



STANTEC CONSULTING SERVICES INC.  
 4969 CENTRE POINTE DRIVE, SUITE 200  
 NORTH CHARLESTON, SC 29417  
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CLIENT: GEORGETOWN COUNTY  
 108 SCREVEN STREET  
 GEORGETOWN, SC 29442  
 TRACY JONES | 843-545-3258

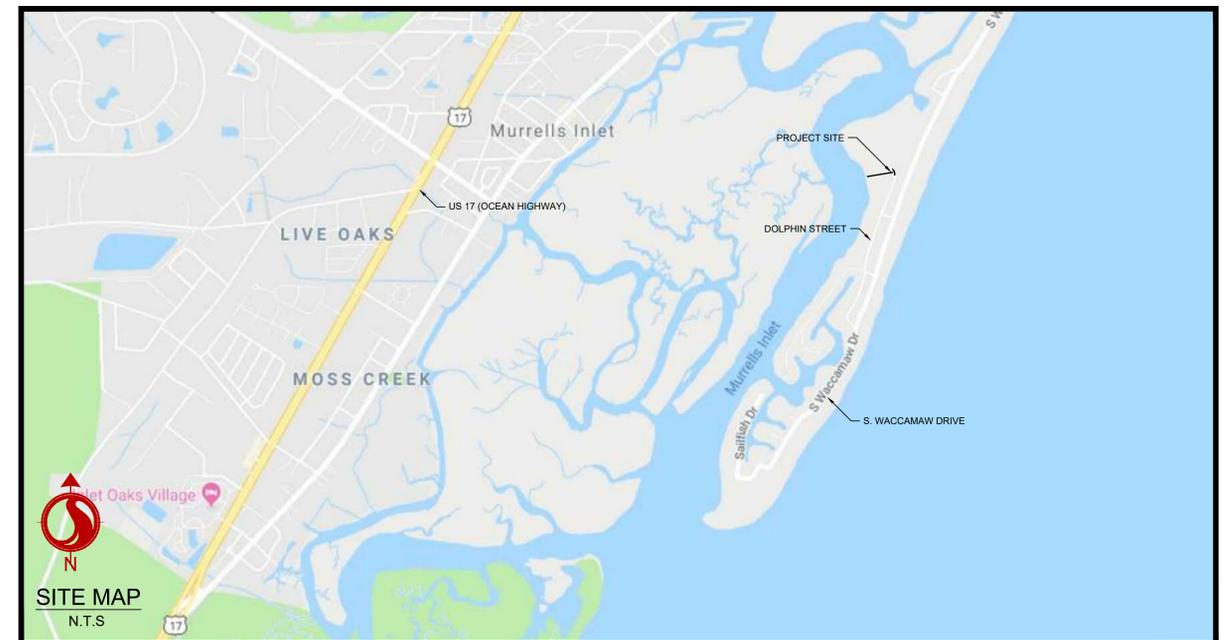
# GARDEN CITY DRAINAGE IMPROVEMENTS

SITE 8  
 GEORGETOWN COUNTY,  
 SOUTH CAROLINA



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PROJECT NUMBER: 178420916

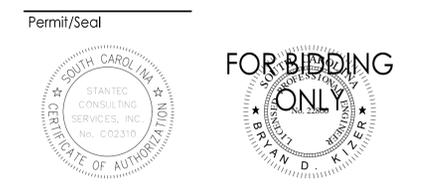


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PROJECT CONTACTS			
SERVICE	MUNICIPALITY/UTILITY PROVIDER	CONTACT	PHONE
PLANNING & ZONING	GEORGETOWN COUNTY DEPARTMENT OF PLANNING	BOYD JOHNSON	(843) - 545-3158
STORMWATER	GEORGETOWN COUNTY STORMWATER DIVISION	TRACY JONES	(843) - 545-3524
WATER AND SEWER	GEORGETOWN COUNTY WATER AND SEWER DISTRICT	ERNIE FUNDERBURK	(843) - 907-1535
POWER	SANTEE COOPER	JIM POSTON	(843) - 347-3399
IRRIGATION	WACCAMAW MANAGEMENT	MIKE JACOBS	(843)-241-6234
ROAD	SCDOT	BENJI SMITH	(843)-661-4710 Ext. 201

Revision	By	Appd	YYYY.MM.DD
BID SET PER COUNTY COMMENTS FOR PRELIM REVIEW	AB	BK	2020.03.25
Issued	SGC	BK	2019.10.29
File Name: C0_916_COVER	SGC	BK	2019.06.15
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 ORIGINAL SHEET - A010

GENERAL NOTES:

- 1. OWNER: GEORGETOWN COUNTY TRACY JONES 100 SREVEN STREET GEORGETOWN, SC 29442 (843) 545-3258
2. ENGINEER: STANTEC CONSULTING SERVICES, INC SHAUN CAVEY, P.E. 4960 CENTRE POINTE DR, SUITE 200 NORTH CHARLESTON, SC 29418 TEL: (843) 740-7700
3. BOUNDARY, TOPOGRAPHIC & EXISTING CONDITIONS INFORMATION TAKEN FROM "TOPOGRAPHIC SURVEY OF A PORTION OF GULF STREAM ESTATES GARDEN CITY BEACH SITE B, PREPARED FOR GEORGETOWN COUNTY," BY COX SURVEYING, DATED NOVEMBER, 2016. VERTICAL DATUM USED WAS NAVD 88.
4. CRITICAL LINE FLAGGED BY CYGNUS ENVIRONMENTAL.
5. WETLANDS, CRITICAL AREAS, OTHER INDICATED ENVIRONMENTALLY SENSITIVE AREAS AND UNDISTURBED BUFFERS SHALL NOT BE DISTURBED EXCEPT WHERE SPECIFICALLY INDICATED WITHIN THESE CONSTRUCTION DOCUMENTS AND/OR AS AUTHORIZED BY THE USACE AND SCDHEC-OCRM.
6. GEORGETOWN COUNTY WILL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS.
7. ALL DRAINAGE EASEMENTS TO BE DEDICATED TO GEORGETOWN COUNTY.
8. CONTRACTOR IS TO VERIFY ALL INFORMATION CONTAINED HEREIN PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OR OWNER OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.
9. ALL CONSTRUCTION, METHODS, MATERIALS, AND WORKMANSHIP, NOT OTHERWISE INDICATED IN THESE PLANS, SHALL CONFORM TO GEORGETOWN COUNTY SPECIFICATIONS, LATEST EDITION. WHERE CONFLICT OCCURS BETWEEN CONSTRUCTION PLANS, SPECIFICATIONS, AND/OR FIELD CONDITIONS, CONTRACTOR IS TO CONTACT ENGINEER OR OWNER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
10. CONTRACTOR TO COORDINATE WITH OWNER AND ENSURE ALL APPLICABLE CONSTRUCTION AND LAND DISTURBANCE PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING ANY WORK.
11. CONTRACTOR TO NOTIFY GEORGETOWN COUNTY WATER & SEWER A MINIMUM OF 48 HOURS BEFORE ANY WATER OR SEWER WORK IS TO BEGIN.

TRAFFIC NOTES:

- 1. LANE CLOSURES ARE REQUIRED FOR ALL WORK WITHIN ONE FOOT OF THE TRAVEL WAY. SHOULDER CLOSURES ARE REQUIRED FOR ALL WORK FROM ONE FOOT TO FIFTEEN FEET FROM THE TRAVEL WAY.

SAFETY NOTES:

- 1. DURING THE CONSTRUCTION AND MAINTENANCE OF THE THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
2. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY THE SCDOT AND APPLICABLE LOCAL AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
4. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH AND SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
5. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AN REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
6. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES. WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
7. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE US DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION. ALL SOUTH CAROLINA AMENDMENTS SHALL APPLY.
8. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATION. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATION.
9. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES.
10. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

CLEARING AND DEMOLITION:

- 1. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SOODED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
2. THE TOP 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER OR THE OWNER'S ENGINEER. UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER, THE REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED. PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.
3. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS OR AS DIRECTED BY THE OWNER.

SHOP DRAWING SUBMITTAL:

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S ENGINEER, 2 SETS OF HARD COPIES AND 1 ELECTRONIC FOR REVIEW.
1.1. THE CONTRACTOR, OR THE CONTRACTOR'S SUPPLIER, MUST INCLUDE WITH THE SHOP DRAWING SUBMITTAL A REFERENCE TO THE GOVERNING MUNICIPALITIES STANDARDS SHOWING COMPLIANCE WITH SAID MUNICIPALITIES REQUIREMENTS.
1.1.1. IN SHOP DRAWING SUBMITTAL FOR A FIRE HYDRANT SHALL INCLUDE A REFERENCE TO "CHARLESTON WATER SYSTEM - MINIMUM STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITARY SEWER SYSTEM - SECTION 10.B.1.a." OR MORE SIMPLY "CWS - 10.B.1.a"
1.1.2. THIS SHALL BE COMPLETED FOR EVERY SUBMITTAL TO ASSURE AN EXPEDITED REVIEW OF SHOP DRAWINGS.
2. SHOP DRAWINGS WILL BE REVIEWED AND RETURNED TO THE CONTRACTOR WITHIN 15 BUSINESS DAYS FROM CONFIRMED RECEIPT BY THE OWNER OR THE OWNERS ENGINEER.
3. SHOP DRAWINGS NOT RECEIVED IN THE PROPER FORMAT WILL BE RETURNED TO THE CONTRACTOR FOR REVISIONS PRIOR TO REVIEW.

AS-BUILT NOTE:

THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF THE SITE (TIED TO THE STATE PLANE COORDINATE SYSTEM), TO INCLUDE ALL STORM DRAINAGE LINES, BOTH EXISTING AND NEWLY INSTALLED. SURVEY SHALL ALSO INCLUDE THE PIPE SIZE, MATERIAL, AND INVERT ELEVATIONS, IN COMPLIANCE WITH THE GEORGETOWN COUNTY REQUIREMENTS AND NPDES PERMIT.

NO GEOTECHNICAL REPORT:

- 1. ASPHALT/PAVEMENT SECTIONS SHOWN ON PLANS AND DETAILS ARE ASSUMED AND SHALL BE VERIFIED WITH GEOTECHNICAL ANALYSIS BY THE CONTRACTOR PRIOR TO INSTALLATION
2. CONTRACTOR TO ASSUME 12 INCHES OF UNDERCUT AND BACKFILL TO BRING TO GRADE.

PAVING AND GRADING

- 1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAR, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.
4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVING OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
5. UNLESS OTHERWISE NOTED, ALL GRADING, ROCKING AND PAVING TO CONFORM TO SCOOT STANDARD SPECIFICATIONS, LATEST EDITION.
6. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE APPROPRIATE MUNICIPAL AUTHORITY OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS.
7. STRIP WORK LIMITS, REMOVING ALL ORGANIC MATTER WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TREES, BRUSH AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING OR GRADING SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
8. IMMEDIATELY FOLLOWING FINE GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180.
9. ALL FILLS WITHIN PUBLIC RIGHT-OF-WAYS AND EASEMENTS SHALL BE ENGINEERED. ADDITIONALLY, ANY FILLS OUTSIDE OF PUBLIC RIGHT-OF-WAYS WHICH ARE OVER 2 FEET IN DEPTH SHALL BE ENGINEERED. ENGINEERED FILLS SHALL BE CONSTRUCTED IN 6" LIFTS. EACH LIFT SHALL BE COMPACTED TO 95 % OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
10. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
11. CRUSHED ROCK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 02630 (BASE AGGREGATE) SCOOT STANDARD SPECIFICATIONS. COMPACT TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). A.C. PAVEMENT SHALL CONFORM TO SECTION 0474 (ASPHALT CONCRETE PAVEMENT) SCOOT STANDARD SPECIFICATIONS FOR STANDARD DUTY MIX. A.C. PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 91% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE RICE STANDARD METHOD.
12. ALL EXISTING OR CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENTS, GAS VALVES, WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA WHEREIN THEY LIE.
13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
14. ENGINEERED FILL MATERIAL SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE AND OTHER UNSUITABLE MATERIALS AND SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
15. IMPORTED SOILS FOR USE AS ENGINEERED FILL SHALL BE NON-EXCLUSIVE MATERIALS AND SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS.
16. AGGREGATE BASE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS.
TABLE: SIEVE SIZE PER ASTM D422 vs PERCENT PASSING BY WEIGHT.
17. ALL AREAS TO RECEIVE FILL AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. STRIPPED SOILS SHALL NOT BE USED IN ENGINEERED FILL, BUT MAY BE USED IN LANDSCAPE AREAS.
18. ENGINEERED FILL MATERIAL SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D998 (STANDARD PROCTOR).
TABLE: ENGINEERED FILL MATERIAL vs NATIVE SOIL vs MOISTURE CONTENT vs RANGE.
19. AGGREGATE BASE COURSE SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER AASHTO T180 (MODIFIED PROCTOR).
TABLE: AGGREGATE BASE MATERIAL vs MOISTURE CONTENT vs RANGE.
NOTE: MOISTURE CONTENT OF ENGINEERED FILL MATERIAL MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION TO PREVENT SOIL PUMPING.

Table with 3 columns: ENGINEERED FILL MATERIAL, MINIMUM PERCENT COMPACTION, MOISTURE CONTENT (RANGE). Rows include NATIVE SOIL, ENGINEERED FILL UNDER STRUCTURES AND BEHIND RETAINING WALLS, ENGINEERED FILL UNDER PAVEMENTS, FILL IN LANDSCAPE AREAS.

Table with 3 columns: AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVEMENT AREAS, MINIMUM PERCENT COMPACTION, MOISTURE CONTENT (RANGE). Row includes AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVEMENT AREAS.

- 18. ENGINEERED FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 6 INCHES THICK (LOOSE).
19. THE TOP 6 INCHES OF SOIL EXPOSED AT THE BOTTOM OF THE EXCAVATIONS SHALL BE COMPACTED, SCARIFIED AND COMPACTED AS ENGINEERED FILL PRIOR TO PLACEMENT OF ADDITIONAL FILL.
20. IF SOFT OR LOOSE SOIL IS PRESENT AT THE BASE OF EXCAVATIONS, IT SHALL BE EXCAVATED AND/OR COMPACTED AS ENGINEERED FILL OR AS RECOMMENDED BY THE GEOTECHNICAL FIELD REPRESENTATIVE.
21. IF SUBGRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL THE SOILS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE ADJUSTED TO PREVENT PUMPING.
22. EXPOSURE TO THE ENVIRONMENT MAY REDUCE THE STRENGTH OF SOILS IN PAVED AREAS. IF THIS OCCURS, THE SOFTENED SOILS SHALL BE REMOVED AND REWORKED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. IF RAINFALL IS EXPECTED AT A TIME WHEN BEARING SOILS IN FOOTING AREAS ARE EXPOSED, A 2 TO 4 INCH THICK LAYER OF LEAN CONCRETE MAY BE PLACED IN SUCH AREA.
23. THE SITE SHALL BE GRADED TO TRANSPORT SURFACE RUNOFF AWAY FROM THE PAVED AREAS. WATER SHALL NOT BE ALLOWED TO ACCUMULATE (POND) ON PAVED AREAS.
24. BACKFILL AND FILL SHALL CONFORM TO THE GENERAL REQUIREMENTS FOR SOIL. MATERIALS ABOVE AND SHALL BE CLASSIFIED AS GW, GP, GM, GC, SW, SP, SM, SC, ML, CL BY ASTM D2487 AND SHALL CONFORM TO THE FOLLOWING:
24.1. SHALL BE CAPABLE OF BEING COMPACTED TO THE SPECIFIED DEGREE OF COMPACTION WHEN THE MOISTURE CONTENT IS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM PERCENT MOISTURE.
24.2. LIQUID LIMIT SHOULD NOT EXCEED 40 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
24.3. PLASTICITY INDEX SHOULD NOT BE GREATER THAN 30 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
24.4. NO MORE THAN 75 PERCENT BY WEIGHT SHALL BE FINER THAN NO. 200 SIEVE WHEN TESTED IN ACCORDANCE WITH ASTM D1140.
25. UNSUITABLE SOIL SHALL BE ANY SOIL MATERIALS DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY AS NOT CONFORMING TO THE REQUIREMENTS DESCRIBED ABOVE FOR BACKFILL AND FILL. A MOISTURE CONTENT WHICH IS MORE THAN 3 PERCENTAGE POINTS FROM OPTIMUM SHALL NOT BE CONSIDERED UNSUITABLE IF SUCH MATERIALS WOULD OTHERWISE BE SUITABLE IF THE MOISTURE CONTENT WERE ADJUSTED. ADJUSTMENTS TO THE SOIL MOISTURE CONTENT BY DRYING, MIXING, ADDING WATER, OR OTHER MEANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
26. MEASUREMENT OF UNSUITABLE MATERIAL: THE VOLUME OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY A LICENSED SURVEYOR BY THE AVERAGE END AREA METHOD. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCALED PLAN WITH SUFFICIENT ELEVATION POINTS TO ACCURATELY DEFINE THE VOLUME OF UNSUITABLE MATERIAL EXCAVATED. THE EXTENT OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY.

DRAINAGE NOTES:

- 1. ALL NEW STORM PIPES, BEDDING, TRENCHING, STORM CURBS, ETC. IN THE RIGHTS-OF-WAY AND/OR CITY OWNED AND MAINTAINED DRAINAGE EASEMENTS SHALL BE INSTALLED PER CURRENT SCOOT SPECIFICATIONS, LOCATED ON THE INTERNET AT http://www.scdot.org/drainageconstruction\_shdnstdspec.aspx. STANDARD SCDOT DETAIL DRAWINGS CAN BE LOCATED AT THE FOLLOWING WEBSITE: http://www.scdot.org/06090401\_book.aspx
2. ALL REINFORCED CONCRETE PIPE SHALL, AT A MINIMUM, BE ASTM C76, CLASS III.
3. REINFORCED CONCRETE PIPE INSTALLED UNDER PAVEMENT AND/OR PARALLEL TO THE EDGE OF PAVEMENT IN PUBLIC RIGHTS-OF-WAY SHALL HAVE O-RING JOINTS IN ACCORDANCE WITH ASTM C443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
4. SUBMERGED DRAINAGE SYSTEMS SHALL HAVE O-RING JOINTS IN ACCORDANCE WITH ASTM C C443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
5. WHERE TONGUE AND GROOVE STORM PIPE IS ALLOWED, REINFORCED CONCRETE PIPE SHALL BE PER ASTM C 76, CLASS III. JOINTS SHALL BE SEALED WITH RAMMECK OR EQUIVALENT PER AASHTO M198. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
6. ALL NEW STORM DRAINAGE LINES SHALL BE LAID UPGRADE AFTER CONFIRMATION OF EXISTING INVERT ELEVATION.
7. GEORGETOWN COUNTY MAINTAINS THE RIGHT TO ALLOW ALTERNATE PIPE INSTALLATIONS OR TYPE OF PIPE FOR ALL PROJECTS ON A CASE-BY-CASE BASIS FOR ANY PIPES TO BE INSTALLED IN AN EXISTING OR PROPOSED CITY ROAD RIGHT-OF-WAY AND/OR DRAINAGE EASEMENT.
8. PIPE LENGTHS SHOWN ARE APPROXIMATE AND CENTER TO CENTER ON DRAINAGE STRUCTURES OR TO END OF PIPE. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO SUBMITTAL OF BID.
9. ALL STORM DRAIN PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.
10. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.
11. FOR CONSTRUCTION OF THE DROP INLET WALLS EITHER BRICK MASONRY OR CLASS 3000 CONCRETE MAY BE USED. FOR CONCRETE THE WALLS ARE TO BE 6" THICK WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. FOR BRICK THE WALLS ARE TO BE 8" THICK.
12. THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6 IN. THICK CLASS 3000 CONCRETE WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. WIRE MESH MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQ. IN. PER FT. IS MET.
13. MORTAR SHALL BE TYPE S OR M.
14. IF DESIRED THESE ITEMS MAY BE PRECAST PRIOR TO INSTALLATION IN LIEU OF BEING CAST IN PLACE. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE SCDOT STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
15. REINFORCING STEEL SHALL BE DEFORMED AND SHALL CONFORM TO AASHTO M 31, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
16. IF STRUCTURE DEPTH EXCEEDS 4'-6", METAL STEPS ARE TO BE PLACED ON WALL. SEE STEP STANDARD DRAWING 719-16.
17. CASTING SHALL CONFORM TO AASHTO M 105, CLASS 358 AND THE ALTERNATE LOAD TEST OF AASHTO M 306. CASTINGS SHALL ALSO MEET THE LOADING REQUIREMENTS OF FEDERAL SPECIFICATION RRF-421 (LATEST EDITION).
18. STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING AND HYDRAULIC REQUIREMENTS ARE MET, AND ARE ON SCOOT LIST OF APPROVED SUPPLIERS.
19. STEEL GRATES SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
20. STEEL GRATES AND FRAMES SHALL BE DIMENSIONED TO BE INTERCHANGEABLE WITH EACH PIECE OF THE CAST IRON GRATE AND FRAME SHOWN. MUST HAVE A POSITIVE MEANS TO RETAIN THE GRATE IN THE FRAME.
21. STRENGTH REQUIREMENTS OF STEEL GRATES AND FRAMES MUST MEET FEDERAL SPECIFICATION RRF-621 (LATEST EDITION).
22. THE LONGEST DIMENSIONS OF THE OPENING IN THE IRON GRATE SHOULD BE ORIENTED IN THE DIRECTION OF FLOW IF PRACTICAL.
23. AS SHOWN BY THIS DRAWING THE FRAME IS SET LEVEL, BUT THE ENGINEER MAY SET SAME ON SLOPE AS REQUIRED BY LOCAL DRAINAGE CONDITIONS.
24. AFTER THE FRAME IS SET IN ITS FINAL POSITION, IT IS TO BE ENCASED WITH CONCRETE AS SHOWN BY DRAWING.
25. THE INSIDE OF THE OUTLET PIPE SHALL BE FLUSH WITH FLOOR OF BASIN, UNLESS OTHERWISE SHOWN ON PLANS (SUMP).
26. THE SOFFIT (INSIDE TOP OF PIPE) OF THE OUTLET PIPE SHOULD BE NO HIGHER THAN THE SOFFIT OF THE INLET PIPE, UNLESS OTHERWISE SHOWN ON PLANS.
27. SHOULD THE CONTRACTOR ENCOUNTER UNSUITABLE MATERIAL, THEN THE CONTRACTOR WILL ENGAGE AN INDEPENDENT GEOTECHNICAL ENGINEER TO VERIFY UNSUITABLE MATERIAL AND MAKE RECOMMENDATIONS ON THE REMOVAL AND THE PLACEMENT AND TYPE OF NEW BEDDING AND BACKFILL MATERIAL. THE RECOMMENDATIONS BY THE INDEPENDENT GEOTECHNICAL ENGINEER SHALL BE SUBMITTED TO THE OWNER AND CIVIL ENGINEER FOR CONCURRENCE PRIOR TO PROCEEDING WITH WORK.

EROSION CONTROL NOTES:

- 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 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, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK, IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, 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 ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE 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 OFF-SITE 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 ROADWAYS(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 SCR10000.
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 CANT. 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. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL 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 THAT FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3:1 V 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, AND 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 BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
-WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
-WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS
-FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE.
-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 BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SCS 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 BMPS 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 THE CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.



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Legend

Revision table with columns: Revision, By, Appd, YYYY.MM.DD

BID SET PER COUNTY COMMENTS FOR PRELIM REVIEW table with columns: Bid Set, County Comments, Date

Issued table with columns: Issued, By, Appd, YYYY.MM.DD

File Name: C0\_116\_COVER table with columns: File Name, SGC, Dwn, Dgri, Chkd, YYYY.MM.DD

Permit/Seal



Client/Project Logo

Client/Project
GEORGETOWN COUNTY
GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 8
MURRELLS INLET, SOUTH CAROLINA

Title

PROJECT NOTES

Project No. table with columns: Project No., Scale

Revision Sheet table with columns: Revision, Sheet, Drawing No.

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Legend

- PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- TEMPORARY SEEDING
- MULCHING
- DUST CONTROL
- LIMITS OF DISTURBANCE
- LIMITS OF DISTURBANCE AND SILT FENCE
- LIMITS OF DISTURBANCE AND TREE PROTECTION
- SILT FENCE
- SEDIMENT TUBE
- TYPE A INLET PROTECTION
- DEMOLISH

Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER COUNTY COMMENTS FOR PRELIM REVIEW	SGC	BK	2019.10.29
	SGC	BK	2019.06.15

Issued	By	Appd	YYYY.MM.DD

File Name: P16_ESC	SGC	SGC	BK
	Dwn.	Dgtn.	Chkd.

Permit/Seal



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Client/Project Logo

Client/Project  
GEORGETOWN COUNTY

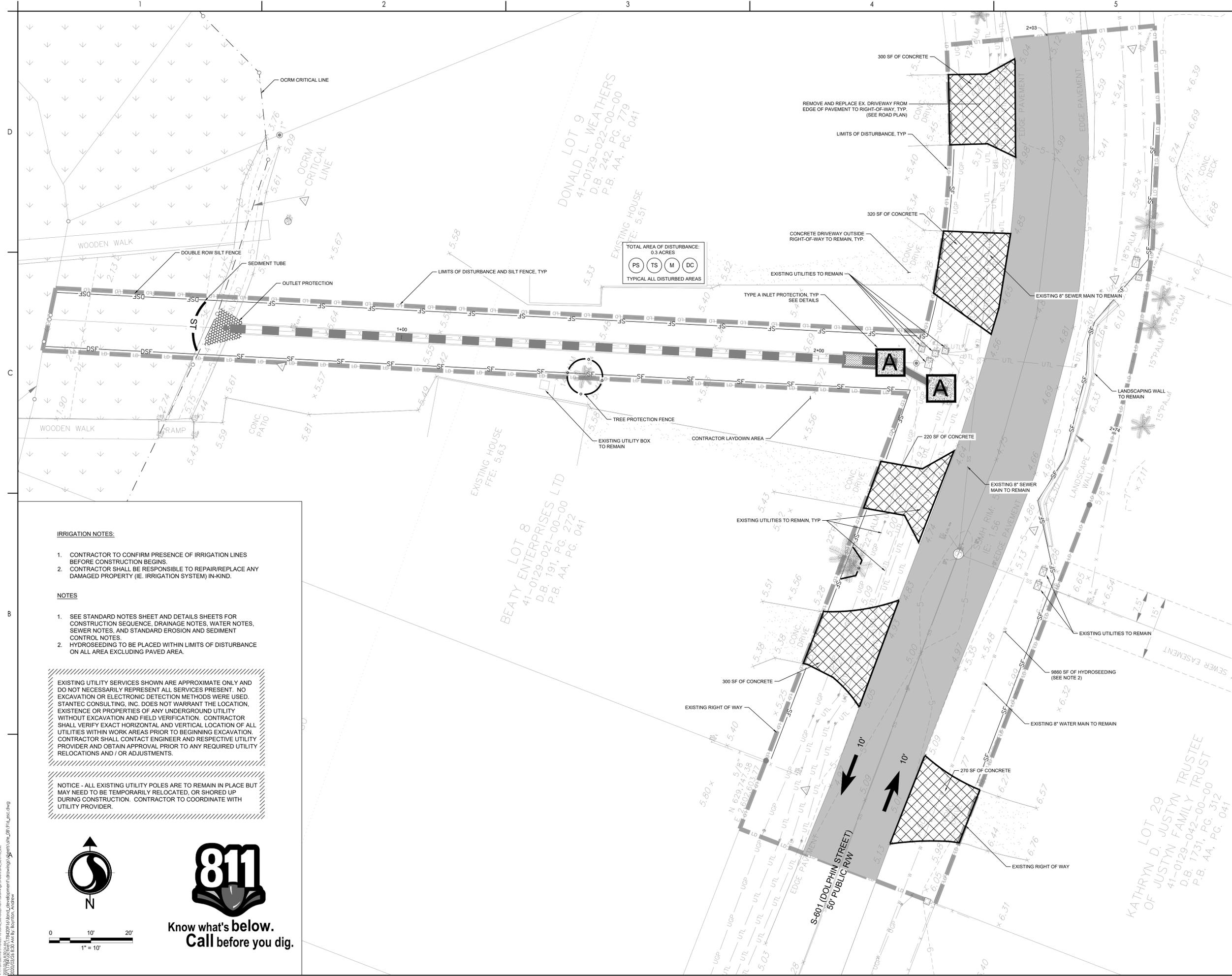
GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8

MURRELLS INLET, SOUTH CAROLINA

Title  
TREE PROTECTION AND EROSION CONTROL PLAN

Project No.	Scale
178420916	

Revision	Sheet	Drawing No.
	4 of 15	C2-00

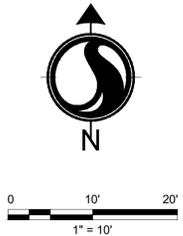


- IRRIGATION NOTES:**
- CONTRACTOR TO CONFIRM PRESENCE OF IRRIGATION LINES BEFORE CONSTRUCTION BEGINS.
  - CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR/REPLACE ANY DAMAGED PROPERTY (IE. IRRIGATION SYSTEM) IN-KIND.

- NOTES**
- SEE STANDARD NOTES SHEET AND DETAILS SHEETS FOR CONSTRUCTION SEQUENCE, DRAINAGE NOTES, WATER NOTES, SEWER NOTES, AND STANDARD EROSION AND SEDIMENT CONTROL NOTES.
  - HYDROSEEDING TO BE PLACED WITHIN LIMITS OF DISTURBANCE ON ALL AREA EXCLUDING PAVED AREA.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.



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### SILT FENCE INSTALLATION

**PLAN SYMBOL**  
—SF—SF—

**SILT FENCE - GENERAL NOTES**

- 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 0.25 cfs.
- Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
- Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
- 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.
- Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
- 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 cleanout.
- Install Silt Fence Checkers (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.

### FLAT-BOTTOM TRENCH DETAIL

### V-SHAPED TRENCH DETAIL

**South Carolina Department of Health and Environmental Control**

**SILT FENCE**  
STANDARD DRAWING NO. SC-03 Page 1 of 2  
NOT TO SCALE FEBRUARY 2014 DATE

### SILT FENCE - POST REQUIREMENTS

- 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 (± 8%).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- 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.
- Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- Post spacing shall be at a maximum of 6-feet on center.

### SILT FENCE - FABRIC REQUIREMENTS

- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:  
- 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.
- 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.
- 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- Filter fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

### SILT FENCE - INSPECTION & MAINTENANCE

- The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 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.
- 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.
- 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.

**South Carolina Department of Health and Environmental Control**

**SILT FENCE**  
STANDARD DRAWING NO. SC-03 PAGE 2 OF 2  
GENERAL NOTES FEBRUARY 2014 DATE

**DOUBLE ROW SILT FENCE**  
N.T.S.

**South Carolina Department of Health and Environmental Control**

**SILT FENCE**  
STANDARD DRAWING NO. SC-03 PAGE 2 OF 2  
GENERAL NOTES FEBRUARY 2014 DATE

### POST INSTALLATION DETAIL

### FILTER FABRIC INSTALLATION DETAIL

**South Carolina Department of Health and Environmental Control**

**Type A FILTER FABRIC INLET PROTECTION**  
STANDARD DRAWING NO. SC-07 PAGE 1 OF 2  
NOT TO SCALE FEBRUARY 2014 DATE

### TYPE A - FILTER FABRIC REQUIREMENTS

- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:  
- 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.
- 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.
- 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- Filter fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

### TYPE A - POST REQUIREMENTS

- 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 (± 8%).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- Post spacing shall be at a maximum of 3-feet on center.

### TYPE A - INSPECTION & MAINTENANCE

- The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a bump is installed in front of the filter, sediment should be removed when it fills approximately 1/3 the depth of the bump.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overtopping the inlet protection.
- Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
- Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

**South Carolina Department of Health and Environmental Control**

**Type A FILTER FABRIC INLET PROTECTION**  
STANDARD DRAWING NO. SC-07 PAGE 2 OF 2  
GENERAL NOTES FEBRUARY 2014 DATE

### SEDIMENT TUBE INSTALLATION

### 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

### SEDIMENT TUBES - GENERAL NOTES

- 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 shall be composed of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
- 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.
- 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.
- Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
- Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
- Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before installation.
- The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
- Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
- Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
- Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
- Install stakes at a diagonal facing incoming runoff.

### SEDIMENT TUBES - INSPECTION & MAINTENANCE

- The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Large debris, trash, and leaves should be removed from in front of tubes when found.
- 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.
- 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.

**South Carolina Department of Health and Environmental Control**

**SEDIMENT TUBES**  
STANDARD DRAWING NO. SC-05 PAGE 2 OF 2  
GENERAL NOTES FEBRUARY 2014 DATE

### TREE PROTECTION DETAIL

**NOTES:**

- ALL TREE PROTECTION BARRICADES MUST HAVE TWO HORIZONTAL CROSS RAILS.
- BARRICADES SHALL BE ERRECTED AT A MINIMUM DISTANCE FROM THE BASE OF PROTECTED TREES AND GRAND TREES ACCORDING TO THE FOLLOWING STANDARDS.  
A. FOR GRAND TREES THE BARRICADE SHALL BE PLACED AT THE DRIPLINE OF THE TREE.  
B. FOR PROTECTED TREES TEN INCHES (10") OR LESS D.B.H. (DIAMETER BREAST HEIGHT), PROTECTIVE BARRICADES SHALL BE PLACED A MINIMUM DISTANCE OF TEN FEET (10') FROM THE BASE OF EACH PROTECTED TREE, OR TO THE EDGE OF THE DRIP LINE, WHICHEVER IS GREATER.  
C. FOR PROTECTED TREES GREATER THAN TEN INCHES (10") D.B.H., PROTECTIVE BARRICADES SHALL PROVIDE A DIAMETER OF PROTECTION AROUND THE TREE EQUAL TO THE DIAMETER BREAST HEIGHT OF THE TREE (i.e., A 24" DIAMETER TREE WOULD REQUIRE A 24 FOOT DIAMETER PROTECTIVE BARRICADE), OR TO THE EDGE OF THE DRIP LINE, WHICHEVER IS GREATER.  
D. CONTRACTOR TO INSTALL SILT FENCING ON THE SIDE OF THE TREE ADJACENT TO THE ROADWAY.
- ALL GRADING AROUND PROTECTED TREES IS TO BE DONE BY HAND. CONTRACTOR SHALL NOT OPERATE HEAVY EQUIPMENT WITHIN THE TREE PROTECTION BARRIERS.
- CONTRACTOR SHALL NOTIFY GEORGETOWN COUNTY UPON INSTALLATION OF TREE PROTECTION FOR INSPECTION AND APPROVAL PRIOR TO LAND DISTURBANCE.

**South Carolina Department of Health and Environmental Control**

**SEDIMENT TUBES**  
STANDARD DRAWING NO. SC-05 PAGE 2 OF 2  
GENERAL NOTES FEBRUARY 2014 DATE

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**Consultant**

**Legend**

TEMPORARY VEGETATION SCHEDULE

SPECIES	RATE (LBS/AC)	OPTIMUM DATES TO PLANT	REMARKS
BROWNTOP MILLET (ALONE)	40	APRIL 20 - AUGUST 15	QUICK, DENSE COVER
BROWNTOP MILLET (MIX)*	10	APRIL 20 - AUGUST 15	QUICK, DENSE COVER
RYE GRAIN (ALONE)	56	FEBRUARY - MARCH, AUGUST 15 - NOVEMBER 20	QUICK COVER
RYE GRAIN (MIX)*	10	FEBRUARY - MARCH, AUGUST 15 - NOVEMBER 20	QUICK COVER
RYE GRASS (ALONE)	50	AUGUST 10 - OCTOBER 10	COMPETITIVE, DENSE
RYE GRASS (MIX)*	8	AUGUST 10 - OCTOBER 10	COMPETITIVE, DENSE

\* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9988 OR AT HTTP://HGIC.CLEMSON.EDU.

PERMANENT VEGETATION SCHEDULE

SPECIES	RATE (LBS/AC)	OPTIMUM DATES TO PLANT	REMARKS
BERMUDA GRASS (HULLED) (ALONE)	8-12	APRIL - JULY 15	QUICK COVER, SOD FORMING, PARTIAL WINTER KILL
BERMUDA GRASS (HULLED) (MIX)*	4-6	APRIL - JULY 15	QUICK COVER, SOD FORMING, PARTIAL WINTER KILL
FESCUE, TALL (KY31) ALONE	40	AUGUST 15 - OCTOBER	SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES
FESCUE, TALL (KY31) MIX*	20	AUGUST 15 - OCTOBER	SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES
ANNUAL RYE GRASS	15	AUGUST 15 - FEBRUARY	GOOD FOR SUPPRESSING WEEDS. DO NOT USE ITALIAN RYE GRASS.
CENTPEDE	10	MARCH 1 - APRIL 15	REQUIRES LOW MAINTENANCE AND FEWER CUTS.

\* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9988 OR AT HTTP://HGIC.CLEMSON.EDU.

SEEDING SCHEDULE

SEQUENCE OF CONSTRUCTION:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. RECEIVE NPDES COVERAGE FROM SCDHEC.</li> <li>2. NOTIFY SCDOT, PRE-CONSTRUCTION MEETING.</li> <li>3. NOTIFY DHEC EOC REGIONAL OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.</li> <li>4. INSTALLATION OF TREE PROTECTION, PERIMETER SILT FENCE, AND EROSION CONTROL MEASURES.</li> <li>5. POTHOLE UTILITY LOCATIONS AS SHOWN ON THE PLANS. LOCATE SEWER SERVICES FOR EACH RESIDENCE, AND NOTIFY OWNER/ENGINEER OF CONFLICTS.</li> <li>6. INSTALLATION OF COFFERDAMS (AS REQUIRED)</li> <li>7. INSTALLATION OF NEW STORMWATER PIPES AND STRUCTURES.</li> <li>8. CONSTRUCT DIVERSION SWALES AS NECESSARY TO CONVEY THE STORM WATER BEFORE THE PROPOSED STORM DRAINAGE SYSTEM IS FULLY FUNCTIONAL, INSTALLING SEDIMENT TUBES IF NECESSARY.</li> <li>9. INSTALL PERIMETER SILT FENCE WHERE SEDIMENT IS OBSERVED TO BE LEAVING CONSTRUCTION AREAS. MAINTAIN PERIMETER SILT FENCE, DIVERSIONS, AND SEDIMENT TUBES.</li> <li>10. PERMANENT/FINAL STABILIZATION OF</li> </ol> | <p>DITCHES/SWALES WITH SEEDING AND/OR SOD.</p> <ol style="list-style-type: none"> <li>11. REPLACE DAMAGED OR DEMOLISHED HARDSCAPE AND LANDSCAPE IN-KIND AS REQUIRED.</li> <li>12. MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.</li> <li>13. CONTACT GEORGETOWN COUNTY FOR FINAL INSPECTION AND CLOSE-OUT OF PROJECT. AS-BUILT, VIDEO AND CLOSE-OUT APPLICATION TO BE SUBMITTED FOR REVIEW AND APPROVAL AS REQUIRED BY GEORGETOWN COUNTY.</li> <li>14. REMOVAL OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AFTER ENTIRE WORK AREA IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).</li> <li>15. SUBMIT TO DHEC FOR N.O.T. WITHIN 30 DAYS OF FINAL STABILIZATION.</li> </ol> |
|--|---|

Revision \_\_\_\_\_ By \_\_\_\_\_ Appd \_\_\_\_\_ YYYY.MM.DD

BID SET \_\_\_\_\_ A8 \_\_\_\_\_ BK \_\_\_\_\_ 2020.03.26  
PER COUNTY COMMENTS \_\_\_\_\_ SGC \_\_\_\_\_ BK \_\_\_\_\_ 2019.10.29  
FOR PRELIM REVIEW \_\_\_\_\_ SGC \_\_\_\_\_ BK \_\_\_\_\_ 2019.06.15

Issued \_\_\_\_\_ By \_\_\_\_\_ Appd \_\_\_\_\_ YYYY.MM.DD

File Name: P16\_ESC \_\_\_\_\_ SGC \_\_\_\_\_ BK \_\_\_\_\_  
Dwn. Dgri. Chkd. YYYY.MM.DD

**Permit/Seal**



**Client/Project Logo**

Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8

MURRELLS INLET, SOUTH CAROLINA

Title  
TREE PROTECTION AND EROSION CONTROL DETAILS

Project No. \_\_\_\_\_ Scale \_\_\_\_\_  
178420916

Revision \_\_\_\_\_ Sheet \_\_\_\_\_ Drawing No. \_\_\_\_\_  
6 of 15 C2-02



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 2020/03/06 08:53 AM by: klynton, Andrew

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Consultant

Legend

- LD LIMITS OF DISTURBANCE
  - 15 EXISTING CONTOURS
  - 20 PROPOSED CONTOUR
  - SF SILT FENCE
  - DSF DOUBLE ROW SILT FENCE
  - MILL AND OVERLAY
  - DRAINAGE FLOW ARROW
  - SPOT ELEVATION
  - CONCRETE COLLAR
- FG - FINISHED GRADE ELEVATION  
CB - CATCH BASIN (SCDOT STANDARD DETAIL 719-110-01)  
JB - JUNCTION BOX (SCDOT STANDARD DETAIL 719-110-02)  
EX - EXISTING GRADE  
LP - LOW POINT  
HP - HIGH POINT

Revision

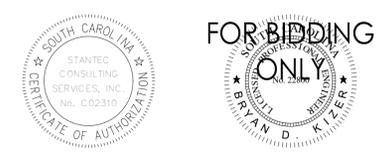
Revision	By	Appd	YYYY.MM.DD
BID SET	AB	BK	2020.03.25
PER COUNTY COMMENTS FOR PRELIM REVIEW	SGC	BK	2019.10.29
	SGC	BK	2019.06.15

Issued

By	Appd	YYYY.MM.DD
SGC	BK	2019.10.29
SGC	BK	2019.06.15

File Name: P16\_GRADING

Permit/Seal



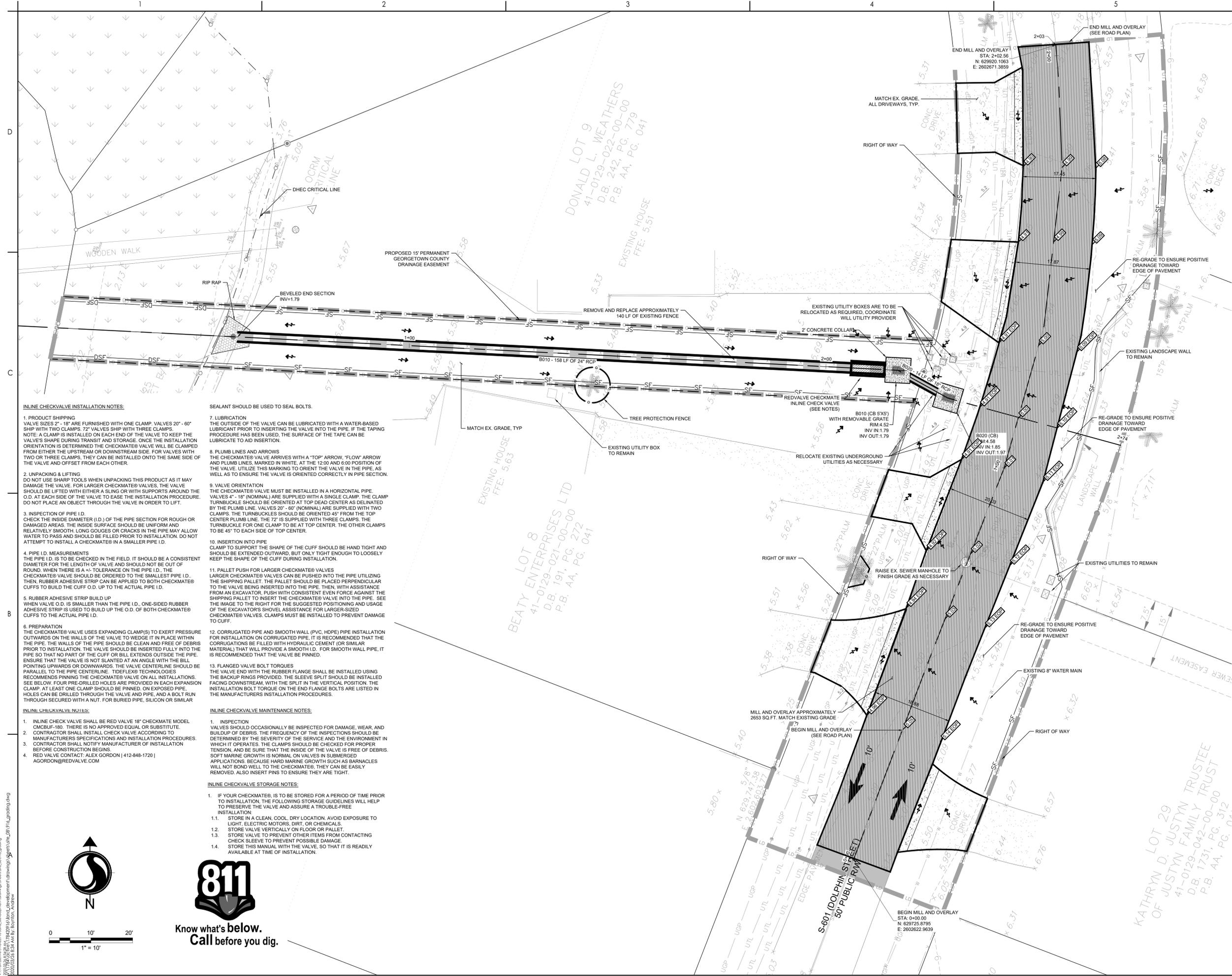
Client/Project Logo

Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8  
MURRELLS INLET, SOUTH CAROLINA

Title  
GRADING AND DRAINAGE PLAN

Project No. 178420916	Scale
Revision Sheet 7 of 15	Drawing No. C3-00



INLINE CHECKVALVE INSTALLATION NOTES:

- PRODUCT SHIPPING  
VALVE SIZES 2" - 18" ARE FURNISHED WITH ONE CLAMP. VALVES 20" - 60" SHIP WITH TWO CLAMPS. 72" VALVES SHIP WITH THREE CLAMPS.  
NOTE: A CLAMP IS INSTALLED ON EACH END OF THE VALVE TO KEEP THE VALVE'S SHAPE DURING TRANSPORT AND STORAGE. ONCE THE INSTALLATION ORIENTATION IS DETERMINED THE CHECKMATE® VALVE WILL BE CLAMPED FROM EITHER THE UPSTREAM OR DOWNSTREAM SIDE. FOR VALVES WITH TWO OR THREE CLAMPS, THEY CAN BE INSTALLED ONTO THE SAME SIDE OF THE VALVE AND OFFSET FROM EACH OTHER.
- UNPACKING & LIFTING  
DO NOT USE SHARP TOOLS WHEN UNPACKING THIS PRODUCT AS IT MAY DAMAGE THE VALVE. FOR LARGER CHECKMATE® VALVES, THE VALVE SHOULD BE LIFTED WITH EITHER A SLING OR WITH SUPPORTS AROUND THE O.D. AT EACH SIDE OF THE VALVE TO EASE THE INSTALLATION PROCEDURE. DO NOT PLACE AN OBJECT THROUGH THE VALVE IN ORDER TO LIFT.
- INSPECTION OF PIPE I.D.  
CHECK THE INSIDE DIAMETER (I.D.) OF THE PIPE SECTION FOR ROUGH OR DAMAGED AREAS. THE INSIDE SURFACE SHOULD BE UNIFORM AND RELATIVELY SMOOTH. LONG GOUGES OR CRACKS IN THE PIPE MAY ALLOW WATER TO PASS AND SHOULD BE FILLED PRIOR TO INSTALLATION. DO NOT ATTEMPT TO INSTALL A CHECKMATE® IN A SMALLER PIPE I.D.
- PIPE I.D. MEASUREMENTS  
THE PIPE I.D. IS TO BE CHECKED IN THE FIELD. IT SHOULD BE A CONSISTENT DIAMETER FOR THE LENGTH OF VALVE AND SHOULD NOT BE OUT OF ROUND. WHEN THERE IS A +/- TOLERANCE ON THE PIPE I.D., THE CHECKMATE® VALVE SHOULD BE ORDERED TO THE SMALLEST PIPE I.D., THEN, RUBBER ADHESIVE STRIP CAN BE APPLIED TO BOTH CHECKMATE® CUFFS TO BUILD THE CUFF O.D. UP TO THE ACTUAL PIPE I.D.
- RUBBER ADHESIVE STRIP BUILD UP  
WHEN VALVE O.D. IS SMALLER THAN THE PIPE I.D., ONE-SIDED RUBBER ADHESIVE STRIP IS USED TO BUILD UP THE O.D. OF BOTH CHECKMATE® CUFFS TO THE ACTUAL PIPE I.D.
- PREPARATION  
THE CHECKMATE® VALVE USES EXPANDING CLAMP(S) TO EXERT PRESSURE OUTWARDS ON THE WALLS OF THE VALVE TO WEDGE IT IN PLACE WITHIN THE PIPE. THE WALLS OF THE PIPE SHOULD BE CLEAN AND FREE OF DEBRIS PRIOR TO INSTALLATION. THE VALVE SHOULD BE INSERTED FULLY INTO THE PIPE SO THAT NO PART OF THE CUFF OR BILL EXTENDS OUTSIDE THE PIPE. ENSURE THAT THE VALVE IS NOT SLANTED AT AN ANGLE WITH THE BILL POINTING UPWARDS OR DOWNWARDS. THE VALVE CENTERLINE SHOULD BE PARALLEL TO THE PIPE CENTERLINE. TIDELIFE® TECHNOLOGIES RECOMMENDS PINNING THE CHECKMATE® VALVE ON ALL INSTALLATIONS. SEE BELOW. FOUR PRE-DRILLED HOLES ARE PROVIDED IN EACH EXPANSION CLAMP. AT LEAST ONE CLAMP SHOULD BE PINNED. ON EXPOSED PIPE HOLES CAN BE DRILLED THROUGH THE VALVE AND PIPE, AND A BOLT RUN THROUGH SECURED WITH A NUT. FOR BURIED PIPE, SILICON OR SIMILAR SEALANT SHOULD BE USED TO SEAL BOLTS.

SEALANT SHOULD BE USED TO SEAL BOLTS.

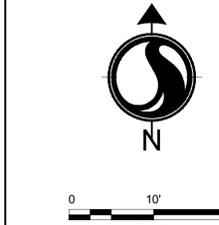
- LUBRICATION  
THE OUTSIDE OF THE VALVE CAN BE LUBRICATED WITH A WATER-BASED LUBRICANT PRIOR TO INSERTING THE VALVE INTO THE PIPE. IF THE TAPING PROCEDURE HAS BEEN USED, THE SURFACE OF THE TAPE CAN BE LUBRICATED TO AID INSERTION.
- PLUMB LINES AND ARROWS  
THE CHECKMATE® VALVE ARRIVES WITH A "TOP" ARROW, "FLOW" ARROW AND PLUMB LINES, MARKED IN WHITE, AT THE 12:00 AND 6:00 POSITION OF THE VALVE. UTILIZE THIS MARKING TO ORIENT THE VALVE IN THE PIPE, AS WELL AS TO ENSURE THE VALVE IS ORIENTED CORRECTLY IN PIPE SECTION.
- VALVE ORIENTATION  
THE CHECKMATE® VALVE MUST BE INSTALLED IN A HORIZONTAL PIPE. VALVES 4" - 18" (NOMINAL) ARE SUPPLIED WITH A SINGLE CLAMP. THE CLAMP TURNBUCKLE SHOULD BE ORIENTED AT TOP DEAD CENTER AS DELINEATED BY THE PLUMB LINE. VALVES 20" - 60" (NOMINAL) ARE SUPPLIED WITH TWO CLAMPS. THE TURNBUCKLES SHOULD BE ORIENTED 45° FROM THE TOP CENTER PLUMB LINE. THE 72" IS SUPPLIED WITH THREE CLAMPS. THE TURNBUCKLE FOR ONE CLAMP TO BE AT TOP CENTER. THE OTHER CLAMPS TO BE 45° TO EACH SIDE OF TOP CENTER.
- INSERTION INTO PIPE  
CLAMP TO SUPPORT THE SHAPE OF THE CUFF SHOULD BE HAND TIGHT AND SHOULD BE EXTENDED OUTWARD, BUT ONLY TIGHT ENOUGH TO LOOSELY KEEP THE SHAPE OF THE CUFF DURING INSTALLATION.
- PALLET PUSH FOR LARGER CHECKMATE® VALVES  
LARGER CHECKMATE® VALVES CAN BE PUSHED INTO THE PIPE UTILIZING THE SHIPPING PALLET. THE PALLET SHOULD BE PLACED PERPENDICULAR TO THE VALVE BEING INSERTED INTO THE PIPE. THEN, WITH ASSISTANCE FROM AN EXCAVATOR, PUSH WITH CONSISTENT EVEN FORCE AGAINST THE SHIPPING PALLET TO INSERT THE CHECKMATE® VALVE INTO THE PIPE. SEE THE IMAGE TO THE RIGHT FOR THE SUGGESTED POSITIONING AND USAGE OF THE EXCAVATOR'S SHOVEL. ASSISTANCE FOR LARGER-SIZED CHECKMATE® VALVES. CLAMPS MUST BE INSTALLED TO PREVENT DAMAGE TO CUFF.
- CORRUGATED PIPE AND SMOOTH WALL (PVC, HDPE) PIPE INSTALLATION  
FOR INSTALLATION ON CORRUGATED PIPE, IT IS RECOMMENDED THAT THE CORRUGATIONS BE FILLED WITH HYDRAULIC CEMENT (OR SIMILAR MATERIAL) THAT WILL PROVIDE A SMOOTH I.D. FOR SMOOTH WALL PIPE. IT IS RECOMMENDED THAT THE VALVE BE PINNED.
- FLANGED VALVE BOLT TORQUES  
THE VALVE END WITH THE RUBBER FLANGE SHALL BE INSTALLED USING THE BACKUP RINGS PROVIDED. THE SLEEVE SPLIT SHOULD BE INSTALLED FACING DOWNSTREAM. WITH THE SPLIT IN THE VERTICAL POSITION, THE INSTALLATION BOLT TORQUE ON THE END FLANGE BOLTS ARE LISTED IN THE MANUFACTURER'S INSTALLATION PROCEDURES.

INLINE CHECKVALVE MAINTENANCE NOTES:

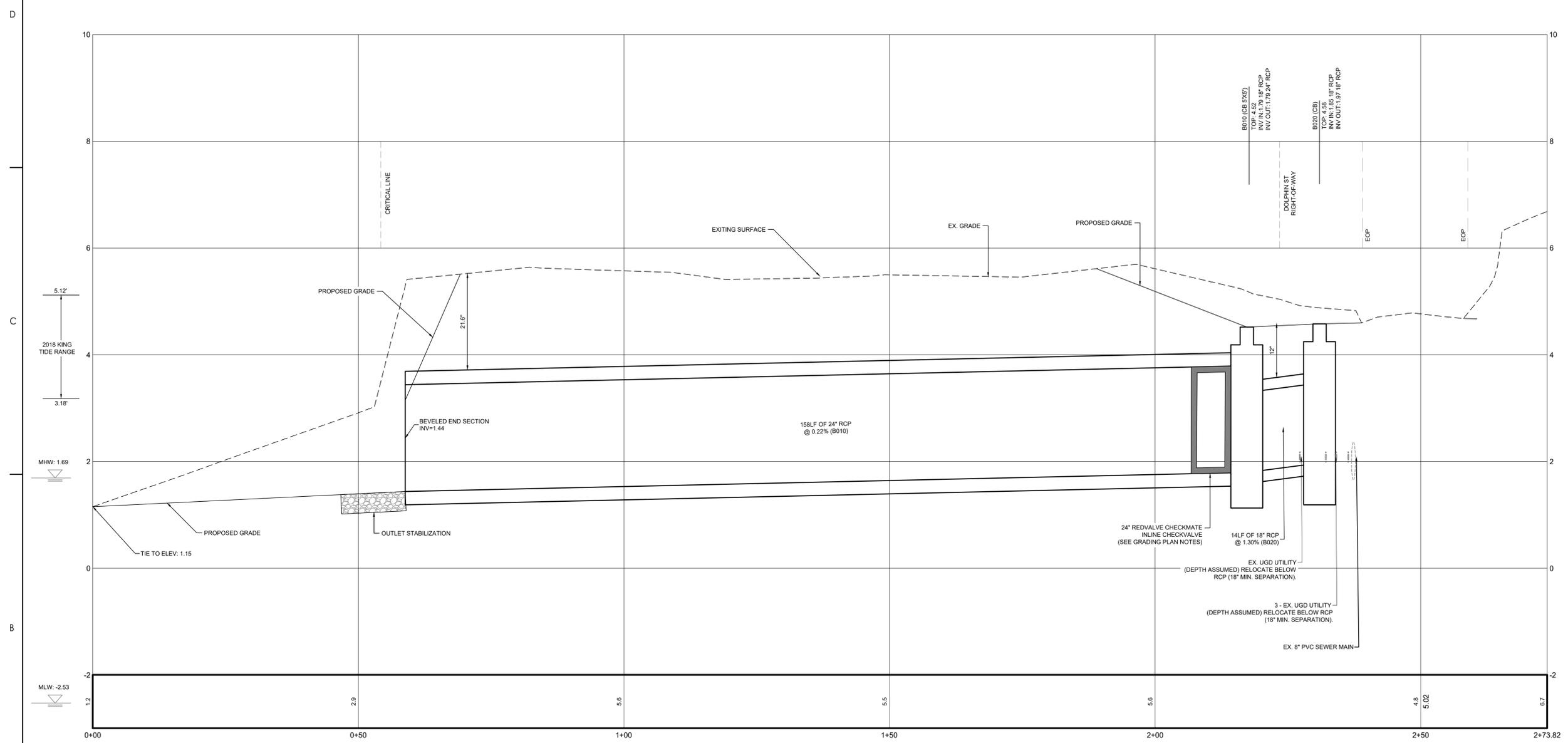
- INSPECTION  
VALVES SHOULD OCCASIONALLY BE INSPECTED FOR DAMAGE, WEAR, AND BUILDUP OF DEBRIS. THE FREQUENCY OF THE INSPECTIONS SHOULD BE DETERMINED BY THE SEVERITY OF THE SERVICE AND THE ENVIRONMENT IN WHICH IT OPERATES. THE CLAMPS SHOULD BE CHECKED FOR PROPER TENSION, AND BE SURE THAT THE INSIDE OF THE VALVE IS FREE OF DEBRIS. SOFT MARINE GROWTH IS NORMAL ON VALVES IN SUBMERGED APPLICATIONS. BECAUSE HARD MARINE GROWTH SUCH AS BARNACLES WILL NOT BOND WELL TO THE CHECKMATE®, THEY CAN BE EASILY REMOVED. ALSO INSERT PINS TO ENSURE THEY ARE TIGHT.

INLINE CHECKVALVE STORAGE NOTES:

- IF YOUR CHECKMATE® IS TO BE STORED FOR A PERIOD OF TIME PRIOR TO INSTALLATION, THE FOLLOWING STORAGE GUIDELINES WILL HELP TO PRESERVE THE VALVE AND ASSURE A TROUBLE-FREE INSTALLATION:
  - STORE IN A CLEAN, COOL, DRY LOCATION, AVOID EXPOSURE TO LIGHT, ELECTRIC MOTORS, DIRT, OR CHEMICALS.
  - STORE VALVE VERTICALLY ON FLOOR OR PALLET.
  - STORE VALVE TO PREVENT OTHER ITEMS FROM CONTACTING CHECK SLEEVE TO PREVENT POSSIBLE DAMAGE.
  - STORE THIS MANUAL WITH THE VALVE, SO THAT IT IS READILY AVAILABLE AT TIME OF INSTALLATION.



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 2020/03/26 08:53:44 AM by: Kevin, Andrew



STORM B PROFILE  
SCALE: H: 1"=10'  
V: 1"=1'

Revision	By	Appd	YYYY.MM.DD
BID SET PER COUNTY COMMENTS FOR PRELIM REVIEW	AB	BK	2020.03.25
Issued	SGC	BK	2019.10.29
File Name: P16_GRADING	SGC	BK	YYYY.MM.DD
	Dwn.	Dgdn.	Chkd.



Client/Project Logo  
Client/Project  
GEORGETOWN COUNTY  
GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8  
MURRELLS INLET, SOUTH CAROLINA

Title  
GRADING AND DRAINAGE PLAN

Project No. 178420916  
Revision Sheet 8 of 15  
Drawing No. C3-01

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.



NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.

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 2020/03/26 8:54 AM by: bryant, Andrew

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Consultant

Legend

Revision	By	Appd	YYYY.MM.DD
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BID SET	AB	BK	2020.03.25
PER COUNTY COMMENTS	SCC	BK	2019.10.29
FOR PRELIM REVIEW	SCC	BK	2019.10.15

Issued	By	Appd	YYYY.MM.DD
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File Name: P16_GRADING_DETAILS	SGC	SGC	BK
	Dwn.	Dgrn.	Chkd.



Client/Project Logo

Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8

MURRELLS INLET, SOUTH CAROLINA

Title  
GRADING AND DRAINAGE DETAILS

Project No. 178420916

Revision Sheet 8 of 15

Drawing No. C3-02

**REFERENCES**

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

714-105-00

714-110-00

714-205-00

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NO. 21242

10/22/2015

DATE

DESCRIPTION

SCDOT

DESIGN STANDARDS OFFICE

955 PARK STREET

ROOM 405

COLUMBIA, SC 29201

STANDARD DRAWING

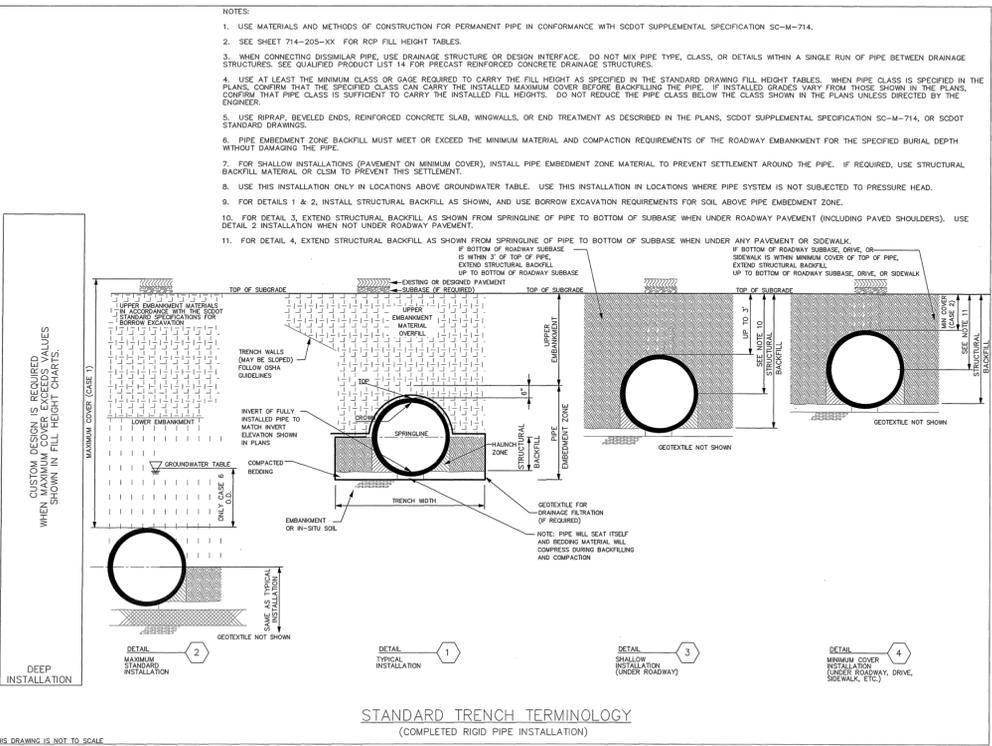
PIPE CULVERTS

RIGID PIPE

COMPLETED TRENCH (IMPROVED FOUNDATION)

714-105-00

OFFICE LETTING DATE

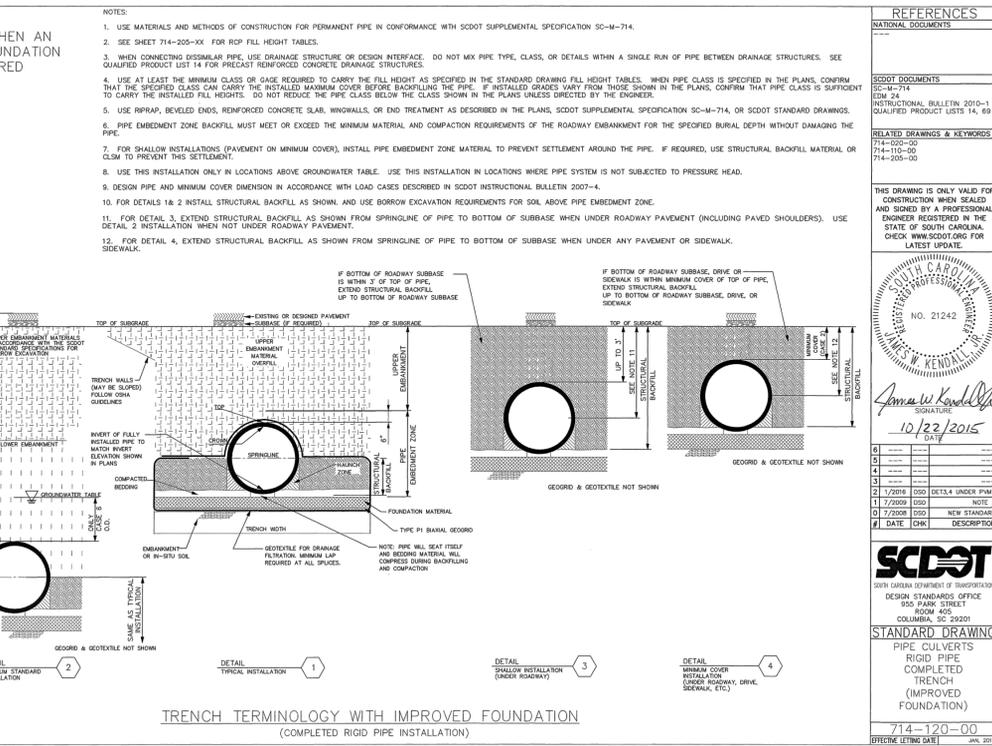


USE ONLY WHEN AN IMPROVED FOUNDATION IS REQUIRED

NOTES:

- USE MATERIALS AND METHODS OF CONSTRUCTION FOR PERMANENT PIPE IN CONFORMANCE WITH SCDOT SUPPLEMENTAL SPECIFICATION SC-M-714.
- SEE SHEET 714-205-XX FOR RCP FILL HEIGHT TABLES.
- WHEN CONNECTING DISSIMILAR PIPE, USE DRAINAGE STRUCTURE OR DESIGN INTERFACE. DO NOT MIX PIPE TYPE, CLASS, OR DETAILS WITHIN A SINGLE RUN OF PIPE BETWEEN DRAINAGE STRUCTURES. SEE QUALIFIED PRODUCT LIST 14 FOR PRECAST REINFORCED CONCRETE DRAINAGE STRUCTURES.
- USE AT LEAST THE MINIMUM CLASS OR GAGE REQUIRED TO CARRY THE FILL HEIGHT AS SPECIFIED IN THE STANDARD DRAWING FILL HEIGHT TABLES. WHEN PIPE CLASS IS SPECIFIED IN THE PLANS, CONFIRM THAT THE SPECIFIED CLASS CAN CARRY THE INSTALLED MAXIMUM COVER BEFORE BACKFILLING THE PIPE. IF INSTALLED GRADES VARY FROM THOSE SHOWN IN THE PLANS, CONFIRM THAT PIPE CLASS IS SUFFICIENT TO CARRY THE INSTALLED FILL HEIGHTS. DO NOT REDUCE THE PIPE CLASS BELOW THE CLASS SHOWN IN THE PLANS UNLESS DIRECTED BY THE ENGINEER.
- USE RIBBAP, BEVELED ENDS, REINFORCED CONCRETE SLAB, WINGWALLS, OR END TREATMENT AS DESCRIBED IN THE PLANS, SCDOT SUPPLEMENTAL SPECIFICATION SC-M-714, OR SCDOT STANDARD DRAWINGS.
- PIPE EMBEDMENT ZONE BACKFILL MUST MEET OR EXCEED THE MINIMUM MATERIAL AND COMPACTION REQUIREMENTS OF THE ROADWAY EMBANKMENT FOR THE SPECIFIED BURIAL DEPTH WITHOUT DAMAGING THE PIPE.
- FOR SHALLOW INSTALLATIONS (PAVEMENT ON MINIMUM COVER), INSTALL PIPE EMBEDMENT ZONE MATERIAL TO PREVENT SETTLEMENT AROUND THE PIPE. IF REQUIRED, USE STRUCTURAL BACKFILL MATERIAL OR CLM TO PREVENT THIS SETTLEMENT.
- USE THIS INSTALLATION ONLY IN LOCATIONS ABOVE GROUNDWATER TABLE. USE THIS INSTALLATION IN LOCATIONS WHERE PIPE SYSTEM IS NOT SUBJECTED TO PRESSURE HEAD.
- DESIGN PIPE AND MINIMUM COVER DIMENSION IN ACCORDANCE WITH LOAD CASES DESCRIBED IN SCDOT INSTRUCTIONAL BULLETIN 2007-4.
- FOR DETAILS 1& 2 INSTALL STRUCTURAL BACKFILL AS SHOWN, AND USE BORROW EXCAVATION REQUIREMENTS FOR SOL ABOVE PIPE EMBEDMENT ZONE.
- FOR DETAIL 3, EXTEND STRUCTURAL BACKFILL AS SHOWN FROM SPRINGLINE OF PIPE TO BOTTOM OF SUBBASE WHEN UNDER ROADWAY PAVEMENT (INCLUDING PAVED SHOULDERS). USE DETAIL 2 INSTALLATION WHEN NOT UNDER ROADWAY PAVEMENT.
- FOR DETAIL 4, EXTEND STRUCTURAL BACKFILL AS SHOWN FROM SPRINGLINE OF PIPE TO BOTTOM OF SUBBASE WHEN UNDER ANY PAVEMENT OR SIDEWALK. IF BOTTOM OF ROADWAY SUBBASE IS WITHIN 3' OF TOP OF PIPE, EXTEND STRUCTURAL BACKFILL UP TO BOTTOM OF ROADWAY SUBBASE. IF SIDEWALK IS WITHIN MINIMUM COVER OF TOP OF PIPE, EXTEND STRUCTURAL BACKFILL UP TO BOTTOM OF ROADWAY SUBBASE, DRIVE, OR SIDEWALK.

TRENCH TERMINOLOGY WITH IMPROVED FOUNDATION (COMPLETED RIGID PIPE INSTALLATION)



**REFERENCES**

NATIONAL DOCUMENTS

ASHTO M32, M52, M170, M188, M201, M220, M260, M300, M315, T96, T104, ASTM A708

SCDOT DOCUMENTS

714-105-00

714-110-00

714-205-00

714-990-00

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NO. 21242

9-26-12

DATE

DESCRIPTION

SCDOT

DESIGN STANDARDS OFFICE

955 PARK STREET

ROOM 405

COLUMBIA, SC 29201

STANDARD DRAWING

PIPE CULVERTS

SMOOTH WALL

(RIGID REINFORCED CONCRETE PIPE (RCP) FILL HEIGHT)

714-205-01

OFFICE LETTING DATE

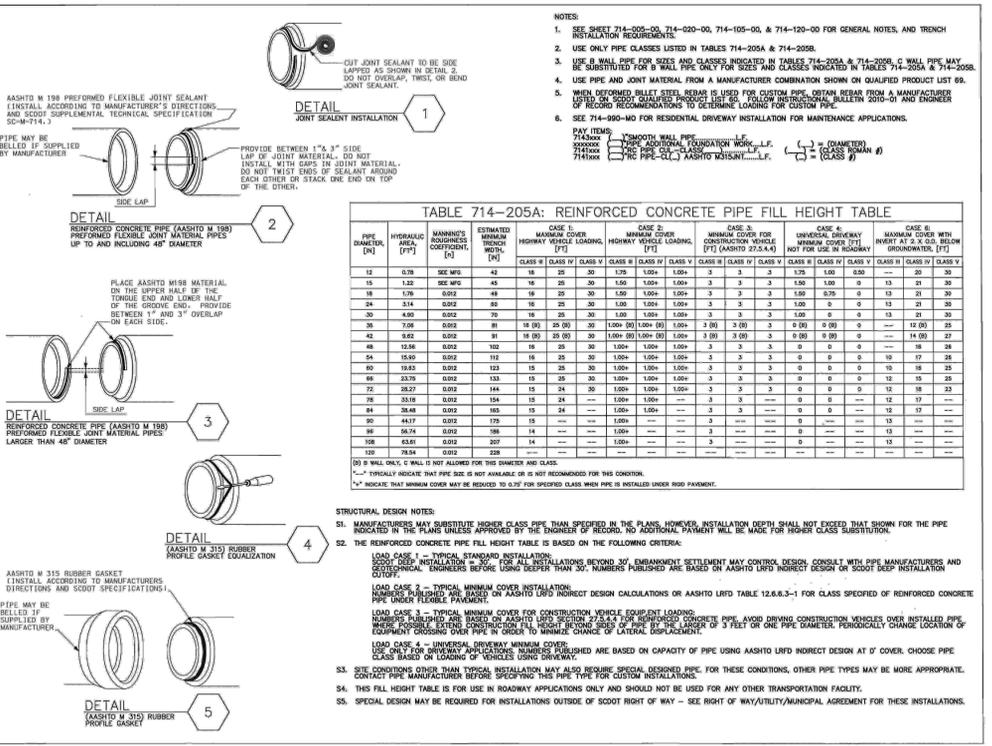


TABLE 714-205B: REINFORCED CONCRETE PIPE (RCP) SMOOTH WALL PIPE AASHTO M170 B & C WALL PIPE WITH CIRCULAR REINFORCEMENT ONLY (AS NOTED) LOADING FROM SCDOT INSTRUCTIONAL BULLETIN 2010-01 HL-93 LOAD CASES 1, 2, AND 4.

INDIRECT DESIGN PIPE DIAMETER [IN]

PIPE DIAMETER [IN]	PIPE DIAMETER [IN]																
	12	15	18	24	30	36	42	48	54	60	72	78	84	90	96	108	120
0.00	V+	V+	V+	V+	V+	III (B)											
0.50	V+	V+	V+	V+	V+	III (B)											
0.75	V+	V+	V+	V+	V+	III (B)											
1.00	IV	IV	IV	IV	IV	III (B)											
1.25	IV	IV	IV	IV	IV	III (B)											
1.50	IV	IV	IV	IV	IV	III (B)											
1.75	III	III	III	III	III	III (B)											
2.00	III	III	III	III	III	III (B)											
2.25	III	III	III	III	III	III (B)											
2.50	III	III	III	III	III	III (B)											
2.75	III	III	III	III	III	III (B)											
3.00	III	III	III	III	III	III (B)											
4.00	III	III	III	III	III	III (B)											
5.00	III	III	III	III	III	III (B)											
6.00	III	III	III	III	III	III (B)											
7.00	III	III	III	III	III	III (B)											
8.00	III	III	III	III	III	III (B)											
9.00	III	III	III	III	III	III (B)											
10.00	III	III	III	III	III	III (B)											
11.00	III	III	III	III	III	III (B)											
12.00	III	III	III	III	III	III (B)	III (B)	III (B)	III (B)	III (							

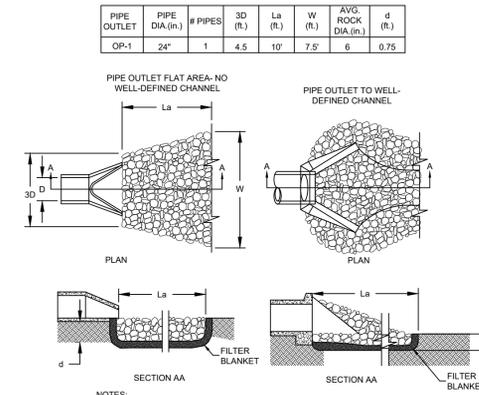


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Legend



- NOTES:
- La IS THE LENGTH OF THE RIPRAP APRON.
  - d IS 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
  - IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
  - A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

OUTLET STABILIZATION STRUCTURE  
N.T.S.

ITEM	QTY.	DESCRIPTION	MAT'L
1	1	ULTRAFLEX CHECKMATE CHECK VALVE	MUST BE SUPPLIED
2	2	CLAMP	MUST BE SUPPLIED

NOTES:

- PIPE INSIDE DIAMETER - MUST BE SUPPLIED (MINIMUM ALLOWABLE PIPE DIAMETER - 23.25 INCHES)
- CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION
- MAXIMUM ALLOWABLE BACK PRESSURE - 45.0 FEET
- IT IS RECOMMENDED TO BOLT OR PIN CHECKMATE TO PIPE AS SHOWN, 4 PLACES 90° APART

PRELIMINARY DRAWING  
NOT FOR APPROVAL PURPOSES

\* PATENT PENDING \*

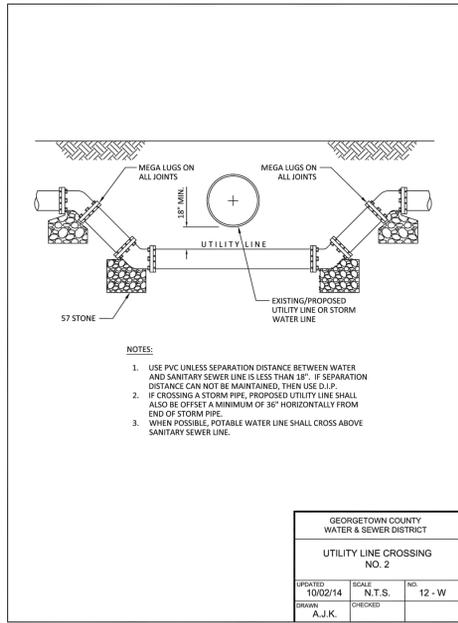
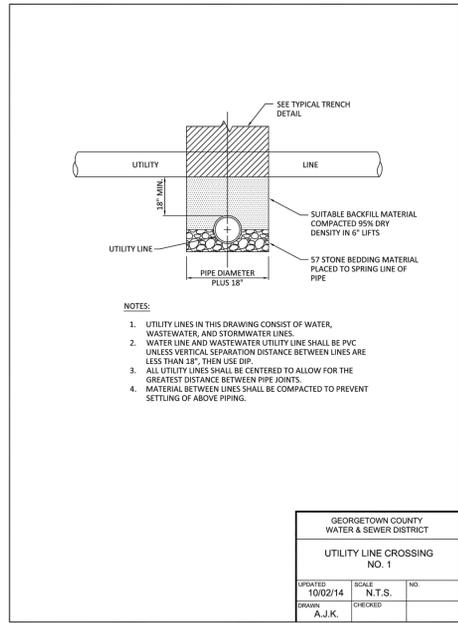
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OPPORTUNITY No: XXXXX SALES ORDER No: TXX-XXXX  
600 N. BELL AVE. CARNEGIE, PA. 15106  
info@tideflex.com 412.279.0044  
A Division of Red Valve Company, Inc. fax 412.279.5410

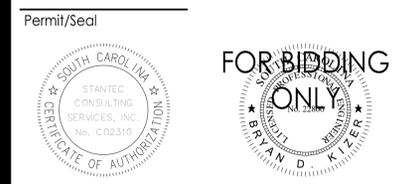
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TT PART No: CMCBUF-240-APPROVAL  
DR. BY: TLM DATE: 2-6-17 CHKD. BY: DATE:  
CAD SCALE: FULL  
PLOT SCALE: 1 = 1 DWG No: TTS-XXXX

CUSTOMER: XXX  
ORDER No: XXX

PIN PER NOTE #4  
RECOMMENDED PINNING CONFIGURATION  
(SUPPLIED BY CUSTOMER) (SEE I.O.M.)  
NOT TO SCALE



Revision	By	Appd	YYYY.MM.DD
BID SET	AB	BK	2020.03.25
PER COUNTY COMMENTS FOR PRELIM REVIEW	SGC	BK	2019.10.29
Issued	By	Appd	YYYY.MM.DD
File Name: P16_GRADING_DETAILS	SGC	BK	
	Dwn.	Dgnd.	Chkd.
			YYYY.MM.DD

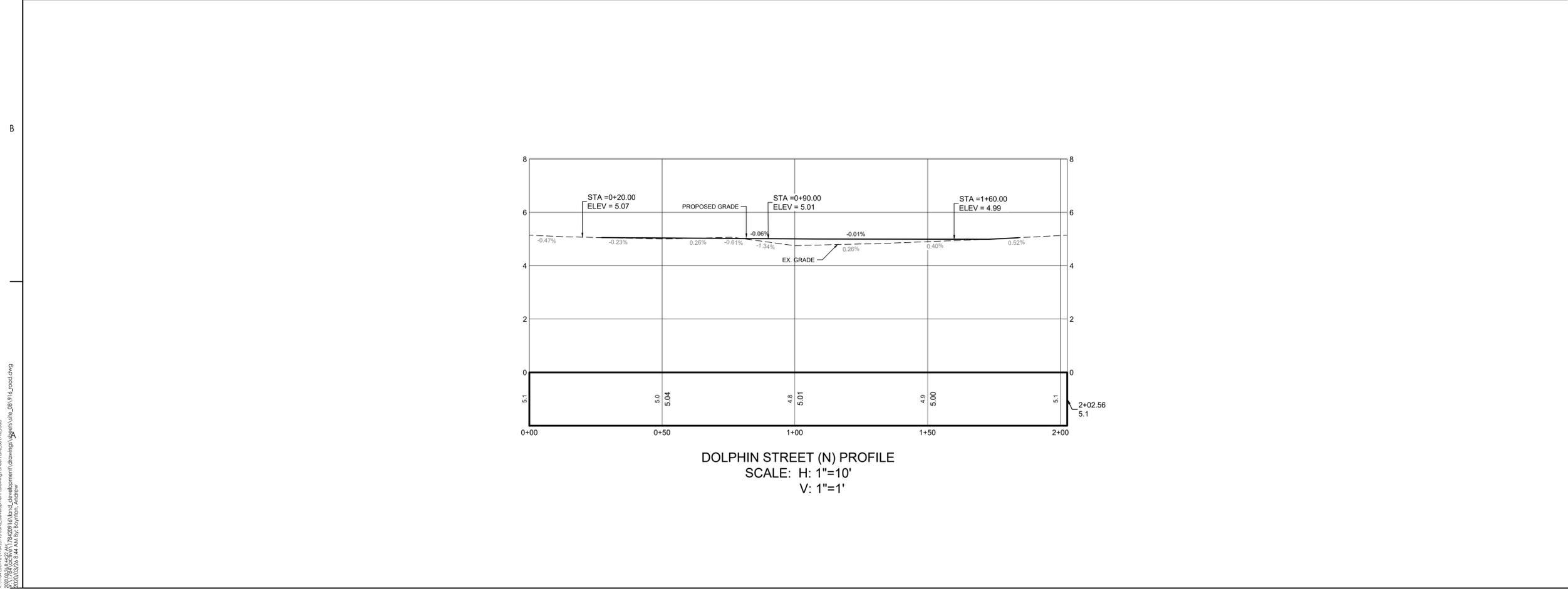
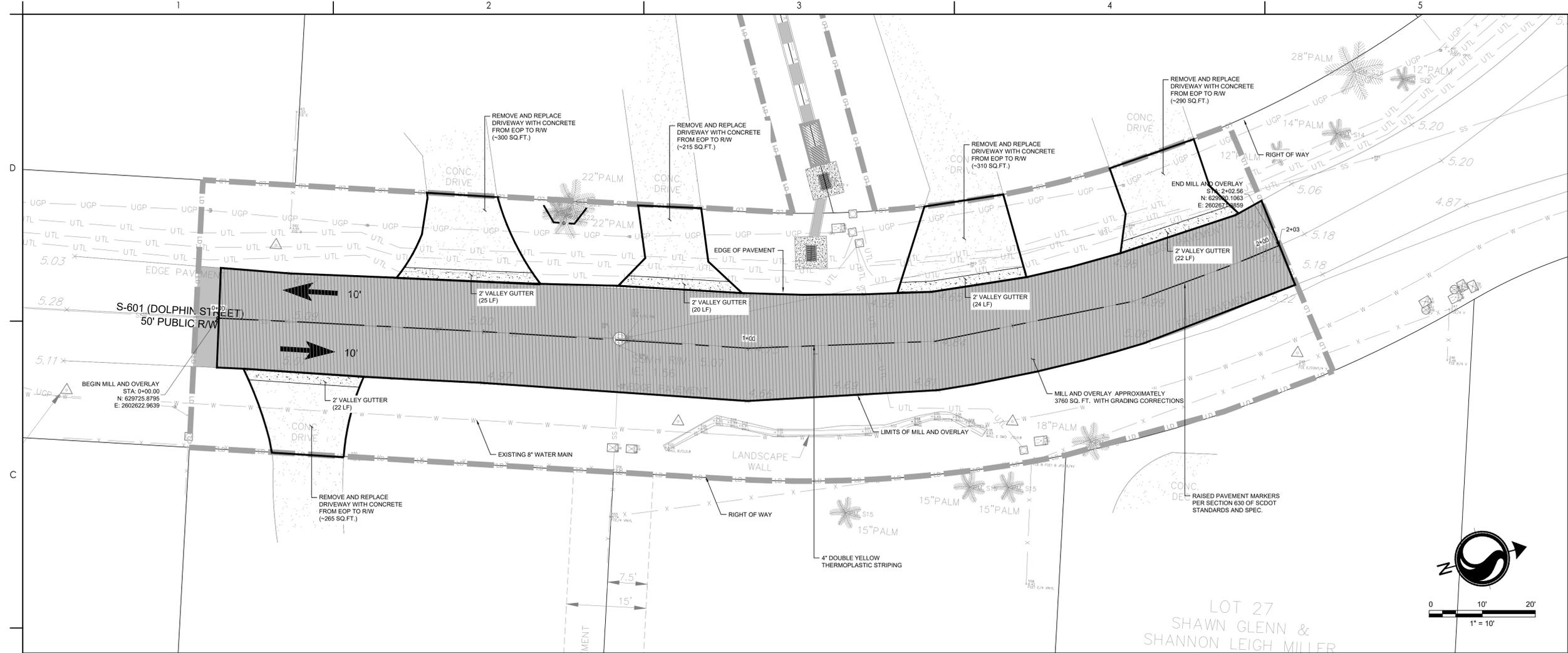


Client/Project Logo  
Client/Project  
GEORGETOWN COUNTY  
GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8  
MURRELLS INLET, SOUTH CAROLINA

Title  
GRADING AND DRAINAGE DETAILS

Project No. 178420916	Scale
Revision Sheet	Drawing No. C3-04
	11 of 15

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Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.25
PER COUNTY COMMENTS FOR PRELIM REVIEW	SGC	BK	2019.10.29
	SGC	BK	2019.06.15

Issued	By	Appd	YYYY.MM.DD

File Name: R16.ROAD	SGC	SGC	BK
	Dwn.	Dgn.	Chkd.
			YYYY.MM.DD

Permit/Seal



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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8  
MURRELLS INLET, SOUTH CAROLINA

Title  
ROADWAY PLAN AND PROFILE

Project No.  
178420916

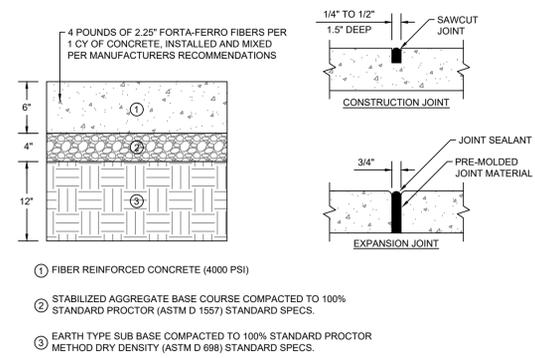
Revision Sheet  
12 of 15

Scale

Drawing No.  
C4-00

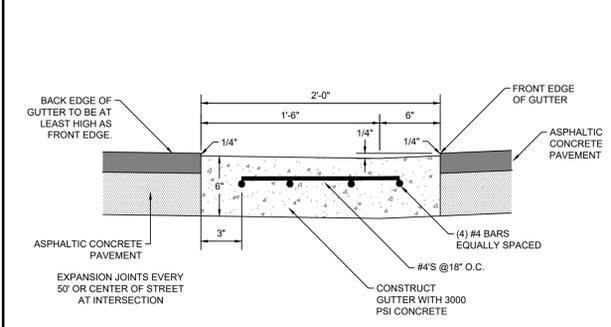
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 2020/03/26 08:54 AM by: Bryon, Andrew

**CONCRETE PAVEMENT SECTION AND JOINT**  
NOT TO SCALE

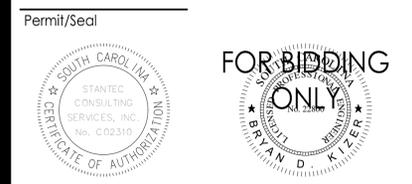


- ① FIBER REINFORCED CONCRETE (4000 PSI)
- ② STABILIZED AGGREGATE BASE COURSE COMPACTED TO 100% STANDARD PROCTOR (ASTM D 1557) STANDARD SPECS.
- ③ EARTH TYPE SUB BASE COMPACTED TO 100% STANDARD PROCTOR METHOD DRY DENSITY (ASTM D 698) STANDARD SPECS.

**24" CONCRETE VALLEY GUTTER**  
NOT TO SCALE



Revision	By	Appd	YYYY.MM.DD
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Issued		By Appd	YYYY.MM.DD
File Name: P16_ROAD	SGC Dwn.	SGC Dgdn.	BK Chkd. YYYY.MM.DD



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**GEORGETOWN COUNTY**

**GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8**

MURRELLS INLET, SOUTH CAROLINA

Title  
**ROADWAY DETAILS**

Project No.  
178420916

Scale

Revision Sheet  
13 of 15

Drawing No.  
**C4-01**

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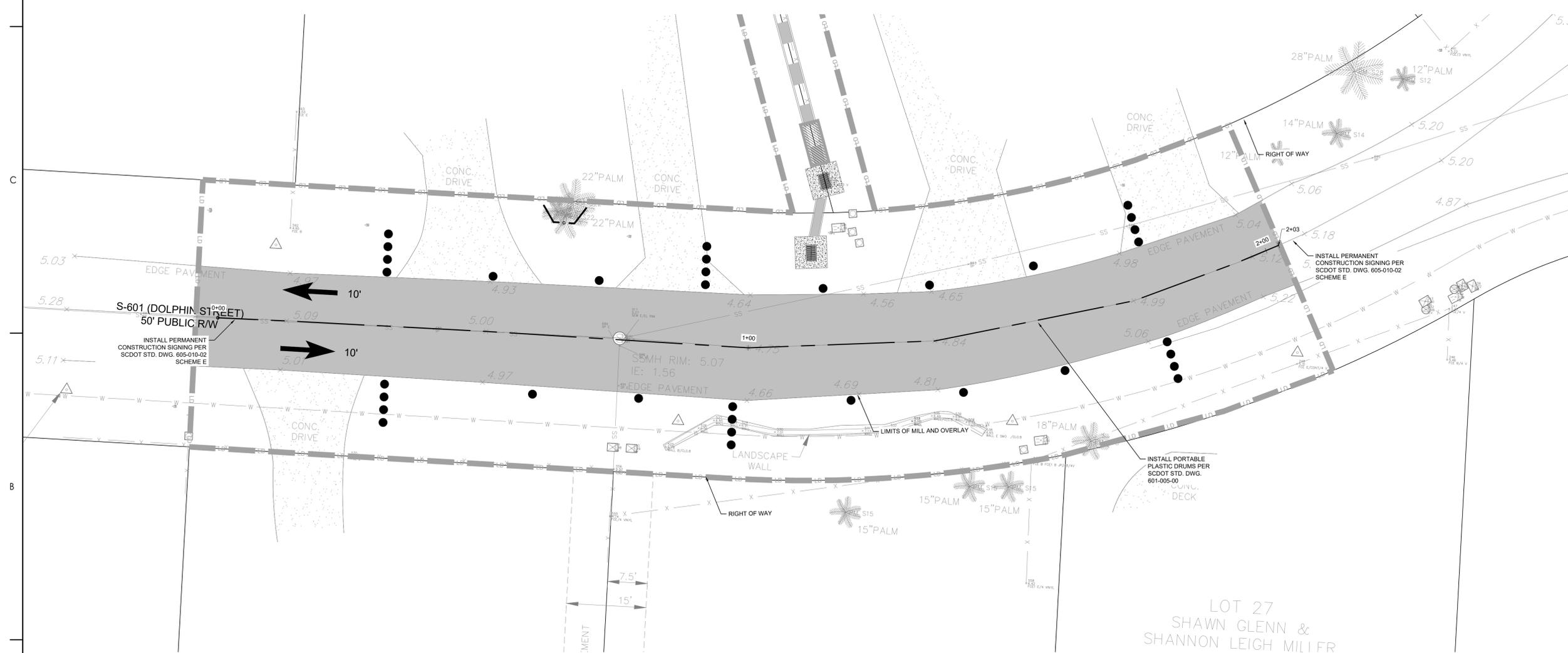
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Consultant

Legend

- CONSTRUCTION NOTES:**
- PORTABLE PLASTIC DRUMS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NUMBER 601-005-00, AND AS DIRECTED BY THE PLANS.
  - CONSTRUCTION OF THIS PROJECT REFERENCES THE FOLLOWING SCDOT STANDARD DRAWINGS:
    - 601-005-00 WIDENING PROJECTS NEW ROADWAY CONSTRUCTION PRIMARY ROUTES
    - 605-005-01 CONSTRUCTION SIGNING GROUND MOUNTED ASSEMBLY U CHANNEL POSTS - BREAKAWAY INSTALLATION
    - 605-010-02 CONSTRUCTION SIGNING PERMANENT PRIMARY ROUTES
    - 605-025-01 CONSTRUCTION SIGNING SPECIAL SIGNS LET 'EM WORK LET 'EM LIVE
    - 605-030-02 CONSTRUCTION SIGNING "ROAD WORK" SIGNS "END ROAD WORK"
    - 610-015-00 LANE CLOSURE NIGHT TIME URBAN LOW SPEED (<35 MPH)
    - 610-205-00 RIGHT SHOULDER CLOSURE (CASE I/CASE II) PRIMARY ROUTES

- CONSTRUCTION SEQUENCE:**
- INSTALL PERMANENT CONSTRUCTION SIGNS.
  - INSTALL PORTABLE PLASTIC DRUMS.
  - MAINTAIN MINIMUM ONE LANE OF TRAFFIC IN EACH DIRECTION ON EXISTING LANES, UTILIZING FLAGMEN.
  - CONSTRUCT SHADED PORTION OF MILL AND OVERLAY AS SHOWN.



Revision	By	Appd	YYYY.MM.DD
BID SET FOR COUNTY COMMENTS FOR PRELIM REVIEW	AB	BK	2020.03.25
Issued	SGC	BK	2019.10.29
	SGC	BK	2019.06.15
File Name: P16_TRAFFIC	SGC	BK	
	Dwn.	Dgdn.	Chkd.
			YYYY.MM.DD

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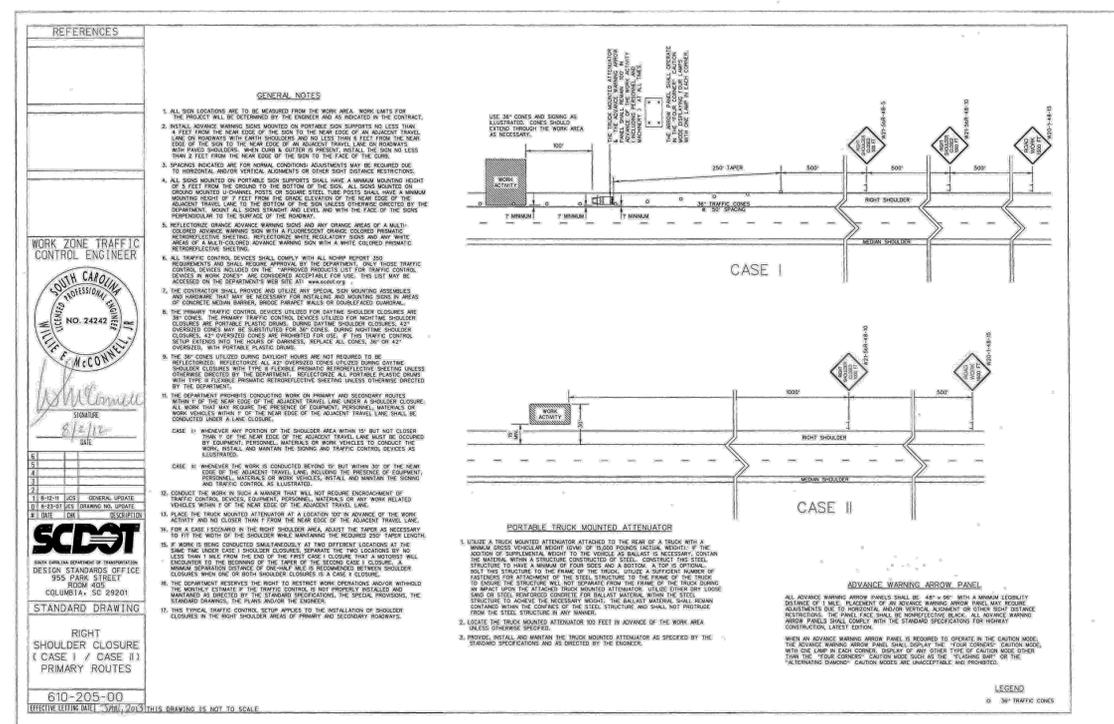
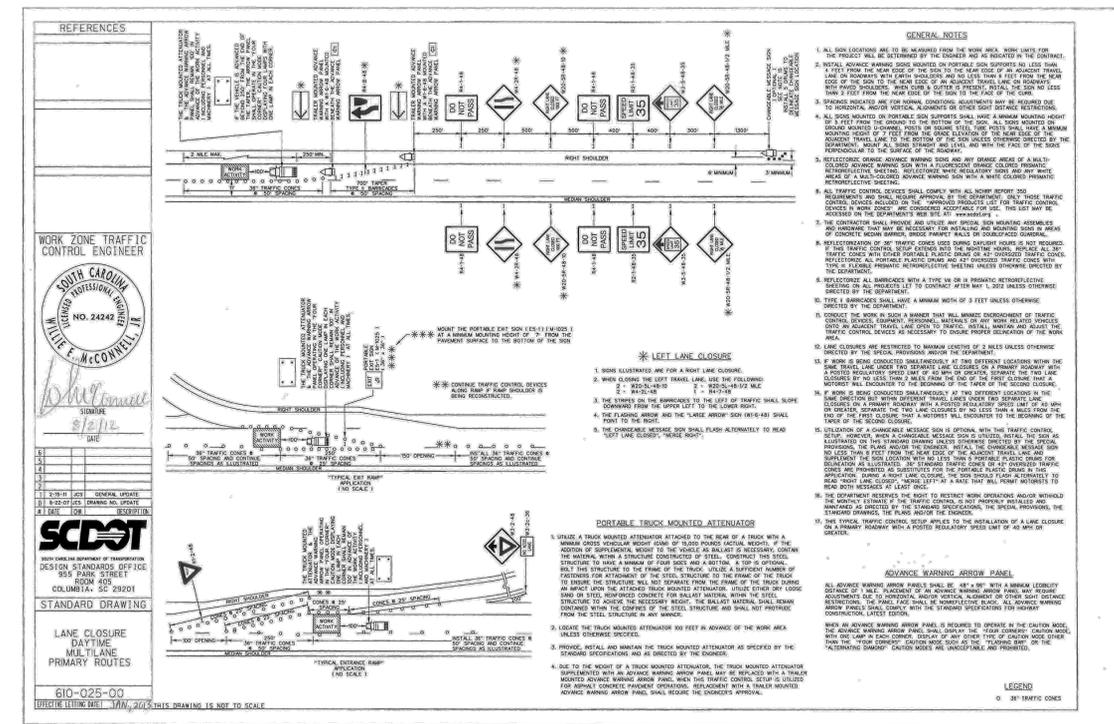
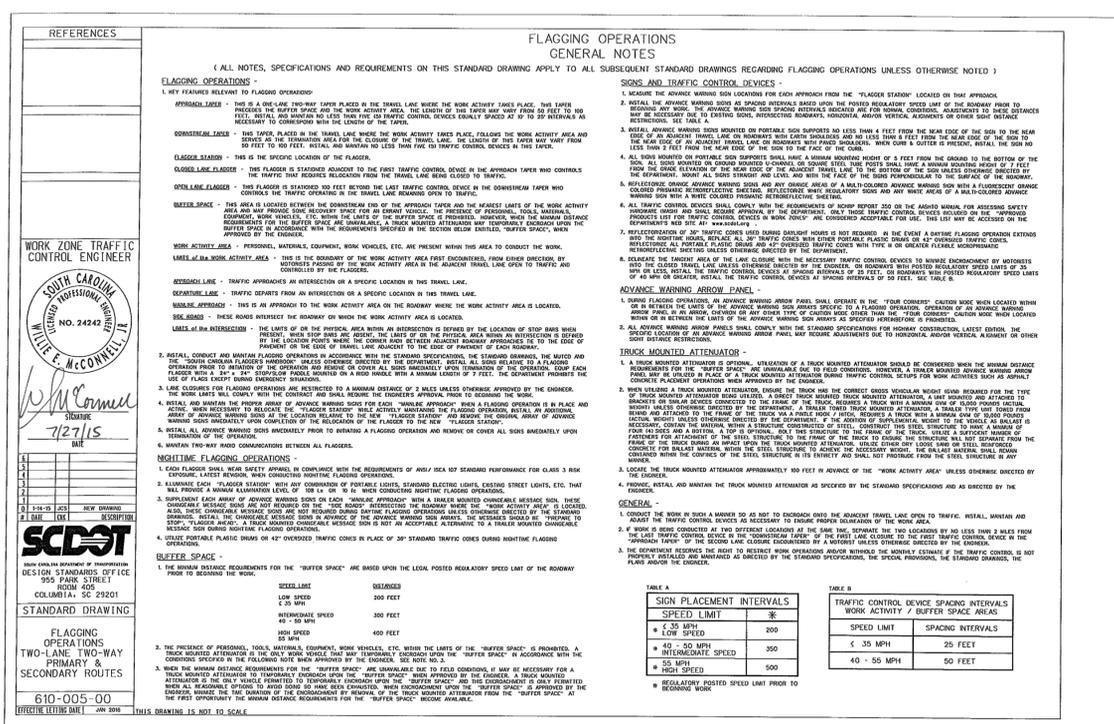
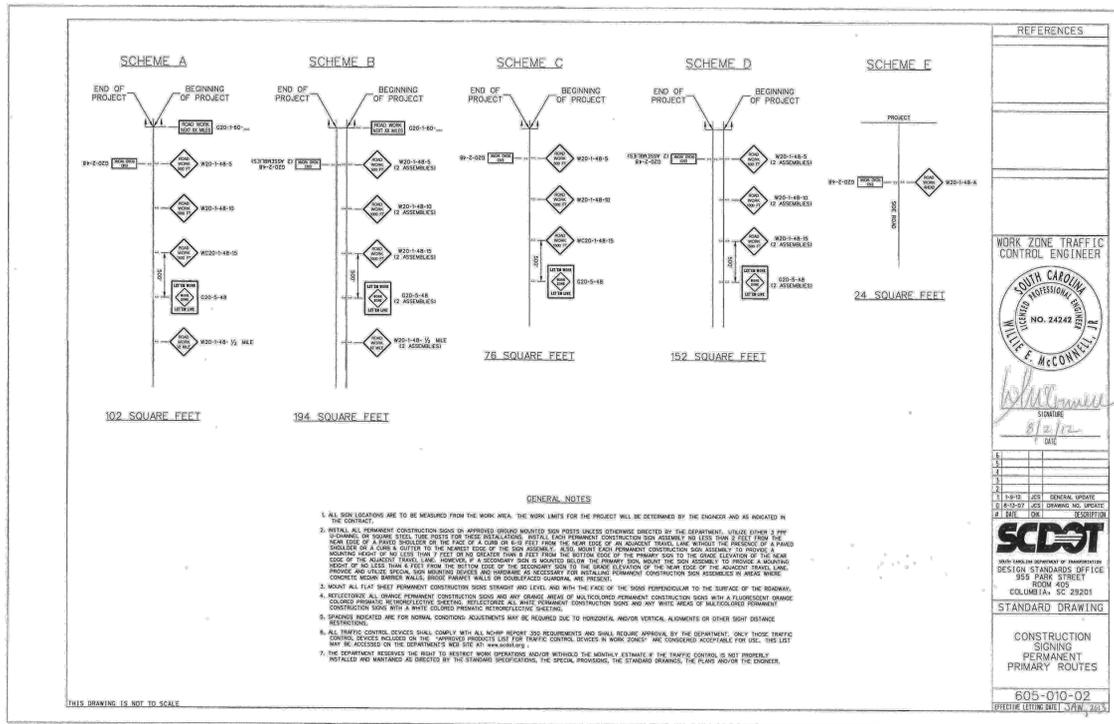
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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 8  
MURRELLS INLET, SOUTH CAROLINA

Title  
TRAFFIC PLAN

Project No. 178420916  
Revision Sheet 14 of 15  
Drawing No. C5-00

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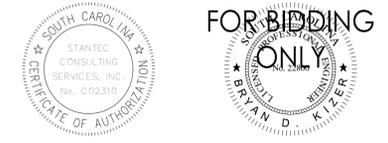
Revision By Appd YYYY.MM.DD

BID SET AB BK 2020.03.25  
PER COUNTY COMMENTS SCC BK 2019.10.29  
SCC PRELIM REVIEW SCC BK 2019.06.14

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File Name: P16\_TRAFFIC SCC SCC BK  
Dwn. Dgln. Chkd. YYYY.MM.DD

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GARDEN CITY DRAINAGE IMPROVEMENTS SITE 8

MURRELLS INLET, SOUTH CAROLINA

Title TRAFFIC DETAILS

Project No. 178420916

Revision Sheet

Drawing No. C5-01

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