RIPARIAN AREA VEGETATION SCHEDULE

PLANTING SCHEDULE

CONTAINER PLANTING ZONE		SPECIES GROUP[1,2]	SPECIES[2]	INDICATOR STATUS	WILDLIFE VALUE: FUNCTIONS	WILDLIFE VALUE: PRIMARY SPECIES	WILDLIFE VALUE: PLANT PART	WILDLIFE VALUE: SEASON	PLANT SPACING[3]	CONTAINER SIZE, RATE, AND QUANTITY[4]: PLANTS PER ACRE	CONTAINER SIZE, RATE, AND QUANTITY[4]: # OF PLANTS
RIPARIAN FOREST	TREE LAYER	1	QUERCUS ALBA (WHITE OAK)	FACU-	Food	Blue jays, woodpeckers, turkey, deer, fox, raccoons, squirrels, other small mammals	Nuts	Fall, Winter	SEE NOTE #3	300 ONE-GALLON -- or -- 600 TUBELINGS -- or -- MIX AT 1:2 RATIO (SEE NOTE #4)	447 (BASED ON ONE-GALLON)
			QUERCUS BICOLOR (SWAMP WHITE OAK)	FACW+							
			QUERCUS PALUSTRIS (PIN OAK)	FACW							
			QUERCUS PHELLOS (WILLOW OAK)	FAC+							
			QUERCUS RUBRA (NORTHERN RED OAK)	FACU-							
		2	ACER NEGUNDO (BOX ELDER)	FAC+	Food	Finches, chickadees, squirrels, robins, goldfinches, other birds	Seeds, buds, flowers, plant	Spring, summer	SEE NOTE #3	150 ONE-GALLON -- or -- 300 TUBELINGS -- or -- MIX AT 1:2 RATIO (SEE NOTE #4)	227 (BASED ON ONE-GALLON)
			ACER RUBRUM (RED MAPLE)	FAC	Food	Finches, chickadees, squirrels, robins, goldfinches, other birds	Seeds, buds, flowers, plant	Spring, summer			
			BETULA NIGRA (RIVER BIRCH)	FACW	Food, cover	Song birds	Seeds, plant	All			
			LIQUIDAMBAR STYRACIFULA (SWEET GUM)	FAC	Food	Finches, cardinals, chickadees, sparrows, squirrels	Seed	Summer, fall, winter			
			NYSSA SYLVATICA (BLACK GUM)	FACW+	Food, cover	Song birds, waterfowl, small mammals	Fruit, plant	All			
			PLATANUS OCCIDENTALIS (AMERICAN SYCAMORE)	FACW-	Food	Raccoons, opossum, wood duck, pileated and other woodpeckers	Hollow trunks	All			
		3	ILEX OPACA (AMERICAN HOLLY)	FACU+	Food, cover, reproductive areas	Robins, bluebirds, mockingbirds, hermit thrush	Fruit, plant	All	SEE NOTE #3	100 ONE-GALLON -- or -- 200 TUBELINGS -- or -- MIX AT 1:2 RATIO (SEE NOTE #4)	149 (BASED ON ONE-GALLON)
				FACU	Food, cover	Songbirds, small mammals	Fruit, plant	All			
	SHRUB LAYER	4	AMELANCHIER CANADENSIS (CANADIAN SERVICEBERRY)	FAC	Food, cover	Song birds, small mammals	Fruit, plant	All	SEE NOTE #3	150 ONE-GALLON -- or -- 300 TUBELINGS -- or -- MIX AT 1:2 RATIO (SEE NOTE #4)	227 (BASED ON ONE-GALLON)
			CERCIS CANADENSIS (EASTERN REDBUD)	FACU-	Food	Honeybees, butterfly caterpillars	Flowers, leaves	Spring, summer			
			CORNUS FLORIDA (FLOWERING DOGWOOD)	FACU-	Food	turkey, cardinal, cedar waxwing, robin, brown thrasher, wood thrush, ra	Flower, fruit	Spring, fall			
			CORYLUS AMERICANA (AMERICAN HAZELNUT)	FACU-	Food, cover	Songbirds, small mammals	Fruit	Summer, fall			
			LINDERA BENZOIN (NORTHERN SPICEBUSH)	FACW-	Food	Thrushes vireos, catbird, bluebird, butterfly caterpillars	Fruit, leaves	Spring, summer, fall			
			VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FAC	Food	Robins, bluebirds, other thrushes, thrashers, catbirds, vireos	Fruit	Fall			
			VIBURNUM PRUNIFOLIUM (BLACK-HAW)	FACU	Food, cover	Catbirds, thrashers, thrushes, cover and next sites for songbirds	Fruit, plant	Spring, fall			
RIPARIAN FOREST QUANTITY SUBTOTALS										**700**	**1,050**
STREAM BANK	TREE AND SHRUB LAYER	5	CORNUS AMOMUM (SILKY DOGWOOD)	FACW	Food	Catbird, thrasher, thrushes, woodpeckers	Fruit	Summer, fall	SEE NOTE #3 (AVERAGES 3' O.C. FOR ONE-GALLON)	N/A	1,162 (BASED ON ONE-GALLON)
			ILEX VERTICILLATA (COMMON WINTERBERRY)	FACW+	Food, cover, reproductive areas	ebird, catbird, brown thrasher, robin, yellow bellied sapsucker, mocking	Flower, seed, leaves	All			
			SAMBUCUS CANADENSIS (ELDERBERRY)	FACW-	Food, cover	Brown thrasher, catbird, woodpeckers, thrushers	Seed	Spring, fall, winter			
			VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FAC	Food, cover, reproductive areas	Purple finch, goldfinch, robin, junco, bluebird, hermit thrush	Flower, fruit	Spring, summer, fall			
STREAM BANK QUANTITY SUBTOTALS										**---**	**1,162**
STREAM EDGE	TREE AND SHRUB LAYER	6	ALNUS SERRULATA (BROOKSIDE ALDER)	OBL	Food, reproductive areas	inches, sparrows, doves, yellow warbler, song sparrow, other songbird	Seeds, buds, stems	Summer, fall, winter	1' O.C. (SEE NOTES #5, #6)	N/A	3,491 (TUBELINGS OR LIVESTAKES ONLY -- SEE NOTE #5)
			CORNUS AMOMUM (SILKY DOGWOOD)	FACW	Food, cover, reproductive areas	Catbird, thrasher, thrushes, cedar waxwings, rabbits	Flower, fruit	Summer, fall, winter			
			SALIX NIGRA (BLACK WILLOW)	FACW+	Food, cover	Beaver, porcupine, deer, muskrat, ducks, fish	Seeds, plant, leaves	Spring, summer, fall			
			VIBURNUM DENTATUM (SOUTHERN ARROWWOOD)	FAC	Food	Robins, bluebirds, other thrushes, thrashers, catbirds, vireos	Fruit	Fall			
STREAM EDGE QUANTITY SUBTOTALS										**---**	**3,491**

PLANTING QUANTITIES (BASED ON ONE-GALLON SIZE)[4]

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T
AREA (SF):	2,041	2,052	2,713	2,718	1,293	1,274	683	695	3,794	6,152	2,638	6,369	13,795	12,234	5,797	686	1,481	485	2,541
AREA (AC):	0.05	0.05	0.06	0.06	0.03	0.03	0.02	0.02	0.09	0.14	0.06	0.15	0.32	0.28	0.13	0.02	0.03	0.01	0.06
LENGTH (LF):	511	512	679	679	322	319	233	235	-	-	-	-	-	-	-	-	-	-	-
Group 1	15	15	18	18	9	9	6	6	27	42	18	45	96	84	39	-	-	-	-
Group 2	8	8	9	9	5	5	3	3	14	21	9	23	48	42	20	-	-	-	-
Group 3	5	5	6	6	3	3	2	2	9	14	6	15	32	28	13	-	-	-	-
Group 4	8	8	9	9	5	5	3	3	14	21	9	23	48	42	20	-	-	-	-
RIPARIAN FOREST QUANTITY SUBTOTALS	**36**	**36**	**42**	**42**	**22**	**22**	**14**	**14**	**64**	**98**	**42**	**106**	**224**	**196**	**92**	**-**	**-**	**-**	**-**
Group 5	170	171	226	226	107	106	78	78	-	-	-	-	-	-	-	-	-	-	-
STREAM BANK QUANTITY SUBTOTALS	**170**	**171**	**226**	**226**	**107**	**106**	**78**	**78**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Group 6	511	512	679	679	322	319	233	235	-	-	-	-	-	-	-	-	-	-	-
STREAM EDGE QUANTITY SUBTOTALS	**511**	**512**	**679**	**679**	**322**	**319**	**233**	**235**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

SUPPLEMENTAL TREE PLANTING (2" CALIPER)

AREA	PLANT LIST	# OF PLANTS
A / B	ACER RUBRUM (Red maple)	2
	AMELANCHIER CANADENSIS (Canadian serviceberry)	4
	CERCIS CANADENSIS (Eastern redbud)	4
	CHIONANTHUS VIRGINICUS (White fringe tree)	4
	CORNUS FLORIDA (Flowering dogwood)	4
	ILEX OPACA (American holly)	4
	LIRIODENDRON TULIPIFERA (Tulip poplar)	2
	MAGNOLIA VIRGINIANA (Sweetbay magnolia)	4
	QUERCUS ALBA (White oak)	4
	QUERCUS RUBRA (Northern red oak)	4
	SASSAFRAS ALBIDUM (Sassafras)	4
	TOTAL 2" CALIPER TREES IN EACH AREA	40

NOTES:
1. Forty 2" caliper trees shall be planted in each planting area for a total of 80 trees.
2. Substitutions for selected species based upon availability shall be requested in writing to engineer.
3. Trees shall be planted randomly within each planting area.
4. Individual tree locations shall be field located to avoid existing infrastructure and easements.

SEEDING SCHEDULE

SEED PLANTING ZONE	SPECIES[3]	SEEDING RATE[2] (LBS/AC)	AREA PER PLANT (AC)	QUANTITY (LBS)
GRASSLAND AREA	KENTUCKY31 OR TURF-TYPE TALL FESCUE	190.00	0.62	117.80
	IMPROVED PERENNIAL RYEGRASS	5.00	0.62	3.10
	KENTUCKY BLUEGRASS	5.00	0.62	3.10
SEEDING TOTALS		**200.00**		**124.00**

SEEDING NOTES:
1. 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.
2. All seeding rates are expressed in pounds of pure live seed (PLS).
3. Grassland Area to be seeded according to the Minimum Care Lawn specifications included in Table 3.32-D of the Virginia Erosion and Sediment Control Handbook, Third Edition.

PLANTING AND SEEDING NOTES:

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, 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 4 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.
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 required 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).

Wetland Studies and Solutions, Inc.®
5300 Wellington Branch Drive, Suite 100 • Gainesville, VA 20155
Phone 703 679 5600 • Fax 703 679 5601
wetlandstudies.com

Northern Virginia Stream Restoration Bank
Colvin Run - Forest Edge North
Fairfax County, Virginia

Vegetation Schedule

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COMMONWEALTH OF VIRGINIA
FRANK R. GRAZIANO
Lic. No. 032099
PROFESSIONAL ENGINEER

REVISIONS

No.	Date	Description	Rev. By	App. By

DATE: JULY 2010
SCALE: N/A

Horizontal Datum: N/A
Vertical Datum: N/A
Boundary and Topo Source: N/A

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