

SEWER NOTES:

1. SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH "TEN STATES STANDARDS," SC DHEC AND BCWS REGULATIONS.
2. ALL SANITARY SEWER SERVICES SHALL BE LAID ON A MINIMUM SLOPE OF 0.5% AND SHALL BE 6" PVC UNLESS INCIDENCES NOTED IN NOTE NO. 10 OCCUR, OR OTHERWISE SPECIFIED.
3. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH BCWS AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
4. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND IN THE FIELD OR ON THE DRAWINGS PRIOR TO BEGINNING OR CONTINUING WORK. ANY DEVIATIONS FROM THE CONSTRUCTION PLANS SHALL NEED TO BE APPROVED IN WRITING BY BCWS.
5. CONNECTION TO EXISTING SEWER SYSTEM SHALL BE MADE IN THE PRESENCE OF BCWS INSPECTOR WITH AT LEAST 72 HOURS ADVANCED NOTICE.
6. CONTRACTOR SHALL PLACE 6" SERVICES AND STUB UP TO EXISTING GRADE. CONCRETE COLLARS SHALL BE PLACED AROUND 6" CLEAN OUT. FOR FUTURE CUSTOMERS THE CONTRACTOR SHALL PLACE 4" CONNECTIONS CAPPED OFF.
7. WATERTIGHT RINGS AND COVERS SHALL BE INSTALLED ON MANHOLES IN SIDEWALK, AREAS AFFECTED BY STREET RUNOFF OR BELOW THE 50 YEAR FLOOD ELEVATION. MANHOLE COVER SHALL BE INSTALLED COMPLETELY WITHIN OR COMPLETELY OUT OF PAVED AREAS (INCLUDING SIDEWALKS).
8. MANHOLES RECEIVING FORCE MAIN DISCHARGE SHALL BE COATED WITH APPROVED EPOXY LINER AS WELL AS THE NEXT DOWNSTREAM MANHOLE, UNLESS OTHERWISE DIRECTED BY BCWS. ADDITIONAL MANHOLES MAY ALSO BE REQUIRED BASED ON PROXIMITY. ALL MANHOLES REGARDLESS IF NEW OR EXISTING, IF COATED WITH EPOXY LINER MUST HAVE COMPOSITE FRAME AND COVER INSTALLED.
9. ALL MAIN LINE GRAVITY INSIDE DROP MANHOLES SHALL BE COATED WITH APPROVED EPOXY LINER AND REQUIRE COMPOSITE FRAME AND COVERS. SEE BCWS APPROVED PARTS LIST APPENDIX F29 FOR LINING PRODUCTS. INSIDE DROP MANHOLES MAY UTILIZE BOWL CONFIGURATION IN LIEU OF TRADITIONAL TEE DROP.
10. ALL DUCTILE IRON PIPES, JOINTS AND FITTINGS SHALL BE LINED WITH APPROVED EPOXY COATING. SEE BCWS APPROVED PARTS LIST APPENDIX F29 FOR LINING PRODUCTS.
11. SDR-26 PVC OR DR18 C900 IN STEEL CASING SHALL BE USED WHEN:
 - CROSSING BENEATH STORM DRAINAGE PIPE WITH LESS THAN 2' OF CLEARANCE;
 - FLOWABLE FILL USE BASED ON BCWS REVIEW AND APPROVAL.
12. SELECTION OF PIPE MATERIALS SHALL COMPLY WITH THE FOLLOWING:
 - LESS THAN THREE (<3') OF COVER: APPROVED EPOXY COATED CLASS 52 DIP; BASED ON REVIEW AND APPROVAL BY BCWS
 - GREATER THAN 3 FEET BUT LESS THAN 15 FEET (>3' BUT <15') IN DEPTH: SDR-26 PVC AND IN ACCORDANCE WITH CROSSING REQUIREMENTS LISTED ABOVE;
 - GREATER THAN 15 FEET BUT LESS THAN 24 FEET (>15' BUT <24') IN DEPTH: DR-18 C900 PVC;
13. SEWER SERVICE CONNECTIONS LOCATED AT DEPTHS GREATER THAN 15' SHALL BE MADE WITH SOLID MOLDED C900 FITTINGS FOR 8" GRAVITY MAINS. P401 LINED DIP TEE TO BE INSTALLED FOR GRAVITY MAINS 10" OR GREATER.
14. CLEAN OUTS SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY OR GENERAL UTILITY EASEMENT (GUE) AND HAVE A MINIMUM OF 18" SEPARATION FROM SIDEWALKS. INSTALL CLEAN OUTS AT THE COMMON PROPERTY CORNER UNLESS OTHERWISE NOTED ON THE CONSTRUCTION PLANS.
15. CONTRACTOR SHALL KEEP A RED-LINED SET OF THE CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES.
16. UPON COMPLETION OF CONSTRUCTION OF THE SEWER SYSTEM, A MINIMUM 30 DAYS AFTER ALL PIPE HAS BEEN INSTALLED THE FOLLOWING APPROVAL PROCEDURE MUST BE FOLLOWED:
 - A. THE CONTRACTOR SHALL SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS WITH BCWS AT LEAST 72 HOURS IN ADVANCE.
 - B. THE CONTRACTOR SHALL CONDUCT A PRELIMINARY INSPECTION TO LOCATE ANY DEFECTS AND DETERMINE WHEN THE SEWER SYSTEM IS READY FOR TESTS AND FINAL INSPECTION. PRIOR TO INSPECTION, THE SEWER SYSTEM SHALL BE FLUSHED AND CLEANED OF DEBRIS.
 - C. THE ENGINEER SHALL SCHEDULE LOW PRESSURE AIR TEST AND DEFLECTION TEST WITH BCWS. DEFLECTION TEST SHALL BE CONDUCTED PRIOR TO LOW PRESSURE AIR TEST.
 - D. THE CONTRACTOR SHALL SUPPLY TO THE OWNER'S ENGINEER AN AS-BUILT SURVEY, INCLUDING THE SERVICE LATERAL INFORMATION, THE LOCATIONS OF WHICH SHALL HAVE BEEN STAKED IN THE FIELD.
 - E. A SET OF PRELIMINARY RECORD DRAWINGS SHALL BE PROVIDED TO BCWS INSPECTOR FOR CCTV INSPECTION VIDEO REVIEW.
 - F. CCTV INSPECTION VIDEOS SHALL BE SUBMITTED FOR BCWS REVIEW. ANY NECESSARY REPAIRS ARE TO BE COMPLETED PRIOR TO SCHEDULING A FINAL INSPECTION.
 - G. THE ENGINEER SHALL SUBMIT THE TEST RESULTS, RECORD DRAWINGS, CONTINUITY TEST CERTIFICATION LETTER AND ALL OTHER REQUIRED DOCUMENTS TO BCWS FOR REVIEW AND APPROVAL.
 - H. THE ENGINEER SHALL SCHEDULE A FINAL INSPECTION WITH BCWS AT LEAST 72 HOURS IN ADVANCE.
 - I. THE INSPECTION SITE MUST MEET ALL MINIMUM CRITERIA IDENTIFIED IN BCWS STANDARD SPECIFICATIONS PRIOR TO SCHEDULING FINAL INSPECTION NOTED IN APPENDIX G SECTION 02731 SANITARY GRAVITY SEWER LINE TESTING SECTION 3.
16. LIMESTONE IS NOT AN APPROVED EMBEDMENT MATERIAL. USE #57 GRANITE, AIR COOLED BLAST FURNACE SLAG OR APPROVED MATERIALS LISTED IN BCWS SPECIFICATIONS.
17. MJ SLEEVES OR APPROVED ADAPTERS SHALL BE USED TO TRANSITION BETWEEN PVC AND DIP. FERNCO OR SIMILAR COUPLINGS ARE NOT ALLOWED. ONLY EXCEPTION TO USE OF FERNCO ON GRAVITY SEWER IS WHEN INSIDE DROP BOWL CONFIGURATION IS INSTALLED.

SEWER PANEL 8