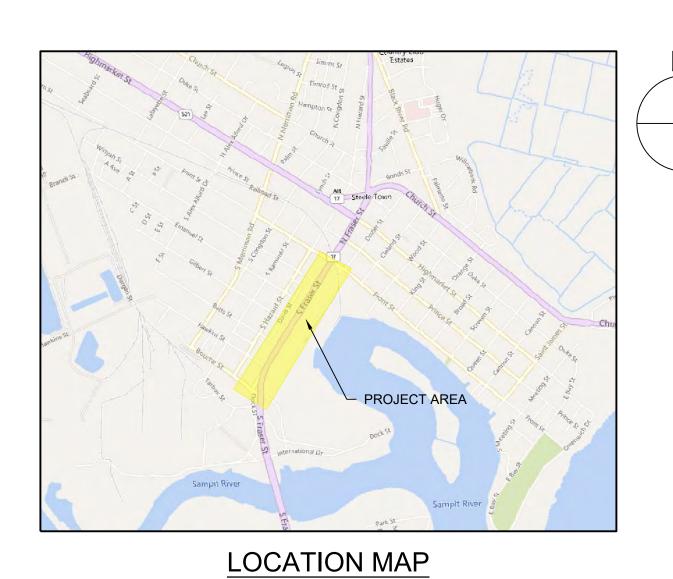
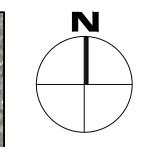
S. FRASER STREET (US HWY 17)

SANITARY SEWER & MANHOLE REHABILITATION PROJECT NO. 1818







VICINITY MAP

November 2023

MAYOR CAROL R. JAYROE

CITY COUNCIL
CLARENCE C. SMALLS
HOBSON HENRY MILTON
JONATHAN ANGNER
JIMMY MORRIS
JIM CLEMENTS
TAMIKA WILLIAMS-OBENG

CITY ADN

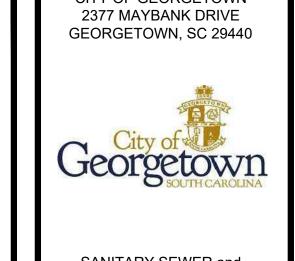


CITY ADMINISTRATOR SCOTT WHITTIER

<u>CITY ENGINEER</u> ORLANDO ARTEAGA, P.E.

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1201 Main Street, Suite 930
Columbia, SC 29201
978.532.1900 800.SAMPSON
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COVER SHEET

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GENERAL NOTES:

- A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES WHILE THE CONTRACTOR IS PERFORMING WORK.
- 2. WITHIN ALL NOTES, THE TERM CONTRACTOR SHALL MEAN THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR OR VENDOR PERFORMING CONSTRUCTION ON THE SITE
- 3. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, THEY SHALL IMMEDIATELY NOTIFY THE ENGINEER AND THE OWNER.
- 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. CONTRACTOR SHALL CONTACT PALMETTO UTILITY PROTECTION SERVICE (PUPS) AT 1-888-721-7877 OR 811 AT LEAST 72 HOURS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL HAVE COPIES OF ACTIVE DIG TICKETS ON-SITE DURING CONSTRUCTION.
- 5. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF FEDERAL, STATE, COUNTY, AND LOCAL MUNICIPALITIES.
- 6. ALL MATERIALS, METHODS, AND DETAILS OF CONSTRUCTION SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND DRAWINGS
- 7. ALL RIGHT-OF-WAY CONSTRUCTION SHALL MEET THE REQUIREMENTS OF LOCAL AND STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DRAWINGS AND COMPLY WITH ALL PERMIT REQUIREMENTS.
- 8. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT.
- 9. GENERAL CONTRACTOR SHALL VERIFY THAT ALL NECESSARY PERMITS FOR CONSTRUCTION HAVE BEEN OBTAINED PRIOR TO THE START OF THE PROJECT.
- 10. ANY CONSTRUCTION TRAILERS USED ON-SITE SHALL BE PERMITTED THROUGH LOCAL GOVERNING AGENCY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE ALL NECESSARY PERMITS.
- 11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING INFRASTRUCTURE WITHIN THE SITE OR ADJOINING PROPERTIES (i.e. PAVEMENT, CURB, SIDEWALK, UTILITIES, LANDSCAPED AREAS, ETC.), CONTRACTOR SHALL REPAIR/REPLACE ALL DAMAGED ITEMS IMMEDIATELY. IF NECESSARY, OR PRIOR TO THE END OF THE JOB AT AT NO COST TO THE UTILITY IN ACCORDANCE WITH LOCAL REGULATORY REQUIREMENTS.
- 12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL UTILITIES BY THE APPROPRIATE UTILITY COMPANY AND SUBCONTRACTORS PERFORMING WORK TO AVOID CONFLICTS. GENERAL CONTRACTOR IS ALSO RESPONSIBLE FOR SCHEDULING INSTALLATION OF ALL UTILITIES IN A TIMELY, ORGANIZED, AND SYSTEMATIC MANNER.
- 13. IN THE EVENT OF A CONFLICT WITH WATER, SEWER, DRAINAGE, OR OTHER UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER PRIOR TO MAKING FIELD ADJUSTMENTS.
- 14. ALL MATERIALS SHALL CONFORM TO THE UTILITY STANDARD SPECIFICATIONS AND DETAILS AS TO TYPE AND DESIGN.
- 15. EXCEPT AT HIS OWN RISK, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER ON ALL MATERIALS PRIOR TO PURCHASE OR INSTALLATION.
- 16. BIDDER SHALL VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE WORK TO BE PERFORMED IN ACCORDANCE TO THE CONTRACT DOCUMENTS PRIOR TO BID.
- 17. THE UTILITY SHALL MAINTAIN OWNERSHIP OF ALL DEMOLISHED ITEMS. ANY DEMOLISHED ITEMS DEEMED UNWANTED BY THE CITY BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN A SATISFACTORY MANNER.

CONSTRUCTION NOTES:

- 1. ALL MATERIALS, METHODS, AND DETAILS OF CONSTRUCTION SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND DRAWINGS.
- 2. THE CONTRACTOR(S) SHALL LOCATE AND PLACE SIGNAGE AT ALL OVERHEAD POWER CROSSINGS MARKING THEIR LOCATION.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ANY NECESSARY TRAFFIC CONTROLS THROUGHOUT THE DURATION OF THE PROJECT, IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION), SCDOT, AND LOCAL AGENCIES. CONTRACTOR SHALL ABIDE BY ALL REQUIREMENTS IN THE APPROVED ENCROACHMENT PERMITS.
- 4. THE CONTRACTOR SHALL ENSURE THAT ALL-WEATHER ACCESS TO LOCAL RESIDENCES AND BUSINESSES IS MAINTAINED THROUGHOUT CONSTRUCTION.
- 5. THE CONTRACTOR SHALL CLEAN AND MAINTAIN ALL ROADWAYS AS NECESSARY TO ENSURE THAT NO CONSTRUCTION DEBRIS IS PRESENT FOR EXTENDED PERIODS OF TIME.
- 6. ALL EXCAVATION AND COMPACTION OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS.
- 7. ALL BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL PERFORM IN-PLACE MOISTURE DENSITY TESTS FOR ALL COMPACTED MATERIAL USING A RECOGNIZED TESTING LABORATORY APPROVED BY THE ENGINEER OR OWNER.
- TRENCH EXCAVATION SHALL NOT EXCEED BACKFILL BY MORE THAN 100 FEET. NO TRENCH SHALL BE LEFT OPEN AFTER NORMAL WORKING HOURS
- 10. DURING WORKING HOURS, ALL OPEN EXCAVATIONS SHALL BE ENCLOSED WITH ORANGE SAFETY BARRICADE FENCE AND DRUMS. NO OPEN EXCAVATIONS SHALL REMAIN
- 11. THE CONTRACTOR SHALL REMOVE ALL RUBBISH, TRASH, DEBRIS, AND EXCESS EXCAVATED MATERIALS FROM THE PROJECT AREA AND DISPOSE OF THEM IN A LEGAL MANNER.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY DEWATERING TO PERFORM AND MAINTAIN EXCAVATIONS AND GRADES. DEWATERING OPERATIONS SHALL NOT DISCHARGE DIRECTILY INTO MARSH OR WETLAND AREAS. WATER PUMPED FROM EXCAVATION AND OTHER WORK AREAS MUST BE HELD IN SETTLING BASINS OR FILTERED PRIOR TO DISCHARGE INTO SURFACE WATERS OR STORM DRAINAGE SYSTEMS. WATER MUST BE DISCHARGED THROUGH A PIPE, WELL-GRASSED OR LINED CHANNEL, OR EQUIVALENT MEANS SUCH THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENTATION.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY OBSTRUCTIONS (FENCES, MAILBOXES, ETC.) IN THE PATH OF CONSTRUCTION AND REPLACING THEM IN THE SAME CONDITION INITIALLY FOUND OR AS SHOWN IN CONTRACT DRAWINGS.
- 14. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING EROSION AND SEDIMENT CONTROL AND STORMWATER POLLUTION
- 15. CONNECTION TO EXISTING SEWER SYSTEM AND REQUIRED TESTS SHALL BE MADE IN THE PRESENCE OF UTILITY INSPECTOR. CONTRACTOR SHALL NOTIFY THE UTILITY AT LEAST 5 DAYS PRIOR TO TESTING AND CONNECTIONS.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WASTEWATER FLOWS AT ALL TIMES, WHETHER PERMANENT OR TEMPORARY IN NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES, FEES AND ANY CLEANUP COSTS ASSOCIATED WITH OVERFLOWS/SPILLS DURING CONSTRUCTION.
- 17. THE CONTRACTOR SHALL INCORPORATE THE USE OF LINE STOPPERS AS NECESSARY TO AVOID ANY SPILLS DURING TIE-IN/CONNECTIONS TO EXISTING LINES.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF THE EXISTING FACILITIES.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR REMAINING IN COMPLIANCE WITH ALL OSHA, STATE, AND FEDERAL REGULATIONS PERTAINING TO WORKING WITH WASTEWATER GASES, COMBUSTIBLE OXYGEN DEFICIENT ATMOSPHERES, AND CONFINED SPACES.
- 20. ANY EXISTING FENCE LINES WITHIN THE EXISTING UTILITY SEWER EASEMENTS SHALL BE REMOVED AND REINSTALLED AS REQUIRED FOR BYPASS PUMPING PURPOSES.
- 21. THE CONTRACTOR SHALL NOTIFY/COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES THE RELOCATION OF ANY UTILITY SERVICE AS INDICATED IN THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS INCURRED IN THE RELOCATION OF THE UTILITIES.
- 22. NOTIFY THE OWNER/ENGINEER AT A MINIMUM OF 48-HOURS BEFORE ANY BYPASS PUMPING ACTIVITIES BEGIN.

STANDARD 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, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON
- 3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR EVERY WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP WAS CONDUCTED INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE
- 5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG. 72-300 ET SEQ. AND SCR100000.
- 8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- 10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 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 (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL
- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, 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;
 - AND 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 SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE 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 THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.
- 20. THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREAS WITH TEMPORARY AND PERMANENT SEEDING. EXCAVATIONS WITHIN YARDS MUST BE RESTORED WITH SOD.
- 21. ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST BE INSTALLED, INSPECTED, AND MAINTAINED PER SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL REQUIREMENTS.

ABBREVIATION	REFERENCE
PUPS	PALMETTO UTILITY PROTECTION SERVICE
SCDOT	SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
S.C. REG	SOUTH CAROLINA REGULATION
wos	WATERS OF THE STATE
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
Н	HORIZONTAL
V	VERTICAL
BMPS	BEST MANAGING PRACTICES
SC	SOUTH CAROLINA
MH	MANHOLE
N	NORTH
S	SOUTH
ML	MAINLINE
ST	STREET
REHAB	REHABILITATION
PROP	PROPOSED
ID	INNER DIAMETER
IN	INCHES (MEASUREMENT)
FT	FOOT (MEASUREMENT)
VCP	VITRIFIED CLAY PIPE
PVC	POLYVINYL CHLORIDE PIPE

ABBREVIATION REFERENCE TABLE

CITY OF GEORGETOWN 2377 MAYBANK DRIVE GEORGETOWN, SC 29440



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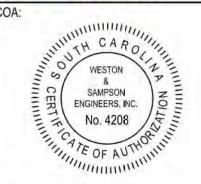


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INFRASTRUCTURE DATA MAP

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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INFRASTRUCTURE DATA MAP

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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INFRASTRUCTURE DATA MAP

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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RECOMMENDED REHABILITATION MAP I

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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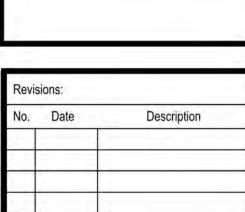


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RECOMMENDED REHABILITATION MAP II

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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RECOMMENDED REHABILITATION MAP III

S. FRASER STREET FROM BOURNE STREET TO FRONT STREET

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GEORGETOWN, SC 29440

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MANHOLE REHAB TABLE

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lepair Item	Sheet Number	Manhole ID	Location Details	MH Width (in)	MH Depth (ft)	NORTHING	EAASTING	Replace Manhole with New 4' Dia. Precast Manhole	Replace Manhole with New 5' Dia. Precast Manhole	Remove and Replace Standard MH Frame & Cover	Remove and Reset Existing Frame & Cover	Install New Flexible Chimney Seal	Repairing & Rebuilding Brickwork for Inverts, Channels, Benches, Wall, Cone & Chimneys	Coating Inverts w/ Quick Setting Grout	Sewer Monolithic Lining 4-ft Dia.	Lining Type	Level 2 MACP MH Inspection	Defect Location	Description of Defects	Manhole Report
MH-1	C200	1818	STREET	45.80	9.60	561679.69	2520471.41	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; INFILTRATION WEEPER; INFILTRATION DRIPPER	1818MH.pdf
MH-2	C200	1819	STREET	45.90	9.80	561638.68	2520448.99	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; INFILTRATION WEEPER; MISING MORTAR SMALL; DEPOSITS SETTLED	1819MH.pdf
MH-3	C201	1822	PRIVATE PROP.	N/A	N/A	562522.39	2521056.80	NO	NO	NO	NO	NO	NO	NO	NO	N/A	NO		REMOVED FROM SCOPE (Manhole Located on Private Property)	N/A
MH-4	C201	1823	PRIVATE PROP.	43.30	5.10	562483.77	2521019.71	NO	NO	NO	NO	NO	NO	NO	NO	N/A	NO		REMOVED FROM SCOPE (Manhole Located on Private Property)	1823MH.pdf
MH-5	C202	1828	STREET	45.60	14.00	563869.70	2521822.41	NO	YES	NO	NO	YES	NO	NO	NO	N/A	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	BROKEN SOIL VISIBLE; DISPLACED BRICK; MISSING MORTAR LARGE	1828MH.pdf
МН-6	C202	1829	STREET	48.00	10.90	563425.98	2521551.15	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	INFILTRATION WEEPER; MISSING MORTAR LARGE; HOLE VOID VISIBLE; INFILTRATION DRIPPER	1829MH.pdf
MH-7	C201	1830	STREET	47.40	9.30	562984.26	2521281.46	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR MEDIUM; INFILTRATION STAIN; MISSING MORTAR LARGE; HOLE SOIL VISBLE; INFILTRATION WEEPER; DISPLACED BRICK; OBSTRUCTION CONSTRUCTION DEBRIS	1830MH.pdf
MH-8	C201	1831	STREET	48.00	8.00	562773.30	2521152.07	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; INFILTRATION WEEPER; OBSTRUCTION CONSTRUCTION DEBRIS; SURFACE DAMAGE AGGREGATE PROJECTING	1831MH.pdf
MH-9	C201	1832	STREET	46.40	8.00	562550.69	2521017.36	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; MISSING MORTAR MEDIUM	1832MH.pdf
ИН-10	C201	1833	STREET	50.40	8.10	562329.59	2520882.83	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; DEPOSITS SETTLED FINE	1833MH.pdf
ИН-11	C201	1834	STREET	45.30	9.00	562114.95	2520752.50	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; DISPLACED BRICK; INFILTRATION WEEPER; OBSTRUCTION CONSTRUCTION DEBRIS	1834MH.pdf
ИН-12	C200	1835	STREET	54.00	9.50	561624.00	2520470.00	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; SUFACE DAMAGE AGGREGATE VISIBLE; INFILTRATION WEEPER; DEPOSITS ATTACHED RAGGING	1835MH.pdf
ИН-13	C200	1835A	STREET	-	9.00	N/A	N/A	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	YES	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MANHOLE PAVED OVER COMPLETE MANHOLE INSPECTION	
ИН-14	C200	1836	STREET	-	7.45	561831.90	2520598.92	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	YES	SURCHARGED	MANHOLE WAS SURCHARGED COMPLETE MANHOLE INSPECTION	
ИН-15	C201	1837	STREET	48.00	10.10	562157.48	2520793.48	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; DISPLACED BRICK; INFILTRATION STAIN; DEPSOITS ATTACHED RAGGING; SURFACE DAMAGE AGGREGATE VISIBLE; INFILTRATION WEEPER	1837MH.pdf
ИН-16	C201	1838	STREET	48.00	9.90	562493.44	2521003.02	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; DEPOSITS ATTACHED RAGGING; SURFACE DAMAGE AGGREGATE VISIBLE; CRACK LONGITUDINAL; INFILTRATION WEEPER	1838MH.pdf
⁄ІН-17	C201	1839	STREET	47.40	10.30	562837.03	2521208.08	NO	NO	NO	NO	YES	YES	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING BRICK; MISSING MORTAR LARGE; INFILTRATION STAIN; DEPOSITS ATTACHED RAGGING; INFILTRATION WEEPER	1839MH.pdf
ИН-18	C202	1840	STREET	48.00	12.00	563181.31	2521418.18	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR MEDIUM; INFILTRATION STAIN; MISSING MORTAR LARGE; DEPOSITS ATTACHED RAGGING; SURFACE DAMAGE AGGREGATE VISIBLE; INFILTRATION WEEPER	1840MH.pdf
ИН-19	C202	1841	STREET	48.00	13.30	563476.11	2521598.14	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR SMALL; MISSING MORTAR LARGE; INFILTRATION STAIN; DEPOSITS ATTACHED RAGGING; SURFACE DAMAGE AGGREGATE VISIBLE	1841MH.pdf
ИН-20	C202	1842	STREET	48.00	10.00	563813.84	2521801.79	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION STAIN; DEPOSITS ATTACHED RAGGING; SURFACE DAMAGE AGGREGATE VISIBLE; INFILTRATION WEEPER; OBSTRUCTION CONSTRUCTION DEBRIS	1842MH.pdf
ИН-21	C200	2193	STREET	44.00	4.20	561236.75	2520241.97	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR LARGE; INFILTRATION WEEPER; DEPOSITS SETTLED FINE; DEPOSITS ATTACHED GREASE; MISSING MORTAR MEDIUM	2193MH.pdf
ИН-22	C200	2194	STREET	44.30	4.20	561250.51	2520220.60	NO	NO	NO	NO	YES	NO	YES	YES	CEMENTITIOUS	NO	CHIMNEY, CONE, WALL, BENCH, CHANNEL	MISSING MORTAR MEDUM; MISSING MORTAR LARGE; DEPOSITS SETTLED GRAVEL	2194MH.pdf

ML#	Sheet Number	Facility ID	Start MH	End MH	Material	CCTV Verified Diameter	CCTV Verified Length	Taps Active	Taps Inactive	Overall Inspection Grade	Proposed Rehab	Rehab Details
ML-1	C200	1835_1835A	1835	1835A	VCP	15	61.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-2	C200	1835A_1836	1835A	1836	VCP	15	181.1	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-3	C200/C201	1836_1837	1836	1837	VCP	15	378.0	0	0	1	No Work Recommended	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-4	C201	1837_1838	1837	1838	VCP	15	400.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-5	C201	1838_1839	1838	1839	VCP	15	400.0	0	0	3	CIPP Short Liner	CIPP Short Liner from 305 ft to 335 ft from USMH; Crack Multiple @ 310 ft to 330 ft from USMH.
ML-6	C201/C202	1839_1840	1839	1840	VCP	15	413.0	0	0	4	CIPP Short Liner	CIPP Short Liner centered at 355 ft from USMH; Large separated joint @ 355 ft from USMH
ML-7	C202	1840_1841	1840	1841	VCP	15	343.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-8	C202	1841_1842	1841	1842	VCP	15	398.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-9	C202	1842_1828	1842	1828	VCP	15	57.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-10	C201	1823_1838	1823	1838	VCP	8	30.0	1	0	5	Alternate Bid	CIPP Line Segment (Alternate Bid Item)
ML-11	C200	2193_2194	2193	2194	VCP	8	25.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-12	C200	2194_1819	2194	1819	VCP	8	450.0	7	2	3	Alternate Bid	CIPP Line Segment (Alternate Bid Item)
ML-13	C200	1818_1819	1818	1819	CIPP	12	50.0	0	0	1	Alternate Bid	No work recommended; CIPP Line Segment (Alternate Bid Item)
ML-14	C200	1819_1835	1819	1835	CAS	12	40.0	0	0	3	Alternate Bid	Heavy clean line segment to remove encrustations; CIPP Line Segment (Alternate Bid Item)
ML-15	C201	1834_1833	1834	1833	VCP	12	257.0	3	4	1	CIPP	CIPP Line Segment
ML-16	C201	1833_1832	1833	1832	VCP	12	252.0	4	4	5	Remove Intruding Tap; CIPP	Cut out intruding tap at 209 ft from USMH; CIPP Line Segment
ML-17	C201	1832_1831	1832	1831	VCP	12	255.0	2	4	5	Point Repair CIPP	20 ft Point Repair starting 235 ft from USMH to MH 1831; CIPP Line Segment
ML-18	C201	1831_1830	1831	1830	VCP	12	256.0	4	5	4	CIPP	CIPP Line Segment
ML-19	C201/C202	1830_1829	1830	1829	VCP	12	512.0	5	12	4	CIPP	CIPP Line Segment
ML-20	C202	1829_1828	1829	1828	VCP	12	530.0	8	24	5	Point Repair CIPP	30 ft Point Repair starting at DSMH headed upstream; CIPP Line Segment
ML-21	C201	1822_1823	1822	1823			Line removed	form scope, I	riday May, 19,	2023 by City of Geor	rgetown. Line segmen	t is on private property (steel mill).



SANITARY SEWER and MANHOLE SURVEY S. FRASER STREET PROJECT #1818



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No.	Date	Description
Seal		MINIMUM COMPANIES

N.T.S. SEPTEMBER 2023

Approved By: W&S Project No.: ENG23-0476

MAINLINE REHAB TABLE

Sheet Number	Pipe ID	Facility ID (USMH_DSMH)	Lateral Material	Lateral Distance from USMH	Active	Defective	Capped	End Seal	Abandon	No Work	Rehab Recommendations
C200	ML-1	1835_1835A								х	No Main Line Service Connections
C200	ML-2	1835A_1836								Х	No Main Line Service Connections
C200/C201	ML-3	1836_1837								Х	No Main Line Service Connections
C201	ML-4	1837_1838								Х	No Main Line Service Connections
C201	ML-5	1838_1839								Х	No Main Line Service Connections
C201/C202	ML-6	1839_1840								Х	No Main Line Service Connections
C202	ML-7	1840_1841								Х	No Main Line Service Connections
C202	ML-8	1841_1842								Х	No Main Line Service Connections
C202	ML-9	1842_1828								Х	No Main Line Service Connections
C201	ML-10	1823_1838	PVC	6.0	xx			xx			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end seal at main connection.
C200	ML-11	2193_2194								Х	No Main Line Service Connections
			VCP	63.4	XX			XX			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end seal at main connection.
			VCP	114.7	xx			xx			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end seal at main connection.
			VCP	165.8	xx			XX			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end seal at main connection.
			VCP	214.3		XX		XX			ALTERNATE BID: Contractor to verify if defective lateral is active. Reinstate if active Abandon if defective cap.
C200	ML-12	2194_1819	VCP	241.4	XX			XX			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end sea at main connection.
			VCP	271.5		xx		xx			ALTERNATE BID: Contractor to verify if defective lateral is active. Reinstate if active Abandon if defective cap.
			VCP	334.9	XX			ХХ			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end sea at main connection.
			VCP	355.6	XX			XX			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end sea at main connection.
			VCP	397.5	XX			xx			ALTERNATE BID: Reinstate lateral after main line CIPP is complete; Install end sea at main connection.
C200	ML-13	1818_1819								Х	No Main Line Service Connections
C200	ML-14	1819_1835								Х	No Main Line Service Connections
			DIP	83.3	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	85.7		Х		xx			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	140.3			Х		Х		Abandon capped lateral.
C201	ML-15	1834_1833	VCP	142.7	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	189.8			Х		Х		Abandon capped lateral.
			VCP	192.4	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	239.9		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	35.7			Х		Х		Abandon capped lateral.
			VCP	38.1	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	101.4			Х		Х		Abandon capped lateral.
			VCP	104.2	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
C201	ML - 16	1833_1832	VCP	154.1			Х		Х		Abandon capped lateral.
			VCP	156.5		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	206.2			Х		Х		Abandon capped lateral.
			VCP	208.9	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	61.8			Х		Х		Abandon capped lateral.
			VCP	64.4			Х		Х		Abandon capped lateral.
	ML-17	1832_1831	VCP	132.5			Х		Х		Abandon capped lateral.
C201	IVIL- I /				_		_			_	
C201	IVIL-17	_	VCP	202.9			Х		Х		Abandon capped lateral.

Sheet Number	Pipe ID	Facility ID (USMH_DSMH)	Lateral Material	Lateral Distance from USMH	Active	Defective	Capped	End Seal	Abandon	No Work	Rehab Recommendations
			VCP	37.5			х		Х		Abandon capped lateral.
			VCP	40.2		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	97.0			Х		×		Abandon capped lateral.
			VCP	97.6	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
C201	ML-18	1831_1830	VCP	99.5		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	166.3			Х				Abandon capped lateral.
			VCP	169.1			Х		Х		Abandon capped lateral.
			VCP	215.2			Х		Х		Abandon capped lateral.
			VCP	218.0		Х		xx			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	46.0			Х		Х		Abandon capped lateral.
			VCP	48.6			Х		Х		Abandon capped lateral.
			VCP	118.1			Х		Х		Abandon capped lateral.
			VCP	120.5			Х		Х		Abandon capped lateral.
			VCP	164.0			Х		Х		Abandon capped lateral.
		1830_1829	VCP	166.5		Х		xx			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	215.4			Х		X		Abandon capped lateral.
			VCP	218.0	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			ZZZ	246.8		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
C201/C202	ML - 19		VCP	267.0			Х		Х		Abandon capped lateral.
			VCP	269.5			Х		Х		Abandon capped lateral.
			VCP	290.6		Х		XX			Contractor to verify if defective lateral is active. Reinstate if active; Abandon if defective cap.
			VCP	314.5	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	316.6	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	332.1	Х			Х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	388.6			Х		Х		Abandon capped lateral.
			VCP	391.2	Х			х			Reinstate lateral after main line CIPP is complete. Install end seal at main connection.
			VCP	442.5			Х		Х		Abandon capped lateral.
			VCP	445.4			х		Х		Abandon capped lateral.



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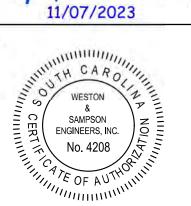


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Subconsultants:		

No.	Date	Description	





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For:		
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Scale:	N.T.S.
Date:	SEPTEMBER 2
Drawn By:	JAP
Reviewed By:	NTS/JTB

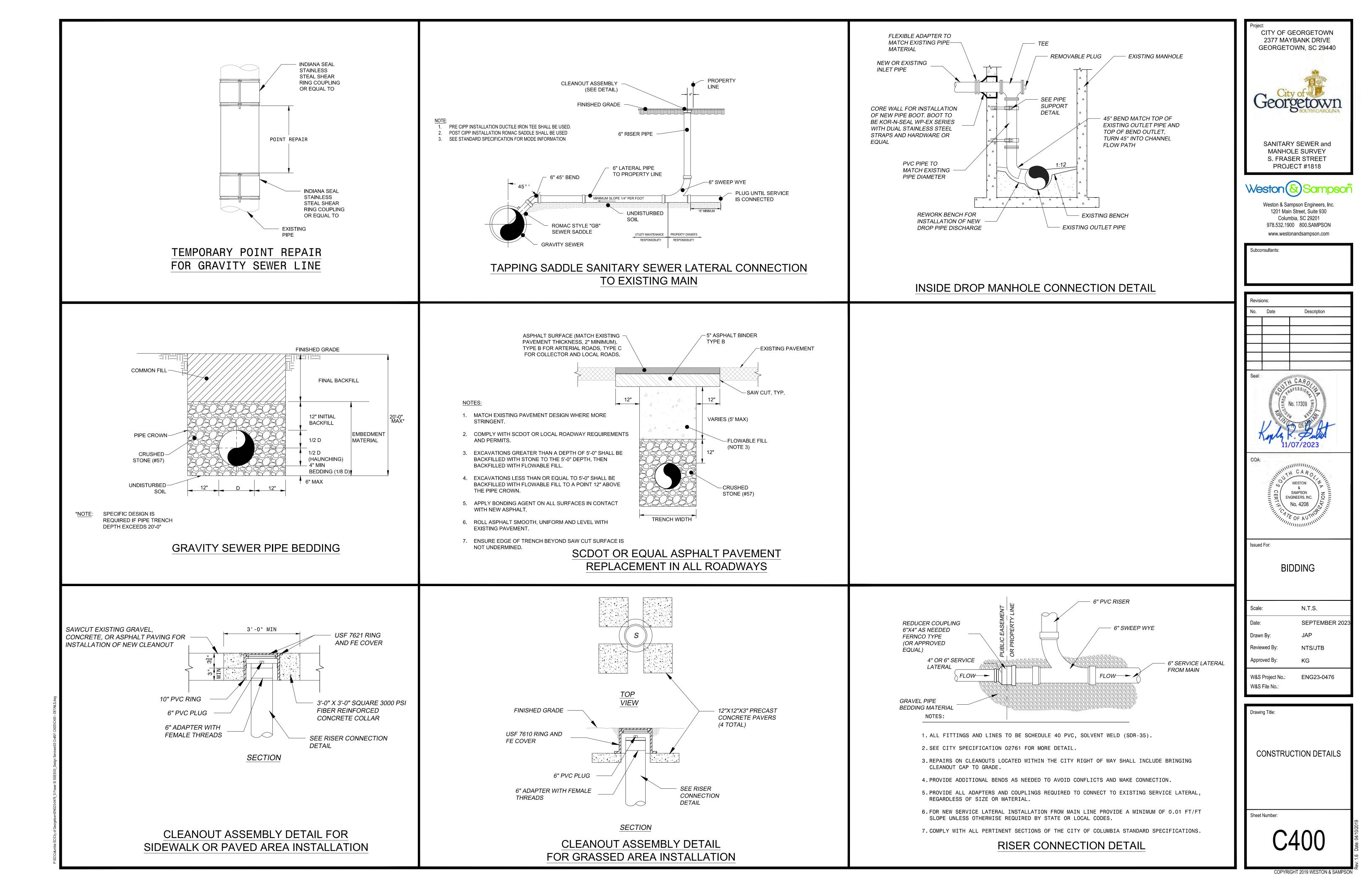
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W&S File No.:	

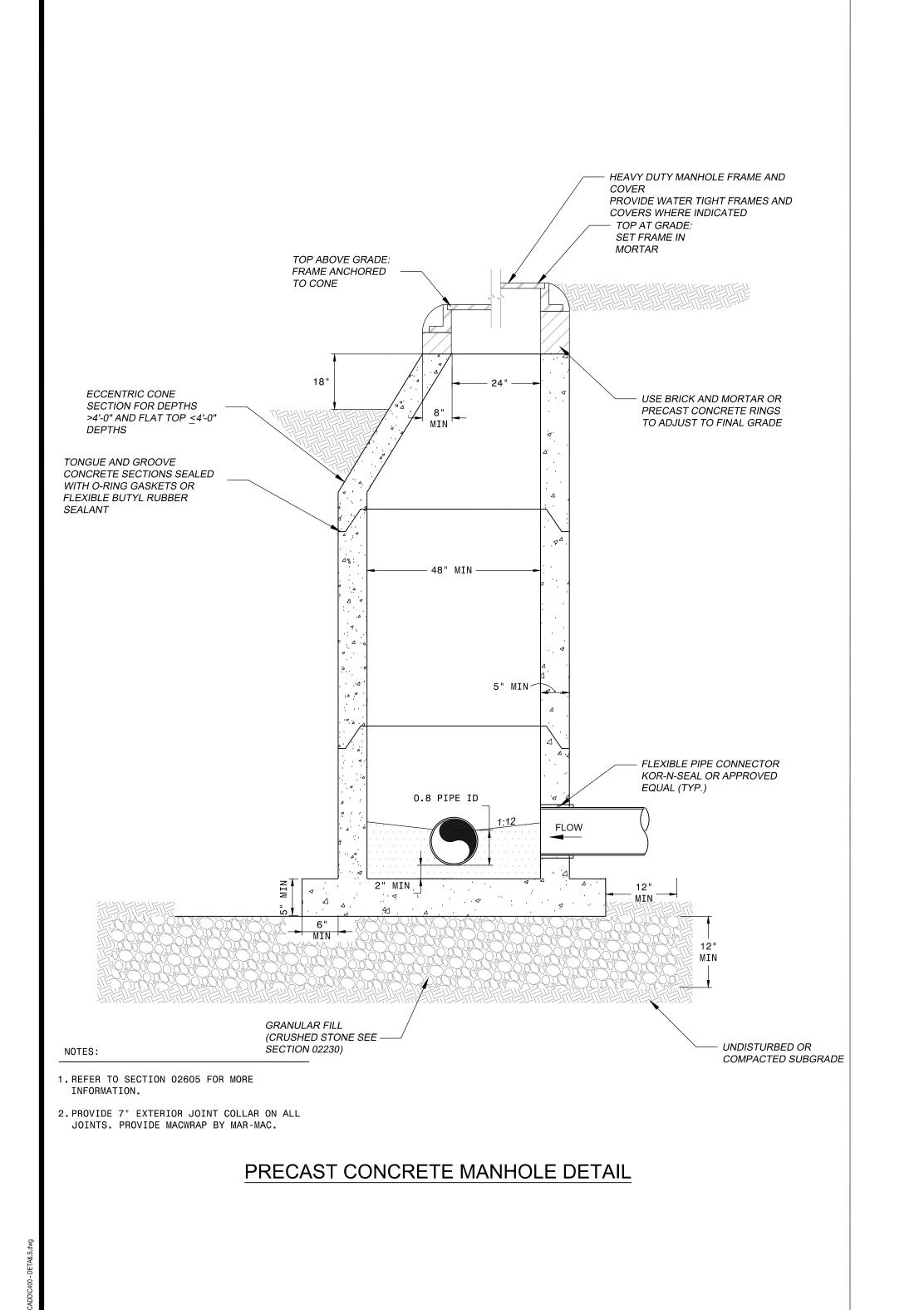
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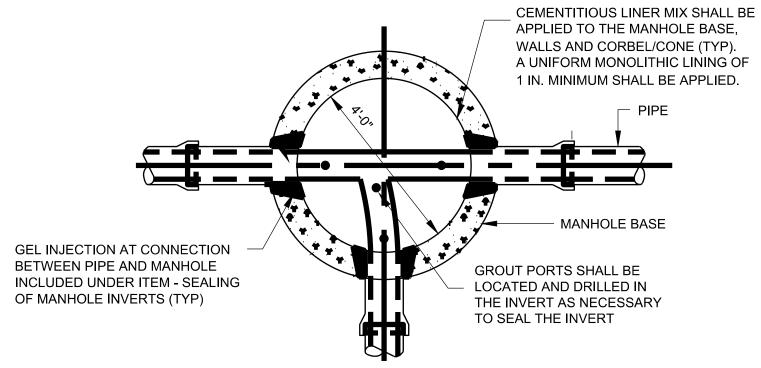
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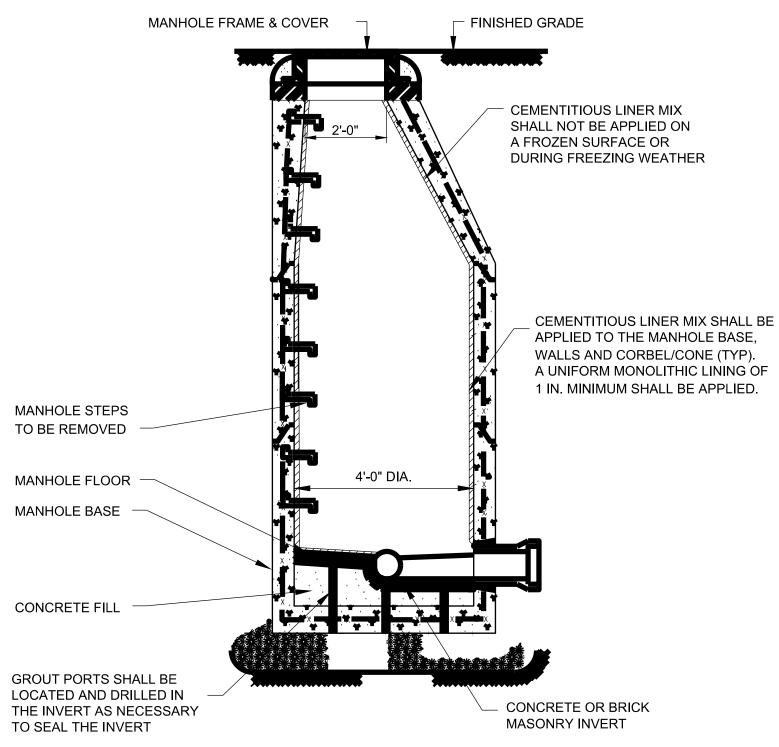
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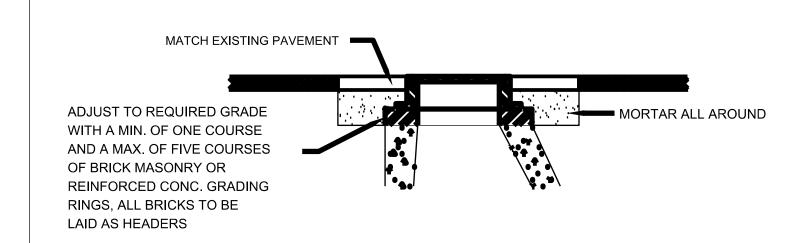




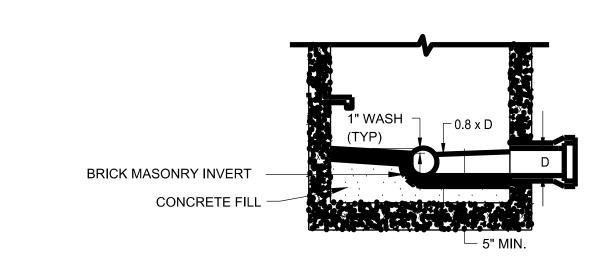
4'-0" DIA. MANHOLE SEALING PLAN



BRICK, BLOCK OR CONCRETE MANHOLE SEALING DETAIL



FURNISH AND INSTALL MANHOLE FRAME AND COVER PAVEMENT REPLACEMENT DETAIL



SEWER MANHOLE
BENCH AND INVERT DETAIL

Project:
CITY OF GEORGETOWN
2377 MAYBANK DRIVE
GEORGETOWN, SC 29440



SANITARY SEWER and MANHOLE SURVEY S. FRASER STREET PROJECT #1818



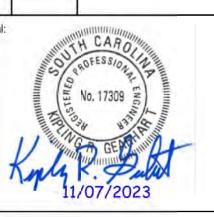
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Revisions:

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Reviewed By: NTS/JTB

Approved By: KG

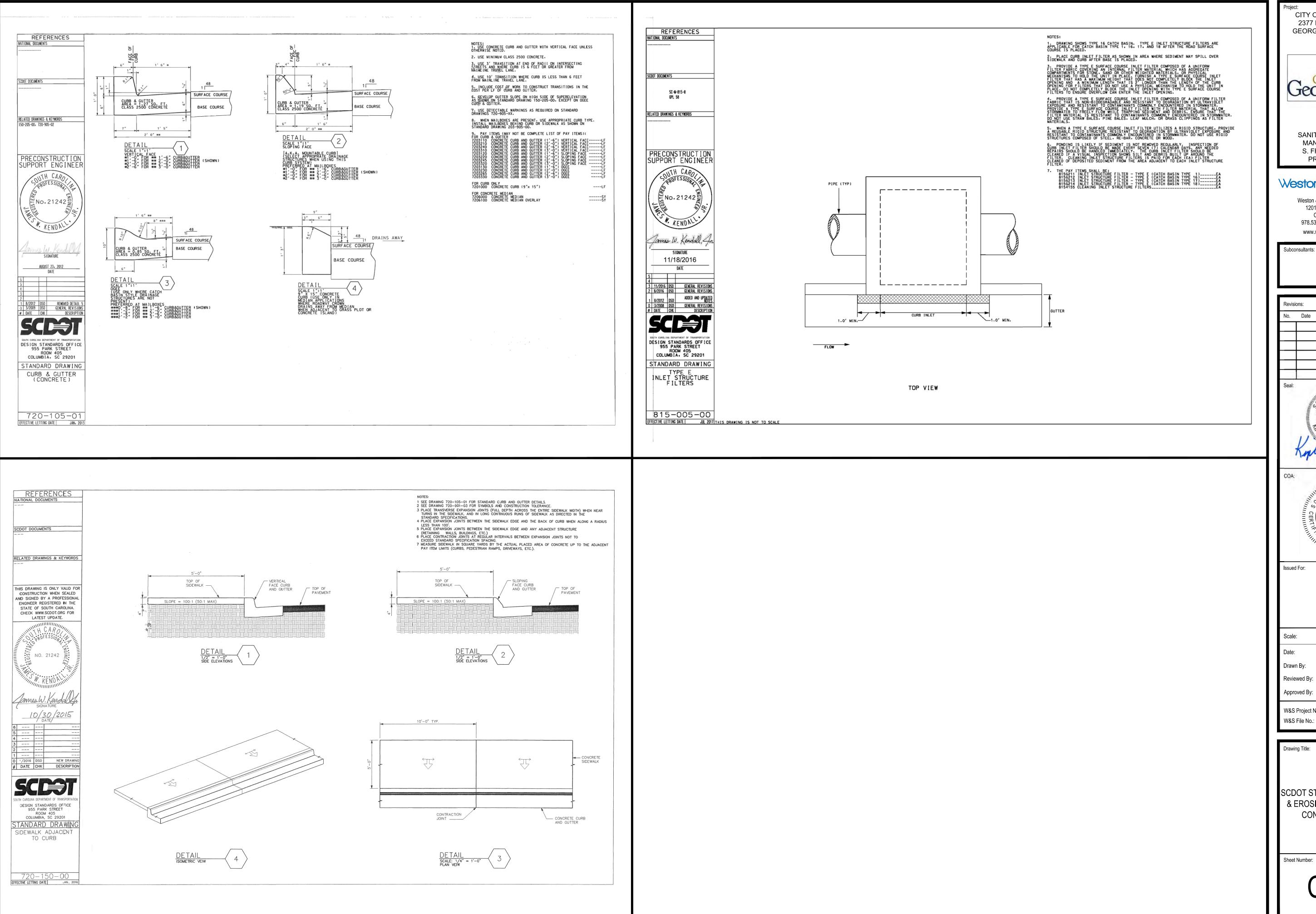
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CONSTRUCTION DETAILS

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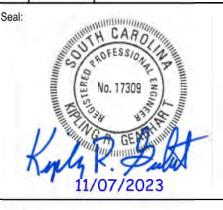
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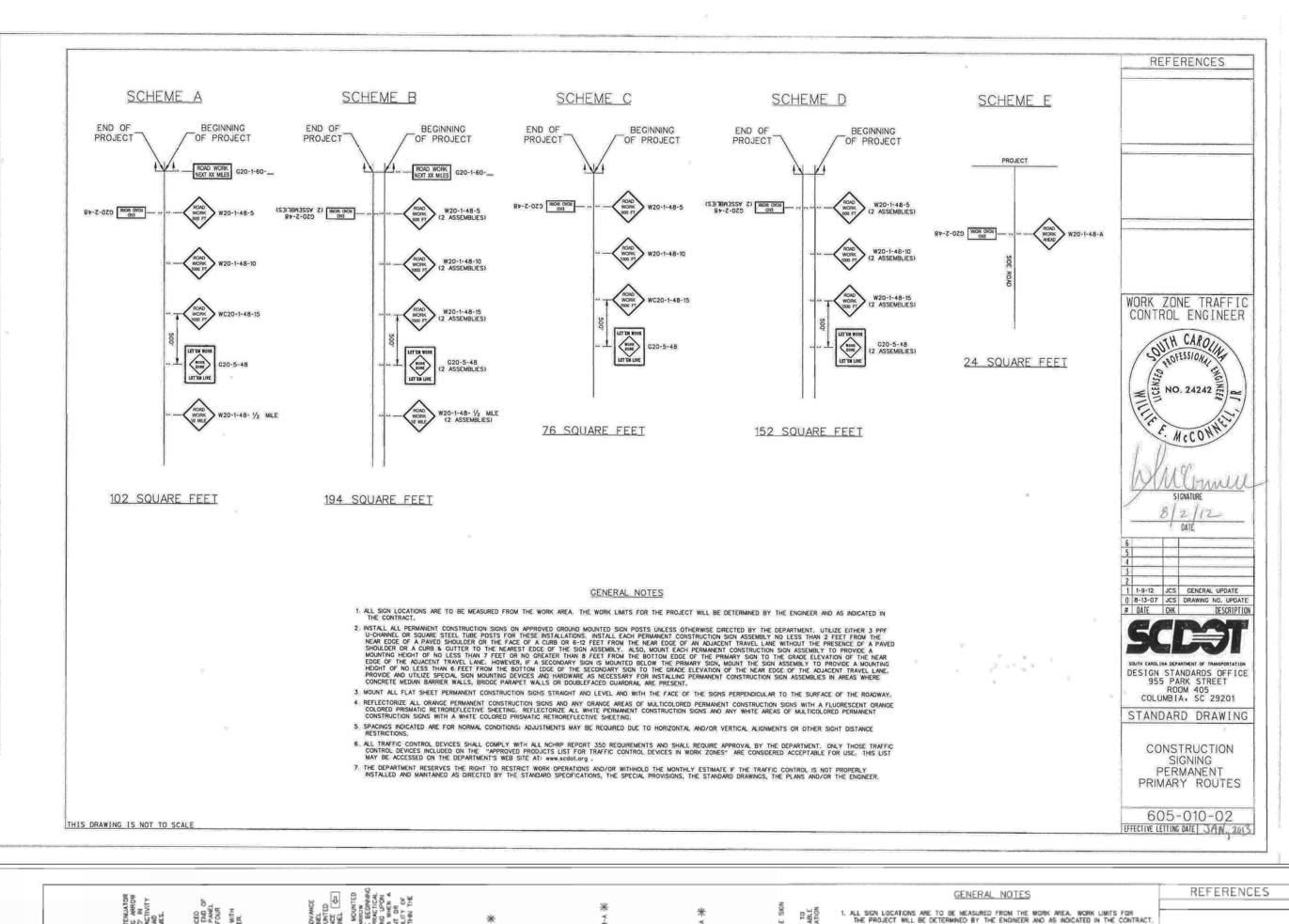
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Drawn By:	JAP
Reviewed By:	NTS/JTB

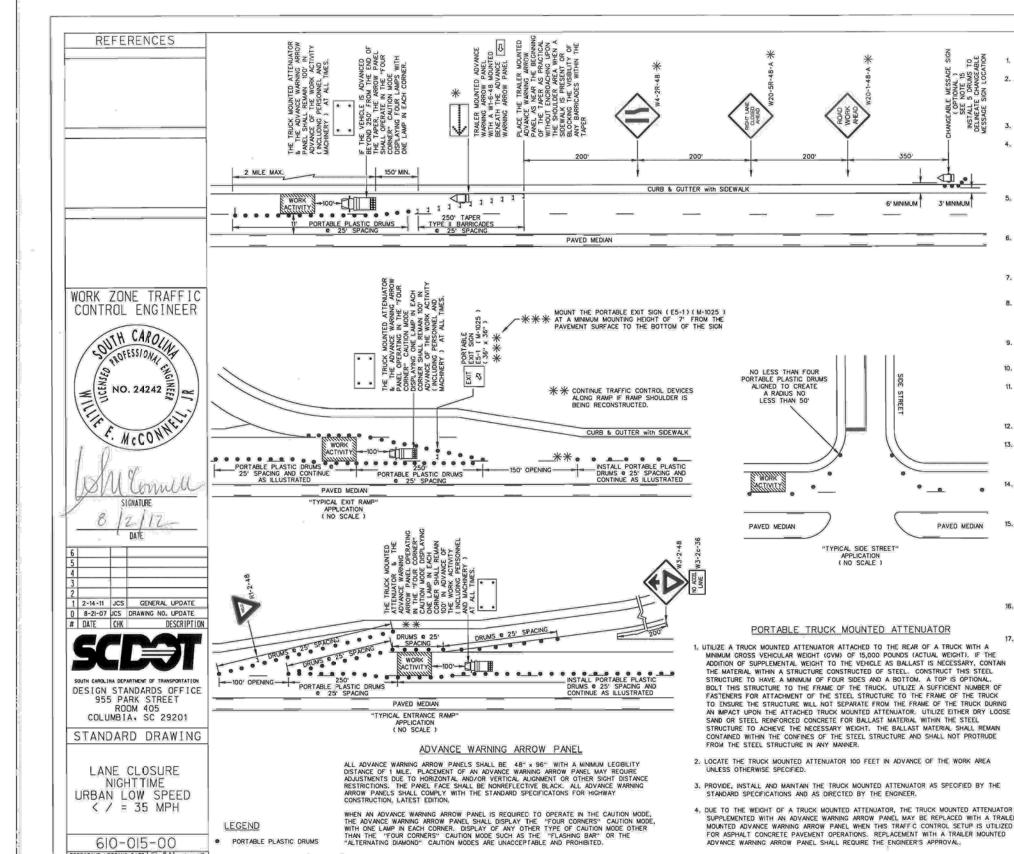
Approved By: KG ENG23-0476 W&S Project No.:

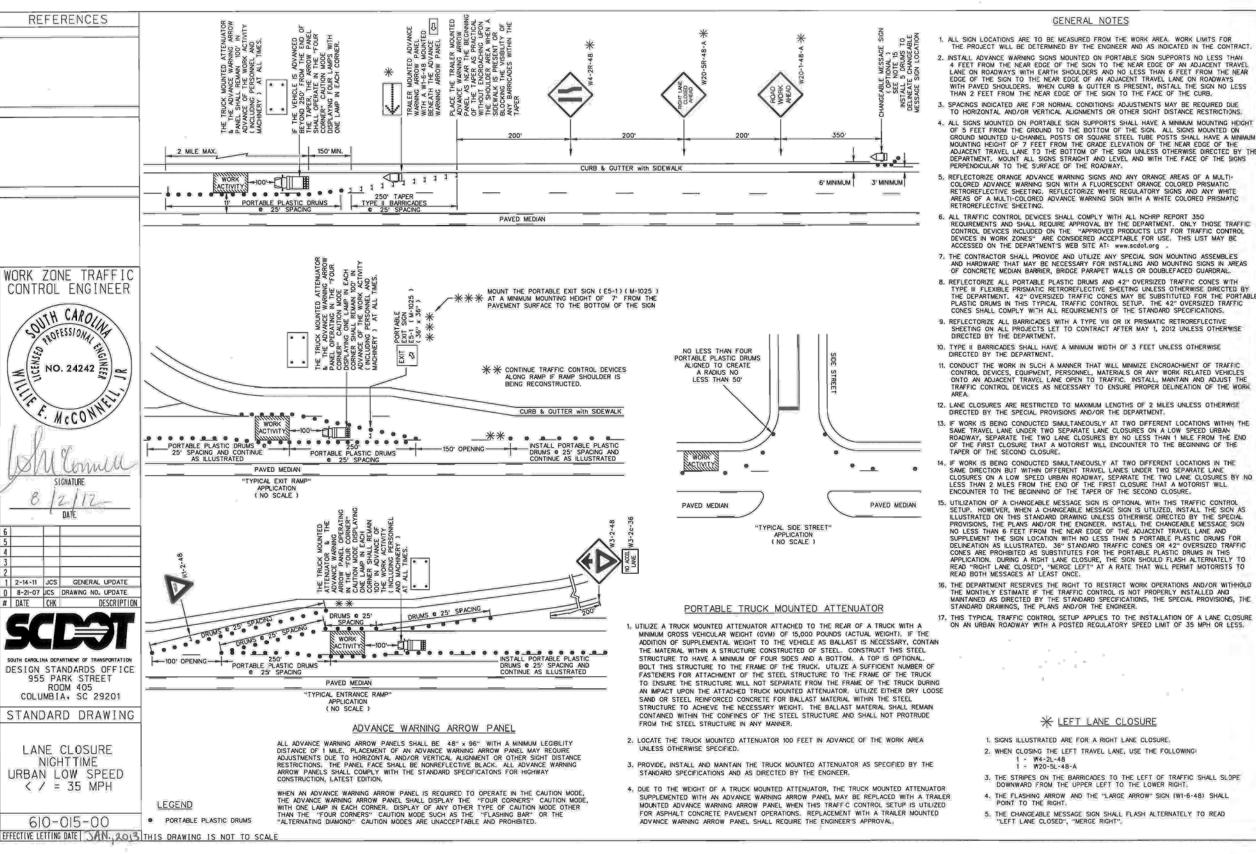
Drawing Title:

SCDOT STANDARD DRAWINGS & EROSION AND SEDIMENT CONTROL DETAILS

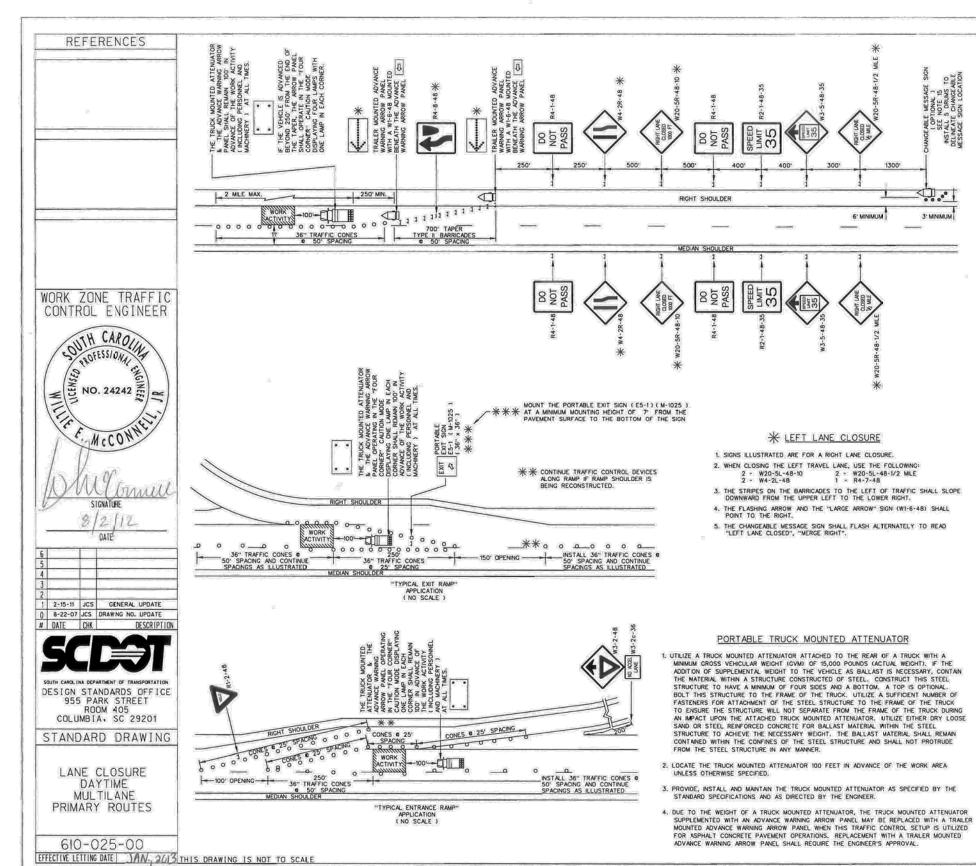
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COA: GENERAL NOTES WESTON ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA. WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT. SAMPSON 2. INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN ENGINEERS, INC. LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB. No. 4208 TE OF AU SPACINGS INDICATED ARE FOR NORMAL CONDITIONS; ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL POSTS OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY. Issued For: 5. REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING. 6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH ALL NOHRP REPORT 350 REQUIREMENTS AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT, ONLY THOSE TRAFFIC CONTROL DEVICES INCLUEDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT "www.sedol.org". 7. THE CONTRACTOR SHALL PROVIDE AND UTILIZE ANY SPECIAL SIGN MOUNTING ASSEMBLIES AND HARDWARE THAT MAY BE INCESSARY FOR INSTALLING AND MOUNTING SIGNS IN AREAS OF CONCRETE MEDIAN BARRIER, BRIDGE PARAPET WALLS OR DOUBLEFACED GUARDRAIL. 8. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED IF THIS TRAFFIC CONTROL SETUP EXTENDS INTO THE NIGHTTIME HOURS, REPLACE ALL 36" TRAFFIC CONES WITH EITHER PORTRABLE PLASTIC DRUWS OR 42" OVERSIZED TRAFFIC CONES REFLECTORIZE ALL PORTABLE PLASTIC DRUWS AND 42" OVERSIZED TRAFFIC CONES WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. N.T.S. REFLECTORIZE ALL BARRICADES WITH A TYPE VIII OR IX PRISMATIC RETROREFLECTIVE SHEETING ON ALL PROJECTS LET TO CONTRACT AFTER MAY 1, 2012 UNLESS OTHERWISE DIRECTED BY THE OEPARTMENT. Scale: 10. TYPE II BARRICADES SHALL HAVE A MINIMUM WIDTH OF 3 FEET UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. SEPTEMBER 20 11. CONDUCT THE WORK IN SUCH A MANNER THAT WILL MINIMIZE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES ONTO AN ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MANTAN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA. JAP Drawn By: 12. LANE CLOSURES ARE RESTRICTED TO MAXIMUM LENGTHS OF 2 MILES UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS AND/OR THE DEPARTMENT. NTS/JTB 13. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS WITHIN THE SAME TRAVEL LANG UNDER TWO SEPARATE LANG CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REQULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LAW CLOSURES BY NO LESS THAN 2 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE, Approved By: KG IN IT WIS BEING CONDUCTED SMILTANEOUSLY AT TWO DIFFERENT LOCATIONS IN THE SAME OF THE SECOND CLOSURE, IN F WORK IS BEING CONDUCTED SMILTANEOUSLY AT TWO DIFFERENT EXCELLINES AND ENTEROTION BUT WITHIN DIFFERENT TRAVEL LANES UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY PRODUMY WITH A POSTED REQULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 4 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE. W&S Project No.: ENG23-0476 I A*LR OF THE SECOND CLOSURE.

15. UTILIZATION OF A CHANGEABLE MESSAGE SIGN IS OPTIONAL WITH THIS TRAFFIC CONTROL SETUP. HOWEVER, WHEN A CHANGEABLE MESSAGE SIGN IS UTILIZED, INSTALL THE SIGN AS ILLUSTRATED ON THIS STANDARD DRAWING UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS, THE PLANS AND/OR THE ENORIESE. INSTALL THE CHANGEABLE MESSAGE SIGN NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE AND SUPPLEMENT THE SIGN LCCATION WITH NO LESS THAN 5 PORTABLE PLASTIC DRUMS FOR DELINEATION AS ILLUSTRATED. 36" STANDARD TRAFFIC CONES OR 42" OVERSIZED TRAFFIC CONES ARE PROHBITED AS SUBSTITUTES FOR THE PORTABLE PLASTIC DRUMS IN THIS APPLICATION. DURING A RIGHT LANE CLOSURE, THE SIGN SHOULD FLASH ALTERNATELY TO READ "RIGHT LANE CLOSURE, THE SIGN SHOULD FLASH ALTERNATELY TO READ BOTH MESSAGES AT LEAST ONCE. W&S File No.: Drawing Title: 16. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MANTANNED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.

17. THIS TYPICAL TRAFFIC CONTROL SETUP APPLIES TO THE INSTALLATION OF A LANE CLOSURE ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER.

ADVANCE WARNING ARROW PANEL

LEGEND

O 36" TRAFFIC CONES

ALL ADVANCE WARNING ARROW PANELS SHALL BE 48" x 96" WITH A MINIMUM LEGIBILITY DISTANCE OF 1 MILE. PLACEMENT OF AN ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS. THE PANEL FACE SHALL BE NORREFLECTIVE BLACK. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

3' MINIMUM

SCDOT STANDARD TRAFFIC CONTROL DETAILS

CITY OF GEORGETOWN 2377 MAYBANK DRIVE GEORGETOWN, SC 29440

SANITARY SEWER and

MANHOLE SURVEY

S. FRASER STREET

PROJECT #1818

Weston & Sampson

Weston & Sampson Engineers, Inc.

1201 Main Street, Suite 930

Columbia, SC 29201

978.532.1900 800.SAMPSON

www.westonandsampson.com

Description

Subconsultants:

No. Date

Sheet Number:

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CONES © 25' CONES © 25' CONES © 25' SPACING AND CONTINUE AS ILLUSTRATED LUTILIZE A TRUCK MOUNTED ATTENUATOR ATTACHED TO THE ISTAR OF A TRUCK WITH A 36" TRAFFIC COMES
9 25" SPACING ADVANCE WARNING ARROW PANEL ALL ADVANCE WARNING AFROM PANELS SHALL BE 48" x 95" WITH A MINIMUM LEGIBILITY DISTANCE OF I MILE. PLACEMENT OF AN ADVANCE WARNING AFROW PANEL MAY REQUIRE ACAUSTMENTS DUE TO HORIZONTAL AND/ON VERTICAL AL KNOWENT OR OTHER SOCIT DISTANCE RESTRICTIONS. THE PANEL FACE SHALL BE MORREFLECTIVE BLACK, ALL ADVANCE MARNING WIRDOW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR INCHINAY CONSTRUCTION, LATEST EDITION. 2. LOCATE THE TRUCK MOUNTED ATTENUATOR 100 FEET IN ADVANCE OF THE WORK AREA PROVIDE. INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE 4. DUE TO THE WEIGHT OF A TRUCK MOUNTED ATTENUATOR, THE TRUCK MOUNTED ATTENUATOR SUPPLEMENTED WITH AN ADVANCE WARNING ARROW PANEL MAY BE REPLACED WITH A TRALER MOUNTED ADVANCE WARNING ARROW PANEL WHEN THIS TRAFFIC CONTROL SETUP IS UTILIZED. WHEN AN ADVANCE WARNING ARROW PANEL IS REQUIRED TO OPERATE IN THE CAUTION MODE, THE ADVANCE WARNING ARROW PANEL SHALL DISPLAY THE "FOUR CORNERS" CAUTION MODE WITH ONE LAMP IN EACH CORNERS" CAUTION OF ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE SUCH AS THE "FLASHING BAR" OR THE "ALTERNATING DIAMOND" CAUTION MODES ARE UNACCEPTABLE AND PROHIBITED. LEGEND O 36" TRAFFIC CONES THIS DRAWING IS NOT TO SCALE

2 MLE MAX.

8 25' SPACING TYPE II BARRICADES

8 25' SPACING

MOUNT THE PORTABLE EXIT SIGN (ES-1) (IN-1025)
**** AT A MINIMUM MOUNTING HOGHT OF 7" FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN

** CONTINUE TRAFFIC CONTROL DEVICES
ALONG RAMP F RAMP SHOULDER IS
BEING RECONSTRUCTED.

CURB & OUTTER with SIDEWALK

 LANE CLOSURES ARE RESTRICTED TO MAXIMUM LENGTHS OF 2 MILES UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS AND/OR THE DEPARTMENT. 15. If WORK IS BEING CONDUCTED SHAULTH/EQUISLY AT TWO DIFFERENT LOCATIONS WITHIN THE SAME TRAVEL LANG UNDER TWO SEPARATE LANG CLOSURES ON A LOW SPEED URBAN ROADWAY, SEPARATE THE TWO LANG CLOSURES BY NO LESS THAN 1 MILE FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE. PAVED MEDIAN PAVED MEDIAN

"TYPICAL SIDE STREET" APPLICATION (NO SCALE)

PORTABLE TRUCK MOUNTED ATTENUATOR

MINIMUM GROSS VEHICULAR WEIGHT IGNMI OF 15,000 POUNDS (ACTUAL WEIGHT). IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL CONSTRUCT THIS STEEL. STRUCTURE TO HAVE A MINIMUM OF FOUR SIGES AND A BOTTOM. A TOP IS OPTIONAL.

STRUCTURE TO THE FRAME OF THE TRUCK, UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK TO ENSURE THE STRUCTURE WILL NOT SUFFARATE FROM THE FRAME OF THE TRUCK DURING ON IMPACT UPON THE ATTACHED TRUCK MOUNTED ATTENUATOR, UTILIZE EITHER DUSCE SAND OR STEEL, REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHEVE THE RECESSARY WOODH. THE BALLAST MATERIAL SHALL REMAIN

ONTANED WITHIN THE CONFINES OF THE STEEL STRUCTURE AND SHALL NOT PROTRUGE

FOR ASPHALT CONCRETE PAVEMENT OPERATIONS. REPLACEMENT WITH A TRALER MOUNTED ACYANCE WARNING ARROW PANEL SHALL REQUIRE THE ENGINEER'S APPROVAL.

FROM THE STEEL STRUCTURE IN ANY MANNER.

STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

NO LESS THAN FOUR 36" TRAFFIC CONES ALIGNED TO CREATE A RADIUS NO LESS THAN 50"

₹

8. NIMMON 2. NIMMON

14. F WORK IS BEING CONDUCTED SMULTANEOUSLY AT TWO DIFFERENT LOCATIONS IN THE SAME DIRECTION BUT WITHIN DIFFERENT TRAVEL LANES UNDER TWO SEPARATE LANE CLOSURES ON A LOW SPEED LIBRIAN RIDADWAY, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 2 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE. EXCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.

15. UTILIZATION OF A CHANGEABLE MESSAGE SIGN IS OPTIONAL WITH THIS TRAFFIC CONTROL SETUP. HOWEVER, WHEN A CHANGEABLE MESSAGE SIGN IS UTILIZED, INSTALL THE SIGN AS LILUSTRATED ON THE STANDARD DRAWING UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS, THE PLANS AMOVER THE ENDERER, INSTALL THE CHANGEABLE MESSAGE SIGN NO LESS THAN 8 PEET FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE AND SUPPLEMENT THE SIGN LOCATION WITH NO LESS THAN 5 PORTABLE PLASTIC DRUMS FOR DOLINEATION AS ILLUSTRATED, 30" STANDARD TRAFFIC COMES OR 42" OVERSIZED TRAFFIC COMES ARE PROHIBITED AS SUBSTITUTES FOR THE PORTABLE PLASTIC DRUMS IN THIS APPLICATION. DURING A RIGHT LANE CLOSURE, THE SIGN SHOULD FLASH ALTERNATELY TO READ TRAFFIC LANE CLOSUR, "MERKEL LEFT" AT A PARTY THAT YILL PERMIT MICROSTATION.

2. NSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS IN LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. MEEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.

SPACINGS INDICATED ARE FOR NORMAL CONDITIONS: AGJUSTMENTS WAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL AUGMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.

4. ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL, SIGNS MOUNTED ON

A REFLECTORIZE DRAWGE ADVANCE WARNING SIGNS AND ANY GRANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUCRESCENT GRANGE COLORED PRISMATIC RETROSEFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AVERS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.

6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT. ONLY THOSE TRAFFIC CONTROL DEVICES INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN YOUR ZONES" AND CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.sedol.org.

THE CONTRACTOR SHALL PROVIDE AND UTILIZE ANY SPECIAL SIGN MOUNTING ASSEMBLIES AND HARDWARE THAT MAY BE NECESSARY FOR INSTALLING AND MOUNTING SIGNS IN AREAS OF CONGRETE VEDIAN BARRIER, BRIDGE PARAMET WALLS ON DOUBLEFACED GUARDRAIL.

B. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED. IF THIS TRAFFIC CONTROL SETUP EXTENDS INTO THE NIGHTIME HOURS, REPLACE ALL 36" TRAFFIC CONES WITH ETHER PORTRAGE PLASTIC CRUSS OR 42" OVERSIZED TRAFFIC CONES WITH TYPE IN FLEXBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.

REFLECTORZE ALL BARRICADES WITH A TYPE VII OR IX PRISNATIC RETROREFLECTIVE SHEETING ON ALL PROJECTS LET TO CONTRACT AFTER MAY 1, 2012 UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.

M. COMDUCT THE WORK IN SUCH A MANNER THAT WILL MINIMZE ENGROADMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES ONTO AN ADJUSCH TRAVEL LAWE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NEGESSARY TO ENSURE PROPER DELINEATION OF THE WORK.

TYPE & BARRICADES SHALL HAVE A MINIMUM WIDTH OF 3 FEET UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.

OF SECT FROM THE CHOINED TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED UP-CHAINSE, POSTS OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HOGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE KEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DRECTED BY THE DEPARTMENT, MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FAGE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY.

16. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHOLD THE MONTHLY ESTMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MANTANDE AS ORDERED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER. THIS TYPICAL TRAFFIC CONTROL SETUP APPLIES TO THE INSTALLATION OF A LANE CLO ON AN URBAN ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 35 MPH OR LES

> * LEFT LANE CLOSURE 1. SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.

2. WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING THE STRIPES ON THE BARRICADES TO THE LEFT OF TRAFFIC SHALL SLOPE DOWNWARD FROM THE UPPER LEFT TO THE LOWER RIGHT.

 THE FLASHING ARROW AND THE "LARGE ARROW" SIGN (WI-6-48) SHALL POINT TO THE RIGHT. THE CHANGEABLE MESSAGE SIGN SHALL FLASH ALTERNATELY TO READ "LEFT LANE CLOSED", "MERCE RICHT".

ROOM 405 COLUMBIA SC 29201 STANDARD DRAWING LANE CLOSURE DAYTIME

< / = 35 MPH610-010-00