

VICINITY MAP
SCALE: 1"=2000'
GRID MAP

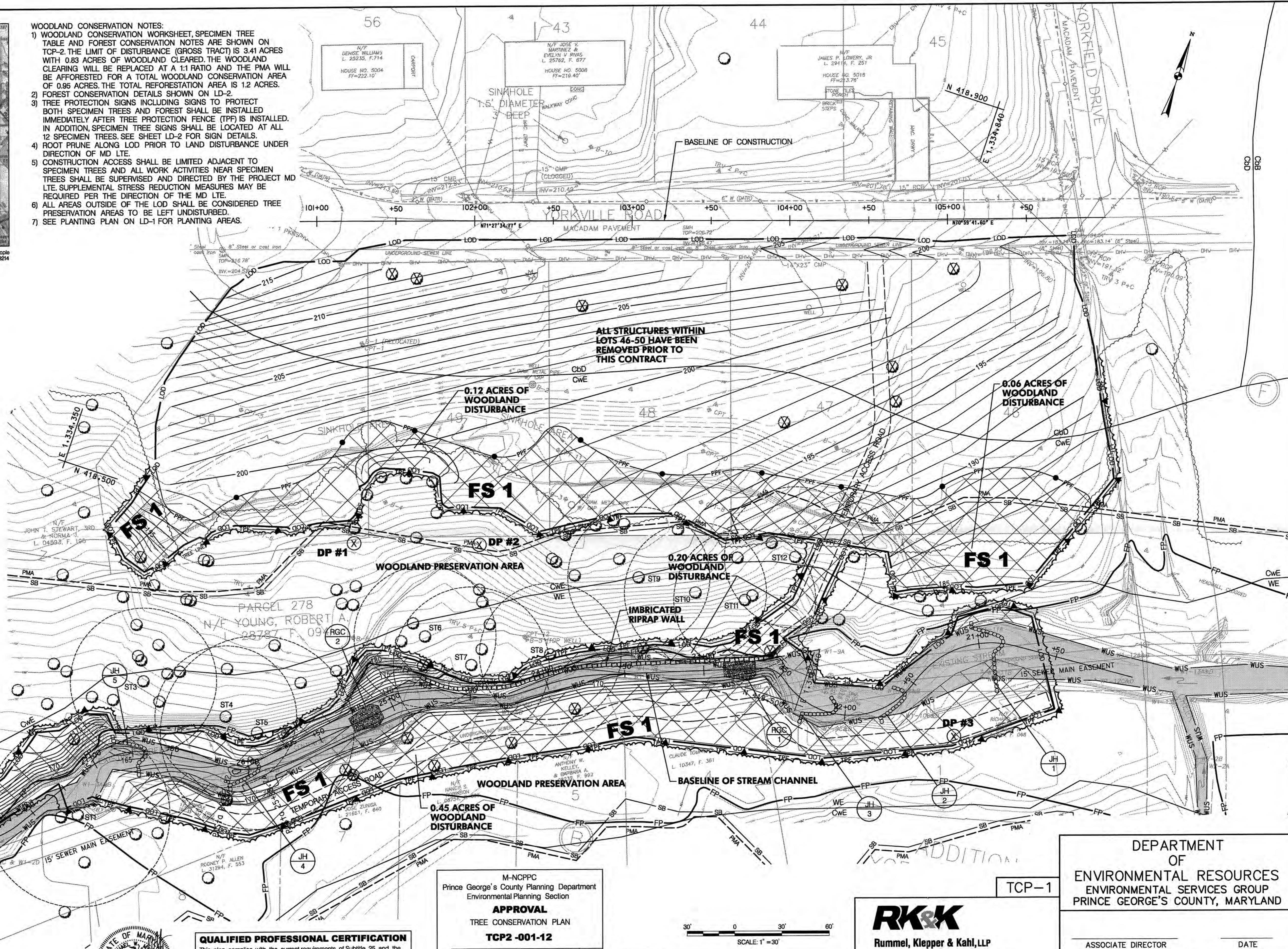
P.G. CO. ADC MAP BOOK 24 G 3
W.S.S.C. GRID MAP 207 SE 05
TAX MAP 97 GRID E-2, F-2

Copyright ADC The Map People
Permitted Use Number 2003204
Expiration: 04/01/2012

WOODLAND CONSERVATION NOTES:

- 1) WOODLAND CONSERVATION WORKSHEET, SPECIMEN TREE TABLE AND FOREST CONSERVATION ARE SHOWN ON TCP-2. THE LIMIT OF DISTURBANCE (GROSS TRACT) IS 3.41 ACRES WITH 0.83 ACRES OF WOODLAND CLEARED. THE WOODLAND CLEARING WILL BE REPLACED AT A 1:1 RATIO AND THE PMA WILL BE AFFORESTED FOR A TOTAL WOODLAND CONSERVATION AREA OF 0.95 ACRES. THE TOTAL REFORESTATION AREA IS 1.2 ACRES.
- 2) FOREST CONSERVATION DETAILS SHOWN ON LD-2.
- 3) TREE PROTECTION SIGNS INCLUDING SIGNS TO PROTECT BOTH SPECIMEN TREES AND FOREST SHALL BE INSTALLED IMMEDIATELY AFTER TREE PROTECTION FENCE (TPF) IS INSTALLED. IN ADDITION, SPECIMEN TREE SIGNS SHALL BE LOCATED AT ALL 12 SPECIMEN TREES. SEE SHEET LD-2 FOR SIGN DETAILS.
- 4) ROOT PRUNE ALONG LOD PRIOR TO LAND DISTURBANCE UNDER DIRECTION OF MD LITE.
- 5) CONSTRUCTION ACCESS SHALL BE LIMITED ADJACENT TO SPECIMEN TREES AND ALL WORK ACTIVITIES NEAR SPECIMEN TREES SHALL BE SUPERVISED AND DIRECTED BY THE PROJECT MD LITE. SUPPLEMENTAL STRESS REDUCTION MEASURES MAY BE REQUIRED PER THE DIRECTION OF THE MD LITE.
- 6) ALL AREAS OUTSIDE OF THE LOD SHALL BE CONSIDERED TREE PRESERVATION AREAS TO BE LEFT UNDISTURBED.
- 7) SEE PLANTING PLAN ON LD-1 FOR PLANTING AREAS.

LEGEND	
WATERS OF THE US	WUS
PROPERTY BOUNDARY	---
FOREST PLOT POINT	DP #2
SPECIMEN TREE AND CRITICAL ROOT ZONE	ST1
SOIL BOUNDARY	CWE
STREAM BUFFER	SB
PRIMARY MANAGEMENT AREA	PMA
PROPOSED CONTOURS	-120
FOREST STAND	FS1
EXISTING CONTOURS	-120
TREE PROTECTION FENCING (TEMPORARY)	TPF
TREE PROTECTION FENCING (PERMANENT)	PPF
WOODLAND PRESERVATION SIGN	▲
REFORESTATION / AFFORESTATION SIGN	●
LIMIT OF DISTURBANCE	LOD
EXISTING WOODLANDS	---
PROPOSED WOODLANDS	---
100-YR FLOODPLAIN	FP
WOODLAND REFORESTATION / AFFORESTATION AREA (WRA)	---



"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19546, EXPIRATION DATE: 2/18/2014"



QUALIFIED PROFESSIONAL CERTIFICATION

This plan complies with the current requirements of Subtitle 25 and the Woodland and Wildlife Conservation Technical Manual.

Signed: *William Morgan* Date: 2/2/2012

WILLIAM MORGAN
81 MOSHER STREET
BALTIMORE, MD 21217
410-468-9174
wmorgan@rkk.com

M-NCPPC
Prince George's County Planning Department
Environmental Planning Section

APPROVAL

TREE CONSERVATION PLAN

TCP2-001-12

DATE	REVISION
01	1/1/12
02	3/13/12
03	
04	
05	

30' 0 30' 60'
SCALE: 1"=30'

RK&K
Rummel, Klepper & Kahl, LLP

81 MOSHER STREET | BALTIMORE, MD 21217
PH: (410) 728-2900 FAX: (410) 728-3160

Engineers | Construction Managers | Planners | Scientists
www.rkk.com

DEPARTMENT
OF
ENVIRONMENTAL RESOURCES
ENVIRONMENTAL SERVICES GROUP
PRINCE GEORGE'S COUNTY, MARYLAND

ASSOCIATE DIRECTOR DATE
SCALE: 1"=30'-0" DWG 13 OF 17

APPROVED SECTION MANAGER DATE

DESIGNED: W. MORGANTE
DRAWN: D. ADKINS
CHECKED BY: G. O'HARE

MANVINDER SINGH
PROJECT MANAGER

DER-2012-0001
BID NO.

DEPARTMENT OF ENVIRONMENTAL RESOURCES



CAPITAL PROJECTS TEAM
ENVIRONMENTAL SERVICES GROUP

YORKVILLE ROAD SLOPE FAILURE
STREAM STABILIZATION PROJECT

TREE CONSERVATION
PLAN 2

NATIVE UPLAND SEED						Size: 9,226 SY (1.91 acres)				
Overall Minimum Spacing (feet center)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Wetland Indicator Status	Size	Type	Placement	
NA	40	NATIVE PERMANENT UPLAND SEED MIX*								
		35	26.7 lbs.	<i>Andropogon virginicus</i>	Broom-sedge	FACU	Seed	NA	Lb. of P.L.S. 762	
		20	15.3 lbs.	<i>Elymus canadensis</i>	Canada Wild Rye	FAC	Seed	NA	Lb. of P.L.S. 762	
		4	3.1 lbs.	<i>Juncus tenuis</i>	Path Rush	FAC-	Seed	NA	Lb. of P.L.S. 762	
		15	11.5 lbs.	<i>Panicum clandestinum</i>	Deer Tongue	FAC	Seed	NA	Lb. of P.L.S. 762	
		10	7.6 lbs.	<i>Panicum virgatum</i>	Switchgrass	FAC	Seed	NA	Lb. of P.L.S. 762	
		12	9.2 lbs.	<i>Schizanthus scoparium</i>	Little Bluestem	FACU	Seed	NA	Lb. of P.L.S. 762	
		4	3.1 lbs.	<i>Sorghastrum nutans</i>	Indian Grass	UPL	Seed	NA	Lb. of P.L.S. 762	
		100.0	76.4 lbs.	=total						

NATIVE UPLAND FOREST						Size: 3,315 SY (0.68 acres)			
Overall Minimum Spacing (feet center)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Wetland Indicator Status	Size	Type	Placement
TREES									
10.5	395								
		9	24	<i>Acer rubrum</i>	Red Maple	FAC	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		15	41	<i>Liriodendron tulipifera</i>	Tulip Poplar	FACU	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		10	27	<i>Prunus serotina</i>	Black Cherry	FACU	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		18	49	<i>Quercus alba</i>	White Oak	FACU	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		18	49	<i>Quercus rubra</i>	Northern Red Oak	FACU	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		15	41	<i>Quercus velutina</i>	Black Oak	UPL	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		15	41	<i>Sassafras albidum</i>	Sassafras	FACU-	1- 1 1/2" o.d.	Cont.	Naturalized @ 10.5' OC
		100.0	271	-total					
8' clustered	36			SHRUBS					
		20	5	<i>Lindera benzoin</i>	Spirobsue	FACW-	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		25	6	<i>Hamamelis virginiana</i>	Witch hazel	FAC-	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		13	3	<i>Vaccinium angustifolium</i>	Low-bush Blueberry	FACU-	12-18" ht.	Cont.	Groups of 3-5, 8' OC
		22	5	<i>Viburnum dentatum</i>	Southern Arrowwood	FAC	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		20	5	<i>Viburnum acerifolium</i>	Mapleleaf Viburnum	FACU	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		100.0	24	-total					
NA	40			NATIVE PERMANENT UPLAND SEED MIX*					
		35	9.6 lbs.	<i>Andropogon virginicus</i>	Broom-sedge	FACU	Seed	NA	Lb. of P.L.S. 762
		20	5.5 lbs.	<i>Elymus canadensis</i>	Canada Wild Rye	FAC	Seed	NA	Lb. of P.L.S. 762
		4	1.1 lbs.	<i>Juncus tenuis</i>	Path Rush	FAC-	Seed	NA	Lb. of P.L.S. 762
		15	4.1 lbs.	<i>Panicum clandestinum</i>	Deer Tongue	FAC	Seed	NA	Lb. of P.L.S. 762
		10	2.7 lbs.	<i>Panicum virgatum</i>	Switchgrass	FAC	Seed	NA	Lb. of P.L.S. 762
		12	3.3 lbs.	<i>Schizanthus scoparium</i>	Little Bluestem	FACU	Seed	NA	Lb. of P.L.S. 762
		4	1.1 lbs.	<i>Sorghastrum nutans</i>	Indian Grass	UPL	Seed	NA	Lb. of P.L.S. 762
		100.0	27.4 lbs.	-total					
*FOR TEMPORARY SEED, REFER TO TEMPORARY SEED TABLE, SHEET ES-3.									

- PLANTING NOTES:
- REMOVE TEMPORARY CONSTRUCTION ACCESS ROAD BEFORE ANY PLANTING IS DONE. MULCH SHALL BE REMOVED CAREFULLY USING HAND TOOLS OR LIGHTWEIGHT EQUIPMENT TO PREVENT DAMAGE TO RETAINED TREES. MD LTE TO PROVIDE SOIL COMPACTION REMEDIATION RECOMMENDATIONS IF REQUIRED.
 - PLANT TYPE SUBSTITUTIONS ARE PERMITTED WITH WRITTEN APPROVAL FROM MNCPPC.
 - ALL PLANTS MUST MEET THE STANDARDS OF THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK SPONSORED BY THE ASSOCIATION OF AMERICAN NURSERYMEN.
 - THE LANDSCAPING SHOWN ON THIS PLAN MUST BE PLANTED IN ACCORDANCE WITH THE LATEST EDITION OF LANDSCAPE SPECIFICATION GUIDELINES, DEVELOPED BY THE MD-DC-VA CHAPTER OF THE LANDSCAPE CONTRACTORS ASSOCIATION.
 - SOIL CONDITIONS MUST BE TESTED, VERIFIED AND ADJUSTED BY THE LANDSCAPE CONTRACTOR TO INSURE THAT APPROPRIATE SOIL COMPOSITION AND PH LEVELS ARE SUITABLE FOR PLANT MATERIALS SPECIFIED FOR THAT SPECIFIC LOCATION.
 - PERMANENT TREE PROTECTION FENCE AND WOODLAND PRESERVATION AREA SIGNS SHALL BE PLACED IN THE LOCATIONS SHOWN ON TCP-1 IMMEDIATELY AFTER PLANTING OPERATIONS PER THE DETAILS SHOWN ON LD-2.
 - DEER PROTECTION DEVICES SHALL BE INSTALLED ON ALL TREES AND SHRUBS. SEE DETAIL ON SHEET LD-2 AND PROJECT SPECIFICATIONS.
 - SEE PLANTING SPECIFICATION NOTES ON TCP-2.

LEGEND:

- NATIVE FLOODPLAIN FOREST
- NATIVE UPLAND FOREST
- NATIVE UPLAND SEED
- PROPERTY BOUNDARY
- 200' PROPOSED CONTOUR
- 180' EXISTING CONTOUR
- LOD LIMIT OF DISTURBANCE
- PROPOSED TREE LINE
- EXISTING TREE LINE
- EXISTING TREE TO BE REMOVED
- TPF TREE PROTECTION FENCE
- PMA PRIMARY MANAGEMENT AREA

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19546, EXPIRATION DATE: 2/18/2014"



NATIVE FLOODPLAIN FOREST							Size: 2,495 SY (0.52 acres)		
Overall Minimum Spacing (feet center)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Wetland Indicator Status	Size	Type	Placement
10.5	395	TREES							
		30	61	<i>Acer rubrum</i>	Red Maple	FAC	1 - 1 1/2" ad.	Cont.	Naturalized @ 10.5' OC
		20	41	<i>Betula nigra</i>	River Birch	FAC	1 - 1 1/2" ad.	Cont.	Naturalized @ 10.5' OC
		20	41	<i>Nyssa sylvatica</i>	Black Gum	FAC	1 - 1 1/2" ad.	Cont.	Naturalized @ 10.5' OC
		30	61	<i>Quercus phellos</i>	Willow Oak	FAC+	1 - 1 1/2" ad.	Cont.	Naturalized @ 10.5' OC
		100	204	=total					
8' clustered	36	SHRUBS							
		35	6	<i>Clethra alnifolia</i>	Sweet Pepperbush	FAC+	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		40	7	<i>Cornus amomum</i>	Silky Dogwood	FACN	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		25	5	<i>Ilex verticillata</i>	Winterberry	FACN+	18-24" ht.	Cont.	Groups of 3-5, 8' OC
		100	18	=total					
NA	40	NATIVE PERMANENT WETLAND SEED MIX*							
		35	7.2 lbs.	<i>Andropogon gerardii</i>	Big Bluestem	FAC	Seed	NA	Lb. of P.L.S. 762
		20	4.1 lbs.	<i>Elymus riparius</i>	Riverbank Wild Rye	FACN	Seed	NA	Lb. of P.L.S. 762
		3	0.8 lbs.	<i>Eupatorium fistulosum</i>	Joe-Pye Weed	FACN	Seed	NA	Lb. of P.L.S. 762
		20	4.1 lbs.	<i>Panicum virgatum</i>	Switchgrass	FAC	Seed	NA	Lb. of P.L.S. 762
		10	2.1 lbs.	<i>Sorghastrum nutans</i>	Wool Grass	FACN	Seed	NA	Lb. of P.L.S. 762
		12	2.5 lbs.	<i>Tripsacum dasyphyllum</i>	Eastern Goma Grass	FACN	Seed	NA	Lb. of P.L.S. 762
		100	20.6 lbs.	=total					
*FOR TEMPORARY SEED, REFER TO TEMPORARY SEED TABLE, SHEET ES-3.									



M-NCPPC
Prince George's County Planning Department
Environmental Planning Section

APPROVAL
TREE CONSERVATION PLAN
TCP2-001-12

Approved by: *[Signature]* Date: 3/13/12

DATE	REVISION
01	
02	
03	
04	
05	

LD-1

RK&K
Rummel, Klepper & Kahl, LLP
81 MOSHER STREET | BALTIMORE, MD 21217
PH: (410) 728-2900 FAX: (410) 728-3160

Engineers | Construction Managers | Planners | Scientists
www.rkk.com

DEPARTMENT OF ENVIRONMENTAL RESOURCES
ENVIRONMENTAL SERVICES GROUP
PRINCE GEORGE'S COUNTY, MARYLAND

ASSOCIATE DIRECTOR DATE

SCALE: 1"=30'-0" DWG 15 OF 17

APPROVED SECTION MANAGER DATE

DESIGNED: W. MORGANTE
DRAWN: D. ADKINS
CHECKED BY: G. O'HARE

C.I.P. NO.
DER-2012-0001
BID NO.

PLOTTED: Tuesday, February 21, 2012 AT 02:01 PM
FILE: K:\projects\403-093\Task 25_Yorkville Rd\CADD\DON\Stream Stabilization\PLS-0001-Yorkville stream.dgn

PLOTTED: Tuesday, February 21, 2012 AT 08:55 AM
 FILE: K:\projects\403-003\403-003.dgn
 Stream Stabilization\403-003-0002-Yorkville stream.dgn

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19546, EXPIRATION DATE: 2/18/2014"



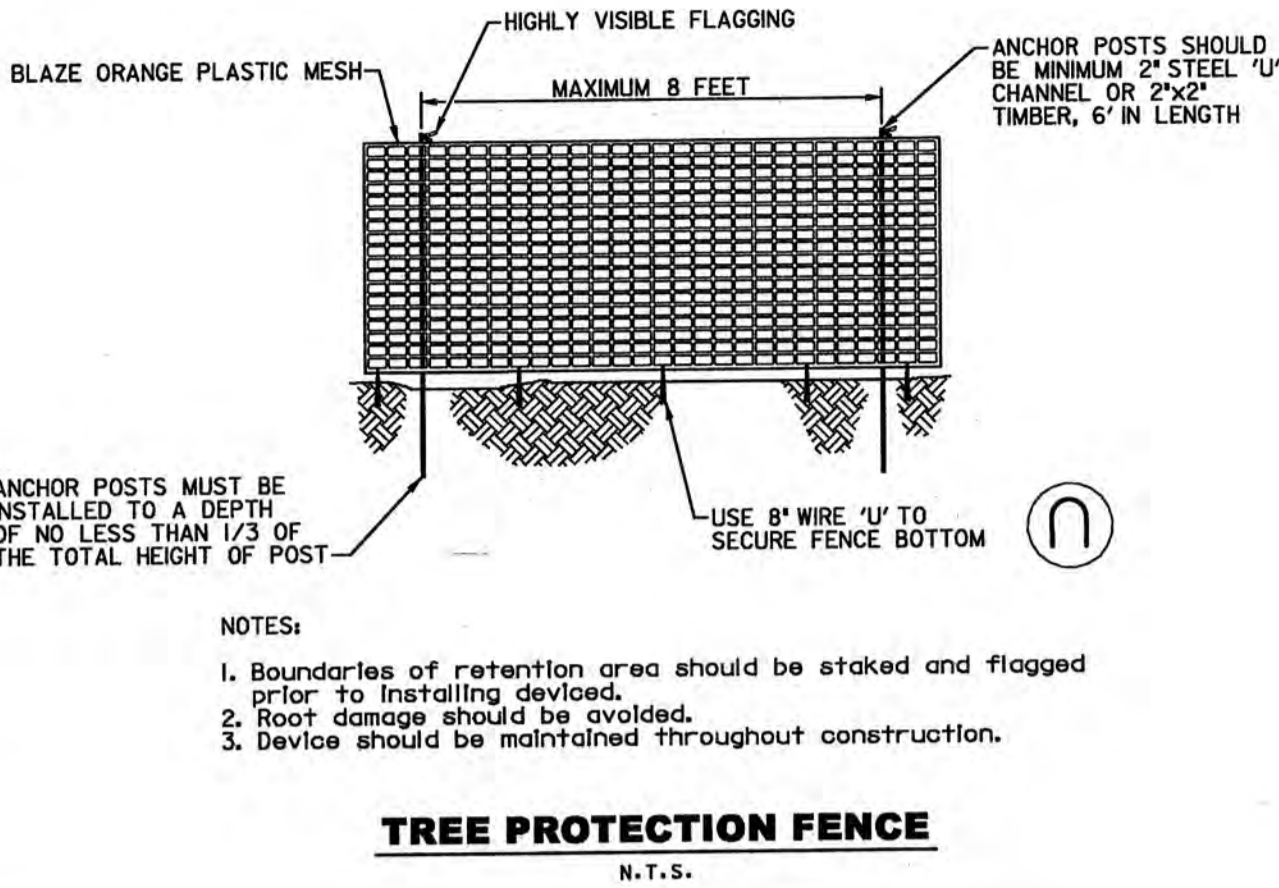
DEPARTMENT OF ENVIRONMENTAL RESOURCES



CAPITAL PROJECTS TEAM
 ENVIRONMENTAL SERVICES GROUP

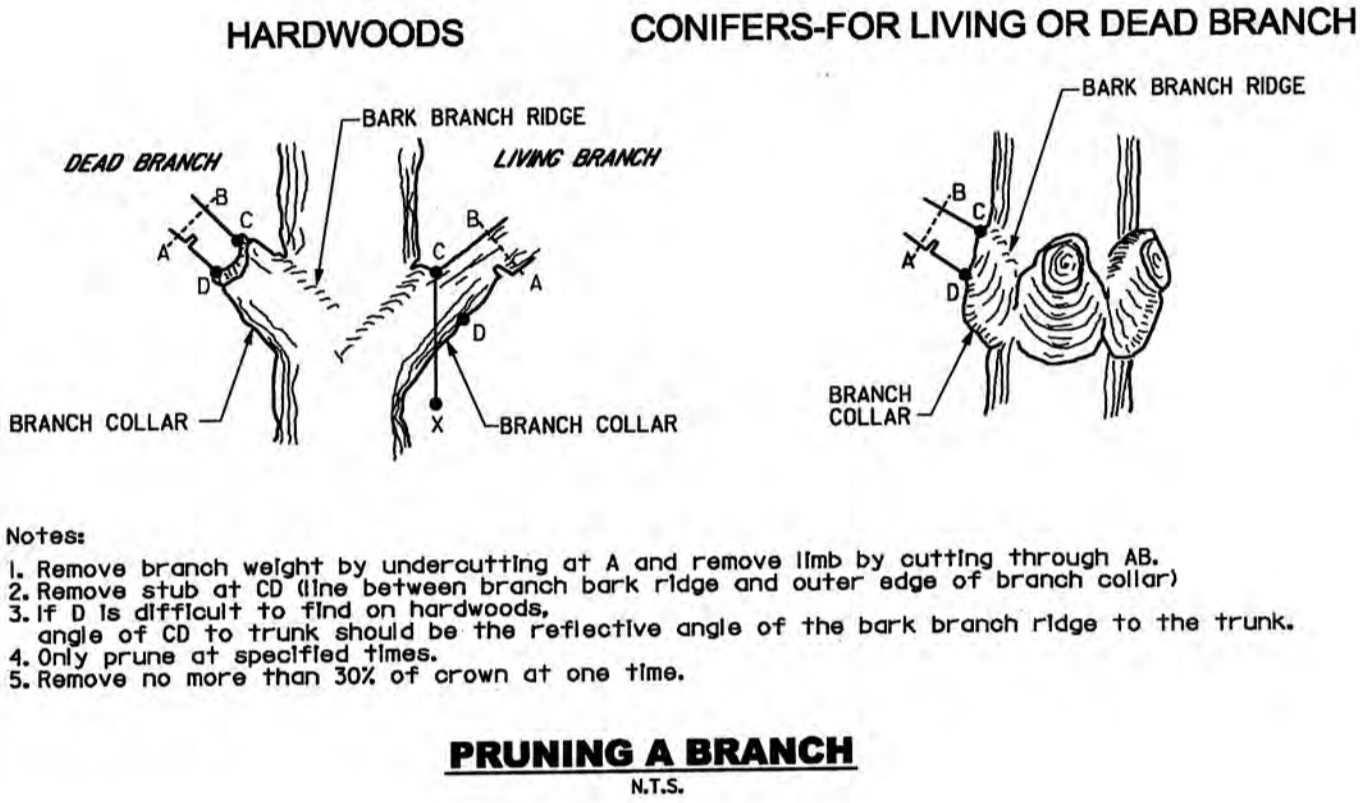
YORKVILLE ROAD SLOPE FAILURE
 STREAM STABILIZATION PROJECT

PLANTING & FOREST
 CONSERVATION
 DETAILS/WORKSHEET



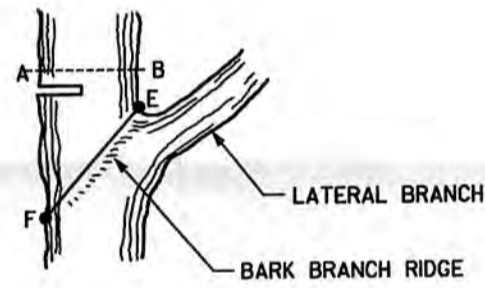
TREE PROTECTION FENCE

N.T.S.



PRUNING A BRANCH

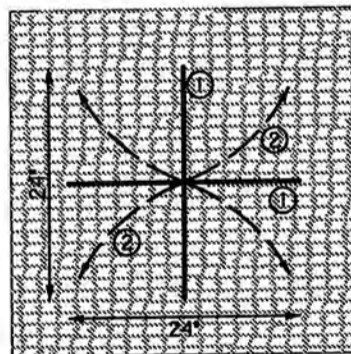
N.T.S.



PRUNING A LEADER TO REDUCE SIZE

N.T.S.

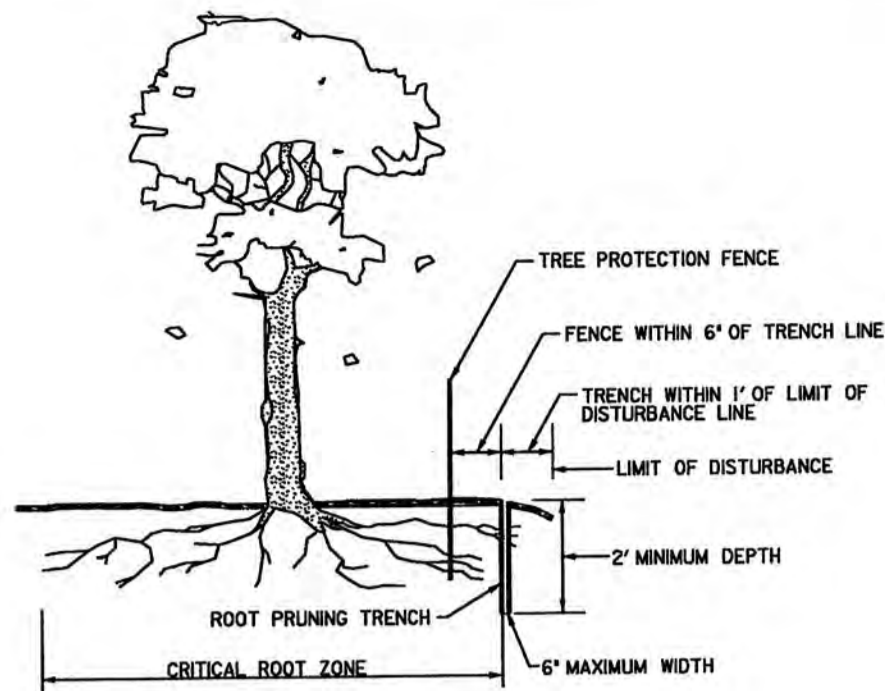
Source: Adapted from Steve Clark & Associates/ACRT, Inc.



- Make cut with sharp knife through Coir Fiber Matting - Solid line in diagram
- Pin back Coir Fiber with 4 staples - dashed line in diagram
- Install plant through pinned back Coir Fiber. Install plant at proper grade to ground plane
- Remove 4 staples
- Place 4 staples in each of four cut sections. Re-anchor Coir Matting to ground

SHRUB INSTALLATION THROUGH COIR FIBER MATTING

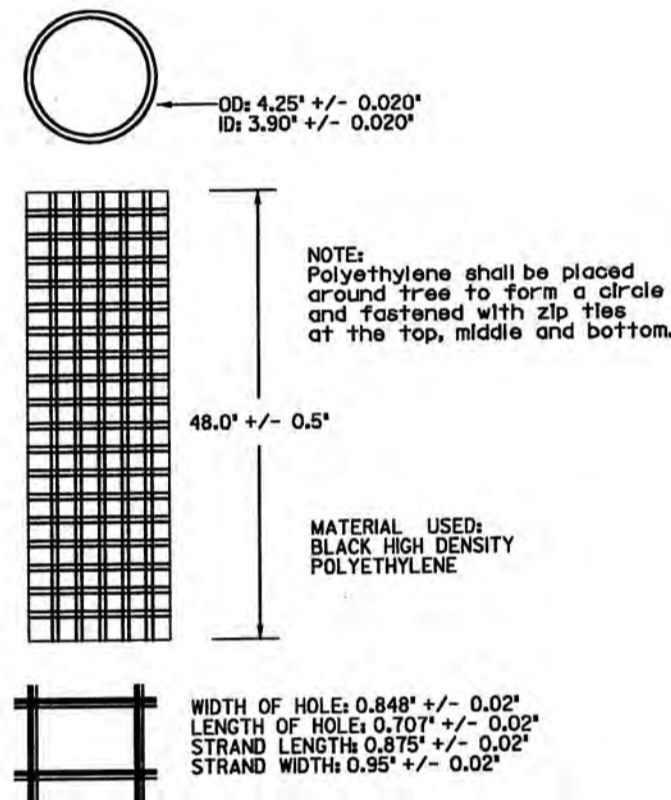
N.T.S.



ROOT PRUNING DETAIL

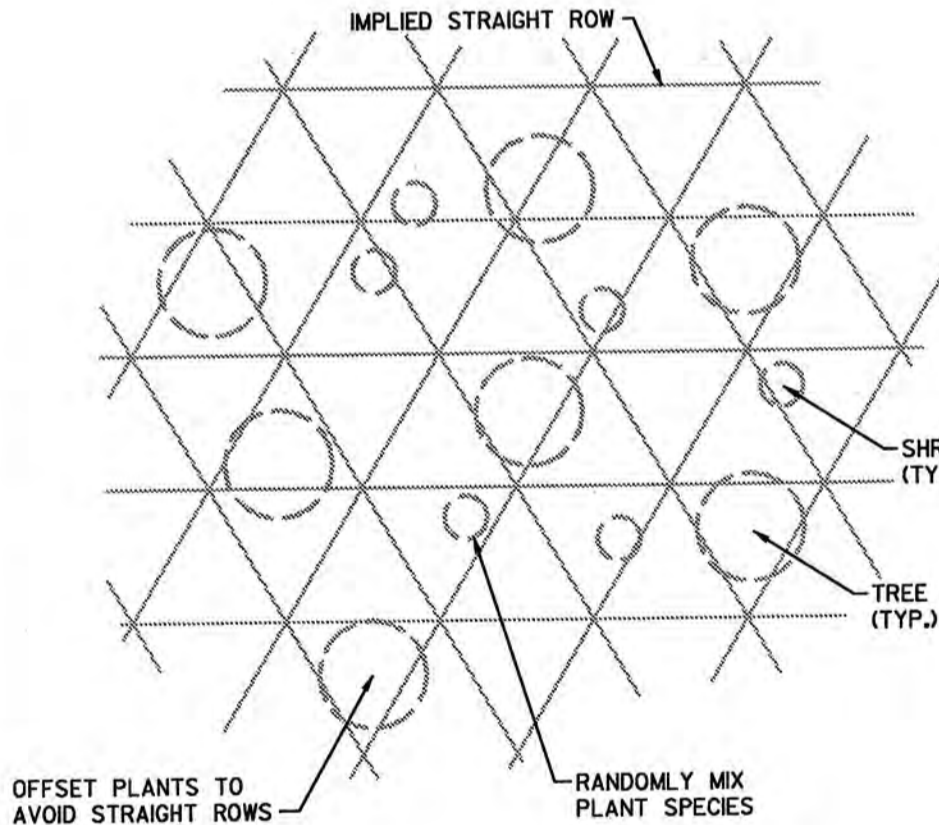
N.T.S.

Source: Adapted from Steve Clark & Associates/ACRT, Inc. and Forest Conservation Manual, 1991



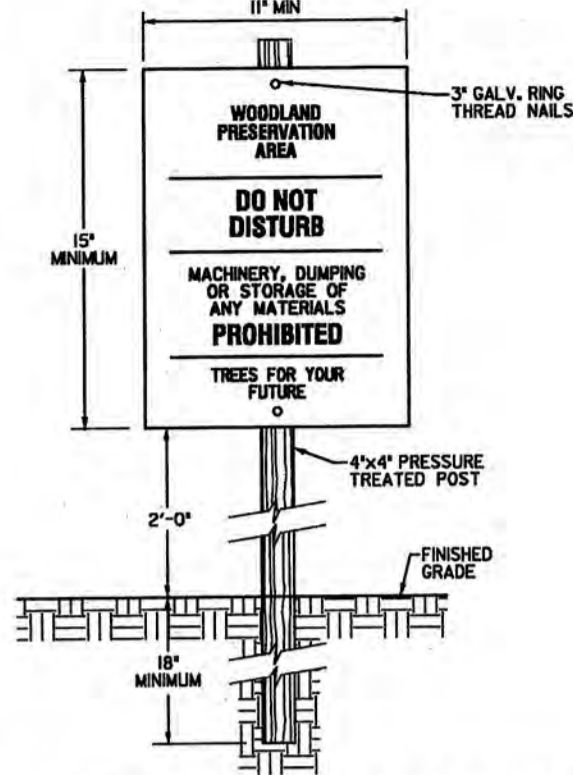
DEER PROTECTION

N.T.S.



NATURALIZED PLANT SPACING

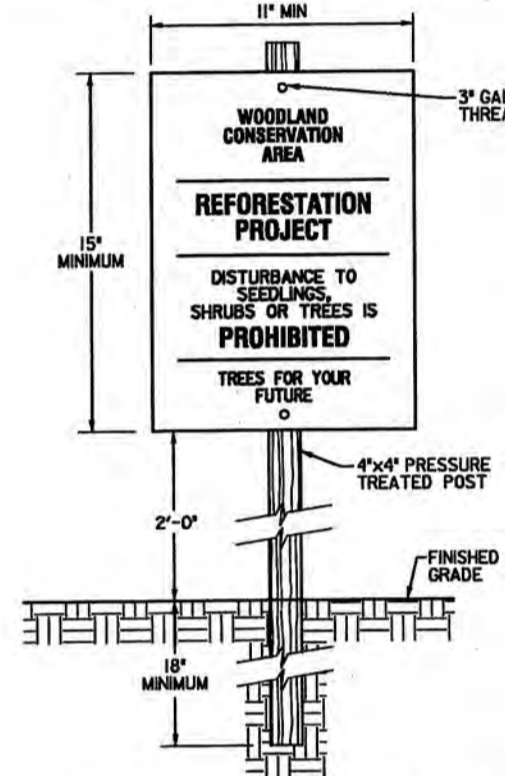
N.T.S.



WOODLAND PRESERVATION AREA SIGN

N.T.S.

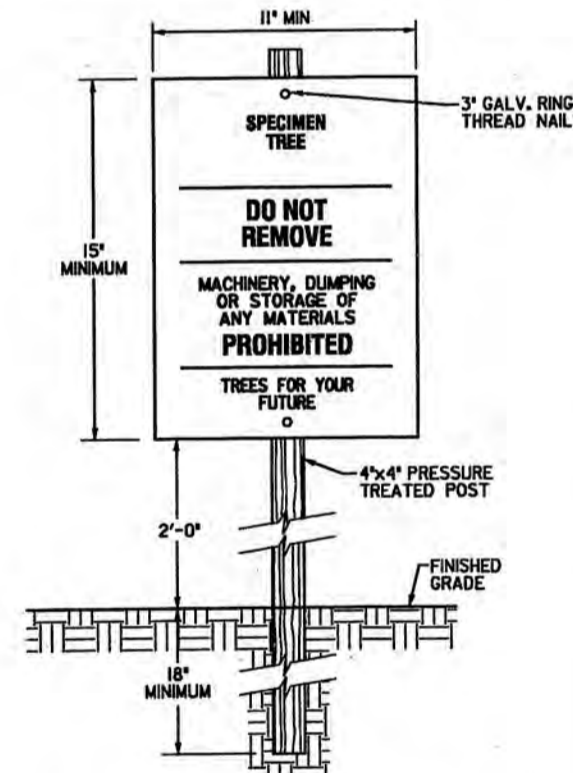
- Attachment of signs to trees is prohibited.
- Signs should be properly maintained.
- Avoid injury to roots when placing posts for the signs.
- Signs should be posted to be visible to all construction personnel from all directions.
- Signs should be installed at same time as tree protection device.
- Locate signs approximately every 50 feet along fencing.
- Signs should be in place immediately following stake out of L.O.D., and remain in place in perpetuity.



REFORESTATION AREA SIGN

N.T.S.

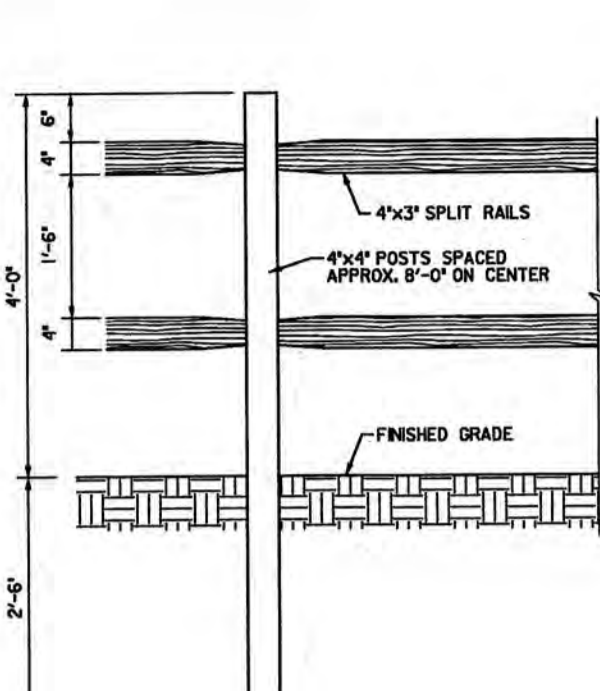
- Attachment of signs to trees is prohibited.
- Signs should be properly maintained.
- Avoid injury to roots when placing posts for the signs.
- Signs should be posted to be visible to all construction personnel from all directions.
- Signs should be installed at same time as tree protection device.
- Locate signs approximately every 50 feet along fencing.
- Signs should be in place immediately following stake out of L.O.D., and remain in place in perpetuity.



SPECIMEN TREE SIGN

N.T.S.

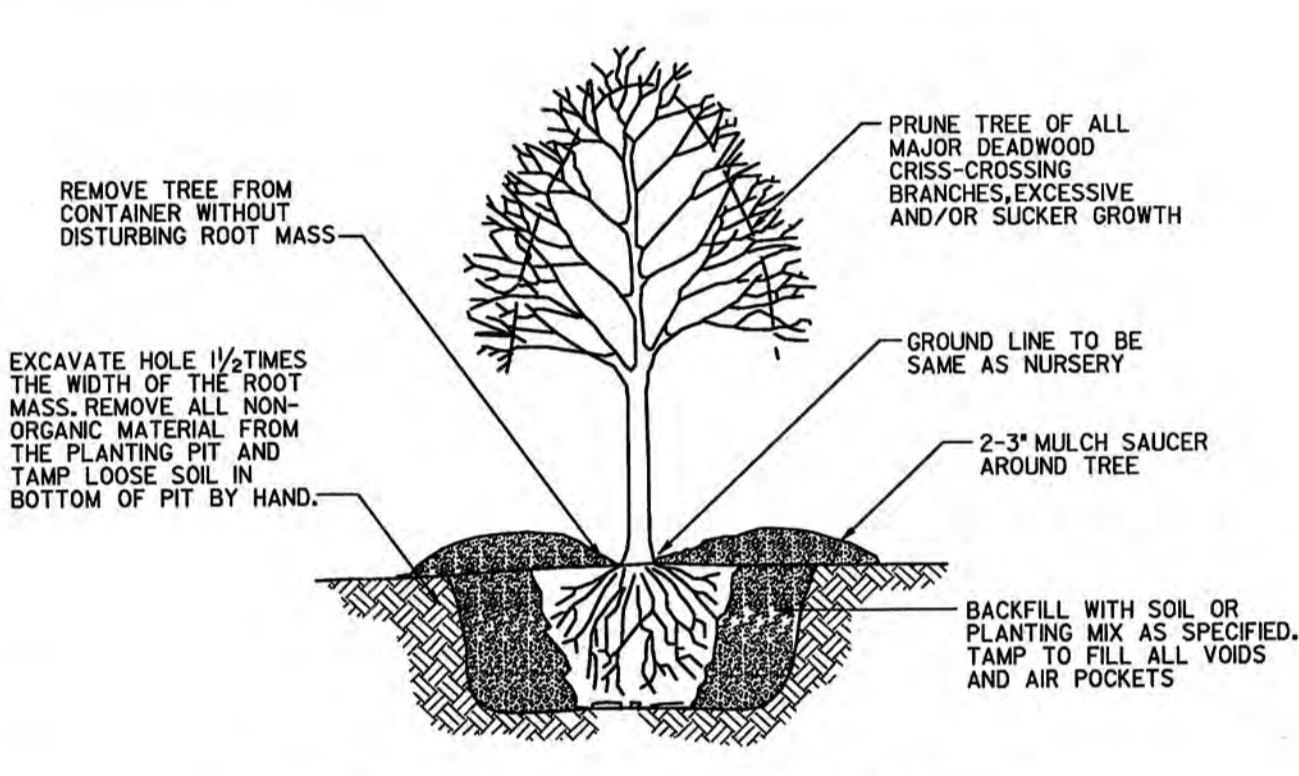
- Attachment of signs to trees is prohibited.
- Signs should be properly maintained.
- Avoid injury to roots when placing posts for the signs.
- Signs should be posted to be visible to all construction personnel from all directions.
- Signs should be installed at same time as tree protection device.
- Locate signs approximately every 50 feet along fencing.
- Signs should be in place immediately following stake out of L.O.D., and remain in place in perpetuity.



PERMANENT (SPLIT RAIL) TREE PROTECTION FENCE FOR REFORESTATION AREAS

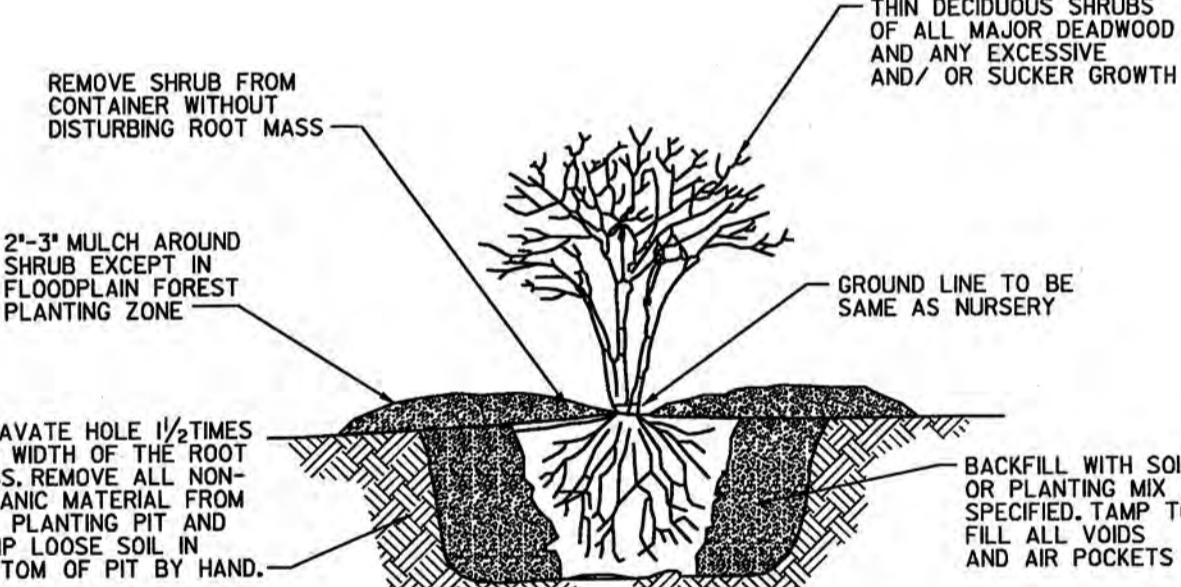
N.T.S.

- 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.
- Signs should be installed at same time as tree protection device.
- Locate signs approximately every 50 feet along fencing.
- Signs should be in place immediately following stake out of L.O.D., and remain in place in perpetuity.



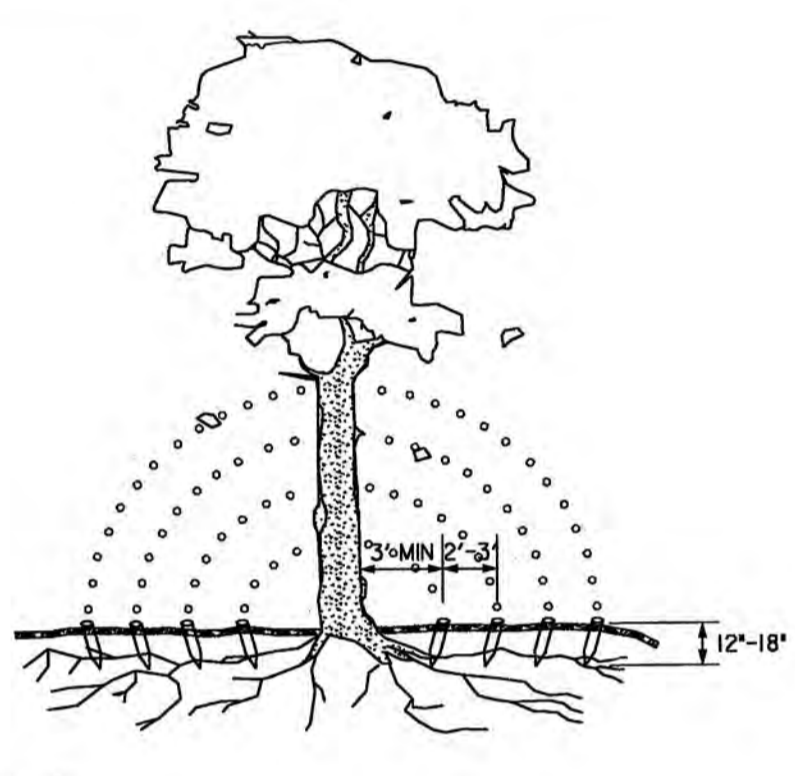
TREE PLANTING - CONTAINER GROWN

N.T.S.



SHRUB PLANTING - CONTAINER

N.T.S.



- No fertilizer within 3 feet of trunk.
- Apply fertilizer to entire critical root zone.

STRESS REDUCTION MEASURES (I) APPLICATION OF FERTILIZERS BY INJECTION

N.T.S.

Source: Adapted from Maryland State Forest Conservation Manual

M-NCPPC Prince George's County Planning Department Environmental Planning Section	
APPROVAL	
TREE CONSERVATION PLAN	
TCP2-001-12	
Approved by	Date
01 KIPm	3/03/12
02	
03	
04	
05	

DEPARTMENT
 OF
 ENVIRONMENTAL RESOURCES
 ENVIRONMENTAL SERVICES GROUP
 PRINCE GEORGE'S COUNTY, MARYLAND

ASSOCIATE DIRECTOR	DATE
SCALE: N.T.S.	DWG 16 OF 17
APPROVED	SECTION MANAGER
DESIGNED: W. MORGANTE	DATE
DRAWN: D. ADKINS	C.I.P. NO.
CHECKED BY: G. O'HARE	
MANVINDER SINGH	DER-2012-0001
PROJECT MANAGER	BID NO.

RK&K
 Rummel, Klepper & Kahl, LLP

81 MOSHER STREET | BALTIMORE, MD 21217
 PH: (410) 728-2900 FAX: (410) 728-3160

Engineers | Construction Managers | Planners | Scientists
 www.rkk.com

LD-2

NOTES

General Notes

1. This plan is submitted to fulfill the woodland conservation requirements for a grading permit. If this grading permit expires, then this TCP2 also expires and is no longer valid.
2. Cutting or clearing of woodland not in conformance with this plan or without the expressed written consent of the Planning Director or designee shall be subject to a \$9.00 per square foot mitigation fee.
3. A pre-construction meeting is required prior to the issuance of grading permits. The Department of Public Works and Transportation or the Department of Environmental Resources, as appropriate, shall be contacted prior to the start of any work on the site to conduct a pre-construction meeting where implementation of woodland conservation measures shown on this plan will be discussed in detail.
4. The County shall notify future buyers of any woodland conservation areas through the provision of a copy of this plan at time of contract signing. Future property owners are also subject to this requirement.
5. The owners of the property subject to this tree conservation plan are solely responsible for conformance to the requirements contained herein.
6. The property is within the Developed Tier and is zoned R-R.
7. The site is not adjacent to a roadway designated as scenic, historic, a parkway or a scenic byway.
8. The site is not adjacent to a roadway classified as arterial or greater.
9. This plan is not grandfathered under CB-27-2010, Section 25-117 (g).

Tree Preservation and Retention Notes

10. All woodlands designated on this plan for preservation are the responsibility of the County. The woodland areas shall remain in a natural state. This includes the canopy trees and understory vegetation. A revised tree conservation plan is required prior to clearing woodland areas that are not specifically identified to be cleared on the approved TCP2.
11. Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
12. The location of all temporary tree protection fencing (TPFs) shown on this plan shall be flagged or staked in the field prior to the pre-construction meeting. Upon approval of the locations by the county inspector, installation of the TPFs may begin.
13. All temporary tree protection fencing required by this plan shall be installed prior to commencement of clearing and grading of the site and shall remain in place until the bond is released for the project. Failure to install and maintain temporary or permanent tree protective devices is a violation of this TCP2.

14. Woodland preservation areas shall be posted with signage as shown on the plans at the same time as the temporary TPF installation. These signs must remain in perpetuity.

Removal of Hazardous Trees or Limbs by Developers or Builders

15. The County is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or parts thereof designated by the county as dead, dying, or hazardous may be removed.
16. A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property damage.
17. During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the permittee shall remove said trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the county inspector. Only after approval by the inspector may the tree be cut by chainsaw to near the existing ground level. The stump shall not be removed or covered with soil, mulch or other materials that would inhibit sprouting.

18. If a tree or trees become hazardous prior to bond release for the project, due to storm events or other situations not resulting from an action by the permittee, prior to removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permittee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the appropriate ANSI A-300 Pruning Standards. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage. Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that is more than 35 feet from the woodland edge shall be cut up to allow contact with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

Afforestation and Reforestation Notes

19. All afforestation and reforestation bonds, based on square footage, shall be posted with the county prior to the issuance of any permits. These bonds will be retained as surety until all required activities have been satisfied or the required timeframe for maintenance has passed, whichever is longer.
20. If planting cannot occur due to planting conditions, the County shall install the fencing and signage in accordance with the approved Type 2 Tree Conservation Plan. Planting shall then be accomplished during the next planting season. If planting is delayed beyond the transfer of the property title to the homeowner, the developer or builder shall obtain a signed statement from the purchaser indicating that they understand that the reforestation area is located on their property and that reforestation will occur during the next planting season. A copy of that document shall be presented to the Grading Inspector and the county.

21. Reforestation areas shall not be mowed. The management of competing vegetation around individual trees and the removal of noxious, invasive, and non-native vegetation within the reforestation areas is acceptable.

22. All required temporary tree protection fencing shall be installed prior to the clearing and grading of the site and shall remain in place until the permanent tree protection fencing is installed with the required planting. The temporary fencing is not required to be installed if the permanent fencing is installed prior to clearing and grading of the site. Failure to install and maintain temporary or permanent tree protective fencing is a violation of this TCP2. Temporary tree protection fencing locations shown on sheet TCP-1.

23. Afforestation /reforestation areas shall be posted with notification signage, as shown on the plans, at the same time as the permanent protection fencing installation. These signs shall remain in perpetuity. Sign locations shown on sheet TCP-1.

24. The county inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.

25. At time of issuance of the first permit, the following information shall be submitted to the M-NCPPC Planning Department regarding the contractor responsible for implementation of this plan: contractor name; business name (if different); address; and phone number. Results of annual survival checks for each of the required four years after tree planting shall be reported to the M-NCPPC, Planning Department.

26. Failure to establish the afforestation or reforestation within the prescribed time frame will result in the forfeiture of the reforestation bond and/or a violation of this plan including the associated \$9.00 per square foot penalty unless the county inspector approves a written extension.

PLANTING SPECIFICATION NOTES

1. Quantity: (See Plant Schedule on LD-1)

2. Type: (See Plant Schedule on LD-1)

3. Plant Quality Standards: The plants selected shall be healthy and sturdy representatives of their species. Plants that do not have an abundance of well developed terminal buds on the leaders and branches shall be rejected.

4. If the plants cannot be planted immediately after delivery to the reforestation site, they shall be stored in the shade with their root masses protected from direct exposure to sun and wind by the use of straw, peat moss, compost, or other suitable material and shall be maintained through periodic watering, until the time of planting.

5. Spacing: See Plant Schedule and /or Planting Plan for spacing requirements. Also refer to the Planting Layout detail for a description of the general planting theory.

6. Soil: Upon the completion of all grading operations, a soil test shall be conducted to determine what soil preparation and soil amendments, if any, are necessary to create good tree growing conditions. Soil samples shall be taken at a rate that provides one soil sample for each area that appears to have a different soil type (if the entire area appears uniform, then only one sample is necessary), and submitted for testing to a private company. The company of choice shall make recommendations for improving the existing soil. The soil will be tested and recommended for corrections of soil texture, pH, magnesium, phosphorus, potassium, calcium and organic matter.

7. Soil Improvement Measures: the soil shall then be improved according to the recommendations made by the testing company.

8. Fencing and Signage: Final protective fencing shall be placed on the visible and/or development side of planting areas. The final protective fence shall be installed upon completion of planting operations unless it was installed during the initial stages of development. Signs shall be posted per the signage detail on sheet LD-2.

9. Mulching: Apply two-inch thick layer of woodchip or shredded hardwood mulch (as noted) to each planting site (see detail shown on this plan).

10. Mowing: No mowing shall be allowed in any planting area.

11. Survival Check for Bond Release: The plantings should be checked at the end of each year for four years to assure that no less than 75% of the original planted quantity survives. If the minimum number has not been provided the area must be supplemented with additional seedlings to reach the required number at time of planting.

FOUR-YEAR MANAGEMENT PLAN FOR REAFFORESTATION AREAS (BY OTHERS)

Field check the re-afforestation area according to the following schedule:

- Year 1: Site preparation and Tree Planting
Survival check once annually (September - November) see Note 1 below.
If watering is needed (2 per month)
Control of undesirable vegetation as needed (once in June and once in September min.)

- Year 2-3: Reinforcement planting is needed (See Note 2 below)
Survival check once annually (September - November)
Control of undesirable vegetation if needed (once in May and once in August min.)

- Year 4: Reinforcement planting if needed. (See Note 2 below)
Survival check (September - November)
1. Survival Check: Check planted stock against plant list (or as-built) by walking the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) to owner after each inspection. Remove all dead plants.

2. Reinforcement Planting: Replace dead or missing plants in sufficient quantity to bring the total number of live plants to at least 75% of the number originally planted. If a particular species suffers unusually high mortality, replace with an alternative plant type.

3. Miscellaneous: Fertilization or watering during years 1 through 3 will be done on an as needed basis. Special return operations or recommendations will be conducted on an as needed basis.

YORKVILLE ROAD SLOPE FAILURE STREAM STABILIZATION PROJECT
SPECIMEN TREE TABLE

No.	Common Name	Scientific Name	DBH	Condition	Comments	Preserved or Removed	Preservation Comments
ST 1	Tulip Poplar	<i>Liriodendron tulipifera</i>	39"	Good		Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer
ST 2	Tulip Poplar	<i>Liriodendron tulipifera</i>	32"	Fair	Dead branches	Preserved	
ST 3	Tulip Poplar	<i>Liriodendron tulipifera</i>	31"	Fair	Trunk decay, dead branches	Preserved	Root prune
ST 4	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Good		Preserved	Branch and root prune
ST 5	Tulip Poplar	<i>Liriodendron tulipifera</i>	41"	Fair	Dead wood, major lean	Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer
ST 6	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Fair	Lean, decay in trunk	Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer
ST 7	Tulip Poplar	<i>Liriodendron tulipifera</i>	33"	Good		Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer
ST 8	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Fair	Lean, trunk decay, dead branches	Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer
ST 9	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Good		Preserved	
ST 10	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Good		Preserved	
ST 11	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Good	Twin	Preserved	
ST 12	Tulip Poplar	<i>Liriodendron tulipifera</i>	30"	Fair	Deadwood, trunk decay	Preserved	Branch prune, root prune & fertilize with low nitrogen fertilizer

All specimen trees within 100 feet of LOD were survey located.

Tree Condition Assessment Guidelines:

- **Excellent** – healthy tree with exceptional growth form; no visible defects; well-formed crown; few minor dead branches acceptable; this tree condition is rare.
- **Good** – healthy tree; very minor defects/decay acceptable with callous forming/complete; well-formed crown; minor lean and/or few minor/major dead branches acceptable; vines may be growing along trunk but not present within crown.
- **Fair** – health questionable/stress evident; structurally sound tree; defects present that do not affect structural integrity; moderate lean; minor/major dead branches may be present; crown not broken out but not necessarily well formed or even; vines may be growing along trunk and within crown.
- Ex. Fair tree could be experiencing insect damage, or exhibit a growth form that makes it very susceptible to wind damage in an open setting.*
- **Poor** – significant health problems; may be structurally unsound; may be dead or dying; may contain significant decay; may have broken or missing top/crown; may have heavy lean; vines may be significantly affecting tree health.

Note: These guidelines were developed in-house based on the professional judgment of our Certified Arborists and other senior environmental staff.

Woodland Conservation Worksheet for Governmental Projects in Prince George's County			
Project Description or Subdivision Name: Yorkville Road Slope Failure Stream Stabilization			
Zone:	R-R		
Gross Tract or Project Area:	3.41		
Existing Woodland in Project Limits = WCT	0.83	or	24.34%
Woodland Cleared	0.83		
Total area of woodland cleared (subject to 1:1 replacement)	0.83		
Off-Site Mitigation Provided (afforestation)	0.00		
Off-Site Mitigation Provided (preservation)	0.00		
Woodland Conservation Requirement:	0.83		
Woodland Conservation Provided:			
Woodland Preserved			
Afforestation/Reforestation	0.95		
Natural Regeneration			
Prior Credit for Off-site Mitigation		Location:	
Current Credit for Off-site Mitigation		Location:	
Off-site Mitigation provided (afforestation)			
Off-site Mitigation provided (preservation)			
Area Mitigated by Fee-In-Lieu (Priority Funding Area)		or	\$0.00
Area Mitigated by Fee-In-Lieu (Non-Priority Funding Area)		or	\$0.00
Total Woodland Conservation Provided	0.95		
Prepared by: William Morgante License Number:			

NOTE:	
This TCP2 shows the clearing and reforestation of 0.17 acres of woodland on adjacent TCP2-038 and 0.12 acres of clearing and reforestation of woodlands on Lots 1 and 4, Block B, Addition to Yorkshire Village.	
TCP-2	

DATE	REVISION

RK&K	
Rummel, Klepper & Kahl, LLP	
81 MOSHER STREET BALTIMORE, MD 21217	
PH: (410) 728-2900	FAX: (410) 728-3180
Engineers Construction Managers Planners Scientists	
www.rkk.com	

M-NCPPC Prince George's County Planning Department Environmental Planning Section	
APPROVAL	
TREE CONSERVATION PLAN	
TCP2-001-12	
Approved by:	Date:
01 <i>William Morgante</i>	3/23/12
02	
03	
04	
05	

DEPARTMENT OF ENVIRONMENTAL RESOURCES ENVIRONMENTAL SERVICES GROUP PRINCE GEORGE'S COUNTY, MARYLAND	
ASSOCIATE DIRECTOR	DATE
SCALE: NONE	DWG 14 OF 17
APPROVED	SECTION MANAGER
DESIGNED: W. MORGANTE	DATE
DRAWN: D. ADKINS	C.I.P. NO.
CHECKED BY: G. O'HARE	
MANVINDER SINGH	DER-2012-0001
PROJECT MANAGER	BID NO.

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19546, EXPIRATION DATE: 2/18/2014"



CAPITAL PROJECTS TEAM
ENVIRONMENTAL SERVICES GROUP

YORKVILLE ROAD SLOPE FAILURE
STREAM STABILIZATION PROJECT

FOREST
CONSERVATION
NOTES

DEPARTMENT OF ENVIRONMENTAL RESOURCES