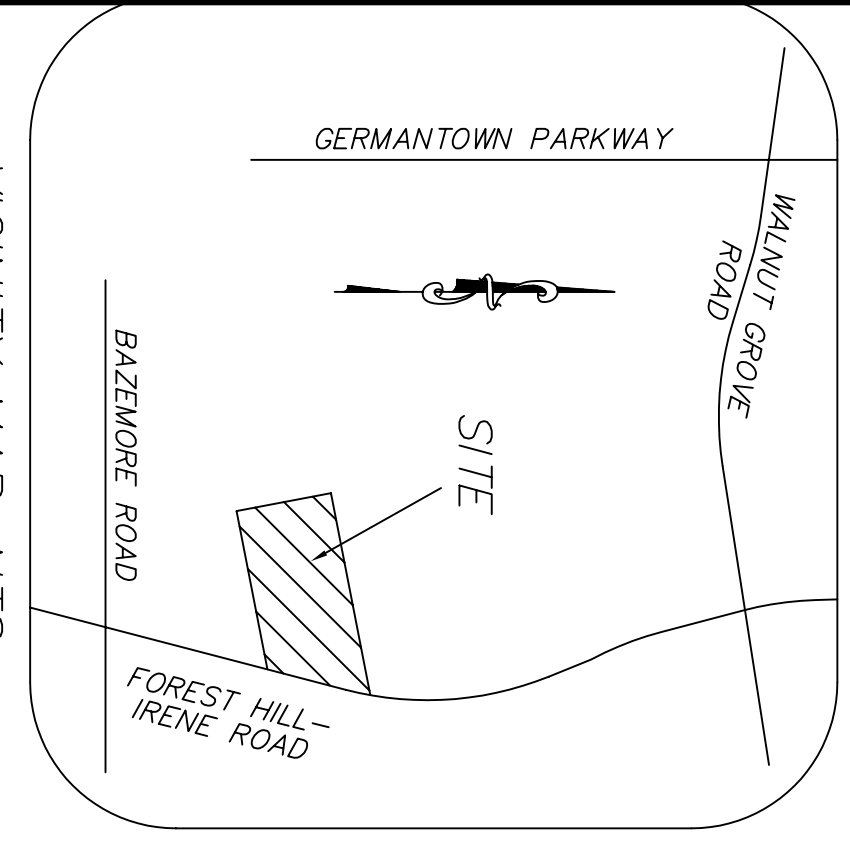
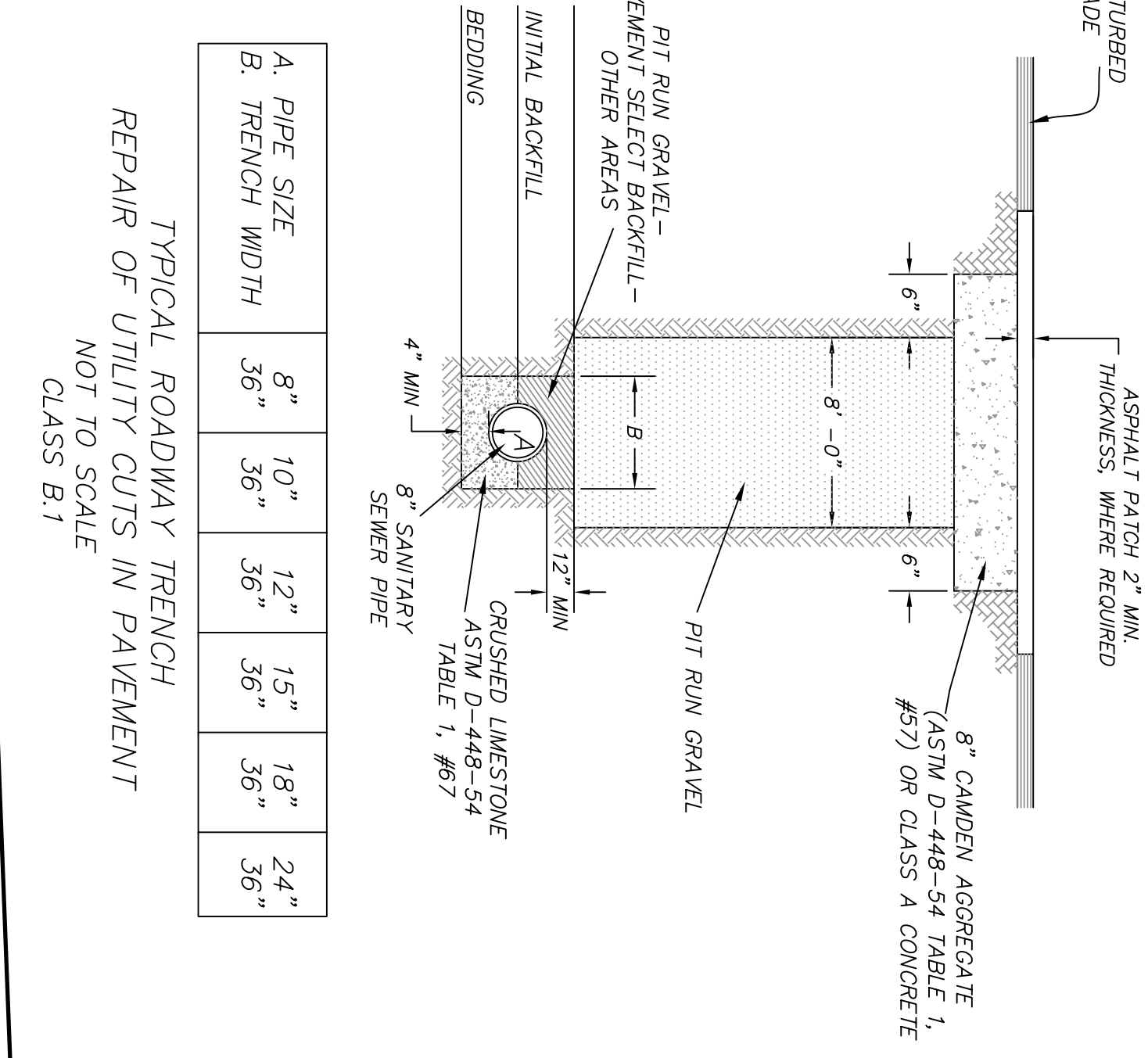


NUMBER	DELTA ANGLE	CHORD DIRECTION	MANAGEMENT	ARC LENGTH	CHORD LENGTH
C5	36.57172°	N 89.06.56° W	82.73	250.00	157.08
C6	28.09.13°	S 83.92.43° E	75.24	250.00	147.44
C7	23.19.56°	N 86.17.32° W	51.62	250.00	101.10
C8	10.92.47°	N 69.11.10° W	23.81	250.00	47.40

NUMBER	DIRECTION	DISTANCE
L1	S 73.34.46° W	147.98 FT

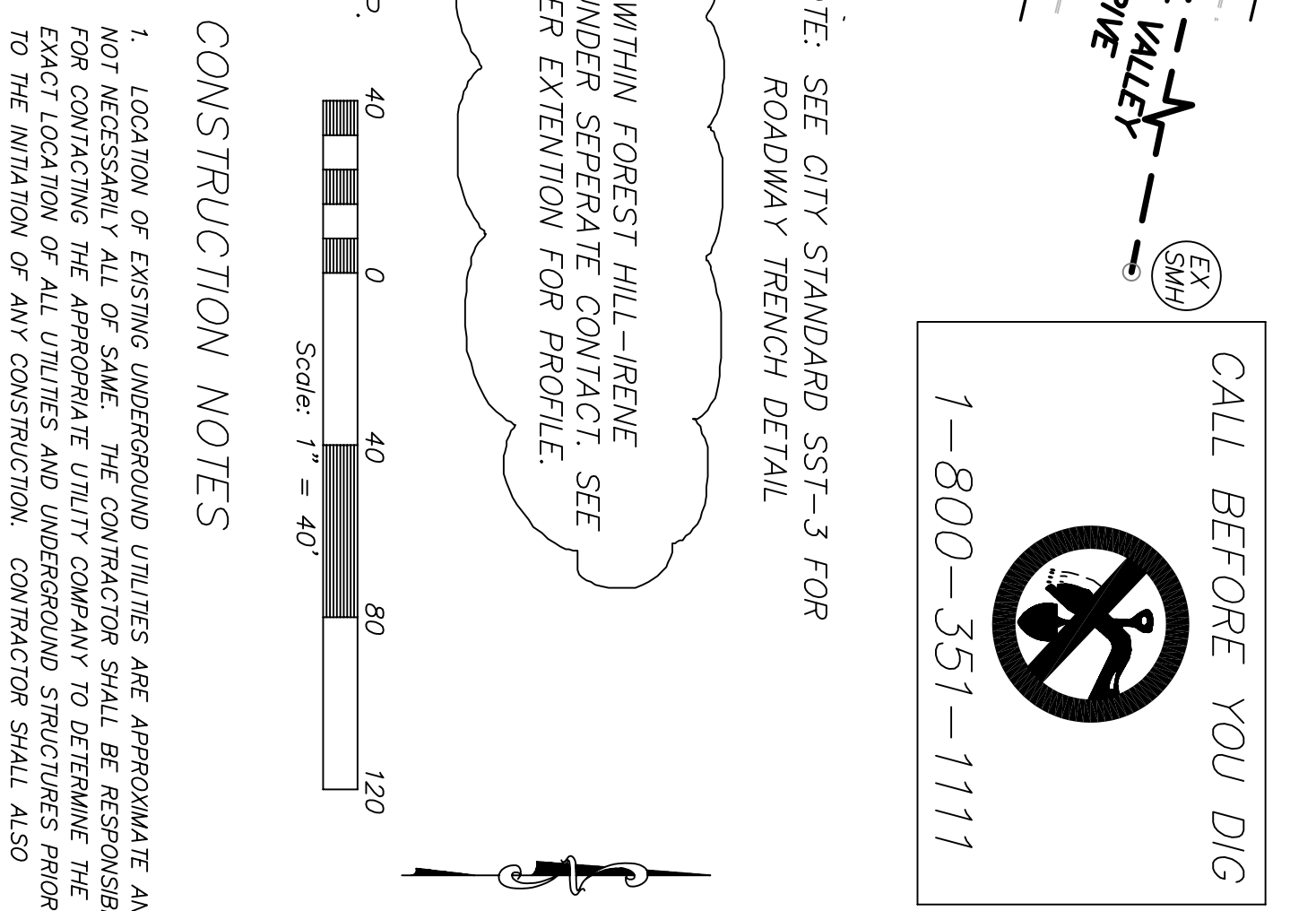


NOTE TO ALL CONTRACTORS:
 THIS SITE HAS BEEN DESIGNED TO ACCOMMODATE GRADING AND DRAINAGE. EROSION CONTROL, ETC. CONTRACTOR AND/OR SUBCONTRACTOR SHALL NOT MODIFY, REVERSE, OR FIELD ADJUST ANY PART OF THESE PLANS AND OR ANY CONSTRUCTION LAYOUT FIELD WORK DONE BY CHASSEM AND ASSOCIATES WITHOUT WRITTEN CONSENT. REVISING, OMISSIONS OR ADJUSTING ANY PART OF THESE PLANS AND OR CONSTRUCTION LAYOUT FIELD WORK WILL VOID ALL WARRANTIES AND ASSUMPTIONS OF CHASSEM AND ASSOCIATES. CONTRACTOR AND/OR SUBCONTRACTOR WILL BE DIRECTLY RESPONSIBLE FOR ANY ALL DAMAGES CAUSED BY SUCH MODIFICATION. IF YOU HAVE ANY QUESTIONS, PLEASE CALL CHASSEM AND ASSOCIATES @ 901-452-7100.

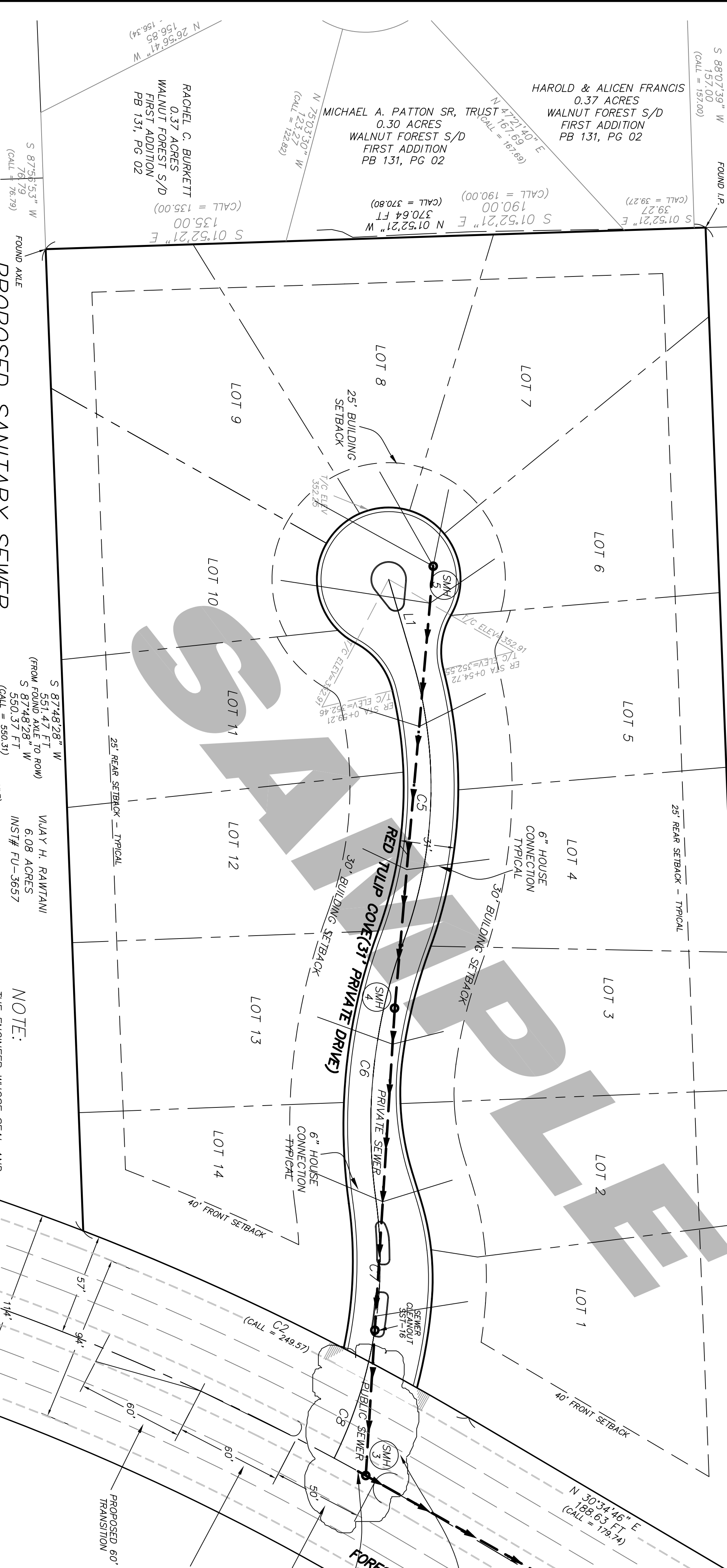


PIPE SIZE	TRENCH WIDTH	PIPE SIZE	TRENCH WIDTH	PIPE SIZE	TRENCH WIDTH
8"	36"	10"	36"	12"	36"
15"	36"	18"	36"	24"	36"

TYPICAL ROADWAY TRENCH
 REPAIR OF UTILITY CUTS IN PAVEMENT
 NOT TO SCALE
 CLASS B-1



CONSTRUCTION NOTES
 1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE DEPTHS AND LOCATIONS OF ALL UTILITIES. 2. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES. 3. CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT 729-2462 A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION. 4. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEED, MULCHED, FERTILIZED, AND/OR SOURED AS REQUIRED TO PREVENT EROSION. 5. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER. 6. ALL CONSTRUCTION MATERIALS & PROCEDURES SHALL BE PER CITY OF MEMPHIS STANDARDS. 7. ALL SEWER MAINS SHALL BE CONSTRUCTED 1.5' ABOVE FINISH GRADE UNLESS OTHERWISE NOTED. 8. ALL SANITARY SEWER INCLUDING SERVICE CONNECTIONS WHICH ARE LESS THAN 1.5' CLEARANCE WITH GRADE SHALL BE CLASS 50 PIPE OR CONCRETE ENCASED TO BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE SHALL BE APPROVED EQUIVALENT. 9. THE CITY OF MEMPHIS SHALL HAVE ACCESS TO ALL PRIVATE DRAINAGE AND SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRAINAGE AND SEWERS. 10. ALL SANITARY SEWER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF MEMPHIS STANDARDS AND PROCEDURES. 11. NO TREES, SHRUBS, PERMANENT STRUCTURES OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASMENTS. 12. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASMENTS IN PRIVATE DRAINAGE AND SEWERS EXCEPT FOR CROSSINGS. 13. ALL SANITARY SEWER MAINS IN REVERSE CURVE STREETS, ALLEYS OR DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF MEMPHIS STANDARDS AND PROCEDURES. 14. THE CONTRACTOR SHALL PROTECT EXISTING AND ADJACENT DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES. SUBJECT PROPERTY IS LOCATED IN ZONE 'X' FROM FIRM MAP TO BE OUTSIDE 100 AND 500 YEAR FLOOD PLAIN PER FIRM MAPS BASE FLOOD ELEVATION = 270.00 LOCATED AT THE WIDE RIVER SOUTH OF THE INTERSECTION OF RIVER MEADOW DRIVE & FOREST HILL IRENE ROAD.



FROM SHW #	TOP (FIN)	INVERT (FIN)	AS-BUILT INVERT (FIN)	TO SHW #	TOP (FIN)	INVERT (FIN)	AS-BUILT INVERT (FIN)	DIAMETER (IN)	LENGTH (FT)	AS-BUILT SLOPE (%)	AS-BUILT SLOPE (1:V)
SHW#1	352.85	340.00	339.78	SHW#4	341.34	334.10	333.91	8"	249	2.37	2.36
SHW#2	341.34	334.00	333.81	SHW#3	332.47	327.10	323.97	8"	183	3.60	3.67
SHW#3	332.47	324.00	323.47	SHW#4	332.89	324.10	323.97	8"	82	3.73	4.30
SHW#4	332.89	315.50	310.65	SHW#5	318.91	305.60	305.87	8"	181	3.56	2.25
SHW#5	318.91	305.50	305.64	SHW#6	315.83	302.10	304.81	8"	80	0.50	1.04
SHW#6	315.83	305.00	304.70	EX SHW	313.75	303.73	303.27	8"	127	1.00	1.13

PROPOSED SANITARY SEWER
 S 550.31 FT TO ROAD AHEAD
 S 550.31 FT TO ROAD AHEAD
 MAY 11, 2012
 6.08 ACRES
 INST# PU-3657

NOTE:
 THE ENGINEER WHOSE SEAL AND SIGNATURE IS HEREON HEREBY ACCEPTS THE RESPONSIBILITY FOR INSPECTION AND VERIFICATION OF THE SYSTEMS SHOWN HEREON AFTER ALL OF THE SYSTEMS HAVE BEEN INSTALLED AND THE ENGINEER WILL PROVIDE THE MEMPHIS AND SHELBY COUNTY WITH A LETTER CERTIFYING THAT THE SYSTEM HAS BEEN ACCORDANCE WITH APPLICABLE LOCAL STANDARDS OR, WHERE THE STANDARDS OF THE STATE OF TENNESSEE OR PRIVATE TO BE USED EXCEPT FOR TESTING UNTIL THIS CERTIFICATION HAS BEEN BY CODE ENFORCEMENT.

ITEM NO.	DESCRIPTION OF CHANGES	APPROVAL DATE
#1	AS-BUILT	05/20/03

THE WINDMILL PLANNED DEVELOPMENT
 ENGINEER: CHASSEM & ASSOCIATES
 DEVELOPER: TRIMARK, L.L.C.
 2003-SSC-20

THIS PLAN SUPERSEDES THE ORIGINAL PLAN DATED 03/12/2003
 SHEET 1 OF 1
 DIVISION OF ENGINEERING
 PRIVATE SANITARY SEWER PLAN (AS-BUILT)
 SHELBY COUNTY, TENNESSEE
 SHEET BY: CHASSEM, DE. RLS. DATE: FEB. 2002
 DESIGNED BY: CHASSEM, DE. RLS. DATE: FEB. 2002
 REVIEWED (FOR PUBLIC ONLY)
 DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

CALL BEFORE YOU DIG
 1-800-351-1111