



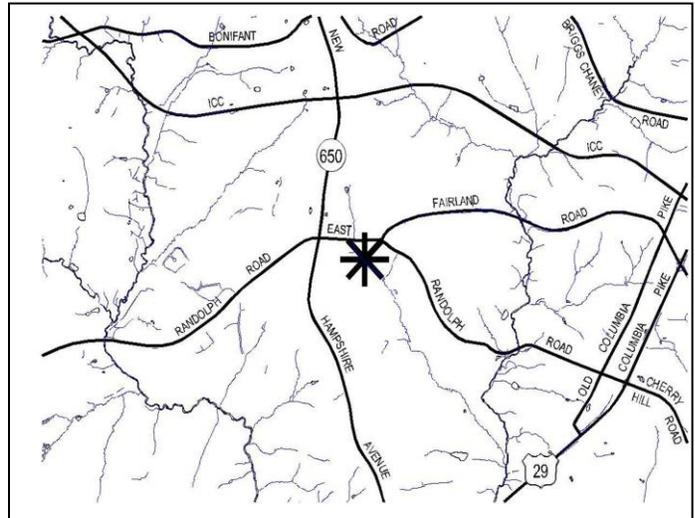
**Randolph Manor, Amended Final Forest Conservation Plan, S-2554**

- Amy Lindsey, Senior Planner, Area 2 Division, [Amy.Lindsey@montgomeryplanning.org](mailto:Amy.Lindsey@montgomeryplanning.org), 301.495.2189
- [KA] Khalid Afzal, Planner Supervisor, Regulatory Team, Area 2 Division, [Khalid.Afzal@montgomeryplanning.org](mailto:Khalid.Afzal@montgomeryplanning.org), 301.495.4650
- [GK] Glenn Kreger, Chief, Area 2 Division, [Glenn.Kreger@montgomeryplanning.org](mailto:Glenn.Kreger@montgomeryplanning.org), 301.495.4653

Completed: 1/17/14

**Description**

- Amended Final Forest Conservation Plan associated with stream restoration for Hollywood Branch in the Paint Branch watershed, on the Randolph Manor property;
- 4.66 acres zoned R-90, *White Oak Master Plan*;
- Filing date: 8/23/13.



**Summary**

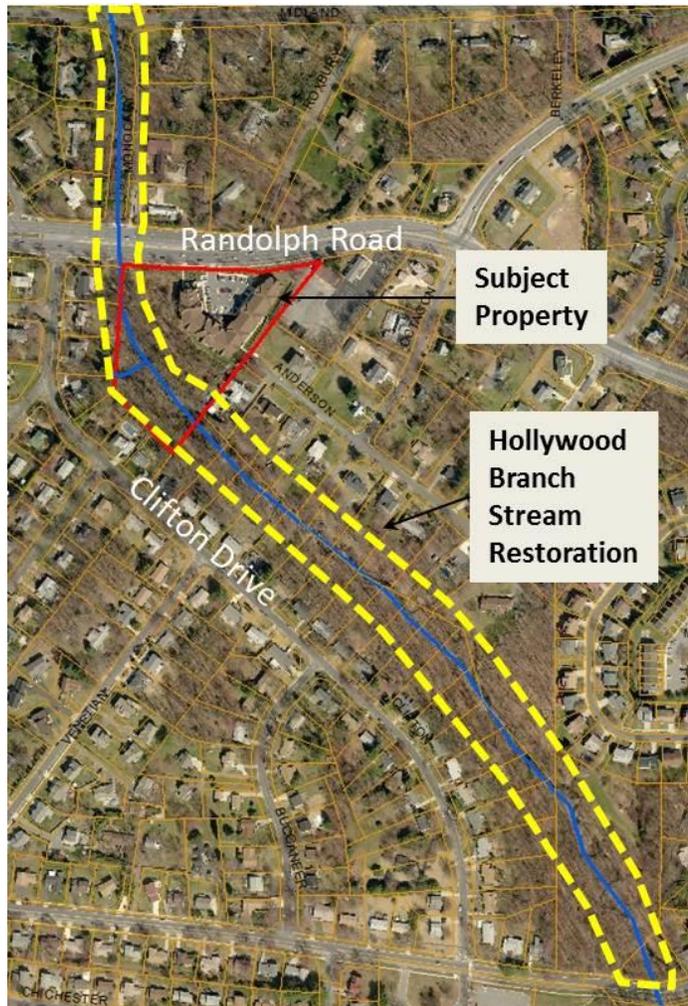
- Staff recommends **approval**.
- Amended Final Forest Conservation Plan includes an additional clearing of 0.62 acres of forest and planting of 0.37 acres of forest within a Category I Conservation Easement. The difference in acreages is due to stream channel.
- Staff has received no correspondence from the community on this application.

## OVERVIEW

This memorandum covers staff's review and recommendations on the Amended Final Forest Conservation Plan (FFCP) for the Randolph Manor property. Randolph Manor is the location of Willow Manor senior independent living facility, which was the subject of a Special Exception, a Preliminary Plan, and a Site Plan. The disturbance shown on this FFCP is part of the Montgomery County Department of Environmental Protection's Hollywood Branch stream restoration project (MR2010006) approved by the Planning Board on November 17, 2011.

The Hollywood Branch Stream Restoration project is located in eastern Montgomery County. Hollywood Branch is a second order tributary to Paint Branch that flows to the Anacostia River and then to the Potomac River. The Hollywood Branch sub-drainage area, situated within the Lower Paint Branch Watershed, is a highly developed area that has undergone rapid development changes over the years. Much of the development within the watershed occurred prior to requirements to mitigate the impacts from stormwater flows.

Hollywood Branch has been identified as a priority watershed for restoration according to the Countywide Stream Protection Strategy (CSPS) issued by the Department of Environmental Protection (DEP) in 2004. The goals of this strategy and the Hollywood Branch Stream Restoration project are to preserve, protect, and restore watersheds. More specifically, the goals of the Hollywood Branch Stream Restoration project are to utilize appropriate design restoration approaches that will stabilize erosive areas, improve floodplain access, enhance riparian and stream conditions, and improve overall aquatic resources.



## ANALYSIS

### Environmental Guidelines

Staff approved a Natural Resource Inventory/Forest Stand Delineation (NRI/FSD #420023460) on July 24, 2002, for the 9.44-acre Property composed of four parcels and two sub-parcels. Hollywood Branch bisects the Property from west to southeast, and there is a tributary flowing from the south. There are 4.39 acres of high priority floodplain forest and approximately 2.86 acres of environmental buffer associated with the streams. The Property is within the Paint Branch watershed – a Use III watershed -

but not within the Upper Paint Branch Special Protection Area. While the entire proposed disturbance is within the environmental buffer, the result of this project will benefit the environment by increasing water quality by stabilizing and enhancing the riparian buffer. The proposed project is in compliance with the *Environmental Guidelines*.

### **Forest Conservation**

This project is subject to the Montgomery County Forest Conservation law (Chapter 22A of the Code). The Planning Board approved a Forest Conservation Plan with Special Exception S-2544 on January 9, 2003, a Preliminary Plan (#120030350) on June 5, 2003, and a Site Plan (#820030130) on June 19, 2003. Staff approved an FFCP (Attachment 1) on June 27, 2003, which showed 1.60 acres of forest clearing, 2.38 acres of forest retention and 0.26 acres of forest planting.

The Amended FFCP proposes an additional 0.62 acres of forest clearing (Attachment 2). Areas of clearing are minimized by providing staging areas outside of the existing forest and minimizing temporary access routes, wherever possible. Tree protection measures will be used during the construction process to minimize damage to the forest and individual trees. These tree protection measures include mulch matting on the temporary access routes to protect the surrounding forest and planking on tree trunks to protect them from damage from equipment. 0.37 acres will be planted after construction is complete. The difference between forest cleared and forest planted is 0.25 acres, which is not considered significant because the stream channels and paths are included in the calculation of existing forest. The stream channels are covered by forest canopy, even though no trees are actually inside the channel. As the stream channels themselves cannot be planted, a numerical difference is shown on the worksheet. DEP will plant all areas within the Limit of Disturbance (LOD) that can be planted and the stream banks will be stabilized with plantings of live stakes or tubelings. This includes staging and storage areas and temporary access roads that are currently unforested.

All aspects of the restoration were designed based on a detailed geomorphic assessment, hydrologic and hydraulic studies. These studies allowed for the most appropriate stabilization measure to be chosen and designed specifically according to the current hydrologic regime. Although the project took special care to protect existing trees, in some instances the most appropriate long-term stream channel stabilization measures require impacts to, or the removal of, select existing trees. Decisions regarding tree impacts were carefully considered knowing that vegetation, especially mature trees, provide invaluable soil stability and often help to slow active stream bank and bed erosion. Conversely however, in more extreme instances, erosion can undermine trees to the extent that they become unstable. This instability leads to tree collapse and channel blockages which, in turn, exacerbate active erosion resulting in the loss of additional trees. Impacts to, or the removal of trees, designated as a part of the Hollywood Stream Restoration will provide greater long-term benefits to stream and floodplain stability, riparian and aquatic habitat, and downstream reaches than if they were to remain.

### **Forest Conservation Variance**

Section 22A-12(b) (3) of County code identifies certain individual trees as high priority for retention and protection. Any impact to these trees, including removal or disturbance within the tree's Critical Root Zone (CRZ) requires a variance. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County code. The code requires no impact to trees that:

- a. measure 30 inches or greater diameter at breast height (DBH);
- b. are part of a historic site or designated with a historic structure; or

- c. are designated as a national, State, or County champion tree; are at least 75 percent of the diameter of the current State champion tree of that species, or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

The applicant submitted a variance request on August 22, 2013 for the impacts to trees with the proposed layout (Attachment 3). The applicant proposes to impact but not remove four trees that are considered high priority for retention under Section 22A-12 (b) (3) of the County Forest Conservation Law. The following table describes the impacts to the trees proposed to be impacted but not removed. Detailed tree protection measures to mitigate effects include root pruning, rock packing, tree planking, and the use of mulch and wooden matting.

ID	Type	DBH	Condition	Comments
141	Black cherry	36"	Poor	This tree is adjacent to LOD and is located on eroded stream bank. Stream restoration work including grading to protect bank toe will be done around this tree CRZ to minimize impacts if possible.
152	Tulip poplar	30"	Fair	This tree is located about 20' inside LOD. About 8% of CRZ will be impacts by grading to stabilize tributary to Hollywood Branch stream channel.
154	Tulip poplar	41"	Fair	This tree is located about 35' inside TPF. About 5% of CRZ will be impacts by grading to stabilize tributary to Hollywood Branch stream channel.
155	Tulip poplar	36"	Fair	This tree is located at the top edge of a severe undercut stream bank. Stream erosion and channel down cutting had exposed and undercut tree roots. Grading and rock packing will be done to protect the tree's root system and stabilize stream bank toe. More than 35% CRZ will be impacted. An arborist will be consulted to ensure the survival of this tree.

**Unwarranted Hardship** - 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. The variance is necessary because of the location of the trees within or adjacent to the stream channel. If the Applicant could not impact the four trees, the project could not proceed. Therefore leaving the requested trees in an undisturbed state would result in an unwarranted hardship.

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

1. *Will not confer on the applicant a special privilege that would be denied to other applicants.*  
Granting this variance will not confer a special privilege on the Applicant as disturbance of the specified trees is due to the proposed restoration of the stream. The trees and/or their critical root zones lie directly adjacent to the stream. Granting a variance request to disturb the CRZs of the trees for the purposes of stream restoration is not unique to this Applicant. This variance is necessary to achieve the County goals of improving water quality. Therefore, staff believes that granting of this variance is not a special privilege that would be denied to other applicants.
2. *Is not based on conditions or circumstances which are the result of the actions by the applicant.*  
The requested variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based on the locations of the trees and the techniques necessary to restore the stream.

3. *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 proposed stream restoration on the Property and not a result of land or building use on a neighboring property.

4. *Will not violate State water quality standards or cause measurable degradation in water quality.*

The proposed stream restoration plan should improve water quality by reducing erosion, improving floodplain access, and enhancing the stream valley buffer area. The requested variance will not violate State water quality standards or cause a measurable degradation in water quality.

**Mitigation for Trees Subject to the Variance Provisions** – The Applicant is requesting a variance for four trees in order to impact their CRZs. Generally, mitigation is not recommended for trees impacted but retained. Additionally, all variance trees affected by construction are located within forest and any impacts for removal would have been compensated for as part of the forest conservation worksheet. However, the Applicant has proffered to plant a minimum of nine, 2.5” DBH native shade trees as part of the Amended Final Forest Conservation Plan to mitigate for impacts to existing specimen trees.

**County Arborist’s Recommendation on the Variance** - In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The request was forwarded to the County Arborist on December 12, 2013. The County Arborist has reviewed the variance request and recommended approval (Attachment 4).

**Variance Recommendation** - Staff recommends that the variance be granted.

## **CONCLUSION**

Staff recommends that the Planning Board approve the Amended Final Forest Conservation Plan. The variance approval is assumed into the Planning Board’s approval of the Amended Final Forest Conservation Plan.

### **Attachments**

1. Approved Final Forest Conservation Plan
2. Proposed Amended Final Forest Conservation Plan
3. Variance Application
4. Letter from County Arborist

# ATTACHMENT 1

## FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. Total tract area...	4.66
B. Land dedication acres (parks, county facility, etc.)...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan)...	0.03
D. Area to remain in commercial agricultural production/ use...	0.00
E. Other deductions (specify)...	0.00
F. Net Tract Area...	4.63

LAND USE CATEGORY: HDR

G. Afforestation Threshold: (15% x "F")	0.69
H. Conservation Threshold: (20% x "F")	0.93

EXISTING FOREST COVER:

I. Existing forest cover...	4.08
J. Area of forest above afforestation threshold...	3.39
K. Area of forest above conservation threshold...	3.15

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation...	1.56
M. Clearing permitted without mitigation...	2.52

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared...	1.60
O. Total area of forest to be retained...	2.48

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold...	0.40
Q. Reforestation for clearing below conservation threshold...	0.00
R. Credit for retention above conservation threshold...	1.55
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

PLANTING PROVIDED:

W. Total forest planting to be provided in Category I easements...	0.26
Reforestation...	0.26
Afforestation...	0.00
X. Total forest planting to be provided in Category II easements...	0.00
Y. Total forest planting to be provided...	0.00
Onsite...	0.26
Offsite...	0.00

I hereby certify that this Forest Conservation Plan has been prepared in accordance with the Maryland Forest Conservation Act of 1991 and the Montgomery County Trees Technical Manual, effective July 1, 1992.

Signature: *Scott R. Wolford*  
 Scott R. Wolford, RLA  
 Registered Landscape Architect, No. 797

### GENERAL NOTES:

1. THE AFFORESTATION AREA PROPOSED WILL INCREASE THE EXISTING FORESTED STREAM BUFFER.
2. PROPOSED TREE PROTECTION FENCE SHALL BE INSTALLED BETWEEN AND ALONG THE BORDER COMMON TO THE "EXISTING FOREST TO REMAIN" EDGE AND THE LIMIT OF DISTURBANCE LINE. ROOT PRUNING SHALL BE DONE BETWEEN THE TREE PROTECTION FENCE AND THE LIMIT OF DISTURBANCE LINE.
3. ALL FOREST RETENTION AND REFORESTATION AREAS SHALL BE PERMANENTLY MARKED WITH APPROPRIATE FOREST CONSERVATION SIGNAGE LOCATED APPROXIMATELY 50' ON CENTER.
4. LONG TERM PROTECTION OF THE FOREST RETENTION AND REFORESTATION AREAS SHALL BE PROVIDED THROUGH THE RECORDING OF A CATEGORY I CONSERVATION EASEMENT.
5. THE REFORESTATION AREAS SHALL BE MAINTAINED FOR A PERIOD OF TWO YEARS AFTER INITIAL INSPECTION PER A MAINTENANCE AGREEMENT BETWEEN THE APPLICANT AND PLANNING BOARD OR PLANNING DIRECTOR.

### SITE TABULATIONS:

SITE AREA: 4.66 ACRES  
 EXISTING ZONING: R-90  
 PROPOSED ZONING: R-90 MPDU  
 EXISTING USE: SINGLE FAMILY DETACHED  
 PROPOSED USE: ELDERLY HOUSING

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

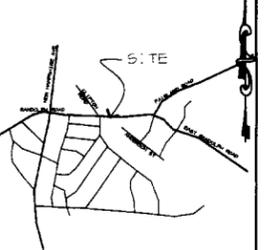
Plan No. **S-2554**  
*Approved 27 June 03*  
 DATE

### LEGEND

	32'	PROPOSED SPOT ELEVATION
		PROPOSED RIGHT-OF-WAY
		PROPOSED LOT LINE
		PROPOSED WATER LINE
		PROPOSED SEWER LINE
		PROPOSED PARCEL
		TREE CLEAR AREA
		AFFORESTATION AREA (OR 150' EASEMENT)
		FOREST CONSERVATION AREA SIGNAGE AND FENCE

### GENERAL NOTES:

1. 2' topography prepared by McKenzie Snyder, Inc.
2. Boundary survey prepared by Patton Harris Rust + Associates, pc.
3. Existing Zoning: R-90
4. Total Site Area: 203,111 S.F. or 4.66 Ac.
5. Planning Area: #33 Colesville, White Oak, and Vicinity
6. Election District: 5th Colesville District
7. Tax Map No. JR561, grid R1,J6
8. W.S.S.C. Map: 217NE01
9. ADC Map: Montgomery County Map 34, Grid B&C-2
10. Proposed Use: Housing for Senior Adults
11. Proposed Units: 83 (23-1 Bedroom, 60-2 Bedroom)
12. Existing Forest Cover: 185,130 S.F. or 4.25 Ac.
13. There are no known historic features on this site.
14. There are no cemeteries located on or adjacent to the site.
15. Existing water category 1, existing sewer category 1. Proposed public water and sewer.
16. Owner/Developer: J. Kirby Development, LLC  
 2205 Warwick Way, Suite 210  
 Marriottsville, Maryland 21104  
 PHONE (410) 480-4144  
 FAX (410) 480-4145
17. Planner/Engineer: Patton Harris Rust + Associates, pc  
 8818 Centre Park Drive, Suite 200  
 Columbia, Maryland 21045  
 T: 410.997.8900 F: 410.997.8282
18. The predominate soil types are:  
 2B Glenelg silt loam  
 2C Glenelg silt loam  
 6A Baile silt loam  
 16B Brinklow-Blocktown channery silt loam  
 \*From Soil Survey-Montgomery County Maryland
19. Stormwater management facilities shown hereon are based on preliminary design and are subject to final engineering.
20. All sidewalk ramps to conform to Montgomery County DOT Standard No. MC-112.01.
21. All concrete curb and gutter shall be in accordance with Montgomery County DOT Standard No. MC-100.01, and meet existing curb, gutter, and paving in line and grade.
22. Spill gutters on all high side curb and gutter.
23. All parking island curb radii 5' unless otherwise noted.
24. All parking to be painted / striped.
25. Fill areas:  
 A. Class I fill to be placed below all buildings.  
 B. Class II fill to be placed below all paved areas including parking lots, drives, and sidewalks.  
 C. Class III fill to be placed in areas that will remain "green".
26. Footings to be extended to existing ground where necessary.
27. Roof and footing drainage to be discharged into on-site storm drain system.
28. Slopes: Maximum: 2:1  
 Minimum: 2% grassed / 1% paved
29. Setbacks:  
 Required:  
 Front: 25' (Sec 59-C-1.62)  
 Side: 25' (Sec 59-G-2.35.c.1.B)  
 Rear: 25' (Sec 59-G-2.35.c.1.B)  
 Provided:  
 Front: 25'  
 Side: 25'  
 Rear: 25'
30. Building Height:  
 Required:  
 By R-90 MPDU Zone  
 40' Maximum per 59-C-1.626(a)  
 Provided:  
 35'
31. Green Area:  
 Required:  
 50% (59-G-2.35.c.4.A)  
 Provided:  
 79.09%
32. Building Coverage:  
 Required:  
 30% MAXIMUM  
 Provided:  
 13.59%
33. Impervious Area:  
 Required:  
 1.04 acres  
 Provided:  
 1.04 acres
34. Density:  
 Provided: 17.81 units per acre



VICINITY MAP  
 SCALE: 1"=1000'

OWNER / DEVELOPER: **J. KIRBY DEVELOPMENT, LLC**  
 ATTN: JEFF KIRBY  
 2205 WARWICK WAY, SUITE 210  
 MARIOTTVILLE, MARYLAND 21104  
 PHONE (410) 480-4144  
 FAX (410) 480-4145

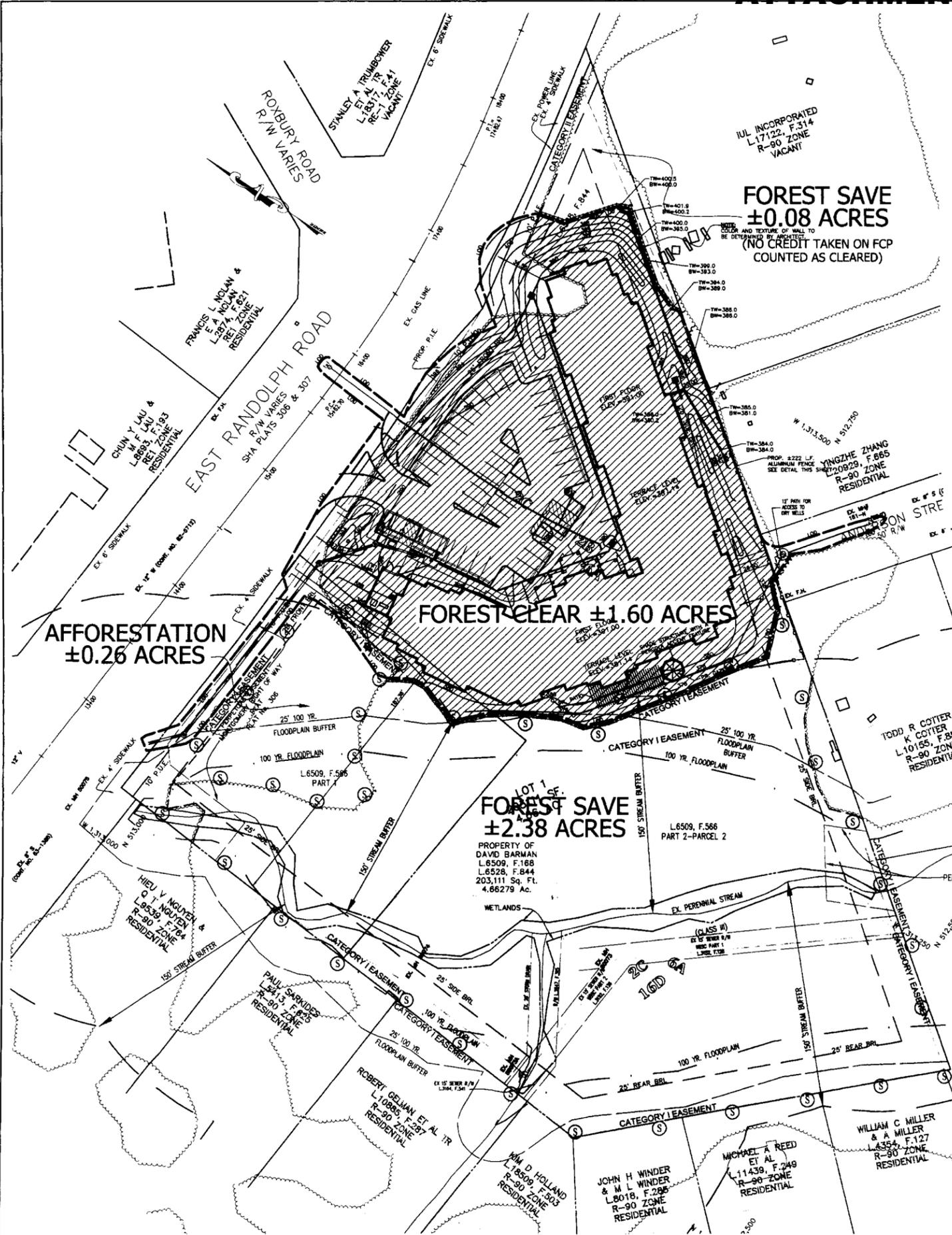
Patton Harris Rust + Associates, pc  
 Engineers, Surveyors, Planners, Landscape Architects.  
 17850 Wedderburn Road, Suite 200, Germantown, MD 20876  
 T: 301-528-4500 F: 301-528-0419

DATE	
REVISION	
NO.	

**FINAL FOREST CONSERVATION PLAN**  
**RANDOLPH MANOR**  
 A J. KIRBY DEVELOPMENT PROJECT  
 COLESVILLE ELECTION DISTRICT (5TH)  
 MONTGOMERY COUNTY, MARYLAND



**C-9**  
 DRAWN: LNB  
 CHECKED: SRW  
 DATE: JUNE 27, 2003  
 SCALE: 1"=30'  
 SHEET 1 OF 2  
 FILE NO. 22540-1-0





# ATTACHMENT 2

TABULATION OF 30 INCH OR GREATER POTENTIALLY IMPACTED SPECIMEN TREES

ID	Common Name	DBH (in.)	Condition	TPF	RP	CRZ Protection	Tree Within LOD	FCP Sheet No.	Remarks
141	Black Cherry	36	Poor	PL	X	X	No	Hollywood FCP 4	This tree is located outside of the Randolph Manor Property line however, its critical root zone extends within the property. Tree # 141 was placed in both Variance Requests for Randolph Manor and Hollywood Stream Restoration. Tree #141 located on an eroded stream bank. Stream restoration work in this area includes grading to protect the bank toe. All efforts will be made to protect any impacts to this tree's CRZ.
152	Tulip Poplar	30	Fair	Yes	X	X	No	FCP-RM2	This tree is located about 20 feet outside the TPF. About 8% of CRZ will be impacted by grading to stabilize the tributary to Hollywood Branch stream channel.
154	Tulip Poplar	41	Fair	Yes	X	X	No	FCP-RM2	This tree is located about 35 feet outside the TPF. About 5% of CRZ will be impacted by grading to stabilize Hollywood Branch stream channel.
155	Tulip Poplar	36	Fair	PL	X	RKP	No	FCP-RM2	Tree is located at the top edge of a severely undercut stream bank. Stream erosion and channel down cutting have caused tree roots to become exposed and undercut. Grading and rock packing will be performed to stabilize erosive areas and protect the bank and tree from further undercutting. More than 35% CRZ will be impacted. Arborist will be consulted to ensure the survival of this tree.

**Terminology:**

(RP) Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven trenchers are not acceptable. (See Detail)

(RKP) Rock Packing - exposed root to be hand packed with stone.

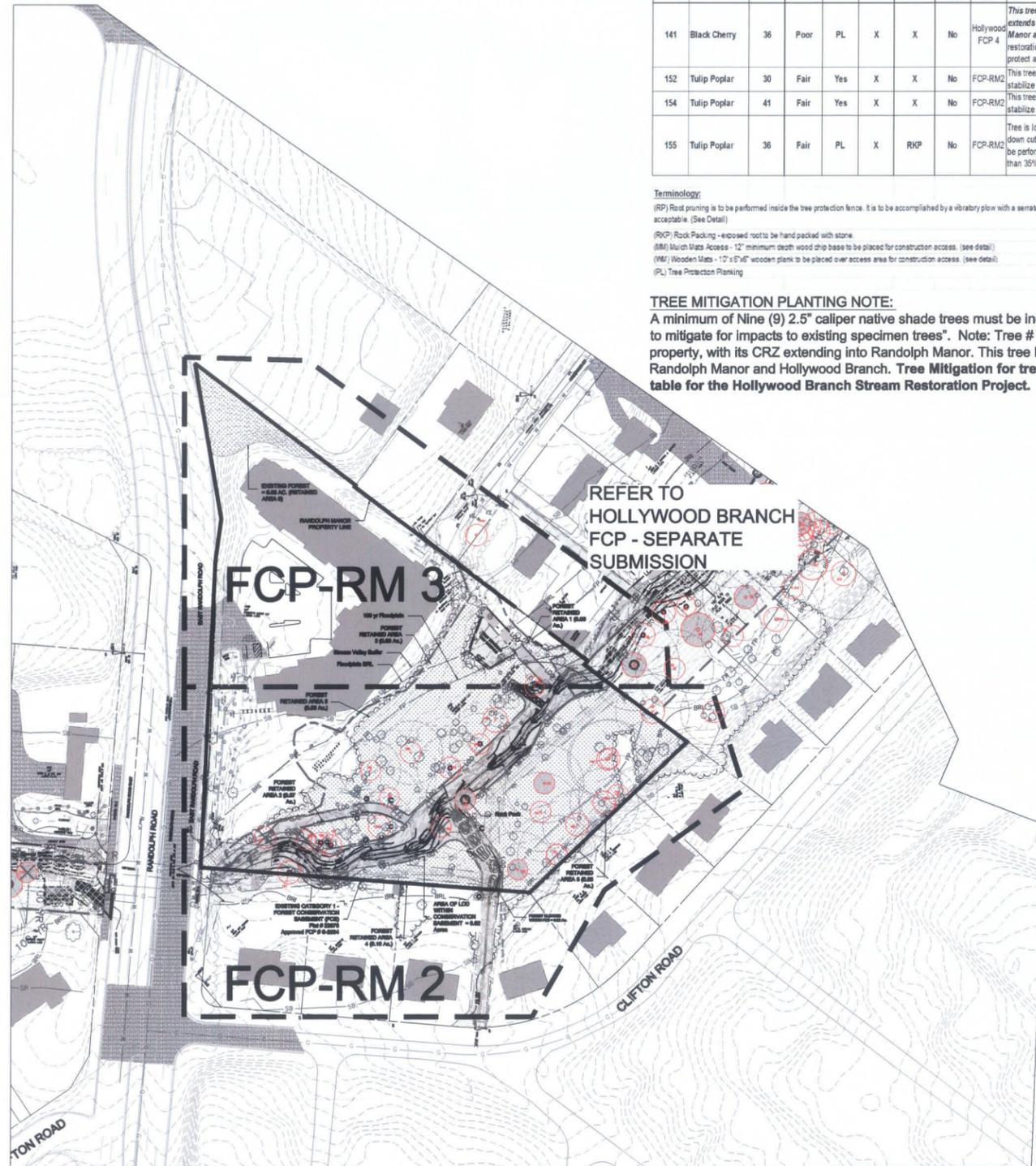
(MM) Mulch Mats Access - 12" minimum depth wood chip base to be placed for construction access. (see detail)

(WM) Wooden Mats - 12" x 6" wooden plank to be placed over access area for construction access. (see detail)

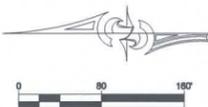
(PL) Tree Protection Planting

**TREE MITIGATION PLANTING NOTE:**

A minimum of Nine (9) 2.5" caliper native shade trees must be included in the final forest conservation planting plan to mitigate for impacts to existing specimen trees". Note: Tree # 141 is located outside the Randolph Manor property, with its CRZ extending into Randolph Manor. This tree has been accounted for in both project variance for Randolph Manor and Hollywood Branch. Tree Mitigation for tree #141 has been accounted for in the planting table for the Hollywood Branch Stream Restoration Project.

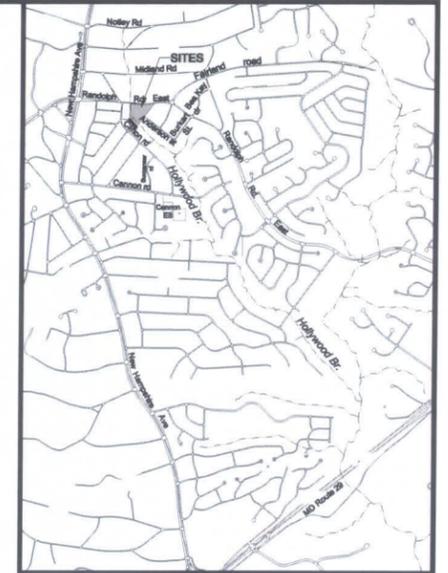


- Notes:**
- All planting area within LOD will be planted with trees and shrubs per County Guidelines following the completion of construction.
  - All temporary access routes to be protected with 12" thick mulch mats unless otherwise noted (see detail).



**SHEET INDEX**

- FCP-RM1 Cover Sheet
- FCP-RM2 Plan View
- FCP-RM3 Plan View
- FCP-RM4 Planting Plan
- FCP-RM5 Planting Plan
- FCP-RM6 Tree Protection & Planting Details
- FCP-RM7 Notes



ADC Vicinity Map  
Montgomery, MD  
33rd Edition Map 31F7, 8 & 9  
Approximate Scale: 1" = 2000'  
Copyright ADC The Map People  
Permitted Use Number 20903121

**Specimen and Significant Trees List**

ID	Common Name	Scientific Name	DBH (in.)	CRZ (ft)	Condition	Req. Variance	Removed?
141	Black Cherry	<i>Prunus serotina</i>	36	54	Poor	Yes	
146	Tulip Poplar	<i>Liriodendron tulipifera</i>	30	45	Fair		
147	Tulip Poplar	<i>Liriodendron tulipifera</i>	33	49.5	Fair		
148	Tulip Poplar	<i>Liriodendron tulipifera</i>	27	40.5	Fair		
149	Tulip Poplar	<i>Liriodendron tulipifera</i>	32	48	Fair		
150	Tulip Poplar	<i>Liriodendron tulipifera</i>	27	40.5	Fair		
151	Tulip Poplar	<i>Liriodendron tulipifera</i>	34	51	Fair		
152	Tulip Poplar	<i>Liriodendron tulipifera</i>	30	45	Fair	Yes	
153	Tulip Poplar	<i>Liriodendron tulipifera</i>	34	51	Fair		
154	Tulip Poplar	<i>Liriodendron tulipifera</i>	41	61.5	Fair	Yes	
155	Tulip Poplar	<i>Liriodendron tulipifera</i>	36	54	Fair	Yes	
11414	Red Maple	<i>Acer rubrum</i>	31	46.5	Fair		
156	Red Maple	<i>Acer rubrum</i>	24	36	Fair		
157	Tulip Poplar	<i>Liriodendron tulipifera</i>	29	43.5	Good		
158	Tulip Poplar	<i>Liriodendron tulipifera</i>	24	36	Good		
159	Tulip Poplar	<i>Liriodendron tulipifera</i>	24	36	Fair		Yes
160	Tulip Poplar	<i>Liriodendron tulipifera</i>	24	36	Fair		
161	Tulip Poplar	<i>Liriodendron tulipifera</i>	26	39	Good		
162	Tulip Poplar	<i>Liriodendron tulipifera</i>	27	40.5	Good		
163	Tulip Poplar	<i>Liriodendron tulipifera</i>	24	36	Good		
164	Tulip Poplar	<i>Liriodendron tulipifera</i>	26	39	Good		
165	Black Walnut	<i>Juglans nigra</i>	24	36	Fair		Yes
166	Tulip Poplar	<i>Liriodendron tulipifera</i>	26	39	Fair		Yes
167	Tulip Poplar	<i>Liriodendron tulipifera</i>	27	40.5	Fair		
168	Tulip Poplar	<i>Liriodendron tulipifera</i>	25	37.5	Good		
169	Tulip Poplar	<i>Liriodendron tulipifera</i>	24	36	Good		

Bold text signifies specimen tree (30" and greater)

**Note:** Tree # 141 is located outside the Randolph Manor property, with its CRZ extending into Randolph Manor.

**FOREST CONSERVATION WORKSHEET**  
Update to Approved Randolph Manor (Plan # S-2554)

NET TRACT AREA:	Existing Data	Updated Data
A. Total tract area	4.66	4.66
B. Land dedication acres (parks, county facility, etc.)	0.00	0.00
C. Land dedication for roads or utilities (not being constructed by this plan)	0.03	0.03
D. Area to remain in commercial agricultural production/use	0.00	0.00
E. Other deductions (specify)	0.00	0.00
F. Net Tract Area	4.63	4.63

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

EXISTING FOREST COVER:	Existing Data	Updated Data
L. Existing forest cover	4.08	4.08
J. Area of forest above afforestation threshold	3.39	3.39
K. Area of forest above conservation threshold	3.15	3.15

BREAK EVEN POINT:	Existing Data	Updated Data
L. Forest retention above threshold with no mitigation	1.56	1.56
M. Clearing permitted without mitigation	2.52	2.52

PROPOSED FOREST CLEARING:	Existing Data	Updated Data
N. Total area of forest to be cleared	-1.66	2.22
O. Total area of forest to be retained	-2.48	1.86

PLANTING REQUIREMENTS:	Existing Data	Updated Data
P. Reforestation for clearing above conservation threshold	-0.40	0.56
Q. Reforestation for clearing below conservation threshold	0.00	0.00
R. Credit for retention above conservation threshold	-1.56	0.93
S. Total reforestation required	0.00	0.00
T. Total afforestation required	0.00	0.00
U. Credit for landscaping (may not exceed 20% of "S")	0.00	0.00
V. Total reforestation and afforestation required	0.00	0.00

**NOTE:** This is the updated forest conservation worksheet from approved FFCP # 9-2554 of Randolph Manor Property for Hollywood Stream Restoration. The values in bold are the updated numbers for this plan revision, and replace the adjacent numbers that are crossed out.

**SUMMARY TABLE** (all values in acres unless noted)

A. Total area of tract	4.66	
Acres of tract remaining in agriculture	0.00	
Acres of road and utility ROW which will not be improved	0.00	
<b>B. Total acreage of existing forest:</b>	<b>4.08</b>	
Forest retained	1.86	
Forest cleared	2.22	
<b>C. Land use category</b>	<b>HDR</b>	
Afforestation threshold	15%	0.69
Conservation threshold	20%	0.93
<b>D. Acreage of forest within wetlands:</b>	<b>0.00</b>	
Retained	0.00	
Cleared	0.00	
Planted	0.00	
<b>E. Acreage of forest within 100 year floodplains:</b>	<b>1.75</b>	
Retained	1.16	
Cleared	0.59	
Planted	0.28	
<b>F. Acreage within stream buffers:</b>	<b>2.46</b>	
Retained	1.50	
Cleared	0.96	
Planted	0.34	
<b>G. Acreage within priority areas:</b>	<b>2.46</b>	
Retained	1.50	
Cleared	0.96	
Planted	0.34	
<b>H. Stream buffer:</b>	<b>150'</b>	
Length	600'	
Average width	150 ft	

**LANDSCAPE ARCHITECT CERTIFICATE:**

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

08/21/13  
Date  
James M. Felchu, RLA  
Registered Landscape Architect  
MD #3241

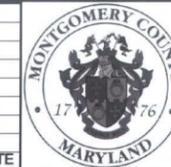


Prepared for:  
Montgomery County Department of Environmental Protection  
255 Rockville Pike, Suite 120  
Rockville, Maryland 20850  
Phone: (240) 777-7713  
Attn: Mr. Craig Carson

MONTGOMERY COUNTY, MD  
Hollywood Branch  
MNCPPC  
P 825  
Tax Map JR61

Update to Approved FFCP # S-2554  
For Hollywood Stream Restoration  
Cover Sheet

DATE:	DESIGNED:	DRAFTED:	CHECKED:	BASE DATA:	NO.	REVISIONS	BY	DATE
08/13	HT/JF	HT	JF	CPJA				

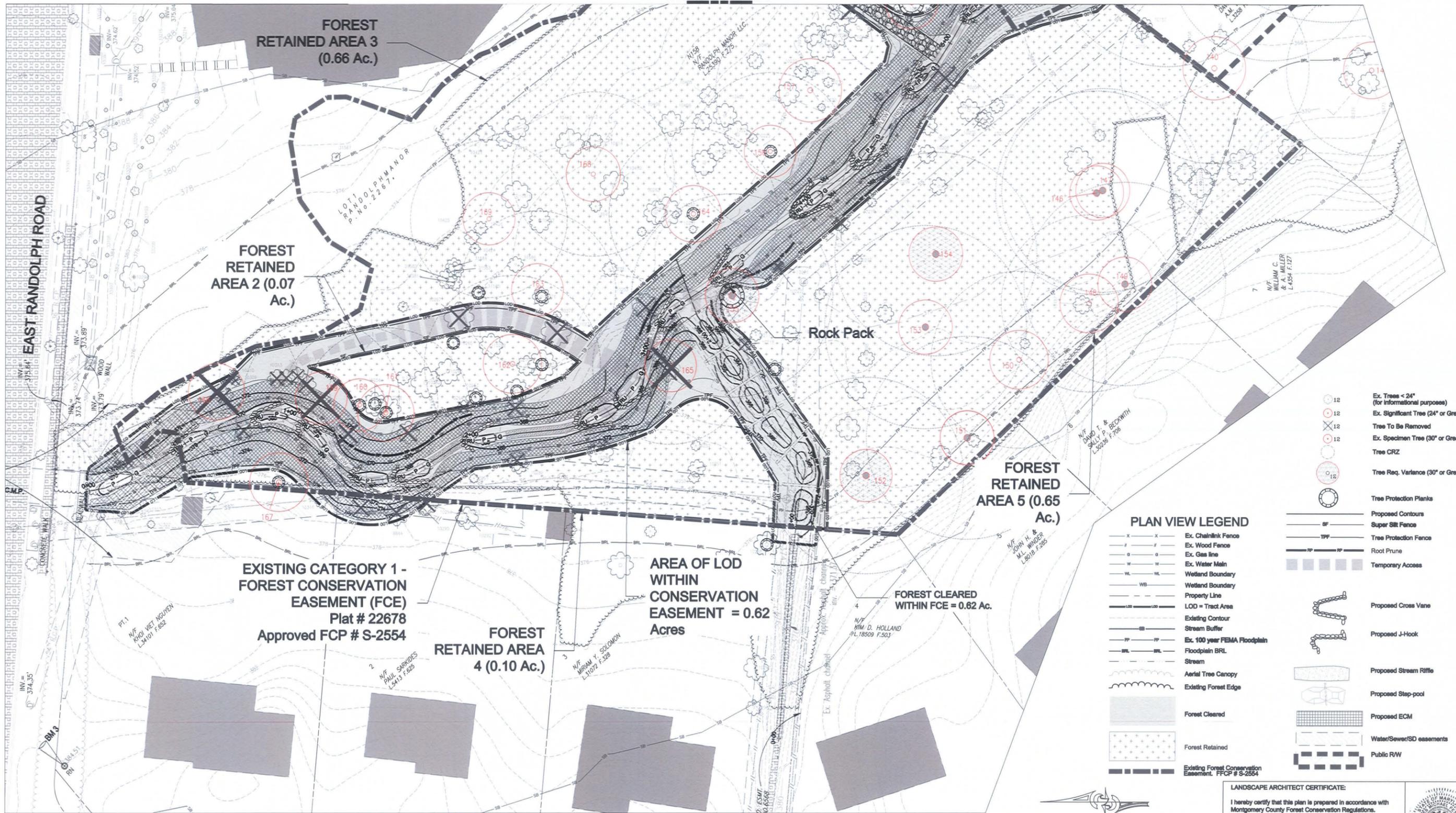


**CPJ**  
Associates

CPJ Environmental Services Division  
STREAM RESTORATION • STORMWATER MANAGEMENT • INSPECTION  
910 CLOPPER ROAD, STE 25N GAITHERSBURG MARYLAND 20878  
Phone: (301) 208-9673 E-mail: envscpj@a.com Fax: (301) 926-4581  
SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
FCP- RM1 of RM7  
**57**  
OF 66 DRAWINGS  
JOB NO. 38-507

Aug 23, 2013 1:12:30pm User: jrcorley  
 Design: JRCorley  
 FCP-RM1-Rev01.dwg  
 Plotting: JRCorley  
 Plotting Conditions: 08/21/13



Prepared for:  
Montgomery County Department of  
Environmental Protection  
255 Rockville Pike, Suite 120  
Rockville, Maryland 20850  
Phone: (240) 777-7713  
Attn: Mr. Craig Carson

MONTGOMERY COUNTY, MD  
Hollywood Branch  
MNCPPC  
P 825  
Tax Map JR61

**Update to Approved FFCP # S-2554**  
*For Hollywood Stream Restoration*  
**Plan View**

DATE:	08/13			
DESIGNED:	HT/JF			
DRAFTED:	HT			
CHECKED:	JF			
BASE DATA:	CPJA			
NO.		REVISIONS		BY DATE



**CPIJ Associates**  
CPJ Environmental Services Division  
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910 CLOPPER ROAD, STE 215N GAITHERSBURG MARYLAND 20878  
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SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
FCP- RM2 of RM7  
**58**  
OF 66 DRAWINGS  
JOB NO. 38-507

Aug 23, 2013 12:30:00 User: cpj  
 Design: jf  
 FCP-Plan-View.dwg  
 Building: C:\Users\jason\Documents\382713.dwg  
 P:\Projects\382713.dwg

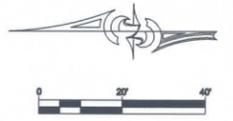


**PLAN VIEW LEGEND**

	Ex. Chainlink Fence
	Ex. Wood Fence
	Ex. Gas line
	Ex. Water Main
	Wetland Boundary
	Property Line
	LOD = Tract Area
	Existing Contour
	Stream Buffer
	Ex. 100 year FEMA Floodplain
	Floodplain BRL
	Stream
	Aerial Tree Canopy
	Existing Forest Edge
	Forest Cleared
	Forest Retained
	Existing Forest Conservation Easement, FFCP # S-2554
	Ex. Tree Stand Boundary
	Ex. Trees < 24" (for informational purposes)
	Ex. Significant Tree (24" or Greater)
	Tree To Be Removed
	Ex. Specimen Tree (30" or Greater)
	Tree CRZ
	Tree Req. Variance (30" or Greater)
	Tree Protection Planks
	Proposed Contours
	Super Silt Fence
	Tree Protection Fence
	Root Prune
	Temporary Access
	Proposed Cross Vane
	Proposed J-hook
	Proposed Stream Riffle
	Proposed Step-pool
	Proposed ECM
	Water/Sewer/SD easements
	Public R/W

**Notes:**

- All planting areas within LOD will be planted with trees and shrubs per County Guidelines following the completion of construction.
- All temporary access routes to be protected with 12" thick mulch mats (see detail).



**LANDSCAPE ARCHITECT CERTIFICATE:**  
 I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.  
 Date: 08/21/13  
 James M. Fetschu, RLA  
 Registered Landscape Architect  
 MD #3241



MATCH LINE SEE SHEET FCP-RM2

Prepared for:  
 Montgomery County Department of  
 Environmental Protection  
 255 Rockville Pike, Suite 120  
 Rockville, Maryland 20850  
 Phone: (240) 777-7713  
 Attn: Mr. Craig Carson

MONTGOMERY COUNTY, MD  
 Hollywood Branch  
 MNCPPC  
 P 825  
 Tax Map JR61

**Update to Approved FFCP # S-2554**  
 For Hollywood Stream Restoration  
 Plan View

DATE:	08/13		
DESIGNED:	HT/JF		
DRAFTED:	HT		
CHECKED:	JF		
BASE DATA:	CPJA		
NO.		REVISIONS	BY DATE

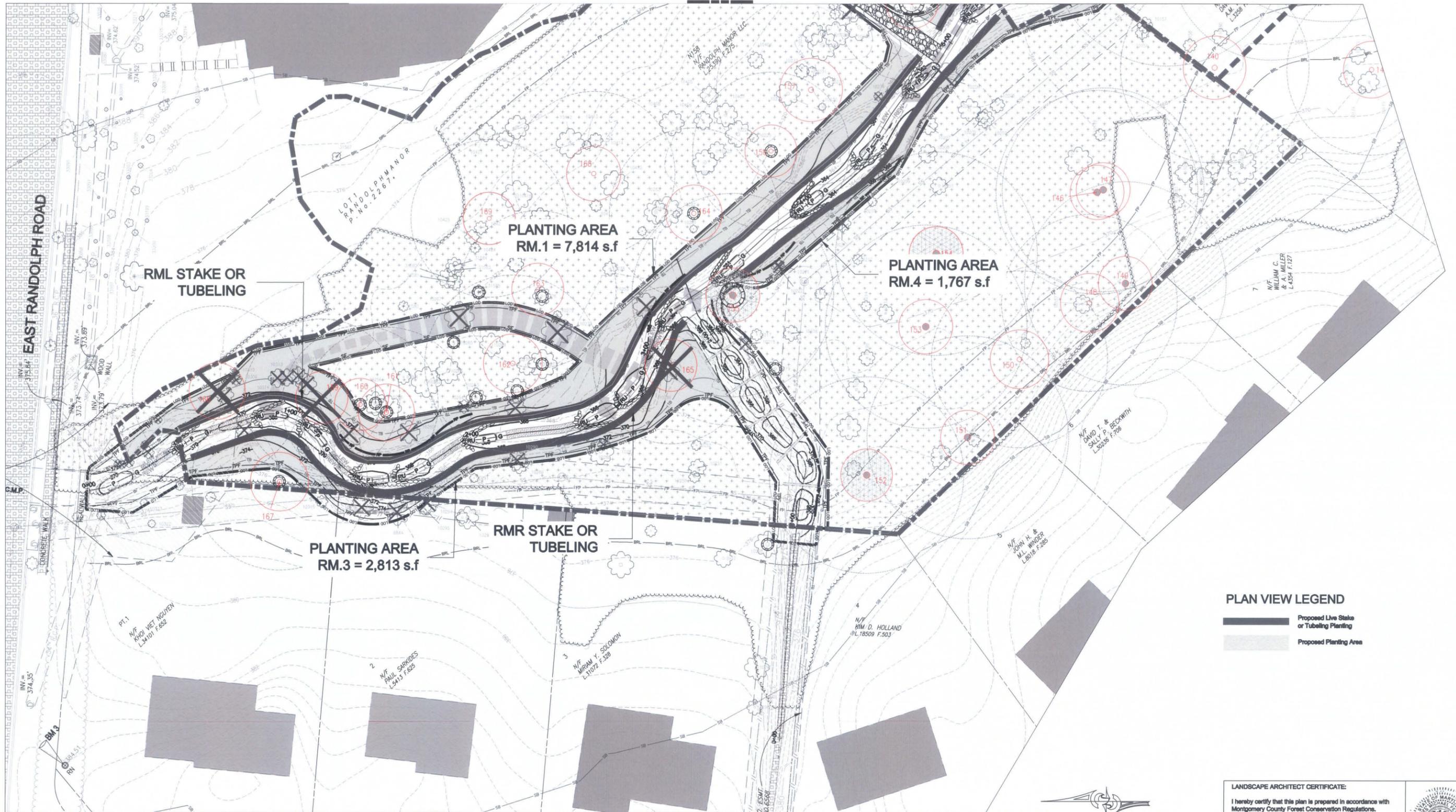


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 CPJ Environmental Services Division  
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 910 CLOPPER ROAD, STE 215N GAITHERSBURG MARYLAND 20878  
 Phone: (301) 208-9673 E-mail: envserv@cpj.com Fax: (301) 208-4661  
 SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
 FCP- RM3 of RM7  
 59  
 OF 66 DRAWINGS  
 JOB NO. 38-507

Project: Hollywood Stream Restoration FFCP # S-2554  
 Date: 08/21/13  
 User: jfetschu  
 Design: jfetschu, ht  
 FCP: ht, jfetschu  
 Existing Conditions: 2012  
 File: Hollywood\_Stream\_Restoration\_FFCP\_S-2554.dwg

MATCH LINE SEE FCP-RM5



**PLAN VIEW LEGEND**

- Proposed Live Stake or Tubing Planting
- Proposed Planting Area

- Notes:**
- All Planting areas within LOD will be planted with trees and shrubs per County Guidelines following the completion of construction.
  - All temporary access routes to be protected with 12" thick mulch mats (see detail).

**LANDSCAPE ARCHITECT CERTIFICATE:**

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

08/21/13  
Date

James M. Fatchu, RLA  
Registered Landscape Architect  
MD #3241

Prepared for:  
Montgomery County Department of  
Environmental Protection  
285 Rockville Pike, Suite 120  
Rockville, Maryland 20850  
Phone: (240) 777-7713  
Attn: Mr. Craig Carson

MONTGOMERY COUNTY, MD  
Hollywood Branch  
MNCPPC  
P 825  
Tax Map JR61

**Update to Approved FFCP # S-2554**  
*For Hollywood Stream Restoration*  
**Planting Plan**

DATE:	08/13			
DESIGNED:	HT/JF			
DRAFTED:	HT			
CHECKED:	JF			
BASE DATA:	CPJA			
	NO.	REVISIONS	BY	DATE



**CPJ Associates**  
CPJ Environmental Services Division  
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Phone: (301) 208-9575 E-mail: enviro@cpja.com Fax: (301) 926-4551  
SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
FCP- RM4 of RM7  
**60**  
OF 66 DRAWINGS  
JOB NO. 38-507

Aug 23, 2013 12:30pm User: jmc  
 Design: jmc  
 Design: jmc  
 Design: jmc  
 Design: jmc

**SEED MIX**

PERMANENT SEED MIX	Percent	Common Name	Scientific Name
Partial shaded woodland - for use with Coir Fiber Matting and all other disturbed areas 20lbs / Acre	25%	Virginia Wild Rye	<i>Elymus virginicus</i>
	10%	Annual Rye	<i>Lolium multiflorum</i>
	20%	Riverbank Wild Rye	<i>Elymus riparius</i>
	15%	Red Fescue	<i>Festuca rubra L.</i>
	10%	Deertongue	<i>Dichanthelium clandestinum</i>
20%	Bottlebrush	<i>Elymus hystrix</i>	
<b>TEMPORARY SEED MIX</b>	35lbs / Acre Cereal Rye		

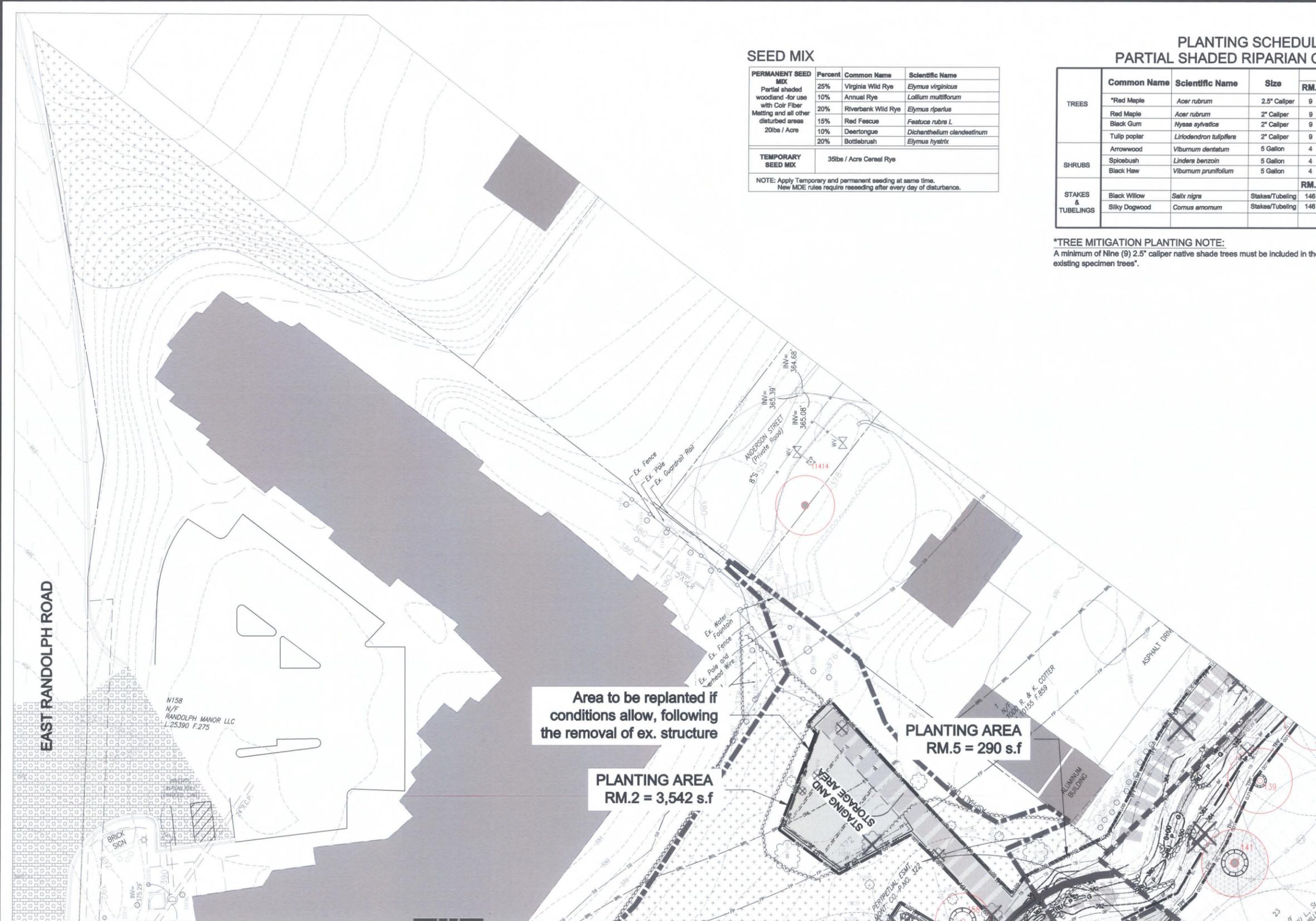
NOTE: Apply Temporary and permanent seeding at same time.  
New MDE rules require reseeding after every day of disturbance.

**PLANTING SCHEDULE  
PARTIAL SHADED RIPARIAN CONDITION**

	Common Name	Scientific Name	Size	QUANTITY					Min. Spacing	Sun Exposure	
				RM.1	RM.2	RM.3	RM.4	RM.5			Total
TREES	*Red Maple	<i>Acer rubrum</i>	2.5" Caliper	9					9	15' O.C.	Partial - Full
	Red Maple	<i>Acer rubrum</i>	2" Caliper	9	5	4	3	0	21	15' O.C.	Partial - Full
	Black Gum	<i>Nyssa sylvatica</i>	2" Caliper	9	5	4	3	0	21	15' O.C.	Partial - Full
	Tulip poplar	<i>Liriodendron tulipifera</i>	2" Caliper	9	5	4	3	0	21	15' O.C.	Partial - Full
	Arrowwood	<i>Viburnum dentatum</i>	5 Gallon	4	2	1	1	1	9	10' O.C.	Partial - Full
SHRUBS	Spicebush	<i>Lindera benzoin</i>	5 Gallon	4	2	1	1	1	9	10' O.C.	Partial - Full
	Black Haw	<i>Viburnum prunifolium</i>	5 Gallon	4	2	1	1	1	9	10' O.C.	Partial - Full
STAKES & TUBELINGS				<b>RM.L</b>	<b>RM.R</b>						
	Black Willow	<i>Salix nigra</i>	Stakes/Tubeling	146	165				311	3' O.C.	
	Silky Dogwood	<i>Cornus amomum</i>	Stakes/Tubeling	146	165				311	3' O.C.	

**\*TREE MITIGATION PLANTING NOTE:**

A minimum of Nine (9) 2.5" caliper native shade trees must be included in the final forest conservation planting plan to mitigate for impacts to existing specimen trees.



**PLAN VIEW LEGEND**

	Proposed Live Stake or Tubeling Planting
	Proposed Planting Area
	Proposed Planting Over Utility Easements

**Notes:**

- All planting areas within LOD will be planted with trees and shrubs per County Guidelines following the completion of construction.
- All temporary access routes to be protected with 12" thick mulch mats (see detail).



**LANDSCAPE ARCHITECT CERTIFICATE:**

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

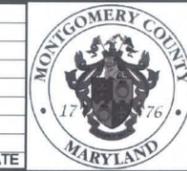
08/21/13  
Date

*James M. Fetchu*  
James M. Fetchu, RLA  
Registered Landscape Architect  
MD #3241



MATCH LINE SEE FCP-RM 4

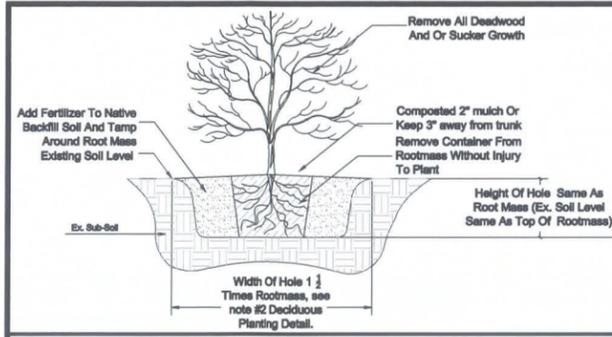
Prepared for: Montgomery County Department of Environmental Protection 255 Rockville Pike, Suite 120 Rockville, Maryland 20850 Phone: (240) 777-7713 Attn: Mr. Craig Carson	MONTGOMERY COUNTY, MD Hollywood Branch MNCPPC P 825 Tax Map JR61	Update to Approved FFCP # S-2554 For Hollywood Stream Restoration Planting Plan	DATE: 08/13				
			DESIGNED: HT/JF				
			DRAFTED: HT				
			CHECKED: JF				
			BASE DATA: CPJA	NO.	REVISIONS	BY	DATE



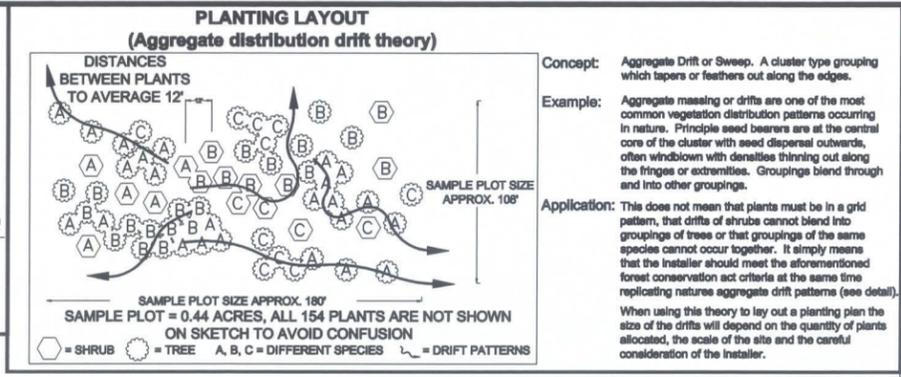
**CPJ Associates**  
 CPJ Environmental Services Division  
 STREAM RESTORATION • STORMWATER MANAGEMENT • INSPECTION  
 910 CLOPPER ROAD, STE 215N GAITHERSBURG MARYLAND 20878  
 Phone: (301) 206-9673 E-mail: envcpja.com Fax: (301) 926-4651  
 SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN
FCP- RM5 of RM7
<b>61</b>
OF 66 DRAWINGS
JOB NO. 38-507

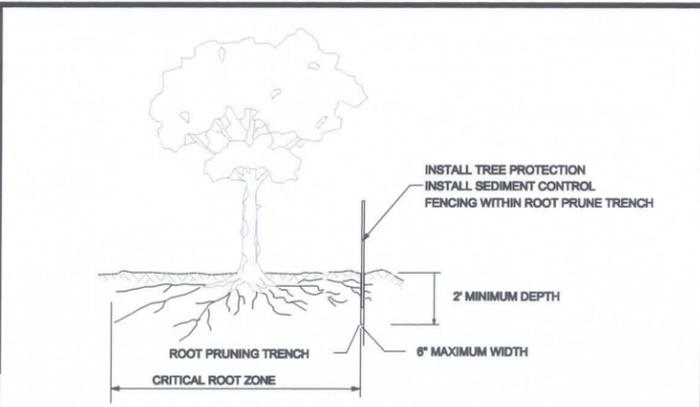
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 Design: jmcnamara  
 FCP-RM5.dwg  
 Building: C:\Users\jmcnamara\Documents\Projects\Hollywood Stream Restoration\Drawings\FCP-RM5.dwg  
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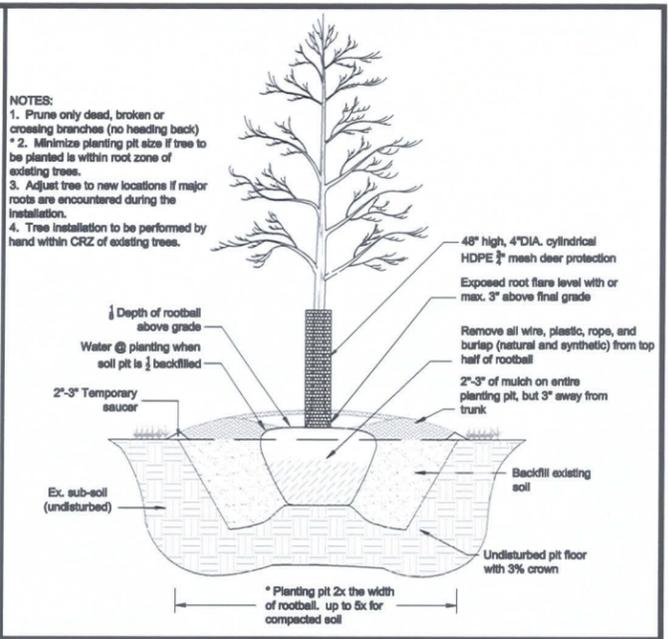
**Shrub Planting**  
not to scale



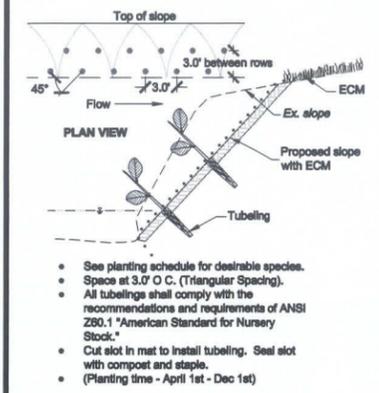
**Tree and Shrub Planting Layout**  
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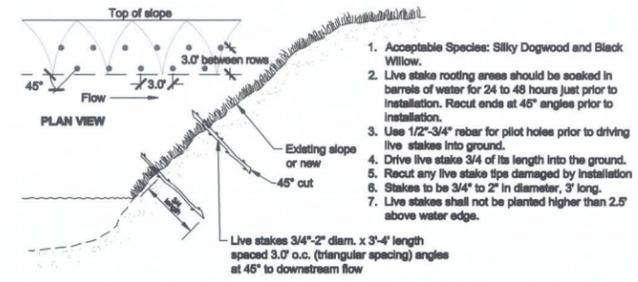
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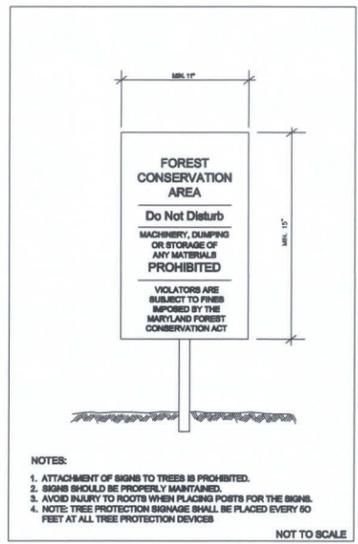
**Deciduous Planting**  
not to scale



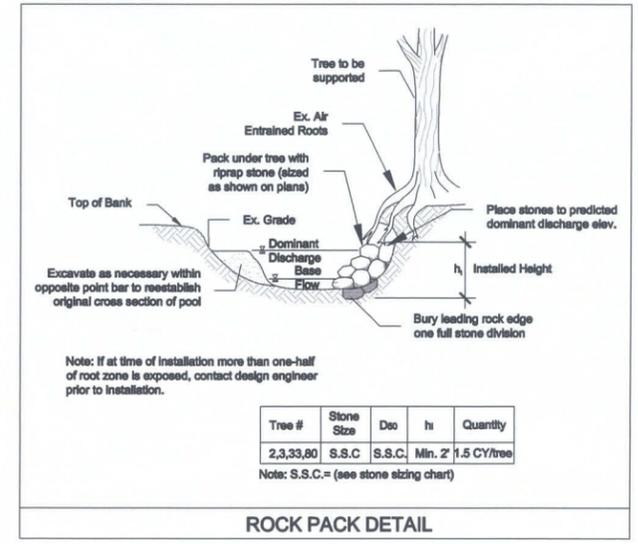
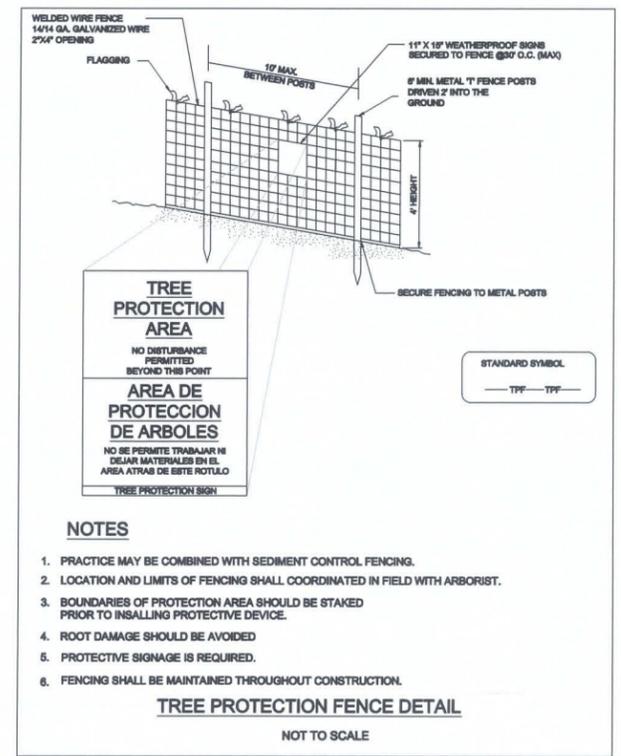
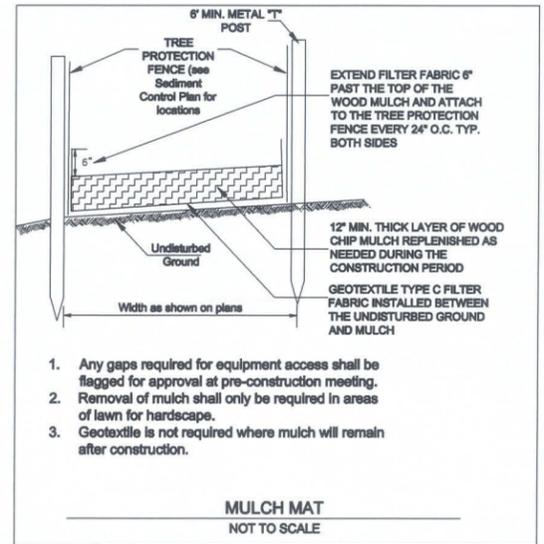
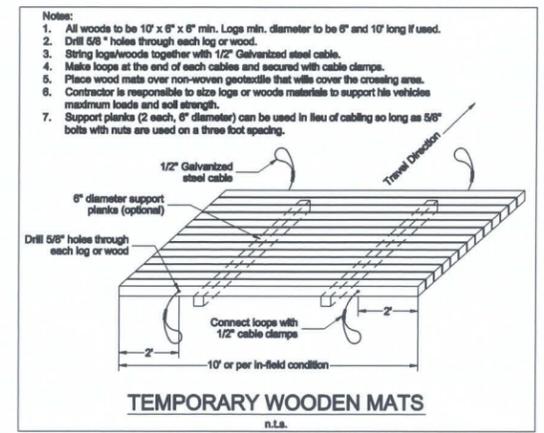
**Tubeling Planting Detail**  
not to scale



**Stake Planting Detail** (planting time Dec. 1st to April. 1st)  
not to scale



**Forest Conservation Sign**  
not to scale



**Update to Approved FFCP # S-2554**

For Hollywood Stream Restoration

Tree Protection and Planting Details

DATE:	08/13			
DESIGNED:	HT/JF			
DRAFTED:	HT			
CHECKED:	JF			
BASE DATA:	CPJA			
NO.		REVISIONS	BY	DATE



**CPJ Associates**

CPJ Environmental Services Division

STREAM RESTORATION • STORMWATER MANAGEMENT • INSPECTION

910 CLOPPER ROAD, STE 256N GAITHERSBURG MARYLAND 20878

Phone: (301) 208-9673 E-mail: envcpj@a.com Fax: (301) 208-4651

SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA

LANDSCAPE ARCHITECT CERTIFICATE:

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

08/21/13  
Date

James M. Fetzhu, RLA  
Registered Landscape Architect  
MD #3241

SCALE AS SHOWN

FCP- RM6 of RM7

62

OF 66 DRAWINGS

JOB NO. 38-507

Aug 21, 2013 1:24:10pm User: jmcnamara  
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TREE AND SHRUB PLANTING NOTES

DESCRIPTION AND MATERIALS: Work for this section includes, but is not limited to installation of trees and shrubs in accordance with MSHA 710 and ANSI Z90.1 "American Standard for Nursery Stock", except as otherwise specified. Plant List and Supply: The Contractor must be responsible for furnishing and installing all native plant material shown on the Contract Documents (Native Plant List). Native plant material installed on Randolph Manor property must conform to the plant list located in the Contract Documents. Contractor must verify they can obtain the specified plants and quantities prior to final construction estimate. Any discrepancies or shortages of specified plant material must be reported to the Owner immediately.

Substitutions will not be permitted unless proof is submitted by the nursery that a plant specified is not obtainable, a written proposal will be considered for use of nearest equivalent size or variety with an equitable adjustment of contract price. The written proposal must be submitted to the Owner one month prior to installation.

All plants must comply with the recommendations and requirements of ANSI Z90.1 "American Standard for Nursery Stock" or latest edition and must be grown in the Piedmont region within 100 miles of Montgomery County, MD. The plants must be true to species and variety as specified on the approved plan or species specified by the Designer or Owner. All plants of the same specified size must be uniform size, character of growth, well branched, well formed, vigorous, healthy planting stock free from disease, sunscald, harmful insects or insect eggs and having a healthy, normal and unbroken root system. All container-grown species must be sufficient to hold soil intact when removed from containers. All root bound container stock or plants which have been pruned back will be rejected by the Owner.

Contract Growing Arrangements: For items where the County agrees to make prior supply arrangements due to known limitations of quantities (e.g., Paw Paws), the County will direct the Contractor to establish arrangements with suppliers to provide predetermined quantities of these items. These arrangements will be made by May 30 of each calendar year.

Delivery: The Contractor must notify the Designer or Owner of the delivery schedule two weeks in advance so that the plant materials may be inspected at the nursery and upon arrival at the job site. All plants delivered for the specific restoration project must be unloaded, inventoried and grouped by plant species under the direct supervision of the onsite Landscape Foreman. The Designer or Owner must approve the delivery with the Landscape Foreman present and all signed delivery tickets matching the approved delivery schedule must be provided to the Designer or Owner upon receipt of the delivery. The plants delivered must be moist and kept moist until planted. Plants not installed the day of delivery must be properly stored and protected from direct sun and wind. Plant material must not be dropped, handled by the trunk, stems or foliage. Plant stems must be protected from being damaged, scamed or broken while being handled, stored and transported by equipment.

Rejection: Any materials and/or work may be rejected by the Designer or Owner if the plant material does not meet the specifications. All rejected materials must be removed from the site by the Contractor within 48 hours. All rejected plant material must be documented by the Landscape Foreman and a copy listing the rejected plant material must be provided to the Owner within 48 hours.

Submittals

- 1. Schedule: Submit final plant schedule listing plants to be installed one month prior to installation.
2. Qualification Data: Submit installer qualifications verifying years of experience; include list of completed projects having similar scope of work identified by name, location, date, reference names and phone numbers.
3. Maintenance: The Contractor must submit daily reports of the work done including number of laborers, hours worked, type of maintenance performed including but not limited to Additional Watering, Invasive Plant Control, re-securing deer protection, insect and disease control, and re-mulching. When Additional Watering and/or Invasive Plant Control is performed, the Contractor must follow all submittals outlined in Additional Watering Contract Line Item 7021 and Invasive Plant Control Contract Line Items 7011-123.
4. Warranty: The Contractor will receive a Certificate of Acceptance from the Owner and the warranty period will begin from the date of the letter. The Contractor must furnish a written warranty covering the plants during the two-year warranty. The Warranty must provide plant replacements during the two-year period for all plants which fail to grow, are not true to name, or are impaired to the extent that they will not grow properly as determined by the Designer or Owner or his representative.

EXECUTION:

Installation
1. Personnel: Landscape Foreman must have 5 years or more documented successful experience in native plant landscape installation. All work must be performed by personnel experienced with the installation procedures and under direct supervision of qualified the Landscape Foreman. The Landscape Foreman must be a member of one of the following organizations:

Landscape Contractors Association
American Association of Nurserymen
Maryland Nurserymen's Association

2. Timing: Planting work must not be started until final subgrade has been established and approved the Owner. Under no conditions must any work be done if weather or soil conditions are not satisfactory. The season for planting trees, shrubs and ground cover must be March 15 to May 15 and September 15 to November 15, unless otherwise approved by the Owner. Any out of seasons planting permitted by the Designer or Owner will be fully guaranteed by the Contractor. Plantings will only occur when weather and soil conditions will permit the successful establishment of plants and only at the Owner's discretion.

3. Examination of Sites: The Contractor must examine the site and all conditions thereon and take into consideration all such conditions that may affect the work. The Contractor is responsible for verifying the location of all utilities. Start of work indicates acceptance of conditions and full responsibility for work of this section.
4. Plant Inspection: Plant inspection must be arranged by the Contractor at least two weeks prior to delivery. No plants must be dug or delivered to the site until the required inspections arrangements have been made and the plant species, size and vendors are approved by the Designer or Owner. All plants must be subject to inspection by the Designer or Owner for species, size, color, and quality. If so desired by the Designer or Owner, a sample for each plant variety must be planted as specified. Once approved, these samples must be tagged by the Contractor and used as standards of comparison for the remainder of the Work.

5. Identification Tags: All plants must be tagged with a 3/4 inch x 3 inch with doubled faced aluminum tag with the ability to write on or emboss with a pencil, pen or pointed instrument. The tag must have a manufacturer's stamped hole for feeding a supplied 9' wire. The tag must be placed securely, but loose to avoid harm to the plant, on each plant near a sturdy branch adjacent to the trunk. The tag must legibly bear the plant's common name, date planted, and an inventory code specified by the Designer or Owner.

6. Preparation: The Contractor must provide the stakes and stela out approved plant material locations before digging and installing plants. The Designer or Owner must approve the layout and the Designer or Owner has the right to adjust the plant material locations and numbers of plantings to meet field conditions. Excavation for plantings will be in accordance with MSHA 7 10.03.04 or as specified in the Contract Documents.

7. Planting: The Contractor must carefully remove the plant from the container and avoid damage to the plant and its root system. By carefully supporting the root mass, place the plant in the properly size hole on a layer of hand compacted soil and begin backfilling and firmly packing soil around roots around roots according to MSHA 7 10.03.09.

8. Pruning: Only dead and broken branches must be removed from trees unless otherwise directed by the Owner. Plant material must be pruned in accordance with standard horticultural practices to preserve the natural character of the plant. Only clean, sharp tools must be used. Cuts over 1/4 inch diameter must be painted with an approved tree wound paint or compound covering all exposed living tissue.

9. Tree Staking and Guying: Trees requiring staking and guying the same day trees are installed, as directed by the Designer or Owner, and in accordance with MSHA 7 10.03.12.

10. Initial Watering: The Contractor must provide one initial watering after planting or seeding or as directed by the Designer or Owner. Watering beyond the initial watering will be considered additional watering. All watering must be accomplished using a hose with nozzle and breaker or a sprinkler. Water must be applied in sufficient quantities to maintain moist soil to a depth of at least 4 inches. Water must be applied at low water pressure directly to each plant, allowing water to be absorbed into the planting pit soil until saturated, but without runoff. The Contractor must avoid application of too much water.

Contractor must be able to supply a water truck or water plants from a nearby hydrant. When a hydrant is used, the Contractor is responsible for all regulations, permits or expenses necessary to use the public water supply. The Contractor may use, upon Designer or Owner's approval, Montgomery County's issued Maryland State Water Appropriation Permit No. M020080008 (02) or most recent State Water Appropriation Permit when watering in isolated areas. The Contractor must follow the requirements specified in the State Water Appropriation Permit and must inform the County of the proportion of overall water usage taken from the stream.

Protection and Repair

All portions of the property, which have been disturbed or damaged due to, or incidental to work performed must be repaired and restored to its original condition to the satisfaction of the Designer or Owner.

The Contractor must fully and satisfactorily maintain and protect all work until completion and acceptance of all work or portions thereof and must repair or replace, at his expense, any work damaged during that period, to the satisfaction of the Owner.

Deer Protection: The Contractor must install 4 inch diameter by 48-inch high cylindrical rigid UV treated HDPE 3/4 X 3/4 inch mesh with each mesh stand approximately 1/8 X 1/8 X 1/8 inches. The Deer Protection must be installed, as directed by the Designer or Owner, for all single stem restoration trees taller than 18 inches. Deer Protection must be placed around trees and secured closed using a minimum of three black two way cable ties. All deer protection must protect the plant during the entire 2-year warranty period.

At the Designer or Owner's direction, trees and shrubs may require the use of alternative protective fencing specified and paid for in Line Item 7071 As Needed Deer Protection Fence. All Deer Protection Fence must protect the plant during the entire 2-year warranty period.

Alternative Deer Protection Fences: In situations where the standard deer protection fencing (HDPE treatment above) will not adequately fit or protect trees or shrubs (often those due to multi-stemmed or wide plants, or those without the strength/ability to support the standard protection), the Designer or Owner may direct the Contractor to use a 4 foot diameter by 4 or 6 foot high, 14-gauge welded wire Deer Protection Fence with a minimum of 2 pointed hardwood support stakes 1x2x16 inch in size. Fourteen (14) gauge galvanized wire strands as determined by the Owner will securely fasten the fence to the support stakes. The Contractor must install, as directed by the Owner, the Deer Protection Fence, the support stakes and fastening wire for all trees and shrubs taller than 18 inches. The Deer Protection Fence height of 4 or 6 feet will be determined by the Owner.

Inspection and Initial Acceptance: In addition to the standard acceptance requirements, the Contractor will provide the Owner with a detailed "as-built" planting plan on a full size copy of the Restoration and Planting Plan. The plan will show distinct, labeled planting areas. The plan will show the individual location of all trees and shrubs species. As directed by the Owner, if the planting density is too high to reasonably show individual plant locations on the plan, the "as-built" planting plan will be accompanied by a spreadsheet Inventory of plants in each distinct planting area. The Inventory will include the numbers of plants and species located in each distinct planting area.

Certificate of Acceptance: If the plant material, installation and planting "as built" is satisfactory, the Owner will give written notice to the Contractor. The notice will constitute the Certificate of Acceptance, and the warranty period will begin from that date of the letter.

Maintenance

The Contractor must begin maintenance immediately after each plant is installed. Inspect plants daily during the installation period and perform maintenance during the two years from the beginning of the warranty period. The Contractor must provide all materials, labor and equipment to complete all landscape maintenance work for two years from the beginning of the warranty period. The Contractor must provide maintenance submittals to the Designer or Owner as described in the submittals section of this Contract Line Item.

Schedule of Maintenance:

1. Additional Watering: When additional watering is deemed necessary in accordance with the Contract Documents, the Contractor must conduct Additional Watering for watering, the Owner must be notified and the Owner must occur. This work is for additional watering of planted trees, shrubs, herbaceous plants, soil, or seeded areas as directed by the Owner. Water used on plants must be free of any substance harmful to the plants.

The Contractor must monitor the water needs of all plant material at least once per week between March 31 and October 31. When the Contractor identifies the need for watering, the Owner must be notified and the Owner must occur. Immediately after the Owner approves watering, the Contractor must begin watering using rates specified in MSHA 710.03.04 unless otherwise specified by the Owner. If the Contractor fails to water as required, the Owner will notify the Contractor and watering must begin within 24 hours. The Contractor must continue watering daily until all plant material in the Contract has been watered as directed by the Owner. Each watering must be completed within five consecutive calendar days. All watering must be accomplished using a hose with nozzle and breaker or watering probe to direct water to the plants and disturbance of mulch during the watering operation. Water must be applied at low water pressure directly to each plant, allowing water to be absorbed until saturated, but without runoff. With prior approval by the Owner, gator bags or approved equal can be used on trees to directly apply water to the base of the tree.

The Contractor must be able to supply a water truck or water plants from a nearby hydrant. When a hydrant is used, the Contractor is responsible for all regulations, permits or expenses necessary to use the public water supply. The Contractor may use, upon approval of the Owner, Montgomery County's issued State Water Appropriation Permit No. M020080008 (01) or most recent State Water Appropriation Permit when watering in isolated areas. The Contractor must follow the requirements specified in the State Water Appropriation Permit and must inform the County of the proportion of overall water usage taken from the stream.

The Contractor is required to monitor and record their daily water usage at each project site. Water must be measured by means of satisfactorily installed meters, or measurements of tank capacities, or by acceptable documentation of tanks of predetermined capacity. The Contractor must submit to the Owner, prior to payment, a water usage report stating the type of vegetation watered, accurate record of the quantity of water furnished in gallons.

2. Insect and Disease Control: The Contractor must be responsible for monitoring the site conditions while performing Additional Watering maintenance visits to determine if any insect or disease or problems exist. The Contractor must immediately notify the Owner if problems exist. The Contractor must include this maintenance activity in the required submittals.

3. Invasive Plant Control: The Contractor must be responsible for monitoring the site conditions while performing Additional Watering maintenance visits during the months May-September to determine if Invasive plant control is needed. The Contractor must immediately notify the Designer or Owner if problems exist. The Contractor must follow the specifications described and paid in the Invasive Plant Control Line Item in the Contract Documents and comply with the practices in the guidance listed, BEST MANAGEMENT PRACTICES FOR CONTROL OF NON-NATIVE INVASIVES ( Natural Resources Stewardship Section Part Planning & Stewardship Division, Montgomery Parks, January 2008).

4. Deer Protection and Tree Staking and Guying: The contractor must be responsible for monitoring the site conditions while performing Additional Watering maintenance visits and repair Deer Protection and Tree Staking and Guying as specified in Tree and Shrub Planting Line Item (7028-32). The Contractor must include this maintenance activity in the required submittals.

5. Tree Staking and Guying: The Contractor must document and send notification to the Designer or Owner of plants that are 25% dead or more, three months prior to the next planting season. Upon approval by the Designer or Owner, the plants must be removed and replaced according to the Replacement specification.

Replacement: All plants will be warranted to be in healthy, vigorous, thriving condition as determined by the Designer or Owner during the two-year warranty period. A tree must be replaced if the main leader has died back, or 25% of the crown is dead. The Contractor must replace all dead plants at no charge to the Corps during the next growing season. Replacements will be made, after approval by the Designer or Owner, during the next appropriate planting period and the replacements must be of the same size and species as originally specified in the Contract Documents. The Contractor, as directed by the Designer or Owner, must install deer protection, tree staking and guying, anchoring erosion control matting around replacement plants. Deciduous material will be guaranteed to break dormancy if planted in the dormant season.

Final Inspection: The Contractor will conduct a final inspection with the Designer or Owner or Montgomery County at the end of the 2 year warranty period. It will be the Contractor's responsibility to notify the Owner within two weeks of the anticipated meeting. Any material that is 25% dead or more must be considered dead and must be replaced at no charge. The Owner may accept or reject any tree as alive. A tree must be considered dead when the main leader has died back, there is greater than 25% of the crown dead, or missing; or there is a wound on the stem covering more than 1/3 the diameter and longer than 4 inches. Deciduous material will be guaranteed to break dormancy if planted in the dormant season.

INVASIVE PLANT CONTROL

DESCRIPTION: Control of invasive plants using approved mechanical removal (machetes, chainsaws, pruners, etc.) methods or approved herbicide applications.

MATERIALS AND EXECUTION:

1. Submittals

a. Qualification Data: Submit State of Maryland Pesticide Applicator License and Certification for the Company, Supervisor/Supervisor working on the project. The Certification must state that the assigned Supervisor/Supervisor is certified in the category related to the project: Forest, Right of Way, or Aquatic Pest Control (for work directly adjacent to or over water).

b. References: 45 days prior to work, the Contractor must provide documentation regarding the qualifications of the Applicator and crew, which includes, but may not be limited to, the following information:

Five references (3 non Montgomery County References) from prior invasive control work completed in the last 5 years. Names and phone numbers of references. Summary of vegetation treated, methods, and equipment used. Summary of success at meeting performance objectives (completion timeline, client satisfaction, application performance).

c. Herbicide Application Log: The Contractor must complete a log which must provide weather conditions during/after application, product/rate applied, and locations of areas controlled. The Contractor must submit a copy of the log to the Owner within 12 hours after application.

d. Exotic/Invasive Species Management Plan: Plan shall include exotic/invasive species control for entire LOD or as directed by the Designer or Owner. The plan shall be prepared in accordance with guidelines established by "Best Management Practices for control of non-native Invasives" prepared by Natural Resources Stewardship Division, Montgomery Parks, January 2008 or (latest revision).

2. Mechanical Removal

The Contractor must coordinate with the Owner (applications on parkland used) to eliminate identified areas of targeted invasive plant species. The Contractor must use machetes, chainsaws, pruners, or other approved hand operated equipment. Before removal can begin, the Contractor and the Owner must delineate the removal area. The Contractor must remove the invasive plants according to the direction of the Owner. The Contractor must be sensitive and selective to avoid harming native plant species during invasive plant removal. The Contractor is responsible for damages if mechanical removal is performed outside the removal area specified by the Owner.

3. Herbicide Application

a. Personnel: The Contractor must provide Certification that the assigned Supervisor/Supervisor is a Maryland Pesticide Applicator certified in the category related to the project: Forest, Right of Way, or Aquatic Pest Control (for work directly adjacent to or over water) for the State of Maryland.

b. Timing: The Contractor is responsible, after consultation with the Owner, for selecting the proper herbicide for the targeted species based on the time of year, weather conditions and to use the herbicide in a manner that is consistent with the label.

c. Application: Care should be taken to ensure that the timing of the application is conducive to uptake and translocation of the herbicide. The Supervisor/Supervisor should ensure that the herbicide is listed for use against the selected species and is labeled for aquatic use if the application will be made over water. Before application, the Contractor must submit the recommended herbicide, application technique, application rate and targeted species to the Owner for approval. The approved herbicide must be applied to avoid harming non targeted plant species. The Contractor is responsible for damages if herbicide applications are sprayed outside the spray zone specified by the Owner.

If required, a follow up treatment of control is to be performed as directed by the Owner during the two-year warranty period. This treatment is not a substitute for the application described in the Performance Warranty.

4. Inspection and Initial Acceptance

The Contractor must notify Owner, in writing that the mechanical or herbicide application is complete and request inspection by the Owner. The inspections will be performed by Owner and Contractor within two weeks of written notification from the Contractor.

5. Certificate of Acceptance

If the mechanical or herbicide control method is approved as satisfactory by the Owner, the Contractor will receive a Certificate of Acceptance. The date on the Certificate of Acceptance will constitute the warranty period.

6. Performance Warranty

The date on the Certificate of Acceptance will begin the performance warranty period of two years for all herbicide applications. The Contractor must furnish the Owner with a written performance warranty which must include the herbicide application log and a guarantee that the approved herbicide application will kill 95% of the invasive plants. The numbers of re-growth, live or dead stem counts, borers and other fiscal reference will determine the effectiveness of the application within the spray zone after one growing season from the initial application. If the application does not meet the 95% kill rate after one growing season, the Contractor must reapply the approved herbicide.

7. Final Inspection

The Contractor will conduct a final inspection with the Owner at the end of the two-year warranty period. It will be the Contractor's responsibility to notify the Owner within two weeks of the anticipated meeting. If the herbicide application area does not meet the 95% kill rate, the Contractor must reapply an approved herbicide in accordance with the Owner.

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

Pre-Construction

1. 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.

- 2. No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate 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 masting
Measures not specified on the forest conservation plan may be required as determined by the forest conservation inspector in coordination with the arborist.

3. 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 reduction measures during the pre-construction meeting.

- 4. 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 protection devices may include:
a. Chain link fence (four feet high)
b. Super silt fence with wire strung between 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 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.

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

7. 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.

INSPECTIONS

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

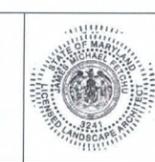
Tree Save Plans and Forest Conservation Plans without Planting Requirements

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

LANDSCAPE ARCHITECT CERTIFICATE: I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations. 08/21/13 Date James M. Felchu, RLA Registered Landscape Architect MD #3241



Prepared for: Montgomery County Department of Environmental Protection 255 Rockville Pike, Suite 120 Rockville, Maryland 20850 Phone: (240) 777-7713 Attn: Mr. Craig Carson

MONTGOMERY COUNTY, MD Hollywood Branch MNCPPC P 825 Tax Map JR61

Update to Approved FFCP # S-2554 For Hollywood Stream Restoration Notes

Table with columns: DATE, DESIGNED, DRAFTED, CHECKED, BASE DATA, NO., REVISIONS, BY, DATE. Values include 08/13, HT/JF, HT, JF, CPJA.



CPJ Environmental Services Division STREAM RESTORATION • STORMWATER MANAGEMENT • INSPECTION 910 CLOPPER ROAD, STE 25N GAITHERSBURG MARYLAND 20878 Phone: 301208-9673 E-mail: envcpj@a.com Fax: 301208-4651 SILVER SPRING, MD FREDERICK, MD FAIRFAX, VA SCALE AS SHOWN FCP- RM7 of RM7 63 OF 66 DRAWINGS JOB NO. 38-507

## ATTACHMENT 3

8/22/2013

Mr. Mark Pfefferle  
Acting Chief  
Environmental Planning, Community-Based Planning  
Maryland – National Capital Park and Planning Commission  
8787 Georgia Ave.  
Silver Spring, MD 20910

RE: Randolph Manor  
Amended Forest Conservation Plan #S-2554  
30" or greater DBH Tree Variance

Dear Mr. Pfefferle:

The Montgomery County Department of Environmental Protection respectfully requests a variance from Section 22A-21 of the Montgomery County Code and from Title 5, Section 5-1607 of the Maryland code for the Hollywood Branch Stream Restoration and Stabilization project.

The Hollywood Branch Stream Restoration project is located in eastern Montgomery County and is a second order tributary to Paint Branch that conveys flows to the Anacostia River and then to the Potomac River. The Hollywood Branch sub-drainage area, situated within the Lower Paint Branch Watershed is a highly developed area that has undergone rapid development changes over the years. Much of the development within the watershed occurred prior to requirements to mitigate the impacts from stormwater flows.

As a result, Hollywood Branch, as a part of the Lower Paint Branch Watershed, has been identified as a priority watershed for restoration according to the Countywide Stream Protection Strategy (CSPS) issued by the Department of Environmental Protection (DEP, 2004). The goal of this strategy and the Hollywood Branch Stream Restoration project are to preserve, protect, and restore watersheds. More specifically, the goals of the Hollywood Stream Restoration project are to utilize appropriate design restoration approaches that will stabilize erosive areas, improve floodplain access, enhance riparian and stream conditions, and improve overall aquatic resources. The study area for the current project includes Hollywood Branch and its tributaries from the outfall of the stormwater management pond upstream of Copley Lane to the culvert on the upstream side of Cannon Road.

All aspects of the restoration were designed based on a detailed geomorphic assessment, hydrologic and hydraulic studies. These studies allowed for the most appropriate stabilization measure to be chosen and designed specifically accordingly to the current hydrologic regime. Although during the design phases of the project existing trees were taken into account, in some instances, the most appropriate long-term stream channel stabilization measures will require impacts to or the removal of select existing trees. Decisions regarding tree impacts were carefully considered knowing that vegetation, especially mature trees, provide invaluable soil stability and often help to slow active stream bank and bed erosion. Conversely however, in more extreme instances, erosion can undermine trees to the extent where they are unstable. This instability

leads to tree collapse and channel blockages which, in turn, exacerbate active erosion that results in the loss of additional trees. Impacts or the removal of trees designated as a part of the Hollywood Stream Restoration will provide greater long-term benefits to stream and floodplain stability, riparian and aquatic habitat, and downstream reaches than if they were to remain.

The Stream Restoration plan required that trees 152, 154, and 155 within this parcel (22678) incur minor impacts within their calculated CRZ's. Each impacted tree will be protected using specific measures as shown in the table attached. Please note tree 141 is located outside of this parcel (22678), but its critical root zone (CRZ) is within the parcel boundary and therefore included in this Variance Request.

Our Forest Conservation Plan and the attached tables identify the specimen trees and details information for tree protection methods that will be implemented in this project such as mulch access, wooden mats, roots prune, and tree protection planking where temporary construction access, grading, and bioengineering structure cannot be established otherwise. In addition, no tree is impacted without consideration of environmental ethics and best management practice and we are willing to further reduce tree impacts and improve our Forest Conservation Plan at time of construction.

It is our understanding that applicants for a variance must demonstrate the following criteria. Our responses follow each point:

- 1) *Describe the special conditions peculiar to the property which would cause unwarranted hardship.*

In February 2006, the Department of Environmental Protection (DEP) completed a watershed study of the Lower Paint Branch that included Hollywood Branch. The study evaluated stream conditions, identified opportunities to improve stormwater management controls in the watershed, and prioritized streams for restoration. DEP conducted two public meetings as part of the study to obtain citizen comments regarding watershed conditions and restoration projects proposed in the study. Comments received regarding DEP's efforts to reduce severe stream bed and bank erosion were favorable. DEP also received citizen complaints regarding stream erosion from residents on Anderson Street, Clifton Road, Rosmere Avenue, Chilton Drive and Downs Drive. To meet the goals and objectives of the watershed study and serve the public good the applicant must access this area and work in the vicinity of these trees. Access was designed to minimize tree loss to the extent possible.

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

Enforcement of these rules would deprive the Montgomery County DEP (owner) of their right and directive to improve stream conditions and enhance riparian stream buffers in order to create wildlife habitats, reduce erosion rates and provide stormwater management controls in the watershed. The proposed stream restoration and stabilization design has been carefully planned according to best management practices that allow for the preservation of as many existing trees as possible. Although unforested areas were utilized where possible, some tree impacts were unavoidable due to their location on the stream banks and the amount of forest within the existing stream buffers.

- 3) *Verify that State water quality standards will not be avoided or that a measurable degradation in water quality will occur as a result of granting the variance.*

State water quality standards will not be avoided and a measurable degradation in water quality will not occur as a result of granting this variance. In this case, the proposed project will focus on stream restoration approaches that will stabilize erosive areas, improve floodplain access, enhances riparian buffers and stream conditions that will improve water quality and overall aquatic habitats. In addition, the Stormwater Management Concept and a Sediment Control Plan will be submitted for review and approval by Montgomery County Department of Permitting Services and the Maryland Department of the Environment to ensure that the proposed plans will meet the current State and County water quality standards and regulations.

- 4) *Provide any other information appropriate to the request.*

There are no rare, threatened or endangered species within the boundaries of the project site as delineated. Also, the Maryland Historical Trust has determined that there are no historic properties affected within the project site. Please note that all specimen trees will be retained upon project completion. Please also note that efforts to retain all trees were made, however due to the existing degraded stream conditions those trees proposed for removal are already under stress and are a safety concern for adjacent home owners. Should the current rate of stream erosion continue, trees proposed for removal will likely be undermined and fall in the future with greater impacts to adjacent property owners.

- 5) *Applicants must apply for and include mitigation in their requests for variances for all trees, and other vegetation, regulated under section 5-1607 that are removed or disturbed by the applicant's activity.*

A note has been added to the Preliminary Forest Conservation plan stating that "a minimum of Nine (9) 2.5" caliper native shade trees must be included in the final forest conservation planting plan to mitigate for the removal of existing specimen trees". Note: Tree # 141 is located outside the Randolph Manor property with its CRZ extending into Randolph Manor. Tree Mitigation for this tree has been accounted for in the FCP for the Hollywood Branch Stream Restoration.

Additional criteria in Section 22A-21(d) states that a variance must not be granted if granting the request:

- (1) *Will confer on the applicant a special privilege that would be denied to other applicants;*
- (2) *Is based on conditions or circumstances which are the result of the actions by the applicant*
- (3) *Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property, or*
- (4) *Will violate State water quality standards or cause measurable degradation in water quality.*

The purpose of the project, as proposed by the Montgomery County DEP is to perform maintenance and rehabilitation of a public water resource while minimizing impacts to the greatest extent possible. The existing conditions of Hollywood Branch are not the result of the applicant, nor did the existing conditions arise from land or building use on a neighboring property. Degraded channel conditions along Hollywood Branch are a cumulative result of

extreme land use changes (i.e. the conversion of forested to impervious) throughout the watershed during a time when stormwater regulations were not in existence. As a result of the restoration project, significant improvements to water quality will occur through the reduction of bank erosion, reduction of sediment supply, creation and restoration of suitable stream substrate imperative for non-tidal aquatic habitat.

In addition to the information provided above, a paper copy of the Preliminary Forest Conservation Plan set and a CD containing a digital copy of this Variance Request letter and Preliminary Forest Conservation Plan are attached for your review and comment.

If you have any other questions or need additional information, please contact me at 301-208-9573 or via email at: JFetchu@cpja.com.

Sincerely,



James Fetchu, RLA  
Environmental Services Division Manager  
CC: Amy Lindsey, M-NCPPC

TABULATION OF 30 INCH OR GREATER POTENTIALLY IMPACTED SPECIMEN TREES

ID	Common Name	DBH (in.)	Condition	TPF	RP	CRZ Protection	Tree Within LOD	FCP Sheet No.	Remarks
141	Black Cherry	36	Poor	PL	X		No	Hollywood FCP 4	<i>This tree is located outside of the Randolph Manor Property however, it critical root zone to be damaged inside the boundary of the Randolph Manor. Therefore, tree # 141 was placed in both Randolph Manor and Hollywood Stream Restoration Variance Request. Tree is adjacent to LOD and is located on eroded stream bank. Stream restoration work includes grading to protect bank toe will be worked around this tree CRZ to minimize impacts if possible.</i>
152	Tulip Poplar	30	Fair	Yes	X		No	2	This tree is located about 20 feet inside TPF. About 8% of CRZ will be impacts by grading to stabilize tributary to Hollywood Branch stream channel.
154	Tulip Poplar	41	Fair	Yes	X		No	2	This tree is located about 35 feet inside TPF. About 5% of CRZ will be impacts by grading to stabilize Hollywood Branch stream channel.
155	Tulip Poplar	36	Fair	Yes	X	RKP	No	2	Tree is located at the top edge of a severe undercut stream bank. Stream erosion and channel down cutting had caused tree roots to expose and undercut. Grading to stabilize erosive area and rock packing to protect tree's root system and stabilize stream bank. More than 35% CRZ will be impacted. <b>Arborist will be consulted to ensure the survival of this tree.</b>

Terminology:

**(RP)** Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven trenchers are not acceptable.

**(RKP)** Rock Packing - exposed root to be hand packed with stone.

**(MM)** Mulch Mats Access - 12" minimum depth wood chip base to be placed for construction access.

**(WM)** Wooden Mats - 10' x 4"x4" wooden plank to be placed over access area for construction access.

**(PL)** Tree Protection Planking

# ATTACHMENT 4



## DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett  
County Executive

Robert G. Hoyt  
Director

January 10, 2014

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

RE: Randolph Manor, application for amendment to FCP accepted for on 8/23/2013

Dear Ms. Carrier:

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

Section 22A-21(d) of the Forest Conservation Law states that a variance must not be granted if granting the request:

1. Will confer on the applicant a special privilege that would be denied to other applicants;
2. Is based on conditions or circumstances which are the result of the actions by the applicant;
3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
4. Will violate State water quality standards or cause measurable degradation in water quality.

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

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

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

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

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

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

Sincerely,



Laura Miller  
County Arborist

cc: Amy Lindsey, Senior Plan Reviewer