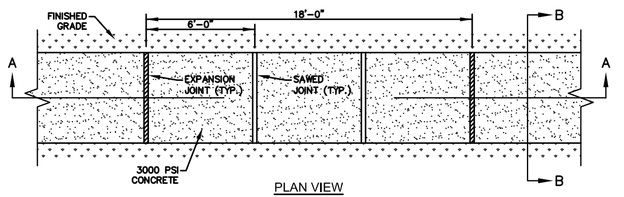
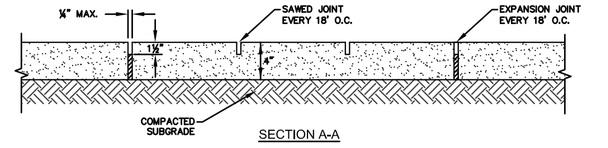
THESE DRAWINGS AND THE DESIGN THEREON ARE THE PROPERTY OF HEANER DESIGN GROUP AND MAY NOT BE USED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF HEANER DESIGN GROUP AND ANY INFRINGEMENT WILL BE SUBJECT TO LEGAL ACTION

NOTES:

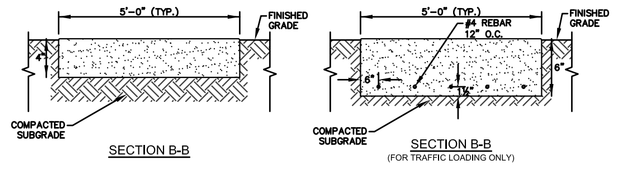
1. CONTRACTOR SHALL COORDINATE ALL WORK ASSOCIATED WITH THIS PROJECT WITH LANDER UNIVERSITY, JEFF BEAVER, DIRECTOR OF ENGINEERING SERVICES AT (864) 388-8208 PRIOR TO BEGINNING ANY WORK.
2. CALL SC811 FOR UTILITY LOCATION BEFORE BEGINNING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE ON NEWLY GRADED AREAS. POOLING OF RUNOFF WILL NOT BE ACCEPTED.
4. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING SIDEWALKS/PAVEMENTS/LANDSCAPING THAT ARE NOT WITHIN THE PROJECT AREA AT NO ADDITIONAL COST TO THE OWNER.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT SURROUNDINGS AND CONDITIONS PRIOR TO BIDDING THE PROJECT.
6. ALL EXISTING ASPHALT REMOVED AS PART OF THIS PROJECT SHALL BE PROPERLY DISPOSED OF OFF SITE.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS AND LICENSES THAT MAY BE REQUIRED AS PART OF THIS PROJECT.
8. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY UTILITY LINES. IRRIGATION LINES, SPRINKLER HEADS, TELEPHONE LINES, COMMUNICATION LINES, ETC... AS PART OF THIS PROJECT AND THERE SHALL BE NO ADDITIONAL COSTS TO THE OWNER FOR SAID REPAIR.
9. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE PROJECT AREA DURING CONSTRUCTION.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING MANHOLE TOPS AND STORM DRAIN INLETS THAT ARE LOCATED WITHIN THE PROJECT AREA. NEW FINISHED GRADE SHALL MATCH THAT OF THE EXISTING STRUCTURE TOPS.
11. ANY REROUTING OF NORMAL TRAFFIC FLOW TO ACCOMMODATE CONSTRUCTION SHALL BE COORDINATED WITH LANDER UNIVERSITY.
12. THE NEWLY FINISHED SIDEWALKS SHALL BE PROTECTED FROM PEDESTRIAN TRAFFIC OF ANY KIND UNTIL THE CONCRETE HAS SET UP AND HARDENED, AND IN NO CASE LESS THAN 48 HOURS.
13. THE CONTRACTOR WILL ADHERE TO THE WEIGHT LIMITS PRESCRIBED ON COUNTY AND STATE MAINTAINED ROADS FOR HAULING EQUIPMENT AND/OR MATERIALS TO AND FROM THIS SITE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO THE STREETS AND/OR UTILITIES DUE TO NON-COMPLIANCE OF WEIGHT LIMIT REGULATIONS.
14. THE EXISTENCE, ABSENCE, LOCATION, AND DEPTH OF UTILITIES AND UNDERGROUND ITEMS HAVE BEEN DETERMINED BY ORDINARY SURVEYING METHODS, FROM FIELD OBSERVATIONS, AND FROM INFORMATION PROVIDED BY THE UTILITY COMPANIES AND THE OWNER AND ARE NOT GUARANTEED.
15. CONTRACTOR IS RESPONSIBLE FOR REMOVING OR CLEANING OUT ANY SILT, DIRT, MUD OR ANY OTHER TYPE OF DEBRIS THAT COMES OFF THIS SITE AND FINDS ITS WAY ONTO PRIVATE OR COUNTY OWNED PROPERTIES TO INCLUDE RIGHT OF WAYS.
16. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF ALL EXISTING PIPES, UTILITIES AND STRUCTURES BEFORE BEGINNING CONSTRUCTION. CALL P.U.P.S. BEFORE DIGGING.
17. ALL NEW CONCRETE WORK ADJACENT TO EXISTING ASPHALT SHALL MATCH THE GRADE AND HAVE A SMOOTH TRANSITION.
18. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING THE DISTURBED AREAS AND CONTAINING THE SEDIMENT TO THIS PROJECT SITE. AT A MINIMUM, ALL INLETS AND OUTLETS, PROPOSED AND EXISTING, SHALL HAVE SEDIMENT TUBES INSTALLED DURING CONSTRUCTION AND UNTIL ALL DISTURBED AREAS ARE STABILIZED.
19. THE CONTRACTOR SHALL ADD SILT FENCE AS NEEDED AROUND THE PERIMETER OF THE PROJECT AREA ON THE LOW SIDE OF THE SITE TO HELP WITH EROSION AND SEDIMENTS CONTROL.
20. UPON REMOVAL OF EXISTING ASPHALT SIDEWALKS, THE CONTRACTOR SHALL RE-GRADE AND COMPACT THE SUBGRADE TO CREATE CONSISTENT, UNIFORM SURFACES AND SLOPES IN PREPARATION OF NEW CONCRETE SIDEWALKS.
21. ALL SIDEWALK INTERSECTIONS SHALL HAVE 2' RADIUS CONNECTING SIDEWALKS.
22. ALL LAWN AREAS OUTSIDE OF SIDEWALKS BUT WITHIN THE DISTURBED LIMITS SHALL BE GRADED TO DRAIN TO NEW OR EXISTING DRAINAGE PIPES/STRUCTURES.
23. CONTRACTOR SHALL USE PENNINGTON SEED STARTER MATS ON ALL SLOPES TO HOLD SEED IN PLACE UNTIL GERMINATION.
24. LANDER UNIVERSITY WILL LOCATE COMMUNICATION LINES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION.
25. UPON COMPLETION OF CONSTRUCTION AND THE SITE IS STABILIZED, EACH PIPE INLET AND OUTLET WITHIN THE PROJECT AREA SHALL HAVE INSTALLED A 2'X'2X6" SPLASH PAD USING 3-5" RIVER ROCK, EXCEPT AS NOTED ON THE SITE PLAN.



PLAN VIEW



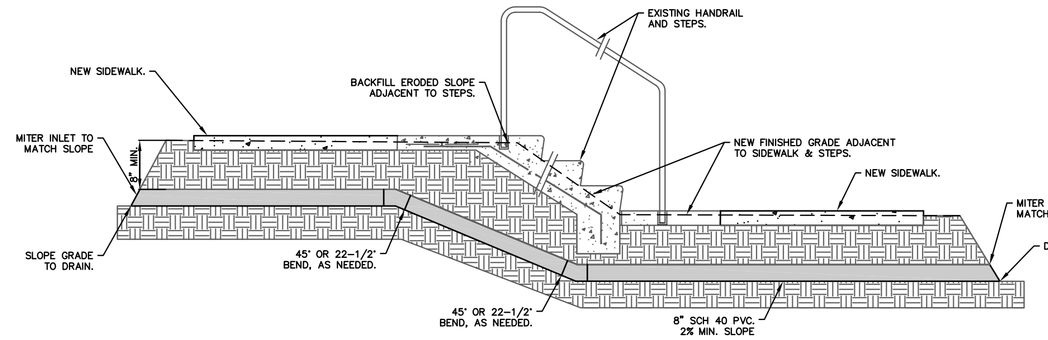
SECTION A-A



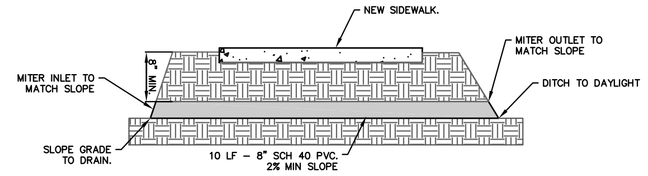
SECTION B-B

SECTION B-B (FOR TRAFFIC LOADING ONLY)

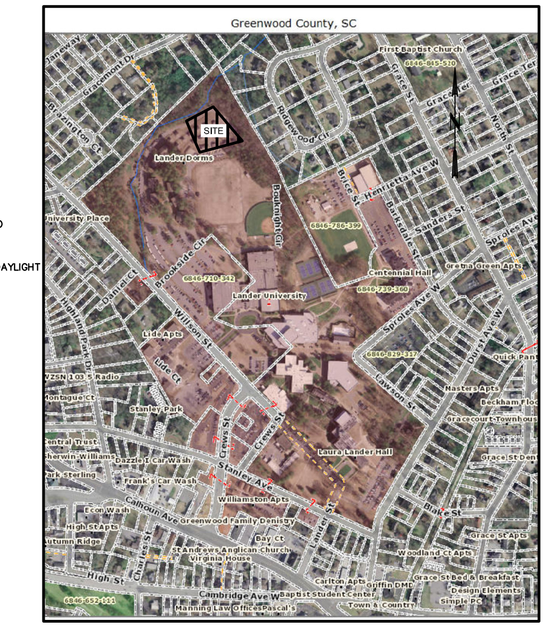
SIDEWALK DETAIL
NOT TO SCALE



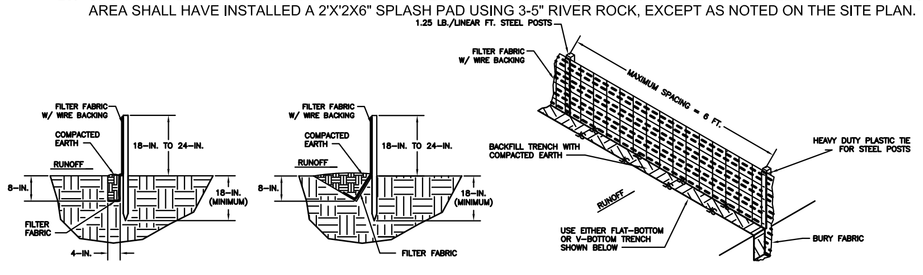
NEW DRAINAGE AT EXISTING STEPS DETAIL
NOT TO SCALE



TYPICAL DRAINAGE UNDER SIDEWALK DETAIL
NOT TO SCALE



LOCATION MAP



FLAT–BOTTOM TRENCH DETAIL

V–SHAPED TRENCH DETAIL

SILT FENCE INSTALLATION

NOTES:

WHEN AND WHERE TO USE IT
SILT FENCE IS APPLICABLE IN AREAS:

WHERE THE MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE FENCE IS 100–FEET.
WHERE THE MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO FENCE LINE) IS 2H:1V.
THAT DO NOT RECEIVE CONCENTRATED FLOWS GREATER THAN 0.5 CFS.
DO NOT PLACE SILT FENCE ACROSS CHANNELS OR USE IT AS A VELOCITY CONTROL BMP.

MATERIALS
STEEL POSTS
USE 48–INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS:
COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.
HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38–INCHES AND NOMINAL "T" LENGTH OF 1.48–INCHES.
WEIGH 1.25 POUNDS PER FOOT (± 8%)
HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17–SQUARE INCHES ATTACHED TO THE STEEL POSTS.
PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

USE STEEL POSTS WITH A MINIMUM LENGTH OF 4–FEET, WEIGHING 1.25 POUNDS PER LINEAR FOOT WITH (± 8) PROJECTIONS TO AID IN FASTENING THE FABRIC. EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW THE GROUND LEVEL FOR ADDED STABILITY.

THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS:
BE COMPOSED OF MINIMUM 15 GAUGE STEEL.
HAVE A MINIMUM CROSS SECTION AREA OF 17–SQUARE INCHES.

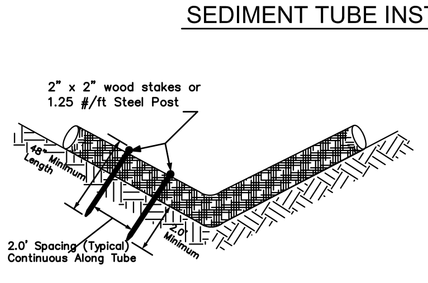
GEOTEXTILE FILTER FABRIC
FILTER FABRIC IS
COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES. FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION. FREE OF DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES. CUT TO A MINIMUM WIDTH OF 36 INCHES.

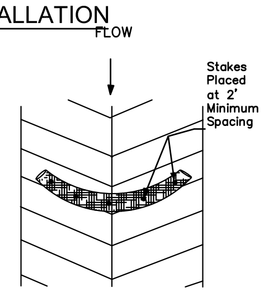
USE ONLY FABRIC APPEARING ON SCDOT APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

INSTALLATION
EXCAVATE A TRENCH APPROXIMATELY 6–INCHES WIDE AND 6–INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12–INCHES OF GEOTEXTILE FABRIC INTO THE 6–INCH DEEP TRENCH, EXTENDING THE REMAINING 6–INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT. BURY 12–INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6–INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24–INCHES. INSTALL POSTS A MINIMUM OF 1– TO 2– INCHES ABOVE THE FABRIC, WITH NO MORE THAN 3–FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6–FEET CENTERS. ATTACH FABRIC TO WOOD POSTS USING STAPLES MADE OF HEAVY–DUTY WIRE AT LEAST 1½–INCH LONG, SPACED A MAXIMUM OF 6–INCHES APART. STAPLE A 2–INCH WIDE LATHE OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE UPSLOPE SIDE OF WOODEN POSTS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY–DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN CALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24–INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE FENCE ABOVE GROUND MAY BE GREATER THAN 24–INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4–, 5–, OR 6–FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SUFFICIENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.

INSPECTION AND MAINTENANCE
INSPECT EVERY SEVEN CALENDAR DAYS. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

SEDIMENT TUBE INSTALLATION





PLAN SYMBOL

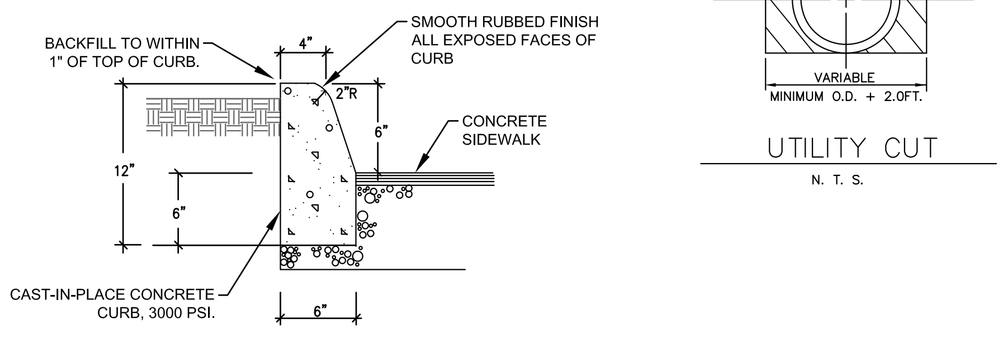
SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

South Carolina Department of Health and Environmental Control
SEDIMENT TUBES
STANDARD DRAWING NO. SC–05 PAGE 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

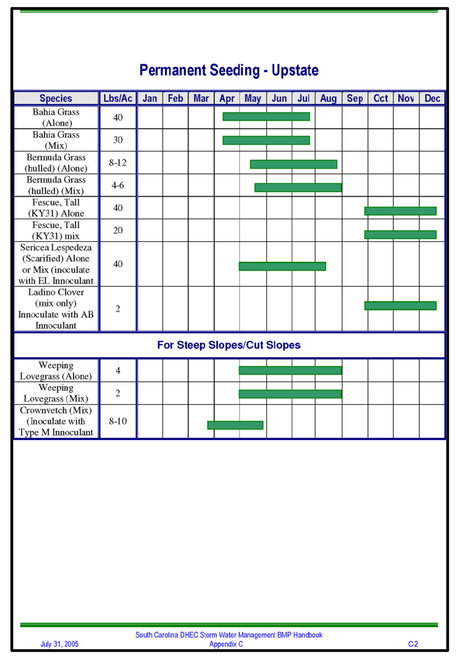


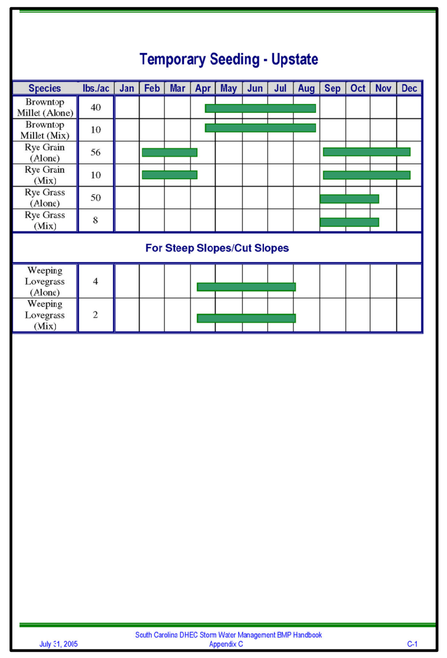
UTILITY CUT
N. T. S.



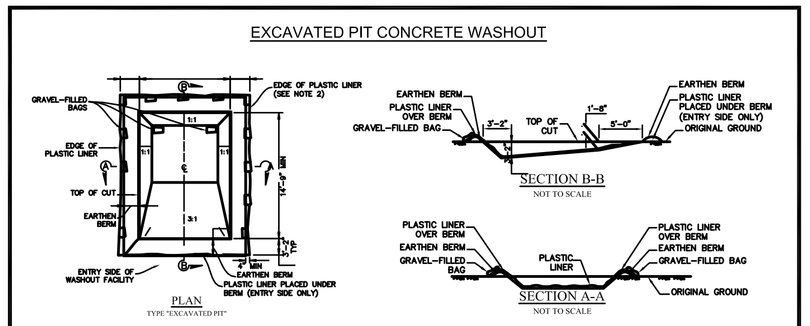
CONCRETE CURB DETAIL
NOT TO SCALE

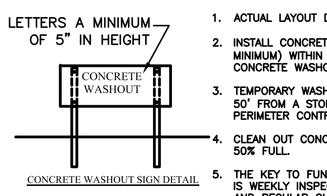
SILT FENCE DETAIL
NOT TO SCALE





EXCAVATED PIT CONCRETE WASHOUT

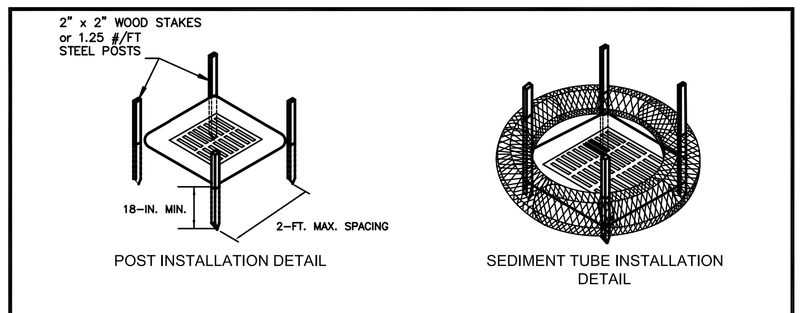




CONCRETE WASHOUT SIGN DETAIL

NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

South Carolina Department of Health and Environmental Control
CONCRETE WASHOUT
EXCAVATED PIT
STANDARD DRAWING NO. RC–08 PAGE 1 of 1
NOT TO SCALE FEBRUARY 2014 DATE



South Carolina Department of Health and Environmental Control
Type A
SEDIMENT TUBE INLET PROTECTION
STANDARD DRAWING NO. SC–07A PAGE 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

UTILITIES PROTECTION CENTER
THREE WORKING DAYS BEFORE YOU DIG SOUTH CAROLINA: 1–888–721–7877

UTILITY WARNING:
The underground utilities shown have been located from field survey information and existing drawings. The Surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.

HEANER DESIGN GROUP, LLC No. C04159 CERTIFICATE OF AUTHORIZATION NORTH CAROLINA SOUTH CAROLINA

PROFESSIONAL ENGINEER No. 21601 REGISTERED CHRISTOPHER EVANS FLANNERY DWIGHT

heaner design group
ENGINEERS LANDSCAPE ARCHITECTS CONSULTANTS
110 BEATIE DRIVE. - P.O. BOX 24027 - GREENWOOD, SC 29649
PHONE: (864)223-1553 • FAX:(864)223-1554

SIDEWALK AND DRAINAGE IMPROVEMENTS - PHASE II
THOMASON DORMATORIES
FOR
LANDER UNIVERSITY
GREENWOOD, SOUTH CAROLINA

CIVIL NOTES & DETAILS

NO	REVISED	CHK'D	DATE

DESIGNED BY: DEFII
DRAWN: DEFII
CHECKED: DEFII
APPROVED: DEFII
JOB NUMBER: 21-065
DATE: 4/15/21

SHEET
C1.0