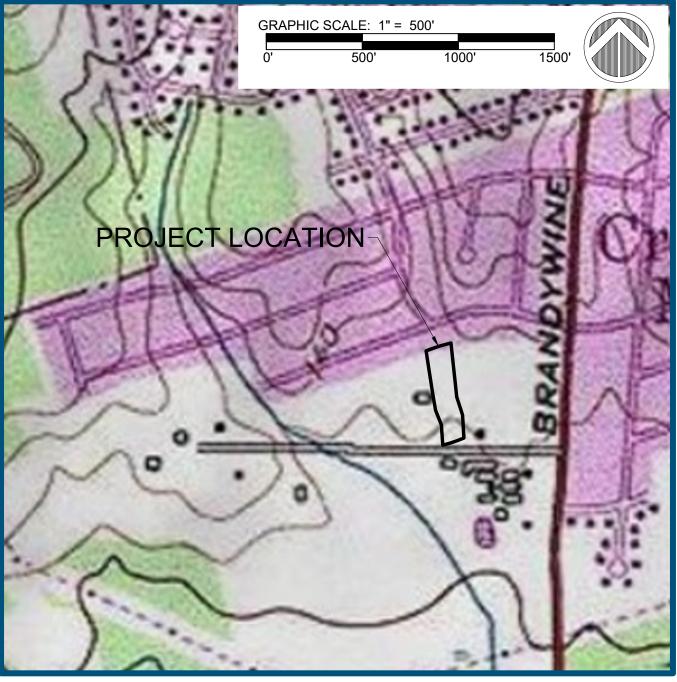
# VICINITY MAP



## LOCATION MAP



LATITUDE: N 38° 44' 98" LONGITUDE: W 76° 53' 51"

	TABLE 1. GENERAL INFORMATION TABLE					
LAYER CATEGORY	LAYER NAME	VALUE				
ZONE	ZONING (ZONE)	R-80				
ZONE	AVIATION POLICY AREA (APA)	N/A				
<b>ADMINISTRATIVE</b>	TAX GRID (TMG)	134-C1				
<b>ADMINISTRATIVE</b>	WSSC GRID	215SE06				
<b>ADMINISTRATIVE</b>	PLANNING AREA (PLAN AREA)	81A - CLINTON & VICINITY				
<b>ADMINISTRATIVE</b>	ELECTION DISTRICT (ED)	9				
<b>ADMINISTRATIVE</b>	CONCILMANIC DISTRICT (CD)	9				
<b>ADMINISTRATIVE</b>	GENERAL PLAN 2002 TIER (TIER)	DEVELOPING				
ADMINISTRATIVE	GENERAL PLAN GROWTH POLICY (2035)	ESTABLISHED COMMUNITIES				
<b>ADMINISTRATIVE</b>	POLICE DISTRICT	V				



	SECTION 1-Establishing
1	Property Description or N
2	Project Location;
3	TCP2 Number:
4	NRI Number:
5	Zone:
6	Gross Tract:
7	Project Area/Limits:
	SECTION 2-Determining
8	SECTION 2-Determining Existing Woodland in Pro
8 9	
	Existing Woodland in Pro Woodland Cleared in Pro
9	Existing Woodland in Pro Woodland Cleared in Pro
9 10	Existing Woodland in Pro Woodland Cleared in Pro Total area of woodland cl Off-Site Woodland Conse
9 10 11	Existing Woodland in Proj Woodland Cleared in Pro Total area of woodland cl Off-Site Woodland Conse

	SECTION 3- Meeting the
14	Woodland Preserved
15	Afforestation /Reforestation
16	Natural Regeneration
17	Landscape Credit
18	Speciment/Historic Tree (
19	Forest Enhancement Cre
20	Street Tree Credit (Existin
21	Prior Credit for Off-site W
22	Current Credit for Off-site
23	Off-site Woodland Conse
24	Off-site Woodland Conse
25	Area Approved for Fee-in-
26	Area Approved for Fee-in-
27	Woodland Conservation

28 Prepared by:

# **OUTFALL 166 IMPROVEMENTS PLAN TYPE 2 TREE CONSERVATION PLAN** PRINCE GEORGE'S COUNTY, MARYLAND

# AERIAL PHOTOGRAPH-PROJECT OVERVIEW

				NAME: CORVIAS PRINCE GEORGE'S COUNTY STORMWATER PARTNERS, LLC.	
				ADDRESS: COMMUNITY MGMT CORP 11300 ROCKVILLE PIKE	
				STE 907, ROCKVILLE, MD 20852	
				CONTACT: DEEPAK SHARMA	
	odland Conservation Wo			EMAIL: SHARMAD@BV.COM	
for Governmental	and Linear Projects in P	rince George's County		PROPERTY OWNER:	
olishing Site Informa	ation			OWNER NAME: VINEYARD HOA INC.	
	UTFALL 166 IMPROVEME			OWNER ADDRESS: COMMUNITY MGMT CORP 11300 ROCKVILLE	
	UMMERSWEET DR, CLIN CP2-039-2022	TON, MD 20745 Rev. No	o: -00		<u> </u>
	RI-094-2020	Rev. No		APPLICANT PIKE STE 907, ROCKVILLE, MD 20852	
	-	R-80		NAME: RES	
	-	<u>1.42</u> acres 1.42 acres		ADDRESS: 5367 TELEPHONE ROAD	
		1.12 40100			
rmining Requiremer			-	WARRENTON, VA 20187	
l in Project Limits = W	/CT	0.90 or	63.38%	CONTACT: JOEY MONHEIT	
l in Project Limits Iland cleared (subject	to 1:1 replacement)	0.90		PHONE NUMBER: 703-393-4844	
Conservation Provide		0.00		EMAIL: JMONHEIT@RES.US	
Conservation Provide	ed (preservation)	0.00		PROPERTY INFO:	
vation Requirement:		0.90 acres		SITE ADDRESS: SUMMERSWEET DR CLINTON, MD	
ting the Requiremer	nts				
red		0.00		20735	
prestation		0.93 Bond amount	\$ 12,153.24	GPIN: 3619525	
tion	-	0.00		ZONING: R-80	
c Tree Credit (CRZ ar	ea *2 0)	0.00		ACREAGE: 1.42 AC. +/-	
ent Credit (Area *.25)		0.00			
(Existing or 10-year c	anopy coverage)	0.00			
-site Woodland Conse		0.00			REVISIONS
Off-site Woodland Co Conservation provide		0.00			REVISIONS
Conservation provided		0.00		QUALIFIED PROFESSIONAL CERTIFICATION	
Fee-in-lieu/PFA		0.00 Fee amount:	\$0.00	This plan complies with the current requirements of Subtitle 25 and the Woodland and Wildlife Conservation	
Fee-in-lieu/non-PFA		0.00 Fee amount:	\$0.00	This plan complex with the current requirements of subtrice 25 and the woodland and withine Conservation Technical Manual.	
vation Provided		0.93 acres		$(\mathcal{L})$	
Ð	u. D		11/8/2022	Signed: Date: 11/8/2022	
Si	gned		Date	REGINALD GRAVES, 240-544-6617, RGRAVES@RES.US (Place printed name, address, phone number, and e-mail address of qualified professional below the signature.)	
-					

# FEMA FIRMETTE PHIC SCALE: 1" = 50 **ROJECT LOCATION**

REFERENCE FEMA MAP: 24033C0335E

## TABLE 3: SITE STATISTICS

SITE STATISTICS	TOTAL
GROSS TRACT AREA	1.42 AC
EXISTING 100-YEAR FLOODPLAIN	0.29 AC
NET TRACT AREA	1.13 AC
EXISTING WOODLAND IN THE FLOODPLAIN	0.16 AC
EXISTING WOODLAND NET TRACT	0.90 AC
EXISTING WOODLAND TOTAL	0.90 AC
EXISTING PMA	1.42 AC
REGULATED STREAMS (LINEAR FEET OF CENTERLINE)	551.8 LF

(EGULATED STREAMS (LINEAR FEET OF CENTERLINE) 55 RIPARIAN (WOODED) BUFFER UP TO 300 FEET WIDE 1.42 AC NOTE: ACRES ROUNDED TO THE NEAREST ONE-HUNDRETH OF

AN ACRE.

SHEET LIST TABLE					
SHEET NUMBER	SHEET TITLE				
1	COVER SHEET				
2	TCP2 DESIGN				
3	TCP2 NOTES				
4	TCP2 DETAILS				
5	TCP2 PLANTING NOTES				

93

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**1ENTS** 

VEN

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166

1 OF 5

Property Owners Awareness Certificate

I/We HGS, LLC hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2. 6pm NO 11/8/2022 Owner or Owners Representative JOEY MONHEIT Date

\_ hereby acknowledge that we are aware of this Type 2 I/We\_\_\_\_ Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2.

Date

Contract Purchaser

## **TYPE 2 TREE CONSERVATION (TCP2) PLAN APPROVAL BLOCK**

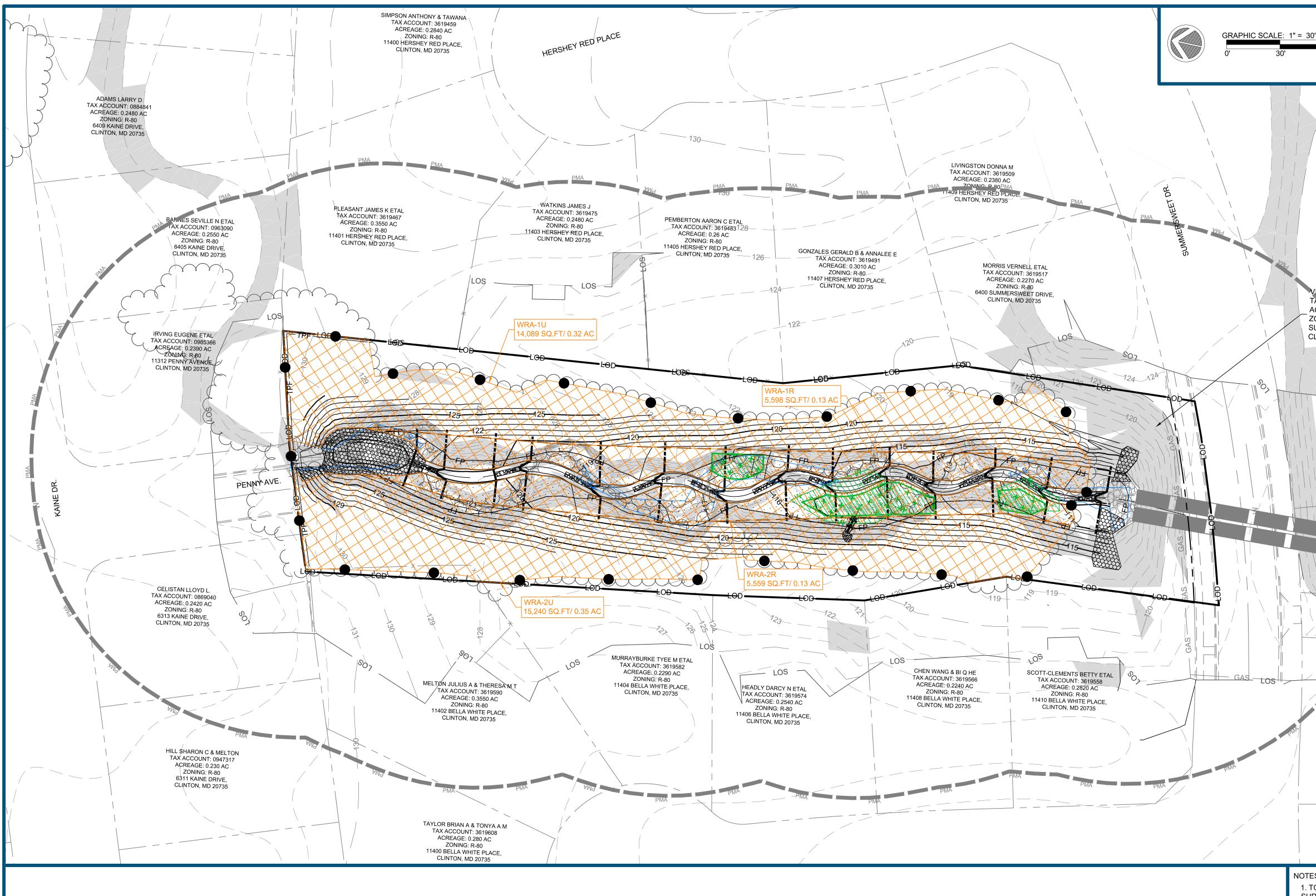
Prince George's County Planning Department, M-NCPPC Environmental Planning Section **TYPE 2 TREE CONSERVATION PLAN APPROVAL** TCP2-039-2022 DRD # Reason for Revision Approved by Date

	Approved by	Dute	2102		
00	Jusanne A. Nickle	12-12-2022	N/A	N/A	AL
01					
02					2
03					
04					
05					

30% DESIGN REVIEW Dailen Wilfur	8/23/22			ROVEMENTS PLAN CLINTON, MD 20735	N
PERMIT PLAN DESIGN REV Dailing Wilfung CONSTRUCTION PLAN RE	9/7/22	PROJECT MANAGER: DESIGNED: DRAWN:	JM BW CD	JOB NUMBER: DESIGN TYPE: PLAN DATE:	105793 TCP2 11/8/2022
			)r	es	
			HGS, LLC. A	RES COMPANY	

COVER SHEET

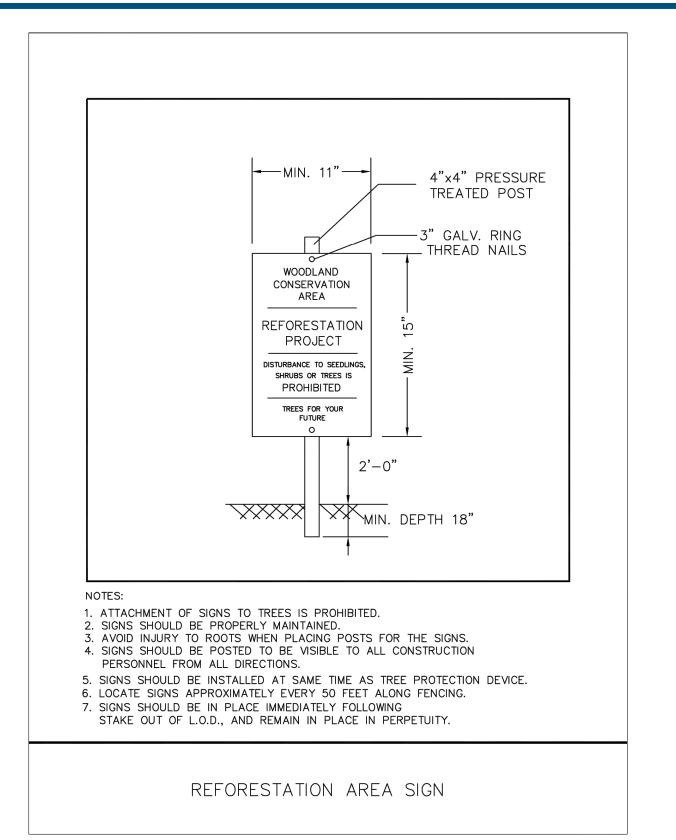
5367 TELEPHONE ROAD, WARRENTON, VIRGINIA 20187 P: 703.393.4844 | F: 703.393.2934 WWW.RES.US

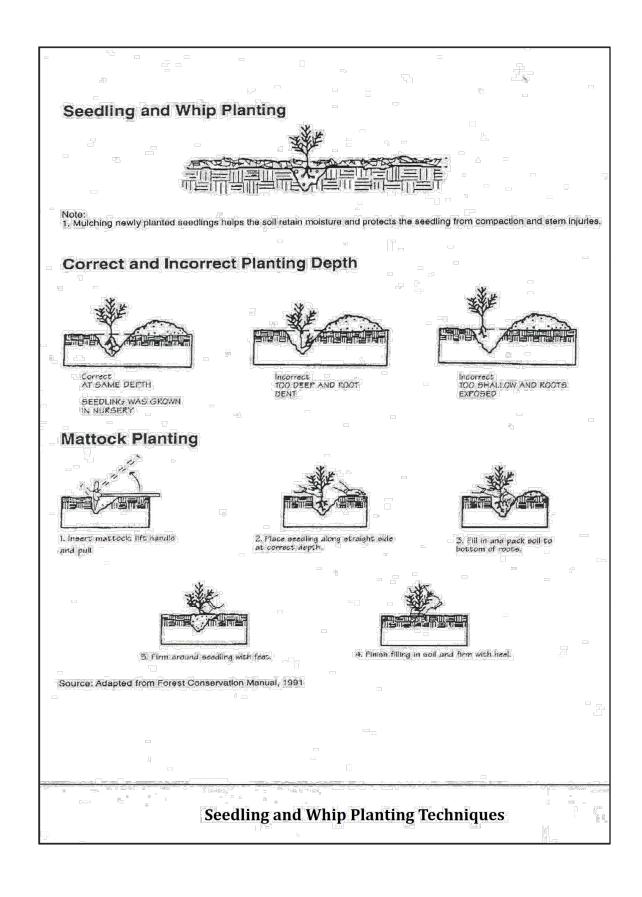


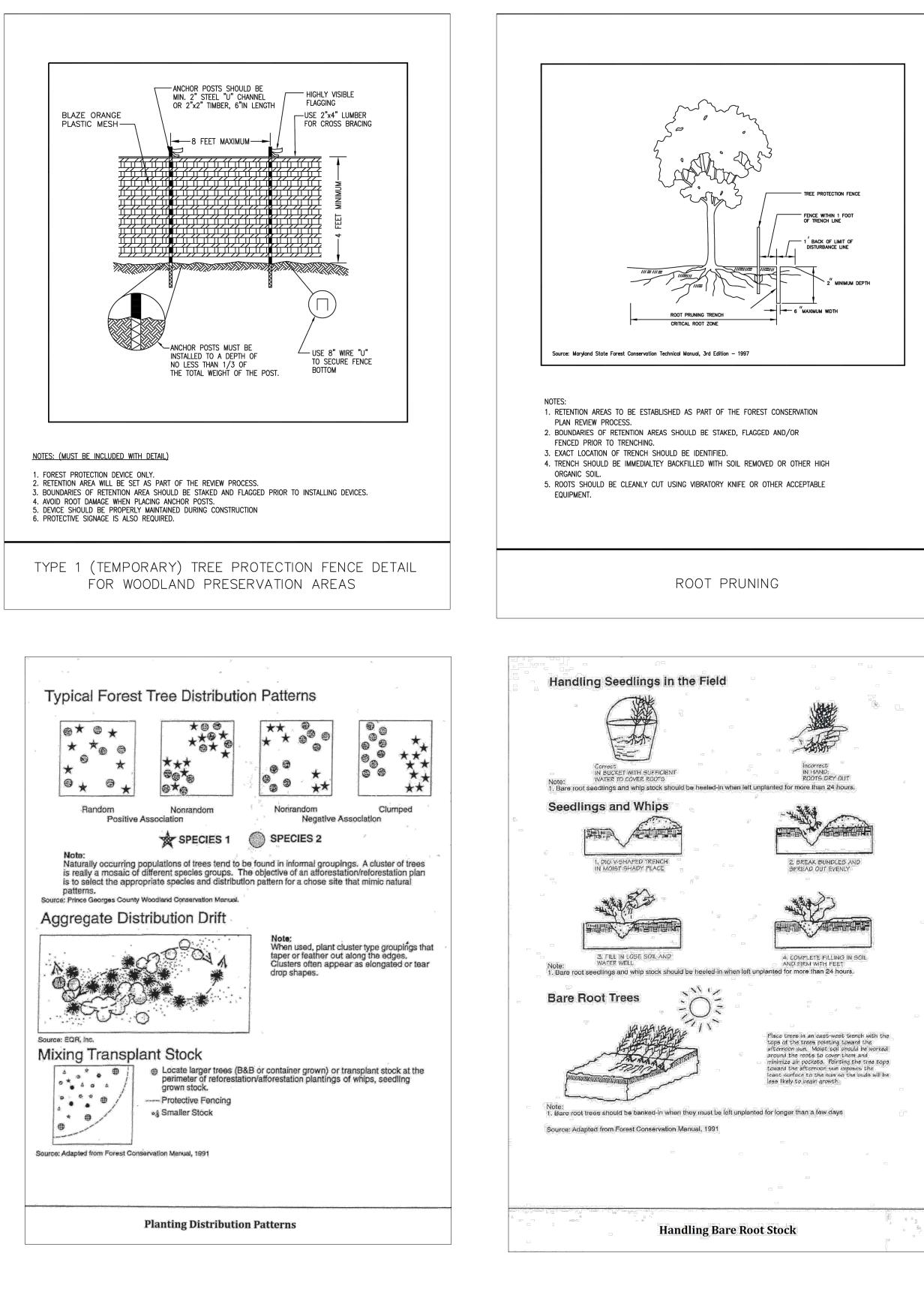
	GRAPHIC SCALE:			LOS	EX. MAJOR CONTOUR EX. MINOR CONTOUR EX. SURVEY LIMITS EX. STREAM CENTERLINE EX. STREAM TOP OF BANK EX. TOP OF BANK	AIAS SOLUTONS	
			T.O.B.		EX. TREELINE EX. 100-YR FLOODPLAIN EX. CRITICAL SLOPE >15% EX. PROPERTY LINE EX. PROPERTY ADJACENT EX. STREAM BUFFER EX. WETLAND BUFFER	PAING GEORGE'S COUNTY   CON-	
M 09 C A ACE, PMA	MEET DR.			OHE GAS SAN 	EX. PRIMARY MANAGEMENT AREA EX. OVERHEAD ELECTRIC EX. GAS EX. GAS EASEMENT EX. SANITARY SEWER EX. WATER LINE EX. EDGE OF PAVEMENT	<b>S</b>	S COMPANY RRENTON, VIRGINIA 20187 :: 703.393.2934 ES.US
/ERNELL ETAL DUNT: 3619517 5E: 0.2270 AC	SUMMERSWEET		₩ ₩ ₩ ₩ ₩	× * LOD	EX. CULVERT EX. FENCE EX. RIPRAP EX. FORESTED WETLAND PR. LIMITS OF DISTURBANCE PR. MAJOR CONTOUR		, A RE. ), WAF 844   F WV.RE
ING: R-80 ERSWEET DRIVE, N, MD 20735		VINEYARDS HOA INC TAX ACCOUNT: 3619525 ACREAGE:1.420 AC ZONING: R-80 / SUMMERSWEET DRIVE, CLINTON, MD 20735		TPF TPF + + + + + + + + + +	PR. MINOR CONTOUR PR. FLOODPLAIN PR. TEMPORARY TREE PROTECTION FENC PR. RIP RAP PR. FORESTED WETLAND		5367 TELEPHONE ROAE P: 703.393.4 W
$\frac{SO_{7}}{124}$					PR. CLEARED FLOODPLAIN AREA PR. WOODLAND REFORESTATION AREA PR. REFORESTATION SIGN PR. ROCK STRUCTURE PR. ROCK SILL	<b>/ATER</b>	
		Sol 1			PR. FLOODPLAIN LOG	S PLAN STORMV	ARYLAND
	CAS		PMA 05	Anna	YYYYYYYYY	VEMENT VEMENT COUNTY S, LLC.	
100 - 119			SO, PMA	June	mang	166 IMPRC GEORGE'S PARTNER	RGE'S CO
SCOTT-CLEMENTS BETTY ETAL TAX ACCOUNT: 3619558 ACREAGE: 0.2820 AC	SAS LOS	LOS					NCE GEO
ZONING: R-80 11410 BELLA WHITE PLACE, CLINTON, MD 20735		PMP				CORVIAS	PRI
PMA PMA PI	MA					STAMP/SEAL: PROFESSIONAL CERTIN I HEREBY CERTIFY THA DOCUMENTS WERE PR APPROVED BY ME, AND	AT THESE REPARED OR
		NOTES:				DULY LICENSED PROFI ENGINEER UNDER THE THE STATE OF MARYLA NO. 52852, EXPIRATION 6/14/2024	ESSIONAL E LAWS OF AND, LICENSE
		SURVEY PERFORMED BY ( FOOT. 2. LINEWORK OUTSIDE THI FEET.	CAPITAL DEVELOPME E SURVEY LIMITS IS E	NT DESIGN INC. ON A	IE SURVEY LIMITS IS BASED ON A FIELD AUGUST 2019. CONTOUR INTERVAL IS ONE E GIS DATA. CONTOUR INTERVAL IS TWO (2) JSA INC. IN OCTOBER 2019 AND CONFIRME	30% DESIGN REVIEW	
Property	y Owners Awareness Certificate	4. PROPERTY LINES ADJAC	CENT TO WORK AREA	ARE BASED ON SUR	RVEY BY CPJ.	Signature PERMIT PLAN DESIGN Dailer Wilfurg Signature	8/23/22 Date N REVIEW 9/7/22 Date
I/ We HGS, LLC Tree Conservation Plan (TCP2) and that	hereby acknowledge that we are awa we understand the requirements as set forth in	are of this Type 2 n this TCP2. 11/8/2022				CONSTRUCTION PLAN	N REVIEW
Owner or Owners Representative JOE		Date are of this Type 2	Prince Ge	APPROVAL BI orge's County Planning Environmental Plan TREE CONSERVATI	Department, M-NCPPC ning Section ON PLAN APPROVAL		
QUALIFIED PROFESSIONAL CERTIFICATION	ON		oved by	TCP2-039-202 Date DRD 7 12-12-2022 N/A		PROJECT MANAGER:	JM
This plan complies with the current requirement Technical Manual.	ts of Subtitle 25 and the Woodland and Wild	life Conservation	anne ff. Nickle	12-12-2022 IN/A		DESIGNED: DRAWN: JOB NUMBER:	BW CD 105793
Signed: <u>#CMAX</u> REGINALD GRAVES, 240-544-6617 (Place printed name, address, phone number, an		11/8/2022         03           elow the signature.)         04           05				DESIGN TYPE: DATE: SHEET NO:	TCP2 11/8/2022
L						<u>2</u>	2OF 5



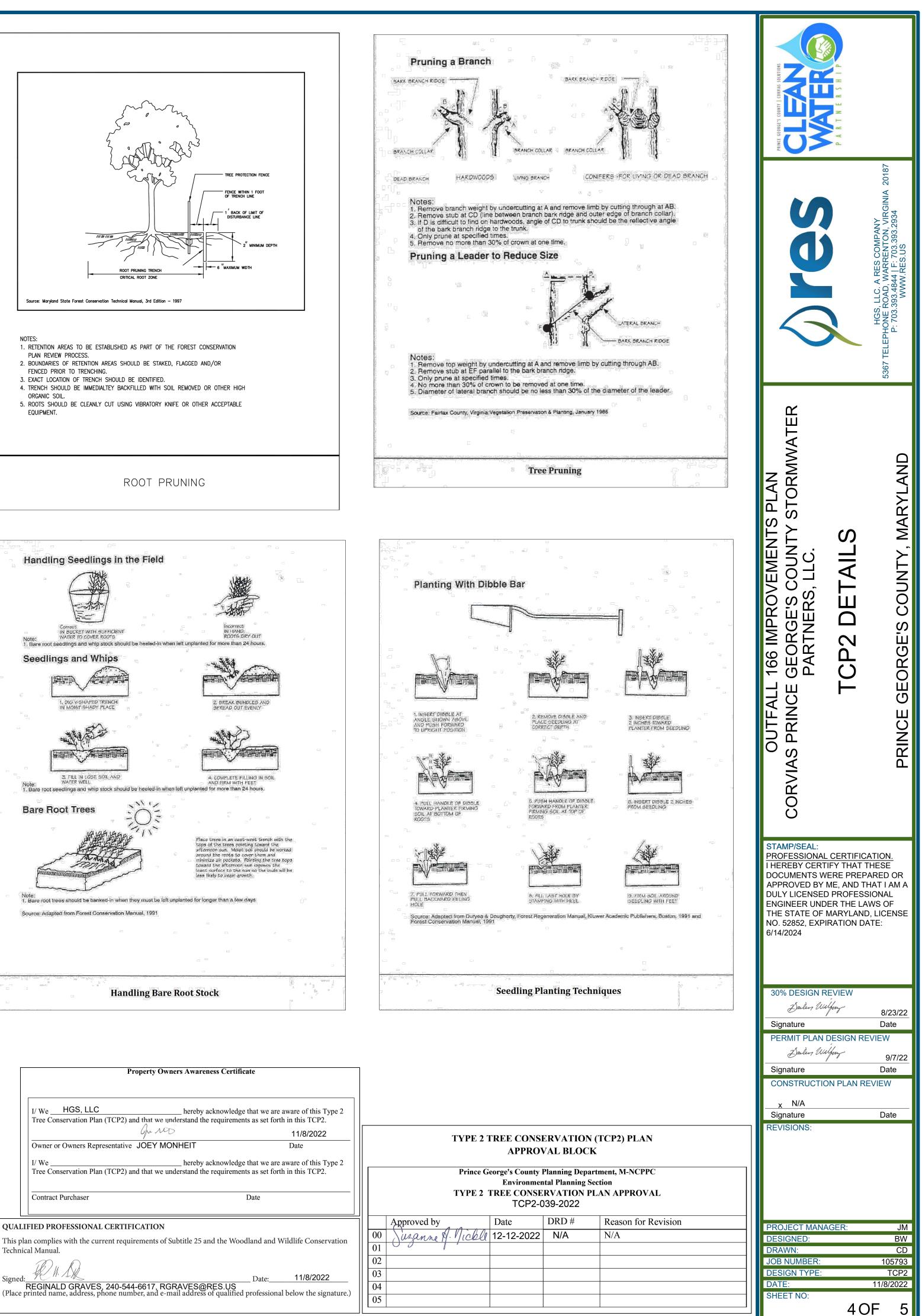
GRADING PERMIT EXPIRES, 2. CUTTING OR CLEARING OF CONSENT OF THE PLANNIN 3. A PRE-CONSTRUCTION MEE PUBLIC WORKS AND TRANS BE CONTACTED PRIOR TO T IMPLEMENTATION OF WOOD 4. THE DEVELOPER OR BUILD WOODLAND CONSERVATIO FUTURE PROPERTY OWNER 5. THE OWNERS OF THE PROF CONFORMANCE TO THE RE 6. THE PROPERTY IS WITHIN T 7. THE SITE IS NOT ADJACENT 8. THE SITE IS NOT ADJACENT 9. THIS PLAN IS NOT GRANDF/ AFFORESTATION AND REFOREST 10. ALL AFFORESTATION AND F	D FULFILL THE WOODLAND CONSERVATION REQUIREMENTS FOR DOE# 12403-2022-0. IF THIS THEN THIS TCP2 (TCP2-039-2022) ALSO EXPIRES AND IS NO LONGER VALID. WOODLAND NOT IN CONFORMANCE WITH THIS PLAN OR WITHOUT THE EXPRESSED WRITTEN G DIRECTOR OR DESIGNEE SHALL BE SUBJECT TO A \$9.00 PER SQUARE FOOT MITIGATION FEE. ETING IS REQUIRED PRIOR TO THE ISSUANCE OF GRADING PERMITS. THE DEPARTMENT OF PORTATION OR THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, AS APPROPRIATE, SHALL THE START OF ANY WORK ON THE SITE TO CONDUCT A PRE-CONSTRUCTION MEETING WHERE DLAND CONSERVATION MEASURES SHOWN ON THIS PLAN WILL BE DISCUSSED IN DETAIL. ER OF THE LOTS OR PARCELS SHOWN ON THIS PLAN SHALL NOTIFY FUTURE BUYERS OF ANY N AREAS THROUGH THE PROVISION OF A COPY OF THIS PLAN AT TIME OF CONTRACT SIGNING. RS ARE ALSO SUBJECT TO THIS REQUIREMENT. "FERTY SUBJECT TO THIS REQUIREMENT. "HE DEVELOPING TIER AND IS ZONED R-80. "TO A ROADWAY DESIGNATED AS SCENIC, HISTORIC, A PARKWAY OR A SCENIC BYWAY. "TO A ROADWAY CLASSIFIED AS ARTERIAL OR GREATER. ATHERED UNDER CB-27-2010, SECTION 25-117 (G).	MarketMa
<ul> <li>11. THE PLANTING OF AFFORES FIRST BUILDING PERMIT. SE BE DONE WHILE GROUND IS AT ANY TIME PROVIDED A DI AT ANY TIME PROVIDED A DI IS. IF PLANTING CANNOT OCCL FENCING AND SIGNAGE IN / BE ACCOMPLISHED DURING PROPERTY TITLE TO THE H PURCHASER INDICATING TH THAT REFORESTATION WIL PRESENTED TO THE GRADI</li> <li>13. REFORESTATION AREAS SH TREES AND THE REMOVAL ACCEPTABLE.</li> <li>14. ALL REQUIRED TEMPORARY THE SITE AND SHALL REMA REQUIRED PLANTING. THE' INSTALLED PRIOR TO CLEA PERMANENT TREE PROTECT</li> <li>15. AFFORESTATION/REFORES THE SAME TIME AS THE PEI</li> <li>16. THE COUNTY INSPECTOR S SITE.</li> <li>17. AT TIME OF ISSUANCE OF T PLANNING DEPARTMENT RE NAME; BUSINESS NAME (IF) EACH OF THE REQUIRED FC</li> </ul>	THE REQUIRED TIMEFRAME FOR MAINTENANCE HAS PASSED, WHICHEVER IS LONGER. STATION OR REFORESTATION AREAS SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF THE HEDLING PLANTING IS TO OCCUR FROM NOVEMBER THROUGH MAY ONLY. NO PLANTING SHALL IS FROZEN. PLANTING WITH LARGER CALIPER STOCK OR CONTAINERIZED STOCK MAY BE DONE HETAILED MAINTENANCE SCHEDULE IS PROVIDED. IN DUE TO PLANTING CONDITIONS, THE DEVELOPER OR PROPERTY OWNER SHALL INSTALL THE ACCORDANCE WITH THE APPROVED TYPE 2 TREE CONSERVATION PLAN. PLANTING SHALL THEN IS THE NEXT PLANTING SEASON. IF PLANTING IS DELAYED BEYOND THE TRANSFER OF THE DMEOWNER, THE DEVELOPER OR BUILDER SHALL OBTAIN A SIGNED STATEMENT FROM THE HAT THEY UNDERSTAND THAT THE REFORESTATION AREA IS LOCATED ON THEIR PROPERTY AND L OCCUR DURING THE NEXT PLANTING SEASON. A COPY OF THAT DOCUMENT SHALL BE NG INSPECTOR AND THE COUNTY. HALL NOT BE MOWED. THE MANAGEMENT OF COMPETING VEGETATION AROUND INDIVIDUAL OF NOXIOUS, INVASIVE, AND NON-NATIVE VEGETATION WITHIN THE REFORESTATION AREAS IS IT TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO THE CLEARING AND GRADING OF IN IN PLACE UNTIL THE PERMANENT TREE PROTECTION FENCING IS INSTALLED WITH THE TEMPORARY FENCING IS NOT REQUIRED TO BE INSTALLED IF THE PERMANENT FENCING IS RING AND GRADING OF THE SITE. FAILURE TO INSTALL AND MAINTAIN TEMPORARY OR TIVE FENCING IS A VIOLATION OF THIS TCP2. TATION AREAS SHALL BE POSTED WITH NOTIFICATION SIGNAGE, AS SHOWN ON THE PLANS, AT RMANENT PROTECTION FENCING INSTALLATION. THESE SIGNS SHALL REMAIN IN PERPETUITY. HALL BE NOTIFIED PRIOR TO SOIL PREPARATION OR INITIATION OF ANY TREE PLANTING ON THIS HE FIRST PERMIT, THE FOLLOWING INFORMATION OR INITIATION OF ANY TREE PLANTING ON THIS HE FIRST PERMIT, THE FOLLOWING INFORMATION OR INITIATION OF ANY TREE PLANTING ON THIS HE FIRST PERMIT, THE FOLLOWING INFORMATION OR INITIATION OF ANY TREE PLANTING ON THIS HE FIRST PERMIT, THE FOLLOWING INFORMATION OR INITIATION OF ANY TREE PLANTING ON THIS HE FIRST PERMIT, THE FOLLOWING INFORMATION OR INITIATION OF	OUTFALL 166 IMPROVEMENTS PLAN CORVIAS PRINCE GEORGE'S COUNTY STORMWATER PARTNERS, LLC. TCP2 NOTES PRINCE GEORGE'S COUNTY, MARYLAND
PER SQUARE FOOT PENALT INVASIVE SPECIES REMOVAL N 19. THE REMOVAL OF NOXIOUS EQUIPMENT ONLY SUCH AS MATERIAL LESS THAN TWO MATERIAL FROM THESE NO BE CUT TO ALLOW CONTAC 20. THE USE OF BROADCAST S DISCOURAGE RE-SPROUTIN OF THE CHEMICAL DIRECTL HERBICIDE SHALL BE DONE	EFORESTATION BOND AND/OR A VIOLATION OF THIS PLAN INCLUDING THE ASSOCIATED \$9.00         Y UNLESS THE COUNTY INSPECTOR APPROVES A WRITTEN EXTENSION.         OTES         Y, INVASIVE, AND NON-NATIVES PLANT SPECIES SHALL BE DONE WITH THE USE OF HAND-HELD         PRUNERS OR A CHAIN SAW. THESE PLANTS MAY BE CUT NEAR THE GROUND AND THE         INCHES DIAMETER MAY BE REMOVED FROM THE AREA AND DISPOSED OF APPROPRIATELY. ALL         XIOUS, INVASIVE, AND NON-NATIVE PLANTS GREATER THAN TWO (2) INCHES DIAMETER SHALL         T WITH THE GROUND, THUS ENCOURAGING DECOMPOSITION.         PRAYING OF HERBICIDES IS NOT PERMITTED. HOWEVER, THE USE OF HERBICIDES TO         IG OF INVASIVE, NOXIOUS, OR NON-NATIVE PLANTS IS PERMITTED IF DONE AS AN APPLICATION         Y TO THE CUT STUMP IMMEDIATELY FOLLOWING CUTTING OF PLANT TOPS. THE USE OF ANY         IN ACCORDANCE WITH THE LABEL INSTRUCTIONS AND BE APPLIED BY A CERTIFIED PESTICIDE         IA PINES ARE PRESENT WITHIN 40 FEET OF THE LIMITS OF DISTURBANCE IN A PRESERVATION         VTPFE 2 TREE CONSERVATION (TCP2) PLAN         APPROVAL BLOCK         Prince George's County Planning Department, M-NCPPC         Environmental Planning Section         TYPE 2 TREE CONSERVATION PLAN APPROVAL         TCP	STAMP/SEAL:PROFESSIONAL CERTIFICATION.IHEREBY CERTIFY THAT THESEDOCUMENTS WERE PREPARED ORAPPROVED BY ME, AND THAT I AM ADULY LICENSED PROFESSIONALENGINEER UNDER THE LAWS OFTHE STATE OF MARYLAND, LICENSENO. 52852, EXPIRATION DATE:6/14/202430% DESIGN REVIEWJailen Muffung8/23/22SignatureDatePERMIT PLAN DESIGN REVIEWJailen Muffung9/7/22SignatureDateCONSTRUCTION PLAN REVIEWxxN/ASignatureDateREVISIONS:
This plan complete with the current requirements of Subtrite 25 and the Woodland and Wildlife Conservation Technical Manual. Signed:	01         02         03           03         04         05	DRAWN: CD JOB NUMBER: 105793 DESIGN TYPE: TCP2 DATE: 11/8/2022 SHEET NO: 3 OF 5







	Property Ov	wners Awareness Certificate	
	I/ We HGS, LLC Tree Conservation Plan (TCP2) and that we	understand the requirements as set for	
	Owner or Owners Representative JOEY M	0	Date
	I/ We Tree Conservation Plan (TCP2) and that we		
	Contract Purchaser	Date	
QUAL	IFIED PROFESSIONAL CERTIFICATION		
-	lan complies with the current requirements of cal Manual.	f Subtitle 25 and the Woodland and	l Wildlife Conservat
Signed	EN. DR	Date:	11/8/2022



## **UPLAND TREES PLANTING LIST (WRA-1U)**

PLANTING DENSITY: 775 STEMS/ACRE (7.5-FT-ON-CEN	TER) PLANTING AREA (AC): 0.32

BOTANICAL NAME	COMMON NAME	PERCENT OF MIX	#OF STEMS	PLANTING STOCK TYPE & SIZE
ACER NEGUNDO	BOX ELDER	10%	25	BAREROOT, 12-24"
ACER RUBRUM	RED MAPLE	6%	15	BAREROOT, 12-24"
ILEX OPACA	AMERICAN HOLLY	6%	15	BAREROOT, 12-24"
LIQUIDAMBAR STYRACIFLUA	SWEET-GUM	10%	25	BAREROOT, 12-24"
PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12%	30	BAREROOT, 12-24"
POPULUS DELTOIDES	EASTERN COTTONWOOD	6%	15	BAREROOT, 12-24"
PRUNUS ANGUSTIFOLIA	CHICKSAW PLUM	6%	15	BAREROOT, 12-24"
QUERCUS PHELLOS	WILLOW OAK	8%	20	BAREROOT, 12-24"
QUERCUS RUBRA	NORTHERN RED OAK	8%	20	BAREROOT, 12-24"
QUERCUS STELLATA	POST OAK	6%	15	BAREROOT, 12-24"
RHUS COPALLINA	WINGED SUMAC	4%	10	BAREROOT, 12-24"
ROBINIA PSEUDOACACIA	BLACK LOCUST	12%	30	BAREROOT, 12-24"
VIBURNUM DENTATUM	SOUTHERN ARROW-WOOD	6%	15	BAREROOT, 12-24"
	TOTALS	100%	251	

SUBSTITUTIONS TO THE ABOVE LISTED SPECIES MAY BE MADE DEPENDING ON NURSERY STOCK AVAILABILITY. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.

UPLAND TREES PLANTING LIST (WRA-2U) PLANTING DENSITY: 775 STEMS/ACRE (7.5-FT-ON-CENTER) PLANTING AREA (AC): 0.35							
BOTANICAL NAME	COMMON NAME	PERCENT OF MIX	# OF STEMS	PLANTING STOCK TYPE & SIZE			
ACER NEGUNDO	BOX ELDER	10%	27	BAREROOT, 12-24"			
ACER RUBRUM	RED MAPLE	6%	16	BAREROOT, 12-24"			
ILEX OPACA	AMERICAN HOLLY	6%	16	BAREROOT, 12-24"			
LIQUIDAMBAR STYRACIFLUA	SWEET-GUM	10%	27	BAREROOT, 12-24"			
PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12%	33	BAREROOT, 12-24"			
POPULUS DELTOIDES	EASTERN COTTONWOOD	6%	16	BAREROOT, 12-24"			
PRUNUS ANGUSTIFOLIA	CHICKSAW PLUM	6%	16	BAREROOT, 12-24"			
QUERCUS PHELLOS	WILLOW OAK	8%	22	BAREROOT, 12-24"			
QUERCUS RUBRA	NORTHERN RED OAK	8%	22	BAREROOT, 12-24"			
QUERCUS STELLATA	POST OAK	6%	16	BAREROOT, 12-24"			
RHUS COPALLINA	WINGED SUMAC	4%	11	BAREROOT, 12-24"			
ROBINIA PSEUDOACACIA	BLACK LOCUST	12%	33	BAREROOT, 12-24"			
VIBURNUM DENTATUM	SOUTHERN ARROW-WOOD	6%	16	BAREROOT, 12-24"			
	TOTALS	100%	271				

SUBSTITUTIONS TO THE ABOVE LISTED SPECIES MAY BE MADE DEPENDING ON NURSERY STOCK AVAILABILITY. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.

PLANTING SCHEDULE - WOODLAND REFORESTATION AREA							
REFORESTATION AREA	ACREAGE SQUARE		SIZE	NUMBER REQUIRED	PLANTING		
IDENTIFIER	ACREAGE	FOOTAGE		PER ACRE	CREDITS		
WRA-1U	0.32	14089	BARE ROOT, SEEDLINGS, OR WHIPS	775	251		
WRA-1R	0.13	5598	BARE ROOT, SEEDLINGS, OR WHIPS	775	100		
WRA-2U	0.35	15240	BARE ROOT, SEEDLINGS, OR WHIPS	775	271		
WRA-2R	0.13	5559	BARE ROOT, SEEDLINGS, OR WHIPS	775	99		
TOTAL REFORESTATION AREA	0.93	40486		TOTAL SITE PLANTING CREDITS	720		

## FLOODPLAIN & WETLAND TREES PLANTING LIST (WRA-1R)

## PLANTING DENSITY: 775 STEMS/ACRE (7.5-FT-ON-CENTER) PLANTING AREA (AC): 0.13

BOTANICAL NAME	COMMON NAME	PERCENT OF MIX	# OF STEMS	PLANTING STOCK TYPE & SIZE
ACER NEGUNDO	BOX ELDER	10%	10	BAREROOT, 12-24"
ACER RUBRUM	RED MAPLE	5%	5	BAREROOT, 12-24"
ALNUS SERRULATA	HAZEL ALDER	3%	5	BAREROOT, 12-24"
BETULA NIGRA	RIVER BIRCH	7%	5	BAREROOT, 12-24"
CARPINUS CAROLIANA	IRONWOOD	5%	5	BAREROOT, 12-24"
CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3%	5	BAREROOT, 12-24"
CLETHRA ALNIFOLIA	SWEETSPIRE	3%	5	BAREROOT, 12-24"
CORNUM AMOMUM	SILKY DOGWOOD	3%	5	BAREROOT, 12-24"
LINDERA BENZOIN	SPICEBUSH	3%	5	BAREROOT, 12-24"
LIQUIDAMBAR STYRACIFLUA	SWEET-GUM	10%	10	BAREROOT, 12-24"
MYRICA CERIFERA	WAX MYRTLE	5%	5	BAREROOT, 12-24"
PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12%	15	BAREROOT, 12-24"
POPULUS DELTOIDES	EASTERN COTTONWOOD	5%	5	BAREROOT, 12-24"
QUERCUS PHELLOS	WILLOW OAK	7%	5	BAREROOT, 12-24"
QUERCUS LYRATA	OVERCUP OAK	3%	5	BAREROOT, 12-24"
QUERCUS MICHAUXII	SWAMP CHESTNUT OAK	5%	5	BAREROOT, 12-24"
ROSA PALUSTRIS	SWAMP ROSE	3%	5	BAREROOT, 12-24"
SAMBUCUS CANADENSIS	ELDERBERRY	3%	5	BAREROOT, 12-24"
TAXODIUM DISTICHUM	BALDCYPRESS	5%	5	BAREROOT, 12-24"
	TOTALS	100%	100	

SUBSTITUTIONS TO THE ABOVE LISTED SPECIES MAY BE MADE DEPENDING ON NURSERY STOCK AVAILABILITY. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.

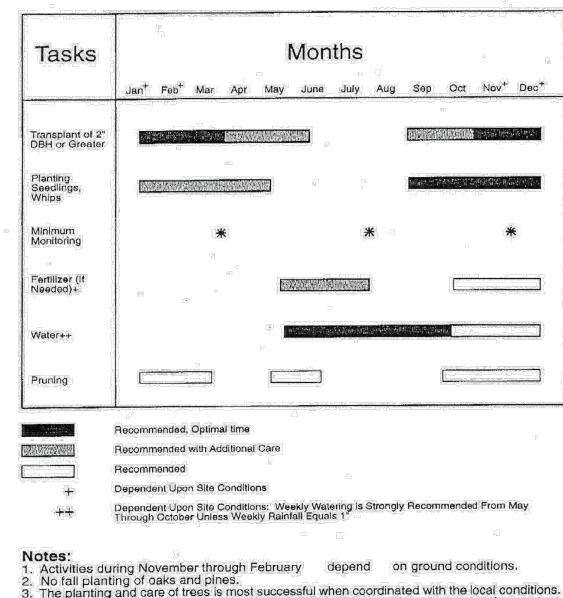
## FLOODPLAIN & WETLAND TREES PLANTING LIST (WRA-2R)

PLANTING DENSITY 775 STEMS/ACRE (7.5-ET-ON-CENTER) PLANTING AREA (AC): 0.13

PLANTING DENSITY: 775 STEMS/A						Free Planting and	l Maintenance Cale	ndar	
BOTANICAL NAME	COMMON NAME	PERCENT OF MIX	# OF STEMS	PLANTING STOCK TYPE & SIZE	Size	Number Required	Approximate Spacing	Surviv	ability
ACER NEGUNDO	BOX ELDER	10%	10	BAREROOT, 12-24"	Deconstruction of the	per Acre	feet on center	Requi	rement
ACER RUBRUM	RED MAPLE	5%	5	BAREROOT, 12-24"				At the end of the secon growing season	
ALNUS SERRULATA	HAZEL ALDER	3%	3	BAREROOT, 12-24"				gioning	
BETULA NIGRA	RIVER BIRCH	7%	7	BAREROOT, 12-24"	Bare Root Seedlings or Whips	700	8 x 8	75%	525
CARPINUS CAROLIANA	IRONWOOD	5%	5	BAREROOT, 12-24"					
CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3%	3	BAREROOT, 12-24"	ing and in the second s				
CLETHRA ALNIFOLIA	SWEETSPIRE	3%	3	BAREROOT, 12-24"					×
CORNUM AMOMUM	SILKY DOGWOOD	3%	3	BAREROOT, 12-24"	Container Grown	500	10 x 10	75%	375
LINDERA BENZOIN	SPICEBUSH	3%	3	BAREROOT, 12-24"	Seedling Tubes (Minimum Cavity Width 1.5")				
LIQUIDAMBAR STYRACIFLUA	SWEET-GUM	10%	10	BAREROOT, 12-24"					
MYRICA CERIFERA	WAX MYRTLE	5%	5	BAREROOT, 12-24"	A MOLLIN				
PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12%	12	BAREROOT, 12-24"				· · · · · · · · · · · · · · · · · · ·	
POPULUS DELTOIDES	EASTERN COTTONWOOD	5%	5	BAREROOT, 12-24"	Container Grown 1, 2, 3 Gallon	400	12 x 12	75%	300
QUERCUS PHELLOS	WILLOW OAK	7%	7	BAREROOT, 12-24"					
QUERCUS LYRATA	OVERCUP OAK	3%	3	BAREROOT, 12-24"					
QUERCUS MICHAUXII	SWAMP CHESTNUT OAK	5%	5	BAREROOT, 12-24"					
ROSA PALUSTRIS	SWAMP ROSE	3%	3	BAREROOT, 12-24"	Container Grown				
SAMBUCUS CANADENSIS	ELDERBERRY	3%	3	BAREROOT, 12-24"	5, 7 Gallon or	300	15 x 15	85%	255
TAXODIUM DISTICHUM	BALDCYPRESS	5%	5	BAREROOT, 12-24"	1" Caliper B & B				
	TOTALS	100%	99						
SUBSTITUTIONS TO THE ABOVE L AVAILABILITY. ALL SUBSTITUTION REPRESENTATIVE.					Container Grown 15, 25 Gallon or 1.5 - 2" Caliper B & B	150 1	20 x 20	100%	150 1

## FOUR-YEAR MANAGEMENT PLAN FOR REFORESTATION AREAS FIELD CHECK THE REFORESTATION AREA ACCORDING TO THE FOLLOWING SCHEDULE:

- YEAR 1: SITE PREPARATION AND TREE PLANTING SURVIVAL CHECK ONCE ANNUALLY (SEPTEMBER-NOVEMBER) SEE NOTE 1) WATERING IS NEEDED (2 X MONTH) CONTROL OF UNDESIRABLE VEGETATION AS NEEDED (1 X IN JUNE AND 1 X IN SEPTEMBER MIN.)
- YEAR 2-3: REINFORCEMENT PLANTING IS NEEDED (SEE NOTE 2) SURVIVAL CHECK ONCE ANNUALLY (SEPTEMBER-NOVEMBER) CONTROL OF UNDESIRABLE VEGETATION IF NEEDED (1 X IN MAY AND 1 X IN AUGUST MIN.)
- YEAR 4: REINFORCEMENT PLANTING IF NEEDED. (SEE NOTE 2) SURVIVAL CHECK (SEPTEMBER – NOVEMBER)
- 1. SURVIVAL CHECK: CHECK PLANTED STOCK AGAINST PLANT LIST (OR AS- BUILT) BY WALKING THE SITE AND TAKING INVENTORY. PLANTS MUST SHOW VITALITY. SUBMIT FIELD DATA FORMS (CONDITION CHECK SHEETS) TO OWNER AFTER EACH INSPECTION. REMOVE ALL DEAD PLANTS.
- 2. REINFORCEMENT PLANTING: REPLACE DEAD OR MISSING PLANTS IN SUFFICIENT QUANTITY TO BRING THE TOTAL NUMBER OF LIVE PLANTS TO AT LEAST 75% OF THE NUMBER ORIGINALLY PLANTED. IF A PARTICULAR SPECIES SUFFERS UNUSUALLY HIGH MORTALITY, REPLACE WITH AN ALTERNATIVE PLANT TYPE.
- 3. MISCELLANEOUS: FERTILIZATION OR WATERING DURING YEARS 1 THROUGH 3 WILL BE DONE ON AN AS NEEDED BASIS. SPECIAL RETURN OPERATIONS OR RECOMMENDATIONS WILL BE CONDUCTED ON AN AS NEEDED BASIS.



. The planting and care of trees is most successful when coordinated with the local conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

These stocking and survival requirements are the minimum numbers estimated to meet the definition of forest from bare land. In certain circumstances, any combination of the above mentioned stocking options, dry

seeding, tree shelters, transplants, and/or natural regeneration may be appropriate strategies to fulfill the requirements of an approved TCP. They will be evaluated on a case-by-case basis by the approving authority.

Spacing does not imply that trees or shrubs must be planted in a grid pattern.

## Site Stocking

**QUALIFIED PROFESSIONAL CERTIFICATION** 

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

11/8/2022 Date:\_\_\_\_\_ REGINALD GRAVES, 240-544-6617, RGRAVES@RES.US (Place printed name, address, phone number, and e-mail address of qualified professional below the signature.)

## PLANTING SPECIFICATION NOTES: 1. QUANTITY: (SEE PLANT SCHEDULE)

Source: Adapted from Fores

Conservation Manual, 1991

### 2. TYPE: (SEE PLANT SCHEDULE)

3. PLANT QUALITY STANDARDS: THE PLANTS SELECTED SHALL BE HEALTHY AND STURDY REPRESENTATIVES OF THEIR SPECIES. SEEDLINGS SHALL HAVE A MINIMUM TOP GROWTH OF 18". THE DIAMETER OF THE ROOT COLLAR (THE PART OF THE ROOT JUST BELOW GROUND LEVEL) SHALL BE AT LEAST 3/8". THE ROOTS SHALL BE WELL DEVELOPED AND AT LEAST 8" LONG, NO MORE THAN TWENTY -FIVE PERCENT (25%) OF THE ROOT SYSTEM (BOTH PRIMARY AND AUXILIARY/FIBROUS ROOTS SHALL BE PRESENT. PLANTS THAT DO NOT HAVE AN ABUNDANCE OF WELL DEVELOPED TERMINAL BUDS ON THE LEADERS AND BRANCHES SHALL BE REJECTED. PLANTS SHALL BE SHIPPED BY THE NURSERY IMMEDIATELY AFTER LIFTING FROM THE FIELD OR REMOVAL FROM THE GREEN HOUSE, AND PLANTED IMMEDIATELY UPON RECEIPT BY THE LANDSCAPE CONTRACTOR. IF THE PLANTS CANNOT BE PLANTED IMMEDIATELY AFTER DELIVERY TO THE REFORESTATION SITE, THEY SHALL BE STORED IN THE SHADE WITH THEIR ROOT MASSES PROTECTED FROM DIRECT EXPOSURE TO SUN AND WIND BY THE USE OF STRAW, PEAT MOSS, COMPOST, OR OTHER SUITABLE MATERIAL AND SHALL BE MAINTAINED THROUGH PERIODIC WATERING, UNTIL THE TIME OF PLANTING.

PLANT HANDLING: THE QUANTITY OF SEEDLINGS TAKEN TO THE FIELD SHALL NOT EXCEED THE QUANTITY THAT CAN BE PLANTED IN A DAY. SEEDLINGS, ONCE REMOVED FROM THE NURSERY OR TEMPORARY STORAGE AREA SHALL BE PLANTED IMMEDIATELY.

TIMING OF PLANTING: THE BEST TIME TO PLANT SEEDLINGS IS WHILE THEY ARE DORMANT, PRIOR TO SPRING BUDDING. THE MOST SUITABLE MONTHS FOR PLANTING ARE MARCH AND APRIL, WHEN THE SOIL IS MOIST, BUT MAY BE PLANTED FROM MARCH THROUGH NOVEMBER. NO PLANTING SHALL BE DONE WHILE GROUND IS FROZEN. PLANTING SHALL OCCUR WITHIN ONE GROWING SEASON OF THE ISSUANCE OF GRADING /BUILDING PERMITS AND/OR REACHING THE FINAL GRADES AND STABILIZATION OF PLANTING AREAS.

SEEDLING PLANTING: TREE SEEDLINGS SHALL BE HAND PLANTED USING A DIBBLE BAR OR SHARP-SHOOTER SHOVEL. IT IS IMPORTANT THAT THE SEEDLING BE PLACED IN THE HOLE SO THAT THE ROOTS CAN SPREAD OUT NATURALLY; THEY SHOULD NOT BE TWISTED, BALLED UP OR BENT. MOIST SOIL SHOULD THEN BE PACKED FIRMLY AROUND THE ROOTS. SEEDLINGS SHOULD BE PLANTED AT A DEPTH WHERE THEIR ROOTS LIE JUST BELOW THE GROUND SURFACE. AIR POCKETS SHOULD NOT BE LEFT AFTER CLOSING THE HOLE WHICH WOULD ALLOW THE ROOTS TO DRY OUT. SEE PLANTING DETAILS FOR FURTHER EXPLANATION. IF THE CONTRACTOR WISHES TO PLANT BY ANOTHER METHOD. THE PREPARER OF THIS TREE CONSERVATION PLAN MUST BE CONTACTED AND GIVE HIS APPROVAL BEFORE PLANTING MAY BEGIN.

SPACING: SEE PLANT SCHEDULE AND/OR PLANTING PLAN FOR SPACING REQUIREMENTS. ALSO REFER TO THE PLANTING LAYOUT DETAIL FOR A DESCRIPTION OF THE GENERAL PLANTING THEORY.

SOIL: UPON THE COMPLETION OF ALL GRADING OPERATIONS, A SOIL TEST SHALL BE CONDUCTED TO DETERMINE WHAT SOIL PREPARATION AND SOIL AMENDMENTS, IF ANY, ARE NECESSARY TO CREATE GOOD TREE GROWING CONDITIONS. SOIL SAMPLES SHALL BE TAKEN AT A RATE THAT PROVIDES ONE SOIL SAMPLE FOR EACH AREA THAT APPEARS TO HAVE A DIFFERENT SOIL TYPE (IF THE ENTIRE AREA APPEARS UNIFORM, THEN ONLY ONE SAMPLE IS NECESSARY), AND SUBMITTED FOR TESTING TO A PRIVATE COMPANY. THE COMPANY OF CHOICE SHALL MAKE RECOMMENDATIONS FOR IMPROVING THE EXISTING SOIL. THE SOIL WILL BE TESTED AND RECOMMENDED FOR CORRECTIONS OF SOIL TEXTURE, PH, MAGNESIUM, PHOSPHORUS, POTASSIUM, CALCIUM AND ORGANIC MATTER.

SOIL IMPROVEMENT MEASURES: THE SOIL SHALL THEN BE IMPROVED ACCORDING TO THE RECOMMENDATIONS MADE BY THE TESTING COMPANY.

10. FENCING AND SIGNAGE: FINAL PROTECTIVE FENCING SHALL BE PLACED ON THE VISIBLE AND/OR DEVELOPMENT SIDE OF PLANTING AREAS. THE FINAL PROTECTIVE FENCE SHALL BE INSTALLED UPON COMPLETION OF PLANTING OPERATIONS UNLESS IT WAS INSTALLED DURING THE INITIAL STAGES OF DEVELOPMENT. SIGNS SHALL BE POSTED PER THE SIGNAGE DETAIL ON SHEET 4.

11. PLANTING METHOD: CONSULT THE PLANTING DETAIL(S) SHOWN ON THIS PLAN.

12. MULCHING: APPLY TWO-INCH THICK LAYER OF WOODCHIP OR SHREDDED HARDWOOD MULCH (AS NOTED) TO EACH PLATING SITE (SEE DETAIL SHOWN ON THIS PLAN).

13. GROUNDCOVER ESTABLISHMENT: THE REMAINING DISTURBED AREA BETWEEN SEEDLING PLANTING SITES SHALL BE SEEDED AND STABILIZED WITH WHITE CLOVER SEED AT THE RATE OF 5 LBS/ACRE.

14. MOWING: NO MOWING SHALL BE ALLOWED IN ANY PLANTING AREA.

SURVIVAL CHECK FOR BOND RELEASE: THE SEEDLING PLANTING IS TO BE CHECKED AT THE END OF EACH YEAR FOR FOUR YEARS TO ASSURE THAT NO LESS THAN 75% OF THE ORIGINAL PLANTED QUANTITY SURVIVES. IF THE MINIMUM NUMBER HAS NOT BEEN PROVIDED THE AREA MUST BE SUPPLEMENTED WITH ADDITIONAL SEEDLINGS TO REACH THE REQUIRED NUMBER AT TIME OF PLANTING.

16. SOURCE OF SEEDLINGS: TBD

	Proper	ty Owners Awa	reness Certificate			
<b></b>					30% DESIGN REVIEW Datus Wilfuz	
I/ We HGS, LL Tree Conservation P	lan (TCP2) and tha	t we understand	by acknowledge that we are aware of the requirements as set forth in this	this Type 2 TCP2.	Signature	8/23/22 Date
	6/~	MD	11/8/	2022	PERMIT PLAN DESIGN R	EVIEW
Owner or Owners R	-		Date		Dailers Willfing	9/7/22
I/We		hereb	y acknowledge that we are aware of	this Type 2	Signature	Date
Tree Conservation P	Tan (TCP2) and tha	t we understand	the requirements as set forth in this 7	ICP2.	CONSTRUCTION PLAN R	EVIEW
Contract Purchaser			Date		<sub>X</sub> N/A	
					Signature	Date
	APPRO	VAL BLOC			REVISIONS:	
	Environmen TREE CONSE	ntal Planning S	artment, M-NCPPC Section PLAN APPROVAL			
Approved by	Date	DRD #	Reason for Revision		PROJECT MANAGER:	JM
Approved by Suzanne A. Nickle	12-12-2022	N/A	N/A		DESIGNED:	BW
001					DRAWN:	CD
					JOB NUMBER:	105793
					DESIGN TYPE:	TCP2
					DATE:	11/8/2022
					SHEET NO:	



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