

ENGINEERS CERTIFICATION

I have placed my signature and seal on the design documents submitted signifying that i accept responsibility for the design of the erosion & sediment control plan. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant to Regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of SCR100000.

NOTES:

- 1. TOTAL ACREAGE BLOCK 2 TAX MAP PARCEL 7-16-01-299.00 : 3.66 ACRES.
- 2. BLOCK 2 ESTIMATED DISTURBED ACREAGE: 2.4 ACRES.
- 3. RECEIVING STREAM: UNNAMED TRIBUTARY TO FAIRFOREST CREEK.
- 4. BLOCK 2 PRE-DEVELOPED IMPERVIOUS AREA = 1.0 ACRES
- 5. POST-DEVELOPED IMPERVIOUS AREA BLOCKS 2 = 0 ACRES.
- 6. SEE CITY OF SPARTANBURG AND SCDHEC STANDARD NOTES ON DRAWING 7 OF 7.
- 7. TEMPORARY AND PERMANENT SEEDING SHALL BE APPLIED TO DISTURBED AREAS. SEE SEEDING SPECIFICATION ON DRAWING 6 OF 7.
- 8. DUST CONTROL SHALL BE PROVIDED BY A WATER BUFFALO, A TRAILER MOUNTED PUMP AND TANK, AND BY THE FIRE HYDRANT ONSITE.
- 9. TOPOGRAPHIC AND PARCEL DATA TAKEN FROM AS-BUILT TOPOGRAPHIC SURVEY PREPARED BY AMERICAN ENGINEERING CONSULTANTS, INC. CAYCE, SOUTH CAROLINA, DATED MARCH 2017.

LEGEND

PS(TS)

à pa la

— — — EXISTING MAJOR CONTOUR (5')

— — — — — EXISTING MINOR CONTOUR (1')

APPROXIMATE SITE BOUNDARY

_____ SILT FENCE OR SEDIMENT TUBE

LIMITS OF DISTURBANCE

GRAPHIC SCALE

TEMPORARY AND/OR PERMANENT SEEDING

(IN FEET)

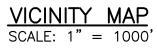
EXISTING IMPERVIOUS AREA

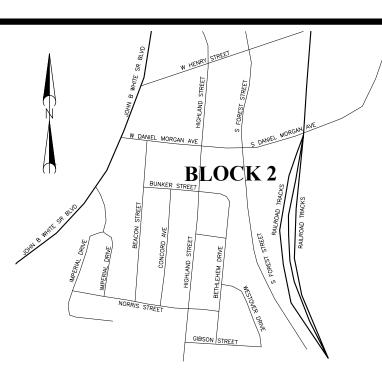
STORMWATER FLOW PATH

INLET PROTECTION

SILT FENCE OUTLET

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D		R		P			F		T	1			
ľ	S&ME, INC. S&ME, INC. NO. CO0473												
											APV		
											ЯН		
FPC	FPC	FPC									RV		
01/22/18 SUBMITTED FOR CLIENT REVIEW	02/00/18 SUBMITTED FOR REGULATORY REVIEW	SUBMITTED FOR DEMOLITION									DESCRIPTION		
01/22/18	02/00/18	02/00/18									DATE		
~	2	e									C Z		
	BLOCK 2 - EROSION & SEDIMENT CONTROL PLAN					STORMWATER POLLUTION PREVENTION PLAN CAMMIE CLAGETT DEMOLITIONS CITY OF SPARTANBURG, SOLITH CAROLINA							
F				OJEC 226									
F	DRAWING NUMBER												
	2							7					

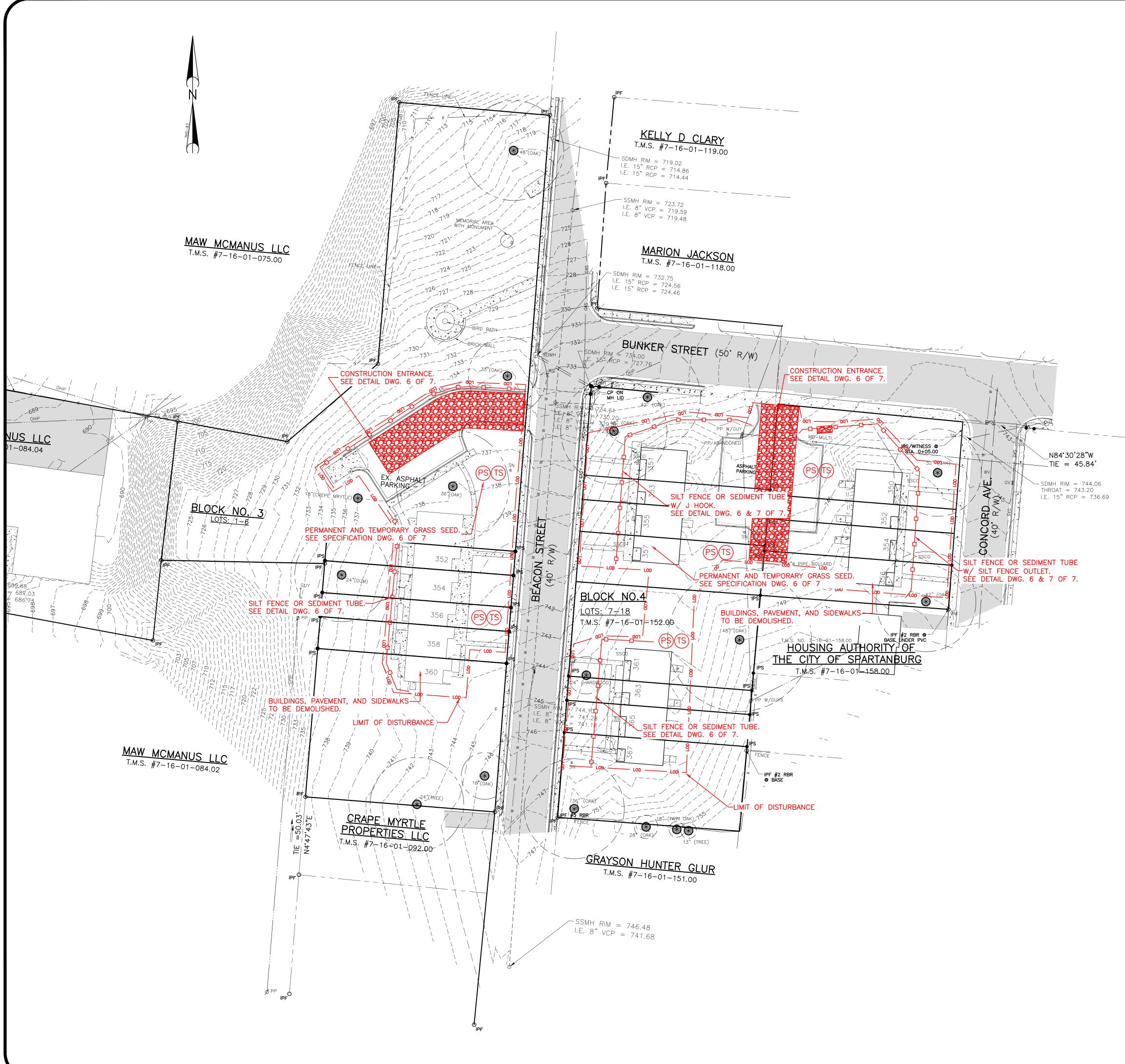






301 ZIMA PARK DRIVE SPARTANBURG, SC 29301

(864) 574-2360

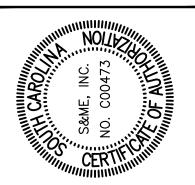


BLOCKS 3 & 4 $\frac{\text{VICINITY MAP}}{\text{SCALE: 1"} = 1000'}$



1935 21st AVENUE SOUTH NASHVILLE, TN 37212 (615) 385-4144

DRAFT



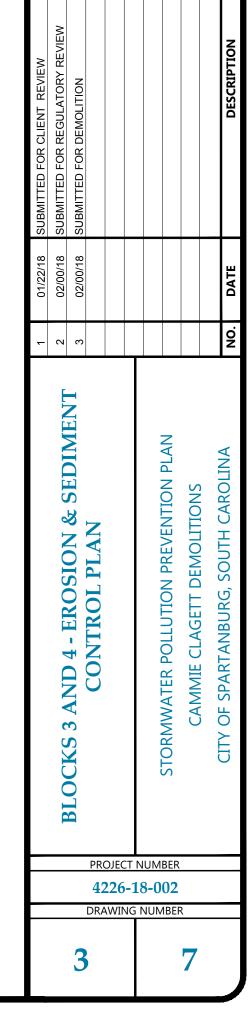
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NOTES:

- 1. TOTAL ACREAGE BLOCK 3 TAX MAP PARCEL 7-16-01-088-00 : 1.35 ACRES. 2. TOTAL ACREAGE BLOCK 4 TAX MAP PARCEL 7-16-01-152-00 : 1.08 ACRES.
- 3. BLOCK 3 ESTIMATED DISTURBED ACREAGE: 0.4 ACRES. 4. BLOCK 4 ESTIMATED DISTURBED ACREAGE: 0.7 ACRES
- 5. RECEIVING STREAM: UNNAMED TRIBUTARY TO FAIRFOREST CREEK AND FAIRFOREST CREEK.
- 6. BLOCK 3 PRE-DEVELOPED IMPERVIOUS AREA = 0.2 ACRES 7. BLOCK 4 PRE-DEVELOPED IMPERVIOUS AREA = 0.3 ACRES
- 8. POST-DEVELOPED IMPERVIOUS AREA BLOCKS 3 & 4 = 0 ACRES.
- 9. SEE CITY OF SPARTANBURG AND SCDHEC STANDARD NOTES ON DRAWING 7 OF 7.
- TEMPORARY AND PERMANENT SEEDING SHALL BE APPLIED TO DISTURBED AREAS. SEE SEEDING SPECIFICATION ON DRAWING 6 OF 7.
- 11. DUST CONTROL SHALL BE PROVIDED BY A WATER BUFFALO, A TRAILER MOUNTED PUMP AND TANK, AND BY THE FIRE HYDRANT ONSITE...
- 12. TOPOGRAPHIC AND PARCEL DATA TAKEN FROM AS-BUILT TOPOGRAPHIC SURVEY PREPARED BY AMERICAN ENGINEERING CONSULTANTS, INC. CAYCE, SOUTH CAROLINA, DATED MARCH 2017.



LEGEND

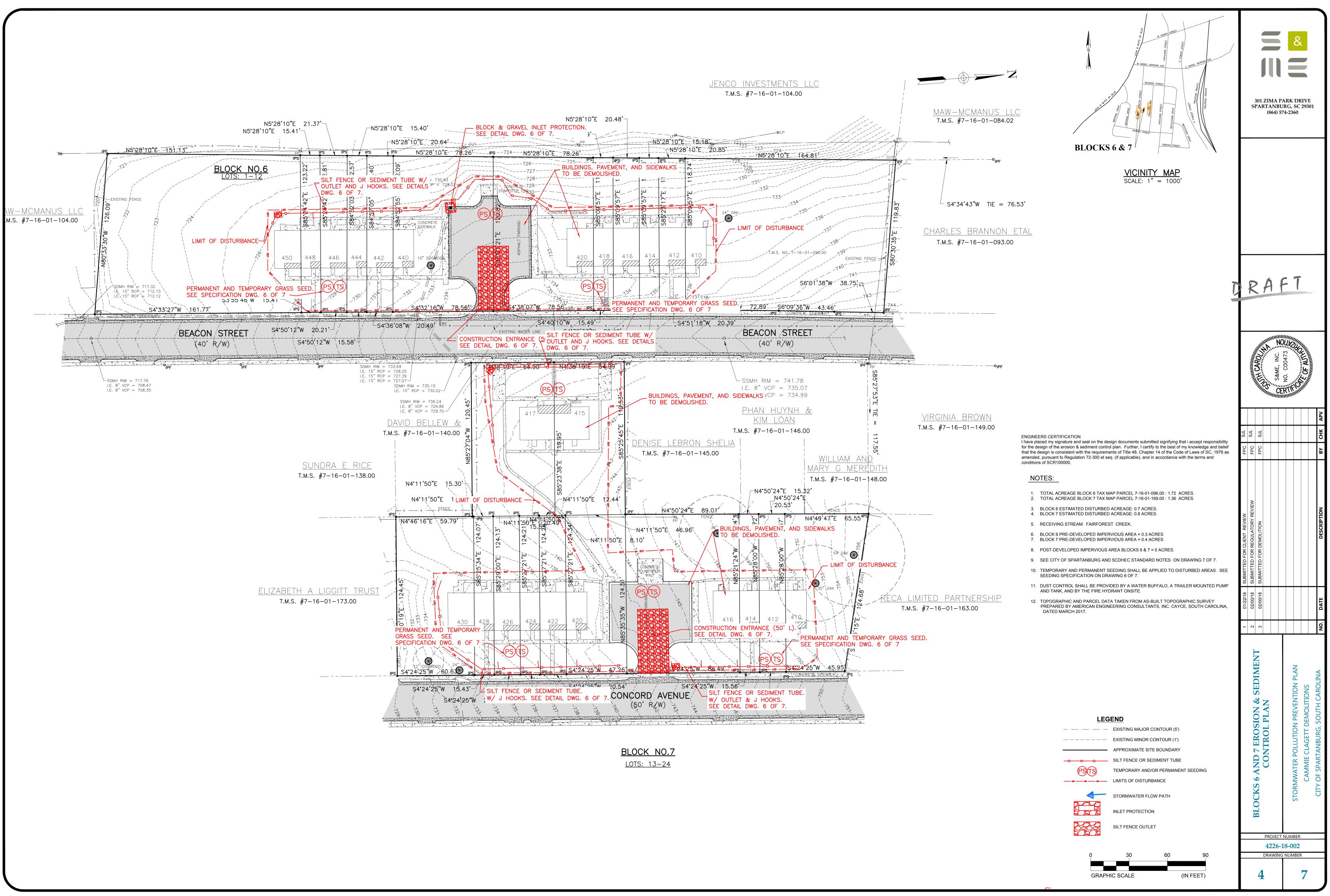
— EXISTING MAJOR CONTOUR (5') - - - - - EXISTING MINOR CONTOUR (1')

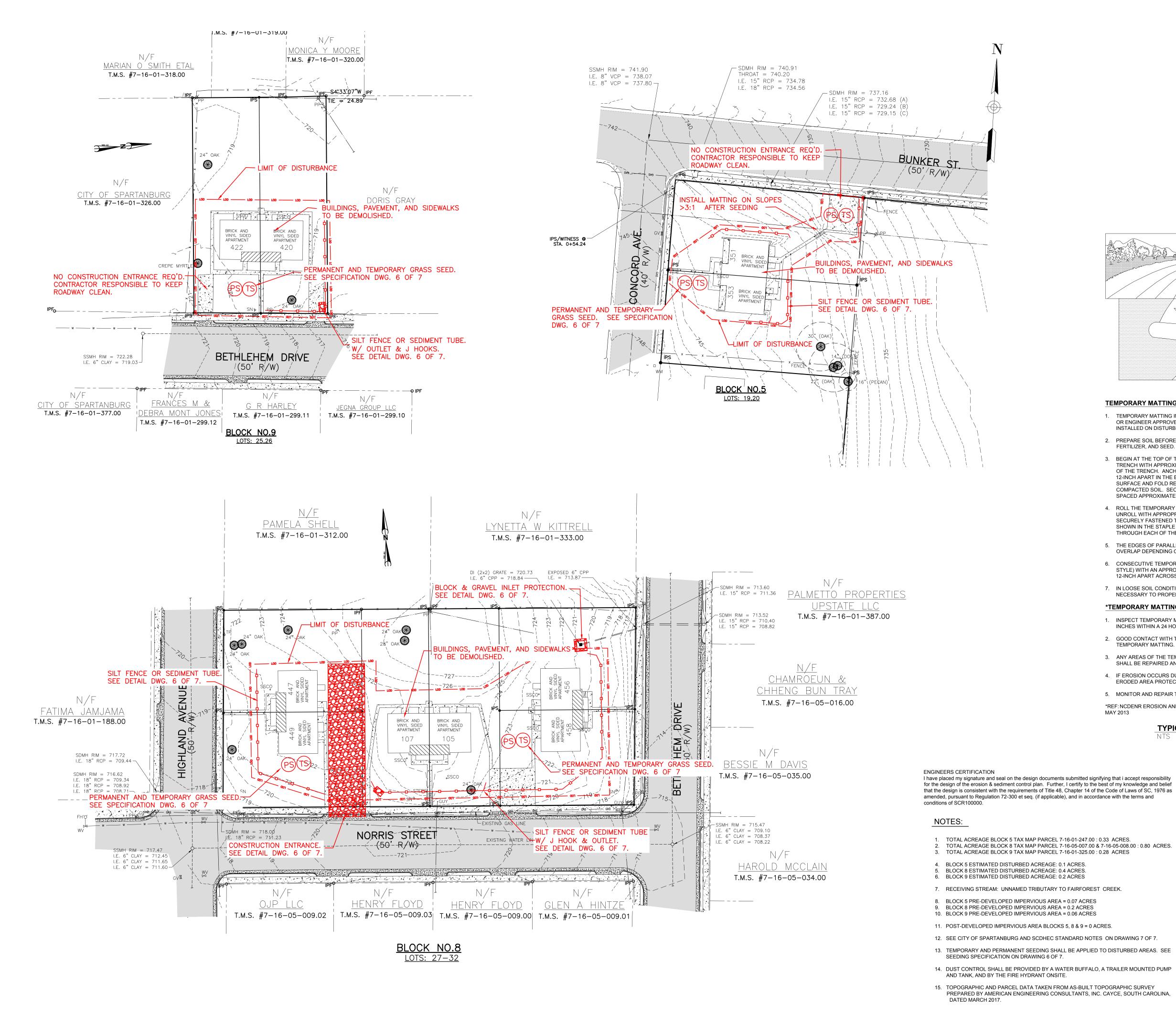
(PS)(TS)

TEMPORARY AND/OR PERMANENT SEEDING LIMITS OF DISTURBANCE EXISTING IMPERVIOUS AREA STORMWATER FLOW PATH INLET PROTECTION SILT FENCE OUTLET

APPROXIMATE SITE BOUNDARY

90 GRAPHIC SCALE (IN FEET)

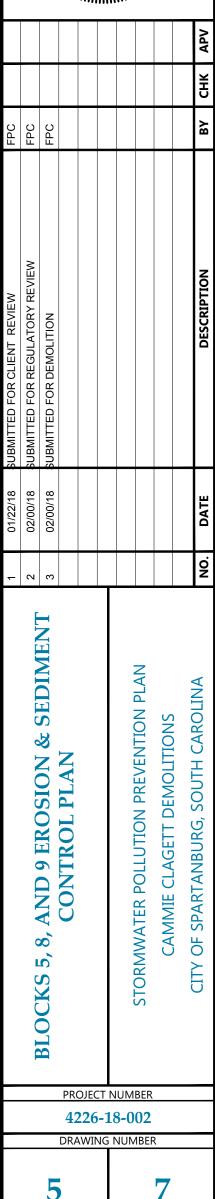




DANIEL MORGAN AV BLOCK BLOCKS 8 & 9 VICINITY MAP SCALE: 1" = 1000 2 TO 5-INCH 6-INCH 1 III III III



301 ZIMA PARK DRIVE SPARTANBURG, SC 29301 (864) 574-2360



TEMPORARY MATTING (SLOPES) NOTES:

- TEMPORARY MATTING INSTALLED ON SLOPES IN UPLAND AREAS SHALL BE NORTH AMERICAN GREEN TYPE DS-75 OR ENGINEER APPROVED EQUIVALENT. REFER TO STREAM CROSSING DETAIL FOR SPECIFIC MATTING TO BE INSTALLED ON DISTURBED STREAM BANKS.
- PREPARE SOIL BEFORE INSTALLING TEMPORARY MATTING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE TEMPORARY MATTING IN A 6-INCH DEEP X 6-INCH WIDE TRENCH WITH APPROXIMATELY 12-INCH OF TEMPORARY MATTING EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE TEMPORARY MATTING WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12-INCH APART IN THE BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AFTER STAPLING. APPLY SEED TO SURFACE AND FOLD REMAINING 12-INCH PORTION OF TEMPORARY MATTING BACK OVER SEED AND COMPACTED SOIL. SECURE TEMPORARY MATTING OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12-INCH APART ACROSS THE WIDTH OF THE TEMPORARY MATTING.
- 4. ROLL THE TEMPORARY MATTING DOWN OR HORIZONTALLY ACROSS THE SLOPE. TEMPORARY MATTING WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL TEMPORARY MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 5. THE EDGES OF PARALLEL TEMPORARY MATTING MUST BE STAPLED WITH APPROXIMATELY 2-INCH TO 5-INCH OVERLAP DEPENDING ON TEMPORARY MATTING TYPE.
- 6. CONSECUTIVE TEMPORARY MATTING SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3-INCH OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12-INCH APART ACROSS ENTIRE TEMPORARY MATTING WIDTH.
- 7. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6-INCH MAY BE NECESSARY TO PROPERLY SECURE THE TEMPORARY MATTING.

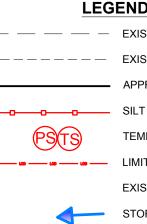
*TEMPORARY MATTING (SLOPES) MAINTENANCE NOTES:

- 1. INSPECT TEMPORARY MATTING AT LEAST WEEKLY AND AFTER EACH RAINFALL EVENT THAT EXCEEDS 0.5 INCHES WITHIN A 24 HOUR PERIOD.
- 2. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE TEMPORARY MATTING.
- 3. ANY AREAS OF THE TEMPORARY MATTING THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
- 4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.

5. MONITOR AND REPAIR THE TEMPORARY MATTING AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED. *REF: NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, CHAPTERS 6 AND 8 REVISED,

TYPICAL TEMPORARY SLOPE MATTING DETAIL

MAY 2013



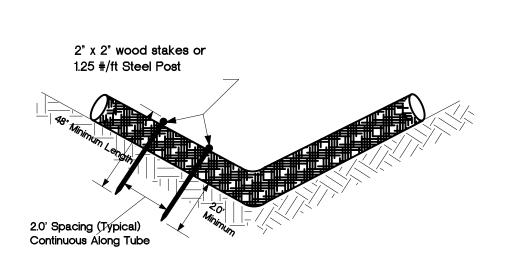
— — — EXISTING MAJOR CONTOUR (5') ---- EXISTING MINOR CONTOUR (1') APPROXIMATE SITE BOUNDARY _____ SILT FENCE OR SEDIMENT TUBE TEMPORARY AND/OR PERMANENT SEEDING ____ 🛥 ___ 👜 ____ LIMITS OF DISTURBANCE EXISTING IMPERVIOUS AREA STORMWATER FLOW PATH SILT FENCE OUTLET



BLOCK & GRAVEL INLET PROTECTION - 90

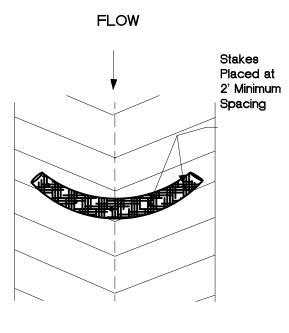
(IN FEET)

GRAPHIC SCALE



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								



PLAN SYMBOL



SEDIMENT TUBES - GENERAL NOTES 1. Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent

- off-site discharge of sediment-laden stormwater runoff. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
- 3. The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material.
- 4. Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on channel dimensions. Diameters outside this range may be allowed where necessary when approved.
- 5. Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed 6. Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T"
- a minimum of 48-inches in length placed on 2-foot centers. 7. Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's
- installation. 8. The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
- 9. Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer. depth equal to 1/5 the diameter of the sediment tube.
- 10. Each sediment tube should be installed in a trench with a
- 11. Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
- 12. Install stakes at a diagonal facing incoming runoff.

SEDIMENT TUBE DETAIL N.T.S.

SEEDING SPECIFICATION

DEFINITION

Controlling runoff and erosion on disturbed areas by establishing perennial vegetative : cover with seed.

PURPOSE

To reduce erosion and decrease sediment yield from disturbed areas, and to permanently stabilize such areas in a manner that is economical, adapts to site conditions, and allows selection of the most appropriate plant materials.

SEEDBED REQUIREMENTS

Establishment of vegetation should not be attempted on sites that are unsuitable due to excessive soil compaction, inappropriate soil texture, poor drainage, concentrated overland flow, or steepness of slope until measures have been taken to correct these problems. To maintain a good stand of vegetation, the soil must meet certain minimum requirements as a growth medium. The existing soil should have these criteria: • Enough fine-grained (silt and clay) material to maintain adequate moisture and nutrient supply (available water capacity of at least .05 inches water to 1 inch of soil).

- Sufficient pore space to permit root penetration.
- Sufficient depth of soil to provide an adequate root zone. The depth to rock or impermeable layers such as hardpans should be 12 inches or more, except on slopes steeper than 2:1 where the addition of soil is not feasible. • A favorable pH range for plant growth, usually 6.0 - 6.5.

• Free from large roots, branches, stones, large clods of earth, or trash of any kind. Clods and stones may be left on slopes steeper than 3:1 if they are to be hydro seeded. If any of the above criteria are not met - i.e., if existing soil is too coarse, dense, shallow or acidic to foster vegetation - special amendments are required. The soil conditioners described below may be beneficial or, preferably, topsoil may be applied.

SEEDBED PREPARATION

Install necessary mechanical erosion and sedimentation control practices before seeding, and complete grading according to the approved plan. Lime and fertilizer needs should be determined by soil tests. Soil testing is available through Clemson University Cooperative Extension Service. Testing is also done by commercial laboratories.

When soil tests results are not available, follow rates suggested in the seeding specifications below. Apply lime and fertilizer evenly and incorporate into the top 4-6 inches of soil by disking or other suitable means. Operate machinery on the contour. When using a hydro seeder, apply lime and fertilizer to a rough, loose surface. Roughen surfaces prior to seeding.

Complete seedbed preparation by breaking up large clods and raking into a smooth, uniform surface (slopes less than 3:1). Fill in or level depressions that can collect water. Broadcast seed into a freshly loosened seedbed that has not been sealed by rainfall.

SEEDING

Recommended seeding dates developed by SCDHEC are provided below. Use certified seed for permanent seeding whenever possible.

Labeling of non-certified seed is also required by law. Labels contain important information on seed purity, germination, and presence of wood seeds. Seeds must meet State standards for content of noxious weeds. Do no accept seed containing "prohibited" noxious weed seed. Apply seed uniformly with a cyclone seeder, drop-type spreader, drill, cultipacker seeder, or hydro seeder on a firm, friable seedbed. When using a drill or cultipacker seeder, plant small grains no more than 1 inch deep, grasses and legumes no more than 1/2 inch. Equipment should be calibrated in the field for the desired seeding rate. When using broadcast-seeding methods, subdivide the area into workable sections and determine the amount of seed needed for each section. Apply one-half the seed while moving back and forth across the area, making a uniform pattern: then apply the second half in the same way, but moving at right angles to the first pass. Mulch all plantings immediately after seeding.

MAINTENANCE

Generally, a stand of vegetation cannot be determined to be fully established until soil cover has been maintained for one full year from planting. Inspect seeded areas for failure and make necessary repairs and reseedings within the same season, if possible. Reseeding--If a stand has inadequate cover, re-evaluate choice of plant materials and quantities of lime and fertilizer. Re-establish the stand. Consider seeding temporary, annual species if the time of year is not appropriate for permanent seeding. If vegetation fails to grow, soil must be tested to determine if acidity or nutrient imbalance is responsible. Fertilization--On the typical disturbed site, full establishment usually requires re-fertilization in the second growing season. Fine turf requires annual maintenance fertilization. Use soil tests if possible or follow the guidelines given for the specific seeding mixture.

TEMPORARY SEEDING SPECIFICATIONS

Temporary Seeding - Upstate													
Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40												
Browntop Millet (Mix)	10												
Rye Grain (Alone)	56												
Rye Grain (Mix)	10												
Rye Grass (Alone)	50												
Rye Grass (Mix)	8												
			For	Stee	p Slo	pes/C	ut Slo	opes					
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												

SOIL AMENDMENTS

Follow recommendations of soil tests or apply minimum 3,000 lb/acre ground agricultural limestone and minimum 500 lb/acre 10-10-10 fertilizer.

MULCH

Apply 3,000 to 4,000 lb/acre straw. Anchor mulch by tacking with asphalt, roving or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring. tool. MAINTENANCE

Re-seed areas where seeding does not grow quickly, thick enough, or adequately to prevent erosion.

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) davs after work has ceased, except as stated below:

• Where stabilization by the 14th 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.

MULCH

MAINTENANCE

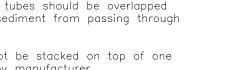
practicable.

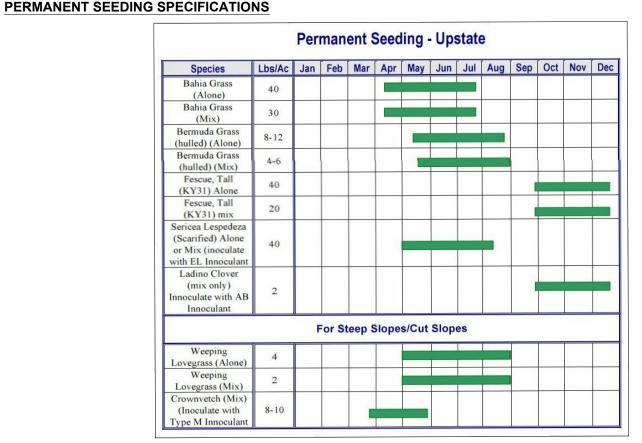
SILT FENCE INSTALLATION

- sections with a minimum weight of 1.25 pounds per foot) at
- recommendations should always be consulted before

SEDIMENT TUBES - INSPECTION & MAINTENANCE 1. The key to functional sediment tubes is weekly inspections,

- routine maintenance, and regular sediment removal. 2. Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Large debris, trash, and leaves should be removed from in front of tubes when found.
- 7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.
- 8. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.





SOIL AMENDMENTS

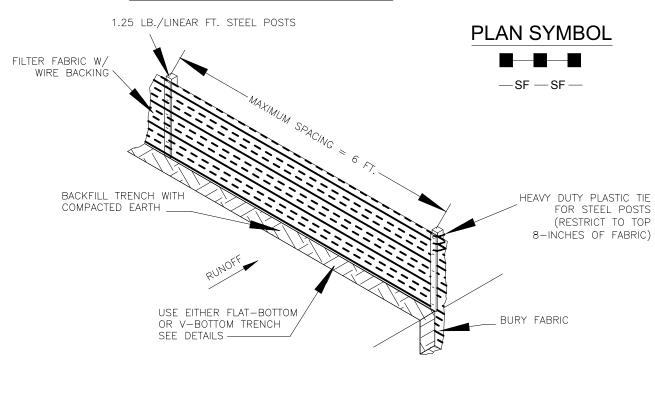
Apply lime and fertilizer according to soil tests, or apply minimum 3,000 lb/acre ground agricultural limestone and minimum 1,000 lb/acre 10-10-10 fertilizer.

Apply 4,000 lb/acre grain straw or equivalent cover of another suitable mulching material. Anchor mulch by tacking with asphalt, roving, or netting. Netting is the preferred anchoring method on steep slopes.

Inspect permanently seeded areas for failure, make necessary repairs and re-seed or overseed within the same growing season if possible. if the grass cover is sparse or patchy, re-evaluate the choice of grass and quantities of lime and fertilizer applied. Final stabilization by permanent seeding of the site requires that it be covered by a 70% coverage rate.

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 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as

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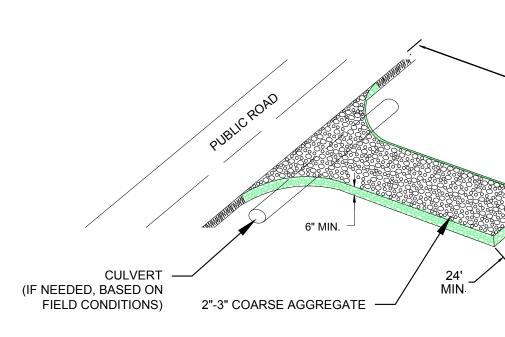


SILT FENCE - GENERAL NOTES

- 1. Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
- 2. Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
- 3. Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
- 4. Silt fence joints, when necessary, shall be completed by one of the following options: - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap: - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or, - Overlap entire width of each silt fence roll from one support post to the next support post.
- 5. Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
- 6. Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and
- 7. Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

SILT FENCE - POST REQUIREMENTS

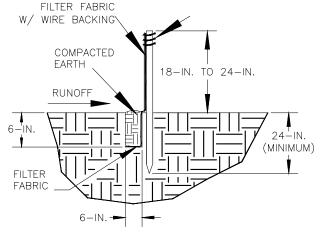
- 1. Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics. - Composed of a high strength steel with a minimum yield strength of 50,000 psi. - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48—inches.
- Weigh 1.25 pounds per foot (\pm 8%) Posts shall be equipped with projections to aid in fastening of filter fabric.
- 3. Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
- 4. Install posts to a minimum of 24-inches. A minimum height of 1- to 2inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- 5. Post spacing shall be at a maximum of 6-feet on center.



TYPICAL CONSTRUCTION ENTRANCE DETAIL NTS

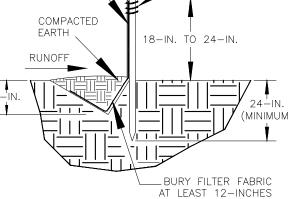






V-SHAPED TRENCH DETAIL

FILTER FABRIC W/ WIRE BACKING



SILT FENCE - FABRIC REQUIREMENTS

- 1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements and wire backing: Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are 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 any defects or flaws that significantly affect its physical and/or
- filtering properties; and, - Have a minimum width of 36-inches.
- 2. Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 3. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- 4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- 5. Filter Fabric shall be installed at a minimum of 24-inches above the ground.

SILT FENCE - INSPECTION & MAINTENANCE

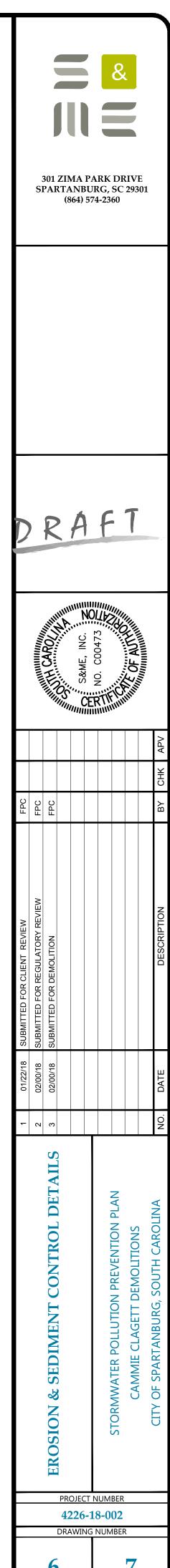
- 1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
- 7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
- 8. Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

GENERAL NOTES:

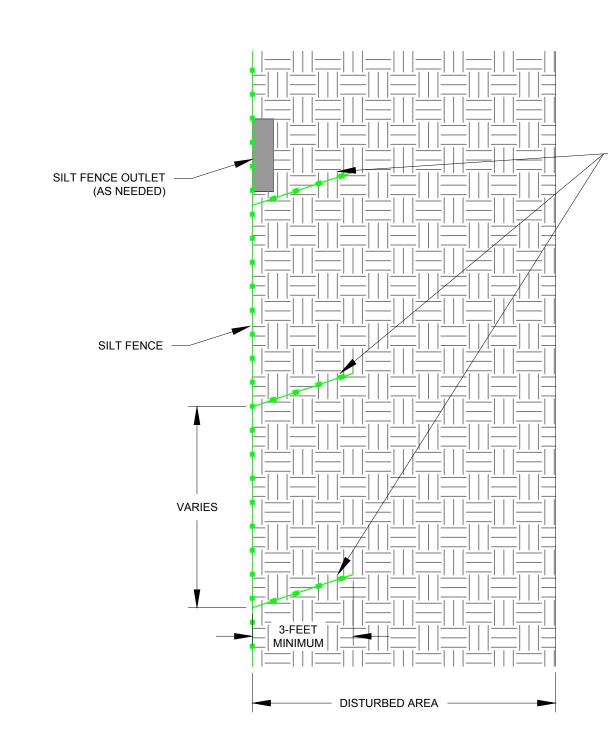
- 1. PLACE 8 $^{O7}_{SY}$ NON-WOVEN GEOTEXTILE BENEATH STONE.
- 2. IF ROADSIDE SWALE IS PRESENT, CONTRACTOR SHALL INSTALL CULVERT SUFFICIENT TO ADEQUATELY CONVEY STORMWATER FLOW.
- DIMENSIONS OF CONSTRUCTION ENTRANCE MAY HAVE TO BE ALTERED BASED ON CONDITIONS IN THE FIELD.

MAINTENANCE NOTES:

- INSPECT CONSTRUCTION ENTRANCES AT LEAST WEEKLY AND AFTER EACH RAINFALL EVENT THAT 1. EXCEEDS 0.5 INCHES WITHIN A 24 HOUR PERIOD AND MAKE ANY REQUIRED REPAIRS IMMEDIATELY. DURING PERIODS OF HEAVY USE THE CONSTRUCTION ENTRANCE SHOULD BE INSPECTED MORE FREQUENTLY.
- THE ENTRANCE WILL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING ROADWAYS. SEDIMENT TRACKED, SPILLED, DROPPED OR OTHERWISE DEPOSITED ONTO ROADWAYS WILL BE SWEPT UP AS SOON AS PRACTICAL AND HAULED OFF-SITE FOR PROPER DISPOSAL.
- 3. IF EXCESS SEDIMENT HAS CLOGGED THE PAD, THE ENTRANCE WILL BE TOPDRESSED WITH NEW STONE AS NEEDED. REPLACEMENT OF THE ENTIRE PAD MAY BECOME NECESSARY WHEN THE PAD BECOMES ENTIRELY FILLED WITH SEDIMENT AND MUD.
- 4. THE CONSTRUCTION ENTRANCE WILL BE REMOVED WHEN CONSTRUCTION ACTIVITIES CEASE ON THE PROJECT. THE REMOVED STONE AND SEDIMENT FROM THE ENTRANCE WILL BE HAULED OFF-SITE AND DISPOSED OF PROPERLY.
- BRING THE AREA TO GRADE AND STABILIZE IT. *REF: SCDHEC Storm Water Manual BMP Handbook, Rev. February 2014



- 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. A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE. B. 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 AND PLANTED AREAS SHALL BE INSPECTED BY THE PERMITTEE ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INSTALLED INAPPROPRIATELY OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 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 ENCOUNTEREI WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS 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.
- 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.
- 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.
- 11. THE OS-SWPPP, INSPECTIONS RECORDS, AND RAINFALL GAUGE & DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF FINAL STABILIZATION.
- 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL
- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, & OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- 15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMP'S (SEDIMENT BASIN, FILTER BAG, ETC.). 16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL B) WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
- C) FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE & EQUIPMENT OPERATION & MAINTENANCE; AND D) SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 18. IF EXISTING BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE. THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMP'S MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE, THIS CONFERENCE MUST BE HELD ON-SITE UNLESS SCDHEC HAS APPROVED OTHERWISE.



SILT FENCE J-HOOKS (APPROXIMATE 3-FEET MINIMUM TIEBACK)

SILT FENCE "J-HOOK" NOTES:

- 1. THE LOCATION OF SILT FENCE "J-HOOKS" ARE SHOWN ON THE E&SC PLAN AND WILL BE DETERMINED IN THE FIELD BASED UPON FIELD CONDITIONS.
- SILT FENCE "J-HOOK" MAINTENANCE NOTES:
- 1. *INSPECT SILT FENCE "J-HOOKS" AT LEAST ONCE PER SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5-INCH PER 24 HOUR PERIOD.
- MAKE ANY NECESSARY REPAIRS IMMEDIATELY.
- 3. SHOULD THE FABRIC OF A SILT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTI Y
- 4. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
- 5. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

*REF: NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, CHAPTERS 6 AND 8 REVISED, MAY 2013

<u>TYPICAL SILT FENCE J-HOOK DETAIL</u>

CITY OF SPARTANBURG STANDARD NOTES

- 1. BEFORE ANY LAND DISTURBING ACTIVITY TAKES PLACE CONTRACTOR MUST ARRANGE A PRE CONSTRUCTION CONFERENCE WITH THE CITY OF SPARTANBURG STORM WATER MANAGER (JAY SQUIRES 596-2089 JSQUIRES@CITYOFSPARTANBURG,ORG)
- 2. IF NECESSARY, A STEEP SLOPE (IE: 3:1 OR GREATER) SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDRO SEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- 3. 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:
- WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER, FROZEN GROUND, OR DROUGHT 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, TEMPORARILY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE

ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY INSPECTIONS SHOULD BE DOCUMENTED AND KEPT ON SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.

- 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 SEDIMENTS 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 THE PAVED ROADWAY CONSTRUCTION AREAS. 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 PROVIDE AN INDIVIDUAL PLAN MEETING SECTION R.72-307 OF THE STORMWATER MANAGEMENT AND SEDIMENT REDUCTION ACT.
- 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 BETWEEN THE DISTURBED AREA AND ALL WOS. IN THE CITY OF SPARTANBURG LAWSONS FORK AND FAIRFOREST CREEK HAVE A RIPARIAN BUFFER OF 100 FEET FROM CENTER LINE OF CREEK EXTENDING ON BOTH SIDES. ALL TRIBUTARIES, OF EACH CREEK, HAVE A 50 FOOT RIPARIAN BUFFER FROM CENTER LINE EXTENDING ON BOTH SIDES OF CREEK.
- 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.
- 11. EITHER ON SITE RAIN GAUGES OR DATA FROM A WEATHER RECORD LOCATED WITHIN A REASONABLE PROXIMITY TO THE SITE MUST BE MAINTAINED TO RECORD RAINFALL FROM ANY RAINFALL EVENT OF .5 INCHES OR GREATER. THE RAINFALL AMOUNTS MUST BE RECORDED IN A RAIN LOG IN THE ON SITE SWPPP. RECORDS FOR THE DAY OF INSPECTION AND ANY SIGNIFICANT RAINFALL EVENTS SINCE THE LAST INSPECTION MUST BE REPORTED ON EACH WEEKLY INSPECTION REPORT FOR REVIEW BY THE CITY OF SPARTANBURG AND SCDHEC.
- 12. ALL NEW CATCH BASINS MUST INCLUDED THE PHRASE, "DON'T POLLUTE FLOWS TO WATERWAYS", OR EQUAL.
- 13. PERMIT OWNER MUST COMPLETE A NOTICE OF TERMINATION (EPA FORM 3510-13) BEFORE A CERTIFICATE OF OCCUPANCY WILL BE GRANTED.

