

LEGEND

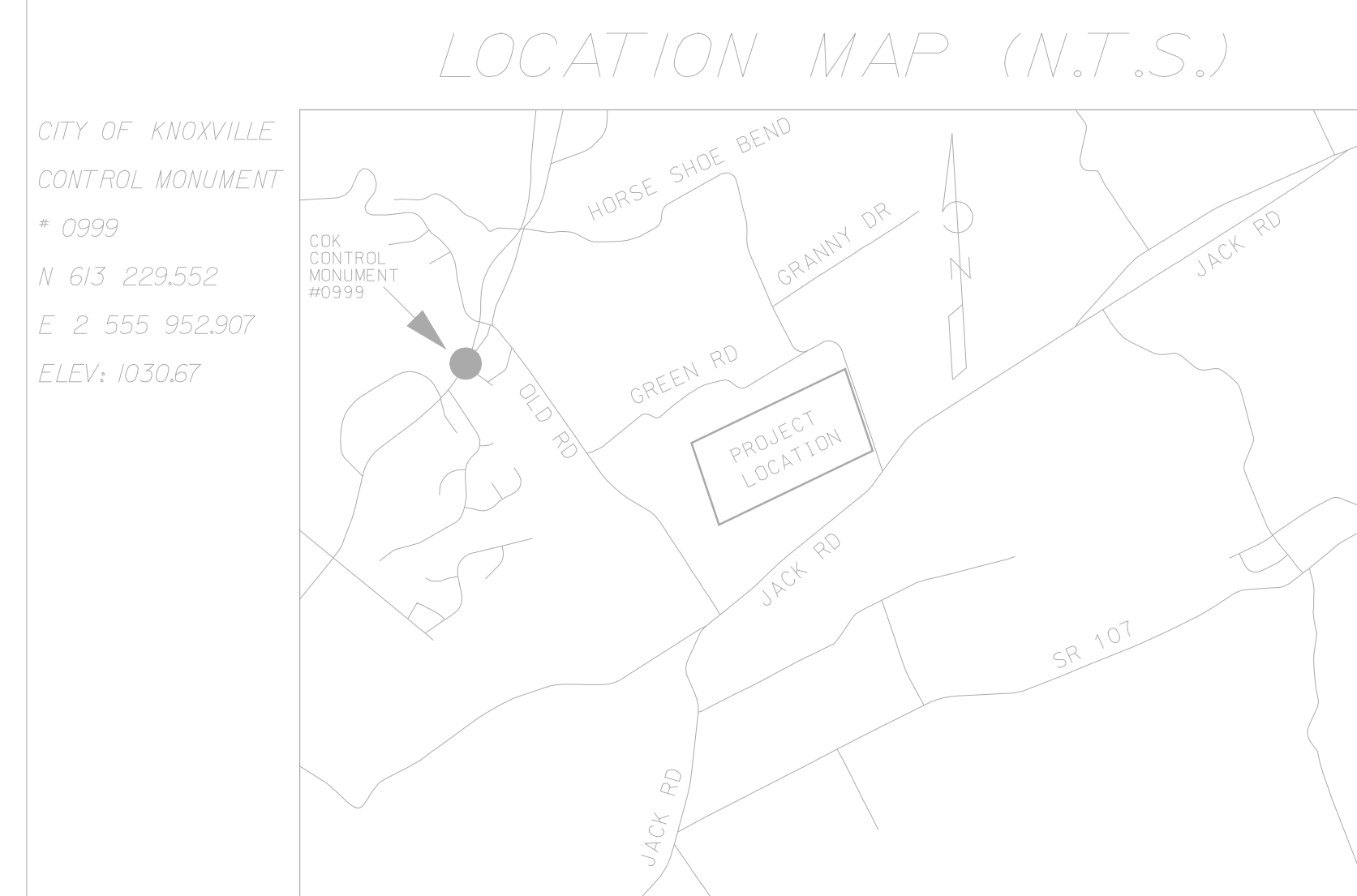
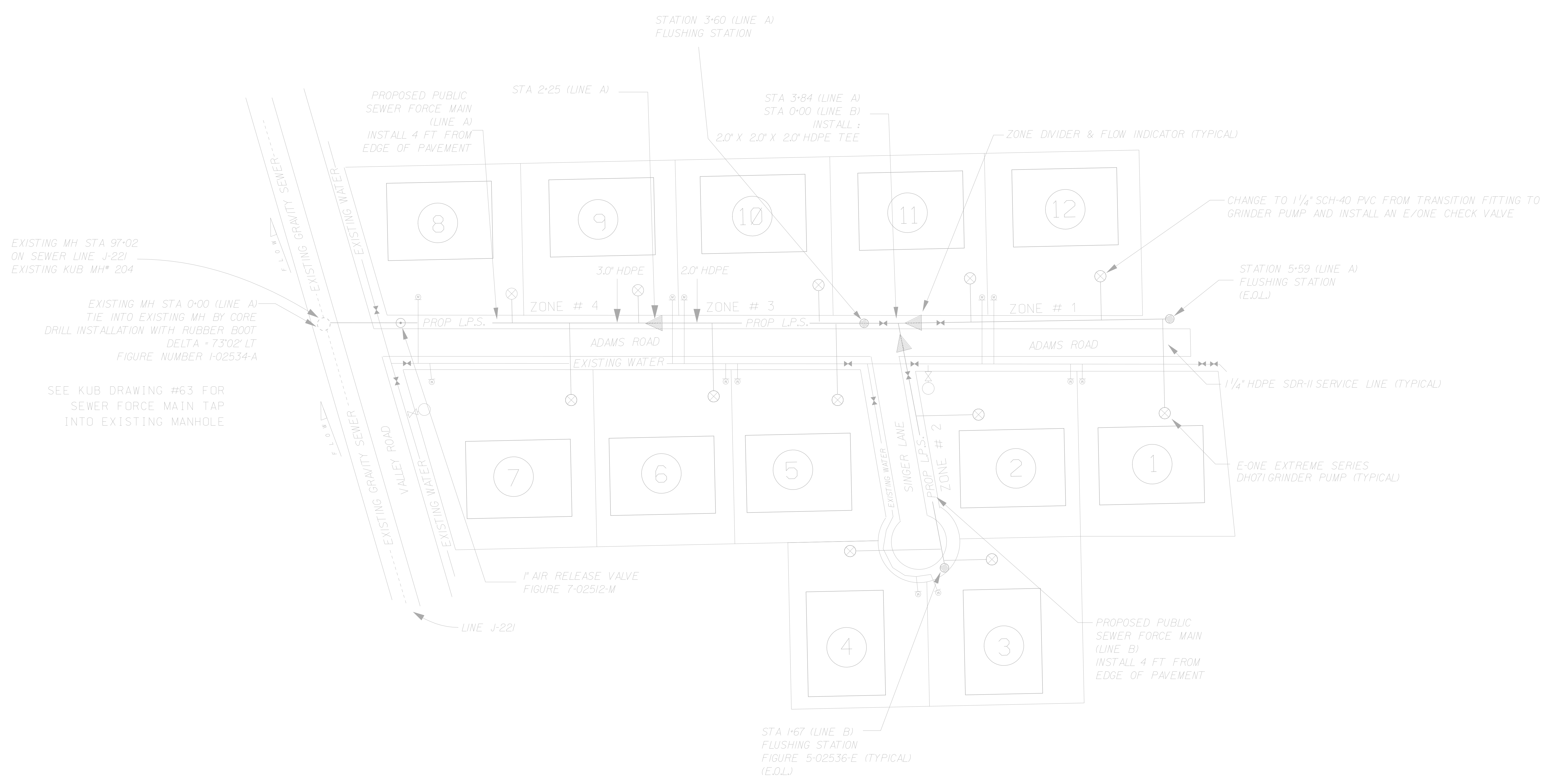
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED E-ONE EXTREME SERIES DHOTI GRINDER PUMP STATION
- ZONE DIVIDER & DIRECTION OF FLOW
- PROPOSED FLUSHING STATION
- PROPOSED WASTEWATER
- EXISTING WASTEWATER

PROPERTY UNITS

MATERIAL	QTY
2" HDPE	50'
3" HDPE	225'
E-ONE EXTREME SERIES DHOTI GRINDER PUMPS	12
FLUSHING ASSEMBLY	2
1" AIR RELEASE VALVE	1

ZONE LOT NUMBERS

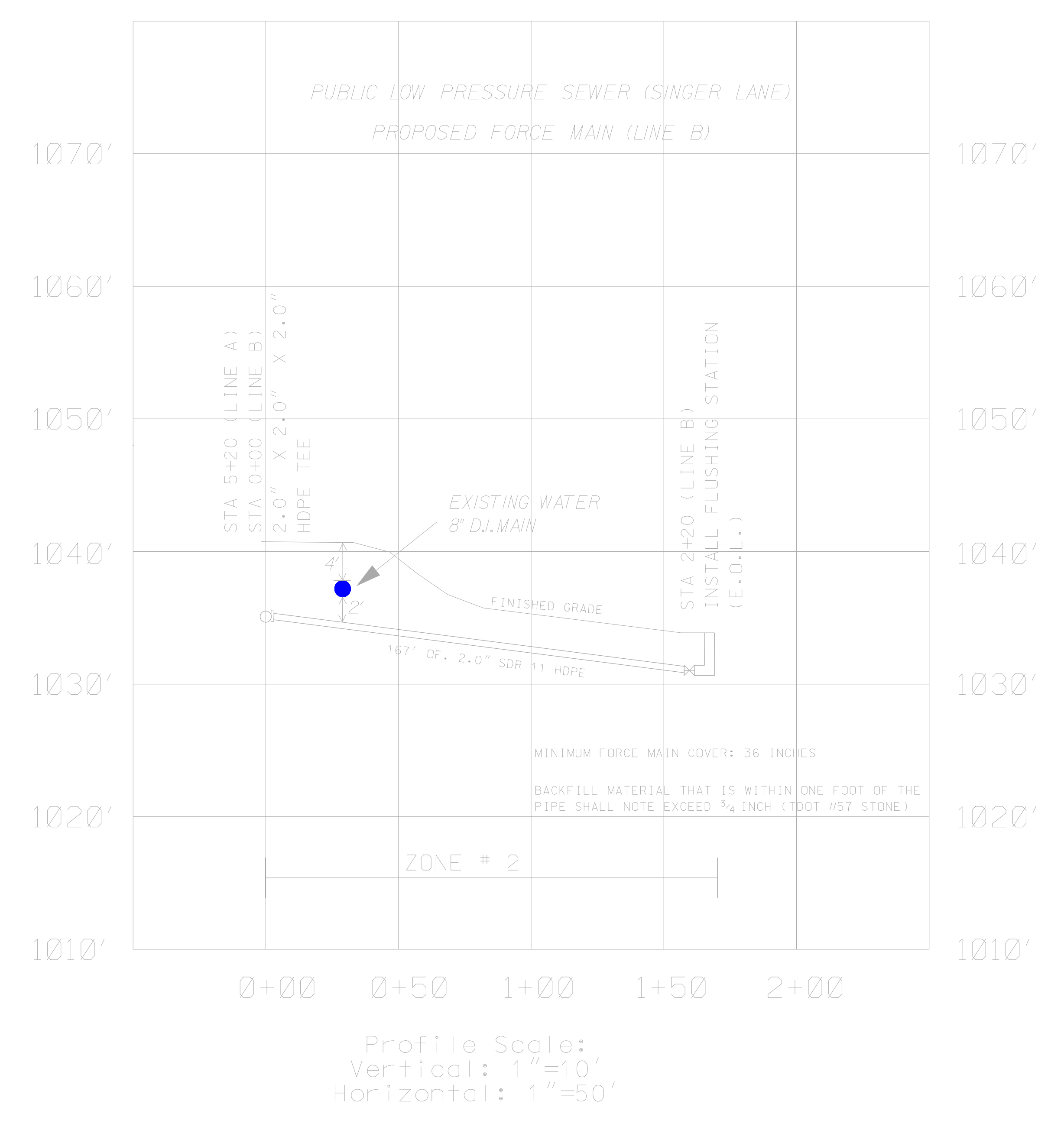
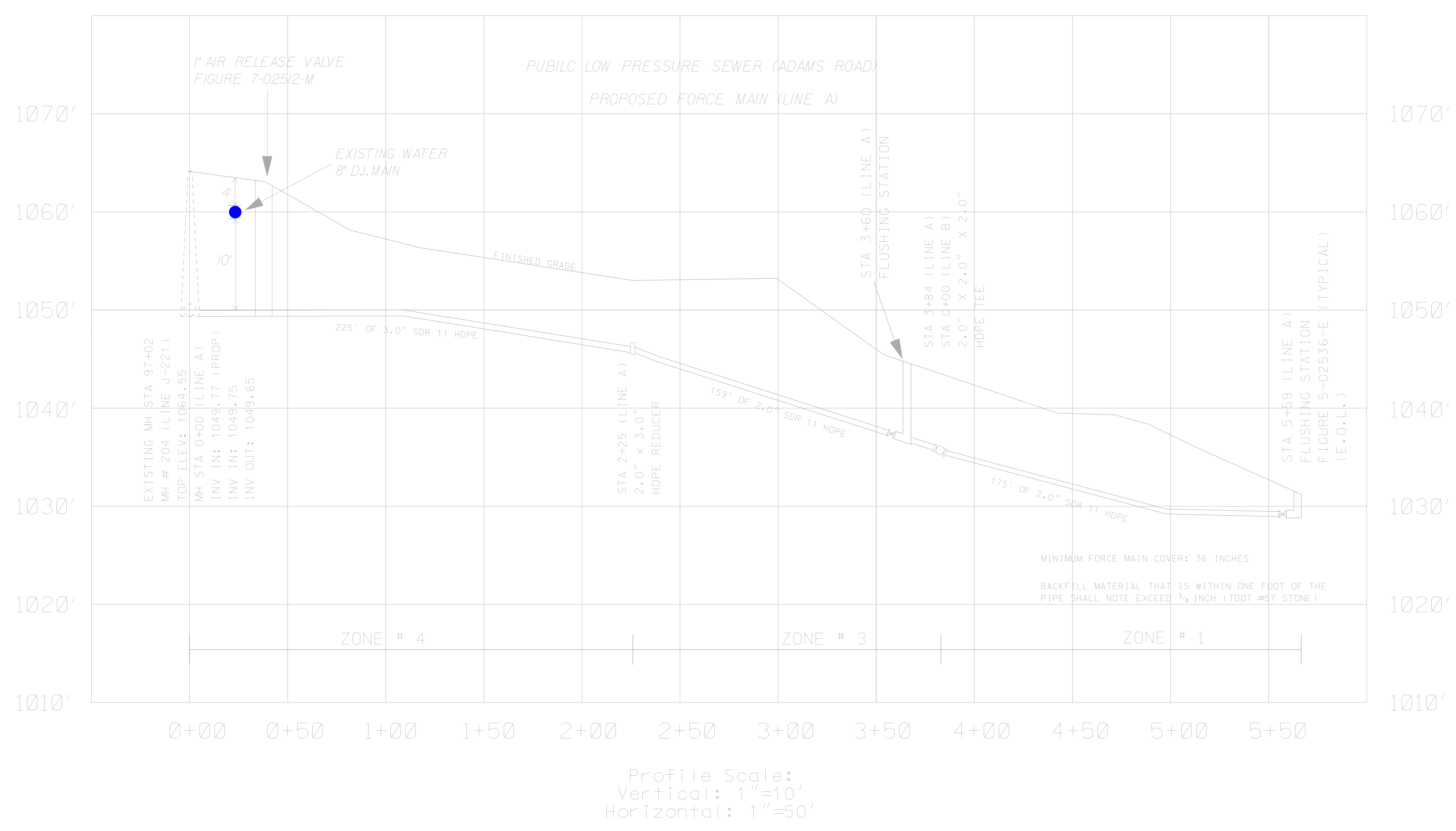
ZONE	LOT NUMBERS
1	1, 11, 12
2	2, 3, 4
3	5, 6, 10
4	7, 8, 9



- GENERAL WASTEWATER REQUIREMENTS:**
- ALL SANITARY SEWER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE KNOXVILLE UTILITIES BOARD'S STANDARD SEWER SYSTEM SPECIFICATIONS AND DETAILS.
 - LOCATION OF ALL EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
 - ALL PIPE SHALL BE INSTALLED IN THE PRESENCE OF THE OWNER.
 - UTILITIES SHALL BE INSTALLED AFTER GRADING HAS BEEN COMPLETED AND APPROVED. BEFORE ANY SURFACE COVER IS FINALIZED TO INCLUDE PAVING, CONCRETE DRIVEWAYS, ETC.
 - 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.
 - REQUIREMENTS FOR PROPER TRENCH AND BACKFILL OPERATIONS MUST MEET OR EXCEED CITY OF KNOXVILLE, KNOX COUNTY AND TDOT STANDARDS.
 - 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.
 - THE CONTRACTOR SHALL OBTAIN PLASTIC WARNING TAPE FOR WASTEWATER MAINS AND BURY IT ONE FOOT ABOVE THE ENTIRE LENGTH OF EACH LATERAL. A 1/4" 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.
 - SANITARY SEWER FLOW CONTROL (SECTION 02542 OF KUB STANDARDS AND SPECIFICATIONS) REQUIREMENTS ARE FULLY UNDERSTOOD AND IMPLEMENTED IN THE WASTEWATER PROJECT.
 - THE APPROPRIATE KUB REPRESENTATIVE BEFORE CONSTRUCTION MUST APPROVE ANY FIELD CHANGES TO APPROVED PLANS.
 - 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.

- LOW PRESSURE SEWER REQUIREMENTS:**
- THE CONTRACTOR MUST BE CERTIFIED TO WELD/FUSE HDPE PIPE FOR LOW PRESSURE SEWER PROJECTS.
 - LOW PRESSURE SEWER SERVICE LATERALS SHALL BE 1/4" INCH HDPE SDR-11 FROM MAIN TO TRANSITION FITTING. CHANGE TO 1/4" INCH SCH-40 PVC FROM TRANSITION FITTING TO GRINDER PUMP (SEE KUB STANDARDS AND SPECIFICATIONS, FIG. 2-02532-BL).
 - INSTALL AN E-ONE CHECK VALVE ON THE 1/4" INCH PVC LATERAL WITHIN 24 INCHES OF THE HDPE TRANSITION FITTING.
 - BACKFILL MATERIAL WITHIN ONE FOOT OF PIPE SHALL NOT EXCEED 3/4" INCH (TDOT *57 STONE).
 - ALL PIPE SHALL BE INSTALLED WITH A 12-GAUGE SOLID COPPER WIRE FOR LOCATING PURPOSES. (SEE KUB STANDARDS AND SPECIFICATIONS 02536, PG. 3)
 - POLYETHYLENE PIPE (HDPE) AND FITTINGS SHALL BE MADE OF HIGH DENSITY, EXTRA HIGH MOLECULAR WEIGHT POLYETHYLENE WITH A STANDARD THERMOPLASTIC MATERIAL DESIGNATION OF PE3408.
 - POLYETHYLENE PIPE (HDPE) SHALL HAVE A CO-EXTRUDED GREEN COVER OR EXTRUDED GREEN STRIPES DESIGNATING USE FOR SANITARY SEWER. COLOR PRINT LINES ARE NOT AN ACCEPTABLE METHOD FOR DESIGNATION OF LOW-PRESSURE SEWER MAINS. PIPE WITH EXTRUDED GREEN STRIPES SHALL HAVE A MINIMUM OF THREE EQUALLY SPACED STRIPES.
 - PROPER INSTALLATION OF LPS FOUND IN KUB'S STANDARDS AND SPECIFICATIONS SECTION 02536 SHALL BE FULLY UNDERSTOOD AND IMPLEMENTED.
 - THRUST/RESTRAINT BLOCKS SHALL BE INSTALLED IN LOCATIONS SHOWN ON THE PLANS OR IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS OR AS REQUIRED BY OWNER. THRUST/RESTRAINT BLOCKS SHALL BE CONSIDERED AN INTEGRAL PART OF THE LOW PRESSURE SEWER MAIN INSTALLATION.

- KUB WASTEWATER CONSTRUCTION NOTES:**
- LOAD RIGHT-OF-WAYS SHALL BE GRADED AND SLOPED TO REQUIRED SPECIFICATIONS OR AS APPROVED BY KUB PRIOR TO STAKING AND INSTALLING WASTEWATER MAINS.
 - 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.
 - CONSTRUCTION MATERIALS MUST MEET KUB SPECIFICATIONS. KUB REPRESENTATIVES MUST APPROVE MATERIALS SUBMITTALS PRIOR TO CONSTRUCTION.
 - 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.
 - 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.
 - CONTRACTOR MUST HAVE A VALID STATE OF TENNESSEE MUNICIPAL UTILITY LICENSE FOR CONSTRUCTION OF WASTEWATER MAINS.
 - 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.
 - THE CONTRACTOR MUST INSTALL LATERALS INSTALLED ACROSS STREETS BEFORE ANY SURFACE COVER IS FINALIZED TO INCLUDE PAVING, CONCRETE DRIVEWAYS, ETC.
 - 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.



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DESIGNED	NO.	DATE	REVISION	APPR.
DRAWN				
CHECKED				

SCALE
1" = 50'

DATE
11 - 1 - 08



MOUNTAIN VIEW S/D - PH 1
 ADAMS ROAD AT VALLEY ROAD
 PUBLIC LOW PRESSURE SEWER

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