

CITY OF ANN ARBOR ENGINEERING

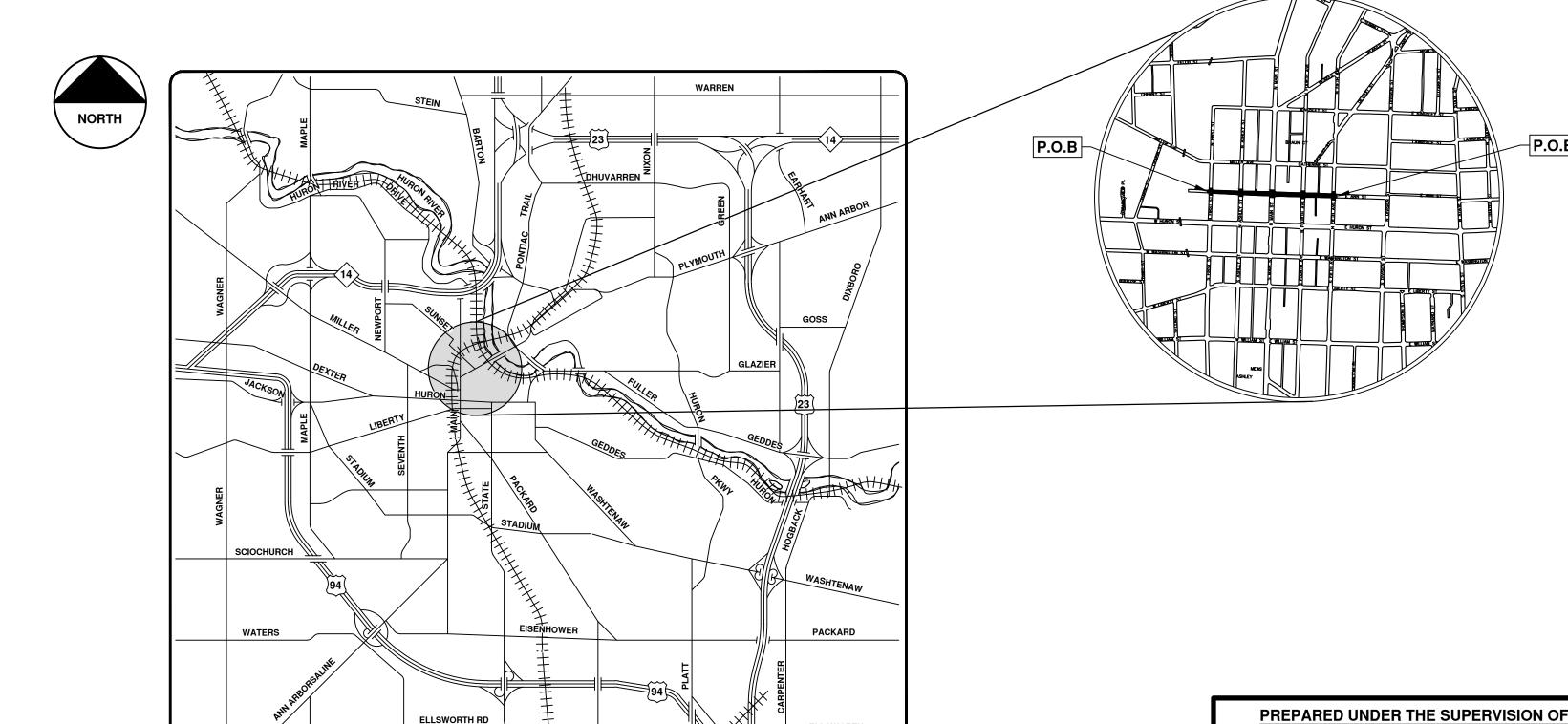
OBLIGATION TO CONSTRUCT ITEMS IN COMPLETE ACCORDANCE WITH THOSE

ANN STREET IMPROVEMENTS

BID No. 26-03, FILE No. 2022-025

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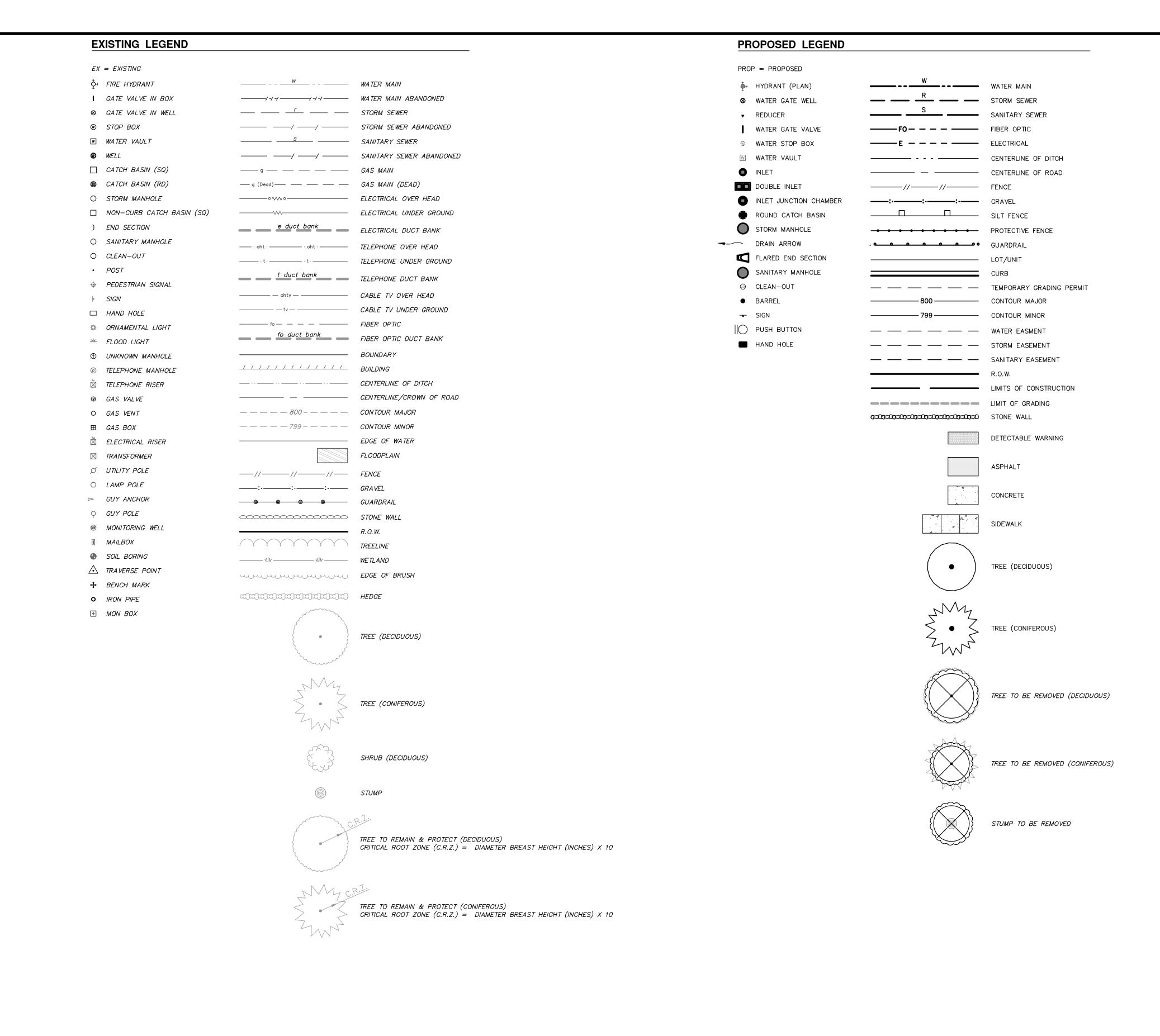


CHRISTOPHER JAY ELENBAAS, P.E. **PROJECT MANAGER**

ANDERSON

CITY APPROVAL

TRACY CRANE ANDERSON, P.E. **PROJECT MANAGER**

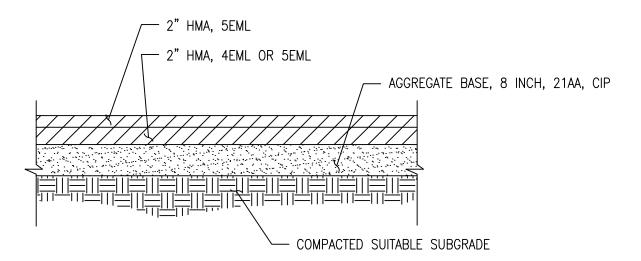


STREET IMPROVEM

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING SHEET No. 2 OF 65

CONSTRUCTION NOTES:

- . DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURES WITH THE PROPERTY OWNER(S) AND RESIDENT(S) IN THE AREAS OF CONSTRUCTION.
- 2. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 3. LOCATION AND DEPTH OF UTILITIES AS DEPICTED ON THE PLANS IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF CONFLICT UTILITIES ACCORDINGLY. ANY DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID AND/OR REPAIR AS NECESSARY.
- 4. THE CONTRACTOR IS TO TAKE SPECIAL CARE TO PROTECT THE EXISTING WATER MAIN AND BE RESPONSIBLE FOR MAINTAINING CONSISTENT WATER SERVICE.
- 5. DURING NON-WORKING HOURS NO TRENCH SHALL REMAIN OPEN: ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- 6. TRENCHES FOR NEW WATER SERVICES SHALL BE EXCAVATED TO MIOSHA AND CITY OF ANN ARBOR PUBLIC WORKS REQUIREMENTS.
- 7. CITY OF ANN ARBOR PUBLIC WORKS WILL INSTALL THE CORPORATION AND COPPER SERVICE LEAD(S) TO TRANSFER THE CONNECTION(S). IF AN EXISTING WATER SERVICE IS FOUND TO BE FAILING OR IS NOT COPPER, THE LEAD WILL BE REPLACED TO THE CURB BOX BY PUBLIC WORKS.
- 8. FOR THE INSTALLATION OF CORPORATIONS, OR ANY OTHER RELATED ACTIVITIES, THE CONTRACTOR SHALL NOT RECEIVE ADDITIONAL COMPENSATION FOR DELAYS DUE TO THE SCHEDULING OF OR COORDINATION WITH THE CITY OF ANN ARBOR PUBLIC WORKS.
- 9. THE CONTRACTOR SHALL BACKFILL TRENCHES IN ACCORDANCE WITH TRENCH DETAIL SPECIFIED ON PLANS. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "EXCAVATE AND BACKFILL FOR WATER SERVICE TAP AND LEAD". ALL CONCRETE REMOVALS AND REPLACEMENTS REQUIRED FOR THIS WORK WILL BE PAID FOR SEPARATELY.
- 10. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLYETHYLENE WRAPPED PER ANSI/AWWA C105/A21.5.
- 11. COR-BLU BOLTS TO BE USED AT ALL MECHANICAL WATER MAIN JOINTS AT HYDRANTS AND MEGALUG FITTINGS
- 12. THE CONTRACTOR SHALL CONSTRUCT, FLUSH, AND BACTERIOLOGICALLY TEST THE WATER MAIN PER DETAILED SPECIFICATION "WATER MAIN INSTALLATION AND TESTING" AND AS APPROVED BY THE ENGINEER. ALL CHLORINATED WATER SHALL BE DISCHARGED DIRECTLY INTO AN APPROVED SANITARY SEWER. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY HOSES, FITTINGS AND THE LIKE TO ACCOMPLISH
- 13. WATER MAIN FITTINGS, OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SUCH AS BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PIPE PAY ITEMS.
- 14. "NO PARKING" SIGNS SHALL BE INSTALLED BY THE CONTRACTOR AT LOCATIONS AS APPROVED OR DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.
- 15. POSTAL DELIVERY AND REFUSE PICKUP SERVICE SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
- 16. ALL FITTINGS, HYDRANTS, VALVES AND CASTINGS REMOVED DURING CONSTRUCTION ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR WITHIN 48 HOURS SHALL DFI IVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
- 17. WHERE STREET CURBS ARE UNDERMINED DUE TO CONSTRUCTION ACTIVITIES, THEY SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE TEMPORARY ROAD SURFACE AND SOIL FROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- 19. ALL CURB, SIDEWALK, DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY ENGINEER BEFORE THE WORK IS DONE.
- 20. SAWED SEWER PIPE CONNECTIONS SHALL BE COUPLED WITH A FERNCO FLEXIBLE COUPLING AND A STAINLESS STEEL SHEAR RING.
- 21. THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS TO BE APPROVED BY THE ENGINEER.



HMA DRIVEWAY CROSS SECTION

- 22. FOR MAINLINE PAVING, THE WIDTH OF THE MAT FOR EACH PASS OF THE PAVER SHALL BE NOT LESS THAN 10.5' OR GREATER THAN 15', AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DIRECT THE LAYOUT OF THE LONGITUDINAL JOINTS DURING CONSTRUCTION.
- 23. ALL STRUCTURES SHALL RECEIVE NEW CASTINGS AS DIRECTED BY THE ENGINEER, AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL DELIVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
- 24. PAYMENT FOR DRAINAGE STRUCTURE SUMPS, WHERE SPECIFIED, SHALL BE INCLUDED IN THE PAYMENT FOR THE VARIOUS DRAINAGE STRUCTURE SIZES AND OR TYPES.
- 25. WHERE SEWER PIPES OF DIFFERENT SIZES OR MATERIALS ARE JOINED, FERNCO FLEXIBLE COUPLINGS WITH STAINLESS STEEL SHEAR RINGS SHALL BE USED. THE CONTRACTOR'S PURCHASE PRICE FOR THESE DEVICES, INCLUDING SHIPPING SHALL BE PAID AS AN EXTRA. PRIOR TO PAYMENT FOR THIS ITEM, THE CONTRACTOR SHALL SUBMIT RECEIPTS FOR THE ENGINEER'S REVIEW AND APPROVAL. ALL OTHER COSTS ASSOCIATED WITH THE INSTALLATION OF THESE DEVICES SHALL BE INCLUDED IN THE PAYMENT FOR THE SEWER.
- 26. WHERE SEWER AND WATER MAIN ARE TO BE REMOVED & REPLACED OR ADDED, ALL PIPE SHALL BE INSTALLED USING TRENCH DETAIL DETAILED IN THE SPECIFICATIONS OR SHOWN ON PLANS. BACKFILL FOR SEWER AND WATER CONSTRUCTION SHALL BE MDOT GRANULAR MATERIAL, CLASS II, MODIFIED.
- 27. EXISTING STREET NAME, GUIDE, AND REGULATORY SIGNS, AND MAILBOXES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED PRIOR TO CONSTRUCTION, STORED IN A MANNER WHICH WILL PREVENT DAMAGE. AND RE-SET IN LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN "MACHINE GRADING, MODIFIED"
- 28. IN AREAS WHERE EDGE DRAIN CANNOT BE INSTALLED IN ACCORDANCE WITH CITY OF ANN ARBOR DETAIL SD-TD-11 THE EDGE DRAIN SHALL BE INSTALLED AT THE DEPTH AS INDICATED ON THE PLANS. OR AS DIRECTED BY ENGINEER. IN NO CASE SHALL THE EDGE DRAIN BE INSTALLED AT A GRADE LESS THAN 0.50% OR AT A DEPTH OF LESS THAN 2' BELOW TOP OF PROPOSED PAVEMENT.

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- 1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CHAPTER 55 ANN ARBOR UNIFIED DEVELOPMENT CODE, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF FROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- 5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL
- 7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- 8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- 11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

- 1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.
- SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE
- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS,
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL FINE GRADING.
- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- 1.9. CLEAN OUT STORM SEWER SYSTEMS.
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.11. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION
- NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN: • Sb - SEBEWA LOAM - IN DEPRESSION AREAS, BROAD LOW-LYING AREA, AND DRAINAGEWAYS OF

- OUTWASH PLAINS, VALLEY TRAINS, AND TERRACES. SLOPE IS 0% TO 2%.
- FOB FOX SANDY LOAM IN UPLAND AREAS AND ON OUT WASH PLAINS, KAMES, VALLEY TRAINS. TERRACES, AND MORAINES. SLOPES ARE UNIFORM OR SHORT AND COMPLEX.
- MdA MATHERTON SANDY LOAM IN DEPRESSION AREAS, BROAD LOW-LYING AREAS, AND ALONG DRAINAGEWAYS, OUTWASH PLAINS, VALLEY TRAINS, AND TERRACES. NEARLY LEVEL TO GENTLY
- MfA METAMORA SANDY LOAM IN DEPRESSION AREAS, BROAD, LOW-LYING AREAS, AND ALONG
- DRAINAGEWAYS OF TILL PLAINS AND MORAINES. • Nab - Nappanee Silty Clay Loam - on foot slopes and along drainageways of till plains, MORAINES, AND LAKE PLAINS. NEARLY LEVEL TO GENTLY SLOPING.

IMPERVIOUS PROJECT AREA

PRIOR TO CONSTRUCTION = 1.30 ACRES

POST CONSTRUCTION = 1.29 ACRES

AREA OF PROPOSED DISTURBANCE = 1.30 ACRES

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR DDIOD TO THE DECINIUMS OF CONSTRUCTION

PERMIT	ISSUING AUTHORITY				
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING				
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING				
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE				
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE				

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
	MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

PUBLIC UTILITIES	OWNER	CONTACT
WATER		
SANITARY		
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD	(734) 794–6350
FORESTRY	ANN ARBOR, MI 48108	
SIGNS SIGNALS STREET LIGHTS		MARK MORENO (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSŁ (734) 544–7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SOUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	MARC GOODELL (313) 405-0574
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016
FIBER OPTIC	WINDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	GREG SERICH (810) 244-3500
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188

BENCHMARKS					
BM#	ELEV	NORTHING	EASTING	DESCRIPTION	
200	811.90	N42° 16' 56.93"	W83° 45' 02.81"	SET COTTON SPINDLE ON S/FACE OF WD UTIL POLE. NE/QUAD OF N FIRST ST & W ANN ST	
201	821.19	N42° 16' 56.43"	W83° 45' 00.35"	CHISELED "O" ON NE BOLT OF LAMP POLE W/ CONC BASE. S/SIDE OF W ANN ST ±105'W OF W ANN ST & N ASHLEY ST INTERSECTION	
202	834.00	N42° 16' 56.11"	W83° 44' 54.83"	CHISELED "+" ON NE BOLT OF GUY POLE W/ CONC BASE. SW/QUAD E ANN ST & N MAIN ST	
203	836.02	N42° 16' 56.05"	W83° 44' 49.29"	SET COTTON SPINDLE ON N/FACE OF WD UITL POLE. SE/QUAD OF E ANNS T & N FOUTH ST	
204	842.41	N42° 16' 56.38"	W83° 44' 44.80"	SET COTTON SPINDLE ON S/FACE OF WD UTIL POLE. NE/QUAD OF E ANN ST & N FIFTH ST	
205	846.54	N42° 16' 55.83"	W83° 44' 41.74"	SET CHIISELED "O" ON NE BOLT OF LT POLE W/ CONC BASE. S/SIDE OF E ANN ST ±105'S OF BLDG #321 E ANN ST	
206	850.13	N42° 16' 56.25"	W83° 44' 39.97"	SET CHISELED "O" ON SE/BOLT OF LT POLE W/ CONC BASE. N/SIDE OF E ANN ST NEAREST TO HOUSE ADDRESS #335	
207	856.48	N42° 16' 55.93"	W83° 44' 37.34"	SET COTTON SPINDLE ON W/FACE OF WD LT POLE. SE/QUAD OF E ANN ST & DIVISION	
208	838.65	N42° 16' 56.59"	W83° 44' 47.57"	SET COTTON SPINDLE ON S/FACE OF WD UTIL POLE. N/SIDE OF E ANN ST ±19' E OF E BLDG LINE OF "TEAHAUS"	

	TRAVERSE POINTS							
TP#	ELEV	NORTHING	EASTING					
100	811.18	N42° 16' 56.51"	W83° 45' 03.02"					
101	823.33	N42° 16' 56.82"	W83° 44' 59.37"					
102	832.79	N42° 16' 56.16"	W83° 44' 54.99"					
103	833.93	N42° 16' 56.60"	W83° 44' 50.34"					
104	840.54	N42° 16' 55.89"	W83° 44' 45.92"					
106	849.95	N42° 16' 55.78"	W83° 44' 40.04"					
107	854.52	N42° 16' 56.23"	W83° 44' 37.93"					
108	836.71	N42° 16' 55.99"	W83° 44' 47.96"					
109	833.87	N42° 16' 56.14"	W83° 44' 52.28"					



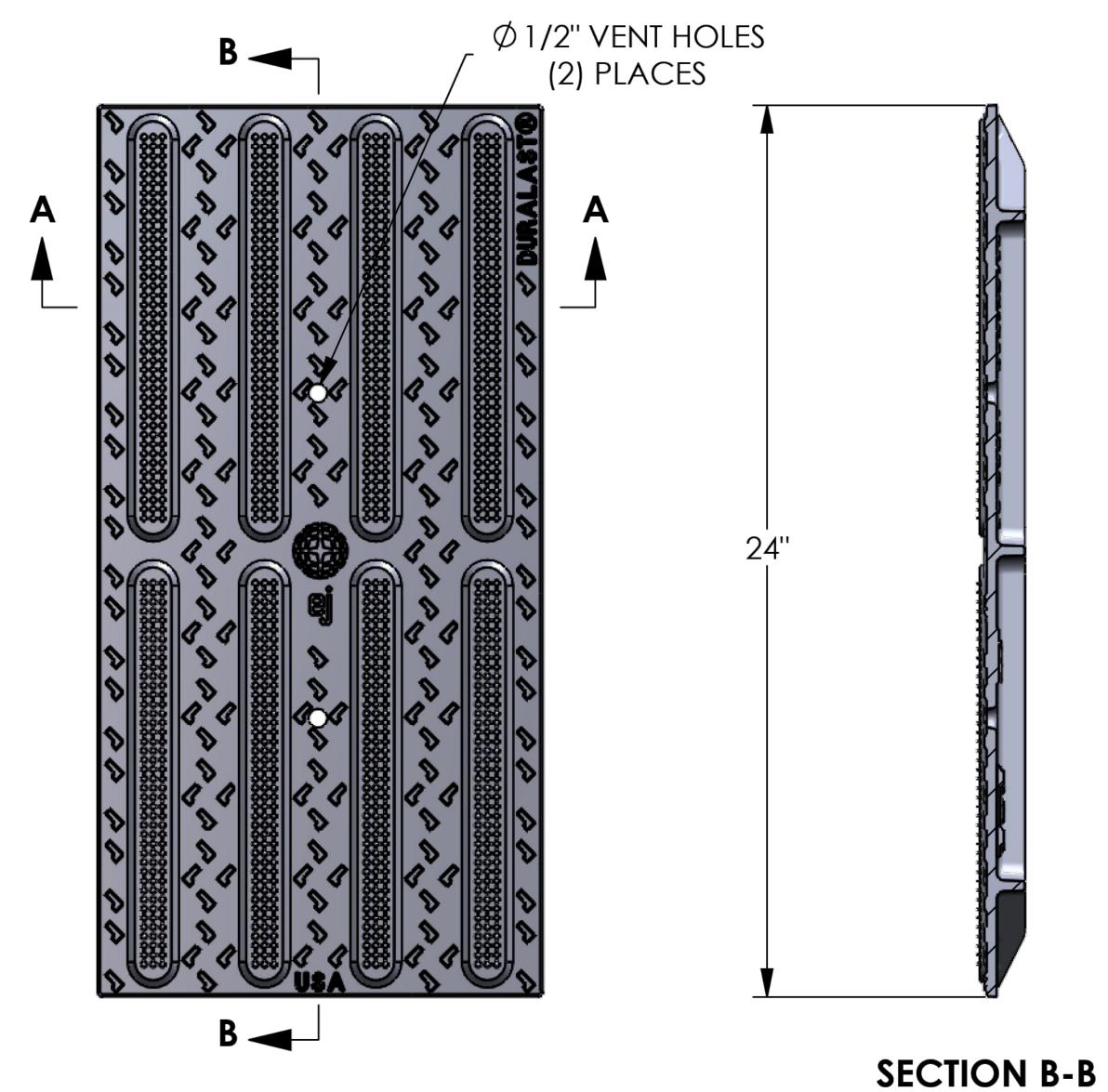
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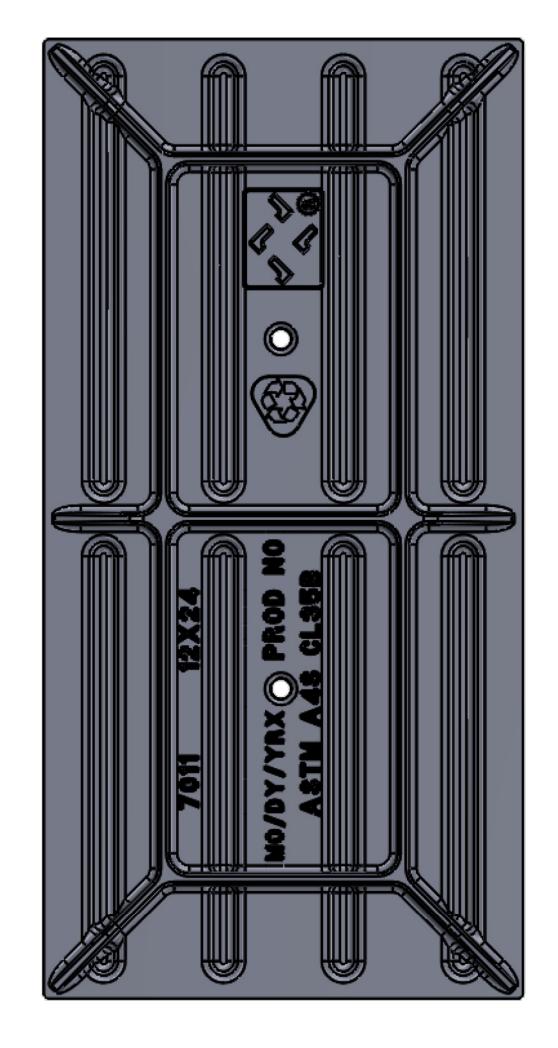
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ARI

SHEET No.

7011 12X24 Directional ADA Plate







Product Number 00701122

Design Features

-Materials

Gray Iron (CL35B)

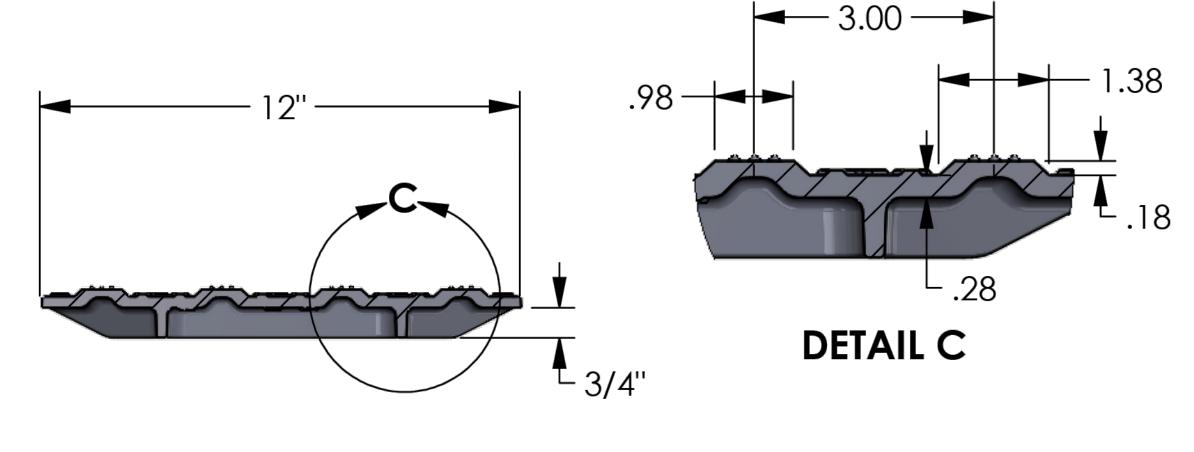
- -Load Rating Heavy Duty
- -Open Área
- -Coating
- Dipped
- -√ Designates Machined Surface
- -Estimated Weight
- 27 lbs

Certification

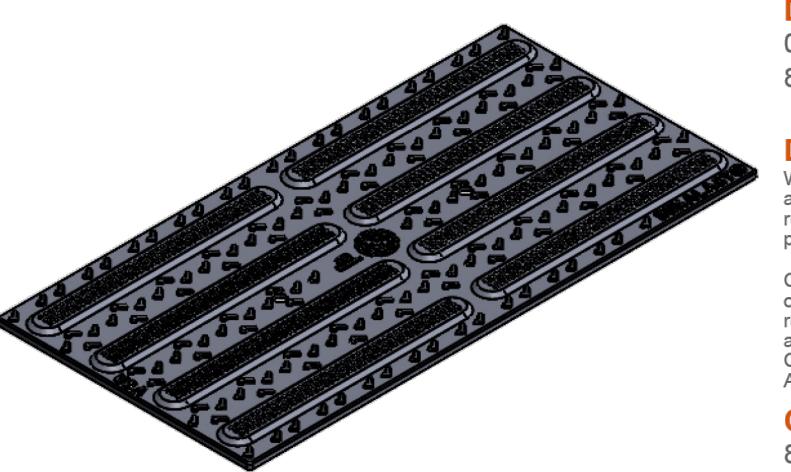
-ASTM A48

-Country of Origin: USA

BOTTOM VIEW



SECTION A-A



ISO VIEW

Drawing Revision

07/15/2024 Designer: MAH 8/1/2024 Revised By: MAH

Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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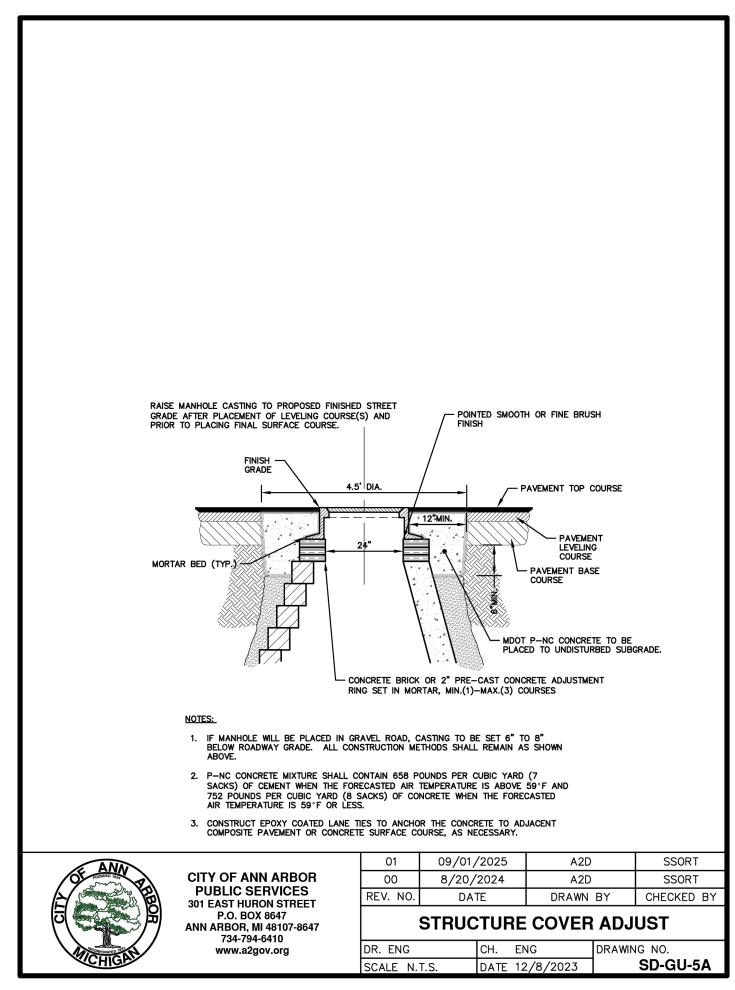
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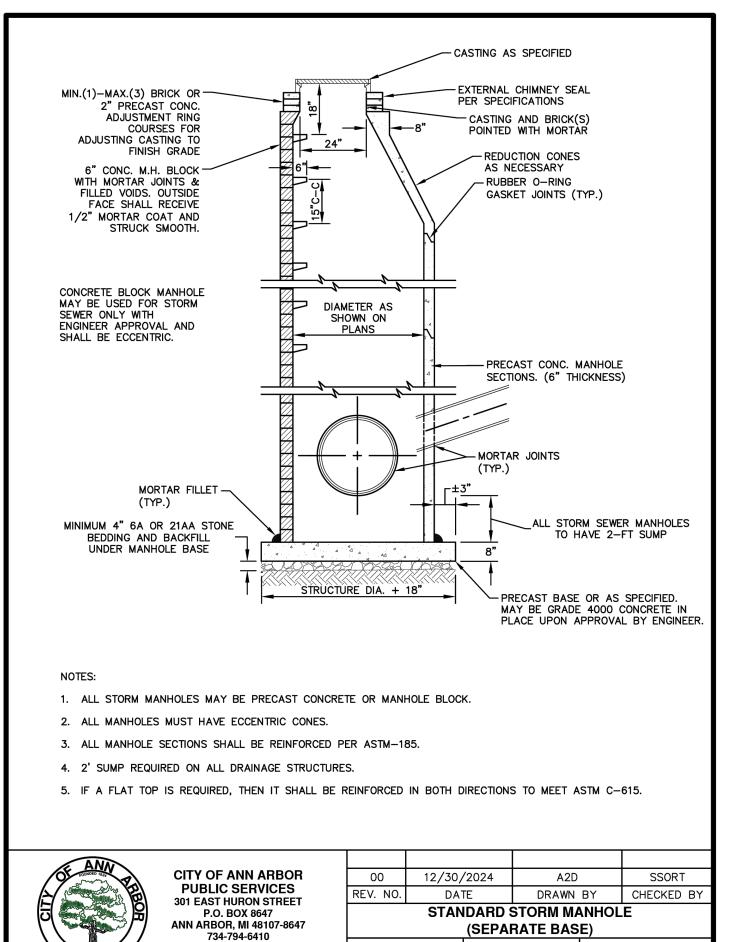
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ANN STREET IMPROVEMENTS

TY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING





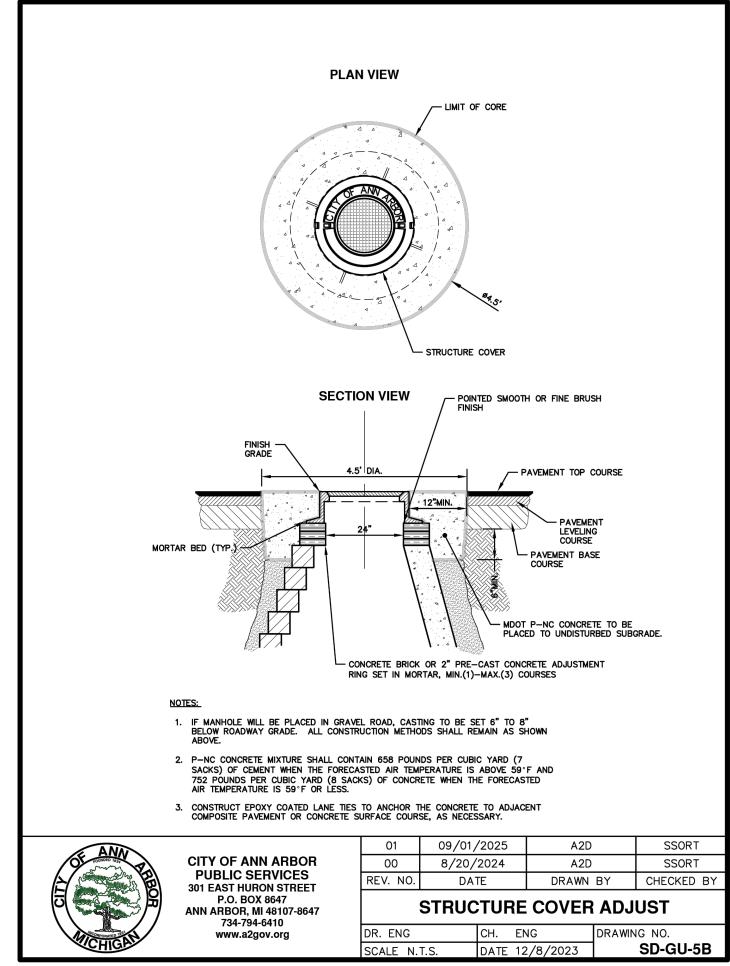
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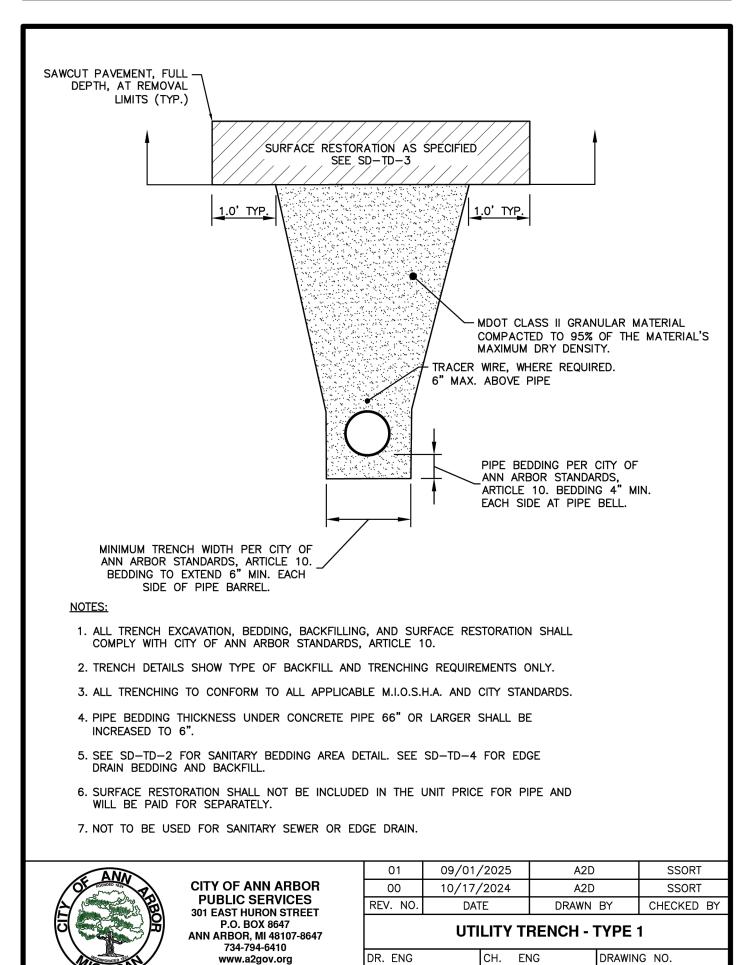
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DRAWING NO.

SD-ST-1A

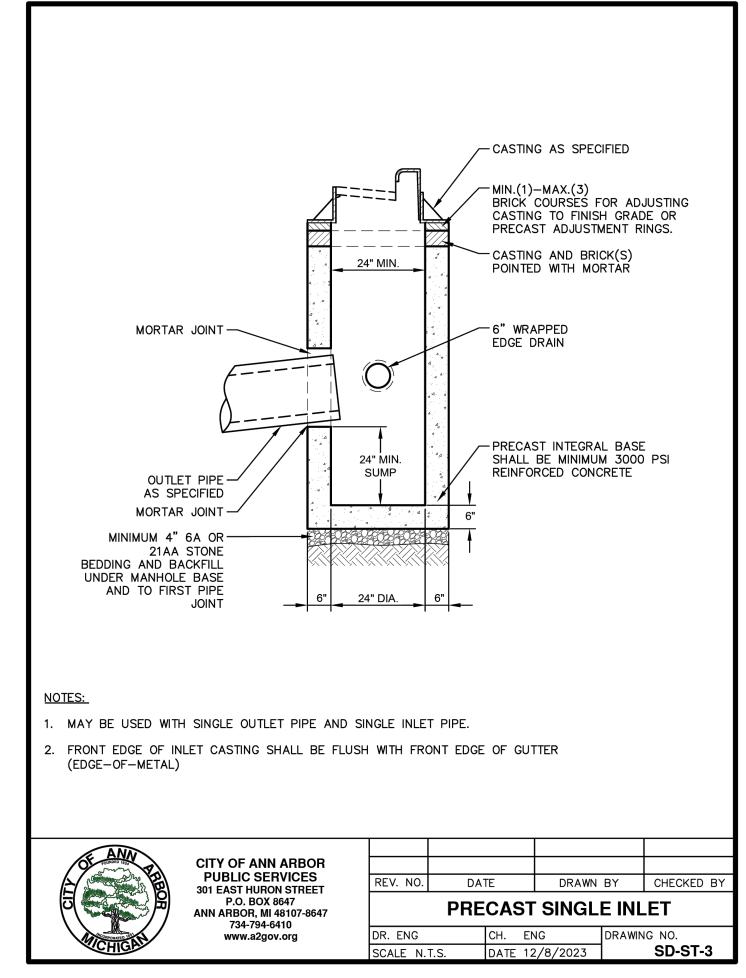
www.a2gov.org

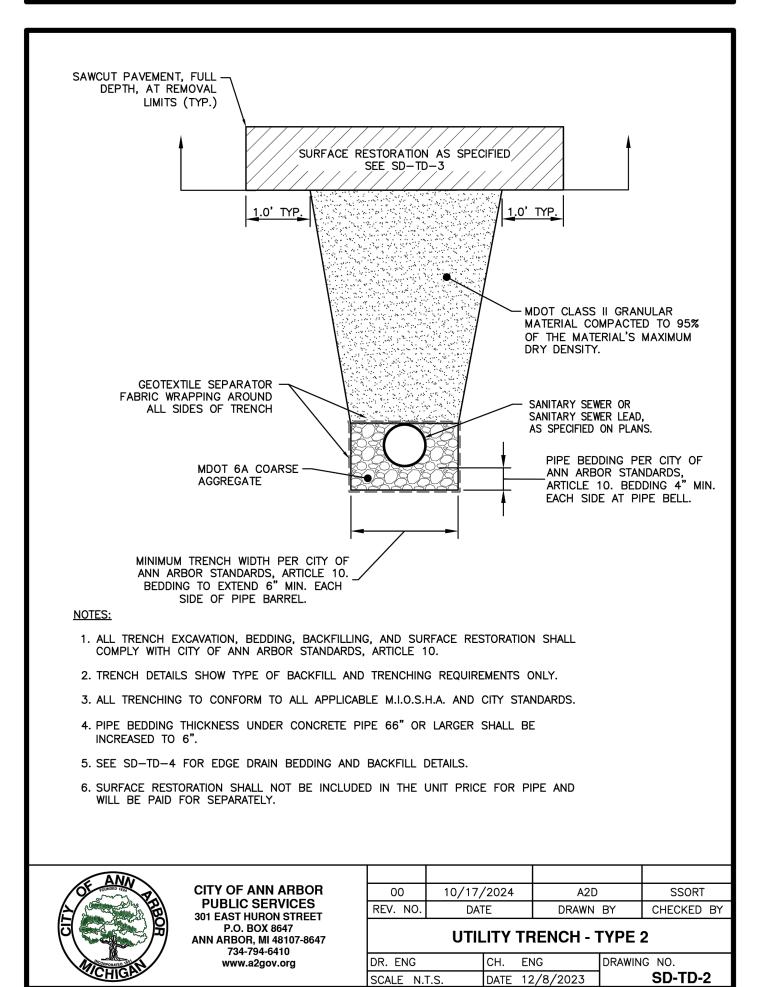


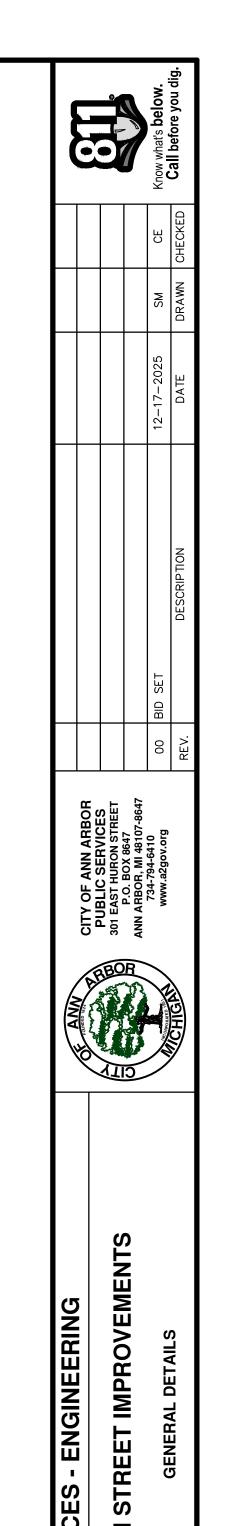


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SCALE N.T.S. DATE 12/8/2023



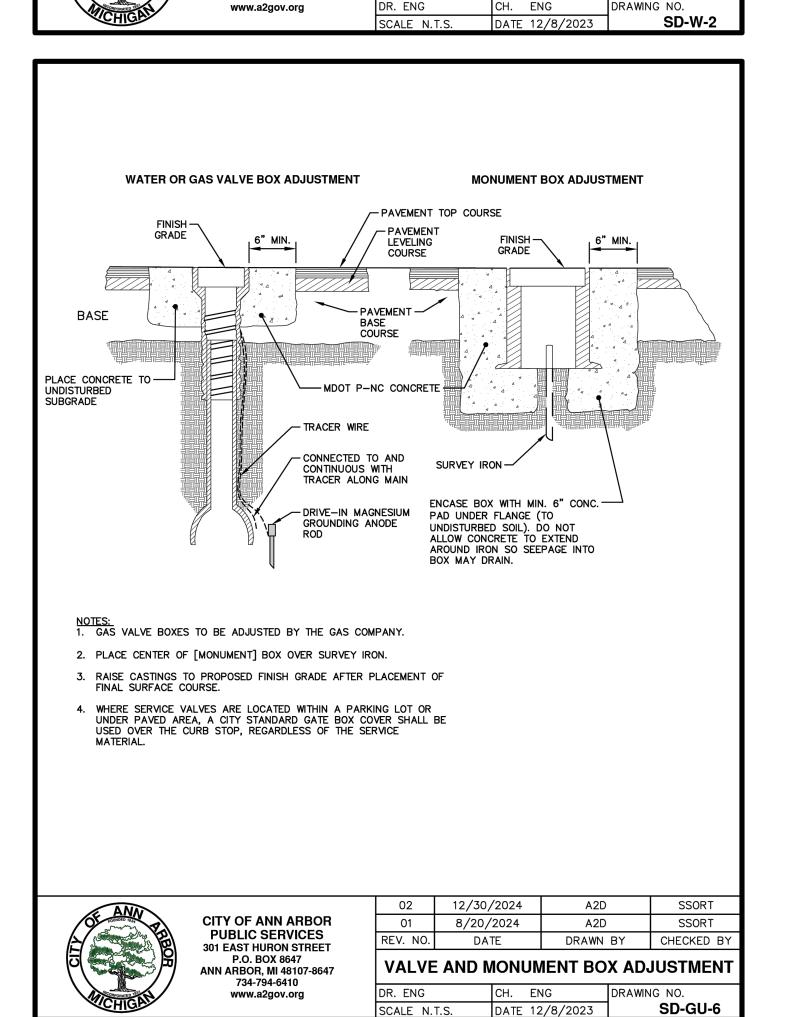


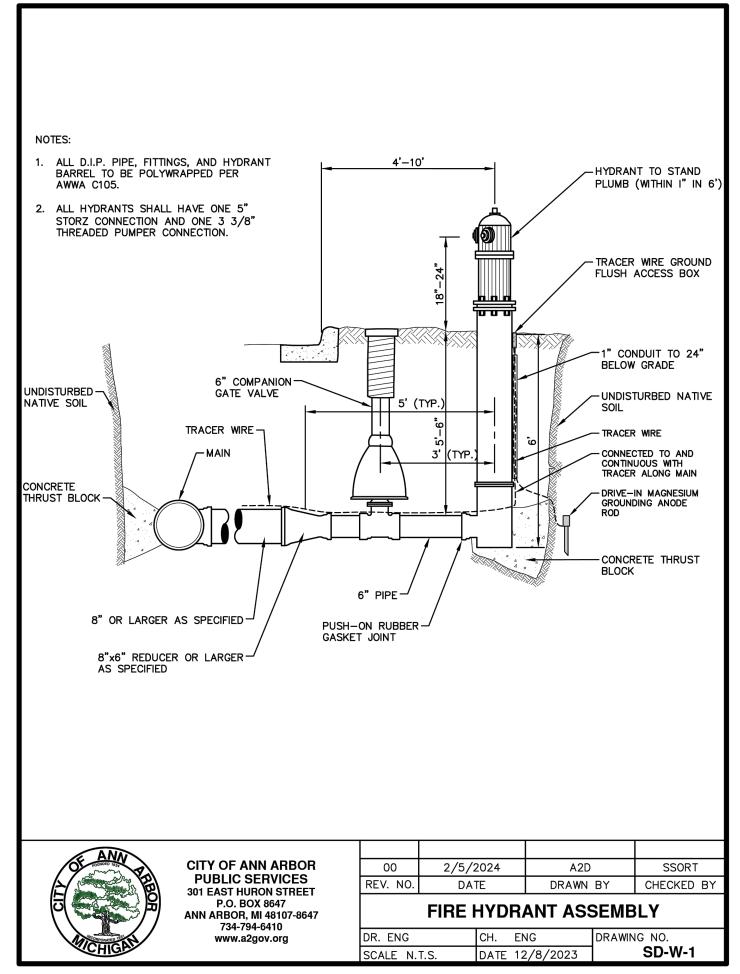


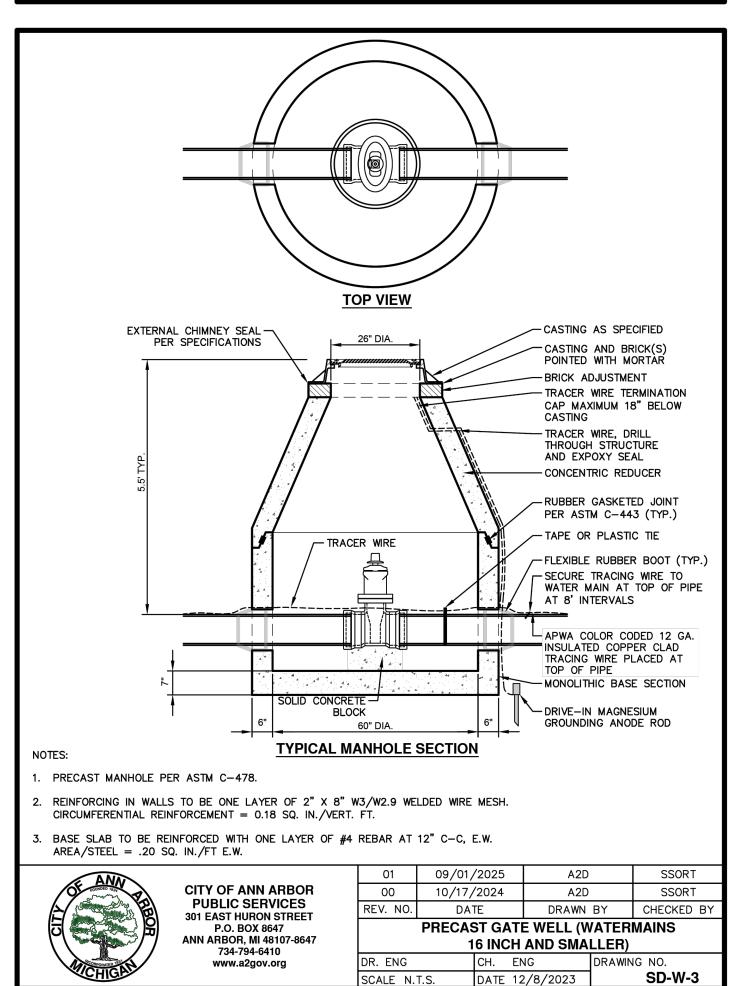
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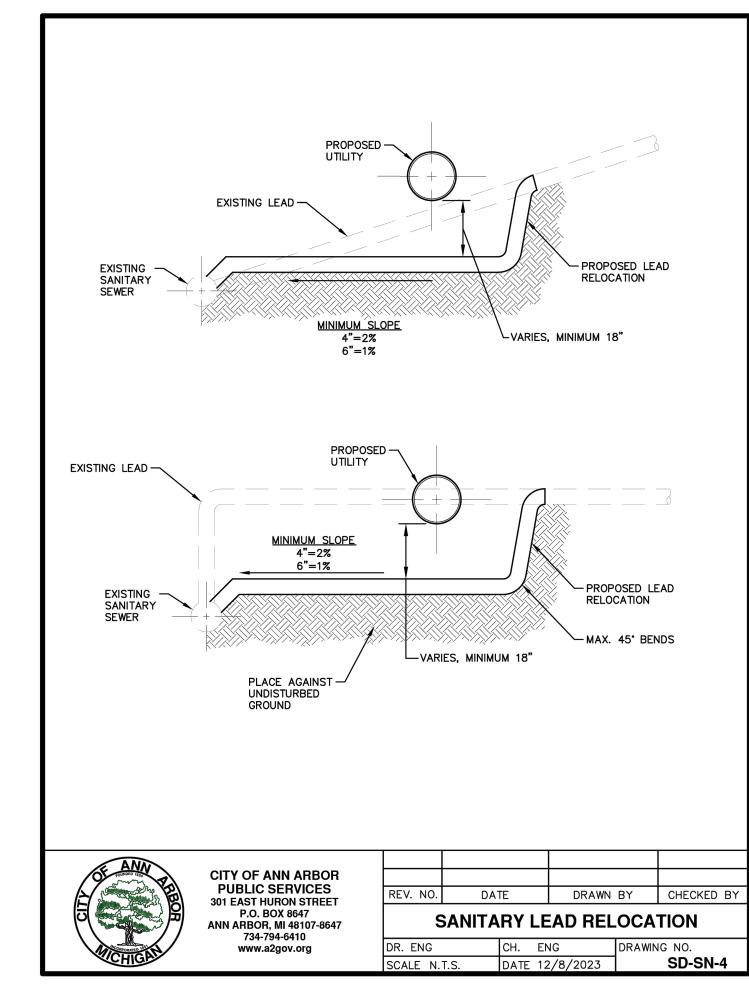
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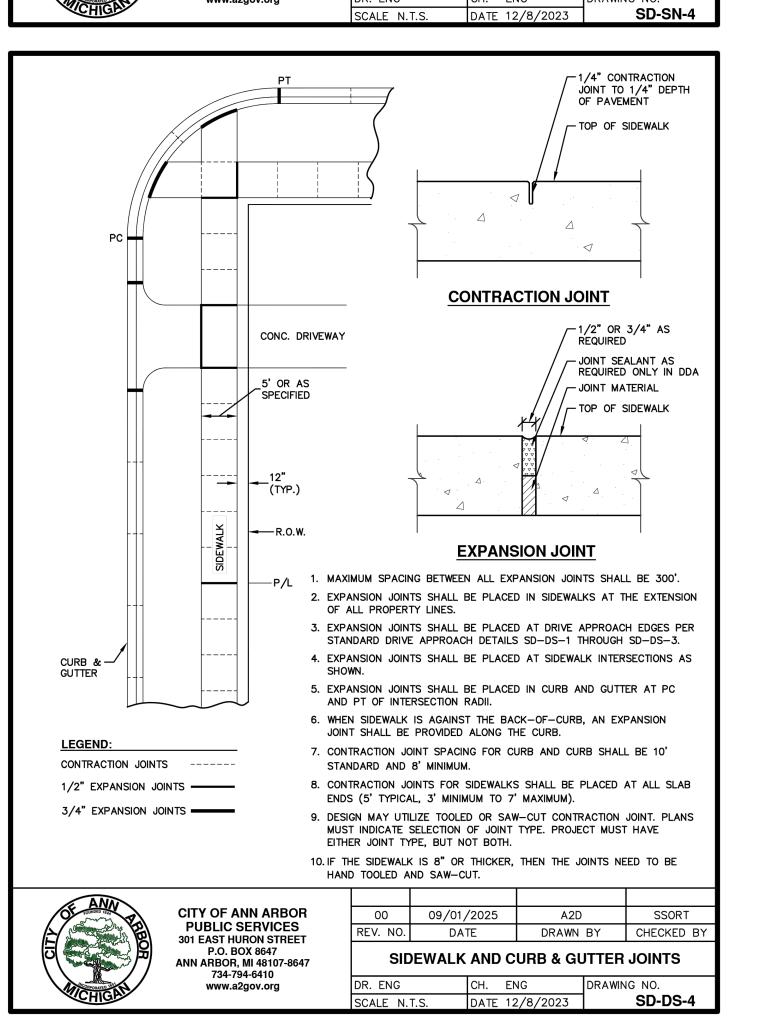
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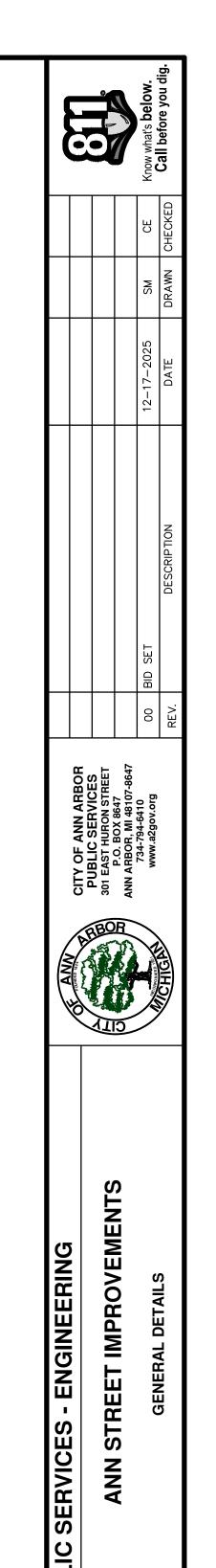








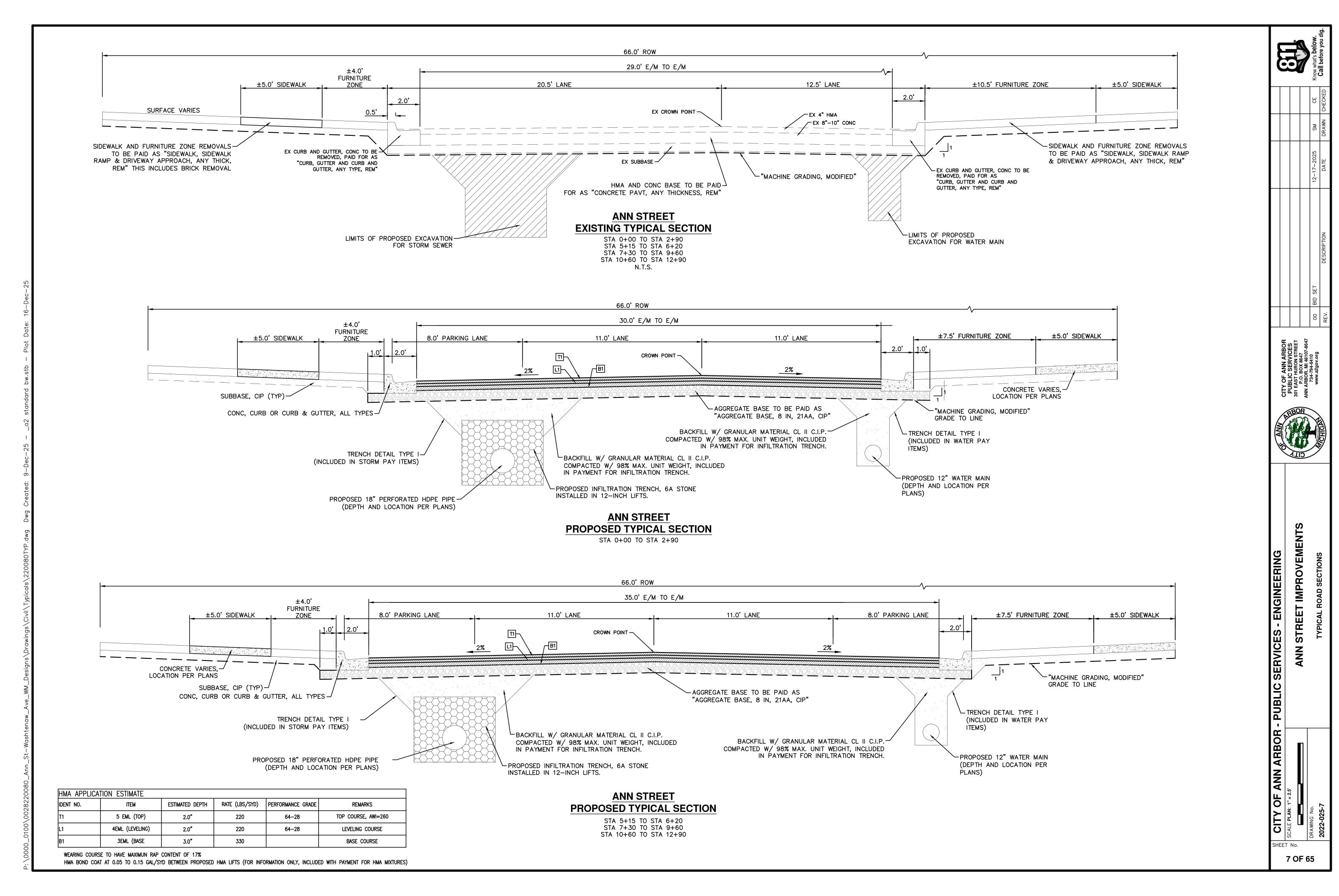




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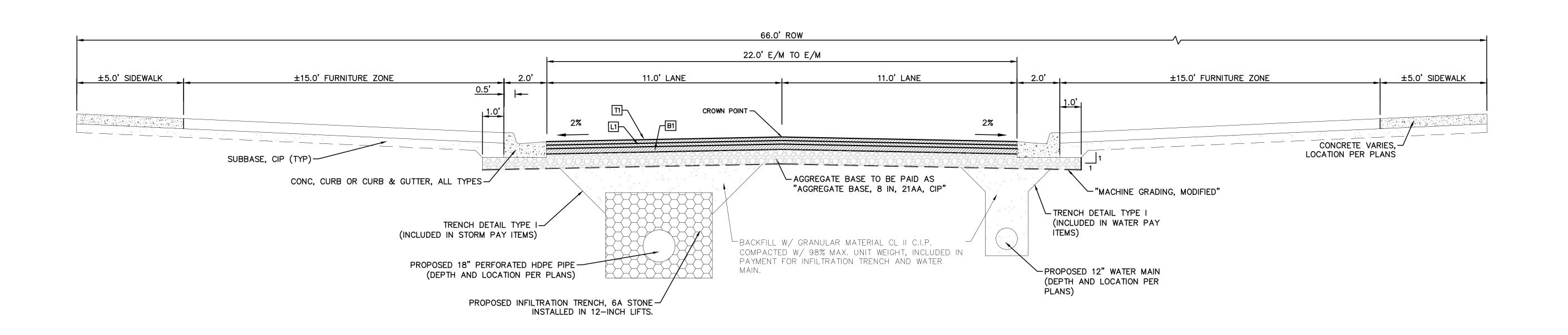
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ANN STREET EXISTING TYPICAL SECTION

STA 3+75 TO STA 5+15 N.T.S.



ANN STREET

PROPOSED TYPICAL SECTION

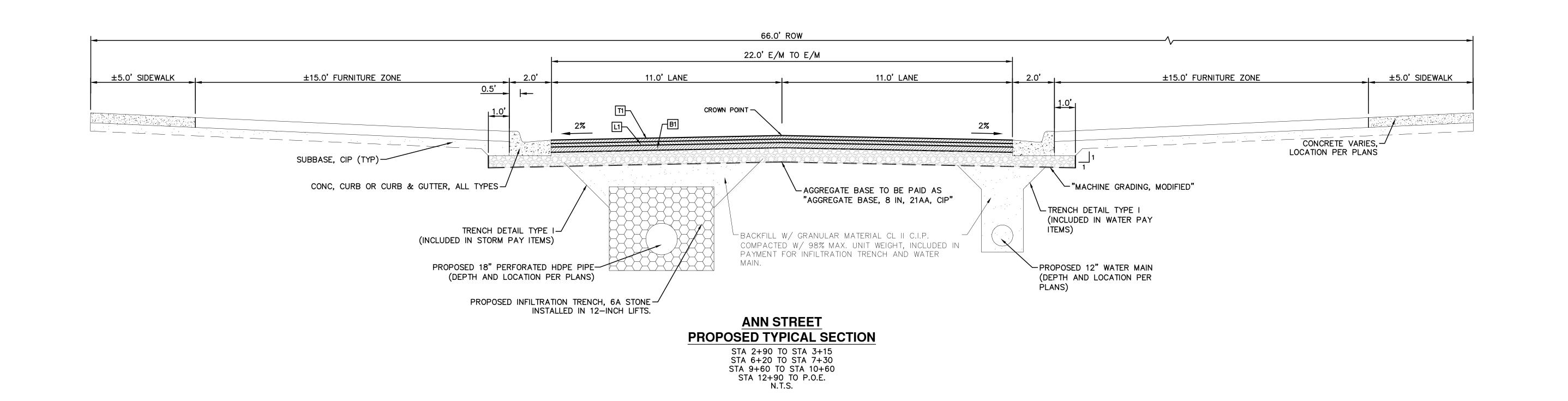
STA 3+75 TO STA 5+15 N.T.S.

ANN STREET IMPROVEMENTS CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SHEET No.

ANN STREET EXISTING TYPICAL SECTION

STA 2+90 TO STA 3+15 STA 6+20 TO STA 7+30 STA 9+60 TO STA 10+60 STA 12+90 TO P.O.E. N.T.S.

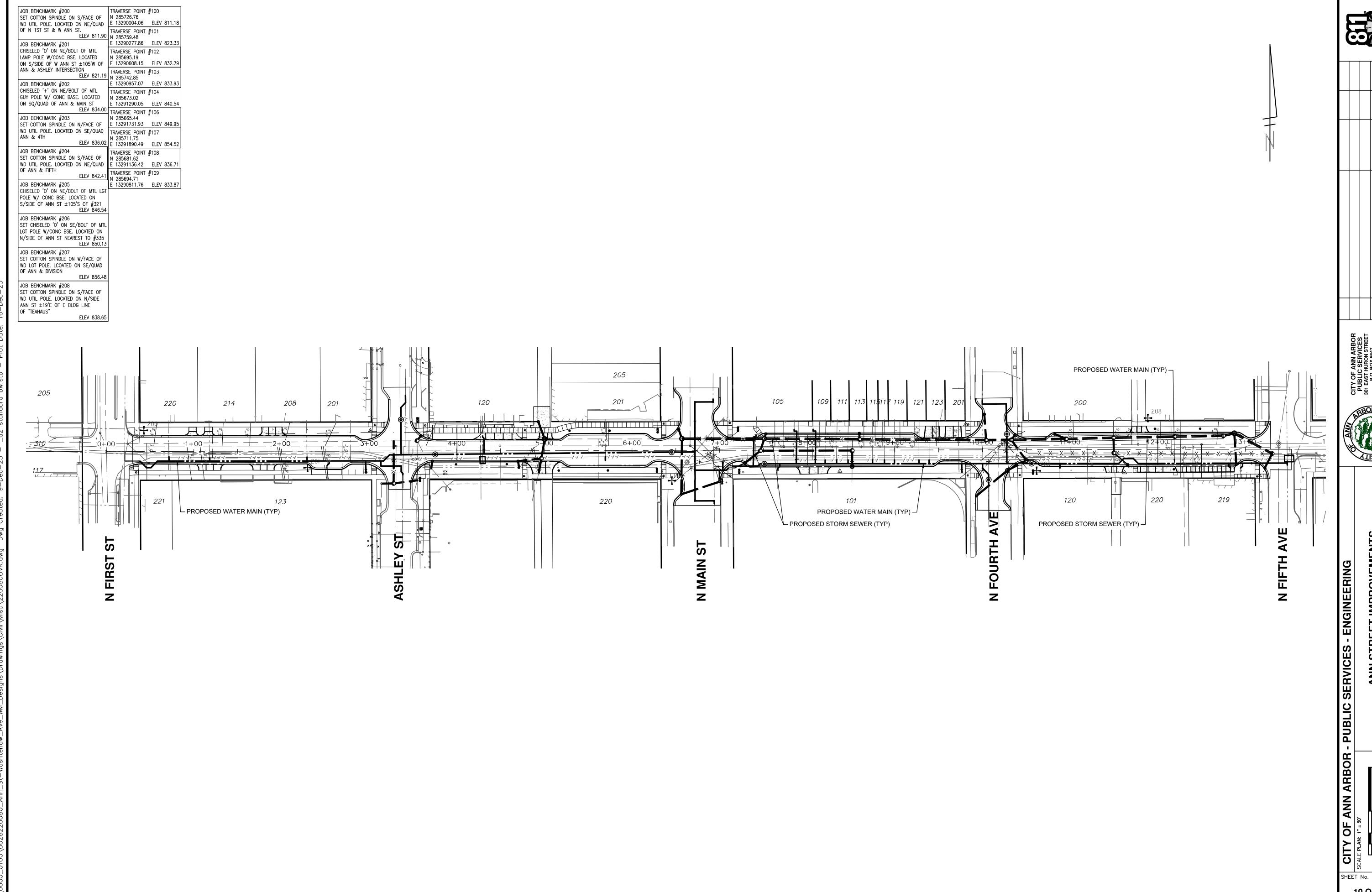




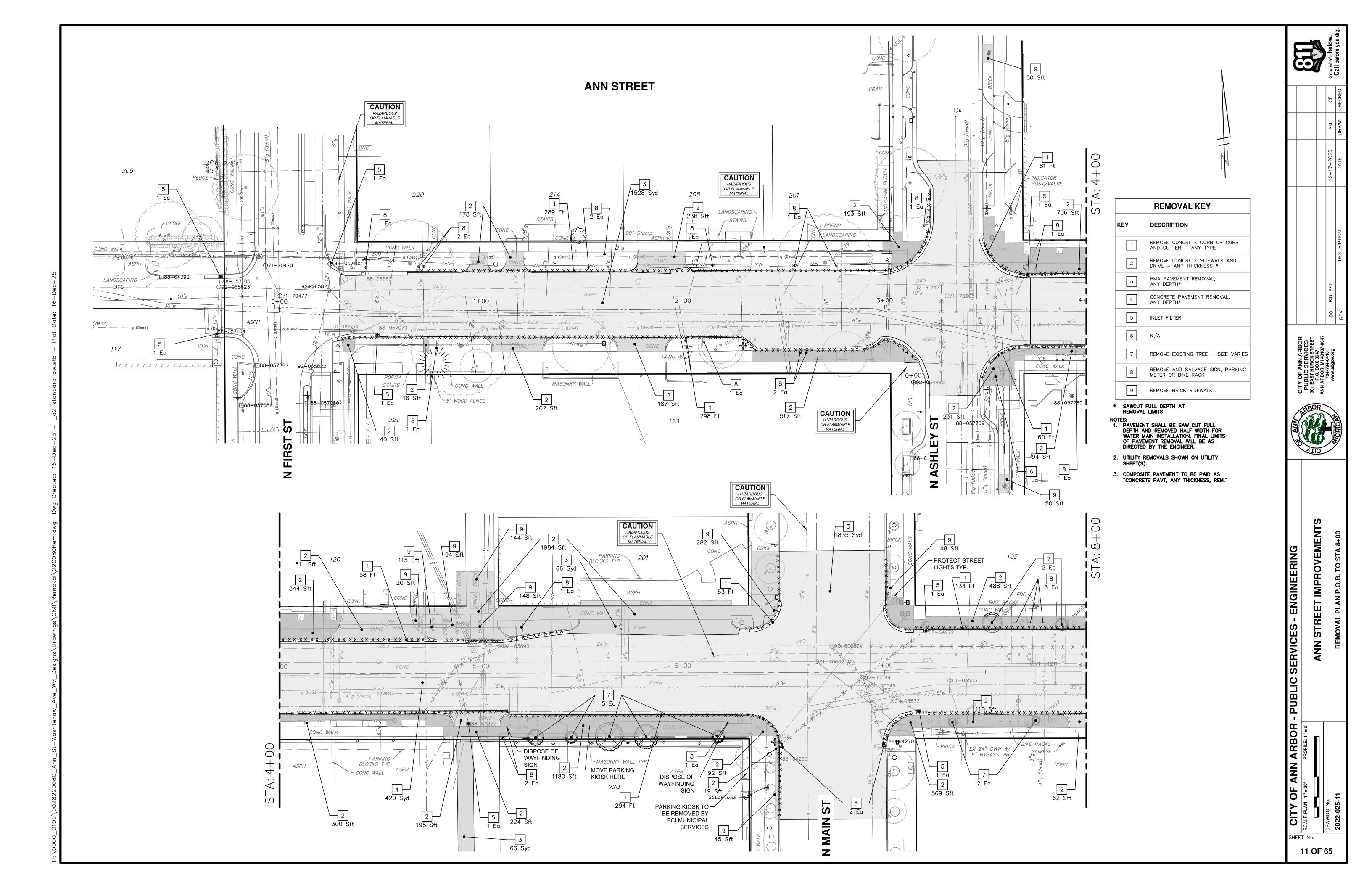
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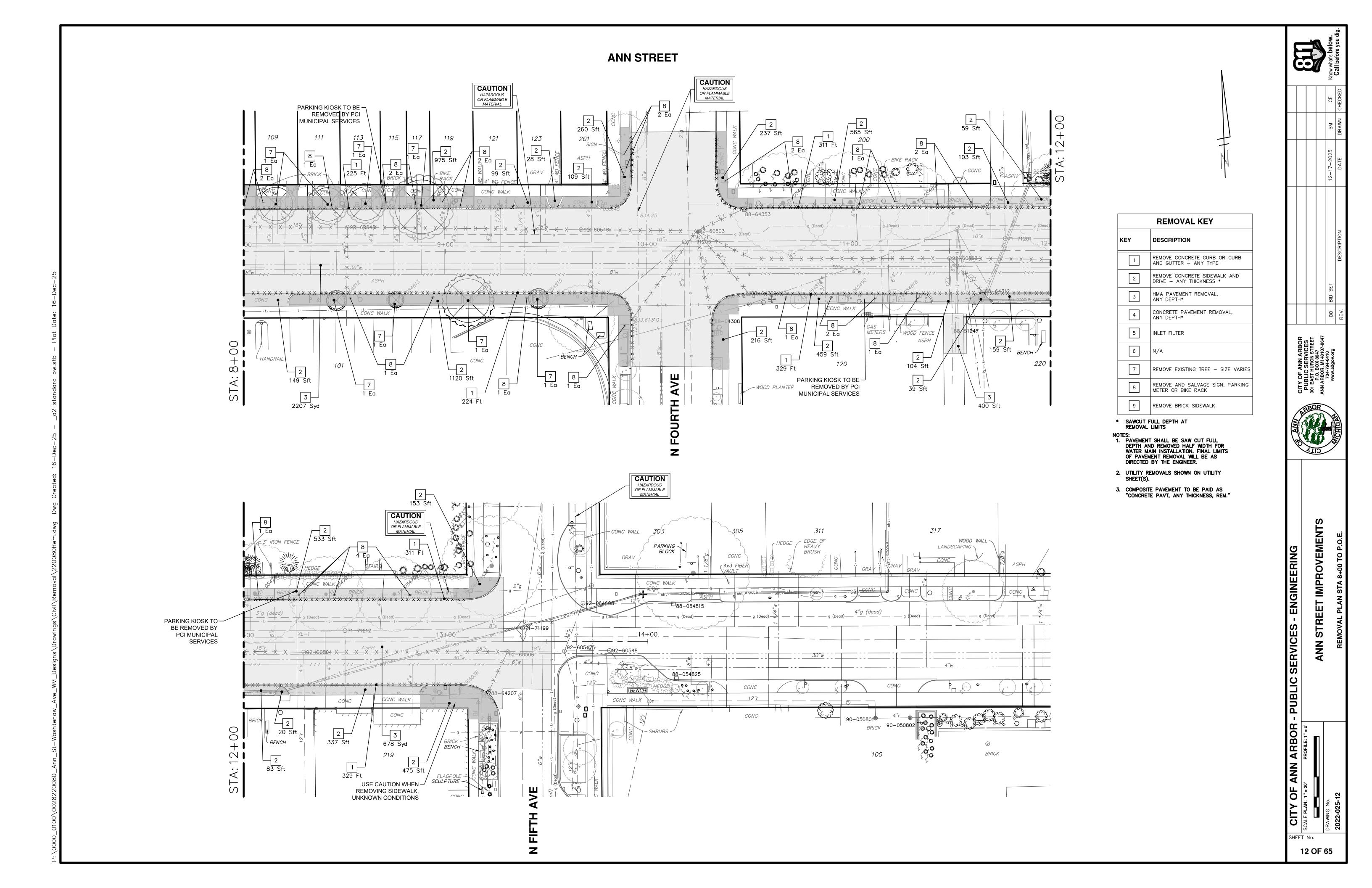
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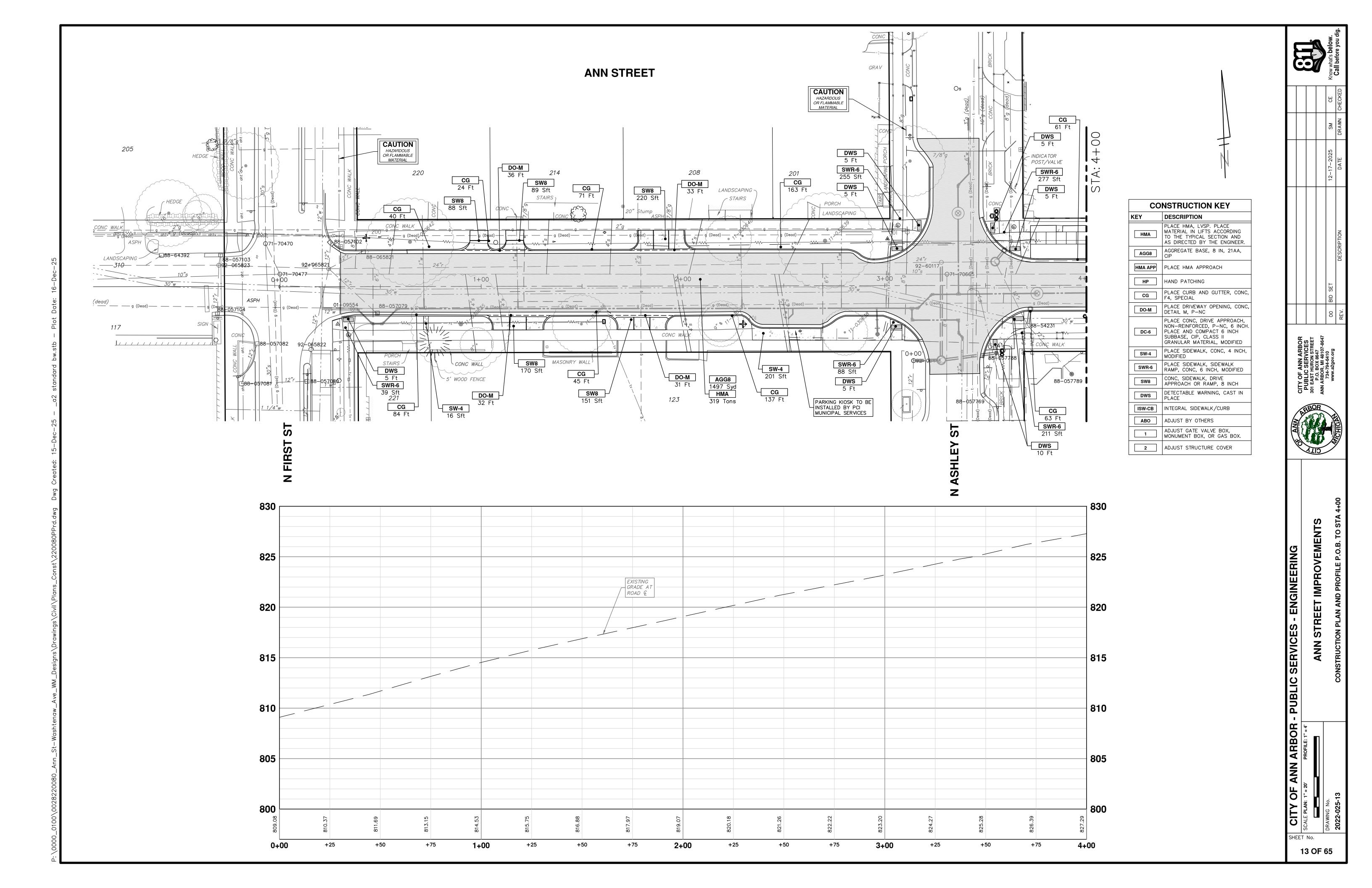
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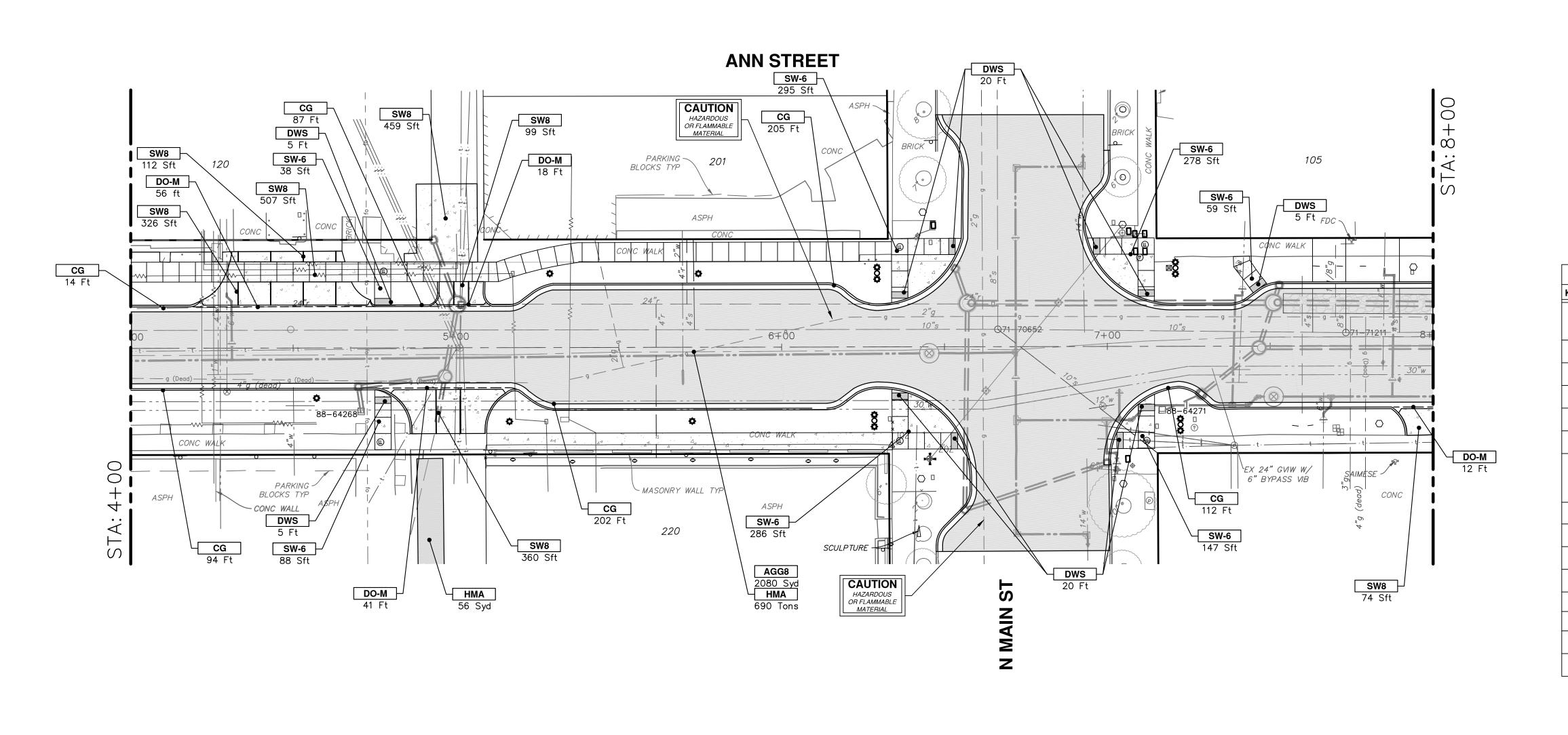


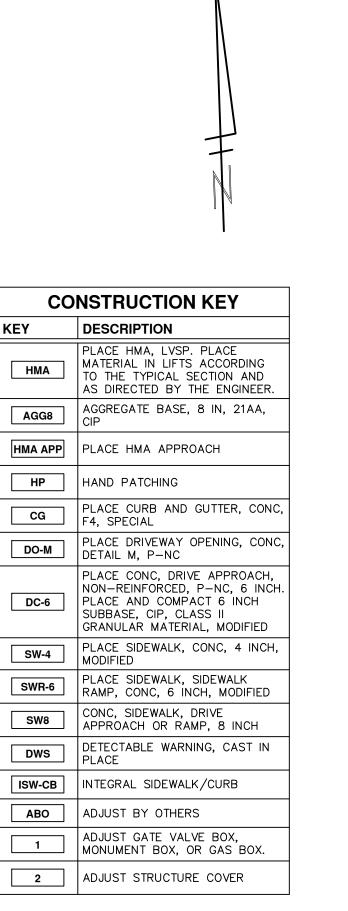
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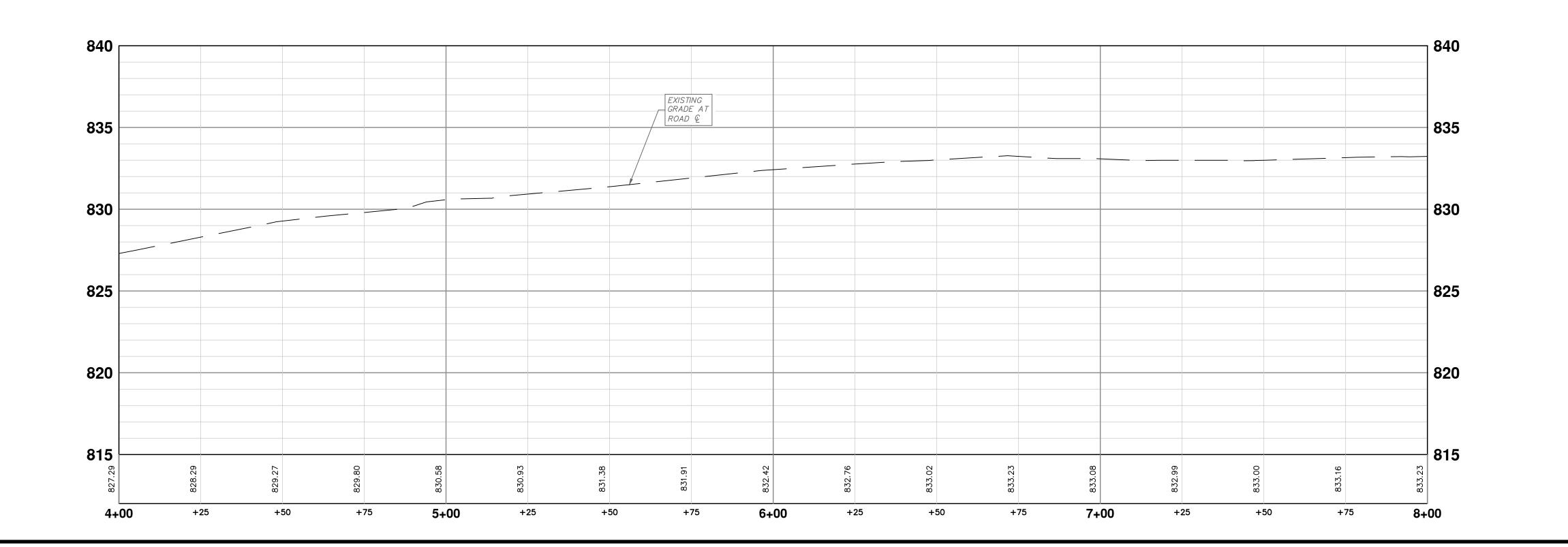




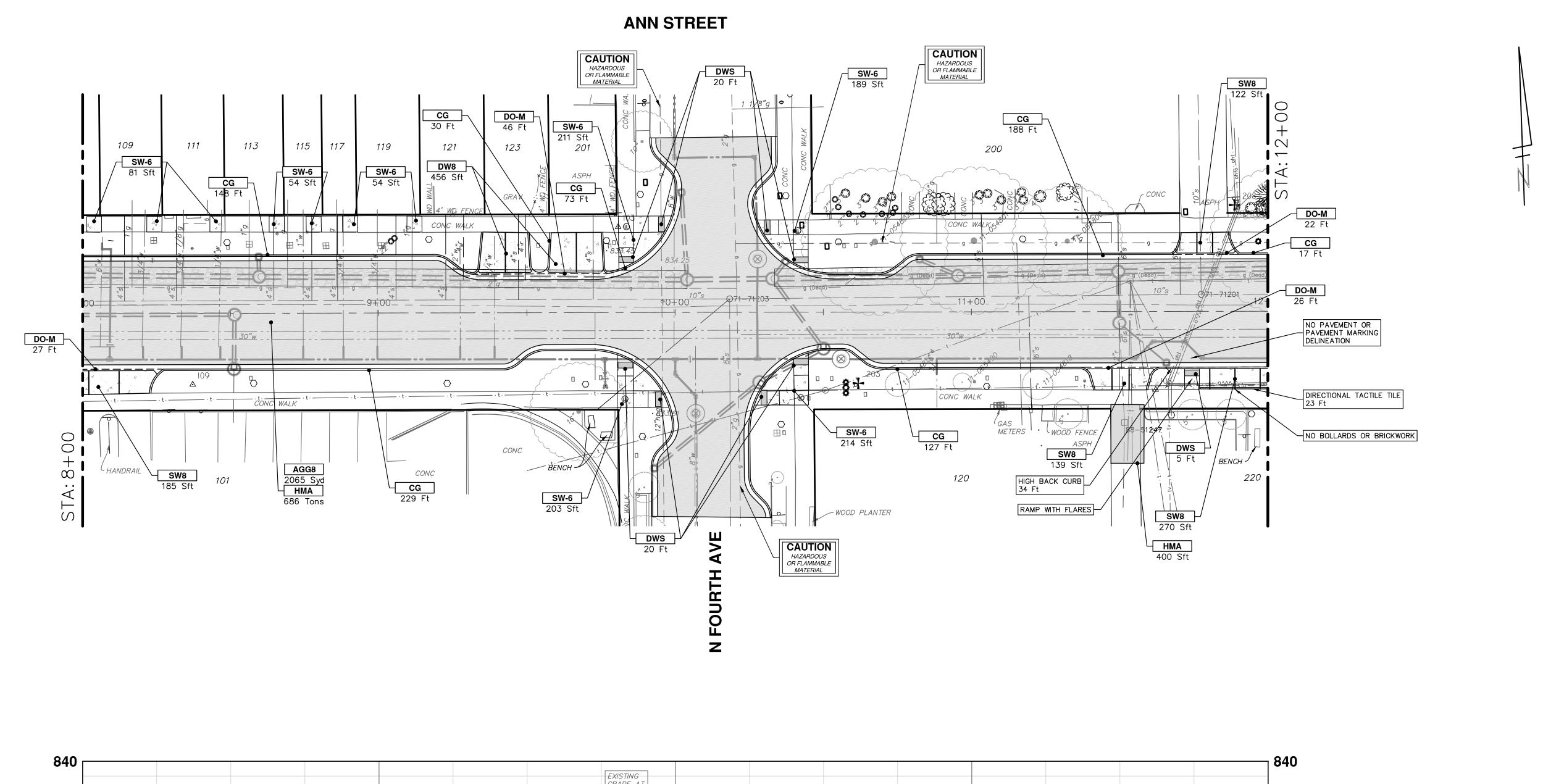


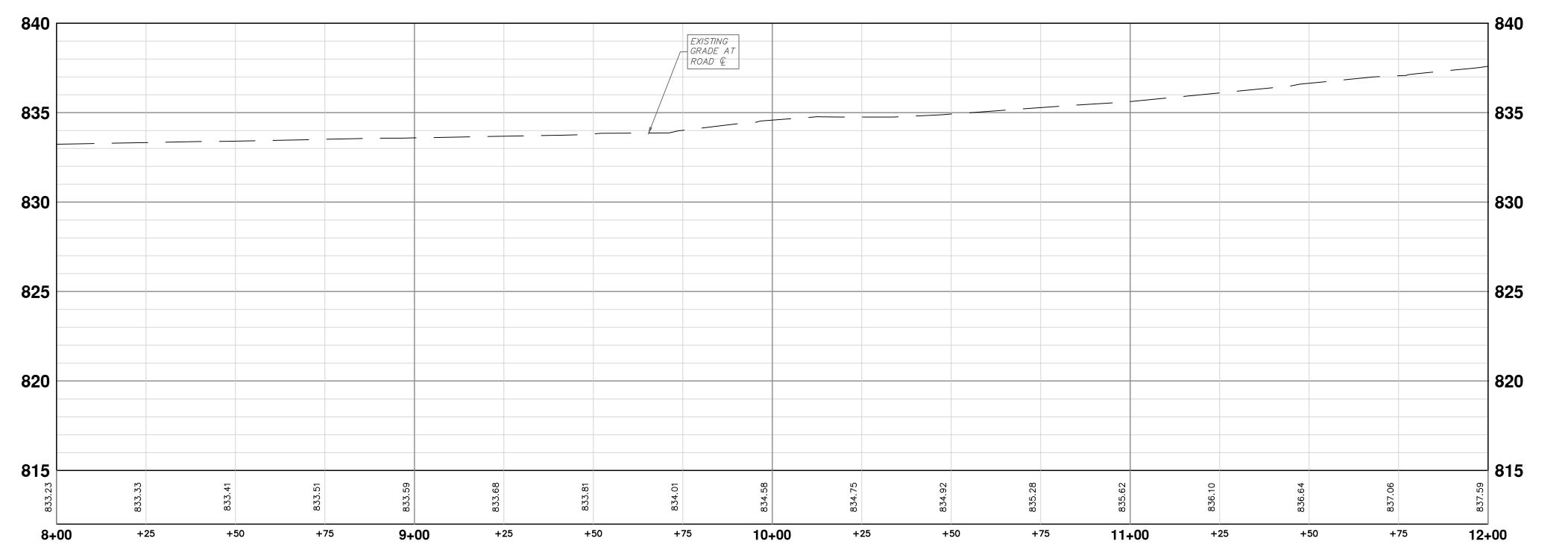






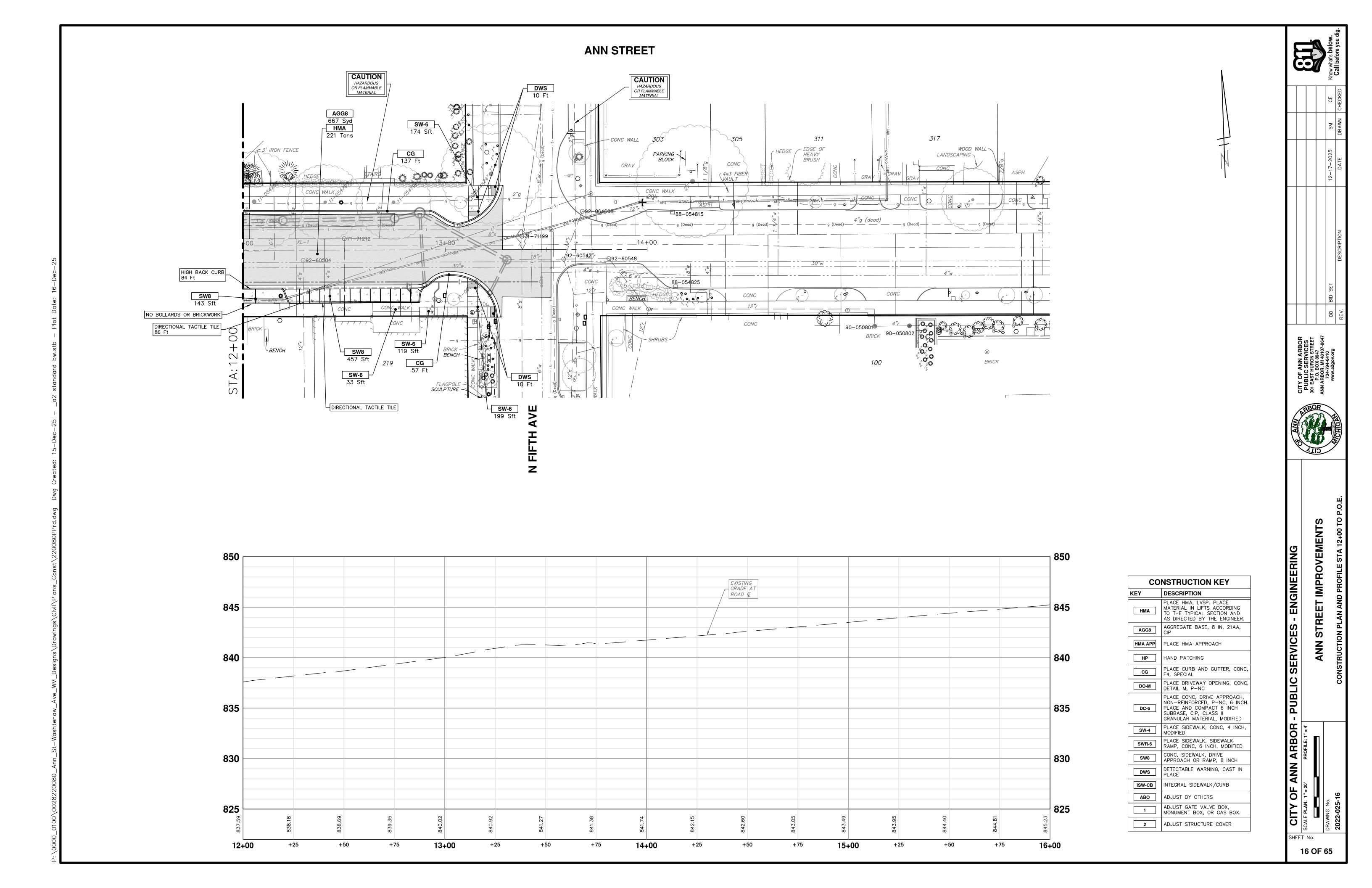
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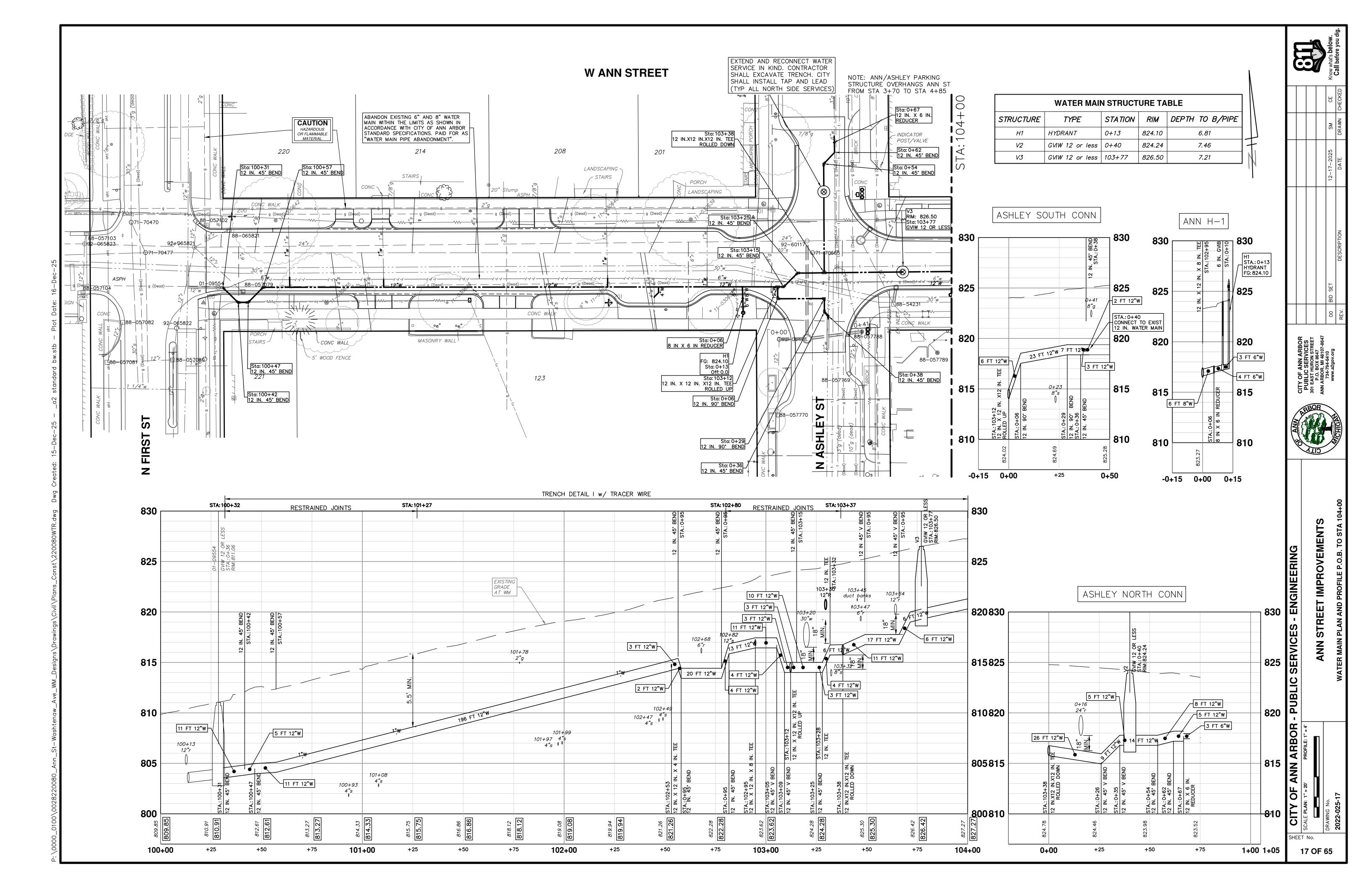


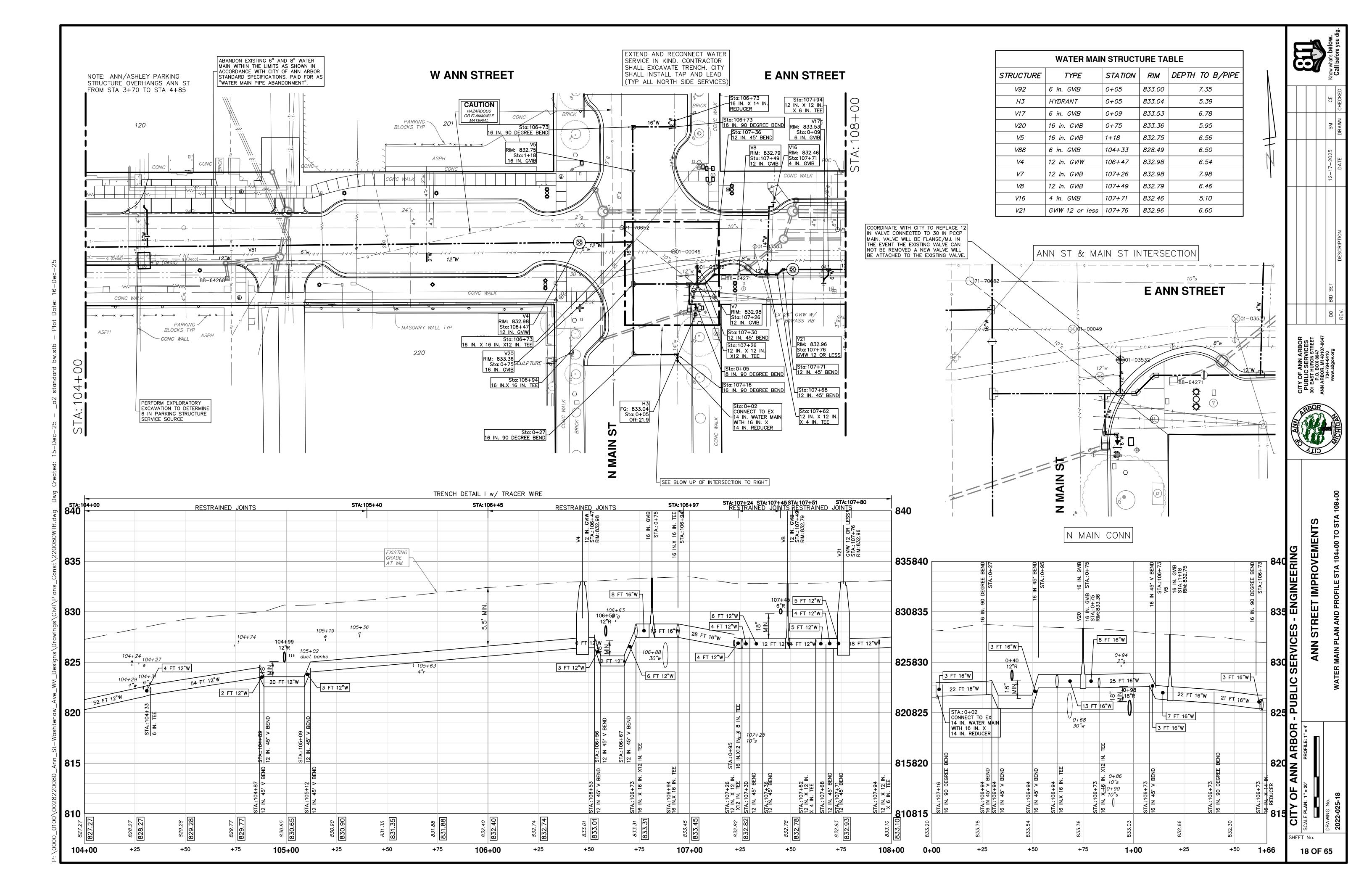


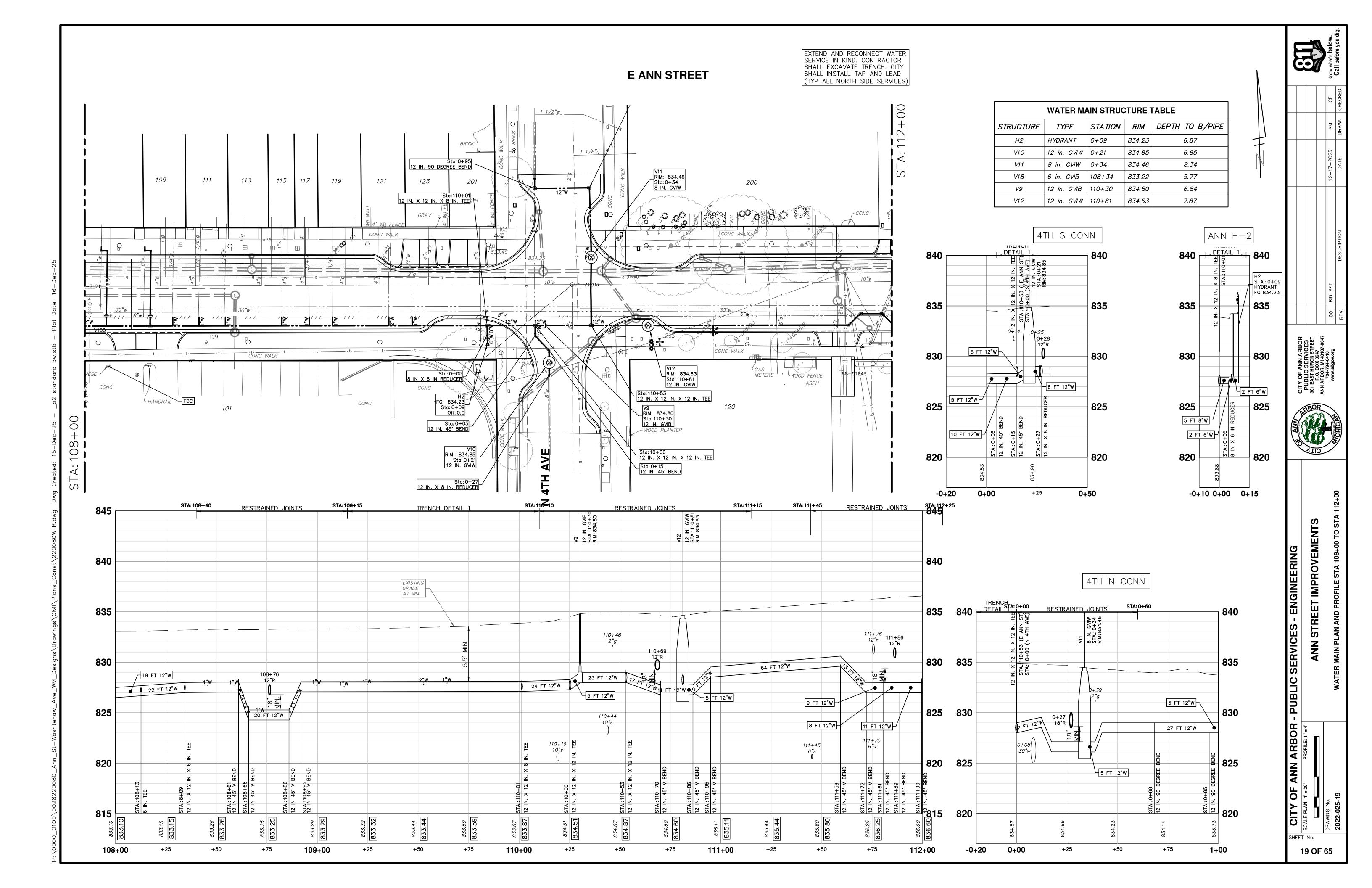
СО	NSTRUCTION KEY
KEY	DESCRIPTION
НМА	PLACE HMA, LVSP. PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
AGG8	AGGREGATE BASE, 8 IN, 21AA, CIP
HMA APP	PLACE HMA APPROACH
НР	HAND PATCHING
CG	PLACE CURB AND GUTTER, CONC, F4, SPECIAL
DO-M	PLACE DRIVEWAY OPENING, CONC, DETAIL M, P-NC
DC-6	PLACE CONC, DRIVE APPROACH, NON-REINFORCED, P-NC, 6 INCH. PLACE AND COMPACT 6 INCH SUBBASE, CIP, CLASS II GRANULAR MATERIAL, MODIFIED
SW-4	PLACE SIDEWALK, CONC, 4 INCH, MODIFIED
SWR-6	PLACE SIDEWALK, SIDEWALK RAMP, CONC, 6 INCH, MODIFIED
SW8	CONC, SIDEWALK, DRIVE APPROACH OR RAMP, 8 INCH
DWS	DETECTABLE WARNING, CAST IN PLACE
ISW-CB	INTEGRAL SIDEWALK/CURB
АВО	ADJUST BY OTHERS
1	ADJUST GATE VALVE BOX, MONUMENT BOX, OR GAS BOX.
2	ADJUST STRUCTURE COVER

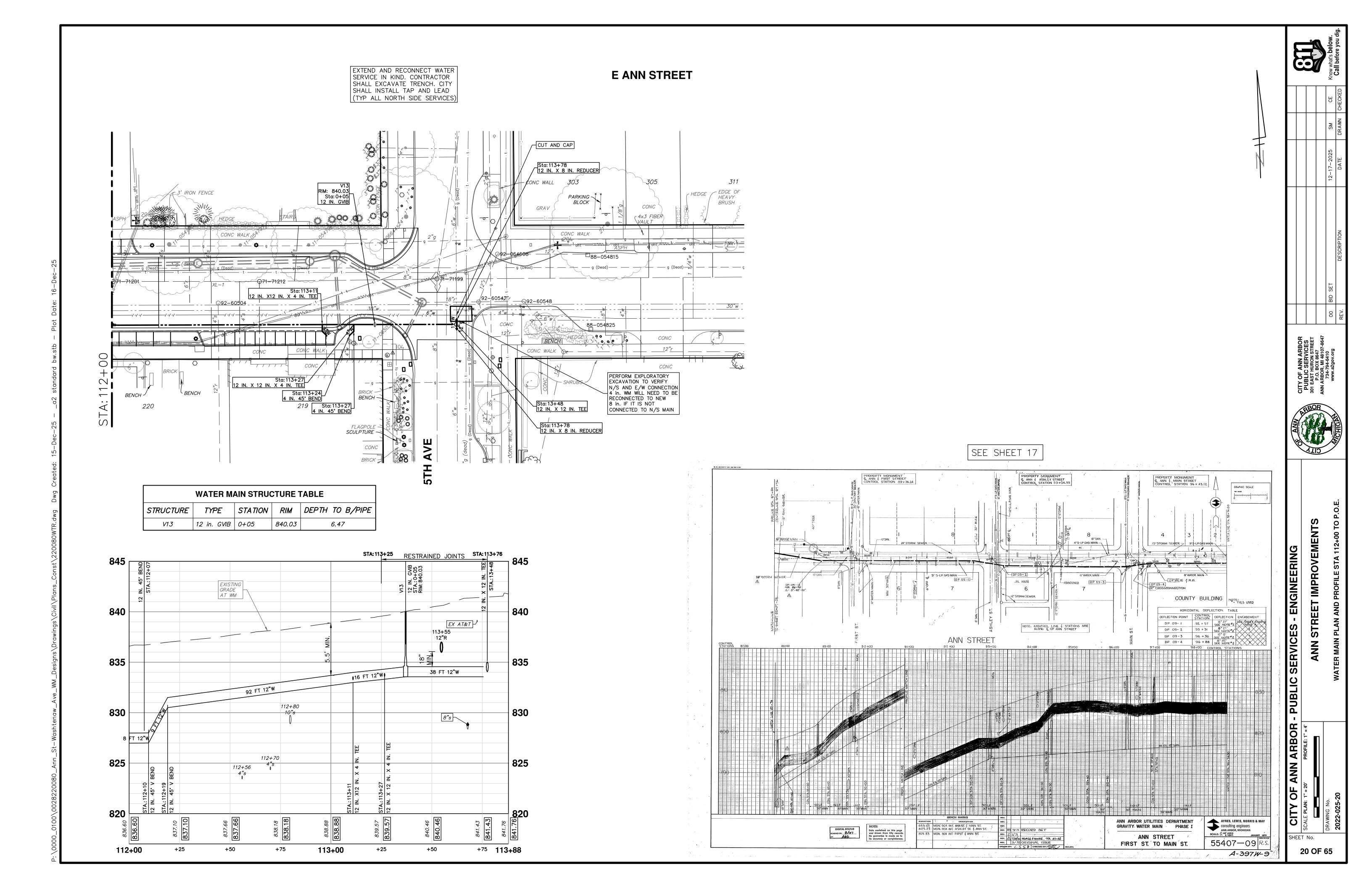
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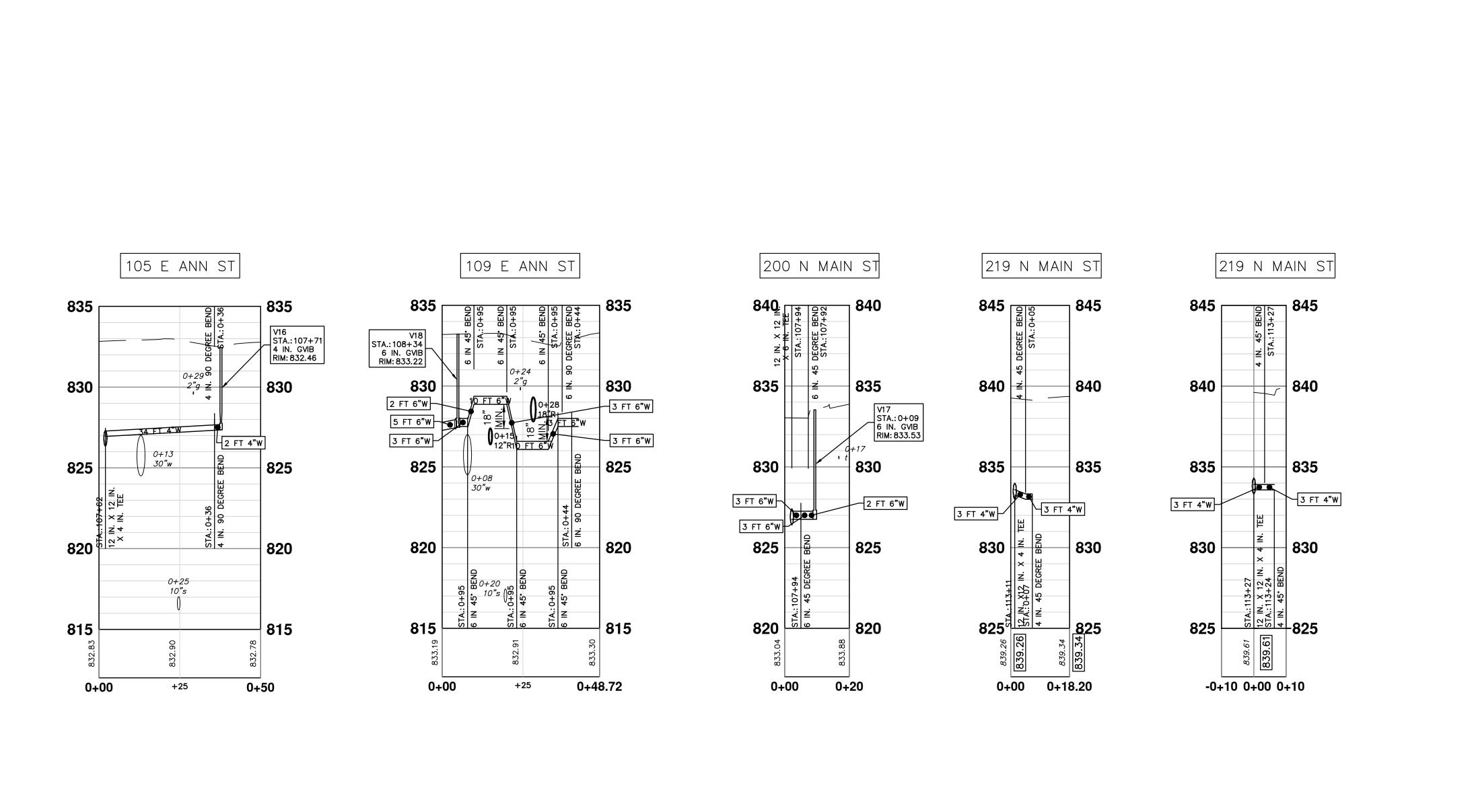






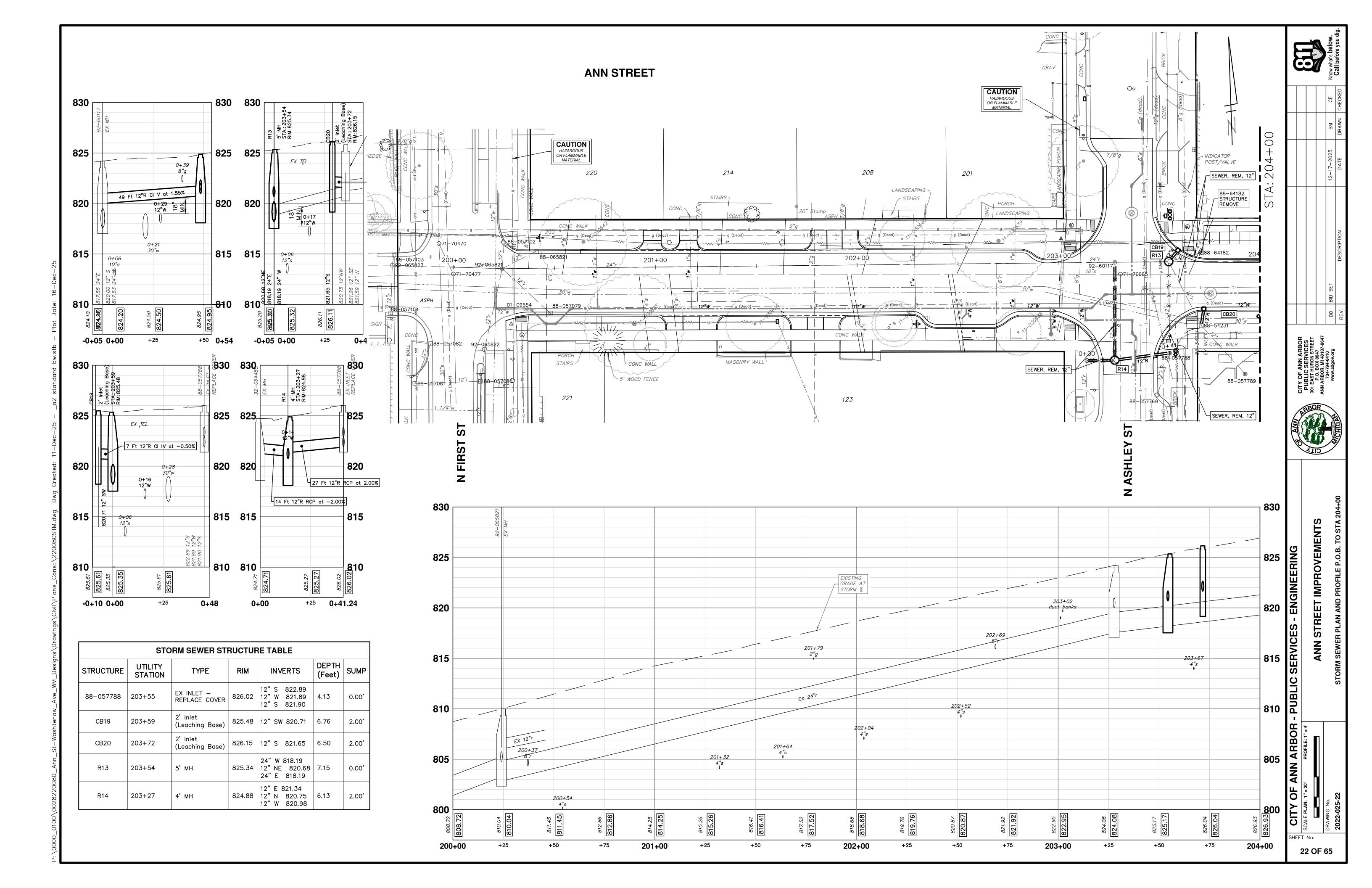


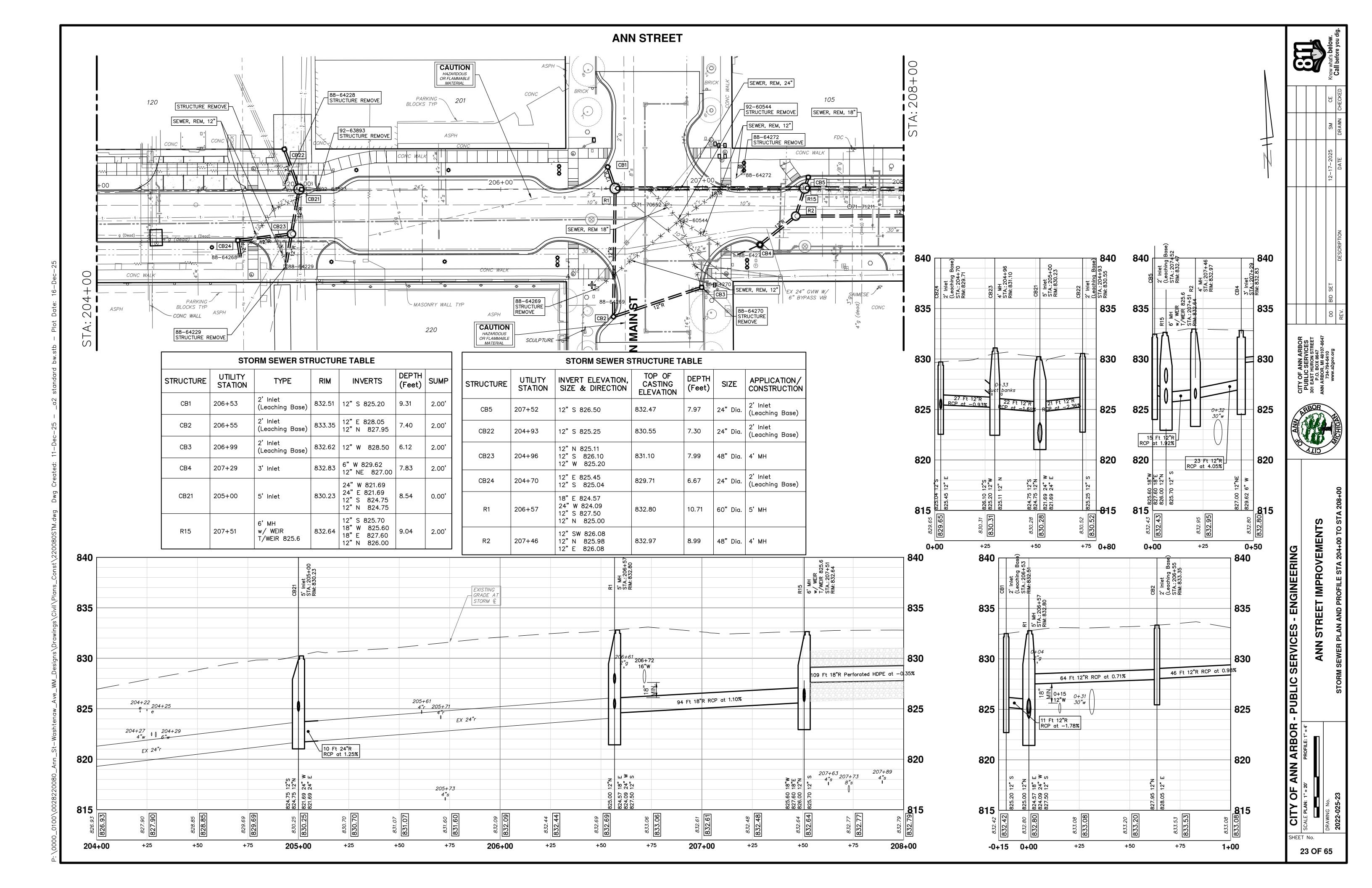


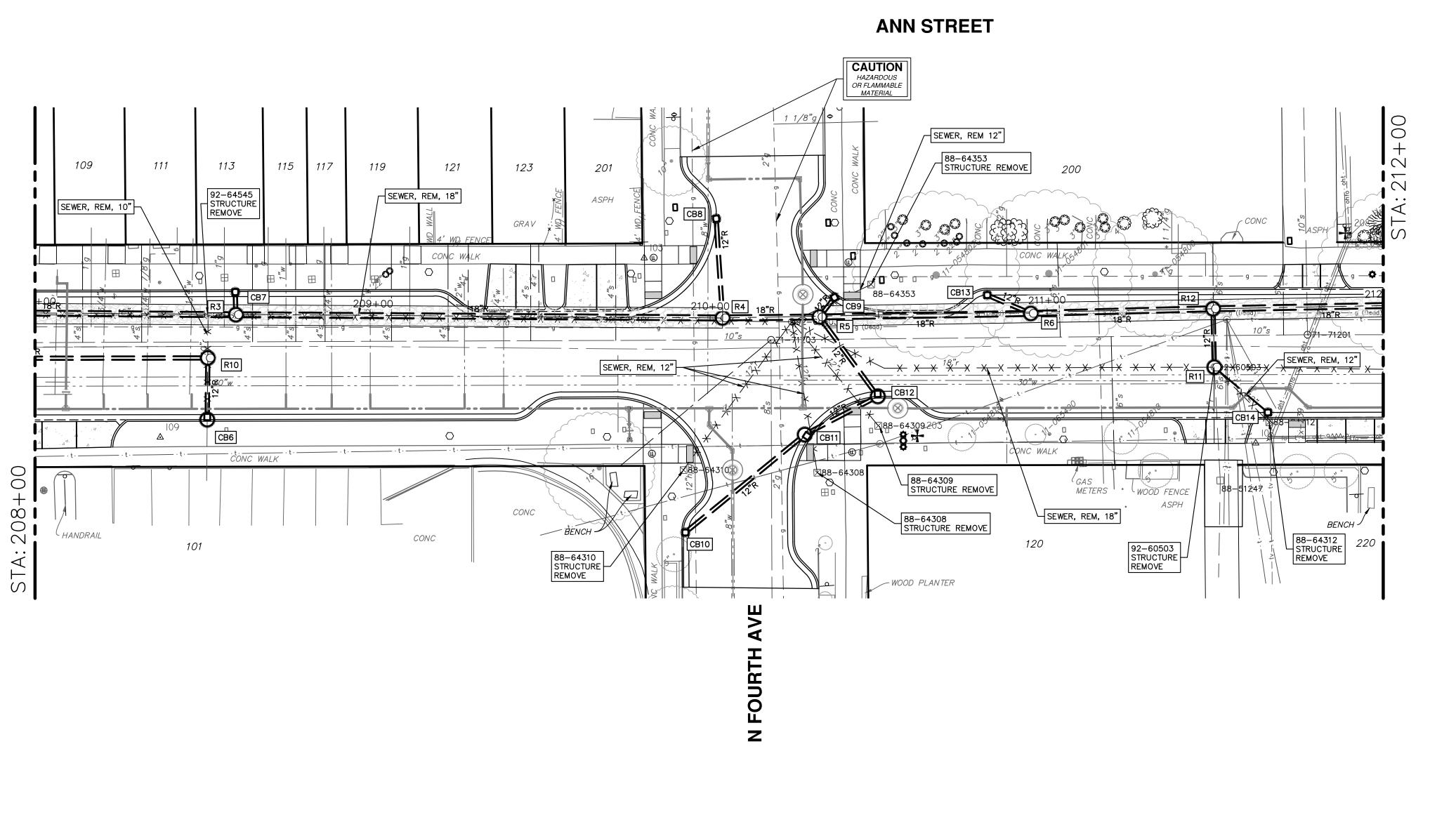


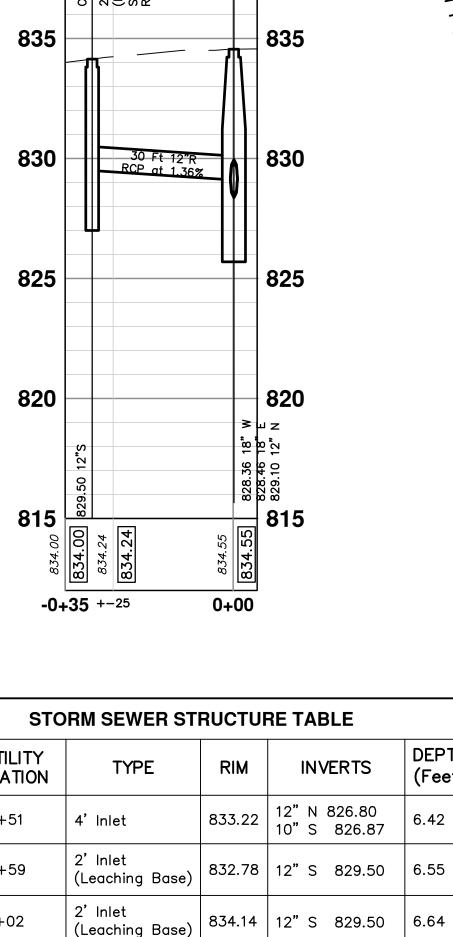
ANN STREET IMPROVEMENTS CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1" = 20' PROFILE: 1" = 4'









10		R3 4' MH (Leaching Base STA.: 208+59 RIM: 833.16	EXISTING GRADE AT STORM Q					CB13 2' Inlet (Leaching Base) STA.: 210+82	R6 STA.: 210+95 RIM: 835.23 4' MH (Leaching Base	12 . MH .eaching Base) TA.: 211+49 IM: 836.32	
5	CB7 STA.: 208+59 RIM: 832.78 2' Inlet (Leaching Base)			TOP OF INFILTRATION TRE		210+20	14 Ft 1 RCP at 0.		211+15 1"g	E)	
		144 Ft 18"	'R Perforated HDPE at -0.33%	09+28 209+49 4"r 4"r	209-	+95 2"a	63 Ft 18"R Perforated		54 Ft 18"R Perforated	HDPE at 0.26%	Ft 18"R Perforated HDPE at 3
5	08+09 6"W 0 829.50 12"S			INSTALL 4" INSER AS "STORM SEWE	RTA-TEE TO BE PAID TR TAP, 6 in. DIA."	12"W					
)	208+14 208+31 4"s 4"s	208+64 208+7208 ************************************	3+86 209+05 209+2 "s 4"s 4"s	22 209+47 4"s	209+72 4″s			Z. SE	211+04 6"s N M W 181	211+49 6"s	211+72011+77 6"s 10"s
832.79	832.80 832.80 833.13	823.19 833.19 833.19 833.19 833.19 833.19	833.27 833.26	833.36 833.49 833.49	833.84	834.47 834.63 834.63	834.45	834.82 830.50 12" 828.80 18"	835.32 828.90 18 835.32 830.40 12	835.79 836.34 829.04 18" 825.14 18" 830.00 12"	836.80

STORM SEWER STRUCTURE TABLE						
STRUCTURE	UTILITY STATION	TYPE	RIM	INVERTS	DEPTH (Feet)	SUMP
CB6	208+51	4' Inlet	833.22	12" N 826.80 10" S 826.87	6.42	0.00'
CB7	208+59	2' Inlet (Leaching Base)	832.78	12" S 829.50	6.55	2.00'
CB8	210+02	2' Inlet (Leaching Base)	834.14	12" S 829.50	6.64	2.00'
CB9	210+37	2' Inlet (Leaching Base)	834.28	12" SW 830.00	6.28	2.00'
CB10	209+93	2' Inlet (Leaching Base)	834.23	12" NE 829.87	6.36	2.00'
CB11	210+27	4' Inlet	834.79	12" SW 829.70 12" NE 829.60	7.19	2.00'
CB12	210+49	4' Inlet	834.77	12" SW 829.10 12" NW 829.00	7.77	2.00'
CB13	210+82	2' Inlet (Leaching Base)	834.77	12" SE 830.50	6.27	2.00'
CB14	211+65	2' Inlet (Leaching Base)	836.15	12" NW 830.52	7.63	2.00'
R3	208+59	4' MH (Leaching Base)	833.16	18" W 827.98 12" N 829.00 18" E 827.88	5.28	0.00'
R4	210+04	4' MH (Leaching Base)	834.55	18" W 828.36 18" E 828.46 12" N 829.10	8.19	2.00'
R5	210+32	6' MH w/ WEIR T/WEIR 829.0	834.56	12" NE 829.50 18" E 828.63 12" SE 828.75 18" W 828.53	6.03	0.00'
R6	210+95	4' MH (Leaching Base)	835.23	18" E 828.90 12" NW 830.40 18" W 828.80	8.43	2.00'
R10	208+51	4' MH	833.41	12" W 826.59 12" S 826.69	8.82	2.00'
R11	211+49	5' MH	836.64	12" N 830.21 12" SE 830.31 12" S 830.41	8.43	2.00'
R12	211+49	4' MH (Leaching Base)	836.32	18" E 829.14 12" S 830.00 18" W 829.04	9.28	2.00'

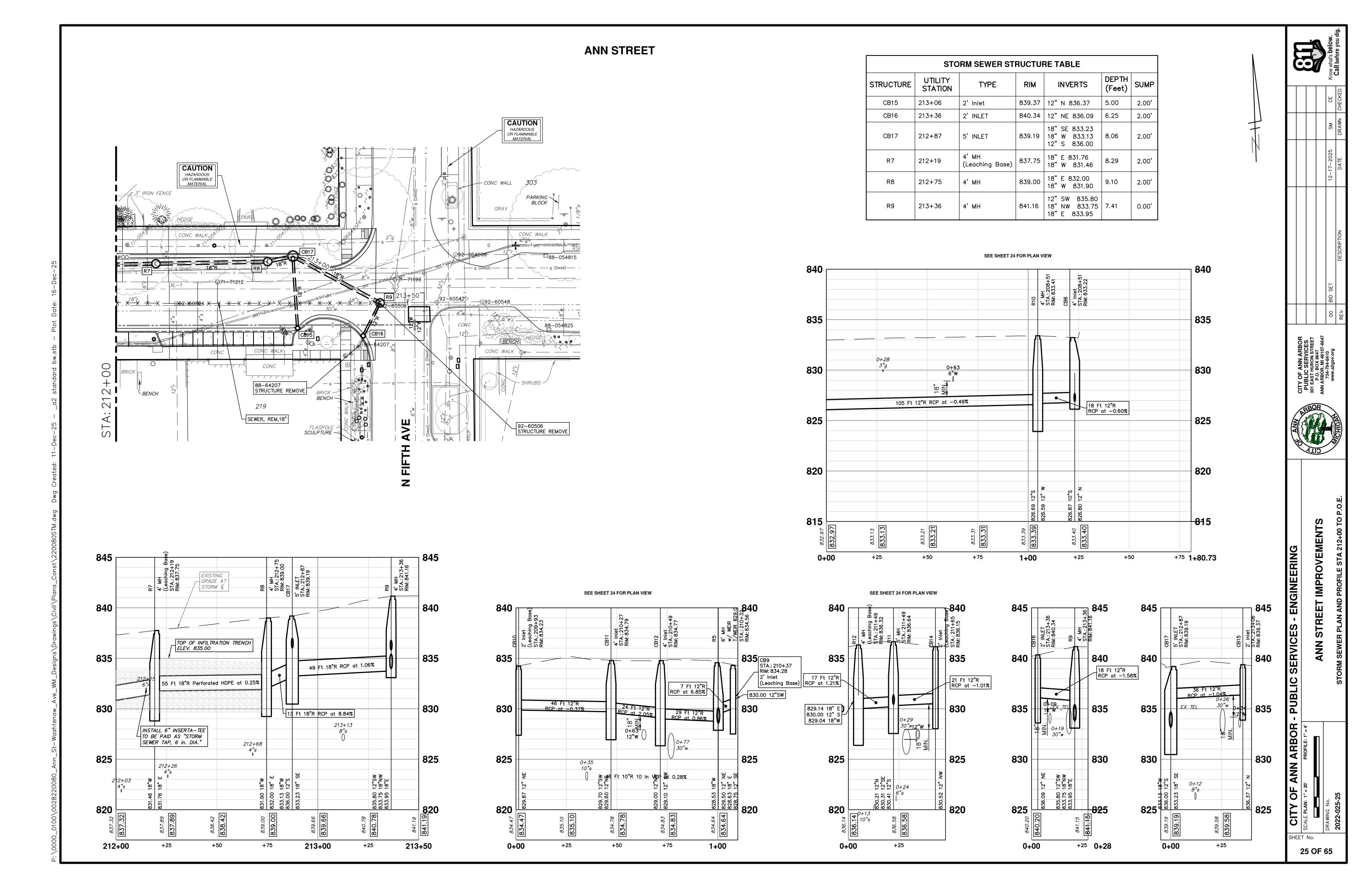
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ANN STREET IMPROVEMENTS

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1" = 20' PROFILE: 1" = 4'



GENERAL NOTES

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH DRAWINGS FOR ALL DIVISIONS OF WORK.
- 2. CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE PROJECT SITE PRIOR TO BIDDING THE WORK.
- 3. THE BASE MAPPING/SURVEY WAS PROVIDED BY . CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WITH WORK.
- 4. CONTACT MISS DIG AT 811 OR (800) 482-7171 AND ALL LOCAL UTILITY SERVICES FOR UTILITY LOCATIONS PRIOR TO COMMENCING WITH WORK.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO COMMENCING WITH WORK.
- 6. THE CONTRACTOR SHALL COORDINATE ALL WORK AND BE RESPONSIBLE FOR ALL METHODS, MEANS, SEQUENCE AND PROCEDURES OF WORK.
- 7. CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
- 8. CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THE DRAWINGS AS WELL AS ANY DISCOVERED DURING THE CONSTRUCTION PROCESS.
- 9. CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE.
- 10. THE LIMIT OF CONSTRUCTION LINE SHOWN DEFINES THE LIMITS OF WORK IN THIS CONTRACT. THERE MAY BE INSTANCES WHERE EROSION PROTECTION DEVICES AND UTILITY SYSTEMS EXTEND BEYOND THE PROJECT LIMITS LINE IN ORDER TO SUCCESSFULLY COMPLETE OPERATIONS AND/OR TIE INTO ADJACENT SYSTEMS.
- 11. THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES AFFECTED BY HIS CONSTRUCTION OPERATIONS CLEAN AND FULLY OPERATIONAL AT ALL TIMES.
- 12. MAINTAIN ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCE, ORANGE GEO FENCE AND/OR OTHER MEASURES) DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS TO THE ADJACENT WATER BODIES, SURFACES AND STORM SEWERS ACCORDING TO ALL APPLICABLE FEDERAL/STATE LAWS AND REGULATIONS.
- 13. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH WORK. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS. NO WORK SHALL BE DONE IN AREAS WHERE SUCH DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 14. REPORT ALL EXISTING DAMAGE OF EXISTING SITE IMPROVEMENTS TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT DAMAGE.
- 15. CONTRACTOR SHALL PROTECT, BY WHATEVER MEANS NECESSARY, THE EXISTING SITE IMPROVEMENTS TO REMAIN. ALL DAMAGED ITEMS SHALL BE REPLACED OR REPAIRED AT NO ADDITIONAL COST TO THE OWNER. NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF ANY DAMAGE OCCURS.
- 16. IN ADDITION TO REQUIREMENTS SET FORTH BY THE CITY OF ANN ARBOR REGARDING CRITICAL ROOT ZONES, ALL AREAS WITHIN THE DRIP-LINES OF EXISTING TREES SHALL REMAIN FREE OF CONSTRUCTION MATERIALS, DEBRIS, VEHICLES AND FOOT TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING, BARRICADES AND/OR OTHER SUITABLE GUARDS OUTSIDE DRIP LINE (OUTSIDE PERIMETER OF BRANCHES) TO PROTECT TREES AND PLANT MATERIAL TO REMAIN. NO WORK SHALL BE PERFORMED WITHIN THE DRIP-LINE OF EXISTING TREES UNLESS INDICATED. ALL WORK INDICATED TO BE PERFORMED WITHIN THE DRIP-LINE OF TREES SHALL BE DONE BY HAND AND CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE TO THE TREE ROOTS.
- 17. CONTRACTORS SHALL COORDINATE ALL WORK WITH RELATED TRADES AND THE GENERAL CONSTRUCTION OF THE PROJECT SO AS NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTORS OWN WORK.
- 18. EACH CONTRACTOR SHALL VERIFY THE CONDITION AND COMPLETENESS OF ALL WORK PERFORMED BY OTHERS IN RELATION TO HIS/HER PROJECT WORK RESPONSIBILITIES INCLUDING THE CHECKING OF EXISTING ELEVATIONS OR STRUCTURES PRIOR TO INITIATING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE IF ANY SITE CONDITIONS ARE INCOMPLETE, MISSING OR DAMAGED.
- 19. ALL CONSTRUCTION DEBRIS AND REMOVED ITEMS SHALL BE DISPOSED OF LEGALLY OFF-SITE UNLESS OTHERWISE INDICATED ON THE DRAWINGS
- 20. NOTIFY OWNER'S REPRESENTATIVE 72 HOURS IN ADVANCE OF ANY PLANNED UTILITY INTERUPTION.
- 21. CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION.
- 22. THE PLANS ASSUME THAT THE LAYOUT AND STAKING WILL BE ACCOMPLISHED USING TOTAL STATIONING / DIGITAL METHODS. ANY INFORMATION PROVIDED IS INTENTED TO SUPPORT INFORMATION ALREADY CONTAINED IN CAD FILES USED FOR DOCUMENTING LAYOUT AND STAKING. CAD FILES DELINEATING ALL GRADING AND HARDSCAPE ELEMENTS SHOWN IN THESE PLANS CAN BE PROVIDED TO THE CONTRACTOR UPON REQUEST.
- 23. CONTRACTOR SHALL EMPLOY SKILLED PERSONNEL AND USE EQUIPMENT NECESSARY TO ENSURE THAT ALL WORK IS PROFESSIONALLY AND PROPERLY INSTALLED AND IN FULL COMPLIANCE WITH THE PLANS AND DETAILS.
- 24. CONTRACTOR SHALL COMPLY WITH STATE AND LOCAL LAWS AND REGULATIONS REGARDING NOTIFICATION OF EXISTING GAS AND OIL PIPELINE COMPANY OWNERS. EVIDENCE OF SUCH NOTICE SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WITH WORK.

PLANTING NOTES

- 1. STAKE ALL BED LINES AND TREE LOCATIONS FOR THE LANDSCAPE ARCHITECT'S REVIEW PRIOR TO INSTALLATION. ALL PLANTING PROCEDURES ARE SUBJECT TO THE REVIEW OF THE LANDSCAPE ARCHITECT AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES FOUND AT NO ADDITIONAL COST TO THE OWNER.
- 2. SECURE PLANT MATERIAL AS SPECIFIED ON PLANS. IN THE EVENT THAT PLANT MATERIALS SPECIFIED ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTIONS FOR PLANT MATERIALS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT
- 3. PLANT LISTS ARE PROVIDED FOR CONTRACTOR CONVENIENCE ONLY; QUANTITIES ON PLAN WILL GOVERN.
- 4. VERIFY THAT ALL PLANTING PRODUCTS, PLANT MATERIAL, AND PLANT QUANTITIES DELIVERED TO THE SITE MATCH WHAT IS INDICATED ON THE PLANS AND SPECIFICATIONS.
- 5. PROTECT ALL PLANT MATERIAL DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS, TRUNKS, BRANCHES AND THE DESICCATION OF LEAVES. PROTECT ALL PLANT MATERIAL DURING SHIPPING WITH SHADE CLOTH OR SHIP WITH ENCLOSED TRANSPORT. MAINTAIN PROTECTIONS AND HEALTH OF PLANT MATERIAL STORED ON SITE. HANDLE ALL TREES WITH NYLON STRAPS. NO CHAINS OR CABLES WILL BE ALLOWED. REMOVE UNACCEPTABLE PLANT MATERIAL IMMEDIATELY FROM THE SITE.
- 6. ALL PLANT MATERIAL SHALL BE NURSERY GROWN, WELL FORMED, TRUE TO SPECIES, HARDENED OFF WITH VIGOROUS ROOT SYSTEMS, FULL CROWN AND CANOPIES, AND FREE FROM DISEASE, PESTS AND INSECTS, AND DEFECTS SUCH AS KNOTS, SUN SCALD, WINDBURN, LEAF DIS-COLORATION, IRREGULAR BRANCHING OR INJURIES.
- 7. ALL PLANT HEIGHTS, SPREADS, CONTAINER SIZES, AND ROOT BALLS SIZES SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN ANSI Z-60.1 "AMERICAN STANDARDS FOR NURSERY STOCK".
- 8. ALL PLANT MATERIAL DELIVERED TO THE SITE IS SUBJECT TO THE REVIEW OF THE LANDSCAPE ARCHITECT BEFORE, DURING AND AFTER INSTALLATION.

PLANTING NOTES (cont.)

- 9. PROVIDE PLANT SAMPLES OR PHOTOGRAPHS OF EACH PLANT SPECIFIED TO THE LANDSCAPE ARCHITECT FOR COMPLIANCE REVIEW PRIOR TO INSTALLATION.
- TEST FILL ALL TREE AND PLANTING PITS WITH WATER, PRIOR TO PLANTING, TO ASSURE PROPER SOIL PERCOLATION. PITS WHICH DO NOT ADEQUATELY DRAIN SHALL BE FURTHER EXCAVATED TO A DEPTH SUFFICIENT FOR DRAINAGE TO OCCUR AND/OR BACKFILLED WITH SUITABLE DRAINAGE GRAVEL. NO ALLOWANCES SHALL BE MADE FOR PLANT MATERIAL LOSS DUE TO IMPROPER DRAINAGE. CONTRACTOR SHALL REPLACE LOST PLANT MATERIAL WITH SAME SIZE AND SPECIES AT NO ADDITIONAL COST TO OWNER.
- 11. ALL PLANT MATERIALS, INCLUDING RELOCATED PLANT MATERIAL, SHALL BE PLANTED IN A PROFESSIONAL MANNER TYPICAL TO THE INDUSTRY STANDARDS OF THE AREA TO ASSURE COMPLETE SURVIVABILITY OF ALL INSTALLED PLANT MATERIALS AS WELL AS TO PROVIDE AN AESTHETICALLY APPROVED PROJECT. CONTRACTOR SHALL REFER TO THE PLANTING DETAILS FOR MINIMUM SIZE AND WIDTH OF PLANTING PITS AND BEDS, GUYING AND STAKING, MULCHING, AND OTHER PLANTING REQUIREMENTS.
- 12. NO PLANTS SHALL BE PLANTED WITH IN A 2'-0" RADIUS (CLEARANCE ZONE) AROUND ALL ATRIUM DRAINS LOCATED IN LANDSCAPE BEDS. CONTRACTOR SHALL MULCH AREA AROUND ALL ATRIUM DRAINS LOCATED IN LANDSCAPE BEDS. REFER TO ENGINEERING DRAWINGS FOR ALL DRAIN LOCATIONS.
- 13. LAWN AREAS TO PROVIDE A SMOOTH AND CONTINUAL GRADE.
- 14. PLANTING BEDS SHALL HAVE A MINIMUM OF 3" DEPTH SHREDDED HARDWOOD MULCH, UNLESS OTHERWISE INDICATED.
- 15. ALL PLANTING AREAS SHALL BE WEED FREE PRIOR TO PLANTING INSTALLATION.
- 16. REMOVE ALL PLANTING AND LANDSCAPE DEBRIS FROM THE PROJECT SITE AND SWEEP AND WASH CLEAN ALL PAVED AND FINISHED SURFACES AFFECTED BY THE LANDSCAPE INSTALLATION.
- 17. REFER TO GENERAL PROJECT NOTES FOR ADDITIONAL INSTRUCTIONS.
- 18. FOR RESTORATION ZONE AREAS, FALL IS THE PREFERRED PLANTING TIME FOR PERENNIAL PLUGS, TREE WHIPS AND STAKES. PLUGS AND TREE WHIPS/STAKES SHOULD BE PLANTED AT THE SAME TIME.
- 19. ENSURE PROPER BROWSE PROTECTION IS IMPLEMENTED IN RESOTRATION ZONE AREAS, SO AS TO MINIMIZE BROWSING OF TREE WHIPS, STAKES AND PLUGS BY DEER, WATER FOWL AND ANY OTHER ANIMALS. FOR TREES, USE BLUE TUBES THAT ARE ZIP TIED, LEAVING A FEW INCHES EXPOSED ABOVE

LANDSCAPE MAINTENANCE NOTES

- 1. ALL TREES SHALL RECEIVE ENGINEER-APPROVED SELF-WATERING DEVICE(S) SIZED PER MANUFACTURER'S WATERING SPECIFICATION CHART.
- SLOW RELEASE WATERING DEVICE: STANDARD PRODUCT MANUFACTURED FOR DRIP IRRIGATION OF PLANTS AND EMPTYING ITS WATER CONTENTS OVER AN EXTENDED PERIOD OF TIME; MANUFACTURED FROM UV-LIGHT-STABILIZED NYLON-REINFORCED POLYETHYLENE SHEET, PVC, OR HDPE PLASTIC.
- TREEDIAPER® TD36R BY ZYNNOVATION LLC, ASHLAND, VA 23005, TEL.: (540)-300-1465.
- TREEGATOR® ORIGINAL, 15-GALLON CAPACITY, BY SPECTRUM PRODUCTS, INC., YOUNGSVILLE, NC 27596, TEL.: 1-866-873-3428.
- OR APPROVED EQUAL
- 2. ALL SELF-WATERING DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE FULL LENGTH OF THE ESTABLISHMENT PERIOD PER MANUFACTURER'S RECOMMENDATION.

MITIGATION NOTES

- REFER TO REMOVAL PLANS
- 2. REFER TO STREET TREE REMOVAL PLAN OVERALL FOR STREET TREE REMOVAL INFORMATION
- 3. REFER TO PLANTING PLANS FOR STREET TREE REPLACEMENT INFORMATION
- 4. A REPLACEMENT TREE OR A COMBINATION OF TREES OF A SPECIES NATIVE TO MICHIGAN SHALL BE PROVIDED TO EQUAL A MINIMUM OF 50% OF THE ORIGINAL DBH FOR EACH LANDMARK TREE THAT IS REMOVED.
- 5. REPLACEMENT TREES SHALL BE NON-STERILE VARIETIES.
- 6. THE MINIMUM SIZE OF DECIDUOUS REPLACEMENT TREE SHALL BE ONE INCH CALIPER.
- 7. THE MINIMUM SIZE OF AN EVERGREEN REPLACEMENT TREE SHALL BE FIVE FEET IN HEIGHT.
- 8. IF MORE THAN 20 REPLACEMENT TREES ARE REQUIRED, A MIXTURE OF THREE OR MORE SPECIES MUST BE USED.
- 9. A REPLACEMENT TREE OR A COMBINATION OF TREES OF A SPECIES NATIVE TO MICHIGAN SHALL BE PROVIDED TO EQUAL A MINIMUM OF 200% OF THE ORIGINAL DBH FOR EACH LANDMARK TREE THAT IS REMOVED WITHOUT THE APPROVAL REQUIRED BY THE CITY OF ANN ARBOR.

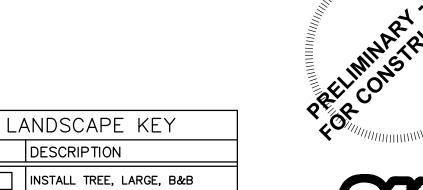
MITIGATION DATA

LANDMARK TREES REMOVED	= 0
NON-LANDMARK TREES REMOVED	= 18
TOTAL TREES REMOVED	= 18

STREET TREES PROVIDED CALIPER INCHES

LANDMA	ARK TREES REMOVED	DBH INCHES	= 0
NON-LA	NDMARK TREES REMO	OVED DBH INCHES	= 106
TOTAL 7	TREES REMOVED DBH	INCHES	= 106

LANDMARK TREES REQUIRED REPLACEMENT INCHES	= 0
NON-LANDMARK TREES REQUIRED REPLACEMENT INCHES	= 0
TOTAL REQUIRED REPLACEMENT INCHES	= 0
STREET TREES PROVIDED	= 22



TL

PPL

PG-1

PG-3

TR

PSM

MUL

INSTALL PLANT, PLUG

INSTALL PLANT, GAL, #1

INSTALL PLANT, GAL, #3

DDA PLANTING SOIL AND MULCH

TURF RESTORATION

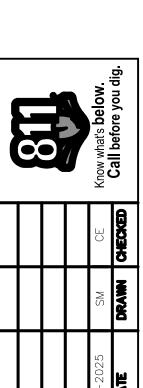
DDA MULCH



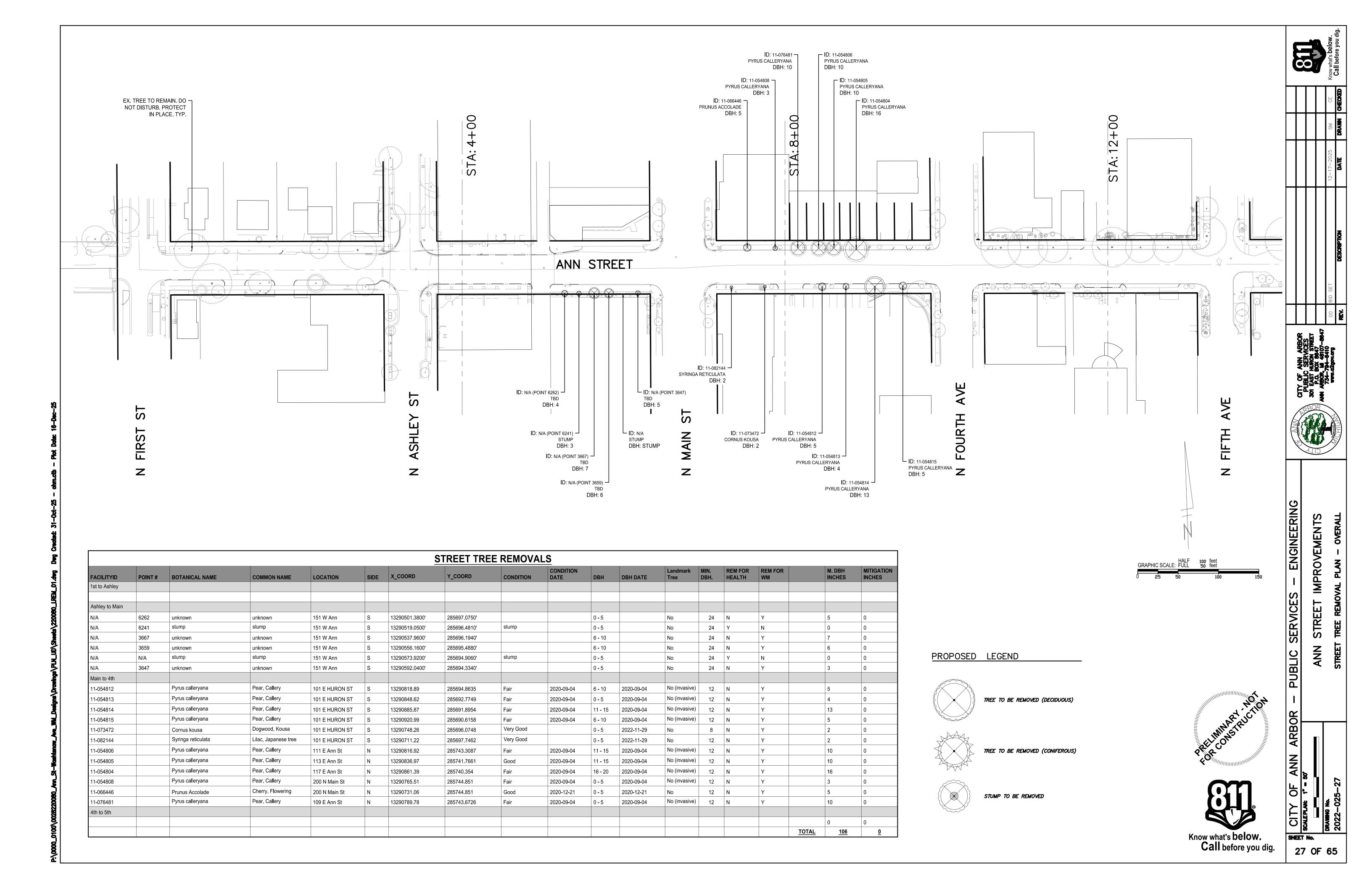


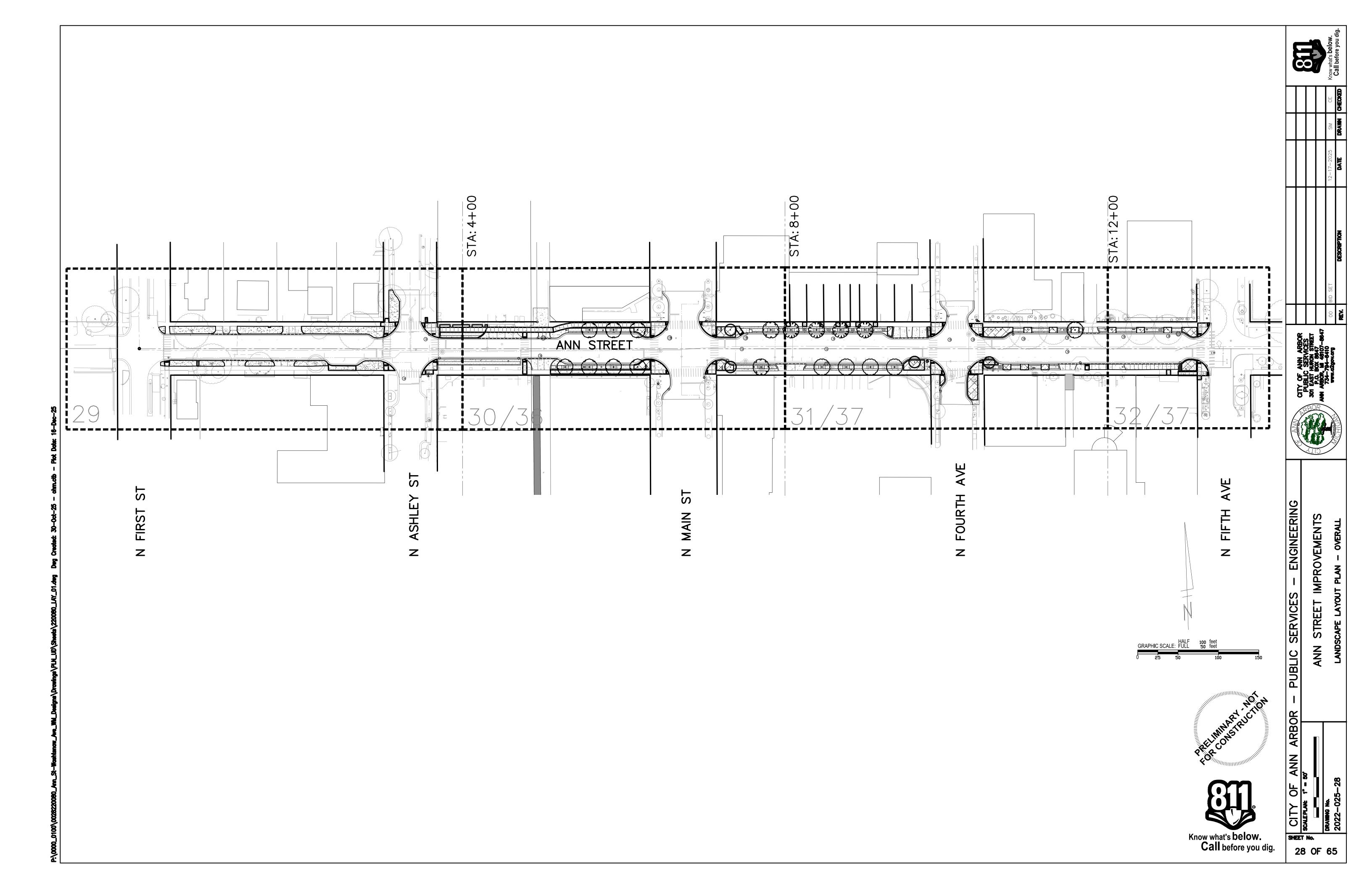
S	SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER		REMARKS
Т	REES								
		AR	4	AESCULUS X CARNEA	RED HORSECHESTNUT	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
	\(\frac{1}{2}\)	GB	2	GINKGO BILOBA	MAIDENHAIR TREE	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
	$\overline{(\cdot)}$	GI	1	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
	\bigcirc	NS	4	NYSSA SYLVATICA	TUPELO	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
	000000000000000000000000000000000000000	SR	4	SYRINGA RETICULATA	JAPANESE TREE LILAC	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
	2 Company of the comp	ZS	7	ZELKOVA SERRATA	JAPANESE ZELKOVA	3" CAL.	B&B		CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
F	PERENNIA	LS	•	1	1	1			
	+	CA2	102	COREOPSIS AURICULATA 'NANA'	DWARF LOBED TICKSEED	1 GAL.	CONT.		PLANT AS SHOWN
1	330000000000000000000000000000000000000	ES	94	ERAGROSTIS SPECTABILIS	PURPLE LOVEGRASS	1 GAL.	CONT.		PLANT AS SHOWN.
	•	MP	102	MONARDA X `PETITE DELIGHT`	PETITE DELIGHT BEE BALM	1 GAL.	CONT.		PLANT AS SHOWN.
S	SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
F	PERENNIA	L AREAS	}						
		GE	198	GERANIUM MACULATUM 'ESPRESSO'	SPOTTED GERANIUM	1 GAL.	CONT.	12" o.c.	
		PW2	650	PHLOX DIVARICATA	WOODLAND PHLOX	1 GAL.	CONT.	12" o.c.	

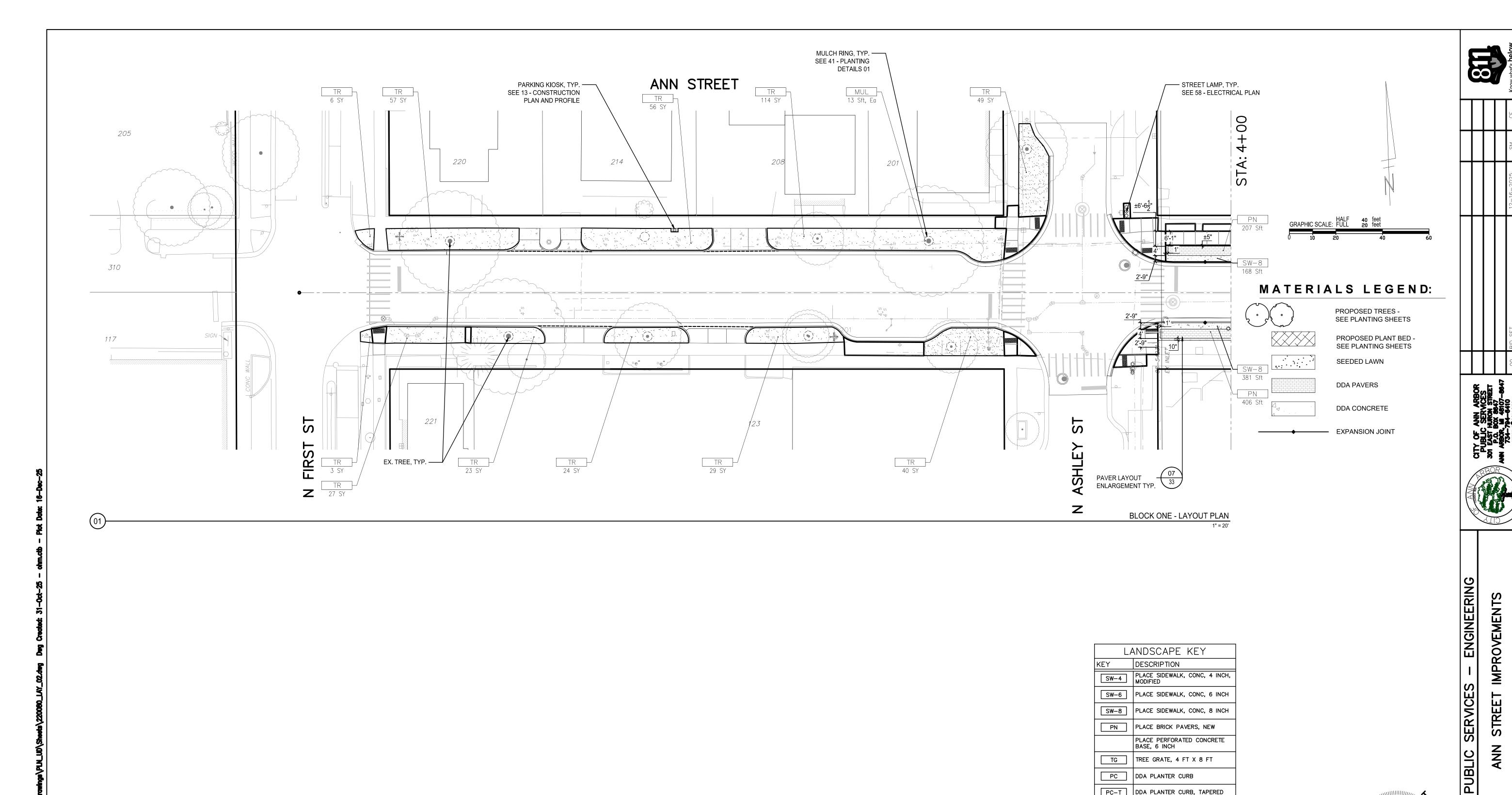
= 66











L	ANDSCAPE KEY			
KEY	DESCRIPTION			
SW-4	PLACE SIDEWALK, CONC, 4 INCH, MODIFIED			
SW-6	PLACE SIDEWALK, CONC, 6 INCH			
SW-8	PLACE SIDEWALK, CONC, 8 INCH			
PN	PLACE BRICK PAVERS, NEW			
	PLACE PERFORATED CONCRETE BASE, 6 INCH			
TG	TREE GRATE, 4 FT X 8 FT			
PC	DDA PLANTER CURB			
PC-T	DDA PLANTER CURB, TAPERED			
PSM	PLANTING SOIL AND MULCH			
MUL	DDA MULCH			
JC	JOINT, CONTRACTION, 1/4 INCH			
JE	JOINT, EXPANSION, SEALED, 1/2 INCH			
JE75	JOINT, EXPANSION, SEALED, 3/4 INCH			
ВН	BIKE HOOP, SURFACE MOUNTED			
TRA	TRASH RECEPTACLE			
UB	URBAN BENCH			
TR	TURF RESTORATION			

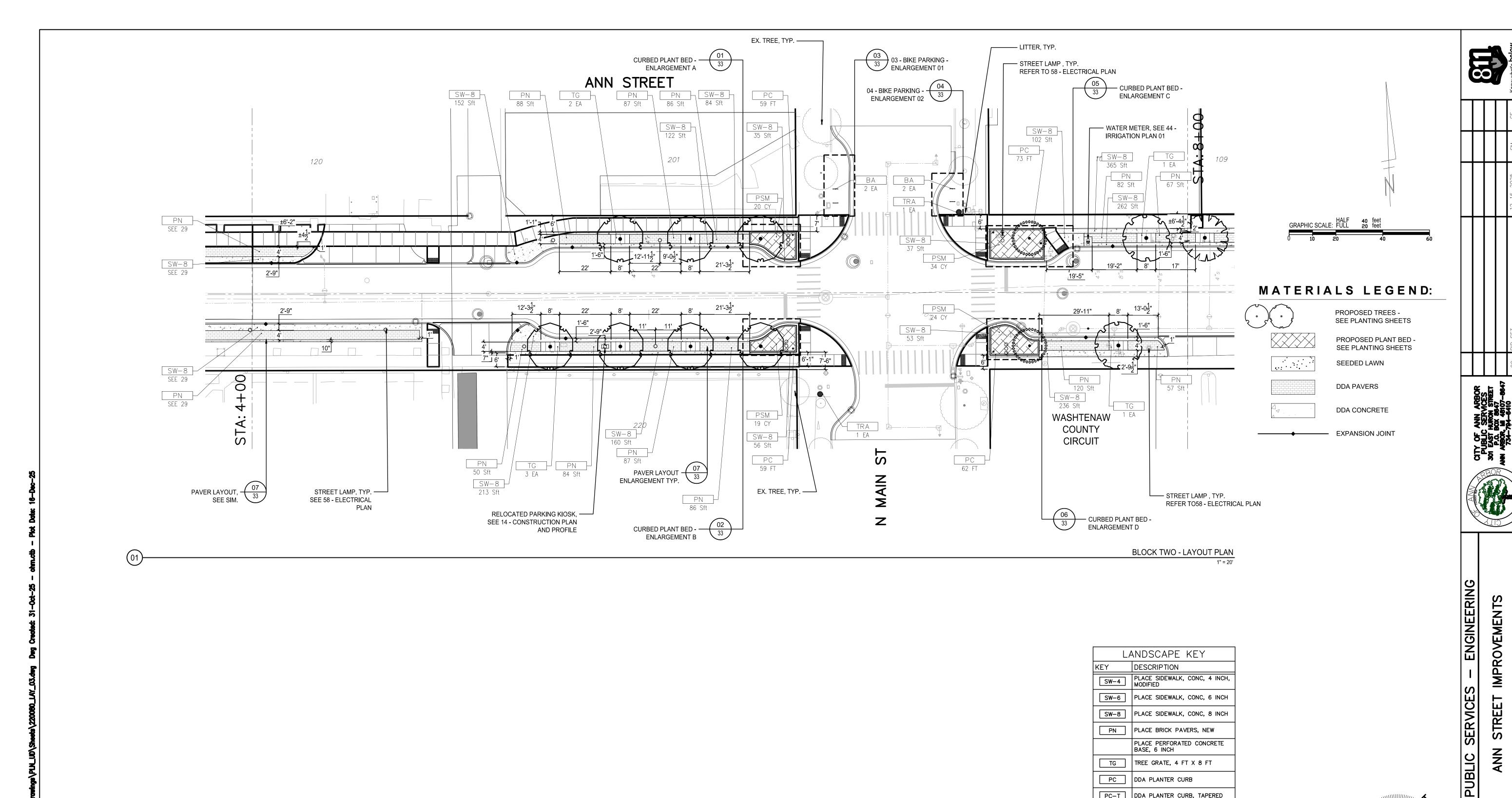




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ARBOR



LANDSCAPE KEY					
KEY	DESCRIPTION				
SW-4	PLACE SIDEWALK, CONC, 4 INCH, MODIFIED				
SW-6	PLACE SIDEWALK, CONC, 6 INCH				
SW-8	PLACE SIDEWALK, CONC, 8 INCH				
PN	PLACE BRICK PAVERS, NEW				
	PLACE PERFORATED CONCRETE BASE, 6 INCH				
TG	TREE GRATE, 4 FT X 8 FT				
PC	DDA PLANTER CURB				
PC-T	DDA PLANTER CURB, TAPERED				
PSM	PLANTING SOIL AND MULCH				
MUL	DDA MULCH				
JC	JOINT, CONTRACTION, 1/4 INCH				
JE	JOINT, EXPANSION, SEALED, 1/2 INCH				
JE75	JOINT, EXPANSION, SEALED, 3/4 INCH				
ВН	BIKE HOOP, SURFACE MOUNTED				
TRA	TRASH RECEPTACLE				
UB	URBAN BENCH				
TR	TURF RESTORATION				

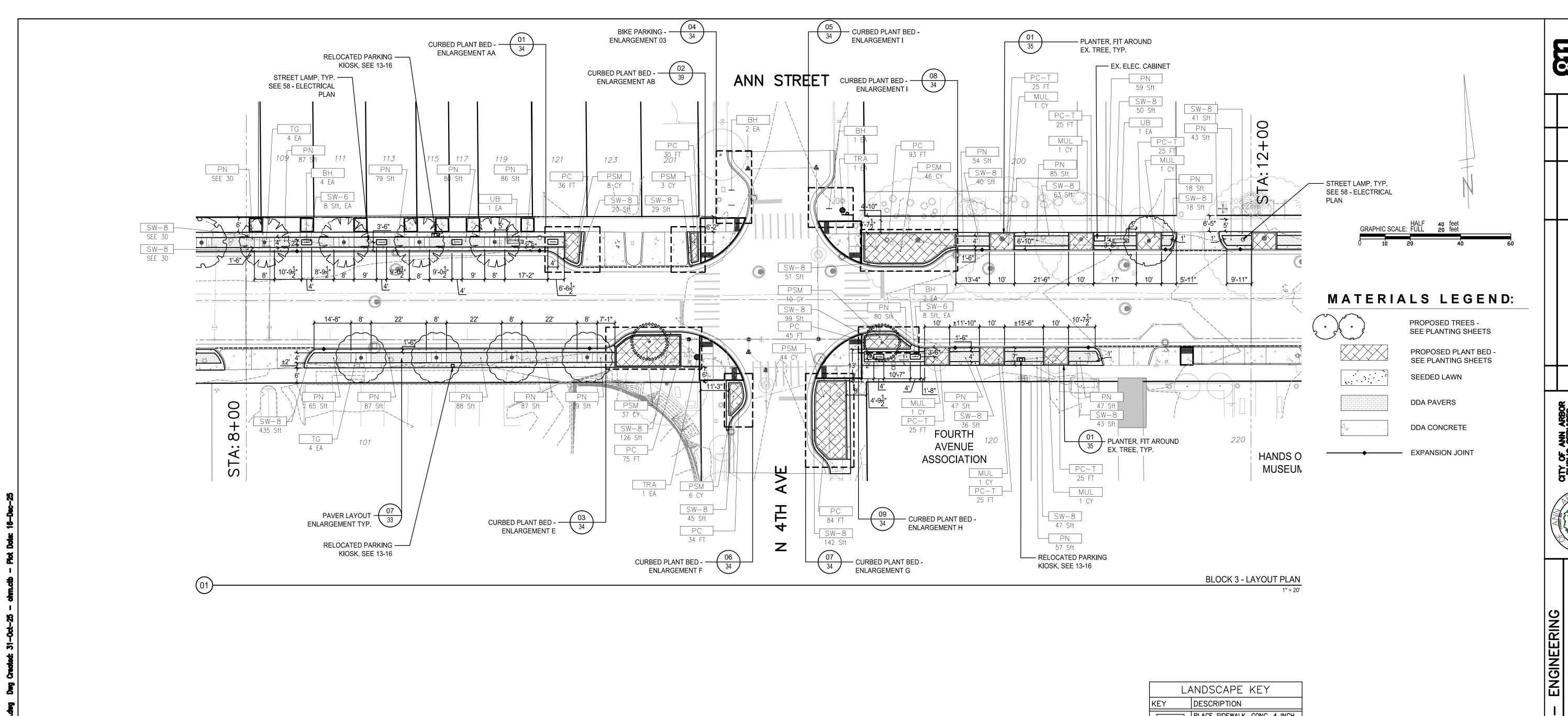


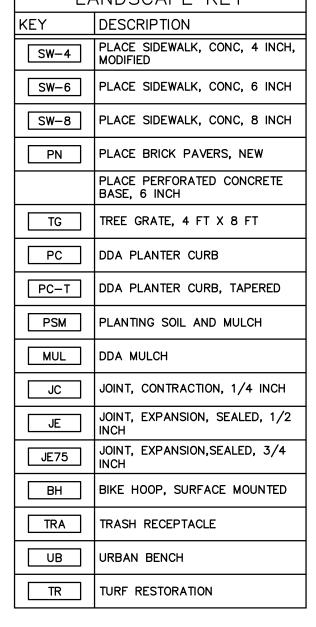


Know what's below.

Call before you dig. 30 OF 65

A N N







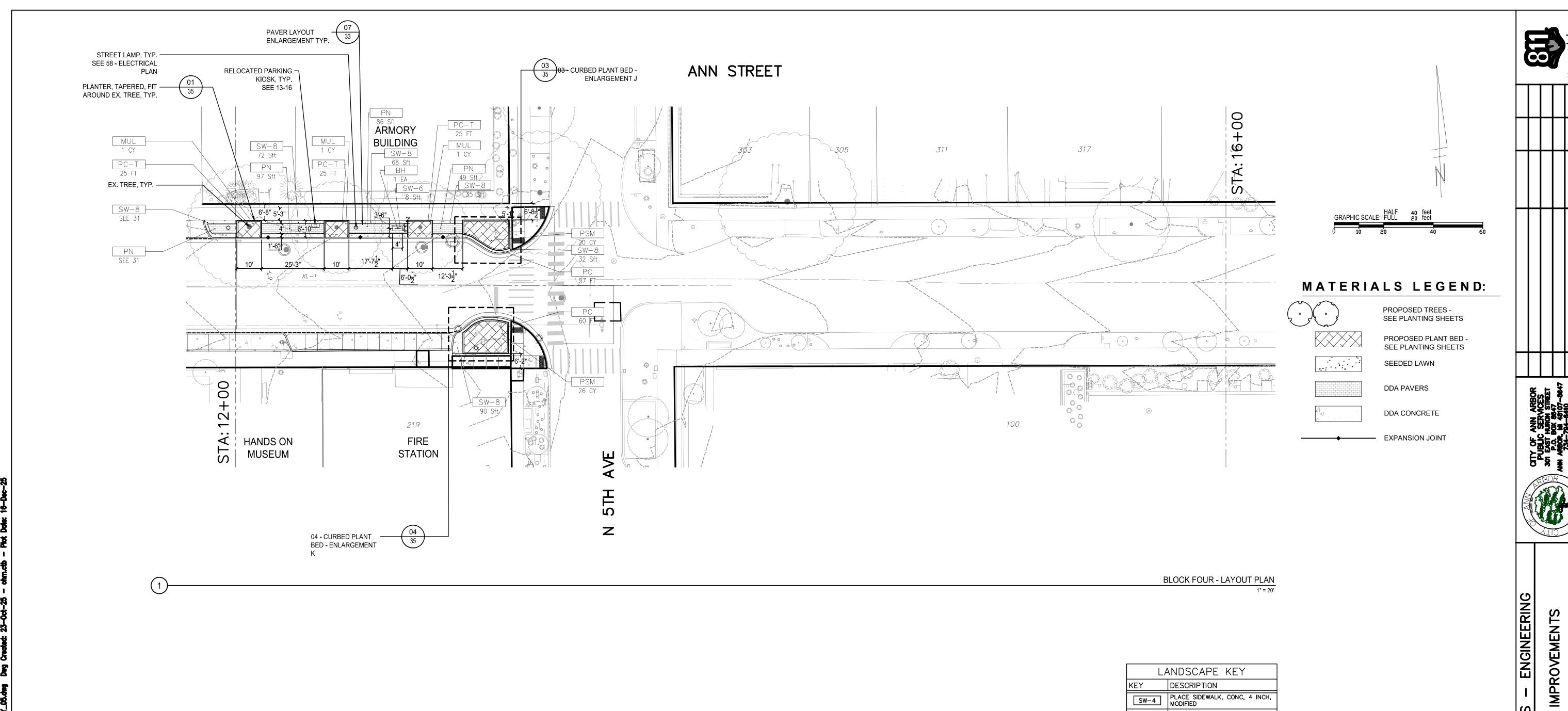


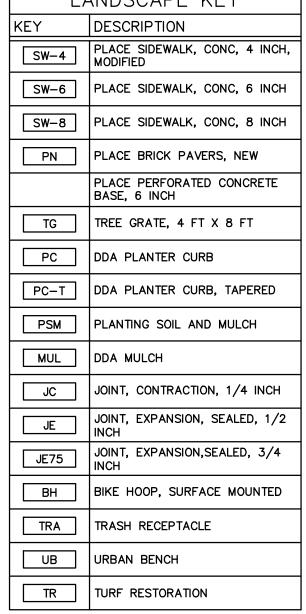
Know what's below.

Call before you dig.

31 OF 65

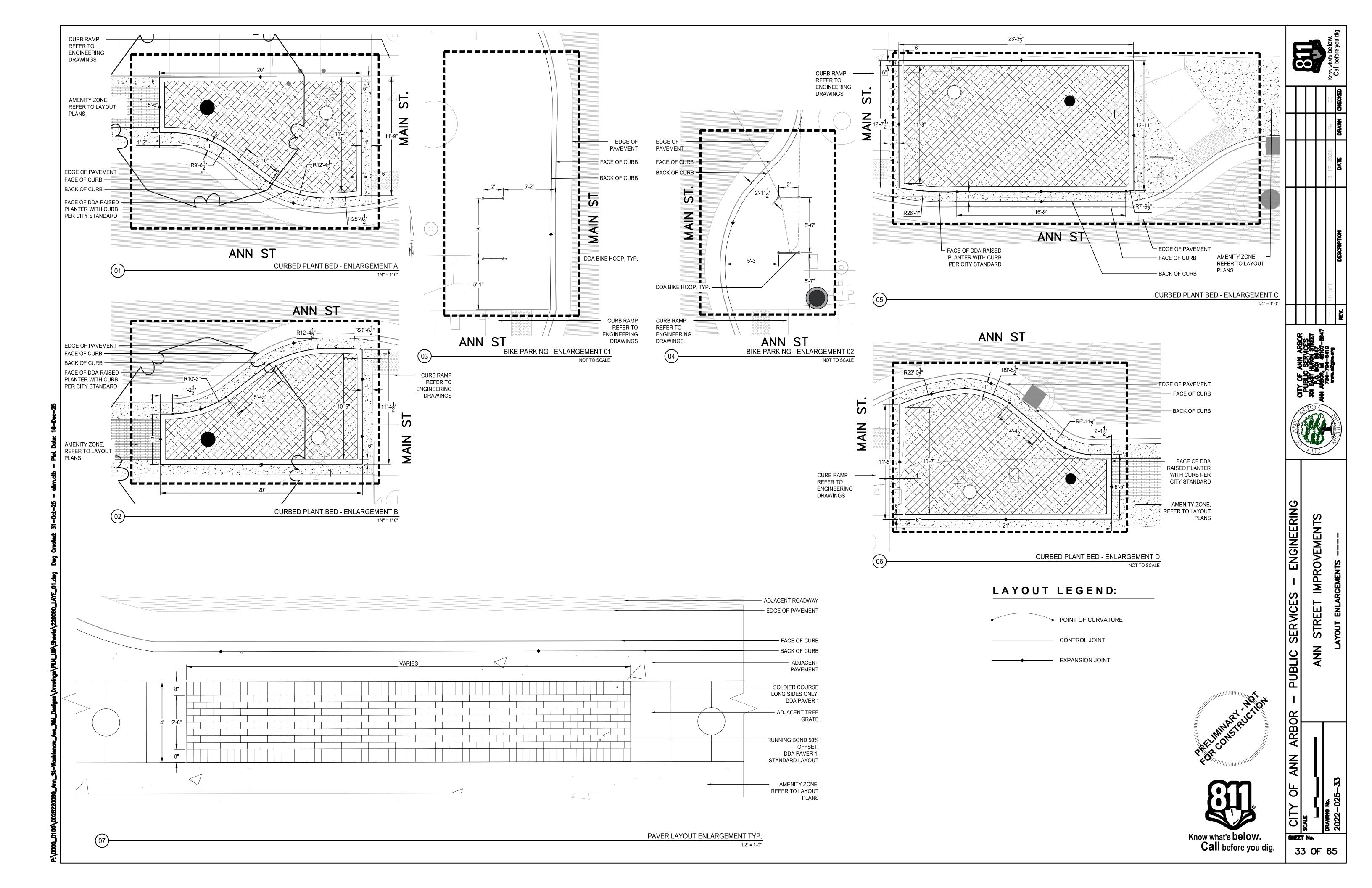
IMPROVEMENTS

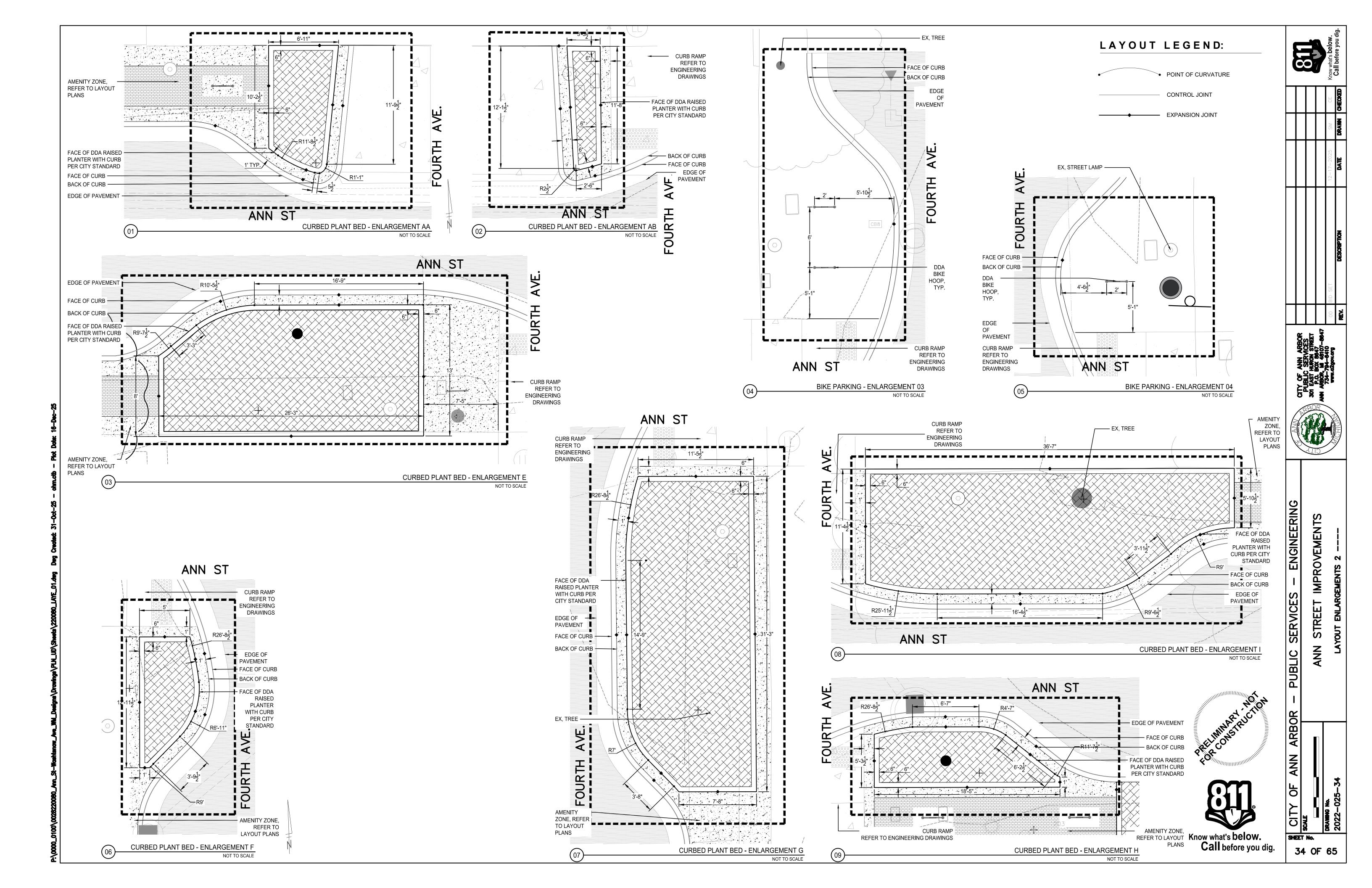


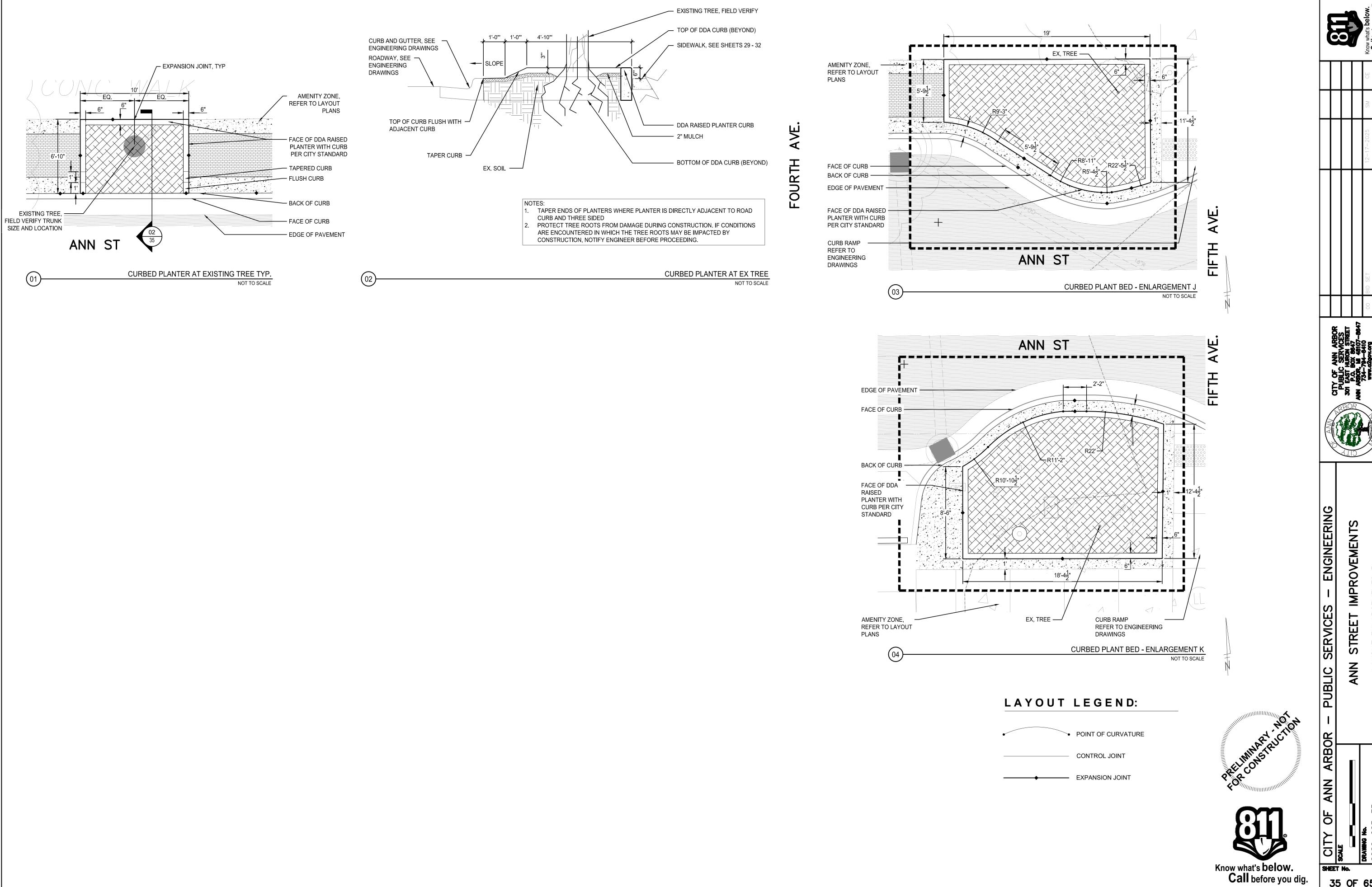


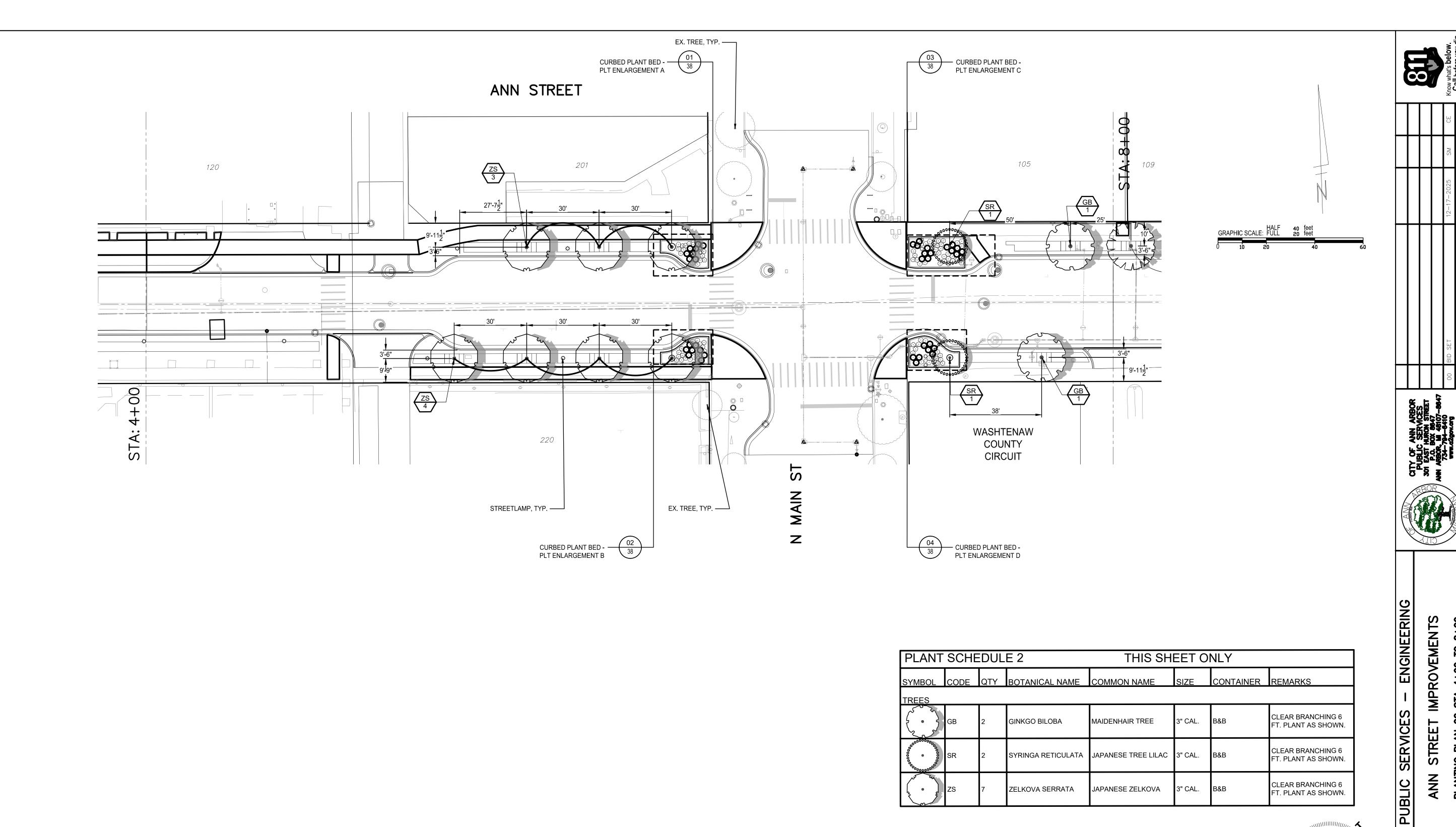












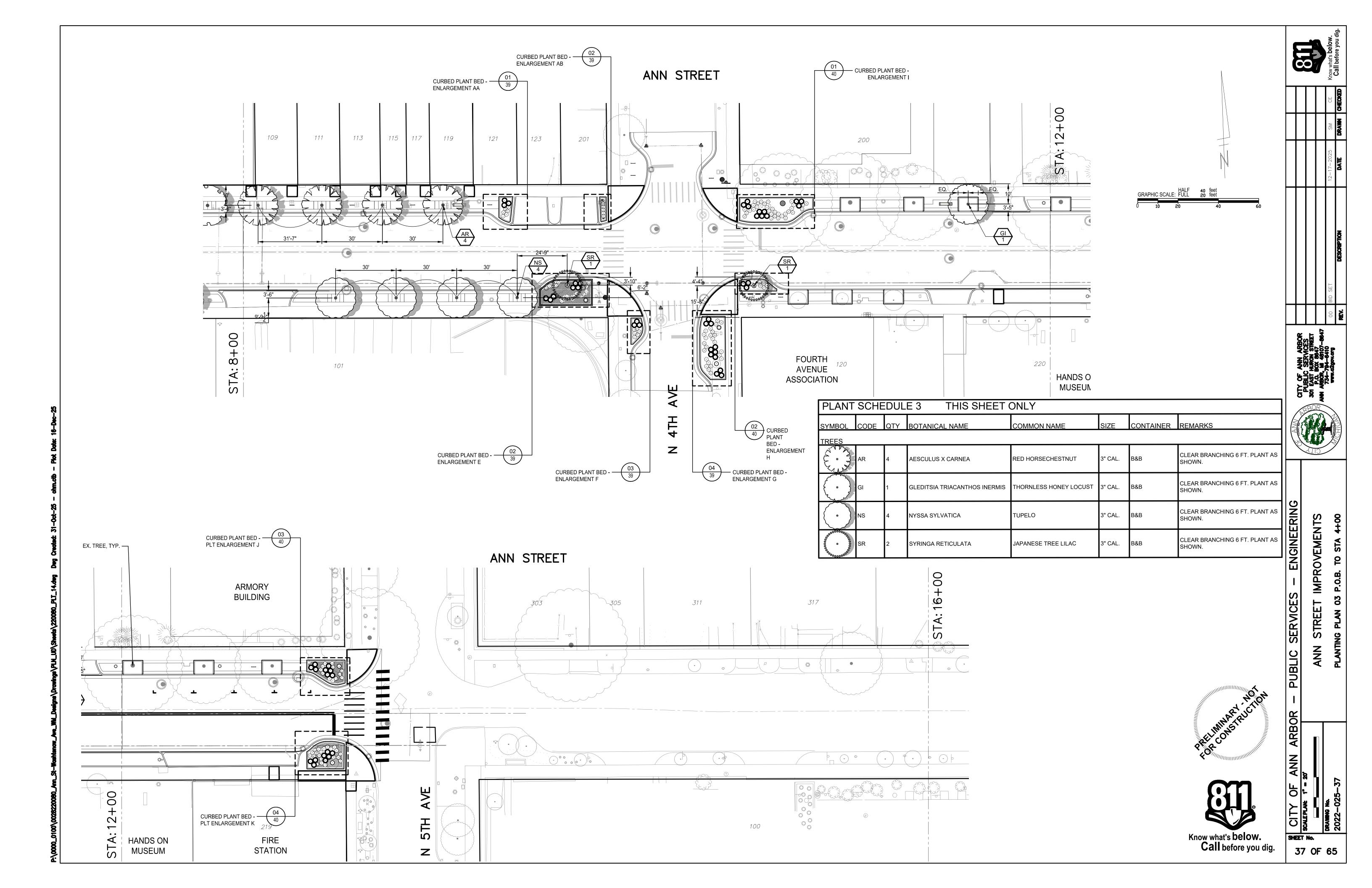
PLANT SCHEDULE 2			THIS SH				
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES							
Son of the second	GB	2	GINKGO BILOBA	MAIDENHAIR TREE	3" CAL.	B&B	CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
00000000000000000000000000000000000000	SR	2	SYRINGA RETICULATA	JAPANESE TREE LILAC	3" CAL.	B&B	CLEAR BRANCHING 6 FT. PLANT AS SHOWN.
3	ZS	7	ZELKOVA SERRATA	JAPANESE ZELKOVA	3" CAL.	B&B	CLEAR BRANCHING 6 FT. PLANT AS SHOWN.

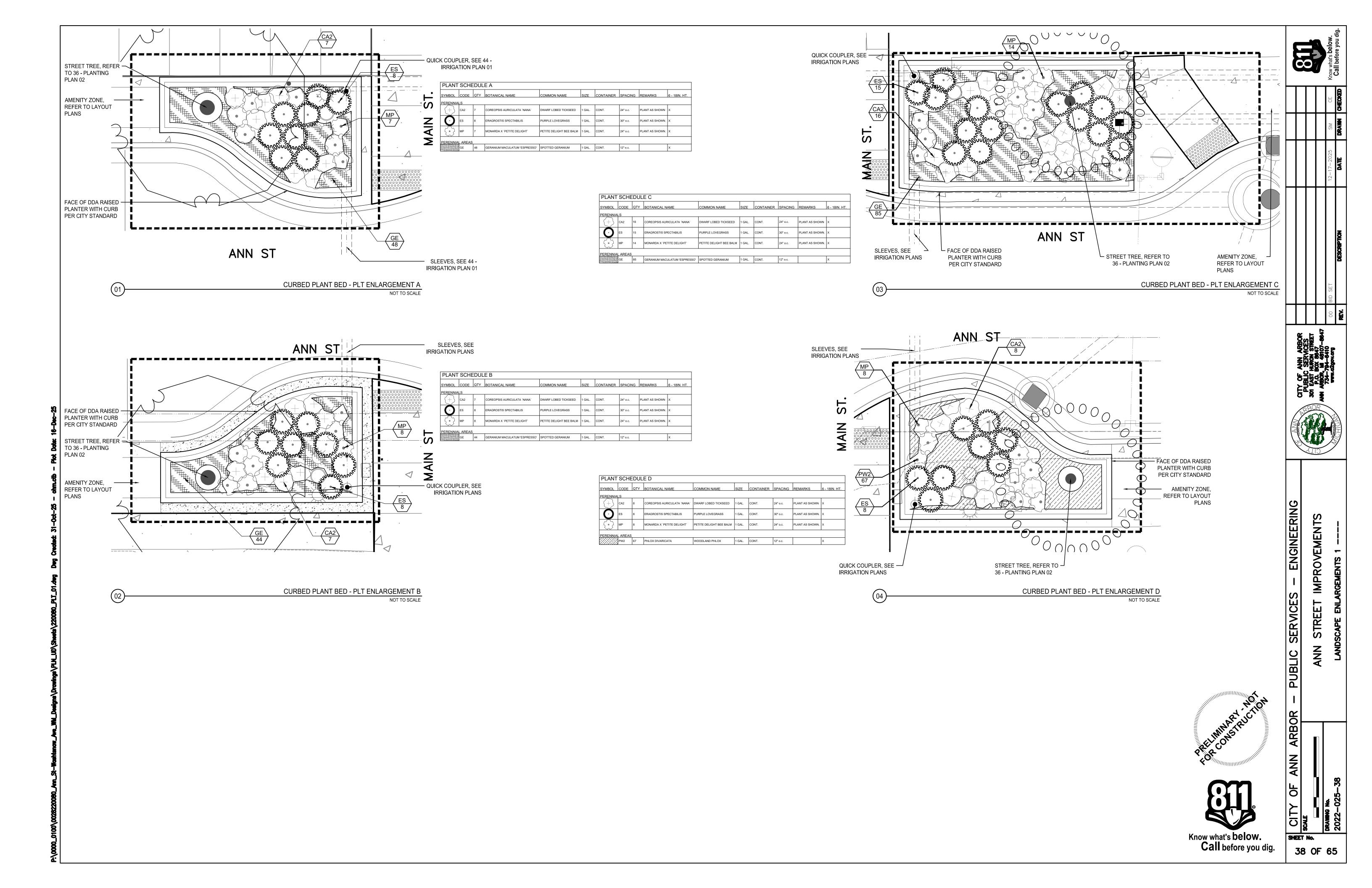


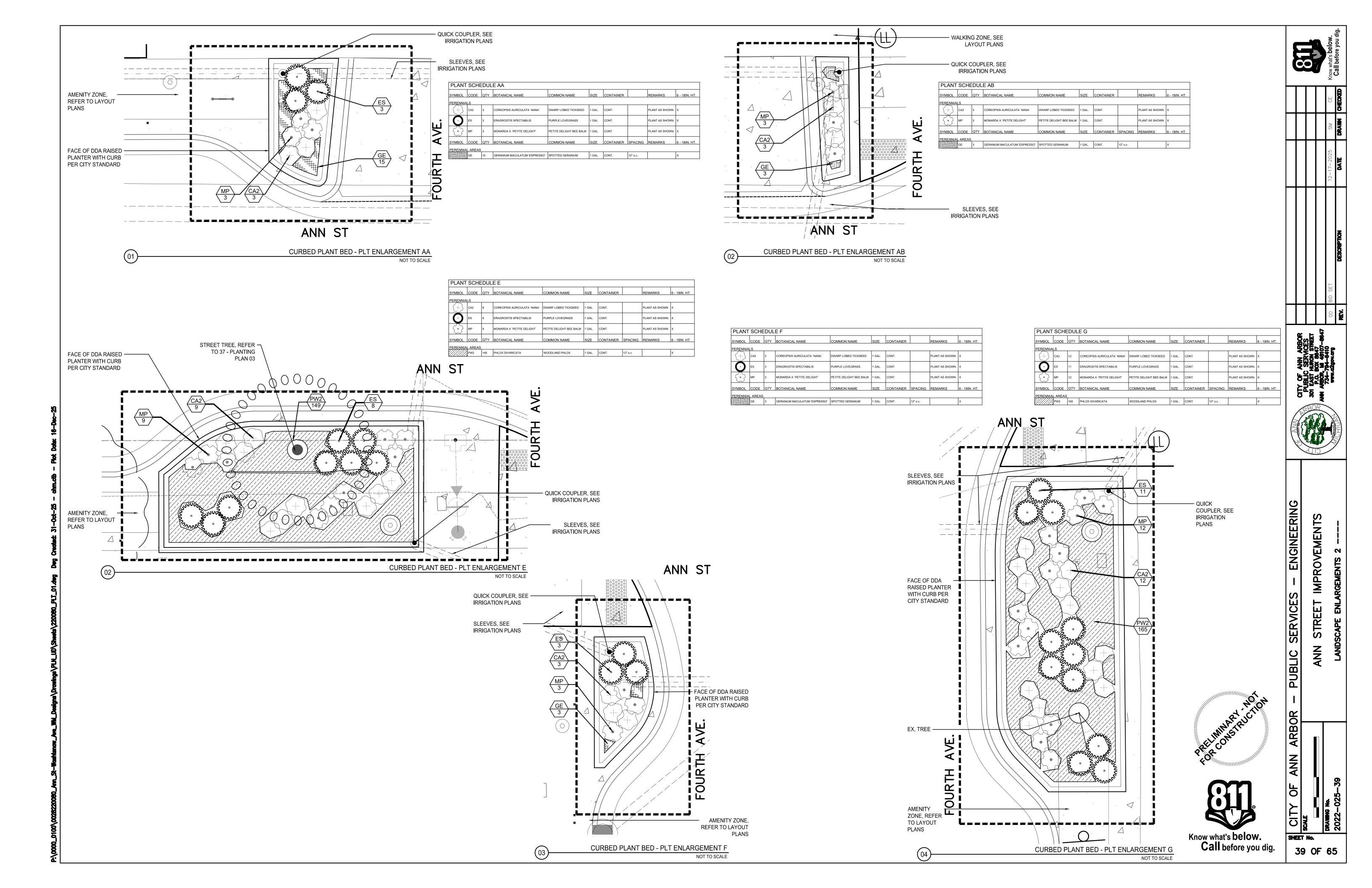


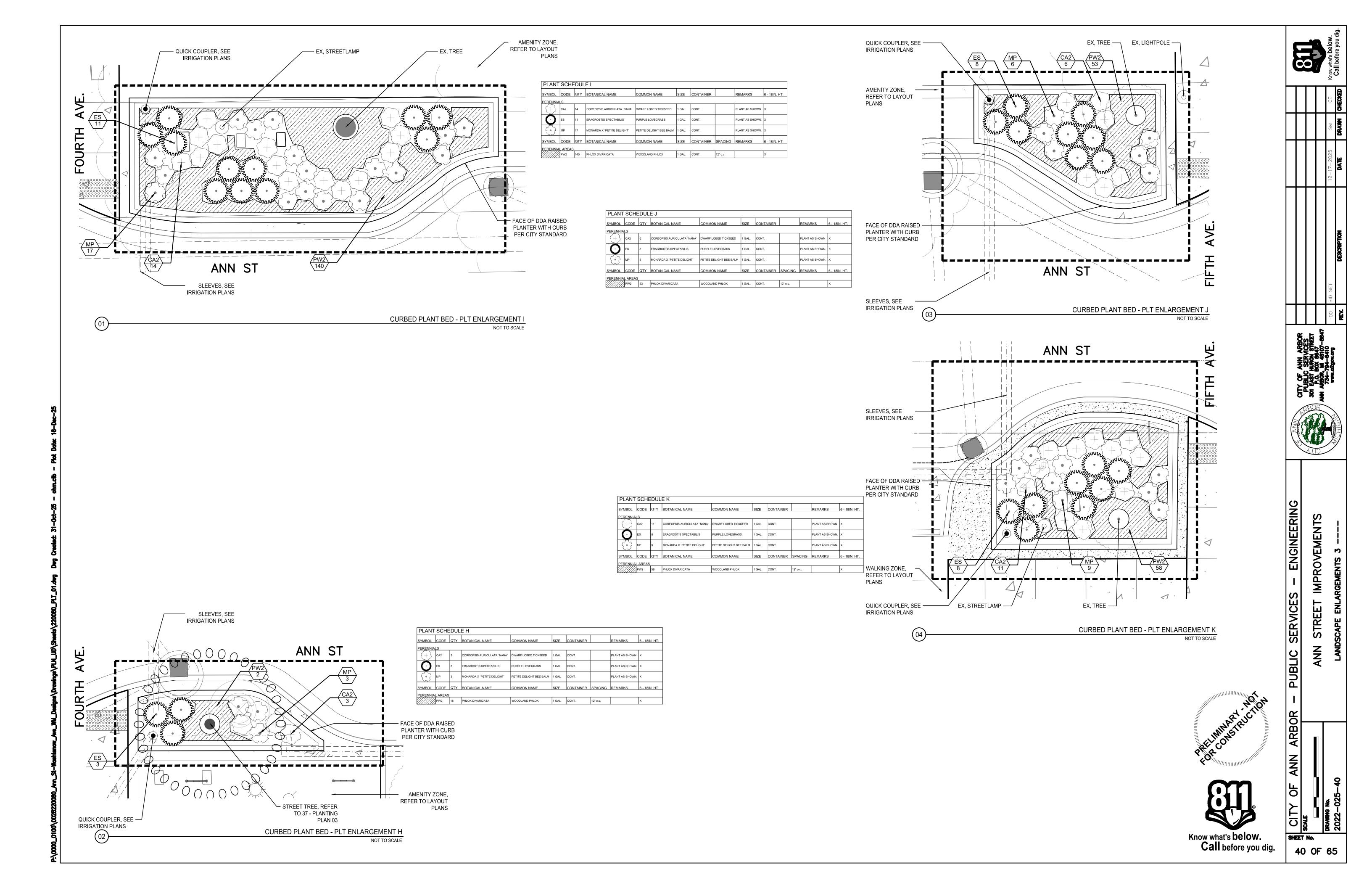
Know what's below.
Call before you dig. 36 OF 65

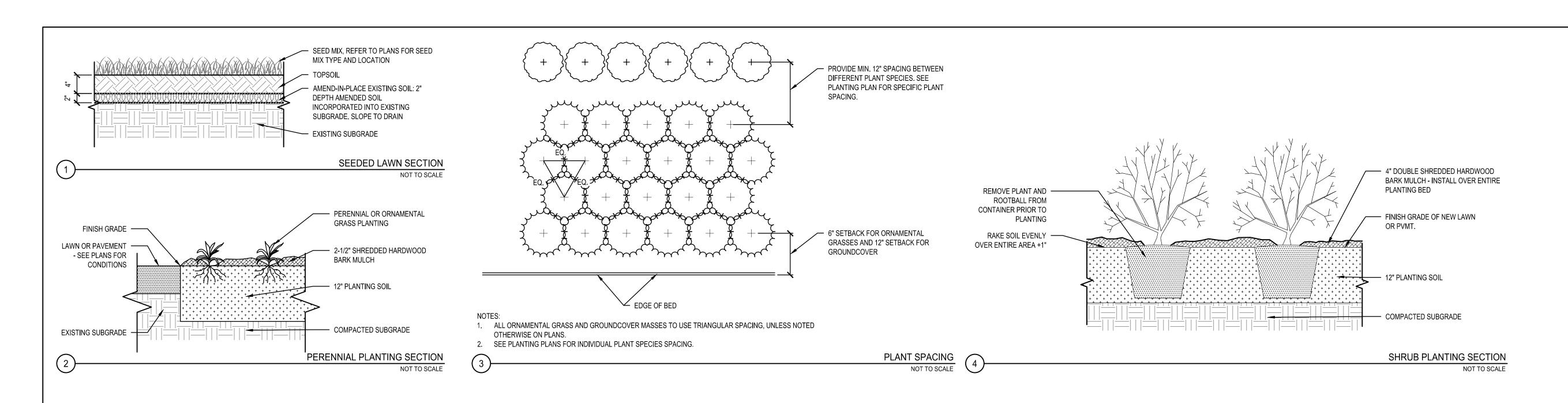
ANN STREET IMPROVEMENTS PLANTING PLAN 02 STA 4+00 TO 8+00



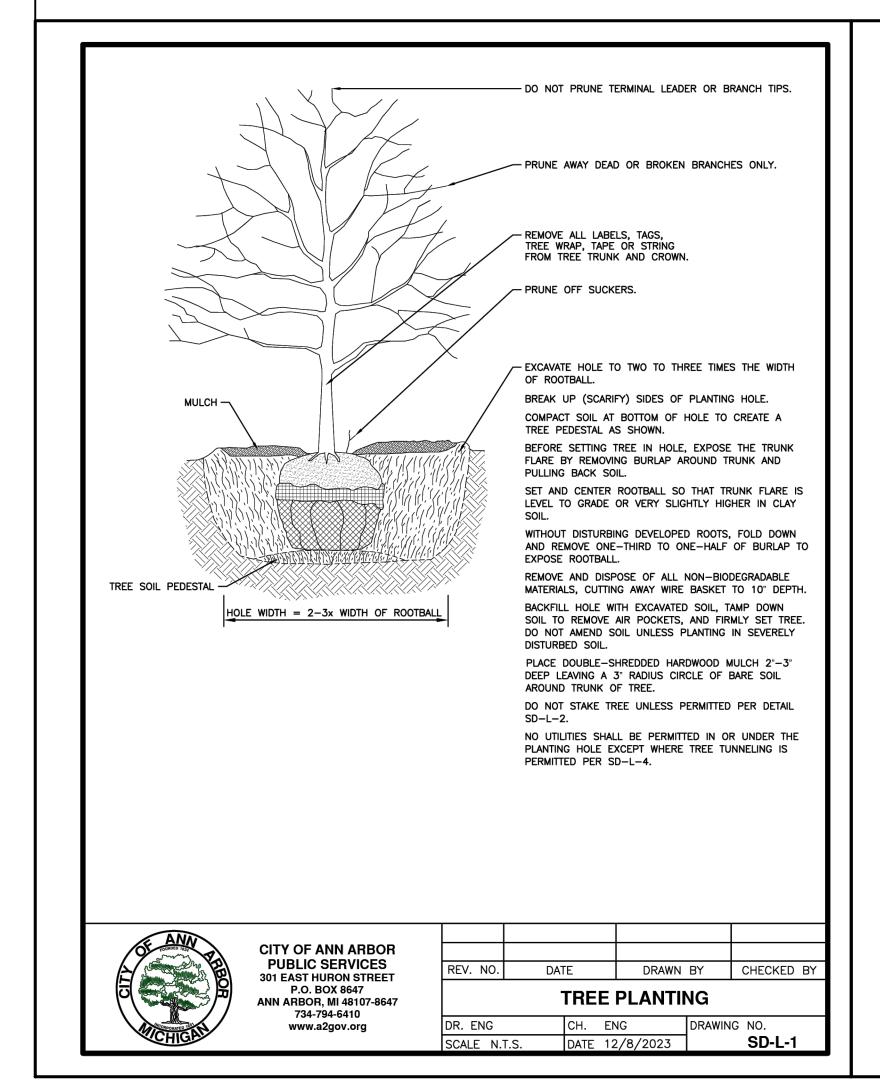


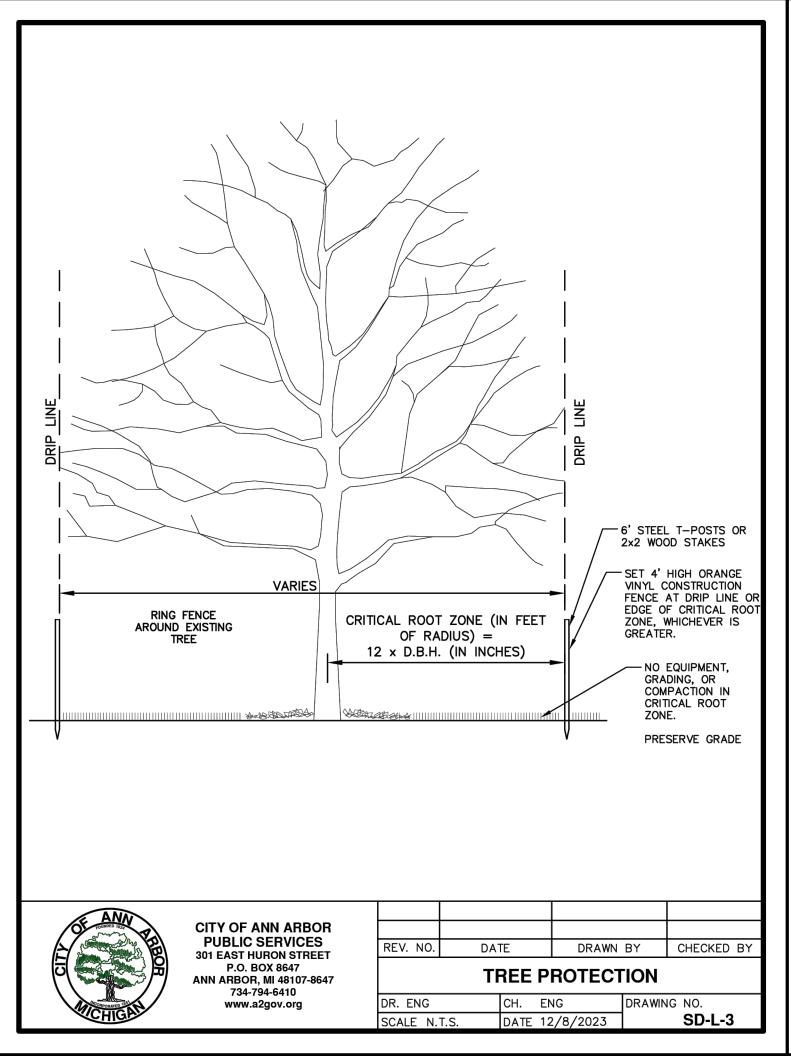


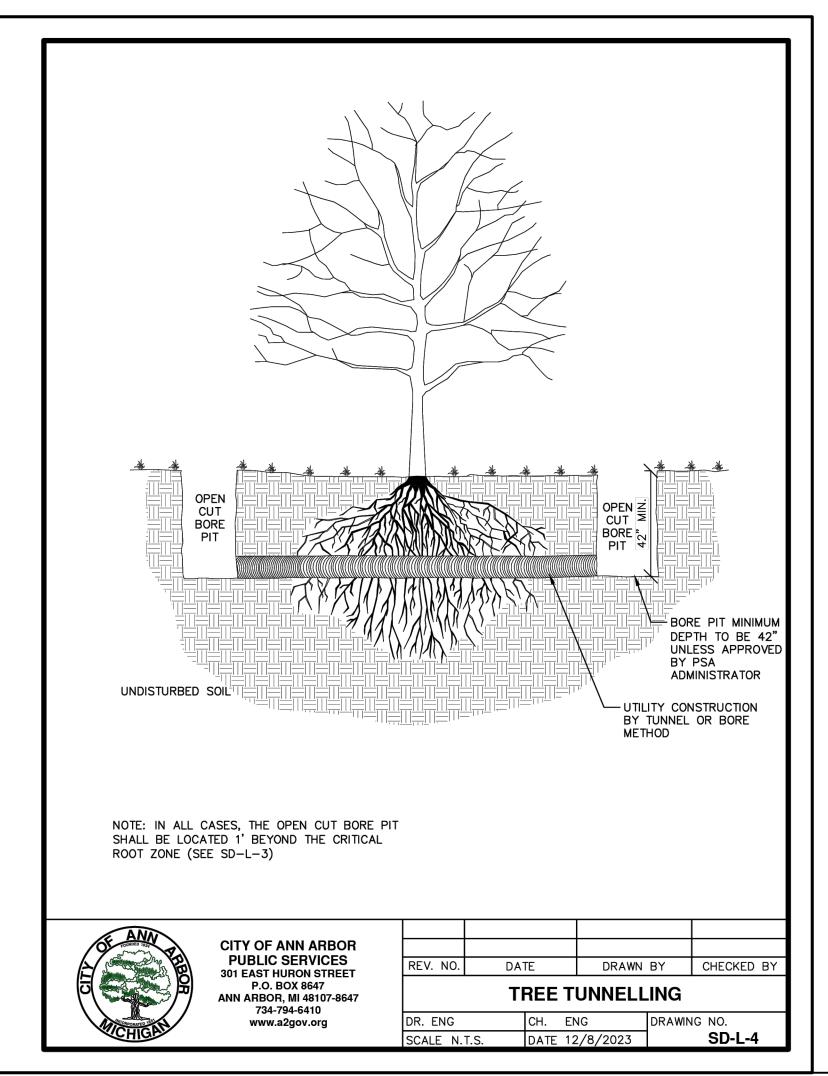


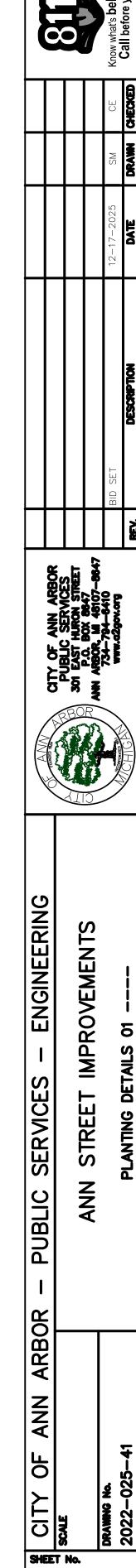


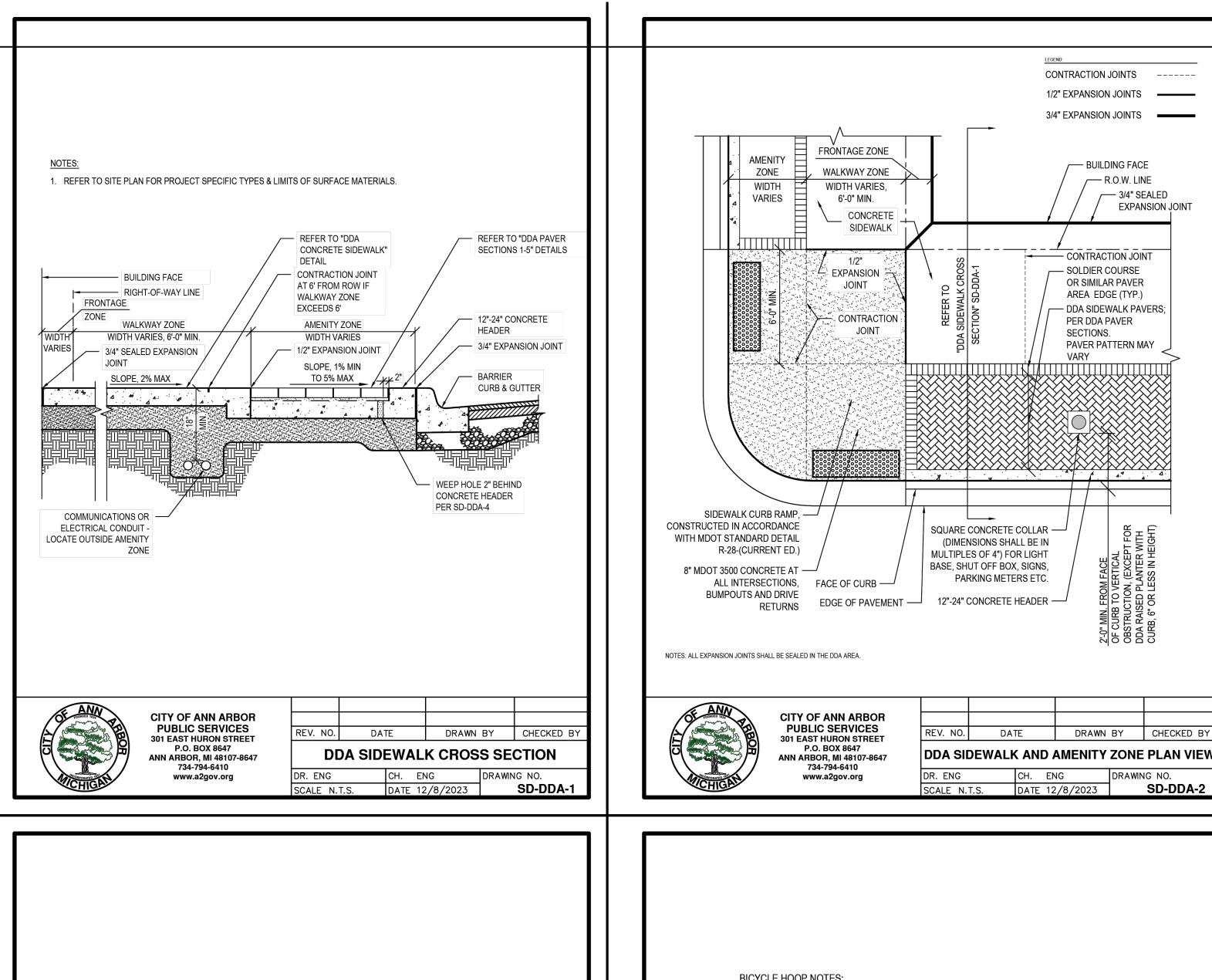


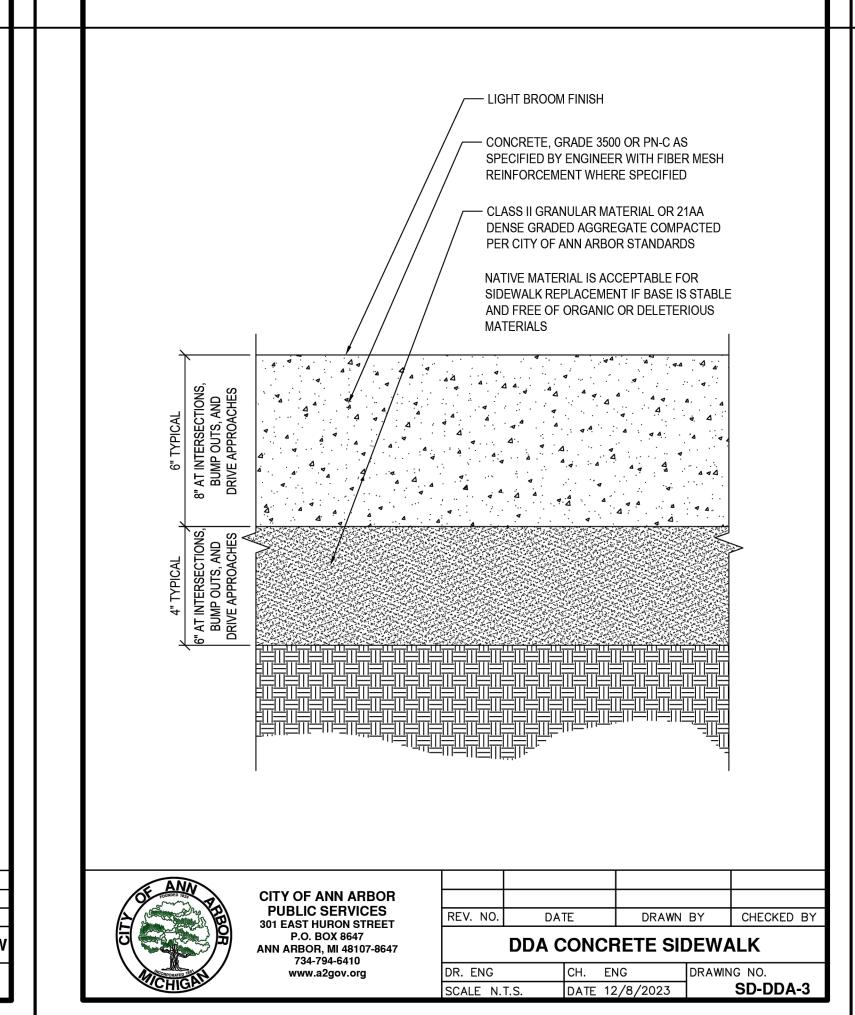


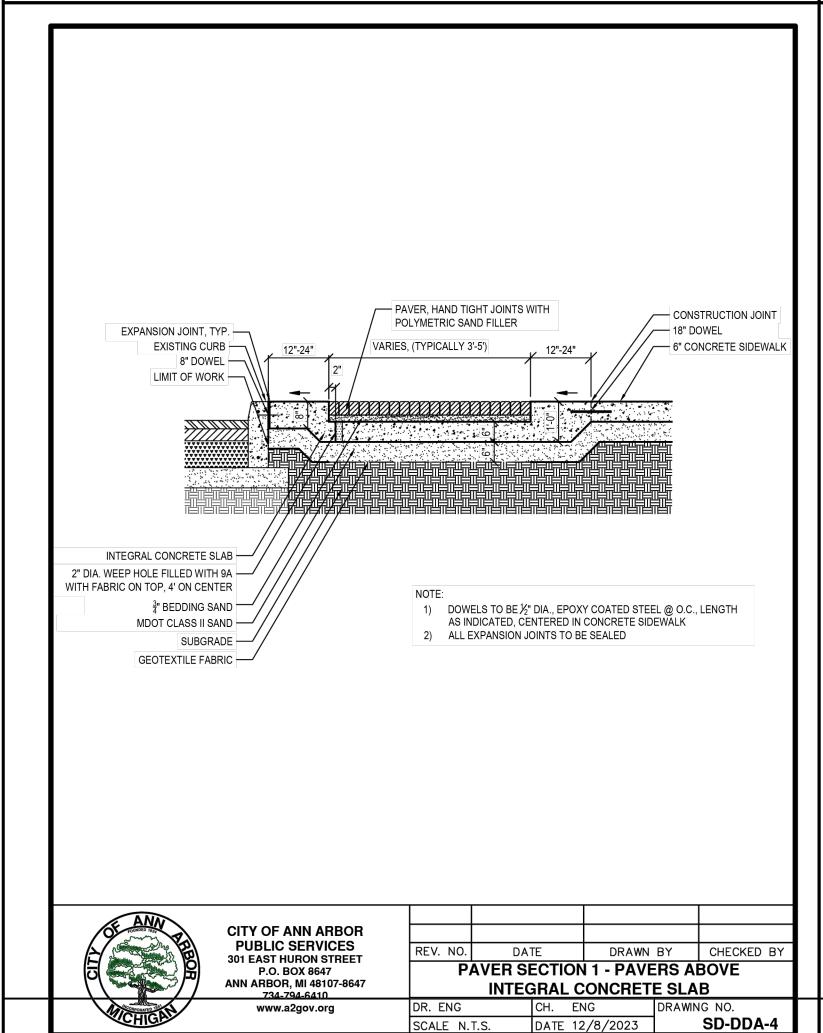


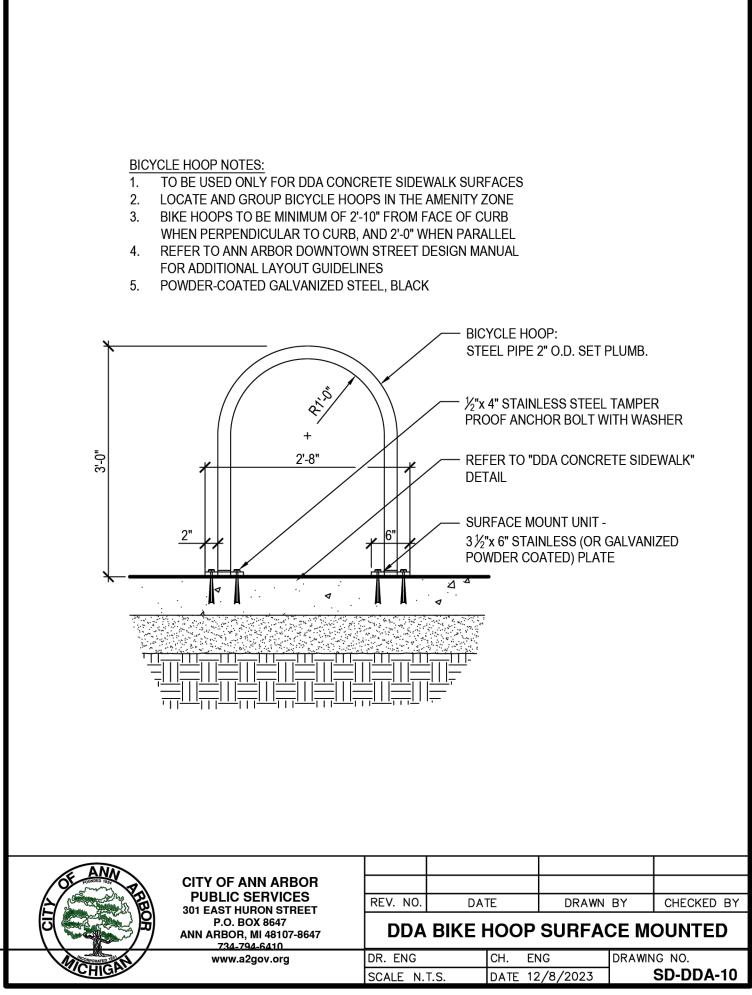


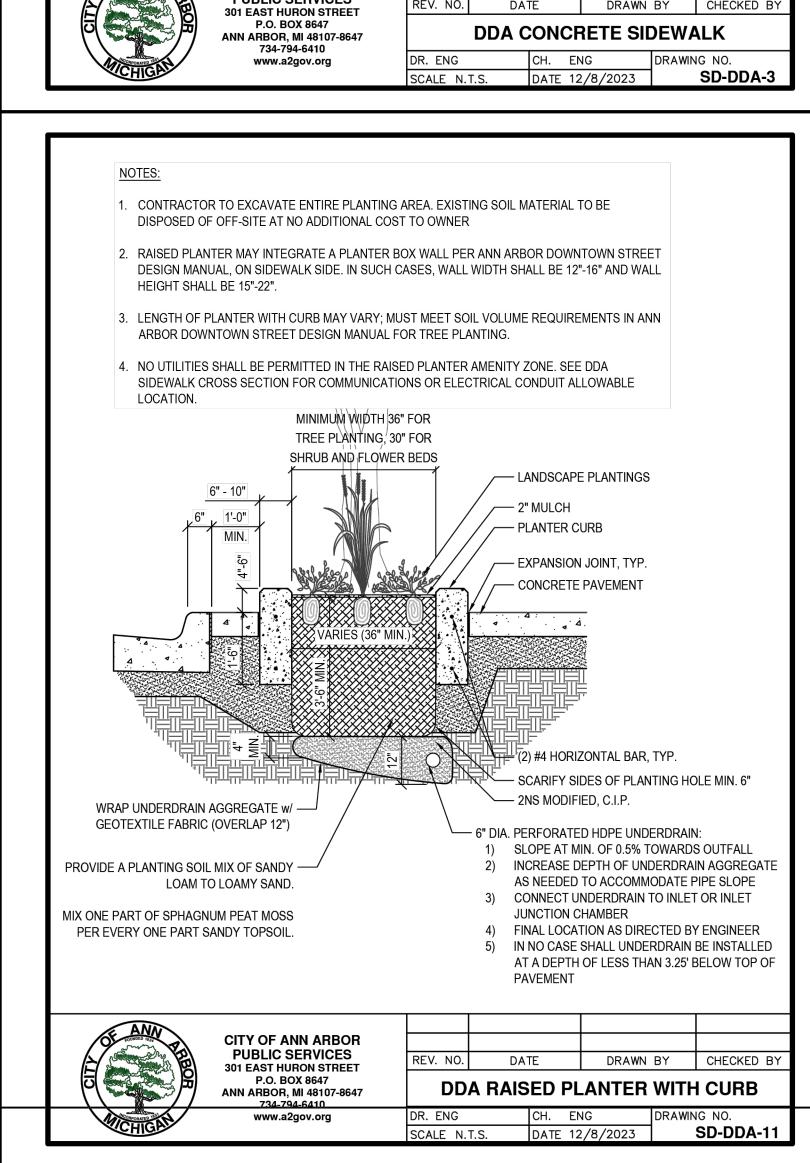


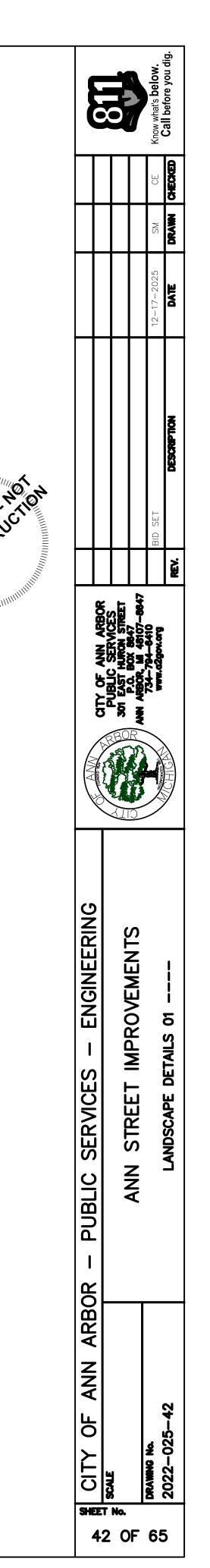


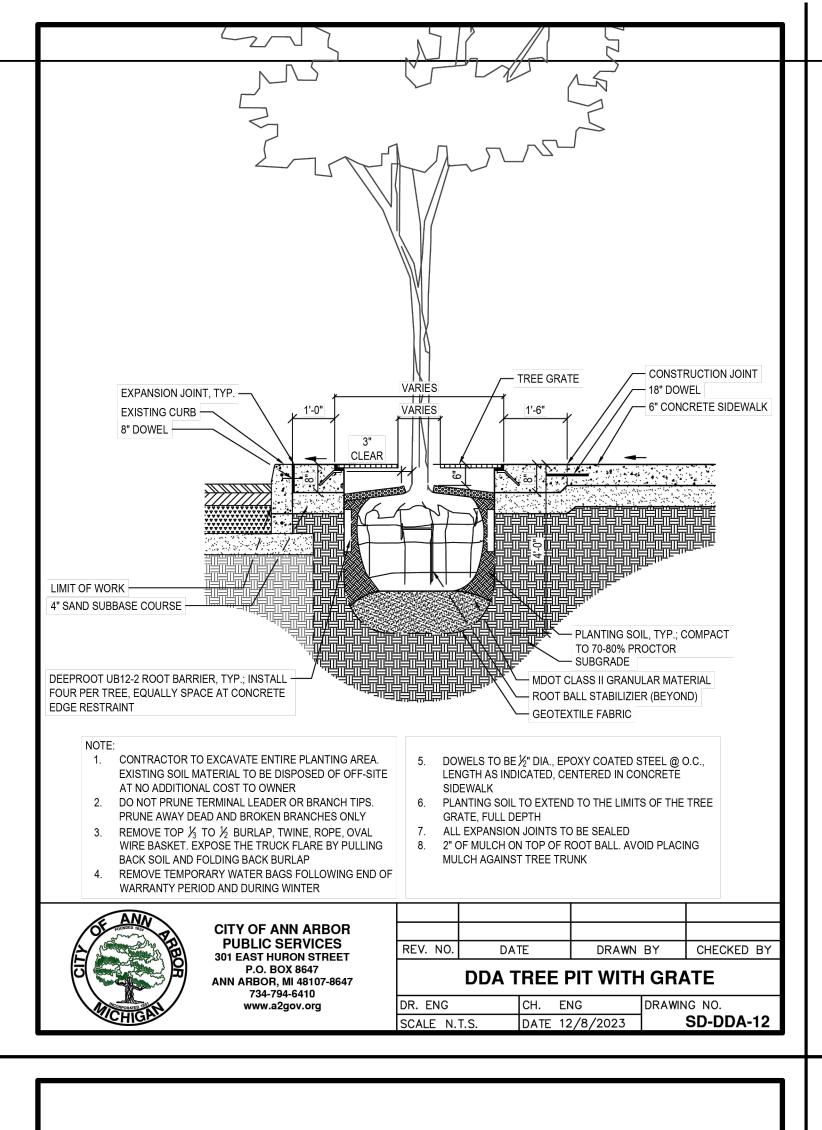


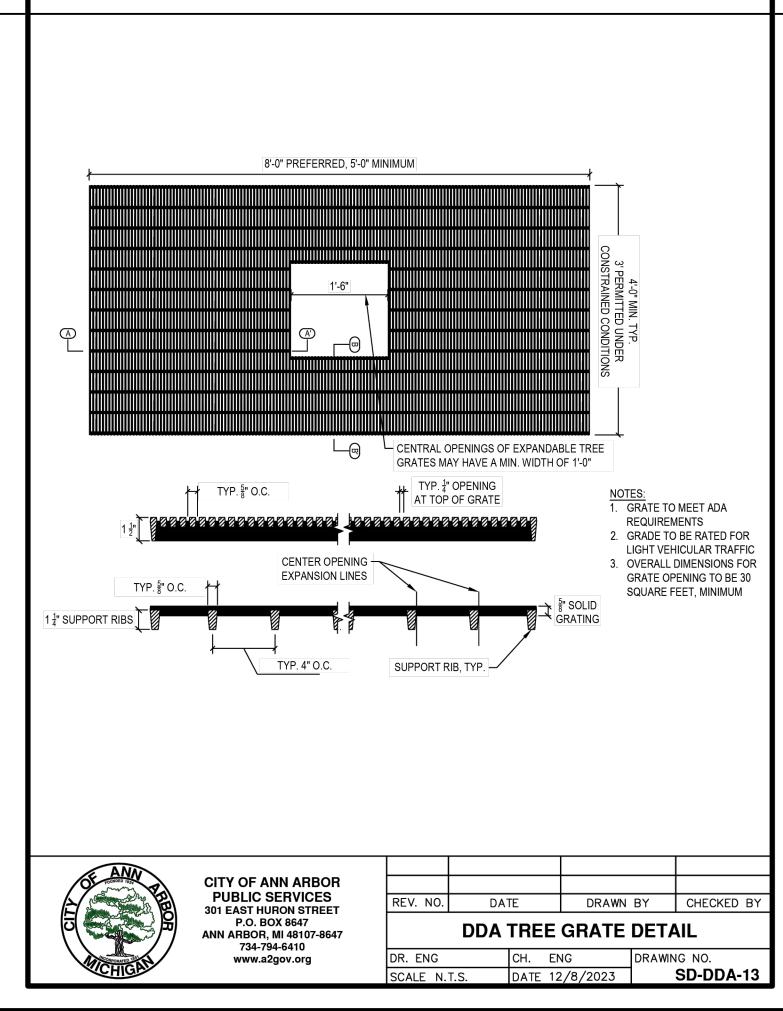


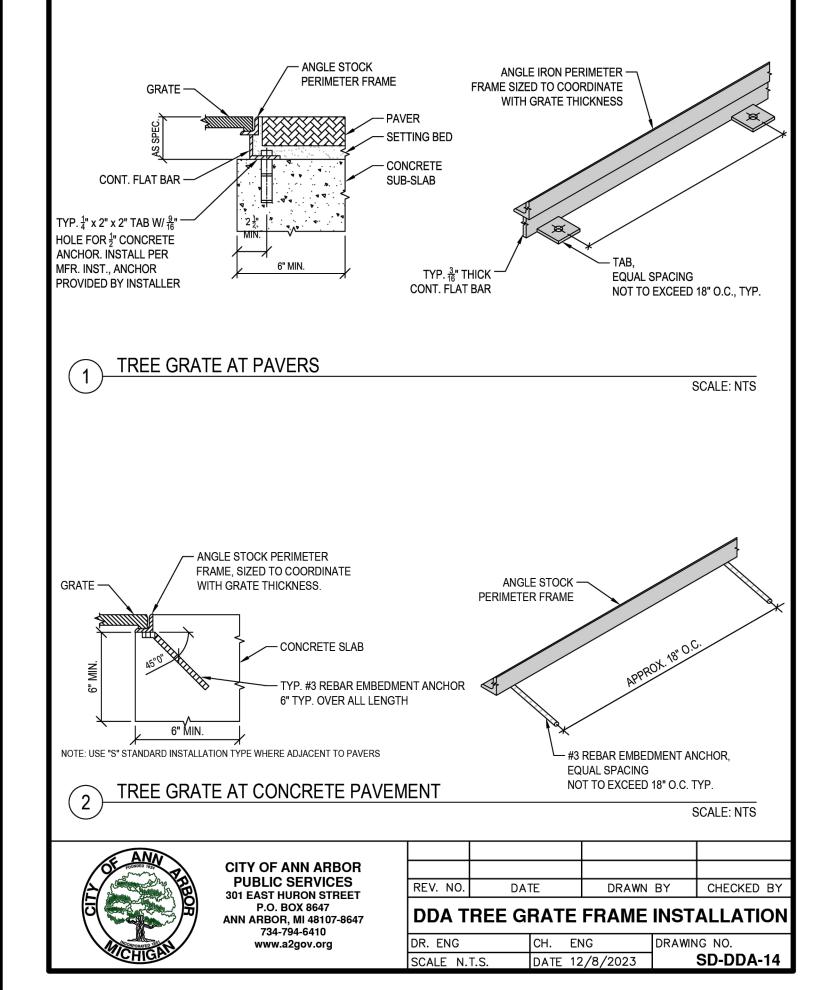


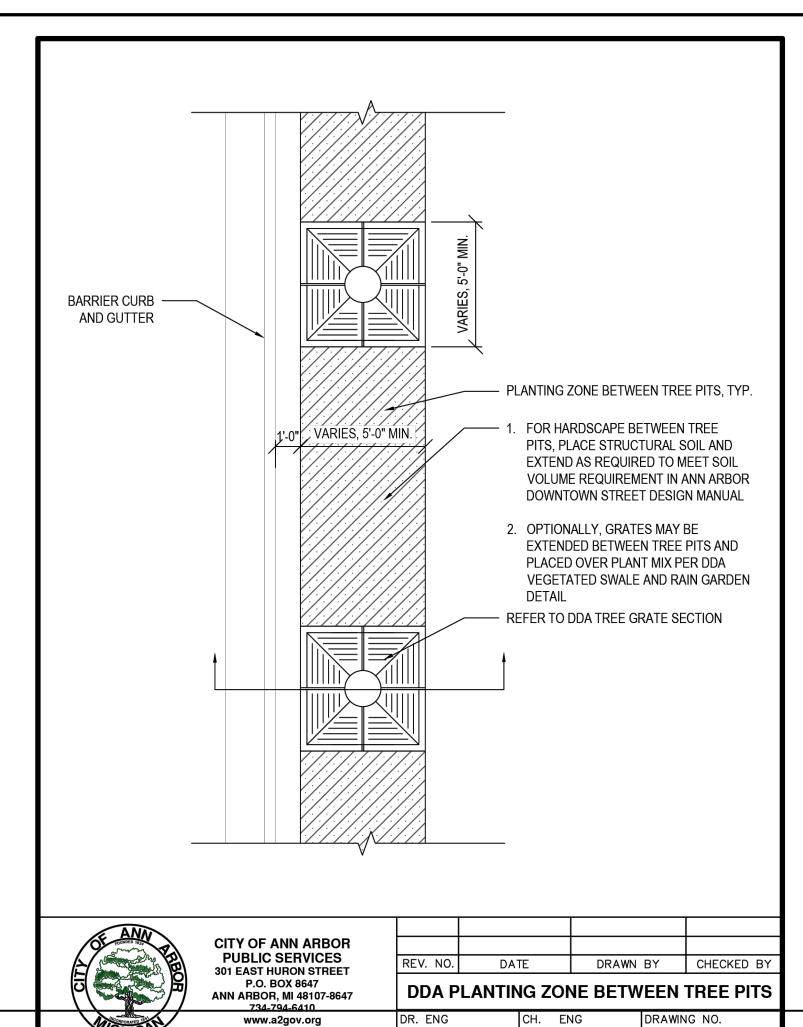








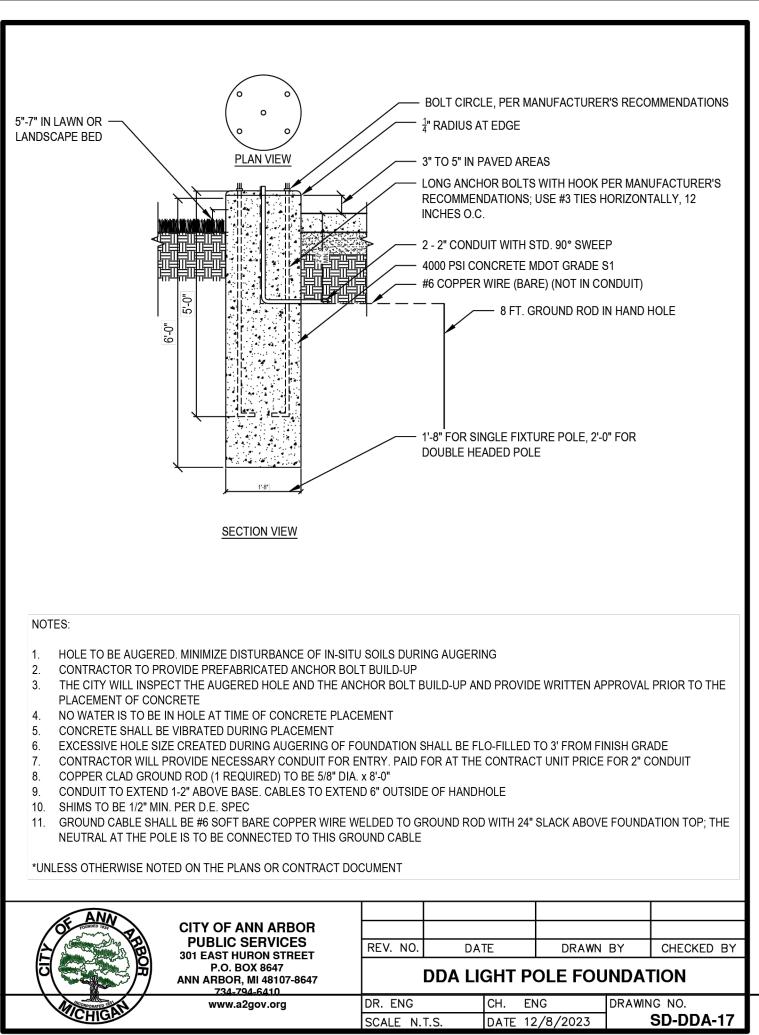


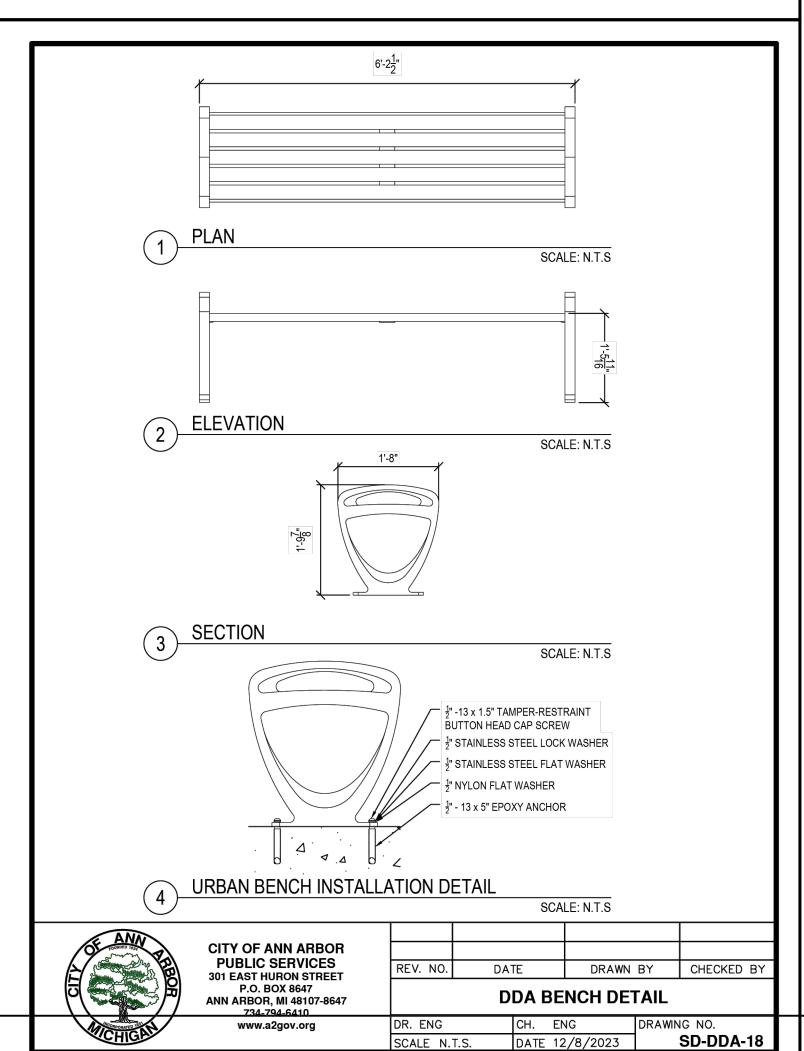


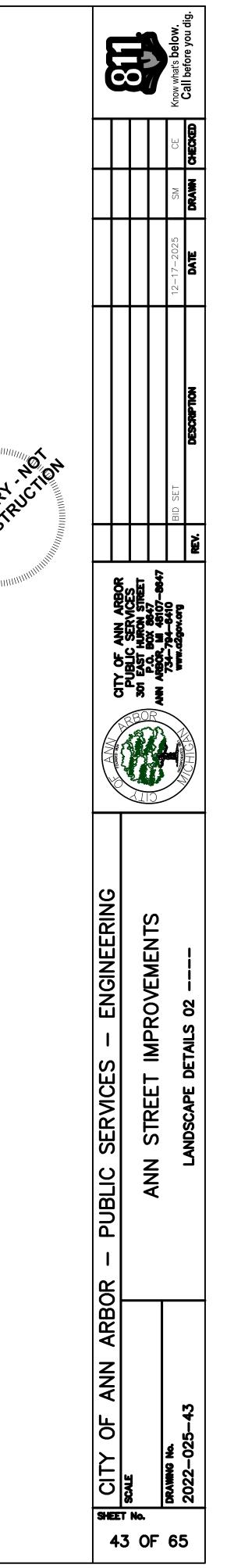
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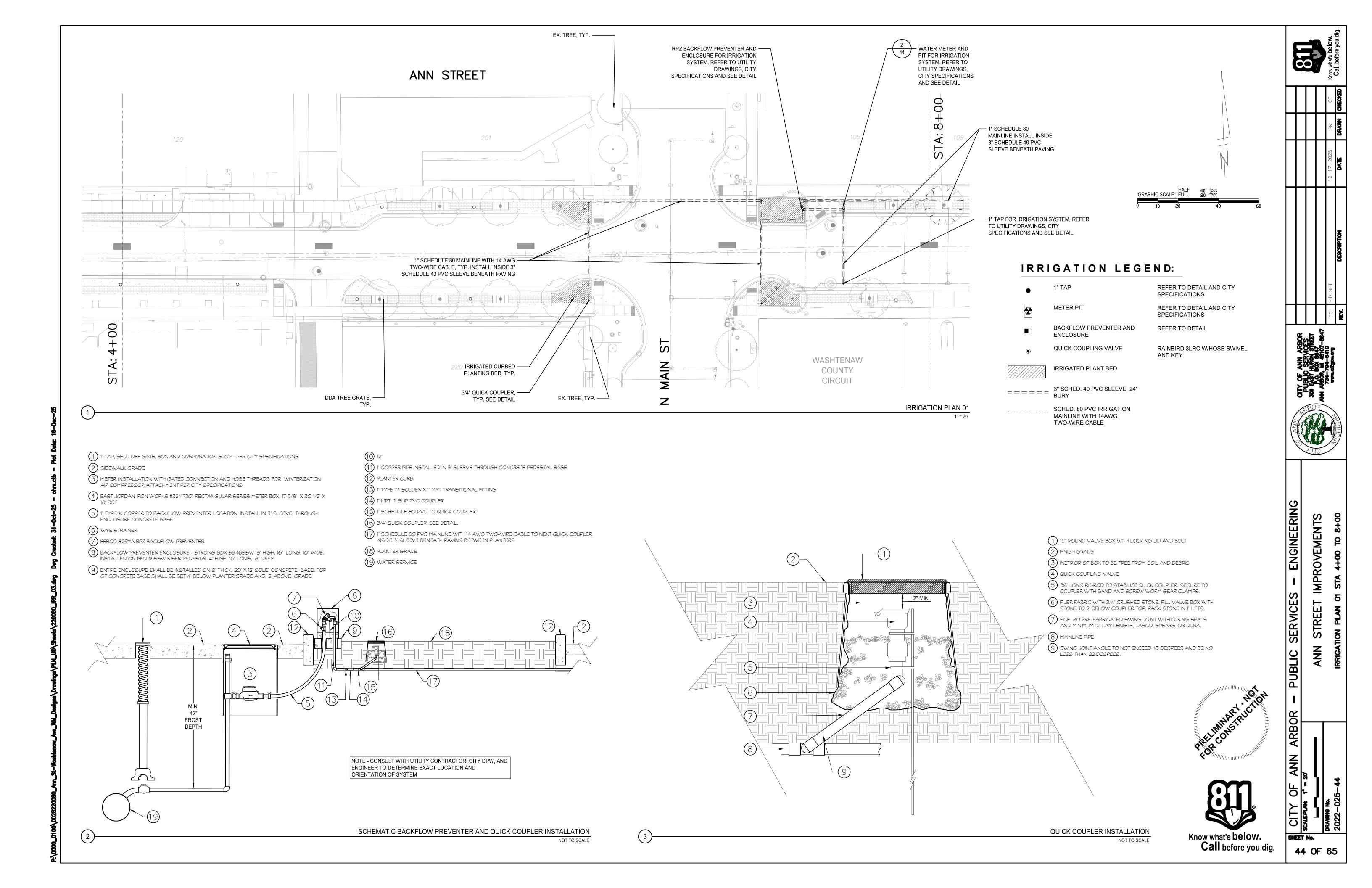
DATE 12/8/2023

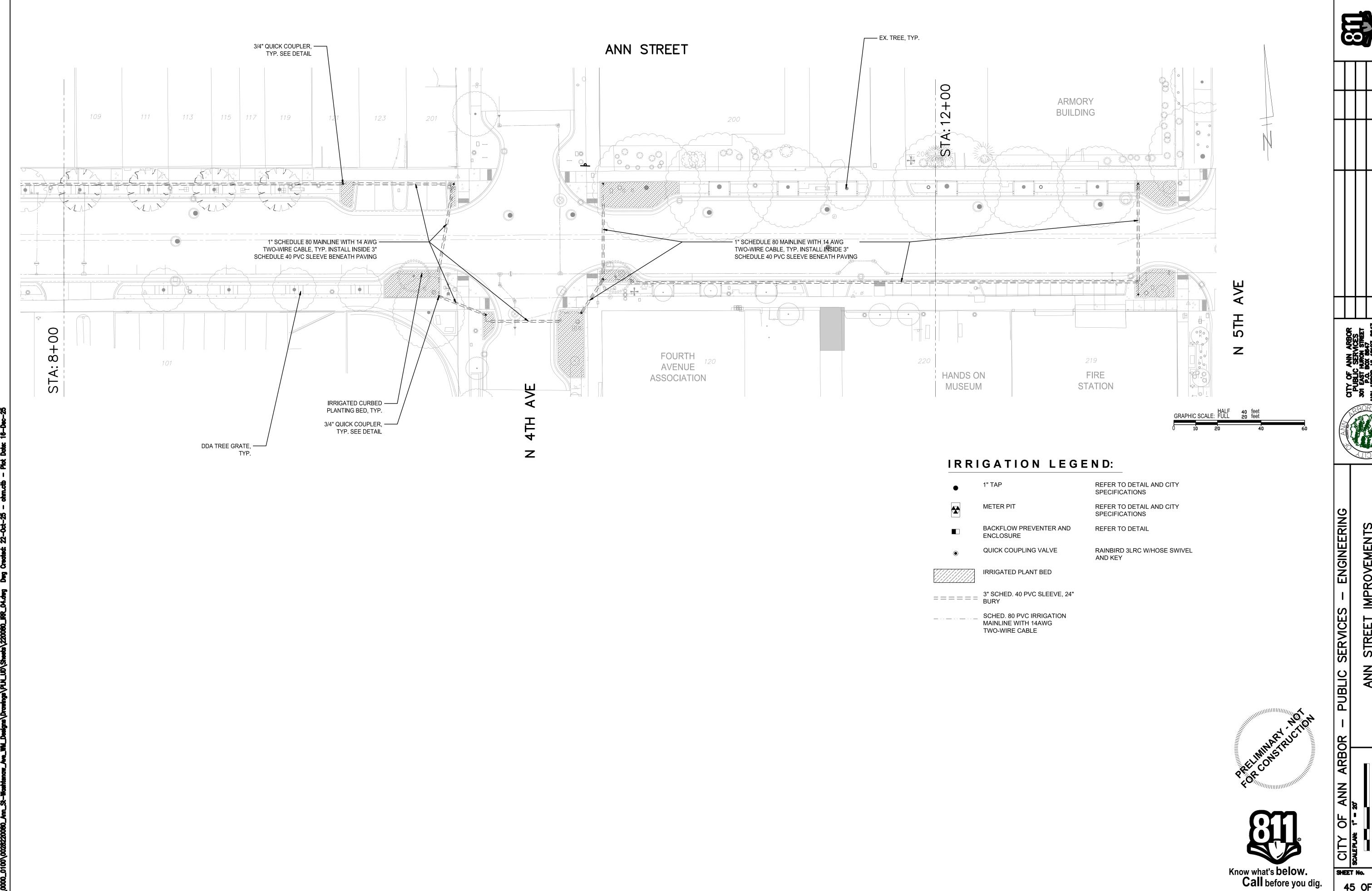
SCALE N.T.S.







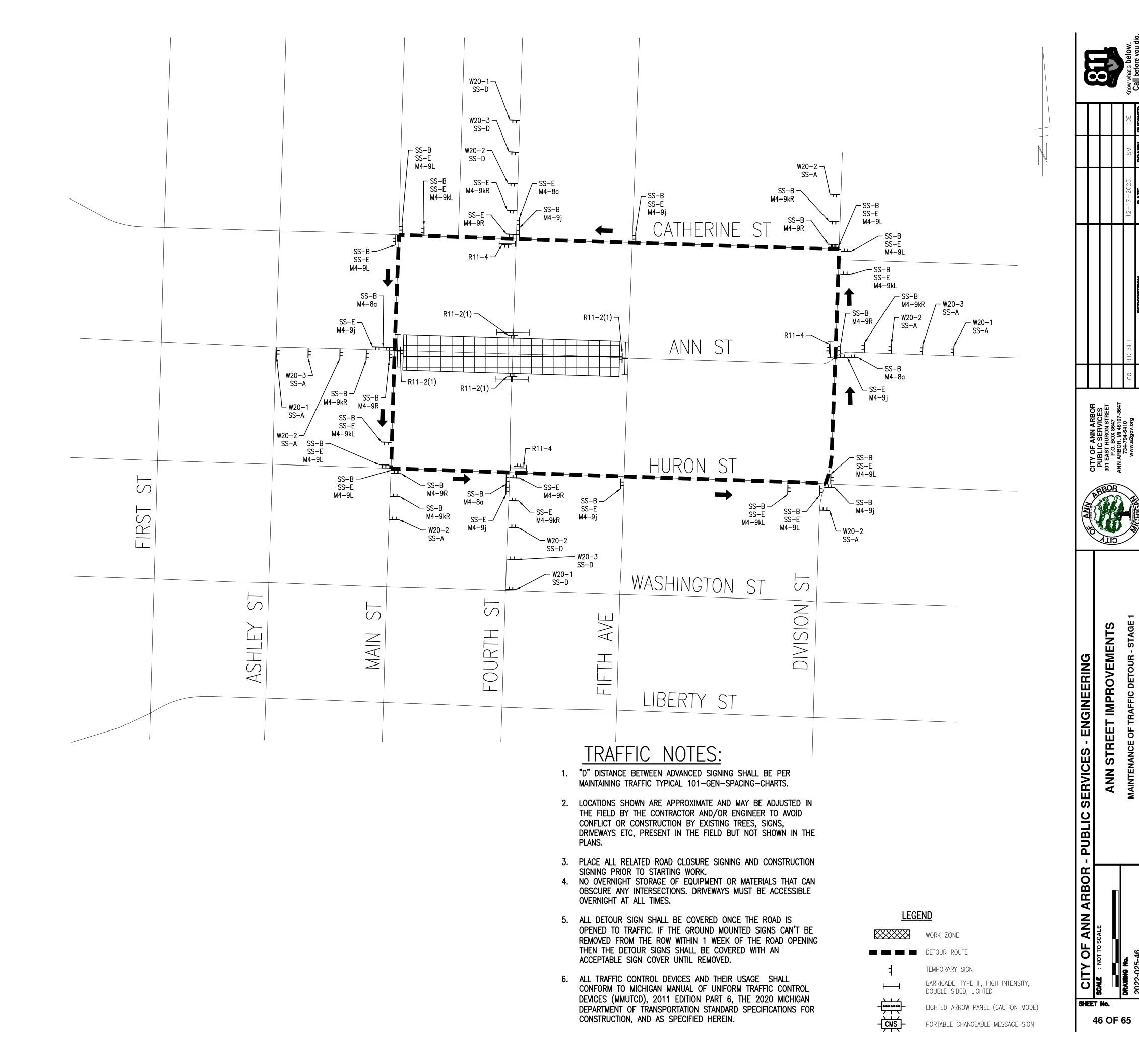




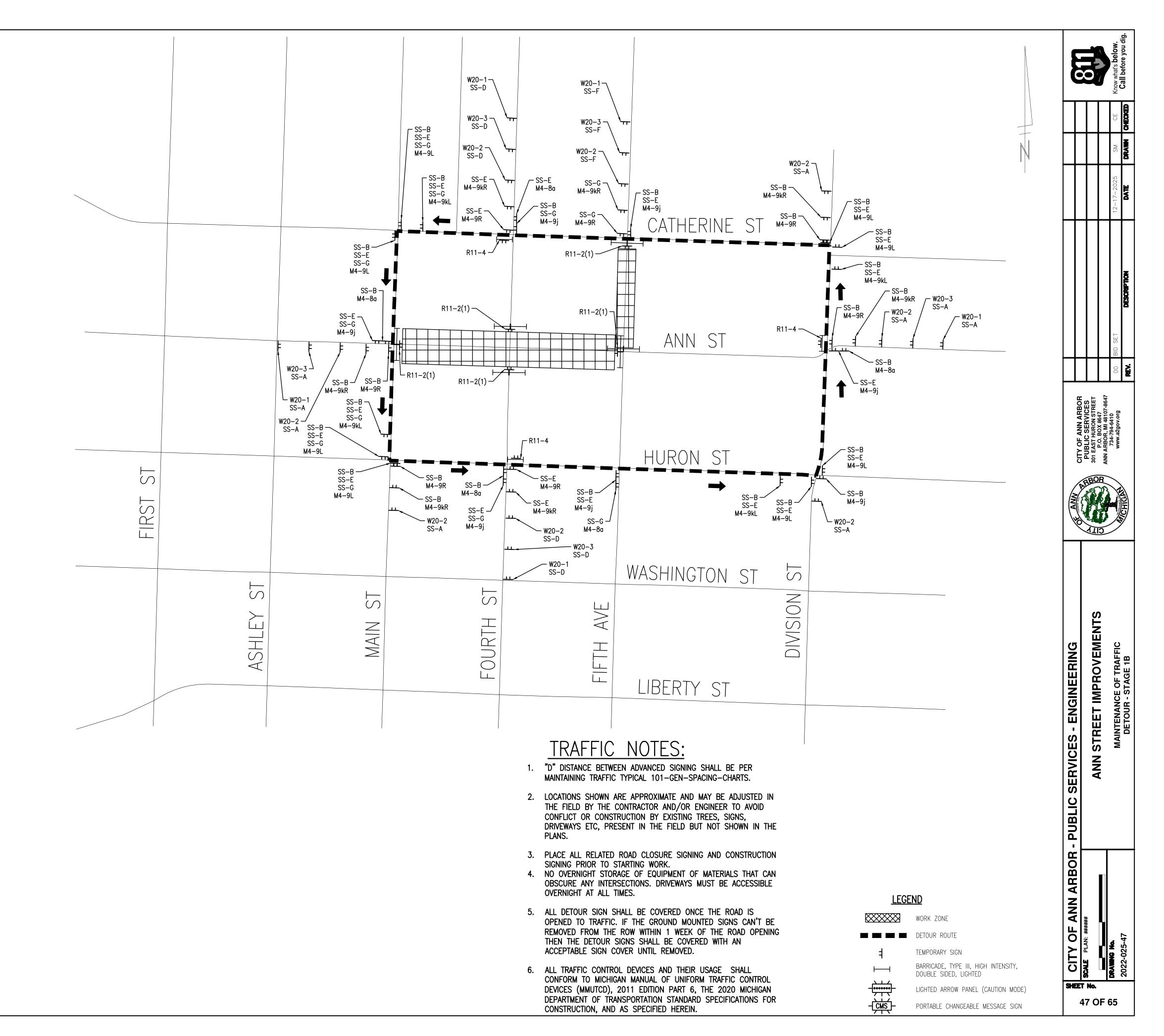


IMPROVEMENTS

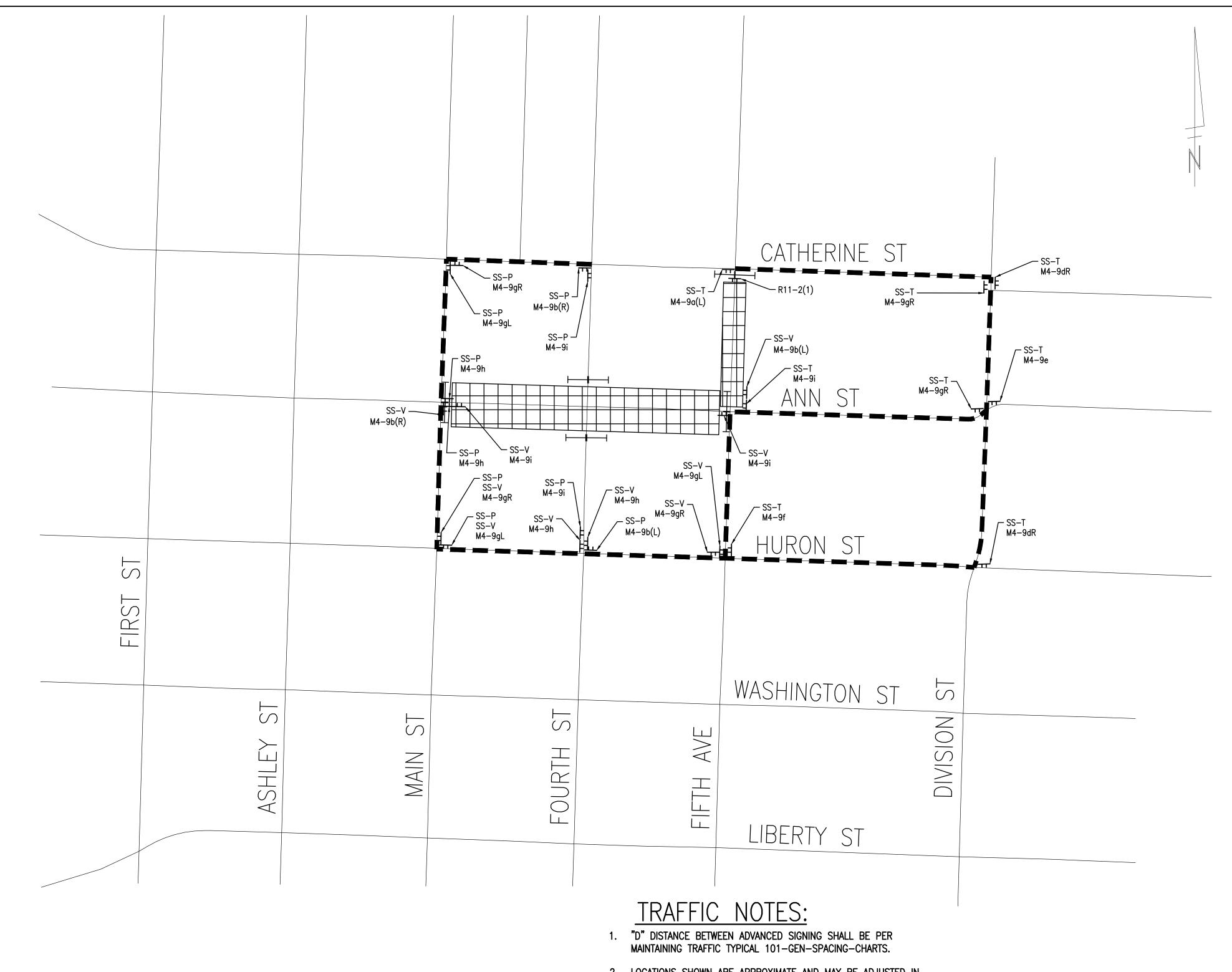
SI	GNING LE	GEND			
SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)
END DETOUR	M4-8a	24"x18"	4	3	12
DETOUR	M4-9L	30"x24"	8	5	40
DETOUR	M4-9kL	30"x30"	4	6.25	25
DETOUR	M4-9R	30"x24"	6	5	30
DETOUR	M4-9kR	30"x30"	6	6.25	37.5
DETOUR	M4-9j	30"x24"	7	5	35
ROAD CLOSED	R11-2(1)	48"x30"	4	10	40
ROAD CLOSED TO THRU TRAFFIC	R11-4	60"x30"	3	12.5	37.5
ROAD WORK AHEAD	W20-1	48"x48"	4	16	64
DETOUR AHEAD	W20-2	48 " x48"	7	16	112
ROAD CLOSED AHEAD	W20-3	48"x48"	4	16	64
ANN ST	SS-A	48"x12"	9	4	36
ANN ST	SS-B	36"x12"	27	3	81
ANN EXIT OLOSED USE ASHLEY ST	SS-C	36 " x24"	0	6	0
FOURTH	SS-D	48"x12"	6	4	24
FOURTH	SS-E	36"x12"	22	3	66
FIFTH	SS-F	48"x12"	0	4	0
FIFTH	SS-G	36"x12"	0	3	0
MAIN ST	SS-J	48"x12"	0	4	0
MAIN ST	SS-H	36"x12"	0	3	0
ASHLEY	SS-K	48"x12"	0	4	0
ASHLEY	SS-L	36"x12"	0	3	0



	SIGNING LE	GEND	,	ADEA	TOTAL
SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)
END DETOUR	M4-8a	24"x18"	5	3	15
DETOUR	M4-9L	30"x24"	8	5	40
DETOUR	M4-9kL	30"x30"	4	6.25	25
DETOUR	M4 -9R	30"x24"	7	5	35
DETOUR	M4-9kR	30"x30"	7	6.25	43.75
DETOUR	M4-9j	30"x24"	7	5	35
ROAD CLOSED	R11-2(1)	48"x30"	5	10	50
ROAD (LOSED) TO THRU TRAFFIC	R11-4	60"x30"	3	12.5	37.5
ROAD WORK AHEAD	W20-1	48"x48"	5	16	80
DETOUR AHEAD	W20-2	48"x48"	8	16	128
ROAD CLOSED AHEAD	W20-3	48"x48"	5	16	80
(ANN ST	SS-A	48"x12"	9	4	36
ANN ST	SS-B	36"x12"	27	3	81
ANN EXIT CLOSED USE ASHLEY ST	SS-C	36"x24"	0	6	0
FOURTH	SS-D	48"x12"	6	4	24
FOURTH	SS-E	36"x12"	22	3	66
FIFTH	SS-F	48"x12"	3	4	12
FIFTH	SS-G	36"x12"	12	3	36
MAIN ST	SS-J	48"x12"	0	4	0
MAIN ST	SS-H	36"x12"	0	3	0
ASHLEY	SS-K	48"x12"	0	4	0
ASHLEY	SS-L	36"x12"	0	3	0



SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)
* END	M4-9i	12"x18"	5	1.5	7.5
DETOUR	M4-9b(L)	30"x24"	2	5	10
DETOUR	M4-9b(R)	30"x24"	2	5	10
*	M4-9gL	12"x18"	3	1.5	4.5
*	M4-9gR	12"x18"	5	1.5	7.5
*	M4-9h	12"x24"	4	2	8
1 END	M4-9f	12"x18"	1	1.5	1.5
1	M4-9e	12"x18"	1	1.5	1.5
1	M4-9dR	12"x18"	2	1.5	3
1	M4-9dL	12"x18"	0	1.5	0
1 DETOUR	M4-9a(L)	30"x24"	1	5	5
1 DETOUR	M4-9a(R)	30"x24"	0	5	0
ROAD	R11-2(1)	48"x30"	1	10	10
FORTH	SS-P	18"x12"	10	1.5	15
MAN ST	SS-Q	18"x12"	0	1.5	0
ASHEY	SS-R	18"x12"	0	1.5	0
FFTH	SS-T	18"x12"	8	1.5	12
ANN ST	SS-V	18"x12"	10	1.5	15



- 2. LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD BY THE CONTRACTOR AND/OR ENGINEER TO AVOID CONFLICT OR CONSTRUCTION BY EXISTING TREES, SIGNS, DRIVEWAYS ETC, PRESENT IN THE FIELD BUT NOT SHOWN IN THE PLANS.
- 3. PLACE ALL RELATED ROAD CLOSURE SIGNING AND CONSTRUCTION SIGNING PRIOR TO STARTING WORK.
- 4. NO OVERNIGHT STORAGE OF EQUIPMENT OF MATERIALS THAT CAN OBSCURE ANY INTERSECTIONS. DRIVEWAYS MUST BE ACCESSIBLE OVERNIGHT AT ALL TIMES.
- 5. ALL DETOUR SIGN SHALL BE COVERED ONCE THE ROAD IS OPENED TO TRAFFIC. IF THE GROUND MOUNTED SIGNS CAN'T BE REMOVED FROM THE ROW WITHIN 1 WEEK OF THE ROAD OPENING THEN THE DETOUR SIGNS SHALL BE COVERED WITH AN ACCEPTABLE SIGN COVER UNTIL REMOVED.
- 6. ALL TRAFFIC CONTROL DEVICES AND THEIR USAGE SHALL CONFORM TO MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), 2011 EDITION PART 6, THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND AS SPECIFIED HEREIN.

<u>LEGEND</u>

WORK ZONE DETOUR ROUTE TEMPORARY SIGN BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED

LIGHTED ARROW PANEL (CAUTION MODE) PORTABLE CHANGEABLE MESSAGE SIGN

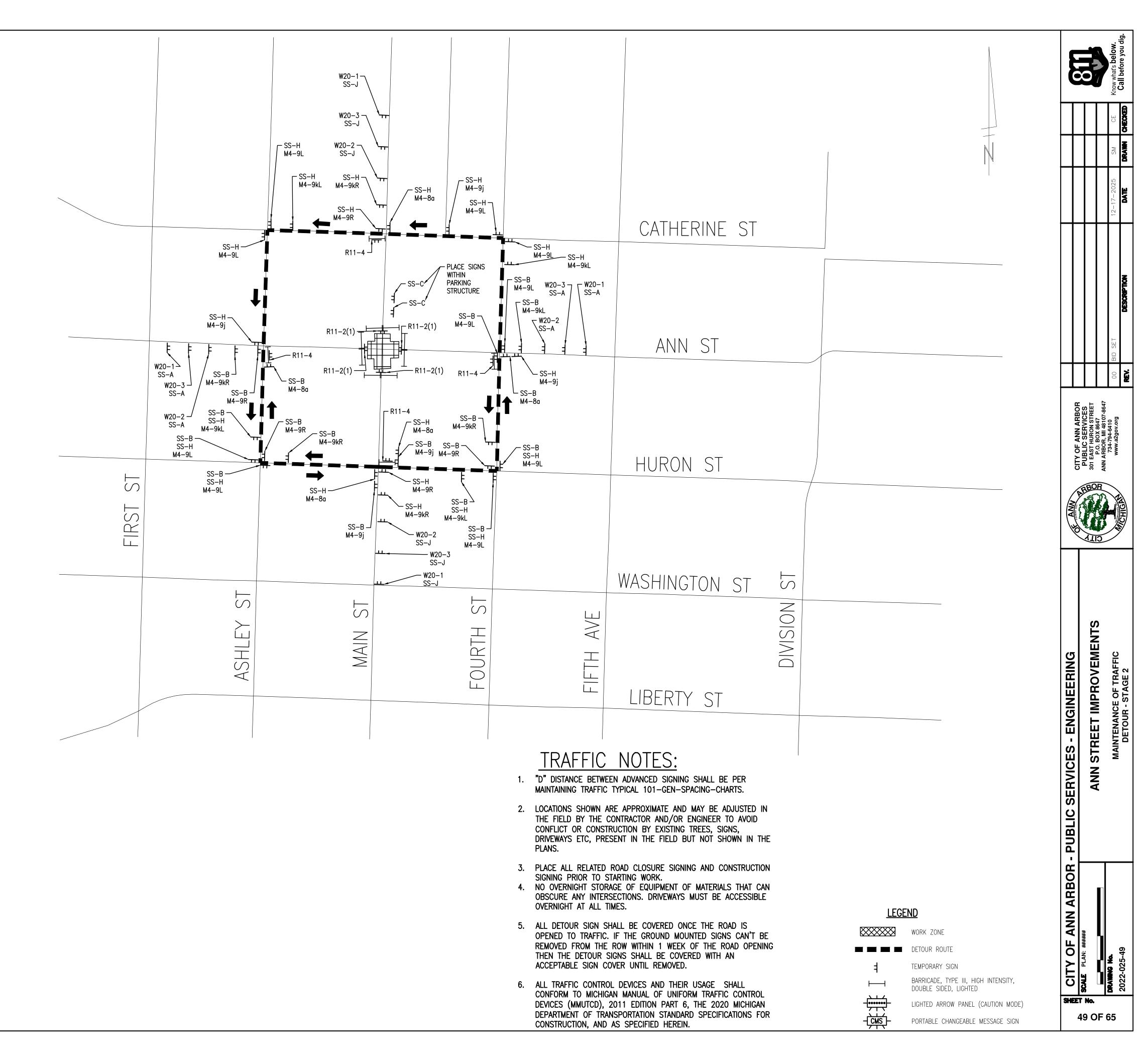
CITY OF ANN ARBOR

ANN STREET IMPROVEMENTS

- PUBLIC SERVICES - ENGINEERING

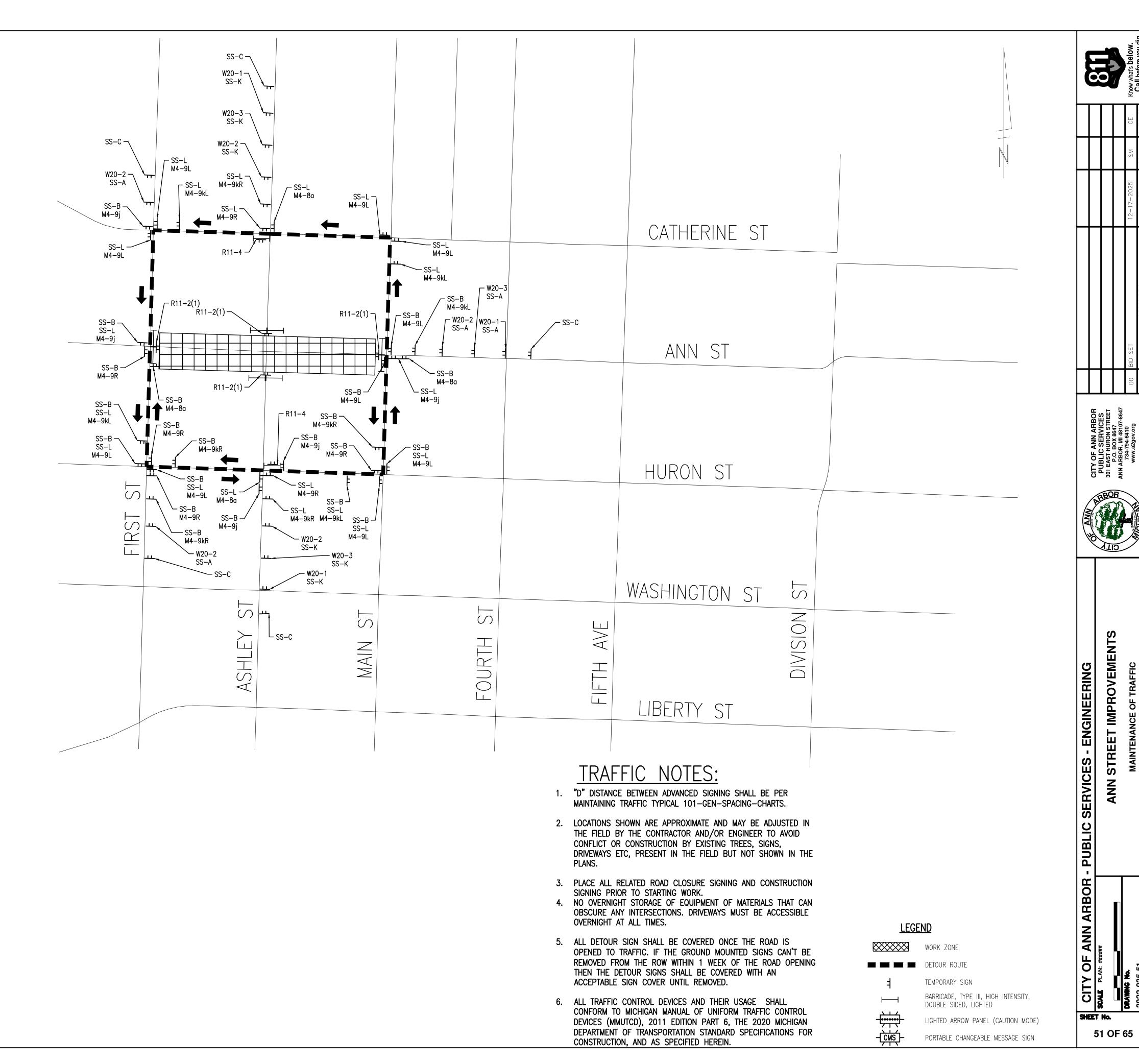
SHEET No. 48 OF 65

SIGNING LEGEND								
SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)			
END	M4-8a	24"x18"	5	3	15			
DETOUR								
	M4-9L	30"x24"	10	5	50			
DETOUR	M4-9kL	30"x30"	5	6.25	31.25			
DETOUR	M4-9R	30"x24"	5	5	25			
DETOUR	M4-9kR	30"x30"	5	6.25	31.25			
DETOUR	M4-9j	30"x24"	5	5	25			
ROAD CLOSED	R11-2(1)	48"x30"	4	10	40			
ROAD CLOSED TO THRU TRAFFIC	R11-4	60"x30"	4	12.5	50			
ROAD WORK AHEAD	W 20-1	48"x48"	4	16	64			
DETOUR AHEAD	₩20-2	48"x48"	4	16	64			
ROAD CLOSED AHEAD	W20-3	48"x48"	4	16	64			
ANN ST	SS-A	48"x12"	6	4	24			
ANN ST	SS-B	36"x12"	19	3	57			
ANN EXIT CLOSED USE ASHLEY ST	SS-C	36"x24"	2	6	12			
FOURTH	SS-D	48"x12"	0	4	0			
FOURTH	SS-E	36"x12"	0	3	0			
FIFTH	SS-F	48"x12"	0	4	0			
FIFTH	SS-G	36"x12"	0	3	0			
MAIN ST	SS-J	48"x12"	6	4	24			
MAN ST	SS-H	36"x12"	22	3	66			
ASHLEY	SS-K	48"x12"	0	4	0			
ASHLEY	SS-L	36"x12"	0	3	0			

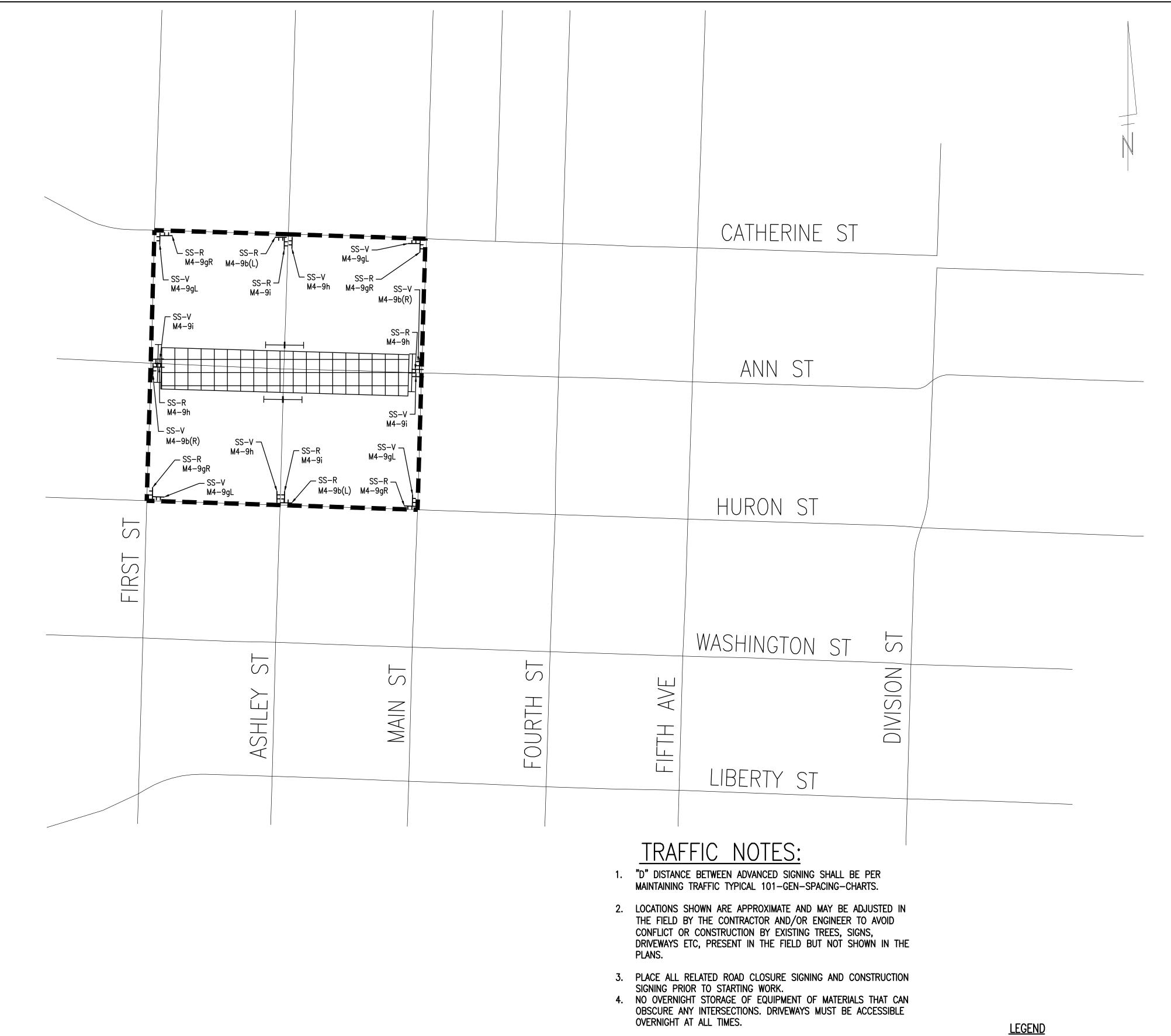


								<u> </u>	pelow.
	SIGNING	LEGE	ND						Know what's
SIGN	SIGN CODI	E :	SIZE	NUMBER REQUIRE	ARED (SF	A TOTAL	.) T		CE
* END	M4-9	9i 12	."x18"	4	1.5	6			MS
DETOUR	M4-9b	(L) 30)"x24"	2	5	10			7-2025
DETOUR	M4-9b	(R) 30)"x24"	2	5	10		CATHERINE ST	12-1
*	M4-9	gL 12	."x18"	4	1.5	6		SS-Q	
***************************************	M4-9	gR 12	! " x18"	4	1.5	6		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
*	M4 -9	9h 12	."x24"	4	2	8		SS-Q M4-9h M4-9h ANN ST	BID SET
1 END	M4-9	9f 12	! " x18"	0	1.5	0		$\begin{array}{c c} SS-V & \\ M4-9b(R) & \\ \end{array}$	F • Fi • F4
1	M4 -9	9e 12	!"x18"	0	1.5	0		SS-V M4-9gL SS-Q M4-9i SS-Q M4-9i SS-Q M4-9gR SS-Q M4-9gR	CII Y OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 ANN ARBOR, MI 48107-8647
1	M4-9	dR 12	."x18"	0	1.5	0			ARBOR ANN
1	M4-9	dL 12	! " x18"	0	1.5	0		LA L	CILL
1 DETOUR	M4-9a	(L) 30)"x24"	0	5	0		WASHINGTON ST 5	
1 DETOUR	M4-9a	(R) 30)"x24"	0	5	0			LS
ROAD CLOSED	R11-2	(1) 48	3"x30"	0	10	0		ASHLEY MAIN DIVISION INDEX THE ASHLEY ASHLEY	OVEMEN'
FORTH	SS-I	P 18	3"x12"	0	1.5	0		AS AS LIBERTY ST	MPR
MAN ST	SS-0	Q 18	3"x12"	10	1.5	15			
ASHEY	SS-I	R 18	3"x12"	0	1.5	0		TRAFFIC NOTES: 1. "D" DISTANCE BETWEEN ADVANCED SIGNING SHALL BE PER MAINTAINING TRAFFIC TYPICAL 101—GEN—SPACING—CHARTS.	IN STR
FFTH	SS-	Т 18	3"x12"	0	1.5	0		1. "D" DISTANCE BETWEEN ADVANCED SIGNING SHALL BE PER MAINTAINING TRAFFIC TYPICAL 101—GEN—SPACING—CHARTS. 2. LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED IN	A
AN ST	SS-Y	V 18	3"x12"	10	1.5	15		THE FIELD BY THE CONTRACTOR AND/OR ENGINEER TO AVOID CONFLICT OR CONSTRUCTION BY EXISTING TREES, SIGNS, DRIVEWAYS ETC, PRESENT IN THE FIELD BUT NOT SHOWN IN THE	
								3. PLACE ALL RELATED ROAD CLOSURE SIGNING AND CONSTRUCTION SIGNING PRIOR TO STARTING WORK. 4. NO OVERNIGHT STORAGE OF EQUIPMENT OF MATERIALS THAT CAN OBSCURE ANY INTERSECTIONS. DRIVEWAYS MUST BE ACCESSIBLE OVERNIGHT AT ALL TIMES. LEGEND	
								5. ALL DETOUR SIGN SHALL BE COVERED ONCE THE ROAD IS OPENED TO TRAFFIC. IF THE GROUND MOUNTED SIGNS CAN'T BE REMOVED FROM THE ROW WITHIN 1 WEEK OF THE ROAD OPENING THEN THE DETOUR SIGNS SHALL BE COVERED WITH AN ACCEPTABLE SIGN COVER UNTIL REMOVED. 6. ALL TRAFFIC CONTROL DEVICES AND THEIR USAGE SHALL CONFORM TO MICHIGAN MANUAL OF LINIFORM TRAFFIC CONTROL SOURCE THE ROAD IS WORK ZONE DETOUR ROUTE DETOUR ROUTE BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED	E PLAN: #####
								DEVICES (MMUTCD), 2011 EDITION PART 6, THE 2020 MICHIGAN LIGHTED ARROW PANEL (CAUTION MODE)	ET No. 50 OF 65

	SIGNING LE	GEND	Т		Г
SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)
END DETOUR	M4-8a	24"x18"	4	3	12
DETOUR	M4-9L	30"x24"	10	5	50
DETOUR	M4-9kL	30"x30"	5	6.25	31.25
DETOUR	M4-9R	30"x24"	6	5	30
DETOUR	M4-9kR	30"x30"	5	6.25	31.25
DETOUR	M4 -9j	30"x24"	6	5	30
ROAD CLOSED	R11-2(1)	48"x30"	4	10	40
ROAD CLOSED TO THRU TRAFFIC	R11-4	60"x30"	2	12.5	25
ROAD WORK AHEAD	W20-1	48"x48"	3	16	48
DETOUR	W20-2	48"x48"	5	16	80
ROAD CLOSED AHEAD	W20-3	48"x48"	3	16	48
ANN ST	SS-A	48"x12"	5	4	20
ANN ST	SS-B	36"x12"	22	3	66
ANN EXIT CLOSED USE ASHLEY ST	ss-c	36"x24"	0	6	0
FOURTH	SS-D	48"x12"	0	4	0
FOURTH	SS-E	36"x12"	0	3	0
FIFTH	SS-F	48"x12"	0	4	0
FIFTH	SS-G	36"x12"	0	3	0
MAIN ST	SS-J	48"x12"	0	4	0
MAN ST	SS-H	36"x12"	0	3	0
ASHLEY	SS-K	48"x12"	6	4	24
ASHLEY	SS-L	36"x12"	20	3	60



SIGN	SIGN CODE	SIZE	NUMBER REQUIRED	AREA (SFT)	TOTAL (SFT)
* END	M4-9i	12"x18"	4	1.5	6
DETOUR	M4-9b(L)	30"x24"	2	5	10
DETOUR	M4-9b(R)	30"x24"	2	5	10
*	M4-9gL	12"x18"	4	1.5	6
*	M4-9gR	12"x18"	4	1.5	6
*	M4 -9h	12"x24"	4	2	8
1 END	M4-9f	12"x18"	0	1.5	0
1	M4-9e	12"x18"	0	1.5	0
1	M4-9dR	12"x18"	0	1.5	0
1	M4-9dL	12"x18"	0	1.5	0
1 DETOUR	M4-9a(L)	30"x24"	0	5	0
1 DETOUR	M4-9a(R)	30"x24"	0	5	0
ROAD CLOSED	R11-2(1)	48"x30"	0	10	0
FORTH	SS-P	18"x12"	0	1.5	0
MANST	SS-Q	18"x12"	0	1.5	0
ASHEY	SS-R	18"x12"	10	1.5	15
FFTH	SS-T	18"x12"	0	1.5	0
ANN ST)	SS-V	18"x12"	10	1.5	15



5. ALL DETOUR SIGN SHALL BE COVERED ONCE THE ROAD IS

THEN THE DETOUR SIGNS SHALL BE COVERED WITH AN

6. ALL TRAFFIC CONTROL DEVICES AND THEIR USAGE SHALL

ACCEPTABLE SIGN COVER UNTIL REMOVED.

CONSTRUCTION, AND AS SPECIFIED HEREIN.

OPENED TO TRAFFIC. IF THE GROUND MOUNTED SIGNS CAN'T BE REMOVED FROM THE ROW WITHIN 1 WEEK OF THE ROAD OPENING

CONFORM TO MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL

DEVICES (MMUTCD), 2011 EDITION PART 6, THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR

WORK ZONE DETOUR ROUTE TEMPORARY SIGN

BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED - CMS

LIGHTED ARROW PANEL (CAUTION MODE) PORTABLE CHANGEABLE MESSAGE SIGN

CITY OF ANN ARBOR SHEET No. 52 OF 65

ANN STREET IMPROVEMENTS

- PUBLIC SERVICES - ENGINEERING

SIGN DETAILS

<u>SS-A</u>

SS-A; 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange; "ANN ST", D;

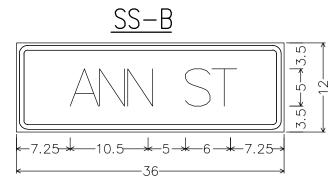
<u>SS-E</u>

<u>SS-J</u>

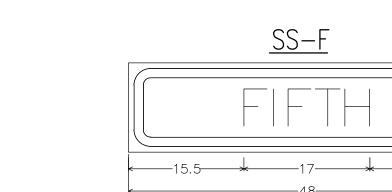
MAIN S

 $\leftarrow 10.25 + 15.25 + 5 + 7.25 + 10.25 \rightarrow$

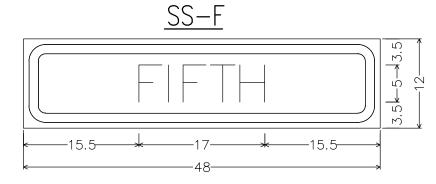
3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange; "MAIN ST", D;



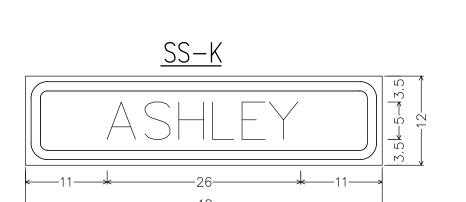
1.500" Radius, 0.625" Border, 0.375" Indent, Black on Orange; "ANN ST", C;



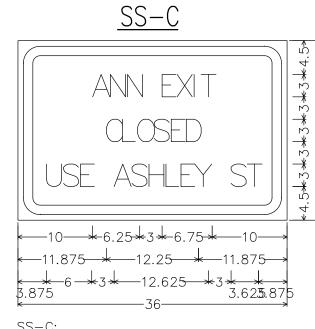
1.500" Radius, 0.625" Border, 0.375" Indent, Black on Orange; "FOURTH", C;



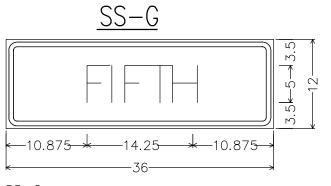
SS-F; 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange;



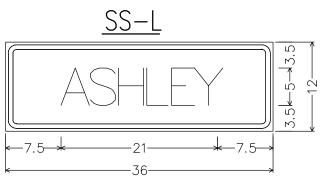
SS-K; 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange;



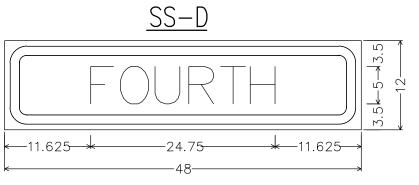
SS-C; 1.250" Border, 0.750" Indent, Black on Orange; "ANN EXIT", C; "CLOSED", C; "USE ASHLEY ST", C;



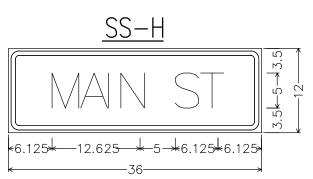
1.500" Radius, 0.625" Border, 0.375" Indent, Black on Orange; "FIFTH", C;



1.500" Radius, 0.625" Border, 0.375" Indent, Black on Orange;



SS-D; 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange; "FOURTH", D;



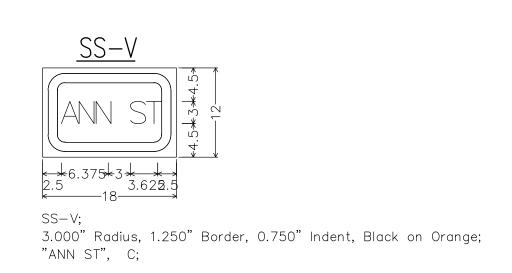
SS-H; 1.500" Radius, 0.625" Border, 0.375" Indent, Black on Orange; "MAIN ST", C;

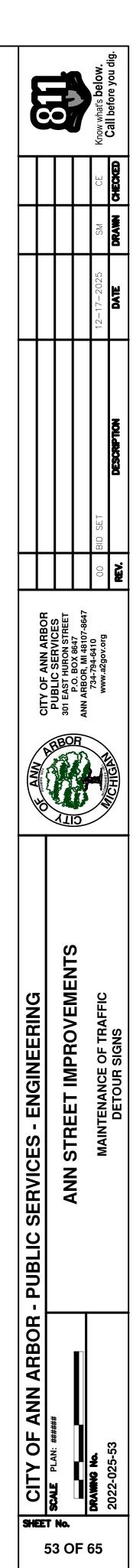


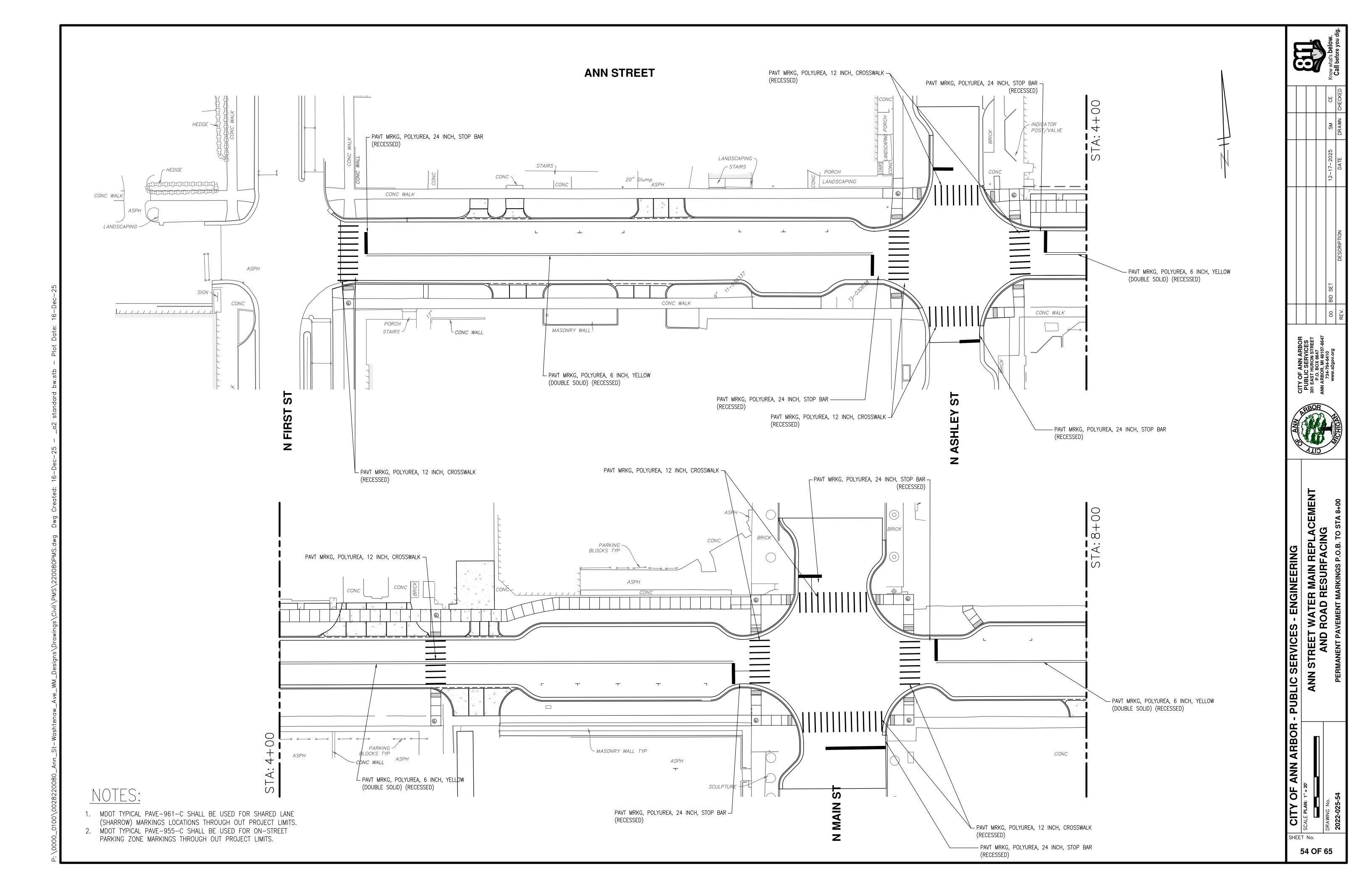
SS-Q; 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange; "FOURTH", C 75% spacing; "MAIN ST", C 75% spacing;

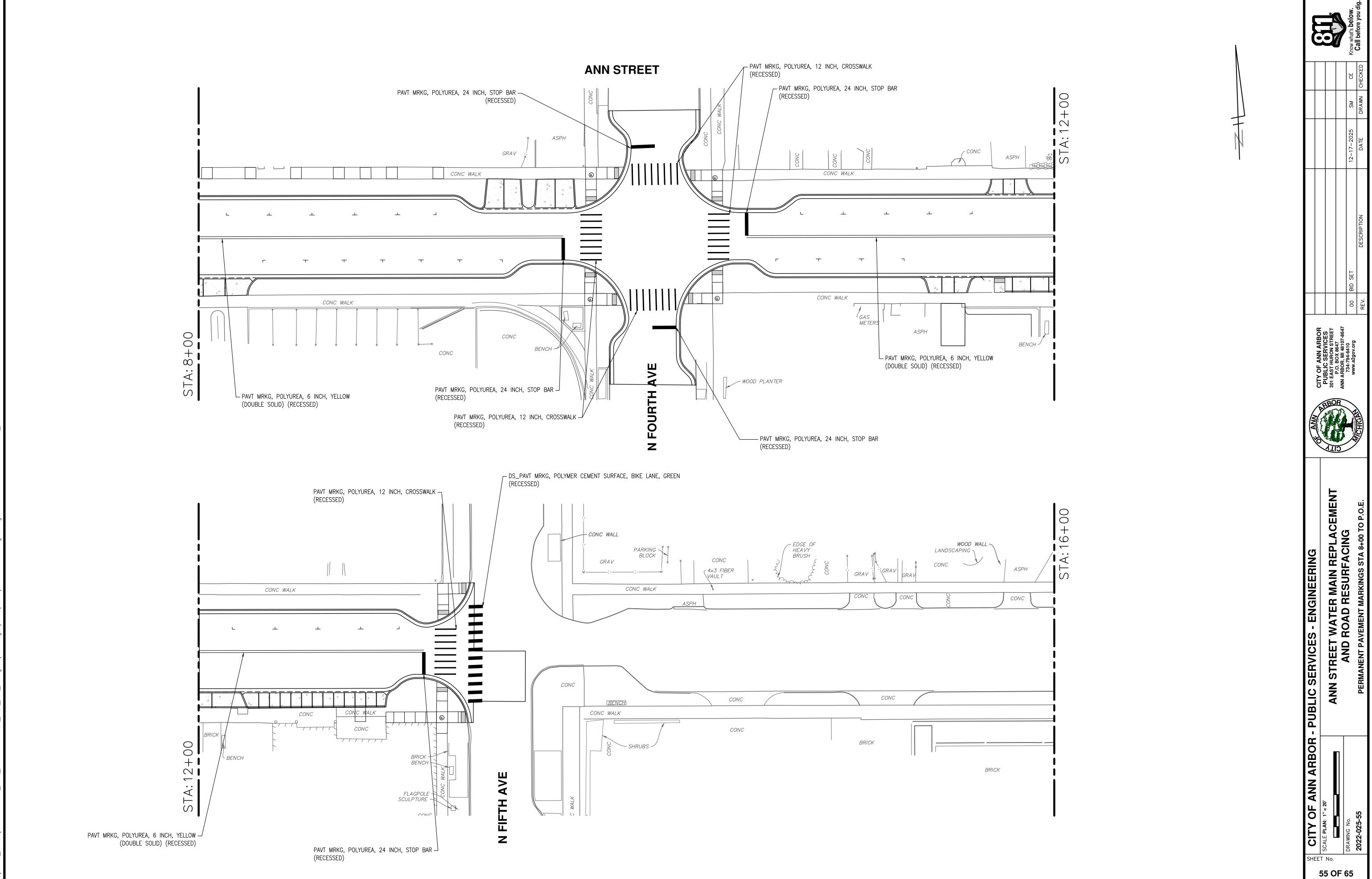


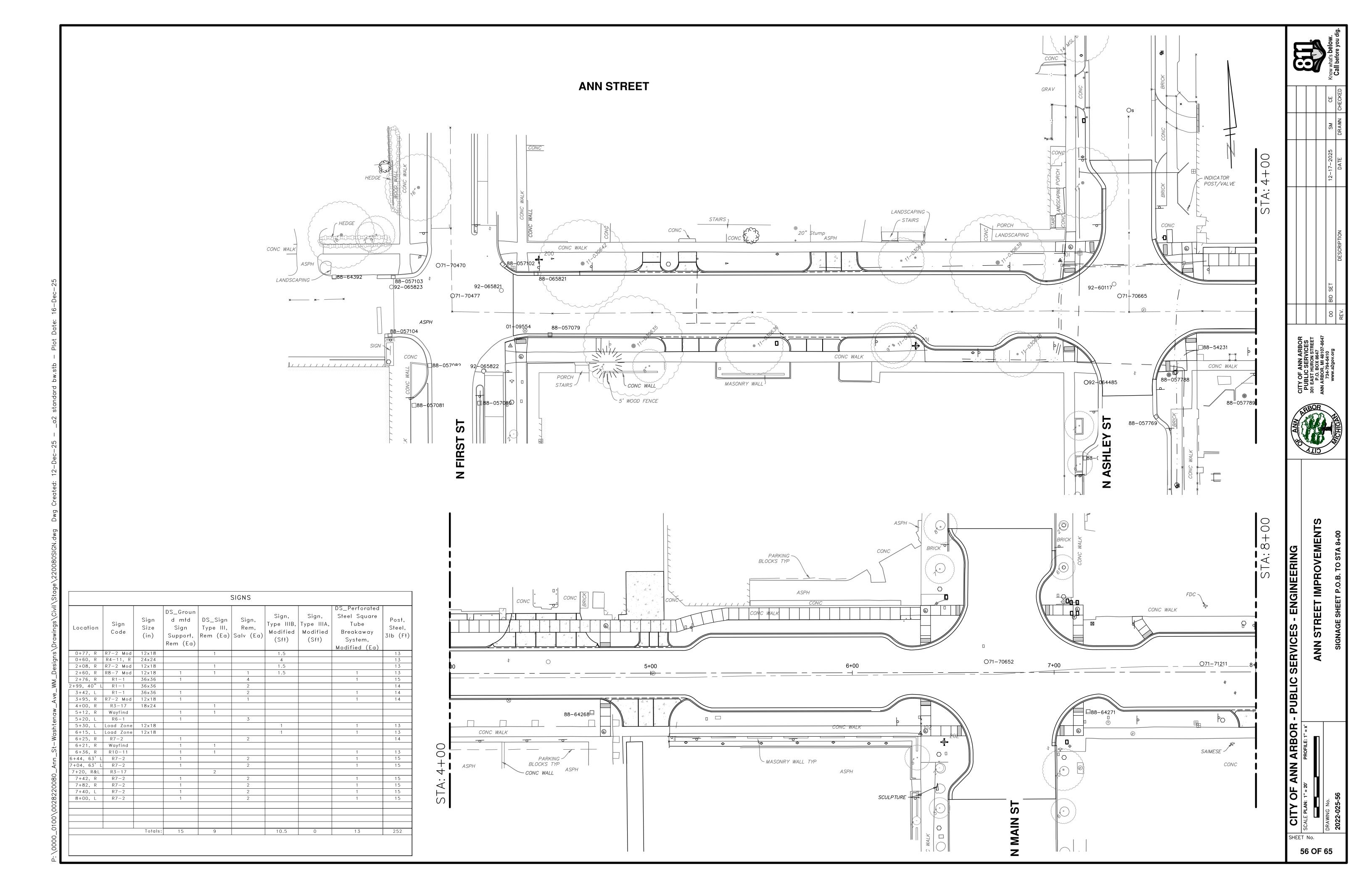
3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange 3.000" Radius, 1.250" Border, 0.750" Indent, Black on Orange; "ASHLEY", C 75% spacing; "FIFTH", C; "ASHLEY", C 75% spacing;

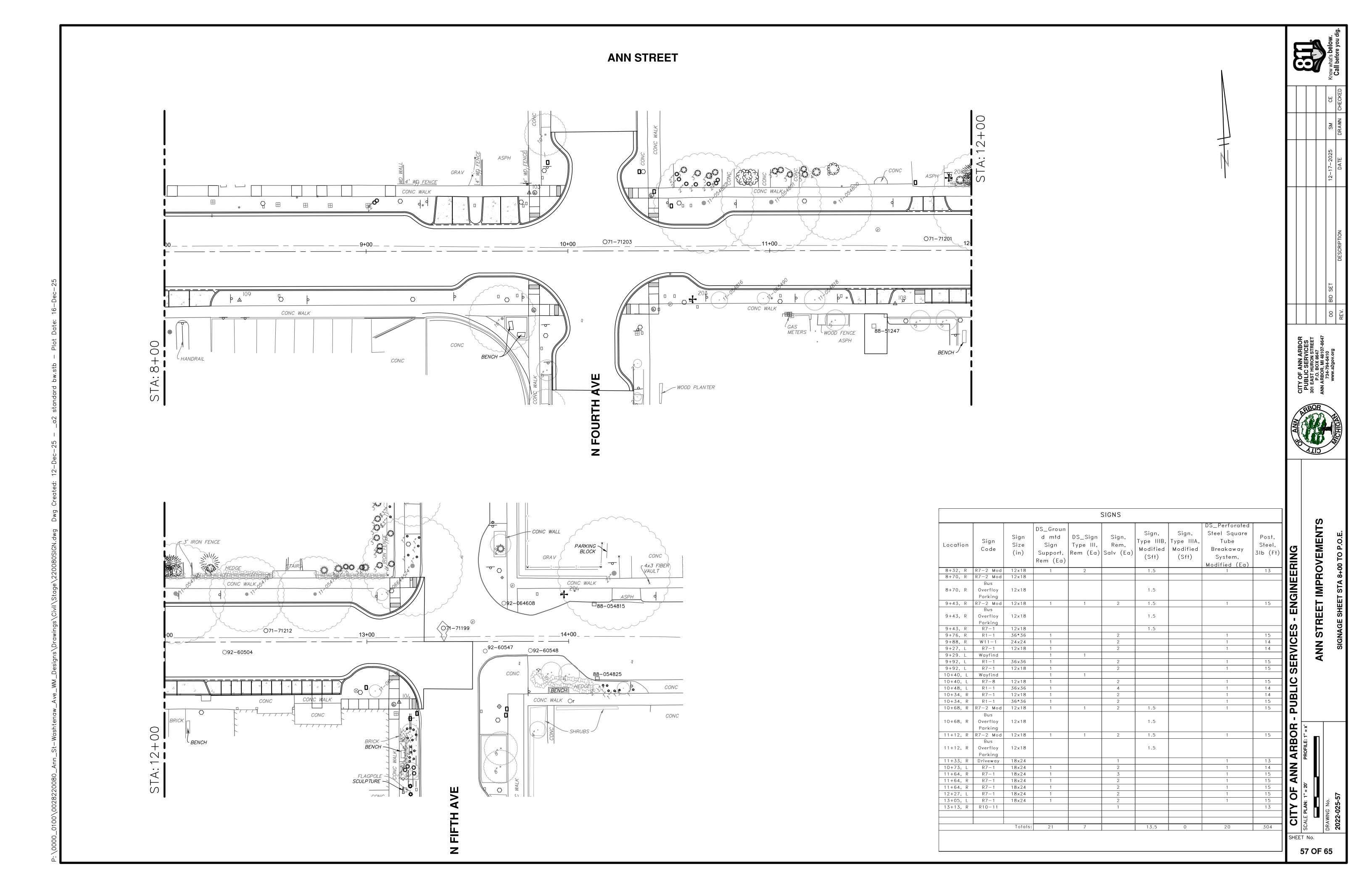


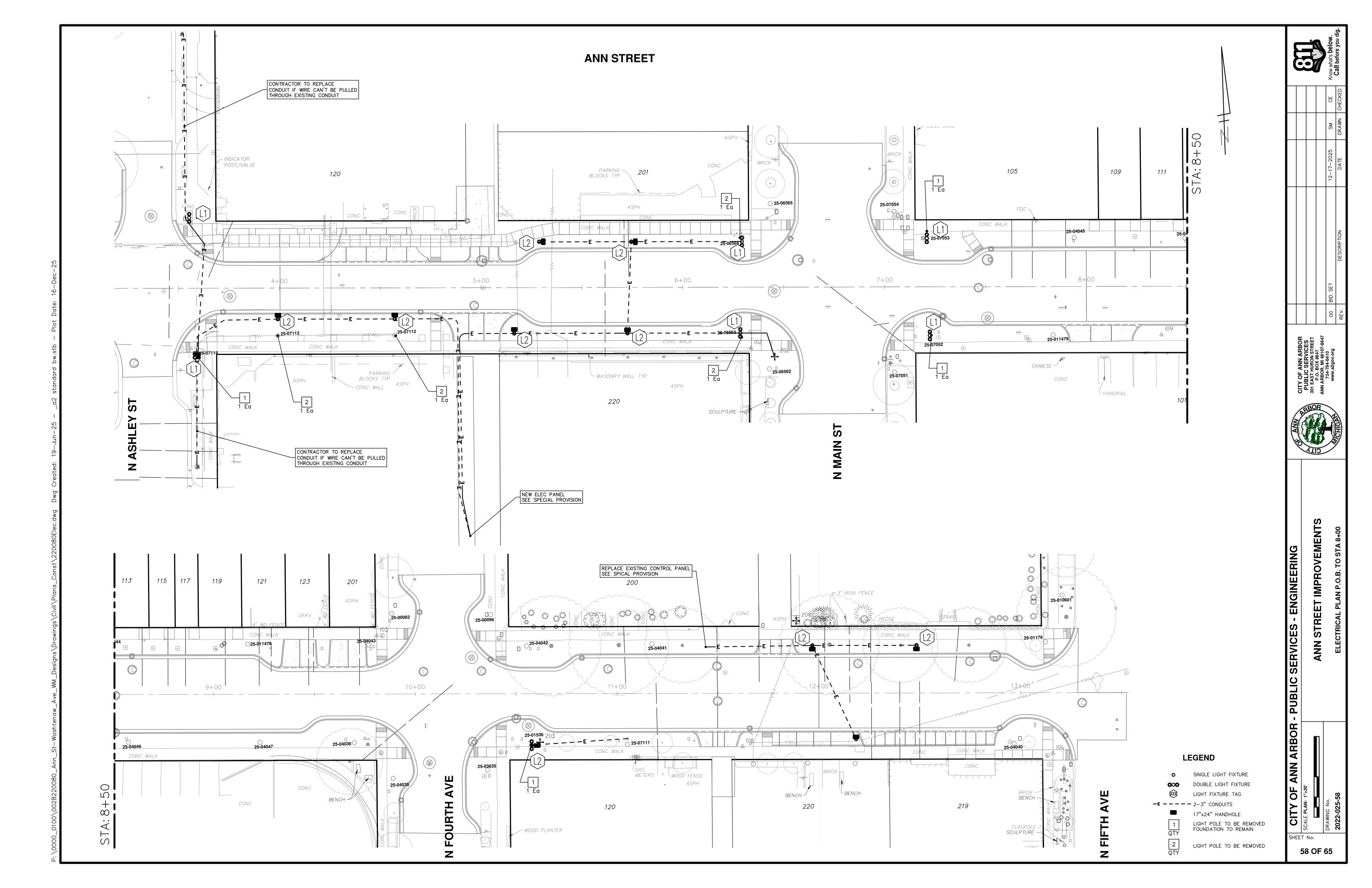


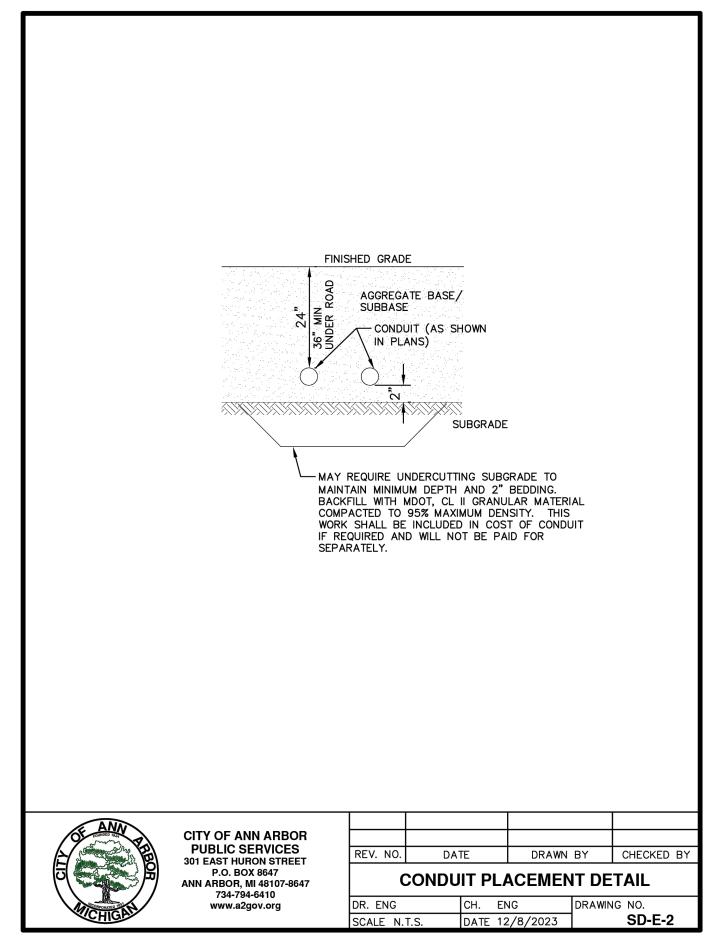


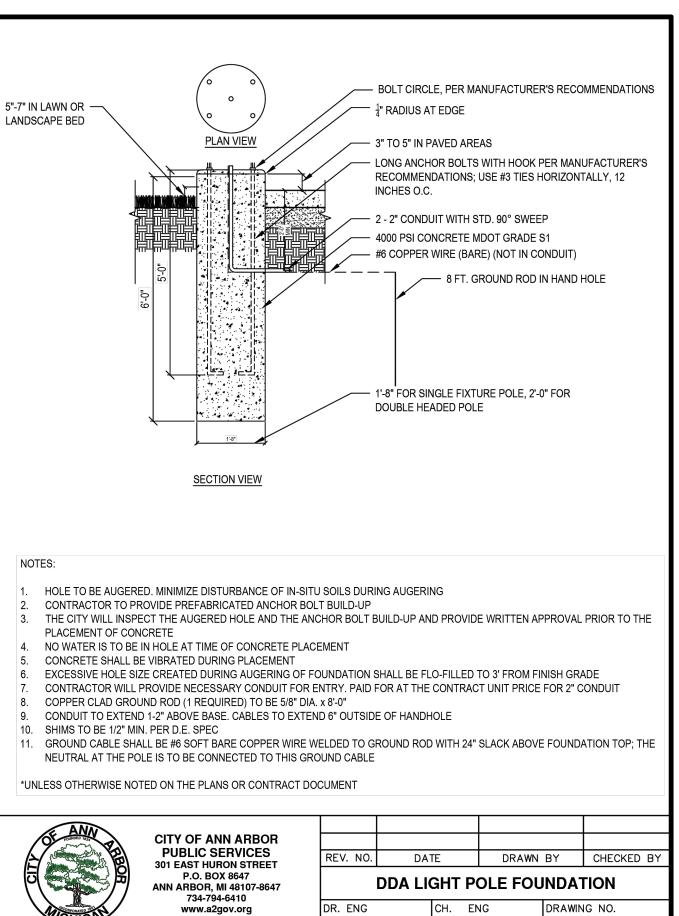




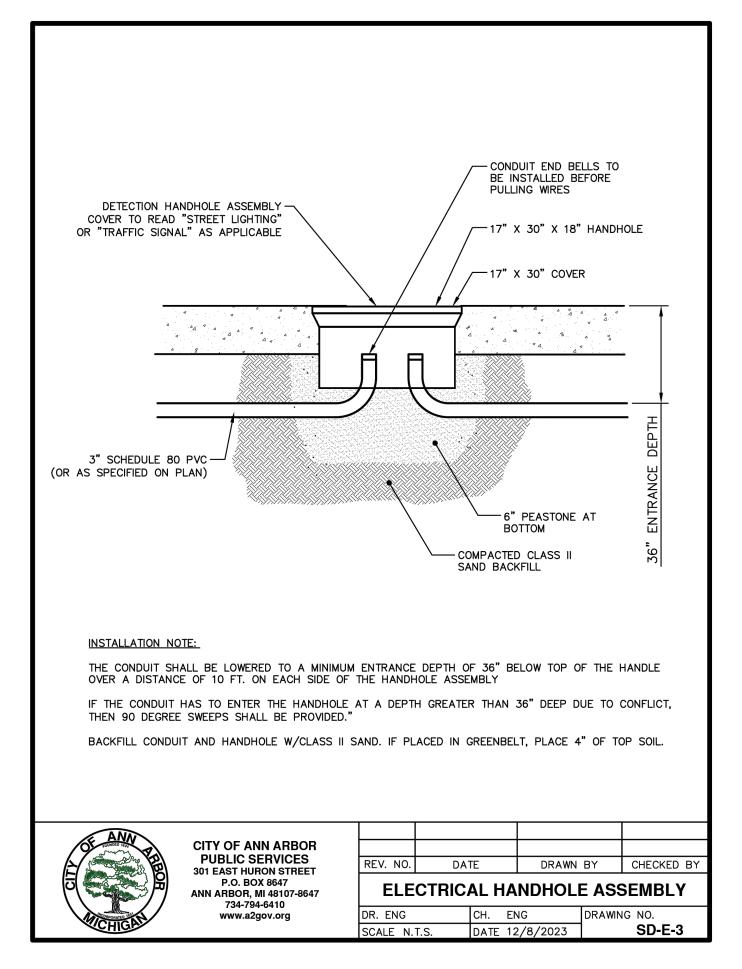


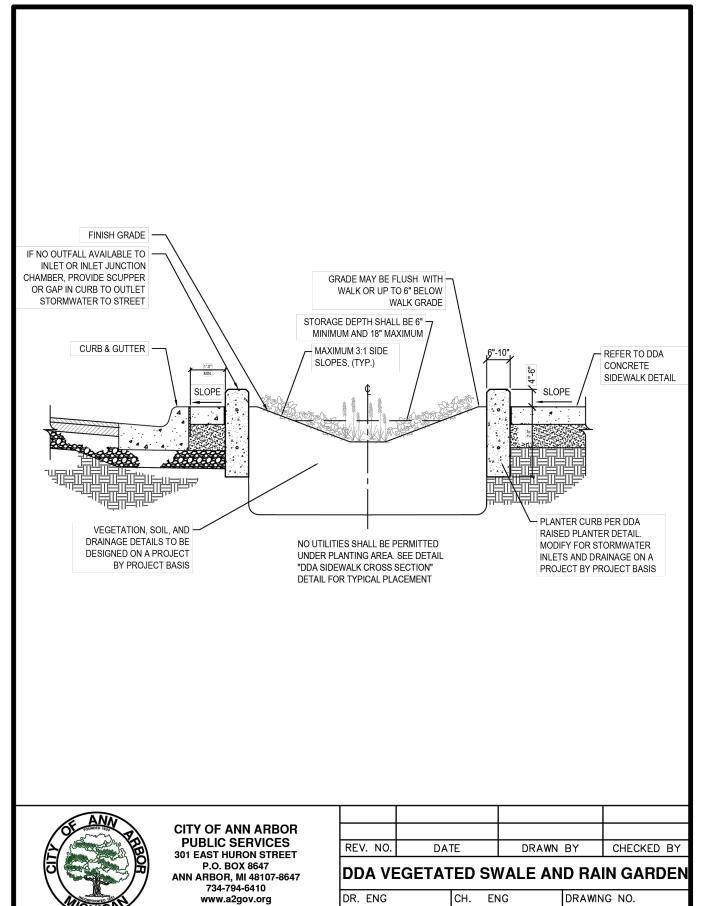






SCALE N.T.S. DATE 12/8/2023 SD-DDA-17





SCALE N.T.S. DATE 12/8/2023 SD-DDA-16

INSTALLATION OF STREETLIGHTS SPECIFICATIONS DESIGN, BUILDING AND CONSTRUCTION RESOURCE BOOK WILL MENTION OUR STREETLIGHT STANDARDS HTTPS: //WWW.A2GOV.ORG/DEPARTMENTS/ENGINEERING/PAGES/ ENGINEERING-AND-CONTRACTOR-RESOURCES.ASPX

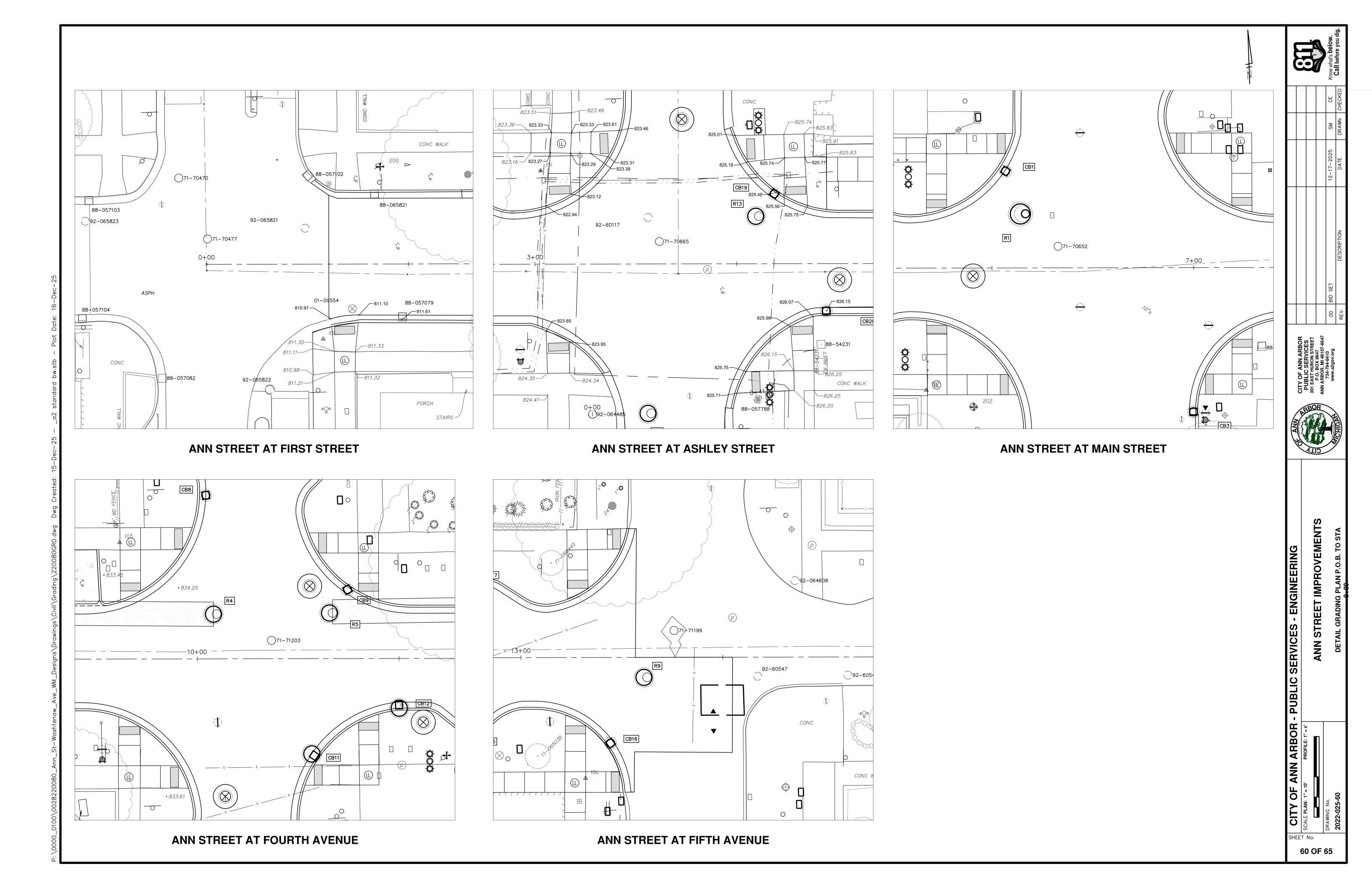
- 1. EACH STREETLIGHT POLE NEEDS A HANDHOLE
- 2. HANDHOLES SHOULD BE 17"X30"X18" POLYMERE CONCRETE TEIR 22
- ODOWNTOWN 13"X24"X18 IS ACCEPTABLE 3. EACH HANDHOLE NEEDS A 5/8", 8FT GROUND
- 4. (2) 3" CONDUIT FROM HANDHOLE TO HANDHOLE
- 5. (1) 2" CONDUIT FROM HANDHOLE TO POLE FOUNDATION
- 6. ALL ELECTRICAL CONNECTIONS IN HANDHOLES NEED ELECTRICAL PUTTY INSULATION (3M SCOTCHFILL) AND THEN RUBBER TAPED (WE DO ALLOW MULTI-TAP CONNECTORS INSULATED WITH SINGLE SIDED ENTRY WIRE - IN THAT CASE THEY DO NOT NEED TO BE ELECTRICAL PUTTY AND/OR TAPE)
- 7. EACH HANDHOLE TO POLE NEEDS #8 COPPER WIRE BARE FROM GROUND ROD (CONNECTED WITH GROUND ROD CLAMP) TO STREETLIGHT POLE GROUND LUG
- 8. EACH STREETLIGHT CIRCUIT #6 CABLE (6-1C 7STR BC RHH-RHW-XLP-USE-2) (WHITE, BLACK, OUP TO 10 LUMINAIRES PER CIRCUIT
- 10. EACH GFCI CIRCUIT #6 CABLE (6-1C 7STR BC RHH-RHW-XLP-USE-2) (WHITE, RED, GREEN) OUP TO 3 GFCIS PER CIRCUIT
- 11. ELECTRICAL CONNECTIONS IN STREETLIGHT POLE HANDHOLES SHOULD BE MADE WITH ALUMINUM TERMINAL BLOCKS (CONNECTOR CABLE TAP ALUM #8-1/0) AND COVERS (COVER PLASTISOL F/UTILCO SLC4-0) (WE DO ALLOW MULTI-TAP CONNECTORS INSULATED WITH SINGLE SIDED ENTRY WIRE - IN THAT CASE THEY DO NO NEED TO BE ELECTRICAL PUTTY AND/OR TAPE)
- 12. FROM BOTTOM OF POLE CONNECTION TO GFCI, #12 CABLE (THHN, RED, WHITE, GREEN FOR GFI) NEEDS TO BE USED
- ODO NOT FUSE GFI CIRCUITS 13. FROM BOTTOM OF POLE TO LUMINAIRE, #12 CABLE (THHN, BLACK, WHITE, GREEN FOR LUMINAIRE) NEEDS TO BE USED EACH STREETLIGHT SHOULD BE FUSED IN THE POLE HANDHOLE WITH A FUSE HOLDER AND BOOTS KIT (BUSS HEB-AA) AND A 5A FUSE (BUSFNM-5).



ENGINEERING STR

ARBOR

SHEET No.



NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- 1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF—SITE AREAS, ROADWAYS OR WATERWAYS.
- 5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM—TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- 7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- 8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF

WATER TRUCKS AND/OR OTHER METHODS APPROVED BY THE ENGINEER.

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- 11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM

- REQUIREMENTS:

 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL FINE GRADING.

- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- 1.9. CLEAN OUT STORM SEWER SYSTEMS.
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.11. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$35,000.

ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:
• EXCAVATION = 400 CY, FILL = 250 CY

• EXCAVATION = 400 CT, FILE = 200 CT

ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN:

- BbB BLOUNT LOAM 2% TO 6% SLOPES.
 CpA CONOVER BROOKSTON LOAMS 0% TO 2% SLOPES
- Pe PEWAMO CLAY LOAM 0% TO 2% SLOPES
- StB ST. CLAIR CLAY LOAM, 2% TO 6% SLOPES
- WaA WAWASEE LAOM, 2% TO 6% SLOPES

IMPERVIOUS PROJECT AREA

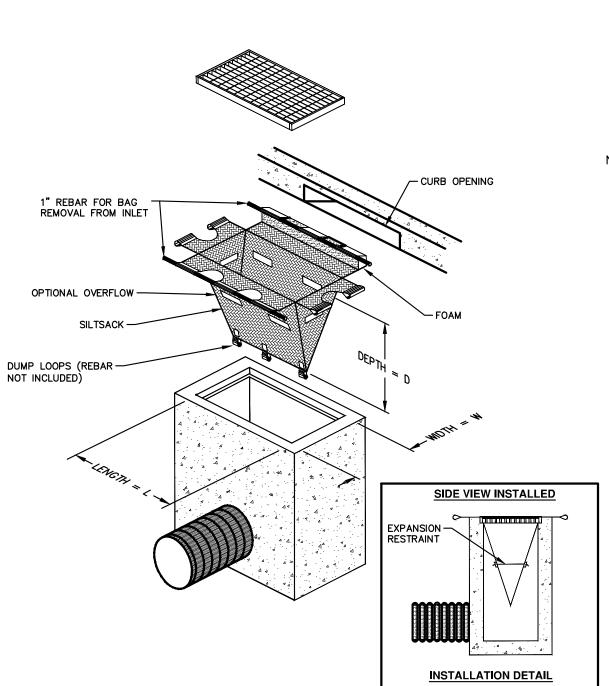
27,240 ft2 - WALK = 0.625 AC

16,700 ft2 - PATH = 0.383 AC

TOTAL AREA OF PROPOSED DISTURBANCE = 3.75 AC

1.05 AC - XXX ROAD

2.70 AC - XXXXX ROAD



SILTSACK DETAIL

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES REQUIRED VALUE TEST METHOD

GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
JV RESISTANCE	ASTM D-4355	80%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
LOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1
	2	3.33 323 .

HI-FLOW SILTSACK

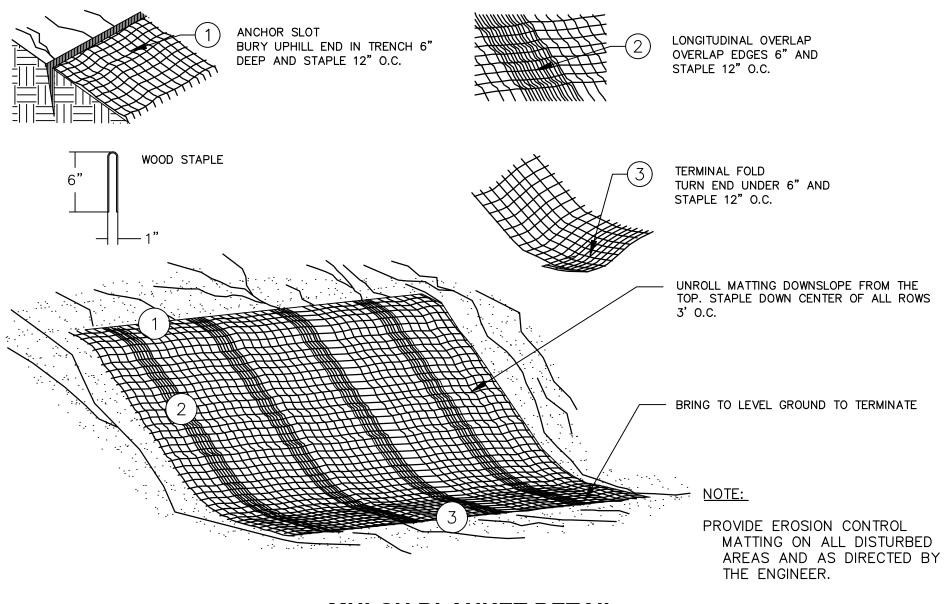
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES REQUIRED VALU	JE TEST METHOD
GRAB TENSILE STRENGTH GRAB TENSILE ELONGATION PUNCTURE MULLEN BURST TRAPEZOID TEAR UV RESISTANCE APPARENT OPENING SIZE FLOW RATE PERMITTIVITY ASTM D-4632 ASTM D-4833 ASTM D-4753 ASTM D-4535 ASTM D-4751 ASTM D-4751 ASTM D-4491	20% 135 LBS 420 PSI 45 LBS 90% 20 US SIEVE 200 GAL/MIN/SQ FT

OIL-ABSORBANT SILTSACK

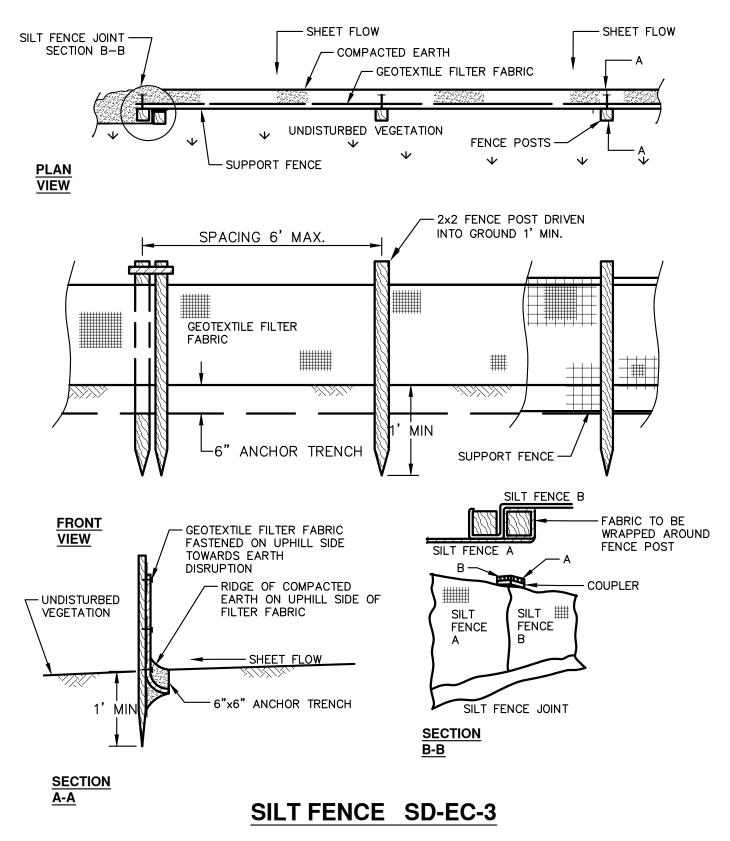
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS THAT THE CONTRACTOR INSTALL THE REBAR AS SHOWN IN THIS DETAIL TO PROVIDE A FULLY FUNCTIONING UNIT. ALL COSTS ASSOCIATED WITH FURNISHING, CLEANING AS MANY TIMES AS REQUIRED, DISPOSAL OF SEDIMENT, AND REMOVING THE INLET FILTER WHEN NO LONGER NEEDED IS INCLUDED IN THE ITEM OF WORK AND WILL NOT BE PAID FOR SEPARATELY.



MULCH BLANKET DETAIL

APPLIES TO ALL AREAS TO BE PERMANENTLY RESTORED WITH GRASS. SEE LANDSCAPE PLANS FOR MORE DETAILS.



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CITY OF ANN ARBO

SHEET No.

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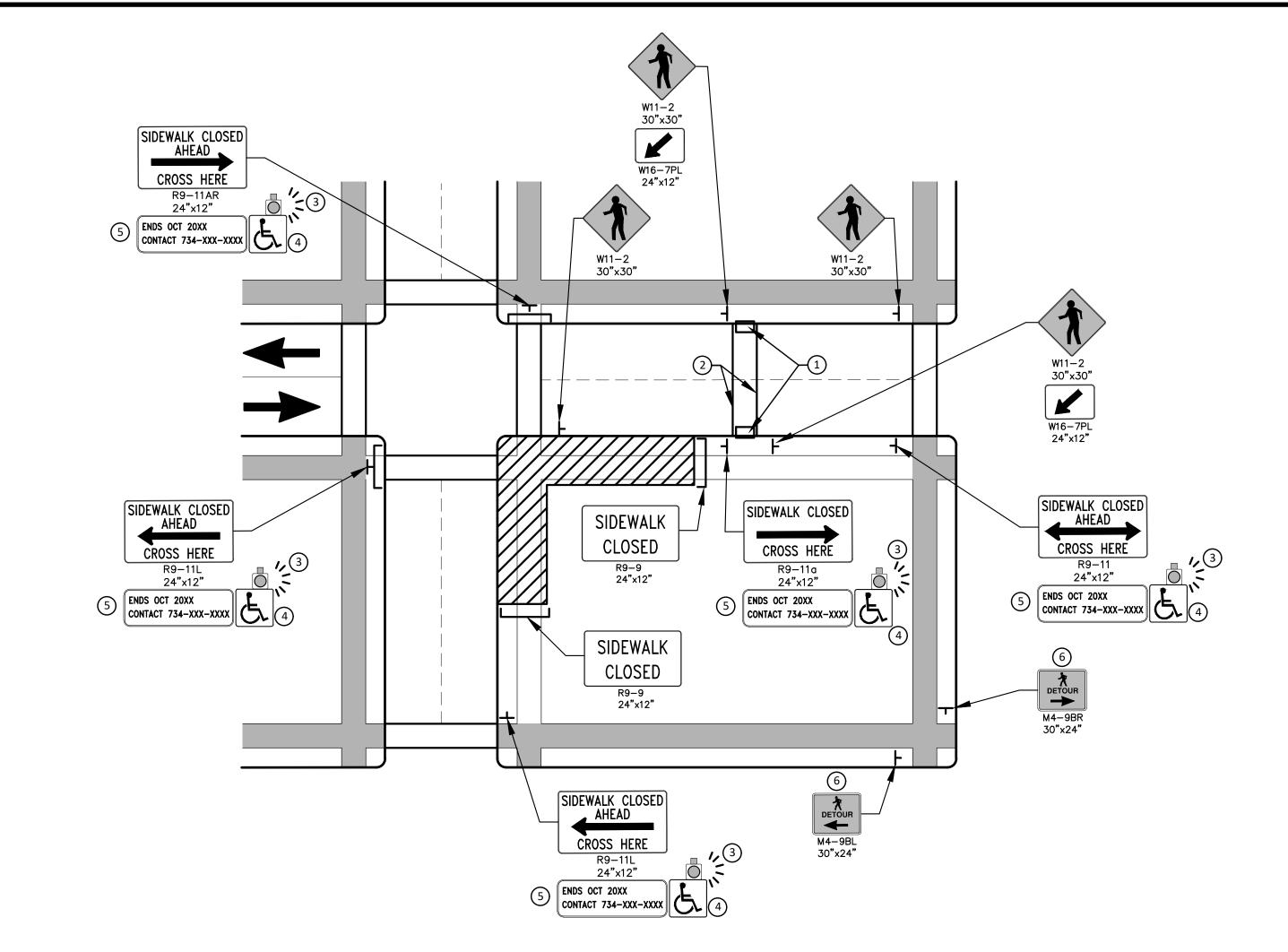
IMPROVEM

STREET

ENGINEERING

ERVICES

PEDESTRIAN DETOUR USING OPPOSITE SIDE OF STREET



OTHER SIDE OF STREET DETOUR OR DETOUR WITH TRAILBLAZING SIGNS (FOR CORNER SIDEWALK CLOSURE WITH OPTIONAL TEMPORARY CROSSWALK)

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, THE CONTRACTOR SHALL PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED BY THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

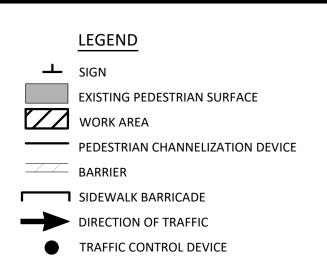
- 1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
- 2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
- 3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

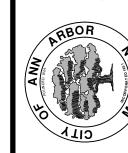
SPECIFIC NOTES

- 1 TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
- (2) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- (3) AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHALL BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
- (4) THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHALL BE POSTED AND AN ALTERNATE ROUTE SHALL BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
- (5) TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHALL INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
- (6) PEDESTRIAN DETOUR TRAILBLAZING SIGNS SHALL BE USED IF THE PEDESTRIAN DETOUR IS IN A LOCATION OTHER THAN ACROSS THE STREET FROM THE SIDEWALK CLOSURE.

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

- 1. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MMUTCD, PART 6.
- 2. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- 3. IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE SHALL BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
- 4. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF NCHRP 350 AND THE MMUTCD SHALL BE USED.
- 5. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- 6. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TPAR HAVE BEEN PROVIDED.
- 7. WHEN DIRECTED BY THE ENGINEER, OR STATED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL BY THE ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC. NO WORK SHALL BE ALLOWED TO BEGIN UNTIL THIS PLAN IS APPROVED BY THE ENGINEER IN WRITING.
- 8. PROVISION OF THE TPAR AND ALL OF ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO, CREATION OF THE TEMPORARY PEDESTRIAN CONTROL PLAN, SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "MINOR TRAFFIC CONTROL."





IMPROVEMENT

STREET ANN

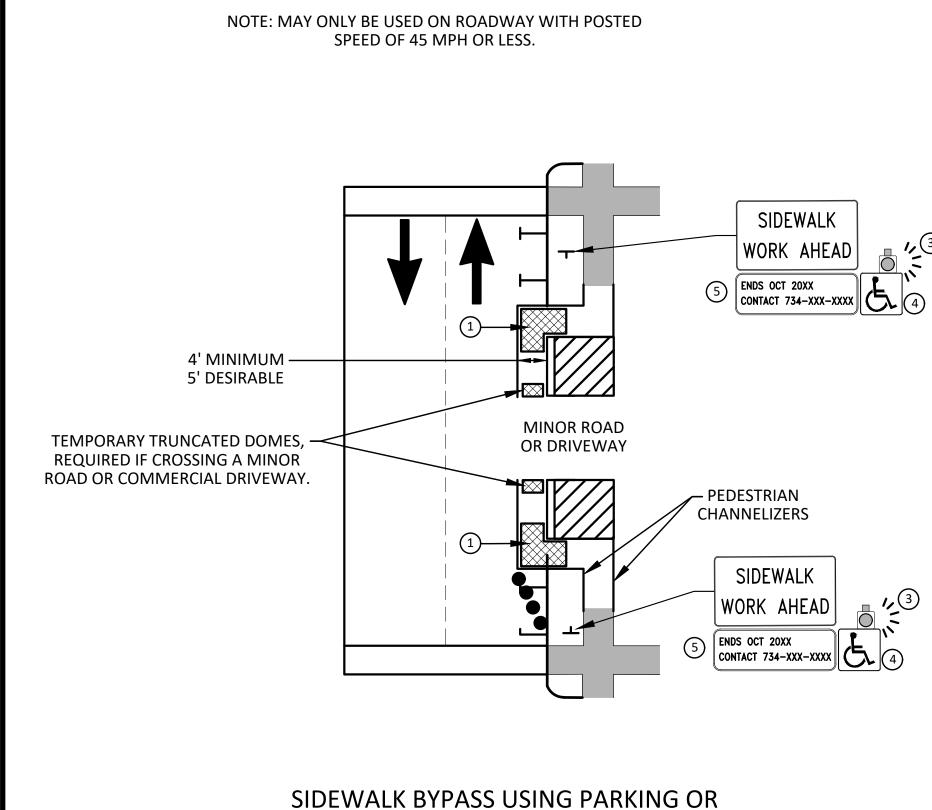
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BYPASS ON ADJACENT AVAILABLE

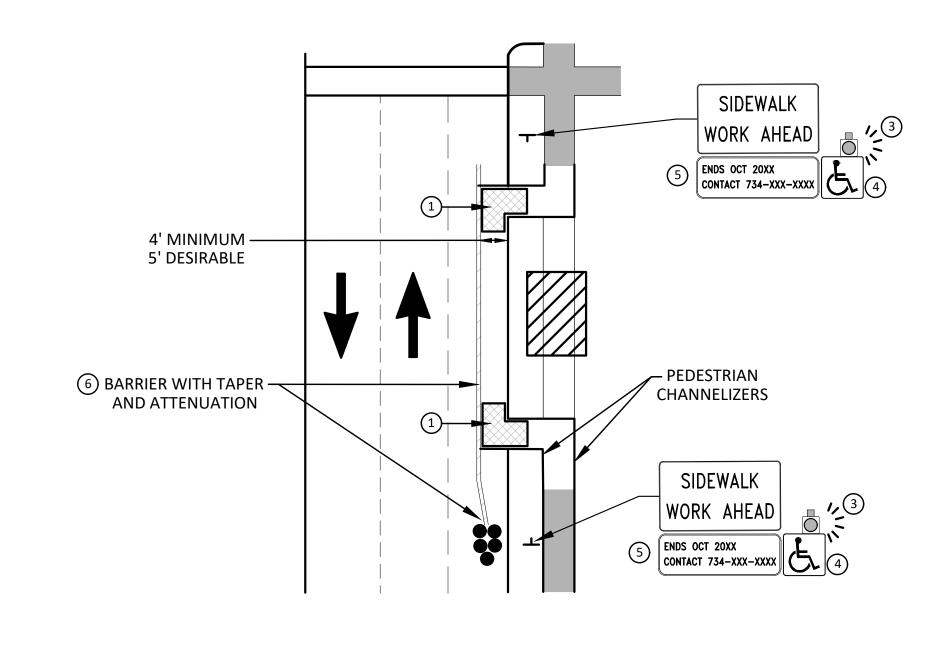
RIGHT OF WAY

BYPASS TYPE A



SHOULDER ON LOW SPEED ROADWAY

BYPASS TYPE B



SIDEWALK BYPASS USING SHOULDER OR PARKING LANE ON HIGH SPEED ROADWAY

BYPASS TYPE C

GENERAL NOTES

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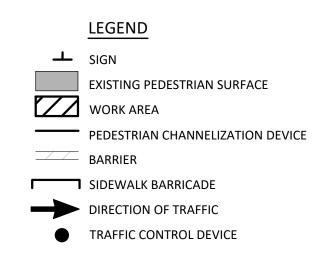
WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF A TRAFFIC CONTROL DEVICE IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

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- 2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
- 3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

SPECIFIC NOTES

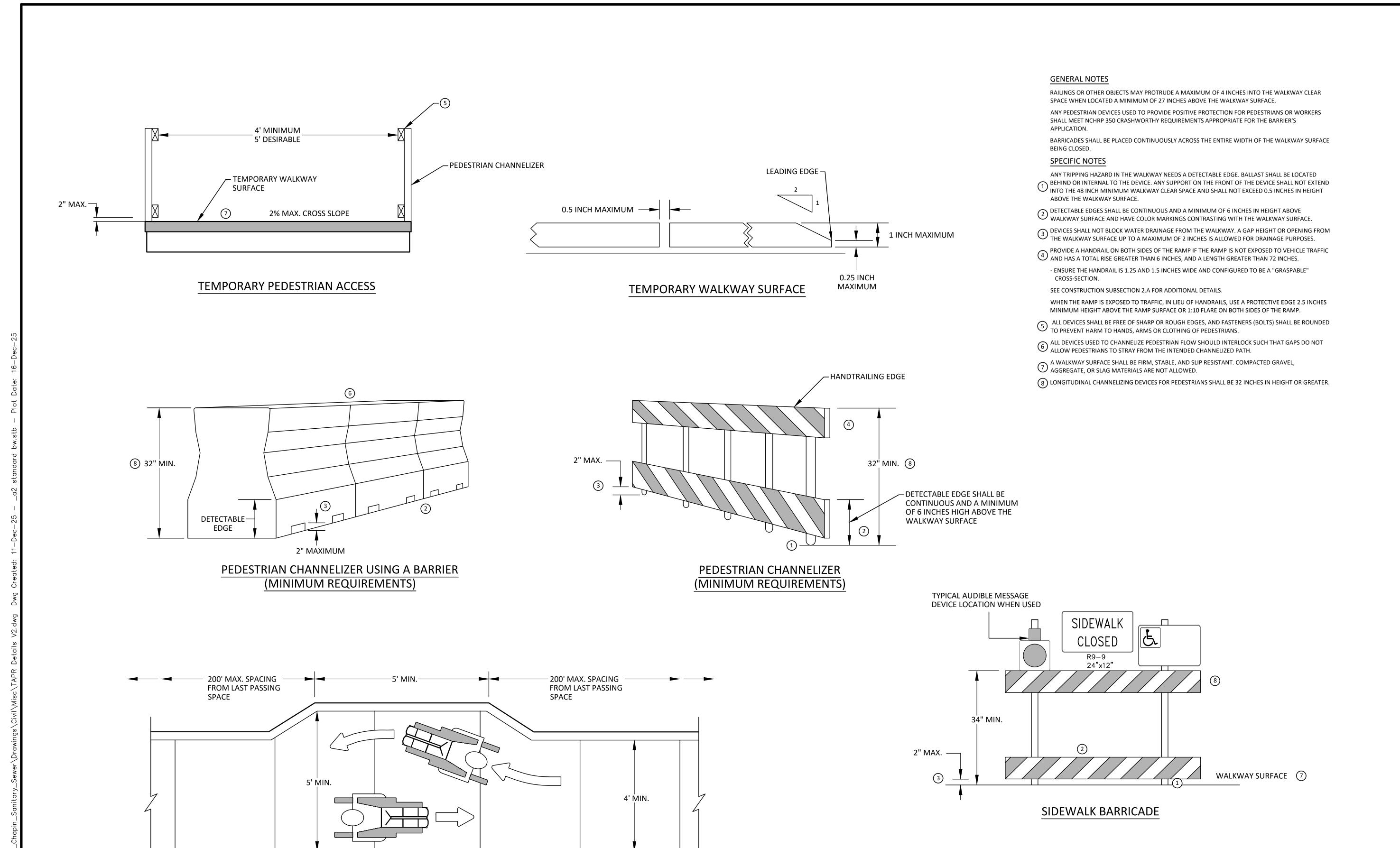
- 1 TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
- (2) 5 DEVICE TAPER 25 FEET LONG, RECOMMENDED WHEN THE CLOSED AREA WAS USED AS AN INTERMITTENT TRAFFIC LANE OR BYPASS LANE. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- (3) AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHOULD BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
- 4) THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHALL BE POSTED AND AN ALTERNATE ROUTE SHALL BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
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- (6) SEE MMUTCD FOR GUIDANCE ON PLACEMENT AND USAGE OF BARRIER.



S STREET IMPROVEMENT ANN **ANN ARBOR**

ERVICES .

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NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL

			<u>x</u>	
	ЭЭ	ЭЭ	ЭЭ	DRAWN CHECKED
	WS	WS	WS	DRAWN
	3-21-2025	1-22-2025	12-19-2024	DATE
	CONSTRUCTION SET	ADDENDUM #2	BID SET	DESCRIPTION
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ANN STREET IMPROVEMENTS

OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING