		Citation No. EPD_	000339
	ministrative Citation orest Conservation	Tessed	with FADS
	Capital Park and Planning Commissi	on 755VW	VV([13 + 1100]
Name: Roshan	vs.	Izadi	panah
Company/Position: Property owner of 15: Address: 15325 Masonwood Drive ( Phone Number: And 150 Company/Position: Fax Number:	325 Masonwood Drive Saithersburg MD 20879 Email	<u> </u>	Last
Location and Description of Violation:  Address/location of site:  Southwest Corr	ver at property next to	grave road	and within
Stream buffer, Property 15 15325	5 Masonwood Drive		צומר/ מו/ נו
Pursuant of the M-NCPPC's authority under Chapter 22A of the Montgor (date) at the stated site location did commit the following:	nery County Code, it is formally charged that the	ne above named defendar	at on 7/10/4010
cut and cleared 45,000 square feet	approximate) of torest, and spread dirt over	dumped portra	ons of cot are feet of
In violation of:  Montgomery County Code, Chapter 22A  Approval ofPlan No	channel. All in Violation	n of Chapter was not gra	inted forthis
Civil Fine and Compliance:  1. (a) You shall pay a fine of \$	20/2015 (date) and complete the remed e has not been paid. by(date).	ial action listed below The daily fine shall accru	e (until the original
	he remedial action listed below is completed. T	his fine shall be paid with	nin 15 days of
Checks should be made payable to M-NCPPC and shall be paid during Office located at 8787 Georgia Avenue, 2 <sup>nd</sup> Floor, Silver Spring, MD 209 proceedings and/or issuance of additional citations including additional five you elect to request a hearing, you must notify the M-NCPPC Office of the within 15 days of the citation.	10, 301-495-4610. Failure to comply with this nes. You may also request a hearing before the	citation may result in furt Planning Board or the B	her enforcement oard's designee. If
	o cleaning, grading or activities authorized	land distur	bance on
	activities as in the	(1) 1.01/	-0 0
(2) For the affected portion of-	the property submit a	tull NKI/F.	S) torreview
by Submit for approval and implement	after approval a Restoration	n Plantor he prestation planti	troperty
If remedial action is not completed by  (date)  You have violated Chapter 22A of the Montgomery County Code,	you shall nay a daily fine of \$ \	a algavanti	-work is confiltered C \(\alpha\)
Acknowledgment: I sign my name as a receipt of a copy of this Citation and not as an admis request a hearing for the offense(s) charged. If I do not exercise my right	sion of guilt. I will comply with the requireme to a hearing, I agree to entry by the court judg	nts set forth in this Citation ment on affidavit for the	on. I have a right to
Defendant's Signature Rothern	12 adparal	Date LC	2/18
Affirmation:  I solemnly affirm under the penalties of perjury, and upon personal know knowledge, information and belief and that I am competent to testify on the penalties of perjury.	ledge or based on the affidavit, that the content hase matters.	s of this citation are true	to the best of my
Inspector's Signature Stephen Perint Name:	Phone Number: 301-495	-4564	•



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

August 29, 2018

Roshan Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

Re: Corrective Action Order at 15325 Masonwood Drive Forest Clearing Violation – Citation No. EPD 000339

Sent Certified Mail and via email to Roshan Izadpanah at roshan@vitelnet.com

### Dear Roshan Izadpanah:

This letter is an update on the status of the restoration at 15325 Masonwood Drive and direction on resolving the forest conservation law violation.

The M-NCPPC Inspector, Stephen Peck, has visited the property in July and August to monitor the cleanup. While some cleanup of the cut wood has occurred, a comprehensive restoration project is required to be implemented as directed by Citation No. EPD 000339. This Citation was issued for 45,000 square feet of unauthorized forest stream buffer clearing. A copy of this Citation is attached.

Attached to this letter is a Corrective Action Order which memorializes the discussion on August 21, 2018 and establishes a timeline for completing the remedial actions of Citation No. EPD 00339 issued for the unauthorized clearing of 45,000 square feet of forest within a forest stream buffer on 15325 Masonwood Drive. This Administrative Order is being issued to you pursuant to Chapter 22A-17 of the Forest Conservation Law. The purpose of the Corrective Action Order is to establish a time period for completing the remedial actions listed on Citation No. 00339.

On August 3, 2018, the Planning Department received a Natural Resource Inventory / Forest Stand Delineation "NRI/FSD" and determined a few elements of the application were missing. Planning Staff issued comments which must be addressed on a revised NRI/FSD to be submitted and accepted for review by August 31, 2018.

A site meeting was held at the property on August 21, 2018. Planning staff met at the property with your representative, Rafik Bazikian, the plan preparer, Matt Smith, representatives from the Maryland Department of Environment and the Montgomery County sediment control inspector. At this meeting, the stream restoration and Restoration Plan were discussed. The plan preparer determined, he can gather all the agencies comments, prepare the Restoration Plan and submit the Restoration Plan to the Planning Department for review and approval by September 14, 2018.

If the Restoration Plan is not submitted to the Montgomery County Planning Department for review by September 14, 2018, the Montgomery County Planning Department will take additional enforcement action which may include a citation or a Notice of Hearing.

At this time, no equipment is to be within the stream channel. Also, the dumped fill dirt is not permitted to be relocated on the property at this time. Movement of the fill dirt on the property and operating equipment in the stream channel requires prior approval of the Restoration Plan



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

and a preconstruction meeting at the property with your representative, the contractor and the sediment control inspector.

It is important that the NRI/FSD and Restoration Plan are submitted, reviewed, approved and implemented after approval. The NRI/FSD will show the existing features of the disturbed area and surrounding. The Restoration Plan is to be for the entire property and is to satisfy forest conservation plan requirements by protected the existing 5-acre forest stand and the 2-acre area of forest stream buffer disturbance within a Category I Conservation Easement. For the 2-acres restoration area, the Restoration Plan is to include the final stream design, any proposed new improvements and reforestation planting and a 2-year planting maintenance program.

Please contact Inspector Stephen Peck at 301-495-4564 if you have any questions about implementing the Corrective Action Order

Sincerely,

Mark Pfefferle

Chief

Development Applications and Regulatory Coordination M-NCPPC, Montgomery County Planning Department

Attachment: August 27, 2018 Corrective Action Order

Copy of Citation No. EPD 000339

CC: Rafik Bazikian, P.E.

Matthew V. Smith, CFM, Smith Planning and Design, LLC Stephen Peck, M-NCPPC Forest Conservation Inspector



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-1306

# <u>Corrective Action Order – August 29, 2018</u>

# RE: To Resolve Forest Conservation Law Violation at

## 15325 Masonwood Drive Gaithersburg, MD 20878

### A. Natural Resource Inventory/Forest Stand Delineation

1. Intake and Review Comments must be addressed on a revised Natural Resources Inventory / Forest Stand Delineation (NRI/FSD) submitted to the Montgomery Planning Department in accordance with Section 22A.00.01.06 of the forest conservation regulations by August 31, 2018.

#### B. Restoration Plan

- A Restoration Plan must be submitted to the Montgomery County Planning
  Department by September 14, 2018. The Restoration Plan must show the
  approximate 5-acre existing forest area between the gas easement right-of-way and
  the northwest corner of the property and the approximate 2-acre forest area
  between the access road and the turf where stream and forest restoration are to
  occur.
  - A. Within the 5-acre existing forest area at the northwest corner of the property show on the plan:
    - i. Soils, slopes, streams, floodplain, wetland, and environmental buffers
    - ii. Aerial extent of forest canopy
    - iii. Existing easements, gas pipeline easement, ingress/egress easements, and equestrian access easements
    - iv. Category I Conservation Easement over all areas of existing forest that is not encumbered by existing easements. Show this area on the Restoration Plan, note the approximate acreage of this area on the plan and show this as Category I Conservation Easement on the legend.
    - v. Installation of a permanent easement markers every 500 feet along the new Category I Conservation easement boundary next to the gas right-of-way easement.
  - B. Within the 2-acre of stream and forest disturbance at the southwestern corner of the property include on the Restoration Plan the following:
    - i. Soils, slopes, streams, floodplain, wetlands, and all environmental buffers
    - ii. Aerial extent of forest / tree canopy
      - 1. Approximate area of forest clearing and disturbance
    - iii. Existing significant and specimen tree locations



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-1306

- iv. Existing 20-foot equestrian access easement
- v. Describe the shrubs, trees and plants present within the stream buffer area
- vi. Describe the presence of any non-native invasive plants
- vii. Show all proposed construction and land disturbance required for stream restoration including construction access, staging, removal of fill dirt and cut wood and new path construction:
  - Existing stream and restored stream locations
  - 2. Areas where dirt and cut wood debris piles are to be removed from the site
  - 3. Areas of grading or filling
  - 4. Show trees to be planked and area to be protected by tree protection fencing
    - a. Show additional tree(s) to be removed for stream restoration
  - 5. Show location of mulch access paths
  - 6. Any proposed permanent access trails or ATV stream crossing bridge
  - 7. Include standard forest conservation sequence of events and inspection notes. Include specific sequence of restoration notes as to how the restoration will be phased and stabilization of restored slopes will occur during each phase.
- viii. Category I Conservation Easement over the restored forest and stream buffer areas between the chainlink fencing and at least 25 feet from the top of bank uphill into the turf and mowed area. Exclude the 20-foot equestrian access easement from the Category I Conservation Easement. Show this Category I Conservation Easement area on the Restoration Plan, note the approximate acreage of this area on the plan and show this as Category I Conservation Easement on the legend.
- ix. Propose and show 1.5-acres of supplemental planting to include 150 native riparian native trees and the planting of 30 shrubs. Trees are to be 1.5 to 2-inch caliper and at least 6 feet tall. Shrubs are to be a minimum of 3 gallons. Tree species should include sycamore, red maple, black gum, white or chestnut oak and American holly. Shrubs should include paw paw and spicebush.
- x. Include planting and deer protection details and 2-year planting maintenance and management notes on the plan. Specific notes for the management of oriental bittersweet, porcelainberry and mile-a-minute required.
- xi. Propose a non-native invasive management program to cut and reduce invasive plant pressure



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-130

xii. Include permanent conservation easement markers every 300 feet along conservation easement boundary where it borders the gravel road and the maintained turf.

### C. Approvals

1. Comments on the submitted NRI/FSD and Restoration Plan must be responded to promptly so that the plans can be approved by October 19, 2018.

### D. Financial Security

1. Financial security in the amount of the fee-in-lieu rate or from an M-NCPPC approved cost estimate must be posted as a surety for the planting. Approximately 1 acre of forest clearing has occurred. At the fee-in-lieu rate, the surety amount is to \$52,272.00 which is calculated by multiplying the approximate area of the forest clearing, 43,560 square feet (1 acre), by the current County Council approved fee-in-lieu of reforestation rate, \$1.20 per square foot. The amount of the surety is to cover the cost of planting the 150 trees, 30 shrubs, installation of permanent conservation easement markers and maintaining the planting for 2 years to meet a 2-year post planting survival of 100% for the trees and 75% for the shrubs as shown and described on the approved Restoration Plan. A financial security instrument must be approved by the Planning Department's Associate General Counsel by November 30, 2018.

### E. Maintenance Agreement

1. Submit a signed 2-year on-site maintenance agreement for the planted forest to the Planning Department for approval by November 30, 2018.

### F. Conservation Easements

 The Property Owner must submit a Category I Conservation Easement agreement for the conservation easement areas shown on the approved Restoration Plan to M-NCPPC for approval. The M-NCPPC-approved Category I Conservation Easement agreement must be recorded in the Land Records of Montgomery County, Maryland by November 30, 2018.

### G. Planting and Inspections

- 1. The Property Owner is to schedule and hold a pre-planting meeting with the M-NCPPC Inspector prior to November 15, 2018. M-NCPPC Inspector acceptance of the planting is required by December 15, 2018.
- 2. The 2-year survival of the planting is to be 100% for the planted tree and 75% for the planted shrubs. Contact the M-NCPPC inspector for a final planting inspection in the fall of 2020.



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue, Silver Spring, Maryland 20910 Environmental Planning Division 301.495.4540 Fax: 301.495.1303

www.MontgomeryPlanning.Org

### NOTICE OF VIOLATION

Attachment 3
PARTMENT
G COMMISSION
910
495.1303

A Photosof 9/2018

FOR MO	ONTGOMERY COUNTY, MAK	RYLAND, the undersigned issuer, being du	ly authorized, states that:
C0	Stonber 202018	ecipient of this NOTICE, Roshan I	adoorah
On,	Data .	10 1 11 Pa	ccipient's Name
who repr	resents the property owner,	yar "Roshan" Izadpanah a	ind Allen tradpanan
		Troperty Owner's Name	The material 22 A) emission at the
following	g location: 15325 Mas	mery County Forest Conservation Law (Convocation Law)	hapter 22-A) exists at the horg, MD 10878
Plan No.	Explanation:	issued 8/29/18 Started	and disturbance without
E <sub>0</sub>	ilure to hold a required pre-construct	VIOLATION: prior ap	proval of Kestoration Plan
X 12	First Step	15 to get sewire andioval at	hestoration Plan then on site
Fa	ilure to have tree protection measure	s inspected prior to starting work.	preconstruction meeting con
Fa	ilure to install or maintain tree protect	ction measures per the approved Forest Conserval	tion or Tree Save plan.
	illure to comply with terms, condition rected by Forest Conservation Inspec	ns and/or specifications of an approved Forest Contor	nservation plan or Tree Save plan, or as
Fa		onservation plan or Tree Save plan prior to cutting	g, clearing, or grading 5,000 square feet on
		afforestation requirements of a Forest Conservation	ion Plan.
		fence permit prior to installing a fence that passe  at 10. Stram Duffer, Movin  and approved of Restore  may result in i) issuance of a cita	
Order, an	nd/or iii) issuance of a Notice of Recipient is to call the inspector	Hearing to appear before the Planning Bo at 20, 195-155 when the corrective as directed and within any time frames spe	eard for appropriate Administrative action is complete. The following
And the second second second		and contact Forest Conservation Inspector for a p	
In	stall tree protection measures and/or	tree care as directed by Forest Conservation Inspe	ector.
	ubmit required application for compli	ance with Chapter 22A of the County Code. Conf	tact Environmental Planning at 301-45-
/\ re	sume work. Only hand w	and/or land distributing activity. Approval from Fork without nechaniled equil	ment is allowed to Stablish I
		he Forest Conservation Inspector prior to the ref	
co	emplete the corrective action by the d	ff to determine appropriate corrective action to be ate assigned may result in i) issuance of a citation	n, ii issuance of a Stop Work Order, and/or
iii	) issuance of a Notice of Hearing to	appear before the Planning Board for appropriate	Administrative Action.
X	ther: by hand without us	s disturbed by bobcat	stablize other distribed
MNCPPC Inspector	Stephen Peck Printed Name	Stephen Beck q	areas with seed & straw  121/18  Date
RECEIVE		Co + = + Col no :	
BY:		Sent certified that	
*	Printed Name	Signature	Date

1. Why is there a forest conservation easement on my property?

When your lot was created in order to build your house, the developer was required by law to preserve a certain amount of property for forest conservation. The developer chose to place a forest conservation easement over a portion of the subdivision that included your lot. The location of your house on the lot was determined by the builder after the subdivision was created with the easements already in place.

2. I have an easement on my property; can I remove it?

In some, but not all cases the Planning Board may let you remove and replace the easement, but it is a costly process. You should expect to survey or replat your property, survey the replacement property, and plant trees and bushes in a much larger area determined appropriate to replace the easement. If you are interested in learning if this is an option for your property, please request a meeting with M-NCPPC staff.

3. I received a Notice of Violation. What do I do?

سد الرسد المعالم الماسية وماسية

The Notice of Violation lists the corrective actions that need to be completed to bring your property into compliance by a certain date. If you have questions or concerns about the corrective actions, you can set up a meeting with M-NCPPC staff before the compliance date.

4. What happens if I don't agree or comply with the Notice of Violation?

You may set up a meeting with M-NCPPC Staff to discuss the Notice of Violation. The staff will work with you to identify possible solutions to bring your property into compliance. However, you can also request a hearing on the matter, and a Notice of Hearing will be issued. *Please read FAQ #Q* If you ignore the Notice of Violation, the inspector may issue an Administrative Citation to you with a fine of up to \$1,000 for each violation and a date by which the fine needs to be paid and the corrective actions completed. You can avoid a fine by bringing your property into compliance.

5. I received an Administrative Citation. What do I do?

The Administrative Citation lists the corrective actions that need to be completed to bring the property into compliance by a certain date. It will also include a fine of up to \$1,000 that must be paid by the date on the Citation. Additional fines may accrue if the deadline is not met. You may also request a hearing within 15 days of the date the Citation was issued. See FAQ #8

6. If I pay the Citation, is there anything else I need to do?

Yes. You must also bring your property into compliance by performing the corrective actions listed on the Citation. If you have any questions about what needs to be done, please contact the inspector.

7. What happens if I don't agree or comply with the Administrative Citation?
If you do not comply with the Administrative Citation, you will be issued a Notice of Hearing.

### 8. How do I request a hearing?

Send a written request to M-NCPPC, Office of the General Counsel, 8787 Georgia Avenue, Silver Spring, MD 20910, and include a copy of the Notice of Violation or Administrative Citation.

### 9. I received a Notice of Hearing. What does that mean?

The Notice of Hearing lists the date and location of a hearing in front of a hearing officer who will make a recommendation to the Planning Board. The hearing is similar to a trial. A lawyer for the Planning Department will present evidence to prove that your property has a forest conservation violation. You will have the opportunity to present contrary evidence. Before the hearing, if you decide that you would like to resolve the violation to avoid the hearing process and an additional financial penalty that will be imposed if you are found in violation, you should contact the inspector to set up a meeting to implement the previously identified corrective actions.

### 10. What can I expect at the hearing?

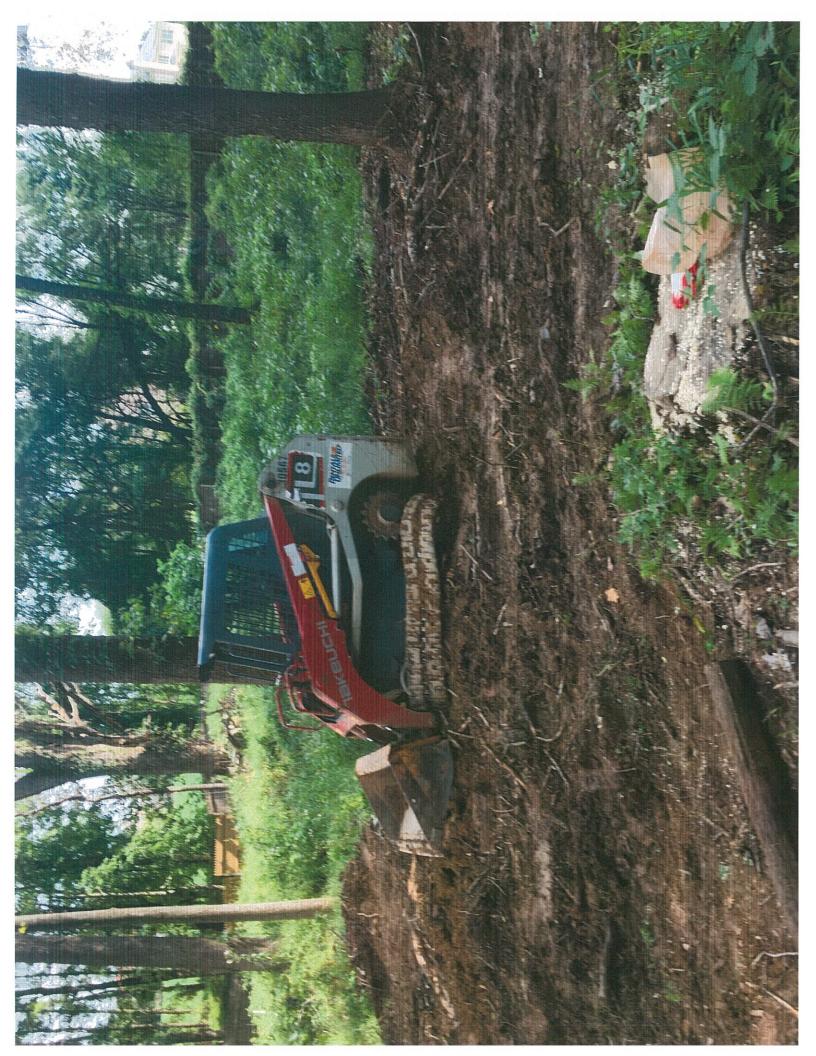
The Enforcement Rules that govern the hearings can be found on the Planning Board's homepage at http://www.montgomeryplanningboard.org/ under the "Learn More" section. The hearing is held in front of a hearing officer, and is similar to a trial. You will have the opportunity to present evidence, have witnesses testify on your behalf and cross-examine the Planning Department's witnesses. The hearing officer will make a recommendation to the Planning Board whether to find you in violation, and if so, recommend corrective actions and an Administrative Civil Penalty in addition to the fine set on the Citation. The Planning Board will hold another hearing that will be limited to review of the hearing officer's recommendation and any issues raised from the first hearing. You will be limited to 10 minutes to present your position to the Planning Board. The Planning Board will decide whether to accept the hearing officer's recommendation, or to make any changes. The Planning Board will then issue an Order that is only appealable in the Circuit Court. Please read FAQ #11.

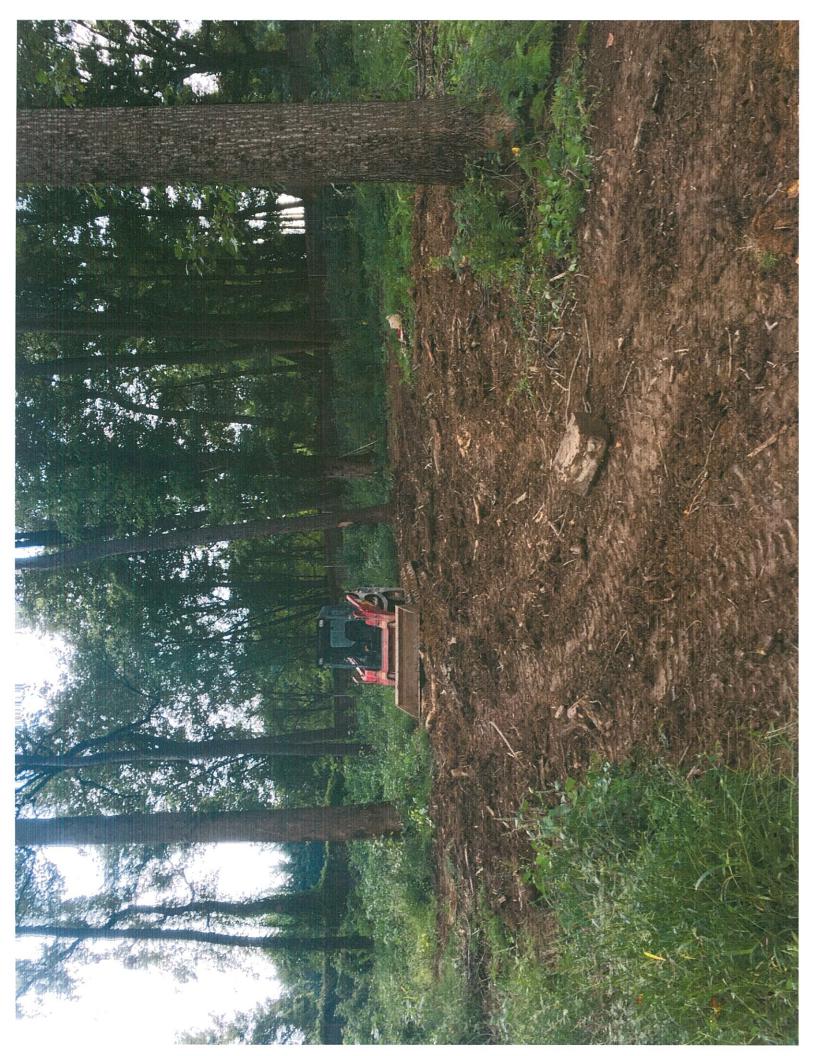
### 11. Do I need an attorney?

If you are found in violation, you could be subject to significant expense – both in penalties and cost to bring your property into compliance. Although you <u>may</u> represent yourself, you should consider hiring an attorney.

#### 12. What will this cost me?







Fax: 301-495-1306



### MONTGOMERY COUNTY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

February 12, 2019

Allen & Roshan Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

RE: NRI/FSD No. 420190190 – Izadpanah Property (15325 Masonwood Drive)

Dear Allen & Roshan Izadpanah:

On September 24, 2018 the Montgomery County Planning Department Staff accepted a Natural Resource Inventory/ Forest Stand Delineation (NRI/FSD) for your property at 15325 Masonwood Drive. The plan was assigned number 420190190. The NRI/FSD plan was required as one of the remedial actions identified in Administrative Citation EPD 000339 issued on April 10, 2018. On February 11, 2019 a revised drawing was submitted on your behalf. That plan **is now approved.** The next step is for the plan preparer to download, print, and sign the Planning Department-approved NRI/FSD and submit this signed and certified approved plan to the Planning Department for filing. The deadline for submitting this certified NRI/FSD is February 20, 2019.

Now that the NRI/FSD is approved, a plan to restore the property can be submitted as required by Administrative Citation EPD 000339. The Restoration Plan must provide for restoration of the 1.9-acre forest impact area, including the 1.03 acres (45,000 square feet) area measured by the forest conservation inspector on April 10, 2018, the affected stream, and the permanent protection of the restored forest stand and all retained forest. The Restoration Plan must be submitted to the Planning Department in conjunction with any Maryland Department of Environment requirements and Montgomery County Department of Permitting Services sediment control plan requirements. Failure to submit this Restoration Plan to the Planning Department by March 1, 2019 will result in further enforcement proceedings.

No stream restoration clearing, grading or land disturbance is permitted to be done on the property until: (1) the Restoration Plan is approved by the Planning Department, (2) an onsite preconstruction meeting occurs with the Forest Conservation Inspector, (3) after the necessary tree protection measures are installed, (4) after the Forest Conservation Inspector accepts the installed tree protection measures.

If you have any questions regarding this action, I can be reached at 301-495-4564. The certified approved NRI/FSD and approval memo will be scanned and be available at the Planning Department's Development Application Information Center webpage.

Sincerely,

Stephen Peck

Senior Planner and Forest Conservation Inspector Development Applications and Regulatory Coordination M-NCPPC - Montgomery County Planning Department

CC: Steven A. Robbins, Lerch, Early & Brewer, Chtd.
Matthew V. Smith, Smith Planning and Design, LLC

PARCEL "B"



# GENERAL NRI/FSD NOTES

- THIS PROPERTY IS ZONED RESIDENTIAL.
   THE PROPERTY OWNER IS ROSHAN IZADPANAH. MR. RAFIK BAZIKIAN IS LISTED
- AS THE APPLICANT AND IS THE ACTING AGENT FOR IZADPANAH.

  Itgorserypte to the total states of the second sec
- 4. FIELD WORK WAS PERFORMED ON JULY 18, 2018 BY MATTHEW V. SMITH, S&S PLANNING AND DESIGN.
- 5. THIS PROPERTY IS NOT WITHIN AN SPA OR PMA.
- 6. PROPERTY TAX ACCOUNT NUMBER ASSOCIATED WITH THE PLANS ARE
- 7. TOPOGRAPHY DERIVED FROM PREVIOUS SITE SURVEY PROVIDED BY ENGINEER.
- 8. WETLAND INFORMATION DERIVED FROM ON-SITE FIELD EVALUATIONS.9. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND
- MEASURED WITH A FORESTERS DBH TAPE MEASURE.

  10. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY
  OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE
  LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
- 11. ALL TREES UNDER 24" ONSITE ARE MEASURED BY OCCULAR ESTIMATE ONLY.
  12. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION. THE U.S. FISH AND WILDLIFE SERVICE STATED "NO FEDERALLY PROPOSED OR LISTED ENDANGERED OR THREATENED SPECIES ARE KNOWN TO EXIST WITHIN THE PROJECT IMPACT AREA."
- 13. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS CURRENT STATE CHAMPION TREES.
- 14. THE SUBJECT PROPERTY IS NOT LISTED AS INDIVIDUAL HISTORIC SITES AS FOUND IN THE MNCPPC HISTORIC PROPERTIES INTERACTIVE MAP.
- 15. NO MAPPED FLOODPLAINS ARE LOCATED ON THE PROPERTY.

  16. THE PROJECT IS LOCATED IN THE SENECA CREEK WATERSHED. HUC CODE
- 16. THE PROJECT IS LOCATED IN THE SENECA CREEK WATERSHED, HUC CODE 020700080601, DESIGNATED USE CLASS I-P.
- 17. WSSC TAXMAP ES122, GRID 221NW14.

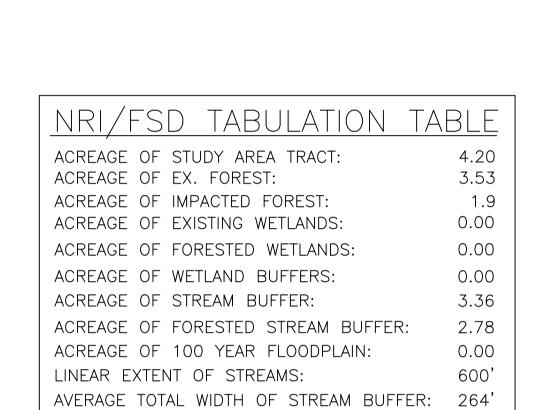
FOREST STAND #1

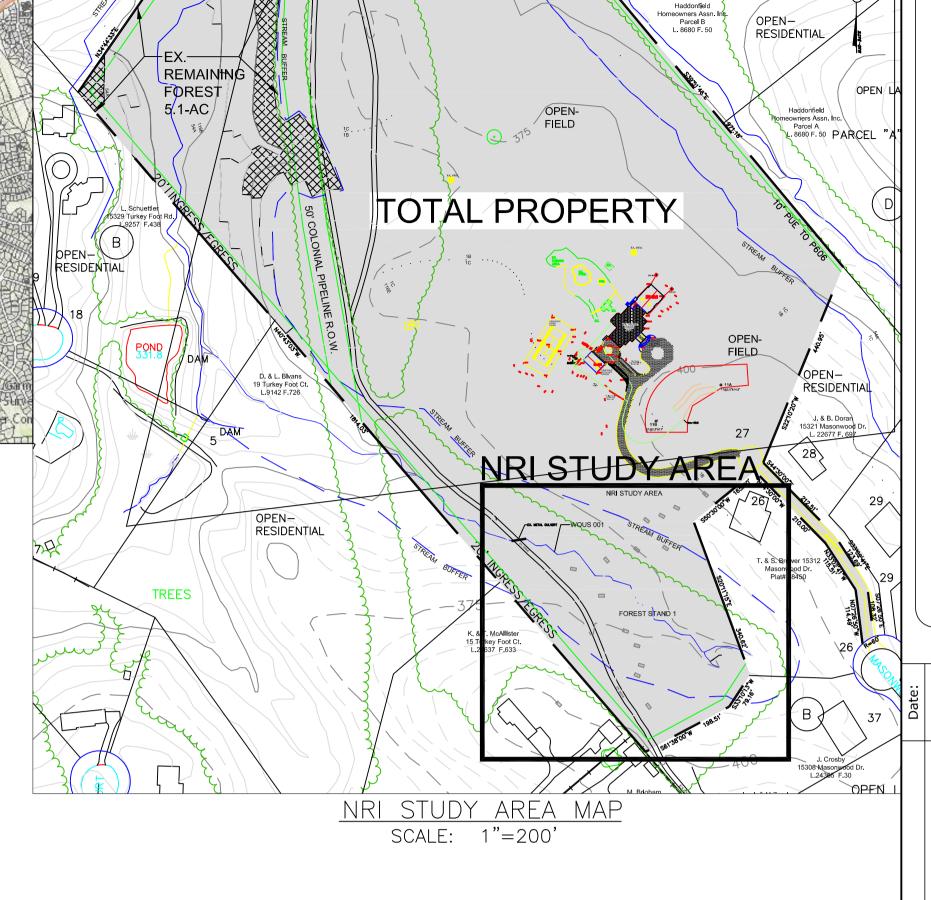
Forest Stand 1 is approximately 3.53 AC / 153,853.3 s.f. in size and consists of a mature upland hardwood stand. The majority of the forest stand, approximately 2.3 AC, is situated within a fenced portion of the property. The focus of this NRI is the 2.3 AC forest portion of Forest Stand 1. The stand is predominated by 24-30" Tulip Tree (*Liriodendron tulipifera*), however, other large canopy trees include Chestnut Oak (*Quercus montana*), White Oak (*Quercus alba*), and Sycamore (*Platanus occidentalis*) are present.

The forest within the study area has been impacted by clearing and grading operations, therefore much of the understory and some of the overstory has been affected. Approximately 1.90 AC of forest was impacted and is shown on the plan. Canopy closure is compromised due to the clearing of some of the large trees. The understory that is present consists of blend of herbaceous species (vines and ferns) and sapling renewal. Tree species observed to be regenerating include Tulip Tree, Oak, Red Maple, Sassafras, and Sycamore, although most were only a couple feet in height.

Thirty (30) large and/or specimen trees are located within the study area. Tree DBH was measured using a steel DBH tape with graduations in inches and tenths.







	NRI STUDY AREA	× °°
	3951	26/04
ST-22		
EX METAL CULVERT WOUS 00	STREAM BUFFER	
	BUER	
ST-21	TER .	
ST-23		T. & S. Br
365	ST-20 ST-19	Mason
ST-24	ST-18	Plat#
	ST-17	
ST-25 ST-		
	ST-28 FOREST STAND 1	
key Foot Ct.	ST-14 ST-29	
637 F.633	ST-30 ST-13	
	ST-11	
	ST-8	
	ST-6	
	ST-4 ST-5	
	ST-3	
	STIT	
	561.37	
	STAND 1 - NRI STUDY ARFA MAP	

		SPECIMEN TR	EE LIST		
TREE NUMBER	SIZE-DBH	SCIENTIFIC NAME	COMMON NAME	CONDITION	SAVE/REMOVE
ST-1	26"	Quercus alba	White Oak	Good	Save
ST-2	30.0"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-3	26 <b>"</b>	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-4	27 <b>"</b>	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-5	25"	Acer rubrum	Red Maple	Good	Save
ST-6	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-7	27"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-8	27"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-9	51"	Quercus alba	White Oak	Good	Save
ST-10	56 <b>"</b>	Platanus occidentalis	Sycamore	Good	Save
ST-11	32"	Quercus alba	White Oak	Good	Save
ST-12	31"	Quercus rubra	Red Oak	Good	Save
ST-13	33"	Liriodendron tulipifera	•	Good	Save
ST-14	28 <u>"</u>	Liriodendron tulipifera	•	Good	Save
ST-15	24"	Nyssa sylvatica	Black Gum	Good	Save
ST-16	42"	Quercus montana	Chestnut Oak	Good	Save
ST-17	26"	Liriodendron tulipifera	,	Good	Save
ST-18	26"	Liriodendron tulipifera	•	Good	Save
ST-19	40"	Acer rubrum	Red Maple	Good	Save
ST-20 ST-21	24" 26"	Liriodendron tulipifera Liriodendron tulipifera		Good Good	Save Save
ST-22	31"	Platanus occidentalis	Sycamore	Good	Save
ST-23	54"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-24	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-25	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-26 ST-27	27" 25"	Liriodendron tulipifera Quercus montana	Tulip Tree Chestnut Oak	Good Good	Save Save
ST-28	32"	Quercus montana	Chestnut Oak	Good	Save
ST-29	25"	Quercus alba	White Oak	Good	Save
ST-30	32 <b>"</b>	Quercus montana	Chestnut Oak	Good	Save

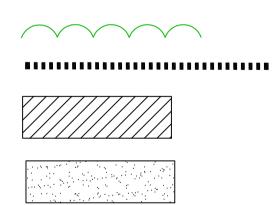
SOILS CHART — TOTAL SITE						
SYMBOL	NAME	K-Factor	HYDRIC	COMMENTS		
1B	Glenelg Silt Loam	0.3	No	3-8% slopes; very deep, well drained		
1C	Glenelg Silt Loam	0.3	No	8-15% slopes; very deep, well drained		
116E	Blocktown Channery Silt Loam	0.24	No	15-25% slopes; shallow and well drained		

# LEGEND: SPECIMEN OR LARGE TREE (and critical root zone) (CRZ shown = 1.5\*dbh) (Large = 24"+ dbh) PROPERTY LINE

EXISTING TREE LINE
SOIL BOUNDARY LINE

STEEP SLOPES (>15%)

FOREST IMPACT AREA



NATURAL RESOURCE INVENTORY/ FOREST STAND DELINEATION PLAN

SIGNATURE BLOCK:
MATTHEW V. SMITH MARYLAND FOREST CONSERVATION ACT 1991
Matthew V. Smith Environmental Scientist alified Professional Status of

Plan No.: 02-NRI-420190190

Date: October 1, 2018

Scale: AS SHOWN

Design: MVS Drawn: MVS

Sheet: 1 of 1

CAD File: MW.NRI.FSD.dwg

Project No.: 18-110

### NOTICE OF HEARING

February 26, 2019

BY E-MAIL & CERTIFIED MAIL Allen A. Izadpanah Hajar "Roshan" Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

Re: Notice of Rescheduled Hearing on <u>April 2, 2019 at 9:30 am</u> at 8787 Georgia Avenue, Silver Spring, MD 20910 for Violation of Montgomery County Forest Conservation Law

### Dear Allen and Roshan Izadpanah:

This Notice of Hearing is being issued to you in accordance with Montgomery County Code §22A-20(d)(2)(B) for alleged violations of the Forest Conservation Law that occurred at the above address as documented in Administrative Citation No. EPD 000339 dated April 10, 2018 (Attachment 1), Inspector Letter dated July 3, 2018 (Attachment 2), Corrective Action Order dated August 29, 2018 (Attachment 3), and Notice of Violation dated September 21, 2018 (Attachment 4). Specifically, the following violations are noted:

- 1. Without prior approval of a forest conservation plan, 45,000 square feet of forest, including portions of forested stream buffer, were cut and cleared on your property located at 15325 Masonwood Drive in Gaithersburg, Maryland.
- 2. Without prior approval of a forest conservation plan, cut trees were dumped into an existing stream channel, and truckloads of dirt were spread over 6,000 square feet of forested stream buffer and existing stream channel on your property located at 15325 Masonwood Drive in Gaithersburg, Maryland.
- 3. Failure to comply with the Corrective Action Order dated August 29, 2018 and the Notice of Violation dated September 21, 2018, including the following:
  - a. Failure to submit a Restoration Plan for the property.
  - b. Failure to implement the required stream restoration, forest planting and forest protection which are to be part of an approved Restoration Plan for the property.
  - c. Failure to adhere to the stop work order directive.
  - d. Failure to spread six (6) inches of wood chips and seed and straw over disturbed areas.

A public hearing is scheduled with the Hearing Examiner designated by the Montgomery County Planning Board on April 2, 2019 at 9:30 am at 8787 Georgia Avenue, Silver

Spring, MD 20910 to consider appropriate administrative enforcement action. After the hearing and consideration of the Hearing Examiner's recommendations, the Planning Board may:

- 1. Impose an administrative civil penalty in accordance with Montgomery County Code §22A-16(d);
- 2. Order appropriate corrective actions in accordance with Montgomery County Code §22A-17;
- 3. Impose other remedies as provided in the Forest Conservation Law; or
- 4. Require any combination of these actions.

Please be prepared to appear at the hearing to respond to the alleged violations.

This is an adjudicatory proceeding governed by The Planning Board's Enforcement Rules. Accordingly, you will have the opportunity to present evidence and have witnesses testify on your behalf, as well as cross-examine the Planning Department's witnesses. You are responsible for securing the attendance of your witnesses, and you must bring with you any evidence you wish the Hearing Examiner to consider. If a subpoena is needed, you may request one from the Hearing Examiner at a cost. You may retain counsel or proceed without counsel. Failure to appear for the scheduled hearing may result in an adverse action against you, including entry of a default judgment. Unless otherwise prohibited by law, the Parties may agree to a stipulated set of facts and waive their right to appear at the hearing. The Enforcement Rules that govern this proceeding may be accessed at the following link: <a href="http://www.montgomeryplanningboard.org/">http://www.montgomeryplanningboard.org/</a>

Sincerely,

Mark Pfefferle, Chief

Development Applications and Regulatory Coordination Division

301-495-4730

cc: Nicholas D. Dumais, Office of General Counsel Stephen Peck, Forest Conservation Inspector

### Attachments:

- 1. Copy of Administrative Citation No. 000339 dated April 10, 2018
- 2. Copy of Inspector Letter dated July 3, 2018
- 3. Copy of Corrective Action Order dated August 29, 2018
- 4. Copy of Notice of Violation dated September 21, 2018

Citation No. EPD 000339

TSSVED WITH FARS

### Administrative Citation Forest Conservation

		The Maryland-Nauc	mai Capitai Fa	ark and Flamming Con	HIIIISSIOH	•	
Name:	Roshan		VS.			Izadpana!	$\wedge$
Company/Posit Address: 150	125 Masony	owner of 1	532 Middle 1 Garther	Nasonwood D sburg MD 2	0878 0878	Last	
Location and I	Description of Violation:	30vthwest co			to grave	l mad and u	vithin
Pursuant of the	M-NCPPC's authority under e) at the stated site location	r Chapter 22A of the Mon		Son Wood Drift Code, it is formally charge	ed that the above n	amed defendant on	0/2018
Cut and trees in	A cleared 45,0 Stream dan	00 Square toet	(approx,1 and 51	read dirt	st, dumpe over 6,0 lation of	d portions at 00 square for 12 chapter 22A	et or
In violation of:  Montgom  Approval	ery County Code, Chapter 2	2A Plan No.		NEPPC appro	oval was	not granted of	ctivit
(b) ☐ Yo fine is paid.	Compliance:  u shall pay a fine of \$  u shall pay a daily fine of \$  ll pay a daily fine of \$		fine has not been	(date) and complete the paid. by	(date). The daily f	ne shall accrue (until the	
completion of a	all remedial action.	_		•	•		
Office located a proceedings an	be made payable to M-NO at 8787 Georgia Avenue, 2 <sup>nd</sup> d/or issuance of additional cluest a hearing, you must not of the citation.	Floor, Silver Spring, MD tations including additions	20910, 301-495- al fines. You ma	4610. Failure to comply w y also request a hearing be	vith this citation ma efore the Planning	y result in further enforce Board or the Board's desig	ment gnee. If
Remedial Acti	Stopwork or	derissued bedore, on	no clea activit	ring, gradin	y or land ed to col	disturbance real violation	on gare
(2) F	oned	d portion of	the pro	perty Submit	t a full	VRI/FSD 6	160,6
<del></del>	on is not completed by  Colored Chapter 22A of the	and and implement	in Plan ate), you shall pa	Must include	oration Plan	on planting and additionalists	permané Anatecti
You have	on is not completed by	Montgomery County/Co	5/10/18 de, and may be sl	Restoration Plan abject to an Administrative	to be Somit e Civil Penalty and	ed by \$/10/18 4 additional corrective mea	Berofies
	ent: as a receipt of a copy of thi g for the offense(s) charged		_	1 2	•		right to
Defendant's Si	gnature	I Rochen	r 12ad	bandu		4/10/18 Date	-
knowledge, inf	rm under the penalties of per ormation and belief and that				<b>*</b>	ation are true to the best o	of my
Inspector's Sig	nature Fleghen	Peck	Phone N	Number: 301-4	Date 195-456	<u>:4</u>	

- 1. Why is there a forest conservation easement on my property?
  When your lot was created in order to build your house, the developer was required by law to preserve a certain amount of property for forest conservation. The developer chose to place a forest conservation easement over a portion of the subdivision that included your lot. The location of your house on the lot was determined by the builder after the subdivision was created with the easements already in place.
- 2. I have an easement on my property; can I remove it?

  In some, but not all cases the Planning Board may let you remove and replace the easement, but it is a costly process. You should expect to survey or replat your property, survey the replacement property, and plant trees and bushes in a much larger area determined appropriate to replace the easement. If you are interested in learning if this is an option for your property, please request a meeting with M-NCPPC staff.
- 3. I received a Notice of Violation: What do I do?

  The Notice of Violation lists the corrective actions that pood to be used.

فضين معررتم بالإيداء أيسا

The Notice of Violation lists the corrective actions that need to be completed to bring your property into compliance by a certain date. If you have questions or concerns about the corrective actions, you can set up a meeting with M-NCPPC staff before the compliance date.

- 4. What happens if I don't agree or comply with the Notice of Violation?

  You may set up a meeting with M-NCPPC Staff to discuss the Notice of Violation. The staff will work with you to identify possible solutions to bring your property into compliance. However, you can also request a hearing on the matter, and a Notice of Hearing will be issued. Please read FAQ #9 If you ignore the Notice of Violation, the inspector may issue an Administrative Citation to you with a fine of up to \$1,000 for each violation and a date by which the fine needs to be pald and the corrective actions completed. You can avoid a fine by bringing your property into compliance.
- 5. I received an Administrative Citation. What do I do?

  The Administrative Citation lists the corrective actions that need to be completed to bring the property into compliance by a certain date. It will also include a fine of up to \$1,000 that must be paid by the date on the Citation. Additional fines may accrue if the deadline is not met. You may also request a hearing within 15 days of the date the Citation was Issued. See FAQ #8.
- 6. If I pay the Citation, is there anything else I need to do?
  Yes. You must also bring your property into compliance by performing the corrective actions listed on the Citation. If you have any questions about what needs to be done, please contact the inspector.

7. What happens if I don't agree or comply with the Administrative Citation?

If you do not comply with the Administrative Citation, you will be issued a Notice of Hearing.

# How do I request a hearing? Send a written request to M-NCPPC, Office of the General Counsel, 8787 Georgia Avenue, Silver Spring, MD 20910, and include a copy of the Notice of Violation or Administrative Citation.

# 9. I received a Notice of Hearing. What does that mean?

The Notice of Hearing lists the date and location of a hearing in front of a hearing officer who will make a recommendation to the Planning Board. The hearing is similar to a trial. A lawyer for the Planning Department will present evidence to prove that your property has a forest conservation violation. You will have the opportunity to present contrary evidence. Before the hearing, if you decide that you would like to resolve the violation to avoid the hearing process and an additional financial penalty that will be imposed if you are found in violation, you should contact the inspector to set up a meeting to implement the previously identified corrective actions.

# 10. What can I expect at the hearing?

The Enforcement Rules that govern the hearings can be found on the Planning Board's homepage at http://www.montgomeryplanningboard.org/ under the "Learn More" section. The hearing is held in front of a hearing officer, and is similar to a trial. You will have the opportunity to present evidence, have witnesses testify on your behalf and cross-examine the Planning Department's witnesses. The hearing officer will make a recommendation to the Planning Board whether to find you in violation, and if so, recommend corrective actions and an Administrative Civil Penalty in addition to the fine set on the Citation. The Planning Board will hold another hearing that will be limited to review of the hearing officer's recommendation and any issues raised from the first hearing. You will be limited to 10 minutes to present your position to the Planning Board. The Planning Board will decide whether to accept the hearing officer's recommendation, or to make any changes. The Planning Board will then issue an Order that is only appealable in the Circuit Court. Please read FAQ #11.

### 11. Do I need an attorney?

If you are found in violation, you could be subject to significant expense – both in penalties and cost to bring your property into compliance. Although you <u>may</u> represent yourself, you should consider hiring an attorney.

### 12. What will this cost me?

In addition to the fine listed on your Administrative Citation, in any case where a violation is found after a hearing, the law requires the Planning Board to impose an Administrative Civil Penalty for violations of the Forest Conservation Law and associated agreements, with a minimum of \$0.30 per square foot of property impacted to a maximum of  $\frac{1}{1000}$  per square foot. The penalty is based on the 8 factors listed in Section 22A-16(d)(2) of the Montgomery County Code. The Planning Board may also impose requirements to bring your property into compliance with the law, such as development of a new forest conservation plan and replanting. You may incur significant additional costs to comply with the Board's Order.





THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

July 3, 2018

Roshan Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

Re: Forest Clearing Violation – Citation No. EPD 000339 Failure to Submit NRI/FSD and Restoration Plan

Sent Certified Mail and via email to Roshan at roshan@vitelnet.com

Dear Roshan Izadpanah:

This letter extends the deadline to submit the Natural Resource Inventory / Forest Stand Delineation "NRI/FSD" and the Restoration Plan to July 20, 2018. The NRI/FSD and Restoration Plan are remedial actions listed on Citation No. 00339, issued for violation of Chapter 22A-4 of the Forest Conservation Law. A copy of the Citation is attached. If the NRI/FSD and Restoration Plan are not submitted to the Montgomery County Planning Department for review by this date, the Montgomery County Planning Department will take additional enforcement action which may include a citation or a Notice of Hearing.

A site meeting was held at the property yesterday. Your contactor can now install a construction entrance, install wood chip access roads, and install additional tree protection fencing and silt fencing. Please call for an inspection of these measures prior to beginning the upland cleanup.

At this time, there is to be no equipment in the stream channel. Prior DPS inspector and MDE Inspector approval is required before operating equipment in the stream channel. Also, the dumped fill dirt is not permitted to be relocated on the property at this time. Movement of the fill dirt on the property will require prior approval of the Restoration Plan.

It is important that the NRI/FSD and Restoration Plan are submitted, reviewed, approved and implemented after approval. The NRI/FSD is to show the existing features of the disturbed area and surrounding. The Restoration Plan is to be for the entire property and is to satisfy forest conservation plan requirements by protected the remaining existing forest stand within a Category I Conservation Easement and including protection of and restoration of the 45,000-square foot area of disturbed forest stream buffer. The Restoration Plan is to include the final stream design and any proposed new improvements as well as reforestation planting.

I am available to meet with the preparer of NRI/FSD and Restoration Plan at the property.

Sincerely

Stephen Peck

Forest Conservation Inspector

ISA Certified Arborist

Development Applications and Regulatory Coordination

M-NCPPC, Montgomery County Planning Department

Attachment: Copy of Citation No. EPD 000339



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

August 29, 2018

Roshan Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

Re: Corrective Action Order at 15325 Masonwood Drive Forest Clearing Violation – Citation No. EPD 000339

Sent Certified Mail and via email to Roshan Izadpanah at roshan@vitelnet.com

Dear Roshan Izadpanah:

This letter is an update on the status of the restoration at 15325 Masonwood Drive and direction on resolving the forest conservation law violation.

The M-NCPPC Inspector, Stephen Peck, has visited the property in July and August to monitor the cleanup. While some cleanup of the cut wood has occurred, a comprehensive restoration project is required to be implemented as directed by Citation No. EPD 000339. This Citation was issued for 45,000 square feet of unauthorized forest stream buffer clearing. A copy of this Citation is attached.

Attached to this letter is a Corrective Action Order which memorializes the discussion on August 21, 2018 and establishes a timeline for completing the remedial actions of Citation No. EPD 00339 issued for the unauthorized clearing of 45,000 square feet of forest within a forest stream buffer on 15325 Masonwood Drive. This Administrative Order is being issued to you pursuant to Chapter 22A-17 of the Forest Conservation Law. The purpose of the Corrective Action Order is to establish a time period for completing the remedial actions listed on Citation No. 00339.

On August 3, 2018, the Planning Department received a Natural Resource Inventory / Forest Stand Delineation "NRI/FSD" and determined a few elements of the application were missing. Planning Staff issued comments which must be addressed on a revised NRI/FSD to be submitted and accepted for review by August 31, 2018.

A site meeting was held at the property on August 21, 2018. Planning staff met at the property with your representative, Rafik Bazikian, the plan preparer, Matt Smith, representatives from the Maryland Department of Environment and the Montgomery County sediment control inspector. At this meeting, the stream restoration and Restoration Plan were discussed. The plan preparer determined, he can gather all the agencies comments, prepare the Restoration Plan and submit the Restoration Plan to the Planning Department for review and approval by September 14, 2018.

If the Restoration Plan is not submitted to the Montgomery County Planning Department for review by September 14, 2018, the Montgomery County Planning Department will take additional enforcement action which may include a citation or a Notice of Hearing.

At this time, no equipment is to be within the stream channel. Also, the dumped fill dirt is not permitted to be relocated on the property at this time. Movement of the fill dirt on the property and operating equipment in the stream channel requires prior approval of the Restoration Plan



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

and a preconstruction meeting at the property with your representative, the contractor and the sediment control inspector.

It is important that the NRI/FSD and Restoration Plan are submitted, reviewed, approved and implemented after approval. The NRI/FSD will show the existing features of the disturbed area and surrounding. The Restoration Plan is to be for the entire property and is to satisfy forest conservation plan requirements by protected the existing 5-acre forest stand and the 2-acre area of forest stream buffer disturbance within a Category I Conservation Easement. For the 2-acres restoration area, the Restoration Plan is to include the final stream design, any proposed new improvements and reforestation planting and a 2-year planting maintenance program.

Please contact Inspector Stephen Peck at 301-495-4564 if you have any questions about implementing the Corrective Action Order

Sincerely,

Mark Pfefferle

Development Applications and Regulatory Coordination M-NCPPC, Montgomery County Planning Department

Attachment: August 27, 2018 Corrective Action Order

Copy of Citation No. EPD 000339

CC: Rafik Bazikian, P.E.

Matthew V. Smith, CFM, Smith Planning and Design, LLC Stephen Peck, M-NCPPC Forest Conservation Inspector



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-1306

# Corrective Action Order - August 29, 2018

# RE: To Resolve Forest Conservation Law Violation at

# 15325 Masonwood Drive Gaithersburg, MD 20878

### A. Natural Resource Inventory/Forest Stand Delineation

1. Intake and Review Comments must be addressed on a revised Natural Resources Inventory / Forest Stand Delineation (NRI/FSD) submitted to the Montgomery Planning Department in accordance with Section 22A.00.01.06 of the forest conservation regulations by August 31, 2018.

### B. Restoration Plan

- A Restoration Plan must be submitted to the Montgomery County Planning
  Department by September 14, 2018. The Restoration Plan must show the
  approximate 5-acre existing forest area between the gas easement right-of-way and
  the northwest corner of the property and the approximate 2-acre forest area
  between the access road and the turf where stream and forest restoration are to
  occur.
  - A. Within the 5-acre existing forest area at the northwest corner of the property show on the plan:
    - i. Soils, slopes, streams, floodplain, wetland, and environmental buffers
    - ii. Aerial extent of forest canopy
    - iii. Existing easements, gas pipeline easement, ingress/egress easements, and equestrian access easements
    - iv. Category I Conservation Easement over all areas of existing forest that is not encumbered by existing easements. Show this area on the Restoration Plan, note the approximate acreage of this area on the plan and show this as Category I Conservation Easement on the legend.
    - v. Installation of a permanent easement markers every 500 feet along the new Category I Conservation easement boundary next to the gas right-of-way easement.
  - B. Within the 2-acre of stream and forest disturbance at the southwestern corner of the property include on the Restoration Plan the following:
    - i. Soils, slopes, streams, floodplain, wetlands, and all environmental buffers
    - ii. Aerial extent of forest / tree canopy
      - 1. Approximate area of forest clearing and disturbance
    - iii. Existing significant and specimen tree locations



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-1300

- iv. Existing 20-foot equestrian access easement
- v. Describe the shrubs, trees and plants present within the stream buffer area
- vi. Describe the presence of any non-native invasive plants
- vii. Show all proposed construction and land disturbance required for stream restoration including construction access, staging, removal of fill dirt and cut wood and new path construction:
  - 1. Existing stream and restored stream locations
  - 2. Areas where dirt and cut wood debris piles are to be removed from the site
  - 3. Areas of grading or filling
  - 4. Show trees to be planked and area to be protected by tree protection fencing
    - a. Show additional tree(s) to be removed for stream restoration
  - 5. Show location of mulch access paths
  - 6. Any proposed permanent access trails or ATV stream crossing bridge
  - 7. Include standard forest conservation sequence of events and inspection notes. Include specific sequence of restoration notes as to how the restoration will be phased and stabilization of restored slopes will occur during each phase.
- viii. Category I Conservation Easement over the restored forest and stream buffer areas between the chainlink fencing and at least 25 feet from the top of bank uphill into the turf and mowed area. Exclude the 20-foot equestrian access easement from the Category I Conservation Easement. Show this Category I Conservation Easement area on the Restoration Plan, note the approximate acreage of this area on the plan and show this as Category I Conservation Easement on the legend.
- ix. Propose and show 1.5-acres of supplemental planting to include 150 native riparian native trees and the planting of 30 shrubs. Trees are to be 1.5 to 2-inch caliper and at least 6 feet tall. Shrubs are to be a minimum of 3 gallons. Tree species should include sycamore, red maple, black gum, white or chestnut oak and American holly. Shrubs should include paw paw and spicebush.
- x. Include planting and deer protection details and 2-year planting maintenance and management notes on the plan. Specific notes for the management of oriental bittersweet, porcelainberry and mile-a-minute required.
- xi. Propose a non-native invasive management program to cut and reduce invasive plant pressure



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue Silver Spring, Maryland 20910 DARC 301-495-4550 Fax: 301-495-1306

xii. Include permanent conservation easement markers every 300 feet along conservation easement boundary where it borders the gravel road and the maintained turf.

### C. Approvals

1. Comments on the submitted NRI/FSD and Restoration Plan must be responded to promptly so that the plans can be approved by October 19, 2018.

### D. Financial Security

1. Financial security in the amount of the fee-in-lieu rate or from an M-NCPPC approved cost estimate must be posted as a surety for the planting. Approximately 1 acre of forest clearing has occurred. At the fee-in-lieu rate, the surety amount is to \$52,272.00 which is calculated by multiplying the approximate area of the forest clearing, 43,560 square feet (1 acre), by the current County Council approved fee-in-lieu of reforestation rate, \$1.20 per square foot. The amount of the surety is to cover the cost of planting the 150 trees, 30 shrubs, installation of permanent conservation easement markers and maintaining the planting for 2 years to meet a 2-year post planting survival of 100% for the trees and 75% for the shrubs as shown and described on the approved Restoration Plan. A financial security instrument must be approved by the Planning Department's Associate General Counsel by November 30, 2018.

### E. Maintenance Agreement

1. Submit a signed 2-year on-site maintenance agreement for the planted forest to the Planning Department for approval by November 30, 2018.

### F. Conservation Easements

The Property Owner must submit a Category I Conservation Easement agreement
for the conservation easement areas shown on the approved Restoration Plan to MNCPPC for approval. The M-NCPPC-approved Category I Conservation Easement
agreement must be recorded in the Land Records of Montgomery County, Maryland
by November 30, 2018.

### G. Planting and Inspections

- 1. The Property Owner is to schedule and hold a pre-planting meeting with the M-NCPPC Inspector prior to November 15, 2018. M-NCPPC Inspector acceptance of the planting is required by December 15, 2018.
- 2. The 2-year survival of the planting is to be 100% for the planted tree and 75% for the planted shrubs. Contact the M-NCPPC inspector for a final planting inspection in the fall of 2020.



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 Georgia Avenue, Silver Spring, Maryland 20910
Environmental Planning Division 301.495.4540 Fax: 301.495.1303

www.MontgomeryPlanning.Org

NOTICE OF VIOLATION

FAUS
That as of 9/20/18
EDPNOV 0001

FOR MONTGOMERY	COUNTY, MARYLAND,	the undersigned issuer,	being duly	authorized,	states that:

OII,_	<del></del>	Date	the recipient of		0 1	Recipient's Name	Tall
who r	eprese	nts the property o	wner, Harac //	lio han L?	ad Panah	and Allen	Tragla V3 D
			₹	Proper	ty Owner's Name		
			ne Montgomery Cou				10878
Plan N	o.	Ex	planation: fail	10 to COMP	y voth co	rdition of	Corrective Action
					(11 1/2) 50	11(11 4 1 2 1	
$\times$	Failure	to hold a required p	re-construction meeting	ict/secure o	entroval of	"Retold on	Plan then on the
,	Failure	to have tree protecti	ion measures inspected	prior to starting wor	k.	bisional	raction matry can
	Failure	to install or maintai	n tree protection measu	res per the approved	Forest Conserv	ation or Tree Save p	olan. Na plur
		to comply with term d by Forest Conserva	ns, conditions and/or spation Inspector	ecifications of an ap	proved Forest C	Conservation plan or	Tree Save plan, or as
		to obtain an approve erty of 40,000 square		plan or Tree Save p	lan prior to cutti	ng, clearing, or grad	ing 5,000 square feet on
* 1			prestation or afforestation	on requirements of a	Forest Conserva	ation Plan.	
		= :	proval for a fence perm			k " \	3 1 1
$\times$	Other:	for Operate	or popering	the mount	er item	in antoni	pulled from
Order Action	r, and/o n. Reci ctive ac	r iii) issuance of a pient is to call the tion(s) must be pe	Notice of Hearing to inspector at <u>0</u> - erformed as directed	o appear before t <del>                                      </del>	he Planning E the corrective ime frames sp	Board for appropi action is complet pecified below:	riate Administrative e. The following
	Stake	out limits of disturba	nce (LOD) and contact	Forest Conservation	Inspector for a	pre-construction me	eeting:
	Install	tree protection meas	ures and/or tree care as	directed by Forest (	Conservation Ins	pector.	
-	Submi 4540.	t required application	n for compliance with (	Chapter 22A of the C	ounty Code. Co	ntact Environmental	Planning at 301-45-
X							Inspector is required to
		<del> </del>	eting with the Forest C				beacton pranting.
	compl	ete the corrective acti	Hearing to appear befo	d may result in i) iss re the Planning Boar	uance of a citati	on, ii issuance of a S	top Work Order, and/or
$\times$	Other:	hy hand with		rechantento terbed hy	bobcat	Mead bir	ether disturbed
MNCP Inspect		Stephen	Peck	Sterrlan.	Bek C	1/21/18	
		Printed Na	ıme	Signature		1/ ~1/10	Date
RECEI BY:	IVED		<u></u>	- certifi	ed Mai		
	-	Printed Na	ame	Signature			Date

### SETTLEMENT AGREEMENT

Upon execution of this Agreement by both Parties, the Planning Department will cancel the enforcement hearing scheduled for April 2, 2019, and will stay any enforcement actions for the alleged violations referenced in the Notice of Hearing, subject to the Property Owner's strict compliance with the Corrective Actions listed below, as determined at the sole discretion of the Planning Department.

Upon the Property Owner's completion of all Corrective Actions listed below, the Planning Department will consider the alleged violations referenced in the Notice of Hearing to be resolved and will close the enforcement case against the Property Owner arising from the alleged violations referenced in the Notice of Hearing.

### Corrective Actions to be Completed by the Property Owner

- Within 5 calendar days of the execution of this Settlement Agreement by the Planning Department, the Property Owner must make a contribution of \$10,000 to the Planning Department's forest conservation penalty fund.
- Within 5 calendar days of the execution of this Settlement Agreement by the Planning Department, the Property Owner must submit \$70,000 to the Planning Department (the "Escrow Funds"), to be placed promptly by the Planning Department in an escrow account created by the Planning Department in the property owner's name. The Planning

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Department will disburse the Escrow Funds to either the Planning Department's forest conservation fund or the Property Owner, in accordance with the dates and terms outlined below.

- 3. By March 1, 2019, the Property Owner must submit a Forest Restoration Plan to the Planning Department. The final, approved Restoration Plan must incorporate any disturbance required by the Maryland Department of the Environment (MDE), or the Montgomery County Department of Permitting Services (DPS), for either stream restoration and/or a sediment control permit. Copies of the submitted plan must be forwarded to MDE and DPS by March 1, 2019.
- 4. By March 8, 2019, the Planning Department will either approve the Forest Restoration Plan that covers the restoration of the 45,000 square feet that was disturbed or provide comments to the Property Owner.
- 5. By March 25, 2019, the Property Owner must resubmit a revised Forest Restoration Plan that addresses all Planning Department comments and is reasonably expected to be approvable by the Planning Department. The Forest Restoration Plan must include:
  - a. Planting of either (a) 264, 1-inch caliper native trees and 18, 2-inch caliper native trees; or (b) 132, 1.5-inch native trees and 18, 2-inch caliper native trees in the forest restoration area; or (c) other combination of trees and shrubs acceptable to the Planning Department Inspector. Native trees include native oak, sycamore, tulip poplar, holly, maple, black gum, musclewood trees, or other species approved by the Planning Department Inspector.
  - b. Protection of the existing 5.1-acre forest stand in the northwest corner of the Property, as shown on the approved NRI/FSD (No. 420190190); the approximately 3-acre forest stand within the Study Area as shown on the approved NRI/FSD, located in the southwest corner of the Property; and an area up to the mow line of the existing lawn or an area 25 feet from the stream on the eastern edge of the forest stand impacted by the violation, whichever is greater, within a Category I

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Conservation Easement. The existing gravel driveway that bifurcates this area will not be included within the Category I Easement.

- c. Welded wire cages to protect the planted trees from deer browse.
- If the Forest Restoration Plan complies with the terms of this Agreement and all other applicable requirements, the Planning Department will approve the Forest Restoration Plan by April 5, 2019.
- 7. If the Planning Department does not have an approvable Forest Restoration Plan by noon on April 5, 2019, as determined by the Planning Department, the Planning Department will disburse \$10,000 from the Escrow Funds to the Planning Department's forest conservation fund.
- 8. If the Planning Department does have an approvable Forest Restoration Plan by noon on April 5, 2019, as determined by the Planning Department, the Planning Department will disburse \$10,000 of the Escrow Funds to the Property Owner.
- 9. By April 12, 2019, the Property Owner must post a financial security in a format acceptable to the Planning Department and the General Counsel's Office for \$54,000 to cover the cost of the planting and maintenance of the restoration area. The financial security must be retained in its entirety for the entire maintenance and management period.
- 10. If MDE/DNR grant a waiver to begin construction during the closure period for a Use I Stream (i.e. March 1st June 15th):
  - a. Prior to May 17, 2019, the Property Owner must contact the Planning Department's Inspector to schedule a pre-construction meeting for all stream restoration and stabilization work. The meeting must include representatives of the Montgomery County Department of Permitting Services (DPS), the Maryland Department of the Environment (MDE), the Property Owner's project manager, and the Property Owner's Maryland Tree Expert.
  - b. On May 24, 2019, the Property Owner will install temporary tree protection

- measures, mulch access road and trunk protection, and request M-NCPPC Inspector approval of these measures. After M-NCPPC Inspector approval, the Property Owner must commence the necessary work to restore the stream according to MDE or DPS requirements.
- c. By July 12, 2019, the Property Owner must complete the work necessary to restore the stream according to the requirements of MDE or DPS and the approved Forest Restoration Plan.
- d. If the Property Owner does not have final approval from MDE for the Stream Restoration work and DPS release of the sediment control permit for the Forest Restoration Plan by noon on July 12, 2019, \$20,000 from the Escrow Funds will be disbursed to the Planning Department's forest conservation fund.
- e. If both MDE and DPS give final approval of all stream restoration and ground stabilization work on the Property before noon on July 12, 2019, the Planning Department will, upon receipt of notice of both the MDE and DPS final approval, disburse \$20,000 of the Escrow Funds to the Property Owner.
- 11. If MDE/DNR denies the Property Owner's request for a waiver to begin construction during the closure period for a Use I Stream (i.e. March 1st June 15th), or does not issue a waiver by May 1, 2018:
  - a. Prior to June 10, 2019, the Property Owner must contact the Planning Department's Inspector to schedule a pre-restoration meeting for all stream restoration and stabilization work. The meeting must include representatives of the Montgomery County Department of Permitting Services (DPS), Maryland Department of the Environment (MDE), the Property Owner's project manager, and the Property Owner's Maryland Tree Expert.
  - b. On June 17, 2019, the Property Owner will commence the necessary work to restore the stream according to MDE or DPS requirements.
  - c. By August 2, 2019, the Property Owner must complete the work necessary to 3235686.2

- restore the stream according to the requirements of MDE or DPS and the approved Restoration Plan.
- d. If the Property Owner does not have final approval from MDE and DPS for the completed stream restoration work by noon on August 2, 2019, \$20,000 from the Escrow Funds will be disbursed to the Planning Department's forest conservation fund.
- e. If both MDE and DPS give final approval of all stream restoration and ground stabilization work on the Property before noon on August 2, 2019, the Planning Department will, upon receipt of notice of both the MDE and DPS final approval, disburse \$20,000 of the Escrow Funds to the Property Owner.
- 12. The Property Owner must submit to the Planning Department and record in the Land Records of Montgomery County, Maryland a deed of easement that will place the existing 5.1-acre forest stand in the northwest corner of the Property, as shown on the approved NRI/FSD (No. 420190190); the approximately 3-acre forest stand within the Study Area as shown on the approved NRI/FSD, located in the southwest corner of the Property; and an area up to the mow line of the existing lawn or an area 25 feet from the stream on the eastern edge of the forest stand impacted by the violation, whichever is greater, within a Category I Conservation Easement. The existing gravel driveway that bifurcates this area will not be included within the Category I Easement. The Conservation Easement must include a provision that allows for restoration activities, a pedestrian foot bridge over the stream channel, and associated maintenance. The deed of easement must be in a form acceptable to the Planning Department and the General Counsel's Office, and the Property Owner must adhere to the following schedule and conditions:
  - a. Before April 15, 2019, the Property Owner must submit a draft deed of easement, with metes and bounds of all areas to be placed into easement, to the Planning Department.
  - b. Before May 1, 2019, the Property Owner must submit a fully executed deed of

- easement to the Planning Department.
- c. Before May 15, 2019, the Property Owner must record the executed easement, after approval by the Planning Department and General Counsel's Office, in the Montgomery County Land Records.
- d. If the Property Owner meets all of these requirements, \$10,000 from the Escrow Funds will be disbursed to the Property Owner.
- e. If the Property Owner fails to meet any of these requirements, \$10,000 from the Escrow Funds will be transferred to the Planning Department's forest conservation fund.
- 13. By May 15, 2019, the Property Owner must submit a two-year maintenance and management agreement, in a format acceptable to the Planning Department and the General Counsel's Office, that covers the planting area. The maintenance and management agreement must include provisions requiring the Property Owner to submit semi-annual reports documenting the maintenance that occurred within the restoration areas, including the control of competing vegetation. The semi-annual reports must be submitted no later than January 15 and July 15 of each year. At the end of two-year maintenance period, 75% of the 1-inch caliper planted trees, 100% of the 2-inch caliper planted trees, or 100% of the 1.5-inch caliper trees, must be alive and vigorous.
  - a. If the Property Owner submits the maintenance and management agreement as described in this condition by May 15, 2019, the Planning Department will disburse
     \$5,000 from the Escrow Funds to the Property Owner.
  - b. If the Property Owner fails to submit the maintenance and management agreement as described in this condition by May 15, 2019, the Planning Department will disburse \$5,000 from the Escrow Funds to the Planning Department's forest conservation fund.
- 14. Prior to October 15, 2019, the Property Owner must contact the Planning Department's Inspector to schedule a pre-planting meeting for all tree planting shown on the approved

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Restoration Plan. Earlier planting may be allowed in areas outside the area of disturbance, at the discretion of the Planning Department's Inspector and subject to holding required pre-planting and post-planting meetings.

- 15. By November 8, 2019, the Property Owner must contact the Planning Department's Inspector to schedule a post-planting inspection. The two-year maintenance and management period for the plantings will begin upon a passing inspection by the Planning Department's Inspector.
- 16. By November 18, 2019, the Property Owner must fully implement the Restoration Plan approved by the Planning Department.
- 17. If the Property Owner does not fully implement the Restoration Plan, as determined by the Planning Department, by November 18, 2019, the Planning Department will disburse the remainder of the Escrow Funds to the Planning Department's forest conservation fund.
- 18. If the Property Owner does fully implement the Restoration Plan, as determined by the Planning Department, by November 18, 2019, the Planning Department will disburse the remainder of the Escrow Funds to the Property Owner.

The Property Owner's failure to strictly comply with the terms of any Corrective Action above will result in a breach of this Agreement, which is enforceable in the Montgomery County Circuit Court, where the Planning Department may seek specific performance of this Agreement in addition to any other remedies provided by law, including the immediate resumption of enforcement actions. At the request of the Property Owner, the Planning Department Inspector may permit later deadlines than those established in this Agreement if the Inspector determines that alternate deadlines are necessary to accommodate any agency delay in reviewing plans and issuing comments.

IN WITNESS WHEREOF, the Parties have executed this Agreement for the purposes contained herein.

#### SIGNATURES ON NEXT PAGE

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Agreed to by:	
	3/25/19
Allen A. Izadpanah	date
12	3,25,19
Hajar "Roshan" Izadpanah	date
STATE OF MARYLAND COUNTY OF Prince Serves	* * to wit:
I HEREBY CERTIFY that of a Notary Public in and for the State	n this $\frac{\lambda S^{+}}{2019}$ day of $\frac{March}{2019}$ , before me, and County aforesaid, personally appeared $\frac{Allen}{2019}$ Teacheral, known to me (or satisfactorily proven) to be the
	the foregoing and annexed instrument and acknowledged ne for the purposes therein contained.
INOTAP WHEREOF,	hereunto set my and official seal.  NOTARY PUBLIC  Brenda J. Phillips  My commission expires 08/11/2020  Prince George's County, MD
STATE OF MARYLAND	*
COUNTY OF Prine Bronges	* to wit:
Tzaclpanah person whose name is subscribed to	n this $\frac{\lambda 5^{11}}{\lambda 5^{12}}$ day of $\frac{Mavel}{avel}$ , $\frac{\lambda 01^{0}}{\lambda 5^{12}}$ , before me, and County aforesaid, personally appeared $\frac{Ha_{1}av}{\mu 5^{12}}$ , known to me (or satisfactorily proven) to be the the foregoing and annexed instrument and acknowledged me for the purposes therein contained.
IN WITNESS WHEREOF,  PHILLION  OTARY  [NOTARIAL SEADS  OF ORGE SCHOOL  OTARY  O	hereunto set my and official seal.  NOTARY PUBILIC  Commission Expires:  Brenda J. Phillips
TO BORGE'S MILLING	My commission expires 08/11/2020 Prince George's County, MD

Par Challes	4-1-19
Mark Pfefferle	date
Chief DARC	
Maryland-National Capital Park and F	Planning Commission
STATE OF MARYLAND	*
COUNTY OF	* to wit:
known to me (or satisfactorily proven)	this 1 day of , 2019, before me, and County aforesaid, personally appeared MARK PREFERE, to be the person whose name is subscribed to the foregoing edged that said individual executed the same for the purposes
IN WITNESS WHEREOF, I h	ereunto set my and official seal.  Augula F. Program Brown  NOTARY PUBLIC
	NØTÁRY PUBLIC
[NOTARIAL SEAL]	Commission Expires: Way 11, 2020
ANGELA F. PROCTOR BR NOTARY Public, State of Ma Prince George's Cou- My Commission Expires May 11.	nty

APPROVED AS TO LEGAL SUFFICIENCY
M-NCPPC LEGAL DEPARTMENT

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THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

April 12, 2019

Allen & Roshan Izadpanah 15325 Masonwood Drive Gaithersburg, MD 20878

RE: Restoration Plan No. 420190190 – Izadpanah Property (15325 Masonwood Drive)

Dear Allen & Roshan Izadpanah:

On April 11, 2019, Montgomery County Planning Department Staff received a revised Restoration Plan for the Izadpanah Property (15325 Masonwood Drive). The Restoration Plan number is 420190190.

The Restoration Plan provides stream restoration and forest protection of a 2.12-acre forest stand impacted by an unauthorized clearing and filling activity and provides permanent protection for the remaining existing retained forest on the property. The 2.12 acres of restored forest, a 0.74-acre retained forest stand and a 4.45-acre retained forest stand will be placed into a Category I Conservation Easement. The stream restoration will re-establish stable stream conditions. Planting of 136 trees, 30 shrubs and 600 live stakes will restore a community of plants and reestablish forest conditions within the impacted forest stand. This planting will be maintained for 2-years according to a to-be-approved Maintenance and Management Agreement.

This letter is to inform you that the Restoration Plan received on April 11, 2019 for the Izadpanah Property (15325 Masonwood Drive) is **approved**.

No stream restoration clearing, grading or land disturbance is permitted to be done on the property until after the onsite preconstruction meeting with the forest conservation inspector, the Owner's representative, the respective county and state regulatory inspectors and the Owner's Maryland License Tree Expert and after the forest conservation inspector's acceptance of installed tree protection measures. The Restoration Plan also list the required inspections including the inspections related to the planting, planting acceptance, planting maintenance and final 2-year post planting approval.

If you have any questions regarding this action or to request any of the required inspections, please contact Inspector Stephen Peck. He can be reached at 301-495-4564 or <a href="Stephen.Peck@mongtomeryplanning.org">Stephen.Peck@mongtomeryplanning.org</a>. The approved Restoration Plan and approval memo will be scanned and be available at the Planning Department's Development Application Information Center webpage.

Sincerely

Neil Braunstein Acting Chief

Development Applications and Regulatory Coordination M-NCPPC - Montgomery County Planning Department

Braumor

CC: Steven A. Robins, Lerch, Early & Brewer, Chtd.

Fax: 301-495-1306

Date: April 3, 2019

Scale: AS SHOWN

Sheet: 1 of 8

Project No.: 18-110

Design: MVS | Drawn: MVS

# STREAM & FOREST RESTORATION PLAN

# PROJECT SITE

# VICINITY MAP

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL PROJECT NOTES
3	APPROVED NRI-FSD
4	PLAN VIEW - SITE LAYOUT
5	PLANTING NOTES & DETAILS
6	NOTES & DETAILS
7	TREE PROTECTION NOTES & DETAILS
8	BRIDGE DETAILS

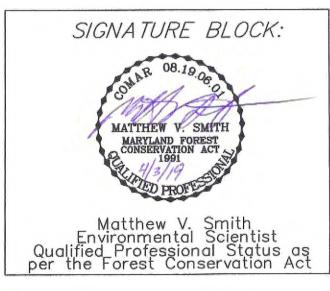
NOTE: Existing improvements, i.e. existing fences, both metal and wooden are to remain within the CAT I Conservation Easements as shown. Furthermore, future maintenance and repairs to the existing fencing is allowed, A small, wood chip based foot path may be installed within Easement Area 3 sometime in the future.

	OWNER'S CERTIFICATE
Forest Restoration I	rees to execute all the features of the Approved Stream & Plan dated. 4/3/19 , including financial bonding tenance, and all other applicable agreements.
Owner's Name:	ALLEN IZADPANAH Printed Name
Address:	15325 MASONHOOD DRIVE
Phone and Email:	703-589-3888 / allen@ vitelnet, com
Cinnature:	A C

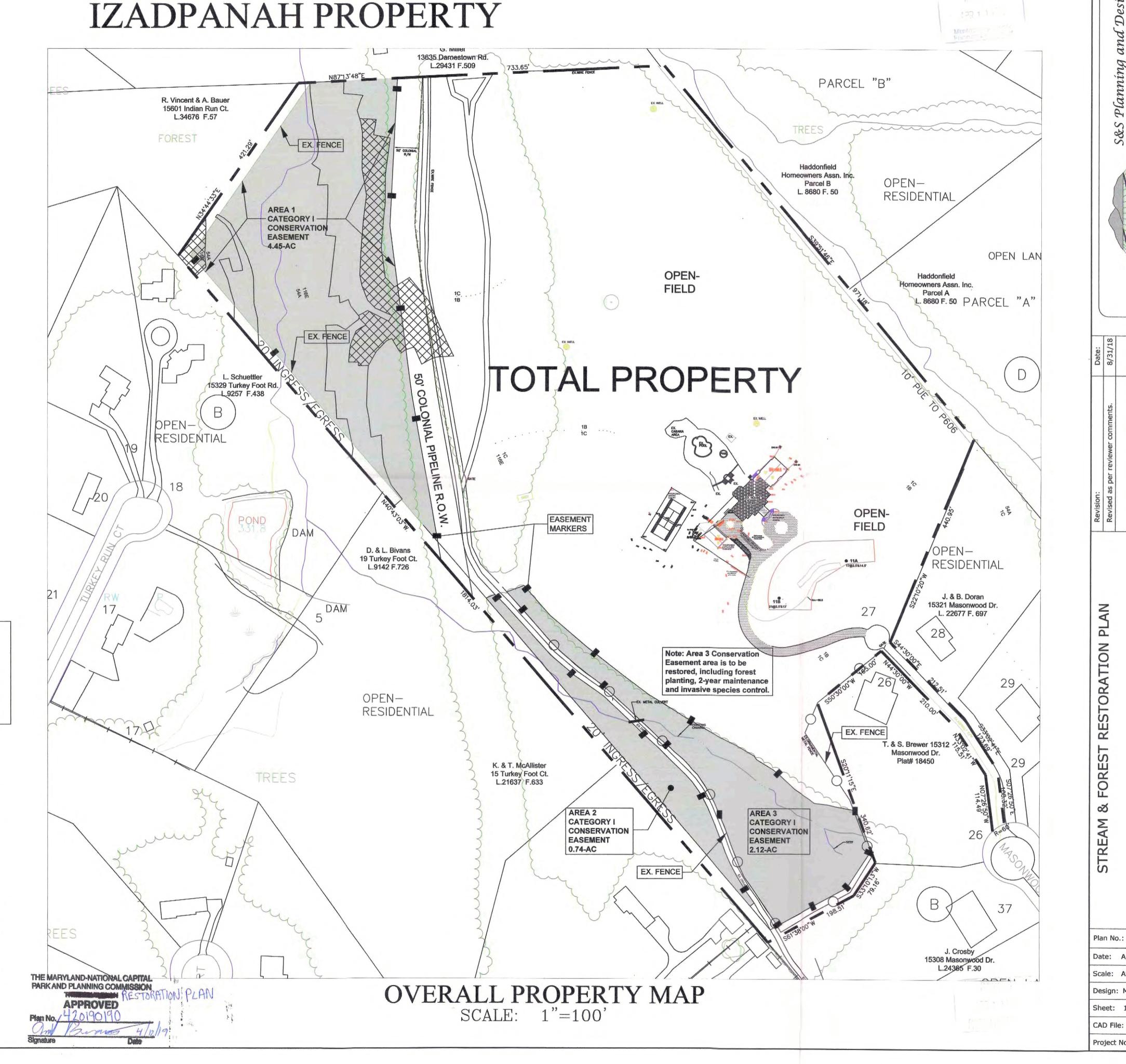
# LEGEND

EASEMENT MARKERS

CATEGORY I FOREST CONSERVATION EASEMENT



NOTE: Category I Forest Conservation Easements are to be established pursuant to a Planning Department approved Category I Conservation Easement agreement for Settlement Agreement prior to MNCPPC inspector initial acceptance of the forest planting.



#### General Notes:

The proposed stream restoration utilizes Natural Channel Design (NCD) methodology. Design parameters are derived from data collected from a reference reach stream from within the same hydro-physiographic region, with a similar valley type, watershed type, and size as the unstable reach. Measured morphological variables of the reference condition are presumed to define a natural, stable channel dimension, pattern, and profile.

The project is designed as a Priority II Restoration where a bank-full channel will be constructed primarily within the existing channel and/or floodprone area. In-stream structures will be installed to stabilize the channel, providing grade control and to reduce near-bank stress. Bioengineering applications such as live stakes and jute matting will be utilized to provide additional stabilizaiton through vegetation. Riparian plantings will be installed in the floodprone areas immediately following the restoration construction.

The new channel will have a total stream length of approximately 345 linear feet. Proposed in-stream structures consist of log-drop structures. These structures will provide for and maintain a stable stream dimension, pattern, and profile. Additionally, these structures will enhance in-stream aquatic habitat. The native vegetated buffer will stabilize the new channel.

#### **Excavated Material:**

All-excavated materials (if available) shall be stockpiled in designated stockpile areas within the limits of construction. The stockpiled material will be tested using Maryland Department of Transportation testing procedures, and if the material passes MDOT specifications the stockpiled material will be used later as backfill for the channel, floodplain and if suitable behind the structures. All additional fill material shall be spoiled on-site at the direction of the inspector. The contractor is responsible for the stabilization of all spoil areas, which includes seeding, mulching, and temporary silt fence.

#### Logs for Structures:

The logs with root wads attached shall range in length from 12 to 15 feet in length and 12 to 24 inches or greater in diameter measured at breast height (DBH) when used for the root wad portion of the structure. Materials shall be furnished from on-or-off-site source selected by the contractor and approved by the designer or inspector. The logs used in the structures shall be green, free of decay and straight with no sweeps or forks.

#### Geotextile:

All geotextiles shall be listed in the National Transportation Product Evaluation Program (NTPEP) for geotextiles. The geotextile shall be manufactured from fibers consisting of long chain synthetic polymers, composed of a minimum 95 percent by weight of polyolefins or polyesters. The fibers shall be formed into a stable network so that the filaments or yarns retain their dimensional stability relative to each other, including selvages. Only those geotextiles that have been tested by NTPEP will be considered candidates for use.

#### Subsurface:

No subsurface information is made available to the contractor for this project. The contractor is responsible for all subsurface investigations and shall be held accountable for any damages during the implementation of the project.

#### Utilities:

The contractor shall be responsible to field identify all utilities inside the construction corridor. The contractor shall follow all OSHA and utility owner guidelines when working near utilities. It is required that Miss Utility of Maryland be contacted at 1-800-257-7777 every 8 business days to comply during the excavation period.

#### **Construction Equipment:**

The Contractor will be required to choose and furnish appropriate equipment for construction. The Contractor will also be required to provide management, labor, material, and all other items necessary for the stream restoration work, including tree & shrub planting and bioengineering material installation. The Contractor is required to install in stream structures using an appropriate-sized tracked excavator with an hydraulic thumb to move rocks and trees as sized in the Drawing and Construction Specifications or by hand if applicable. All earth moving equipment shall be serviced prior to start of work each morning. Equipment shall be maintained to prevent fuel, oil and lubricant spills within the vicinity of the stream. It is the responsibility of the contractor to contain and clean up any spills within the project area. A spill kit is required on site for the duration of the project.

#### Site/Easement:

Contractor is responsible to keep all public roadways and drainage systems free from dirt, mud, and construction debris at an times.

Contractor is responsible for all repairs to any items damaged during construction, including but not limited to: fences, roads, utilities, parking lots, etc.

#### **Erosion Control Measures During Construction:**

During construction the contractor shall be responsible for installing additional sediment and erosion control measures not shown on the plans. These may become evident only after construction begins and may be required to control excess sediment as per consultation with designer.

The contractor shall make every effort to minimize disturbance in the stream channel and in gaining access to/from work areas.

Silt fence shall be installed downstream of the construction area to reduce sedimentation. The contractor shall only conduct bank and streambed work that can be completed or stabilized within that working day, unless directed by the project manager or designer.

#### **Erosion Control:**

All work shall be in compliance with regulations of the National Pollutant Discharge Elimination System (NPDES) program and the requirements of the MDE sediment and erosion control program.

The excavation and movement of soil materials shall be minimized to limit the area disturbed as well as the time soils are left unprotected.

Throughout the duration of the project, soil stockpile areas shall be stabilized with silt fence. The contractor is responsible for the temporary and permanent protection of stockpile areas as well as all soil intentionally transported from the site.

Silt fence shall be properly anchored in staging and stockpile areas to prevent erosion. Once staging and stockpile areas are no longer needed, contractor shall remove silt fence and grade, seed, and mulch all associated disturbance.

The contractor shall inspect daily and maintain continuously all erosion and sediment control measures until such time as permanent stabilization of exposed soil occurs. The contractor shall maintain close contact with erosion control inspector so that periodic inspections can be performed.

All temporary erosion and sediment control measures shall be removed after final site stabilization or after temporary erosion control measures are no longer needed. Site inspections shall continue during this period until temporary seeding becomes established. Where soil material is transported onto a paved or public road surface, daily cleaning is required and shall be completed prior to exiting the site. Soil materials shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. When a crushed stone construction entrance or haul road has been covered with soil or compacted into soil by construction traffic, it shall be brought back to its original elevation upon completion of the project.

Sediment and erosion controls shall be constructed in accordance with local, state, and federal erosion control regulations.

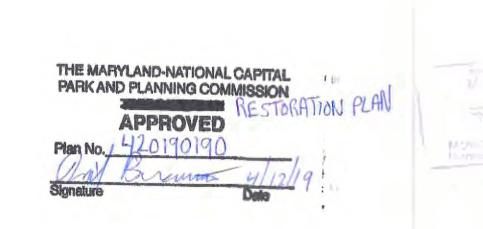
#### Vegetation Plan:

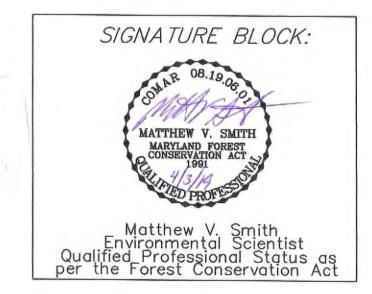
As soon as final grading is completed, structures are finished, and stabilization measures (matting) are installed, a mixture of grasses, sedges, forbs and shrubs will be planted on all disturbed surfaces. Seed mixes shall consist of native species and exact specifications will be included in the construction plans. Seeded areas shall be mulched with straw. Local sources of plant materials shall be used if possible. All plantings must be approved by the designer/inspector.

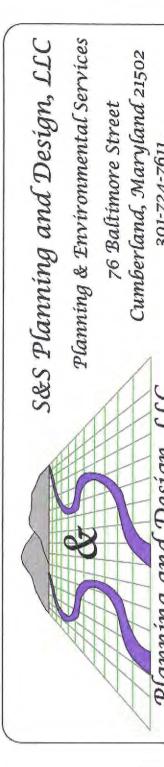
Woody plant selection was based upon native vegetation at the site and that observed in nearby streams under similar conditions. Woody species shall be planted after construction is complete and during the dormant period. Planting techniques may include bare root plantings or containers, as well as live staking. Plantings are intented to promote soil stabilization, structure stabilization, terrestrial wildlife habitat, and riparian shade.

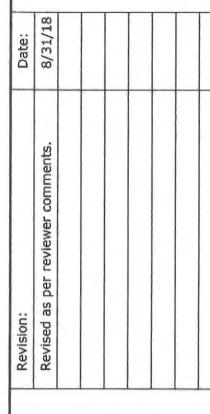
#### General Sequence of Construction:

- The site shall be reviewed by the engineer, project manager, and contractor for any unforeseen hazards, areas and objects to be avoided and protected during construction (trees, etc.). These areas shall be marked/flagged as they are identified.
- 2. The construction manager, engineer, and the contractor shall identify, confirm, and mark the location of the material storage and staging area(s).
- 3. The contractor shall make any needed improvements to the existing access road. This work shall be done before construction materials are brought to the project site and before construction begins.
- 4. Equipment shall be mobilized to the site. This work will be done before construction materials are brought to the project site and before construction begins.
- 5. MDE Compliance Division will be notified at least 5 days before construction begins and MISS UTILITY will be contacted and all utilities will be marked prior to any construction beginning.
- 6. Install silt fence around any stockpile, staging, and other areas designated on the plan. Temporary stockpile and staging areas shall be used to store materials needed for the completion of the project, such as: structure logs, stone, geo-textile fabric, fill material, etc.
- 7. The equipment shall be stored in the staging area during the duration of the project, after each day's activities, and during any non-work period. Any equipment maintenance and repairs shall be performed in this area.
- 8. The stream diversion and dewatering plan shall be implemented following sediment control installation. Pump-around practices shall be utilized to divert and dewater the work area. The engineer, inspector, and contractor shall determine and agree to the upper and lower limits of the pump around process.
- 9. Once dewatered, channel work my commence with grading, fill, and structure installation. Structures are to be installed where indicated on the plan and profile sheets. Construction of the channel and structures shall proceed from upstream to downstream. Field modifications, both horizontal and vertical, may be required and shall be approved by the engineer and/or inspector.
- 10. Structures shall be built to appropriate specifications as shown in the structure typical drawings. Non-woven geotextile will be placed behind (upstream/inside) all rock structures and woven geotextile will be placed behind all log structures. Wood and rock shall be used on the first 1/3 to 1/2 of the backfill depth and bed material will be used to backfill the rest of the structure. Jute fabric shall be placed where indicated for bank stabilization. After placement of each in-stream structure, all disturbance associated with their installation shall be graded, seeded, and mulched.
- Flow shall be reintroduced after all construction and stabilization activities are completed within each work section with the approval of the inspector.
   Any adjustment to the structures and/or channel post installation shall be made with as little disturbance as possible. Any areas disturbed during alterations shall be reseeded and mulched.
- 13. Temporary seeding and mulching shall be done immediately after new channel grading and structure installation is complete. The area shall be temporarily seeded with annual seed mix.
- 14. If plant material is on-site and available, the riparian area adjacent to the channel shall be permanently planted with live stakes and rooted/container material in accordance with the planting plan. The permanent riparian seed mix shall be utilized along the banks and overbank areas, then stabilized with jute matting and straw mulch.
- 15. Once the project manager, engineer, and inspector have agreed that the restoration work has been implemented in accordance with the approved plan, the stockpile and staging area shall be graded, seeded, and mulched. All sediment controls shall be removed and any remaining disturbed areas shall be graded (if applicable), seeded, and mulched.
- 16. Woody shrubs and trees shall be planted following site stabilization in accordance with the planting plan and time of year restrictions.
- 17. Any areas highly impacted during the construction process shall be restored to pre-existing or better condition.









PLAN

RUCTION NOTE

FOREST CONSTR

STREAM & | GENERAL PANAH PROPERTY

ZA

Plan No.:

Date: April 3, 2019

Scale: AS SHOWN

Design: MVS Drawn: MVS

Sheet: 2 of 8

CAD File:

Project No.: 18-110



FEB 1 9 2019

#### GENERAL NRI/FSD NOTES

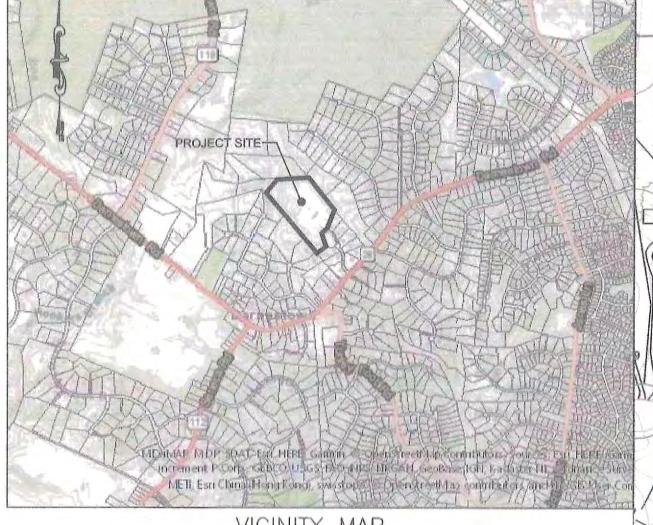
- THIS PROPERTY IS ZONED RESIDENTIAL.
- THE PROPERTY OWNER IS ROSHAN IZADPANAH, MR. RAFIK BAZIKIAN IS LISTED AS THE APPLICANT AND IS THE ACTING AGENT FOR IZADPANAH. RETTHE TOTAL OF RACT AREA IS 34.8 ACRES; HOWEVER, THIS NRI HAS BEEN PREPARED ONLY FOR AN APPROXIMATELY 4.2 ACRE STUDY AREA OF WHICH 2.2 ACRES WERE IMPACTED AND CITED FOR A FOREST CONSERVATION
- FIELD WORK WAS PERFORMED ON JULY 18, 2018 BY MATTHEW V. SMITH, S&S PLANNING AND DESIGN.
- 5. THIS PROPERTY IS NOT WITHIN AN SPA OR PMA. 6. PROPERTY TAX ACCOUNT NUMBER ASSOCIATED WITH THE PLANS ARE
- 7. TOPOGRAPHY DERIVED FROM PREVIOUS SITE SURVEY PROVIDED BY
- WETLAND INFORMATION DERIVED FROM ON-SITE FIELD EVALUATIONS.
- 9. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND MEASURED WITH A FORESTERS DBH TAPE MEASURE. 10. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE
- LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE. 11. ALL TREES UNDER 24" ONSITE ARE MEASURED BY OCCULAR ESTIMATE ONLY. 12. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION, THE U.S. FISH AND WILDLIFE SERVICE STATED "NO FEDERALLY PROPOSED OR LISTED ENDANGERED OR THREATENED SPECIES ARE KNOWN TO EXIST WITHIN THE
- PROJECT IMPACT AREA." 13. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS
- CURRENT STATE CHAMPION TREES.
- 14. THE SUBJECT PROPERTY IS NOT LISTED AS INDIVIDUAL HISTORIC SITES AS FOUND IN THE MINCPPC HISTORIC PROPERTIES INTERACTIVE MAP.
- NO MAPPED FLOODPLAINS ARE LOCATED ON THE PROPERTY. 16. THE PROJECT IS LOCATED IN THE SENECA CREEK WATERSHED, HUC CODE
- 020700080601, DESIGNATED USE CLASS I-P. 17. WSSC TAXMAP ES122, GRID 221NW14.

#### FOREST STAND #1

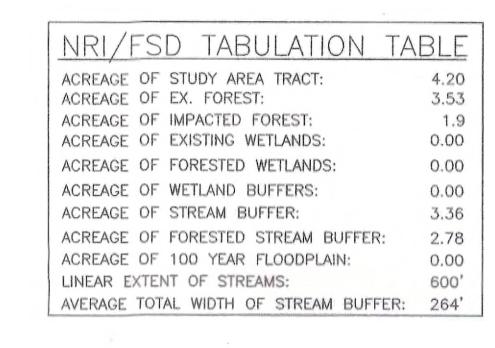
Forest Stand 1 is approximately 3.53 AC / 153,853.3 s.f. in size and consists of a mature upland hardwood stand. The majority of the forest stand, approximately 2.3 AC, is situated within a fenced portion of the property. The focus of this NRI is the 2.3 AC forest portion of Forest Stand 1. The stand is predominated by 24-30" Tulip Tree (Liriodendron tulipifera), however, other large canopy trees include Chestnut Oak (Quercus montana), White Oak (Quercus alba), and Sycamore (Platanus occidentalis) are present.

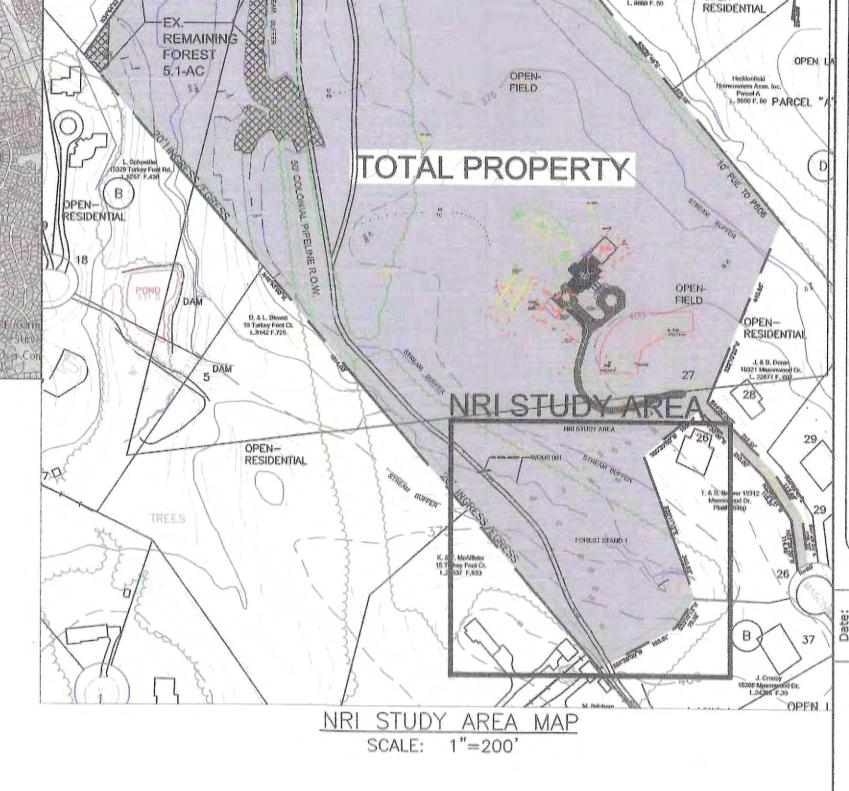
The forest within the study area has been impacted by clearing and grading operations, therefore much of the understory and some of the overstory has been affected. Approximately 1.90 AC of forest was impacted and is shown on the plan. Canopy closure is compromised due to the clearing of some of the large trees. The understory that is present consists of blend of herbaceous species (vines and ferns) and sapling renewal. Tree species observed to be regenerating include Tulip Tree, Oak, Red Maple, Sassafras, and Sycamore, although most were only a couple feet in height.

Thirty (30) large and/or specimen trees are located within the study area. Tree DBH was measured using a steel DBH tape with graduations in inches and tenths.









LEGEND:

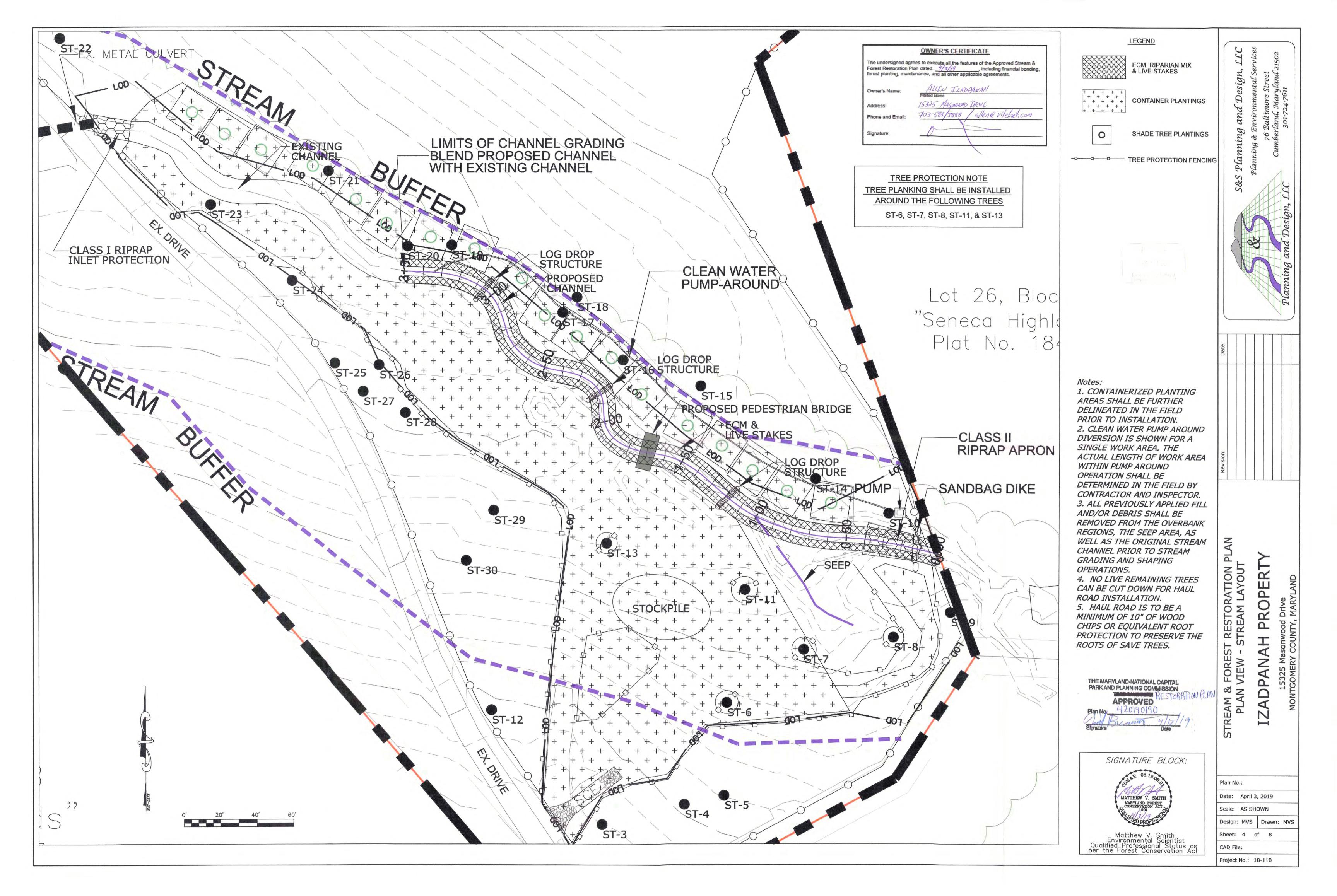
	NRI STUDY AREA	163. 139
	333	26/00 / 26/00
ST-22	500	550'50
EX METAL CULVERT	WOUS 001 STREAM	
Ex Denie	WOUS 001 STREAM BUFFER	
ST-2	A Company of the comp	
10	ST-20 ST-19	Mason
	ST-24 ST-18	Plat#
	ST-17	
	ST-25 ST-26 ST-15	
	FOREST STAND 1	
. McAllister		ST-14.
key Foot Ct. 637 F.633	ST-29 ST-13	ST-10 CS.
	5T-30	SEÉP.
		ST-8
		1-6
	32 151-12	
	ST-V ST	-5
	Sh 3	198.51
	18 0"	N
	56	

FOREST STAND 1 - NRI STUDY ARFA MAP

		SPECIMEN TR	EE LIST		
TREE NUMBER	SIZE-DBH	SCIENTIFIC NAME	COMMON NAME	CONDITION	SAVE/REMOVE
ST-1	26"	Quercus alba	White Oak	Good	Save
ST-2	30.0"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-3	26"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-4	27"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-5	25"	Acer rubrum	Red Maple	Good	Save
ST-6	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-7	27"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-8 ST-9	27" 51"	Liriodendron tulipifera Quercus alba	Tulip Tree White Oak	Good Good	Save Save
ST-10	56"	Platanus occidentalis	Sycamore	Good	Save
ST-11	32"	Quercus alba	White Oak	Good	Save
ST-12	31"	Quercus rubra	Red Oak	Good	Save
ST-13	33"	Liriodendron tulipifera		Good	Save
ST-14	28"	Liriodendron tulipifera	•	Good	Save
ST-15	24"	Nyssa sylvatica	Black Gum	Good	Save
ST-16	42" 26"	Quercus montana	Chestnut Oak	Good	Save
ST-17		Liriodendron tulipifera	•	Good	Save
ST-18	26"	Liriodendron tulipifera		Good	Save
ST-19	40"	Acer rubrum	Red Maple	Good	Save
ST-20 ST-21	24" 26"	Liriodendron tulipifera Liriodendron tulipifera	Tulip Tree Tulip Tree	Good Good	Save Save
ST-22	31"	Platanus occidentalis	Sycamore	Good	Save
ST-23	54"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-24	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-25	24"	Liriodendron tulipifera	Tulip Tree	Good	Save
ST-26 ST-27	27" 25"	Liriodendron tulipifera Quercus montana	Tulip Tree Chestnut Oak	Good Good	Save Save
ST-28	32"	Quercus montana	Chestnut Oak	Good	Save
ST-29	25"	Quercus alba	White Oak	Good	Save
ST-30	32"	Quercus montana	Chestnut Oak	Good	Save

SPECIMEN OR LARGE TREE (and critical root zone) (CRZ shown = 1.5*dbh) (Large = 24"+ dbh)	ST-1		
PROPERTY LINE		>3	>
EXISTING TREE LINE		18.5 2.5	E
SOIL BOUNDARY LINE		I NO	E S
STEEP SLOPES (>15%)		INVENTORY EATION PLA	SOPERT Drive
FOREST IMPACT AREA		URCE INVENTORY/ DELINEATION PLAN	Pood VTV,
Plan N Signatu	1 Burso 4/12/19	NATURAL RESOURCE FOREST STAND DELIN	IZADPANAH PRO 15325 Masonwood Drive MONTGOMERY COUNTY, MARN
	SIGNATURE BLOCK:	Plan No.: 02	2-NRI-420190190
	MATTHEW W. SMITH	Date: Octo	ober 1, 2018
	MARYLAND FOREST CONSERVATION ACT	Scale: AS	SHOWN
	1 1991		the state of the s

SOILS CHART - TOTAL SITE K-Factor HYDRIC SYMBOL COMMENTS 0.3 No Glenelg Silt Loam 3-8% slopes; very deep, well drained



#### IZADPANAH STREAM RESTORATION PROJECT PLANTING NOTES & DETAILS

#### INTRODUCTION

This planting plan has been designed to provide bioengineering material & riparian vegetation installation within the riparian corridor for the Izadpanah Stream Restoration Project.

#### II. Simplified Sequence of Construction

- Limit-of -Disturbance delineated and marked.
- Installation of sediment and erosion control devices.
- Excavation/grading of channel & structure installation. 4. Vegetative planting, live stakes, and erosion control matting installation.
- 5. Removal of sediment and erosion control devices.

#### III. Additional Soil and Erosion Control Notes

- 1. All erosion and sediment control practices are to be constructed and maintained according to the minimum standards of the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual. The contractor is responsible for being thoroughly familiar with the measures contained within this document that are pertinent to this project.
- 2. It is the contractors responsibility to inspect all erosion control devices periodically and after every erodible rainfall. Necessary repairs to maintain the effectiveness of the erosion control devices shall be made immediately. This maintenance will include the repair of measures damaged by any subcontractor.
- 3. All erosion and siltation measures are to be 'in place' prior to construction.
- 4. If, during construction, additional erosion control devices are found necessary by either the contractor, or applicable inspector, they shall be installed.
- 5. Permanent soil stabilization shall be applied to bare areas within seven days of reaching final grade. No disturbed area will be denuded for more than 28 calendar days.
- 6. Temporary seeding shall be accomplished within seven days to denuded areas that may not be completed.
- 7. The term Seeding, Final Cover or Stabilization shall include establishment of a stable grass cover according to the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual.
- 8. Temporary erosion control measures are not to be removed until all disturbed areas are stabilized. After completion of stabilization, all measures are removed within 30 days. Trapped sediment shall be spread and seeded.
- 9. Modifications in the scope of the proposed project are to be reviewed and approved by the Maryland Department of the Environment prior to use.
- 10. Minimize the area disturbed to that area only required for construction. Native vegetation will be preserved to the maximum extent possible consistent with the use and development permitted and according to the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual.

#### Seeding Schedule

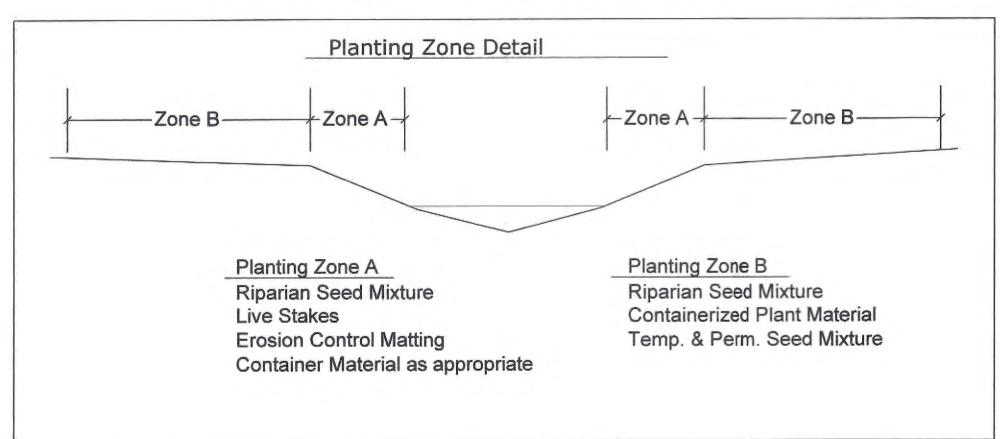
Barley or Oats at 96 lbs/ac or other approved contractor's mix **Temporary Seeding** Ernst Mix 178 or Approved Equivalent at 15 lb/ac. Riparian Area

(Riparian Area is defined as the stream banks and overbank areas within 20' from top of bank.)

## Plant Schedule

Quantity	Common Name	Scientific Name	Size	Spacing
26	Swamp White Oak	Quercus bicolor	1.5" cal.	12' o.c.
26	Red Maple - Sunset	Acer rubrum	1.5" cal.	12' o.c.
26	N. Red Oak	Quercus rubra	1.5" cal.	12' o.c.
26	Black Gum	Nyssa sylvatica	1" cal.	12' o.c.
25	Sycamore	Platanus occidentalis	5 gal., 1" cal.	10' o.c.
30	American Hornbeam	Carpinus caroliniana	5 gal., 1" cal.	10' o.c.
30	Spicebush	Lindera benzoin	3 gal.	10' o.c.
18	Tulip Poplar	Liriodendron tulipifera	2" cal.	22' o.c.
200	Silky Dogwood	Cornus amomum	live stake	2' o.c.
200	Streamco Willow	Salix purpurea	live stake	2' o.c.
200	Black Willow	Salix nigra	live stake	2' o.c.

Notes: Equivalent replacements may be approved by the MNCPPC Forest Inspector. Live stakes shall be installed during the fall dormant season.



#### IV. Grading Criteria

To effectively establish a constructed stable channel, the proposed restoration site requires the excavation of soil and rock. The proposed restoration will be graded to the specified elevations on the Grading Plan, Cross Sections & Profile.

#### V. Planting Specifications

Planting shall commence after final grading. All container plant material shall be installed between March 1 to May 30 or September 1 to October 30. Live stakes shall only be installed while dormant.

Planting materials will consist of container grown shrubs and trees. All stock will be planted as received, no pruning will be done at the site. Stock not meeting specifications

All planting stock shall be protected from sunscald, desiccation, and structural damage during shipment to the site. Delivery of materials will be no sooner than one week prior to planting. Materials held for planting will be moistened and placed in cool, shaded areas until ready for placement.

#### A. Plant Materials

- 1. The plant species required are usually not available from standard landscape nursery sources. The contractor shall make arrangements with competent wetland restoration sources to ensure a supply of the required material.
- 2. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen, except where otherwise noted.
- 3. Plant materials must be selected from certified nurseries that have been inspected by appropriate state or federal agencies.
- 4. Botanical nomenclature is according to Hortus III.
- 5. Plant material will be inspected by an authorized representative prior to planting. All plant material deemed unacceptable due to damage or poor health will be required to be replaced with acceptable plant material by the contractor.

#### B. Planting Schedule.

- 1. All containerized plants shall be installed between March 1 to May 30 or September 1 to October 30. Live stakes shall only be installed while dormant, typcially after October 31.
- 2. The representative retains the right to inspect the storage site, and plants prior to delivery to the site.

#### C. Bed Preparation

No bed preparation is required with the exception of removing all trash and debris prior to beginning planting. Excavated topsoil may be required to be stockpiled, and respread following rough grading.

### D. Planting

- 1. A pre-planting meeting shall be conducted with the MNCPPC forest conservation inspector prior to planting. Meeting attendees shall include at a minimum, the landscaper and the owner or owner's representative.
- 2. The contractor shall stake the locations of each planting areas. The locations shall be field verified by the MNCPPC forest conservation inspector prior to planting.
- 3. Plants shall be planted according to the spacing indicated on the plant schedule within the designated bank & riparian area.
- 4. Plant material shall be planted in existing soil with each planting pit excavated to 1 1/2 times the width of the entire root mass of the plant.
- The root mass shall be placed in the planting pit and excavated soil shall be placed around the root mass and tamped to fill all voids and air pockets.

#### E. Cleanup

- 1. Final cleanup shall be the responsibility of the contractor and consist of removing all trash and materials incidental to the project and the proper disposal of the material off-site.
- Cleanup procedure activities shall not damage existing plants.

#### VI. Plant Maintenance and Management

EMBED GEOTEXTILE -

GEOTEXTILE FABRIC

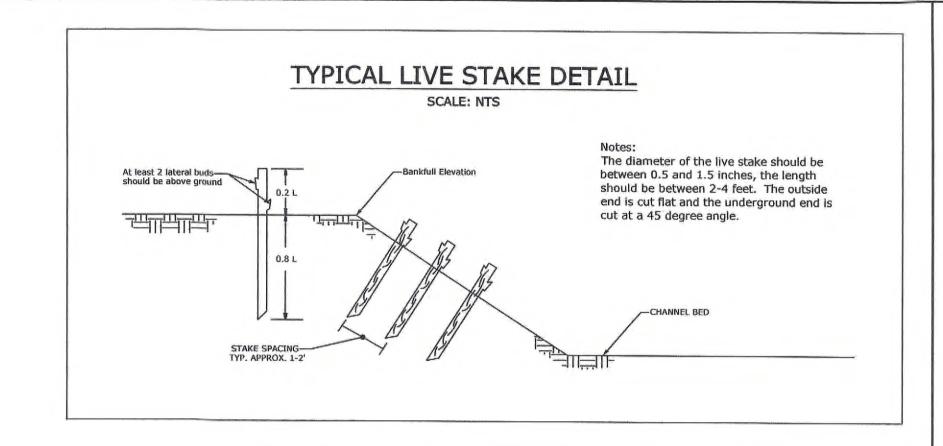
A maintenance program will be implemented to employ proven management techniques and monitor the restoration site to achieve the goal of 75% of the 1-inch caliper planted trees, 100% of the 2-inch caliper planted trees. or 100% of the 1.5-inch caliper trees, must be alive and vigorous at the end of the two-year maintenance period.

Vegetation demonstrating immediate stress or dieback will be replaced. In addition, soil and climatic factors will be analyzed in relation to plant growth. The following management techniques will

- A. Replace dead or dying plant species with same species or approved alternative.
- B. Remove debris that impairs plant growth quarterly, during the growing season.
- C. All excessive noxious and invasive plant growth shall be eradicated using an acceptable PARK AND PLANNING COMMISSION method.

CLASS II RIPRAP APRON SECTION

NOT TO SCALE



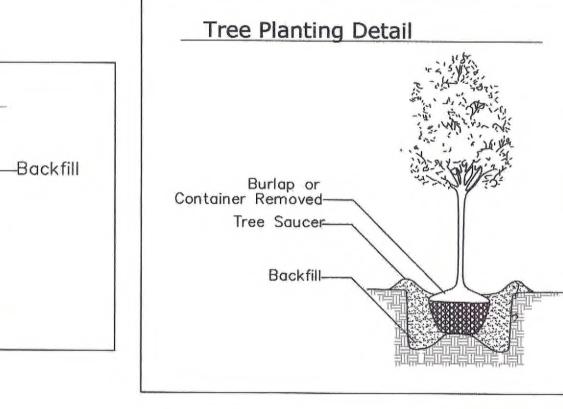
Shrub Planting Detail

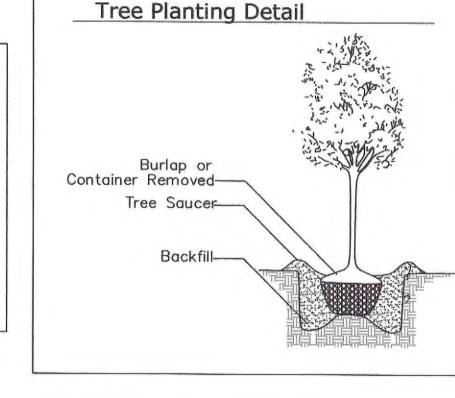
Container Removed-

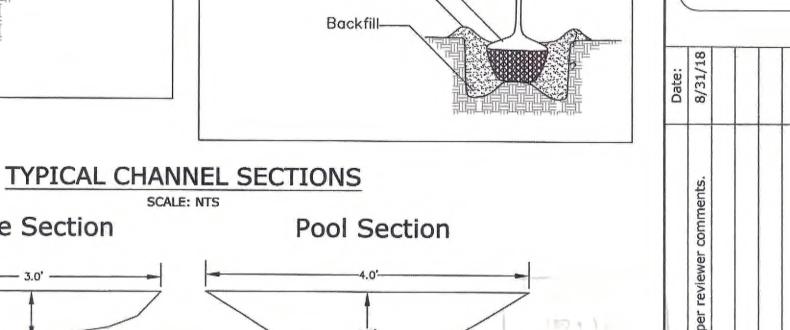
APPROVED

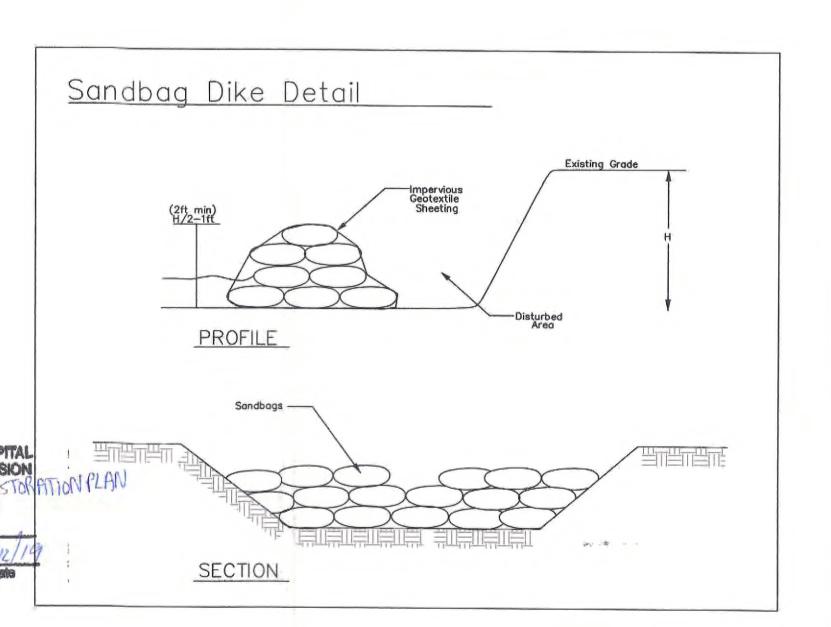
Sycamore

Tree Saucer-





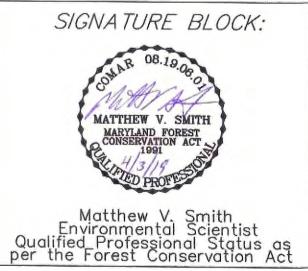




SCALE: NTS

Riffle Section





RESTORATION TAILS PROPER  $\overline{\Box}$ න TREAM & FOREST . N ADPANA **PLANTING** Plan No.: Date: April 3, 2019 Scale: AS SHOWN Design: MVS | Drawn: MVS Sheet: 5 of 8

CAD File:

Project No.: 18-110

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# DETAIL 1.2: PUMP-AROUND PRACTICE PLAN VIEW approved dewatering device diversion pumps – discharge hoses– \_\_ intake dewatering pump intake hose clean water dike / - sump-hole or pool sediment dike -(12" to 18" deep 2' dia.) —pumps should discharge length not to exceed that which can be onto a stable velocity dissipator made of rip rap completed in one day or sandbags SECTION A-A impervious sheeting (2 foot minimum) cross section of sandbag dike REVISED NOVEMBER 2000 PAGE 1.2 - 3

#### Maryland's Guidelines To Waterway Construction MGWC 1.2: Pump-Around Practice

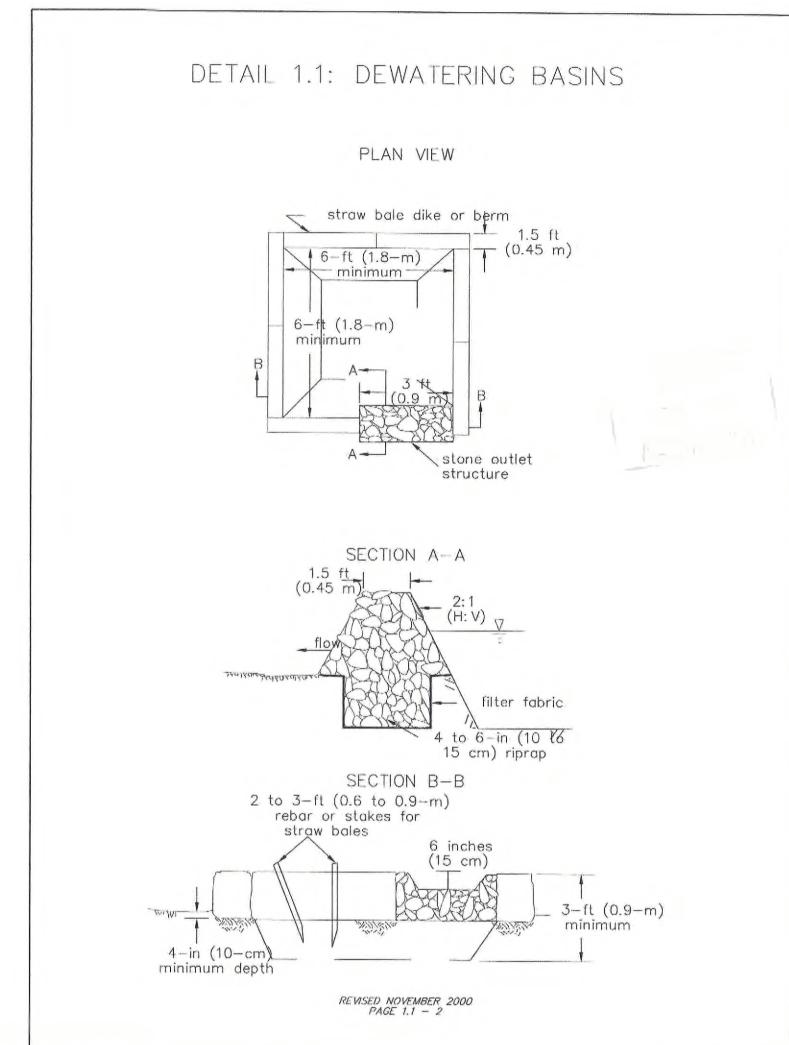
#### Description

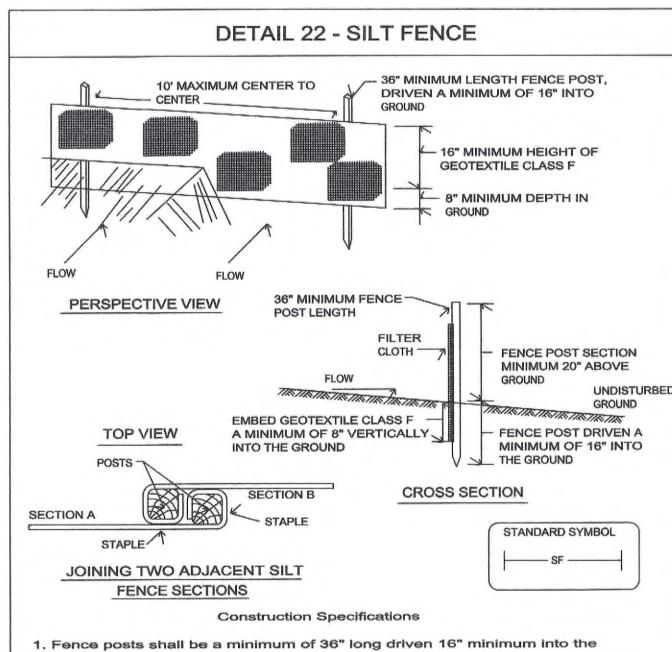
The work should consist of installing a temporary pump around and supporting measures to divert flow around in-stream construction sites.

#### Implementation Sequence

Sediment control measures, pump-around practices, and associated channel and bank construction should be completed in the following sequence (refer to Detail 1.2):

- 1. Construction activities including the installation of erosion and sediment control measures should not begin until all necessary easements and/or right-of-ways have been acquired. All existing utilities should be marked in the field prior to construction. The contractor is responsible for any damage to existing utilities that may result from construction and should repair the damage at his/her own expense to the county's or utility company's satisfaction.
- 2. The contractor should notify the Maryland Department of the Environment or WMA sediment control inspector at least 5 days before beginning construction. Additionally, the contractor should inform the local environmental protection and resource management inspection and enforcement division and the provider of local utilities a minimum of 48 hours before starting
- 3. The contractor should conduct a pre-construction meeting on site with the WMA sediment control inspector, the county project manager, and the engineer to review limits of disturbance, erosion and sediment control requirements, and sequence of construction. The contractor should stake out all limits of disturbance prior to the pre-construction meeting so they may be reviewed. The participants will also designate the contractor's staging areas and flag all trees within the limit of disturbance which will be removed for construction access. Trees should not be removed within the limit of disturbance without approval from the WMA or local authority.
- Construction should not begin until all sediment and erosion control measures have been installed and approved by the engineer and sediment control inspector. The contractor should stay within limits of the disturbance shown on the plans and minimize disturbance within work area whenever possible.
- Upon installation of all sediment control measures and approval by the sediment control inspector and the local environmental protection and resource management inspection and enforcement division, the contractor should begin work at the upstream section and proceed downstream beginning with the establishment of stabilized construction entrances. In some cases, work may begin downstream if appropriate. The sequence of construction must be followed unless the contractor gets written approval for deviations from WMA or local authority. The contractor should only begin work in an area which can be completed by the end of the day including grading adjacent channel. At the end of each work day, the work area must be stabilized and the pump around removed from the channel. Work should not be conducted in the channel during rain events. Sandbag dikes should be situated at the upstream and downstream ends of the work area as shown on the plans, and stream flow should be pumped around the work area. The pump
- should discharge onto a stable velocity dissipator made of rip-rap or sandbags. Water from the work area should be pumped to a sediment filtering measure such as a dewatering basin, sediment bag, or other approved source. The measure should be located such
- that the water drains back into the channel below the downstream sandbag dike. 8. Traversing a channel reach with equipment within the work area where no work is proposed should be avoided. If equipment has to traverse such a reach for access to another area, then timber mats or similar measures should be used to minimize disturbance to the channel. Temporary stream crossings should be used only when necessary and only where noted on the plans or specified. (See Section 4, Stream Crossings, Maryland Guidelines to Waterway Construction).
- 9. All stream restoration measures should be installed as indicated by the plans and all banks graded in accordance with the grading plans and typical-cross sections. All grading must be stabilized at the end of each day with seed and mulch or seed and matting as specified on plans.
- 10. After an area is completed and stabilized, the clean water dike should be removed. After the first sediment flush, a new clean water dike should be established upstream from the old sediment dike. Finally, upon establishment of a new sediment dike below the old one, the old sediment dike should be removed.
- 11. A pump around must be installed on any tributary or storm drain outfall which contributes baseflow to the work area. This should be accomplished by locating a sandbag dike at the downstream end of the tributary or storm drain outfall and pumping the stream flow around the work area. This water should discharge onto the same velocity dissipater used for the main
- 12. If a tributary is to be restored, construction should take place on the tributary before work on the main stem reaches the tributary confluence. Construction in the tributary, including pump around practices, should follow the same sequence as for the main stem of the river or stream. When construction on the tributary is completed, work on the main stem should resume. Water from the tributary should continue to be pumped around the work area in the main stem.
- 13. The contractor is responsible for providing access to and maintaining all erosion and sediment control devices until the sediment control inspector approves their removal.
- 14. After construction, all disturbed areas should be regraded and revegetated as per the planting plan.





ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

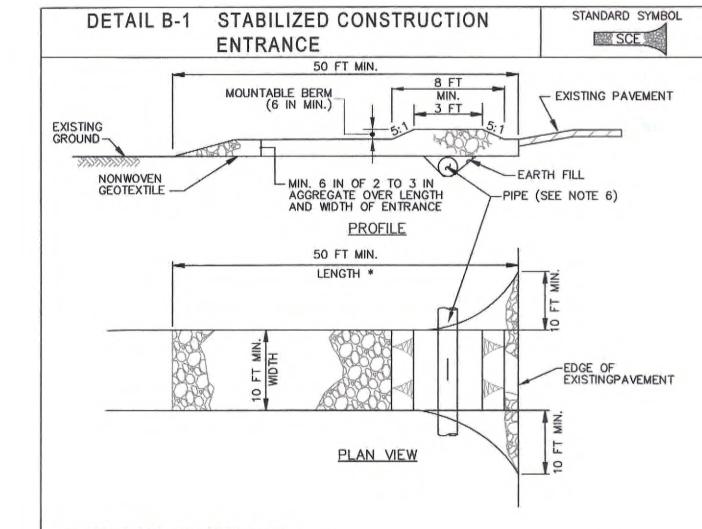
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Test: MSMT 509 Tensile Strength 50 lbs/in (min.) Test: MSMT 509 Tensile Modulus 20 lbs/in (min.) 0.3 gal ft / minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.)

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when

bulges occur or when sediment accumulation reached 50% of the fabric height. U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E-15-3 WATER MANAGEMENT ADMINISTRATION

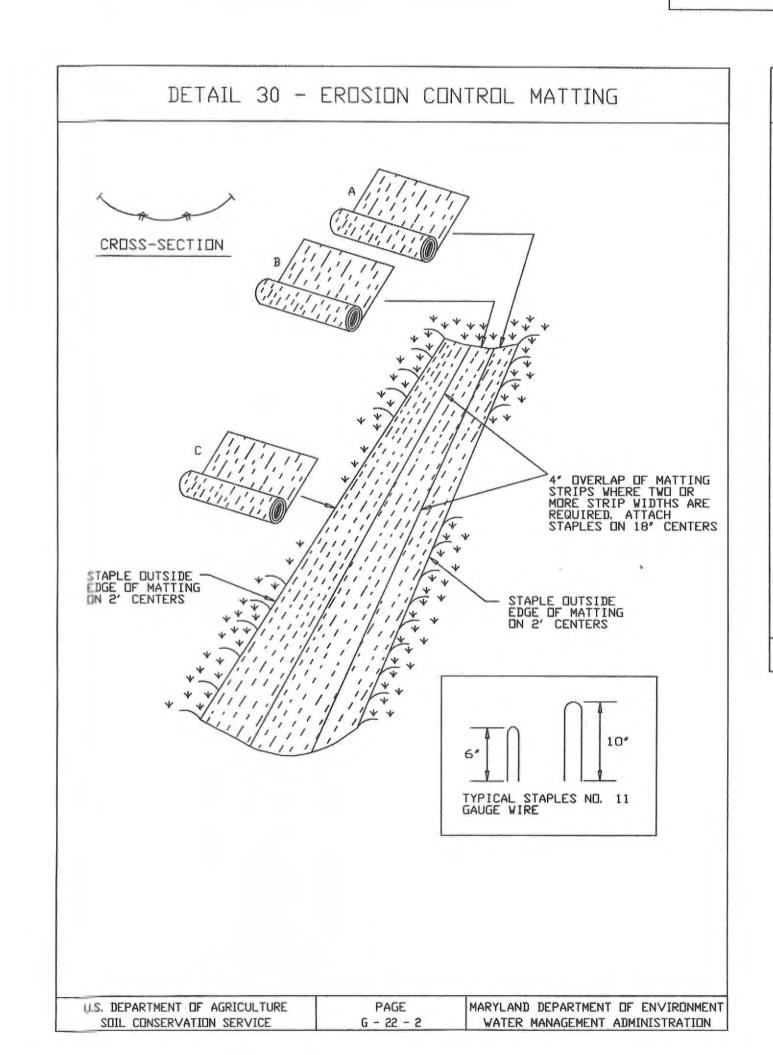


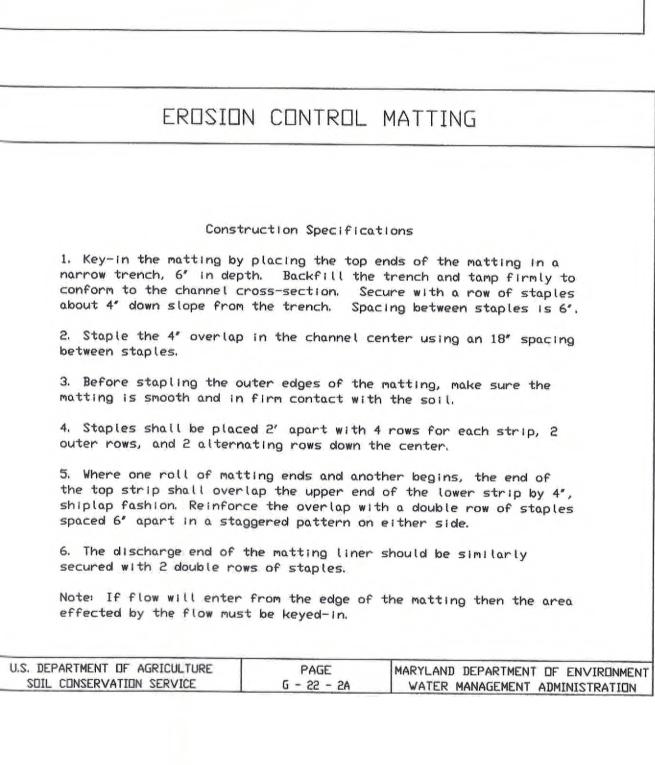
#### CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

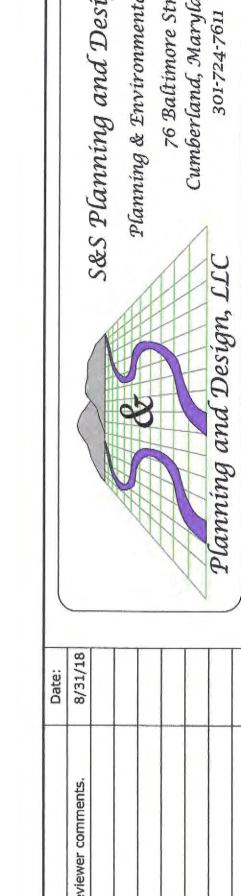
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION









PLAN RESTORATION

PE 0 0 

FORE DP 0 ಂಶ

Plan No.: Date: April 3, 2019 Scale: AS SHOWN

Design: MVS Drawn: MVS

CAD File:

Sheet: 6 of 8

Project No.: 18-110

1. In General: Suppression efforts are aimed at the removal of invasive, exotic species ("target species"), which displace or prevent the establishment of native forests. The primary focus of this Final Forest Conservation Plan (FFCP) document is the suppression and control efforts of invasive and exotic species, as noted, primarily including but not exclusive to: Oriental bittersweet, Multiflora Rose (Rose Multiflora), Porcelainberry, Mile-a-Minute, and Japanese Honeysuckle Vine (Lonicera Japonica).

2. Goal and Purpose: Suppression efforts shall include the initial removal or treatment of the target species and the maintenance required to control re-growth. Implementation and choice of treatment and method shall be such that neither the invasive species nor the method of control adversely affects the establishment and survival of native species. Target species are generally persistent with regard to eradication and control efforts. Therefore, the goal is to suppress the target species to allow the native species to form a dense canopy. The shade created by the dense canopy ideally will provide additional shade, which will manage the re-growth of the targeted species.

3. Minimum Requirements: A minimum of two applications or treatments shall be made during each one-year period of the Forest Improvement and Protection Agreement (FIPA).

4. Suppression and control efforts within the site shall take place in all forestation areas, tree save areas, and all forest retention areas (saved forest areas). Suppression and control efforts shall also take place in the existing forest areas retained. As noted, all of the retained existing forest is included in the suppression area because of the presence of target species throughout the site. Also, new planting areas may also be subject to suppression efforts if there is a presence of target species within the planting areas.

5. Timing of Operations: Suppression efforts may begin at any time. However, if suppression efforts have not commenced prior to obtaining a Forest Conservation Permit, suppression efforts must begin in forest retention and tree save areas once a Forest Conservation Permit is obtained. Initial removal and treatment of the target species must occur prior to planting forestation areas.

6. Flagging Required: Target vegetation within the suppression area (s) shall be clearly flagged with surveyor's ribbon or otherwise identified in a clear and recognized manner. Flagging or otherwise identifying target vegetation shall be done so as to prevent removal of desirable (native) species along with the

target species. 7. Methods of Removal: Suppression and control of the target species can be by mechanical or chemical methods or a combination of both. Mechanical controls include mowing or chopping at or near the ground level and removal of the plant by digging, pulling, or bulldozing. Mowing or chopping will likely result in re-growth from the stump or root sprouts. Therefore, this method requires also treating the remaining stump and/or root sprouts. The removal of the remaining roots by some means of excavation will disturb the soil. This may require sediment control measures, which is the responsibility of the contractor. Holes created by the removal of roots are to be filled with topsoil.

8. Stabilizing Bare Ground: All bare ground areas resulting from mechanical control methods are to be immediately stabilized. Disturbed areas with sufficient light shall be seeded per the improvement plan specifications. Densely shaded areas shall be mulched with 2" of shredded hardwood mulch or wood chips. The use of heavy equipment within non-wetland floodplain areas is prohibited, unless the soil is dry enough for the equipment to be supported without excessive damage to the soil or desirable ground cover plants. Heavy equipment is not allowed in wetlands or streams.

9. Use of Chemicals: Chemical control is by herbicide application to the target species. The use of herbicides shall be in strict accordance with state and Federal regulations and include but are not limited to:

The use and application of all herbicides shall be in strict accordance with the label on the herbicide's container and/or the instructions accompanying the herbieide.

Herbicides used in or near wetlands or streams shall be clearly labeled as to indicate that the herbicide is for use near bodies of water. All herbicide applications shall be conducted during the appropriate time of year and under environmentally favorable conditions with consideration to

weather elements (i.e. wind and temperature) and in accordance with the label. Individuals who are qualified and licensed pesticide applicators will conduct all herbicide applications.

Herbicides are to be applied in a manner that only suppresses the target vegetation and does not suppress or destroy surrounding desirable plants.

10. Protecting Living Root Mats: Root mats of plants treated with herbicides are to remain in place to stabilize the soil. 11. Debris Removal: Brush, root mats, and debris resulting from the use of mechanical controls shall be removed from the site and properly disposed.

12. Recommended Sources of Information: Recommended suppression treatments can be obtained from publications written by Philip D. Pannill. Regional Watershed Forester, Western Region, Maryland Department of Natural Resources, Forest Service, Recommended are:

Problem Weed Species for Forestry in Maryland Ailanthus Altissima - Controlling Tree of Heaven

Tree of Heaven Control

Control of Ailanthus in Forest Management

The contractor shall consult the above publications for recommended herbicides and additional treatment options. These publications as well as other relevant publications are available upon request by contacting: Maryland Dept. of Natural Resources

1260 Maryland Avenue, Hagerstown, MD 21740

Phone: 301-791-4010; Email: ppannill@dnr.state.md.us; Website: www.dnr.state.md.us/forrest

13. Specific Recommendations: The contractor and pesticide/herbicide applicator shall choose the appropriate control measures to match both local conditions

and available skilled labor so at to minimize impacts to the environment. The following treatment methods are advised: Japanese Honeysuckle: manually cut or pull vines or treat re-sprouts with herbicide (post-emerge).

February 2017

Multiflora Rose: repeated mowing or cutting or treat re-sprouts with herbicide (post-emergent).

Tree of Heaven: initial cutting of trees followed by frequent cutting and mowing of sprouts.

Herbicide treatments include post-emerge foliar spray, cut surface treatments and basal bark application.

14. Follow-up Treatments: Following the initial treatment, the suppressed areas shall be monitored/inspected and re-growth/re-infestation shall be treated at least three additional times during the two-year maintenance period.

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI

#### Pre-Construction

- 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- The property owner must arrange for the meeting and following people should must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
  - a. Typical tree protection devices include:
    - i. Chain link fence (four feet high)
    - ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
    - iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar
  - posts (minimum 4 feet high) with high visibility flagging. b. Typical stress reduction measures may include, but are not limited to:
  - i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
  - ii. Crown Reduction or pruning
  - iii. Watering
  - iv. Fertilizing
  - v. Vertical mulching vi. Root aeration systems

Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including

9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:

a. Removal, and possible replacement, of dead, dying, or hazardous trees

b. Pruning of dead or declining limbs

- Soil aeration d. Fertilization
- e. Watering

f. Wound repair

Page 2 of 3

photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

- 4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. 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.
- 5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest
- areas is prohibited. This includes the following activities: Parking or driving of equipment, machinery or vehicles of any type.
- b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder,
- trash, garbage, or debris of any kind.
- Felling of trees into a protected area. e. Trenching or grading for utilities, irrigation, drainage, etc.
- 6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and

#### During Construction

- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

#### Post-Construction

February 2017

g. Clean up of retention areas, including trash removal

Anchor posts must be put in the ground == to a depth of at == ||

PERMANENT FOREST

**EASEMENT SIGNAGE** 

POST TO BE INSTALLED IN A VERTICALLY

ALL WOOD SHALL BE PRESSURE TREATED

SOUTHERN YELLOW PINE OR GEDAR.

ALL FASTENERS SHALL BE STAINLESS

ALL POSTS TO BE INSTALLED ALONG

AS SPECIFIED PER APPROVED FINAL

FOREST CONSERVATION PLAN OR

8' Min. Metal 'T' Fence Posts driven at

M-NCPPC FIELD INSPECTOR'S

FOREST CONSERVATION EASEMENT LINE

Tree Protection Fence

MAXIMUM

10 FEET

PLUMB POSITION.

STEEL 1-1" IN LENGTH.

INSTRUCTIONS.

Welded Wire

Welded Wire Mesh-

14/14 Gauge Galvinized Wire 2"x4" Opening least 2' into the ground

CONSERVATION

- CAPPED POST OR BEVELED

POSITIVE DRAINAGE.

- FINISHED GRADE

HOLE AS NECESSARY.

- 10" X 12" Weatherproof signs secured to fence @ 30' o.c. (max)

metal posts

MONTGOMERY COUNTY PLANNING DEPT. 12/23/2008

5 1/2"X8" METAL FOREST CONSERVATION

6x6x8 PRESSURE TREATED WOODEN POST

COMPACT SOIL TO ADJACENT UNDISTURBED

SOIL DENSITY, ADD QUICK CRETE 10 SOIL

MIXTURE AS NECESSARY TO CREATE FIRM

FOUNDATION, SLOPE TOP OF FOOTING FOR

INSTALL GRAVEL SUMP PRIOR TO POST

INSTALLATION, OVER EXCAVATE POST

PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

REMOVAL OF THIS FENCE REQUIRES THE APPROVAL OF MONTGOMERY COUNTY INSPECTOR.

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED

AND FLAGGED PRIOR TO INSTALLING DEVICE.

ROOT DAMAGE SHOULD BE AVOIDED.

5. PROTECTIVE SIGNAGE IS REQUIRED.

SIGNS (AS SPECIFIED BY M-NCPPC)

10. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be

#### INSPECTIONS

All field inspections must be requested by the applicant. Field Inspections must be conducted as follows: Plans with Planting Requirements

1. Pre-Restoration -- After the limits of disturbance have been staked and flagged, but

before any clearing or grading begins.

2. Tree Save Measures -- After necessary stress reduction and tree save measures have been completed and protection measures have been installed, but before any clearing and grading begin.

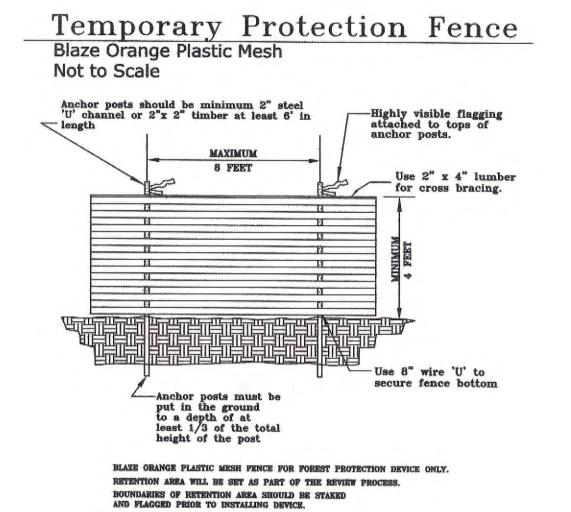
3. Final Stream Restoration -- After completion of all stream restoration construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provisions of the stream and forest restoration plan.

4. Pre-Planting -- Before the start of any required forest restoration or riparian planting. 5. Plant Material Acceptance Meeting -- To be conducted when plant material arrives at the site and prior to installation.

6. Post-Planting Meeting -- 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

7. Interim Warranty Meeting -- To be held near the approximate middle of the warranty period to evaluate planting success/failure trends.

8. Final Planting & Easement Marker Inspection -- 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.



Root Pruning Detail

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION

ROOT DAMAGE SHOULD BE AVOIDED.

PROTECTIVE SIGNAGE MAY ALSO BE USED.

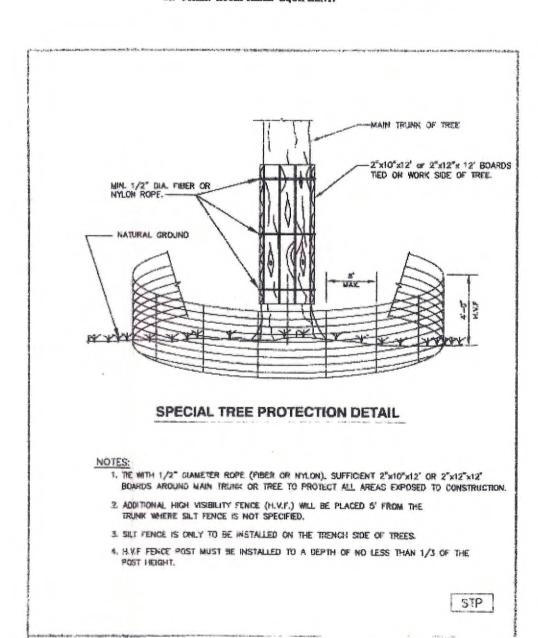
FR 7 7 1 -Tree Protection Fence LOCATION AND LIMITS-OF-FENCING SHALL BE COORDINATED IN FIELD WITH INSPECTOR.

EXACT LOCATION SPECIFIED IN FIELD BY MONTGOMERY COUNTY INSPECTOR.

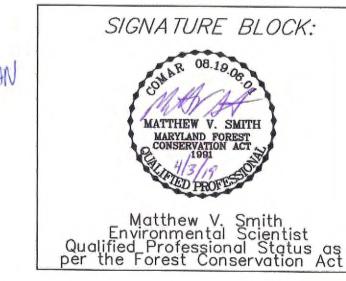
BACKFILL ROOT PRUNING TRENCH WITH SOIL REMOVED OR OTHER HIGH ORGANIC SOIL.

ROOT PRUNING EQUIPMENT TO BE APPROVED BY THE COUNTY INSPECTOR.

ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION



Design, nning

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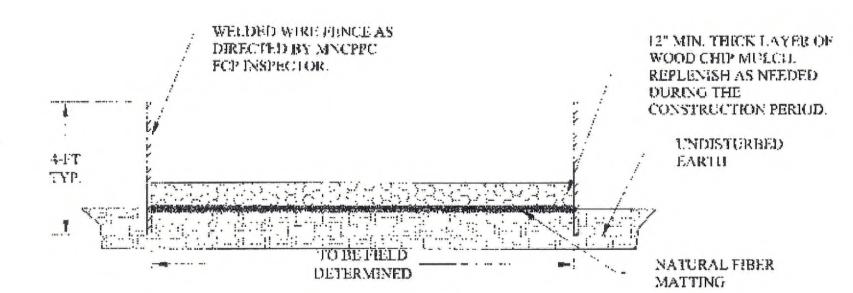
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Plan No.: Date: April 3, 2019

Design: MVS | Drawn: MVS Sheet: 7 of 8 CAD File:

Scale: AS SHOWN

Project No.: 18-110



1. Mulch root protection to be installed as indicted on the approved forest conservation or tree save plans in critical root zones of

2. Access routes to be verified by the MNCPPC Forest Conservation Program (FCP). Inspector at the preconstruction meeting. Revisions to the alignment that minumize tree disturbance are encouraged and require review and approval by the MNCPPC FCP

3. Natural finer mutting shall be placed with scams parallel to the flow of traffic. Overlap fabric by 18" minimum at scams.

4. Natural fiber maning may be climinated by the direction of the MNCPPC FCP inspector.

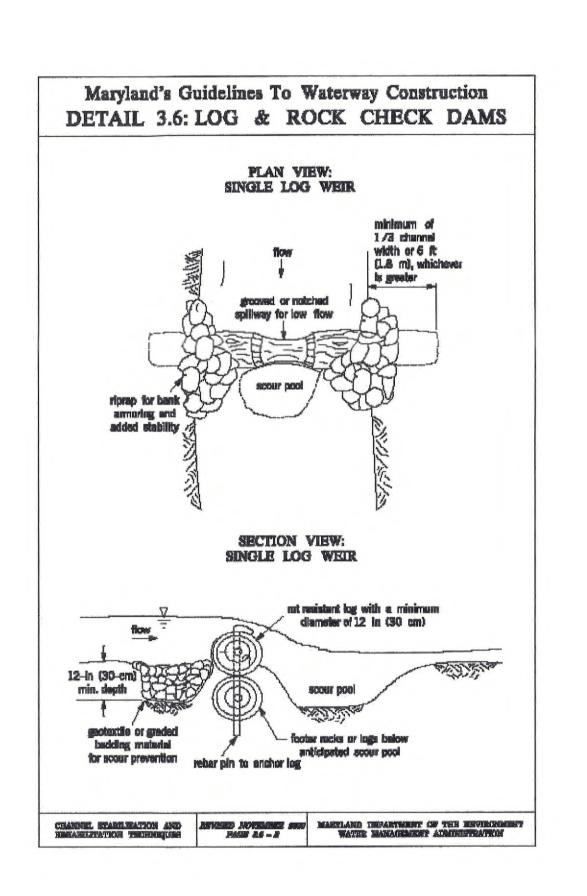
5. Contractor shall maintain mulch mat throughout the construction period.

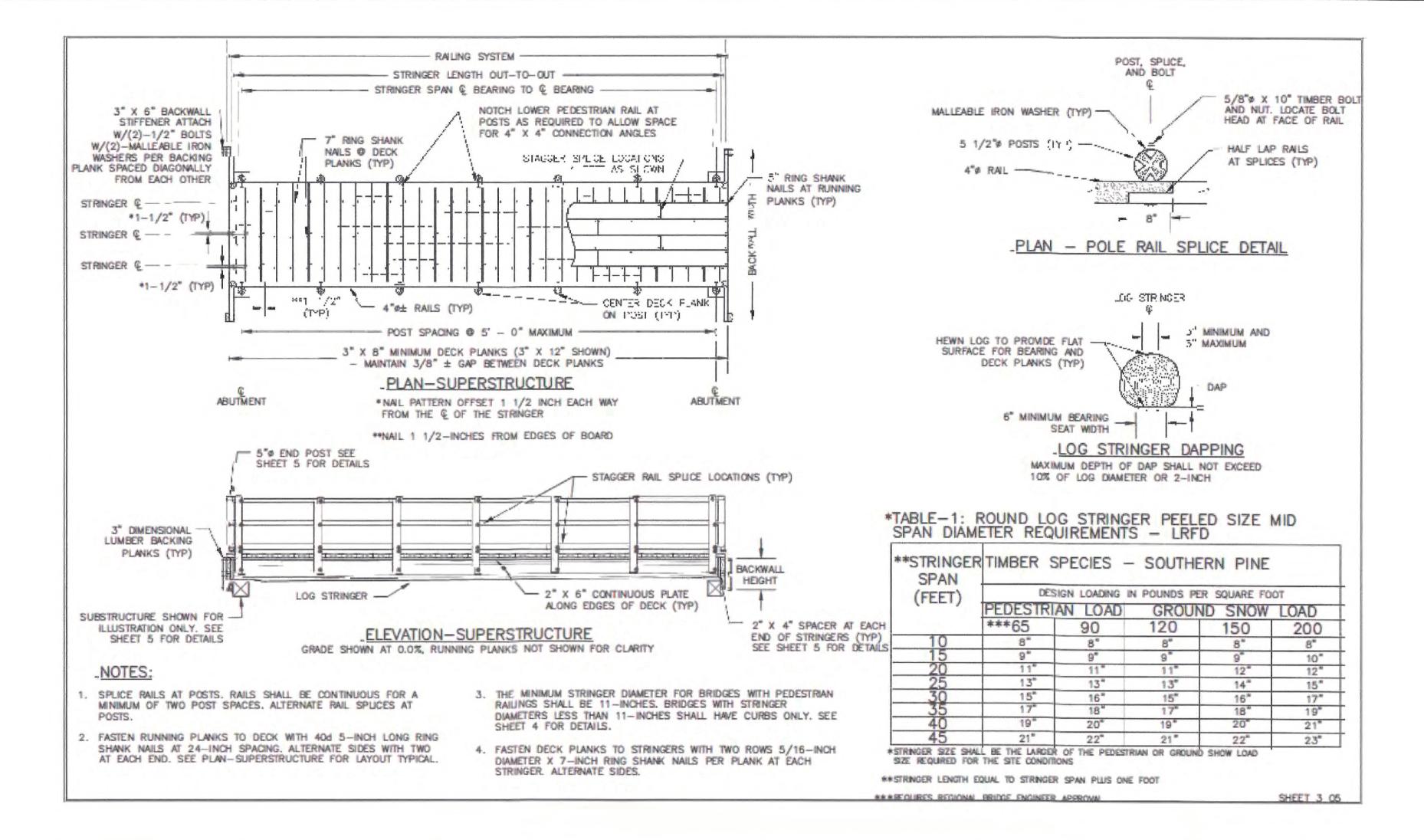
6. Upon competion of the project mulch can remain in place at a maximum depth of 2".

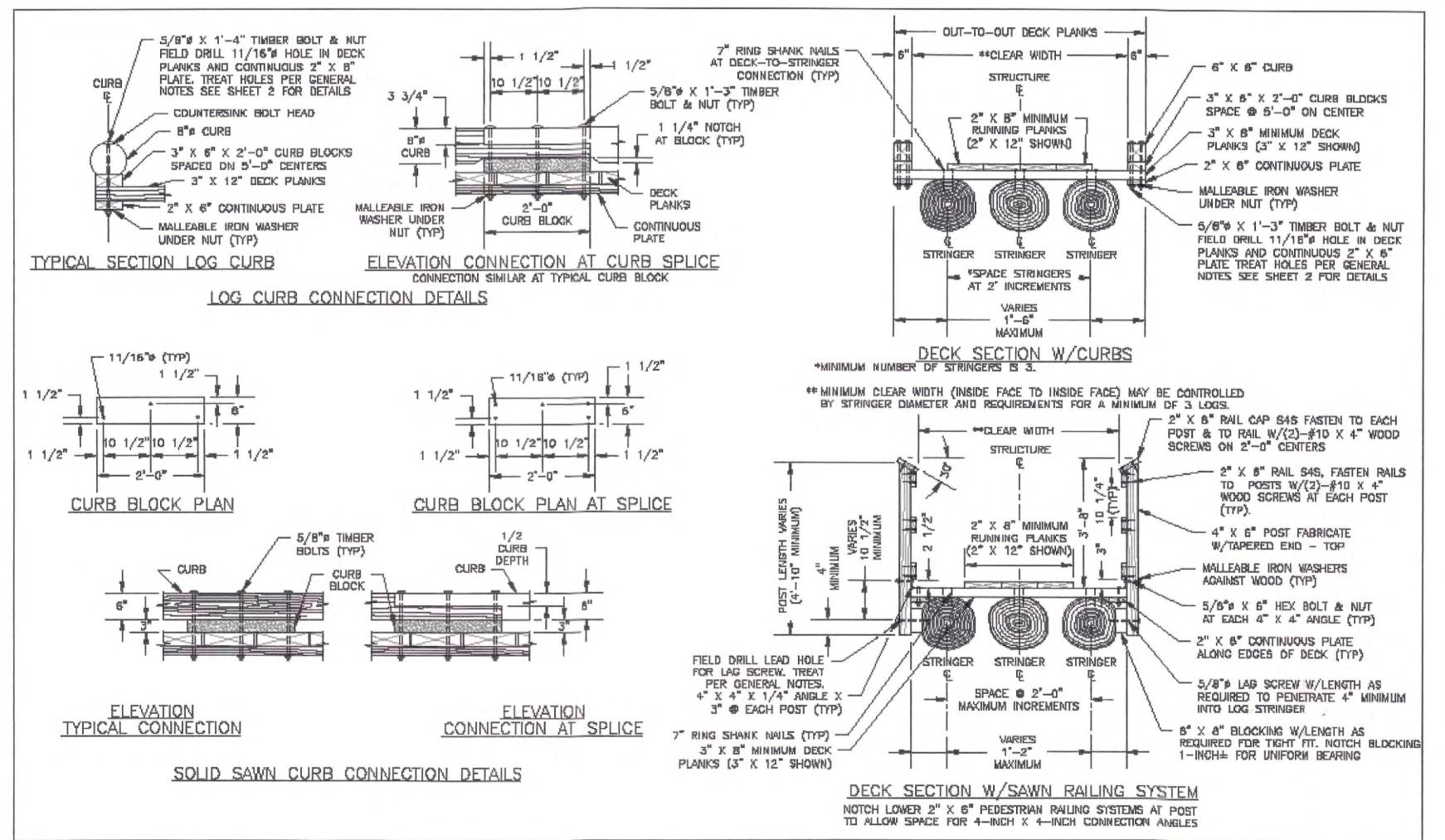
7. Searification of compacted mulch to occur upon removal of hard road at direction of the MNCPPC FCP Inspector. 8. The root protection system is designed to prevent the compaction of existing soils and tree roots using low pressure equipment which exerts no more from 8 psi. If the contractor intends to use any equipment with higher leads additional protection measures mest be provided.

# MULCH ACCESS ROOT PROTECTION DETAIL

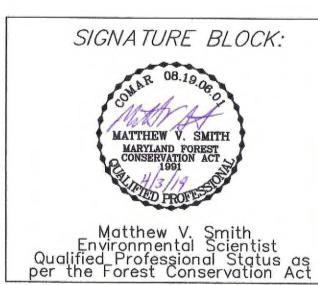
1 DEC 2011

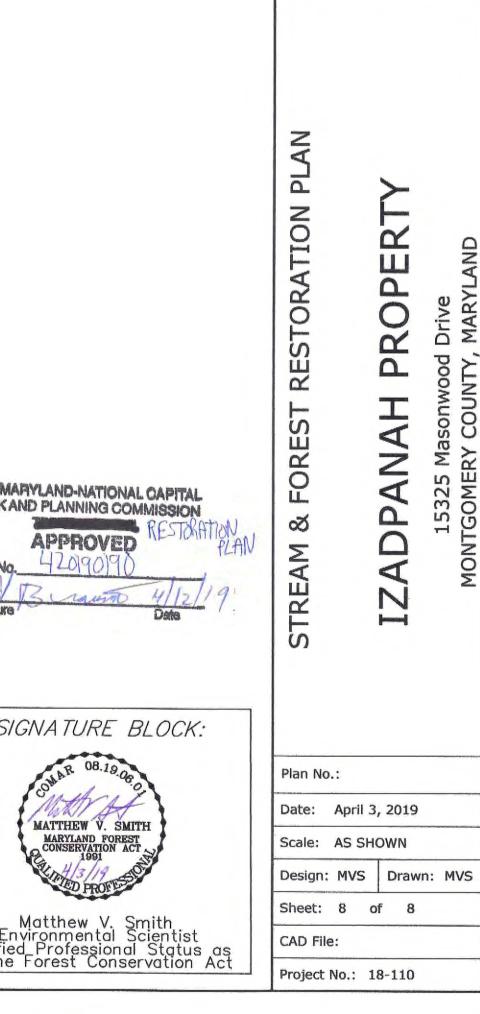












nning

Attachment 8

Parcel I.D. No. 06-02956126

# CONSERVATION DEED OF EASEMENT ("Easement") Category I

#### **DEFINITIONS**

<u>Grantor</u>: Allen A. Izadpanah and Hajar Izadpahan, fee simple owner(s) of real property subject to Plan approval conditioned on recordation of a Category I conservation easement agreement.

<u>Grantee</u>: Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission ("Commission").

**Property**: Lot 27, Block B, Subdivision: "Seneca Highlands", recorded among the Land Records of Montgomery County, Maryland, as Plat No. 18449; being all of the property acquired by Allen A. Izadpanah and Hajar Izadpanah, husband and wife, from Seneca Highlands, L.C., a Virginia limited liability company, by a deed dated October 20, 2004, and recorded among the aforesaid Land Records in Liber 28575 at folio 47.

<u>Planning Board</u>: Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission.

<u>Planning Director</u>: Director of the Montgomery County Planning Department of The Maryland-National Capital Park and Planning Commission, or the Director's designee.

<u>Plan</u>: Restoration Plan No. 420190190, approved by the Planning Director pursuant to Chapter 22A of the Montgomery County Code.

Exhibit A: Approved Restoration Plan No. 420190190.

**Exhibit B**: Description and sketch of the Easement over and across the Property.

PLEASE RETURN TO: Lerch, Early & Brewer, Chartered 7600 Wisconsin Avenue, Suite 700 Bethesda, MD 20814 Attn: Judith A. Hill, Paralegal

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#### **WITNESSETH**

The Easement reflects a grant of easement by Grantor to the Grantee.

WHEREAS Grantor (or Grantor's agent) has obtained approval of a Plan in accordance with Montgomery County, Maryland laws; and

WHEREAS, the Planning Board or Planning Director approved Grantor's Plan conditioned upon Grantor subjecting the Property or a portion of the Property to a conservation easement pursuant to the provisions of Montgomery County Code Chapter 22A (Forest Conservation); and

WHEREAS, the location of this Easement is as shown and described on Exhibit B attached hereto and incorporated by reference into the terms of this Easement; and

WHEREAS, the purpose of this Easement is to protect existing and future forest cover, individual trees, streams and adjacent buffer areas, wetlands and other sensitive natural features, and to maintain existing natural conditions to protect plant habitats, water quality and wildlife; and

WHEREAS, the purpose includes preservation of the natural beauty of the portion of the Property subject to the Easement ("Easement Area") and prevention of any alteration, construction, or destruction that will tend to mar or detract from such natural beauty; and

WHEREAS, the purpose also includes the protection and preservation of natural features within the Easement Area, which efforts are consistent with the terms and conditions of the approved Plan and applicable law; and

WHEREAS, the Grantor and Grantee (collectively referred to as the "Parties") intend for the conditions and covenants contained in this Easement to run with the land in perpetuity and to be binding on all subsequent owners and occupants of the Property; and

WHEREAS, the Grantor intends that a servitude be placed upon the Property to create a conservation benefit in favor of the Planning Board.

NOW, THEREFORE, the Grantor has executed this Easement for no monetary

consideration but for the purpose of ensuring compliance with a Plan approved in accordance with Montgomery County law and placement of appropriate measures for the long-term protection of conservation areas in accordance with the Montgomery County Code. The Grantor does hereby grant and convey unto the Planning Board, in perpetuity, an easement on the Property of the size and location described in Exhibit B attached hereto and incorporated by reference into the terms of this Easement, and further described on the Plan, of the nature and character described herein. This Easement constitutes a covenant running with the title of the land and is granted to preserve, protect, and maintain the general topography and natural character of the land. The Grantor does hereby waive any challenge to the validity of this Easement whether or not shown on a plat. Grantor, its heirs, successors and assigns covenant to abide by the following restrictions within the Easement:

- 1. The foregoing recitals are agreed to and incorporated herein and shall be binding upon the Grantor.
- 2. No living trees or shrubs (of any size or type) shall be cut down, removed, or destroyed without prior written consent from the Planning Director. Diseased or hazardous trees or limbs may be removed to prevent personal injury or property damage after reasonable notice to the Planning Director, unless such notice is not practical in an emergency situation or removal of trees is undertaken pursuant to a forest management plan approved by the Planning Director.
- 3. No plant materials (including, but not limited to brush, saplings, undergrowth, or non-woody vegetation) shall be mowed or cut down, dug up, removed or destroyed unless removed pursuant to the terms and conditions of an approved forest management plan. Noxious weeds (limited to those weeds defined as "noxious" under Maryland State or Montgomery County laws or regulations and "exotic or invasive plants" in the Montgomery County *Trees Technical Manual*) may be removed as required by law, but the method of removal must be consistent with the limitations contained within this Easement. Vegetation removal shall be limited to noxious weeds and exotic and invasive plants only, and protective measures must be taken to protect nearby trees and shrubs.
- 4. No mowing, agricultural activities, or cultivation shall occur. Grantor may replace dead trees or undergrowth provided that new plantings are characteristic of trees or undergrowth native to Maryland.
- 5. Nothing in this Easement precludes activities necessary to implement afforestation or reforestation efforts pursued pursuant to the Plan, and associated maintenance

agreement and Sediment and Erosion Control Plan approved by the Department of Permitting Services, implemented under Chapters 19 and 22A of the Montgomery County Code.

- 6. The following activities may not occur at any time within the Easement Area:
  - a. Construction, excavation or grading (except for afforestation and reforestation efforts conducted in compliance with the approved Plan).
  - b. Erection of any building or structural improvements on or above ground (except for a pedestrian footbridge that crosses the stream channel, as show on the Plan), including (but not limited to) sheds, dog pens, play equipment, and retaining walls.
  - c. Construction of any roadway or private drive.
  - d. Activities which in any way could alter or interfere with the natural ground cover or drainage (including alteration of stream channels, stream currents or stream flow), except in connection with the stream restoration plan approved by the Maryland Department of the Environment ("MDE").
  - e. Industrial or commercial activities.
  - f. Timber cutting, unless conducted pursuant to an approved forest management plan approved by the Planning Director and the Department of Natural Resources for the State of Maryland.
  - g. Location of any component of a septic system or wells.
  - h. Excavation, dredging, or removal of loam, gravel, soil, rock, sand, and other materials (except for work in connection with the Plan and stream restoration plan approved by MDE).
  - i. Diking, dredging, filling, or removal of wetlands (except for work in connection with the stream restoration plan approved by MDE).
  - j. Pasturing of livestock (including horses) and storage of manure or any

other effluent.

- k. Stream alteration (except for work in connection with the stream restoration plan approved by MDE).
- 7. Nothing in this Easement shall prevent construction or maintenance of stormwater structures and/or facilities or other utilities, including, but not limited to water and sewer lines, on, over, or under the Easement Area, if said structures, facilities, or utilities are (i) shown on the approved Plan and (ii) approved by the appropriate governing bodies or agencies in accordance with applicable laws and regulations.
- 8. No dumping of unsightly or offensive material, including trash, ashes, sawdust, or grass clippings shall occur within the Easement Area. Natural biodegradable materials may be allowed in a properly located, designed, managed, and maintained compost pile, provided the activity does not damage adjacent trees. Upon prior written approval of the Planning Director, suitable heavy fill and other stabilization measures may be placed to control and prevent erosion, provided that the fill is covered by arable soil or humus and properly stabilized.
- 9. Fences consistent with the purposes of the Easement may be erected within the Easement Area if shown on the Plan or only after written approval from the Planning Director.
- 10. Unpaved paths or trails consistent with the purposes of the Easement may be created only after written approval from the Planning Director. Other paths or trails may be allowed only if shown on the Plan.
- 11. All rights reserved by or not prohibited to Grantor shall be exercised so as to prevent or minimize damage to the forest and trees, streams and water quality, plant and wildlife habitats, and the natural topographic character of the land within the Easement Area.
- 12. Grantor authorizes Planning Board representatives to enter the Property and Easement Area at their own risk and at reasonable hours for the purpose of making periodic inspections to ascertain whether the Grantor, its heirs, successors, or assigns, have complied with the restrictions, conditions, and easements established herein. This Easement does not convey to the general public the right to enter the Property or Easement Area for any purpose. This Easement does not restrict or enlarge access to the general public in common open space held under community or homeowner association control beyond any access rights created by applicable community or homeowner association covenants and by-laws.

- 13. The Grantor does hereby waive any challenge to the validity of this Easement in the event it is not shown on a plat, and Grantor agrees to make specific reference to this Easement in a separate paragraph of any subsequent deed, sales contract, mortgage, lease or other legal instrument by which any possessory or equitable interest in the Property is conveyed.
- 14. No failure on the part of the Planning Board to enforce any covenant or provision herein shall waive the Planning Board's right to enforce any covenant within this Easement.
- 15. Upon finding a violation of any of the restrictions, conditions, covenants, and easements established by this Easement, the Planning Director and the Planning Board shall have the right to enforce such provisions in accordance with any statutory authority (including, if applicable, the imposition of civil monetary fines or penalties in amounts and by such means as may be promulgated from time to time). The Planning Board also may seek injunctive or other appropriate relief in any court of competent jurisdiction, including the right to recover damages in an amount sufficient to restore the property to its original natural state, and Grantor agrees to pay for court costs and reasonable attorney fees if the Planning Board successfully seeks judicial relief.
- 16. All written notices required by this Easement shall be sent to the Planning Director, M-NCPPC, 8787 Georgia Avenue, Silver Spring, Maryland 20910.
- 17. Nothing contained in this Easement shall be, or be deemed to be, a gift or dedication of any part of the Easement Area or the Property to the County or to the general public. This Declaration does not confer on the general public any rights or ownership or control of the Easement Area.

TO HAVE AND TO HOLD unto the Planning Board, its successors and assigns forever, this Grant shall be binding upon the heirs, successors and assigns of the Grantor in perpetuity and shall constitute a covenant real running with the title of the Property.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Grantor has cauby itself or its duly authorized officer as of this 30	sed to be executed this Easement to be signed by day of April, 2019.
WITNESS: Danie for Usan Print:	GRANTOR:  By: Allen A. Izadpanah
STATE OF MARYLAND	
COUNTY OF Prince Deorges	_ to wit:
I HEREBY CERTIFY that on this 30 Notary Public in and for the State and Countain Izadpanah, known to me (or satisfactorily proven) the foregoing and annexed instrument and acknow for the purposes therein contained.  IN WITNESS WHEREOF, I hereunto set in	to be the person whose name is subscribed to rledged that said individual executed the same
My Commission Expires: Brenda J. Phillips My commission expires 08/ Prince George's County, Mi	11/2020 D
PRIZONO CORGE'S COUNTY	

IN WITNESS WHEREOF, Grantor has cau by itself or its duly authorized officer as of this 30th	sed to be executed this Easement to be signed day of, 2019.
WITNESS:  Print:  Witness:  Pan Ch Same for Chism	GRANTOR:  By: Majar Izadpanah
STATE OF MARYLAND	
COUNTY OF Prince Dense's	_ to wit:
Notary Public in and for the State and County afor known to me (or satisfactorily proven) to be the foregoing and annexed instrument and acknowledge the purposes therein contained.	ne person whose name is subscribed to the ged that said individual executed the same for
IN WITNESS WHEREOF, I hereunto set m	ly hand and official seal.
My Commission Expireda J. Phillips  My commission expires 08/11/202  [NOTARIAL SEALPrince George's County, MD	O Burland. Phillips
PRINCE ORGE'S COUNTY	Approved for legal sufficiency Office of the General Counsel, MNCPPC

#### ATTORNEY OR GRANTOR CERTIFICATION

In accordance with Section 3-104(f)(1) of the Real Property Article of the Annotated Code of Maryland, I certify that this instrument was prepared by the undersigned, an attorney admitted to practice before the Court of Appeals of Maryland.

Elizabeth C. Rogers

#### Exhibit A

Approved Forest Restoration Plan

**BOOK: 57557 PAGE: 190** 15335 M850ЛИОО DHVE 36 Baltimore Street Serland, Maryland 21502 1187-224-7611 YTA39089 HANA90ASI esiales ininsmuoriant d grivites OLL Pluning and Design, LLC NAJ9 NOTTAROTES TESTOR & MASATE Herborners Amerika.
Lengal A. PARCEL "A" OPEN LA OPEN-RESIDENTIAL æ STREAM & FOREST RESTORATION PLAN PARCEL 'B" Perce S Perce S L 1990 F. (0) OTÁL PROPERTY OVERALL PROPERTY MAP SCALE: 1"=100' PEC. . . IZADPANAH PROPERTY OPEN-RESIDENTIAL REES R. Vicent & A. Baue 1900 Index Run C. L.Mort F.ST F.DREL T NOTE: Category I Forest Conservation Easements are to be established pursuant to a Planning Department approved Category I Conservation Easement agreement for Settlement Agreement prior to MNCPPC inspector initial acceptance of the forest planting. NOTE: Existing improvements, i.e. existing fences, both metal and wooden are to remain within the CAT I Conservation Essements as shown. Furthermore, future maintenance and repairs to the existing fencing is allowed, A small, wood chip based foot path may be installed within Easement Area 3 sometime in the future. EASEMENT MARKERS CATEGORY I FOREST CONSERVATION EASEMENT TREE PROTECTION NOTES & DETAILS BRIDGE DETAILS PLANTING NOTES & DETAILS LEGEND PLAN VIEW - SITE LAYOUT GENERAL PROJECT NOTES APPROVED NRI-FSD VICINITY MAP NOTES & DETAILS DESCRIPTION COVER SHEET 13 735 / Astronomy Device SIGNATURE BLOCK

SHEET

General Notes:

The proposed stream restbration utilizes Natural Channel Design (NCD) methodology.

Design parameters are derived from data collected from a reference reach stream from within the same hydro-physiographic region, with a similar valley type, watershed type, and size as the unstable reach. Measured morphological variables of the reference condition are presumed to define a natural, stable channel dimension, pattern, and profile.

The project is designed as a Priority II Restoration where a bank-full channel will be constructed primarily within the existing channel and/or floodprone area. In-stream structures will be installed to stabilize the channel, providing grade control and to reduce near-bank stress. Bloengine-ring applications such as live stakes and jute matting will be utilized to provide additional stabilization through vegetation. Rigarian plannings will be installed in the floodprone areas immediately following the restoration construction.

The new channel will have a total stream length of approximately 345 linear feet. Proposed in-stream structures consist of log-drop structures. These structures will provide for and maintain a stable stream dimension, pattern, and profile. Additionally, these structures will enhance in-stream aquatic habitat. The native vegetated buffer stabilize the new channel.

Excavated Material:

Whereavered materials (if available) shall be stockpiled in designated stockpile areas within the limits of construction. The stockpiled material will be tested using Maryland benature in or fransportation testing procedures, and if the material passes MDOT specifications the stockpiled material will be used later as backfill for the channel. Oncopienia and if suitable behind the structures. All additional fill material shall be spoiled on-site at the direction of the inspector. The contractor is responsible for the stabilization of all spoil areas, which includes seeding, mulching, and temporary sit tence.

Logs for Structures:
The logs with root wads attached shall range in length from 12 to 15 feet in length and 12.
The logs with root wads attached shall range in length floshly must for the 24 inches or greater in diameter measured to at breast height (D8H) when used for the root wad portion of the structure. Materials shall be furnished from on-or-off-site source selected by the contractor and approved by the designer or inspector. The logs used in the structures shall be green, free of decay and straight with no sweeps or forks.

Geotextile:

All geotextiles shall be listed in the National Transportation Product Evaluation Program (NTPEP) for geotextiles. The geotextile shall be manufactured from fibers consisting of long chain synthetic polymers, composed of a minimum 85 percent by weight of polyolefins or polyesters. The fibers shall be formed into a stable network so that the fibers of years retain their drimensional stablish relative to each other, including salvages. Only those geotextiles that have been tested by NTPEP will be considered candidates for use.

<u>Subsurface:</u>
No subsurface information is made available to the contractor for this project. The contractor is responsible for all subsurface investigations and shall be held accountable for any anangas during the implementation of the project.

<u>Udities:</u>
The contractor shall be responsible to field identify all utilities inside the construction corridor. The contractor shall follow all OSHA and utility owner guidelines when working near utilities. It is required that Miss Utility of Maryland be contacted at 1-800-257-7777 every 8 business days to comply during the excavation period.

Construction Equipment:
The Contractor will be required to choose and furnish appropriate equipment for construction.
The Contractor will be required to provide management, labor, material, and all other times necessary for the stream restoration work, including tree & shrub planting and bloengineering material installation. The Contractor is required to install in stream structures using an appropriate-sized tracked excavator with an hydraulic lumb to move nocks and trees as sized in the Drawing and Construction Specifications to by hand if applicable. All earth moving equipment shall be serviced prior to start of work each morning. Equipment shall be maintained to prevent lock of on and turbicant spalls within the wiching of the stream. It is the responsibility of the contractor to contain and clean up any spills within the project area. A spill kit is required on site for the duration of the project.

<u>Site/Easement.</u>
Contractor is responsible to keep all public roadways and drainage systems free from dirt, mud, and construction debrits at an times.
Contractor is responsible for all repairs to any items damaged during construction, including but not limited to: fences, roads, utilities, parking lots, etc.

Erosion Control Measures During Construction:
During construction the contractor stable to responsible for installing additional sediment and
erosion control measures not shown on the plans. These may become evident only after
construction begins and may be required to control excess sediment as per consultation with designer. The contractor shall make every effort to minimize disturbance in the stream channel and in

gaining access toffrom work areas.

If fire shall be installed downstream of the construction area to reduce sedimentation.

Sift ence shall be installed downstream of the construction area to reduce sedimentation.

The contractor shall only conduct bank and streambed work that can be completed or stabilized within that working day, unless directed by the project manager or designer.

Erosion Control: All work shall be in compliance with regulations of the National Pollutant Discharge Elimination All work shall be in compliance with regulations of the MDE sediment and erosion control excavation and movement of soil materials shall be minimized to limit the area disturbed

as well as the time soils are left unprotected.

Thoughout the duration of the project, soil stockpile areas shall be stabilized with silf fance.

The contractor is responsible for the temporary and permanent protection of stockpile areas as well as as it soil intentionally transported from the site.

Salf lence shall be properly anchored in staging and stockpile areas to prevent enosion. Once staging and stockpile areas are no longer needed, contractor shall remove silf fence and grade, seed, and mulch all associated distribution. The contractor shall inspect daily and maintain continuously all erosion and sediment control measures until such time as permanent stabilization of exposed soil occurs. The contractor shall maintain dose contact with erosion control inspectors so that periodic inspections can be performed.

profitting the motion and sediment control measures shall be removed after final site stabilization or after temporary encion control measures are no longer needed. Site inspections shall continuou during this period until temporary seeding becomes established. Site inspections shall continuou during this period until temporary seeding becomes established. Where soil materials is transported onto a paved or public road surface, daily deaning is required and shall be completed prior to exiting the site. Soil materials shall be removed from the needs by shoveling or sweeping and transported to a sediment control disposal area. On pacted into soil by construction entrance or hau nead has been covered with soil or compacted into soil by construction traffe, it shall be brought back to its original elevation upon completion of the project.

Sediment and central soils or constructed in accordance with local, state, and federal erosion control regulations.

As soon as final grading is completed, structures are finished, and stabilization measures (matting) are installed, a mixture of grasses, sedges, forbs and shrubs will be plainted on all disturbed surfaces. Seed mixes shall consist of native species and exact specifications will be included in the construction plans. Seeded areas shall be mulched with straw. Local sources of plant materials shall be used if possible. All plantings must be approved by the

Woody plant selection was based upon native vegetation at the site and that observed in Woody plant selection was based upon native vegetation at the site and that observed in some streams under similar conditions. Woody species shall be planted after construction is complete and during the dormant period. Planting techniques may include bare root plantings complete and during the dormant period. Plantings are intented to promote soil stabilization, or containers, as well as live staking. Plantings are intented to promote soil stabilization, structure stabilization, terrestrial wildlife habitat, and riparian shade.

General Sequence of Construction:

1. The site shall be reviewed by the engineer, project manager, and contractor for any unforescen hazards, areas and objects to be avoided and protected during construction (trees, etc.). These areas shall be marked/flagged as they are identified.

76 Ballinore Street Cumbertand, Maryland 21502 SOV-724-7611

Planning & Environmental Service. OFF Learning and Design, LLC

The construction manager, engineer, and the contractor shall identify, confirm, and mark the focation of the material storage and straging area(s), and confirm, and mark the focation of the material stronges and straging access road. This work shall be done before construction materials are brought to the project site and before construction begins. Expirement shall be mobilized to the site. This work will be done before construction materials are brought to the construction materials are brought to the project site and before construction.

begins.

5. MDE Compliance Division will be notified at least 5 days before construction begins and MISS UTILITY will be contacted and all utilities will be marked prior

The state of the s

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organs and wisso III.11 Yaw to contacted and all utitities will be marked prior to any controction beginning.

6. Install still tence around any stockpie, staging, and other eness designated on the plan. Temporary stockpile and staging areas shall be used to store materials needed for the completion of the project, such as: shrudure logs, store, geo-textile fabric, fill material, etc.

7. The equipment shall be stored in the staging area shall be used to store materials needed for the completion of the project, such as: shrudure logs, store, geo-textile fabric, fill material, etc.

8. The stream develor habitation. Pump-around predicts shall be implemented following equipment maintenance and repails shall be performed in this area.

9. The stream diversion and develoring plan shall be implemented following and dewater the work area. The engineer, inspector, and contractor shall determine and agree to the upper and lower limits of the pump around process.

9. Once dewatered, channel work my commence with grading, fill, and structure installation. Structures are to be installed where indicated on the plan and profile sheets. Construction of the channel and structures shall proceed from upstream to dewaitsman. Field modifications, both horizontals and vertical, may be required and shall be approved by the engineer and/or inspector.

10. Structures shall be built to appropriate specifications as shown in the structure typical drawings. Non-woven geosteritie will be placed behind all log structures. Wood and rock shalb be used on the first 10 to 12 of the backfill depth and bed material will be used to backfill the rest of the structure. Live fabric shall be placed where indicated for bank stabilization. After placement of each in-stream structures and/or channel gost installation shall be affectiven in shall be graded, seeded, and mulched.

12. Any adjustment to the structures and/or channel post installation shall be disturment as shall be unitared and structure installation shall be graded as storeded and mulched

BOOK: 57557 PAGE: 191

12325 МВБОПИТУ, МАВУГАИD

IZADPANAH PROPERTY

STREAM & FOREST RESTORATION PLAN
GENERAL CONSTRUCTION NOTES







Par Ib.:

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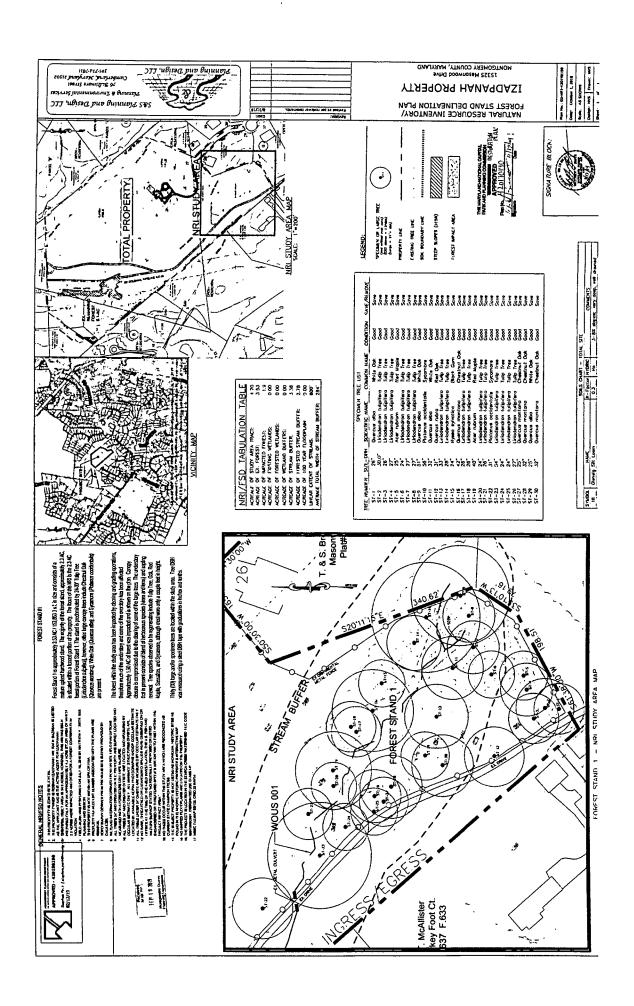
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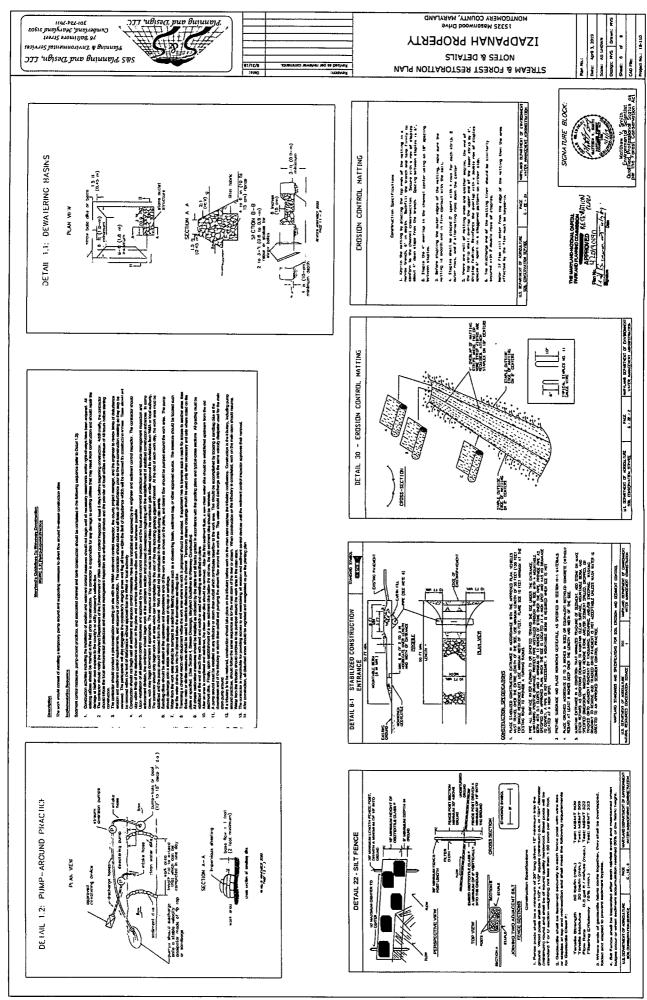
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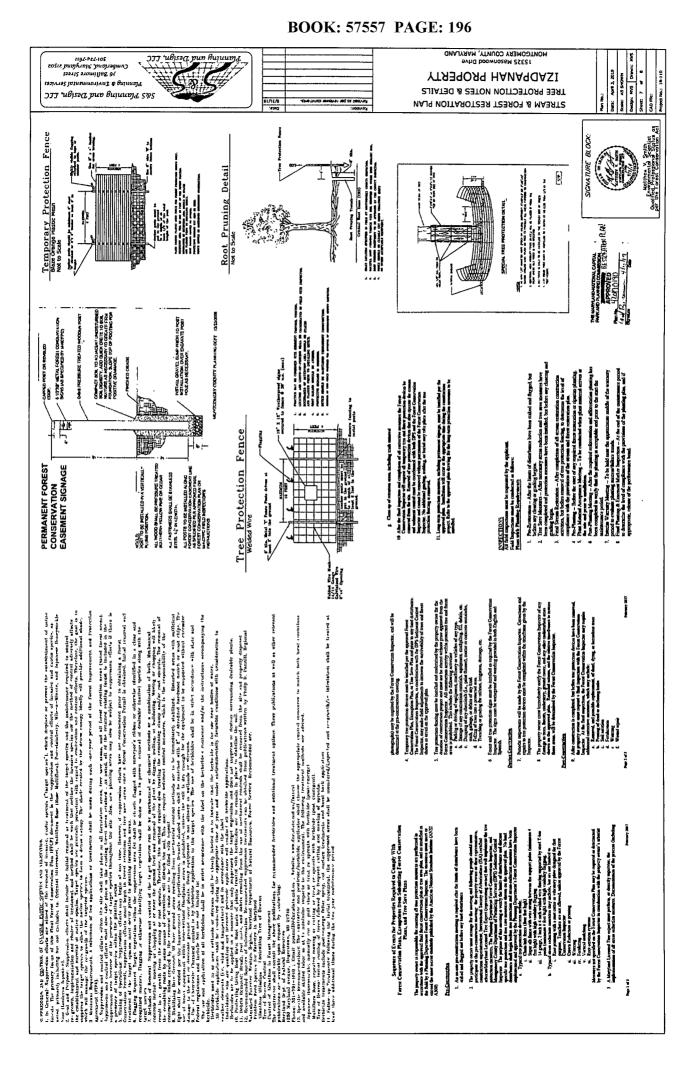


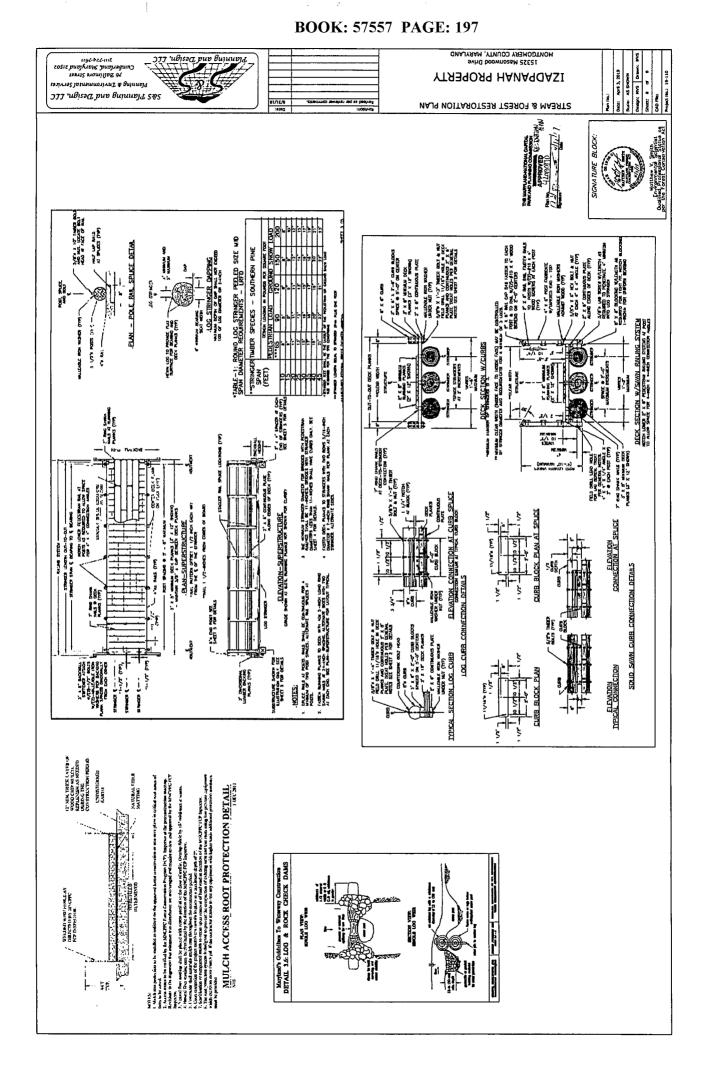
**BOOK: 57557 PAGE: 193** MONTGOMERY COUNTY, MARYLAND
15325 Mesonwood Drive 76 Baltimore Street Cozis andiyind, Maryland 21502 YTAB90A9 HANA90ASI Planning & Environmental Service. DAREN & FOREST RESTORATION PLAN LYOUAL MASATE - WILV NAJ9 S&S 'Planning and 'Design, LLC SHADE TREE PLANTINGS CONTAINER PLANT SIGNA TURE BLOCK ECU, RIPARIAN 0 Bloc "Seneca Highld Plat No. 184 -CLASS II RIPRAP APRON SANDBAG DIKE TREE PLANGING NOTE TREE PLANGING SHALL BE INSTALLED AROUND THE FOLLOWING TREES ST-6, ST-7, ST-8, ST-11, & ST-13 Lot 26, -CLEAN WATER LIMITS OF CHANNEL GRADING BLEND PROPOSED CHANNEL WITH EXISTING CHANNEL T-12 et Deuk T-23. METAL COLVERT CLASS I RIPRAP INLET PROTECTION

**`** ഗ

BOOK: 57557 PAGE: 194 15325 Мазопиооф Drve Plannia & Zinvinonnanial Sarvica 76 Balisone Staves 507-25-100 507-25-100 Design: HVS - Drawn YTA390A9 HANA9QASI PLANTING NOTES & DETAILS S&S Planning and Dosign, LLC NAJ9 NOITAROTEST RESTORATION PLAN Matthew V. Smith Enwomental Scientist Occilied Professional Status of per the Forest Consorvation Act SIGNA TURE BLOCK: Tree Planting Detail Pool Section TYPICAL LIVE STAKE DETAIL TYPICAL CHANNEL SECTIONS 20 (60. 588) altered cololylown Sandbag Dike Detail A PARTY AND THE Riffle Section NMER'S CERTIFICATE SECTION PROFILE Shrub Planting Detail Tion P. F. The among and invasive plant growth shall be eradicated using an ecceptable wave numeron consequence. The among an ecceptable wave numeron consequence of the consequ A maintenance program will be implemented to employ proven management techniques and monitor the restoration site to eathere the goal of 17% of the \*-inch caligor planted trees, 100% of the 2-fact caligor planted trees, or 100% of the 1,5-dat office trees, must be also and vigorous at the end of the two-year maintenance period. . The plant species required are usually not available from standard landscape nursery sources. The contractor half make errangements with competent wetland restoration sources to ensure a supply of the required material. Bed Preparation become with the exception of removing all trash and debts prior to beginning planting polariting polariti . A pre-planting meeting shall be conducted with the MNCPPC forest conservation inspector prior optaining. Meeting attendees shall include at a minimum, the landscaper and the owner or owner's repres-). Plants shall be planted according to the spacing indicated on the plant schedule within the designated All containertized plants shall be installed between March i to May 30 or September 1 to October 30.
 Live stakes shall only be installed while dormant, typically other October 31. Plant material shall be planted in existing soil with each planting pit excavated to 1 1/2 times the width the entire not mass of the plant. The representative retains the right to inspect the storage site, and plants prior to delivery to the site. The root mass shall be placed in the planning pit and excavated soil shall be placed around the root nass and tamped to fill all voids and air pockets. Plant material will be inspected by an authorized representative prior to planting.All plant material demend unacceptable due to damage or poor health will be required to be replance with acceptable plant material by the contractor. Plant materials must be selected from certified nursaries that have been inspected by appropriate state or federal agencies. All planting stock shall be protected from surscald, desiccation, and structural damage during a protection to the site. Delivery of materials will be now some when too to planting. Materials held be not some years until ready for places. Materials held be cook, shaded areas until ready for places. Planting shall commence after final grading. All container plant material shall be installed between Harch 1 to May 30 or September 1 to October 30. Live stakes shall only be installed while dorman 2. All plant material shall conform to the current issue of the American Standard for Nursery Stock bublished by the American Association of Nurserymen, except where otherwise noted. Vogetation demonstrating immediate stress or dieback will be replaced. In addition, soil and straints factors will be analyzed in relation to plant growth. The following management techniques be utitized. . Final cleanup shall be the responsibility of the contractor and consist of removing all trash and naterials incidental to the project and the proper disposal of the material off-site. Planting materials will consist of containes grown shoubs and trees. All stock with be blanting as pecifications will be blanting as pecifications that be returned. To effectively establish a constructed stable channel, the proposed restoration sits requires the exception of soil gard now. The proposed restoration will be graded to the specified devestions on the Grading Plan, Cross Sections & Profile. A. Replace dead or dying plant species with same species or approved alternative. B. Remove debris that impairs plant growth quarterly, during the growing season. The contractor shall stake the locations of each planting areas. The locations shall be field verified by the MNCPPC forest conservation inspector prior to planting. CLASS II RIPRAP APRON SECTION NOT TO SCALE Clearup procedure activities shall not damage existing plants. . Botanical nomendature is according to Hortus III. Plant Maintenance and Management V. Planting Specifications Planting Schedule Grading Criteria A. Plant Materials The tarm Seeding, Final Cover or Stabilization shall include establishment of a stable grass cover according to the 2011 Manyland Standards & Specifications for Soil Erosion & Sediment Control Manual Planting Zone B
Riparlan Seed Mixture
Containerized Plant Material
Temp. & Perm. Seed Mixture 2. It is the compactor responsibility to inserted it enceto control devices perfecting and after the service control devices perfecting the service control devices respected entitial. Necessary repairs to maintain the effectiveness of the encetor control devices that the meade immediately. This maintenance will include the repair of measures damaged by any subcontractor. Temporary Seeding Barley or Oats at 96 habac or other approved contractor's mix
Riparian Area Errst Mix 178 or Approved Equivolent at 15 librac.
(Riparian Area is defined as the stream banks and overbank areas within 20 from top of bank.) 8. Temporary erosion control nessures are not to be removed unit all disturbed areas are stabilized. After completion of abilitation, all measures are removed within 30 days. Trapped sediment shall be spread and seeded. 5. Permanent soil stabilization shall be applied to bare areas within seven days of reaching fine grade. No disturbed area will be denuded for more than 28 calendar days. Temporary seeding shall be accomplished within seven days to denuded areas that may not be completed. This planting plan has been designed to provide bicenglnearing material & riparian regetation installation within the riparian corridor for the tradpanal Stream Restoration Project Modifications in the scope of the proposed project are to be reviewed and approved by the Maydand Department of the Environment prior to use. Vottes: Equivalent replacements may be approved by the MNCPPC Forest I Live stakes shall be installed during the fall dormant season. 10. Minimize the area disturbed to that area only required for construction. Native vegetation will be preserved to the machinum artent possible constituting with the use and development permitted and according to the 2011 Maryland Standards & Specifications to Solitonian Control Manual. If during construction, additional erosion control devices are found necessary by either the contractor, or applicable inspector, they shall be installed. -Zone A IZADPANAH STREAM RESTORATION PROJECT PLANTING NOTES & DETAILS ). All erosion and siltation measures are to be 'in place' prior to construction Planting Zone A.
Riparian Seed Mixture
Live Stakes
Fresion Control Matting
Container Material as appropriate Planting Zone Detail Limit of Disturbance delineated and marked.
 Enstained or sediment and ensown commit devices.
 Encarationing of planned is shouther established.
 A regesting partial properties and ensource commit at Vegeting pathing.
 Removal of sediment and ensoine control of sediment and ensoine control of sediments. Additional Soil and Erosion Control Notes Simplified Sequence of Construction - Zone A Common Name
Swamp White Oak
Red Maple. Surract
N. Red Oak
Black Gum
Sycamore
American Hembern
Spicebush
Tulip Poglar
Sirky Dogwood
Stramor Willow
Black Willow Seeding Schedule Plant Schedule -Zone B-INTRODUCTION 







#### **Exhibit B**

Page 1 of 7

Parcel I.D. No. 06-02956126

# Description of CATEGORY I CONSERVATION EASEMENTS Across the Property of the ALLEN A. IZADPANAH and HAJAR IZADPANAH Darnestown (6th) Election District Montgomery County, Maryland

Being 3 strips or parcels of land running in, through, over and across part of Lot 27, Block B, as shown on a plat of subdivision entitled "Lot 27, Block B, Seneca Highlands", and recorded among the Land Records of Montgomery County, Maryland, as Plat Number 18449; said Lot 27, Block B, being all of the property acquired by Allen A. Izadpanah and Hajar Izadpanah, husband and wife, from Seneca Highlands, L.C., a Virginia limited liability company, by a deed dated October 20, 2004, and recorded among the aforesaid Land Records in Liber 28575 at folio 47, and being more particularly described as Part 1, Part 2 and Part 3 as follows:

#### Part 1:

Beginning for said strip or parcel of land at a point on the northerly or North 87° 13' 48" East, 733.65 foot line of said Lot 27, Block B, distant 25.21 feet from the westerly end thereof; thence running with part of said lot line and binding on the 4<sup>th</sup> or South 85° 39' 30" West, 734.05 foot line as described in a deed from Gerald T. Christner and Dorothy E. Christner, to Guelda Miller, dated March 1, 2005, and recorded among the aforesaid Land Records in Liber 29431 at folio 509, the following course and distance:

- 1. North 87° 15' 31" East, 150.84 feet to a point on the westerly outline of a 75 foot wide Colonial Pipeline Right of Way Easement recorded among the aforesaid Land Records in Liber 5508 at folio 336; thence leaving said northerly lot line and running with the westerly outline of said pipeline easement, the following 5 courses and distances:
- 2. South 05° 28' 04" West, 23.91 feet to a point; thence
- 3. South 02° 45' 44" West, 280.44 feet to a point; thence
- 4. South 07° 59' 42" East, 342.96 feet to a point; thence
- 5. South 10° 04' 25" East, 174.52 feet to a point; thence

- 6. South 10° 31' 02" East, 84.34 feet to a point on the northeasterly line of a 20 foot wide Access Easement as shown on the aforesaid Plat Number 18449; thence running with part of the northeasterly line of said access easement, parallel to and 20 feet northeast of the southwesterly or North 40° 43' 03" West, 1814.04 foot line of said Lot 27, Block B, the following course and distance
- 7. North 40° 41' 20" West, 718.90 feet to a point on the southeasterly line of a 20 foot wide Access Easement as shown on the aforesaid Plat Number 18449; thence running with part of the southeasterly line of said access easement, parallel to and 20 feet southeast of the northwesterly or North 34° 44' 33" East, 421.29 foot line of said Lot 27, Block B, the following course and distance
- 8. North 34° 46' 16" East, 421.17 feet to the Point of Beginning; containing 193638 square feet or 4.44531 acres of land more or less.

#### Part 2:

Beginning for said strip or parcel of land at a point on the South 20° 11' 15" East, 340.62 foot line of said Lot 27, Block B, distant 108.89 feet from the southerly end thereof; thence running with part of said lot line and binding on the South 20° 11' 15" East, 340.62 foot line of Lot 26, Block B, as shown on a plat of subdivision entitled "Lots 24 thru 26 & 28 thru 34, Block B, Seneca Highlands", and recorded among the aforesaid Land Records as Plat Number 18450, the following course and distance:

- 1. South 20° 09' 32" East, 96.43 feet to a point on the northwesterly line of a 20 foot wide Equestrian Access Easement as shown on said Plat Number 18449; thence leaving said lot line and running with the northwesterly outline of said Equestrian Access Easement, parallel to and 10 feet northwest of the southeasterly or South 33° 10' 13" West, 79.16 foot line and the South 61° 38' 00" West, 198.51 foot line of said Lot 27, Block B, the following 2 courses and distances:
- 2. South 33° 11' 56" West, 84.06 feet to a point; thence
- 3. South 61° 39' 35" West, 165.41 feet to a point; thence leaving said Equestrian Access Easement and running across said Lot 27, Block B, the following 24 courses and distances:

- 4. North 33° 32' 28" West, 130.22 feet to a point; thence
- 5. North 26° 58' 20" West, 36.73 feet to a point; thence
- 6. North 19° 02' 58" West, 79.17 feet to a point; thence
- 7. North 22° 28' 16" West, 30.38 feet to a point; thence
- 8. North 27° 00' 13" West, 42.87 feet to a point; thence
- 9. North 31° 55' 14" West, 43.02 feet to a point; thence
- 10. North 48° 30' 02" West, 112.09 feet to a point; thence
- 11. North 38° 50' 15" West, 89.68 feet to a point; thence
- 12. North 48° 20' 13" West, 65.06 feet to a point; thence
- 13. North 57° 11' 15" West, 54.83 feet to a point; thence
- 14. North 49° 03' 50" West, 67.21 feet to a point; thence
- 15. North 41° 33' 38" West, 109.20 feet to a point; thence
- 16. North 47° 28' 52" East, 27.33 feet to a point; thence
- 17. South 42° 31' 08" East, 67.85 feet to a point; thence
- 18. South 50° 07' 24" East, 124.04 feet to a point; thence
- 19. South 52° 12' 52" East, 131.78 feet to a point; thence
- 20. South 57° 46' 08" East, 77.16 feet to a point; thence
- 21. South 59° 55' 00" East, 78.19 feet to a point; thence
- 22. South 59° 19' 53" East, 94.08 feet to a point; thence
- 23. South 58° 39' 51" East, 70.19 feet to a point; thence
- 24. South 42° 29' 27" East, 28.00 feet to a point; thence
- 25. South 53° 24' 04" East, 49.80 feet to a point; thence
- 26. South 88° 17' 39" East, 28.79 feet to a point; thence

27. South 75° 56' 46" East, 59.73 feet to the Point of Beginning; containing 92267 square feet or 2.11817 acres of land more or less.

#### Part 3:

Beginning for said strip or parcel of land at a point distant North 32° 09' 23" West, 134.80 feet from the southeasterly end of the southwesterly or North 40° 43' 03" West, 1814.04 foot line of said Lot 27, Block B, as shown on Plat Number 18449; said point also being on the northeasterly line of a 20 foot wide Access Easement as shown on said Plat Number 18449; thence running with part of the northeasterly line of said access easement, parallel to and 20 feet northeast of the southwesterly or North 40° 43' 03" West, 1814.04 foot line of said Lot 27, Block B, the following course and distance:

- 1. North 40° 41' 20" West, 797.13 feet to a point on the easterly outline of said 75 foot wide Colonial Pipeline Right of Way Easement recorded in Liber 5508 at folio 336; thence leaving the northeasterly line of said access easement and running with part of the easterly outline of said pipeline easement, the following course and distance
- 2. North 10° 31' 02" West, 21.64 feet to a point; thence leaving said pipeline easement and running across said Lot 27, Block B, the following 9 courses and distances
- 3. South 45° 07' 18" East, 97.43 feet to a point; thence
- 4. South 43° 12' 43" East, 132.94 feet to a point; thence
- 5. South 52° 06' 54" East, 149.76 feet to a point; thence
- 6. South 43° 04' 56" East, 145.69 feet to a point; thence
- 7. South 48° 08' 37" East, 73.77 feet to a point; thence
- 8. South 33° 19' 17" East, 55.75 feet to a point; thence
- 9. South 21° 25' 09" East, 85.94 feet to a point; thence
- 10. South 24° 41' 31" East, 87.35 feet to a point; thence
- 11. South 49° 16' 57" West, 10.00 feet to the Point of Beginning; containing 32340 square feet or 0.74241 acres of land more or less.

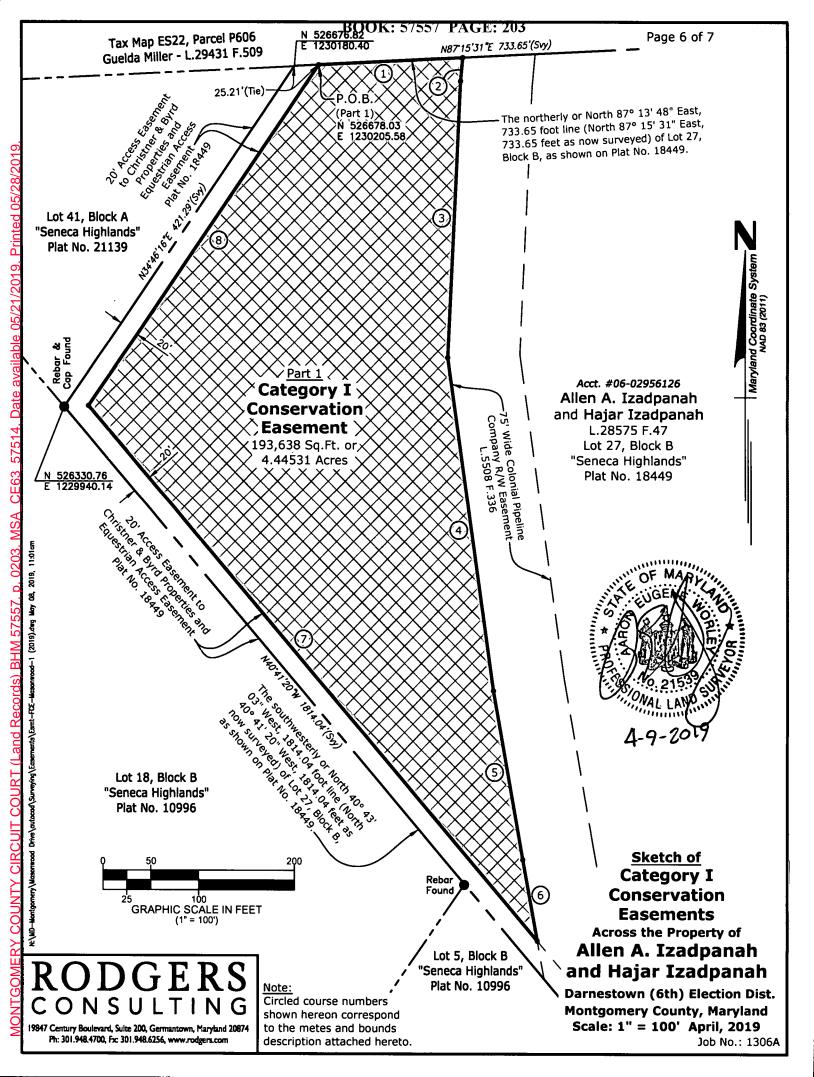
This description was prepared by Rodgers Consulting, Inc. (RCI), and is in the Maryland Coordinate System (NAD83(2011), SPCS zone 1900[MD], U.S. Survey Feet) based on static GPS observations post-processed by the National Geodetic Survey's Online Positioning User Service (OPUS). Measured points include RCI traverse station 9400. The combined scale factor (mapping scale factor x elevation scale factor) for the site is 0.99994545.

(9400: North 525166.961 East 1231589.446)

The undersigned, being a licensed surveyor, personally prepared or was in responsible charge of the preparation and the survey work reflected in this metes and bounds description, in compliance with the requirements set forth in "COMAR" Title 09, Subtitle 13, Chapter 06, Regulation .12.

(License Expiration Date: 12-23-2019)







#### State of Maryland Land Instrument Intake Sheet

Information provided is for the use of the Clerk's Office, State Department of Assessments and Taxation, and County Finance Office Only.

Certified By: Babra, Beant

Bellin

Approved on: 5/14/2019 8:35:08

AM

1. Type(s) of Instruments		rtgage		ation Deed of Easement (	Category I					
	Deed of Trust [ ]Lea	ise	[ ]Other	and the second s	AND THE COLUMN PROPERTY.					
2. Conveyance Type	Not a farm	Not a farm   Farm within five years								
Tou Evernation	Recordation Document not subject to recordation/transfer taxes.									
3. Tax Exemption (if Applicable)	State Transfer Document not subject to recordation/transfer taxes.									
Cite or Explain Authority	County Transfer			ot subject to recordation						
,	Considera	tion Amou	<u> </u>		***************************************	e Use Only:				
	Purchase Price/Consideration	\$ 0.00	Arit.	Transfer Tax Considerat		50.00				
	Any New Mortgage	\$ 0.00		X( 0)%		60.00				
4. Consideration and Tax	Balance of Existing Mortgage	\$ 0.00		Less Exemption Amount		,0.00				
Calculation	Other 1	\$ 0.00		Total Transfer Tax	·	00.00				
	Other 2	\$ 0.00		Recordation Tax Consid		80.00				
	Full Cash Value	\$		X(0) per \$500.00		50.00				
				TOTAL DUE		0.00				
	Amount of Fees:		Doc.1	Doc.2						
	Recording Charge		\$ 75.00	\$ 0.00		Agent				
	Surcharge		\$ 40.00	\$ 0.00		Babra, Beant				
	State Recordation Tax		\$ 0.00	\$ 0.00		Tax Bill				
5. Fees	County Transfer Tax		\$ 0.00	\$ 0.00		PAID FULL				
	State Transfer Tax		\$ 0.00	\$ 0.00		C.B Credit				
	Other 1		\$ 0.00	\$ 0.00						
	Other 2		\$ 0.00	\$ 0.00		Ag.Tax/Other				
	District		Pro	perty Tax ID No.(1)		Grantor Liber/Folio				
	06		02956126			28575/0047				
	. Map			Parcel No.		Var. LOG				
					ŀ	1				
	***************************************				J					
6. Description of Property	Subdivision Name Lot (3a)			Block (3b)						
SDAT requires submission of all application information. A	070-SENECA HIGHALNDS 27			S-54A(4)						
maximum of 40 characters will be	Sect/AR (3c)			Plat Ref.	1	SqFt/Acreage(4)				
indexed in accordance with the			La adda a da a da a da a da a da a da a	and being Convoyed!		J				
priority cited in Real Property			Location/Address of Property being Conveyed(2)							
Article 15325 MASONWOOD DR, GAITHERSBURG, MD 20878-3611										
Article						Water Meter Account Numbe				
Article Section 3-104(g)(3)(i)			RG, MD 20878-3611 erty Identifiers (if applica			Water Meter Account Numbe				
	C	ther Prop	erty Identifiers (if applica	able)						
	C  Residential [ X ] Non-Residen	ther Prop	erty Identifiers (if applica			Amount \$ 0.00				
	C Residential [X] Non-Residen Partial Conveyance ?	tial [	erty Identifiers (if application	able)						
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LR - Easement (No-Taxes) Recording 75.00 Fee Name: LZADPANAH

Ref:

LR - Easement

(No-Taxes) Surcharge

SubTotal: 115.00

115.00 Total:

05/14/2019 12:39 CC15-KM

#12129286 CC0602 -Montgomery

County/CC06.02.06 -

Register 06



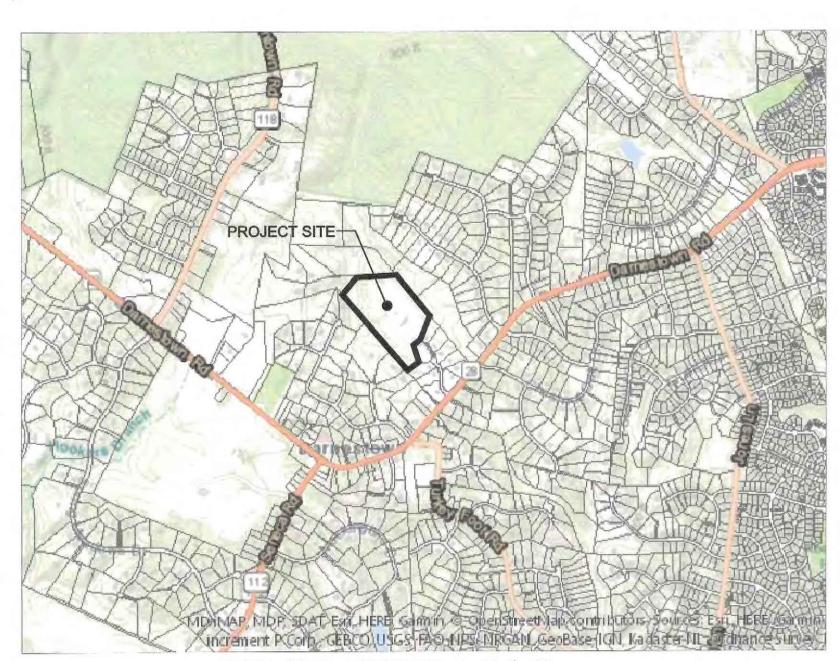
#### **DOCUMENT VALIDATION PAGE**

FOR CLERK'S USE ONLY (EXCLUDED FROM PAGE COUNT FOR CERTIFIED COPY)

#### **BARBARA H. MEIKLEJOHN**

Clerk of the Circuit Court for Montgomery County 50 Maryland Avenue Rockville, Maryland 20850 Recording and Licensing (240) 777-9470

# STREAM & FOREST RESTORATION PLAN



# VICINITY MAP

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL PROJECT NOTES
3	APPROVED NRI-FSD
4	PLAN VIEW - SITE LAYOUT
5	PLANTING NOTES & DETAILS
6	NOTES & DETAILS
7	TREE PROTECTION NOTES & DETAILS
8	BRIDGE DETAILS

NOTE: Existing improvements, i.e. existing fences, both metal and wooden are to remain within the CAT I Conservation Easements as shown. Furthermore, future maintenance and repairs to the existing fencing is allowed, A small, wood chip based foot path may be installed within Easement Area 3 sometime in the future.

	OWNER'S CERTIFICATE
Forest Restoration F	rees to execute all the features of the Approved Stream & Plan dated, including financial bonding tenance, and all other applicable agreements.
Owner's Name:	ALLEN IZADPANAY
	Printed Mame
Address:	15325 MASONWOOD DRIVE 703-589-3888 / allen@ vitelnet.com

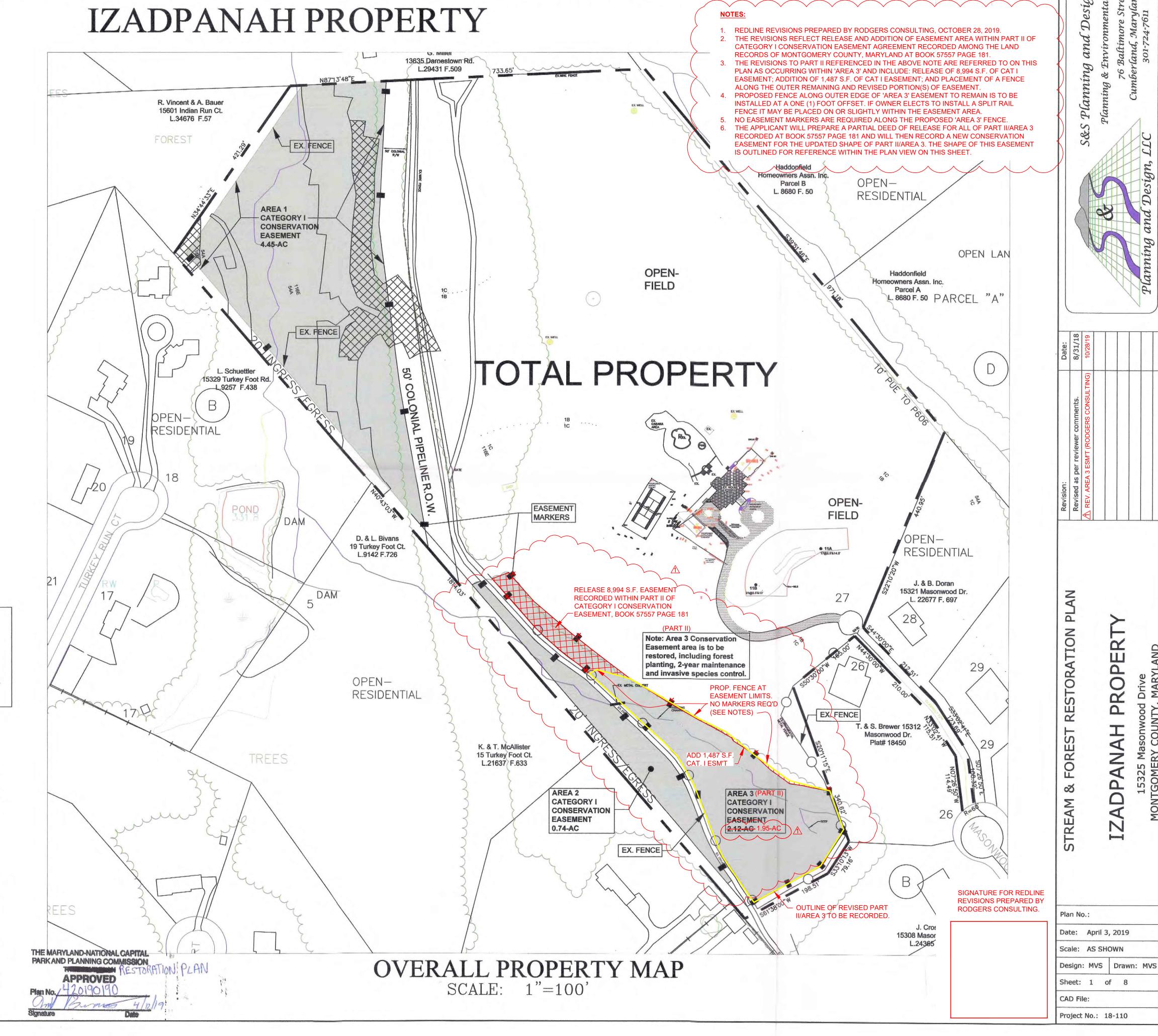
# LEGEND

EASEMENT MARKERS

CATEGORY I FOREST CONSERVATION EASEMENT



NOTE: Category I Forest Conservation Easements are to be established pursuant to a Planning Department approved Category I Conservation Easement agreement for Settlement Agreement prior to MNCPPC inspector initial acceptance of the forest planting.



#### General Notes:

The proposed stream restoration utilizes Natural Channel Design (NCD) methodology Design parameters are derived from data collected from a reference reach stream from within the same hydro-physiographic region, with a similar valley type, watershed type, and size as the unstable reach. Measured morphological variables of the reference condition are presumed to define a natural, stable channel dimension, pattern, and profile.

The project is designed as a Priority II Restoration where a bank-full channel will be constructed primarily within the existing channel and/or floodprone area. In-stream structures will be installed to stabilize the channel, providing grade control and to reduce near-bank stress. Bioengineering applications such as live stakes and jute matting will be utilized to provide additional stabilizaiton through vegetation. Riparian plantings will be installed in the floodprone areas immediately following the restoration construction.

The new channel will have a total stream length of approximately 345 linear feet. Proposed in-stream structures consist of log-drop structures. These structures will provide for and maintain a stable stream dimension, pattern, and profile. Additionally, these structures will enhance in-stream aquatic habitat. The native vegetated buffer will stabilize the new channel.

#### Excavated Material:

All-excavated materials (if available) shall be stockpiled in designated stockpile areas within the limits of construction. The stockpiled material will be tested using Maryland Department of Transportation testing procedures, and if the material passes MDOT specifications the stockpiled material will be used later as backfill for the channel, floodplain and if suitable behind the structures. All additional fill material shall be spoiled on-site at the direction of the inspector. The contractor is responsible for the stabilization of all spoil areas, which includes seeding, mulching, and temporary silt fence.

#### Logs for Structures:

The logs with root wads attached shall range in length from 12 to 15 feet in length and 12 to 24 inches or greater in diameter measured at breast height (DBH) when used for the root wad portion of the structure. Materials shall be furnished from on-or-off-site source selected by the contractor and approved by the designer or inspector. The logs used in the structures shall be green, free of decay and straight with no sweeps or forks.

#### Geotextile:

All geotextiles shall be listed in the National Transportation Product Evaluation Program (NTPEP) for geotextiles. The geotextile shall be manufactured from fibers consisting of long chain synthetic polymers, composed of a minimum 95 percent by weight of polyolefins or polyesters. The fibers shall be formed into a stable network so that the filaments or yarns retain their dimensional stability relative to each other, including selvages. Only those geotextiles that have been tested by NTPEP will be considered candidates for use.

#### Subsurface:

No subsurface information is made available to the contractor for this project. The contractor is responsible for all subsurface investigations and shall be held accountable for any damages during the implementation of the project.

#### Utilities:

The contractor shall be responsible to field identify all utilities inside the construction corridor. The contractor shall follow all OSHA and utility owner guidelines when working near utilities. It is required that Miss Utility of Maryland be contacted at 1-800-257-7777 every 8 business days to comply during the excavation period.

#### Construction Equipment:

The Contractor will be required to choose and furnish appropriate equipment for construction. The Contractor will also be required to provide management, labor, material, and all other items necessary for the stream restoration work, including tree & shrub planting and bioengineering material installation. The Contractor is required to install in stream structures using an appropriate-sized tracked excavator with an hydraulic thumb to move rocks and trees as sized in the Drawing and Construction Specifications or by hand if applicable. All earth moving equipment shall be serviced prior to start of work each morning. Equipment shall be maintained to prevent fuel, oil and lubricant spills within the vicinity of the stream. It is the responsibility of the contractor to contain and clean up any spills within the project area. A spill kit is required on site for the duration of the project.

#### Site/Easement:

Contractor is responsible to keep all public roadways and drainage systems free from dirt, mud, and construction debris at an times.

Contractor is responsible for all repairs to any items damaged during construction, including but not limited to: fences, roads, utilities, parking lots, etc.

#### **Erosion Control Measures During Construction:**

During construction the contractor shall be responsible for installing additional sediment and erosion control measures not shown on the plans. These may become evident only after construction begins and may be required to control excess sediment as per consultation with designer.

The contractor shall make every effort to minimize disturbance in the stream channel and in gaining access to/from work areas.

Silt fence shall be installed downstream of the construction area to reduce sedimentation. The contractor shall only conduct bank and streambed work that can be completed or stabilized within that working day, unless directed by the project manager or designer.

#### **Erosion Control:**

All work shall be in compliance with regulations of the National Pollutant Discharge Elimination System (NPDES) program and the requirements of the MDE sediment and erosion control program.

The excavation and movement of soil materials shall be minimized to limit the area disturbed as well as the time soils are left unprotected.

Throughout the duration of the project, soil stockpile areas shall be stabilized with silt fence. The contractor is responsible for the temporary and permanent protection of stockpile areas as well as all soil intentionally transported from the site.

Silt fence shall be properly anchored in staging and stockpile areas to prevent erosion. Once staging and stockpile areas are no longer needed, contractor shall remove silt fence and grade, seed, and mulch all associated disturbance.

The contractor shall inspect daily and maintain continuously all erosion and sediment control measures until such time as permanent stabilization of exposed soil occurs. The contractor shall maintain close contact with erosion control inspector so that periodic inspections can be

All temporary erosion and sediment control measures shall be removed after final site stabilization or after temporary erosion control measures are no longer needed. Site inspections shall continue during this period until temporary seeding becomes established. Where soil material is transported onto a paved or public road surface, daily cleaning is required and shall be completed prior to exiting the site. Soil materials shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. When a crushed stone construction entrance or haul road has been covered with soil or compacted into soil by construction traffic, it shall be brought back to its original elevation upon completion of the project.

Sediment and erosion controls shall be constructed in accordance with local, state, and federal erosion control regulations.

#### Vegetation Plan:

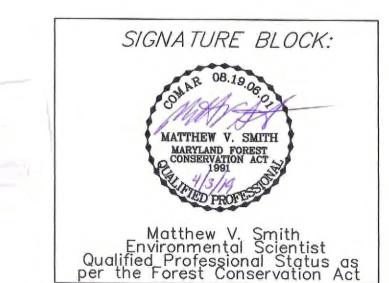
As soon as final grading is completed, structures are finished, and stabilization measures (matting) are installed, a mixture of grasses, sedges, forbs and shrubs will be planted on all disturbed surfaces. Seed mixes shall consist of native species and exact specifications will be included in the construction plans. Seeded areas shall be mulched with straw. Local sources of plant materials shall be used if possible. All plantings must be approved by the designer/inspector.

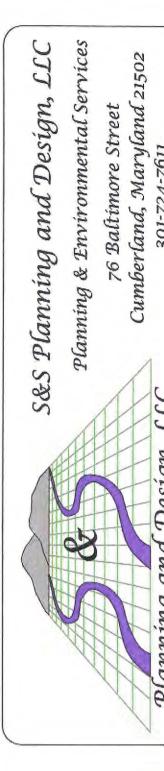
Woody plant selection was based upon native vegetation at the site and that observed in nearby streams under similar conditions. Woody species shall be planted after construction is complete and during the dormant period. Planting techniques may include bare root plantings or containers, as well as live staking. Plantings are intented to promote soil stabilization, structure stabilization, terrestrial wildlife habitat, and riparian shade.

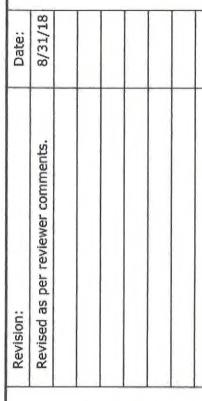
#### General Sequence of Construction:

- 1. The site shall be reviewed by the engineer, project manager, and contractor for any unforeseen hazards, areas and objects to be avoided and protected during construction (trees, etc.). These areas shall be marked/flagged as they are identified.
- 2. The construction manager, engineer, and the contractor shall identify, confirm, and mark the location of the material storage and staging area(s).
- 3. The contractor shall make any needed improvements to the existing access road. This work shall be done before construction materials are brought to the project site and before construction begins.
- 4. Equipment shall be mobilized to the site. This work will be done before construction materials are brought to the project site and before construction begins.
- 5. MDE Compliance Division will be notified at least 5 days before construction begins and MISS UTILITY will be contacted and all utilities will be marked prior to any construction beginning.
- 6. Install silt fence around any stockpile, staging, and other areas designated on the plan. Temporary stockpile and staging areas shall be used to store materials needed for the completion of the project, such as: structure logs, stone, geo-textile fabric, fill material, etc.
- 7. The equipment shall be stored in the staging area during the duration of the project, after each day's activities, and during any non-work period. Any equipment maintenance and repairs shall be performed in this area.
- 8. The stream diversion and dewatering plan shall be implemented following sediment control installation. Pump-around practices shall be utilized to divert and dewater the work area. The engineer, inspector, and contractor shall determine and agree to the upper and lower limits of the pump around process.
- 9. Once dewatered, channel work my commence with grading, fill, and structure installation. Structures are to be installed where indicated on the plan and profile sheets. Construction of the channel and structures shall proceed from upstream to downstream. Field modifications, both horizontal and vertical, may be required and shall be approved by the engineer and/or inspector.
- 10. Structures shall be built to appropriate specifications as shown in the structure typical drawings. Non-woven geotextile will be placed behind (upstream/inside) all rock structures and woven geotextile will be placed behind all log structures. Wood and rock shall be used on the first 1/3 to 1/2 of the backfill depth and bed material will be used to backfill the rest of the structure. Jute fabric shall be placed where indicated for bank stabilization. After placement of each in-stream structure, all disturbance associated with their installation shall be graded, seeded, and mulched.
- 11. Flow shall be reintroduced after all construction and stabilization activities are completed within each work section with the approval of the inspector. 12. Any adjustment to the structures and/or channel post installation shall be made with as little disturbance as possible. Any areas disturbed during alterations shall be reseeded and mulched.
- 13. Temporary seeding and mulching shall be done immediately after new channel grading and structure installation is complete. The area shall be temporarily seeded with annual seed mix.
- 14. If plant material is on-site and available, the riparian area adjacent to the channel shall be permanently planted with live stakes and rooted/container material in accordance with the planting plan. The permanent riparian seed mix shall be utilized along the banks and overbank areas, then stabilized with jute matting and straw mulch.
- 15. Once the project manager, engineer, and inspector have agreed that the restoration work has been implemented in accordance with the approved plan, the stockpile and staging area shall be graded, seeded, and mulched. All sediment controls shall be removed and any remaining disturbed areas shall be graded (if applicable), seeded, and mulched.
- 16. Woody shrubs and trees shall be planted following site stabilization in accordance with the planting plan and time of year restrictions.
- 17. Any areas highly impacted during the construction process shall be restored to pre-existing or better condition.









PLAN

RUCTION NOTE

FOREST CONSTR

STREAM & | GENERAL

RTY H PRO NAH PA

Plan No.: Date: April 3, 2019

ZA

Scale: AS SHOWN Design: MVS | Drawn: MVS Sheet: 2 of 8 CAD File: Project No.: 18-110



FEB 1 9 2019

McAllister

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637 F.633

#### GENERAL NRI/FSD NOTES

- THIS PROPERTY IS ZONED RESIDENTIAL.
- THE PROPERTY OWNER IS ROSHAN IZADPANAH. MR. RAFIK BAZIKIAN IS LISTED AS THE APPLICANT AND IS THE ACTING AGENT FOR IZADPANAH. RETTHE TOTAL TRACT AREA IS 34.8 ACRES; HOWEVER, THIS NRI HAS BEEN PREPARED ONLY FOR AN APPROXIMATELY 4.2 ACRE STUDY AREA OF WHICH 2.2 ACRES WERE IMPACTED AND CITED FOR A FOREST CONSERVATION
- FIELD WORK WAS PERFORMED ON JULY 18, 2018 BY MATTHEW V. SMITH, S&S PLANNING AND DESIGN.
- 5. THIS PROPERTY IS NOT WITHIN AN SPA OR PMA. 6. PROPERTY TAX ACCOUNT NUMBER ASSOCIATED WITH THE PLANS ARE
- 7. TOPOGRAPHY DERIVED FROM PREVIOUS SITE SURVEY PROVIDED BY
- 8. WETLAND INFORMATION DERIVED FROM ON-SITE FIELD EVALUATIONS. 9. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND
- MEASURED WITH A FORESTERS DBH TAPE MEASURE. 10. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE
- LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE 11, ALL TREES UNDER 24" ONSITE ARE MEASURED BY OCCULAR ESTIMATE ONLY 12. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION, THE U.S. FISH AND WILDLIFE SERVICE STATED "NO FEDERALLY PROPOSED OR LISTED ENDANGERED OR THREATENED SPECIES ARE KNOWN TO EXIST WITHIN THE
- PROJECT IMPACT AREA." 13. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS
- CURRENT STATE CHAMPION TREES.
- 14. THE SUBJECT PROPERTY IS NOT LISTED AS INDIVIDUAL HISTORIC SITES AS FOUND IN THE MINOPPO HISTORIC PROPERTIES INTERACTIVE MAP.

NRI STUDY AREA

- 15. NO MAPPED FLOODPLAINS ARE LOCATED ON THE PROPERTY. 16. THE PROJECT IS LOCATED IN THE SENECA CREEK WATERSHED, HUC CODE
- 020700080601, DESIGNATED USE CLASS I-P. 17. WSSC TAXMAP ES122, GRID 221NW14.

WOUS 001

#### FOREST STAND #1

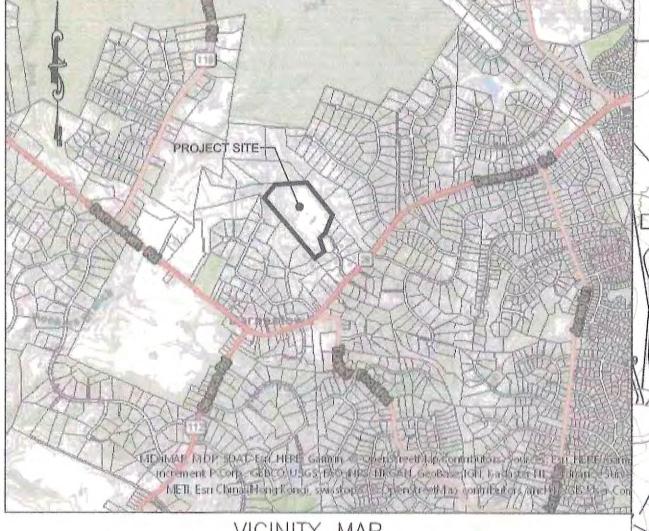
Forest Stand 1 is approximately 3.53 AC / 153,853.3 s.f. in size and consists of a mature upland hardwood stand. The majority of the forest stand, approximately 2.3 AC, is situated within a fenced portion of the property. The focus of this NRI is the 2.3 AC forest portion of Forest Stand 1. The stand is predominated by 24-30" Tulip Tree (Liriodendron tulipifera), however, other large canopy trees include Chestnut Oak (Quercus montana), White Oak (Quercus alba), and Sycamore (Platanus occidentalis) are present.

The forest within the study area has been impacted by clearing and grading operations, therefore much of the understory and some of the overstory has been affected. Approximately 1.90 AC of forest was impacted and is shown on the plan. Canopy closure is compromised due to the clearing of some of the large trees. The understory that is present consists of blend of herbaceous species (vines and ferns) and sapling renewal. Tree species observed to be regenerating include Tulip Tree, Oak, Red Maple, Sassafras, and Sycamore, although most were only a couple feet in height.

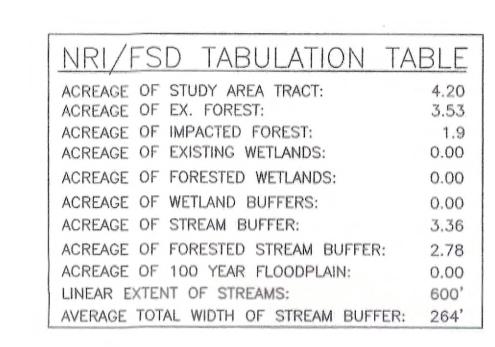
Thirty (30) large and/or specimen trees are located within the study area. Tree DBH was measured using a steel DBH tape with graduations in inches and tenths.

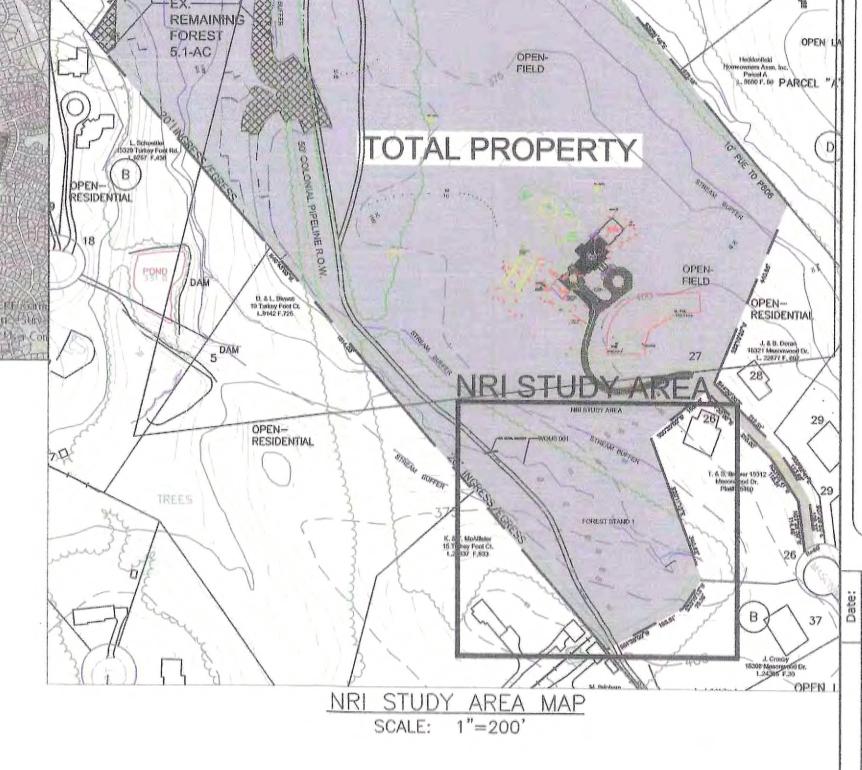
. & S. Br

Mason







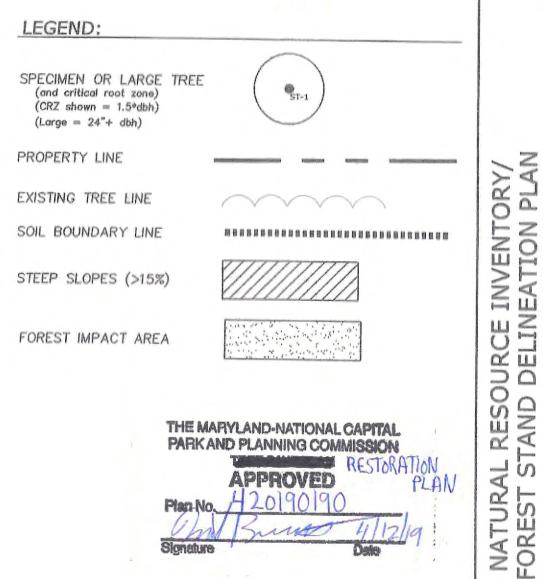


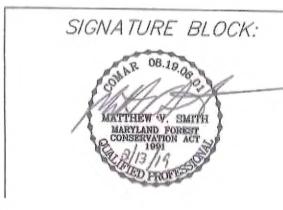
	viewer o		
1/	Revision: Revised as per re		
Mar and during	Revision: Revised a	-	
SPANIS OF			

RESIDENTIAL

SPECIMEN TREE LIST								
TREE NUMBER	SIZE-DBH	SCIENTIFIC NAME (	COMMON NAME	CONDITION	SAVE/REMOVE			
ST-1	26"	Quercus alba	White Oak	Good	Save			
ST-2	30.0"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-3	26"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-4	27"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-5	25"	Acer rubrum	Red Maple	Good	Save			
ST-6	24"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-7	27"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-8	27"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-9	51"	Quercus alba	White Oak	Good	Save			
ST-10	56"	Platanus occidentalis	Sycamore	Good	Save			
ST-11	32"	Quercus alba	White Oak	Good	Save			
ST-12	31"	Quercus rubra	Red Oak	Good	Save			
ST-13	33"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-14	28"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-15	24"	Nyssa sylvatica	Black Gum	Good	Save			
ST-16	42"	Quercus montana	Chestnut Oak	Good	Save			
ST-17	26"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-18	26"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-19	40"	Acer rubrum	Red Maple	Good	Save			
ST-20 ST-21	24" 26"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-22	31"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-23	54"	Platanus occidentalis	Sycamore	Good	Save			
		Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-24	24"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-25	24"	Liriodendron tulipifera	Tulip Tree	Good	Save			
ST-26 ST-27	27" 25"	Liriodendron tulipifera Quercus montana	Tulip Tree Chestnut Oak	Good Good	Save Save			
ST-28	32"	Quercus montana	Chestnut Oak	Good	Save			
ST-29	25"	Quercus alba	White Oak	Good	Save			
ST-30	32"	Quercus montana	Chestnut Oak	Good	Save			

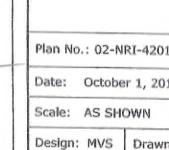
		SULS CF	IARI - I	OTAL SITE	
SYMBOL	NAME	K-Factor	HYDRIC	COMMENTS	
1B	Glenelg Silt Loam	0.3	No	3-8% slopes; very deep, well drained	





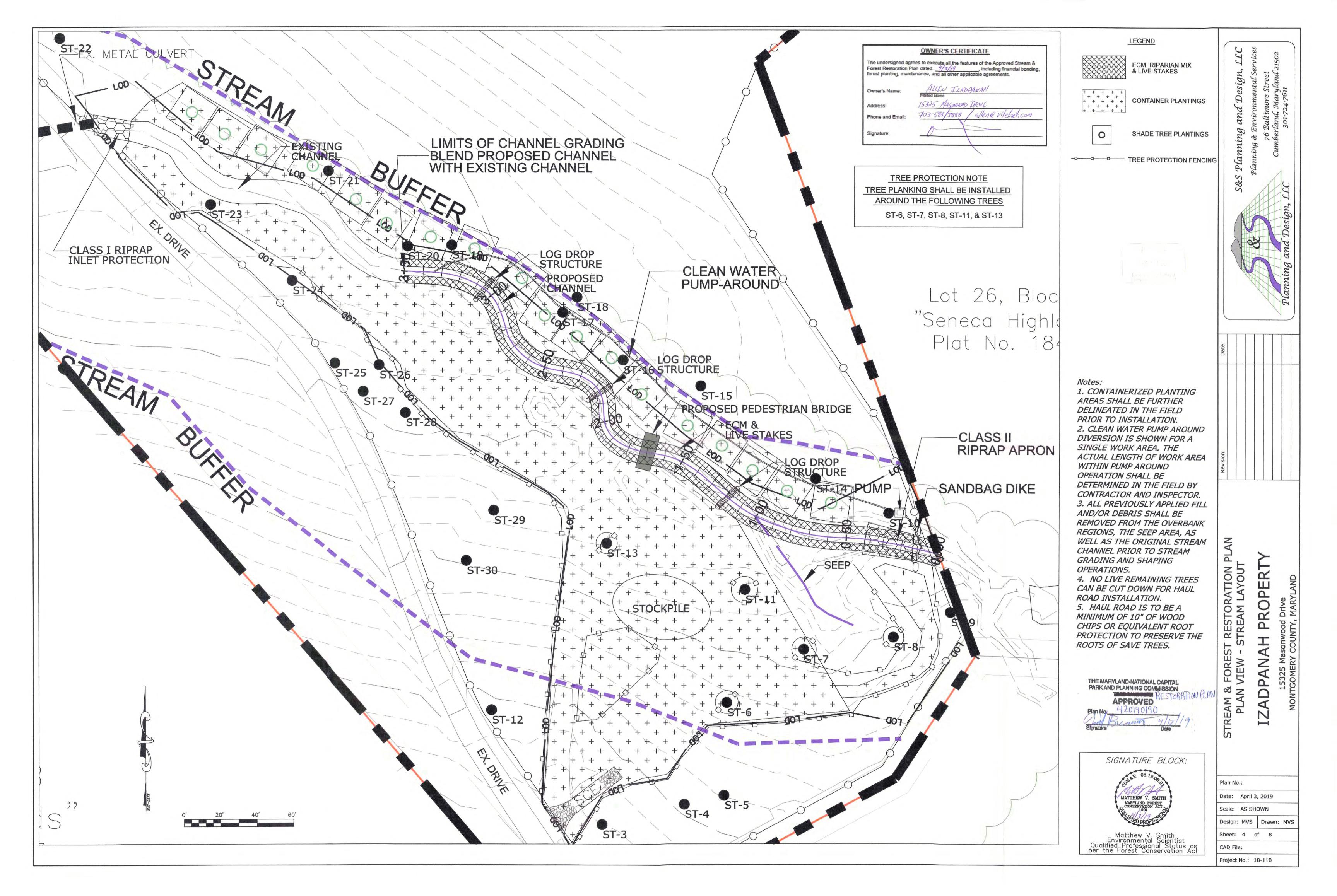
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Plan No.: 02-NRI-420190190 Date: October 1, 2018 Design: MVS Drawn: MVS

FOREST STAND 1 - NRI STUDY ARFA MAP



#### IZADPANAH STREAM RESTORATION PROJECT PLANTING NOTES & DETAILS

#### INTRODUCTION

This planting plan has been designed to provide bioengineering material & riparian vegetation installation within the riparian corridor for the Izadpanah Stream Restoration Project.

#### II. Simplified Sequence of Construction

- Limit-of -Disturbance delineated and marked.
- Installation of sediment and erosion control devices.
- Excavation/grading of channel & structure installation. 4. Vegetative planting, live stakes, and erosion control matting installation.
- 5. Removal of sediment and erosion control devices.

#### III. Additional Soil and Erosion Control Notes

- 1. All erosion and sediment control practices are to be constructed and maintained according to the minimum standards of the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual. The contractor is responsible for being thoroughly familiar with the measures contained within this document that are pertinent to this project.
- 2. It is the contractors responsibility to inspect all erosion control devices periodically and after every erodible rainfall. Necessary repairs to maintain the effectiveness of the erosion control devices shall be made immediately. This maintenance will include the repair of measures damaged by any subcontractor.
- 3. All erosion and siltation measures are to be 'in place' prior to construction.
- 4. If, during construction, additional erosion control devices are found necessary by either the contractor, or applicable inspector, they shall be installed.
- 5. Permanent soil stabilization shall be applied to bare areas within seven days of reaching final grade. No disturbed area will be denuded for more than 28 calendar days.
- 6. Temporary seeding shall be accomplished within seven days to denuded areas that may not be completed.
- 7. The term Seeding, Final Cover or Stabilization shall include establishment of a stable grass cover according to the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual.
- 8. Temporary erosion control measures are not to be removed until all disturbed areas are stabilized. After completion of stabilization, all measures are removed within 30 days. Trapped sediment shall be spread and seeded.
- 9. Modifications in the scope of the proposed project are to be reviewed and approved by the Maryland Department of the Environment prior to use.
- 10. Minimize the area disturbed to that area only required for construction. Native vegetation will be preserved to the maximum extent possible consistent with the use and development permitted and according to the 2011 Maryland Standards & Specifications for Soil Erosion & Sediment Control Manual.

#### Seeding Schedule

Barley or Oats at 96 lbs/ac or other approved contractor's mix **Temporary Seeding** 

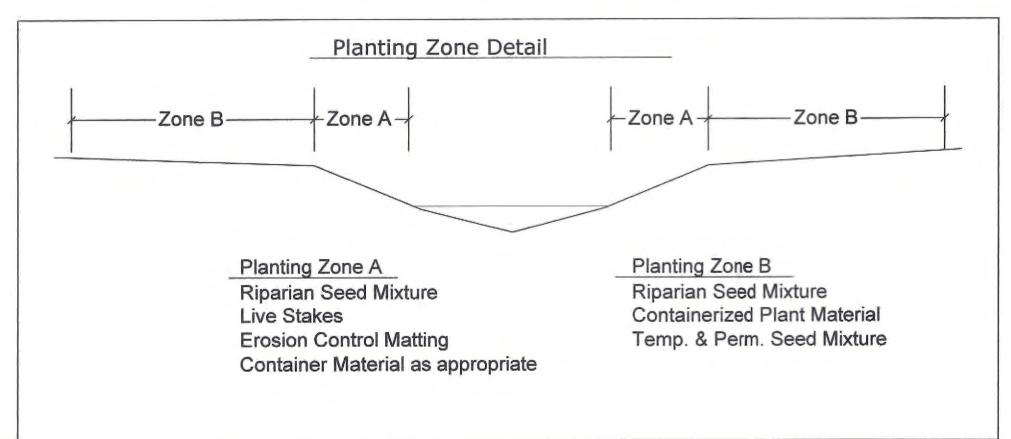
Ernst Mix 178 or Approved Equivalent at 15 lb/ac. Riparian Area

(Riparian Area is defined as the stream banks and overbank areas within 20' from top of bank.)

## Plant Schedule

Quantity	Common Name	Scientific Name	Size	Spacing
26	Swamp White Oak	Quercus bicolor	1.5" cal.	12' o.c.
26	Red Maple - Sunset	Acer rubrum	1.5" cal.	12' o.c.
26	N. Red Oak	Quercus rubra	1.5" cal.	12' o.c.
26	Black Gum	Nyssa sylvatica	1" cal.	12' o.c.
25	Sycamore	Platanus occidentalis	5 gal., 1" cal.	10' o.c.
30	American Hornbeam	Carpinus caroliniana	5 gal., 1" cal.	10' o.c.
30	Spicebush	Lindera benzoin	3 gal.	10' o.c.
18	Tulip Poplar	Liriodendron tulipifera	2" cal.	22' o.c.
200	Silky Dogwood	Cornus amomum	live stake	2' o.c.
200	Streamco Willow	Salix purpurea	live stake	2' o.c.
200	Black Willow	Salix nigra	live stake	2' o.c.

Notes: Equivalent replacements may be approved by the MNCPPC Forest Inspector. Live stakes shall be installed during the fall dormant season.



#### IV. Grading Criteria

To effectively establish a constructed stable channel, the proposed restoration site requires the excavation of soil and rock. The proposed restoration will be graded to the specified elevations on the Grading Plan, Cross Sections & Profile.

#### V. Planting Specifications

Planting shall commence after final grading. All container plant material shall be installed between March 1 to May 30 or September 1 to October 30. Live stakes shall only be installed while dormant.

Planting materials will consist of container grown shrubs and trees. All stock will be planted as received, no pruning will be done at the site. Stock not meeting specifications

All planting stock shall be protected from sunscald, desiccation, and structural damage during shipment to the site. Delivery of materials will be no sooner than one week prior to planting. Materials held for planting will be moistened and placed in cool, shaded areas until ready for placement.

#### A. Plant Materials

- 1. The plant species required are usually not available from standard landscape nursery sources. The contractor shall make arrangements with competent wetland restoration sources to ensure a supply of the required material.
- 2. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen, except where otherwise noted.
- 3. Plant materials must be selected from certified nurseries that have been inspected by appropriate state or federal agencies.
- Botanical nomenclature is according to Hortus III.
- 5. Plant material will be inspected by an authorized representative prior to planting. All plant material deemed unacceptable due to damage or poor health will be required to be replaced with acceptable plant material by the contractor.

#### B. Planting Schedule.

- 1. All containerized plants shall be installed between March 1 to May 30 or September 1 to October 30. Live stakes shall only be installed while dormant, typcially after October 31.
- 2. The representative retains the right to inspect the storage site, and plants prior to delivery to the site.

#### C. Bed Preparation

No bed preparation is required with the exception of removing all trash and debris prior to beginning planting. Excavated topsoil may be required to be stockpiled, and respread following rough grading.

#### D. Planting

- 1. A pre-planting meeting shall be conducted with the MNCPPC forest conservation inspector prior to planting. Meeting attendees shall include at a minimum, the landscaper and the owner or owner's representative.
- 2. The contractor shall stake the locations of each planting areas. The locations shall be field verified by the MNCPPC forest conservation inspector prior to planting.
- 3. Plants shall be planted according to the spacing indicated on the plant schedule within the designated bank & riparian area.
- 4. Plant material shall be planted in existing soil with each planting pit excavated to 1 1/2 times the width of the entire root mass of the plant.
- The root mass shall be placed in the planting pit and excavated soil shall be placed around the root mass and tamped to fill all voids and air pockets.

#### E. Cleanup

- 1. Final cleanup shall be the responsibility of the contractor and consist of removing all trash and materials incidental to the project and the proper disposal of the material off-site.
- Cleanup procedure activities shall not damage existing plants.

#### VI. Plant Maintenance and Management

EMBED GEOTEXTILE -

GEOTEXTILE FABRIC

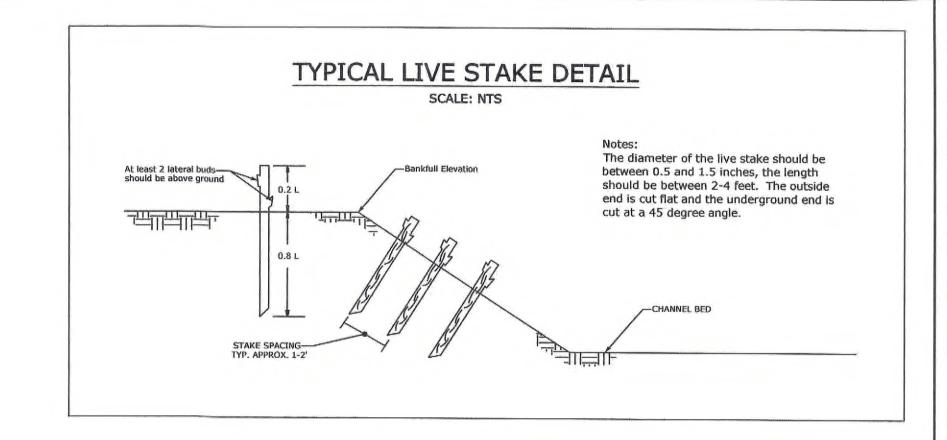
A maintenance program will be implemented to employ proven management techniques and monitor the restoration site to achieve the goal of 75% of the 1-inch caliper planted trees, 100% of the 2-inch caliper planted trees. or 100% of the 1.5-inch caliper trees, must be alive and vigorous at the end of the two-year maintenance period.

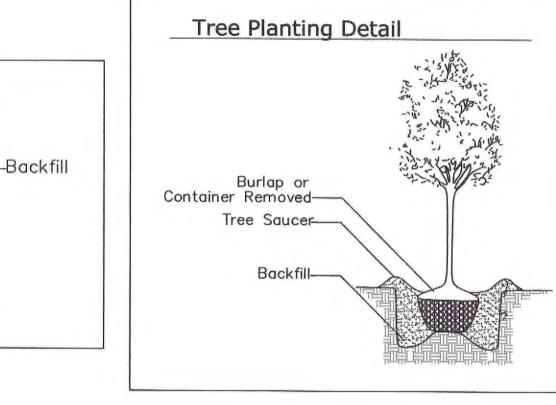
Vegetation demonstrating immediate stress or dieback will be replaced. In addition, soil and climatic factors will be analyzed in relation to plant growth. The following management techniques will

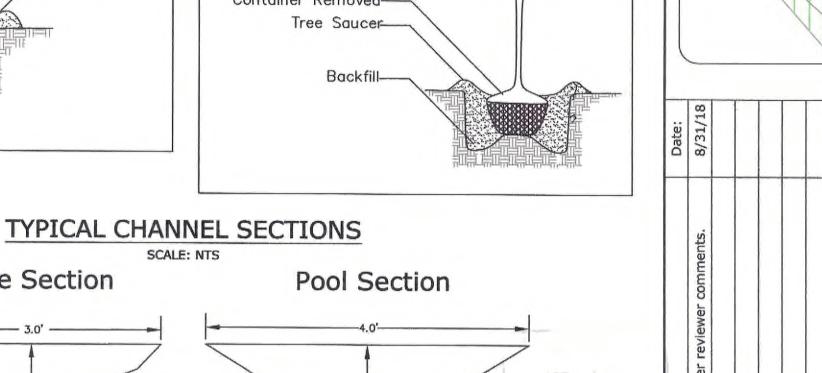
- A. Replace dead or dying plant species with same species or approved alternative.
- B. Remove debris that impairs plant growth quarterly, during the growing season.
- C. All excessive noxious and invasive plant growth shall be eradicated using an acceptable PARK AND PLANNING COMMISSION method.

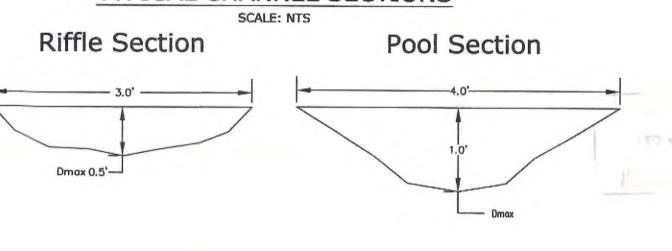
CLASS II RIPRAP APRON SECTION

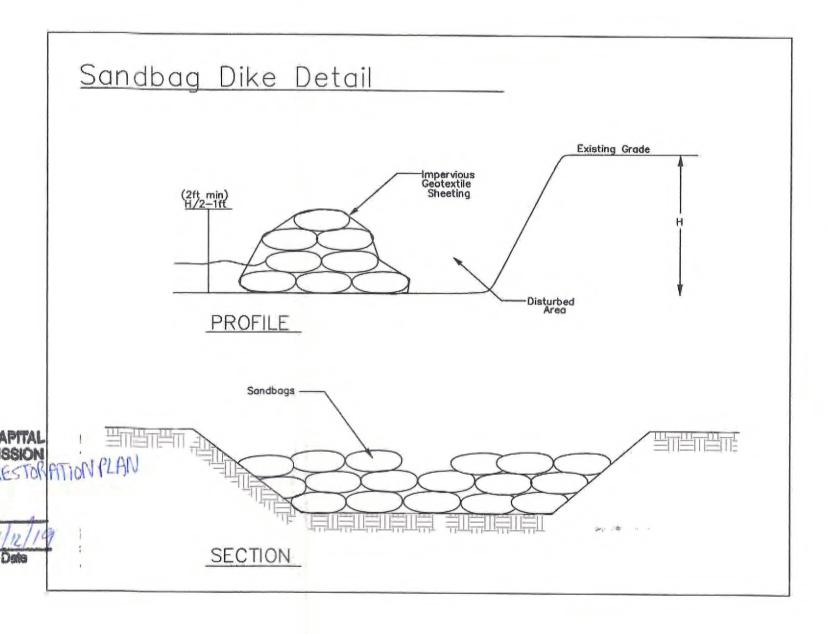
NOT TO SCALE













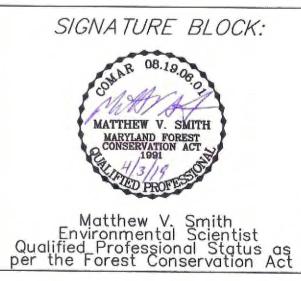
Shrub Planting Detail

Container Removed-

APPROVED

Sycamore

Tree Saucer-



7 RESTORATION TAILS PROPER  $\overline{\Box}$ න TREAM & FOREST . N ADPANA **PLANTING** 

ing

Plan No.: Date: April 3, 2019 Scale: AS SHOWN Design: MVS | Drawn: MVS Sheet: 5 of 8 CAD File:

Project No.: 18-110

# DETAIL 1.2: PUMP-AROUND PRACTICE PLAN VIEW approved dewatering device diversion pumps – discharge hoses– \_\_ intake dewatering pump intake hose clean water dike / - sump-hole or pool sediment dike -(12" to 18" deep 2' dia.) —pumps should discharge length not to exceed that which can be onto a stable velocity dissipator made of rip rap completed in one day or sandbags SECTION A-A impervious sheeting (2 foot minimum) cross section of sandbag dike REVISED NOVEMBER 2000 PAGE 1.2 - 3

#### Maryland's Guidelines To Waterway Construction MGWC 1.2: Pump-Around Practice

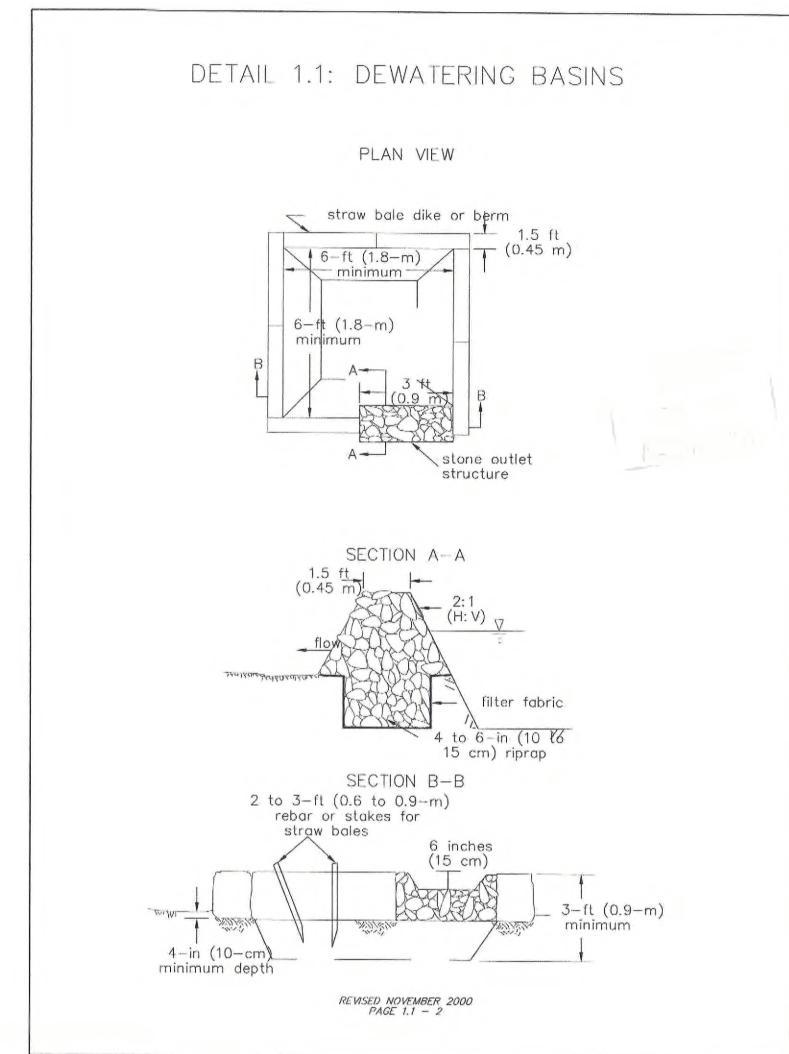
#### Description

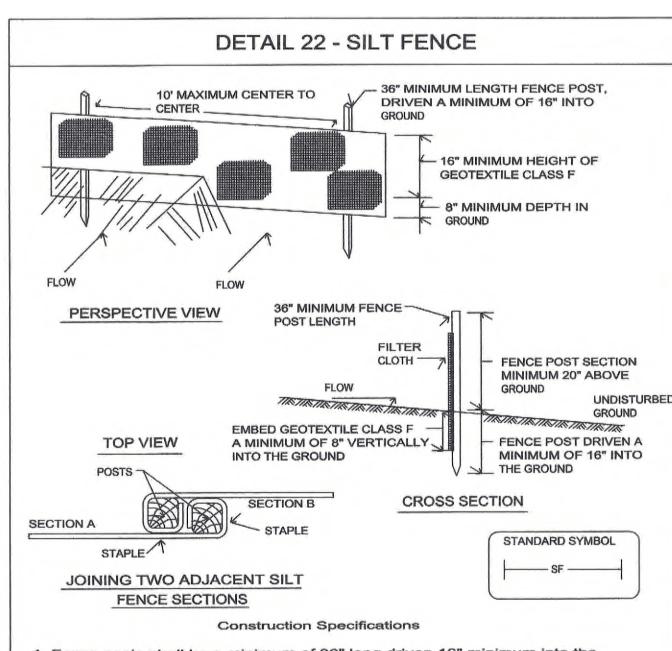
The work should consist of installing a temporary pump around and supporting measures to divert flow around in-stream construction sites.

#### Implementation Sequence

Sediment control measures, pump-around practices, and associated channel and bank construction should be completed in the following sequence (refer to Detail 1.2):

- 1. Construction activities including the installation of erosion and sediment control measures should not begin until all necessary easements and/or right-of-ways have been acquired. All existing utilities should be marked in the field prior to construction. The contractor is responsible for any damage to existing utilities that may result from construction and should repair the damage at his/her own expense to the county's or utility company's satisfaction.
- 2. The contractor should notify the Maryland Department of the Environment or WMA sediment control inspector at least 5 days before beginning construction. Additionally, the contractor should inform the local environmental protection and resource management inspection and enforcement division and the provider of local utilities a minimum of 48 hours before starting
- 3. The contractor should conduct a pre-construction meeting on site with the WMA sediment control inspector, the county project manager, and the engineer to review limits of disturbance, erosion and sediment control requirements, and sequence of construction. The contractor should stake out all limits of disturbance prior to the pre-construction meeting so they may be reviewed. The participants will also designate the contractor's staging areas and flag all trees within the limit of disturbance which will be removed for construction access. Trees should not be removed within the limit of disturbance without approval from the WMA or local authority.
- Construction should not begin until all sediment and erosion control measures have been installed and approved by the engineer and sediment control inspector. The contractor should stay within limits of the disturbance shown on the plans and minimize disturbance within work area whenever possible.
- Upon installation of all sediment control measures and approval by the sediment control inspector and the local environmental protection and resource management inspection and enforcement division, the contractor should begin work at the upstream section and proceed downstream beginning with the establishment of stabilized construction entrances. In some cases, work may begin downstream if appropriate. The sequence of construction must be followed unless the contractor gets written approval for deviations from WMA or local authority. The contractor should only begin work in an area which can be completed by the end of the day including grading adjacent channel. At the end of each work day, the work area must be stabilized and the pump around removed from the channel. Work should not be conducted in the channel during rain events.
- Sandbag dikes should be situated at the upstream and downstream ends of the work area as shown on the plans, and stream flow should be pumped around the work area. The pump should discharge onto a stable velocity dissipator made of rip-rap or sandbags.
- Water from the work area should be pumped to a sediment filtering measure such as a dewatering basin, sediment bag, or other approved source. The measure should be located such that the water drains back into the channel below the downstream sandbag dike.
- 8. Traversing a channel reach with equipment within the work area where no work is proposed should be avoided. If equipment has to traverse such a reach for access to another area, then timber mats or similar measures should be used to minimize disturbance to the channel. Temporary stream crossings should be used only when necessary and only where noted on the plans or specified. (See Section 4, Stream Crossings, Maryland Guidelines to Waterway Construction).
- 9. All stream restoration measures should be installed as indicated by the plans and all banks graded in accordance with the grading plans and typical-cross sections. All grading must be stabilized at the end of each day with seed and mulch or seed and matting as specified on plans.
- 10. After an area is completed and stabilized, the clean water dike should be removed. After the first sediment flush, a new clean water dike should be established upstream from the old sediment dike. Finally, upon establishment of a new sediment dike below the old one, the old sediment dike should be removed.
- 11. A pump around must be installed on any tributary or storm drain outfall which contributes baseflow to the work area. This should be accomplished by locating a sandbag dike at the downstream end of the tributary or storm drain outfall and pumping the stream flow around the work area. This water should discharge onto the same velocity dissipater used for the main
- 12. If a tributary is to be restored, construction should take place on the tributary before work on the main stem reaches the tributary confluence. Construction in the tributary, including pump around practices, should follow the same sequence as for the main stem of the river or stream. When construction on the tributary is completed, work on the main stem should resume. Water from the tributary should continue to be pumped around the work area in the main stem.
- 13. The contractor is responsible for providing access to and maintaining all erosion and sediment control devices until the sediment control inspector approves their removal.
- 14. After construction, all disturbed areas should be regraded and revegetated as per the planting plan.





1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

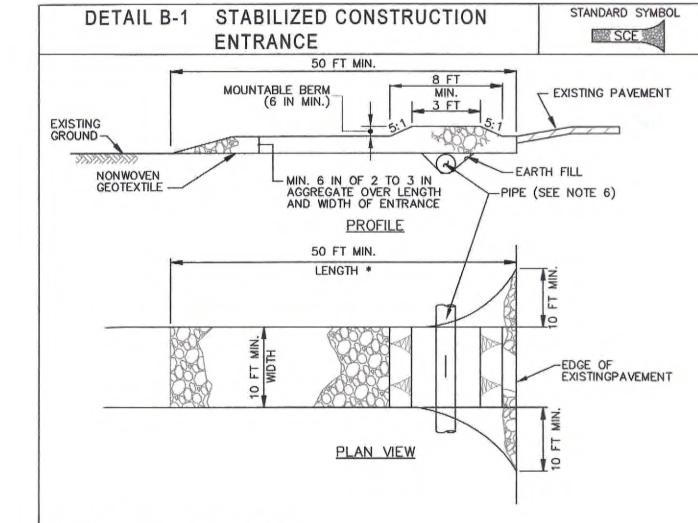
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Test: MSMT 509 Tensile Strength 50 lbs/in (min.) Test: MSMT 509 Tensile Modulus 20 lbs/in (min.) 0.3 gal ft / minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.)

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when

bulges occur or when sediment accumulation reached 50% of the fabric height. U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E-15-3 WATER MANAGEMENT ADMINISTRATION



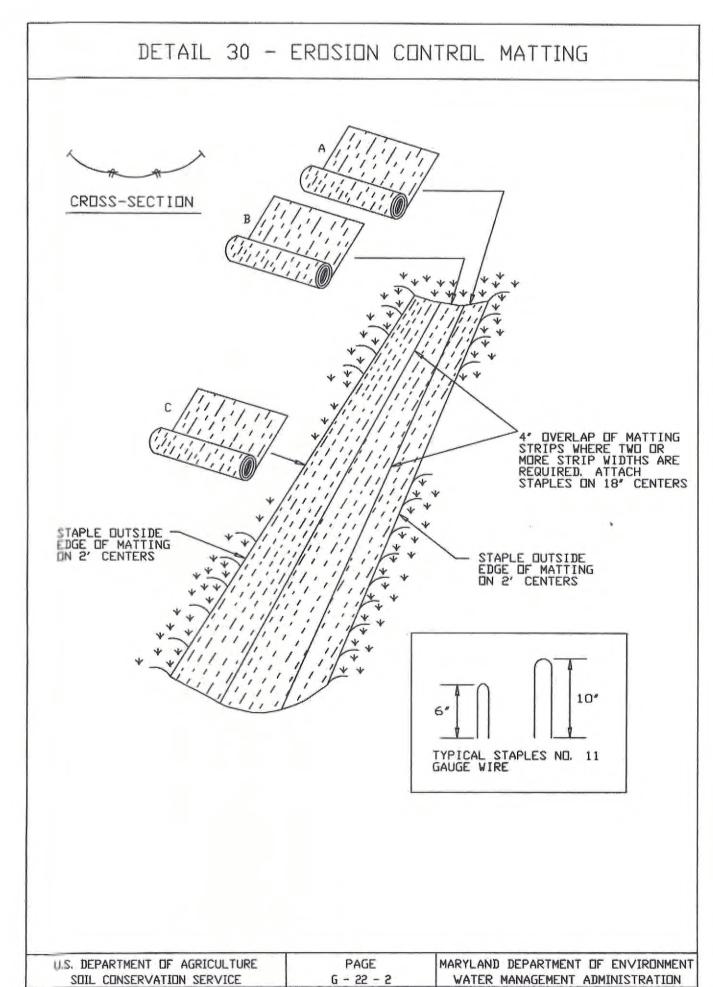
#### CONSTRUCTION SPECIFICATIONS

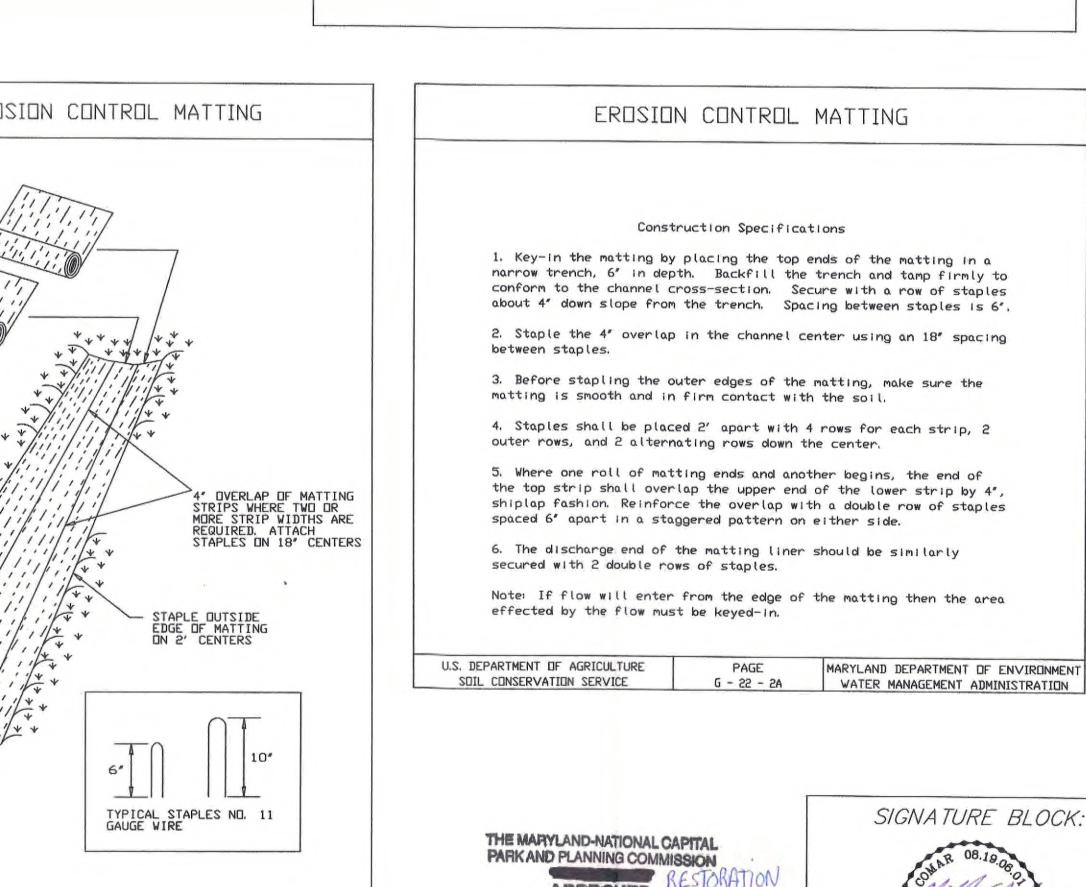
NATURAL RESOURCES CONSERVATION SERVICE

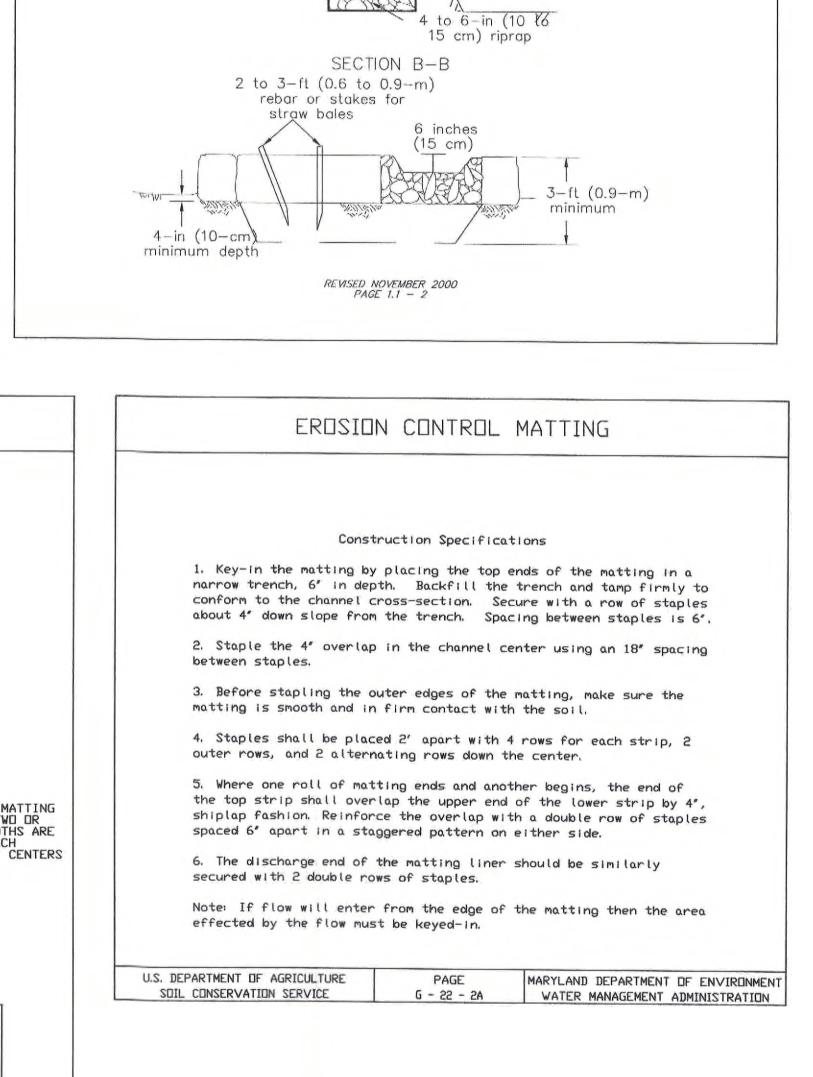
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

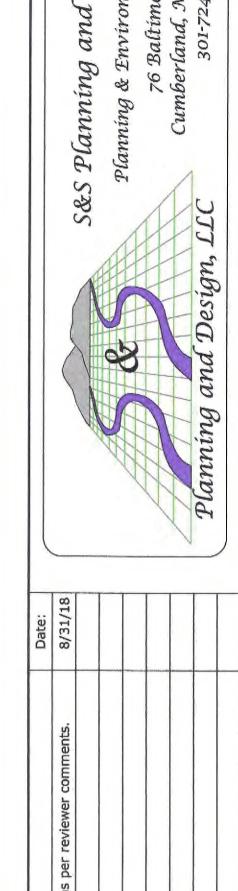
WATER MANAGEMENT ADMINISTRATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT









PLAN RESTORATION PE 0 0 DP 0

Plan No.: Date: April 3, 2019 Scale: AS SHOWN Design: MVS Drawn: MVS

Project No.: 18-110

Matthew V. Smith Environmental Scientist Qualified Professional Status as per the Forest Conservation Act Sheet: 6 of 8 CAD File:

MATTHEW V. SMITH

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1. In General: Suppression efforts are aimed at the removal of invasive, exotic species ("target species"), which displace or prevent the establishment of native forests. The primary focus of this Final Forest Conservation Plan (FFCP) document is the suppression and control efforts of invasive and exotic species, as noted, primarily including but not exclusive to: Oriental bittersweet, Multiflora Rose (Rose Multiflora), Porcelainberry, Mile-a-Minute, and Japanese Honeysuckle Vine (Lonicera Japonica).

2. Goal and Purpose: Suppression efforts shall include the initial removal or treatment of the target species and the maintenance required to control re-growth. Implementation and choice of treatment and method shall be such that neither the invasive species nor the method of control adversely affects the establishment and survival of native species. Target species are generally persistent with regard to eradication and control efforts. Therefore, the goal is to suppress the target species to allow the native species to form a dense canopy. The shade created by the dense canopy ideally will provide additional shade, which will manage the re-growth of the targeted species.

3. Minimum Requirements: A minimum of two applications or treatments shall be made during each one-year period of the Forest Improvement and Protection Agreement (FIPA).

4. Suppression and control efforts within the site shall take place in all forestation areas, tree save areas, and all forest retention areas (saved forest areas). Suppression and control efforts shall also take place in the existing forest areas retained. As noted, all of the retained existing forest is included in the suppression area because of the presence of target species throughout the site. Also, new planting areas may also be subject to suppression efforts if there is a presence of target species within the planting areas.

5. Timing of Operations: Suppression efforts may begin at any time. However, if suppression efforts have not commenced prior to obtaining a Forest Conservation Permit, suppression efforts must begin in forest retention and tree save areas once a Forest Conservation Permit is obtained. Initial removal and treatment of the target species must occur prior to planting forestation areas.

6. Flagging Required: Target vegetation within the suppression area (s) shall be clearly flagged with surveyor's ribbon or otherwise identified in a clear and recognized manner. Flagging or otherwise identifying target vegetation shall be done so as to prevent removal of desirable (native) species along with the target species.

7. Methods of Removal: Suppression and control of the target species can be by mechanical or chemical methods or a combination of both. Mechanical controls include mowing or chopping at or near the ground level and removal of the plant by digging, pulling, or bulldozing. Mowing or chopping will likely result in re-growth from the stump or root sprouts. Therefore, this method requires also treating the remaining stump and/or root sprouts. The removal of the remaining roots by some means of excavation will disturb the soil. This may require sediment control measures, which is the responsibility of the contractor. Holes created by the removal of roots are to be filled with topsoil.

8. Stabilizing Bare Ground: All bare ground areas resulting from mechanical control methods are to be immediately stabilized. Disturbed areas with sufficient light shall be seeded per the improvement plan specifications. Densely shaded areas shall be mulched with 2" of shredded hardwood mulch or wood chips. The use of heavy equipment within non-wetland floodplain areas is prohibited, unless the soil is dry enough for the equipment to be supported without excessive damage to the soil or desirable ground cover plants. Heavy equipment is not allowed in wetlands or streams.

9. Use of Chemicals: Chemical control is by herbicide application to the target species. The use of herbicides shall be in strict accordance with state and Federal regulations and include but are not limited to:

The use and application of all herbicides shall be in strict accordance with the label on the herbicide's container and/or the instructions accompanying the herbieide.

Herbicides used in or near wetlands or streams shall be clearly labeled as to indicate that the herbicide is for use near bodies of water. All herbicide applications shall be conducted during the appropriate time of year and under environmentally favorable conditions with consideration to

weather elements (i.e. wind and temperature) and in accordance with the label. Individuals who are qualified and licensed pesticide applicators will conduct all herbicide applications.

Herbicides are to be applied in a manner that only suppresses the target vegetation and does not suppress or destroy surrounding desirable plants.

10. Protecting Living Root Mats: Root mats of plants treated with herbicides are to remain in place to stabilize the soil. 11. Debris Removal: Brush, root mats, and debris resulting from the use of mechanical controls shall be removed from the site and properly disposed.

12. Recommended Sources of Information: Recommended suppression treatments can be obtained from publications written by Philip D. Pannill. Regional Watershed Forester, Western Region, Maryland Department of Natural Resources, Forest Service, Recommended are:

Problem Weed Species for Forestry in Maryland Ailanthus Altissima - Controlling Tree of Heaven

Tree of Heaven Control

Control of Ailanthus in Forest Management

The contractor shall consult the above publications for recommended herbicides and additional treatment options. These publications as well as other relevant publications are available upon request by contacting:

Maryland Dept. of Natural Resources 1260 Maryland Avenue, Hagerstown, MD 21740

Phone: 301-791-4010; Email: ppannill@dnr.state.md.us; Website: www.dnr.state.md.us/forrest

13. Specific Recommendations: The contractor and pesticide/herbicide applicator shall choose the appropriate control measures to match both local conditions

and available skilled labor so at to minimize impacts to the environment. The following treatment methods are advised: Japanese Honeysuckle: manually cut or pull vines or treat re-sprouts with herbicide (post-emerge).

Multiflora Rose: repeated mowing or cutting or treat re-sprouts with herbicide (post-emergent).

Tree of Heaven: initial cutting of trees followed by frequent cutting and mowing of sprouts.

Herbicide treatments include post-emerge foliar spray, cut surface treatments and basal bark application.

14. Follow-up Treatments: Following the initial treatment, the suppressed areas shall be monitored/inspected and re-growth/re-infestation shall be treated at least three additional times during the two-year maintenance period.

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI

#### Pre-Construction

- 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- The property owner must arrange for the meeting and following people should must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
  - a. Typical tree protection devices include: i. Chain link fence (four feet high)
    - ii. Super silt fence with wire strung between the support poles (minimum 4
    - feet high) with high visibility flagging.
    - iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
  - b. Typical stress reduction measures may include, but are not limited to:
  - i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
    - ii. Crown Reduction or pruning
    - iii. Watering
    - iv. Fertilizing
    - v. Vertical mulching vi. Root aeration systems

Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including

Page 2 of 3 February 2017

photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

- 4. Temporary tree protection devices must be installed per the approved Forest The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest
- 5. Tree protection fencing must be installed and maintained by the property owner for the
  - Parking or driving of equipment, machinery or vehicles of any type.
  - b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder,
  - trash, garbage, or debris of any kind.
  - e. Trenching or grading for utilities, irrigation, drainage, etc.
- Inspector. The signs must be waterproof and wording provided in both English and

#### During Construction

- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

#### Post-Construction

- 9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
  - a. Removal, and possible replacement, of dead, dying, or hazardous trees
  - b. Pruning of dead or declining limbs
  - Soil aeration
  - d. Fertilization
  - e. Watering f. Wound repair

February 2017

- Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. shown as saved on the approved plan.
- duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest
- areas is prohibited. This includes the following activities:

- Felling of trees into a protected area.
- 6. Forest and tree protection signs must be installed as required by the Forest Conservation

#### INSPECTIONS

All field inspections must be requested by the applicant. Field Inspections must be conducted as follows: Plans with Planting Requirements

protection fencing is removed.

PERMANENT FOREST

**EASEMENT SIGNAGE** 

POST TO BE INSTALLED IN A VERTICALLY

ALL WOOD SHALL BE PRESSURE TREATED

SOUTHERN YELLOW PINE OR GEDAR.

ALL FASTENERS SHALL BE STAINLESS

ALL POSTS TO BE INSTALLED ALONG

AS SPECIFIED PER APPROVED FINAL

FOREST CONSERVATION PLAN OR

8' Min. Metal 'T' Fence Posts driven at

M-NCPPC FIELD INSPECTOR'S

FOREST CONSERVATION EASEMENT LINE

Tree Protection Fence

MAXIMUM

10 FEET

Anchor posts must be put in the ground == to a depth of at == ||

g. Clean up of retention areas, including trash removal

10. After the final inspection and completion of all corrective measures the Forest

Conservation Inspector will request all temporary tree and forest protection devices be

removed from the site. Removal of tree protection devices that also operate for erosion

and sediment control must be coordinated with both DPS and the Forest Conservation

Inspector and cannot be removed without permission of the Forest Conservation

Inspector. No additional grading, sodding, or burial may take place after the tree

11. Long-term protection measures, including permanent signage, must be installed per the

approved plan. Installation will occur at the appropriate time during the construction

project. Refer to the approved plan drawing for the long-term protection measures to be

PLUMB POSITION.

STEEL 1-1" IN LENGTH.

INSTRUCTIONS.

Welded Wire

Welded Wire Mesh-

14/14 Gauge Galvinized Wire 2"x4" Opening least 2' into the ground

CONSERVATION

- CAPPED POST OR BEVELED

POSITIVE DRAINAGE.

- FINISHED GRADE

HOLE AS NECESSARY.

- 10" X 12" Weatherproof signs secured to fence @ 30' o.c. (max)

metal posts

MONTGOMERY COUNTY PLANNING DEPT. 12/23/2008

5 1/2"X8" METAL FOREST CONSERVATION

6x6x8 PRESSURE TREATED WOODEN POST

COMPACT SOIL TO ADJACENT UNDISTURBED

SOIL DENSITY, ADD QUICK CRETE 10 SOIL

MIXTURE AS NECESSARY TO CREATE FIRM

FOUNDATION, SLOPE TOP OF FOOTING FOR

INSTALL GRAVEL SUMP PRIOR TO POST

INSTALLATION, OVER EXCAVATE POST

PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

REMOVAL OF THIS FENCE REQUIRES THE APPROVAL OF MONTGOMERY COUNTY INSPECTOR.

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED

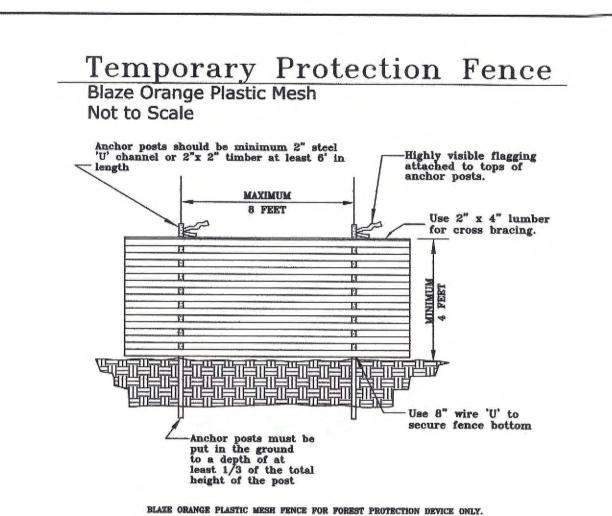
AND FLAGGED PRIOR TO INSTALLING DEVICE.

ROOT DAMAGE SHOULD BE AVOIDED.

5. PROTECTIVE SIGNAGE IS REQUIRED.

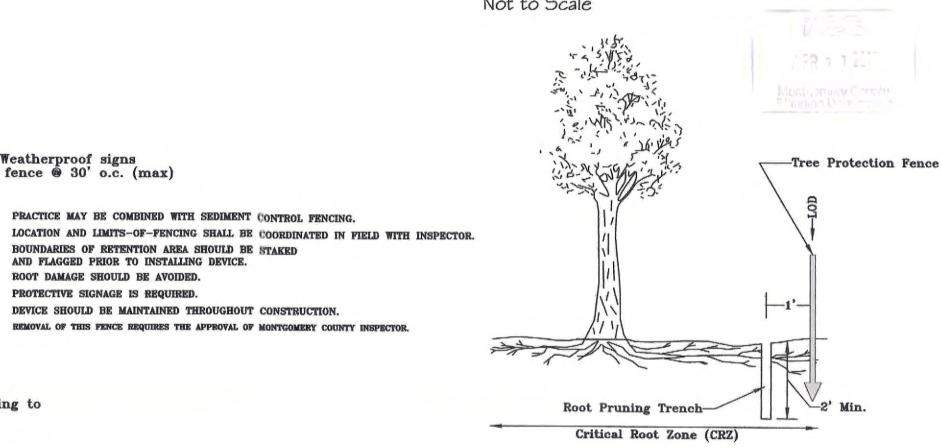
SIGNS (AS SPECIFIED BY M-NCPPC)

- 1. Pre-Restoration -- After the limits of disturbance have been staked and flagged, but before any clearing or grading begins.
- 2. Tree Save Measures -- After necessary stress reduction and tree save measures have been completed and protection measures have been installed, but before any clearing and grading begin.
- 3. Final Stream Restoration -- After completion of all stream restoration construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provisions of the stream and forest restoration plan.
- 4. Pre-Planting -- Before the start of any required forest restoration or riparian planting. 5. Plant Material Acceptance Meeting -- To be conducted when plant material arrives at the site and prior to installation.
- 6. Post-Planting Meeting -- 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
- 7. Interim Warranty Meeting -- To be held near the approximate middle of the warranty period to evaluate planting success/failure trends.
- 8. Final Planting & Easement Marker Inspection -- 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.



RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE. ROOT DAMAGE SHOULD BE AVOIDED. PROTECTIVE SIGNAGE MAY ALSO BE USED. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION

Root Pruning Detail

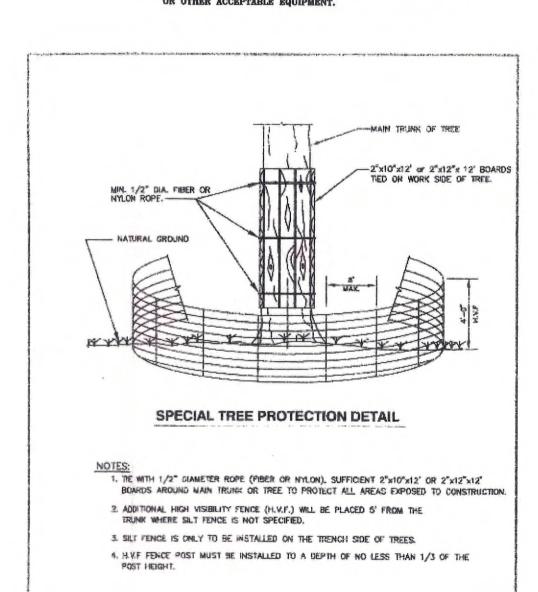


EXACT LOCATION SPECIFIED IN FIELD BY MONTGOMERY COUNTY INSPECTOR.

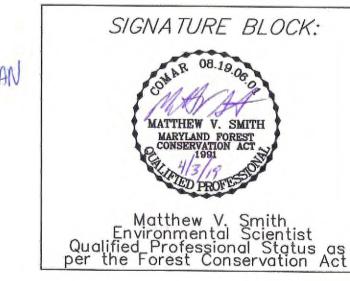
BACKFILL ROOT PRUNING TRENCH WITH SOIL REMOVED OR OTHER HIGH ORGANIC SOIL.

ROOT PRUNING EQUIPMENT TO BE APPROVED BY THE COUNTY INSPECTOR.

ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION



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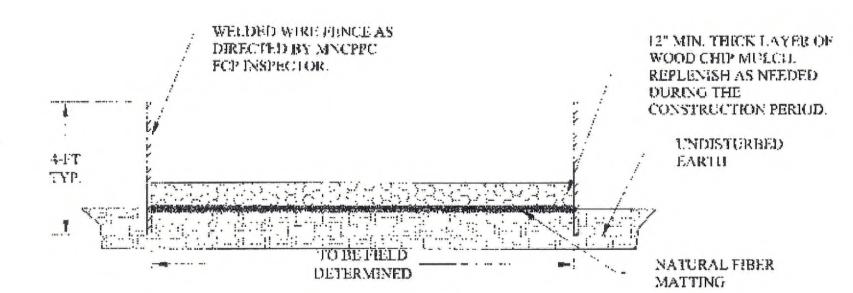
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Plan No.: Date: April 3, 2019 Scale: AS SHOWN

Design: MVS | Drawn: MVS

Sheet: 7 of 8 CAD File:

Project No.: 18-110



1. Mulch root protection to be installed as indicted on the approved forest conservation or tree save plans in critical root zones of

2. Access routes to be verified by the MNCPPC Forest Conservation Program (FCP). Inspector at the preconstruction meeting. Revisions to the alignment that minumize tree disturbance are encouraged and require review and approval by the MNCPPC FCP

3. Natural finer mutting shall be placed with scams parallel to the flow of traffic. Overlap fabric by 18" minimum at scams.

4. Natural fiber maning may be climinated by the direction of the MNCPPC FCP inspector.

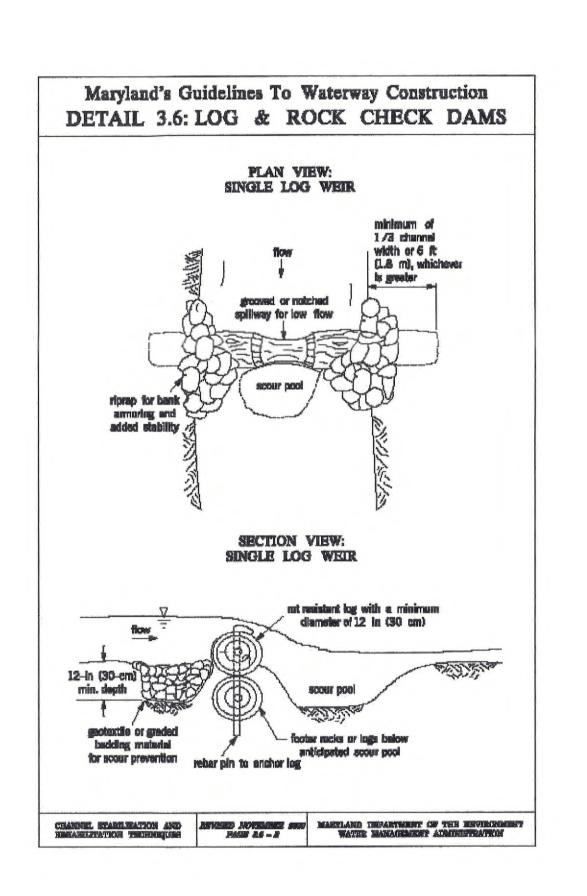
5. Contractor shall maintain mulch mat throughout the construction period.

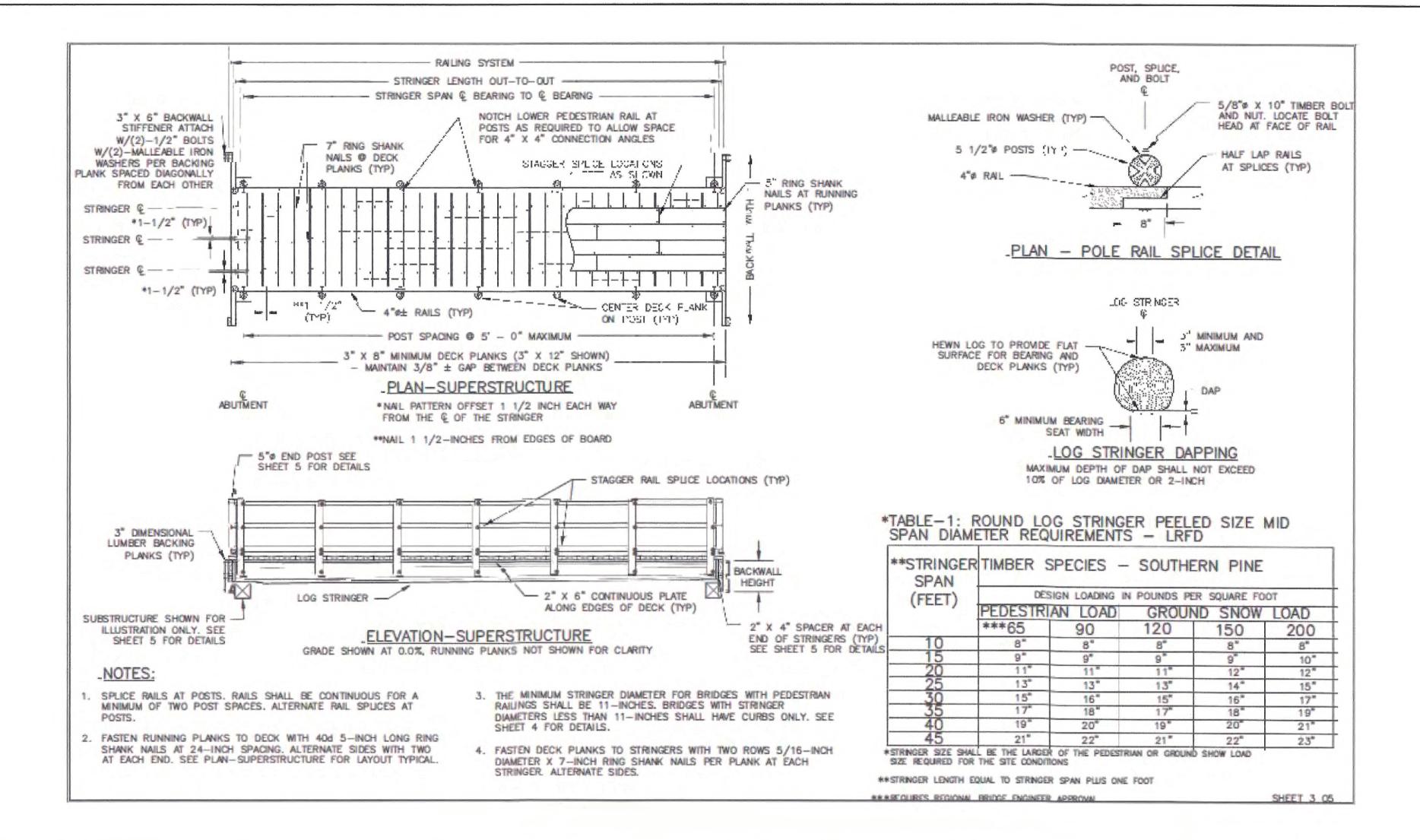
6. Upon competion of the project mulch can remain in place at a maximum depth of 2".

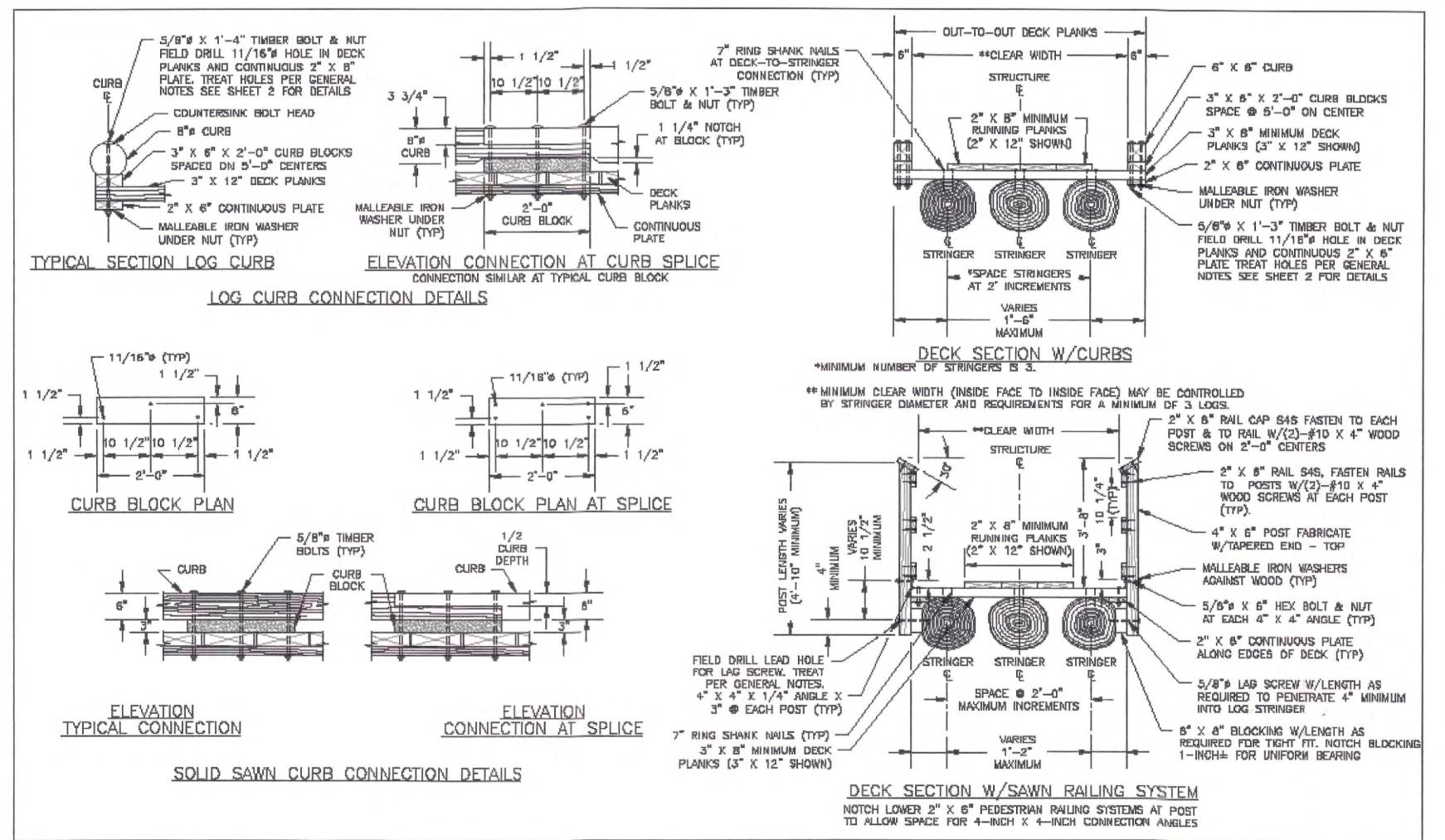
7. Searification of compacted mulch to occur upon removal of hard road at direction of the MNCPPC FCP Inspector. 8. The root protection system is designed to prevent the compaction of existing soils and tree roots using low pressure equipment which exerts no more from 8 psi. If the contractor intends to use any equipment with higher leads additional protection measures mest be provided.

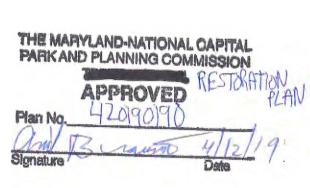
# MULCH ACCESS ROOT PROTECTION DETAIL

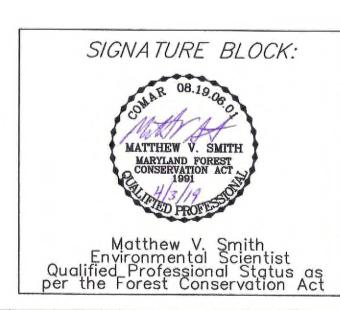
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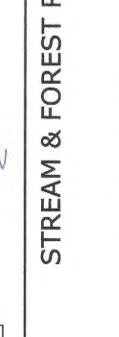












STORATION

Plan No.: Date: April 3, 2019 Scale: AS SHOWN Design: MVS | Drawn: MVS Sheet: 8 of 8 CAD File:

Project No.: 18-110

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