



Snouffer School Road North (Webb Tract)

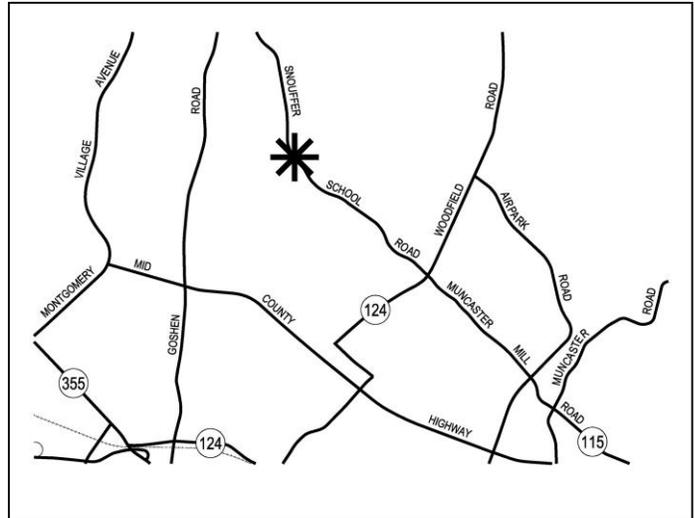
Part E: Lois Y. Green Farm Conservation Park, Amended Forest Conservation Plan, SC2008018

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Completed: 5/16/16

Description

- Request to Amend Final Forest Conservation Plan to allow for the widening of Snouffer School Road and associated stream restoration;
- Snouffer School Road south of Turkey Thicket Drive;
- 47.81 acres, R-200 Zone;
- 1985 (Amended 1990) *Gaithersburg Vicinity Master Plan*;
- Applicant: Montgomery County Department of Transportation;
- Filing date: 3/23/2016.



Summary

- Staff recommends approval with conditions.
- Pursuant to Chapter 22A of the County Code, the Board’s actions on Forest Conservation Plans are regulatory and binding.
- This is one of the three forest conservation plan actions associated with the Snouffer School Road North project, Mandatory Referral No. MR2014038.

Conditions of Approval

1. Prior to demolition, clearing, or grading, the Applicant must revise the amended Final Forest Conservation Plan to reflect all requirements of COMCOR 22A.00.01.09.
2. The Applicant must plant a minimum total of 87 caliper inches of native canopy trees as mitigation for the tree variance impacts on the Property within one calendar year or two growing seasons after completion of road construction. The trees must be a minimum of three-inch caliper each.
3. The Final Forest Conservation Plan must show how the 2.80-acre reforestation requirement will be met.
4. The Sediment Control Plan must be consistent with the limits of disturbance shown on the amended Final Forest Conservation Plan.

OVERVIEW

The 47.8-acre Property is located on Snouffer School Road, adjacent to the Montgomery County Airpark. Staff approved a Final Forest Conservation Plan (FFCP) on January 22, 2008 associated with the development of an entrance and parking area (Attachment 1) required as part of Preliminary Plan 120040180, Airpark North Business Park (Attachment 2).

ANALYSIS

Forest Conservation

This Property (outlined in red) is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code). The submitted FFCP amendment (Attachment 3) allows for the widening of Snouffer School Road and the stream restoration associated with this road improvement project. Approximately 1,500 linear feet of Cabin Branch will be stabilized and restored as part of this project.

The amended FFCP shows the clearing of 2.8 acres of forest that was previously approved as retained. Although the Property will still have approximately 8.45 acres of forest retention above the break-even point (a level of forest retention that does not require reforestation), the Planning Board has consistently required mitigation plantings for the loss of forest previously approved as retained or protected by conservation easements. In order to be consistent with this policy, Staff is recommending that the Applicant must either plant 2.8 acres of forest on-site or plant a minimum of 5.6 acres of forest



off-site. The Applicant has submitted a planting plan showing individual trees with this amendment. However, the amended FFCP must be revised to reflect the requirements of COMCOR 22A.00.01.09, to show appropriate acreages of forest planting.

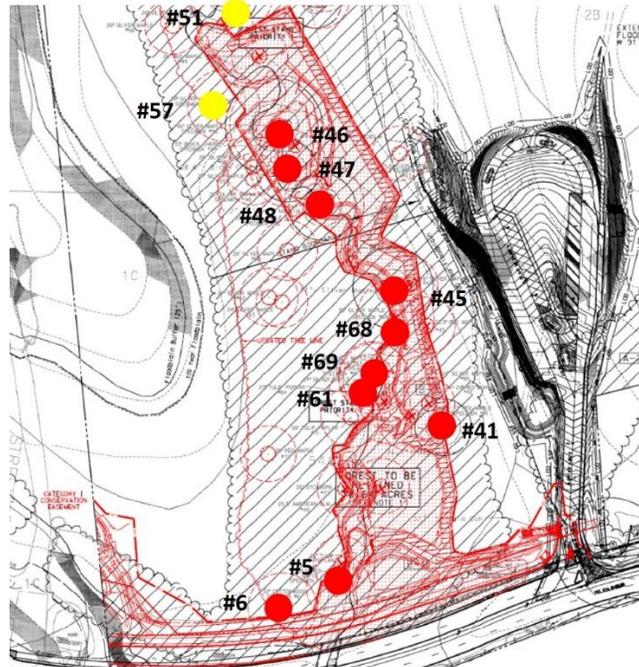
Forest Conservation Variance

Section 22A-12(b) (3) of the County Code provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance for any impact, including removal or disturbance within the tree’s critical root zone (CRZ), to trees that are: 30 inches or greater Diameter at Breast Height (DBH); part of a historic site or designated with a historic structure; designated as national, State, or County champion trees; at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs and plants that are designated as Federal or State rare, threatened, or endangered species. 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.

On February 2, 2016, the Applicant submitted a variance request for the increased impacts to high priority trees (revised on March 14, 2016 and again on April 12, 2016), to remove 10 trees, and impact, but retain, two trees that are considered high priority for retention under Section 22A-12 (b) (3) of the County Forest Conservation Law (Attachment 4).

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 would result in unwarranted hardship. In this case, the unwarranted hardship is caused by the need for the widening of Snouffer School Road and related stream restoration. Access and grading have been designed to minimize forest and tree loss. The design has taken into consideration the natural resources and significant trees. The roadway and associated median have been reduced to the minimum width feasible for a divided road and bridge. Separation of the bridge is required due to a combination of clearance for flood conveyance and the 5 percent super-elevation of the bridge. Increasing the overall elevation of the bridge to an elevation sufficient to allow a single-span structure increases the height of bridge approaches, affecting site visibility near an intersection and increasing the width of fill required for side slopes, all of which increases the likelihood of impacts to wetlands, wetland buffers, forest stands, or other specimen candidate trees as well as construction cost.

Variance Tree Locations



Variance Tree Tables

Removals

ID	Species	Size	Condition	Notes
5	Silver maple	30.1"	Fair	Bridge construction and stream restoration.
6	Cottonwood	32.0"	Fair	Road widening.
41	Red maple	33.0"	Good	Access for stream restoration.
45	Silver maple	37"	Good	Stream restoration and access.
46	Silver maple	46"	Excellent	Stream restoration.
47	Black cherry	33"	Poor	Stream restoration.
48	Silver maple	36"	Good	Stream restoration.
61	Tulip poplar	33"	Good	Stream restoration.
68	Silver maple	36"	Excellent	Stream restoration.
69	Silver maple	32"	Good	Stream restoration.

Impacts

ID	Species	Size	Condition	Notes
51	Silver maple	42"	Good	Stream restoration and access.
57	Silver maple	34"	Fair	Stream restoration.

Variance Findings - Based on the review of the variance request and the proposed Amended 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.*

The disturbance to the specified trees is a result of the need to widen Snouffer School Road and restore Cabin Branch stream. The Applicant will not be able to do either activity without disturbing the listed trees. Granting this variance request is not a special privilege that would be denied to other applicants.

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 which are the result of actions by the Applicant. The variance is based on the location of the trees next to the road and stream. Disturbance has been minimized by siting the stream restoration access away from the stream and forest.

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 road widening and stream restoration and construction, and not a result of land or building use on a neighboring property.

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

The proposed project should improve water quality by restoring the stream channel and providing bank stabilization. Additionally, the new trees proposed as mitigation for the loss of specimen trees will enhance the form and function of the existing tree canopy. Trees protect water quality by reducing runoff through rainfall interception and water uptake. The trees also provide shade for impervious areas and improve soil texture, which also results in improved water quality.

Mitigation for Trees Subject to the Variance Provisions – Generally, mitigation is recommended for trees removed but not for trees impacted but retained. The proposed removal of ten trees will be mitigated by additional plantings. Mitigation planting is calculated at the rate of 1 caliper inch planted per 4-inch DBH lost. Using this ratio, the Applicant will be required to plant a total of 87 caliper inches of native canopy trees as mitigation for the tree variance impacts on the Site within one calendar year or two growing seasons after completion of road construction. The trees must be a minimum of three-inch caliper each.

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. Staff forwarded the request to the County Arborist on 4/19/2016. A response letter has not been received at time of staff report posting.

Variance Recommendation – Staff recommends the variance be granted.

Conclusion

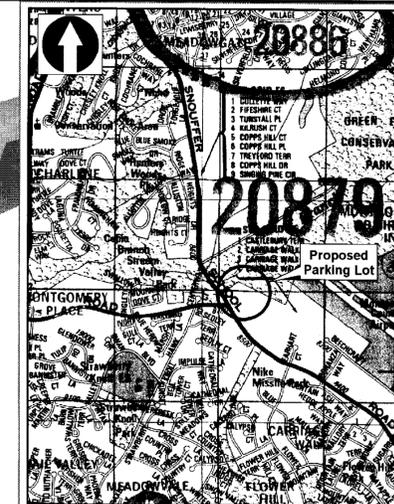
Staff recommends that the Planning Board approve the Amended Final Forest Conservation Plan with the conditions stated above. The variance approval is assumed into the Planning Board's approval of the Amended Final Forest Conservation Plan.

ATTACHMENTS:

1. 2008 Final Forest Conservation Plan
2. Planning Board Opinion, Preliminary Plan 1004018
3. Proposed Amended Final Forest Conservation Plan
4. Variance Request

MATCHLINE (SEE SHEET 2 OF 3)

MONTGOMERY COUNTY
AIRPARK INDUSTRIAL SITES
PLAT 22630



VICINITY MAP
not to scale



SOILS TABLE				
SYMBOL	SOIL SYSTEM	K VALUE	HYDRIC - Y/N	STRUCTURAL LIMITATIONS
1C	GAULA SILT LOAM 3-8% SLOPES	0.37	N	SEVERE FOR SHALLOW EXCAVATIONS DUE TO CAVING CUTBANKS MODERATE FOR LOCAL ROADS AND STREETS DUE TO FROST ACTION
2B	GLENELE SILT LOAM 3-8% SLOPES	0.32	N	SLIGHT FOR SHALLOW EXCAVATIONS MODERATE FOR LOCAL ROADS DUE TO FROST ACTION
6A	BAILE SILT LOAM 0-3% SLOPES	0.43	Y	SEVERE FOR SHALLOW EXCAVATIONS DUE TO WETNESS SEVERE FOR LOCAL ROADS AND STREETS DUE TO WETNESS AND FROST ACTION
16D	BRINKLOW-BLOCKTOWN CHANNERY SILT LOAM 15-25% SLOPES	0.28	N	SEVERE FOR SHALLOW EXCAVATIONS DUE TO DEPTH TO ROCK AND SLOPE SEVERE FOR LOCAL ROADS AND STREETS DUE TO SLOPE
54A	HAYBIRD SILT LOAM 0-3% SLOPES FREQUENTLY FLOODED	0.49	Y	SEVERE FOR SHALLOW EXCAVATIONS DUE TO WETNESS SEVERE FOR LOCAL ROADS AND STREETS DUE TO FLOODING, WETNESS AND FROST ACTION

LEGEND

- Property Line
- 2B Existing Contours
- Soils
- Existing Tree Line
- Existing Stream
- Stand Boundary Line
- Specimen Trees
- C-2 Sample Plot Location
- Temporary Tree Protection
- Forest to be Retained
- Cut
- Fill
- Proposed Grade
- L00 Limits of Disturbance
- Critical Root Zone
- 15-25% Slopes
- 25% or Greater Slopes
- 100 Yr. Floodplain
- 25 Ft. Floodplain Buffer
- Stream Valley Buffer

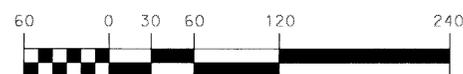
GENERAL NOTES

1. FOREST TO BE RETAINED WILL BE OWNED AND MANAGED BY M-NCPPC AS A PARK.
2. TOTAL TRACT AREA = 47.81 ACRES.
3. EXISTING ZONING: IDA
4. 100 YEAR FLOODPLAIN OBTAINED FROM DPS.

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION
FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. SC 2008018
Signature: [Signature] Date: 1-22-08



NO.	REVISION	DATE	BY

THIS PLAN WAS PREPARED BY
MICHAEL TRUMBauer
KCI TECHNOLOGIES
MDNR QUALIFIED PROFESSIONAL STATUS
(8/30/2002)

Signature: [Signature] Date: 12/14/07

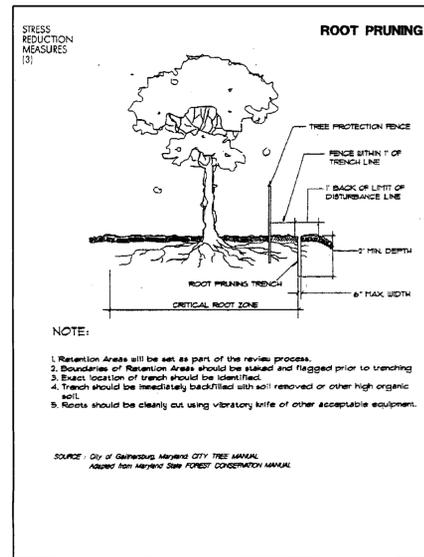
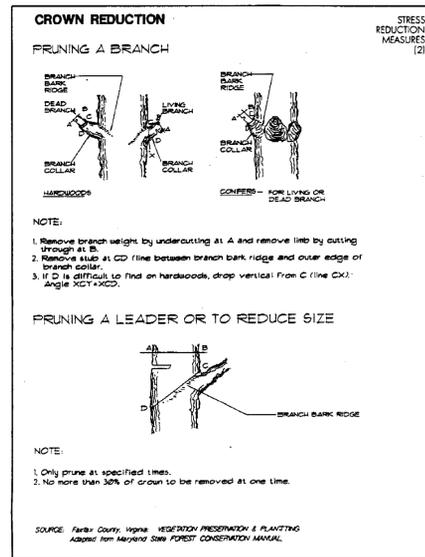
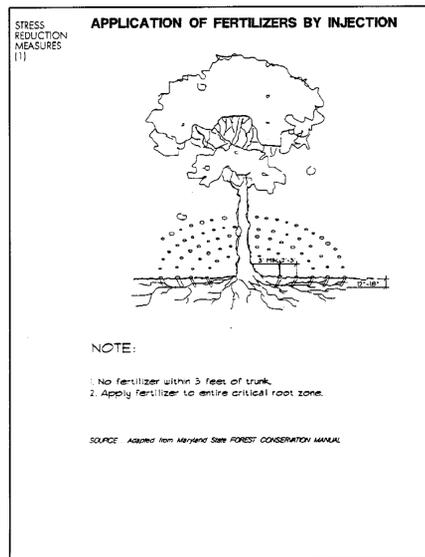
LOIS Y. GREEN
CONSERVATION FARM PARK
FOREST CONSERVATION PLAN

SCALE: 1" = 60'

Date Prepared: DECEMBER 2007

Project No.: 01065185

SHEET 1 of 3



FOREST SUMMARY TABLE

AREA WITHIN THE MONTGOMERY COUNTY AIRPARK PARCEL

TOTAL FOREST (Ac.)	23.62 Ac.
WETLAND (Ac.)	0.00
FORESTED WETLAND (Ac.)	0.00
STREAM BUFFER (Ac.)	25.21 Ac.
FORESTED STREAM BUFFER (Ac.)	21.76 Ac.

SPECIMEN TREES

NUMBER	DBH	BOTANICAL / COMMON NAME	CONDITION
1	26.1"	Acer rubrum / Red Maple	Good
2	37.0"	Acer saccharinum / Silver Maple	Good
3	31.2"	Acer saccharinum / Silver Maple	Good
4	28.6"	Prunus serotina / Black Cherry	Good
5	44.9"	Acer saccharinum / Silver Maple	Good
6	31.7"	Acer rubrum / Red Maple	Good
7	25.7"	Liriodendron tulipifera / Tulip Poplar	Good
8	29.0"	Liriodendron tulipifera / Tulip Poplar	Good
9	51.0"	Quercus imbricaria / Shingle Oak	Dead - Remove

FOREST CONSERVATION WORKSHEET

Lois Green Conservation Park Parking Lot

NET TRACT AREA:

A. Total tract area ...	47.81
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	47.81

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
0	0	1	0	0	0

G. Afforestation Threshold ... 15% x F = 7.17
H. Conservation Threshold ... 20% x F = 9.56

EXISTING FOREST COVER:

I. Existing forest cover	23.62
J. Area of forest above afforestation threshold	16.45
K. Area of forest above conservation threshold	14.06

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation	12.37
M. Clearing permitted without mitigation	11.25

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared	0.53
O. Total area of forest to be retained	23.09

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold	0.13
Q. Reforestation for clearing below conservation threshold	0.00
R. Credit for retention above conservation threshold	13.53
S. Total reforestation required	0.00
T. Total afforestation required	0.00
U. Credit for landscaping (may not exceed 20% of "S")	0.00
V. Total reforestation and afforestation required	0.00

EXPLANATION OF PRIORITY

Maximum priority has been given to the retention of the existing forest during the design of the Lois Y. Green Farm Conservation Park Parking Lot. The forest conservation requirement will be met through the retention of existing forest resources IN THE AMOUNT OF 23.09 ACRES.

GENERAL NOTES

Standard non-disturbance note:
"There shall be no clearing, grading, construction, or disturbance of vegetation in the Forest Conservation Easement except as permitted by the Maryland National Capital Park & Planning Commission."

Reforestation Note:
There ARE NO reforestation requirements for this project.
For additional information on existing forest conditions, refer to the Forest Stand Delineation Report prepared by KCI Technologies, Inc.

SEQUENTIAL TIMETABLE

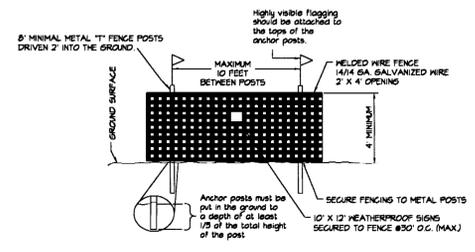
- Notify the owner's Engineer and the Maryland National Capital Park & Planning Commission for a pre-construction meeting to field verify the limits of clearing specified on the approved plan and authorize installation of protection devices.
- Install Temporary Forest Protection Fencing (SEE DETAIL - THIS SHEET) around the forest and tree areas to be protected, as indicated on this plan. Contact the qualified professional who prepared this plan to set the fence location in the field. Install sediment control devices and proceed with clearing and grading activities (A second inspection may be required after installation of the protection devices and prior to clearing and grading activities).
- When all construction is completed, contact the Maryland National Capital Park & Planning Commission for inspection. A qualified tree professional may be required to evaluate remaining trees and suggest corrective actions.
- Following the completion of all corrective measures, the owner shall request an inspection by staff.
- After construction has been completed all short-term protection devices, and sediment control devices shall be removed.

PENALTY FOR VIOLATION

Following the completion of construction and prior to use, the Project Landscape Architect, and/or MC-MNCPPC Inspector, if required, shall inspect the entire site. If trees in the retention areas are found severely damaged or dead due to mechanical intrusion or other violations of the Forest Conservation Plan or Project Specifications, the area may be considered to be in violation of the Tree Save Plan and corrective measures shall be required and/or fees and penalties shall be assessed as applicable.

FOREST PROTECTION NOTES

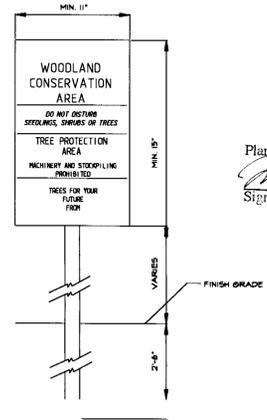
- A. PLANNING AND DESIGN OF PROTECTION DEVICES:**
For all retained areas, including both forested and isolated specimen trees:
- All retention areas and isolated specimen trees shall be protected by highly visible, well-anchored temporary protection devices.
 - If there are more than 50' of existing woodland between the forest retention area and the limits of disturbance, temporary protection devices will not be required.
 - All protection devices shall be in place prior to any grading or land clearing.
 - All protection devices shall remain in place until all construction has ceased in the immediate vicinity.
 - Devices shall be maintained throughout construction.
 - Attachment of signs or any other objects to trees is prohibited.
 - No equipment, machinery, vehicles, materials, or excessive pedestrian traffic shall be allowed within the protected area.
- B. PRE-CONSTRUCTION PHASE**
Pre-construction meeting:
After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place on site, a pre-construction meeting at the construction site shall take place. The developer, contractor or project manager, and Maryland National Capital Park & Planning Commission inspectors shall attend.
- Installation of Protection Devices:
Install Temporary Forest Protection Fencing around the forest and tree areas to be protected, as indicated on this plan. Contact the qualified professional who prepared this plan to set the fence location in the field. Install sediment control devices and proceed with clearing and grading activities (A second inspection may be required after installation of the protection devices and prior to clearing and grading activities).
- C. CONSTRUCTION PHASE**
Problems identified, by enforcement staff, shall be corrected in a timely manner. Problems caused by construction impact include:
Dead, dying or hazardous tree limbs
Protective barriers need repair or replacement
Storage of material, stockpiles or trash in retention areas
Excessive flooding or siltation of the retention areas
Overclearing
- D. PROJECT COMPLETION PHASE:**
The following measures shall be taken:
- Corrective measures if damages occurred due to negligence:
 - Stress reduction.
 - Removal of dead or dying trees. This may be done only if trees pose an immediate safety hazard.
 - Removal of temporary structures:
 - No burial of discarded materials will occur on-site within the conservation area.
 - No open burning within 100 feet of a wooded area.
 - All temporary forest protection structures will be removed after construction.



- GENERAL NOTES:**
- Limits of disturbance will be set as part of the review process for an approved TCP
 - The boundaries of the limits of disturbance should be staked or flagged prior to erecting the protection device
 - Anchor posts should be placed to avoid severing or damaging large tree roots.
 - Fencing material shall be fastened securely to the anchor posts, cross bracing and ground.
 - Tree protection fencing shall be maintained throughout construction.

TEMPORARY FOREST PROTECTION FENCING INSTALLATION DETAIL

NOT TO SCALE



WOODLANDS CONSERVATION AREA DETAIL

NOT TO SCALE

- NOTES:**
- BOTTOM OF SIGN TO BE HIGHER THAN TREE PROTECTION FENCE.
 - SIGNS TO BE PLACED APPROXIMATELY 50' APART. CONDITION ON SITE AFFECTING VISIBILITY MAY WARRANT PLACING SIGNS CLOSER OR FARTHER APART.
 - ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
 - SIGNS SHOULD BE PROPERLY MAINTAINED.
 - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
 - SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
FINAL FOREST CONSERVATION PLAN
APPROVAL
Plan No. SC200818
Signature [Signature] Date 1-22-08



NO.	REVISION	DATE	BY

THIS PLAN WAS PREPARED BY
MICHAEL TRUMBAUER KCI
TECHNOLOGIES MDNR QUALIFIED
PROFESSIONAL STATUS
(8/30/2002)

SIGNATURE [Signature] DATE 1/2/08

LOIS Y. GREEN FARM
CONSERVATION PARK
FOREST CONSERVATION NOTES
& DETAILS

SCALE: _____ Date Prepared: DECEMBER 2007
Project No.: 01065185 SHEET 3 of 3

ATTACHMENT 2

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760



Date Mailed: July 26, 2004

Action: Approved Staff Recommendation

Motion of Comm. Wellington, seconded by Comm. Bryant with a vote of 4-0;

Comms. Berlage, Bryant, Robinson and Wellington voting in favor; Comm. Perdue absent

MONTGOMERY COUNTY PLANNING BOARD

OPINION

Preliminary Plan 1-04018

NAME OF PLAN: North Airpark Business Park

On 09/11/03, Airpark North Business Park submitted an application for the approval of a preliminary plan of subdivision of property in the I-4 zone. The application proposed to create 23 lots on 134.07 acres of land. The application was designated Preliminary Plan 1-04018. On 07/15/04, Preliminary Plan 1-04018 was brought before the Montgomery County Planning Board for a public hearing. At the public hearing, the Montgomery County Planning Board heard testimony and received evidence submitted in the record on the application. Based upon the testimony and evidence presented by staff and on the information on the Preliminary Subdivision Plan Application Form, attached hereto and made a part hereof, the Montgomery County Planning Board finds Preliminary Plan 1-04018 to be in accordance with the purposes and requirements of the Subdivision Regulations (Chapter 50, Montgomery County Code, as amended) and approves Preliminary Plan 1-04018.

Approval, Subject to the Following Conditions:

- 1) As outlined in the Transportation Planning memorandum dated July 2, 2004 (Attachment C), limit the preliminary plan to up to 559,300 square feet of research and development office use, up to 247,626 square feet of business park use (i.e., generally light industrial and commercial office uses), and up to 461,285 square feet of warehouse use, or a combination of non-residential development with an equivalent number of weekday morning and evening peak hour trips.
- 2) Satisfy Local Area Transportation Review (LATR) at the intersection of Goshen Road and Centerway Road by constructing separate northbound and southbound Goshen Road right-turn lanes prior to release of building permits for the last 10% of the total approved development (i.e., or up to 1,141,390 square feet of the total 1,268,211 square feet). As an alternative,

contribute the equivalent cost of the intersection improvement to the anticipated future Montgomery County Department of Public Works and Transportation's (DPWT) Capital Improvements Program (CIP) project to widen Goshen Road between Odendhal Avenue and Warfield Road, if construction funding is readily anticipated prior to release of the initial building permits.

- 3) Satisfy LATR at two intersections along Snouffer School Road at Centerway Road and Alliston Hollow Way/proposed northwestern main site access point at Street "A" by widening Snouffer School Road from two to four through lanes with a fifth lane for a separate left-turn lane at the approaches to these two intersections.
- 4) Satisfy Policy Area Transportation Review (PATR) by widening Snouffer School Road from two to four through lanes from Centerway Road to Goshen Road with a fifth center lane for a separate left-turn lane approaching intersecting streets. Include a five-foot sidewalk with a landscaped street panel on the northeast side. A sidewalk on the southwest side of Snouffer School Road would take or damage existing mature trees and is not recommended.

The contract to reconstruct Snouffer School Road from two through lanes to four through lanes from Centerway Road westerly across the site frontage (including installation of traffic signals at the two site access driveways if determined to be warranted by DPWT) shall be let prior to release of the first building permit. The contract to construct the remainder of the Snouffer School Road widening from the western property line to Goshen Road shall be let at the earlier of either of two occurrences:

- a. Prior to release of building permits for 75% or more of the total approved development.
 - b. Three years after the first building permit is released.
- 5) If determined to be warranted by DPWT, install traffic signals at two intersections along Snouffer School Road:
 - a. Existing Alliston Hollow Way/proposed northwestern main site access point at Street "A".
 - b. Existing access point to Green Farm Conservation Park/proposed southeastern site access point at Street "D".
 - 6) Dedicate approximately eight feet of right of way for 80 feet from the opposite right-of-way line along Snouffer School Road and provide a five-foot sidewalk along the property frontage.
 - 7) Provide a maximum of 30 bike racks with one or two racks at each of the 23 proposed buildings. The specific location of the bike racks is to be determined in coordination with Park and Planning's Bicycle Coordinator and DPWT.
 - 8) Pay the transportation - development impact tax with credits for the cost of the transportation improvement described in Condition No's. 2, 3, 4 and 5 as legally permitted.

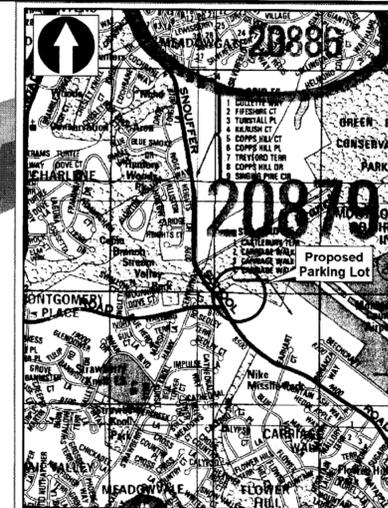
- 9) All road right-of ways shown on the approved preliminary plan shall be dedicated and constructed, by the applicant, to the full width mandated by the Master Plan, and to the design standards imposed by all applicable road codes. Only those roads (or portions thereof) expressly designated on the preliminary plan, "To Be Constructed By _____" are excluded from this condition.
- 10) Compliance with the conditions of approval for the preliminary forest conservation plan. The applicant must satisfy all conditions prior to recording of plat(s) or MCDPS issuance of sediment and erosion control permits.
- 11) Compliance with the Montgomery County Department of Permitting Services (MCDPS) requirements for complex structures, as determined by MCDPS.
- 12) Record plat to reflect a Category I easement over all areas of forest conservation and stream valley buffers.
- 13) Access and improvements as required to be approved by MCDPWT prior to recordation of plat(s).
- 14) Compliance with conditions of MCDPS stormwater management approval letter dated, June 29, 2004.
- 15) On-site lighting plan to be submitted to MNCPPC staff prior to release of individual building permits that show conformance to Illuminating Engineers Society of North America (IESNA) standards. Light fixture to have zero cutoff and no light intrusion into neighboring residential properties.
- 16) Applicant to construct, at Applicant's expense, a paved entrance road to the Lois Green Conservation Park along the south side of the Applicant's property to extend from Snouffer School Road at a location approved by appropriate State, County and M-NCPPC transportation staff, into parkland and ending just past the current driveway entrance to the historic house. Limits of disturbance for the road grading and construction on Park property to be located outside of stream buffers, and applicable engineering plans to be approved by M-NCPPC staff. Both sides of the entrance road and any park areas disturbed by its construction to be planted and landscaped as approved by M-NCPPC staff with the goal of creating an aesthetically pleasing, park like entrance. Applicant's plantings to be maintained and guaranteed by Applicant for at least three (3) years.
- 17) Applicant to engineer, construct and maintain a stormwater management facility sufficient to accommodate stormwater from the constructed park entrance road, the southeast corner of Applicant's property, and the future parking area and improvements to be constructed by M-NCPPC on the portion of Green Conservation Park draining to this facility. M-NCPPC to supply Applicant with concept drawings adequate to determine the needed stormwater control capacity. Applicable engineering plans to be approved by M-NCPPC staff. Necessary easements to allow Applicant to maintain the portions of stormwater facility on parkland to be provided by M-NCPPC.

- 18) The entrance road's stream crossing to be constructed to minimize impacts on the stream and downstream aquatic resources.
- 19) Prior to the end of the validity period for the first stage, (see conditions #27), applicant to dedicate to M-NCPPC, the land that lies on the south side of the newly constructed park entrance road (not to include the stormwater facility proposed at the corner of the new road and Snouffer School Road, or RPZ).
- 20) Prior to the end of the validity period for the first stage, (see conditions #27), Park entrance monument and signage to be provided by Applicant and located at the corner of Snouffer School Road and the new park entrance road. Monumentation and signage to be approved by M-NCPPC staff.
- 21) Prior to the end of the validity period for the first stage, (see conditions #27), applicant to engineer and construct a paved parking lot, and an adequate entrance off of Snouffer School Road for such parking lot, at the Park Master Planned location for the Park Natural Discovery Area, located south of the new park entrance road.
- 22) Prior to the end of the validity period for the first stage, (see conditions #27), applicant to provide engineering and construction of an adequate stormwater management facility for such parking lot and entrance. Parking lot size, configuration and exact location to be determined by M-NCPPC staff but shall not be larger than 44 parking spaces. Design to include adequate turn around area for buses. All designs and engineering plans to be approved by M-NCPPC staff. If Applicant is unable to obtain the needed permits and approvals for such parking lot at this location, Applicant shall construct the parking lot on park property at a location off of the new park entrance road to be determined by M-NCPPC staff.
- 23) A plat of reservation for all lots and property affected by the RPZ for a period not to exceed three years to allow potential purchase by the Montgomery County Revenue Authority and/or Federal Aviation Administration (FAA).
- 24) Prior to recordation of plat(s) for Lots 14 through 17, relocation of Street "D" as shown on the approved preliminary plan, as necessary, to avoid the Montgomery County Airpark's Runway Protection Zone (RPZ), to the extent required by the Federal Aviation Administration or the Montgomery County Revenue Authority.
- 25) Prior to recordation of initial plat, applicant to provide staff with a copy of an executed agreement between the FAA and/or the Montgomery County Revenue Authority and applicant regarding the right to over flight, noise and vibration associated with the Montgomery County Airpark, and to address the other conditions as prescribed in the Revenue Authority's letter dated, July 8, 2004, as applicable.
- 26) Compliance with approved landscape plan for Snouffer School Road frontage
- 27) The Preliminary Plan will remain valid for one hundred forty-five (145) months from the date of mailing of the Planning Board Opinion. Record plats must be recorded in phases based upon the following schedule:

- Phase I (expires 37 months from the date of mailing of the Planning Board Opinion): 200,000 square feet of the approved density.
- Phase II (expires 73 months from the date of mailing of the Planning Board Opinion): 400,000 square feet of the approved density.
- Phase III (expires 109 months from the date of mailing of the Planning Board Opinion): 300,000 square feet of the approved density.
- Phase IV (expires 145 months from the date of mailing of the Planning Board Opinion): all remaining development.

Prior to the expiration period, the final record plat for all remaining lots within each phase must be recorded, or a request for extension must be filed.

- 28) The Adequate Public Facility (APF) review for the Preliminary Plan will remain valid for one hundred forty-five (145) months from the date of mailing of the Planning Board Opinion.
- 29) No plat(s) to be recorded prior to thirteen (13) months from the mailing date of the Planning Board opinion.
- 30) Prior to recordation of initial plat, applicant to resubmit landscape plan for the Snouffer School frontage to MNCPPC technical staff to address long term screening with overstory and understory of the buildings fronting on Snouffer School Road.
- 31) Concurrent with condition ^(#29)~~#30~~, MNCPPC to explore the purchase of, or easement on, Lot #7 to provide access for local neighborhood to Lois Green Farm Conservation Park.
- 32) Other necessary easements shall be shown on the record plats.



VICINITY MAP
not to scale



SOILS TABLE				
SYMBOL	SOIL SYSTEM	K VALUE	HYDRIC - Y/N	STRUCTURAL LIMITATIONS
1C	GAILA SILT LOAM 3-8% SLOPES	0.37	N	SEVERE FOR SHALLOW EXCAVATIONS DUE TO CAVING CUTBANKS MODERATE FOR LOCAL ROADS AND STREETS DUE TO FROST ACTION
2B	GLENELG SILT LOAM 3-8% SLOPES	0.32	N	SLIGHT FOR SHALLOW EXCAVATIONS MODERATE FOR LOCAL ROADS DUE TO FROST ACTION
6A	BAILE SILT LOAM 0-3% SLOPES	0.43	Y	SEVERE FOR SHALLOW EXCAVATIONS DUE TO WEIENESS SEVERE FOR LOCAL ROADS AND STREETS DUE TO WEIENESS AND FROST ACTION
16D	BRIMLOW-BLOCKTOWN CHANNERY SILT LOAM 15-25% SLOPES	0.28	N	SEVERE FOR SHALLOW EXCAVATIONS DUE TO DEPTH TO ROCK AND SLOPE SEVERE FOR LOCAL ROADS AND STREETS DUE TO SLOPE
54A	HARBORO SILT LOAM 0-3% SLOPES FREQUENTLY FLOODED	0.49	Y	SEVERE FOR SHALLOW EXCAVATIONS DUE TO WEIENESS SEVERE FOR LOCAL ROADS AND STREETS DUE TO FLOODING, WEIENESS AND FROST ACTION

LEGEND

- Property Line
- Existing Contours
- 2B Soils
- Existing Tree Line
- Existing Stream
- Stand Boundary Line
- ⊙ Specimen Trees
- [C-2] Sample Plot Location
- Temporary Tree Protection
- Forest to be Retained
- Cut
- Fill
- Proposed Grade
- LOD Limits of Disturbance
- Critical Root Zone
- 15-25% Slopes
- 25% or Greater Slopes
- 100 Yr. Floodplain
- 25 Ft. Floodplain Buffer
- Stream Valley Buffer

THE MARYLAND NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. SC 2008018
 Signature: [Signature] Date: 1-22-08

CERTIFICATION

I CERTIFY THAT I AM A DULY QUALIFIED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MARYLAND, AND THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND IN COMPLIANCE WITH THE FOREST CONSERVATION LAW REQUIREMENTS.

DAVID MERKEY PND, QUALIFIED PROFESSIONAL
 ADDRESS: 10977 GULFORD ROAD, ANNAPOLIS JUNCTION, MD 20701
 PHONE: (410) 880-3055
 EMAIL: DMERKEY@GPNET.COM

GENERAL NOTES

1. FOREST TO BE RETAINED WILL BE OWNED AND MANAGED BY M-NCPCC AS A PARK.
2. TOTAL TRACT AREA = 47.81 ACRES.
3. EXISTING ZONING : IDA
4. 100 YEAR FLOODPLAIN OBTAINED FROM DPS.

- [Red Dotted Area] FOREST STAND REMOVAL
2.8 ACRES REMOVED
& REFORESTED
- [Red Line] 12" MULCH MAT
- [Red Dash] RP - ROOT PRUNE
- [Red Dash] TPF - TREE PROTECTION FENCE



ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

10 NORTH PARK DRIVE
HONEY VALLEY, MD 21030
PHONE: (410) 316-7800
FAX: (410) 316-7817
WWW.KCI.COM

NO.	REVISION	DATE	BY

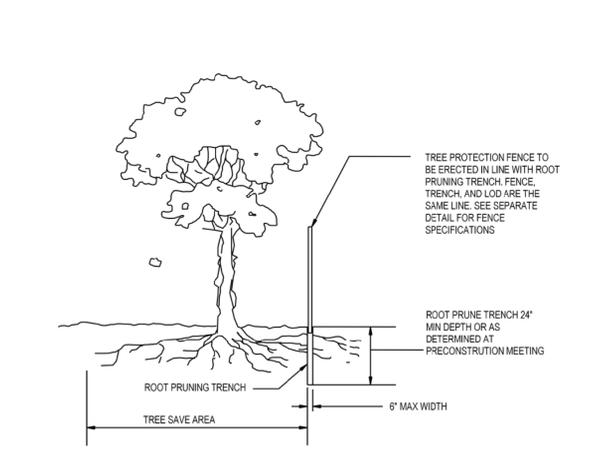
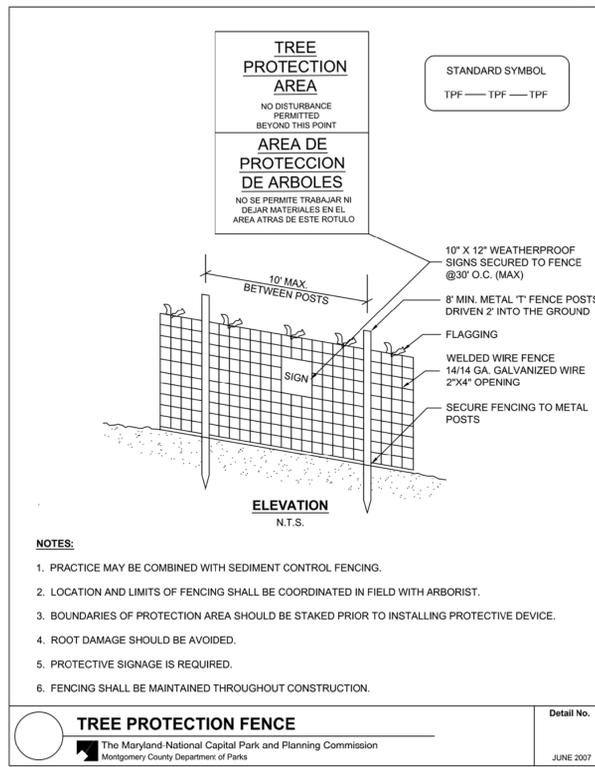
THIS PLAN WAS PREPARED BY
 MICHAEL TRUMBauer
 KCI TECHNOLOGIES
 MDNR QUALIFIED PROFESSIONAL STATUS
 (8/30/2002)

SIGNATURE: [Signature] DATE: 12/14/07

LOIS Y. GREEN
 CONSERVATION FARM PARK
 FOREST CONSERVATION PLAN

TREES GREATER THAN OR EQUAL TO 30" DBH							
Tree number	Size DBH	Forest Stand	Common name	Scientific name	Condition	CRZ Impact	Status
4	26.4	1	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	10.15%	Save
5	30.1	1	Silver Maple	<i>Acer saccharinum</i>	Fair	100.00%	Remove
6	32.0	1	Cottonwood	<i>Populus deltoides</i>	Fair	35.65%	Remove
40	25.5	1	American Elm	<i>Ulmus americana</i>	Good	100.00%	Remove
41	33.0	1	Red Maple	<i>Acer rubrum</i>	Good	100.00%	Remove
42	24.0	1	Red Maple	<i>Acer rubrum</i>	Good	100.00%	Remove
43	27	1	Red Maple	<i>Acer rubrum</i>	Good	50.00%	Remove
44	26	1	Silver Maple	<i>Acer saccharinum</i>	Fair	100.00%	Remove
45	37	1	Silver Maple	<i>Acer saccharinum</i>	Good	100.00%	Remove
46	46	1	Silver Maple	<i>Acer saccharinum</i>	Excellent	100.00%	Remove
47	33	1	Black Cherry	<i>Prunus serotina</i>	Poor	100.00%	Remove
48	36	1	Silver Maple	<i>Acer saccharinum</i>	Good	100.00%	Remove
49	26	1	Red Maple	<i>Acer rubrum</i>	Good	100.00%	Remove
50	25	1	Silver Maple	<i>Acer saccharinum</i>	Good	38.00%	Remove
51	42	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.70%	Save
52	24	1	Silver Maple	<i>Acer saccharinum</i>	Poor	0.00%	Save
53	24	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.00%	Save
54	30	1	Silver Maple	<i>Acer saccharinum</i>	Fair	0.00%	Save
55	26	1	Silver Maple	<i>Acer saccharinum</i>	Fair	0.00%	Save
56	26	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.60%	Save
57	34	1	Silver Maple	<i>Acer saccharinum</i>	Fair	29.00%	Remove
58	26	1	Silver Maple	<i>Acer saccharinum</i>	Good	30.00%	Save
59	24	1	Silver Maple	<i>Acer saccharinum</i>	Good	20.00%	Save
60	28	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.00%	Save
61	33	1	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	33.00%	Remove
62	27	1	Silver Maple	<i>Acer saccharinum</i>	Fair	0.00%	Save
63	24	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.00%	Save
64	26	4	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	0.00%	Save
65	35	4	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	0.00%	Save
66	28	4	Tulip poplar	<i>Liriodendron tulipifera</i>	Fair	0.00%	Save
67	26	4	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	0.40%	Save
68	36	1	Silver Maple	<i>Acer saccharinum</i>	Excellent	100.00%	Remove
69	32	1	Silver Maple	<i>Acer saccharinum</i>	Good	45.00%	Remove
70	24	1	Silver Maple	<i>Acer saccharinum</i>	Good	40.00%	Remove
71	28	1	Tulip poplar	<i>Liriodendron tulipifera</i>	Poor	27.00%	Save
72	26	1	Red Maple	<i>Acer rubrum</i>	Good	0.00%	Save
73	26	1	Sycamore	<i>Plantanus occidentalis</i>	Good	58.00%	Remove
84	27	1	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	22.00%	Save
85	24	1	Silver Maple	<i>Acer saccharinum</i>	Good	100.00%	Remove

NOTE: SPECIMEN TREES IN BOLD.



- NOTES:
- RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.
 - BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.
 - EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INSPECTOR.
 - TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.
 - ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.
 - ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL NTS

INSPECTIONS

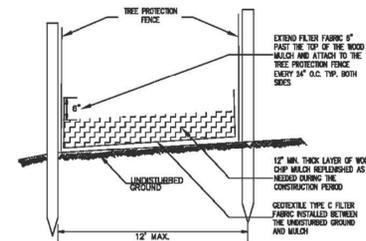
All field inspections must be requested by the applicant. Inspections must be conducted as follows:

Tree Save Plans and Forest Conservation Plans without Planting Requirements

- After the limits of disturbance have been staked and flagged, but before any clearing or grading begins
- After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin.
- 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

- Before the start of any required reforestation and afforestation planting
- After the required reforestation and afforestation planting has been completed to verify that the planting is established and prior to the start the maintenance period.
- 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.



- NOTES:
- ACCESS ROUTES TO BE FIELD LOCATED WITH M-NPPPC AND WCOPS AT PRE-CONSTRUCTION MEETING.
 - FILTER FABRIC SHALL BE A SINGLE PIECE ACROSS WIDTH. OVERLAP FABRIC BY 18" MIN. ALONG LENGTH OF ROUTE.
 - FILTER FABRIC MAY ONLY BE ELIMINATED AT DIRECTION OF M-NPPPC ARBORIST.
 - CONTRACTOR SHALL MAINTAIN MULCH MAT THROUGHOUT CONSTRUCTION PERIOD. MULCH SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE APPROVED BY M-NPPPC.

MULCH MAT DETAIL

NOT TO SCALE

Sequence of Events for Property Owners Required to Comply With Forest Conservation and/or Tree-Save Plans

Pre-Construction

- An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged, but before any clearing or grading begins. The property owner should contact the Montgomery County Planning Department inspection staff before construction to verify the limits of disturbance and discuss tree protection and tree care measures. The developer's representative, construction superintendent, ISA certified arborist or Maryland-licensed tree expert that will implement the tree protection measures, forest conservation inspector, and Department of Permitting Services (DPS) sediment control inspector should attend this pre-construction meeting.
- No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include, but are not limited to:
 - Root pruning
 - Crown reduction or pruning
 - Watering
 - Fertilizing
 - Vertical mulching
 - Root aeration matting

Measures not specified on the forest conservation plan may be required as determined by the forest conservation inspector in coordination with the arborist.

- A Maryland-licensed tree expert or an International Society of Arboriculture-certified arborist must perform all stress reduction measures. Documentation of stress reduction measures must be either observed by the forest conservation inspector or sent to the inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The forest conservation inspector will determine the exact method to convey the stress reductions measures during the pre-construction meeting.

- Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities. Tree protection fencing locations should be staked 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 protect devices may include:
 - Chain link fence (four feet high)

- Super silt fence with wire strung between support poles (minimum 4 feet high) with high visibility flagging.
- 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

- Temporary protection devices shall be maintained and installed by the contractor 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 will be permitted. Tree protection shall not be removed without prior approval of forest conservation inspector.

- Forest retention area signs shall be installed as required by the forest conservation inspector, or as shown on the approved plan.

- Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details. Installation will occur at the appropriate time during the construction project. Refer to the plan drawing for long-term protection measures to be installed.

During Construction

- 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 inspector.

Post-Construction

- After construction is completed, an inspection shall be requested. Corrective measures may include:
 - Removal and replacement of dead and dying trees
 - Pruning of dead or declining limbs
 - Soil aeration
 - Fertilization
 - Watering
 - Wound repair
 - Clean up of retention areas
- After inspection and completion of corrective measures have been undertaken, all temporary protection devices shall be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the Department of Permitting Services and the forest conservation inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

CERTIFICATION

I CERTIFY THAT I AM A DULY QUALIFIED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MARYLAND, AND THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND IN COMPLIANCE WITH THE FOREST CONSERVATION LAW REQUIREMENTS.

DAVID MERKEY Phd, QUALIFIED PROFESSIONAL
ADDRESS: 10977 GUILFORD ROAD, ANNAPOLIS JUNCTION, MD 20701
PHONE: (410) 880-3055
EMAIL: DMERKEY@GPI.NET.COM

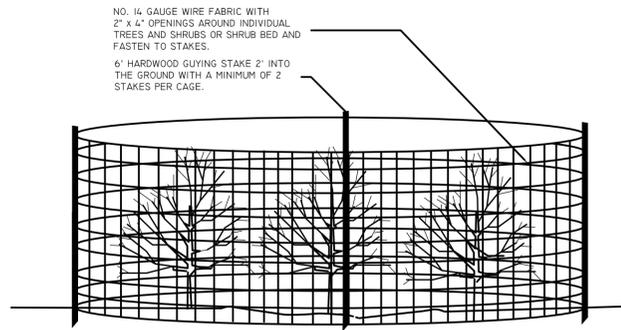
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND				RECOMMENDED FOR APPROVAL				
				Chief, Transportation Planning & Design Section	Date			
APPROVED				Chief, Division of Transportation Engineering				
				Date	Date			
NO.	REVISION	DATE	BY	Designed by: <u>GPI</u>	Drawn by: <u>GPI</u>	Checked by: <u>GPI</u>	Project No.:	SHEET <u>3A</u> of <u> </u>

LOIS Y. GREEN
CONSERVATION FARM PARK
FOREST CONSERVATION PLAN

DETAIL SHEET

SCALE : AS SHOWN

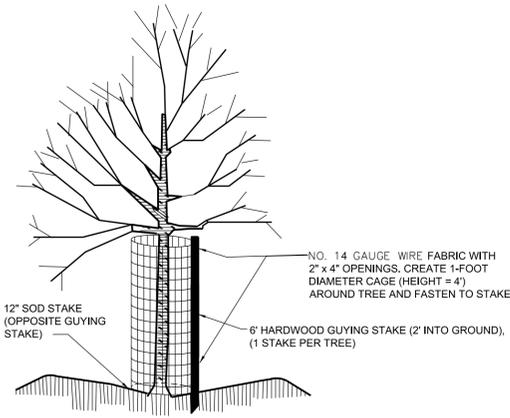




NO. 14 GAUGE WIRE FABRIC WITH 2' x 4' OPENINGS AROUND INDIVIDUAL TREES AND SHRUBS OR SHRUB BED AND FASTEN TO STAKES.
6' HARDWOOD GUYING STAKE 2' INTO THE GROUND WITH A MINIMUM OF 2 STAKES PER CAGE.

NOTES:

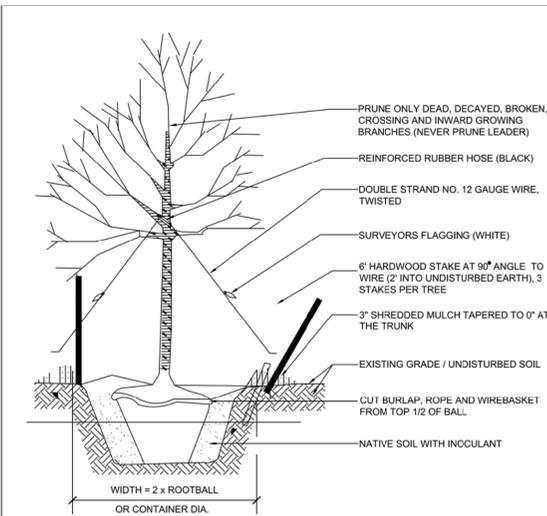
1. THIS DETAIL IS TO BE USED FOR INDIVIDUAL SHRUBS AND SHRUB BEDS. IN ADDITION, IT WILL BE USED FOR EVERGREEN TREES OR DECIDUOUS TREES WITH BRANCHES LOWER THAN 4' IN HEIGHT.
2. HEIGHT OF CAGE SHALL BE 4 FEET MINIMUM WITH A MAXIMUM DIAMETER OF 10 FEET.
3. CAGE SHALL BE FASTENED TO STAKE WITH 3 (MIN.) TWIST TIE EVENLY SPACED WITH A 6" (MIN.) ABOVE THE GROUND.
4. CAGE SHALL SURROUND ALL SHRUBS AND TREES WITH A 1 FOOT SPACING FROM THE OUTSIDE OF THE PLANT.
5. STAKES SHALL BE PLACED AT A MAXIMUM 5 FOOT SPACING.
6. CAGES TO BE REMOVED AT DIRECTION OF M-NCPPC CONSTRUCTION MANAGER.
7. HARDWOOD MULCH SHALL BE PLACED TO 2-3 INCH DEPTH WITHIN FENCING.



NO. 14 GAUGE WIRE FABRIC WITH 2' x 4' OPENINGS, CREATE 1-FOOT DIAMETER CAGE (HEIGHT = 4') AROUND TREE AND FASTEN TO STAKE.
6' HARDWOOD GUYING STAKE (2' INTO GROUND), (1 STAKE PER TREE)
12' SOD STAKE (OPPOSITE GUYING STAKE)

NOTES:

1. CAGE SHALL BE NO. 14 GAUGE WIRE FABRIC WITH 2' x 4' OPENINGS.
2. CAGE HEIGHT SHALL BE 4' (MIN.)
3. CREATE A 1-FOOT DIAMETER CAGE AROUND TREE.
4. FOR MULTI-STEM TREES AND SHRUBS OR TREES WITH LEADERS BELOW 4', USE WIDER CAGE TO LEAVE A 1-FOOT DIAMETER AROUND TREE.
5. CAGE SHALL BE FASTENED TO STAKE WITH TWO (MIN.) 11-INCH TWIST TIES, ONE AT TOP AND ONE AT 6" (MIN.) ABOVE THE GROUND.
6. INSTALL 6' HARDWOOD GUYING STAKE, 2' INTO GROUND, 1 STAKE (MIN.) PER CAGE.
7. ENSURE CAGE IS FASTENED TO THE GROUND TO PREVENT UPLIFT BY DEER BY INSTALLING A 12' SOD STAKE OPPOSITE THE GUYING STAKE.
8. FOR TREES LARGER THAN 3" CALIPER WITH NO BRANCHING BELOW 4', CAGE CAN BE SUBSTITUTED WITH DEER BARK PROTECTORS (ITEMS #bg48, BY A.M. LEONARD) OR EQUAL.
9. DO NOT DAMAGE TREE DURING INSTALLATION.
10. CAGES TO BE REMOVED ONLY AT DIRECTION OF FOREST ECOLOGIST.



PRUNE ONLY DEAD, DECAYED, BROKEN, CROSSING AND INWARD GROWING BRANCHES (NEVER PRUNE LEADER)
REINFORCED RUBBER HOSE (BLACK)
DOUBLE STRAND NO. 12 GAUGE WIRE, TWISTED
SURVEYORS FLAGGING (WHITE)
6' HARDWOOD STAKE AT 90° ANGLE TO WIRE (2' INTO UNDISTURBED EARTH), 3 STAKES PER TREE
3' SHREDDED MULCH TAPERED TO 0" AT THE TRUNK
EXISTING GRADE / UNDISTURBED SOIL
CUT BURLAP, ROPE AND WIRE BASKET FROM TOP 1/2 OF BALL
NATIVE SOIL WITH INOCULANT
WIDTH = 2 x ROOTBALL OR CONTAINER DIA.

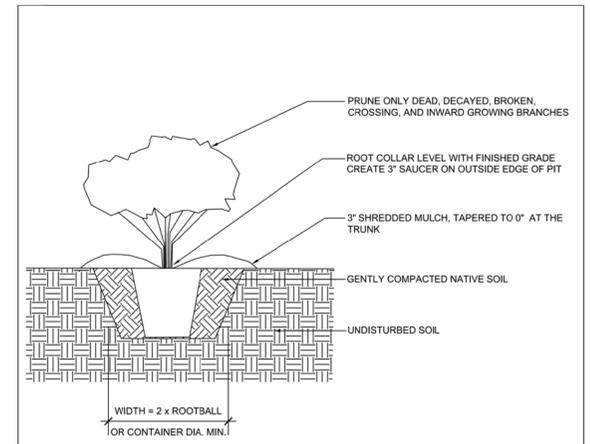
NOTES:

1. STAKES AND WIRES MUST BE REMOVED NO LATER THAN 12 MONTHS AFTER PLANTING.
2. PLANTING HOLE SHALL BE DUG BY A BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
3. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC PLANNING DEPT INSPECTOR OR PARKS DEPT FOREST ECOLOGIST, AN AREA UP TO 5 TIMES THE DIA. OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND THE SOIL SHALL BE AMENDED.
4. DO NOT DAMAGE OR CUT LEADER.
5. ROOT FLAIR EVEN WITH LEVEL OF UNDISTURBED GROUND.

DECIDUOUS PLANTS - (2 1/2" Caliper or Larger)

Detail No.

DECEMBER 2007



PRUNE ONLY DEAD, DECAYED, BROKEN, CROSSING, AND INWARD GROWING BRANCHES (NEVER PRUNE LEADER)
ROOT COLLAR LEVEL WITH FINISHED GRADE CREATE 3" SAUCER ON OUTSIDE EDGE OF PIT
3' SHREDDED MULCH, TAPERED TO 0" AT THE TRUNK
GENTLY COMPACTED NATIVE SOIL
UNDISTURBED SOIL
WIDTH = 2 x ROOTBALL OR CONTAINER DIA. MIN.

NOTES:

1. REMOVE ALL POTS AND WIRE AND CUT CONTAINER CLEANLY WAY FROM ROOTS.
2. REMOVE BURLAP FROM TOP HALF OF ROOT BALL.
3. CONTAINER PLANTINGS MAKE 4 TO 5 VERTICAL CUTS TO THE ROOT BALL BEFORE SETTING IN PLACE.
4. PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS AND ROOTS.
5. CLEANLY PRUNE ALL DAMAGED ROOT ENDS TEASE ROOTS OF CONTAINER GROWN STOCK.
6. DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
7. DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB

N. T.S.

The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No.

OCTOBER 2007

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 reductions 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 protect 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.

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.

During 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.

Post-Construction

10. After construction is completed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
 - a. Removal and replacement of dead and dying trees
 - b. Pruning of dead or declining limbs
 - c. Soil aeration
 - d. Fertilization
 - e. Watering
 - f. Wound repair
 - g. Clean up of retention areas including trash removal
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.

INSPECTIONS

All field inspections must be requested by the applicant.

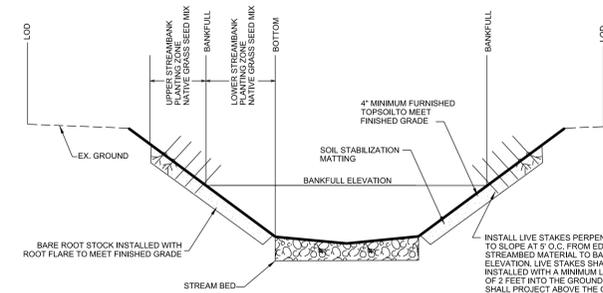
Field Inspections must be conducted as follows:

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 and before release of the building permit.
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.



1. BARE ROOT STOCK SHALL BE INSTALLED HIGH ON THE LOWER BANK AS SHOWN IN THE DETAIL. THE PLANTING HOLE SHALL BE WIDE AND DEEP ENOUGH TO ENSURE THAT THE ROOTS FIT WITHOUT BEING FOLDED UPWARD.
2. PRIOR TO INSTALLATION THE PORTION OF THE STAKE TO BE INSTALLED UNDERGROUND SHALL BE TREATED WITH AN APPROVED ROOTING HORMONE.

+ - COMMON ELDERBERRY
△ - SILKY WILLOW

LIVE STAKE SPACING - 2' OC
PLAN VIEW

SHRUB PLAN TING - LIVE STAKES
TYPICAL SECTION

NOT TO SCALE

NOT TO SCALE

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR 2014038 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: Montgomery County DOT
Contact Person or Owner: _____
Address: _____
Phone and Email: _____
Signature: _____



NO.	REVISION	DATE	BY

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section _____ Date _____

Chief, Division of Transportation Engineering _____ Date _____

Designed by: _____ Drawn by: _____ Checked by: _____

**LOIS Y. GREEN
CONSERVATION FARM PARK**

**STREAM RESTORATION
LANDSCAPE PLAN
DETAIL SHEET**

SCALE : NTS

Project No. : 200661 (501119)

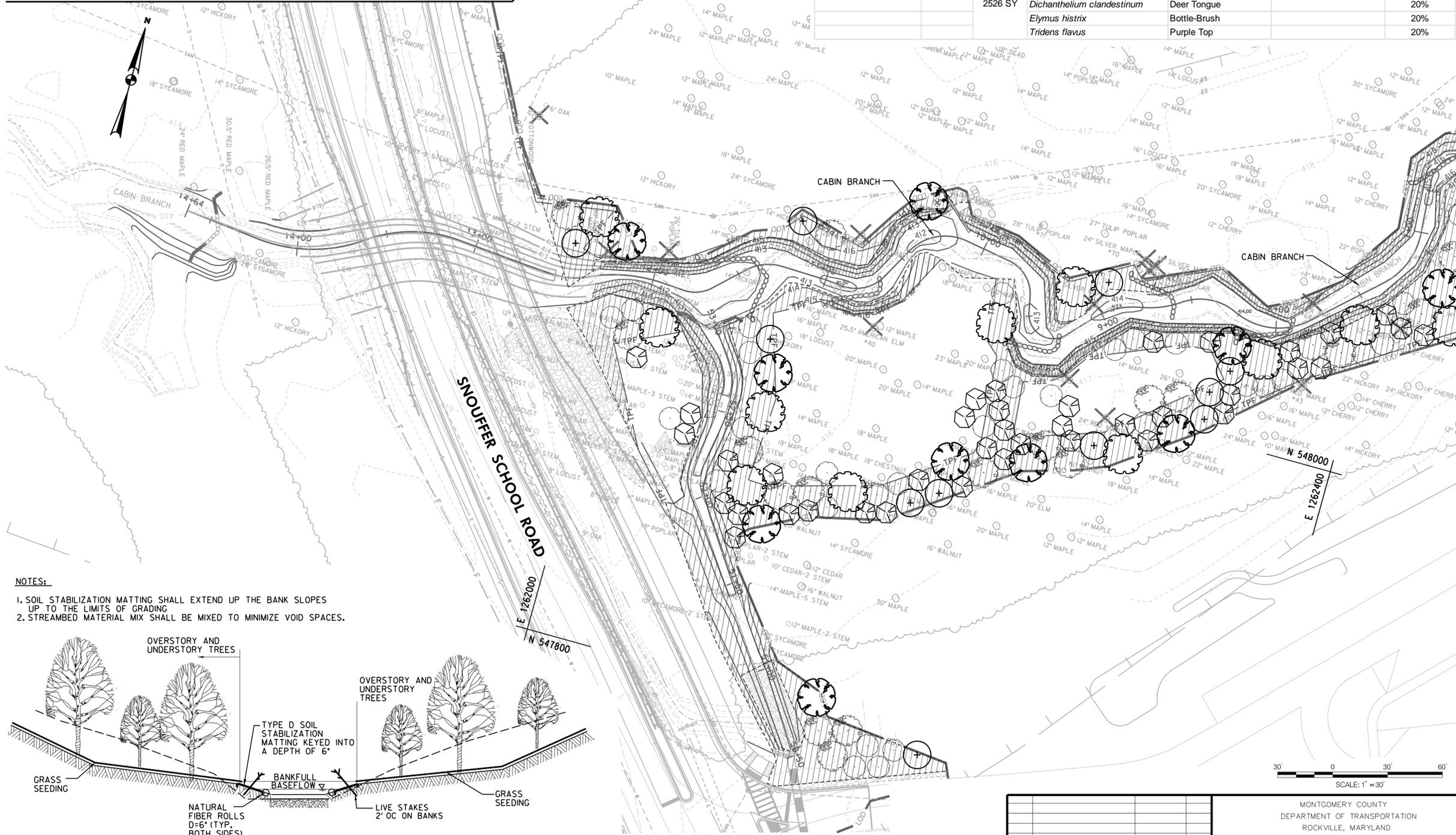
LD-02

MATCH LINE SHEET LD-03

SNOUFFER SCHOOL ROAD STREAM RESTORATION PLANT LIST						
FORM	SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE	NOTES
Live Stakes		680	<i>Sambucus nigra ssp. canadensis</i>	Common Elderberry	0.5-1" dia., 3.0'min. long	2' OC
Live Stakes		680	<i>Salix sericea</i>	Silky Willow	0.5-1" dia., 3.0'min. long	2' OC
Tree	AS	18	<i>Acer saccharinum</i>	Silver Maple	2" Cal.	15' OC
Tree	PO	11	<i>Platanus occidentalis</i>	Sycamore	2" Cal.	15' OC
Tree (Variance Mitigation)	AR	11	<i>Acer rubrum</i>	Red Maple	3" Cal.	20' OC
Tree (Variance Mitigation)	QB	10	<i>Quercus bicolor</i>	Swamp White Oak	3" Cal.	20' OC
Tree	CC	30	<i>Cercis canadensis</i>	Redbud	1" Cal.	12' OC
Tree	AA	39	<i>Amelanchier arborea</i>	Downy serviceberry	Multi-stem 6-8' Ht.	12' OC
Floodplain Seed Mix						
			<i>Elymus virginicus</i>	Virginia Wild Rye		20%
			<i>Elymus riparius</i>	Riparian Wild Rye		20%
		2526 SY	<i>Dichanthelium clandestinum</i>	Deer Tongue		20%
			<i>Elymus hystrix</i>	Bottle-Brush		20%
			<i>Tridens flavus</i>	Purple Top		20%

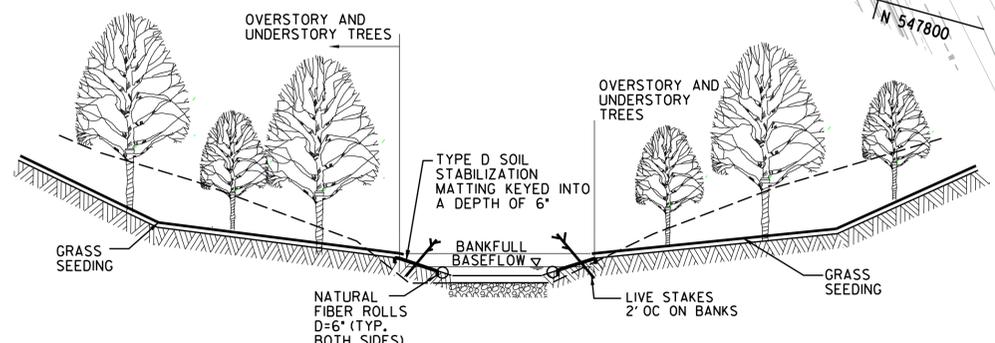
LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING TREE TO BE REMOVED
- PROPOSED ROCK SILL
- PROPOSED J-HOOK
- PROPOSED CROSS VANE
- FLOODPLAIN SEEDING
- LIVE STAKE PLANTING
- 3" CAL. TREE TO MEET MITIGATION
- 2" CAL. OVERSTORY TREE
- 1" CAL. UNDERSTORY TREE



MATCH LINE SHEET LD-02

- NOTES:**
- SOIL STABILIZATION MATTING SHALL EXTEND UP THE BANK SLOPES UP TO THE LIMITS OF GRADING
 - STREAMBED MATERIAL MIX SHALL BE MIXED TO MINIMIZE VOID SPACES.



CONSTRUCTED CHANNEL LANDSCAPE DETAIL
CABIN BRANCH

NOTE: SEE SHEET SR-20A FOR PLANTING DETAILS

MCDPS APPROVED FOR:	
STORMWATER MANAGEMENT:	
REVIEWED	DATE
APPROVED	DATE
SM FILE #	
SEDIMENT CONTROL TECHNICAL REQUIREMENTS:	
REVIEWED	DATE
APPROVED	DATE
ADMINISTRATIVE REQUIREMENTS:	
REVIEWED	DATE
SEDIMENT CONTROL PERMIT #	

NOTE
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

THIS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			
RECOMMENDED FOR APPROVAL			
Chief, Design Section	_____	_____	_____
APPROVED			DATE
Chief, Division of Transportation Engineering	_____	_____	_____
Designed by: _____	Drawn by: _____	Checked by: _____	

**LOIS Y. GREEN
CONSERVATION FARM PARK**

**STREAM RESTORATION
LANDSCAPE PLAN
SHEET 1**

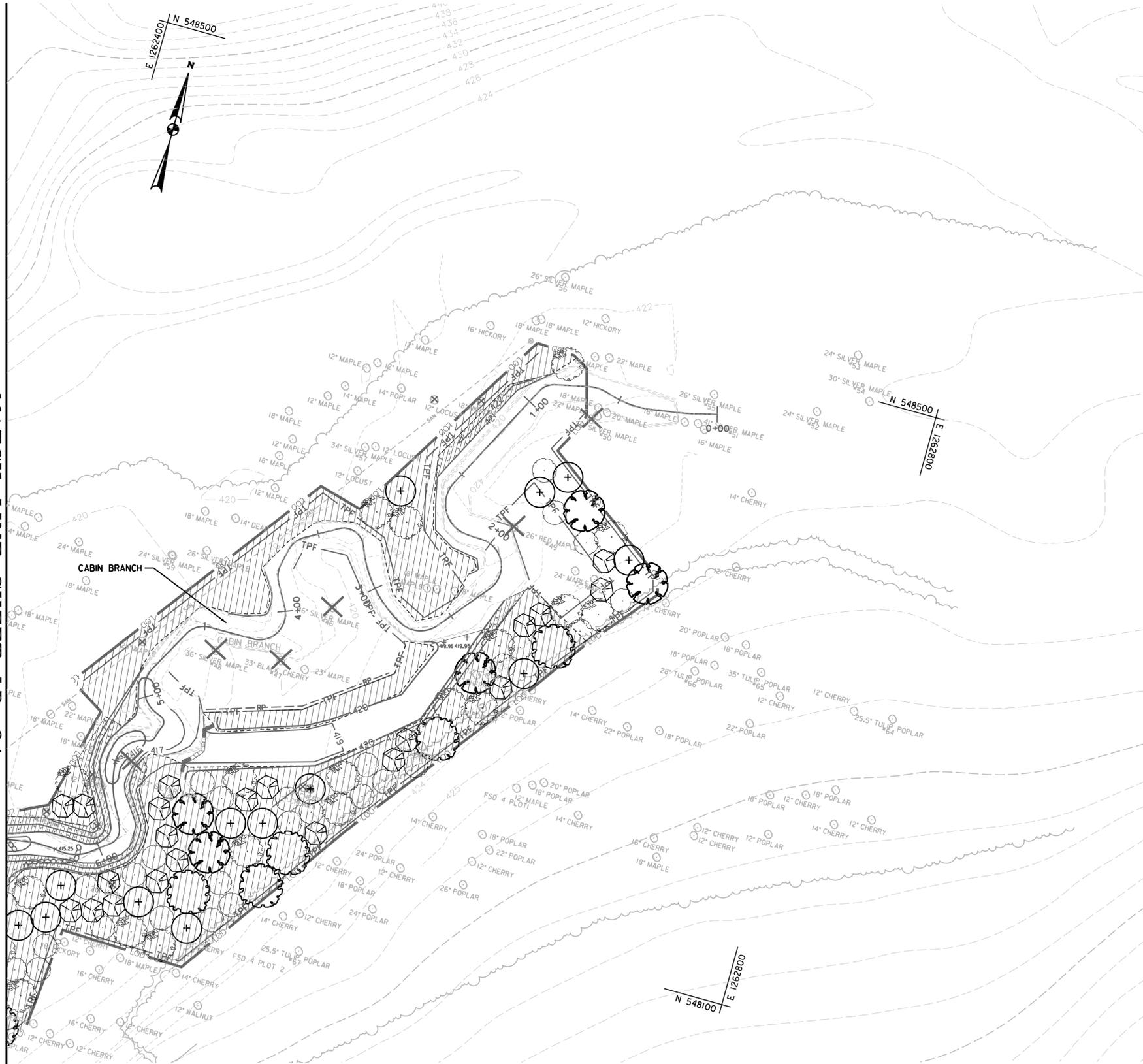
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LD-01

Project No.: 200661 (501119) 01 of 05

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MATCH LINE SHEET LD-01

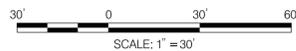


SNOUFFER SCHOOL ROAD STREAM RESTORATION PLANT LIST						
FORM	SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE	NOTES
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Tree	PO	13	<i>Platanus occidentalis</i>	Sycamore	2" Cal.	15' OC
Tree (Variance Mitigation)	AR	5	<i>Acer rubrum</i>	Red Maple	3" Cal.	20' OC
Tree (Variance Mitigation)	QB	5	<i>Quercus bicolor</i>	Swamp White Oak	3" Cal.	20' OC
Tree	CC	28	<i>Cercis canadensis</i>	Redbud	1" Cal.	12' OC
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Floodplain Seed Mix						
			<i>Elymus virginicus</i>	Virginia Wild Rye		20%
			<i>Elymus riparius</i>	Riparian Wild Rye		20%
		2581SY	<i>Dichanthelium clandestinum</i>	Deer Tongue		20%
			<i>Elymus histrix</i>	Bottle-Brush		20%
			<i>Tridens flavus</i>	Purple Top		20%

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING TREE TO BE REMOVED
- PROPOSED ROCK SILL
- PROPOSED J-HOOK
- PROPOSED CROSS VANE
- FLOODPLAIN SEEDING
- LIVE STAKE PLANTING
- 3" CAL. TREE TO MEET MITIGATION
- 2" CAL. OVERSTORY TREE
- 1" CAL. UNDERSTORY TREE

MCDPS APPROVED FOR:	
STORMWATER MANAGEMENT:	
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REVIEWED	DATE
SEDIMENT CONTROL PERMIT #	
NOTE	
<p>MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.</p> <p>THIS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.</p> <p>DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.</p>	



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			
RECOMMENDED FOR APPROVAL			
Chief, Design Section	_____	_____	_____
APPROVED			
Chief, Division of Transportation Engineering	_____	_____	_____
Designed by: _____	Drawn by: _____	Checked by: _____	

**LOIS Y. GREEN
CONSERVATION FARM PARK**

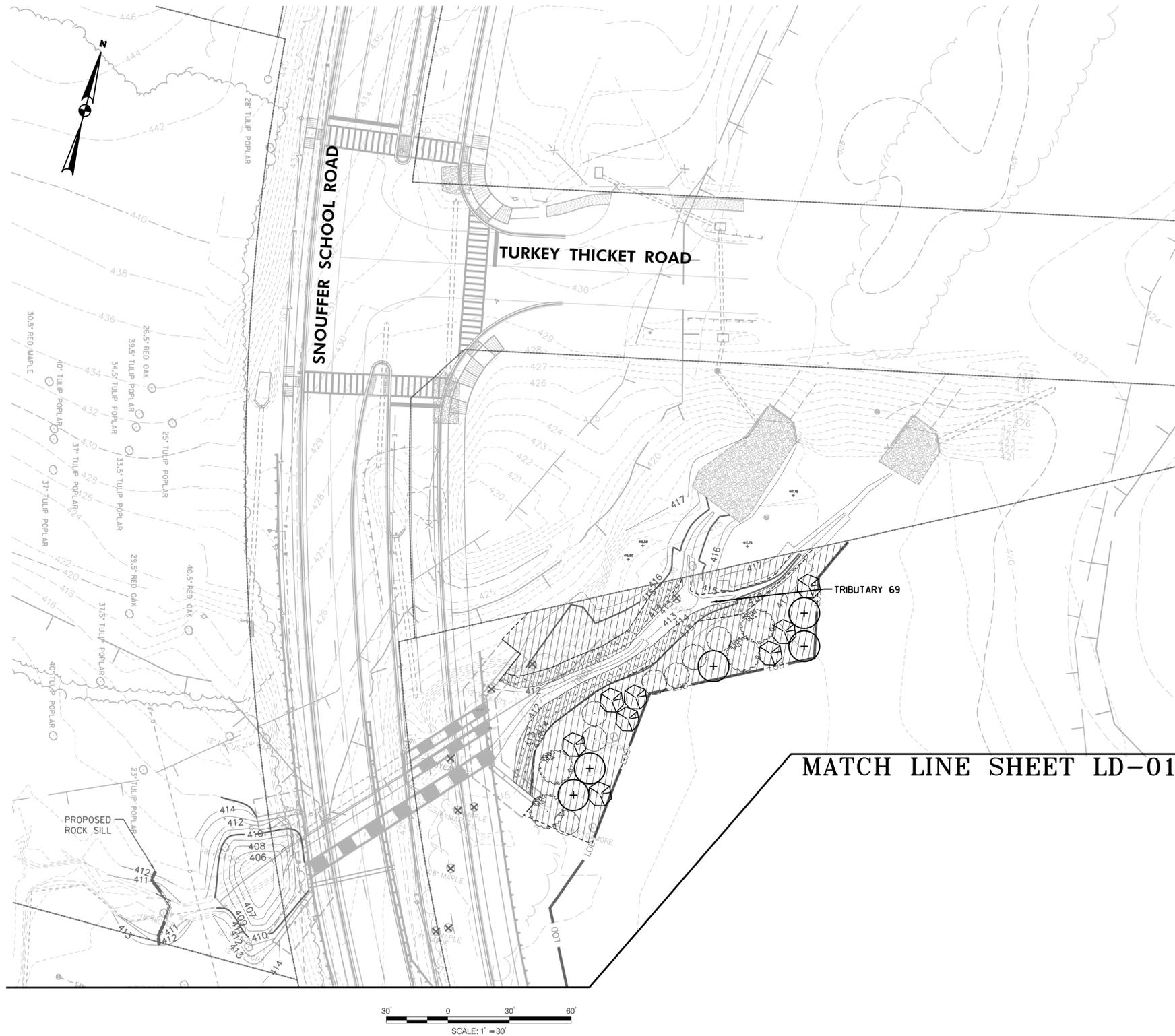
**LANDSCAPE PLAN
SHEET 2**

SCALE : 1" = 30'

LD-02

Project No. : 200661 (501119) 02 of 05

Title: 12.2015.01.01
 Date: 12/20/15
 Author: R. Green
 Project: 200661 (501119)
 Sheet: LD-02 of 05



SNOUFFER SCHOOL ROAD STREAM RESTORATION PLANT LIST						
FORM	SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE	NOTES
Live Stakes		249	<i>Sambucus nigra ssp. canadensis</i>	Common Elderberry	0.5-1" dia., 3.0'min. long	2' OC
Live Stakes		249	<i>Salix sericea</i>	Silky Willow	0.5-1" dia., 3.0'min. long	2' OC
Tree	AS	4	<i>Acer saccharinum</i>	Silver Maple	2" Cal.	15' OC
Tree	PO	5	<i>Platanus occidentalis</i>	Sycamore	2" Cal.	15' OC
Tree	AR	0	<i>Acer rubrum</i>	Red Maple	3" Cal.	20' OC
Tree	QB	0	<i>Quercus bicolor</i>	Swamp White Oak	3" Cal.	20' OC
Tree	CC	7	<i>Cercis canadensis</i>	Redbud	1" Cal.	12' OC
Tree	AA	8	<i>Amelanchier arborea</i>	Downy serviceberry	Multi-stem 6-8' Ht.	12' OC
Floodplain Seed Mix						
			<i>Elymus virginicus</i>	Virginia Wild Rye		20%
			<i>Elymus riparius</i>	Riparian Wild Rye		20%
		1319 SY	<i>Dichanthelium clandestinum</i>	Deer Tongue		20%
			<i>Elymus hystrix</i>	Bottle-Brush		20%
			<i>Tridens flavus</i>	Purple Top		20%

NOTE: SEE SHEET SR-20A FOR PLANTING DETAILS

LEGEND	
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING TREE TO BE REMOVED
	PROPOSED ROCK SILL
	PROPOSED J-HOOK
	PROPOSED CROSS VANE
	FLOODPLAIN SEEDING
	LIVE STAKE PLANTING
	3" CAL. TREE TO MEET MITIGATION
	2" CAL. OVERSTORY TREE
	1" CAL. UNDERSTORY TREE

MCDPS APPROVED FOR:	
STORMWATER MANAGEMENT:	
REVIEWED	DATE
APPROVED	DATE
SM FILE #	
SEDIMENT CONTROL TECHNICAL REQUIREMENTS:	
REVIEWED	DATE
APPROVED	DATE
ADMINISTRATIVE REQUIREMENTS:	
REVIEWED	DATE
SEDIMENT CONTROL PERMIT #	
NOTE	
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Title Block
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 118 Snouffer Farm Road\NDA\LD-01\20160118.dwg

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND				LOIS Y. GREEN CONSERVATION FARM PARK	
RECOMMENDED FOR APPROVAL Chief, Design Section _____ Date _____ Chief, Division of Transportation Engineering _____ Date _____				LANDSCAPE PLAN SHEET 3	
Designed by: _____ Drawn by: _____ Checked by: _____				SCALE : 1" = 30' Project No. : 200661 (501119) _____ of _____	
NO.	REVISION	DATE	BY	LD-03	

Engineering and Construction Services

February 8, 2016

Area 2 Division
M-NCPPC
8787 Georgia Avenue
Silver Spring, MD 20910

Re: Tree Removal Variance for Lois Y. Green Farm Conservation Park
Forest Conservation Plan SC#2008018 Amendment

Attn: Amy Lindsey

Pursuant to Section 22A-21 Variance provisions of the Montgomery County Code and provisions contained in Section 5-1607 of Title 5 (Natural Resources) of the Maryland Code, the Montgomery County Department of Transportation (MC-DOT) is writing to request a variance to allow disturbance to three (3) trees identified on the approved Natural Resource Inventory/ Forest Stand Delineation and described below for the above-named project.

Project Description

As part of Snouffer School Road Improvement project, a Capital Improvement Project to upgrade the roadway conditions and safety along Snouffer School Road, Cabin Branch and Tributary 69 are to undergo stream restoration. The existing two lane road is inadequate for the current and future traffic projections. A Multi-service agency complex is being developed within the project limits that will increase traffic counts. In order to provide for the additional capacity and the more importantly to improve safety throughout this segment of roadway, a four-lane divided roadway is being designed. It will have a new segment of bridge over Cabin Creek, an 8-foot shared use path on the northern side, and a 5-foot sidewalk on the southern side. This section of road links to the proposed one-mile roadway improvement directly to the south from Centerway Drive to Sweet Autumn Drive.

Approximately 1500 linear feet along Cabin Branch and 450 feet along Tributary 69, upstream and downstream of Snouffer School Road, were found to be in need of restoration. The plan revisions will affect SC #2008018 and are addressed in this amendment.

Ten (10) specimen candidate trees are proposed for removal to effectively stabilize the stream banks on Cabin Branch. Five (5) of these specimen candidate trees are noted on the Lois Y. Green Farm Conservation Park. These specimen tree conditions are described below:

1. Tree ID #1 (#41 in Snouffer School Road Improvement project), would have 100% of its CRZ impacted. This Red Maple currently measures 33" dbh although in 2008 it measured as a 26.1" and it is in good condition. It is however, a twin trunk tree and therefore is more subject to disease and a shorter life span. The CRZ impacts are a result of grading to stabilize the stream bed.
2. Tree ID#3 (#45 in Snouffer School Road Improvement project), a 37" dbh Silver Maple, would have a CRZ impact of 100%. The tree is in good condition however, it is on the stream bank and the proposed stream stabilization will impact its roots.
3. Tree ID#2 (#68 in Snouffer School Road Improvement project), would have a 100% of its CRZ impacted. The 31.2" dbh Silver Maple has current dbh of 36" and is in excellent condition however, it is growing on the stream bank edge. Stream stabilization measures would impact the roots and compromise the tree's health.
4. Tree ID #4 (#47 in Snouffer School Road Improvement project), would have a 50% of its CRZ impacted. The 28.6" dbh Black Cherry has current dbh of 33" and is in poor condition with sparse branching, dead branches, and suckering. Stream stabilization measures would impact the roots and compromise the tree's health.

- Tree ID#5 (#46 in Snouffer School Road Improvement project), would have a 40% of its CRZ impacted. The 31.7" dbh Silver Maple has current dbh of 46" and is in excellent condition however, it is growing on the stream bank edge. This tree can be field reviewed by an MNCPPC arborist during construction and potentially saved.

Five (5) additional trees, which have reached specimen size, will have disturbance within their critical root zones and are proposed for removal.

- Tree ID#5 would have a 100% of its CRZ impacted. The 30.1" dbh Silver Maple is in fair condition however, it is on the stream bank and the proposed stream stabilization will impact its roots.
- Tree ID#6 would have a 35.65% of its CRZ impacted. The 32" dbh Cottonwood has current is in fair condition. The project LOD was adjusted to potentially save this tree. It can be field reviewed by an MNCPPC arborist during construction.
- Tree ID#48 would have a 36% of its CRZ impacted. The 36" dbh Silver Maple has current is in good condition. The project proposes to divert the stream away from this tree therefore, it can be field reviewed by an MNCPPC arborist during construction and potentially saved.
- Tree ID#61 would have a 48% of its CRZ impacted. The 33" dbh Tulip Poplar is in good condition however, it is on the stream bank and the proposed stream stabilization will impact its roots.
- Tree ID#69 would have a 45% of its CRZ impacted. The 32" dbh Silver Maple is in good condition however, it is on the stream bank and the proposed stream stabilization will impact its roots.

The following list details all the trees with a 30" or greater dbh and a disturbance within their critical root zones. Due to the nature of the disturbance and the tree root condition some of these trees may be saved. Much of the expected disturbance will be for access only and trees will be protected with tree protection measures. The roots of the trees along the stream bank are exposed and in many cases dead and therefore the CRZ does not extend beyond the stream. The final decision will be at the discretion of the MNCPPC arborist during construction.

Tree number	Size DBH	Forest Stand	Common name	Scientific name	Condition	CRZ Impact	Status
5	30.1	1	Silver Maple	<i>Acer saccharinum</i>	Fair	100.00%	Remove
6	32.0	1	Cottonwood	<i>Populus deltoides</i>	Fair	35.65%	Remove
41 / 1	33.0	1	Red Maple	<i>Acer rubrum</i>	Good	100.00%	Remove
45 / 3	37	1	Silver Maple	<i>Acer saccharinum</i>	Good	100.00%	Remove
46 / 5	46	1	Silver Maple	<i>Acer saccharinum</i>	Excellent	100.00%	Remove
47 / 4	33	1	Black Cherry	<i>Prunus serotina</i>	Poor	100.00%	Remove
48	36	1	Silver Maple	<i>Acer saccharinum</i>	Good	100.00%	Remove
51 / 6	42	1	Silver Maple	<i>Acer saccharinum</i>	Good	0.70%	Save
57	34	1	Silver Maple	<i>Acer saccharinum</i>	Fair	29.00%	Save
61	33	1	Tulip poplar	<i>Liriodendron tulipifera</i>	Good	48.00%	Remove
68 / 2	36	1	Silver Maple	<i>Acer saccharinum</i>	Excellent	100.00%	Remove
69	32	1	Silver Maple	<i>Acer saccharinum</i>	Good	45.00%	Remove

The Forest Conservation Plan provides detailed information for the available tree protection methods that will be used (e.g. mulch access, tree protection fencing and planking, pruning, and matting) where access or grading cannot be eliminated without imposing a significant and unwarranted hardship upon MC-DOT. Again, no tree is impacted without due consideration on this project and we reserve the right to further reduce tree impacts and improve our Forest Conservation Plan further after construction stake-out where possible.

Requirements and Justification for 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;

The attached Preliminary Forest Conservation Plan shows the project site, its surroundings and proposed construction relative to the existing trees for which this variance request has been filed. We have designed access and grading to minimize tree loss, particularly to specimen trees, and we have a vested interest in minimizing tree loss. The design has taken into consideration the natural resources and significant trees. The roadway and associated median have been reduced to the minimum amount possible for a divided road and bridge. Separation of the bridge is required due to a combination of clearance for flood conveyance and the 5 percent superelevation of the bridge. Increasing the overall elevation of the bridge to an elevation sufficient to allow a single structure would increase the height of bridge approaches, affecting site visibility near an intersection, increasing the width of fill required for side slopes, thus increasing the likelihood of impacts to wetlands, wetland buffers, forest stands, or other specimen candidate trees as well as construction cost

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

MC-DOT projects are designed to protect public safety with the pledge to protect natural resources to the maximum practicable extent. This includes wetlands, waterways, forests and specimen trees. Of the 25 significant (>24 inch DBH) trees and 14 specimen trees (>30 inch DBH) observed within the 100-ft NRI/FSD study area, ten (10) trees greater than 30 inches DBH are planned for removal. Two additional trees (part of this project but found in MR2014038) will be removed. While activities are planned in the critical root zones of some of the trees listed above, most tree impacts will be mitigated with proper oversight and tree protection measures. Execution of this project will also improve water quality by updating the stormwater management infrastructure in the area and improve safety for the traveling public. Enforcement of a prohibition on potentially disturbing the specimen trees would deprive the public of rights commonly enjoyed by others who are served by similar projects in developing areas that have benefited from such projects.

(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;

All stream channel work will be carried out using a stream flow pump-around to minimize erosion and maximize sediment control by working in dry stream channels. All disturbed areas will be stabilized with permanent seeding and matting. All activities in these areas will be conducted in accordance with appropriate permits, processes, and guidelines including:

1. Army Corps of Engineers – Nationwide General Permit
2. Maryland Department of the Environment - Joint Permit process and Maryland State Waterway Construction Guidelines,
3. Montgomery County Department of Permitting Services – Sediment Control Permit, Floodplain
4. District Permit, Right-of-Way Permit
5. Maryland National Capitol Park & Planning Commission - Montgomery County – NRI-FSD,
6. Forest Conservation Permit and Park Construction Permit.

For the above reasons, the removal of the specimen trees would not violate the aforementioned standards, nor would it result in a measurable degradation in water quality.

Much of the floodplain forest is comprised of similarly aged red and silver maple. The canopy is so dense that understory trees, shrubs and ground cover are generally lacking, contributing to lack of roots to stabilize stream banks. The restoration of the stream and removal of a few existing trees will create enough light gaps for

mitigation plantings to become established, thus enhancing stand structural diversity and the long term stability of the stream banks.

Finally, we understand that we need to address mitigation for tree removal under revisions to the State's Forest Conservation Act (FCA) that took effect on October 1, 2009. For the proposed project, a total of 348 inches of tree DBH are being removed and replaced at a 25 percent amount. Therefore, an equivalent of 87 inches of tree caliber is to be replanted. To mitigate for the removal of the trees, the landscape plans for Snouffer School Road Improvements project include planting of twenty one (29) trees with a 3-inch caliber. This Forest Conservation Plan and worksheet address all impacts to regulated trees to be removed and critical root zones within the project limits of disturbance and forest boundary.

If you have any other questions or need additional information, please contact me at 410-880-3055 or via email at dmerkey@gpinet.com.

Sincerely,

A handwritten signature in blue ink that reads "Dave Merkey". The signature is fluid and cursive, with the first name "Dave" being larger and more prominent than the last name "Merkey".

Dave Merkey