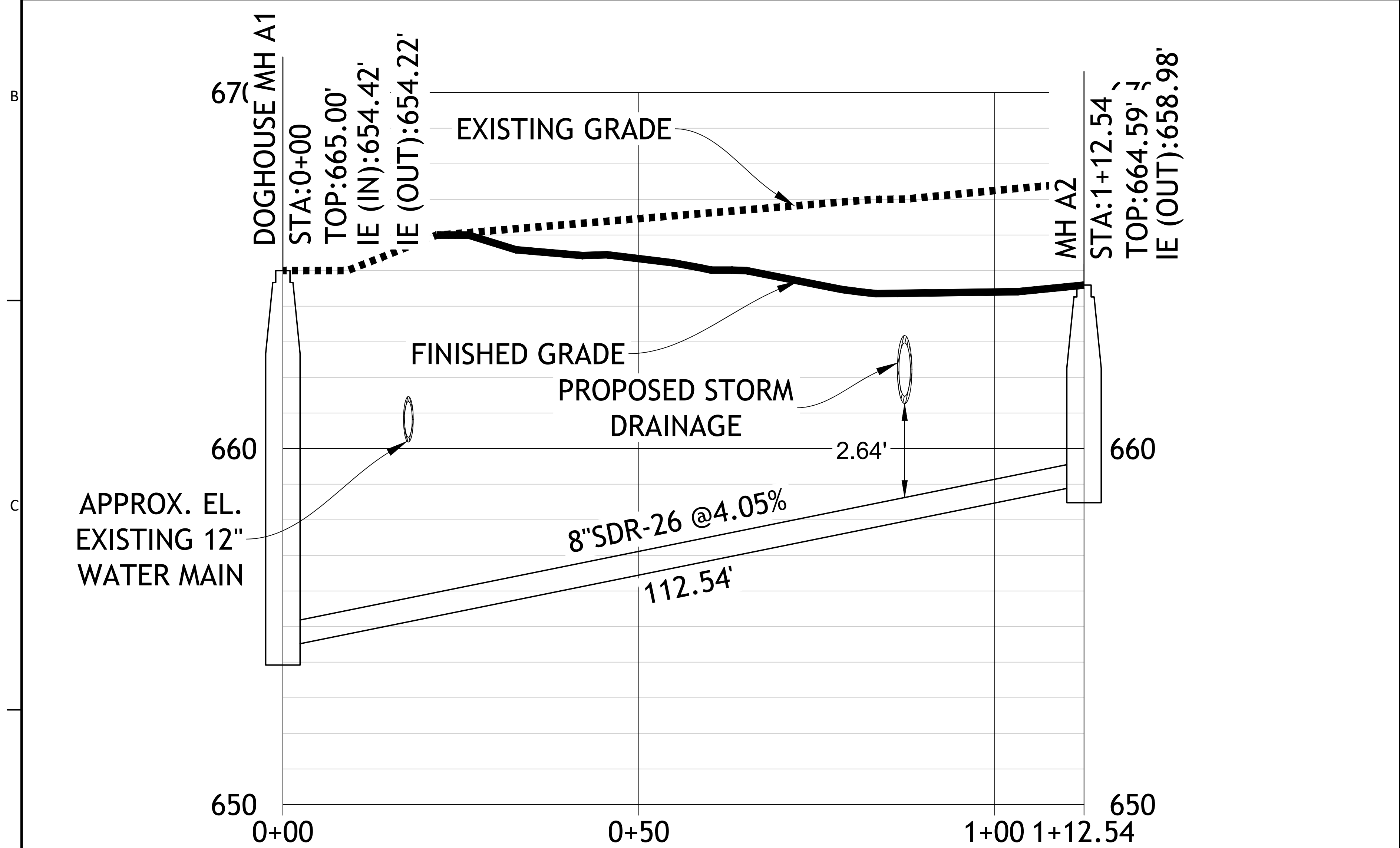
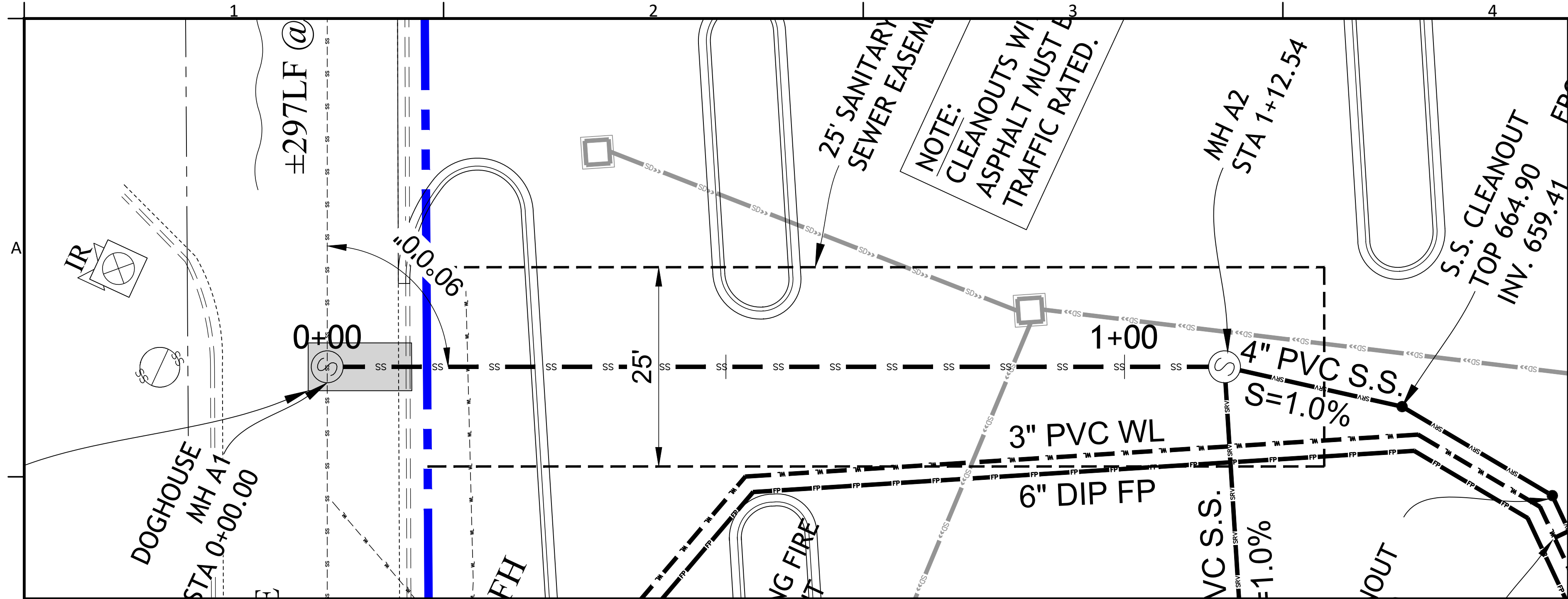




SEWER LINE-A

SCALE:
HORIZONTAL: 1"=10'
VERTICAL: 1"=2'

SANITARY SEWER LINES NOTES

1. M.H. FRAME AND COVER SHALL BE MF-11 AND MC-18 RESPECTIVELY AS MANUFACTURED BY SUMMIT MACHINERY COMPANY OR SEWER AUTHORITY APPROVED EQUAL. FRAME SHALL WEIGH 208 POUNDS AND COVER SHALL WEIGH 120 POUNDS. ALL SURFACES OF FRAME AND COVER SHALL BE BITUMINOUS COATED.
2. STEPS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC, REINFORCED WITH 1/2" GRADE 60 REINFORCEMENT OR SEWER DISTRICT APPROVED.
3. THE CONTRACTOR IS RESPONSIBLE FOR TOP ELEVATION OR ALL M.H. COVER TO ALLOW FOR THICKNESS OF ASPHALT PAVEMENT, STONE OR TOPSOIL IN GRASSED AREAS TO MEET FINISH GRADE ELEVATIONS.
4. BENCH MAY CONTAIN BROKEN BRICKS, TILE, ETC., IN MORTAR MIX.
5. REINFORCED PRECAST M.H. WITH FORMED INVERTS AS MANUFACTURED BY TINDALL CONCRETE COMPANY ("C" SERIES) CONFORMING TO ASTM C-478, OR APPROVED EQUAL MAY BE USED. PRECAST CONCRETE RINGS, NOT EXCEEDING 12 INCHES MAY BE USED FOR ADJUSTMENT OF RING TO SURFACE. ADJUSTMENTS GREATER THAN 12 INCHES REQUIRE ADDITIONAL BARREL RISER SECTIONS INSTALLED BELOW THE CONE SECTION.
6. FOR STRAIGHT (GRADE AND ALIGNMENT) THROUGH M.H., P.V.C. PIPE SHALL BE LAID INSTEAD OF BRICK INVERT. PIPE SHALL BE CUT SO JOINT DOES NOT HIT IN M.H. TOP ONE-FOURTH SECTION OF PIPE SHALL BE EVENLY BROKEN OUT AFTER BENCH IS POURED.
7. A DROP OF 24 INCHES MAXIMUM FROM THE POINT OF SEWAGE ENTRANCE TO THE POINT OF SEWAGE OUTFLOW IS PERMITTED PROVIDED THE INVERT IS SLOPED FROM THE ENTRANCE POINT TO THE OUTFLOW POINT. CONTRACTOR SHALL MATCH "CROWN OF PIPE" WHEN CONNECTING NEW SEWER LINE TO EXISTING.
8. ANY MANHOLES LOCATED OFF OF ROADS OR HIGHWAY RIGHT-OF-WAY SHALL BE RAISED APPROXIMATELY ONE (1) FOOT ABOVE FINISHED GRADE.
9. POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL CONFORM TO ASTM D-3034, SDR-35, INSTALLED IN ACCORDANCE WITH ASTM D-2321. ELASTOMERIC JOINTS SHALL COMPLY WITH ASTM D-3212. SDR-35 SHALL BE INSTALLED IN "CLASS B" BEDDING AS DETAILED ON DRAWINGS. NO ULTRARIB PIPE ALLOWED.
10. DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151, FURNISHED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL DUCTILE IRON PIPE SHALL BE LINED WITH PROTECTO 401 (INSTALLATION OF GRAVITY SEWER), JOINTS IN D.I.P. AT THE CREEK CROSSING SHALL BE RESTRAINED FROM MOVEMENT (LOCK-TIGHT OR APPROVED EQUAL).
11. EACH JOINT SHALL BE CLEARLY AND LEGIBLY MARKED WITH THE MANUFACTURER'S NAME OR IDENTIFYING SYMBOL WITH THE LETTERS E.S. APPEARING ON THE EXTERIOR OF THE PIPE NEAR THE SOCKET.
12. MECHANICAL JOINT COUPLINGS SHALL BE USED AT ALL PIPE TRANSITIONS.
13. A MIN. OF 4 FT. OF COVER SHALL BE MAINTAINED OVER ALL PVC PIPE LINES.
14. ALL SANITARY SEWER LINES SHALL BE AIR TESTED AND MUST CONFORM TO ASTM C828, LATEST REVISION.
15. ALL FLEXIBLE PIPE SHALL BE TESTED BY PULLING A MANDREL, GO/NO GO, DEVICE BY HAND NO EARLIER THAN 30 DAYS AFTER THE TRENCHING HAS BEEN COMPLETELY BACKFILLED. THE MAXIMUM ALLOWABLE PIPE DEFLECTION SHALL NOT EXCEED 5 PERCENT OF NOMINAL INSIDE PIPE DIAMETER.
16. WATER LINES SHALL BE INSTALLED AFTER ALL GRAVITY SEWER LINES ARE INSTALLED.
17. THIS CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTACT WATER, TELEPHONE, POWER AND GAS COMPANY BEFORE EXCAVATION IS BEGUN.
18. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY WORK NECESSARY TO STAKE SEWER LINES. THE CENTERLINE AND ALL MANHOLE LOCATIONS SHALL BE STAKED IN THE FIELD. THE OWNER'S SURVEYOR WILL SET ALL LOT CORNERS. CONTRACTOR SHALL PROTECT ALL PROPERTY MARKERS.
19. ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO EXISTING ROADS USED BY HIS OPERATION. THE CONTRACTOR SHALL REMOVE MUD AND DEBRIS FROM HIGHWAY AND NOT ALLOW DUST TO BECOME A NUISANCE OR SAFETY HAZARD.
21. ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AS DETAILED ON THE DRAWING. THE CONTRACTOR SHALL PROVIDE STANDARD MANHOLES AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AND ORDINANCES. THE ENGINEER, THE LOCAL AUTHORITY AND THE STATE HEALTH AUTHORITY MUST INSPECT ALL SEWER WORK AS REQUIRED BEFORE BEING PUT IN SERVICE.
22. ALL WORK SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND INSTRUCTIONS GIVEN BY THE OWNER'S REPRESENTATIVE, THE STATE HEALTH AUTHORITY AND THE LOCAL GOVERNING AUTHORITY.
23. CONTRACTOR SHALL NOT THE NEW SEWER LINE TO EXISTING MANHOLE UNTIL ALL CONSTRUCTION IS APPROVED, TESTED AND ACCEPTED BY THE LOCAL GOVERNING AUTHORITY.
24. ALL SEWER LINES IN RELATION TO WATER LINES MUST CONFORM TO "TEN STATES STANDARDS", SECTION 38.3, 1990 EDITION, AT A MINIMUM.
25. THE CONTRACTOR SHALL GRASS ALL RIGHT-OF-WAY IN ACCORDANCE WITH SPECIFICATIONS FOR GRASSING.
26. A PRE-CONSTRUCTION CONFERENCE WITH THE CONTRACTOR, SEWER AUTHORITY, STATE HEALTH AUTHORITY, AND THE ENGINEER WILL BE HELD PRIOR TO SEWER LINE CONSTRUCTION.
27. CONTRACTOR TO ASSUME CLASS "B" BEDDING FOR SDR-35 PVC IN HIS BID PROPOSAL. CLASS "A" BEDDING WILL BE PAID FOR AS AN "EXTRA" SHOULD FIELD CONDITIONS REQUIRE THIS BEDDING.
28. COUPLINGS SHALL BE HYMAX COUPLING 984-260 OR 1200-260 AS MANUFACTURED BY TOTAL PIPING SOLUTIONS, OLEAN, NEW YORK, OR APPROVED EQUAL.
29. SANITARY SEWER SERVICES SHALL BE INSTALLED PER DETAILS. LOCATION OF SERVICE LINES SHALL BE MEASURED FROM MANHOLES AND FURNISHED WITH "AS-BUILT" DRAWINGS TO THE ENGINEER. EACH LOT OR BUILDING SHALL HAVE (1) 6" OR 4" SERVICE LINE, AS SPECIFIED FOR ON THE DRAWINGS, PLUGGED AT R/W LINE OR WITHIN 5' OF THE BUILDING. NEW SERVICE LINES SHALL BE INSTALLED AS REQUIRED ON EXISTING SEWER LINES FOR APPLICABLE LOTS OR BUILDINGS. MINIMUM SLOPE ON ALL 6" SERVICE LINES SHALL BE 1% AND ON ALL 4" SERVICE LINES SHALL BE 2%.
30. ALL WATER AND SEWER LINE BACKFILL IN ROAD R/W OR PAVED AREAS SHALL BE COMPACTED TO 95% STD. PROCTOR BY CONTRACTOR. THE OWNER'S REPRESENTATIVE SHALL TEST COMPACTION.
31. THE UTILITY CONTRACTOR SHALL BLADE ROADS SMOOTH READY FOR PAVING AFTER ALL UTILITY CONSTRUCTION IS COMPLETE.
32. ALL SEWER LINE WORK SHALL BE "APPROVED" BY THE STATE HEALTH AND LOCAL AUTHORITY, AND "APPROVED" AS-BUILT DRAWINGS SHALL BE FURNISH TO THE OWNER BEFORE CONTRACTOR RECEIVES FINAL PAYMENT.
33. THE CONTRACTOR SHALL PAY ALL SEWER TAP FEES TO THE LOCAL GOVERNING AUTHORITY. THE CONTRACTOR SHALL INSTALL TEE AND RUN THE SERVICE LINES TO ROAD RIGHT-OF-WAY.
34. THE CONTRACTOR SHALL NOT PERFORM ANY WORK UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS.
35. THIS CONTRACTOR SHALL SHORE TRENCH EXCAVATION AND USE PIPE BOX TO COMPLY WITH ALL OSHA SAFETY REGULATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE JOB SITE SAFETY AND COMPLY WITH ALL SAFETY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR HIS MEANS AND METHODS OF CONSTRUCTION.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY EXISTING INVERTS AND ELEVATIONS IN THE FIELD. IF ANY DISCREPANCY IS OBSERVED, CONTRACTOR TO NOTIFY ENGINEER.

1. D.I.P. IS REQUIRED WHERE COVER IS LESS THAN FOUR FEET.
2. D.I.P. IS REQUIRED WHERE CLEARANCE BETWEEN STORM DRAINAGE AND SEWER IS LESS THAN 18". IF SEPARATION IS LESS THEN 18" ONE 18" OR 20" DIP CENTERED AT CROSSING SHALL BE USED.
3. SEWER LINE WILL BE INSTALLED AFTER FINISH GRADE HAS BEEN ESTABLISHED.
4. MANHOLES RIMS OUTSIDE ROAD R/W MUST BE A MINIMUM OF 24" ABOVE FINISHED GRADE.
5. CONTRACTOR TO CORE DRILL THE EXISTING MANHOLES AT THE TIE-IN CONNECTIONS AND INSTALL A FLEXIBLE RUBBER BOOT. CONNECTION SHALL BE WATERTIGHT. CONTRACTOR SHALL CORE DRILL THE TABLE OF THE EXISTING MANHOLE TO FORM AN INVERT OR CHANNEL ON TOP OF THE TABLE. GREER CPW SHALL BE CONTACTED TO INSPECT THE INSIDE AND OUTSIDE OF THE MANHOLE PRIOR TO BACKFILL.
6. PRECAST CONCRETE RINGS, NOT EXCEEDING 12-INCHES, SHALL BE USED TO ADJUST THE HEIGHT OF THE MANHOLE FRAME AND COVER TO SURFACE. NO MORE THAN TWO (2) RINGS SHALL BE USED. ADJUSTMENTS GREATER THAN 12-INCHES SHALL REQUIRE AN ADDITIONAL BARREL RISER SECTION INSTALLED BELOW THE CONE SECTION.
7. D.I.P. SHALL BE USED FOR A SANITARY SEWER SERVICE WITH LESS THAN 24-INCHES (2-FEET) OF FINAL GRADE (GROUND COVER) OR IF SEPARATION BETWEEN THE STORM DRAINAGE PIPE AND SANITARY SEWER SERVICE IS LESS THAN 18-INCHES.
8. C900 PVC PIPE SHALL BE USED FOR A SANITARY SEWER SERVICE WITH AT LEAST 18-INCHES AND 24-INCHES (2-FEET) OF SEPARATION BETWEEN THE STORM DRAIN PIPE AND SANITARY SEWER SERVICE. THE SERVICE SHALL BE BEDDED WITH STONE - AT LEAST 6-INCHES ABOVE THE TOP OF PIPE/SANITARY SEWER SERVICE.
9. D.I.P. SHALL BE LINED WITH PROTECTO 401

LEGEND	
-----	EXISTING GRADE
————	FINISHED GRADE
○	STORM DRAINAGE (RCP UNLESS NOTED)

SAFETY NOTE TO CONTRACTOR
THE CONTRACTOR SHALL SHORE TRENCH EXCAVATION AND USE PIPE BOX TO COMPLY WITH ALL OSHA SAFETY REGULATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE JOB SITE SAFETY AND COMPLY WITH ALL SAFETY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR HIS MEANS AND METHODS OF CONSTRUCTION.



UTILITY NOTE TO CONTRACTOR
THE UTILITIES SHOWN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

NO.	DATE	BY	REVISION
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SANITARY SEWER PROFILES
PROPOSED HOME 2 SUITES BY HILTON
GREENWOOD COUNTY SOUTH CAROLINA
475 HOSPITALITY BOULEVARD

0 10 20 Feet
SCALE: 1" = 10'
PROJECT MANAGER: ZDJ
DRAWN BY: MSG
PROJECT DATE: 5/3/2023
JOB No.: 2023104
PLOT DATE: 3/17/25
SHEET
SS-1

