



PROJECT:

**WATERLINE UPGRADE  
 CDBG - PHASE III  
 GREENWOOD CPW  
 CDBG # 4-A-10-005**

SHEET NAME:

**GENERAL  
 DETAILS**

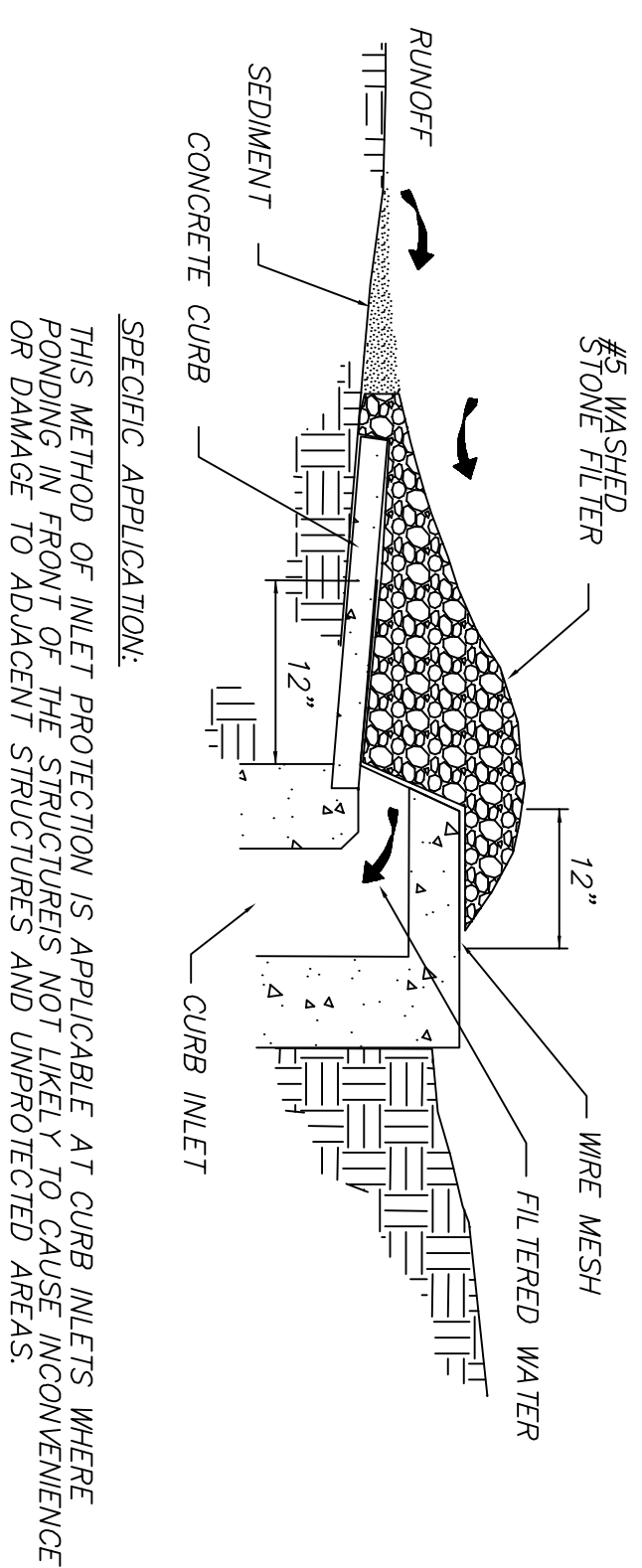
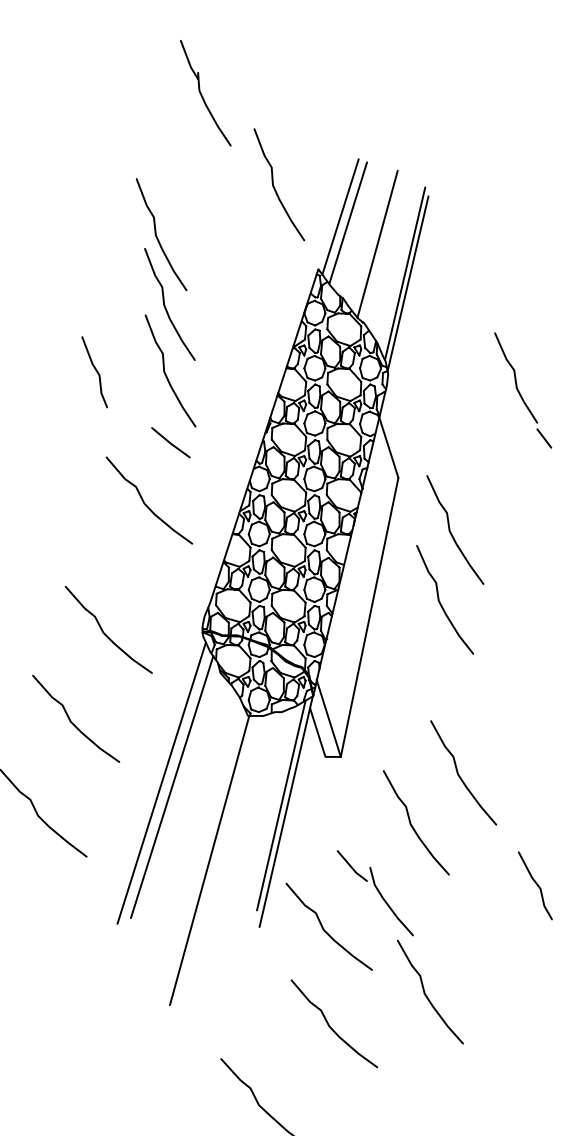
REVISIONS:

DRAWN: **WRH**  
 APPROVAL: **CEC**  
 DATE: **08/27/11**

SHEET NUMBER:

**D-3**

- Receive NPDES coverage from DHEC
  - Pre-construction meeting
  - Notify DHEC EOC Regional office 48 hours prior to beginning land-disturbing activities
  - Installation of perimeter controls (e.g. silt fence)
  - Installation of storm drain inlet protection at each existing inlet
  - Installation of water line.
  - Permanent / final stabilization
  - Clean-out of storm drain inlet protection as needed
- Note: Maintenance of sediment and erosion control measures must continue until the site is permanently stabilized and the controls are removed.*



**GRAVEL CURB INLET SEDIMENT FILTER**  
 N.T.S.

- SITE WORK GENERAL NOTES:**
- 1) ALL SOIL EROSION AND SEDIMENT PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES OR IN THEIR PROPER SEQUENCES, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED BY CONTRACTOR/OWNER.
  - 2) ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING.
  - 3) PERMANENT VEGETATION TO BE SEEDED OR SOODED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER FINAL GRADING.
  - 4) ALL WORK TO BE DONE IN ACCORDANCE WITH THE STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN SOUTH CAROLINA.
  - 5) THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF COMMENCEMENT OF ANY LAND DISTURBING ACTIVITY.
  - 6) ADDITIONAL EROSION CONTROL DEVICES SHALL BE USED AS REQUIRED.

**SEEDING SCHEDULE**

**SEED, FERTILIZER, LIME AND MULCH REQUIREMENTS FOR**

**OF SOUTH CAROLINA**  
 PER 1,000 SQUARE FEET

FROM MAY 1 - AUGUST 30 FROM SEPTEMBER 1 - APRIL 30

BROWNTOP MILLET	1/2 LB.	ANNUAL REGRASS
HILLED BERMUDEGRASS	1/2 LB.	HILLED BERMUDEGRASS
10-10-10 FERTILIZER *	1-1/2 LBS.	UMULLED BERMUDE
AGRICULTURAL LIME	25 LBS.	10-10-10 FERTILIZER *
GRAIN STRAW MULCH	2 BALES	AGRICULTURAL LIME
		GRAIN STRAW MULCH

-OR-

BROWNTOP MILLET	1/2 LB.	BROWNTOP MILLET
BAHIA GRASS	2 LBS.	BAHIA GRASS
AGRICULTURAL LIME	75 LBS.	10-10-10 FERTILIZER *
GRAIN STRAW MULCH	2 BALES	AGRICULTURAL LIMESTONE
		GRAIN STRAW MULCH

IF HYDROSEDED USE 13 LBS. PER 1000 SQ. FT. OF LOW SALT FORMULATION OF 19-19-19 INSTEAD OF 10-10-10 TO GIVE LONG TERM FERTILIZATION BENEFITS. LIQUID LIME IS NOT A SUBSTITUTE FOR AGRICULTURAL LIME. A FEW GALLONS OF LIQUID LIME RAISES SOIL PH ONE POINT, BUT THIS EFFECT IS VERY TEMPORARY, USUALLY 45-50 WEEKS. LIQUID LIME MAY BE USED WITH AGRICULTURAL LIME TO GIVE QUICK RESULTS TOGETHER WITH THE LONG TERM BENEFITS OF AGRICULTURAL

GRAIN STRAW MULCH IS THE MOST IMPORTANT INGREDIENT IN THESE SEEDING RECOMMENDATIONS AND IS 90% OF THE REASON FOR SUCCESS. PAPER AND OTHER SYNTHETIC MULCHES MAY BE SUBSTITUTED FOR GRAIN STRAW WHEN A HYDROSEEDER IS USED, BUT NOT ON STEEP AREAS, AREAS WITH CONCENTRATED WATER RUNOFF, OR ON DEEP SANDY SOILS. ALL SLOPES STEEPER THAN 2:1 MUST BE HYDROSEDED AND MULCHED WITH GRAIN STRAW USING AN APPROVED MACHONING METHOD SUCH AS GLE TRACKER OR TRACTOR AND STRAIGHT DISK HARROW.

GROWTH OF REGRASS AND GRAIN RYE MUST BE MOWED IN EARLY SPRING TO ENCOURAGE GROWTH OF THE PERMANENT GRASSES - BERMUDE GRASS, BAHIA GRASS AND CENTIPEDE GRASS.

THESE RECOMMENDATIONS MEET U.S. SOIL CONSERVATION SERVICES STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANNING IN THE SANDHILLS AND SOUTHERN Piedmont OF SOUTH CAROLINA.

**SOIL EROSION AND SEDIMENTATION CONTROL NOTES:**

- 1) PERFORM ALL EARTHWORK OPERATIONS IN SUCH A MANNER AS TO CONTROL EROSION AND MAINTAIN SEDIMENTATION FROM EVENING STREAMS OR BEING TRACKED ONTO ROADWAYS.
- 2) INSTALL AND OBTAIN APPROVAL OF ALL SEDIMENTATION CONTROL DEVICES PRIOR TO COMMENCEMENT OF DEMOLITION, CLEARING AND GRADING OPERATIONS.
- 3) ALL EROSION AND WATER QUALITY CONTROL STRUCTURES WILL BE INSPECTED FOR STABILITY AND OPERATION FOLLOWING EVERY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24 HOUR PERIOD OR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- 4) MAKE NEEDED REPAIRS TO CONTROL STRUCTURES IMMEDIATELY UPON DETECTION OF DEFICIENCIES OR DAMAGE.
- 5) SEDIMENT SHALL BE PLACED FOR REUSE IN TOPSOIL BERMS.
- 6) REMOVE SEDIMENT FROM SILT FENCES WHEN THE DEPTH REMOVES APPROXIMATELY 1/2" OF SEDIMENT. DIVERSION DITCHES SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
- 7) REMOVE ALL SEDIMENTATION CONTROL DEVICES FROM SITE UPON COMPLETION OF GRASSING.
- 8) IF NECESSARY SLOPES THAT EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO GRASSING/HYDROSEEDING, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE PROTECTION DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- 9) PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
- 10) THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 11) RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THIS PLAN DURING LOT CONSTRUCTION OR PROVIDE AN INDIVIDUAL MEETING SCHEDULE WITH THE CONTRACTOR TO OBTAIN APPROVAL FOR EROSION CONTROL DEVICES. STORM GRADING BEYOND THE FOOTPRINT OF THE HOUSE WILL REQUIRE A NEW PERMIT FOR THAT GRADING.
- 12) PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY CONSTRUCTION.
- 13) ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO PREVENT EROSION. CONSTRUCTION DEVICES SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION AND SITE IS STABILIZED.
- 14) ALL SLOPES MUST BE STABILIZED. IF NEEDED, MEASURES IN ADDITION TO GRASSING OR HYDROSEEDING SHALL INCLUDE SYNTHETIC OR VEGETATIVE MATTING, DIVERSION BERMS, TEMPORARY SLOPE DRAINS, ETC.
- 15) STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN THIRTY-ONE (31) DAYS.
- 16) TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PREVENT EROSION AND/OR SLOPE RUNOFF AND/OR DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 17) LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 18) ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A STATE BUFFER CAN BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10 FT. BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.

**New Standard Notes [SCDHEC]**

- 1) If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
- 2) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
  - > Where stabilization by the 14<sup>th</sup> day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
  - > Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
- 3) All sediment and erosion control devices shall be inspected every seven (7) days. If site inspections identify BMPs that are damaged or are not operating effectively, maintenance must be performed as soon as practical or as reasonably possible and before the next storm event whenever practicable.
- 4) Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove any sediment before being pumped back into any waters of the State.
- 5) All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
- 6) The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
- 7) Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C. Reg. 72-300 et seq. and SCR100000.
- 8) Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
- 9) All waters of the State (WOS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WOS. A 10-foot buffer should be maintained between the last row of silt fence and all WOS.
- 10) Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.