

RESTORED STREAM PLANTING DETAIL

NOT TO SCALE

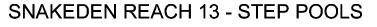
PLANTING SCHEDULE CONTAINER SIZE, RATE, AND CONTAINER SPECIES SPECIES² INDICATOR PLANT QUANTITY⁴ PLANTING ZONE GROUP1. STATUS SPACING3 PER ACRE SEE NOTE #3 ONE-GALLON - or -QUERCUS PALUSTRIS (PIN OAK) FACW TUBELINGS QUERCUS PHELLOS (WILLOW OAK) FAC+ MIX AT1:2 RATIO QUERCUS RUBRA (NORTHERN RED OAK) FACU-(SEE NOTE #4) ACER NEGUNDO (BOX ELDER) ACER RUBRUM (RED MAPLE) FAC SEE NOTE #3 ONE-GALLON FACW TREE LAYER BETULA NIGRA (RIVER BIRCH) RIPARIAN FOREST LIQUIDAMBAR STYRACIFULA (SWEET GUM) FAC TUBELINGS FACW+ NYSSA SYLVATICA (BLACK GUM) MIX AT1:2 RATIO (SEE NOTE #4) FACW-PLATANUS OCCIDENTALIS (AMERICAN SYCAMORE) ILEX OPACA (AMERICAN HOLLY) SEE NOTE #3 ONE-GALLON TUBELINGS MIX AT1:2 RATIO (SEE NOTE #4) CERCIS CANADENSIS (EASTERN REDBUD) FACU-SEE NOTE #3 ONE-GALLON ORNUS FLORIDA (FLOWERING DOGWOOD) FACU-SHRUB LAYER 4 CORYLUS AMERICANA (AMERICAN HAZELNUT) FACU-TUBELINGS FACW-MIX AT1:2 RATIO LINDERA BENZOIN (NORTHERN SPICEBUSH) (SEE NOTE #4) FAC /IBURNUM DENTATUM (SOUTHERN ARROWWOOD) FACU VIBURNUM PRUNIFOLIUM (BLACK-HAW) RIPARIAN FOREST QUANTITY SUBTOTALS 700 APPROX. LINDERA BENZOIN (NORTHERN SPICEBUSH) FACW-(AVERAGES TREE AND 3' O.C. FOR STREAM ONE-GALLON FACW-HRUB LAYER ONE-GALLON) 9730 FAC VIBURNUM DENTATUM (SOUTHERN ARROWWOOD) FACU VIBURNUM PRUNIFOLIUM (BLACK-HAW) TUBELING STREAM BANK QUANTITY SUBTOTALS LNUS SERRULATA (BROOKSIDE ALDER) FACW ORNUS AMOMUM (SILKY DOGWOOD) STREAM EDGE TREE AND SEE NOTES #5, #6 FACW+ SHRUB LAYER SALIX NIGRA (BLACK WILLOW) VIBURNUM DENTATUM (SOUTHERN ARROWWOOD) STREAM EDGE QUANTITY SUBTOTALS

LIVE STAKE CROSS SECTION

THROUGH STREAM BANK

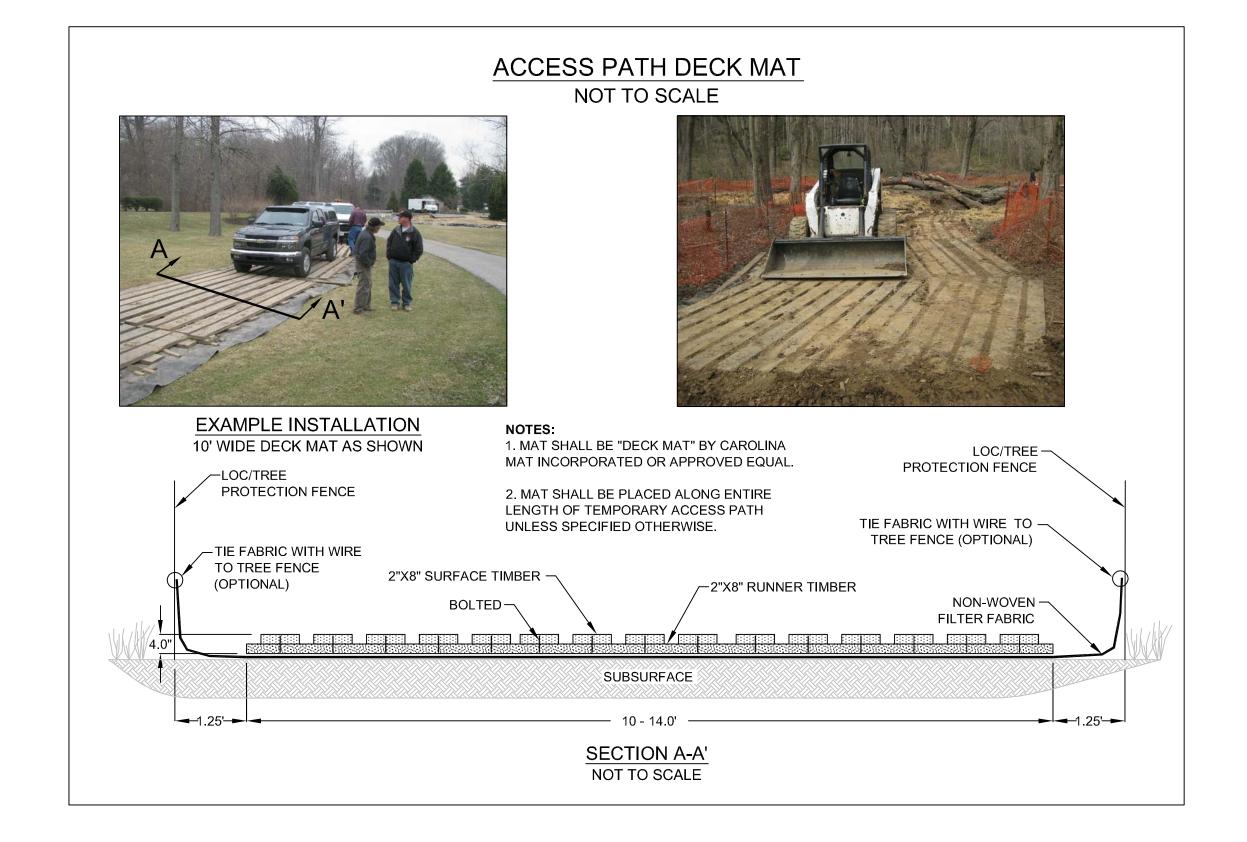
SEED PLANTING ZONE	SPECIES GROUP ^{1,2}	SPECIES ²	INDICATOR STATUS	SEEDING RATE (LBS/AC)
		LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)	NI	45.00
	7	SETARIA ITALICA (FOXTAIL MILLET) (OR ECHINOCHLOA CRUSGALII VAR. FRUMENTACEA)	UPL	45.00
		CAREX SCOPARIA (BLUNT BROOM SEDGE)	FACW	0.20
		CAREX SQUARROSA (SQUARROSE SEDGE)	NI	0.20
	8	CAREX VULPINOIDEA (FOX SEDGE)	OBL	0.20
		CYPERUS ESCULENTUS (CHUFA)	FACW	0.20
		JUNCUS EFFUSUS (SOFT RUSH)	FACW+	0.20
		JUNCUS TENUIS (PATH RUSH)	FAC-	0.20
		ELYMUS RIPARIUS (RIVERBANK WILD RYE)	FACW	10.00
	9	ELYMUS VIRGINICUS (VIRGINIA WILD RYE)	FACW-	10.00
		PANICUM CLANDESTINUM (DEER TONGUE GRASS)	FAC+	10.00
		PANICUM DICHOTOMIFLORUM (SMOOTH PANIC GRASS)	FACW-	10.00
		ANEMONE VIRGINIANA (THIMBLE WEED)	NI	0.10
		ASTER NOVAE-ANGLIAE (NEW ENGLAND ASTER)	FACW-	0.10
RIPARIAN BUFFER SEED MIX	10	ASTER PILOSUS (HEATH ASTER)	UPL	0.10
	10	· · ·		
		ASTER PRENANTHOIDES (ZIG ZAG ASTER)	FAC	0.10
		LILIUM SUPERBUM (TURKS CAP LILY)	FACW+	0.10
		SOLIDAG O JUNCEA (EARLY GOLDENROD)	UPL	0.10
	11	EUPATORIUM FISTULOSUS (JOE PYE WEED)	FACW	0.10
		EUPATORIUM PERFOLIATUM (BONESET)	FACW+	0.10
		EUTHAMIA GRAMINIFOLIA (GRASS LEAVED GOLDENROD)	FAC	0.10
		SOLIDAG O CANADENSIS (CANADIAN GOLDENROD)	FACU	0.10
		SOLIDAG O SPECIOSA (SHOWY GOLDENROD)	UPL	0.10
		VERNONIA NOVEBORACENSIS (NEW YORK IRONWEED)	FACW+	0.10
		ZIZIA AUREA (GOLDEN ALEXANDERS)	FAC	0.10
		ASCLEPIAS SYRIACA (COMMON MILKWEED)	UPL	0.20
		BIDENS FRONDOSA (BEGGAR TICKS)	FACW	0.20
		HELENIUM AUTUMNALE (COMMON SNEEZEWEED)	FACW+	0.20
	12	HELIANTHUS ANGUSTIFOLIUS (NARROW-LEAF SUNFLOWER)	FACW	0.20
		ONOCLEA SENSIBILIS (SENSITIVE FERN)	FACW	0.20
		PENSTEMON DIGITALIS (PENSTEMON)	FAC	0.20
		VERBENA HASTATA (BLUE VERVAIN)	FACW+	0.20
		VERBESINA ALTERNIFOLIA (WINGSTEM)	FAC	0.20
		COREOPSIS LANCEOLATA (LANCE LEAVED COREOPSIS)	FACU	0.20
		HELIOPSIS HELIANTHOIDES (OXEYE SUNFLOWER)	UPL	0.20
	13	POLYGONUM PENSYLVANICUM (PA SMARTWEED)	FACW	0.20
		RUDBECKIA HIRTA (BLACK EYED SUSAN)	FACU-	0.20
		SENNA HEBECARPA (WILD SENNA)	FAC	0.20
		AMELANCHIER CANADENSIS (CANADIAN SERVICEBERRY)	FAC	0.20
		ARONIA MELANOCARPA (BLACK CHOKEBERRY)	UPL	0.20
			FAC-	0.20
		HAMAMELIS VIRGINIANA (WITCH HAZEL)		
	14	ILEX VERTICILLATA (WINTERBERRY)	FACW+	0.20
		LINDERA BENZOIN (NORTHERN SPICEBUSH)	FACW-	0.20
		PHYSO CARPUS OPULIFOLIUS (COMMON NINEBARK)	FACW-	0.20
		VIBURNUM DENTATUM (SOUTHERN ARROW WOOD)	FAC	0.20
		VIBURNUM PRUNIFOLIUM (BLACK-HAW)	FACU	0.20
		ACER RUBRUM (RED MAPLE)	FAC	0.20
		CARPINUS CAROLINIANA (MUSCLEWOOD)	FAC	0.20
		CERCIS CANADENSIS (EASTERN REDBUD)	FACU-	0.20
	15	CORNUS FLORIDA (FLOWERING DOGWOOD)	FACU-	0.20
		NYSSA SYLVATICA (BLACK GUM)	FAC	0.20
		PLATANUS OCCIDENTALIS (AMERICAN SYCAMORE)	FAC	0.20
	I .			







GLADE REACH 1 - MODIFIED CROSS VANE



PLANTING AND SEEDING NOTES:

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1. 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,

H) 4 OF THE 6 SPECIES IN GROUP 8,

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,

O) 5 OF 6 IN GROUP 15.

N) 5 OF 8 IN GROUP 14, AND

I) 3 OF THE 4 SPECIES IN GROUP 9,

- 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,
- 2. 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.
- 3. THE PLANTED TREES AND SHRUBS SHALL BE RANDOMLY SPACED AND SPECIES MIXED THROUGHOUT THE PLANTING AREAS.
- 4. 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.
- 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.
- 6. 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.
- 7. ALL SEEDING RATES ARE EXPRESSED IN POUNDS OF PURE LIVE SEED (PLS).

DRAFT

Northern Virginia Stream Restoration Bank Colvin Run - Buttermilk Creek

Fairfax County, Virginia

Preliminary Plan

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No. Date Description Approved SRP SRP FRG Sheet # 5 of 5 Computer File Name: DATE: FEBRUARY 11, 2012 | SCALE: N/A C.I. = 0.5'