterion.
2. Based on a discussion on March 19, 2010 between representatives of the County, the Planning Department, and the Maryland Department of Natural Resources Forest Service, the disturbance of trees, or other vegetation, as a result of development activity is not, in and of itself, interpreted as a condition or circumstance that is the result of the actions by the applicant. Therefore, the



variance can be granted under this criterion, as long as appropriate mitigation is provided for the resources disturbed.

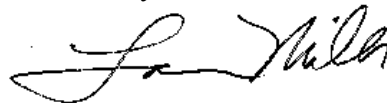
3. The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance can be granted under this criterion.
4. The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance can be granted under this criterion.

Therefore, I recommend a finding by the Planning Board that this applicant qualifies for a variance conditioned upon the applicant mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law based on the limits of disturbance (LOD) recommended during the review by the Planning Department. In the case of removal, the entire area of the critical root zone (CRZ) should be included in mitigation calculations regardless of the location of the CRZ (i.e., even that portion of the CRZ located on an adjacent property). When trees are disturbed, any area within the CRZ where the roots are severed, compacted, etc., such that the roots are not functioning as they were before the disturbance must be mitigated. Exceptions should not be allowed for trees in poor or hazardous condition because the loss of CRZ eliminates the future potential of the area to support a tree or provide stormwater management. Tree protection techniques implemented according to industry standards, such as trimming branches or installing temporary mulch mats to limit soil compaction during construction without permanently reducing the critical root zone, are acceptable mitigation to limit disturbance. Techniques such as root pruning should be used to improve survival rates of impacted trees but they should not be considered mitigation for the permanent loss of critical root zone. I recommend requiring mitigation based on the number of square feet of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

In the event that minor revisions to the impacts to trees subject to variance provisions are approved by the Planning Department, the mitigation requirements outlined above should apply to the removal or disturbance to the CRZ of all trees subject to the law as a result of the revised LOD.

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

Sincerely,



Laura Miller
County Arborist

cc: Amy Lindsey, Planner Coordinator