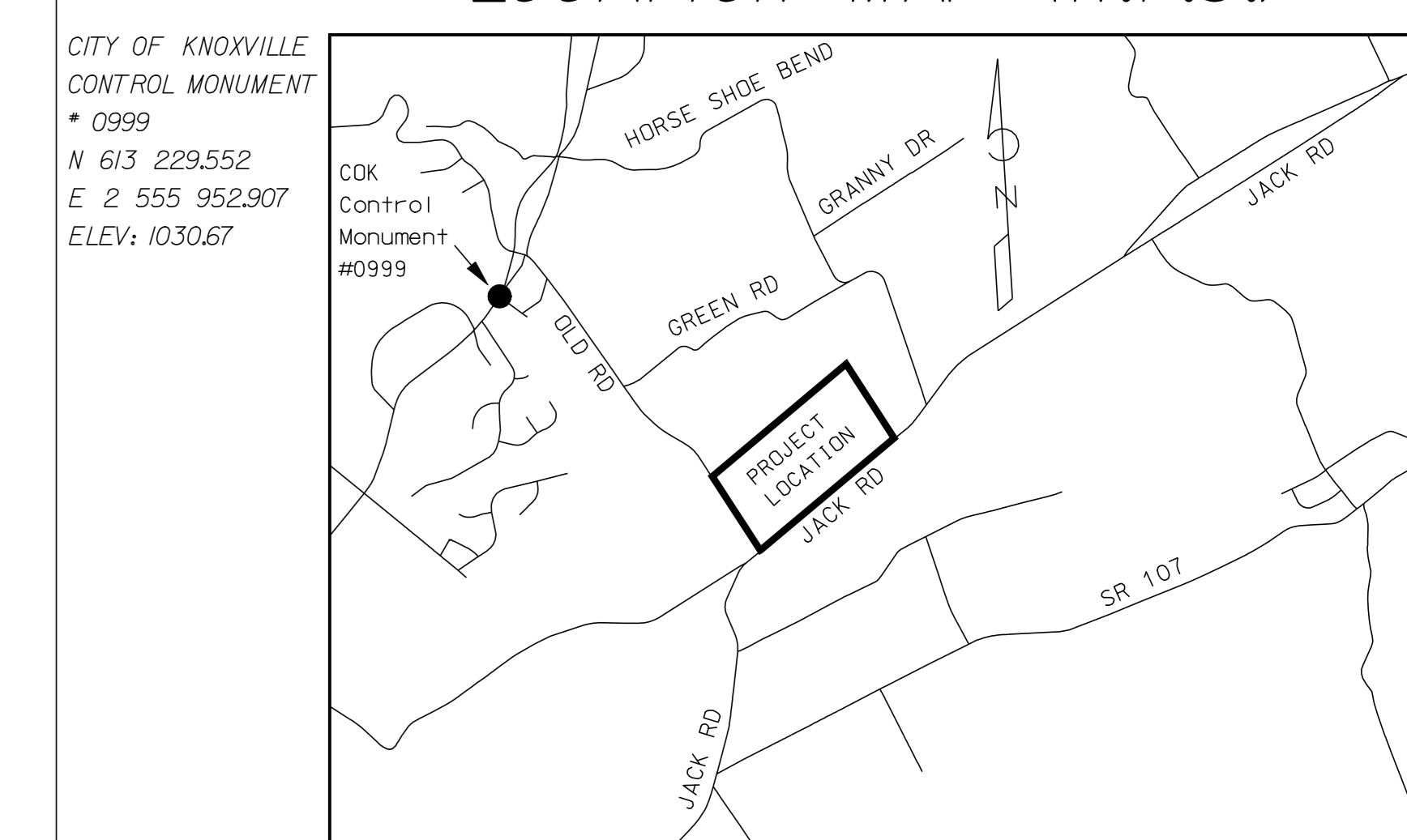


LEGEND

- EXISTING SANITARY MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - PROPOSED SANITARY LINE
 - WATER STOP
- WHERE:
 A - *FT LENGTH OF THE LATERAL FROM THE MAIN TO THE PROPERTY LINE
 B - *FT OF DEPTH WHERE THE LATERAL TAPS INTO THE SEWER MAIN (NOT NECESSARY UNTIL ASBUILT)
 C - *FT FROM THE NEAREST DOWNSTREAM MANHOLE

Plan Scale:
1" = 100'

LOCATION MAP (N.T.S.)

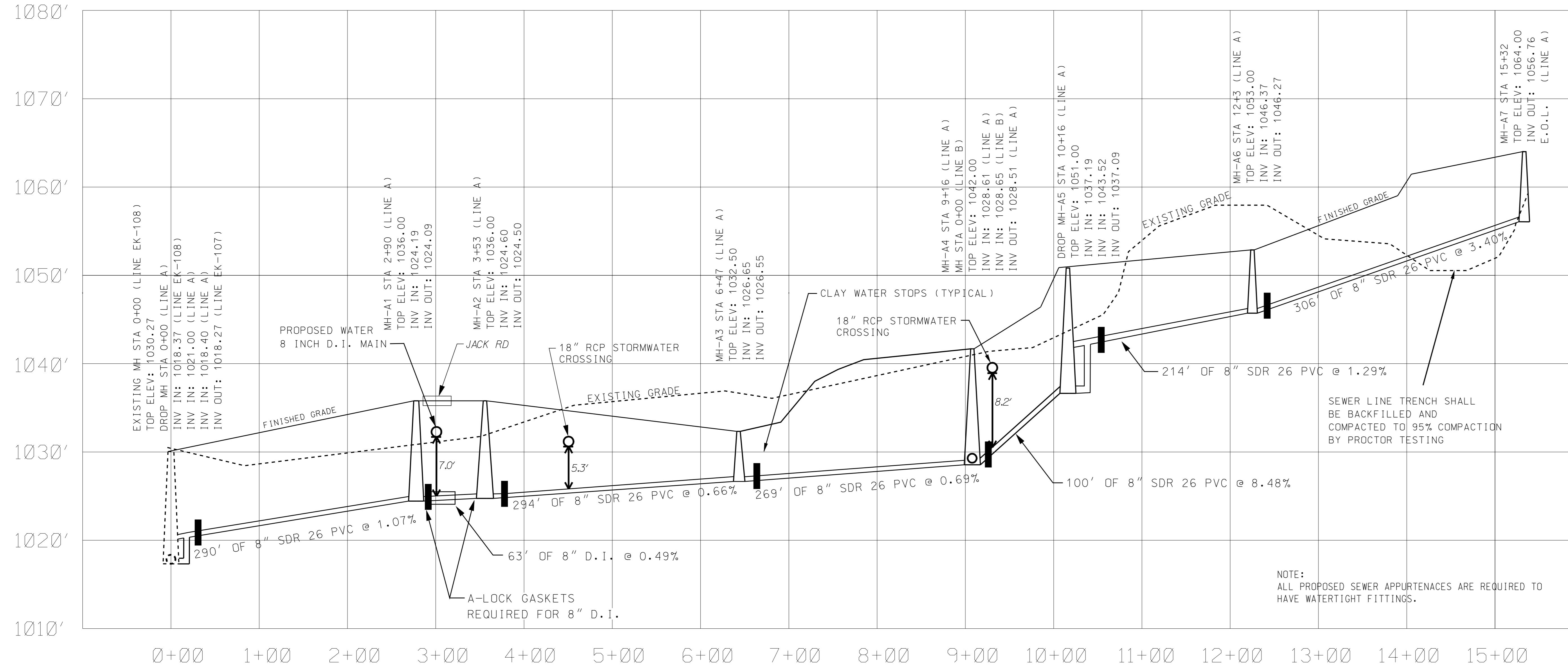
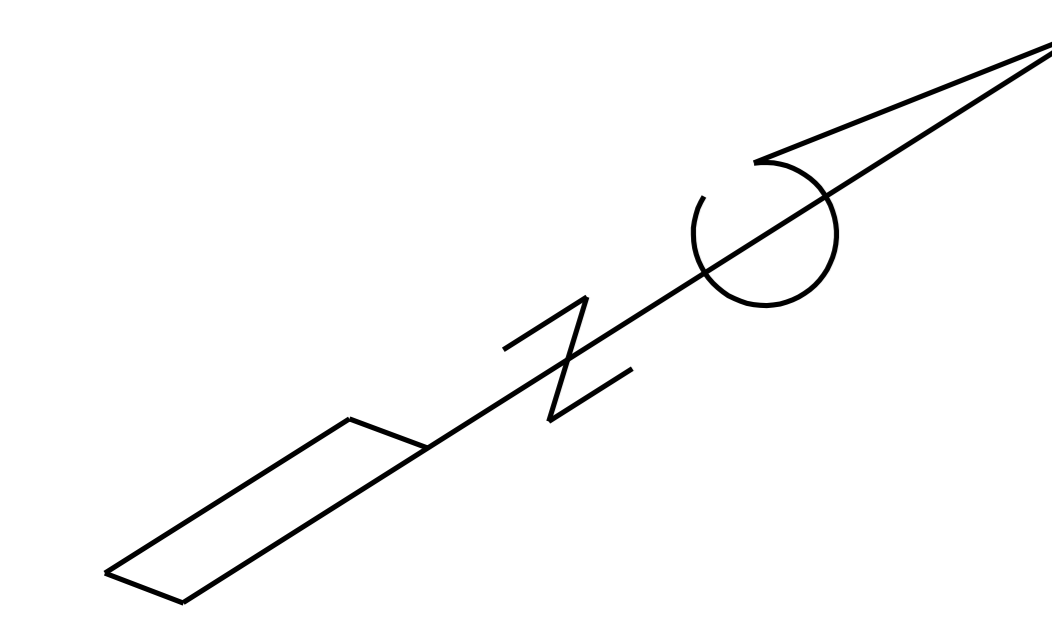
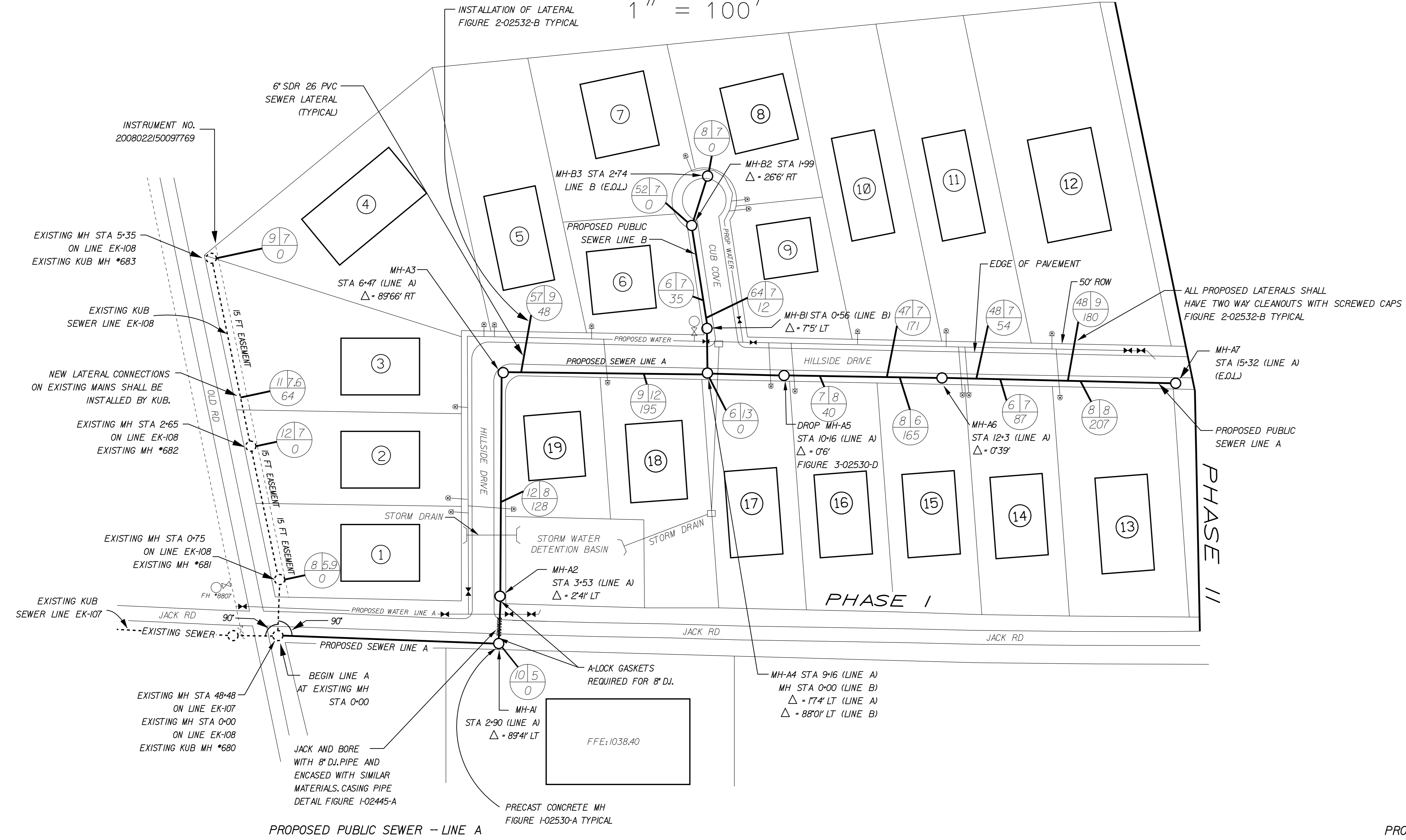


- GENERAL WASTEWATER REQUIREMENTS:**
1. ALL SANITARY SEWER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE KUB'S STANDARD SEWER SYSTEM SPECIFICATIONS AND DETAILS.
 2. LOCATION OF ALL EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
 3. ALL PIPE SHALL BE INSTALLED IN THE PRESENCE OF THE OWNER.
 4. UTILITIES SHALL BE INSTALLED AFTER GRADING HAS BEEN COMPLETED AND APPROVED BEFORE ANY SURFACE COVER IS FINALIZED TO INCLUDE PAVING, CONCRETE DRIVEWAYS, ETC.
 5. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
 6. REQUIREMENTS FOR PROPER TRENCH AND BACKFILL OPERATIONS MUST MEET OR EXCEED CITY OF KNOXVILLE, KNOX COUNTY, AND TDOT STANDARDS.
 7. AFTER COMPLETING EACH SECTION OF THE SEWER, ALL DEBRIS AND CONSTRUCTION MATERIALS SHALL BE REMOVED FROM THE WORK SITE AS WELL AS SMOOTHLY GRADING THE DISTURBED GROUND SURFACE ON THE PROJECT SITE.
 8. THE CONTRACTOR SHALL OBTAIN PLASTIC WARNING TAPE FOR WASTEWATER MAINS AND BURY IT ONE FOOT ABOVE THE ENTIRE LENGTH OF EACH LATERAL. 3/8" DIAMETER STEEL REBAR SHALL BE DRIVEN INTO THE GROUND AT THE END OF EACH LATERAL AND PAINTED GREEN. THE BURIED END OF THE REBAR SHALL BE BENT TO FORM A HOOK.
 9. SANITARY SEWER FLOW CONTROL (SECTION 02542 OF KUB STANDARDS AND SPECIFICATIONS) REQUIREMENTS ARE FULLY UNDERSTOOD AND IMPLEMENTED IN THE WASTEWATER PROJECT.
 10. ANY FIELD CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE APPROPRIATE KUB REPRESENTATIVE BEFORE CONSTRUCTION.
 11. A COPY OF THE LATEST APPROVED SET OF UTILITY PLANS DESIGNATED BY THE KUB RED STAMP MUST BE PRESENT DURING ALL TIMES OF CONSTRUCTION OF THE APPROPRIATE UTILITIES.
 12. SEWER SERVICE LATERALS SHALL BE CONNECTED TO CLEANOUT AS DEPICTED IN FIGURE 2-02532-B. SECTION 02542 OF KUB STANDARDS AND SPECIFICATIONS, SEWER SERVICE LATERALS SHALL NOT BE CONNECTED TO SERVICE RISERS OR LATERAL COMPONENTS OF CLEANOUT.

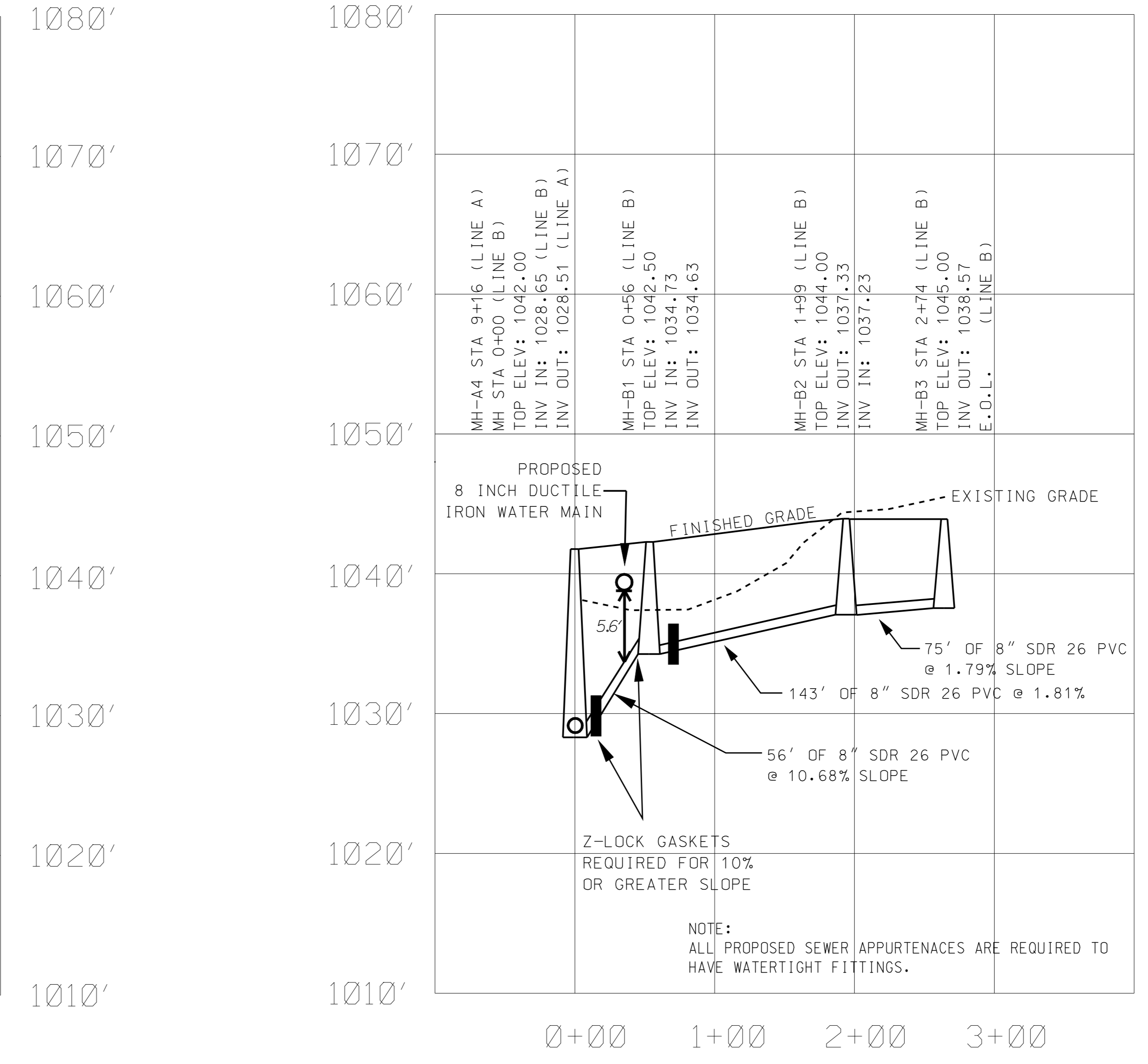
| PROPERTY UNITS | |
|----------------|-------|
| MATERIALS | QTY |
| MH'S | 10 |
| 8" D.I. | 63' |
| 8" PVC | 1746' |
| LATERALS | 20 |

- GRAVITY WASTEWATER REQUIREMENTS:**
1. LASERS SHALL BE USED TO INSTALL ALL WASTEWATER LINES.
 2. ALL REQUIREMENTS FOR INSTALLATION OF GRAVITY SEWER (PART 3 IN SECTION 02532 OF KUB STANDARDS AND SPECIFICATIONS ARE TO BE UNDERSTOOD BY THE CONTRACTOR AND FULLY IMPLEMENTED IN THE ENTIRE WASTEWATER PROJECT.
 3. ALL REQUIREMENTS FOR SEWER LATERALS (PART 3 IN SECTION 02532 OF KUB STANDARDS AND SPECIFICATIONS) ARE TO BE UNDERSTOOD BY THE CONTRACTOR AND FULLY IMPLEMENTED IN THE ENTIRE WASTEWATER PROJECT.
 4. ALL REQUIREMENTS FOR TESTING OF GRAVITY SEWERS (PART 3 IN SECTION 02532 OF KUB STANDARDS AND SPECIFICATIONS) ARE TO BE UNDERSTOOD BY THE CONTRACTOR AND FULLY IMPLEMENTED IN THE ENTIRE WASTEWATER PROJECT.
 5. THE MINIMUM WASTEWATER LATERAL HAS A 6-INCH DIAMETER PVC (SDR 26) FROM THE MAIN TO THE PROPERTY LINE OR EDGE OF EASEMENT.
 6. ALL SEWER LATERALS SHALL INCLUDE 6-INCH TEES OF THE SAME MATERIAL AS THE SEWER MAINS.
 7. TWO WAY DIRECTIONAL CLEANOUT TEES WILL BE REQUIRED ON ALL LATERALS. CLEANOUTS SHALL BE LOCATED AT THE PROPERTY LINE OR EASEMENT LINE IN MOST CASES AND SHALL BE SDR 35 MANUFACTURED BY PLASTIC TRENDS, INC.
 8. ALL LATERALS AND CLEANOUTS SHALL HAVE CAPS WITH SCREWED PLUGS INSTALLED.
 9. ALL SEWER APPURTENANCES ARE REQUIRED TO HAVE WATERTIGHT FITTINGS.
 10. ALL REQUIREMENTS WITH FLEXIBLE COUPLINGS AND SADDLE TEES (PARTS 2D2 AND 2D3 IN SECTION 02532 OF KUB STANDARDS AND SPECIFICATIONS) ARE TO BE FULLY UNDERSTOOD AND IMPLEMENTED.

- KUB WASTEWATER CONSTRUCTION NOTES:**
1. ROAD RIGHT-OF-WAYS SHALL BE GRADED AND SLOPED TO REQUIRED SPECIFICATIONS OR AS APPROVED BY KUB PRIOR TO STAKING AND INSTALLING WASTEWATER MAINS.
 2. THE DEVELOPER'S AUTHORIZED REPRESENTATIVE SHALL STAKE THE PROPOSED WASTEWATER MAIN LAYOUTS, PROPERTY CORNERS, AND EASEMENT LOCATIONS, ETC., PRIOR TO CONSTRUCTION TO ALLOW AMPLE TIME FOR KUB'S INSPECTORS TO INSPECT THE LAYOUTS PRIOR TO CONSTRUCTION. KUB WILL DETERMINE IF STAKING MAY BE REQUIRED PRIOR TO APPROVAL OF PLANS.
 3. CONSTRUCTION MATERIALS MUST MEET KUB SPECIFICATIONS. KUB REPRESENTATIVES MUST APPROVE MATERIALS SUBMITTALS PRIOR TO CONSTRUCTION.
 4. WASTEWATER MAIN INSTALLATION MUST BE INSPECTED BY KUB/CONTACT KUB FIELD SERVICES AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION AT 558-2786. TRENCHES SHALL BE LEFT OPEN AND NOT BACKFILLED UNTIL INSPECTED BY KUB.
 5. CONTACT KUB FIELD SERVICES AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION AT 558-2786 TO INSPECT FROM CLEANOUT TO STRUCTURE WHEN PROJECT IS LOCATED OUTSIDE OF CITY OF KNOXVILLE LIMITS.
 6. CONTRACTOR MUST HAVE A VALID STATE OF TENNESSEE MUNICIPAL UTILITY LICENSE FOR CONSTRUCTION OF WASTEWATER MAINS.
 7. AN A-LOCK OR Z-LOCK GASKET SHALL BE PROVIDED FOR EACH WASTEWATER MAIN OR LATERAL CONNECTING TO A NEW MANHOLE. EACH TAP TO AN EXISTING MANHOLE MUST BE MECHANICALLY CORED AND PROPERLY BOOTED.
 8. THE CONTRACTOR MUST INSTALL LATERALS INSTALLED ACROSS STREETS BEFORE ANY SURFACE COVER IS FINALIZED TO INCLUDE PAVING, CONCRETE DRIVEWAYS, ETC.
 9. WATER STOPS SHALL BE INSTALLED IN SEWER LINE TRENCHES NO MORE THAN 500 FEET APART TO PREVENT WATER FROM DRAINING THROUGH THE GRAVEL BEDDING. THE STOPS SHALL CONSIST OF COMPACTED CLAY AT LEAST THREE (3) FEET THICK FROM THE BOTTOM OF THE TRENCH TO THE TOP OF THE TRENCH. THE STOPS SHALL BE CUT A MINIMUM DEPTH OF TWO (2) FEET INTO BOTH WALLS OF THE TRENCH. THE PREFERRED LOCATION OF A WATER STOP IS UPSTREAM OF EACH MANHOLE. ALL STREAM CROSSINGS SHALL INCLUDE WATER STOPS ON BOTH SIDES OF CROSSING.



Profile Scale:
Vertical: 1"=10'
Horizontal: 1"=100'



Profile Scale:
Vertical: 1"=10'
Horizontal: 1"=100'

ENGINEER
PERFECTION ENGINEERING
594 OLD SCHOOL LN
KNOXVILLE, TN 37999
(865) 426-9876

DEVELOPER
BOB R SMITH
2468 N. SHORE DR
JAXON, TN 36678
(865) 391-4895

DESIGNED
DRAWN
CHECKED

| NO. | DATE | REVISION | APPR. |
|-----|------|----------|-------|
| | | | |

SCALE
1" = 10'
1" = 100'
DATE
11 - 1 - 08



KUB SUBDIVISION - PH I
JACK RD AT OLD RD
PUBLIC WASTEWATER PLAN

PE STAMP GOES HERE
TDEC APPROVAL STAMP GOES HERE
SHEET / OF SHEETS