

EXAMPLE PLANTING PLAN			
ZONE		DESCRIPTION	TABLE REFERENCE
A	UPLAND	PERMANENT TURF GRASS, CONTAINERIZED TREES AND SHRUBS, TEMPORARY SEEDING	SEE NOTE
B	TERRACE SLOPE	PERMANENT TURF GRASS, CONTAINERIZED TREES AND SHRUBS, TEMPORARY SEEDING	SEE NOTE
C	FLOODPLAIN BENCH	PERMANENT NATIVE GRASS, CONTAINERIZED TREES AND SHRUBS, TEMPORARY SEEDING	SEE NOTE
D	STREAM BANK	PERMANENT NATIVE GRASS, LIVE STAKING, TEMPORARY SEEDING	SEE NOTE
E	EMERGENT ZONE	PLUGGING	SEE NOTE

NOTE: THE DESIGNER SHALL CROSS REFERENCE APPROPRIATE TABLE(S) LISTING PLANT SPECIES, SIZE, SPACING AND OTHER SPECIFIC REQUIREMENTS (SEE EXAMPLE TABLES, SHEET 2).

PLAN VIEW

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE. THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

**NOT TO SCALE**

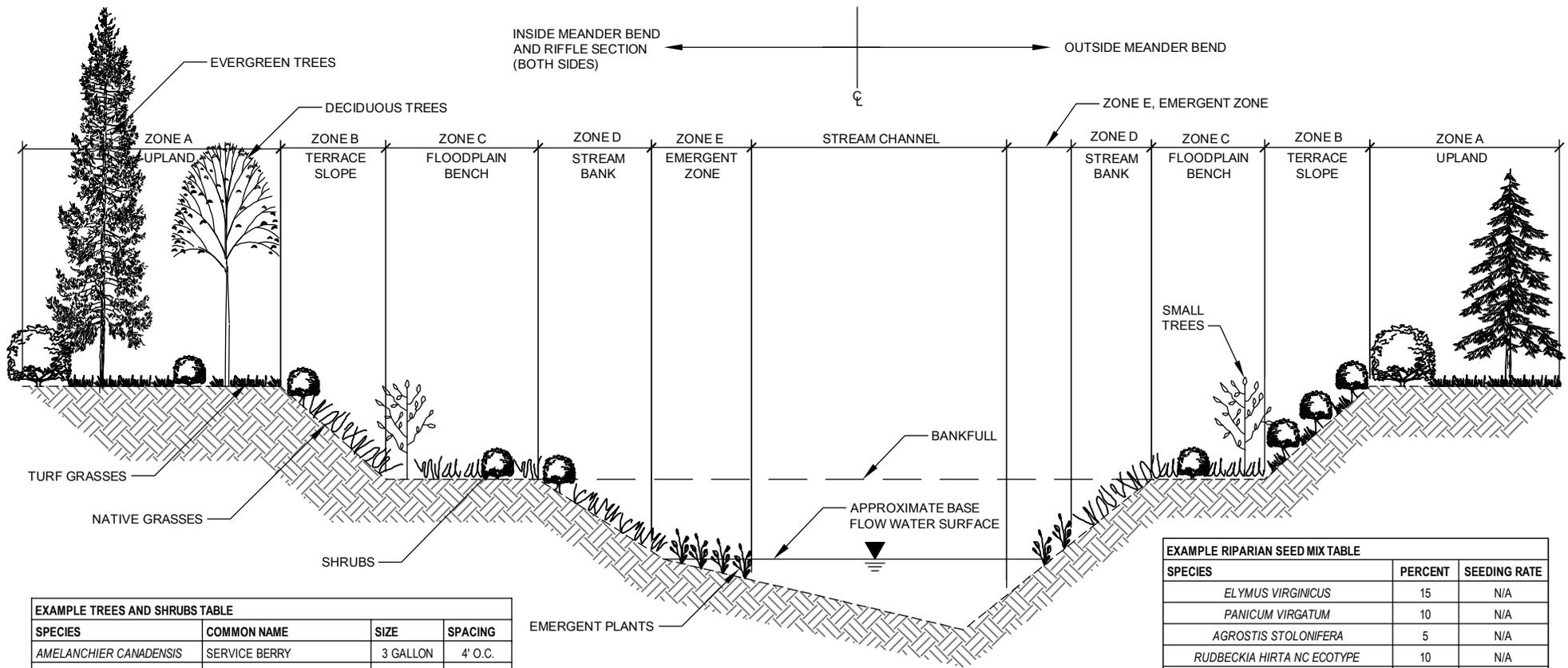


CHARLOTTE-MECKLENBURG  
STORM WATER SERVICES  
GENERIC DETAIL REQUIREMENTS

**PLANTING PLAN**

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EXAMPLE TREES AND SHRUBS TABLE			
SPECIES	COMMON NAME	SIZE	SPACING
AMELANCHIER CANADENSIS	SERVICE BERRY	3 GALLON	4' O.C.
CALLICARPA AMERICANA	BEAUTY BERRY	3 GALLON	4' O.C.
CERCIS CANADENSIS	REDBUD	5 GALLON	6' O.C.
CORNUS FLORIDA	FLOWERING DOGWOOD	5 GALLON	6' O.C.
DIOSPYROS VIRGINIANA	PERSIMMON	5 GALLON	6' O.C.
ITEA VIRGINICA	VA. SWEETSPIRE	3 GALLON	4' O.C.
PLATANUS OCCIDENTALIS	SYCAMORE	2" CALIPER	10' O.C.
VIBURNUM DENTATUM	ARROWWOOD AIBURNUM	3 GALLON	4' O.C.

NOTE: THIS TABLE IS AN EXAMPLE ONLY. THE DESIGNER SHALL SPECIFY VEGETATION FOR ALL ZONES ON PROJECT.

EXAMPLE RIPARIAN SEED MIX TABLE		
SPECIES	PERCENT	SEEDING RATE
ELYMUS VIRGINICUS	15	N/A
PANICUM VIRGATUM	10	N/A
AGROSTIS STOLONIFERA	5	N/A
RUDBECKIA HIRTA NC ECOTYPE	10	N/A
COREOPSIS LANCEOLATA	10	N/A
PANICUM CLANDESTINUM	5	N/A
ANDROPOGON GERARDII	5	N/A
JUNCUS EFFUSUS	5	N/A
TRIPSACUM DACTYLOIDES	5	N/A
CHAMAECRISTA FASCICULATA	25	N/A
CAREX INTUMESCENS	5	N/A
N/A	100	25 LBS/ACRE

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**CROSS SECTION**

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**NOTES:**

1. PLANT MATERIALS SHALL BE INSTALLED USING A VARIETY OF METHODS AND MATERIALS AS SPECIFIED BY THE DESIGNER AND MAY INCLUDE ONE OR MORE OF THE FOLLOWING:
  - A. SEEDING AND MULCHING
  - B. SOIL BIOENGINEERING (E.G. - LIVE STAKES, BRUSH MATTRESS, BRUSH LAYER, VEGETATED GEOGRID, LIVE FASCINES, ETC.)
  - C. TREE, SHRUB, AND GROUND COVER PLANTING
  - D. PLUGGING
  - E. TRANSPLANTS (INCLUDING SOD MATS)
2. ALL INFORMATION FOR PLANTING THIS SITE IS NOT NECESSARILY INCLUDED ON THE PLAN SHEETS. ADDITIONAL INFORMATION IS CONTAINED IN THE TECHNICAL SPECIFICATIONS AND THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS".
3. SEE TABLES, OTHER DETAILS, AND/OR SPECIFICATIONS FOR PLANT SPECIES NAME(S), SIZE, TYPE, APPLICATION RATE, AND/OR SPACING FOR EACH INSTALLATION METHOD. IF THE CONTRACTOR IS NOT REQUIRED TO INSTALL EVERY SPECIES LISTED THEY SHALL INFORM THE CITY WHICH SPECIES HAVE BEEN SELECTED FOR USE AT LEAST ONE (1) WEEK IN ADVANCE OF INSTALLATION.
4. DEPENDING UPON LOCAL AVAILABILITY AND COST, SPECIES SUBSTITUTIONS MAY BE ACCEPTABLE. ALL SUBSTITUTIONS (INCLUDING PRE-PACKAGED SEED MIXES) SHALL BE SUBMITTED TO THE CITY AT LEAST ONE (1) WEEK PRIOR TO INSTALLATION FOR APPROVAL.
5. LABELS SHALL BE ATTACHED SECURELY TO ALL PLANTING MATERIALS (SEED, DORMANT CUTTINGS, FERTILIZER, ETC.). LABELS SHALL BE DURABLE, LEGIBLE, USE WEATHER-RESISTANT INK OR OTHER RESILIENT LETTERING, SO THE CITY MAY DETERMINE THAT ALL MATERIALS CONFORM TO THE SPECIFICATIONS (SIZE, SPECIES, ORIGIN, ETC.)
6. THE BEST SOURCE OF PLANT MATERIAL IS FROM THE AREA LOCAL TO THE PROJECT. PLANT MATERIALS MAY BE HARVESTED FROM LOCAL SITES (WITH APPROVAL FROM THE CITY) OR OBTAINED FROM COMMERCIAL NURSERIES. IF MATERIALS ARE HARVESTED BY THE CONTRACTOR, POSITIVE IDENTIFICATION OF THE SPECIES MUST BE MADE/DOCUMENTED AND PERMISSION FROM THE HARVEST SITE PROPERTY OWNER MUST BE OBTAINED BY THE CONTRACTOR AND DOCUMENTED TO THE CITY, IN WRITING.
7. PLANT MATERIALS SHALL BE HANDLED WITH CARE AT ALL TIMES INCLUDING DURING HARVESTING, PACKING, DELIVERY, UNLOADING, HANDLING, AND INSTALLATION. PLANTS SHALL BE PROTECTED FROM DISTURBANCE FROM ON-GOING CONSTRUCTION ACTIVITIES AFTER INSTALLATION (WITH FLAGGING, FENCING, ETC., AS NECESSARY).
8. ALL PLANTINGS SHALL BE MAINTAINED TO ENSURE SURVIVAL THROUGH A ONE (1) YEAR WARRANTY PERIOD. SUCH MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, WATERING, WEED CONTROL, PEST CONTROL, ETC.
9. ALL PLANTING AREAS SHALL BE PREPARED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS (INCLUDING THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS") PRIOR TO SEEDING, LIVE STAKING, AND/OR OTHER TYPE(S) OF PLANT MATERIAL INSTALLATION, INCLUDING:
  - A. THE DESIGNER SHALL CONSIDER THE NUTRIENT REQUIREMENTS OF THE PROPOSED VEGETATION AND ADJUST THE SOIL PREPARATION REQUIREMENTS FROM THE "LANDSCAPE CONSTRUCTION STANDARDS" OR OTHERWISE DIRECT THAT THE PLANT SUPPLIER SHALL PROVIDE SUCH REQUIREMENTS.
  - B. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING THE SUITABILITY OF SOILS FOR THE SPECIFIED PLANTING ACTIVITIES.
  - C. PRIOR TO PLANTING THE CONTRACTOR SHALL TEST THE SOIL AND PRESENT THE CITY WITH RESULTS SHOWING THAT THE NUTRIENT REQUIREMENTS OF THE PLANTS HAVE BEEN MET. IF SOIL AMENDMENTS ARE REQUIRED THEN THE CONTRACTOR SHALL SUBMIT A LIST OF PROPOSED SOIL AMENDMENTS TO CITY FOR APPROVAL ONE (1) WEEK PRIOR TO APPLICATION.
  - D. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER APPLICATION OF SOIL AMENDMENTS. THE CONTRACTOR SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL LAWS RELATED TO THE APPLICATION OF ANY SOIL AMENDMENT(S) ADJACENT TO WATER BODIES.
  - E. THE FINAL STEP OF PREPARATION OF ALL PLANTING SURFACES (ZONES, CONSTRUCTION ACCESS, AND ANY OTHER DISTURBED AREAS) IS DRAGGING OR RAKING OF THE SOIL TO A SMOOTH FINISH SO THAT THERE ARE NO LUMPS, CLOUDS, DEBRIS, RUTS, OR ABRUPT SLOPE TRANSITIONS. THIS IS ESPECIALLY CRITICAL AT THE INTERFACE OF THE TOP OF THE BANK TO THE FLAT, OVERBANK AREA.
10. ALL SEEDING AND MULCHING SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS (INCLUDING THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS"), INCLUDING:
  - A. THE DESIGNER SHALL SPECIFY THE LOCATIONS REQUIRING TEMPORARY (EROSION CONTROL, COVER CROP, NURSE CROP) AND/OR PERMANENT SEEDING. THIS SHALL INCLUDE PROJECT ACCESS, PROJECT AREAS, AND ANY OTHER LOCATIONS DISTURBED BY CONSTRUCTION ACTIVITIES.
  - B. ALL SEEDING AND MULCHING METHODS AND MATERIALS, INCLUDING TEMPORARY AND PERMANENT SEEDING, SHALL BE PER THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS" UNLESS OTHERWISE REQUIRED BY THE TYPE OF SEED USED AND SPECIFIED BY THE DESIGNER.
  - C. ALL AREAS OF THE PROJECT SHALL HAVE PERMANENT VEGETATION PLANS BUT THE USE OF TEMPORARY SEEDING, SUCH AS FOR EROSION CONTROL, SHALL NOT TAKE THE PLACE OF THE PERMANENT VEGETATION.
  - D. THE CONTRACTOR SHALL NOT SOW SEED OR APPLY MULCH IN WINDY OR ANY OTHER WEATHER CONDITIONS THAT MAY AFFECT APPLICATION RATE OR SURFACE COVERAGE.
  - E. IF EROSION CONTROL MATTING IS SPECIFIED BY THE DESIGNER IT SHALL BE INSTALLED OVER THE COMPLETED SEEDING AND MULCHING.
11. SOIL BIOENGINEERING STREAM BANK STABILIZATION (E.G. - LIVE STAKING, BRUSH MATTRESS, BRUSH LAYER, VEGETATED GEOGRID, LIVE FASCINES, ETC.) IS A PART OF THE PLANTING PLAN. THE DESIGNER SHALL PROVIDE INFORMATION REGARDING THOSE METHODS HERE OR OTHERWISE INCORPORATE APPLICABLE DETAILS INTO THIS DETAIL BY REFERENCE.
12. ALL TREE, SHRUB, AND/OR GROUND COVER PLANTING SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS (INCLUDING THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS"), INCLUDING:
  - A. THE DESIGNER SHALL SPECIFY THE LOCATIONS REQUIRING TREE, SHRUB, AND GROUND COVER PLANTING.
  - B. ALL TREE, SHRUB, AND GROUND COVER METHODS AND MATERIALS SHALL BE PER THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS" UNLESS OTHERWISE SPECIFIED BY THE DESIGNER.
  - C. PLANTS SHALL BE AND INSTALLED AT THE SPACING INDICATED AND WITH SPECIES MIXED RANDOMLY AS INDICATED BY THE DESIGNER.
13. ALL PLANT PLUGS SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS (INCLUDING THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS"), INCLUDING:
  - A. THE DESIGNER SHALL SPECIFY THE LOCATIONS REQUIRING PLUGGING.
  - B. ALL PLUGGING METHODS AND MATERIALS SHALL BE AS SPECIFIED BY THE DESIGNER.
  - C. PLUGS SHALL BE HANDLED IN A MANNER CONSISTENT WITH THE SUPPLIER RECOMMENDATIONS, INCLUDING BEING KEPT MOIST UNTIL TIME OF INSTALLATION.
14. ALL VEGETATION TRANSPLANTS SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS (INCLUDING THE CITY'S "LANDSCAPE CONSTRUCTION STANDARDS"), INCLUDING:
  - A. TRANSPLANT SPECIES AND EXISTING LOCATIONS MUST BE APPROVED BY CITY PRIOR TO COMMENCING PLANT REMOVAL. IF SOURCE MATERIAL FOR TRANSPLANTS IS OUTSIDE THE LIMITS OF CONSTRUCTION THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE PROPERTY OWNER.
  - B. THE DESIGNER SHALL SPECIFY THE LOCATIONS REQUIRING TRANSPLANTS.
  - C. ALL TRANSPLANTING METHODS AND MATERIALS SHALL BE AS SPECIFIED BY THE DESIGNER.
  - D. TRANSPLANTS SHALL BE REMOVED AND INSTALLED IN THEIR PROPOSED LOCATIONS ONE AT A TIME UNLESS OTHERWISE SPECIFIED BY THE DESIGNER.

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