UTILITY IMPROVEMENT PLANS
FOR

POSSUM POINT SEWER EXTENSION (PHASE FOUR)

SIMMONSVILLE ROAD
BLUFFTON, SOUTH CAROLINA

VICINITY MAP
SCALE 1"=700'

TOWN OF BLUFFTON
P.O. BOX 386
20 BRIDGE STREET
TELEPHONE No. (843) 706-4500
BLUFFTON, SOUTH CAROLINA 29910
JULY 2014

SCHEDULE OF DRAWINGS

SHEET NO.	DESCRIPTION
1	COVER SHEET, VICINITY MAP AND SCHEDULE OF DRAWINGS
2	CONSTRUCTION NOTES & LEGEND
3	PROJECT MAP
4 THRU 6	EROSION AND SEDIMENT CONTROL PLAN
7 THRU 11	SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES
12 THRU 14	CONSTRUCTION DETAILS

SOUTH CAROLINA No. 28714 PROFESSIONAL ENGINEER CHRISTOPHER J. CHANKE, JR.

SOUTH CAROLINA HUSSEY, GAY, BELL & DEYOUNG INC. No. C00539 CERTIFICATE OF AUTHORIZATION

HGBD A Bell Company

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POSSUM POINT CDBG SEWER PHASE FOUR
BJWSA No. 2015-019

POSSUM POINT SEWER EXTENSION (PHASE FOUR)
CDBG Grant Number 4-C1-14-002

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CONSTRUCTION NOTES:

GENERAL NOTES:

1. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER.
2. CONTRACTOR IS TO VERIFY ALL EXISTING SITE CONDITIONS AND REPORT ANY CONFLICTS TO THE ENGINEER.
3. A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. THERE MAY BE ADDITIONAL UTILITIES OTHER THAN THOSE DEPICTED ON THESE PLANS.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION/RELOCATION/PROTECTION OF UTILITIES BY THE APPROPRIATE UTILITY COMPANY.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS ON THE PROJECT.
7. TEMPORARY SOIL EROSION AND SEDIMENT CONTROLS (SILT FENCES) SHALL BE PLACED AT ALL INLETS AND PIPES UNTIL SOIL STABILIZATION IS COMPLETE. TEMPORARY MEASURES SHALL BE REMOVED AFTER STABILIZATION IS COMPLETE (INCLUDING SILT FENCE).
8. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF FEDERAL, STATE, COUNTY AND LOCAL MUNICIPALITIES/AUTHORITIES.
9. ALL MATERIALS, METHODS AND DETAILS OF CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BEAUFORT COUNTY, S.C.D.O.T., THE TOWN OF BLUFFTON, BJWSA AND/OR THE APPROPRIATE UTILITY COMPANY, WHICHEVER TAKES PRECEDENCE.
10. CONTRACTOR SHALL VERIFY THAT ALL NECESSARY CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO THE COMMENCEMENT OF THE PROJECT.
11. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, OSHA, STATE & LOCAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
12. TRANSFER OF SITE BENCHMARKS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL ONLY BE DONE BY A S.C. LICENSED LAND SURVEYOR.
13. GENERAL CONTRACTOR SHALL OVERSEE INSTALLATION OF UTILITIES AND COORDINATE WITH ALL DISCIPLINES TO AVOID CONFLICTS.
14. IN THE EVENT OF A CONFLICT WITH WATER, SEWER, DRAINAGE OR OTHER UTILITY LINES, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER PRIOR TO MAKING FIELD ADJUSTMENTS.
15. A SET OF APPROVED OCRM DRAWINGS MUST BE ON-SITE AT ALL TIMES; OCRM PLACARD MUST BE CLEARLY DISPLAYED AT ALL TIMES.
16. ALL PROPERTY/RIGHT-OF-WAY LINES ARE APPROXIMATE, UNLESS MONUMENT OR PIN LOCATIONS ARE SHOWN.
17. ALL PROPERTY MONUMENTS AND RIGHT-OF-WAY MONUMENTS THAT ARE DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY A LICENSED SURVEYOR. CONCRETE MONUMENT MARKERS SHALL BE A MINIMUM OF 4"X4"X30".
18. ALL WORK SHALL BE PERFORMED IN A MANNER AS TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE POSSIBLE. AT LEAST ONE TRAVEL LANE MUST REMAIN OPEN AT ALL TIMES. ALL TRAFFIC CONTROL DEVICES, SIGNS, STRIPING AND FLAGGING SHALL BE FURNISHED BY THE CONTRACTOR.
19. ALL EXISTING DRIVES SHALL BE PROVIDED INGRESS/EGRESS ROUTES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL NOT LEAVE DRAINAGE DITCHES BLOCKED, EXCEPT FOR A BRIEF TIME DURING ACTUAL INSTALLATION OF INFRASTRUCTURE. PROVIDE TEMPORARY BYPASS DRAINAGE AS REQUIRED TO HAVE PROPERLY FUNCTIONING DRAINAGE AT ALL TIMES. THE DITCHES SHALL BE CLEAR OF OBSTRUCTIONS CREATED BY CONSTRUCTION AT THE END OF EACH WORKING DAY.
21. REMOVE AND REPLACE DRIVEWAYS AND CULVERTS AS REQUIRED FOR PIPE INSTALLATION, OR IF NECESSARY REPLACE ANY DAMAGED CULVERTS DURING PIPE INSTALLATION. ALL REPLACED ITEMS SHALL BE REPLACED TO PRE-CONSTRUCTION CONDITION AT A MINIMUM.
22. ALL MATERIALS WHICH ARE TO BE REMOVED AND ARE NOT SHOWN TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
23. IF PIPE TRENCH IS LOCATED WITHIN 10' OF POWER POLES, CONTRACTOR MUST NOTIFY THE POWER COMPANY AND TAKE ALL PRECAUTIONS AS REQUIRED BY THE POWER COMPANY. BACKFILLING AND COMPACTION REQUIRED THE SAME DAY AS EXCAVATION OCCURS. ALL GUY WIRE RELOCATIONS OR TEMPORARY UTILITY DISCONNECTIONS AND ASSOCIATED FEES SHALL BE COORDINATED AND PROVIDED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY.
24. CONTRACTOR SHALL PAY SPECIAL ATTENTION TO ANY UNDERGROUND TELEPHONE, FIBER OPTIC CABLES, GAS MAINS, WATER MAINS, OVERHEAD POWER, ETC. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION AS NECESSARY FOR SAFETY IN AREAS WHERE CONSTRUCTION ACTIVITIES REQUIRE SUCH. THE CONTRACTOR SHALL HAVE UTILITY COMPANY WRAP LINES, SUPPORT POLES, ETC. THE CONTRACTOR SHALL PAY ALL FEES TO THE APPROPRIATE UTILITY FOR THEIR WORK.
25. ALL EXISTING WATER SERVICE LINES SHALL REMAIN IN SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL PROMPTLY REPAIR ANY WATER SERVICE LINE THAT IS INADVERTENTLY DAMAGED. IF TEMPORARY WATER SERVICE DISCONNECTION CANNOT BE AVOIDED, THE CONTRACTOR SHALL NOTIFY THE PROPER AUTHORITY A MINIMUM OF 24 HOURS IN ADVANCE.
26. THE CONTRACTOR SHALL SCHEDULE AND ACCOMPLISH THE WORK SO AS TO MINIMIZE ANY INCONVENIENCE TO PROPERTY OWNERS.
27. ALL LATERAL LOCATIONS ARE SCHEMATIC. THE CONTRACTOR SHALL FIELD DETERMINE THE MOST PRACTICAL LOCATION OF LATERALS TO SERVE LOTS.
28. SURVEY DATUM: VERTICAL: NGVD 29, HORIZONTAL: SOUTH CAROLINA STATE PLANE COORDINATES NAD83.
29. UTILITY LOCATIONS ARE SHOWN BY SURFACE MARKINGS BY OTHERS, THEREFORE LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY.
30. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES. BEFORE ANY WORK NEAR AN EXISTING UTILITY, THE CONTRACTOR SHALL CONTACT THE OWNER OF THE SUBJECT UTILITY AND COORDINATE CONSTRUCTION AND NECESSARY PRECAUTIONS FOR PROTECTION OF THE SUBJECT UTILITY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
31. ALL EXCAVATION WITHIN 5' OF THE PAVED SCDOT ROADWAY (SIMMONSVILLE ROAD) SHALL BE BACKFILLED WITH FLOWABLE FILL. IN AREAS OF ASPHALT PAVING, FLOWABLE FILL SHALL BE USED TO WITHIN TWO INCHES OF THE FINISHED SURFACE WHERE SCDOT TYPE 'B' HOT MIXED ASPHALT SHALL BE USED FOR THE WEARING SURFACE.
32. IN LOCATIONS WHERE IT IS NECESSARY FOR THE CONTRACTOR TO OPEN CUT THE EXISTING SCDOT ROADWAY (SIMMONSVILLE ROAD), THE CONTRACTOR SHALL MILL ONE LANE WIDTH (12' WIDE) FOR 100 L.F. IN ADDITION TO THE DISTURBED AREA (50 L.F. FROM THE EDGE OF DISTURBED ROADWAY, EACHWAY) 2" DEEP AND REPAVE THE ENTIRE AREA WITH SCDOT TYPE 'B' ASPHALT. CONTRACTOR SHALL COORDINATE THE EXTENT OR LIMITS OF THE ASPHALT SURFACE COURSE IN THE SCDOT ROAD RIGHT OF WAY.
33. FORCEMAINS AND ASSOCIATED APPURTENANCES SHOWN ON THESE PLANS ARE NOT FIELD LOCATED. THEY ARE SHOWN ACCORDING TO RECORD DRAWING INFOMRAITON PROVIDED BY BJWSA.
34. TREE PROTECTION IS SHOWN FOR GENERAL GUIDEANCE. PRIOR TO LAND DISTURBANCE, THE CONTRACTOR SHALL CONTACT THE TOWN FOR A SITE WALK THROUGH TO DETERMINE WHERE TREE PROTECTION IS REQUIRED.

OWNER INFORMATION:

TOWN OF BLUFFTON
C/O JOHN HUTCHINSON
P.O. BOX 386
20 BRIDGE STREET
BLUFFTON, SOUTH CAROLINA 29910
PHONE: 843/706-4500

PAVING, GRADING AND DRAINAGE PLAN NOTES:

1. SEE GENERAL NOTES.
2. THE CONTRACTOR SHALL REMOVE ALL STRIPPING, DEBRIS AND EXCESS EXCAVATED MATERIALS FROM THE SITE.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATIONS AND GRADING INCLUDING FURNISHING OFF-SITE BORROW AS REQUIRED TO MEET PLAN GRADES.
4. IF UNSUITABLE SUBGRADE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT (FROM OFF-SITE BORROW MATERIAL) OF ALL UNSUITABLE MATERIAL TO MEET COMPACTION REQUIREMENTS UNDER PAVED SURFACES. UNSUITABLE MATERIALS ARE THOSE CLASSIFIED AS MH, CH, OH, OL AND PEAT IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, UNLESS APPROVED IN WRITING BY THE PROJECT MANAGER. THE SITE ENGINEER AND PROJECT MANAGER SHALL BE NOTIFIED IMMEDIATELY UPON ENCOUNTERING UNSUITABLE SUBGRADE MATERIAL.
5. GRADE ALL DISTURBED AREAS TO PROVIDE POSITIVE DRAINAGE TO EXISTING OR NEW DRAINAGE FACILITIES. NO COLLECTION 'POCKETS' SHALL BE CREATED BY WORK SHOWN IN THESE PLANS.
6. ALL FINISHED SURFACES SHALL BE FREE FROM SURFACE IRREGULARITIES.
7. LOCATIONS AND TOP/INVERT ELEVATIONS OF INLETS/PIPES AND STRUCTURES WILL BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER AND OWNER PRIOR TO MAKING FIELD ADJUSTMENTS.
8. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. DEWATERING OPERATIONS SHALL NOT DISCHARGE DIRECTLY INTO WETLAND AREAS. SETTLING BASINS AND SILT FENCING/SILT BAGS SHALL BE UTILIZED TO PREVENT DISCHARGE OF SILTS INTO THESE AREAS.
9. INVERTS SHOWN ON THE PLAN ARE PIPE INVERTS.
10. TEMPORARY SOIL EROSION AND SEDIMENT CONTROLS (SILT FENCES) SHALL BE PLACED AT ALL INLETS AND PIPES UNTIL SOIL STABILIZATION IS COMPLETE.
11. ANY SUBSTITUTION FOR MATERIALS OR PROCEDURES MUST HAVE PRIOR WRITTEN APPROVAL OF PROJECT ENGINEER OR OWNER.
12. EACH PARCEL SHALL HAVE ITS YARD, LANDSCAPING, DRIVEWAY, ETC. REESTABLISHED UPON THE COMPLETION OF INFRASTRUCTURE FOR THAT PARTICULAR PARCEL.

WATER AND SEWER PLAN NOTES:

1. SEE GENERAL NOTES.
2. GENERAL CONTRACTOR SHALL OVERSEE INSTALLATION OF UTILITIES AND COORDINATE WITH ALL DISCIPLINES TO AVOID CONFLICTS.
3. IN THE EVENT OF A CONFLICT WITH WATER, SEWER, DRAINAGE OR OTHER UTILITY LINES, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER PRIOR TO MAKING FIELD ADJUSTMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CONNECTION OF NEW UTILITIES TO EXISTING WATER AND SEWER SYSTEMS.
5. CONTRACTOR SHALL NOTIFY ENGINEER TEN DAYS IN ADVANCE OF BEGINNING ANY UTILITY CONSTRUCTION TO ALLOW FOR PROPER S.C.D.H.E.C. NOTIFICATION.
6. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. DEWATERING OPERATIONS SHALL NOT DISCHARGE DIRECTLY INTO MARSH OR WETLAND AREAS. SETTLING BASINS) AND SILT FENCING/SILT BAGS SHALL BE UTILIZED TO PREVENT DISCHARGE OF SILTS INTO THESE AREAS.
7. CONTRACTOR SHALL VERIFY EXISTING DEPTH, MATERIALS AND LOCATION OF EXISTING WATER MAINS BEING TIED INTO, PRIOR TO CONSTRUCTION.
8. CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF BEAUFORT-JASPER WATER AND SEWER AUTHORITY.
9. ALL WATER LINES SHALL HAVE 36" MINIMUM COVER FROM FINISHED GRADE.
10. CONTRACTOR SHALL USE A SECTION OF DUCTILE IRON PIPE SURROUNDED BY STONE AT ANY CROSSING OF POTABLE WATER LINE AND STORM DRAINAGE PIPE OR BOTTOM OF DRAINAGE STRUCTURE, OR SANITARY SEWER LINE WITH LESS THAN 18" VERTICAL (OUTSIDE TO OUTSIDE) OR 10' HORIZONTAL SEPARATION (OUTSIDE TO OUTSIDE). ALONG WITH D.I.P. PIPE, TWO D.I.P. - PVC ADAPTERS OR APPROVED EQUAL WILL BE CONSTRUCTED AT BOTH ENDS OF D.I.P.
11. CONTRACTOR SHALL USE BENDS AS SHOWN ON THE PLANS, AT A MINIMUM, MANUFACTURER'S ALLOWABLE DEFLECTION AND MINOR BENDS AS NEEDED TO LAY WATER MAIN AS SHOWN. ALL BENDS SHALL BE D.I.P. COSTS FOR ALL BENDS SHALL BE INCLUDED IN THE BID PRICE.
12. CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS, MATERIALS AND LOCATION OF EXISTING SANITARY SEWER LINES AND MANHOLES BEING TIED INTO, PRIOR TO CONSTRUCTION.
13. CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF BEAUFORT-JASPER WATER AND SEWER AUTHORITY.
14. SANITARY SEWER LINES NOT HAVING 36" OF COVER SHALL BE ENCASED IN DUCTILE IRON PIPE. CONTRACTOR SHALL EVALUATE DITCH CROSSINGS AND STORM DRAIN CROSSINGS. IF A MINIMUM OF 36" OF COVER AND A MINIMUM VERTICAL SEPARATION OF 18" (OUTSIDE TO OUTSIDE) OR 10' HORIZONTAL SEPARATION (OUTSIDE TO OUTSIDE) CAN NOT BE MAINTAINED, THE CARRIER PIPE SHALL BE ENCASED IN DIP AND SURROUNDED BY STONE.
15. CONTRACTOR SHALL ENCASE THE CARRIER PIPE IN DUCTILE IRON PIPE AT ANY CROSSING OF SANITARY SEWER LINE AND STORM DRAINAGE PIPE OR BOTTOM OF DRAINAGE STRUCTURE, OR POTABLE WATER LINE WITH LESS THAN 18" VERTICAL (OUTSIDE TO OUTSIDE) OR 10' HORIZONTAL SEPARATION (OUTSIDE TO OUTSIDE).
16. ALL SEWER LINE TIES INTO MANHOLES WILL HAVE A MINIMUM ANGLE OF 90 DEGREES TO DOWNSTREAM SEWER LINE, UNLESS OTHERWISE SHOWN.
17. PROPOSED SANITARY SEWER MANHOLE TOP ELEVATIONS ARE APPROXIMATE AND SHALL BE ADJUSTED IN THE FIELD TO BE SET 0.2 FEET ABOVE FINISHED GRADE IN GRASSED AREAS AND FLUSH IN PAVED AREAS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH INSPECTION AND TESTING OF WATER AND SEWER LINES AND APPURTENANCES.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND COSTS ASSOCIATED WITH TEMPORARY WATER SERVICE IF REQUIRED. TEMPORARY CONNECTIONS OR HYDRANT CONNECTIONS SHALL BE UTILIZED IN STRICT ADHERENCE TO THE CURRENT UTILITY GUIDELINES. FAILURE TO FOLLOW SAID GUIDELINES COULD RESULT IN FINES BY THE UTILITY FOR WHICH CONTRACTOR IS FULLY RESPONSIBLE.
20. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS CONSTRUCTED RECORD DRAWINGS WHICH MEET ALL APPLICABLE UTILITY REQUIREMENTS. THE ENGINEER SHALL BE PROVIDED A COPY OF ALL RECORD DRAWING INFORMATION.
21. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH INVERT ELEVATIONS OF THE STEEL CASING FOR THE JACK AND BORES (VERIFIED BY A S.C. LICENSED SURVEYOR) BEFORE INSTALLING CARRIER PIPE. THE CONTRACTOR SHALL NOT INSTALL CARRIER PIPE IN THE JACK AND BORES UNTIL AUTHORIZED TO DO SO, IN WRITING, BY THE ENGINEER. IF THE CASING IS NOT INSTALLED AT THE SLOPE SPECIFIED (AT A MINIMUM) THE CONTRACTOR SHALL INCUR ALL COSTS ASSOCIATED WITH CORRECTLY INSTALLING THE CASING.
22. CONTRACTOR SHALL PROVIDE LOCATIONS OF ALL CLEANOUTS, STUBS, VALVES, BENDS, ETC. WITH A MEASURED DISTANCE BETWEEN TWO KNOWN, PERMANENT FEATURES (LIGHT POLES, SEWER MANHOLES, PROPERTY MONUMENTS, ETC.)
23. CONTRACTOR SHALL LABEL ALL WATER & SEWER MAINS WITH LENGTH (BETWEEN FITTINGS), SIZE, MATERIAL, & SLOPE (IF APPLICABLE) AND SUPPLY INFORMATION TO THE ENGINEER. SAID INFORMATION WILL BE PROVIDED TO BJWSA IN THE RECORD DRAWINGS.
24. ALL RECORD DRAWING INFORMATION SHALL MEET REQUIREMENTS SET FORTH BY BJWSA & OTHER REGULATING AGENCIES. RECORD DRAWINGS SHALL INCLUDE MOST RECENT 911 ADDRESS FOR ALL PARCELS ON PLANS.

SEDIMENTATION AND EROSION CONTROL NOTES:

PROJECT NARRATIVE:

PROJECT CONSISTS OF CONSTRUCTION OF SEWER MAIN EXTENSIONS AND SERVICE CONNECTIONS AS WELL AS WATER MAIN EXTENSIONS AND SERVICE CONNECTIONS. THE SITE WILL BE RESTORED TO ITS PRE CONSTRUCTION STATE WITH THE EXCEPTION OF THE IMPROVED DRIVES.

1. SEE GENERAL NOTES.
2. IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHALL 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.
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, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN TWENTY-ONE (21) DAYS.
4. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY FOURTEEN (14) DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER. IF SITE INSPECTIONS IDENTIFY BMPS THAT ARE DAMAGED OR ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED AS SOON AS PRACTICAL OR AS REASONABLY POSSIBLE AND BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE.
5. 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 SHALL BE FILTERED, BY DEVICES SUCH AS SILT BAGS OR OTHER APPROVED METHODS, TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
6. 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.
7. 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, INCLUDING SILT FENCE AND TREE PROTECTION FENCE, SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
8. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY (OR MORE OFTEN IF NECESSARY) REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
9. 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.
10. TEMPORARY DIVERSION BERMS AND/OR DITCHES SHALL 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.
11. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND-DISTURBING ACTIVITIES, EXCEPT THOSE OPERATIONS REQUIRED TO INSTALL SUCH MEASURES. THE CONTRACTOR SHALL OBTAIN TOWN OF BLUFFTON EROSION CONTROL ACCEPTANCE BY THE GROWTH MANAGEMENT DEPARTMENT'S OFFICE OF CONSTRUCTION AND COMPLIANCE.
12. WHEN ACCESSING SITE, PROVIDE A 50' LONG BY 20' WIDE (MIN) TEMPORARY CONSTRUCTION EXIT STABILIZED WITH GEOTEXTILE FABRIC AND 6" THICK GRAVEL SURFACE COURSE. CONSTRUCTION EXIT SHALL BE RELOCATED AS PROJECT PROGRESSES.
13. TEMPORARY SEDIMENT TRAPS SHALL BE ACCEPTED WITH THE UNDERSTANDING THAT MASONRY INLETS SHALL BE LEFT LOW ENOUGH, DURING CONSTRUCTION, FOR WATER TO ENTER.
14. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES MAY RESULT IN CONSTRUCTION BEING HALTED.
15. SEE SEEDING SCHEDULE FOR TEMPORARY STABILIZATION.
16. SEE DETAIL SHEETS FOR EROSION CONTROL DETAILS.
17. MAINTENANCE RESPONSIBILITY OF ALL STORM DRAINAGE PIPING AND STRUCTURES SHALL REMAIN WITH THE GENERAL CONTRACTOR DURING CONSTRUCTION.
18. 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 THE STORM WATER DISCHARGES.
19. NO TEMPORARY FUEL TANKS, PERMITTED OR NOT, WILL BE ALLOWED TO BE ON SITE UNLESS IT IS IN THE PROCESS OF FUELING EQUIPMENT. FUEL TRUCKS/TRAILERS ARE ONLY ALLOWED ON SITE WHILE IN THE ACT OF FUELING EQUIPMENT.
20. 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.

SEEDING SCHEDULE Ds2 Ds3

WINTER/SPRING

SEEDING MIXTURE:

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	30
COMMON BERMUDA (HULLED)	10

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES:
MOUNTAINS – ABOVE 2500 FT: FEB. 15 – MAY 15
BELOW 2500 FT: FEB. 1 – MAY 1
PIEDMONT – JAN.1 – MAY 1
COASTAL PLAIN – DEC.1 – APR.15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SUMMER

SEEDING MIXTURE:

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40
COMMON BERMUDA (HULLED)	20

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

SEEDING DATES:
MOUNTAINS – MAY 15 – AUG. 15
PIEDMONT – MAY 1 – AUG. 15
COASTAL PLAIN – APR. 15 – AUG. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FALL

SEEDING MIXTURE:

SPECIES	RATE (LB/ACRE)
RYE	120
COMMON BERMUDA (HULLED)	10

SEEDING DATES:
MOUNTAINS – AUG. 15 – DEC. 15
COASTAL PLAIN & PIEDMONT – AUG. 15 – DEC. 30 AND – APR. 15 – AUG. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REPAIR AND RE-FERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

FLOOD ZONE NOTE:
IN MY OPINION, IN ACCORDANCE WITH FIRM MAP NO.450025-0085-D, REVISED SEPTEMBER 29,1986, THIS PROPERTY DOES NOT FALL WITHIN THE LIMITS OF THE 100-YR. (ZONE "C")

SEQUENCE OF CONSTRUCTION:

1. INSTALL EROSION CONTROL DEVICES AS SHOWN ON PLANS.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCES AS REQUIRED.
3. CLEAR AND GRUB AS REQUIRED.
4. INSTALL GRAVITY SEWER LINES AND STRUCTURES.
5. MODIFY WATER LINES AND STRUCTURES.
6. FINE GRADING, LANDSCAPING AND GRASSING.
7. REMOVE EROSION CONTROL DEVICES & TREE BARRICADES AFTER SOIL STABILIZATION

LEGEND:

	EXISTING	PROPOSED
ASPHALT PAVING		
CONCRETE PAVING		
EARTH DRIVE		
STORM DRAINAGE PIPE		
SANITARY SEWER PIPE	SAN	
SANITARY SEWER MANHOLE		
WATER MAIN	10"W	6"W
WATER VALVE		
FIRE HYDRANT		
WATER METER		
WATER LATERAL		
WATER LATERAL (DOUBLE)		
SEWER LATERAL (SINGLE)		
SEWER LATERAL (DOUBLE)		
GAS MAIN	GAS	
GAS VALVE		
U/G TELECOMUNICATIONS	UGT	
TELECOMMUNICATIONS BOX		
OVERHEAD POWER	OHP	
POWER POLE		
CONTOURS	28	
SPOT ELEVATION	19.01	
DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING		Ds2
DISTURBED AREA STABILIZATION WITH PERMANENT SEEDING		Ds3
TEMPORARY SEDIMENT BARRIER SILT FENCE, TYPE "A"		Sd1-A
DITCH CHECK – CHECK DAM		Cd 9"
WETLANDS		
SOIL TYPE		Sw / Sk

PALMETTO UTILITY LOCATION SERVICE
1-800-922-0983
A ONE CALL SYSTEM

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 28714 CHRISTOPHER J. CHANCE JR. 9-30-14

SOUTH CAROLINA HUSSEY, GAY, BELL & DeYOUNG INC. No. C00638 CERTIFICATE OF AUTHORIZATION

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REVISIONS:

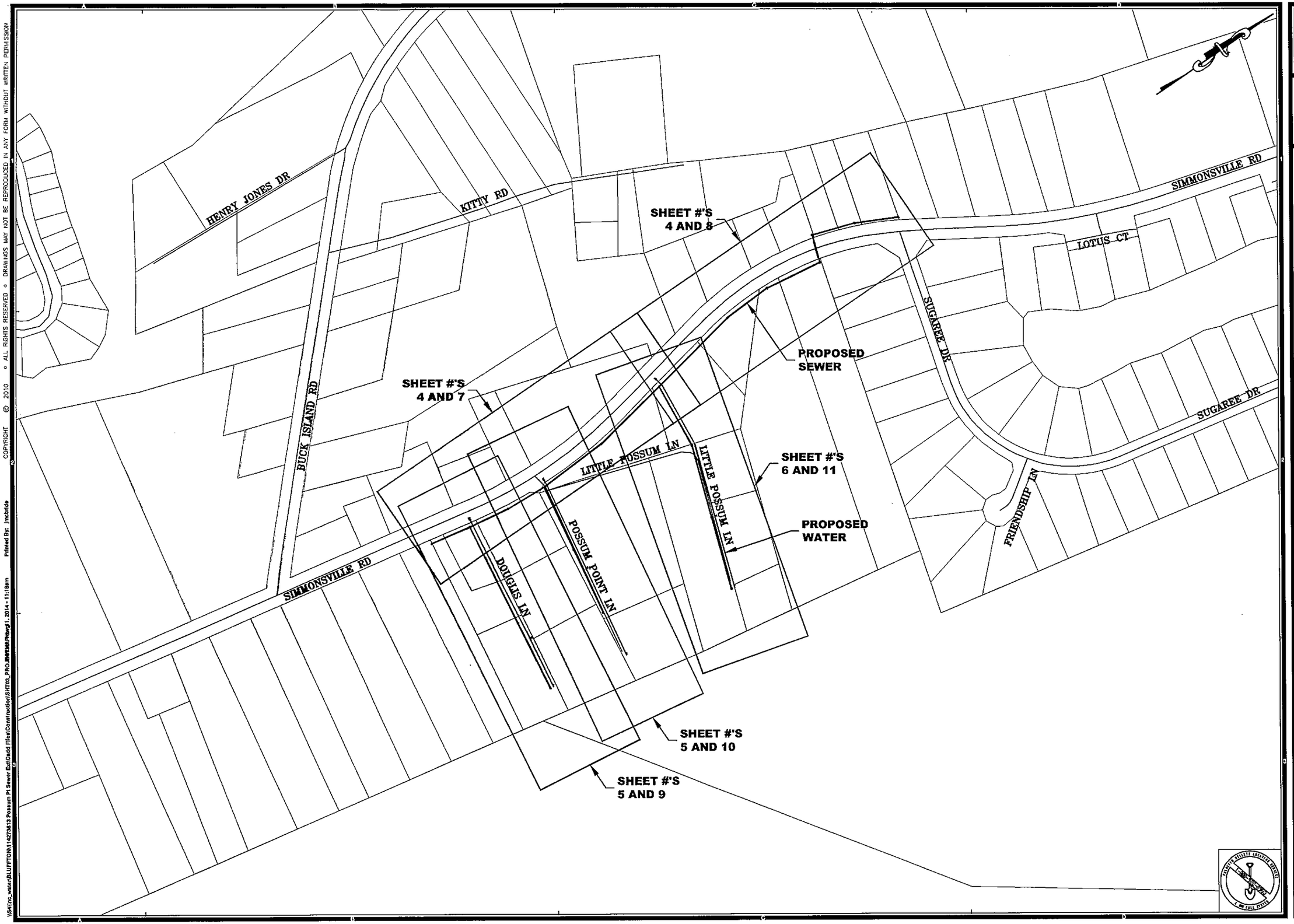
DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014
JOB NO.114273813
SCALE: NONE

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

CONSTRUCTION NOTES & LEGEND

DRAWING NUMBER
2
OF 14



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REVISIONS:

DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014
JOB NO. 114273813
SCALE: 1"=60'/20'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

PROJECT MAP

DRAWING NUMBER
3
OF 14

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R610 039 000 0014A 0000
30 HAUL AWAY LLC
262 SIMMONSVILLE ROAD
260 SIMMONSVILLE ROAD

R610 039 000 014D 0000
JEROME KITTY
256 SIMMONSVILLE ROAD

R610 039 000 0190 000
CHARLES HAMILTON
252 SIMMONSVILLE ROAD

R610 039 000 0192 000
JAMES KENNETH
250 SIMMONSVILLE ROAD

R610 039 000 001D 000
JESSE KITTY
18 KITTY ROAD

BENCHMARK
RR SPIKE IN 19 PINE
ELEV.=30.32 NGVD 29

SIMMONSVILLE ROAD

DOUGLAS LN.

POSSUM POINT LN.

R610 038 000 0217 0000
GADWINS HORIZON GROUND
2 DOUGLAS LN

R610 039 000 0146 000
CARRIE B. FRAZIER
253 SIMMONSVILLE ROAD
251 SIMMONSVILLE ROAD

MATCHLINE - SEE SHEET 5

MATCHLINE - SEE SHEET 5

MATCHLINE - SEE SHEET 6

MATCHLINE - SEE LOWER LEFT

R610 039 000 0171 0000
CYNTHIA CLARA MITCHELL
218 SIMMONSVILLE RD
216 SIMMONSVILLE RD

R610 039 000 008A 0000
ENRIQUE FERRER
230 SIMMONSVILLE ROAD

R610 039 000 0176 0000
MARVIN LAMBERT
228 SIMMONSVILLE ROAD

R610 039 000 0135 0000
VIOLA DUPONT
226 SIMMONSVILLE ROAD
224 SIMMONSVILLE ROAD

R610 039 000 0315 0000
JOSE ESQUIVEL
222 SIMMONSVILLE ROAD

R610 039 000 0146 0000
GERARDO DURAN
220 SIMMONSVILLE ROAD

R610 039 000 009D 000
ISABEL A. ASTACIO
238 SIMMONSVILLE ROAD
240 SIMMONSVILLE ROAD

R610 039 000 001D 000
JESSE KITTY
18 KITTY ROAD

BENCHMARK
RR SPIKE SET IN P.P.
ELEV.=29.73 NGVD 29

MATCHLINE - SEE UPPER RIGHT

R610 039 000 0184 000
FELIX GUERRERO
235 SIMMONSVILLE ROAD

R610 039 000 0175 0000
C.W. ENTERPRISE
231 SIMMONSVILLE ROAD

R610 039 000 017F 0000
FIREMONT HOME LOAN TRUST 2006-2
229 SIMMONSVILLE ROAD

R610 039 000 014B 000
VERNA MAE SENKINS
247 SIMMONSVILLE ROAD
249 SIMMONSVILLE ROAD

BENCHMARK
RR SPIKE SET IN P.P.
ELEV.=28.43 NGVD 29

SUGAREE DRIVE

GRAPHIC SCALE
1" = 30'

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 28714
CHRISTOPHER J. CHANCE, P.E.

SOUTH CAROLINA
HUSSEY, GAY, BELL & DEYOUNG INC.
CERTIFICATE OF AUTHORIZATION
No. C000630

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CJC	JJM	

DATE: JULY, 2014

JOB NO.114273813

SCALE: 1"=30'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

EROSION AND SEDIMENT CONTROL PLAN

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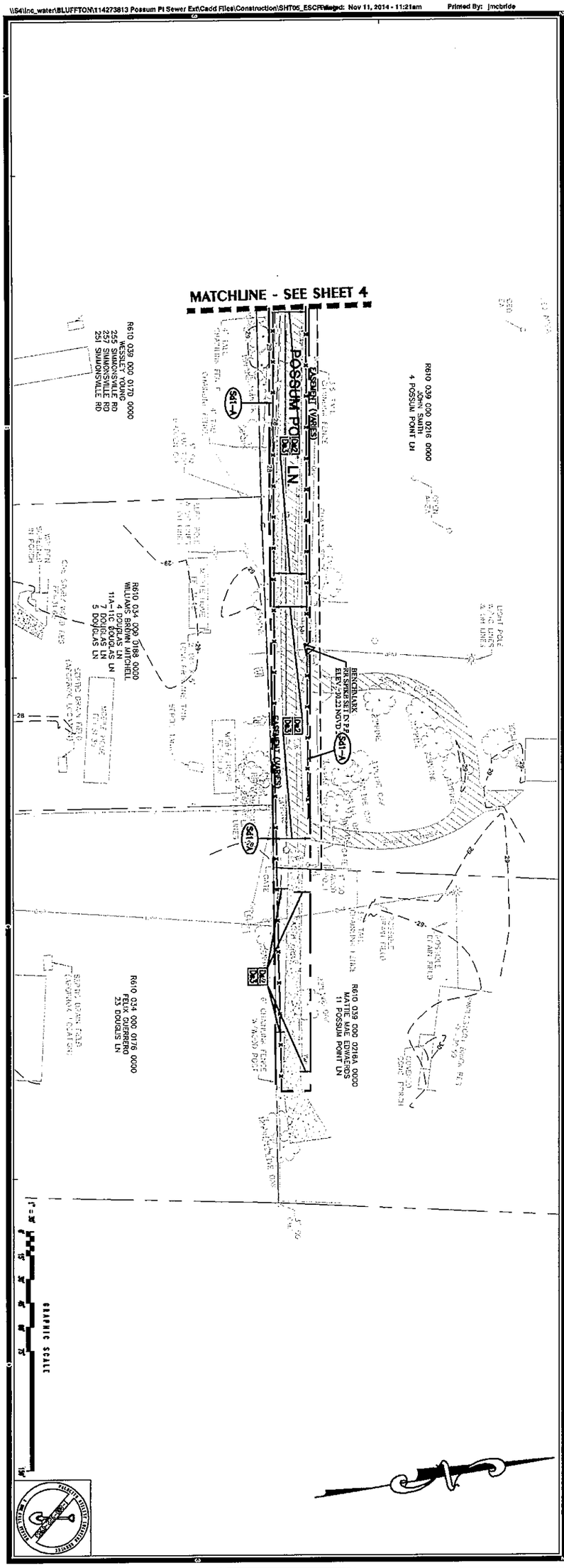

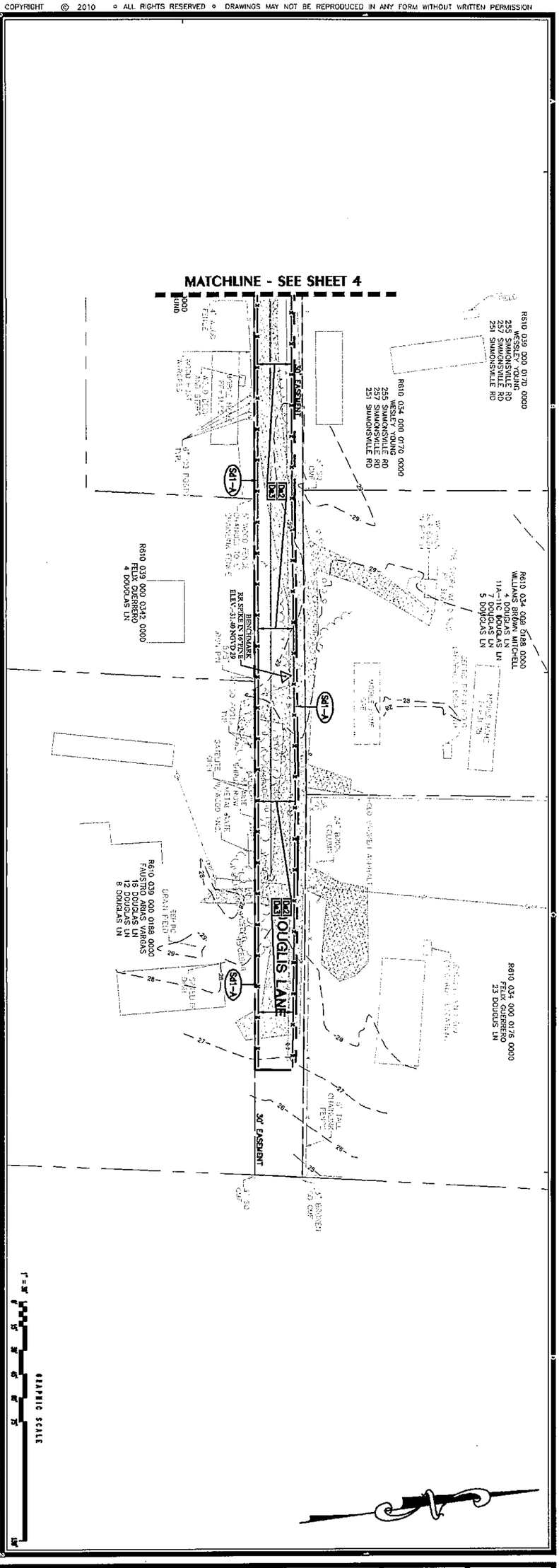

DRAWING NUMBER 5 OF 14

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

EROSION AND SEDIMENT CONTROL PLAN

DATE: JULY, 2014
JOB NO.: 114273813
SCALE: 1"=30'

REVISIONS:

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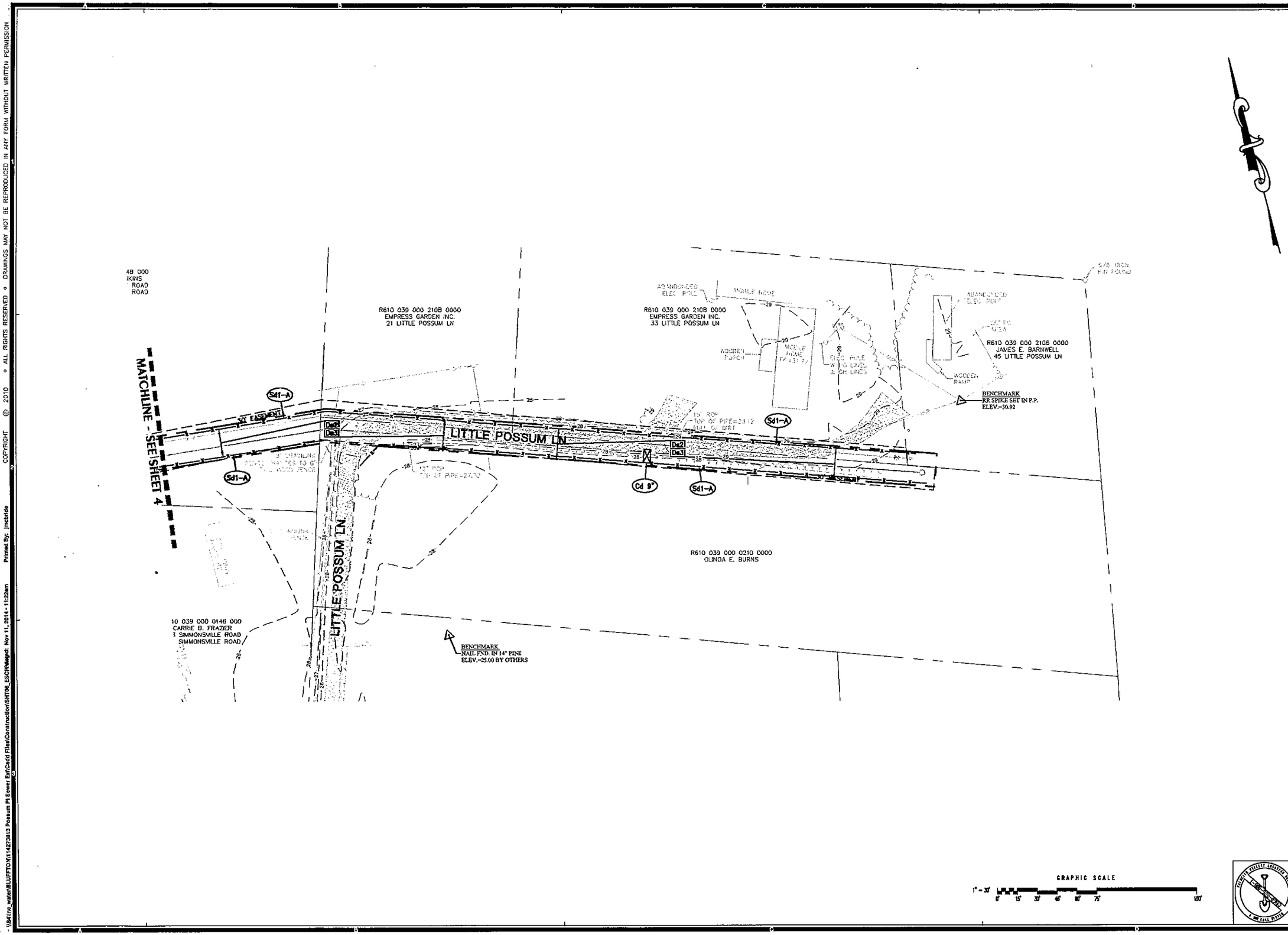
FAX (912) 354-6764



SOUTH CAROLINA
No. 28714
PROFESSIONAL
9-30-14
ENGINEER
CHRISTOPHER J. CHANCE JR.

SOUTH CAROLINA
HUSSEY, GAY, BELL & DEYOUNG INC.
No. C00638
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CJC	JJM	

DATE: JULY, 2014
JOB NO.114273813
SCALE: 1"=30'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

EROSION AND SEDIMENT CONTROL PLAN

DRAWING NUMBER
6
OF 14

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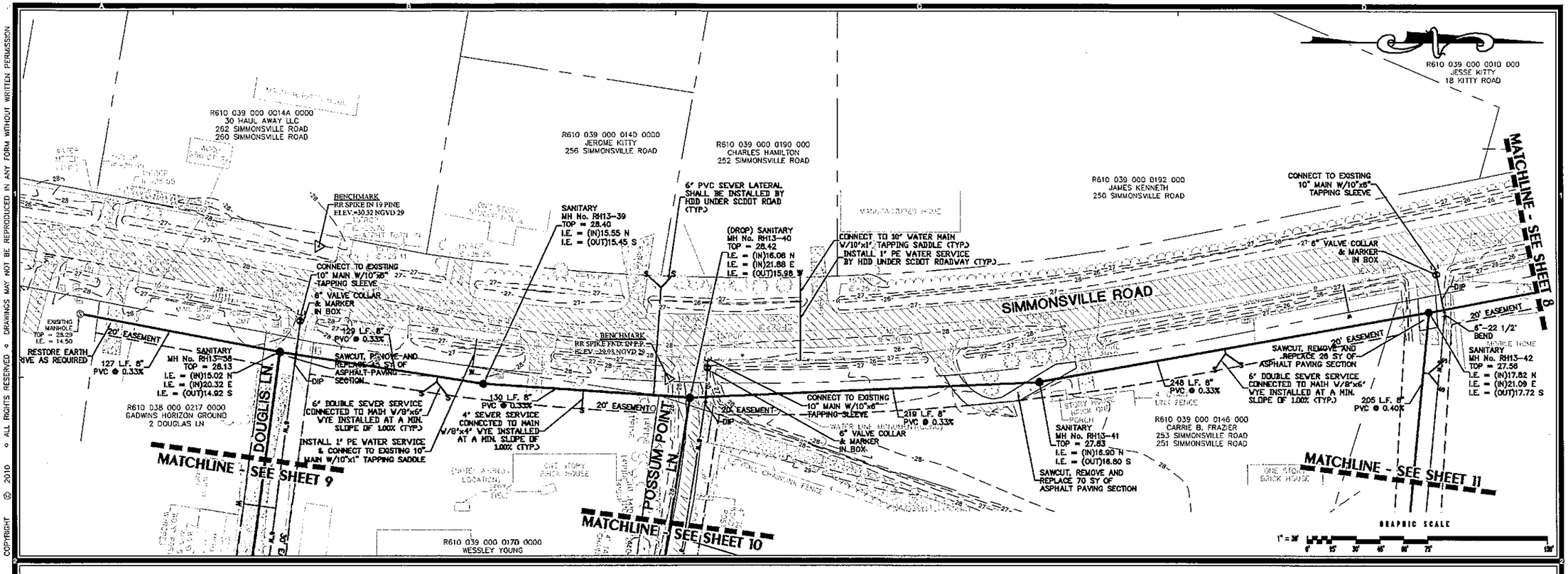

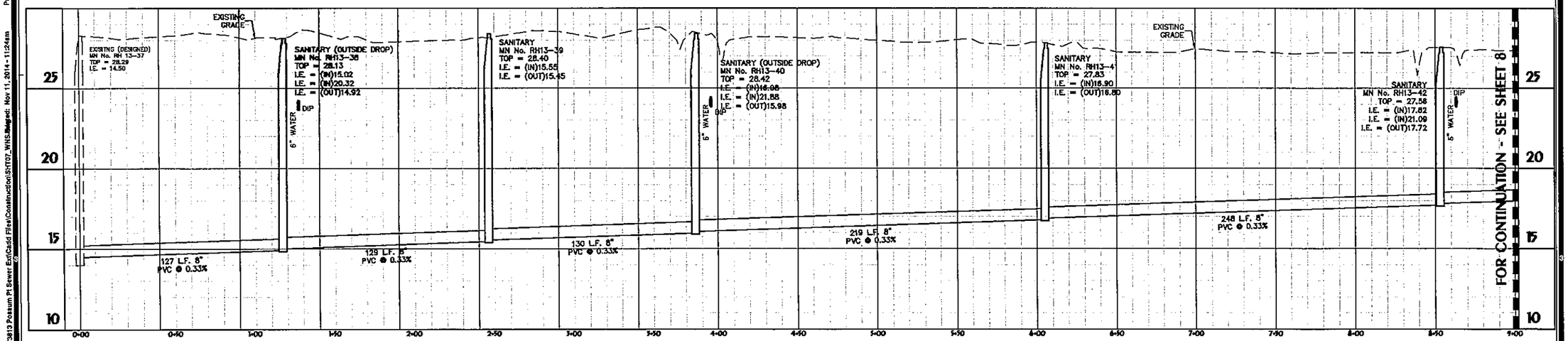

SEWER PROFILE
MANHOLES 4 & 8

SCALE: HOR. 1" = 30'
VER. 1" = 7'

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 28714
PROFESSIONAL
11-30-15
CHRISTOPHER J. CHANCELLOR
ENGINEER

SOUTH CAROLINA
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No. C00630
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REVISIONS	DRAWN	CHECKED
	CJC	JJM
DATE: JULY, 2014		
JOB NO.114273813		
SCALE: 1"=30'		

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES

DRAWING NUMBER
7
OF 14

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6" PVC SEWER LATERAL SHALL BE INSTALLED BY HDD UNDER SCDOT ROAD (TYP.)

6" PVC SEWER LATERAL SHALL BE INSTALLED BY HDD UNDER SCDOT ROAD (TYP.)

R610 039 000 001D 000
JESSE KITTY
15 KITTY ROAD

R610 039 000 009D 000
ISABEL A. ASTACIO
238 SIMMONSVILLE ROAD
240 SIMMONSVILLE ROAD

R610 039 000 0171 0000
CYNTHIA CLARA MITCHELL
218 SIMMONSVILLE RD
216 SIMMONSVILLE RD

R610 039 000 008A 0000
ENRIQUE FERRER
230 SIMMONSVILLE ROAD

R610 039 000 0176 0000
MARVIN LAMBERT
228 SIMMONSVILLE ROAD

R610 039 000 0135 0000
VIOLA DUPONT
226 SIMMONSVILLE ROAD
224 SIMMONSVILLE ROAD

R610 039 000 0316 0000
JOSE ESQUIVEL
222 SIMMONSVILLE ROAD

R610 039 000 0146 0000
GERARDO DURAN
220 SIMMONSVILLE ROAD

6" DOUBLE SEWER SERVICE CONNECTED TO MAIN W/8"x6" WYE INSTALLED AT A MIN. SLOPE OF 1.00% (TYP.)

BENCHMARK
RR SPIKE SET IN P.P.
ELEV.=29.73 NGVD 29

6" DOUBLE SEWER SERVICE CONNECTED TO MH INSTALLED AT A MIN. SLOPE OF 1.00% (TYP.)

SANITARY
MH No. RH13-46
TOP = 27.40
I.E. = (IN)21.15 N
I.E. = (OUT)21.05 E
10'x10'
RECEIVING PIT

SANITARY
MH No. RH13-47
TOP = 27.10
I.E. = (IN)21.70 NE
I.E. = (OUT)21.60 S

RESTORE EARTH DRIVE AS REQUIRED

20' EASEMENT

155 L.F. 8" PVC @ 0.33%

86 L.F. 8" PVC @ 1.00%

JACK AND BORE 60 L.F. 8' PVC IN 16" STEEL CASING (0.3125" WALL THICKNESS)

RESTORE EARTH DRIVE AS REQUIRED

SIMMONSVILLE ROAD

MATCHLINE SEE SHEET 7

150 L.F. 8" PVC @ 0.33%

SANITARY
MH No. RH13-43
TOP = 27.80
I.E. = (IN)18.90 N
I.E. = (OUT)18.80 S

295 L.F. 8" PVC @ 0.33%

20' EASEMENT

6"-22 1/2° BEND

SANITARY
MH No. RH13-42
TOP = 27.56
I.E. = (IN)17.82 N
I.E. = (IN)21.09 E
I.E. = (OUT)17.72 S

F. 8" @ 1.40%

SANITARY
MH No. RH13-44
TOP = 27.40
I.E. = (IN)19.50 N
I.E. = (OUT)19.40 S

RESTORE EARTH DRIVE AS REQUIRED

180 L.F. 8" PVC @ 0.33%

6" DOUBLE SEWER SERVICE CONNECTED TO MAIN W/8"x6" WYE INSTALLED AT A MIN. SLOPE OF 1.00% (TYP.)

12'x32' BORE PIT
SANITARY
MH No. RH13-45
TOP = 27.40
I.E. = (IN)20.19 W
I.E. = (OUT)20.09 S

20'x20' TEMPORARY CONSTRUCTION EASEMENT

135 L.F. 8" PVC @ 0.33%

20' EASEMENT

SANITARY
MH No. RH13-48
TOP = 28.60
I.E. = (OUT)22.15 SW

R610 039 000 0171 0000
CYNTHIA MITCHELL
218 SIMMONSVILLE ROAD
216 SIMMONSVILLE ROAD

R610 039 000 0184 000
FELIX GUERRERO
235 SIMMONSVILLE ROAD

R610 039 000 0175 0000
C.W. ENTERPRISE
231 SIMMONSVILLE ROAD

R610 039 000 017F 0000
FIREMONT HOME LOAN TRUST 2006-2
229 SIMMONSVILLE ROAD

R610 039 000 0148 000
VERNA MAE SENKINS
247 SIMMONSVILLE ROAD
249 SIMMONSVILLE ROAD

SAWCUT, REMOVE AND REPLACE 20 SY OF CONCRETE PAVING

BENCHMARK
RR SPIKE SET IN P.P.
ELEV.=28.49 NGVD 29

INSTALL 1" PE WATER SERVICE & CONNECT W/10"x1" SADDLE (TYP.)

SUGAREE DRIVE

GRAPHIC SCALE
1" = 30'
0' 15' 30' 45' 60' 75' 130'

FOR CONTINUATION - SEE SHEET 7

EXISTING GRADE

SANITARY
MH No. RH13-43
TOP = 27.80
I.E. = (IN)18.90
I.E. = (OUT)18.80

SANITARY
MH No. RH13-44
TOP = 27.40
I.E. = (IN)19.50
I.E. = (OUT)19.40

SANITARY
MH No. RH13-45
TOP = 27.40
I.E. = (IN)20.19
I.E. = (OUT)20.09

SANITARY
MH No. RH13-46
TOP = 27.40
I.E. = (IN)21.15
I.E. = (OUT)21.05

SANITARY
MH No. RH13-47
TOP = 27.10
I.E. = (IN)21.70
I.E. = (OUT)21.60

SANITARY
MH No. RH13-48
TOP = 28.60
I.E. = (OUT)22.15

295 L.F. 8" PVC @ 0.33%

150 L.F. 8" PVC @ 0.33%

180 L.F. 8" PVC @ 0.33%

86 L.F. 8" PVC @ 1.00%

JACK AND BORE 60 L.F. 8' PVC IN 16" STEEL CASING (0.3125" WALL THICKNESS)

135 L.F. 8" PVC @ 0.33%

135 L.F. 8" PVC @ 0.33%

25
20
15
10

9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50 16+00 16+50 17+00 17+50 18+00 18+40

SEWER PROFILE
MANHOLES 1 & 8

SCALE: HOR. 1" = 30'
VER. 1" = 5'

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 28714 CHRISTOPHER J. CHANCE

SOUTH CAROLINA HUSSEY, GAY, BELL & DEYOUNG, INC. CERTIFICATE OF AUTHORIZATION

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559 COMMERCIAL DRIVE 31406
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FAX (912) 354-0214
www.hgbd.com

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REVISIONS:

DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014

JOB NO.114273813

SCALE: 1"=30'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES

DRAWING NUMBER
8
OF 14

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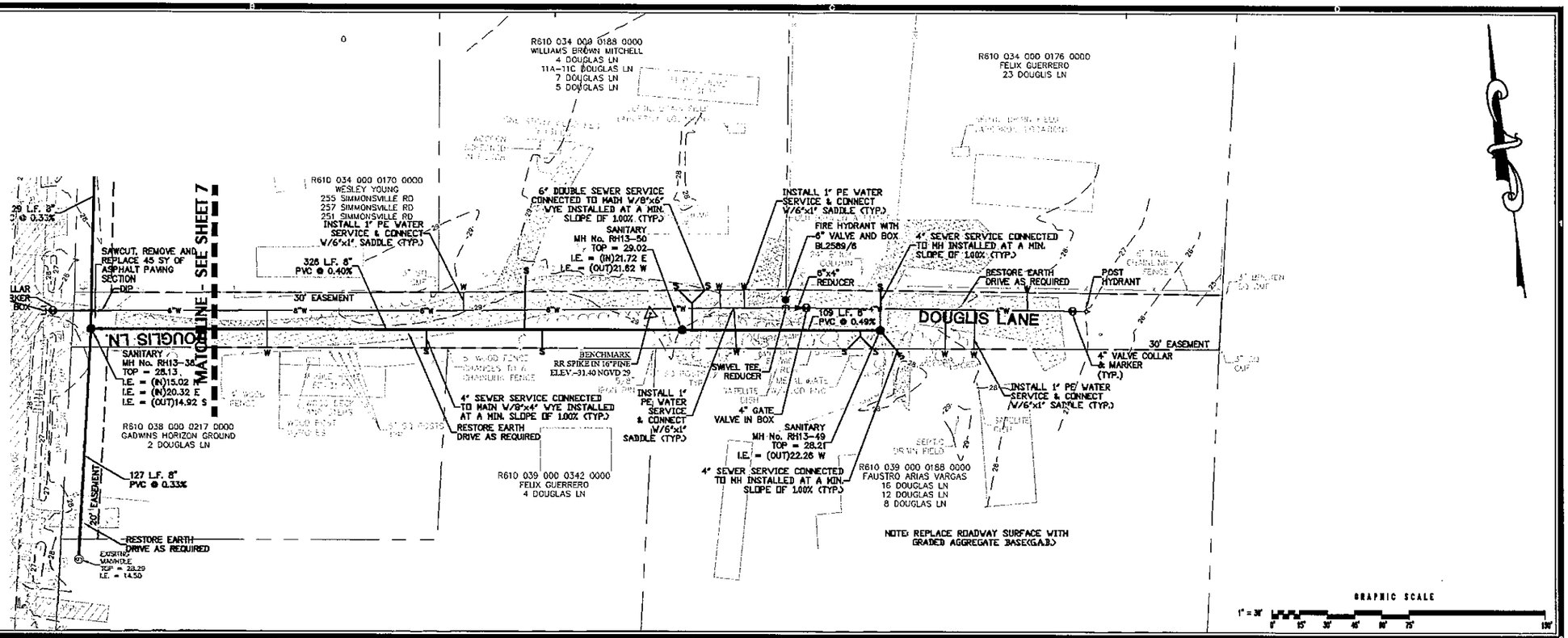

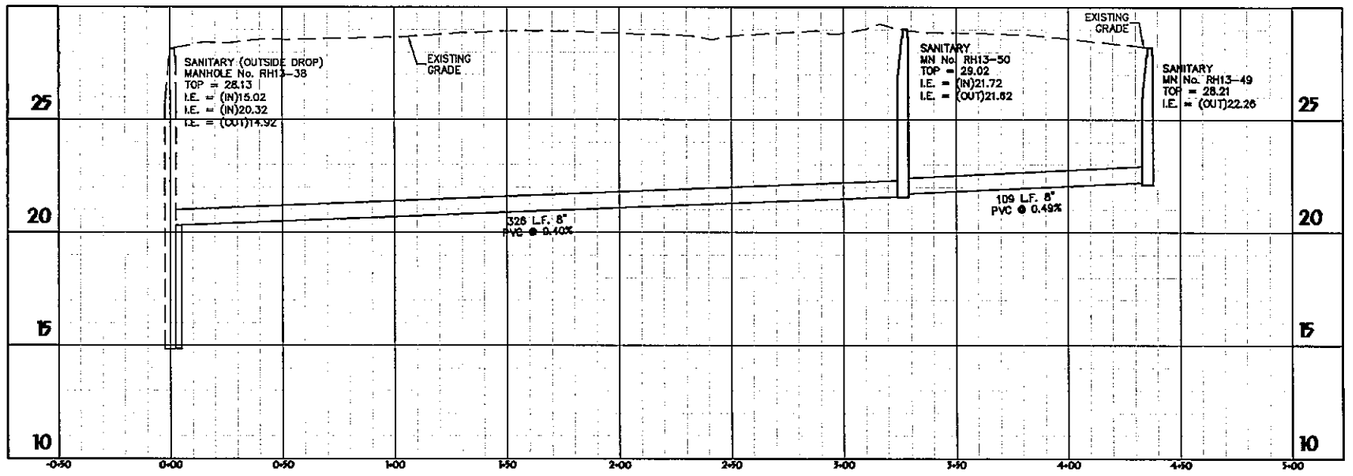

SEWER PROFILE
MANHOLES 4, 15 THRU 16

SCALE: HOR. 1" = 30'
VER. 1" = 5'

SOUTH CAROLINA No. 28714 PROFESSIONAL ENGINEER CHRISTOPHER J. CHANCE
SOUTH CAROLINA HUSSEY, GAY, BELL & DEYOUNG, INC. CERTIFICATE OF AUTHORIZATION
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www.hgbdcivil.com
A Bell Company

REVISIONS

DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014
JOB NO.114273813
SCALE: 1"=30'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES

DRAWING NUMBER
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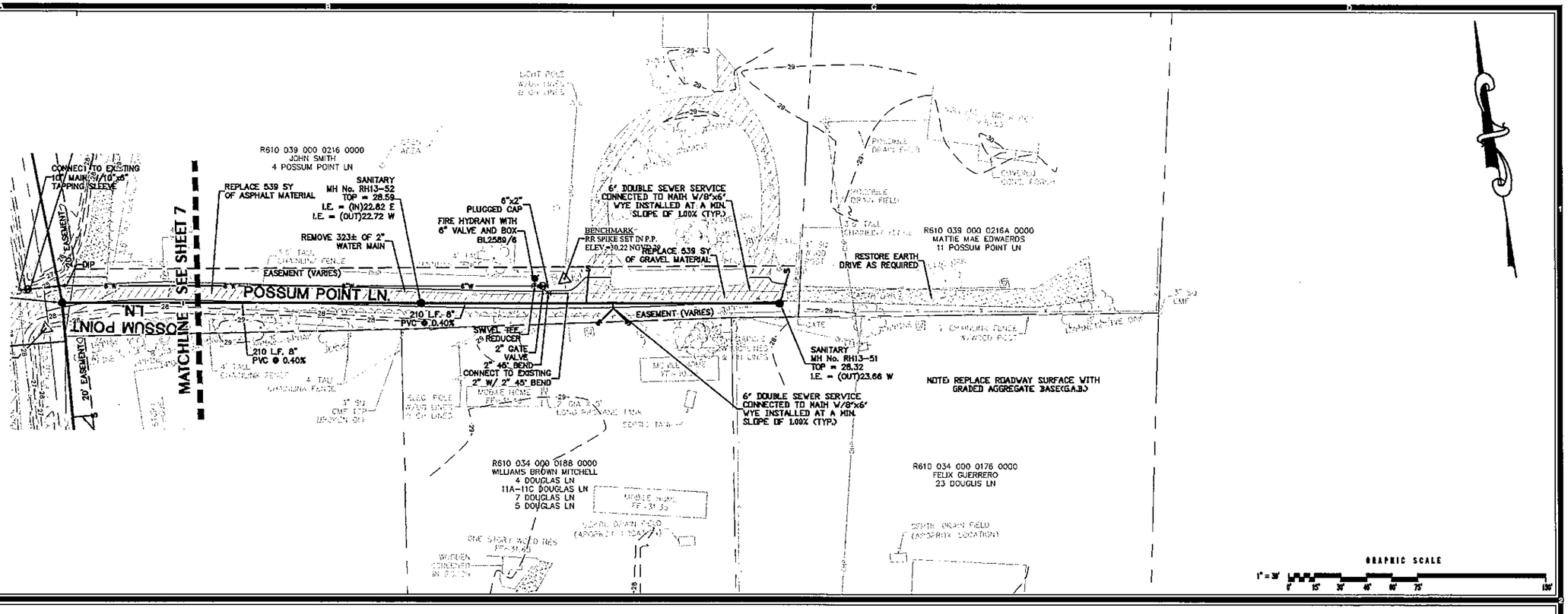

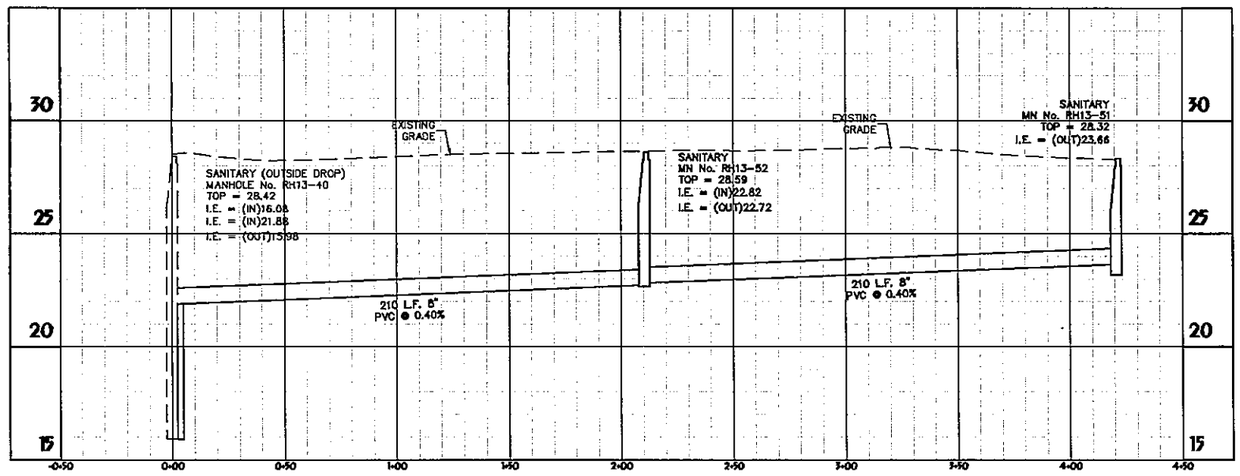

SEWER PROFILE
MANHOLES 6, 17 THRU 22

SCALE: HOR. 1" = 30'
VER. 1" = 7'

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 28714
CHRISTOPHER J. CHANCE, JR.

SOUTH CAROLINA
HUSSEY, GAY, BELL & DeYOUNG, INC.
CERTIFICATE OF AUTHORIZATION
No. C000530

HUSSEY, GAY, BELL & DEYOUNG, INC.
CONSULTING ENGINEERS
POST OFFICE BOX 16447
SAVANNAH, GEORGIA
31416-1447
300 COMMERCIAL DRIVE 31406
TEL (912) 354-4626
FAX (912) 354-0241
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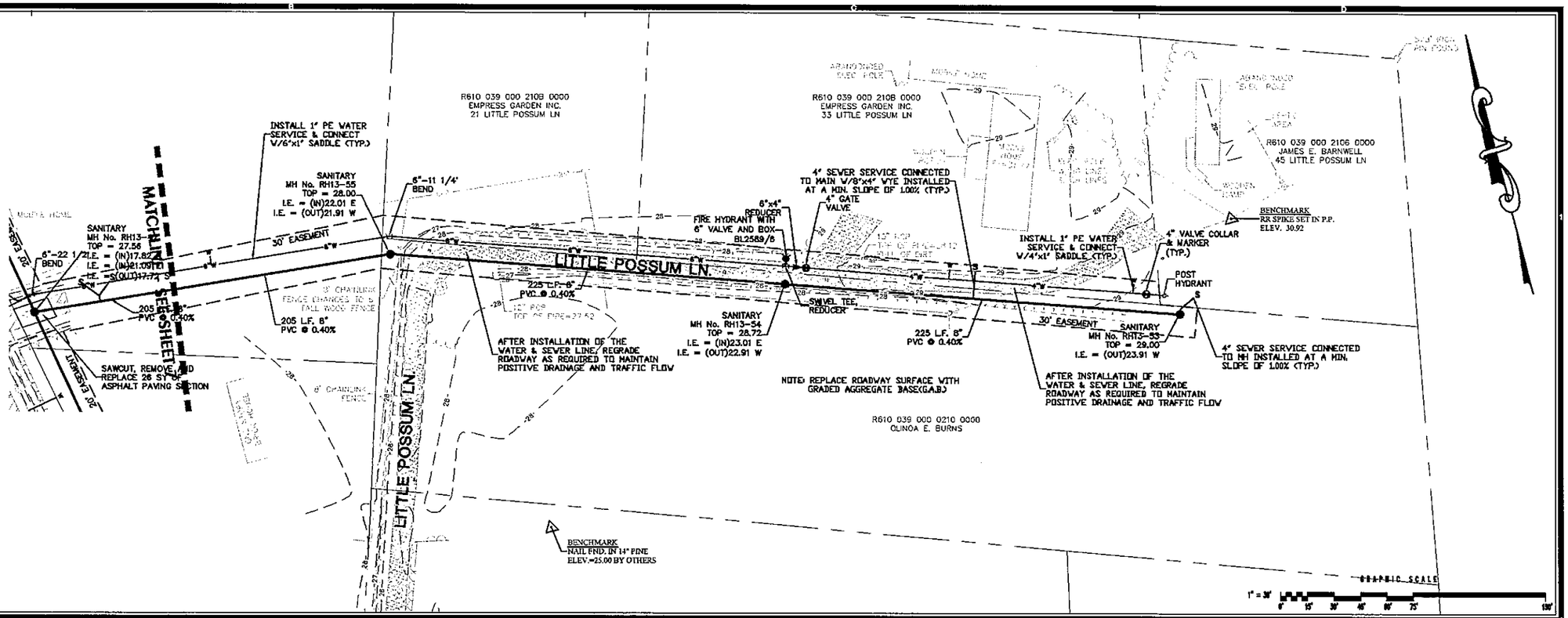
REVISIONS

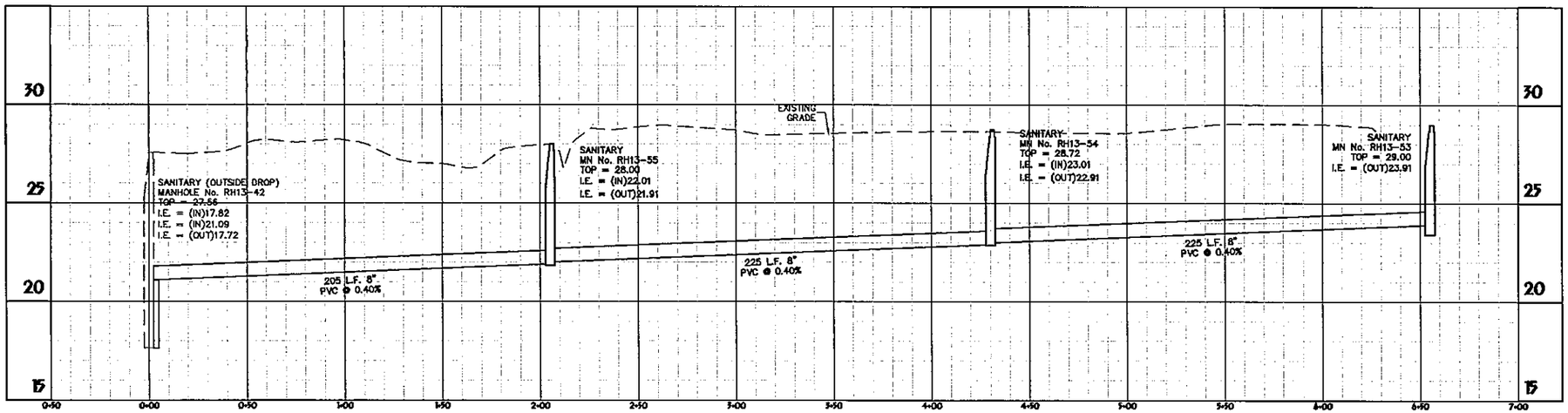
DRAWN CJC	CHECKED JJM	CHECKED
DATE: JULY, 2014		
JOB NO. 114273813		
SCALE: 1"=30'		

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES

DRAWING NUMBER
10
OF 14





SEWER PROFILE
MANHOLES 18 & 21

SCALE: HOR. 1" = 30' VER. 1" = 5'

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REVISIONS:

DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014
JOB NO. 114273813
SCALE: 1"=30'

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

SANITARY SEWER, WATER DISTRIBUTION PLAN AND SANITARY PROFILES

DRAWING NUMBER
11
OF 14

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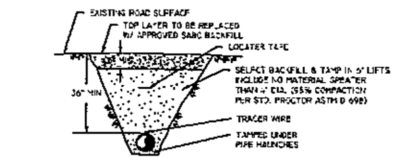
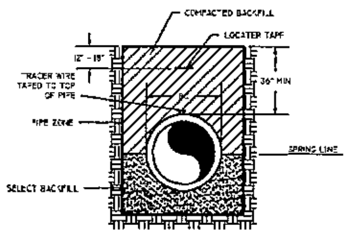
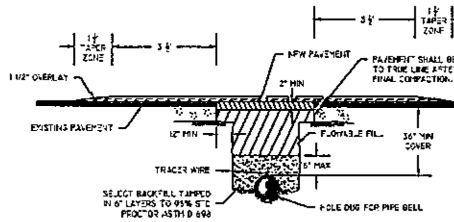


UNPAVED ROADWAY BEDDING DETAIL



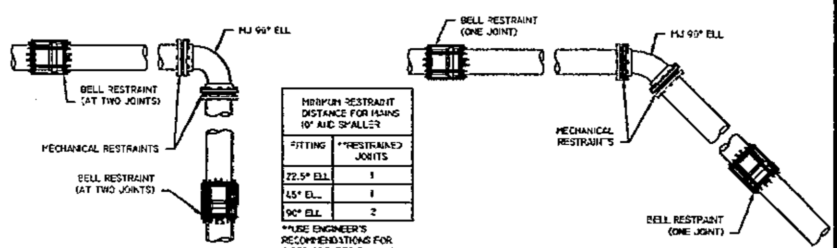
TYPICAL BEDDING DETAIL



PAVED AREA DETAIL

NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MATCH EXISTING PAVEMENT TYPE AND THICKNESS. MINIMUM THICKNESS OVER TRENCH IS 2".
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT

BEAUFORT - JASPER WATER & SEWER AUTHORITY
BEDDING PRESSURE PIPE DETAIL
DATE 07/01/09 | DRAWN BY BMC | DRAWING # G-02
SCALE N.T.S. | APPROVED BY ERS

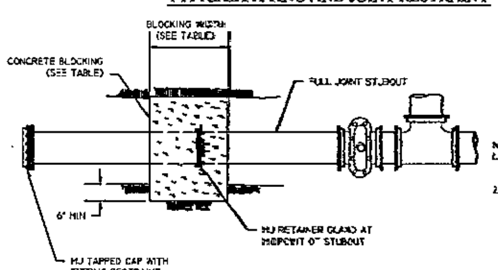


MINIMUM RESTRAINT DISTANCE FOR MAINS 10" AND SMALLER	
FITTING	**RESTRAINED JOINTS
22.5° ELL	1
45° ELL	1
90° ELL	2

**USE ENGINEER'S RECOMMENDATIONS FOR SIZES GREATER THAN 10"

TYPICAL FITTING AND JOINT RESTRAINT

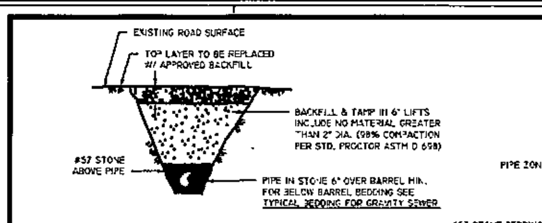
MINIMUM BLOCKING DIMENSIONS		
PIPE SIZE (IN)	BLOCKING BEARING AREA (FT²)	BLOCKING WIDTH (IN)
4	2	24
6	4	24
8	7	36
10	11	36
12	15	36
OVER 12" BY THE DESIGN ENGINEER		



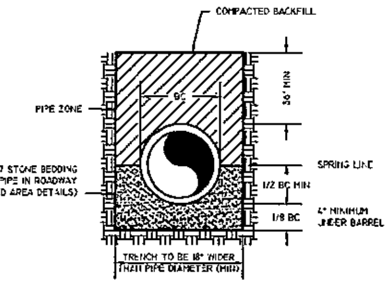
TYPICAL FUTURE STUBOUT

NOTE:
1. THE MINIMUM DIMENSIONS TABLE IS BASED ON AN ASSUMED SOIL BEARING OF 2000 LBS PER SQ. FT. IF BEARING VALUE FOR SOIL IS LESS THAN AREA SHOWN HEREIN SHOULD BE INCREASED ACCORDINGLY.
2. JOINT IS DEFINED TO BE A MINIMUM OF 18" IN LENGTH.

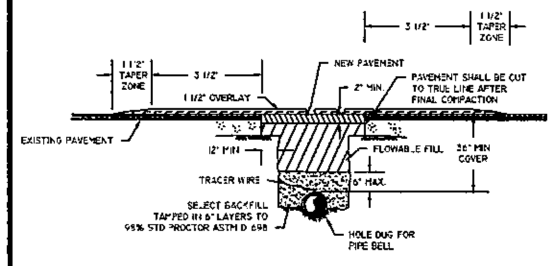
BEAUFORT - JASPER WATER & SEWER AUTHORITY
MECHANICAL RESTRAINT
DATE 07/01/09 | DRAWN BY BMC | DRAWING # G-08
SCALE | APPROVED BY ERS



UNPAVED ROADWAY BEDDING DETAIL



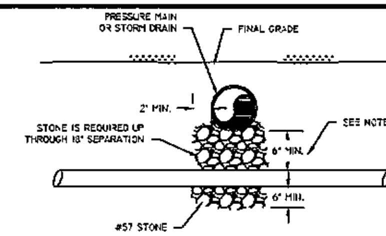
TYPICAL BEDDING FOR GRAVITY SEWER PIPE



PAVED AREA DETAIL

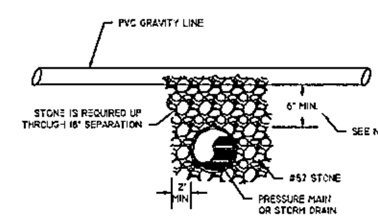
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH INSTALLATION CUT, FINAL CUT TO BE MADE AFTER FINAL COMPACTION.
2. MATCH EXISTING PAVEMENT TYP THICKNESS IS TO BE 2" UNLESS EXISTING IS THICKER.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT, IF MORE STRINGENT.

BEAUFORT - JASPER WATER & SEWER AUTHORITY
BEDDING DETAIL, GRAVITY PIPE
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-01
SCALE N.T.S. | APPROVED BY ERS



GRAVITY MAIN CROSSING UNDER STORM DRAIN / PRESSURE MAIN

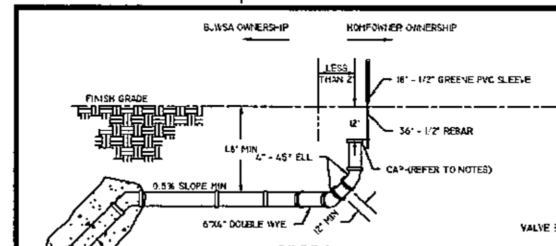
NOTE:
1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED



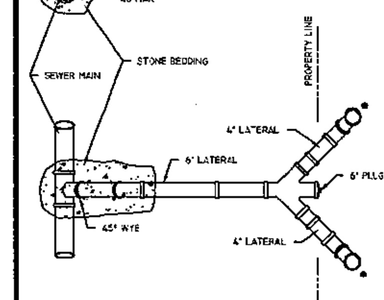
GRAVITY MAIN CROSSING OVER STORM DRAIN / PRESSURE MAIN

N.T.S.

BEAUFORT - JASPER WATER & SEWER AUTHORITY
GRAVITY MAIN CROSSING
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-03
SCALE | APPROVED BY ERS



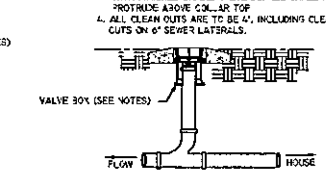
PROFILE VIEW



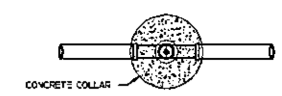
PLAN VIEW

BJWSA OWNERSHIP HOMEOWNER OWNERSHIP

NOTES:
1. DOUBLE SERVICE LATERALS SHALL ONLY BE ALLOWED FOR RESIDENTIAL SERVICES.
2. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
3. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP
4. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

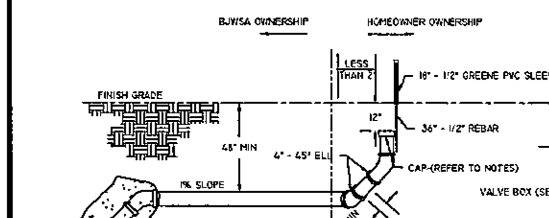


CLEAN OUT INSTALLATION - PROFILE VIEW



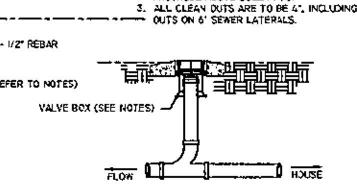
CLEAN OUT - PLAN VIEW

BEAUFORT - JASPER WATER & SEWER AUTHORITY
SEWER SERVICE, DOUBLE
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-10
SCALE N.T.S. | APPROVED BY ERS

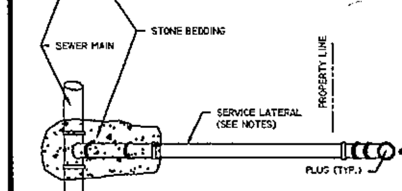


PROFILE VIEW

NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP
3. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.



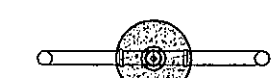
CLEAN OUT INSTALLATION - PROFILE VIEW



PLAN VIEW

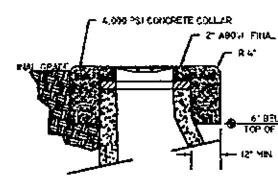
BJWSA OWNERSHIP HOMEOWNER OWNERSHIP

N.T.S.



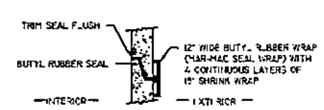
CLEAN OUT - PLAN VIEW

BEAUFORT - JASPER WATER & SEWER AUTHORITY
SEWER SERVICE, SINGLE
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-11
SCALE N.T.S. | APPROVED BY ERS

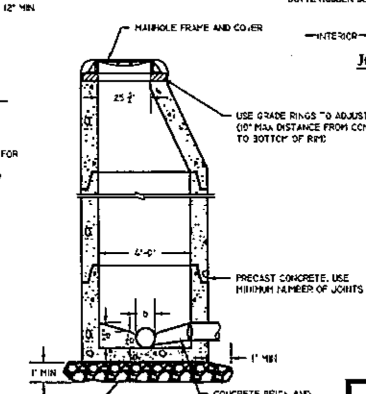


RURAL MANHOLE PROTECTIVE COLLAR

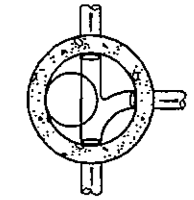
NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.



JOINT DETAIL



SECTION VIEW

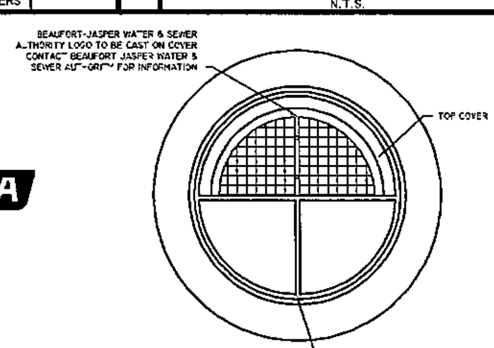


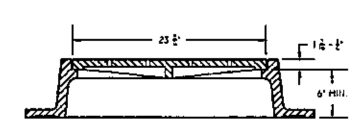
PLAN VIEW

BEAUFORT - JASPER WATER & SEWER AUTHORITY
STANDARD MANHOLE
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-09
SCALE N.T.S. | APPROVED BY ERS

BJWSA

LOGO





NOTES:
1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW-HOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS. GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN

BEAUFORT - JASPER WATER & SEWER AUTHORITY
MANHOLE, COVER AND FRAME
DATE 07/01/09 | DRAWN BY BMC | DRAWING # S-05
SCALE N.T.S. | APPROVED BY ERS

SOUTH CAROLINA REGISTERED No. 28714 PROFESSIONAL ENGINEER CHRISTOPHER J. CHANCE JR. 9-30-14

SOUTH CAROLINA HUSSEY, GAY, BELL & DeYOUNG INC. No. C00639 CERTIFICATE OF AUTHORIZATION

HUSSEY, GAY, BELL & DEYOUNG, INC.
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329 COMMERCIAL DRIVE 31406 TEL (912) 354-4626 FAX (912) 354-6754
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REVISIONS:

DESIGNED CJC | DRAWN JJM | CHECKED
DATE: JULY, 2014
JOB NO. 114273813
SCALE: NONE

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

CONSTRUCTION DETAILS

DRAWING NUMBER
12
OF 14

PALMETTO UTILITY PROTECTION SERVICE 1-800-922-? A ONE CALL SYSTEM

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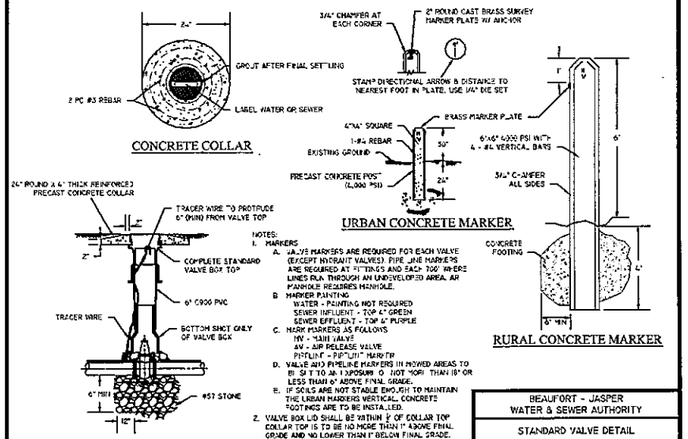
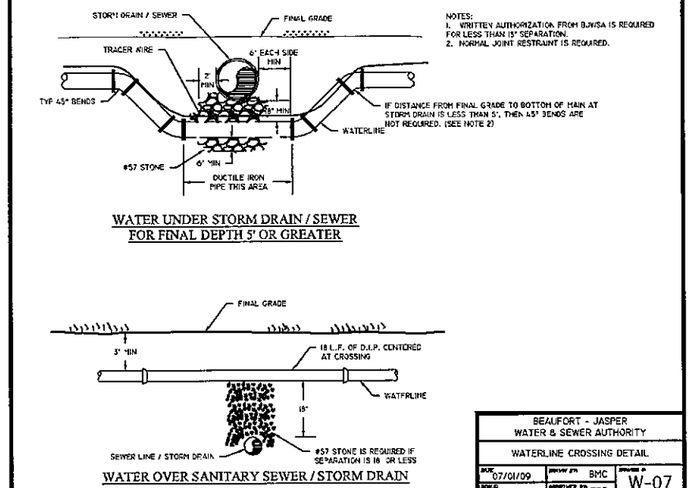


BEAUFORT - JASPER WATER & SEWER AUTHORITY		
STANDARD VALVE DETAIL		
DATE 07/01/09	DRAWN BY BMC	DRAWING # G-12
SCALE N.T.S.	APPROVED BY ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
WATERLINE CROSSING DETAIL		
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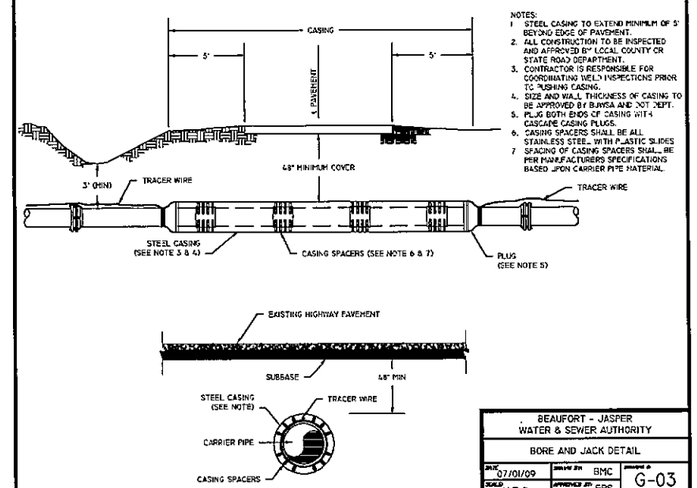
SCALE N.T.S.	APPROVED BY ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
BORE AND JACK DETAIL		
DATE 07/01/09	DRAWN BY BMC	DRAWING # G-03
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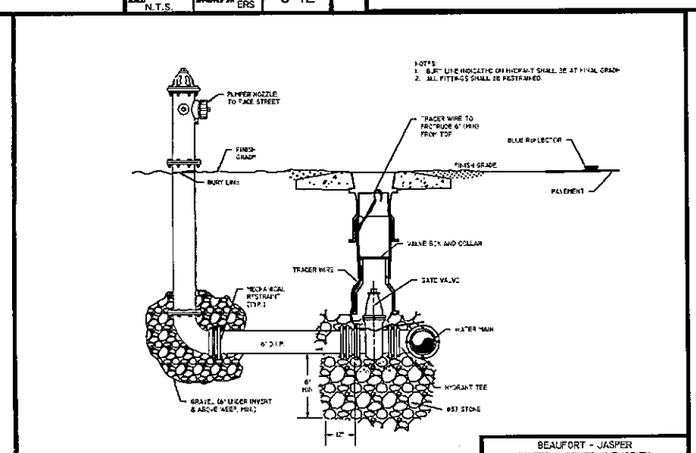
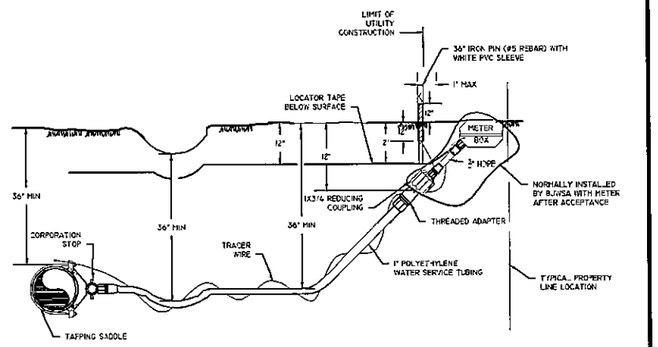
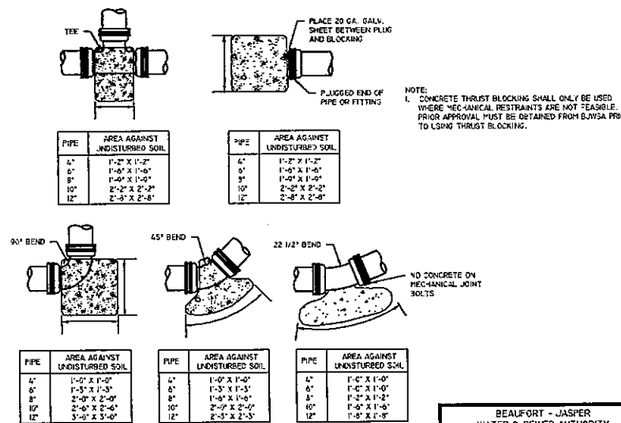


BEAUFORT - JASPER WATER & SEWER AUTHORITY		
STANDARD FIRE HYDRANT		
DATE 07/01/09	DRAWN BY BMC	DRAWING # W-03
SCALE N.T.S.	APPROVED BY ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
WATER SERVICE PROFILE		
DATE 07/01/09	DRAWN BY BMC	DRAWING # W-09
SCALE N.T.S.	APPROVED BY ERS	



PIPE	AREA AGAINST UNDISTURBED SOIL
4"	1'-2" X 1'-2"
6"	1'-6" X 1'-6"
8"	1'-9" X 1'-9"
10"	2'-2" X 2'-2"
12"	2'-5" X 2'-5"

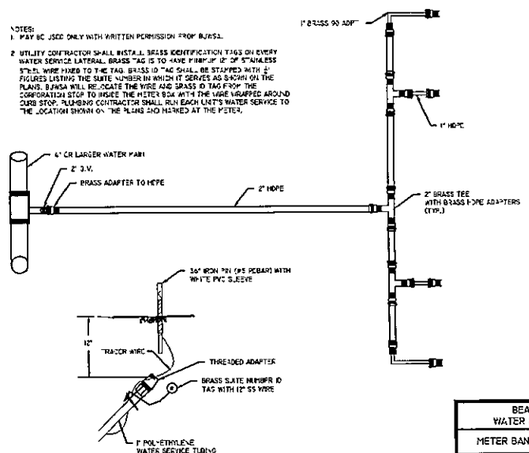
PIPE	AREA AGAINST UNDISTURBED SOIL
4"	1'-2" X 1'-2"
6"	1'-6" X 1'-6"
8"	1'-9" X 1'-9"
10"	2'-2" X 2'-2"
12"	2'-5" X 2'-5"

PIPE	AREA AGAINST UNDISTURBED SOIL
4"	1'-0" X 1'-0"
6"	1'-3" X 1'-3"
8"	1'-6" X 1'-6"
10"	2'-0" X 2'-0"
12"	2'-3" X 2'-3"

PIPE	AREA AGAINST UNDISTURBED SOIL
4"	1'-0" X 1'-0"
6"	1'-3" X 1'-3"
8"	1'-6" X 1'-6"
10"	2'-0" X 2'-0"
12"	2'-3" X 2'-3"

PIPE	AREA AGAINST UNDISTURBED SOIL
4"	1'-0" X 1'-0"
6"	1'-0" X 1'-0"
8"	1'-2" X 1'-2"
10"	1'-6" X 1'-6"
12"	1'-8" X 1'-8"

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
RESTRAINT, THRUST BLOCKING		
DATE 07/01/09	DRAWN BY BMC	DRAWING # G-09
SCALE N.T.S.	APPROVED BY ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
METER BANK DETAIL; 6 METER MAX		
DATE 07/01/09	DRAWN BY BMC	DRAWING # W-11
SCALE N.T.S.	APPROVED BY ERS	

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 28714 CHRISTOPHER J. CHASE, JR. 9-30-14
SOUTH CAROLINA HUSSEY, GAY, BELL & DEYOUNG, INC. CERTIFICATE OF AUTHORIZATION No. C000630
HUSSEY, GAY, BELL & DEYOUNG, INC.
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HGBD A Bell Company

REVISIONS

DESIGNED CJC	DRAWN JJM	CHECKED
DATE JULY, 2014		
JOB NO. 114273813		
SCALE: NONE		

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON
CONSTRUCTION DETAILS

DRAWING NUMBER 13 OF 14

BEAUFORT-JASPER WATER & SEWER AUTHORITY

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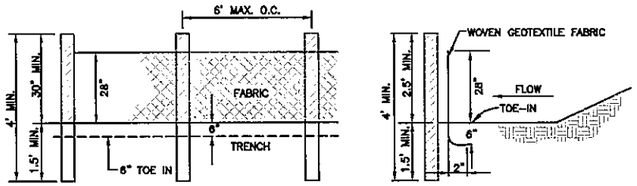
\\SAIinc_water\BLUFFTON\114273813 Possum Pt Sewer Ext\Cadd Files\Construction\SHT14_DTLSHT.dwg Printed By: jmcbride Nov 11, 2014 - 11:39am



FRONT VIEW

SIDE VIEW

TYPE A FABRIC (36")

USE:
1) ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN OR EQUAL TO 6 MONTHS.
2) WHERE THE SLOPE GRADIENT IS STEEPER THAN 3:1.

POST SIZE

MIN. LENGTH	TYPE OF POST	SIZE OF POST
4'	SOFT WOOD	3" DIA. OR 2X4
4'	OAK	1.5"X1.5"
4'	STEEL	1.3 LB./FT. MIN.

FASTENERS FOR WOOD POST (WIRE STAPLES)

GAUGE	CROWN	LEGS	STAPLES/POST
17 MIN.	3/4" WIDE	1/2" LONG	5 MIN.

FASTENERS FOR WOOD POST (NAILS)

GAUGE	LENGTH	BUTTON HEADS	NAIL/POST
14 MIN.	1"	3/4"	4 MIN.

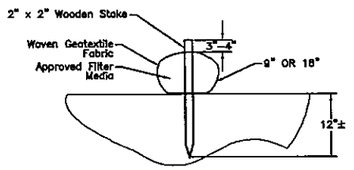
NOTE: FILTER FABRIC MAY ALSO BE ATTACHED TO THE POST BY WIRE, CORD, AND POCKETS.

FENCE

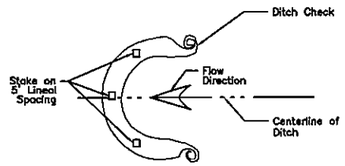
TENSILE STRENGTH (LBS. MIN.) (1) (ASTM D-4632)	ELONGATION (%MAX.) (ASTM D-4632)	AOS (APPARENT OPENING SIZE) (MAX. SIEVE SIZE) (ASTM D-4751)	FLOW RATE (GAL/MIN./SQ. FT.) (GDT-87)	ULTRAVIOLET STABILITY (2) (ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355)	BURSTING STRENGTH MIN. (PSI MIN.) (ASTM D-3786 DIAPHRAGM BURSTING STRENGTH TESTER)	FABRIC WIDTH (INCHES)
WARP-120 FILL-100	40	#30	25	80	175	36

(1) MIN. ROLL AVERAGE OF FIVE SPECIMENS.
(2) PERCENT OF REQUIRED INITIAL MIN. TENSILE STRENGTH.

SEDIMENT BARRIER SILT FENCE – TYPE A — Sd1-A



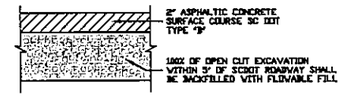
Ditch Check Section



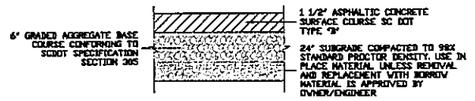
Ditch Check Plan View

Notes:
1. All material to meet manufacturers specifications.
2. Filter/media fill to meet application requirements.
3. BMP depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.
5. Geotextile fabric shall meet manufacturers specifications.
6. Filter media/compost shall meet manufacturers specifications.
7. Ditch Check products shall be Filtrex Ditch Chexx, Erosion Eels, BioD-StitCheck, or other approved device.

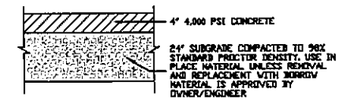
DITCH CHECK — Sd2-F



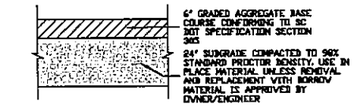
SCDOT PAVEMENT SECTION
N.T.S.



STANDARD PAVEMENT SECTION
N.T.S.



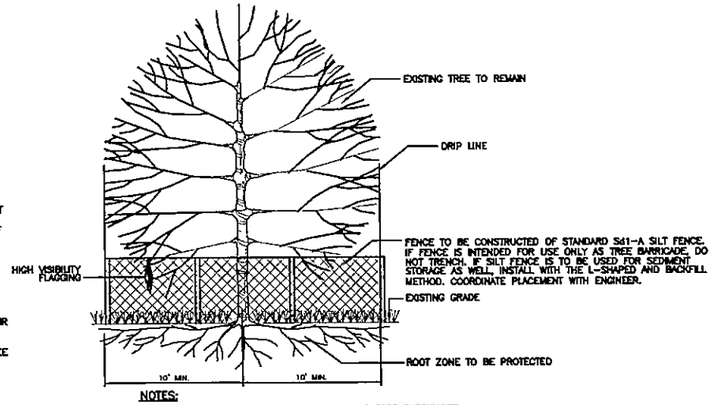
TYPICAL CONCRETE SECTION
N.T.S.



TYPICAL CRUSHER RUN SECTION
N.T.S.

TREE PROTECTION NOTES:

PROTECTIVE TREE BARRICADE TO BE PLACED A MINIMUM OF 10' FROM BASE OF TREE PLUS AN ADDITIONAL 1' FOR EACH ADDITIONAL 1" DBH GREATER THAN 10" DBH.
ALL WORK DONE WITHIN PROTECTIVE BARRICADES IS TO BE DONE BY HAND.
MAINTAIN TREE BARRICADES AT ALL TIMES.
ALL ROOTS TO BE REMOVED DURING DEVELOPMENT SHALL BE SEVERED CLEAN AND A 2" LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS DURING DEVELOPMENT.
NO VARIANCE FROM SPECIFIED MATERIALS SHALL BE PERMITTED FOR TREE BARRICADE WITHOUT PRIOR APPROVAL FROM THE PROJECT MANAGER. A DECREASE IN GRADE SHALL ONLY BE ALLOWED WITH THE USE OF APPROVED RETAINING WALLS OR TERRACING PLANS.
THE INSTALLATION OF UTILITIES THROUGH A PROTECTION ZONE MAY BE ALLOWED WITH PRIOR APPROVAL BY BORING OR TUNNELING AS APPROVED BY THE PROJECT MANAGER.
TRENCHING WILL BE ALLOWED WITHIN THE TREE PROTECTION ZONE ONLY WITH PROJECT MANAGER'S APPROVAL. IMPERVIOUS SURFACE MATERIALS ON RIGID FOUNDATIONS ARE NOT ALLOWED WITHIN THE TREE PROTECTION ZONE. BUILDING FOUNDATIONS AND OTHER SUBGRADE BUILDING ELEMENTS ARE NOT ALLOWED WITHIN THE TREE PROTECTION ZONE. AREAS REMOTE FROM LAND DISTURBANCE SHALL UTILIZE PASSIVE FORMS OF TREE PROTECTION DURING DEVELOPMENT ACTIVITIES. THESE AREAS MUST BE SURROUNDED WITH CONTINUOUS ROPE OR FLAGGING (HEAVY MIL., MINIMUM TWO INCH WIDTH). ALL PASSIVE TREE PROTECTION MUST BE ACCOMPANIED BY "KEEP OUT" OR "TREE PROTECTION AREA" SIGNAGE.



NOTES:
1. COORDINATE ALL PRUNING, TREEWELLS AND TREE BARRICADES WITH THE PROJECT MANAGER.
2. NO GRADE CHANGES WITHIN TREE BARRICADE AREA.
3. POSITIVE DRAINAGE SHALL BE MAINTAINED FOR ALL TREES TO REMAIN
4. ALL PRUNING OF PROTECTED TREES AND GRAND TREES SHALL BE DONE BY A QUALIFIED TREE SERVICE DURING DEVELOPMENT ACCORDING TO THE NATIONAL ARBORISTS ASSOCIATION, PRUNING STANDARDS FOR SHADE TREES.
5. USE TREE PROTECTION AS DIRECTED BY THE TOWN OF BLUFFTON PROJECT MANAGER.

TREE PROTECTION
NOT TO SCALE

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 28714 CHRISTOPHER J. CHANCE, JR.

SOUTH CAROLINA HUSSEY, GAY, BELL & DEYOUNG, INC. No. C00639 CERTIFICATE OF AUTHORIZATION

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HGBD A Bell Company

DESIGNED	DRAWN	CHECKED
CJC	JJM	

DATE: JULY, 2014
JOB NO.114273813
SCALE: NONE

POSSUM POINT SEWER EXTENSION
PHASE FOUR
BLUFFTON, SOUTH CAROLINA
FOR
TOWN OF BLUFFTON

CONSTRUCTION DETAILS

DRAWING NUMBER
14
OF 14