



PLANTING SCHEDULE					
CONTAINER PLANTING ZONE	SPECIES GROUP ^{1,2}	SPECIES ²	INDICATOR STATUS	PLANT SPACING ³	CONTAINER SIZE, RATE, AND QUANTITY ⁴ PER ACRE
RIPARIAN FOREST	1	QUERCUS ALBA (WHITE OAK)	FACU+	SEE NOTE #3	300 ONE-GALLON TUBELINGS
		QUERCUS BICOLOR (SWAMP WHITE OAK)	FACU+		600 TUBELINGS
		QUERCUS PALUSTRIS (PIN OAK)	FACU+		600 TUBELINGS
		QUERCUS PHellos (WILLOW OAK)	FACU+		600 TUBELINGS
		QUERCUS RUBRA (NORTHERN RED OAK)	FACU+		MIX AT 1:2 RATIO (SEE NOTE #4)
	2	ACER NEGUNDO (BOX ELDER)	FACU+	SEE NOTE #3	150 ONE-GALLON
		ACER RUBRUM (RED MAPLE)	FACU+		300 TUBELINGS
		BETULA NIGRA (RIVER BIRCH)	FACU+		300 TUBELINGS
		LIQUIDAMBAR STYRACIFULA (SWEET GUM)	FACU+		600 TUBELINGS
		NYSSA SYLVATICA (BLACK GUM)	FACU+		MIX AT 1:2 RATIO (SEE NOTE #4)
3	ILEX OPACA (AMERICAN HOLLY)	FACU+	SEE NOTE #3	100 ONE-GALLON	
				200 TUBELINGS	
				200 TUBELINGS	
				200 TUBELINGS	
				MIX AT 1:2 RATIO (SEE NOTE #4)	
RIPARIAN FOREST	4	AMELANCHIER CANADENSIS (CANADIAN SERVICEBERRY)	FACU+	SEE NOTE #3	150 ONE-GALLON
		CERCIS CANADENSIS (EASTERN REDBUD)	FACU+		300 TUBELINGS
		CORNUS FLORIDA (FLOWERING DOGWOOD)	FACU+		300 TUBELINGS
		CORYLUS AMERICANA (AMERICAN HAZELNUT)	FACU+		300 TUBELINGS
		LINDERA BENZOIN (NORTHERN SPICEBUSH)	FACU+		MIX AT 1:2 RATIO (SEE NOTE #4)
		VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FACU+		300 TUBELINGS
STREAM BANK	5	ILEX VERTICILLATA (COMMON WINTERBERRY)	FACU+	SEE NOTE #3 (AVERAGES 3' O.C. FOR ONE-GALLON)	APPROX. 485 ONE-GALLON
		LINDERA BENZOIN (NORTHERN SPICEBUSH)	FACU+		3730 TUBELINGS
STREAM BANK	5	SAMBUCUS CANADENSIS (ELDERBERRY)	FACU+		300 TUBELINGS
		VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FACU+		300 TUBELINGS
		VIBURNUM PRUNIFOLIUM (BLACK-HAW)	FACU+		300 TUBELINGS
		VIBURNUM PRUNIFOLIUM (BLACK-HAW)	FACU+		300 TUBELINGS
STREAM EDGE	6	ALNUS SERRULATA (BROOKSIDE ALDER)	GBL		NA
		CORNUS AMOMUM (SILKY DOGWOOD)	FACU+	1' O.C. (SEE NOTES #5, #6)	NA
		SALIX NIGRA (BLACK WILLOW)	FACU+		NA
		VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FACU+		NA
		VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FACU+		NA

SEEDING SCHEDULE						
SEED PLANTING ZONE	SPECIES GROUP ^{1,2}	SPECIES ²	INDICATOR STATUS	SEEDING RATE ³ (LBS/AC)		
RIPARIAN BUFFER SEED MIX	7	LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)	NI	45.00		
		SETARIA ITALICA (FOXTAIL MILLET)	UPL	45.00		
	8	CAREX SCOPARIA (BLUNT SPERM SEDGE)	FACU+	0.20		
		CAREX SQUARROSA (SQUARROSE SEDGE)	NI	0.20		
		CAREX VULPINOIDEA (FOX SEDGE)	DBL	0.20		
		CYPERUS ESCULENTUS (CHUFA)	FACU+	0.20		
		JUNCUS EFFUSUS (SOFT RUSH)	FACU+	0.20		
	9	JUNCUS TENUIS (PATH RUSH)	FACU+	0.20		
		ELYMIUS RIPARIUS (RIVERBANK WILD RYE)	FACU+	10.00		
		ELYMIUS VIRGINICUS (VIRGINIA WILD RYE)	FACU+	10.00		
		PANICUM CLANDESTINUM (DEER TONGUE GRASS)	FACU+	10.00		
	10	PANICUM DICHTOMIFLORUM (SMOOTH PANIC GRASS)	FACU+	10.00		
		ANEMONE VIRGINIANA (THIMBLEWEED)	NI	0.10		
		ASTER NOVAE-ANGLIAE (NEW ENGLAND ASTER)	FACU+	0.10		
	11	ASTER PILOSUS (HEATH ASTER)	UPL	0.10		
ASTER PRENANTHOIDES (ZIG ZAG ASTER)		FACU+	0.10			
LILIUM SUPERBUM (TURKISH CAP LILY)		FACU+	0.10			
SOLIDAGO JUNCEA (EARLY GOLDENROD)		UPL	0.10			
EUPATORIUM FISTULOSUM (DEE PYLE WEEED)		FACU+	0.10			
EUPATORIUM PERFOLIATUM (BONSEET)		FACU+	0.10			
EUTHAMIA GRAMINIFOLIA (GRASS LEAVED GOLDENROD)		FACU+	0.10			
SOLIDAGO CANADENSIS (CANADIAN GOLDENROD)		FACU+	0.10			
SOLIDAGO SPECIOSA (SHOWY GOLDENROD)		UPL	0.10			
VERNONIA NOVEBORACENSIS (NEW YORK IRONWEED)		FACU+	0.10			
ZIZIA AUREA (GOLDEN ALEXANDERS)	FACU+	0.10				
12	ASCLEPIAS SYRIACA (COMMON MILKWEED)	UPL	0.20			
	BIDENS FRONDOSA (BEGGAR TICKS)	FACU+	0.20			
	HELENIUM AUTUMNALE (COMMON SNEEZEWEED)	FACU+	0.20			
	HELIANTHUS ANGLUSTIFOLIUS (NARROW-LEAF SUNFLOWER)	FACU+	0.20			
	ONOCLEA SENSIBILIS (SENSITIVE FERN)	FACU+	0.20			
	PENSTEMON DIGITALIS (PENSTEMON)	FACU+	0.20			
	VERBENA HASTATA (BLUE VERVAIN)	FACU+	0.20			
	VERBESINA ALTERNIFOLIA (WINGS STEM)	FACU+	0.20			
	COREOPSIS LANCEOLATA (LANCE LEAVED COREOPSIS)	FACU+	0.20			
	HELOPSIS HELIANTHOIDES (DQVEY SUNFLOWER)	UPL	0.20			
13	POLYGONUM PENNSYLVANICUM (PA SMARTWEED)	FACU+	0.20			
	RHODOXYLA HIRTA (BLACK EYED SUSAN)	FACU+	0.20			
	SENNA HEBEICARPA (WILD SEMINA)	FACU+	0.20			
	AMELANCHIER CANADENSIS (CANADIAN SERVICEBERRY)	FACU+	0.20			
14	ARONIA MELANOCARPA (BLACK CHERRY BERRY)	UPL	0.20			
	HAMAMELIS VIRGINIANA (WITCH HAZEL)	FACU+	0.20			
	ILEX VERTICILLATA (WHITE BERRY)	FACU+	0.20			
	LINDERA BENZOIN (NORTHERN SPICEBUSH)	FACU+	0.20			
	PHYSOCARPUS OPULOLIFOLIUS (COMMON NINEBARK)	FACU+	0.20			
15	VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FACU+	0.20			
	VIBURNUM PRUNIFOLIUM (BLACK-HAW)	FACU+	0.20			
	ACER RUBRUM (RED MAPLE)	FACU+	0.20			
	CARPINUS CAROLINIANA (MUSCLEWOOD)	FACU+	0.20			
	CERCIS CANADENSIS (EASTERN REDBUD)	FACU+	0.20			
SEEDING TOTALS				137.90		

- PLANTING AND SEEDING NOTES:**
- IT IS EXPECTED AND PREFERRED THAT ALL SPECIES IN EACH OF THE SPECIES GROUPS ARE PLANTED. THE TOLERANCES LISTED IN THIS NOTE ARE INTENDED TO INCORPORATE FLEXIBILITY ACCORDING TO SPECIES AVAILABILITY. AT A MINIMUM, CONTRACTOR TO PROVIDE AT LEAST:
 - A) 3 OF THE 5 SPECIES IN GROUP 1,
 - B) 4 OF THE 6 SPECIES IN GROUP 2,
 - C) ALL OF GROUP 3,
 - D) 5 OF THE 7 SPECIES IN GROUP 4,
 - E) 3 OF THE 5 SPECIES IN GROUP 5,
 - F) 3 OF THE 4 SPECIES IN GROUP 6 (WITH SALIX NIGRA A REQUIRED SPECIES),
 - G) ALL OF GROUP 7,
 - H) 4 OF THE 6 SPECIES IN GROUP 8,
 - I) 3 OF THE 4 SPECIES IN GROUP 9,
 - J) 5 OF 6 SPECIES IN GROUP 10,
 - K) 5 OF 7 IN GROUP 11,
 - L) 6 OF 8 IN GROUP 12,
 - M) 4 OF 5 IN GROUP 13,
 - N) 5 OF 8 IN GROUP 14, AND
 - O) 5 OF 6 IN GROUP 15.
 - SUBSTITUTIONS FOR SELECTED SPECIES BASED UPON AVAILABILITY SHALL BE REQUESTED IN WRITING TO ENGINEER DOCUMENTING THE LACK OF AVAILABILITY IF THE FLEXIBILITY INHERENT IN THE ABOVE SCHEDULE IS STILL NOT SUFFICIENT. ENGINEER IS UNDER NO OBLIGATION TO APPROVE SUBSTITUTIONS.
 - THE PLANTED TREES AND SHRUBS SHALL BE RANDOMLY SPACED AND SPECIES MIXED THROUGHOUT THE PLANTING AREAS.
 - CONTAINER RATES AND QUANTITIES SHOWN FOR ONE GALLON SIZE. FOR PURPOSES OF SUBSTITUTION, TWO TUBELINGS ARE THE EQUIVALENT OF ONE 1-GALLON CONTAINER PLANT IN THIS SCHEDULE. CONTRACTOR MAY PROVIDE A MIX OF CONTAINER AND TUBELING SIZES FOR EACH SPECIES REQUIREMENT, PROVIDED THE RATIO OF TUBELINGS TO CONTAINERS IS NOT LESS THAN 2:1. EXCEPTION - GROUP 6 (STREAM EDGE) SHALL BE PLANTED IN ACCORDANCE WITH NOTE #5.
 - GROUP 6 (STREAM EDGE) ZONE SHALL BE PLANTED WITH TUBELINGS, OR AS LIVESTAKES (SALIX NIGRA ONLY, AND ONLY BETWEEN FEBRUARY 1 AND MARCH 31). NO ONE GALLONS ARE TO BE USED FOR ANY OF THIS GROUP'S SPECIES.
 - STREAM BANK AND STREAM EDGE ZONES SHALL BE PLANTED SUCH THAT THE COMBINED MIX OF SPECIES IS SPACED APPROX. 3' O.C. AND 1' O.C. RESPECTIVELY. THESE ZONES SHALL NOT BE PLANTED SUCH THAT EACH INDIVIDUAL SPECIES IN THESE ZONES IS PLANTED AT THESE RATES, RESULTING IN TIGHTER SPACING.
 - ALL SEEDING RATES ARE EXPRESSED IN POUNDS OF PURE LIVE SEED (PLS).

Northern Virginia Stream Restoration Bank
Vantage Hill
Fairfax County, Virginia

Preliminary Plan

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REVISIONS				H. D.: VCS NAD 83 V. D.: NGVD 29			
No.	Date	Description	Rev. By	App. By	No.	Date	Description

Boundary and Topo Source: WSSI and Fairfax Digital Data

Design: KLP Draft: KLP Approved: FRG

Sheet # **3 of 3**

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DATE: AUGUST 30, 2011 SCALE: 1" = 30' C.I. = 0.5'