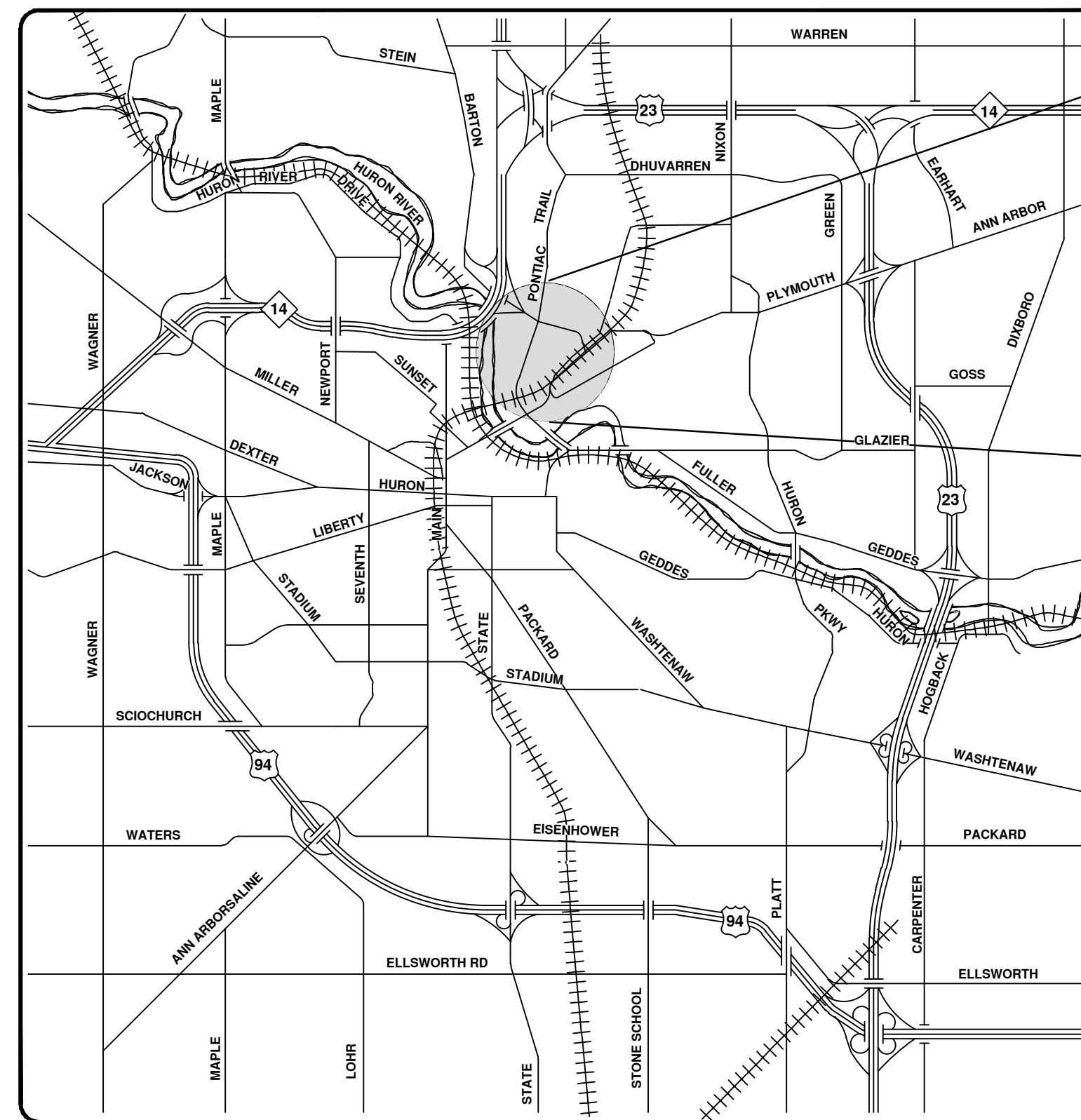
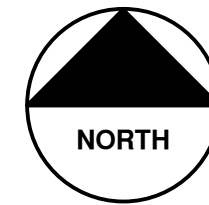




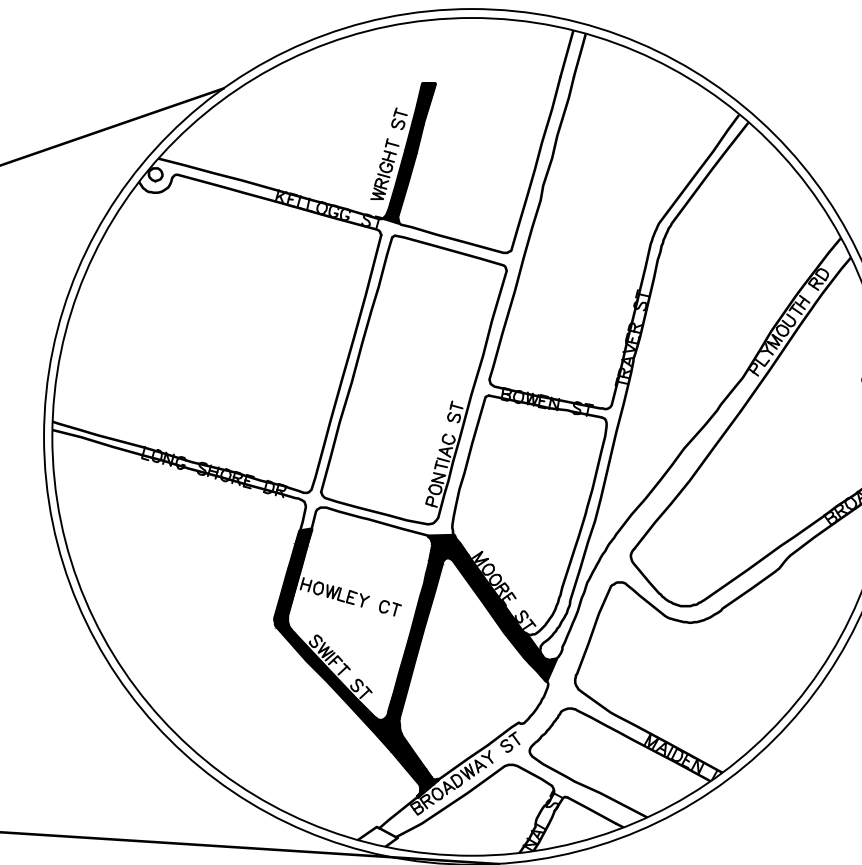
CITY OF ANN ARBOR ENGINEERING

PONTIAC, SWIFT, MOORE, & WRIGHT INFRASTRUCTURE IMPROVEMENTS

BID No. 23-22, FILE No. 2022-032



VICINITY MAP



NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

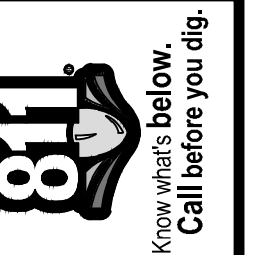
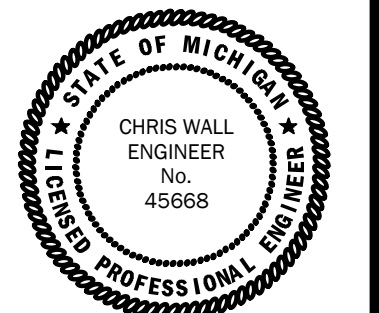
THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS. ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.

PREPARED UNDER THE SUPERVISION OF

Chris Wall

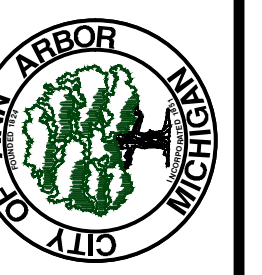
CHRIS WALL, P.E.
MI LICENSE No. 45668
PROJECT MANAGER

03/28/2023
DATE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCM/CEW

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
www.a2gov.org



CITY OF ANN ARBOR - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
COVER

SCALE
DRAWING No. 2022-032-1
SHEET No. 1 OF 52

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING 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
* NO COST TO CONTRACTOR	

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.	
PERMIT	ISSUING AUTHORITY
EGLE WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

CONTACT INFORMATION		
PUBLIC UTILITIES	OWNER	CONTACT
WATER (DAN WOODEN)	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
SANITARY (TRAVIS CONLEY)		
STORM (MARK SIRLS)		
FORESTRY (NICK JACOB)		
SIGNS SIGNALS STREET LIGHTS (MARC MORENO)		(734) 794-6361
FIBER OPTIC (IT)		(734) 794-6550
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE. YPSILANTI TOWNSHIP, MI 48198	DARRYL ELLINGTON (313) 995-6078 ZACH WHITE (313) 405-6024
GAS	CONSUMERS ENERGY 1000 GRAND OAKS DR. HOWELL, MI 48843	BOB MCLACHLAN (517) 242-7878
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	STEVEN ALLSHOUSE (734) 996-5381
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-8016
FIBER OPTIC	WINDSTREAM 1295 S LINBDEN ROAD, SUITE B FLINT, MI	GREG SERICH (810) 244-3500
FIBER OPTIC	LUMEN 19675 W 10 MILE ROAD SOUTHFIELD, MI 48075	DAVE HUCKFELDT (517) 812-2592
FIBER OPTIC	FIBERLINK, INC PO BOX 701 LAPEER, MI 48446	TINA SNOBLEN (810) 667-2891 EXT 307
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188
UNIVERSITY OF MICHIGAN UTILITIES	UNIVERSITY OF MICHIGAN 1201 KIPKE DRIVE, ROOM 1080 ANN ARBOR, MI 48109	TERRY RAMSEY (734) 647-2031

EXISTING LEGEND

EX = EXISTING

- ⊕ FIRE HYDRANT
- I GATE VALVE IN BOX
- ⊗ GATE VALVE IN WELL
- ⊙ STOP BOX
- ⊠ WATER VAULT
- ⊙ WELL
- CATCH BASIN (SQ)
- ⊙ CATCH BASIN (RD)
- ⊙ STORM MANHOLE
- NON-CURB CATCH BASIN (SQ)
-) END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- POST
- ⊕ PEDESTRIAN SIGNAL
- ⊔ SIGN
- ⊔ HAND HOLE
- ⊕ ORNAMENTAL LIGHT
- ✱ FLOOD LIGHT
- ⊙ UNKNOWN MANHOLE
- ⊙ TELEPHONE MANHOLE
- ⊠ TELEPHONE RISER
- ⊙ GAS VALVE
- ⊙ GAS VENT
- ⊠ GAS BOX
- ⊠ ELECTRICAL RISER
- ⊠ TRANSFORMER
- ⊕ UTILITY POLE
- LAMP POLE
- ▷ GUY ANCHOR
- GUY POLE
- ⊙ MONITORING WELL
- ⊠ MAILBOX
- ⊙ SOIL BORING
- △ TRAVERSE POINT
- ⊕ BENCH MARK
- IRON PIPE
- ⊠ MON BOX

--- W --- WATER MAIN
 - - - - - WATER MAIN ABANDONED
 --- R --- STORM SEWER
 - - - - - STORM SEWER ABANDONED
 --- S --- SANITARY SEWER
 - - - - - SANITARY SEWER ABANDONED
 --- G --- GAS MAIN
 - - - - - GAS MAIN (DEAD)
 --- g (Dead) --- ELECTRICAL OVER HEAD
 --- E --- ELECTRICAL UNDER GROUND
 --- e duct bank --- ELECTRICAL DUCT BANK
 --- oht --- TELEPHONE OVER HEAD
 --- t --- TELEPHONE UNDER GROUND
 --- t duct bank --- TELEPHONE DUCT BANK
 --- ohtv --- CABLE TV OVER HEAD
 --- tv --- CABLE TV UNDER GROUND
 --- fo --- FIBER OPTIC
 --- fo duct bank --- FIBER OPTIC DUCT BANK
 --- BOUNDARY
 --- BUILDING
 --- CENTERLINE OF DITCH
 --- CENTERLINE/CROWN OF ROAD
 --- 800 --- CONTOUR MAJOR
 --- 799 --- CONTOUR MINOR
 --- EDGE OF WATER
 --- FLOODPLAIN
 --- // // // --- FENCE
 --- : : : --- GRAVEL
 --- : : : --- GUARDRAIL
 --- : : : --- STONE WALL
 --- R.O.W.
 --- TREELINE
 --- WETLAND
 --- EDGE OF BRUSH
 --- HEDGE
 ○ TREE (DECIDUOUS)
 * TREE (CONIFEROUS)
 ○ SHRUB (DECIDUOUS)
 ○ STUMP
 ○ TREE TO REMAIN & PROTECT (DECIDUOUS)
 CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10
 * TREE TO REMAIN & PROTECT (CONIFEROUS)
 CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10

PROPOSED LEGEND

PROP = PROPOSED

- ⊕ HYDRANT (PLAN)
- ⊗ WATER GATE WELL
- ▼ REDUCER
- ⊕ WATER GATE VALVE
- ⊙ WATER STOP BOX
- ⊠ WATER VAULT
- INLET
- ⊕ DOUBLE INLET
- ⊕ INLET JUNCTION CHAMBER
- ROUND CATCH BASIN
- STORM MANHOLE
- ⊕ DRAIN ARROW
- ⊕ FLARED END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- BARREL
- ▼ SIGN
- PUSH BUTTON
- HAND HOLE

--- W --- WATER MAIN
 --- R --- STORM SEWER
 --- S --- SANITARY SEWER
 --- FO --- FIBER OPTIC
 --- E --- ELECTRICAL
 --- CENTERLINE OF DITCH
 --- CENTERLINE OF ROAD
 --- FENCE
 --- GRAVEL
 --- SILT FENCE
 --- PROTECTIVE FENCE
 --- GUARDRAIL
 --- LOT/UNIT
 --- CURB
 --- TEMPORARY GRADING PERMIT
 --- 800 --- CONTOUR MAJOR
 --- 799 --- CONTOUR MINOR
 --- WATER EASEMENT
 --- STORM EASEMENT
 --- SANITARY EASEMENT
 --- R.O.W.
 --- LIMITS OF CONSTRUCTION
 --- LIMIT OF GRADING
 --- STONE WALL
 ■ DETECTABLE WARNING
 ■ ASPHALT
 ■ CONCRETE
 ■ SIDEWALK
 ○ TREE (DECIDUOUS)
 * TREE (CONIFEROUS)
 ○ TREE TO BE REMOVED (DECIDUOUS)
 * TREE TO BE REMOVED (CONIFEROUS)
 ○ STUMP TO BE REMOVED

811 Know what's below. Call before you dig.

ISSUED FOR BID	03/28/2023	DATE	CGT/BLA	VCM/CEW	CHECKED	DRAWN	REV.	DESCRIPTION	

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 PONTIAC, SWIFT, MOORE, &
 WRIGHT INFRASTRUCTURE
 IMPROVEMENTS
 LEGEND

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106
 734.794.4410
 www.aagov.org

SCALE: NTS
 DRAWING No. 2022-032-3
 SHEET No. 3 OF 52

CONSTRUCTION NOTES:

- 1. 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 TO ALL PROPERTIES. 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 CONTRACTOR SHALL MAINTAIN REASONABLE ACCESS FOR RESIDENTS AND BUSINESSES TO ACCESS THEIR HOMES AND BUSINESSES AT ALL TIMES. A SAFE ACCESS PATH SHALL BE IDENTIFIED ALONG WITH VEHICLE PARKING IN THE EVENT THAT CONSTRUCTION ACTIVITIES INHIBIT VEHICULAR ACCESS TO HOMES AND BUSINESSES.
3. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THIS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN GENERAL CONDITIONS, MAX \$_____.

CONSTRUCTION NOTES (CONT):

- 22. SOME STORM SEWER MAY UNAVOIDABLY BECOME DAMAGED DURING CONSTRUCTION OR IT MAY BE DETERMINED BY THE ENGINEER THAT EXISTING STORM SEWER NEEDS TO BE REPLACED. IN EITHER CASE, THE ENGINEER MAY DIRECT THE SEWER TO BE REMOVED AND REPLACED. THE REMOVAL OF THE EXISTING SEWER AND/OR DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE CONTRACT WORK ITEMS "SEWER, ANY SIZE OR DEPTH, REM" OR "DR STRUCTURE, ANY SIZE OR DEPTH, REM", AND THE REPLACEMENT SEWER SHALL BE INSTALLED AND PAID FOR AT THE CORRESPONDING CONTRACT UNIT PRICE, IF CONTAINED WITHIN THE CONTRACT, FOR THE VARIOUS TYPES AND SIZES OF SEWER TO BE REPLACED.
23. WHERE EXISTING SEWER AND/OR DRAINAGE STRUCTURES ARE TO BE REMOVED, THEY SHALL BE PROPERLY DISPOSED OF OFF-SITE AND THE EXCAVATION SHALL BE BACKFILLED WITH MDOT CLASS II GRANULAR MATERIAL, COMPACTED TO 95% OF ITS MAX. DRY DENSITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT ITEMS "SEWER, ANY SIZE OR DEPTH, REM" AND/OR DR STRUCTURE, ANY SIZE OR DEPTH, REM".
24. IF THE CONTRACTOR ENCOUNTERS EXISTING EDGE DRAIN(S) DURING CONSTRUCTION OF THE PROPOSED EDGE DRAINS, INLET LEADS, OR CATCH BASINS, IT SHALL BE CAPPED AT EACH END TO PREVENT MATERIAL FROM ENTERING THE PIPE. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PARTICULAR ITEM OF WORK BEING PERFORMED WHEN EXISTING EDGE DRAIN(S) ARE ENCOUNTERED.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

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 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.

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 PLANS AND SPECIFICATIONS 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.

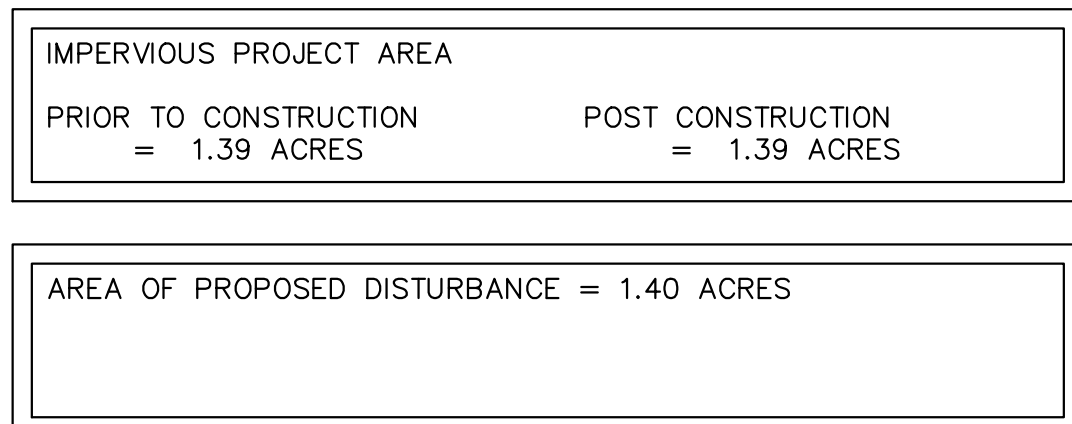
THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$51,000

ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:
EXCAVATION = 50 CY, FILL = 25 CY

- 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 OUTWASH PLAINS, KAMES, VALLEY TRAINS, TERRACES, AND MORAINES. SLOPES ARE UNIFORM OR SHORT AND COMPLEX. SLOPE IS 2% TO 6%.
BnF - BOYER LOAMY SAND - IN OUTWASH PLAINS, VALLEY TRAINS, KAMES, BEACH RIDGES, RIVER TERRACES, LAKE TERRACES, DELTAS, AND MORAINES. SLOPE IS 25% TO 50%.
BnB - BOYER LOAMY SAND - IN OUTWASH PLAINS, VALLEY TRAINS, KAMES, BEACH RIDGES, RIVER TERRACES, LAKE TERRACES, DELTAS, AND MORAINES. SLOPE IS 1% TO 6%.

WATER MAIN CONSTRUCTION NOTES

- 1. SEE EROSION CONTROL SHEETS FOR DETAILS ON PLACEMENT, MAINTENANCE, AND REMOVAL OF EROSION CONTROL ITEMS.
2. THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY DURING CONSTRUCTION OPERATIONS ALL UTILITIES, SITE FEATURES, LANDSCAPING, AND OTHER ITEMS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT. PAYMENT FOR PROTECTION OF UTILITIES INCLUDED IN "GENERAL CONDITIONS, MAX". EXISTING FACILITIES NOT DESIGNATED FOR REMOVAL OR ABANDONMENT, BUT WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE, AS DETERMINED BY THE ENGINEER.
3. THE EXISTING UTILITIES SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED THROUGH SURVEYS AND/OR EXISTING PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES. IF STORM OR WATERMAINS CROSS OTHER UTILITIES, CONTACT THEIR RESPECTIVE OWNERS FOR INFORMATION ON HOW TO PROCEED. PAYMENT FOR THE COORDINATION EFFORTS AND ASSOCIATED ITEMS SHALL BE INCLUDED IN ASSOCIATED PROPOSED STORM OR WATERMAIN ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.
4. THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY THE EXISTING WATER MAIN DURING CONSTRUCTION OPERATIONS. ANY DAMAGE TO THIS FACILITY BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE, AS DETERMINED BY THE ENGINEER. PAYMENT FOR PROTECTION OF THE EXISTING WATER MAIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX".
5. THE CONTRACTOR SHALL NOT REMOVE OR DAMAGE EXISTING SANITARY SEWER OR WATER MAIN LEADS FOR EASE OF CONSTRUCTING OTHER ASPECTS OF WORK. THE CONTRACTOR SHALL CAREFULLY PROTECT ALL LEADS FROM DAMAGE OR INJURY.
6. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICE'S DEPARTMENT STANDARD SPECIFICATIONS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH CURRENT PUBLIC SERVICE DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS.
7. ALL WATER MAIN SHALL BE PRESSURE CLASS 350 OR THICKNESS CLASS 52 DUCTILE IRON WATER MAIN, CEMENT-LINED (DOUBLE THICKNESS), WITH POLYWRAP UNLESS NOTED OTHERWISE.
8. RESTRAINED JOINT SYSTEMS FOR WATER MAIN SHALL BE UTILIZED WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. RESTRAINED JOINT GASKET SYSTEMS ARE TO BE USED. (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL).
9. ALL WATER MAIN TO HAVE 5.5 FEET OF COVER. MAINTAIN A MINIMUM OF 18-INCH VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12-INCH VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
10. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
11. NEW FIRE HYDRANTS SHALL BE EIWJ 5BR-250 WITH 5-INCH STORZ CONNECTION, 1-3/8-INCH PENTAGON OPERATING NUT, 3-3/8-INCH AA PUMPER CONNECTION, PUSH-ON JOINT WITH NO BARREL DRAIN.
12. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY HYDRANT EXTENSIONS, THRUST BLOCKS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE COMPANION VALVE. FIRE HYDRANT ASSEMBLY INCLUDES 6-INCH COMPANION VALVE LOCATED THREE FEET FROM THE HYDRANT.
13. ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II GRANULAR MATERIAL (SEE UTILITY TRENCH TYPE I DETAIL).
14. CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW MAIN HAS BEEN SUCCESSFULLY TESTED AND HAS PASSED ALL HYDROSTATIC AND BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER.
15. THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED AND APPROVAL HAS BEEN GRANTED BY THE ENGINEER.
16. WATER SERVICES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE BASED ON RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE CITY IN LOCATING, VERIFYING AND RECONNECTING ALL EXISTING ACTIVE SERVICES.
17. ALL LINE STOP LOCATIONS SHALL BE DETERMINED BY THE CITY ENGINEER AS NEEDED. THIS ITEM OF WORK SHALL BE PAID FOR AS "LINE STOP, DUCTILE/CAST IRON PIPE, ___-INCH."



PROJECT BENCHMARKS table with columns: BM #, ELEV, DESCRIPTION. Rows include: 50, 807.99, PK NAIL NORTHEAST SIDE OF UTILITY POLE, SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT; 51, 812.11, PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD; 52, 784.73, PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY



Table with columns: VCM/CEM, CHECKED, CGT/YBLA, DRAWN, 03/28/2023, DATE, ISSUED FOR BID, REV, DESCRIPTION

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 9847 ANN ARBOR, MI 48106-9847 www.aagov.org



CITY OF ANN ARBOR - ENGINEERING PONTIAC, SWIFT, MOORE, & WRIGHT INFRASTRUCTURE IMPROVEMENTS NOTES

SCALE: NTS DRAWING NO: 2022-032-4 SHEET NO. 4 OF 52

C:\pwwork\mifanogon\41253461\CDI-PLTS-Ann Arbor Details.dwg Dwg Created: 27-Mar-23 - _a2 standard bw.stb - Plot Date: 28-Mar-23

INLET PROTECTION SD-SESC-1

1. SIZE AND SHAPE OF INLET FILTER SHALL MATCH THE STRUCTURE.
 2. WHERE CONDITIONS WARRANT, THE FILTER SHALL BE MADE WITH AN OIL-ABSORBENT FILTER WITH A WOVEN PILLOW INSERT.

REVISED 4-15-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO. SD-SESC-1	
SCALE N.T.S.	DATE 11/6/92		

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 P.O. BOX 8647
 ANN ARBOR, MI 48107-8647
 734-794-6410
 www.a2gov.org

SILT FENCE SD-SESC-3

REVISED 4-15-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF/SMJ	CH. CSS/DF	DRAWING NO. SD-SESC-3	
SCALE N.T.S.	DATE 11/06/92		

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MULCH BLANKET SD-SESC-4

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

REVISED 4-15-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO. SD-SESC-4	
SCALE N.T.S.	DATE 11/6/92		

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TREE PROTECTION SD-L-3

REVISED 3-19-18

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF/SMJ	CH. CSS	DRAWING NO. SD-L-3	
SCALE N.T.S.	DATE 11/6/92		

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UTILITY TRENCH-TYPE I SD-TD-1A
 (UNDER BITUMINOUS PAVEMENT EXCL. SANITARY SEWER & EDGE DRAIN)

REVISED 6-15-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO. SD-TD-1A	
SCALE N.T.S.	DATE 11/6/92		

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UTILITY TRENCH-TYPE VI SD-TD-6
 (IN GREENBELT AREA REQUIRING CLASS II BACKFILL)

REVISED 6-16-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO. SD-TD-6	
SCALE N.T.S.	DATE 11/6/92		

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UTILITY TRENCH-TYPE VII SD-TD-7
 (UNDER SIDEWALK OR DRIVE APPROACH)

REVISED 6-16-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO. SD-TD-7	
SCALE N.T.S.	DATE 11/6/92		

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TYPICAL EDGE DRAIN TRENCH SD-TD-8

REVISED 7-7-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. ARG	CH. DG	DRAWING NO. SD-TD-8	
SCALE N.T.S.	DATE 7/7/20		

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811 Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
00	03/28/2023	ISSUED FOR BID
		CGT/BLA
		VCM/CEW
		CHECKED
		DRAWN

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 PONTIAC, SWIFT, MOORE, & WRIGHT
 INFRASTRUCTURE IMPROVEMENTS
 DETAILS 1

SCALE PLAN: #####
 DRAWING NO. 2022-032-5
 SHEET NO. 5 OF 52

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCM/CEW

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PUBLIC SERVICES
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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
DETAILS 2

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
SCALE PLAN: #####
DRAWING NO: 2022-032-6
SHEET NO.

TYPE M DRIVE APPROACH FOR ASPHALT STREETS WITH BARRIER CURB SD-R-6

NOTE:
1. MINIMUM REQUIREMENT FOR DRIVE APPROACH TO BE MDOT P1 CONCRETE.
2. R (RADIUS) AND W1 (OPENING WIDTH) AND W2 (CURB CUT WIDTH) AS REQUIRED PER TABLE A, ARTICLE 6 OF CITY STANDARDS.
3. IF GUTTER IS OVERLAID, GUTTER OF THE APPROACH SHALL BE AT SAME ELEVATION AS EXISTING CONCRETE GUTTER AND ASPHALT WEDGE SHALL BE PLACED IN THE APPROACH.

REVISED 7-2-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DR/DCO	CH. CSS/DF	DRAWING NO.	SCALE N.T.S.
DATE 11/6/92		SD-R-6	

SPILL-OUT BARRIER CURB & GUTTER SD-R-4

REVISED 6-2-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. ARG	CH. DG	DRAWING NO.	SCALE N.T.S.
DATE 6/2/20		SD-R-4	

MOUNTABLE CURB & GUTTER FOR ASPHALT STREETS SD-R-2

REVISED 6-2-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO.	SCALE N.T.S.
DATE 11/6/92		SD-R-2	

BARRIER CURB AND GUTTER SD-R-1

REVISED 6-2-20

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF	CH. CSS	DRAWING NO.	SCALE N.T.S.
DATE 11/6/92		SD-R-1	

EXPANSION JOINT

GENERAL NOTES:
1. DESIGN MAY UTILIZE TOOLED OR SAW-CUT CONTRACTION JOINT. PLANS MUST INDICATE SELECTION OF JOINT TYPE. PROJECT MUST HAVE EITHER JOINT TYPE, BUT NOT BOTH.

REVISED 9-5-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. SGJR	CH. CEC	DRAWING NO.	SCALE N.T.S.
DATE 10/28/15		SD-R-11	

SIDEWALK AND CURB & GUTTER JOINTS SD-R-10

LEGEND:
CONTRACTION JOINTS
1/2\"/>

REVISED 9-5-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DPF	CH. CSS	DRAWING NO.	SCALE N.T.S.
DATE 11/06/92		SD-R-10	

SIDEWALK CROSS SECTION SD-R-9

GENERAL NOTE:
SIDEWALKS IN THE DDA SHALL BE CONSTRUCTED PER DETAILS SD-DDA-1 THROUGH SD-DDA-7.

NOTES:
1. STANDARD SIDEWALK WIDTH SHALL BE 5'.
2. STANDARD SLAB LENGTH SHALL BE 5'.
3. MINIMUM SLAB LENGTH SHALL BE 3' AND MAXIMUM 7'.
4. MINIMUM SIDEWALK THICKNESS (T1) SHALL BE 4".
5. SIDEWALK THICKNESS (T1) SHALL BE INCREASED AT DRIVE APPROACHES TO 6" FOR SINGLE OR DUPLEX USES AND TO 8" FOR ALL OTHER USES.
6. BASE THICKNESS (T2) SHALL BE 4".
7. BASE THICKNESS (T2) SHALL BE INCREASED TO 6" AT DRIVE APPROACHES.
8. NATIVE MATERIAL IS ACCEPTABLE FOR SIDEWALK REPLACEMENT IF BASE IS STABLE AND FREE OF ORGANIC OR DELETERIOUS MATERIALS.
9. SIDEWALK RAMP SHALL BE CONSTRUCTED AT STREET INTERSECTIONS AS DIRECTED AND SHALL COMPLY WITH THE REQUIREMENTS OF MDOT DETAIL R-28 (LATEST VERSION).
10. IF SIDEWALKS ARE APPROVED TO MEANDER WITHIN THE RIGHT-OF-WAY TO PROTECT AND SAVE TREES, SLOPES, ETC., CURVES IN THE SIDEWALK SHALL HAVE A MINIMUM 5' RADIUS, WITH A MINIMUM 3' LAWN EXTENSION.
11. EXPANSION AND CONTRACTION JOINTS SHALL BE PROVIDED PER STANDARD DETAIL SD-R-10.

REVISED 6-28-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DPF	CH. CSS	DRAWING NO.	SCALE N.T.S.
DATE 11/06/92		SD-R-9	

TYPE L DRIVE APPROACH FOR STREETS WITH MOUNTABLE CURB SD-R-7

NOTE:
1. MINIMUM REQUIREMENT FOR DRIVE APPROACH TO BE MDOT P1 CONCRETE.
2. R (RADIUS) AND W1 (OPENING WIDTH) AND W2 (CURB CUT WIDTH) AS REQUIRED PER TABLE A, ARTICLE 6 OF CITY STANDARDS.
3. IF GUTTER IS OVERLAID, GUTTER OF THE APPROACH SHALL BE AT SAME ELEVATION AS EXISTING CONCRETE GUTTER AND ASPHALT WEDGE SHALL BE PLACED IN THE APPROACH.

REVISED 6-25-19

REV. NO.	DATE	DRAWN BY	CHECKED BY
DR. DF/DCO	CH. CSS/DF	DRAWING NO.	SCALE N.T.S.
DATE 11/6/92		SD-R-7	

TABLE 1

PIPE SIZE	MIN. DIA.
<36"	4'
36"-42"	5'
48"-54"	6'

NOTES:

- ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 UNLESS APPROVED BY PSAA FOR SHALLOW APPLICATION.
- ALL MANHOLES MUST HAVE ECCENTRIC CONES.
- ALL SANITARY SEWER OPENINGS SHALL BE PRECAST WITH RUBBER BOOT CONNECTIONS CONFORMING TO ASTM C923.
- ALL JOINTS SHALL CONFORM TO ASTM C443.
- MINIMUM MANHOLE DIAMETER SHOWN IN TABLE 1 SHALL BE INCREASED AS NEEDED BASED ON NUMBER OF PIPES AND ANGLE BETWEEN PIPES WITH 12" MIN. BETWEEN OPENINGS.

REVISED 4-9-20

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REV. NO. DATE DRAWN BY CHECKED BY

SANITARY MANHOLE

DR. DF CH. CSS DRAWING NO. SD-SN-1
 SCALE N.T.S. DATE 11/6/92

TABLE 1

PIPE SIZE	MIN. DIA.
<36"	4'
36"-42"	5'
48"-54"	6'

NOTES:

- ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 UNLESS APPROVED BY PSAA FOR SHALLOW APPLICATION.
- ALL MANHOLES MUST HAVE ECCENTRIC CONES.
- ALL JOINTS SHALL CONFORM TO ASTM C443.
- MINIMUM MANHOLE DIAMETER SHOWN IN TABLE 1 SHALL BE INCREASED AS NEEDED BASED ON NUMBER OF PIPES AND ANGLE BETWEEN PIPES WITH 12" MIN. BETWEEN OPENINGS.

REVISED 4-10-20

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REV. NO. DATE DRAWN BY CHECKED BY

STORM MANHOLE

DR. DF CH. CSS DRAWING NO. SD-ST-1
 SCALE N.T.S. DATE 11/6/92

NOTES:

- ALL D.I.P. PIPE, FITTINGS, AND HYDRANT BARREL TO BE POLYWRAPPED PER AWWA C105.
- ALL HYDRANTS SHALL HAVE ONE 5" STORZ CONNECTION AND ONE 3 3/8" THREADED PUMPER CONNECTION.

REVISED 2-19-19

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REV. NO. DATE DRAWN BY CHECKED BY

FIRE HYDRANT ASSEMBLY

DR. DF CH. CSS DRAWING NO. SD-W-1
 SCALE N.T.S. DATE 11/06/92

MINIMUM STANDARDS

THE MDT GRADE PI OR P-NC CONCRETE AT THE FITTING FACE SHALL EXTEND TO WITHIN 2" OF THE BELL AND SHALL EXTEND FROM THE FITTING FACE A MINIMUM OF 2" TO THE UNDISTURBED SOLID GROUND.

THE DIMENSIONS OF THE THRUST BLOCK AT THE FACE OF THE UNDISTURBED SOLID GROUND SHALL BE AS SHOWN IN THE TABLE BELOW.

IF THERE ISN'T SUFFICIENT SPACE FOR THE INSTALLATION OF THE THRUST BLOCK WITHOUT INTERFERENCE WITH OTHER SERVICES, ANOTHER ARRANGEMENT SATISFACTORY TO THE ENGINEER SHALL BE USED.

FITTINGS I.D.	PLUG TEE CROSS	BENDS						HYDRANT	
		90°		45°		22½°		11¼°	
INCHES	W H	W H	W H	W H	W H	W H	W H	W H	
4	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	2.0 1.5	
6	2.0 1.5	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.5 2.0	
8	2.5 2.0	3.5 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.5 2.0	
12	3.5 3.0	5.5 3.0	3.5 2.5	2.5 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 1.0	
16	6.0 3.5	6.0 4.0	5.0 3.0	3.5 2.5	2.0 2.0	2.0 2.0	2.0 2.0		

FOR FITTING SIZES LARGER THAN 16", THRUST BLOCK DIMENSIONS SHALL BE AS SPECIFIED BY ENGINEER.

W = WIDTH IN FEET
 H = HEIGHT IN FEET

NOTE:
 THESE ARE MINIMUM STANDARDS. WHERE SOIL CONDITIONS DICTATE, ADJUSTMENTS IN SIZE SHALL BE MADE AS DIRECTED BY THE PUBLIC SERVICES AREA ADMINISTRATOR.

REVISED 1-10-18

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REV. NO. DATE DRAWN BY CHECKED BY

THRUST BLOCK

DR. DF CH. CSS DRAWING NO. SD-W-2
 SCALE N.T.S. DATE 11/06/92

TOP VIEW

PIPE SIZE | **MH DIA. (D)**

12" OR LESS	5'
16"	6'

NOTES:

- ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE
- ALL JOINTS SHALL BE MADE WATER TIGHT WITH RUBBER GASKET JOINTS
- NO STEPS ARE PERMITTED
- MANHOLE SECTIONS SHALL MEET ASTM C-478

REVISED 1-10-18

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REV. NO. DATE DRAWN BY CHECKED BY

GATE WELL FOR MAIN 16" & SMALLER

DR. DF CH. CSS DRAWING NO. SD-W-3
 SCALE N.T.S. DATE 11/06/92

WATER OR GAS VALVE BOX ADJUSTMENT
 NOTE: GAS VALVE BOXES TO BE ADJUSTED BY THE GAS COMPANY.

MONUMENT BOX ADJUSTMENT
 NOTE: RAISE CASTING TO PROPOSED FINISH STREET GRADE AFTER PLACEMENT OF LEVELING COURSE(S) AND PRIOR TO PLACING FINAL SURFACE COURSE.

REVISIONS

REV. NO.	DATE	BY	CHK. BY	DATE

PUBLIC SERVICES DEPARTMENT
 CITY OF ANN ARBOR

VALVE/MONUMENT BOX ADJUSTMENT

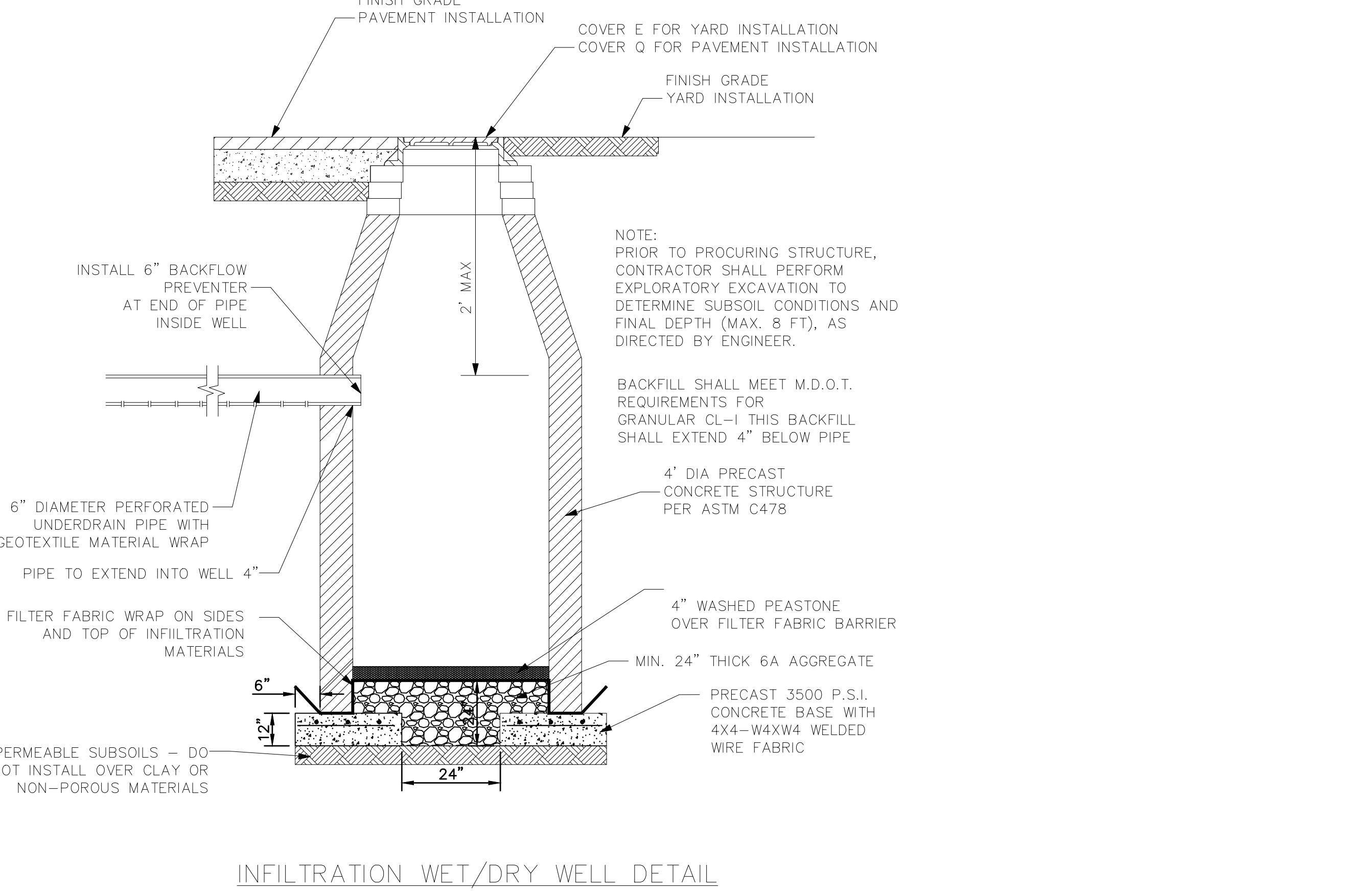
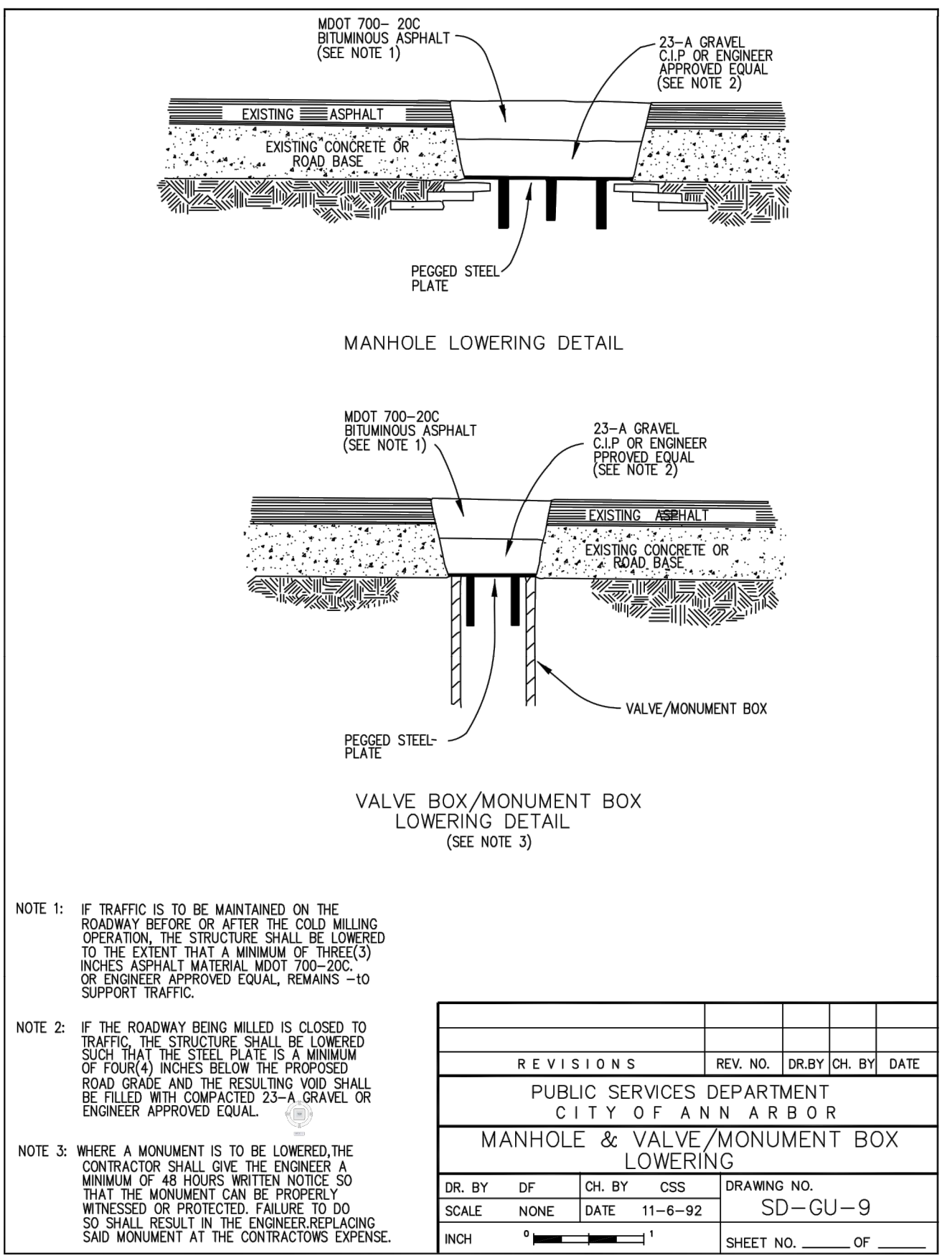
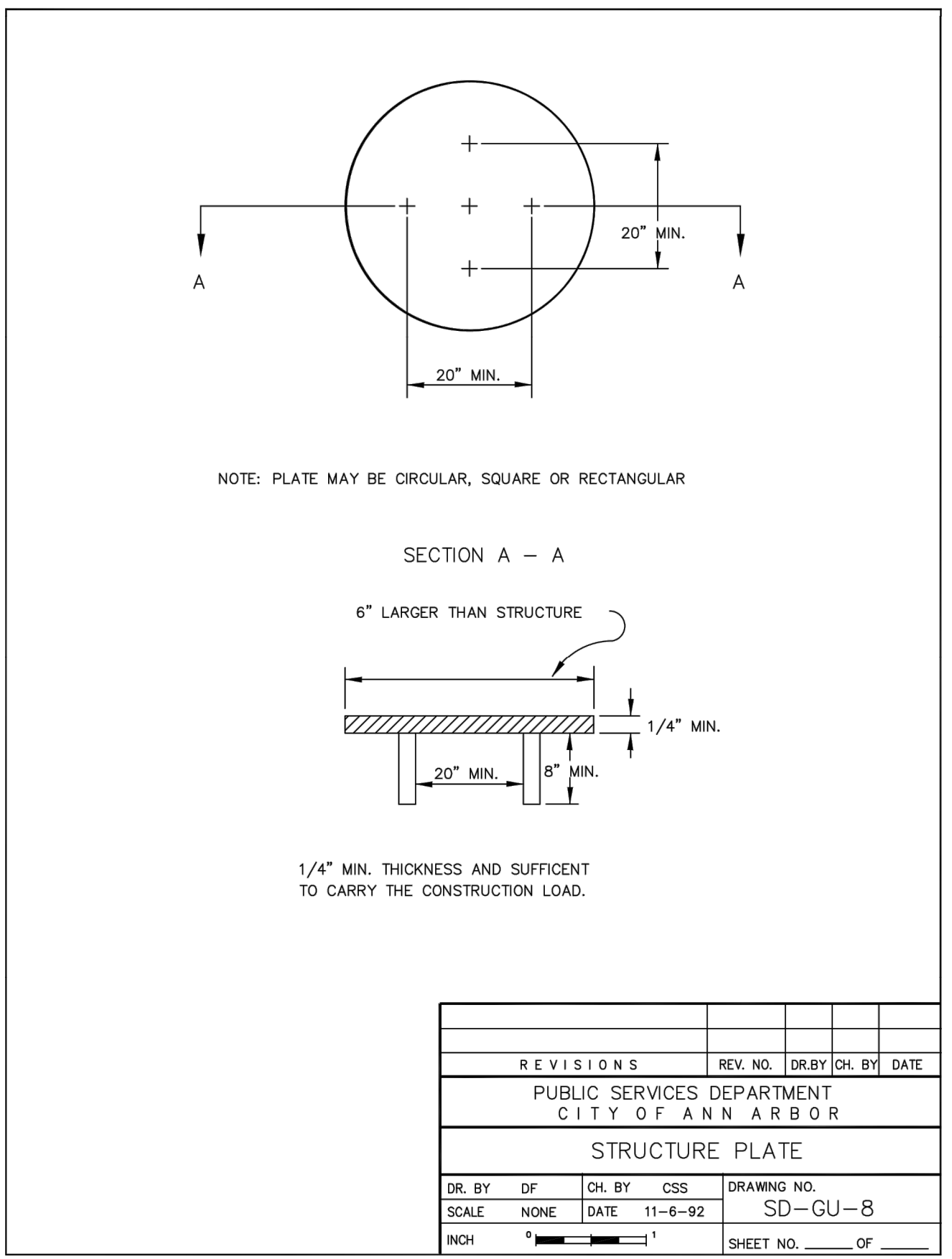
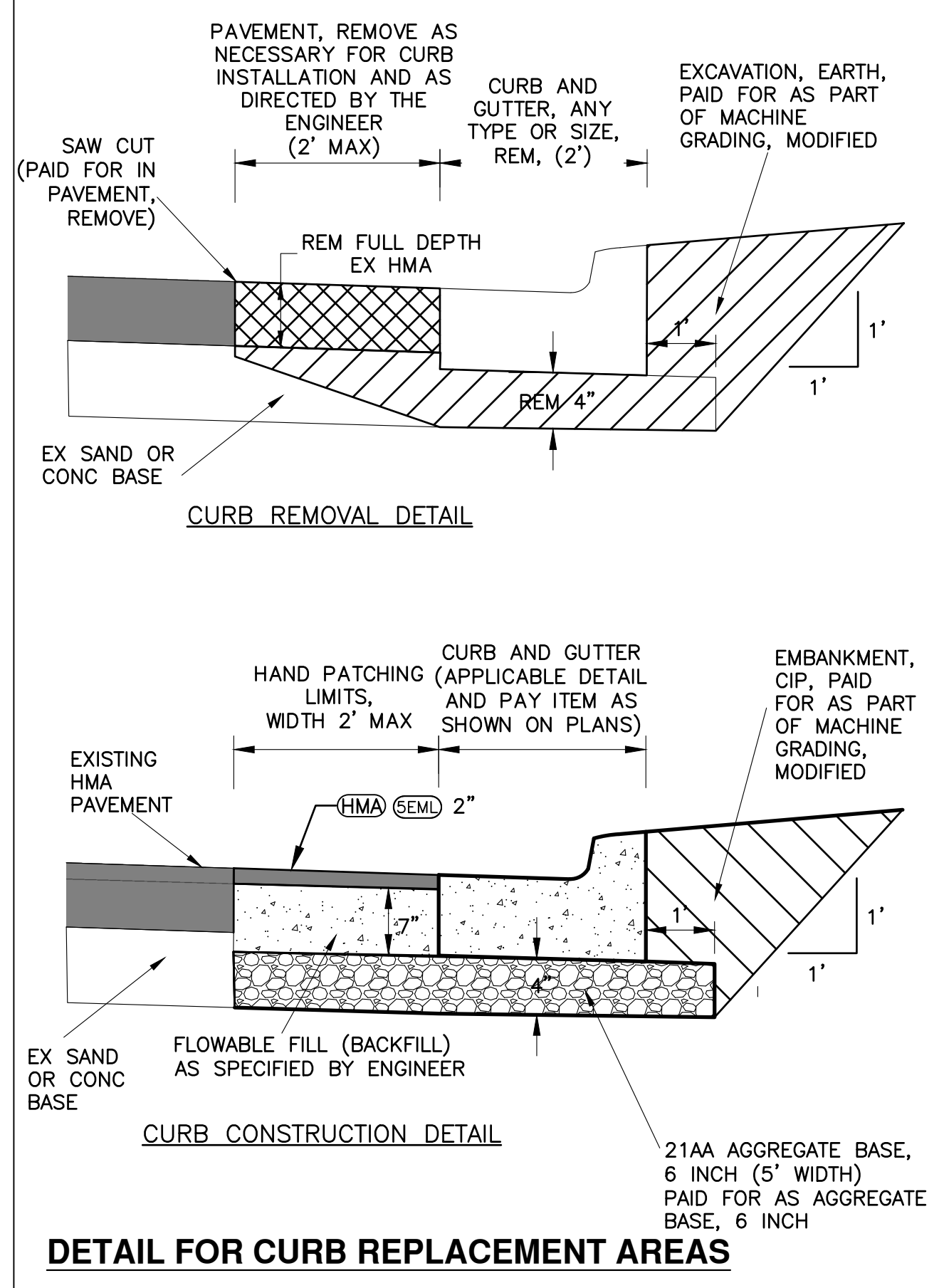
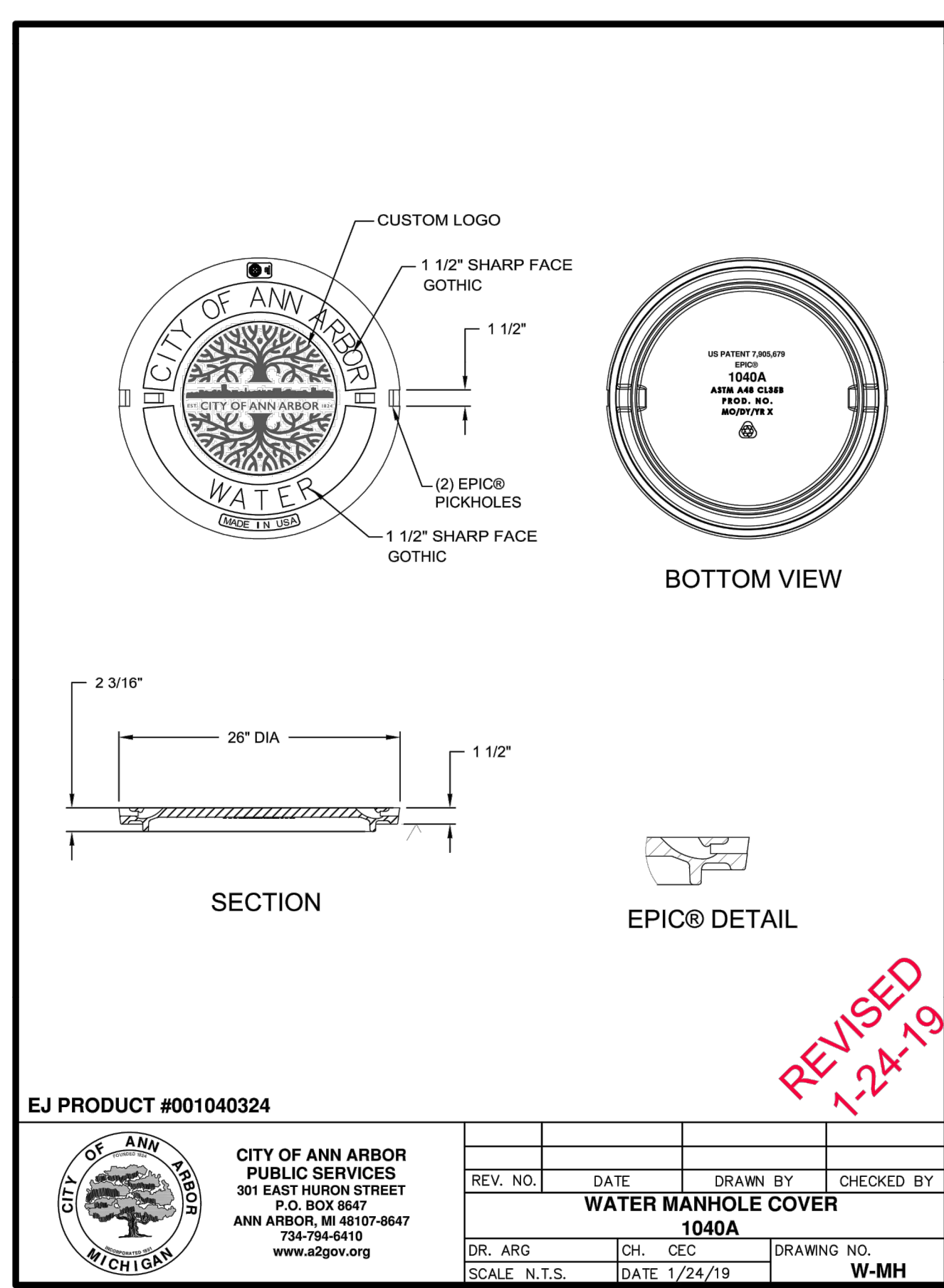
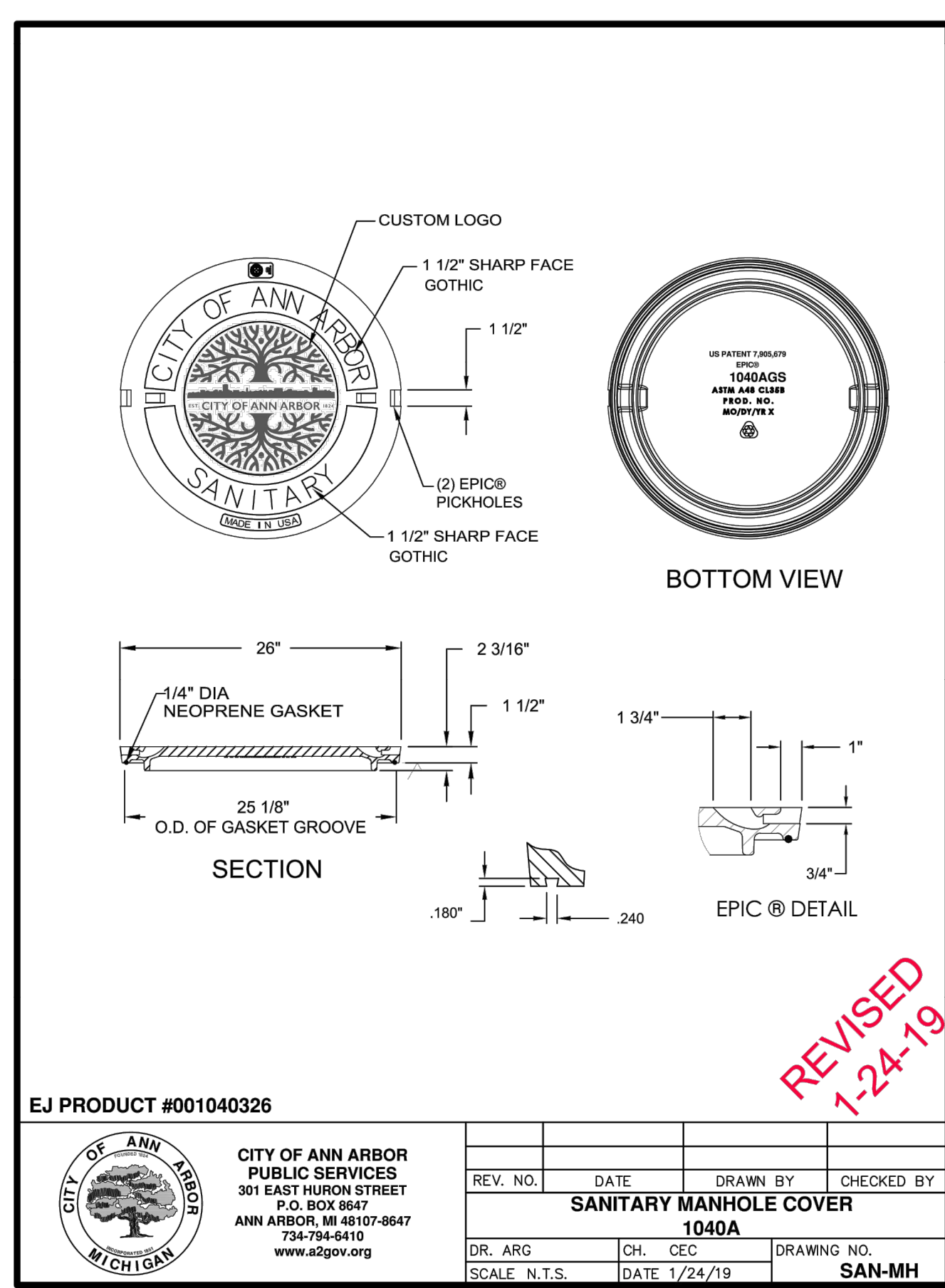
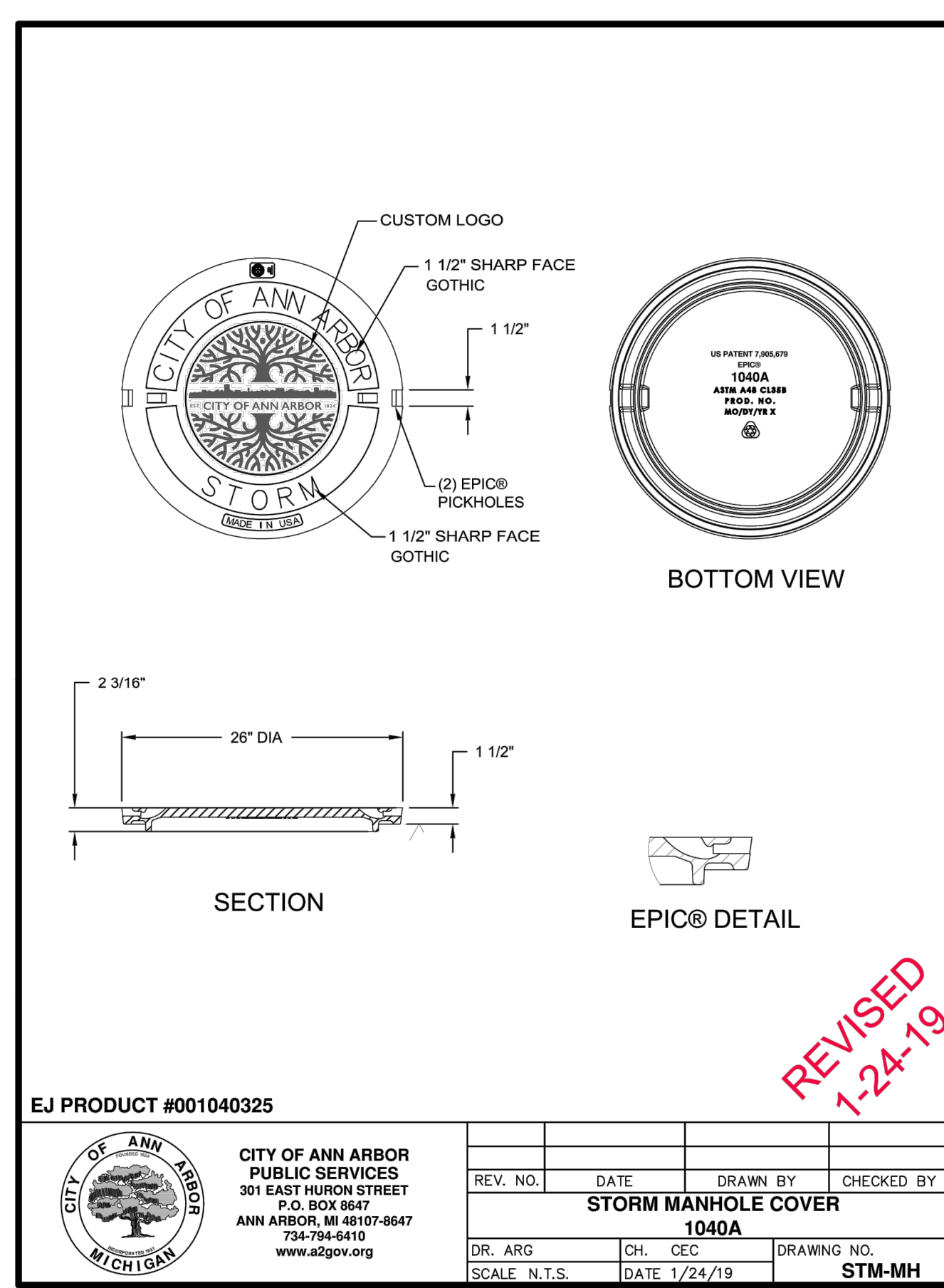
DR. BY DF CH. BY CSS DRAWING NO. SD-GU-7
 SCALE NONE DATE 11-6-92 SHEET NO. OF

- WATER VALVE BOX ASSEMBLY IN PAVEMENT
 *4" TO 6" VALVES: BASE #4 W/ 8550,8560,6800 SET
 *8" TO 12" VALVES: BASE #6 W/ 8550,8560, 6800 SET
 *16" AND LARGER: BASE #16 W/ 8550,8560, 6800 SET

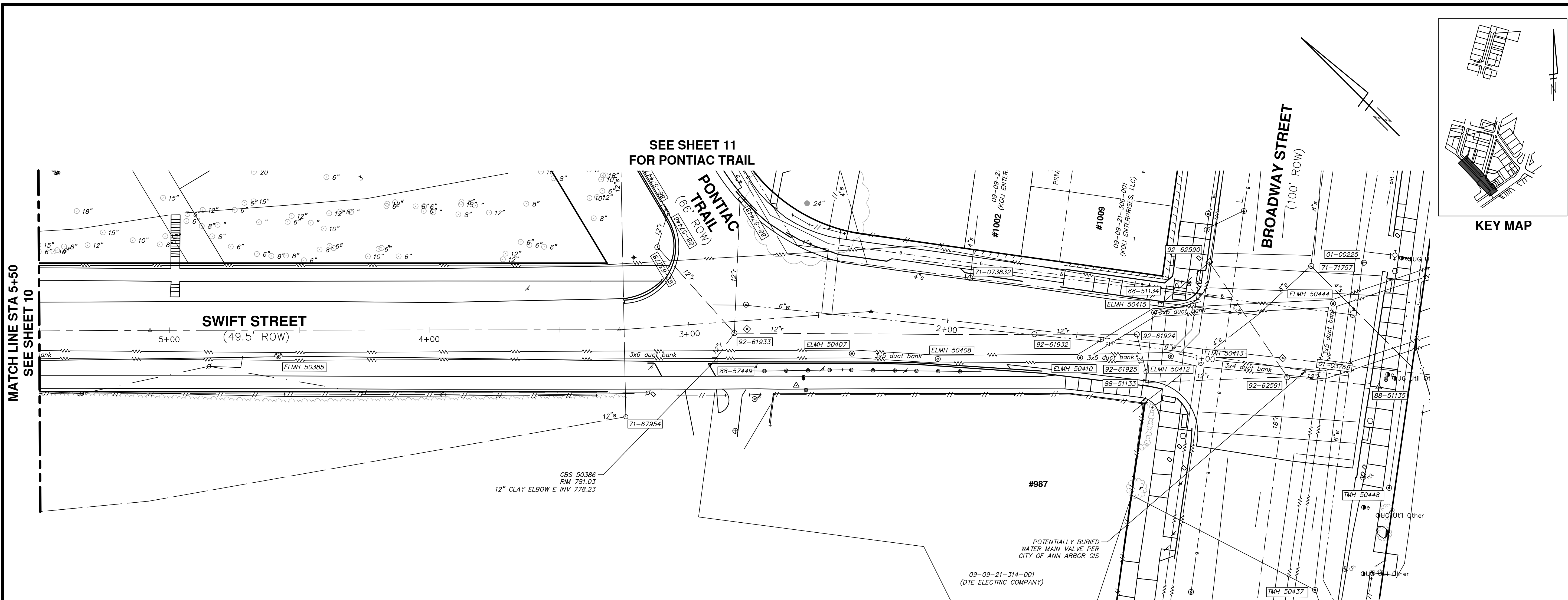
CASTING SCHEDULE

TYPE OF CASTING	MDOT DESIGNATION	EJ CASTING NO.	NEENAH CASTING NO.
STORM MANHOLE AND WATER GATE WELL FRAME AND COVER	Q	1040Z W/1040A LOGO COVER*	R-1642 W/TYPE C COVER*
BARRIER CURB INLET FRAME AND COVER	K	7045Z W/7050 T2 BACK W/7045 M1 GRATE	R-3031-B W/TYPE S GRATE
BARRIER CURB LARGE CAPACITY INLET FRAME AND COVER	K	7035Z W/7030 T6 BACK W/7030 M2 GRATE	N/A
GUTTER INLET FRAME AND COVER	R	5080Z W/TYPE 5000M2 GRATE	R-3448C, W/TYPE S GRATE
GUTTER LARGE CAPACITY INLET FRAME AND COVER	R	7034Z W/7034 M GRATE	N/A
MOUNTABLE CURB INLET ASSEMBLY	C	7045Z W/ 7060 T1 BACK W/ 7045 M1 GRATE	N/A
YARD DRAIN (BEE HIVE) FRAME AND COVER	E	1040Z, W/1040 O2 GRATE	R-2560-E1
WATER VALVE BOX ASSEMBLY IN PAVEMENT	MON BOX	PLEASE SEE BELOW	N/A
MONUMENT BOX ASSEMBLY	MON BOX	8360Z W/ 8360A3 COVER	N/A
SUGGESTED MONUMENT BOX	MON BOX	2966Z W/ 2965A COVER	
SUGGESTED SANITARY MANHOLE FRAME AND COVER	Q	1040-1ZPT W/ 1040AGS LOGO COVER* IN FLOOD PRONE AREAS: 1040-ZPT W/ 1040AGSPT COVER	

*EACH COVER SHALL HAVE "SANITARY", "STORM," OR "WATER" CAST IN THE SURFACE, WHICHEVER IS APPLICABLE. SANITARY SEWER COVERS FOR FLOOD PRONE AREAS SHALL BE UTILIZED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE PSAA. FRAMES AND COVERS MUST HAVE MACHINED BEARING SURFACES.



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EXISTING ELECTRICAL STRUCTURE TABLE

STRUCTURE #	RIM	SIZE	CONDITION AND CONNECTIONS
ELMH-50385	796.75	120"	CONDITION: FAIR BRICK LARGE VAULT DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE, WSW WIRE/CONDUIT DEPTH: 5 FT BOTTOM ELEV: 787.75
ELMH-50407	779.13	72"	CONDITION: FAIR BRICK LOTS OF WIRES LOW-6.90 HIGH-3.40 DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE, W WIRE/CONDUIT DEPTH: 6.9 FT BOTTOM ELEV: 770.13
ELMH-50408	778.18	72"	CONDITION: FAIR BRICK LOTS OF WIRES LOW-11.70 HIGH-9.00 DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE, W WIRE/CONDUIT DEPTH: 11.7 FT BOTTOM ELEV: 765.38
ELMH-50410	777.25	72"	CONDITION: FAIR BRICK LOT WIRES LOW-7.40 HIGH-4.00 DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE, W WIRE/CONDUIT DEPTH: 7.4 FT BOTTOM ELEV: 768.25
ELMH-50412	776.46	72"	CONDITION: FAIR BRICK LOW WIRE-8.00 HIGH WIRE-6.00 DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE, NE WIRE/CONDUIT DEPTH: 8 FT BOTTOM ELEV: 766.86
ELMH-50415	777.12	72"	CONDITION: FAIR BRICK LOW WIRE-10.90 HIGH WIRE-5.00 DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, SE WIRE/CONDUIT DEPTH: 10.9 FT BOTTOM ELEV: 764.72
ELMH-50444	777.16	UNK	CONDITION: UTO TRAFFIC WIRE/CONDUIT SIZE: UNK WIRE/CONDUIT DIRECTION(S): UNK WIRE/CONDUIT DEPTH: UNK BOTTOM ELEV: UNK

EXISTING TELEPHONE STRUCTURE TABLE

STRUCTURE #	RIM	SIZE	CONDITION AND CONNECTIONS
TMH-50437	775.11	UNK	CONDITION: UTO TRAFFIC WIRE/CONDUIT SIZE: UNK WIRE/CONDUIT DIRECTION(S): UNK WIRE/CONDUIT DEPTH: UNK BOTTOM ELEV: UNK
TMH-50448	775.71	48"	CONDITION: FAIR BRICK FOD FOW DUCT BANK: N WIRE/CONDUIT SIZE: 1 IN WIRE/CONDUIT DIRECTION(S): E, W WIRE/CONDUIT DEPTH: 2.3 FT BOTTOM ELEV: 771.41

EXISTING WATER STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
01-00225	GVWD 50445	777.48	UNK	CONDITION: UTO TRAFFIC BOTTOM ELEV: UNK
No GIS ID	GVWD 50388	780.71	36"	CONDITION: GOOD PRECAST FOD NPV CONC BOX AT BOTTOM? BOTTOM ELEV: 774.41

EXISTING STORM STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
88-57447	CBS 50390	782.35	24"	CONDITION: COMBINED WITH PT#50391 BOTTOM ELEV: UNK
88-57446	CBS 50391	782.46	24"	CONDITION: POOR BRICK N BLOCK FOD COMBINED WITH PT#50390 12 IN RCP SW, INV 779.76 BOTTOM ELEV: 779.76
88-57448	CBS 50392	781.88	12"	CONDITION: POOR CONC 12 IN RCP ELBOW W, INV 778.48 BOTTOM ELEV: 778.48
88-57399	CBS 50396	808.42	12"	CONDITION: FAIR CLAY 12 IN CLAY ELBOW N, INV 805.67 BOTTOM ELEV: 805.67
88-51133	CBS 50411	776.20	24"	CONDITION: FAIR CONC FOD FOW 12 IN RCP NE, INV 773.10 12 IN RCP SE, INV 771.40 BOTTOM ELEV: 770.90
88-51134	CBS 50416	777.16	24"	CONDITION: FAIR PRECAST FOD 12 IN PVC E, INV 775.26 BOTTOM ELEV: 775.06
92-62590	CBS 50417	777.12	36"	CONDITION: FAIR PRECAST FOD FOW 12 IN RCP W, INV 774.42 12 IN PVC NE, INV 774.72 12 IN RCP S, INV 771.72 BOTTOM ELEV: 771.42

EXISTING STORM STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
92-61933	STMH 50387	781.38	48"	CONDITION: FAIR BRICK 12 IN RCP N, INV 776.23 12 IN RCP NW, INV 776.23 12 IN RCP/CLAY W, INV 777.23 12 IN RCP SE, INV 775.78 RCP IN E 5.15, INV UNK BOTTOM ELEV: 775.78
92-63278	STMH 50389	784.02	36"	CONDITION: GOOD BRICK N BLOCK 12 IN RCP S, INV 779.27 12 IN RCP NE, INV 779.32 BOTTOM ELEV: 779.27
92-61932	STMH 50409	777.68	24"	CONDITION: FAIR BRICK 12 IN RCP NW, INV 773.98 12 IN RCP SE, INV 773.88 8 IN CLAY NE, INV 774.78 BOTTOM ELEV: 774.88
92-61924	STMH 50414	777.05	36"	CONDITION: FAIR PRECAST 12 IN RCP NW, INV 773.45 12 IN RCP W, INV 773.40 BOTTOM ELEV: 774.05

PROJECT BENCHMARKS

BM #	ELEV	DESCRIPTION
50	807.99	PK NAIL NORTHEAST SIDE OF UTILITY POLE. SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT
51	812.11	PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD
52	784.73	PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY



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				03/28/2023		

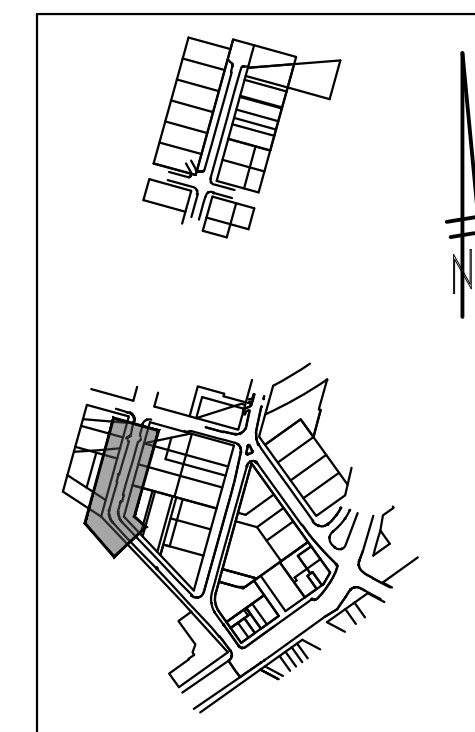
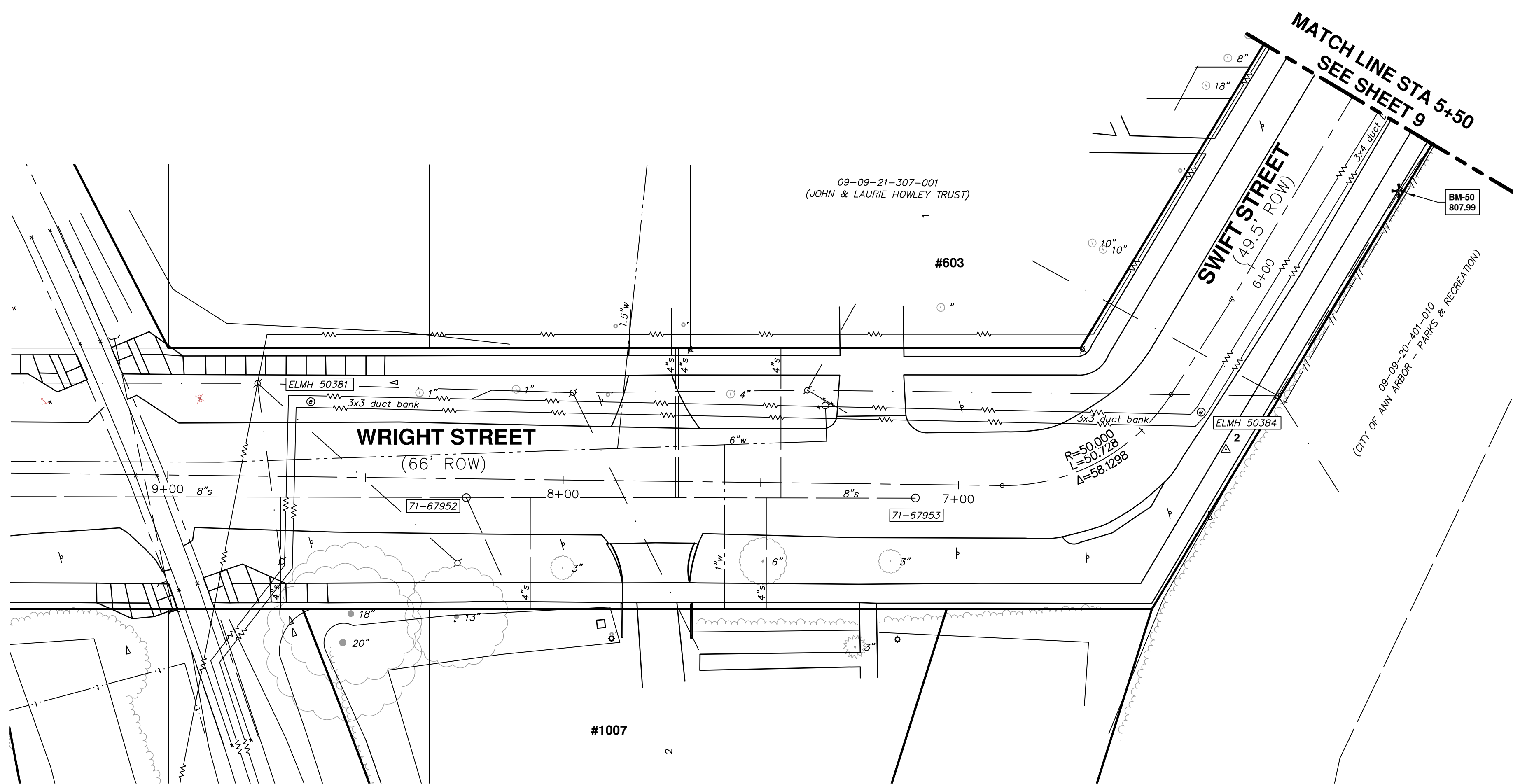
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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
EXISTING CONDITIONS & ALIGNMENT PLAN - SWIFT ST STA 0+00 TO 5+50

SCALE PLAN: 1"=80'
DRAWING NO: 2022-032-9
SHEET NO.

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KEY MAP

EXISTING SANITARY SEWER STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
71-67952	SMH 50382	811.36	48"	CONDITION: FAIR PRECAST 10 IN CLAY NNE, INV 802.46 10 IN CLAY SSW, INV 802.56 4 IN CLAY WSW, INV 804.16 BOTTOM ELEV: 802.51
71-67953	SMH 50383	813.01	60"	CONDITION: GOOD PRECAST 10 IN CLAY NNE, INV 804.21 10 IN CLAY BULKHEAD? S, INV 804.21 6 IN CLAY STRAIGHT VERTICAL, INV 805.96 BOTTOM ELEV: 804.31

EXISTING ELECTRICAL STRUCTURE TABLE

STRUCTURE #	RIM	SIZE	CONDITION AND CONNECTIONS
ELMH-50381	810.56	120"	CONDITION: FAIR BRICK LARGE VAULT DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): N, S WIRE/CONDUIT DEPTH: 5 FT BOTTOM ELEV: 801.36
ELMH-50384	810.62	120"	CONDITION: FAIR BRICK LARGE VAULT DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NE, SE WIRE/CONDUIT DEPTH: 5.5 FT BOTTOM ELEV: 801.62

PROJECT BENCHMARKS

BM #	ELEV	DESCRIPTION
50	807.99	PK NAIL NORTHEAST SIDE OF UTILITY POLE, SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT
51	812.11	PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD
52	784.73	PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY



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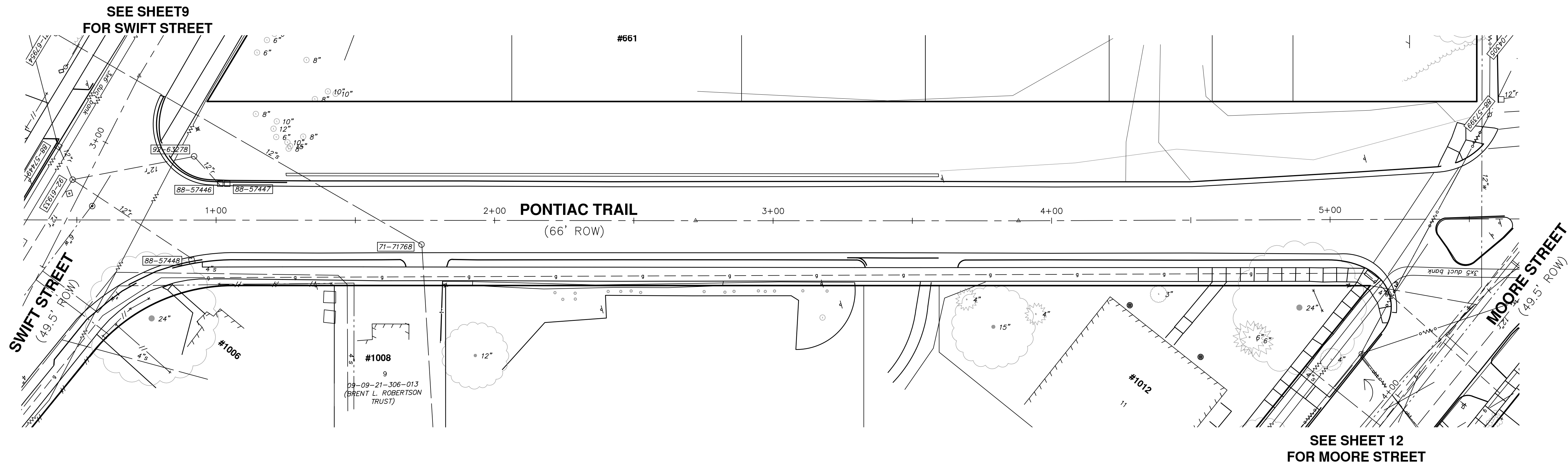
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EXISTING CONDITIONS & ALIGNMENT PLAN - SWIFT ST STA 5+50 TO 9+00

SCALE PLAN: 1"=20'
DRAWING No. 2022-032-10

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SEE SHEET 9
FOR SWIFT STREET

SEE SHEET 12
FOR MOORE STREET

EXISTING STORM STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
88-57399	CBS 50396	808.42	12"	CONDITION: FAIR CLAY 12 IN CLAY ELBOW N, INV 805.67 BOTTOM ELEV: 805.67
88-57446	CBS 50391	782.46	24"	CONDITION: POOR BRICK N BLOCK FOD COMBINED WITH PT#50390 12 IN RCP SW, INV 779.76 BOTTOM ELEV: 779.76
88-57447	CBS 50390	782.35	24"	CONDITION: COMBINED WITH PT#50391 BOTTOM ELEV: UNK
88-57448	CBS 50392	781.88	12"	CONDITION: POOR CONC 12 IN RCP ELBOW W, INV 778.48 BOTTOM ELEV: 778.48
88-57449	CBS 50386	781.03	12"	CONDITION: FAIR CLAY 12 IN CLAY ELBOW E, INV 778.23 BOTTOM ELEV: 778.23
92-61933	STMH 50387	781.38	48"	CONDITION: FAIR BRICK 12 IN RCP N, INV 776.23 12 IN RCP NW, INV 776.23 12 IN RCP/CLAY W, INV 777.23 12 IN RCP SE, INV 775.78 RCP IN E 5.15, INV UNK BOTTOM ELEV: 775.78
92-63278	STMH 50389	784.02	36"	CONDITION: GOOD BRICK N BLOCK 12 IN RCP S, INV 779.27 12 IN RCP NE, INV 779.32 BOTTOM ELEV: 779.27

EXISTING SANITARY STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
71-71768	SMH 50393	786.07	48"	CONDITION: FAIR BRICK 12 IN CLAY SW, INV 768.72 12 IN CLAY E, INV 768.57 4 IN PVC S, INV 779.97 BOTTOM ELEV: 768.57

PROJECT BENCHMARKS

BM #	ELEV	DESCRIPTION
50	807.99	PK NAIL NORTHEAST SIDE OF UTILITY POLE, SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT
51	812.11	PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD
52	784.73	PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING


**PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS**

EXISTING CONDITIONS & ALIGNMENT PLAN - PONTIAC TRAIL

SCALE PLAN: 1"=20'

DRAWING No. 2022-032-11

SHEET No. 11 OF 52

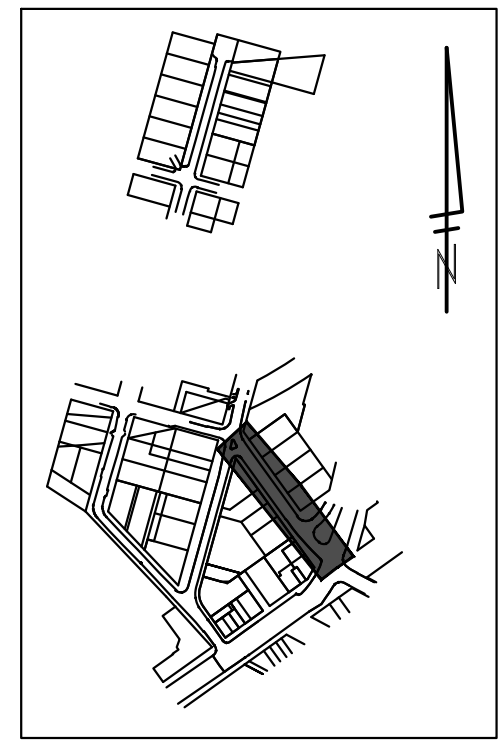
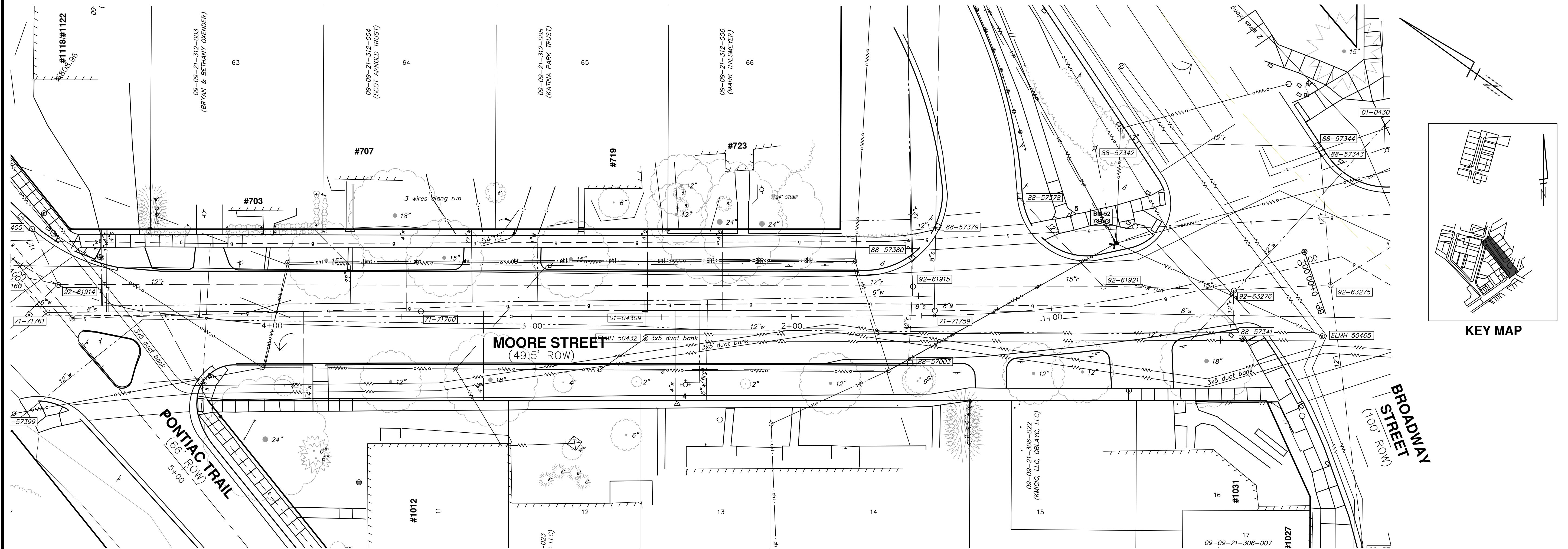


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SEE SHEET 11
FOR PONTIAC TRAIL

EXISTING ELECTRICAL STRUCTURE TABLE

STRUCTURE #	RIM	SIZE	CONDITION AND CONNECTIONS
ELMH-50403	808.57	72"	CONDITION: FAIR CONC DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NE, SW WIRE/CONDUIT DEPTH: 6.9 FT BOTTOM ELEV: 797.82
ELMH-50432	792.43	72"	CONDITION: FAIR BRICK DUCT BANK: Y WIRE/CONDUIT SIZE: 3 IN WIRE/CONDUIT DIRECTION(S): NW, S WIRE/CONDUIT DEPTH: 4.6 FT BOTTOM ELEV: 784.93
ELMH-50465	780.73	UNK	CONDITION: UTO TRAFFIC WIRE/CONDUIT SIZE: UNK WIRE/CONDUIT DIRECTION(S): UNK WIRE/CONDUIT DEPTH: UNK BOTTOM ELEV: UNK
ELMH-50466	782.52	UNK	CONDITION: UTO TRAFFIC WIRE/CONDUIT SIZE: UNK WIRE/CONDUIT DIRECTION(S): UNK WIRE/CONDUIT DEPTH: UNK BOTTOM ELEV: UNK

EXISTING STORM STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
88-57342	CBS 50424	782.00	18"	CONDITION: FAIR PRECAST FOD FOW 12 IN RCP SE, INV 778.15 12 IN RCP NE, INV 778.30 BOTTOM ELEV: 777.80
88-57378	CBS 50425	788.20	18"	CONDITION: FAIR BRICK N BLOCK FOD FOW 12 IN RCP S, INV 783.80 BOTTOM ELEV: 783.00
88-57379	CBS 50426	787.90	24"	CONDITION: FAIR BRICK N BLOCK FOD FOW 12 IN RCP NNW, INV 785.90 BOTTOM ELEV: 785.40
88-57380	CBS 50427	787.33	24"	CONDITION: FAIR BRICK N BLOCK 12 IN RCP SSE, INV 783.83 12 IN CLAY WSW, INV 783.63 BOTTOM ELEV: 783.73
88-57003	CBS 50428	786.33	18"	CONDITION: FAIR PRECAST FOD FOW 12 IN PVC NE, INV 784.03 12 IN PVC SW, INV 784.13 BOTTOM ELEV: 783.43
88-57343	CBS 50462	781.17	24"	CONDITION: FAIR PRECAST FOD FOW 12 IN RCP N, INV 776.92 12 IN RCP NE, INV 775.02 12 IN RCP NW, INV 775.07 BOTTOM ELEV: 774.47
88-57344	CBS 50463	781.21	24"	CONDITION: FAIR BRICK N BLOCK 12 IN RCP SW, INV 775.06 BOTTOM ELEV: 775.01

EXISTING STORM STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
No GIS ID	STMH 50402	807.87	24"	CONDITION: FAIR BRICK N BLOCK FOD 12 IN RCP N, INV 805.07 12 IN RCP SW, INV 803.87 BOTTOM ELEV: 803.87
92-61914	STMH 50406	806.94	48"	CONDITION: FAIR BRICK FOD ABANDONED WATER LINE PRESENT TOP-4.80 12 IN RCP BULKHEAD NNW, INV 802.44 12 IN CLAY WNW, INV 799.94 12 IN CLAY S, INV 799.44 12 IN CLAY N, INV 799.94 CLAY IN NE 4.3, INV 798.94 N S DEPTH TO TOP IN 5.2 BOTTOM ELEV: 799.44
92-63276	STMH 50422	781.18	24"	CONDITION: POOR BRICK N BLOCK 15 IN RCP N, INV 777.68 15 IN RCP S, INV 777.68 12 IN RCP W, INV 777.68 BOTTOM ELEV: 777.48
92-61921	STMH 50429	783.27	36"	CONDITION: FAIR BRICK 15 IN RCP NW, INV 779.37 15 IN RCP SE, INV 779.32 12 IN RCP N, INV 779.87 12 IN RCP BULKHEAD E, INV 780.57 BOTTOM ELEV: 780.47
92-61915	STMH 50431	787.44	36"	CONDITION: FAIR PRECAST 12 IN CLAY N, INV 782.04 12 IN CLAY E, INV 782.44 12 IN CLAY S, INV 781.94 12 IN CLAY W, INV 782.94 BOTTOM ELEV: 782.44
92-63276	STMH 50464	781.03	UNK	CONDITION: UTO TRAFFIC BOTTOM ELEV: UNK

EXISTING SANITARY STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
71-71761	SMH 50405	807.42	48"	CONDITION: FAIR BRICK 12 IN CLAY NE, INV 798.52 12 IN CLAY SE, INV 798.42 12 IN CLAY W, INV 798.72 BOTTOM ELEV: 798.92
71-71759	SMH 50430	786.81	36"	CONDITION: FAIR BRICK 12 IN RCP NNW, INV 779.51 12 IN RCP SSE, INV 779.31 12 IN RCP E, INV 780.11 BOTTOM ELEV: 779.91
71-71760	SMH 50433	797.36	48"	CONDITION: FAIR BRICK N BLOCK 12 IN CLAY N, INV 789.36 12 IN CLAY S, INV 789.16 BOTTOM ELEV: 789.66

PROJECT BENCHMARKS

BM #	ELEV	DESCRIPTION
50	807.99	PK NAIL NORTHEAST SIDE OF UTILITY POLE. SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT
51	812.11	PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD
52	784.73	PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY



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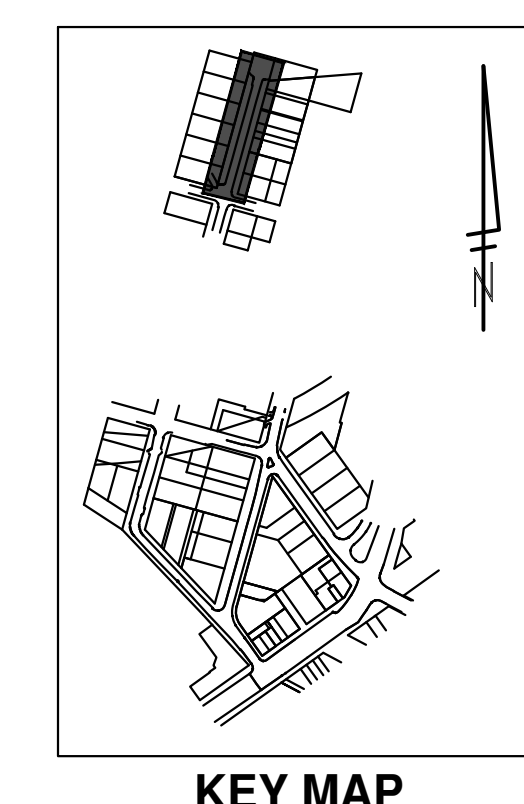
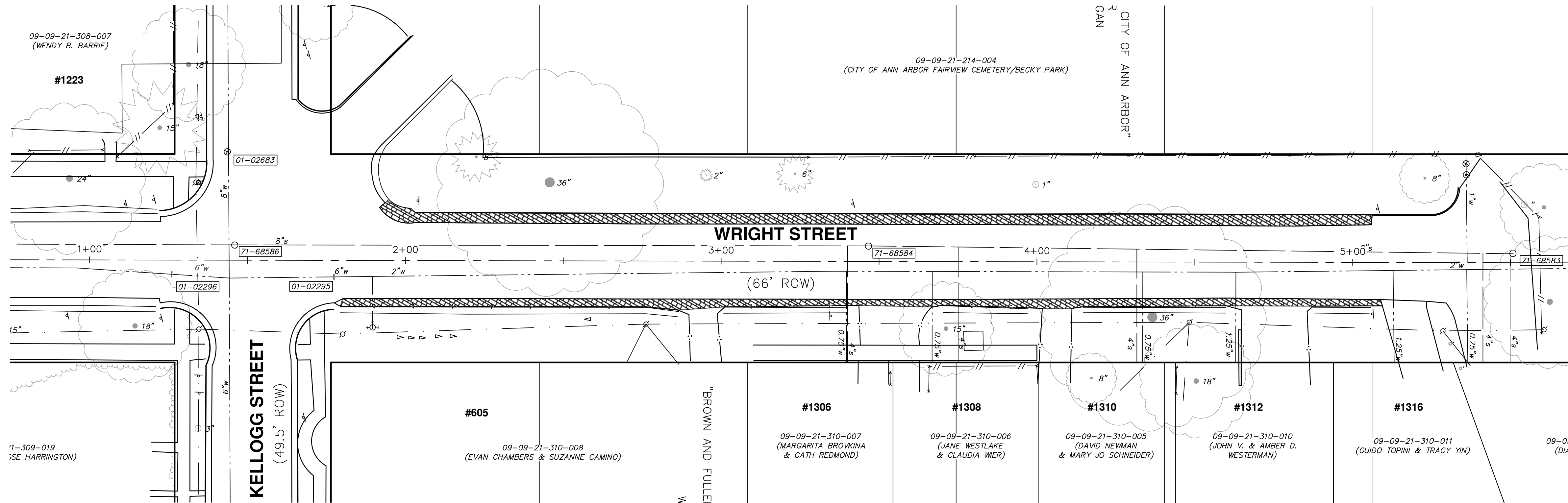
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EXISTING CONDITIONS & ALIGNMENT PLAN - MOORE ST

SCALE PLAN: 1"=20'
DRAWING No.
2022-032-12

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EXISTING SANITARY STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
71-68583	SMH 50372	848.65	48"	CONDITION: FAIR BRICK FOD 8 IN PVC SSW, INV 839.45 BOTTOM ELEV: 839.45
71-68584	SMH 50374	841.55	36"	CONDITION: FAIR BRICK 8 IN PVC NNE, INV 832.25 8 IN PVC SSW, INV 832.15 BOTTOM ELEV: 832.20
71-68586	SMH 50376	830.75	48"	CONDITION: FAIR BRICK N BLOCK 8 IN PVC NNE, INV 821.65 8 IN PVC SSW, INV 821.55 12 IN RCP ENE, INV 821.95 12 IN RCP WSW, INV 822.15 BOTTOM ELEV: 821.60

EXISTING WATER STRUCTURE TABLE

AA GIS #	WADE TRIM #	RIM	SIZE	CONDITION AND CONNECTIONS
No GIS ID	GVWD 50373	848.05	36"	CONDITION: FAIR BRICK FOD FOW NPV TOV-4.00 BOTTOM ELEV: 843.65
01-02683	GVWD 50375	830.96	48"	CONDITION: FAIR BRICK N BLOCK FOD FOW TOP-4.20 TOV-2.60 8 IN STEEL? WNW ESE, T/P 826.01 BOTTOM ELEV: 826.06

PROJECT BENCHMARKS

BM #	ELEV	DESCRIPTION
50	807.99	PK NAIL NORTHEAST SIDE OF UTILITY POLE, SOUTH SIDE SWIFT, 2ND POLE SOUTHWEST OF INTERSECTION OF SWIFT AND WRIGHT
51	812.11	PK NAIL EAST SIDE OF UTILITY POLE AT NORTHWEST CORNER PONTIAC TRAIL & LONGSHORE BETWEEN HYDRANT AND RAILROAD
52	784.73	PK NAIL SOUTHWEST SIDE OF UTILITY POLE AT NORTHEAST CORNER MOORE & BROADWAY



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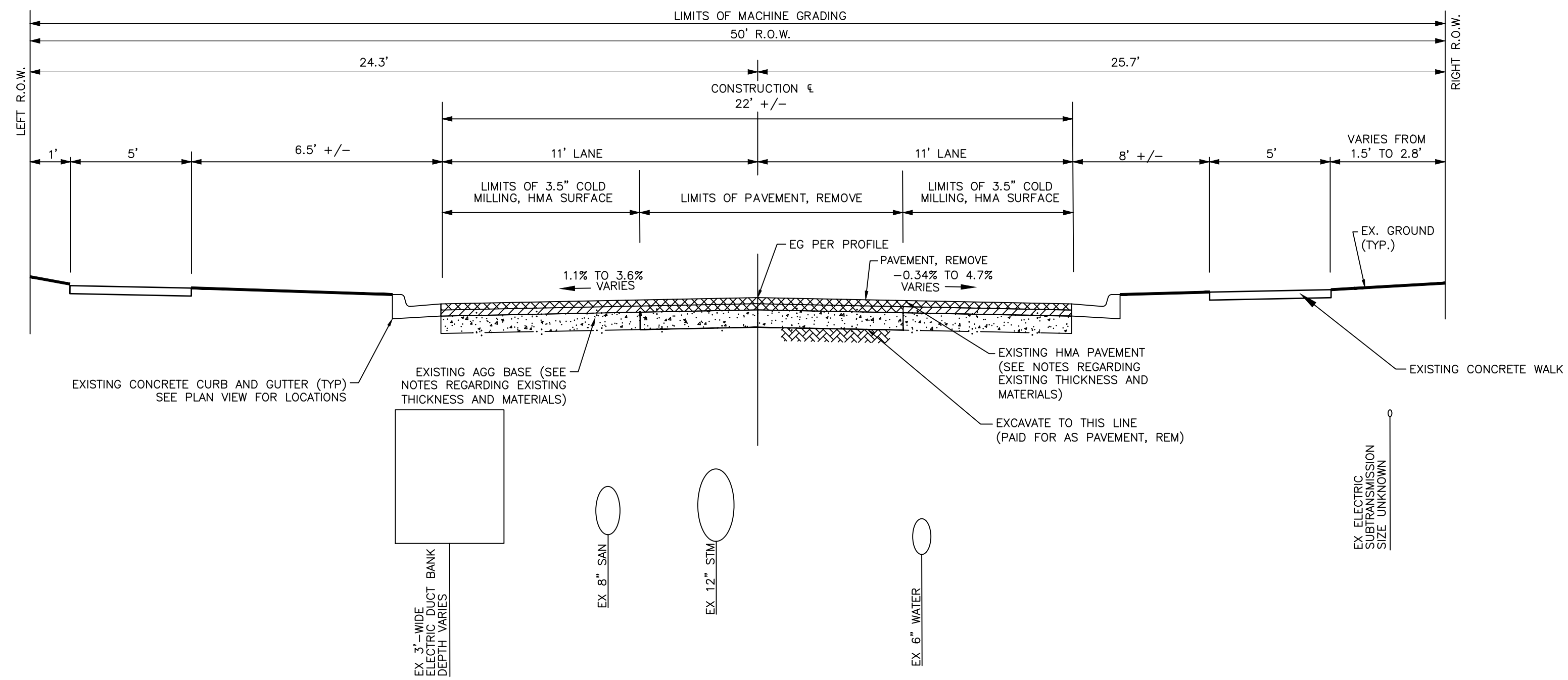
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EXISTING PAVEMENT SECTION NOTES:

W-1 10' SOIL BORING INDICATES 3.25" OF EXISTING ASPHALT THICKNESS, 8.75" OF MOIST BROWN SAND WITH GRAVEL, 2" OF MEDIUM COMPACT MOIST BROWN CLAYEY SAND WITH TRACE OF GRAVEL, 2.5" OF MEDIUM COMPACT MOIST BROWN SAND WITH TRACE OF GRAVEL, AND 4.5" OF DENSE MOIST BROWN SAND WITH SOME GRAVEL, PEBBLE & GRAVEL SEAMS

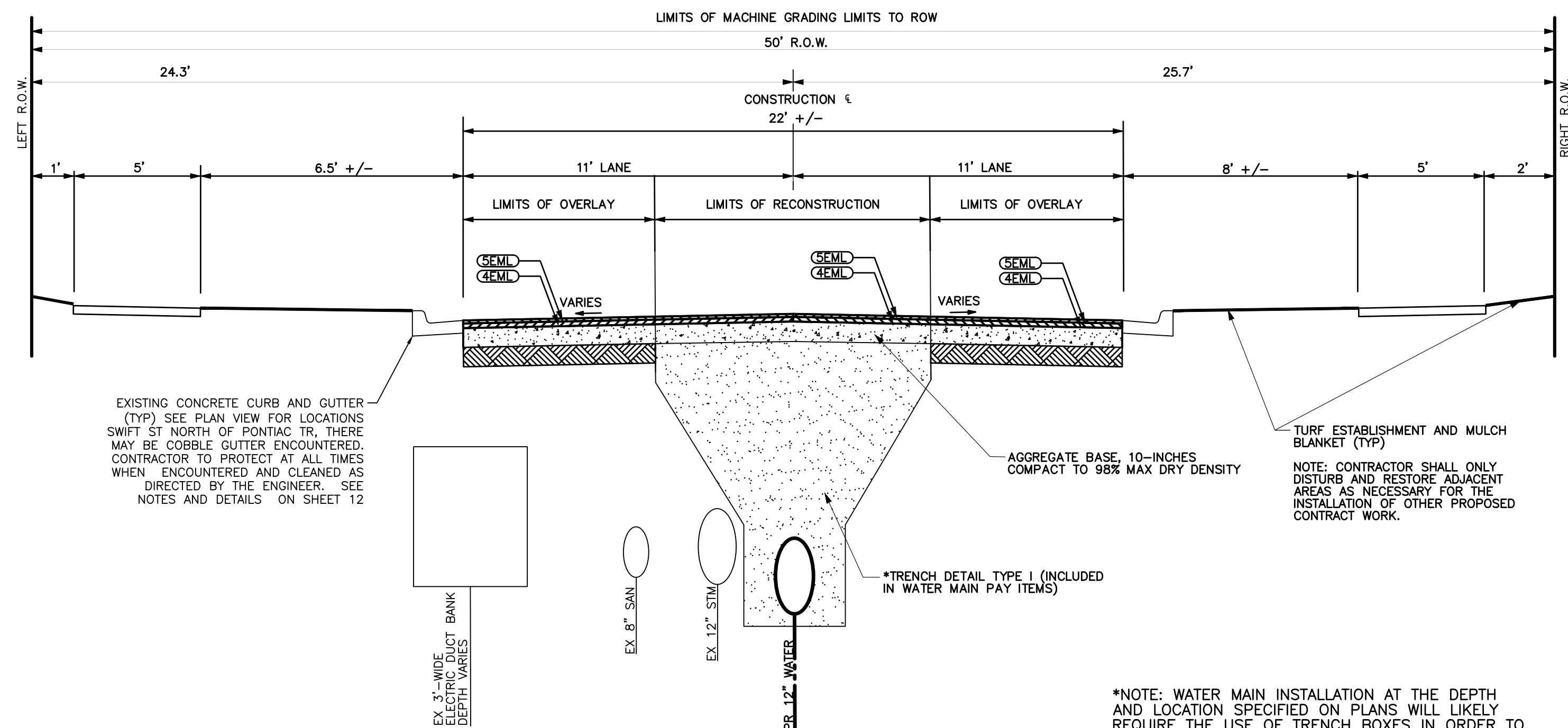
S-4 10' SOIL BORING INDICATES 7" OF EXISTING ASPHALT THICKNESS, AND 9.42' OF MEDIUM COMPACT MOIST BROWN SAND WITH SOME GRAVEL & GRAVEL SEAMS



EXISTING TYPICAL CROSS SECTION

SWIFT ST

POB STA 1+16.55 TO POE STA 7+50
NOT TO SCALE



PROPOSED TYPICAL CROSS SECTION

SWIFT ST

POB STA 1+16.55 TO POE STA 9+02.51
NOT TO SCALE

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AW (MIN)
HMA, 5EML	5EML (TOP)	165 LB/SYD	1.5"	PG 70-28P	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2"	PG 70-28P	260
WEDGING	4EML	110 LB/IN/SYD	VARIES	PG 70-28P	-

HMA APPLICATION ESTIMATE

*NOTE: WATER MAIN INSTALLATION AT THE DEPTH AND LOCATION SPECIFIED ON PLANS WILL LIKELY REQUIRE THE USE OF TRENCH BOXES IN ORDER TO PROTECT EXISTING ADJACENT CURB AND GUTTER AND TO KEEP THE EXISTING WATER MAIN LIVE. THIS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR WATER MAIN.



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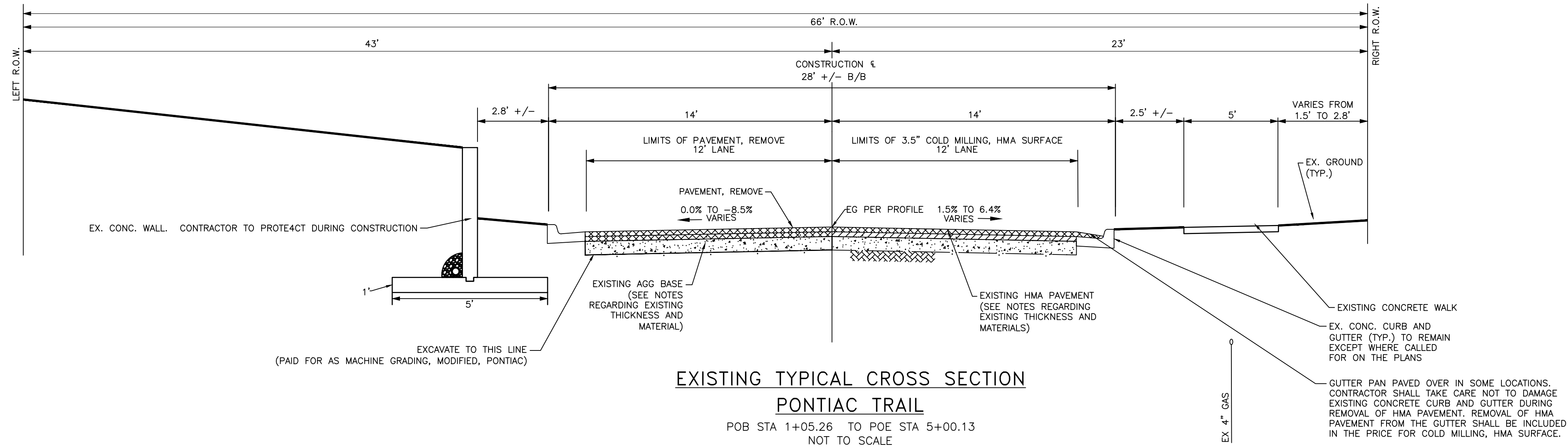
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IMPROVEMENTS
TYPICALS - SWIFT STREET**

SCALE PLAN: #####
DRAWING No. 2022-032-14

EXISTING PAVEMENT SECTION NOTES:

P-5 10' SOIL BORING INDICATES 6.5" OF EXISTING ASPHALT THICKNESS, 6.75" OF MOIST BROWN SAND WITH TRACE OF GRAVEL, AND 8.9" OF MEDIUM COMPACT MOIST BROWN MEDIUM SAND WITH TRACE OF GRAVEL.

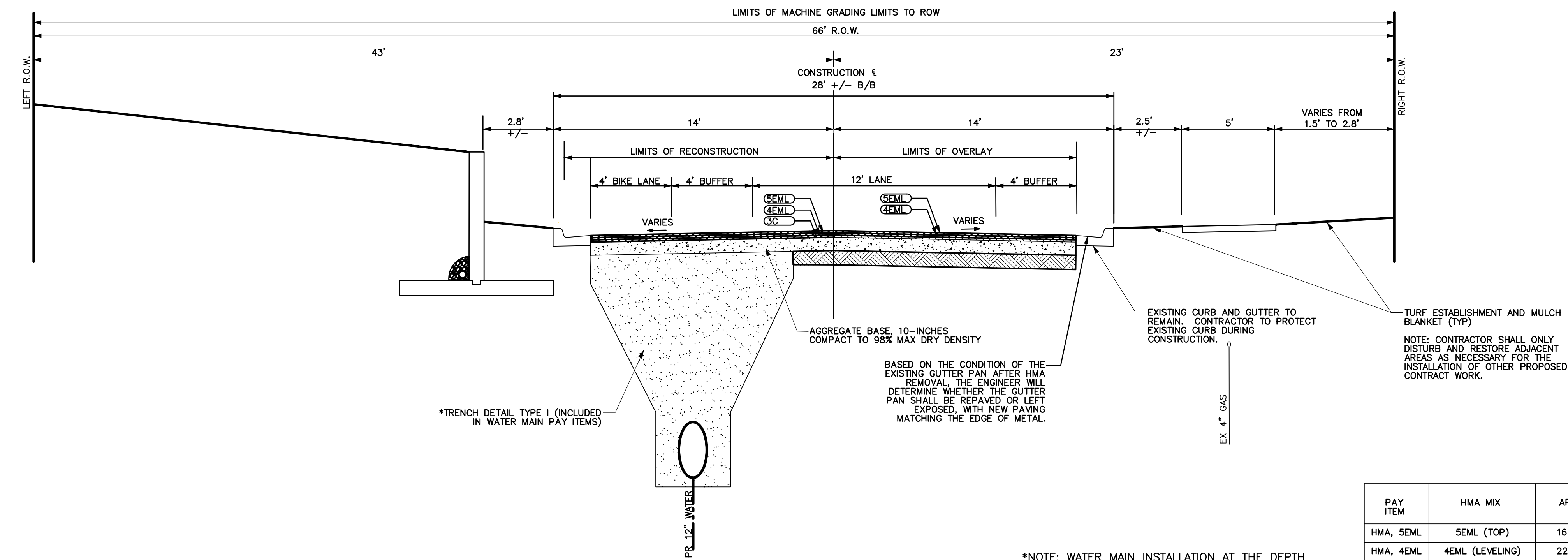
P-6 10' SOIL BORING INDICATES 6" OF EXISTING ASPHALT THICKNESS, 2.5' OF COMPACT MOIST BROWN FINE SAND, AND 7" OF MEDIUM COMPACT MOIST BROWN SAND WITH SOME GRAVEL.



EXISTING TYPICAL CROSS SECTION

PONTIAC TRAIL

POB STA 1+05.26 TO POE STA 5+00.13
NOT TO SCALE



PROPOSED TYPICAL CROSS SECTION

PONTIAC TRAIL

POB STA 1+05.26 TO POE STA 5+00.13
NOT TO SCALE

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA, 5EML	5EML (TOP)	165 LB/SYD	1.5"	PG 70-28P	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2"	PG 70-28P	260
HMA, 3C	3C (BASE)	220 LB/SYD	2"	PG 70-28P	260
WEDGING	4EML	110 LB/IN/SYD	VARIES	PG 70-28P	-

HMA APPLICATION ESTIMATE

*NOTE: WATER MAIN INSTALLATION AT THE DEPTH AND LOCATION SPECIFIED ON PLANS WILL LIKELY REQUIRE THE USE OF TRENCH BOXES IN ORDER TO PROTECT EXISTING ADJACENT CURB AND GUTTER AND TO KEEP THE EXISTING WATER MAIN LIVE. THIS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR WATER MAIN.

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TYPICALS - PONTIAC TRAIL

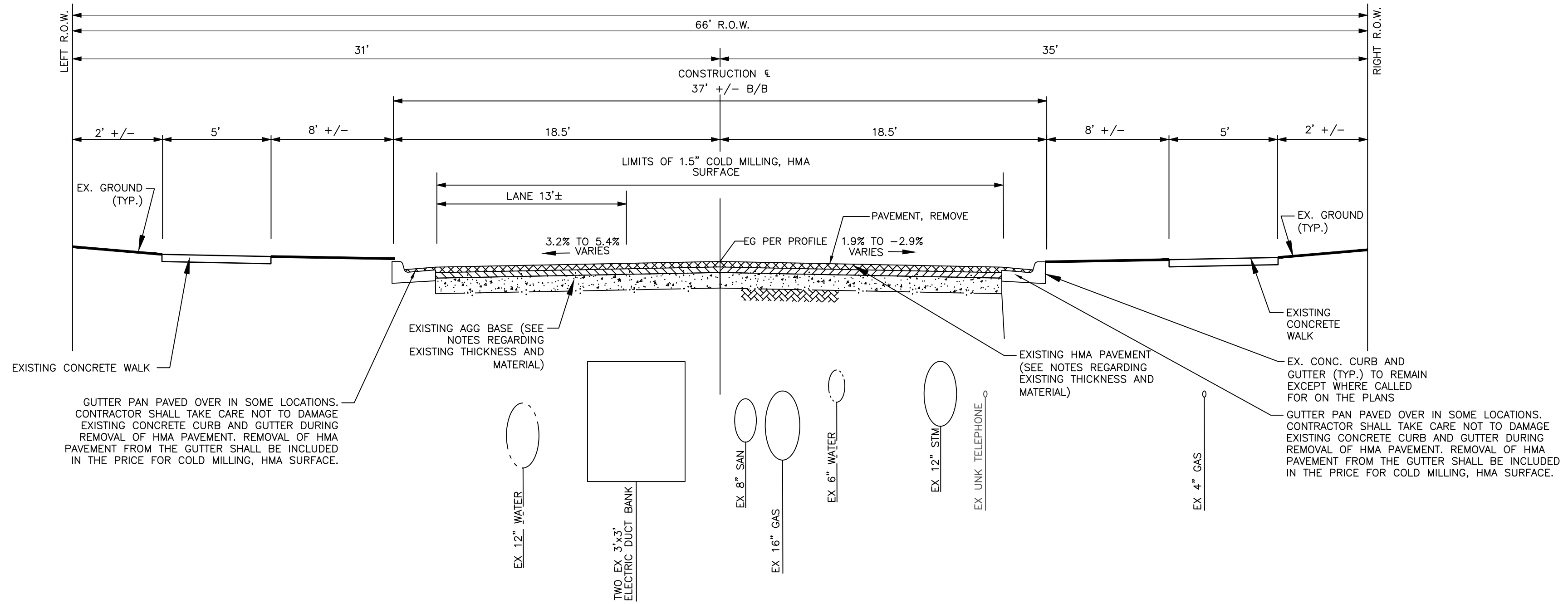
SCALE PLAN: #####
DRAWING No. 2022-032-15

SHEET No.

EXISTING PAVEMENT SECTION NOTES:

M-7 5' SOIL BORING INDICATES 3.5" OF EXISTING ASPHALT THICKNESS, 1' OF MOIST BROWN SAND WITH SOME GRAVEL, 1.7' OF COMPACT MOIST BROWN SAND WITH TRACE OF GRAVEL, AND 2' OF LOOSE MOIST BROWN CLAYEY SAND WITH TRACE OF GRAVEL

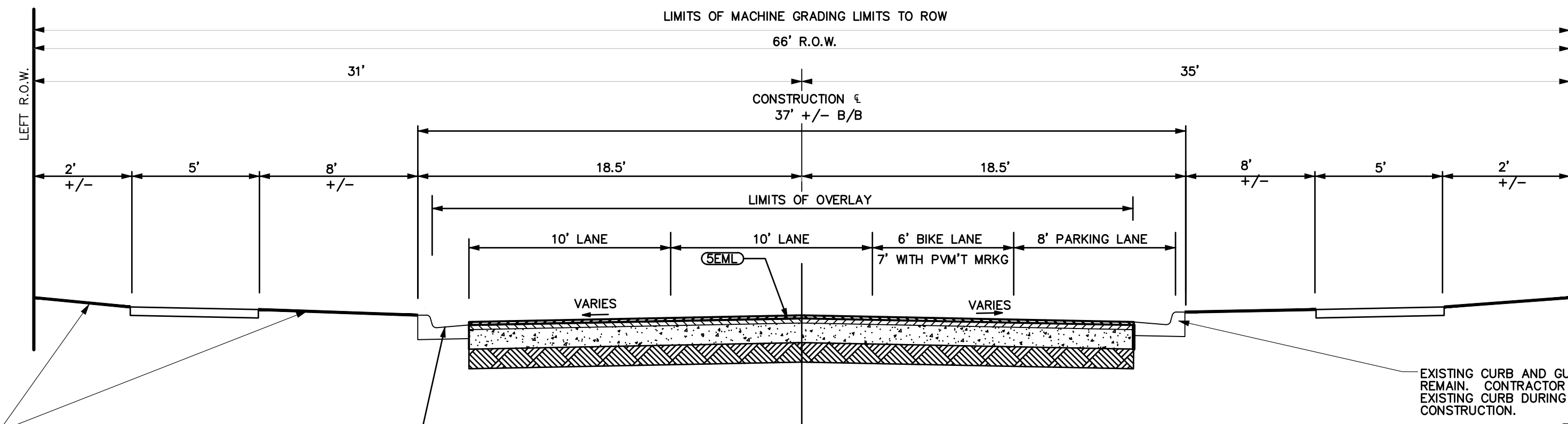
M-8 5' SOIL BORING INDICATES 5" OF EXISTING ASPHALT THICKNESS, 1.78' OF MEDIUM COMPACT MOIST BROWN SAND WITH SOME GRAVEL, AND 2.8' OF FIRM MOIST BROWN CLAY WITH SOME SILT, TRACE OF GRAVEL & SAND SEAMS



EXISTING TYPICAL CROSS SECTION

MOORE ST

POB STA 1+77.81 TO POE STA 5+50.00
NOT TO SCALE



PROPOSED TYPICAL CROSS SECTION

MOORE ST

POB STA 1+77.81 TO POE STA 5+50.00
NOT TO SCALE

HMA APPLICATION ESTIMATE

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AM (MIN)
HMA, 5EML	5EML (TOP)	165 LB/SYD	1.5"	PG 70-28P	260
WEDGING	4EML	110 LB/IN/SYD	VARIES	PG 70-28P	-

*NOTE: MOORE STREET IS MILL AND OVERLAY OF 1.5" IN THE AREAS OF THE WATER MAIN TIE OVERS THE PROPOSED SECTION IS 10" AGGREGATE BASE AND 3.5" ASPHALT.

TURF ESTABLISHMENT AND MULCH BLANKET (TYP)
NOTE: CONTRACTOR SHALL ONLY DISTURB AND RESTORE ADJACENT AREAS AS NECESSARY FOR THE INSTALLATION OF OTHER PROPOSED CONTRACT WORK.

BASED ON THE CONDITION OF THE EXISTING GUTTER PAN AFTER HMA REMOVAL, THE ENGINEER WILL DETERMINE WHETHER THE GUTTER PAN SHALL BE REPAVED OR LEFT EXPOSED, WITH NEW PAVING MATCHING THE EDGE OF METAL (TYP, BOTH SIDES OF MOORE ST.)

EXISTING CURB AND GUTTER TO REMAIN. CONTRACTOR TO PROTECT EXISTING CURB DURING CONSTRUCTION.

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ANN ARBOR MI 48106-1647
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CITY OF ANN ARBOR - ENGINEERING
PONTIAC, SWIFT, MOORE, &
WRIGHT INFRASTRUCTURE
IMPROVEMENTS
TYPICALS - MOORE STREET

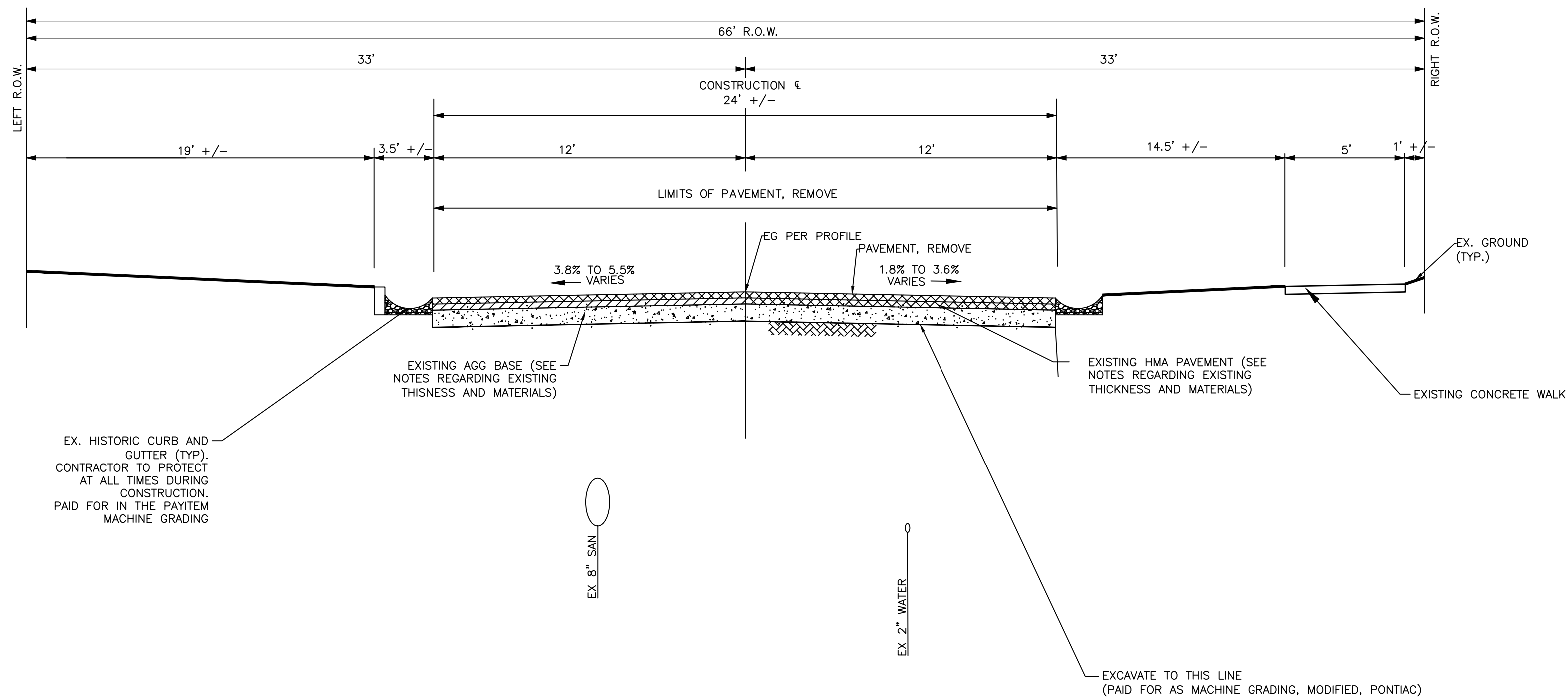
SCALE PLAN: #####
DRAWING No. 2022-032-16
SHEET No.

C:\pwwork\mflnagon\1253461\CTP-PLTS-Typicals.dwg Dwg Created: 27-Mar-23 - _o2_standard bw.stb - Plot Date: 28-Mar-23

EXISTING PAVEMENT SECTION NOTES:

W-2 10' SOIL BORING INDICATES 5.5" OF EXISTING ASPHALT THICKNESS, 2.84' OF FIRM MOIST BROWN CLAY WITH SOME SILT & TRACE OF GRAVEL-POSSIBLE FILL, 2.5' OF MEDIUM COMPACT MOIST TO WET BROWN SAND WITH SOME GRAVEL, 3.2' OF STIFF MOIST BROWN CLAY WITH SOME SILT, AND 1' OF STIFF MOIST GRAY CLAY WITH SOME SILT

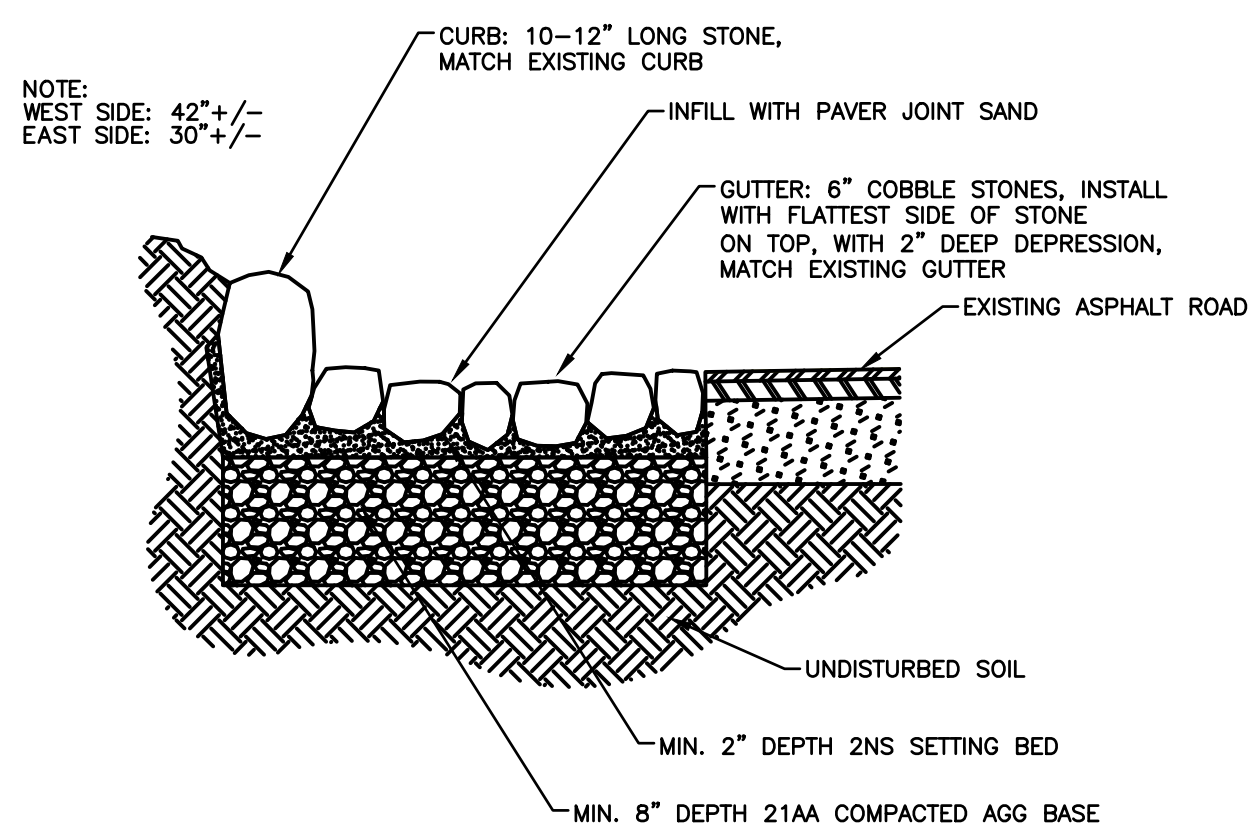
W-3 10' SOIL BORING INDICATES 2.75" OF EXISTING ASPHALT THICKNESS, 3.77' OF LOOSE MOIST BROWN CLAYEY SAND WITH SOME GRAVEL & CLAY LAYER-FILL, 1.5' OF COMPACT MOIST BROWN SAND & GRAVEL, 2.5' OF MEDIUM COMPACT MOIST BROWN CLAYEY SAND WITH SOME GRAVEL & CLAY LAYERS, AND 2' OF MEDIUM COMPACT MOIST BROWN FINE TO MEDIUM SAND



EXISTING TYPICAL CROSS SECTION

WRIGHT ST

POB STA 2+04.18 TO POE STA 5+56.38
NOT TO SCALE

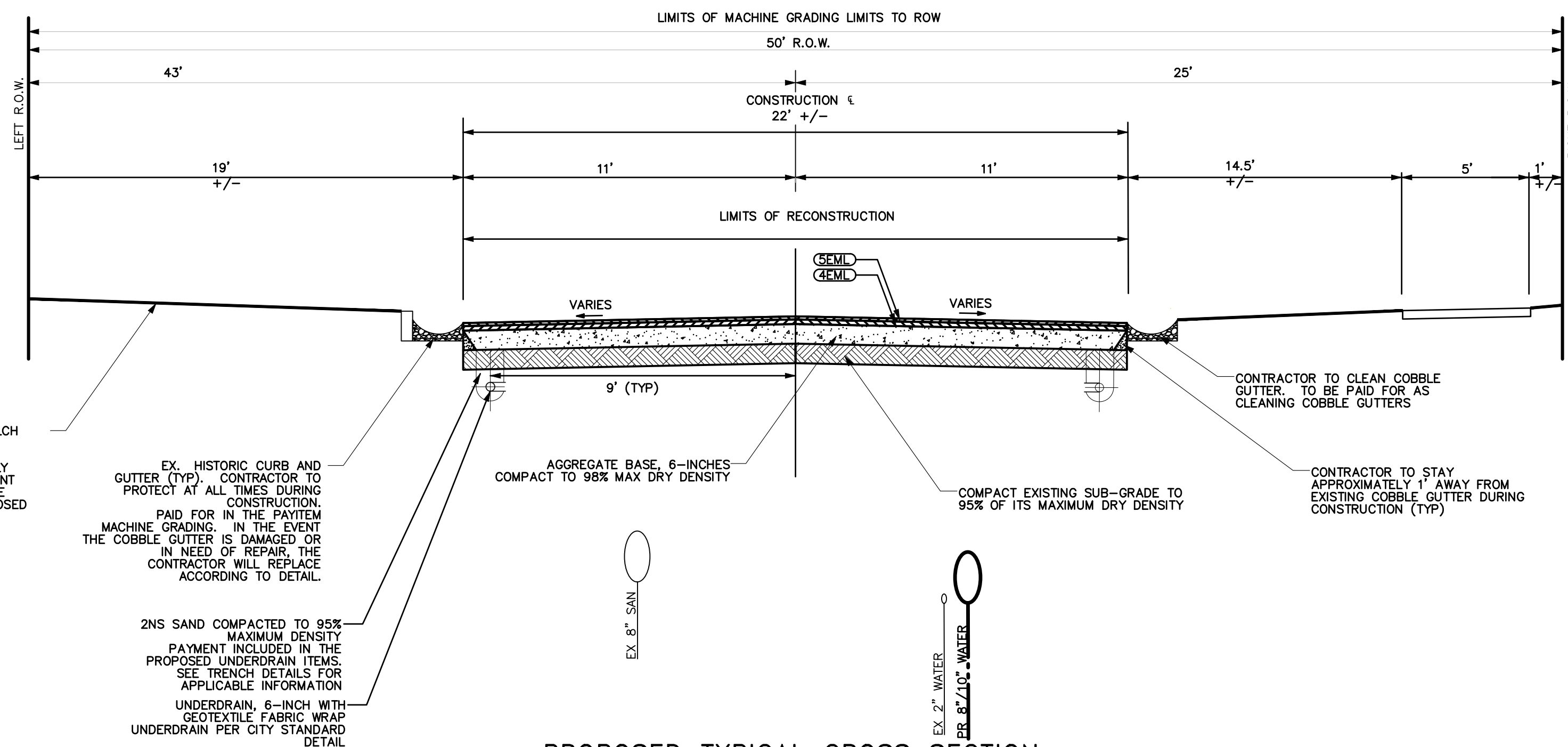


CONTRACTOR SHALL PROTECT COBBLE GUTTERS AT ALL TIMES DURING CONSTRUCTION. IF THE COBBLE GUTTERS ARE REMOVED FOR CONSTRUCTION PURPOSES, IT WILL BE PAID FOR AS REMOVE COBBLE GUTTERS. THE REPLACEMENT OF THE COBBLE GUTTERS PER THE ABOVE DETAIL, WILL BE PAID FOR AS REPLACE COBBLE GUTTER.

TURF ESTABLISHMENT AND MULCH BLANKET (TYP)
NOTE: CONTRACTOR SHALL ONLY DISTURB AND RESTORE ADJACENT AREAS AS NECESSARY FOR THE INSTALLATION OF OTHER PROPOSED CONTRACT WORK.

EX. HISTORIC CURB AND GUTTER (TYP). CONTRACTOR TO PROTECT AT ALL TIMES DURING CONSTRUCTION.
PAID FOR IN THE PAYITEM MACHINE GRADING. IN THE EVENT THE COBBLE GUTTER IS DAMAGED OR IN NEED OF REPAIR, THE CONTRACTOR WILL REPLACE ACCORDING TO DETAIL.

2NS SAND COMPACTED TO 95% MAXIMUM DENSITY
PAYMENT INCLUDED IN THE PROPOSED UNDERDRAIN ITEMS. SEE TRENCH DETAILS FOR APPLICABLE INFORMATION
UNDERDRAIN, 6-INCH WITH GEOTEXTILE FABRIC WRAP UNDERDRAIN PER CITY STANDARD DETAIL



PROPOSED TYPICAL CROSS SECTION

WRIGHT ST

POB STA 2+04.18 TO POE STA 5+56.38
NOT TO SCALE

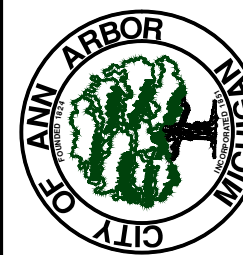
PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AW (MIN)
HMA, 5EML	5EML (TOP)	165 LB/SYD	1.5"	PG 70-28P	260
HMA, 4EML	4EML (LEVELING)	165 LB/SYD	1.5"	PG 70-28P	-
WEDGING	4EML	110 LB/IN/SYD	VARIES	PG 70-28P	-

HMA APPLICATION ESTIMATE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCM/CEW

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CITY OF ANN ARBOR - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
TYPICALS - WRIGHT STREET

SCALE PLAN: #####
DRAWING No. 2022-032-17

SHEET No.



Testing Engineers & Consultants, Inc.
1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249
(248) 588-6200 or (313) T-E-S-T-I-N-G
Fax (248) 588-6232

Boring No.: W-1 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 4 4 7		2.7	ASPHALT (3 1/4")	14.8	133	
2.5	LS 5 8 12		3	Moist Brown Gravelly Well Graded Sand With Some Clay-FILL	14.8	133	
5.0	LS 11 31/6"		5.5	Medium Compact Moist Brown Clayey SAND With Trace Of Gravel	5.9	146	
7.5	LS 21/2"		10	Dense Moist Brown SAND With Some Gravel, Pebble & Gravel Seams			
10.0				Bottom of Boring at 10'			

Water Encountered: None
At Completion: None
Boring No. W-1



Testing Engineers & Consultants, Inc.
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(248) 588-6200 or (313) T-E-S-T-I-N-G
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Boring No.: W-2 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 4 4 5		4.6	ASPHALT (5 1/2")	13.0	137	
2.5	LS 5 10 12		3.3	Firm Moist Brown CLAY With Some Silt & Trace Of Gravel-Possible Fill	9.9	140	
5.0	LS 6 8 13		5.8	Medium Compact Moist To Wet Brown SAND With Some Gravel	19.2	130	4940
7.5	LS 7 10 17		9	Stiff Moist Brown CLAY With Some Silt	16.3	135	11540
10.0			10	Extremely Stiff Moist Gray CLAY With Some Silt			
10.0				Bottom of Boring at 10'			

Water Encountered: 4.3"
At Completion: 7.1"
Boring No. W-2



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Boring No.: W-3 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 3 5 4		2.3	ASPHALT (2 3/4")	9.8	131	
2.5	LS 5 21 19		4	Loose Moist Brown Clayey Sand With Some Gravel & Clay Layer-FILL	7.5	135	
5.0	LS 9 12 17		5.5	Compact Moist Brown SAND & Gravel	7.4	135	
7.5	LS 4 5 7		8	Medium Compact Moist Brown Clayey SAND With Some Gravel & Clay Layers	6.4	137	
10.0			10	Medium Compact Moist Brown Fine To Medium SAND			
10.0				Bottom of Boring at 10'			

Water Encountered: None
At Completion: None
Boring No. W-3



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Boring No.: S-4 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 6 8 8		5.8	ASPHALT (7")	7.0	136	
2.5	LS 4 6 7			Medium Compact Moist Brown Well Graded Sand & Gravel With Some Silt & Gravel Seams-FILL	4.6	130	
5.0	LS 6 8 14				7.1	136	
7.5	LS 11 12 12		10		6.0	138	
10.0				Bottom of Boring at 10'			

Water Encountered: None
At Completion: None
Boring No. S-4



00	ISSUED FOR BID	03/28/2023	DATE
			DESCRIPTION
			CCT/BLA
			VCM/CEW
			CHECKED
			DRAWN

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Fax (248) 588-6232

Boring No.: P-5 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 8 10 12		5.4	ASPHALT (8 1/2")	5.0	139	
2.5	LS 5 6 8			Moist Brown Fine Sand With Some Silt & Trace Of Gravel-FILL	3.5	139	
5.0	LS 7 7 9			Medium Compact Moist Brown Medium SAND With Trace Of Gravel	3.5	138	
7.5	LS 4 6 10		10		3.2	139	
10.0				Bottom of Boring at 10'			

Water Encountered: None
At Completion: None
Boring No. P-5



Testing Engineers & Consultants, Inc.
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Fax (248) 588-6232

Boring No.: P-6 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 16 16 16		5	ASPHALT (6")	3.3	130	
2.5	LS 5 9 10		3	Compact Moist Brown Fine SAND With Some Silt & Trace Of Gravel	4.4	126	
5.0	LS 11 10 13			Medium Compact Moist Brown SAND With Some Gravel	1.4	133	
7.5	LS 5 10 17		10		3.2	133	
10.0				Bottom of Boring at 10'			

Water Encountered: None
At Completion: None
Boring No. P-6



Testing Engineers & Consultants, Inc.
1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249
(248) 588-6200 or (313) T-E-S-T-I-N-G
Fax (248) 588-6232

Boring No.: M-7 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 11 15 15		2.9	ASPHALT (3 1/2")	6.6	137	
2.5	LS 3 2 2		1.3	Moist Brown Gravelly Well Graded Sand With Some Silt-FILL	16.1	134	410
5.0			3	Compact Moist Brown SAND With Trace Of Gravel			
5.0			5	Loose Moist Brown Clayey SAND With Trace Of Gravel			
5.0				Bottom of Boring at 5'			

Water Encountered: None
At Completion: None
Boring No. M-7



Testing Engineers & Consultants, Inc.
1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249
(248) 588-6200 or (313) T-E-S-T-I-N-G
Fax (248) 588-6232

Boring No.: M-8 Job No.: 63228 Project: Watermain Resurfacing Project
Client: City of Ann Arbor Location: Ann Arbor, Michigan
Type of Rig: Truck Drilled By: I. Mickie
Drilling Method: Solid Stem Augers Started: 2/12/2023
Ground Surface Elevation: Completed: 2/12/2023

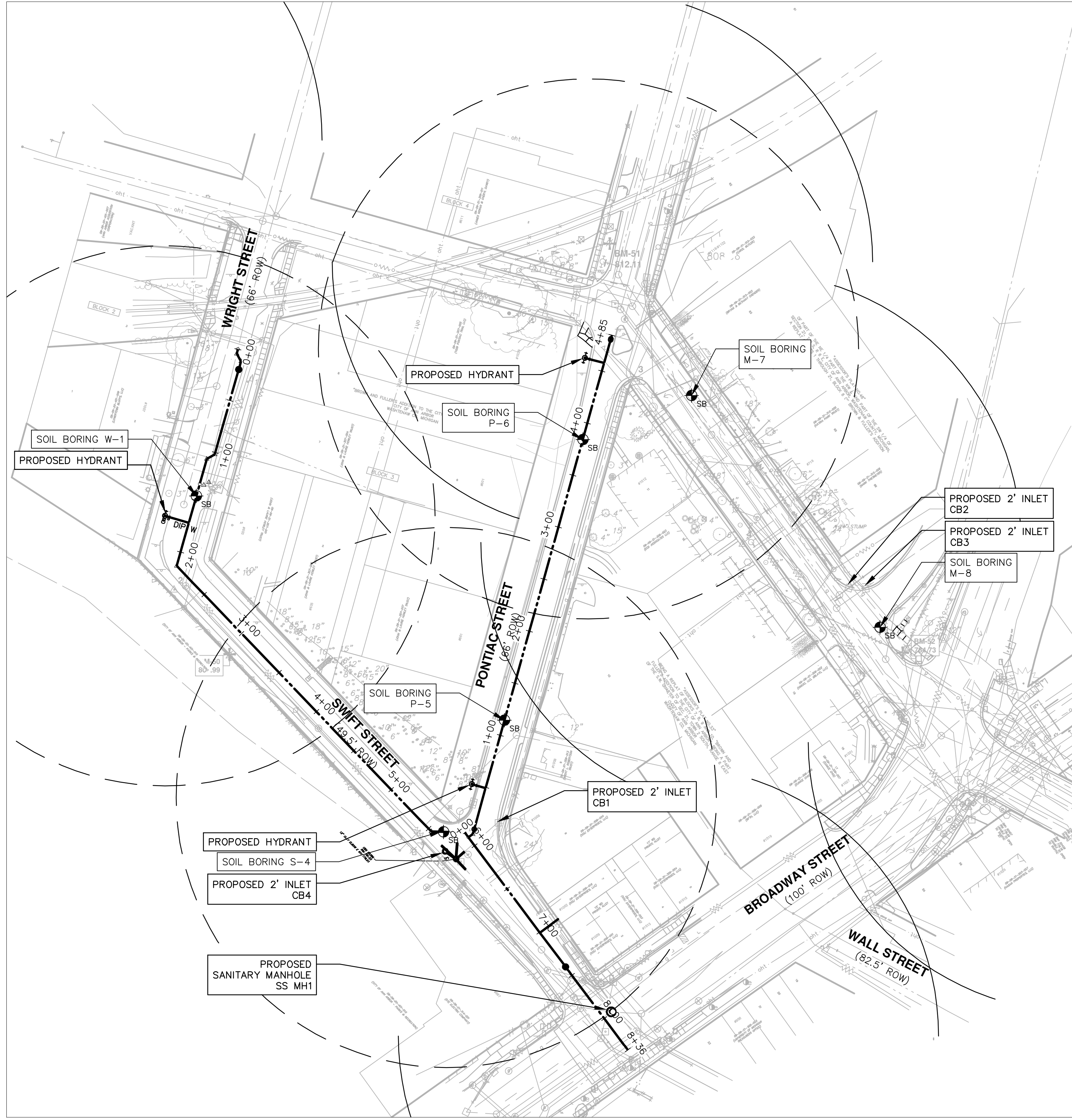
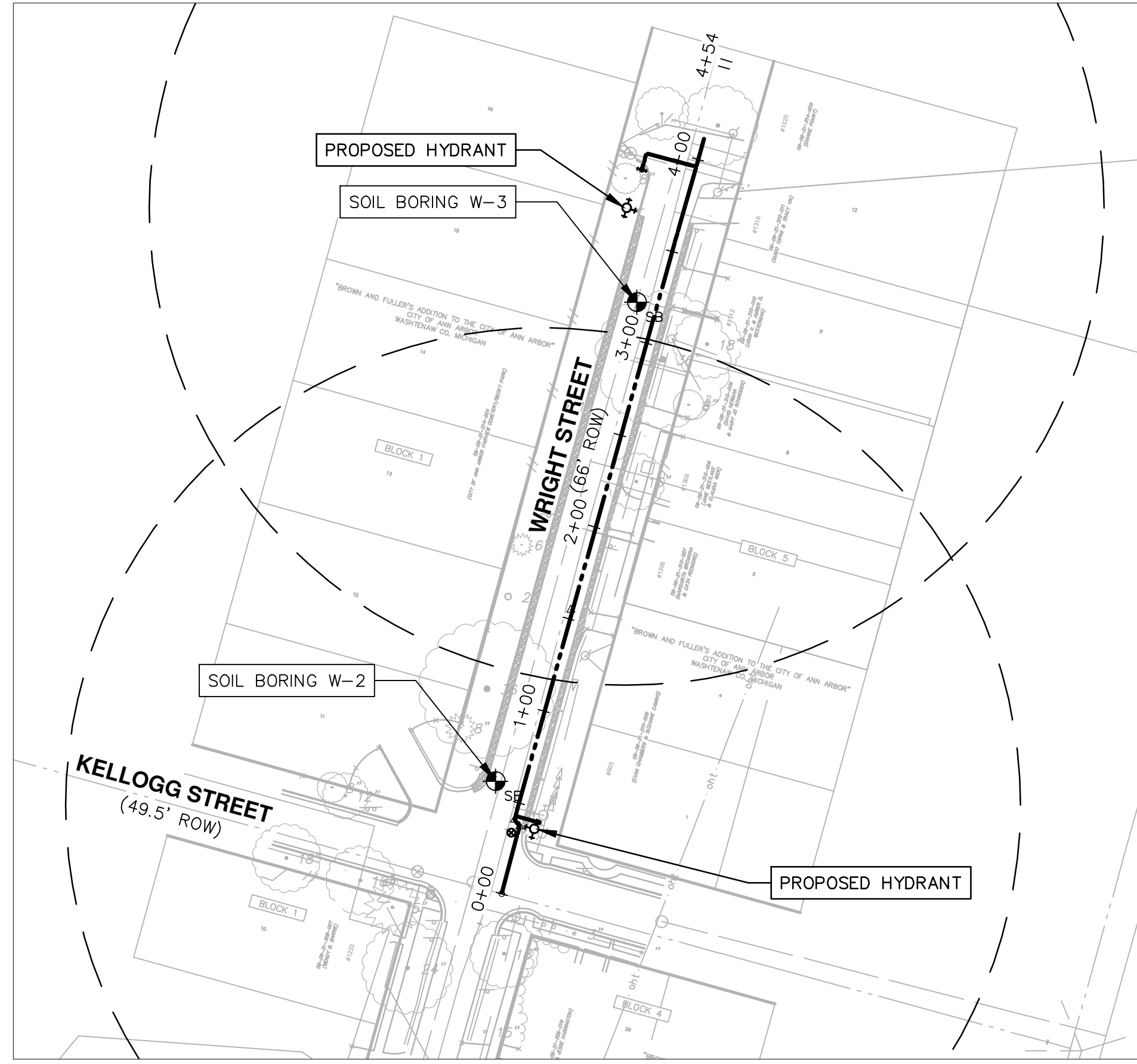
Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu
2.5	LS 16 12 7		4.2	ASPHALT (5")	7.0	136	
2.5	LS 5 7 7		2.2	Medium Compact Moist Brown Gravelly Well Graded Sand With Some Silt-FILL	19.4	129	2230
5.0			5	Firm Moist Brown CLAY With Some Silt, Trace Of Gravel & Sand Seams			
5.0				Bottom of Boring at 5'			

Water Encountered: None
At Completion: None
Boring No. M-8

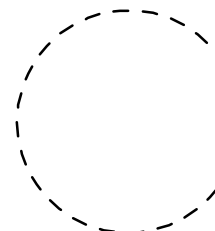
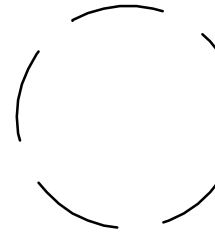

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CITY OF ANN ARBOR - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
SOIL BORING LOGS
DRAWING No. 2022-032-18
SHEET No. 18 OF 52

C:\pw_work\mfanagon\01253461\CMM-PLTS-MM-Overall.dwg Dwg Created: 27-Mar-23 -- _a2_standard_bw.stb -- Plot Date: 28-Mar-23



LEGEND

-  250-FT. HYDRANT COVERAGE (PROPOSED)
-  250-FT. HYDRANT COVERAGE (EXISTING)
-  SOIL BORING LOCATION

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

PONTIAC, SWIFT, MOORE, & WRIGHT

INFRASTRUCTURE IMPROVEMENTS

OVERALL UTILITY PLAN

SCALE PLAN: 1"=40'


DRAWING No. 2022-032-19

SHEET No. 19 OF 52

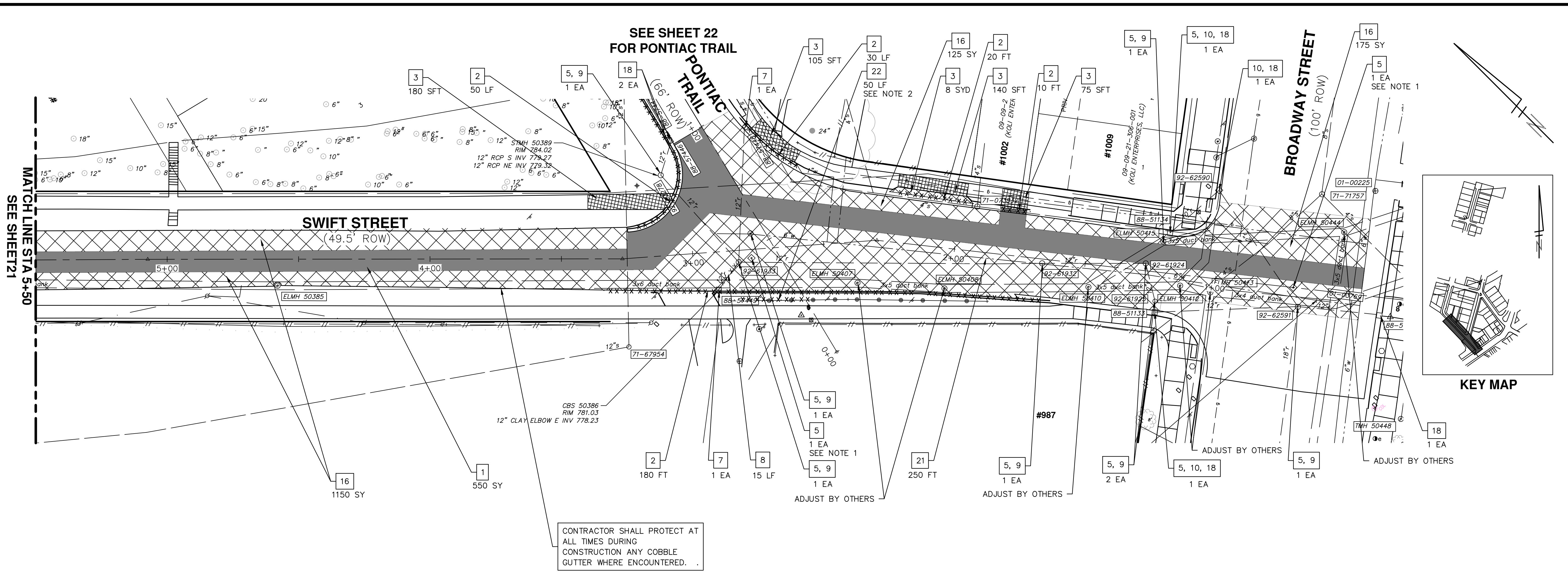
811
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C:\pwwork\wade-trim_bonderson\d1253461\CRW-PLTS-Removals.dwg Dwg Created: 28-Mar-23 - _a2 standard bw.stb - Plot Date: 28-Mar-23



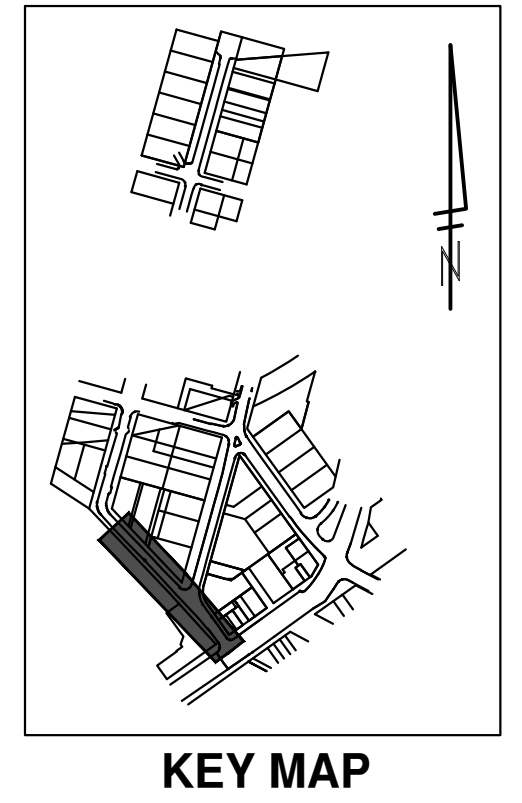
REMOVAL KEY	
KEY	DESCRIPTION
1	PAVEMENT, REMOVE
2	CURB AND GUTTER, ANY TYPE OR SIZE, REMOVE*
3	SIDEWALK AND RAMPS, REMOVE* DRIVEWAY APPROACH, REMOVE*
5	ADJUST MONUMENT BOX, GATE VALVE BOX, OR STRUCTURE COVER
7	DR STRUCTURE, ANY SIZE OR DEPTH, REM
8	SEWER, ANY SIZE OR DEPTH, REM
9	DR STRUCTURE COVER, TYPE Q, SPECIAL
10	DR STRUCTURE COVER, TYPE K, SPECIAL
13	GATE VALVE IN WELL, ABANDON
14	FIRE HYDRANT, REM
16	COLD MILLING, HMA SURFACE
18	EROSION CONTROL, INLET FILTER
19	GATE VALVE IN BOX, ABANDON
21	WATER MAIN PIPE ABANDONMENT
22	GUARDRAIL, REMOVE, SALVAGE AND RECONSTRUCT
24	PROTECTIVE FENCE, ORANGE, PLASTIC, 4 FOOT HT


NOTE: SAWCUT FULL DEPTH AT REMOVAL LIMITS

NOTE 1: CONTRACTOR MUST NOTIFY THE ENGINEER PER THE CONTRACT DOCUMENTS IN ADVANCE OF DISTURBING MONUMENT SO THAT WITNESSING OF THE MONUMENT CAN BE COORDINATED.

NOTE 2: REMOVE AND SALVAGE GUARDRAIL TERMINAL. REMOVE ONE GUARDRAIL PANEL. REINSTALL GUARDRAIL TERMINAL TO ALLOW FOR CLEARANCE TO INSTALL SIDEWALK RAMP


LEGEND	
	PAVEMENT, REMOVE
	BITUMINOUS DRIVEWAY APPROACH, REM
	CONCRETE DRIVEWAY APPROACH, REM
	COLD MILLING, HMA SURFACE
	SIDEWALK AND RAMPS, REM
	CURB AND GUTTER, REM SEWER, ANY SIZE OR DEPTH, REM
	SILT FENCE
	TREE PROTECTION FENCE





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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 REMOVAL PLAN - SWIFT ST STA 0+00 TO 5+50

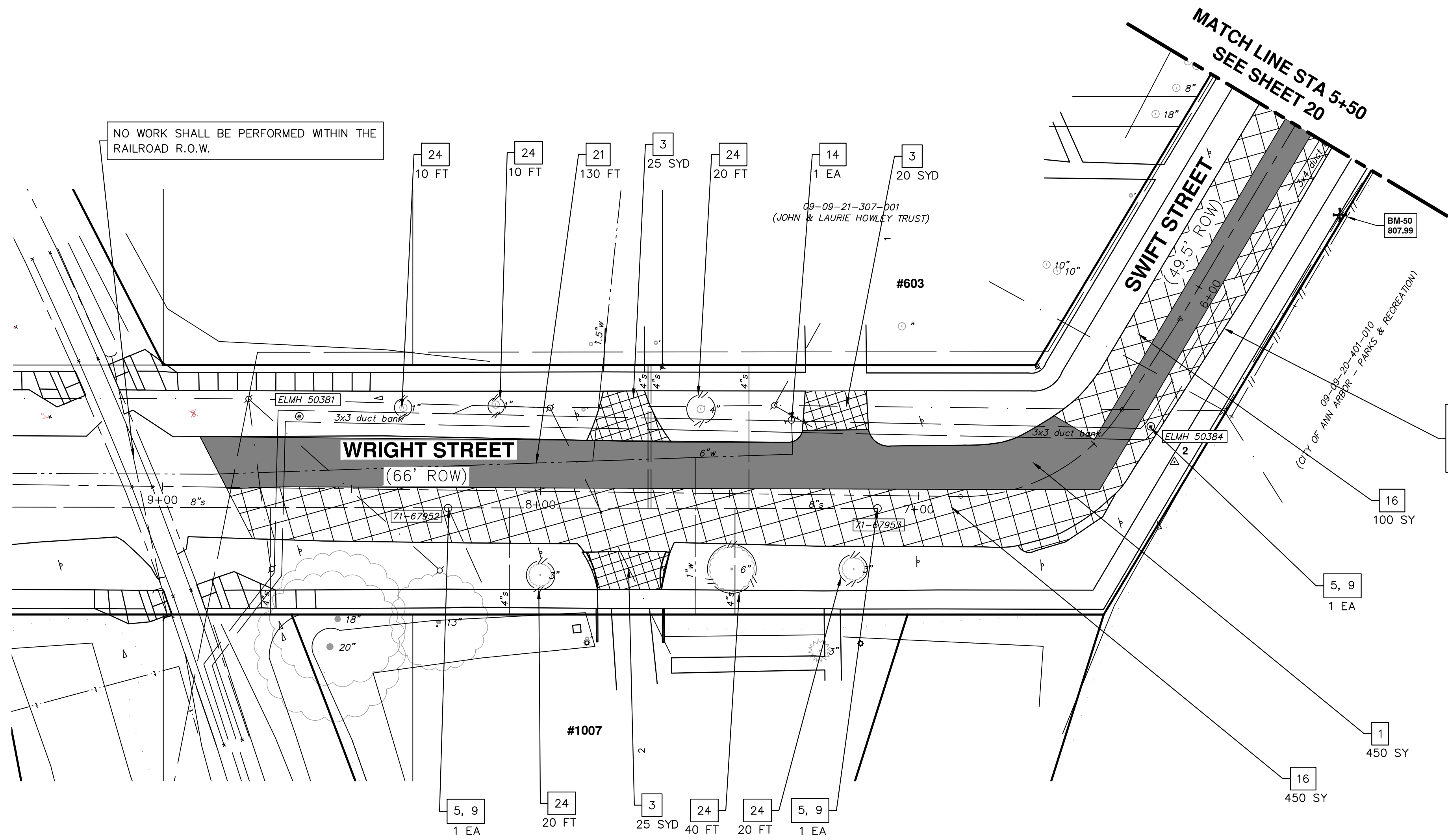
SCALE PLAN: 1"=20'

DRAWING No. 2022-035-20

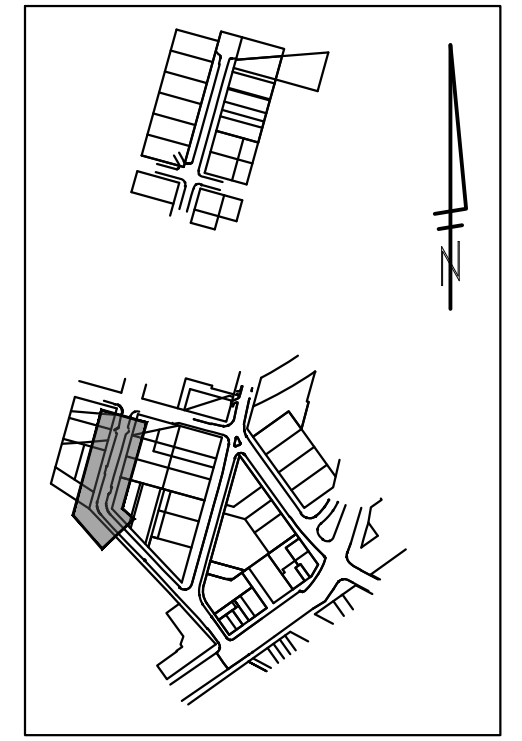
SHEET No.

20 OF 52

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CONTRACTOR SHALL PROTECT AT ALL TIMES DURING CONSTRUCTION ANY COBBLE GUTTER WHERE ENCOUNTERED.



KEY MAP

REMOVAL KEY	
KEY	DESCRIPTION
1	PAVEMENT, REMOVE
2	CURB AND GUTTER, ANY TYPE OR SIZE, REMOVE*
3	SIDEWALK AND RAMPS, REMOVE* DRIVEWAY APPROACH, REMOVE*
5	ADJUST MONUMENT BOX, GATE VALVE BOX, OR STRUCTURE COVER
7	DR STRUCTURE, ANY SIZE OR DEPTH, REM
8	SEWER, ANY SIZE OR DEPTH, REM
9	DR STRUCTURE COVER, TYPE Q, SPECIAL
10	DR STRUCTURE COVER, TYPE K, SPECIAL
13	GATE VALVE IN WELL, ABANDON
14	FIRE HYDRANT, REM
16	COLD MILLING, HMA SURFACE
18	EROSION CONTROL, INLET FILTER
19	GATE VALVE IN BOX, ABANDON
21	WATER MAIN PIPE ABANDONMENT
22	GUARDRAIL, REMOVE, SALVAGE AND RECONSTRUCT
24	PROTECTIVE FENCE, ORANGE, PLASTIC, 4 FOOT HT

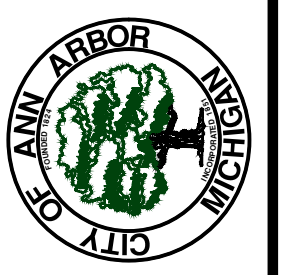
NOTE: SAWCUT FULL DEPTH AT REMOVAL LIMITS

LEGEND	
	PAVEMENT, REMOVE
	BITUMINOUS DRIVEWAY APPROACH, REM
	CONCRETE DRIVEWAY APPROACH, REM
	COLD MILLING, HMA SURFACE
	SIDEWALK AND RAMPS, REM
	CURB AND GUTTER, REM SEWER, ANY SIZE OR DEPTH, REM
	SILT FENCE
	TREE PROTECTION FENCE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCN/CEW

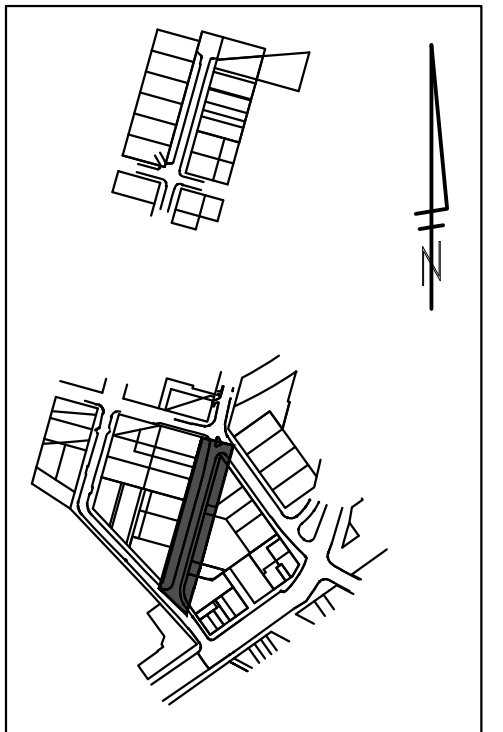
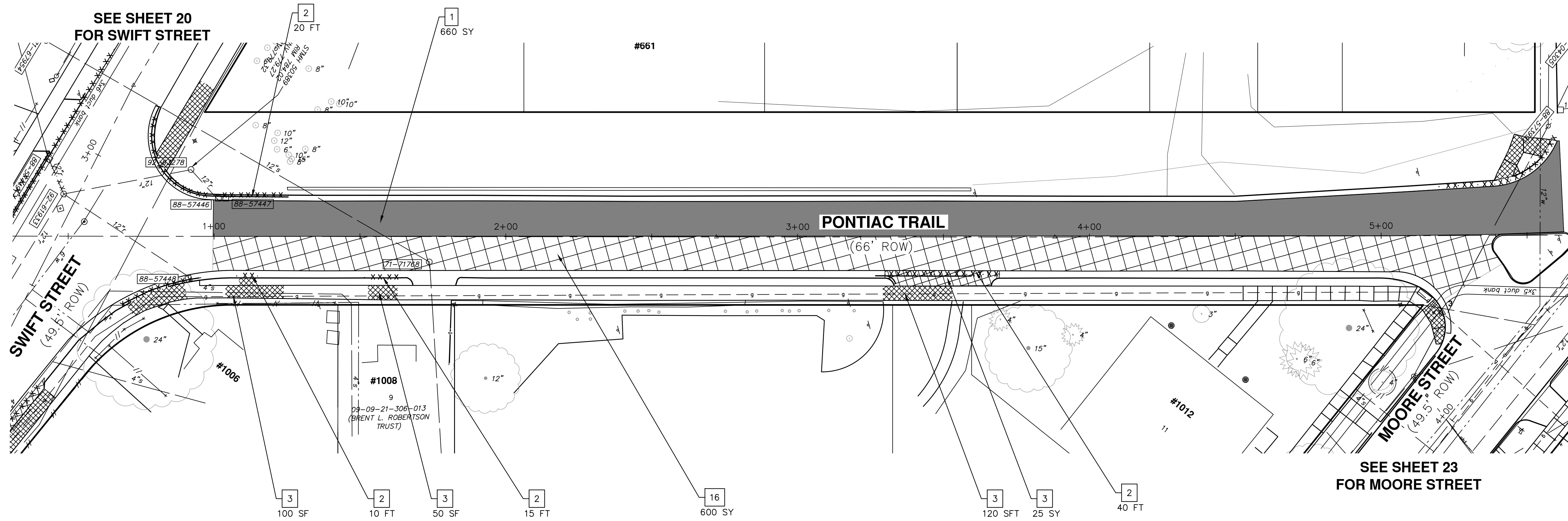
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
REMOVAL PLAN - SWIFT ST STA 5+50 TO POE

SCALE PLAN: 1"=20'
DRAWING No. 2022-032-21
SHEET No.

C:\pwwork\wade-trim_banderson\d1253461\CRW-PLTS-Removals.dwg Dwg Created: 28-Mar-23 - _a2 standard bw.stb - Plot Date: 28-Mar-23

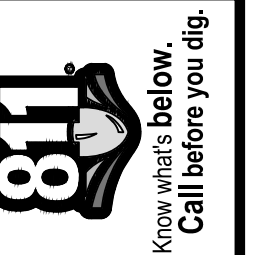


KEY MAP
NOTE: CONTRACTOR MUST NOTIFY THE ENGINEER PER THE CONTRACT DOCUMENTS IN ADVANCE OF DISTURBING MONUMENTS SO THAT WITNESSING OF THE MONUMENT CAN BE COORDINATED.

REMOVAL KEY	
KEY	DESCRIPTION
1	PAVEMENT, REMOVE
2	CURB AND GUTTER, ANY TYPE OR SIZE, REMOVE*
3	SIDEWALK AND RAMPS, REMOVE* DRIVEWAY APPROACH, REMOVE*
5	ADJUST MONUMENT BOX, GATE VALVE BOX, OR STRUCTURE COVER
7	DR STRUCTURE, ANY SIZE OR DEPTH, REM
8	SEWER, ANY SIZE OR DEPTH, REM
9	DR STRUCTURE COVER, TYPE Q, SPECIAL
10	DR STRUCTURE COVER, TYPE K, SPECIAL
13	GATE VALVE IN WELL, ABANDON
14	FIRE HYDRANT, REM
16	COLD MILLING, HMA SURFACE
18	EROSION CONTROL, INLET FILTER
19	GATE VALVE IN BOX, ABANDON
21	WATER MAIN PIPE ABANDONMENT
22	GUARDRAIL, REMOVE, SALVAGE AND RECONSTRUCT
24	PROTECTIVE FENCE, ORANGE, PLASTIC, 4 FOOT HT

NOTE: SAWCUT FULL DEPTH AT REMOVAL LIMITS

LEGEND	
	PAVEMENT, REMOVE
	BITUMINOUS DRIVEWAY APPROACH, REM
	CONCRETE DRIVEWAY APPROACH, REM
	COLD MILLING, HMA SURFACE
	SIDEWALK AND RAMPS, REM
	CURB AND GUTTER, REM SEWER, ANY SIZE OR DEPTH, REM
	SILT FENCE
	TREE PROTECTION FENCE



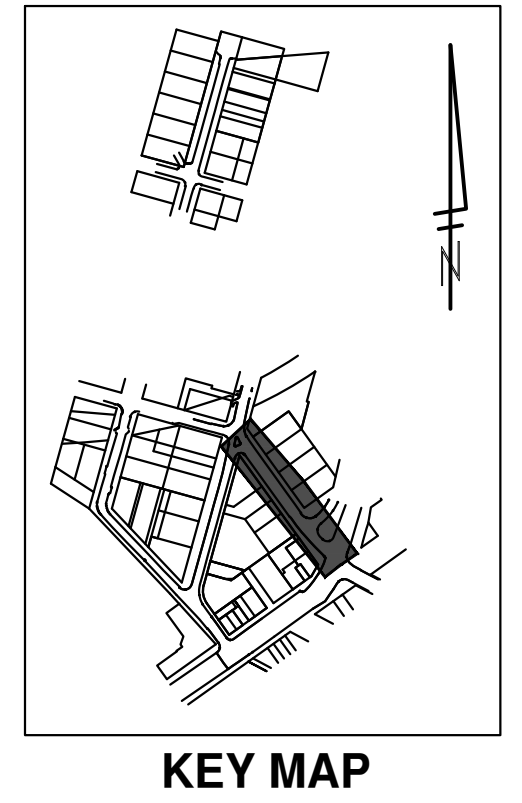
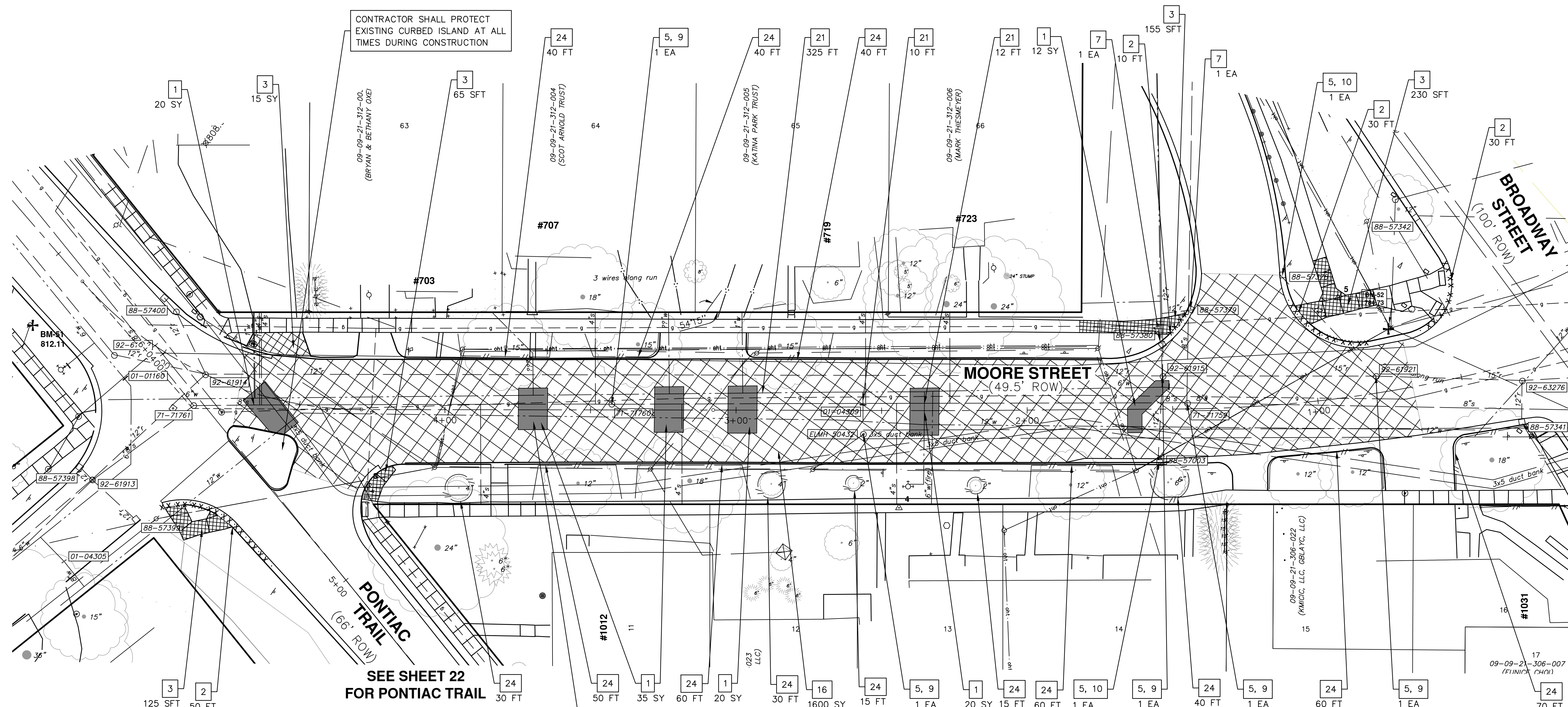
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023		

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
REMOVAL PLAN - PONTIAC TRAIL

SCALE PLAN: 1"=20'
DRAWING No. 2022-032-22

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CONTRACTOR SHALL PROTECT EXISTING CURBED ISLAND AT ALL TIMES DURING CONSTRUCTION


AREAS OF WATER MAIN CONSOLIDATION FROM EXISTING 6" TO EXISTING 12" (TYP)

SEE SHEET 22 FOR PONTIAC TRAIL

REMOVAL KEY	
KEY	DESCRIPTION
1	PAVEMENT, REMOVE
2	CURB AND GUTTER, ANY TYPE OR SIZE, REMOVE*
3	SIDEWALK AND RAMPS, REMOVE* DRIVEWAY APPROACH, REMOVE*
5	ADJUST MONUMENT BOX, GATE VALVE BOX, OR STRUCTURE COVER
7	DR STRUCTURE, ANY SIZE OR DEPTH, REM
8	SEWER, ANY SIZE OR DEPTH, REM
9	DR STRUCTURE COVER, TYPE Q, SPECIAL
10	DR STRUCTURE COVER, TYPE K, SPECIAL
13	GATE VALVE IN WELL, ABANDON
14	FIRE HYDRANT, REM
16	COLD MILLING, HMA SURFACE
18	EROSION CONTROL, INLET FILTER
19	GATE VALVE IN BOX, ABANDON
21	WATER MAIN PIPE ABANDONMENT
22	GUARDRAIL, REMOVE, SALVAGE AND RECONSTRUCT
24	PROTECTIVE FENCE, ORANGE, PLASTIC, 4 FOOT HT


LEGEND	
	PAVEMENT, REMOVE
	BITUMINOUS DRIVEWAY APPROACH, REM
	CONCRETE DRIVEWAY APPROACH, REM
	COLD MILLING, HMA SURFACE
	SIDEWALK AND RAMPS, REM
	CURB AND GUTTER, REM SEWER, ANY SIZE OR DEPTH, REM
	SILT FENCE
	TREE PROTECTION FENCE

NOTE: SAWCUT FULL DEPTH AT REMOVAL LIMITS



Know what's below.
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00	03/28/2023	ISSUED FOR BID	CGT/BLA	VCM/CEW



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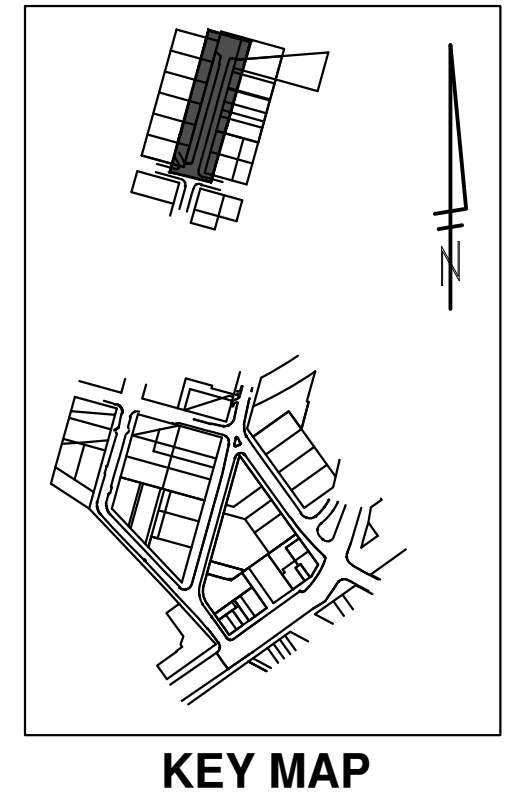
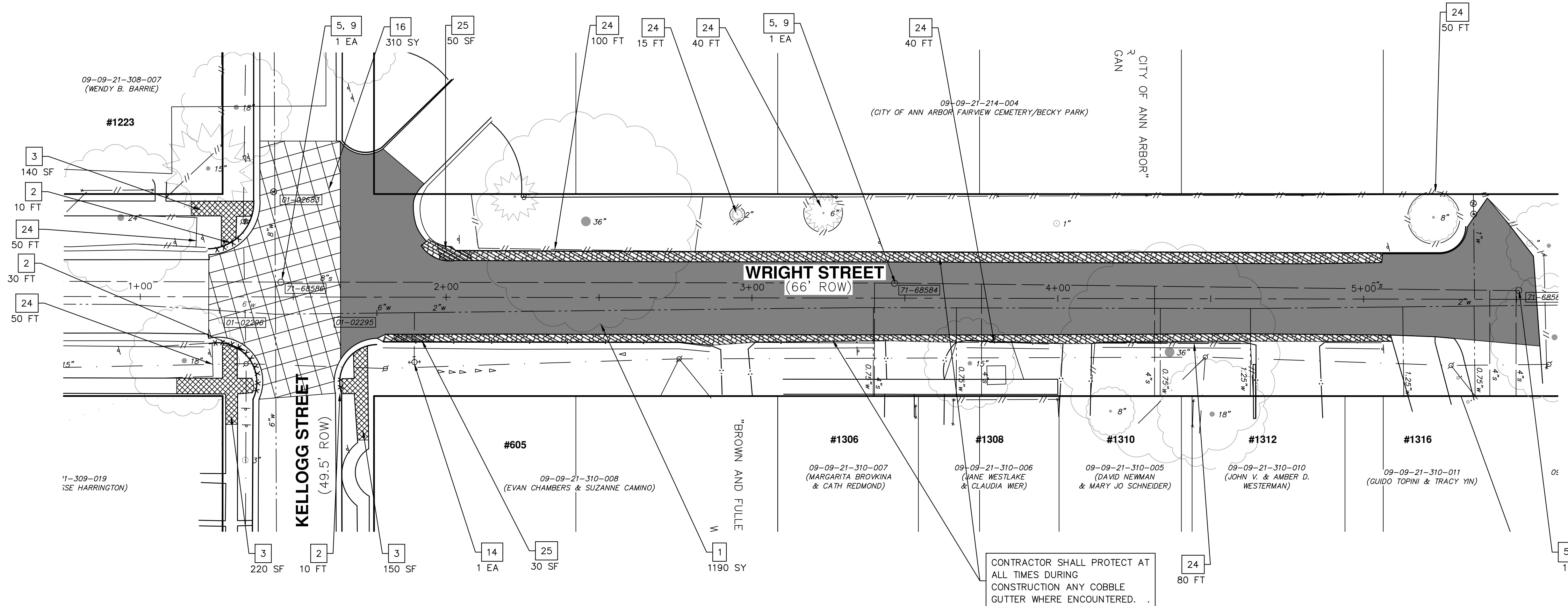
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 REMOVAL PLAN - MOORE

SCALE PLAN: 1"=80'

DRAWING No. 2022-032-23

SHEET No. 23 OF 52

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KEY MAP

REMOVAL KEY	
KEY	DESCRIPTION
1	PAVEMENT, REMOVE
2	CURB AND GUTTER, ANY TYPE OR SIZE, REMOVE*
3	SIDEWALK AND RAMPS, REMOVE* DRIVEWAY APPROACH, REMOVE*
5	ADJUST MONUMENT BOX, GATE VALVE BOX, OR STRUCTURE COVER
7	DR STRUCTURE, ANY SIZE OR DEPTH, REM
8	SEWER, ANY SIZE OR DEPTH, REM
9	DR STRUCTURE COVER, TYPE Q, SPECIAL
10	DR STRUCTURE COVER, TYPE K, SPECIAL
13	GATE VALVE IN WELL, ABANDON
14	FIRE HYDRANT, REM
16	COLD MILLING, HMA SURFACE
18	EROSION CONTROL, INLET FILTER
19	GATE VALVE IN BOX, ABANDON
21	WATER MAIN PIPE ABANDONMENT
22	GUARDRAIL, REMOVE, SALVAGE AND RECONSTRUCT
24	PROTECTIVE FENCE, ORANGE, PLASTIC, 4 FOOT HT
25	COBBLE GUTTER, REM

NOTE: SAWCUT FULL DEPTH AT REMOVAL LIMITS

LEGEND	
	PAVEMENT, REMOVE
	BITUMINOUS DRIVEWAY APPROACH, REM
	CONCRETE DRIVEWAY APPROACH, REM
	COLD MILLING, HMA SURFACE
	SIDEWALK AND RAMPS, REM
	CURB AND GUTTER, REM SEWER, ANY SIZE OR DEPTH, REM
	SILT FENCE
	TREE PROTECTION FENCE

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 REMOVAL PLAN - WRIGHT

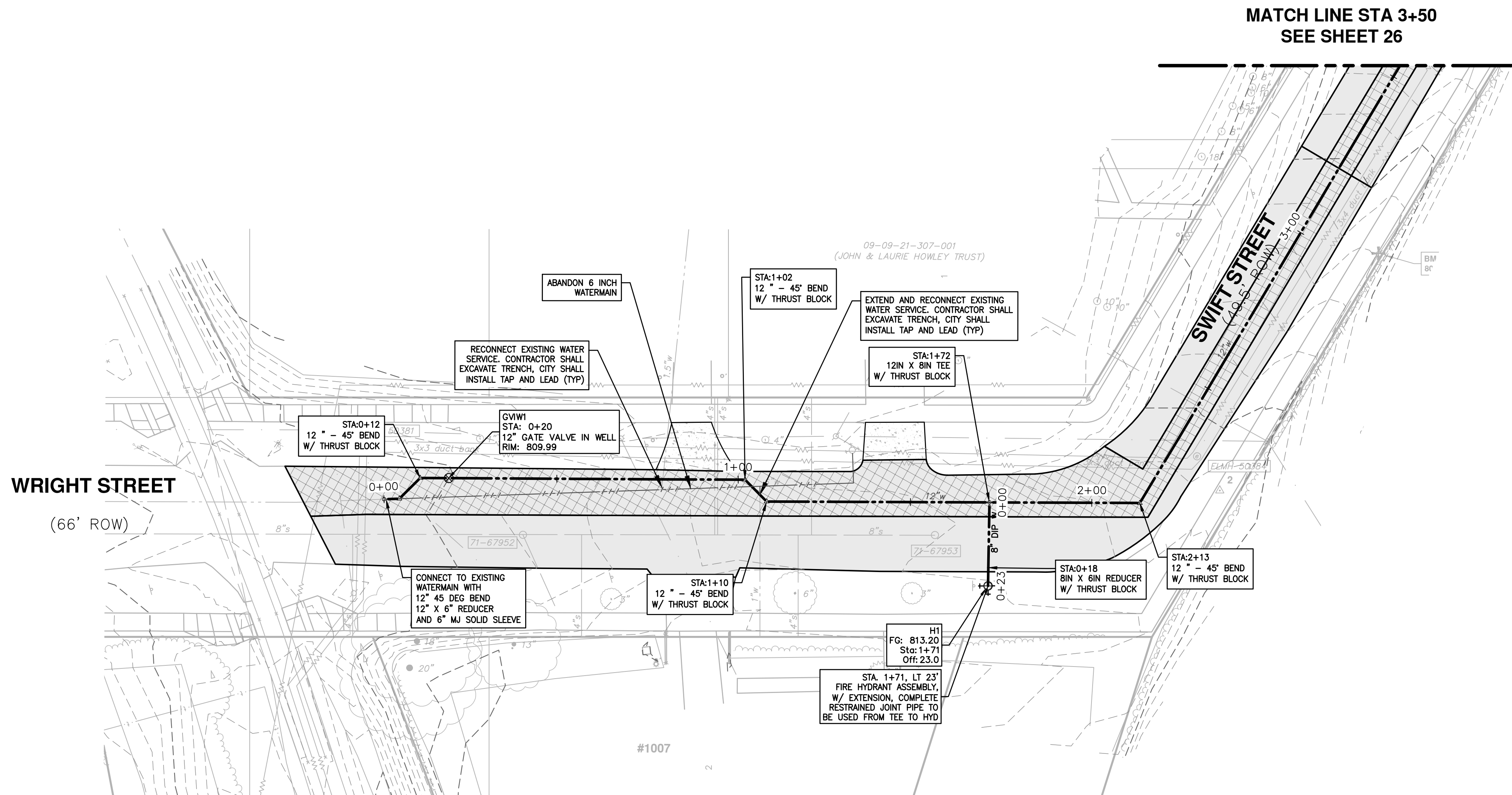
SCALE PLAN: 1"=80'
 DRAWING No. 2022-032-24

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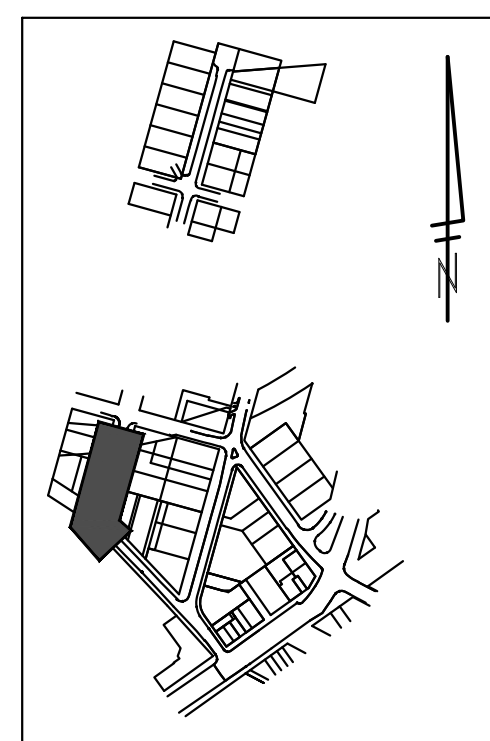
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WRIGHT STREET
(66' ROW)

MATCH LINE STA 3+50
SEE SHEET 26

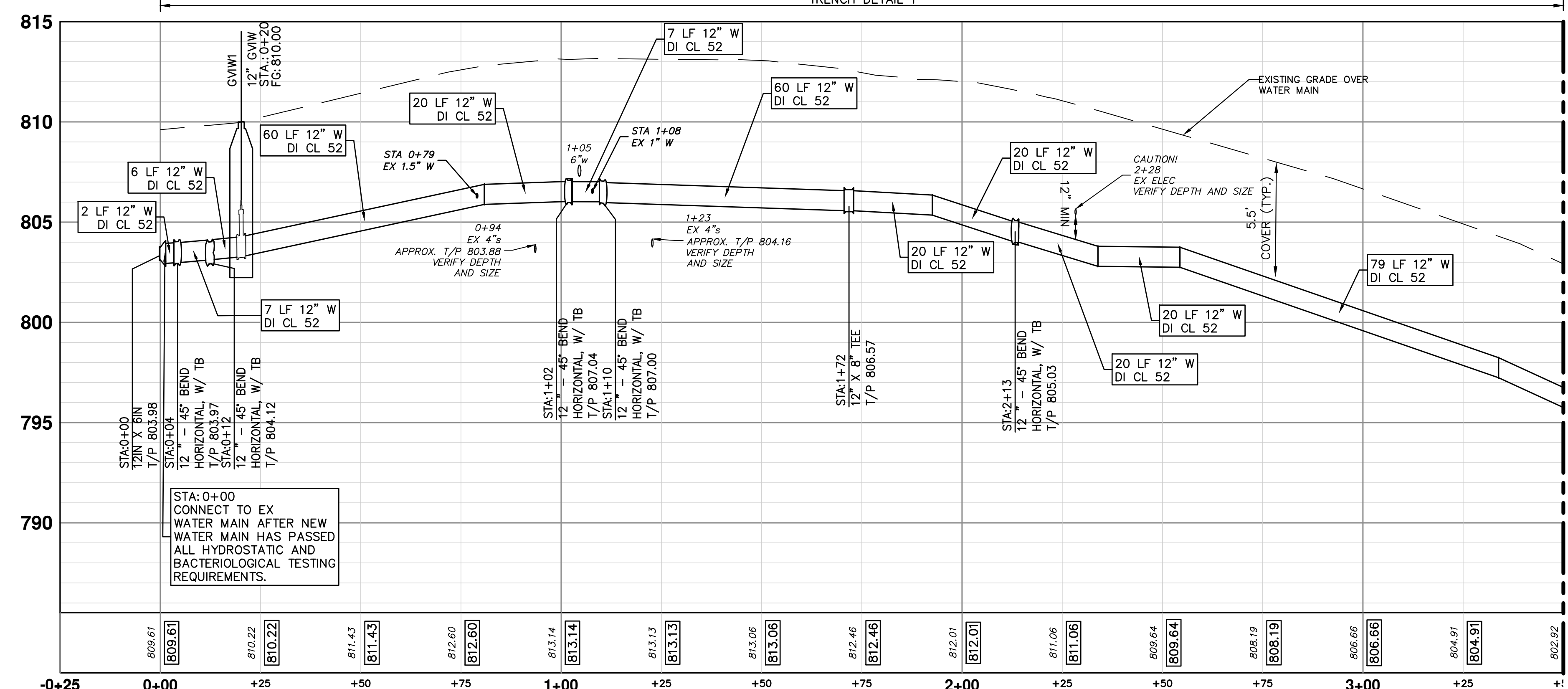


KEY MAP

NOTES

- TWO WEEKS PRIOR TO THE START OF CONSTRUCTION ON WRIGHT ST THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION ON WRIGHT STREET AT THE CONNECTION POINT OR AS DIRECTED BY THE ENGINEER TO VERIFY THE LOCATION OF THE EXISTING WATERMAIN. ALL COSTS ASSOCIATED WITH THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK - EXPLORATORY EXCAVATION (0-10; DEEP)(TRENCH DETAIL 1)
- WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, XX LB"
- THE DEPTH AND SIZE OF ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER GENERAL CONDITIONS, MAX.

12" DI CL 52 W/ POLYETHYLENE WRAP
TRENCH DETAIL 1



MATCH LINE STA 3+50
SEE SHEET 26

STRUCTURE	TYPE	STATION	RIM	WELL DEPTH
GVIW1	12" GVIW	0+20	809.99	7.52

STRUCTURE	TYPE	STATION	FG	T/P
H1	HYD	???	813.20	5.50

Address	Station	Size (in)
1007	1+08	1.00
601	0+79	1.50

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 PROPOSED WATER MAIN PLAN AND PROFILE SWIFT ST STA 0+00 TO 3+50

SCALE PLAN: #####

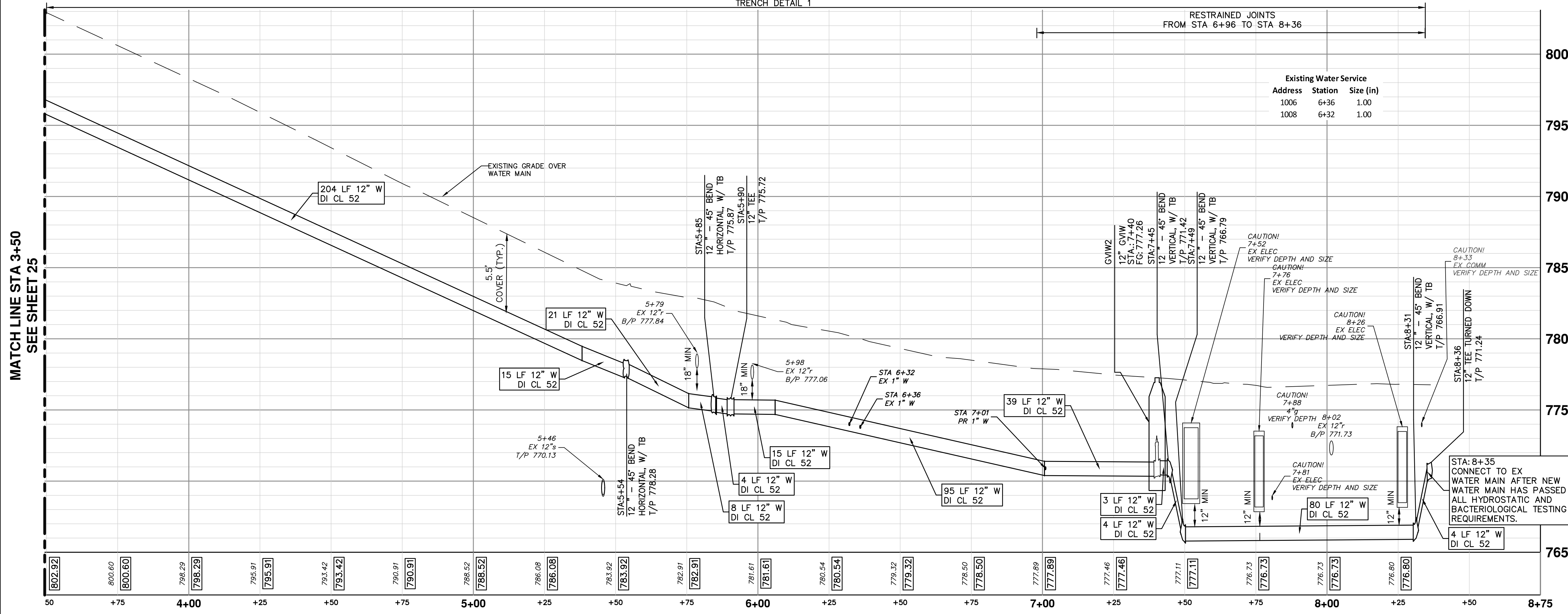
DRAWING NO.: 2022-035-25

SHEET NO.: 25 OF 52

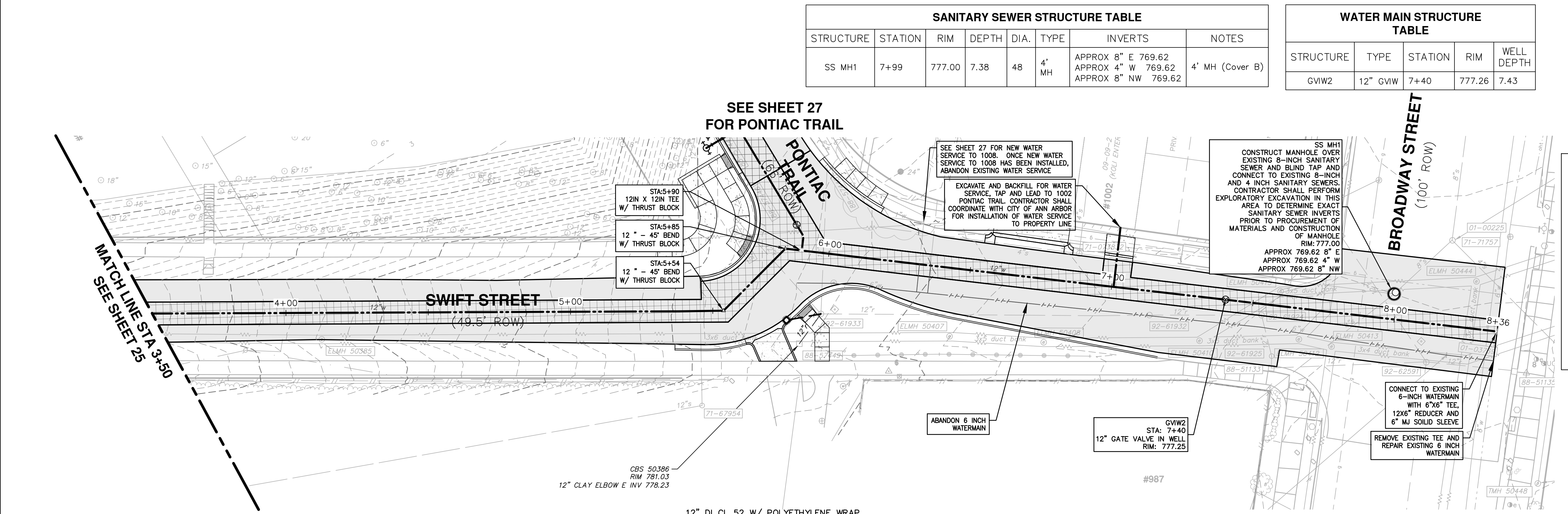
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MATCH LINE STA 3+50
SEE SHEET 25



MATCH LINE STA 3+50
SEE SHEET 25



SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	NOTES
SS MH1	7+99	777.00	7.38	48"	4' MH	APPROX 8" E 769.62 APPROX 4" W 769.62 APPROX 8" NW 769.62 4' MH (Cover B)

WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	WELL DEPTH
GVIW2	12" GVIW	7+40	777.26	7.43

- NOTES
- TWO WEEKS PRIOR TO THE START OF CONSTRUCTION ON SWIFT ST THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION AT THE INTERSECTION OF SWIFT AND BROADWAY ST CONNECTION POINT OR AS DIRECTED BY THE ENGINEER TO VERIFY THE LOCATION OF THE EXISTING WATERMAIN. ALL COSTS ASSOCIATED WITH THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK - EXPLORATORY EXCAVATION (0-10; DEEP)(TRENCH DETAIL 1)
 - WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, XX LB"
 - THE DEPTH AND SIZE OF ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER GENERAL CONDITIONS, MAX.

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CITY OF ANN ARBOR MICHIGAN

PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS

PROPOSED WATER MAIN PLAN AND PROFILE SWIFT ST STA 3+50 TO POE

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: #####

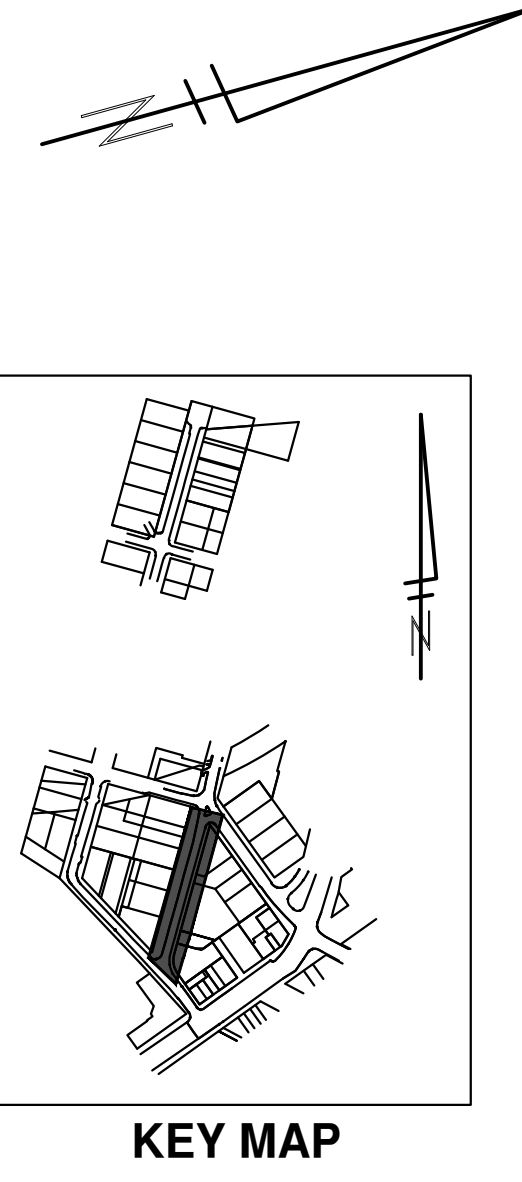
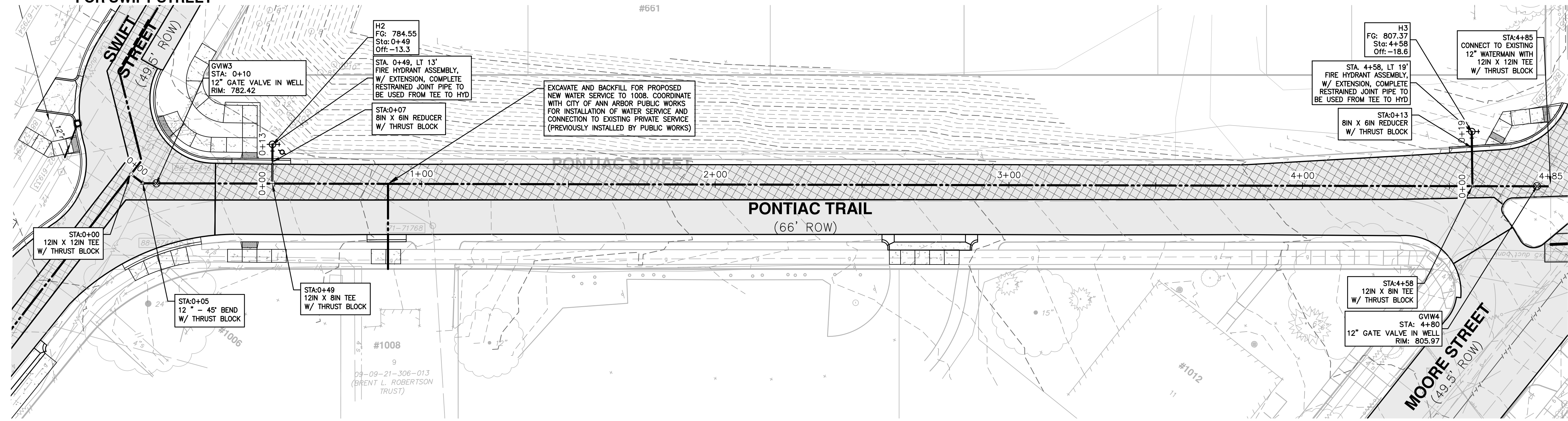
DRAWING NO: 2022-035-26

SHEET NO. 26 OF 52

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

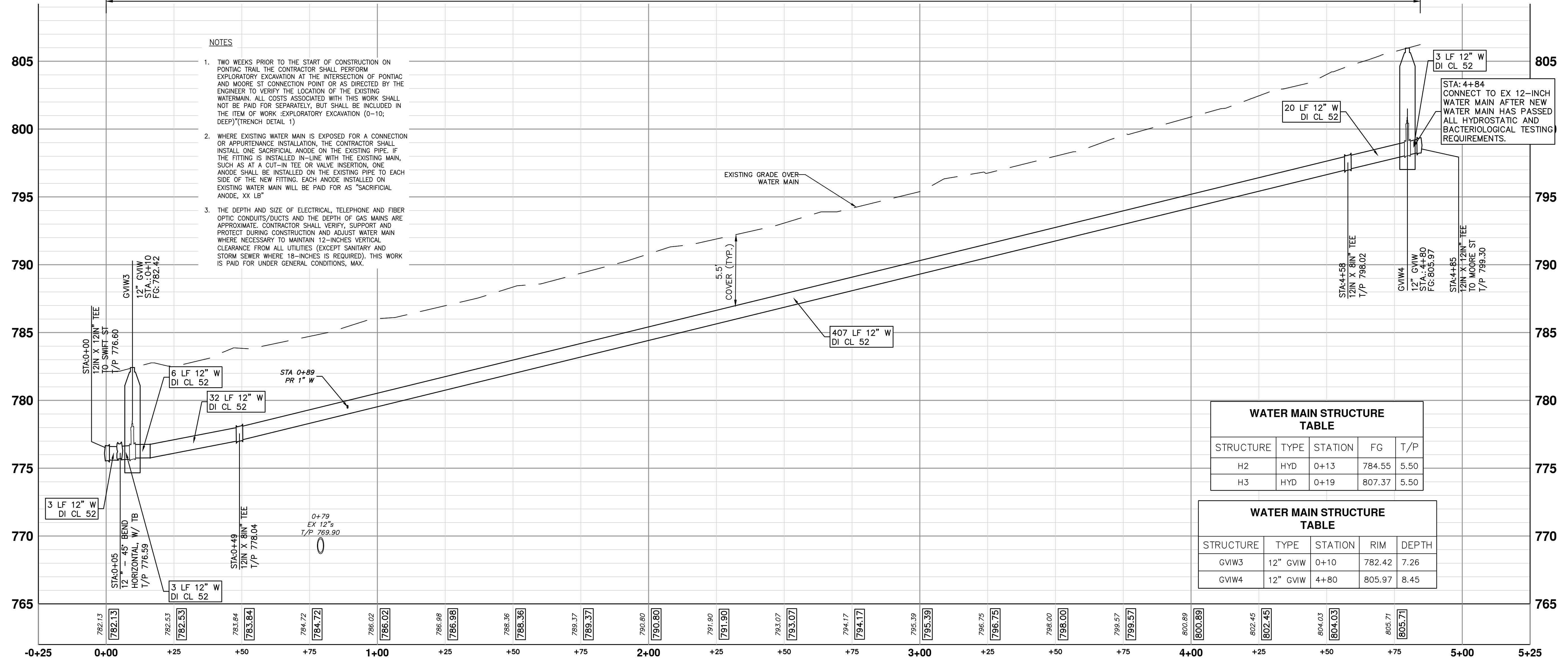
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SEE SHEET 26
FOR SWIFT STREET



12" DI CL 52 W/ POLYETHYLENE WRAP
TRENCH DETAIL 1

SEE SHEET 29
FOR MOORE STREET



- NOTES
- TWO WEEKS PRIOR TO THE START OF CONSTRUCTION ON PONTIAC TRAIL THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION AT THE INTERSECTION OF PONTIAC AND MOORE ST CONNECTION POINT OR AS DIRECTED BY THE ENGINEER TO VERIFY THE LOCATION OF THE EXISTING WATERMAIN. ALL COSTS ASSOCIATED WITH THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK :EXPLORATORY EXCAVATION (0-10; DEEP) (TRENCH DETAIL 1)
 - WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, XX LB"
 - THE DEPTH AND SIZE OF ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER GENERAL CONDITIONS, MAX.

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	FG	T/P
H2	HYD	0+13	784.55	5.50
H3	HYD	0+19	807.37	5.50

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVIW3	12" GVIW	0+10	782.42	7.26
GVIW4	12" GVIW	4+80	805.97	8.45

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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
PROPOSED WATER MAIN PLAN AND PROFILE - PONTIAC TRAIL

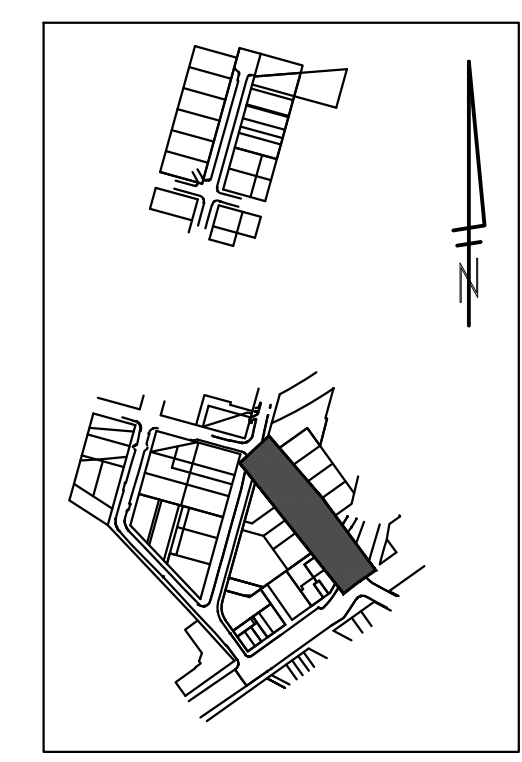
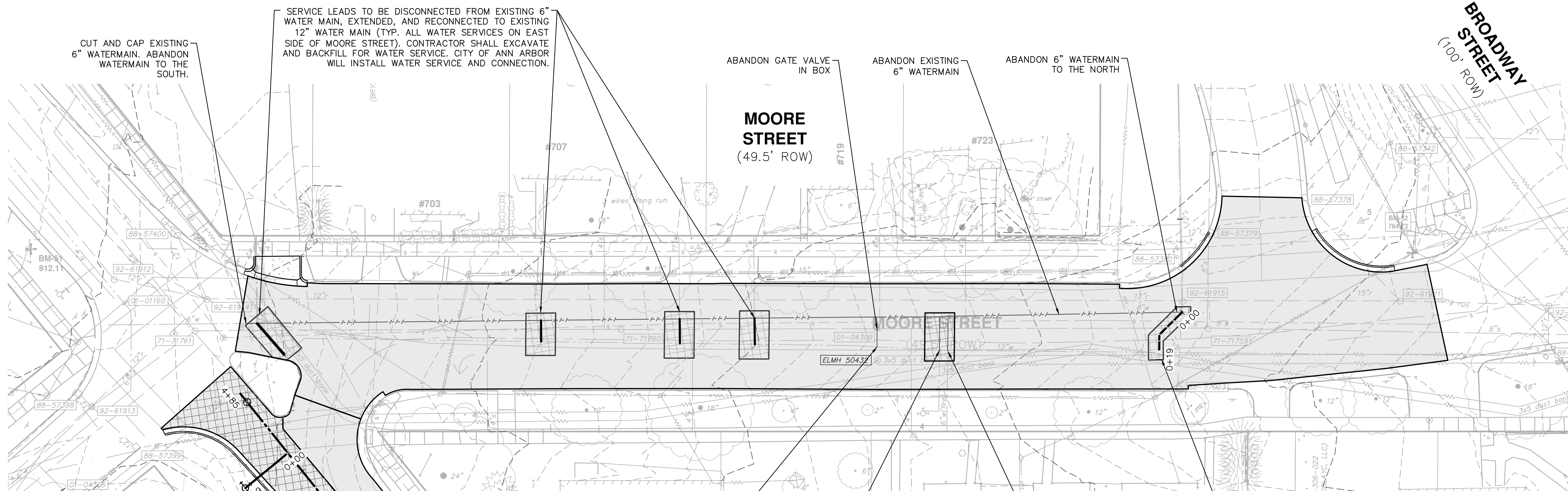
SCALE PLAN: #####
DRAWING NO: 2022-032-27
SHEET NO: 27 OF 52

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CITY OF ANN ARBOR
MICHIGAN

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KEY MAP

SEE SHEET 27 FOR PONTIAC TRAIL

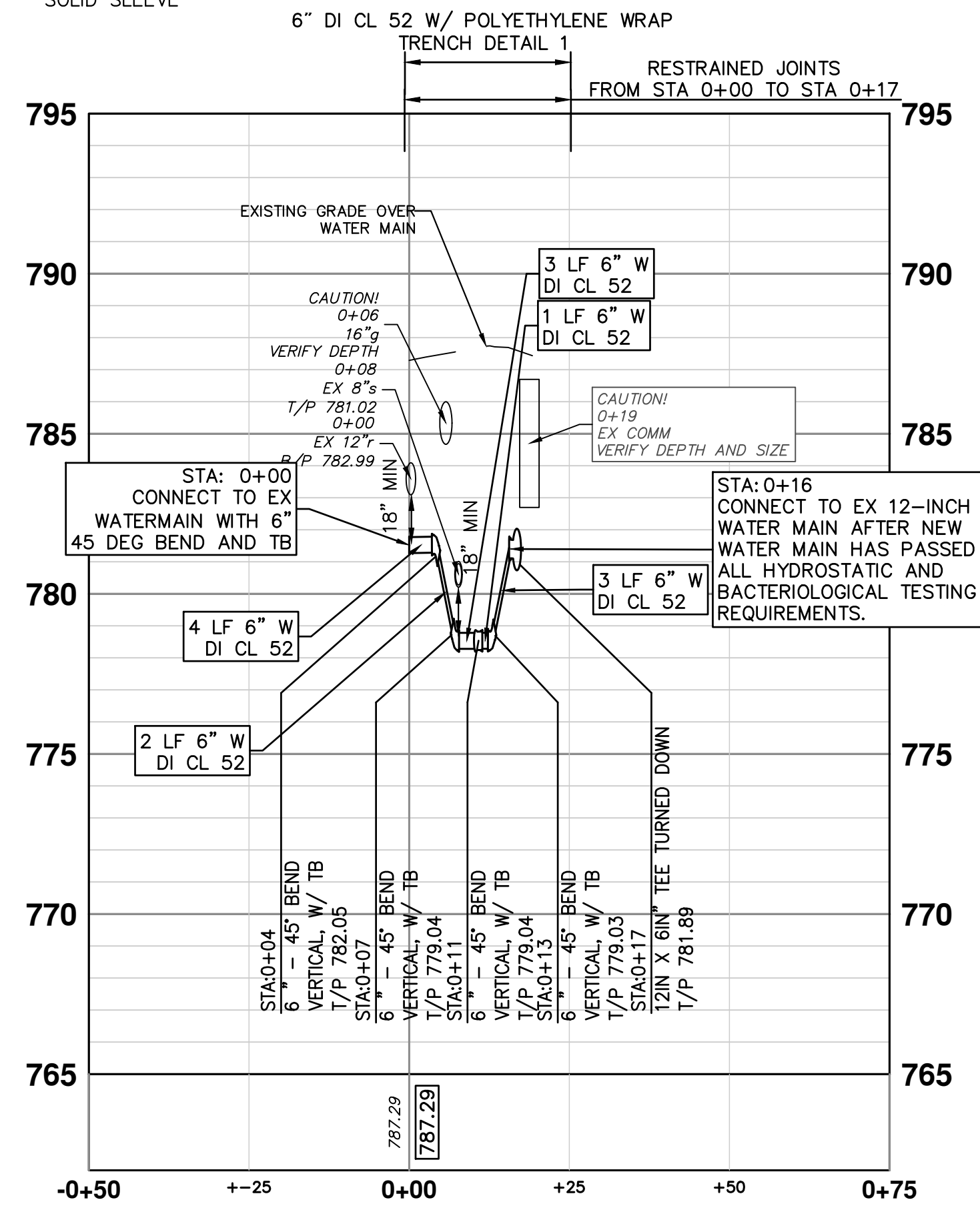
PONTIAC TRAIL (66' ROW)

REMOVE EXISTING 12"x8" TEE AND REPAIR 12-INCH WATER MAIN WITH MJ SOLID SLEEVE

HYDRANT SERVICE LEAD TO BE DISCONNECTED FROM EXISTING 6" WATER MAIN RECONNECTED TO EXISTING 12" WATER MAIN WITH 12"x6" TEE AND 12" MJ SOLID SLEEVE


FIRE SERVICE LEAD TO BE DISCONNECTED FROM EXISTING 6" WATER MAIN AND RECONNECTED TO EXISTING 12" WATER MAIN WITH 12"x6" TEE AND 12" MJ SOLID SLEEVE

EXTEND EXISTING 6-INCH WATERMAIN ON TRAVER. CONNECT TO EXISTING 12-INCH WATERMAIN WITH 12"x6" TEE, THRUST BLOCK AND 12" MJ SOLID SLEEVE.




NOTES

- TWO WEEKS PRIOR TO THE START OF CONSTRUCTION ON PONTIAC TRAIL THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION AT THE INTERSECTION OF PONTIAC AND MOORE ST CONNECTION POINT OR AS DIRECTED BY THE ENGINEER TO VERIFY THE LOCATION OF THE EXISTING WATERMAIN. ALL COSTS ASSOCIATED WITH THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK :EXPLORATORY EXCAVATION (0-10; DEEP)(TRENCH DETAIL 1)
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PONTIAC, SWIFT, MOORE, & WRIGHT

INFRASTRUCTURE IMPROVEMENTS

PROPOSED WATER MAIN CONSOLIDATION - MOORE ST

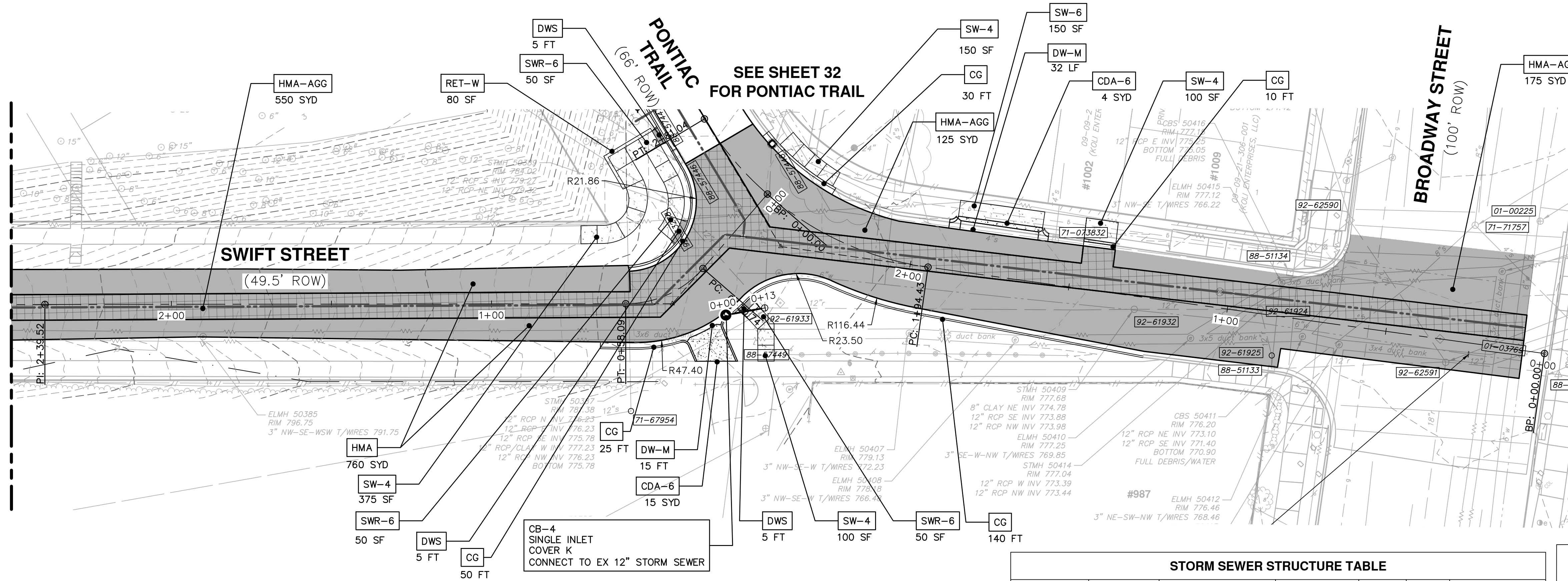
SCALE PLAN: 1" = 20'

DRAWING No. 2022-035-29

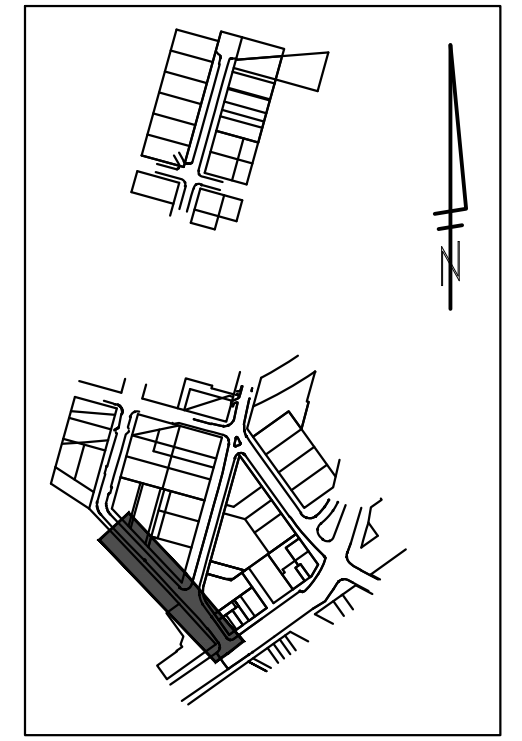
SHEET No. 29 OF 52

MATCH LINE STA 2+50
SEE SHEET 31

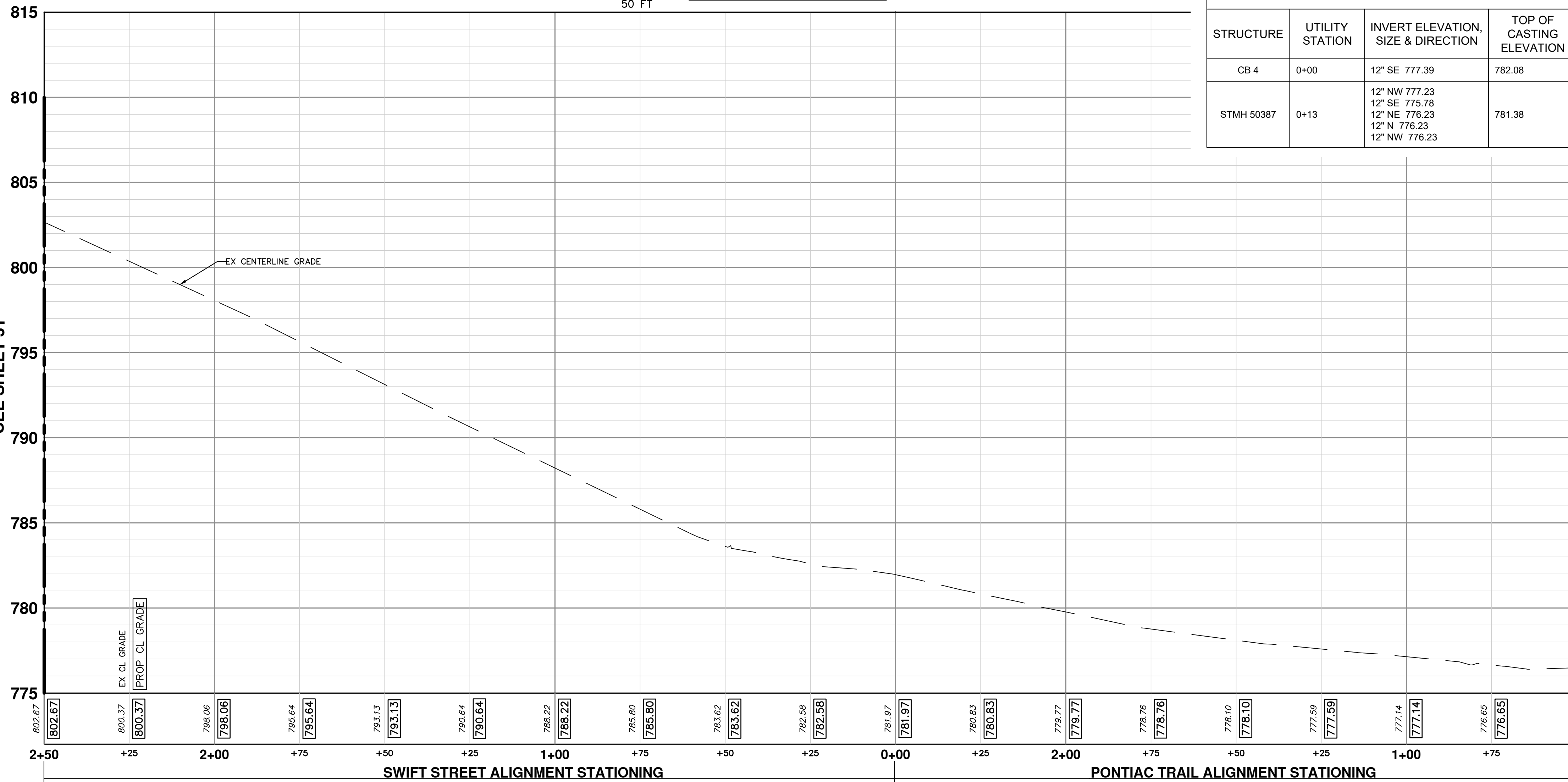
MATCH LINE STA 2+50
SEE SHEET 31



SEE SHEET 32
FOR PONTIAC TRAIL



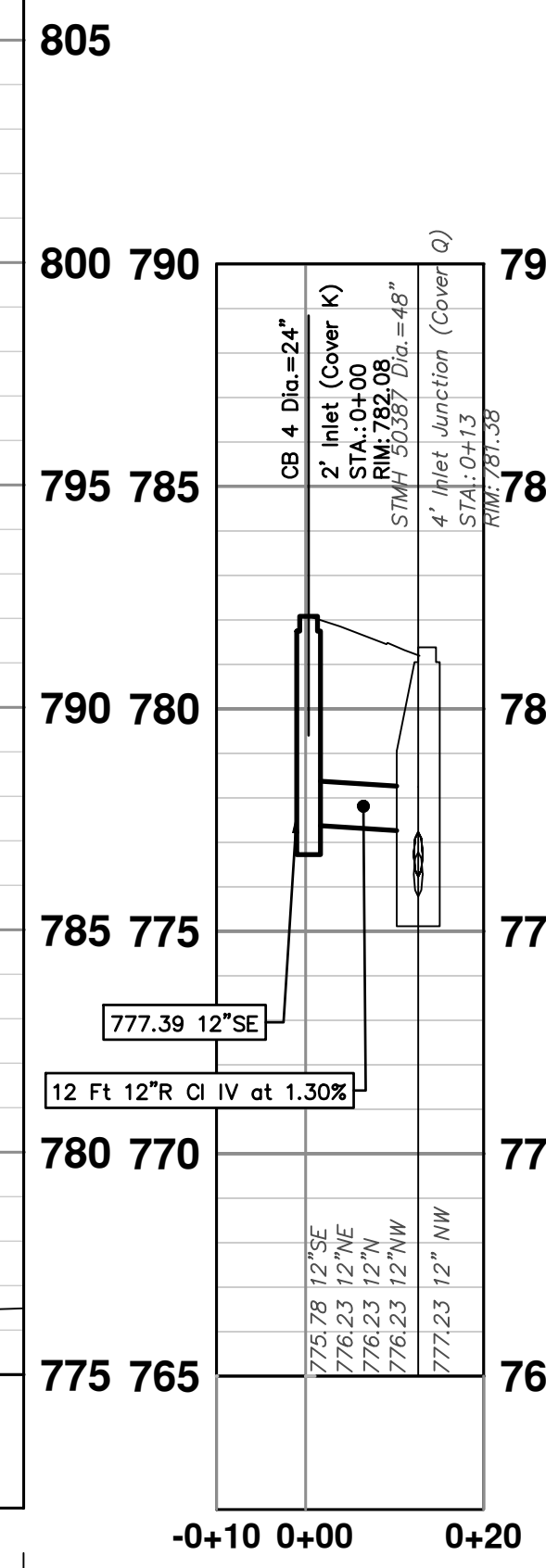
KEY MAP



STRUCTURE	UTILITY STATION	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE	APPLICATION/ CONSTRUCTION
CB 4	0+00	12" SE 777.39	782.08	4.86	24" Dia.	2' Inlet (Cover K)
STMH 50387	0+13	12" NW 777.23 12" SE 775.78 12" NE 776.23 12" N 776.23 12" NW 776.23	781.38	5.60	48" Dia.	4' Inlet Junction (Cover Q)

	PROPOSED HMA PAVING ON AGGREGATE BASE
	PROPOSED HMA PAVING
	PROPOSED CONCRETE
	PROPOSED CONCRETE WALK

KEY	DESCRIPTION
HMA-AGG	SURFACE AREA FOR HMA ON AGGREGATE BASE
HMA	SURFACE AREA FOR HMA
CG	CURB AND GUTTER, CONC, AA DET SD-R-1
SW-4	SIDEWALK, CONCRETE, 4 INCH
SWR-6	SIDEWALK RAMP, CONCRETE, 6 INCH,
DWS	DETECTABLE WARNING SURFACE, MODIFIED
REST	TOPSOIL SURFACE, 4 INCH HYDROSEEDING
CDA-6	DRIVE APPROACH, CONC, 6 INCH, NONREINF, P-NC
DW-M	DRIVEWAY OPENING, CONC, DETAIL M, P-NC
SW-6	SIDEWALK CONC, 6 INCH, P-NC
RET-W	INTEGRAL SIDEWALK RETAINING WALL, 18-36 INCH



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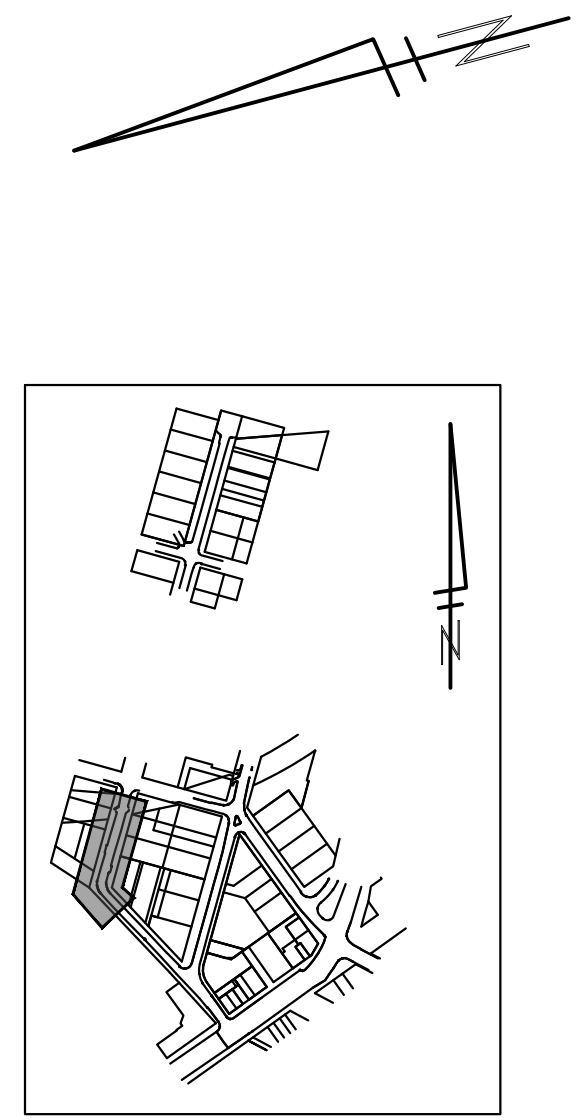
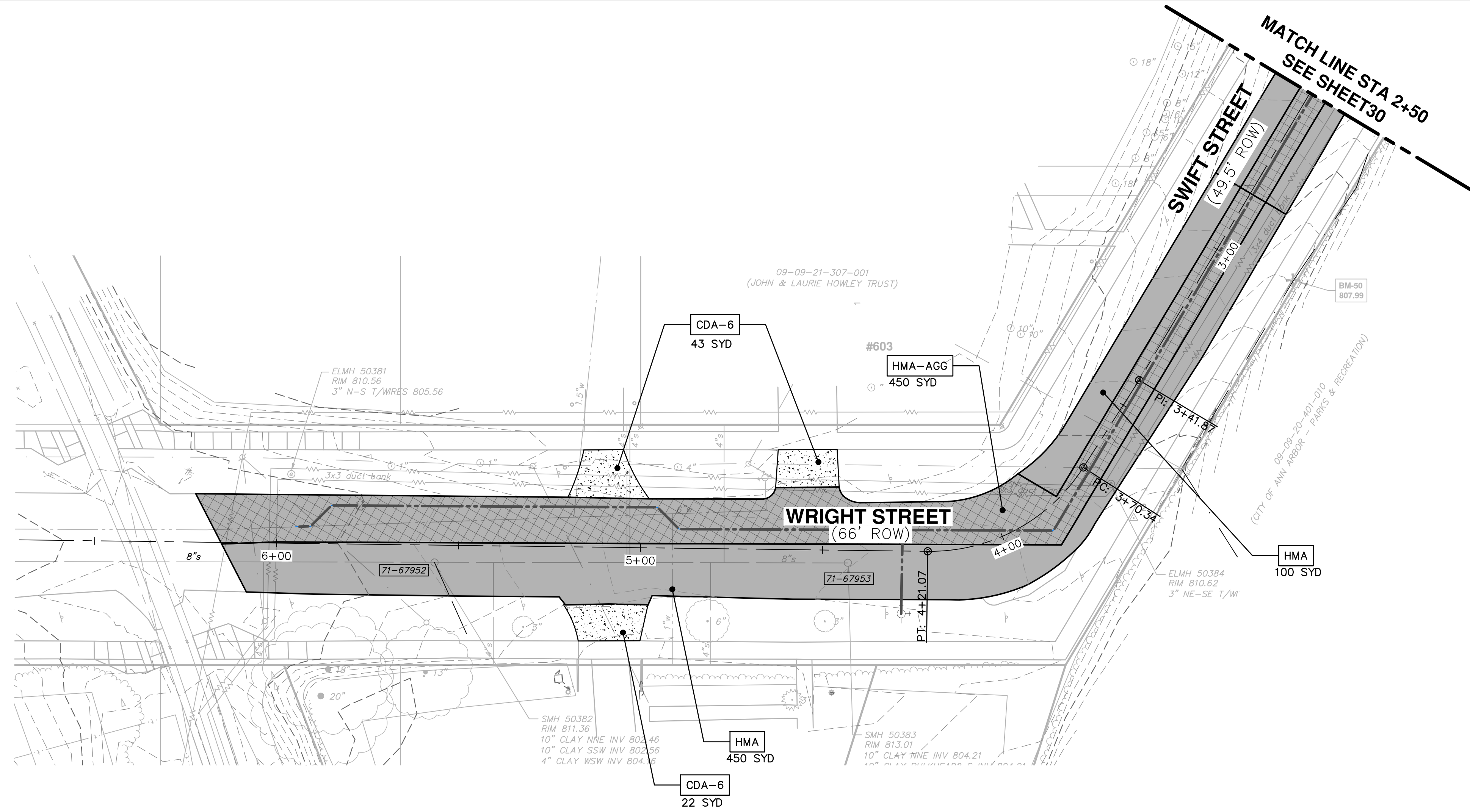
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS

PROPOSED PAVING PLAN - SWIFT ST STA 0+00 TO STA 2+50

SHEET No. 30 OF 52

DRAWING No. 2022-032-30

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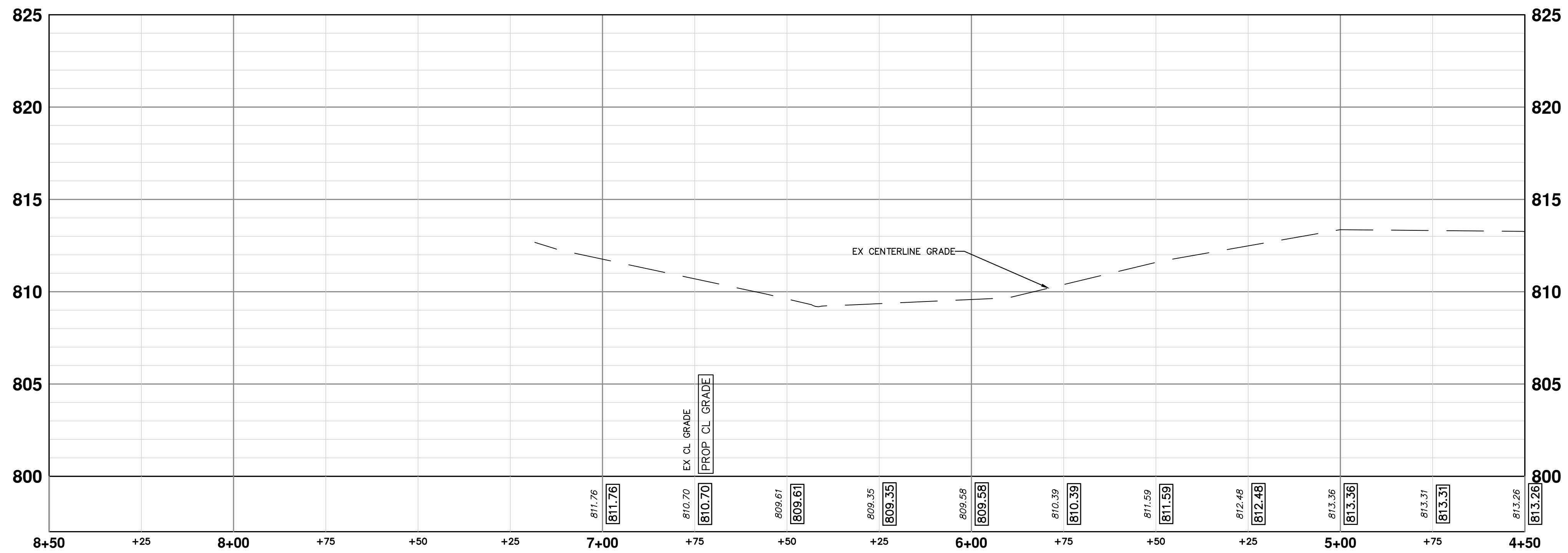
KEY MAP

LEGEND

	PROPOSED HMA PAVING
	PROPOSED HMA PAVING ON AGGREGATE BASE
	PROPOSED CONCRETE
	PROPOSED CONCRETE WALK

CONSTRUCTION KEY

KEY	DESCRIPTION
HMA-AGG	SURFACE AREA FOR HMA ON AGGREGATE BASE
HMA	SURFACE AREA FOR HMA
CG	CURB AND GUTTER, CONC, AA DET SD-R-1
SW-6	SIDEWALK, CONCRETE, 6 INCH, P-NC
SWR-6	SIDEWALK RAMP, CONCRETE, 6 INCH,
DWS	DETECTABLE WARNING SURFACE, MODIFIED
REST	TOPSOIL SURFACE, 4 INCH HYDROSEEDING
CDA-6	DRIVE APPROACH, CONC, 6 INCH, NONREINF, P-NC
DW-M	DRIVEWAY OPENING, CONC, DETAIL M, P-NC
SW-6	SIDEWALK CONC, 6 INCH, P-NC



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00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCM/CEW

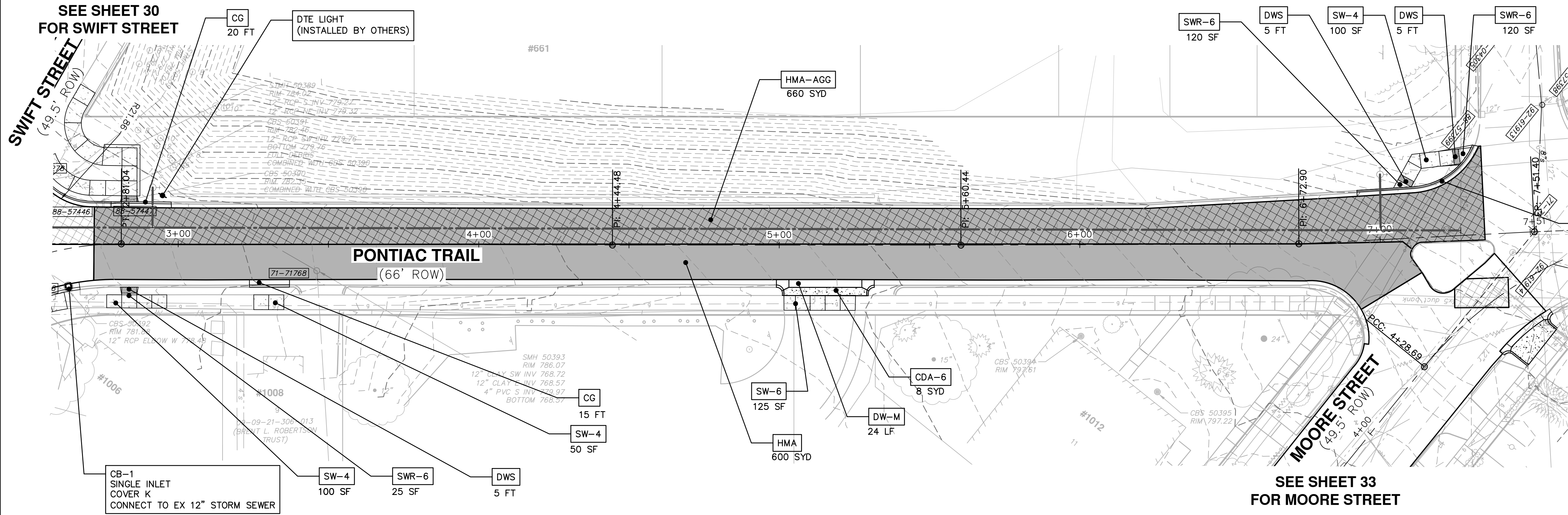
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 PROPOSED PAVING PLAN - SWIFT ST STA 2+50 TO POE

SCALE PLAN: 1"=80'

DRAWING No. 2022-032-31

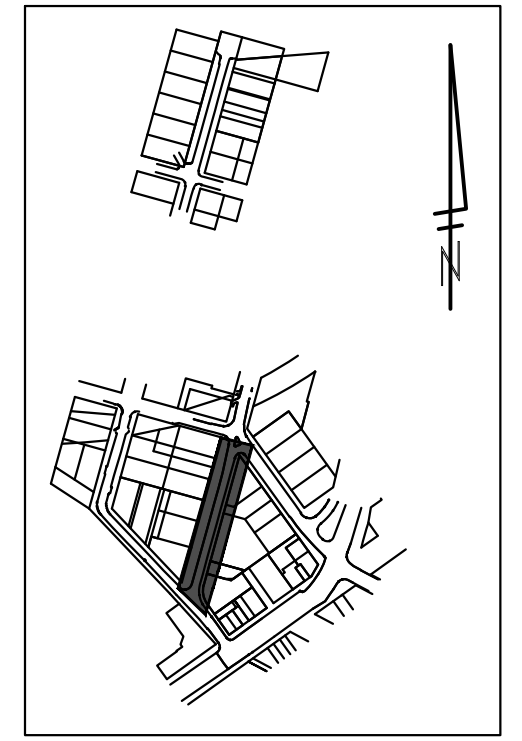
SHEET No. 31 OF 52

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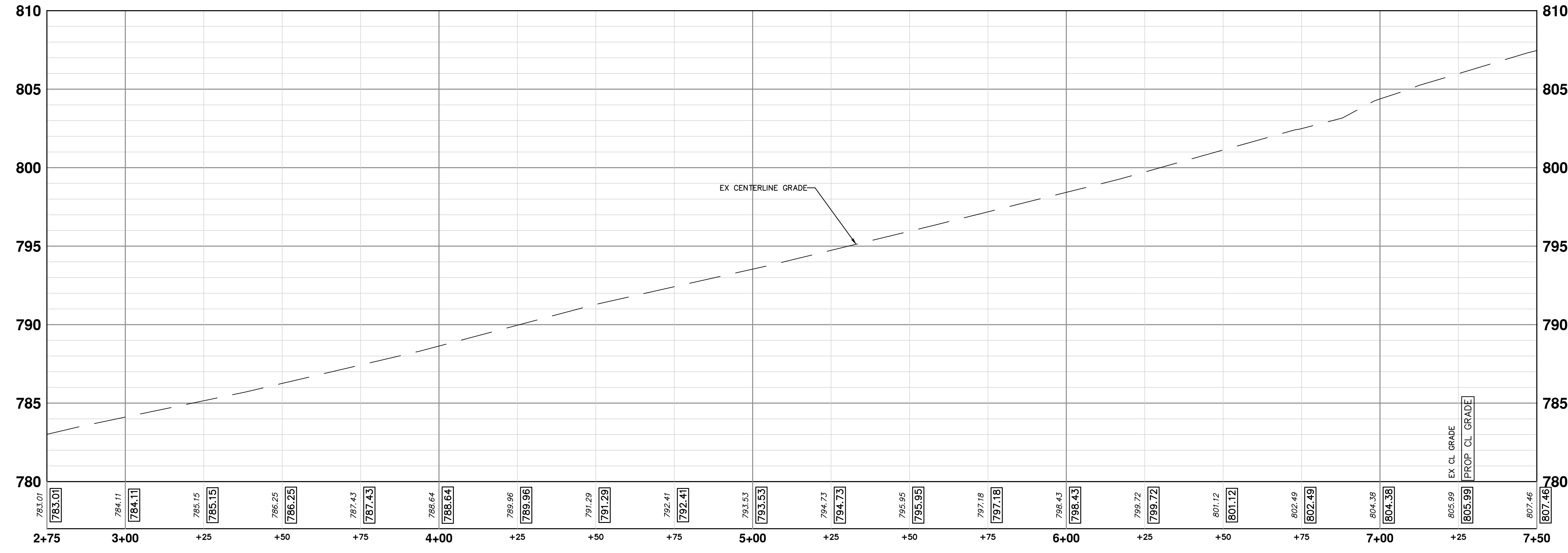


SEE SHEET 30
FOR SWIFT STREET

SEE SHEET 33
FOR MOORE STREET



KEY MAP



LEGEND

- PROPOSED HMA PAVING
- PROPOSED HMA PAVING ON AGGREGATE BASE
- PROPOSED CONCRETE
- PROPOSED CONCRETE WALK

CONSTRUCTION KEY

KEY	DESCRIPTION
HMA-AGG	SURFACE AREA FOR HMA ON AGGREGATE BASE
HMA	SURFACE AREA FOR HMA
CG	CURB AND GUTTER, CONC, AA DET SD-R-1
SW-4	SIDEWALK, CONCRETE, 4 INCH
SWR-6	SIDEWALK RAMP, CONCRETE, 6 INCH,
DWS	DETECTABLE WARNING SURFACE, MODIFIED
REST	TOPSOIL SURFACE, 4 INCH HYDROSEEDING
CDA-6	DRIVE APPROACH, CONC, 6 INCH, NONREINF, P-NC
DW-M	DRIVEWAY OPENING, CONC, DETAIL M, P-NC
SW-6	SIDEWALK CONC, 6 INCH, P-NC

811
Know what's below. Call before you dig.

ISSUED FOR BID
03/28/2023
DATE
DRAWN
CHECKED
VCM/CEW
CGT/BLA
DESCRIPTION

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

ANN ARBOR MICHIGAN

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

**PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS**

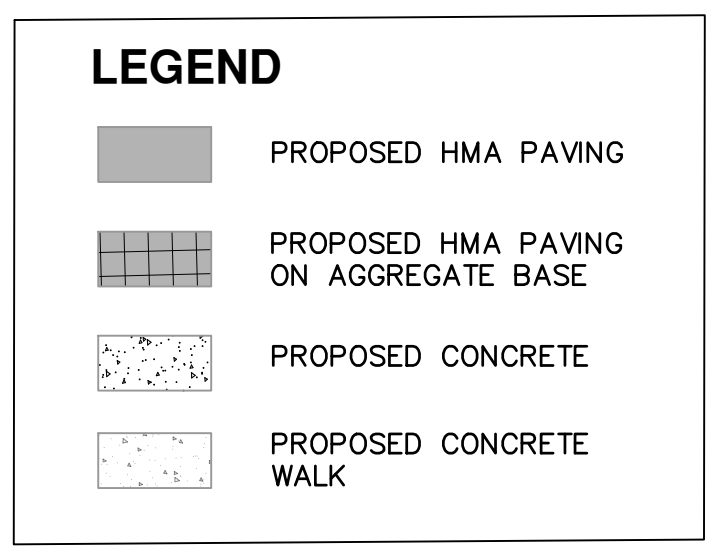
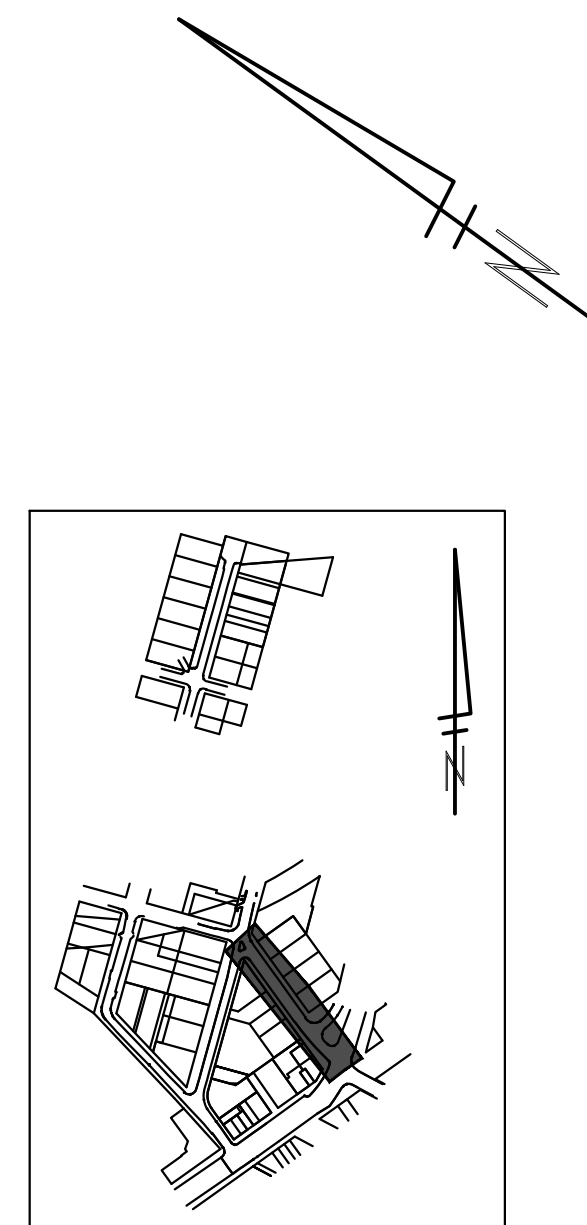
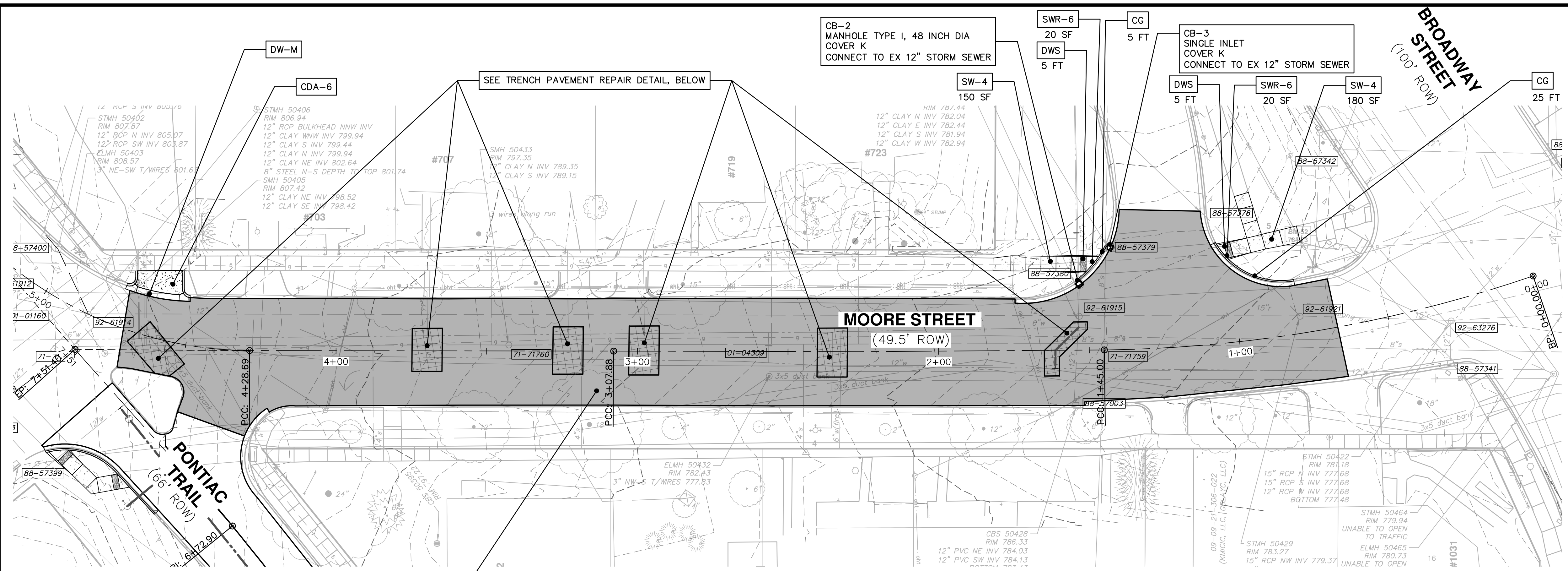
SCALE PLAN: 1"=30'

PROPOSED PAVING PLAN - PONTIAC TRAIL

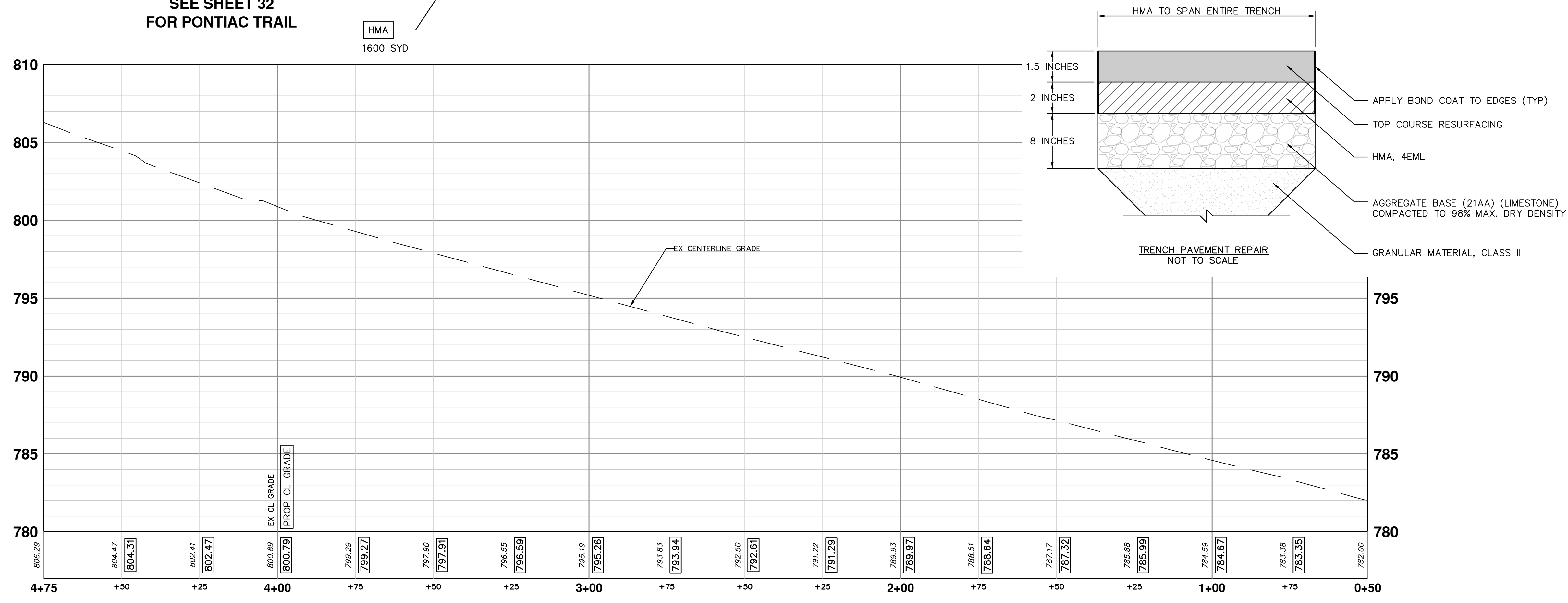
SHEET No.

DRAWING No.
2022-032-32

32 OF 52



CONSTRUCTION KEY	
KEY	DESCRIPTION
[HMA-AGG]	SURFACE AREA FOR HMA ON AGGREGATE BASE
[HMA]	SURFACE AREA FOR HMA
[CG]	CURB AND GUTTER, CONC, AA DET SD-R-1
[SW-4]	SIDEWALK, CONCRETE, 4 INCH
[SWR-6]	SIDEWALK RAMP, CONCRETE, 6 INCH,
[DWS]	DETECTABLE WARNING SURFACE, MODIFIED
[REST]	TOPSOIL SURFACE, 4 INCH HYDROSEEDING
[CDA-6]	DRIVE APPROACH, CONC, 6 INCH, NONREINF, P-NC
[DW-M]	DRIVEWAY OPENING, CONC, DETAIL M, P-NC
[SW-6]	SIDEWALK CONC, 6 INCH, P-NC



Know what's below. Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023		

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 PROPOSED PAVING PLAN - MOORE

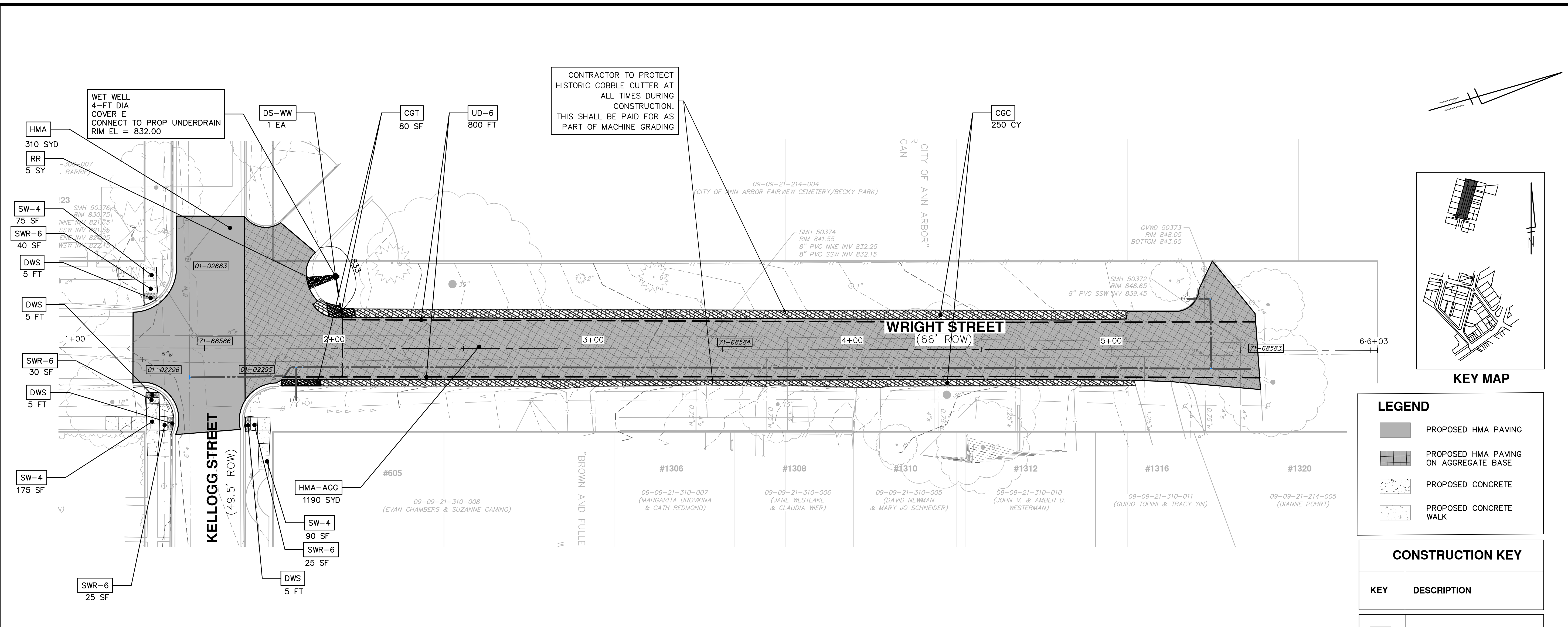
SCALE PLAN: 1"=20'

DRAWING No. 2022-032-33

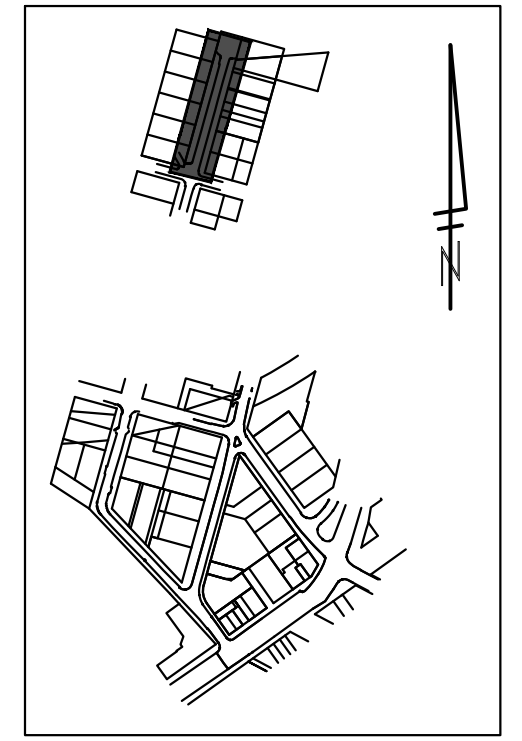
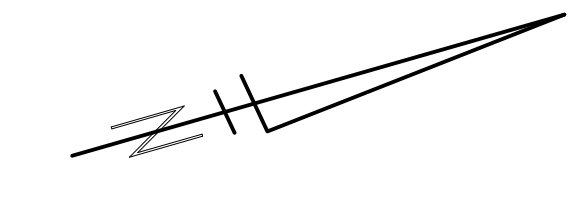
SHEET No. 33 OF 52

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C:\pwork\mflnagon\1253461\CPS-PLTS-Paving.dwg Dwg Created: 28-Mar-23 - Plot Date: 28-Mar-23



CONTRACTOR TO PROTECT HISTORIC COBBLE CUTTER AT ALL TIMES DURING CONSTRUCTION. THIS SHALL BE PAID FOR AS PART OF MACHINE GRADING



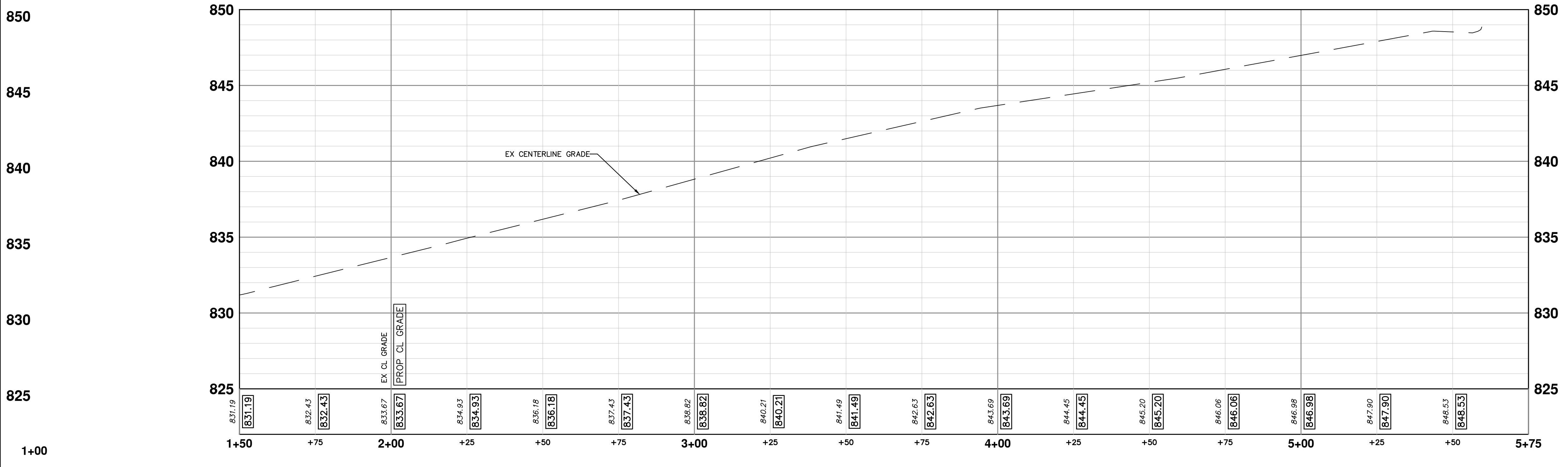
KEY MAP

LEGEND

	PROPOSED HMA PAVING
	PROPOSED HMA PAVING ON AGGREGATE BASE
	PROPOSED CONCRETE
	PROPOSED CONCRETE WALK

CONSTRUCTION KEY

KEY	DESCRIPTION
HMA	SURFACE AREA FOR HMA
CG	CURB AND GUTTER, CONC, AA DET SD-R-1
SW-4	SIDEWALK, CONCRETE, 4 INCH
SWR-6	SIDEWALK RAMP, CONCRETE, 6 INCH,
DWS	DETECTABLE WARNING SURFACE, MODIFIED
REST	TOPSOIL SURFACE, 4 INCH HYDROSEEDING
CDA-6	DRIVE APPROACH, CONC, 6 INCH, NONREINF, P-NC
DW-M	DRIVEWAY OPENING, CONC, DETAIL M, P-NC
DS-WW	DRAINAGE STRUCTURE-WET WELL
RR	RIPRAP
CGT	COBBLE GUTTER, INSTALL
UD-6	6 INCH, WRAPPED UNDERDRAIN
SW-6	SIDEWALK CONC, 6 INCH, P-NC
CGC	COBBLE GUTTER, CLEANING
HMA-AGG	SURFACE AREA FOR HMA ON AGGREGATE BASE



811
Know what's below. Call before you dig.

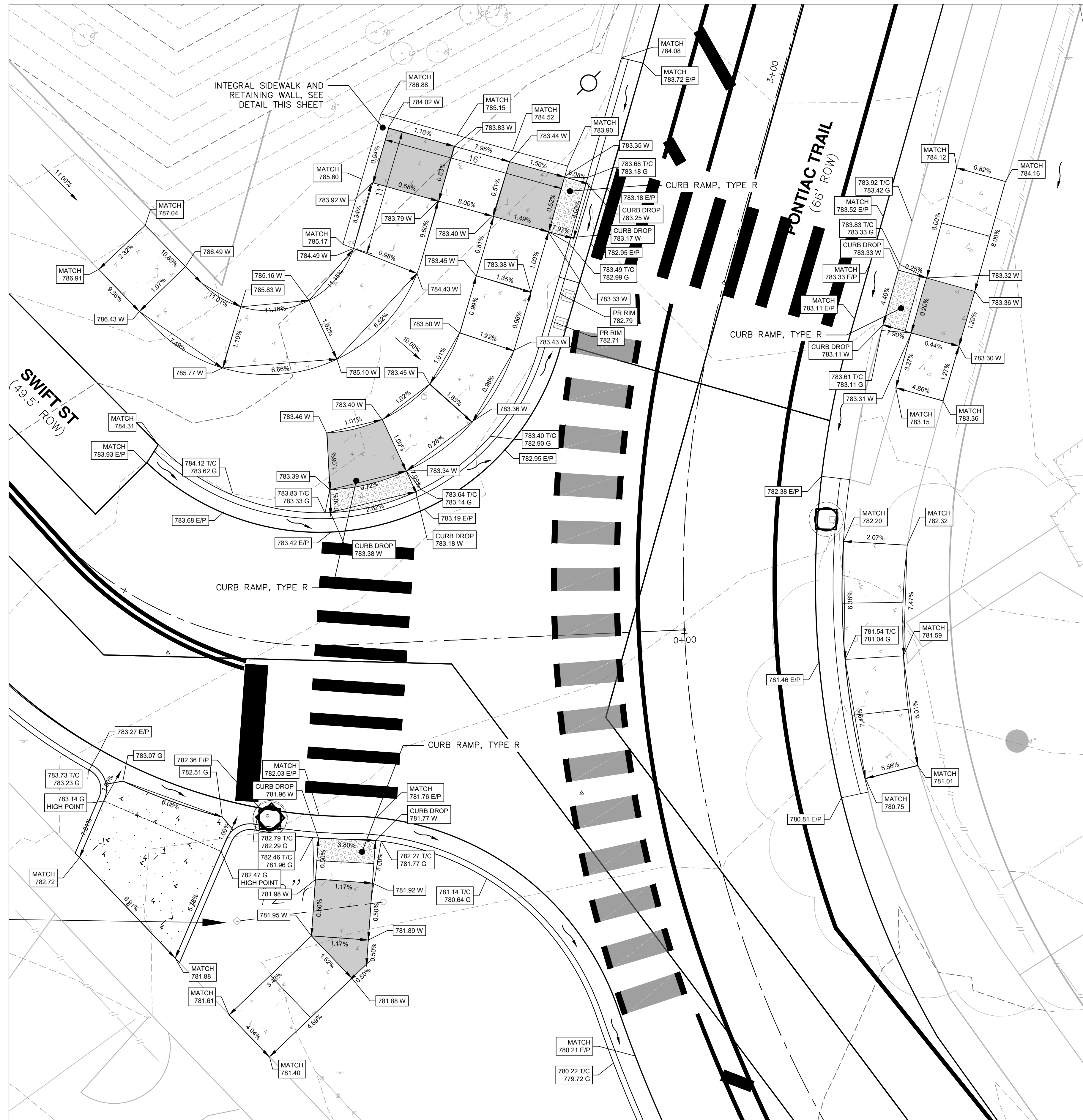
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023		

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INFRASTRUCTURE IMPROVEMENTS
PROPOSED PAVING PLAN - WRIGHT

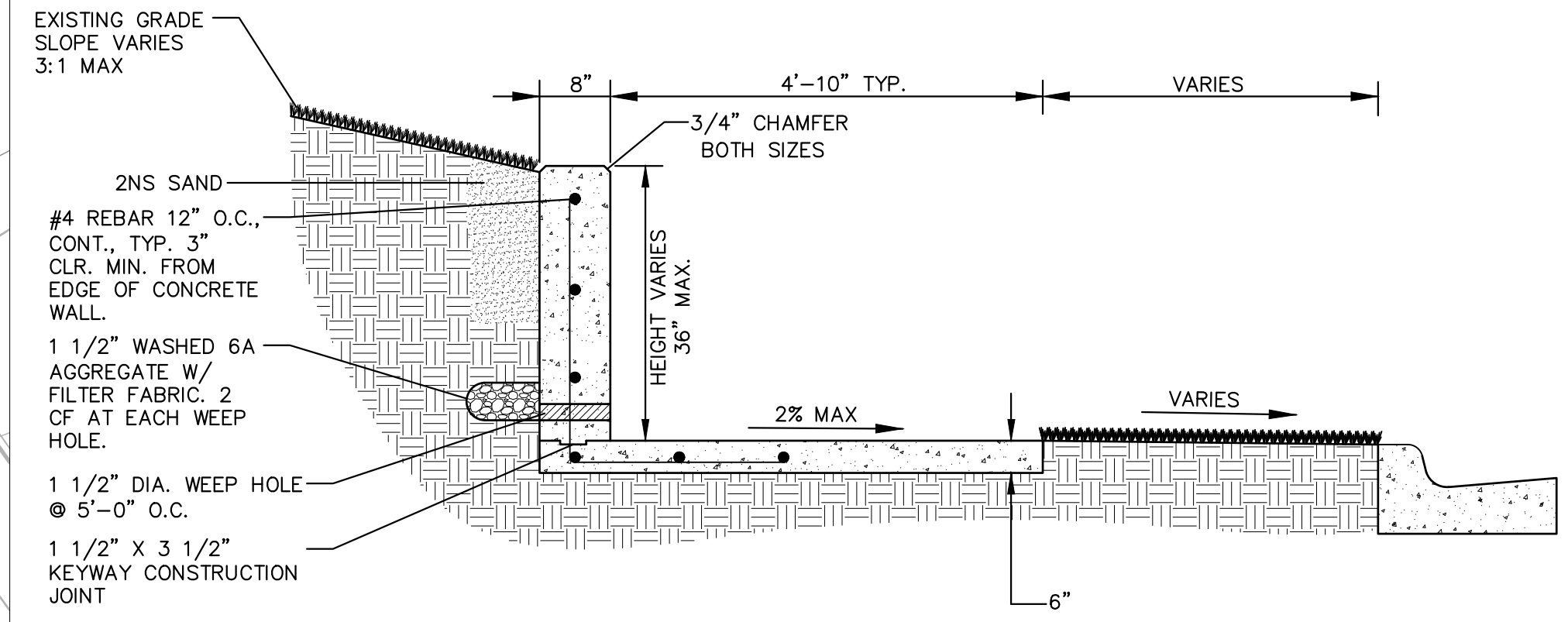
SCALE PLAN: 1"=30'
DRAWING NO.: 2022-032-34
SHEET No. 34 OF 52

C:\pw_work\mfanogon\01253461\CSP-PLTS-ADA Ramps.dwg Dwg Created: 27-Mar-23 - _a2_standard bw.stb - Plot Date: 28-Mar-23



LEGEND

- PROPOSED LEVEL LANDING
- PROPOSED DETECTABLE WARNING SURFACE



INTEGRAL SIDEWALK AND RETAINING WALL
18" - 36" WALL
 NOT TO SCALE

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00	03/28/2023	ISSUED FOR BID
		DRAWN
		VCM/CEW
		CCT/BLA
		CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

PONTIAC, SWIFT, MOORE, & WRIGHT

INFRASTRUCTURE IMPROVEMENTS

ADA RAMPS - SWIFT & PONTIAC

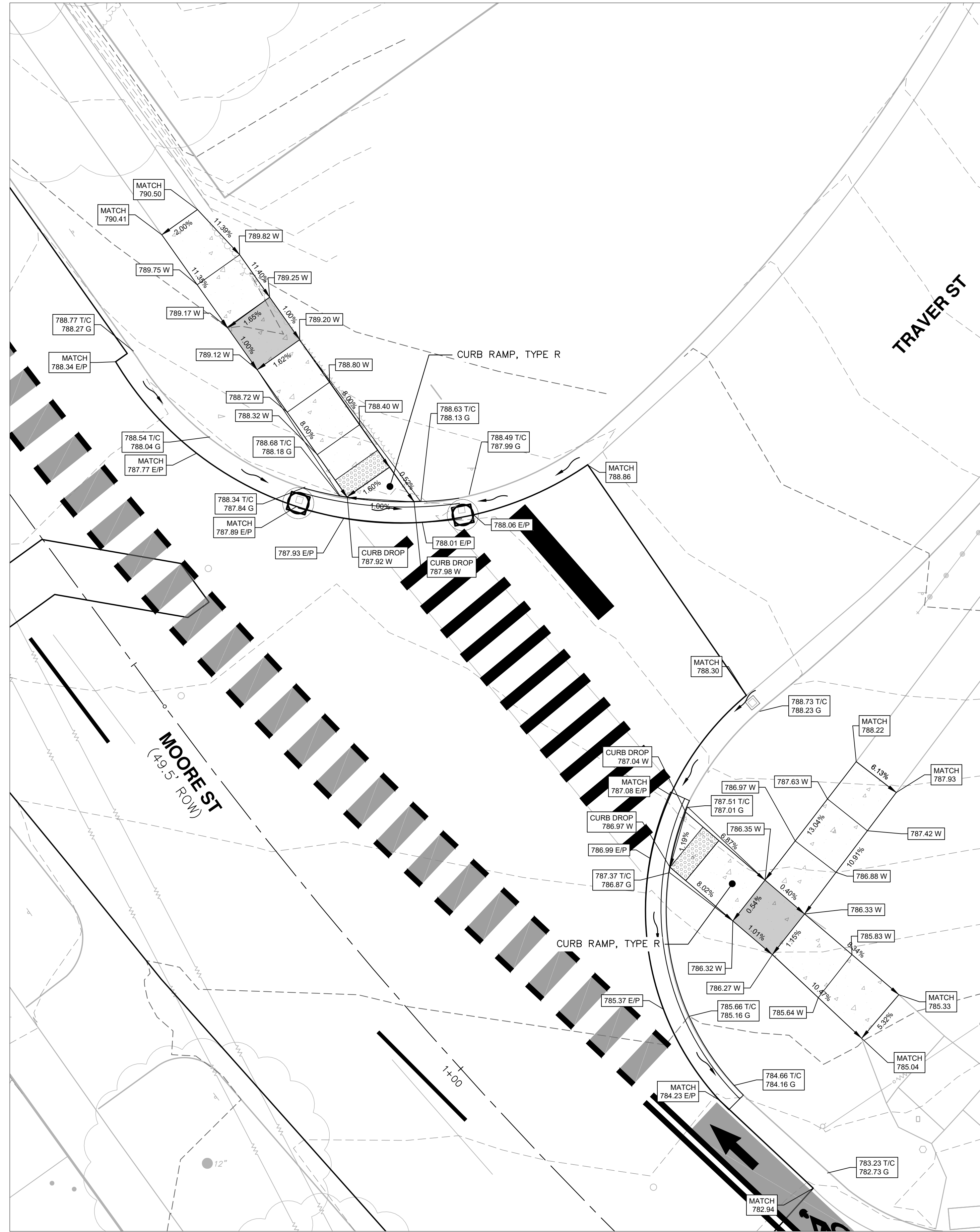
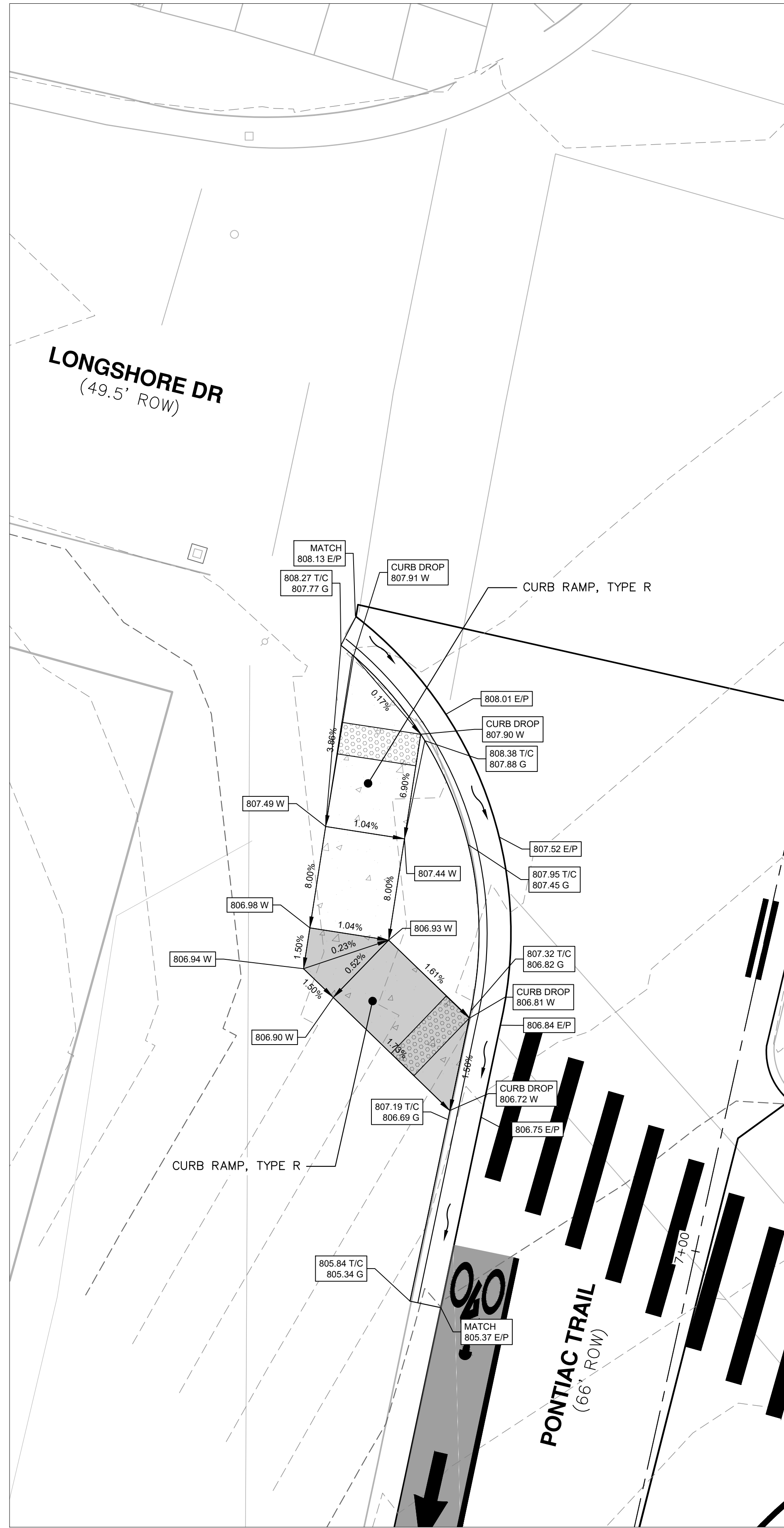
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SCALE PLAN: 1" = 5'

DRAWING No. 2022-032-35

SHEET No. 35 OF 52

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LEGEND

- PROPOSED LEVEL LANDING
- PROPOSED DETECTABLE WARNING SURFACE

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00	ISSUED FOR BID	03/28/2023	CGT/BLA	VCM/CEW

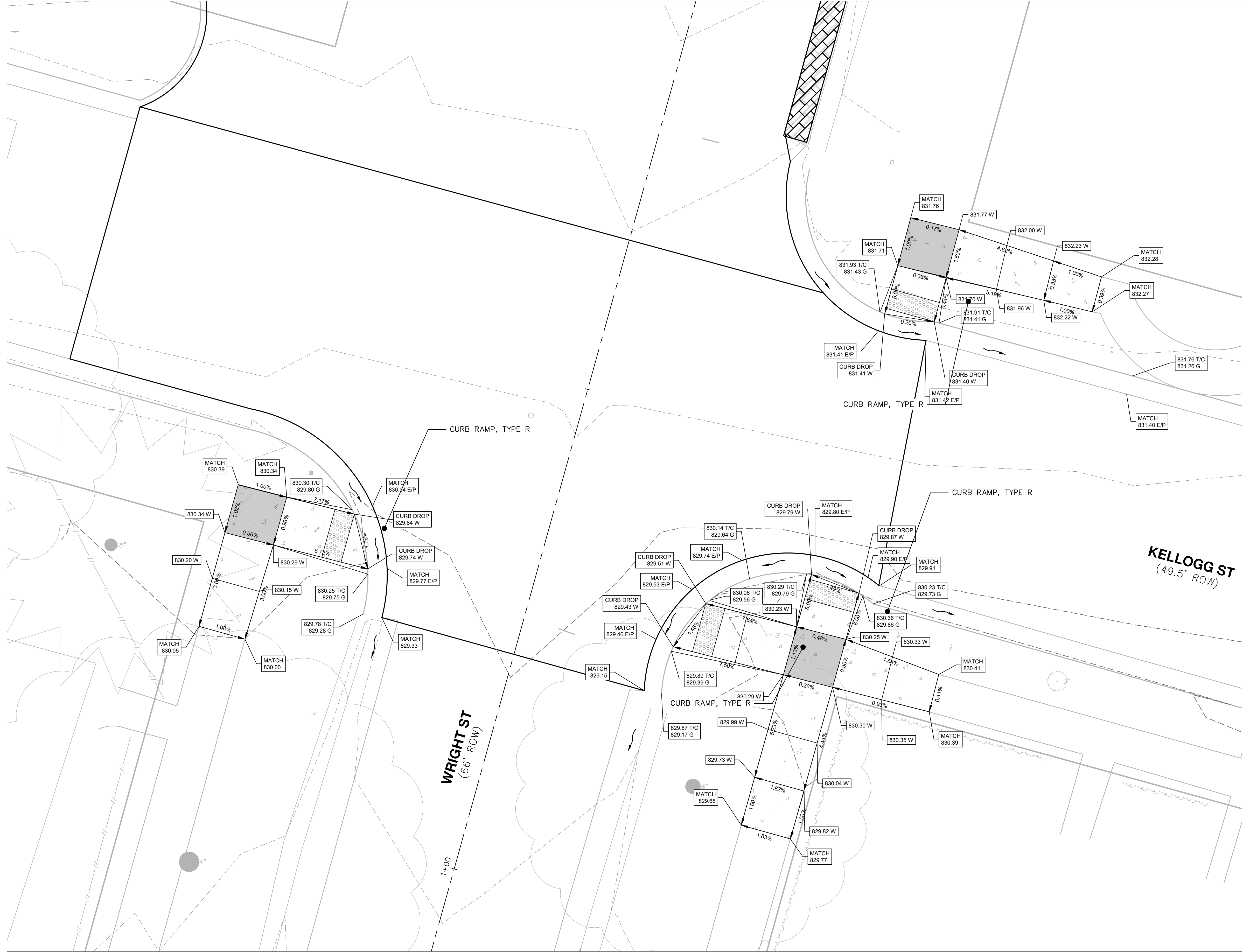
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CITY OF ANN ARBOR MICHIGAN

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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
ADA RAMPS - MOORE ST

SCALE PLAN: #####
DRAWING No. 2022-032-36
SHEET No. 36 OF 52

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LEGEND

- PROPOSED LEVEL LANDING
- PROPOSED DETECTABLE WARNING SURFACE

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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 ADA RAMPS - WRIGHT & KELLOGG

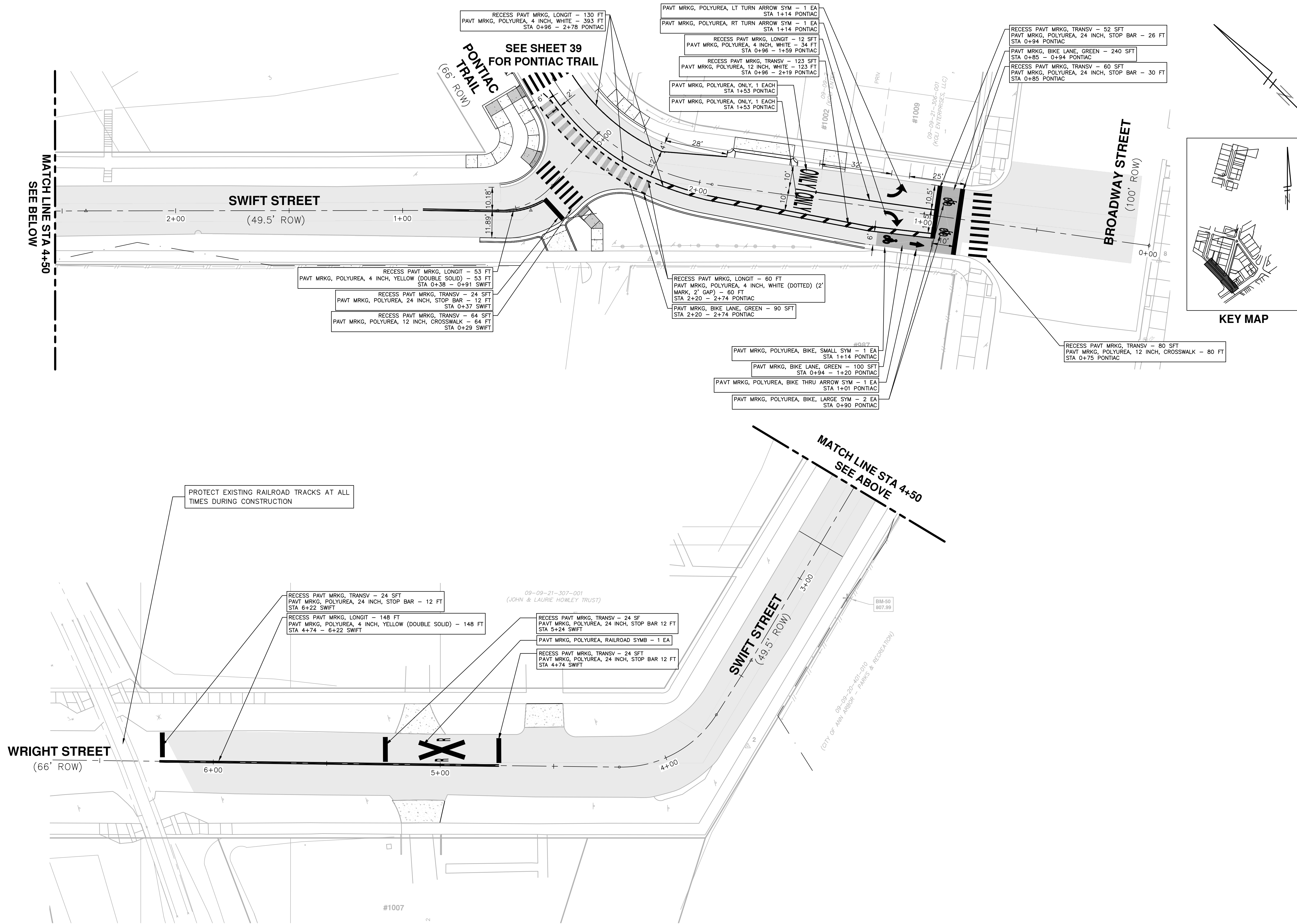
811
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00	ISSUED FOR BID	03/28/2023			

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 ANN ARBOR: 734.794.4410
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 SCALE PLAN: 1" = 5'
 DRAWING No. 2022-032-37
 SHEET No. 37 OF 52

C:\pw_work\wade-trim_banderson\dt253461\GPS-PLTS-Pavement_Markings.dwg Dwg Created: 28-Mar-23 - Plot Date: 28-Mar-23



811
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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	ISSUED FOR BID	03/28/2023	CCT/BLA	VCM/CEW

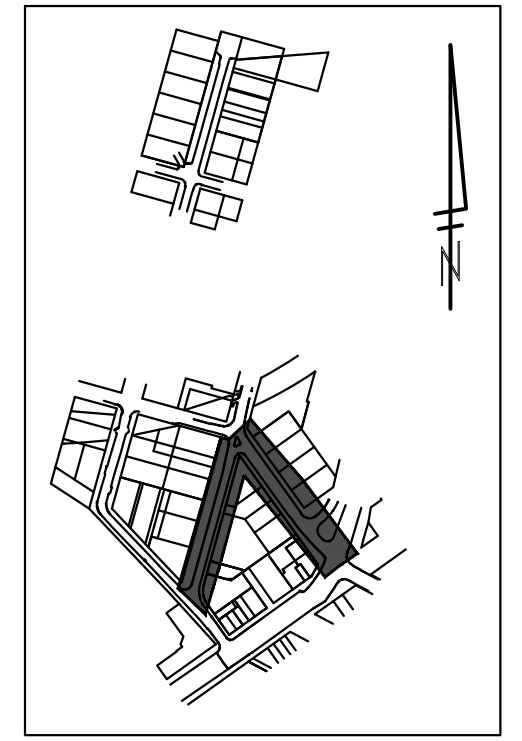
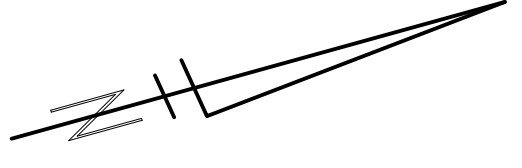
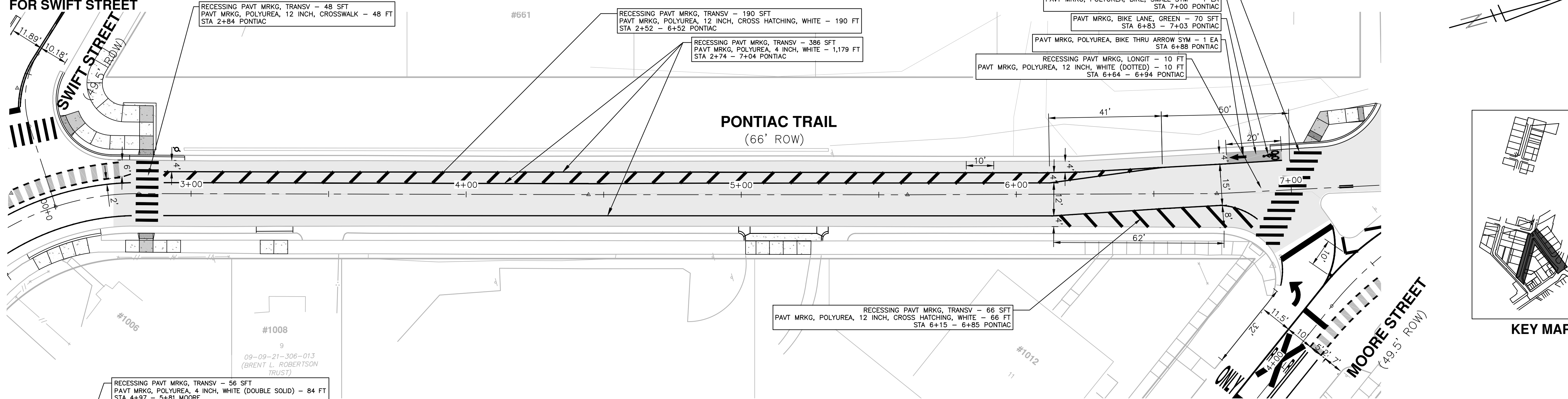
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 PROPOSED PAVEMENT MARKING - SWIFT & WRIGHT

SCALE PLAN: 1"=20'
 DRAWING No. 2022-032-38
 SHEET No. 38 OF 52

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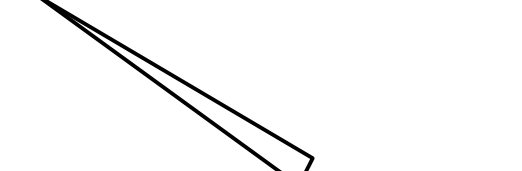
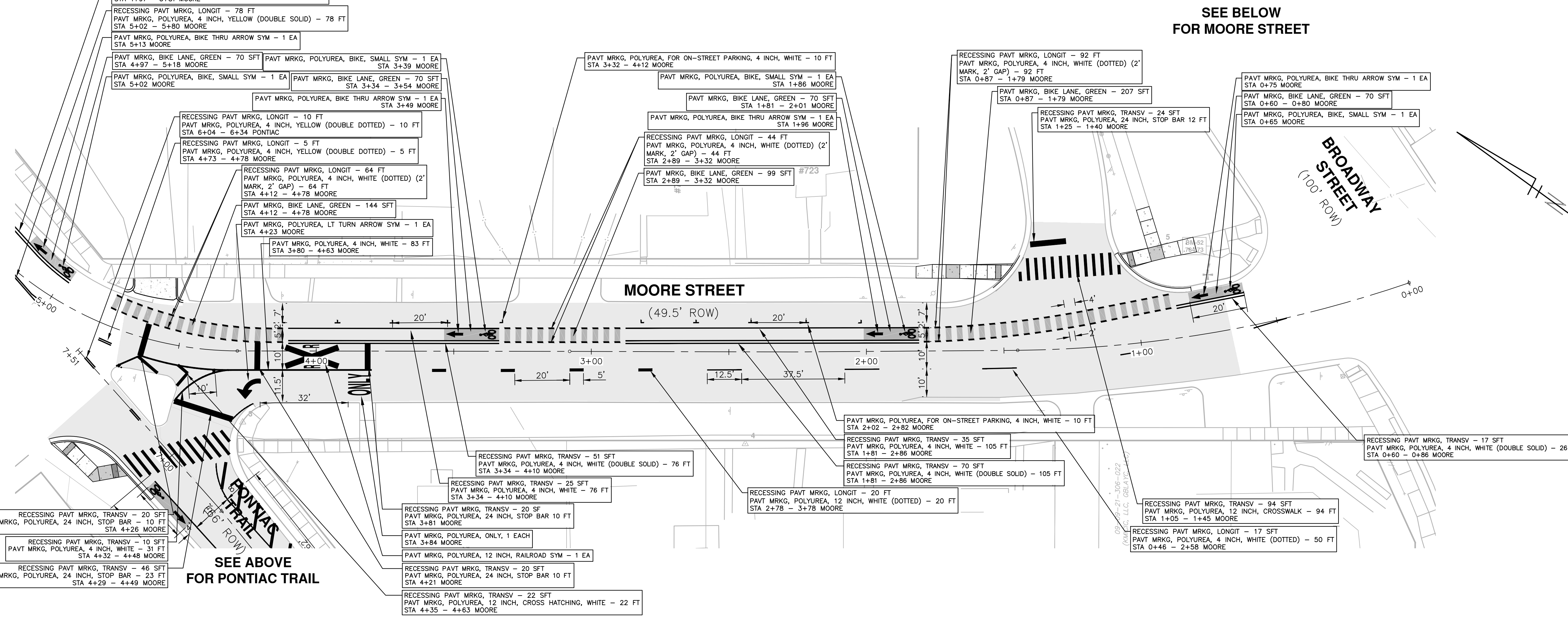
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SEE SHEET 38 FOR SWIFT STREET



KEY MAP

SEE BELOW FOR MOORE STREET



SEE ABOVE FOR PONTIAC TRAIL

811
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REV.	DATE	DESCRIPTION	CCT/BLA	VCN/CEW	CHECKED
00	03/28/2023	ISSUED FOR BID			

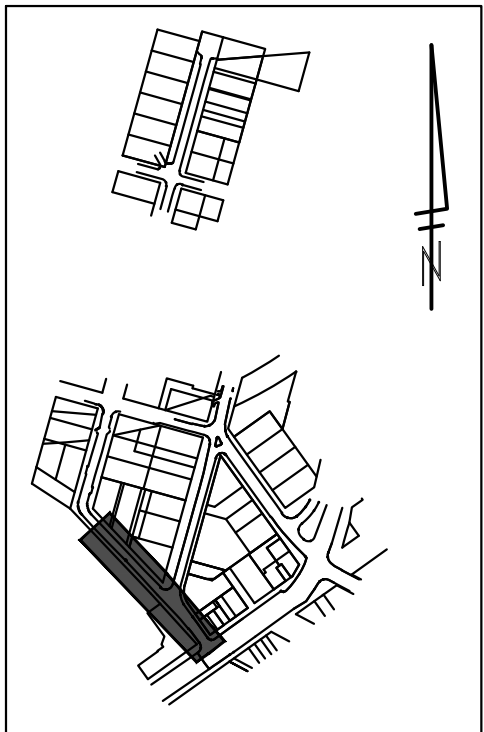
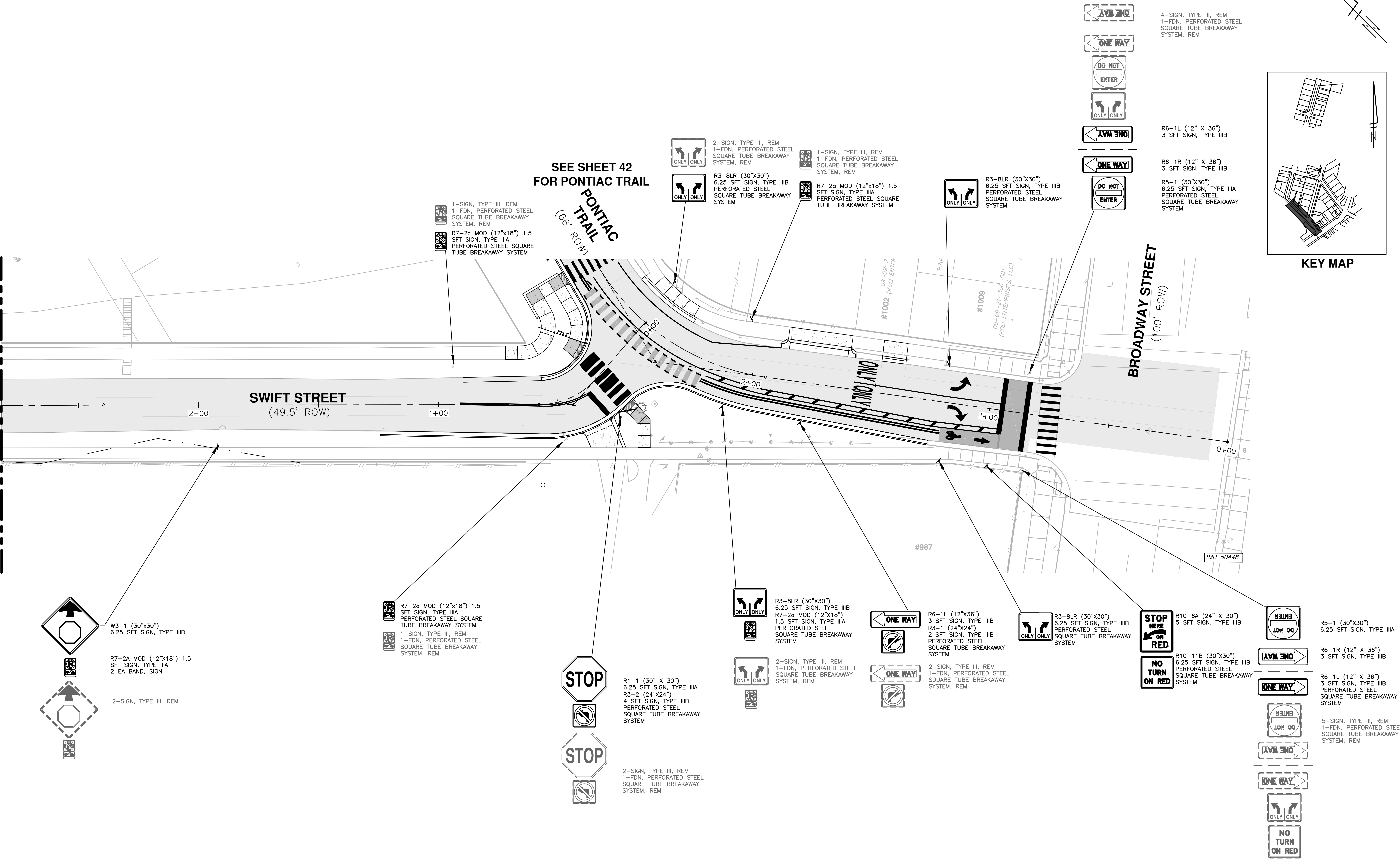
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 PROPOSED PAVEMENT MARKING - PONTIAC & MOORE

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 ANN ARBOR, MI 48106-1667
 ANN ARBOR: 734.794.4410
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CITY OF ANN ARBOR MICHIGAN

SCALE PLAN: 1"=30'
 DRAWING No. 2022-035-39
 SHEET No. 39 OF 52

MATCH LINE STA 4+00
SEE SHEET 41



KEY MAP



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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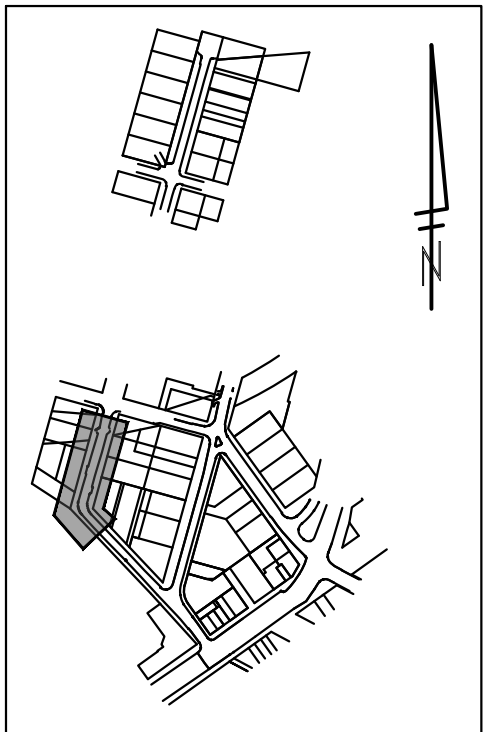
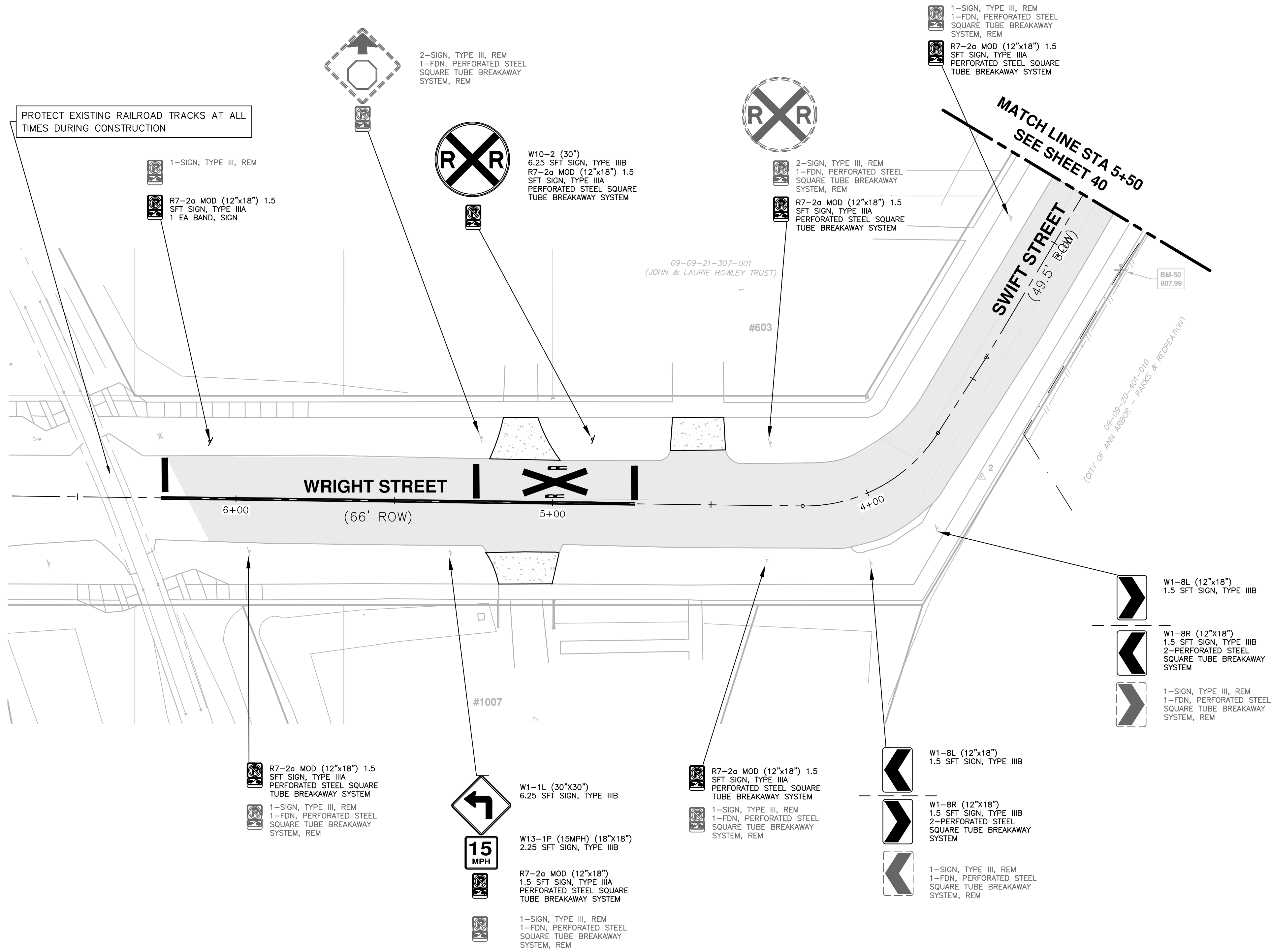
CITY OF ANN ARBOR
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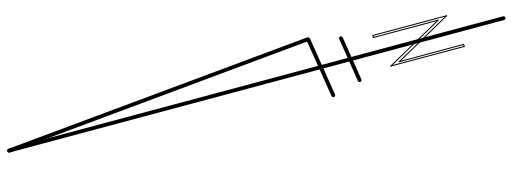
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
PROPOSED SIGNING - SWIFT

SCALE PLAN: 1"=20'
DRAWING No. 2022-032-40

C:\pw_work\wade-trim_banderson\d1253461\GPS-PLTS-Signage.dwg Dwg Created: 27-Mar-23 - _g2 standard bw.stb - Plot Date: 28-Mar-23

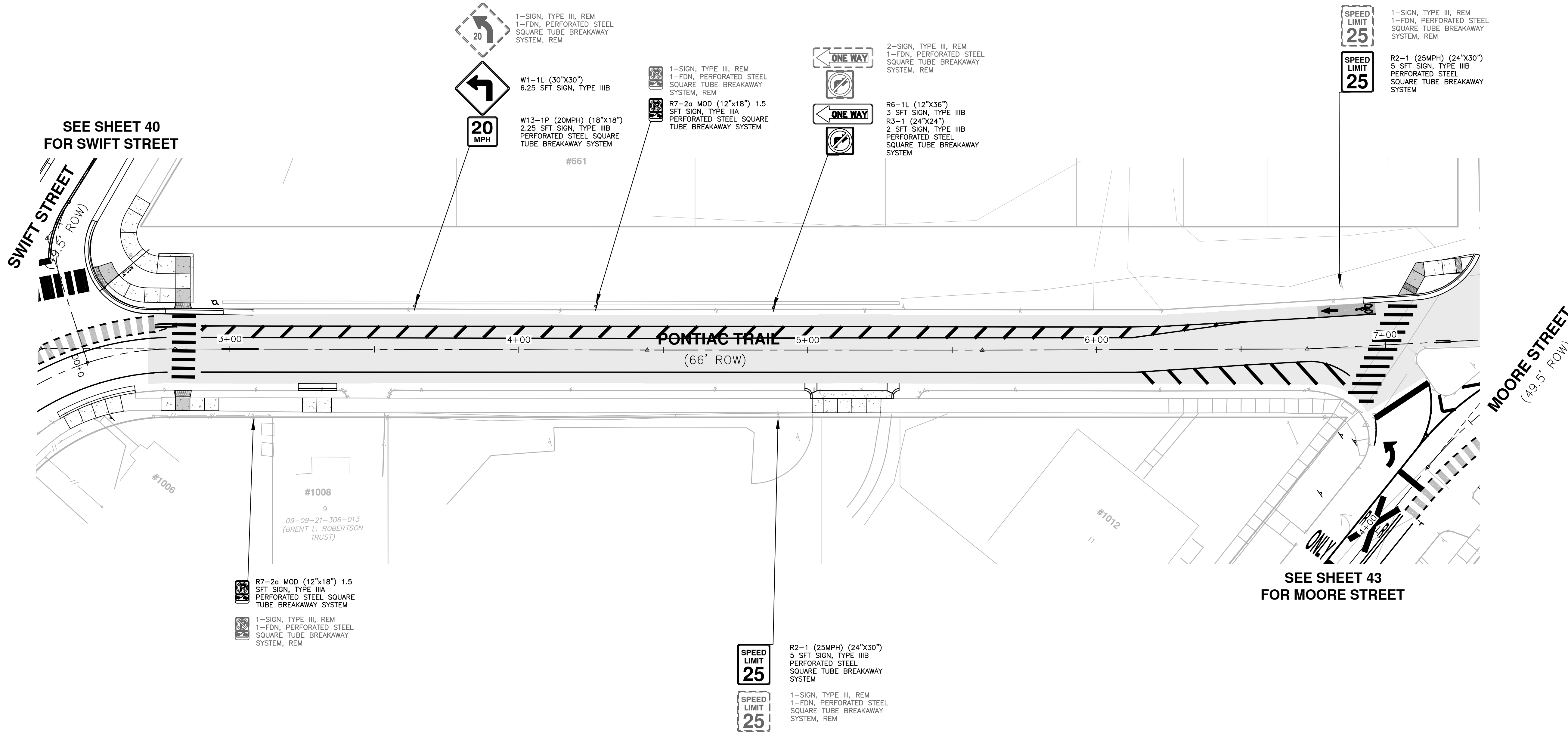


KEY MAP



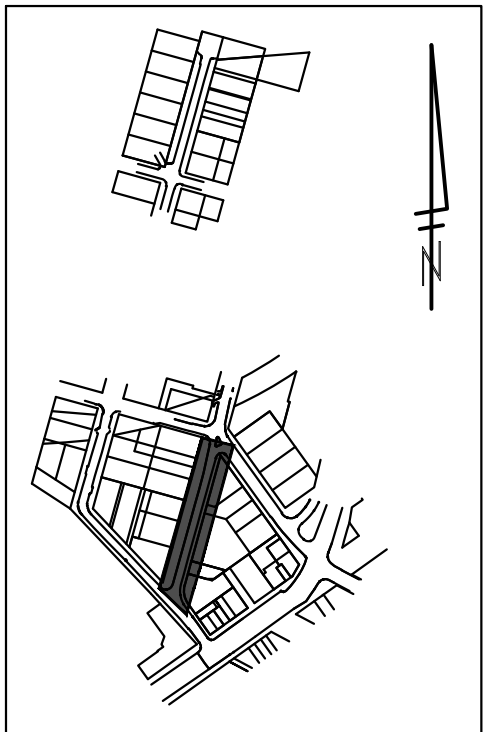
ISSUED FOR BID	DESCRIPTION
03/28/2023	DATE
CGT/BLA	DRAWN
VCM/CEW	CHECKED
<p>CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING</p> <p>PONTIAC, SWIFT, MOORE, & WRIGHT</p> <p>INFRASTRUCTURE IMPROVEMENTS</p> <p>PROPOSED SIGNING - SWIFT & WRIGHT</p>	
CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48107-8647 www.a3gov.org	<p>SCALE PLAN: 1"=20'</p> <p>DRAWING No. 2022-032-41</p>
SHEET No.	41 OF 52

C:\pw_work\wade-trim_banderson\d1253461\GPS-PLTS-Signage.dwg Dwg Created: 27-Mar-23 - _02 standard bw.stb - Plot Date: 28-Mar-23



SEE SHEET 40 FOR SWIFT STREET

SEE SHEET 43 FOR MOORE STREET



KEY MAP



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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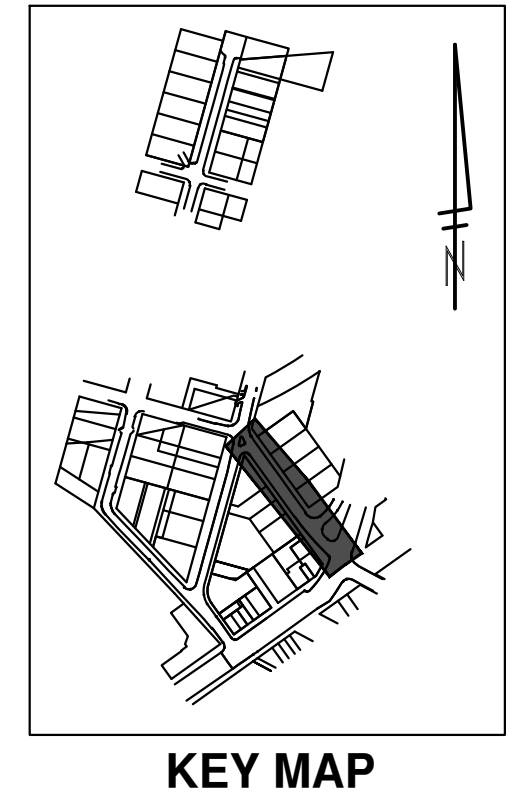
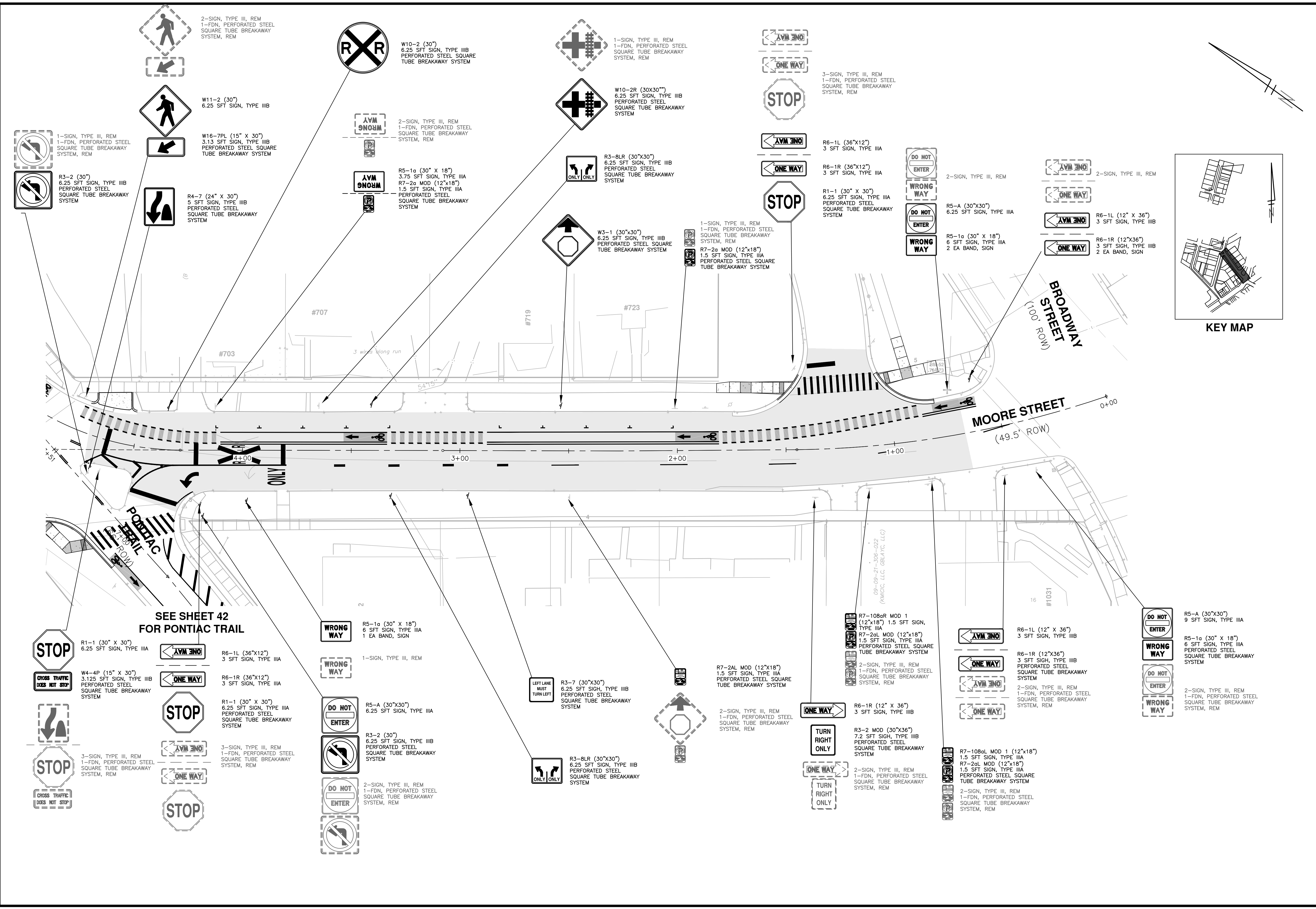
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PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
PROPOSED SIGNING - PONTIAC

SCALE PLAN: 1"=20'
DRAWING No. 2022-032-42

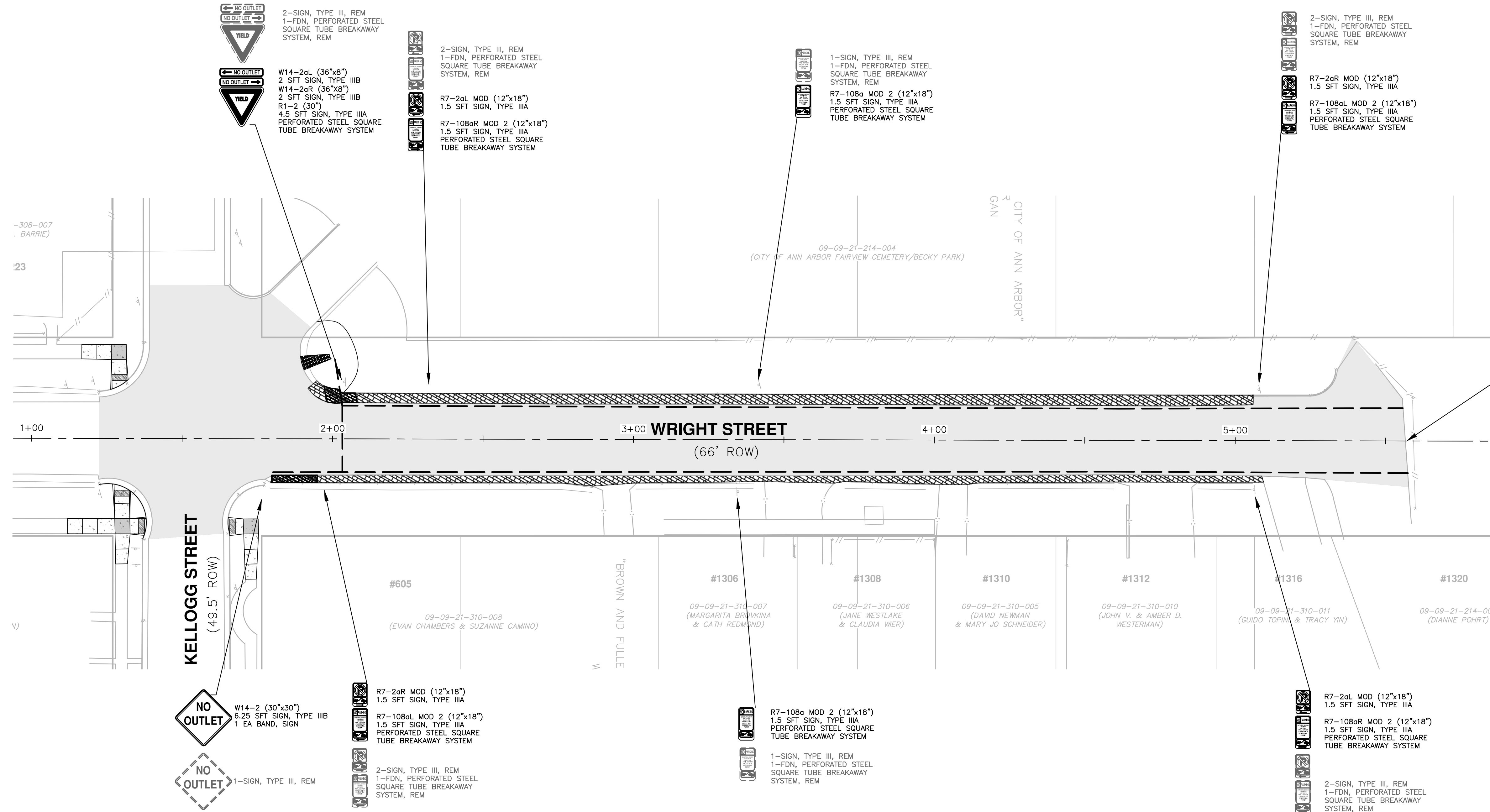
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00 ISSUED FOR BID REV.	03/28/2023 DATE
CMT/BLA DRAWN	VCM/CEW CHECKED
DESCRIPTION	
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING PONTIAC, SWIFT, MOORE, & WRIGHT INFRASTRUCTURE IMPROVEMENTS PROPOSED SIGNING - MOORE	
SCALE PLAN: 1"=20' DRAWING No. 2022-032-43	
SHEET No. 43 OF 52	

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KELLOGG STREET
(49.5' ROW)

NO OUTLET
W14-2 (30"x30")
6.25 SFT SIGN, TYPE III B
1 EA BAND, SIGN

NO OUTLET
1-SIGN, TYPE III, REM

R7-2aR MOD (12"x18")
1.5 SFT SIGN, TYPE III A

R7-108aL MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

2-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

R7-108a MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

1-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

R7-2aL MOD (12"x18")
1.5 SFT SIGN, TYPE III A

R7-108aR MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

2-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

2-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

W14-2aL (36"x8")
2 SFT SIGN, TYPE III B
W14-2aR (36"x8")
2 SFT SIGN, TYPE III B
R1-2 (30")
4.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

2-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

R7-2aL MOD (12"x18")
1.5 SFT SIGN, TYPE III A

R7-108aR MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

1-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

R7-108a MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

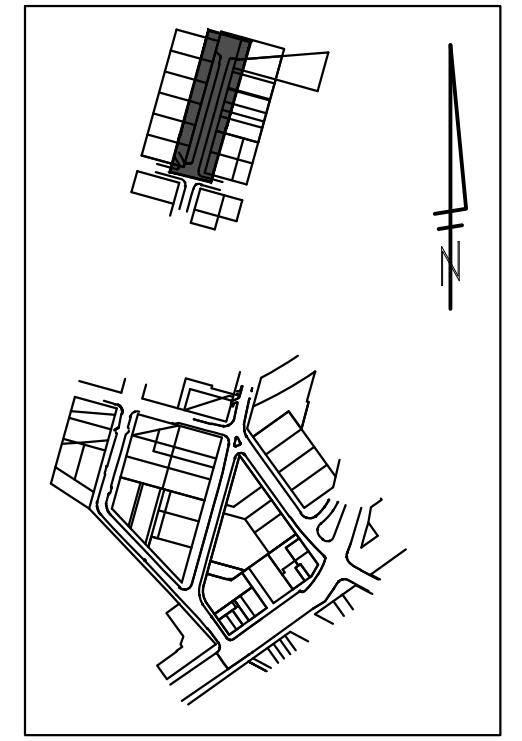
2-SIGN, TYPE III, REM
1-FDN, PERFORATED STEEL
SQUARE TUBE BREAKAWAY
SYSTEM, REM

R7-2aR MOD (12"x18")
1.5 SFT SIGN, TYPE III A

R7-108aL MOD 2 (12"x18")
1.5 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM

ROAD ENDS

W14-2b (30"x30")
6.25 SFT SIGN, TYPE III B
0M4-3 (18"x18")
2.25 SFT SIGN, TYPE III A
PERFORATED STEEL SQUARE
TUBE BREAKAWAY SYSTEM



KEY MAP

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

PONTIAC, SWIFT, MOORE, & WRIGHT

INFRASTRUCTURE IMPROVEMENTS

PROPOSED SIGNING - WRIGHT

SCALE PLAN: 1"=20'

DRAWING No. 2022-032-44

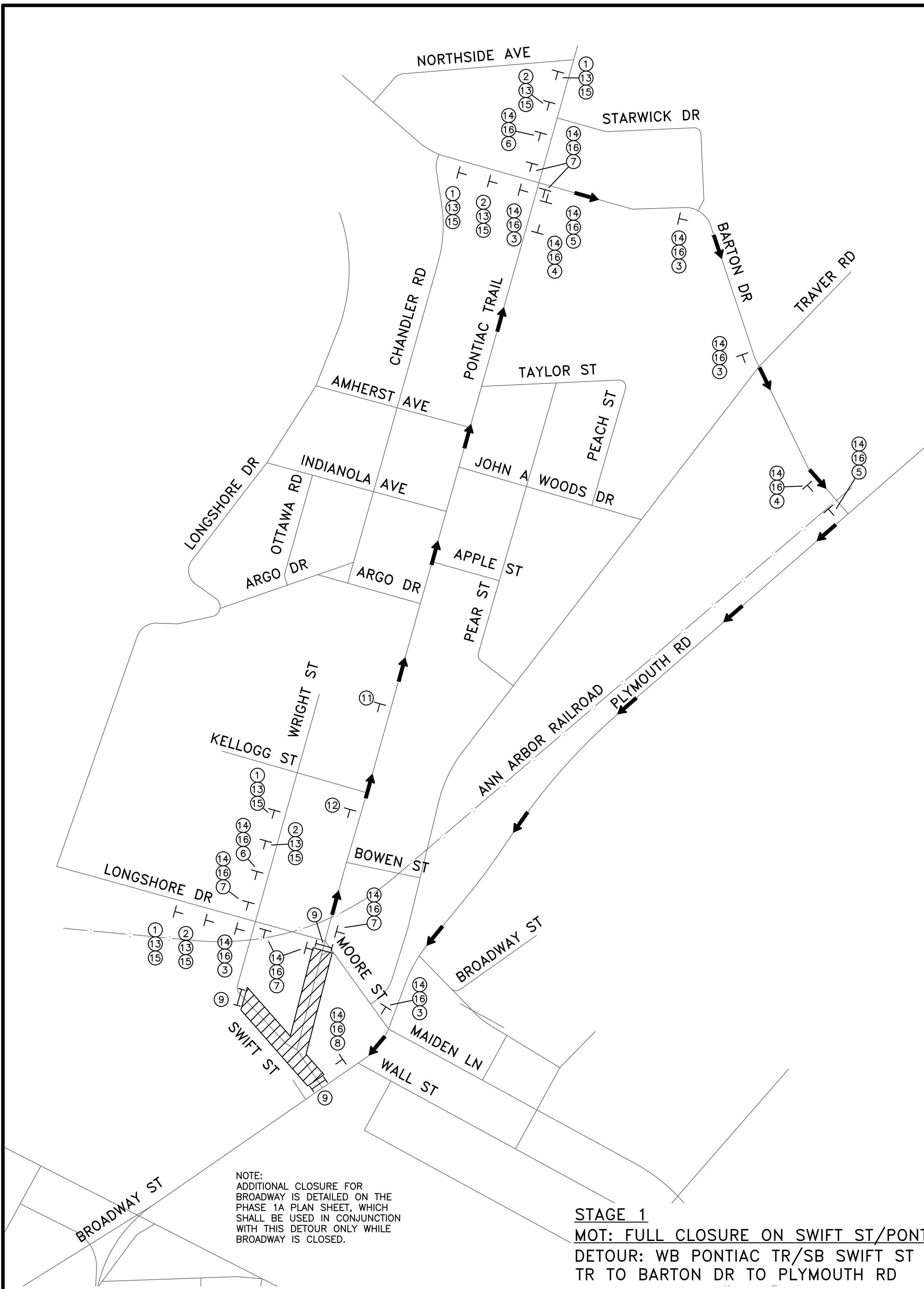
SHEET No. 44 OF 52

811
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REV.	DATE	DESCRIPTION	DRAWN	CHECKED
00	03/28/2023	ISSUED FOR BID	CGT/BLA	VCM/CEW

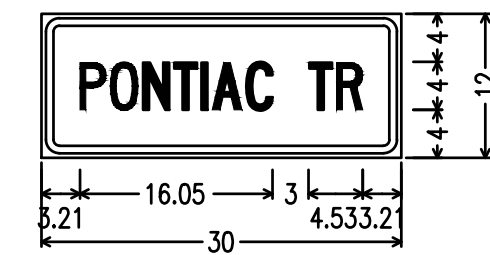
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C:\pwork\mflanagan\1253461\CMT-PLTS-MOT.dwg Dwg Created: 27-Mar-23 - _a2 standard bw.stb - Plot Date: 28-Mar-23

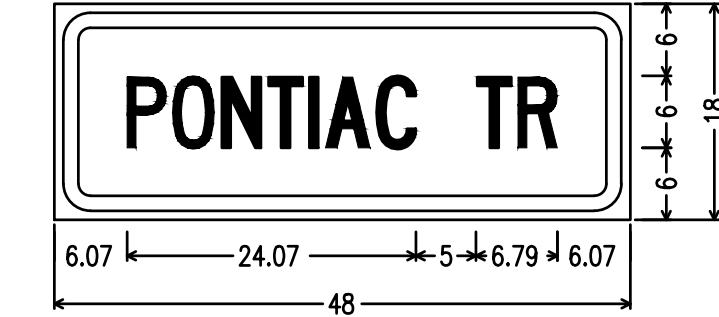


NOTE:
ADDITIONAL CLOSURE FOR
BROADWAY IS DETAILED ON THE
PHASE 1A PLAN SHEET, WHICH
SHALL BE USED IN CONJUNCTION
WITH THIS DETOUR ONLY WHILE
BROADWAY IS CLOSED.

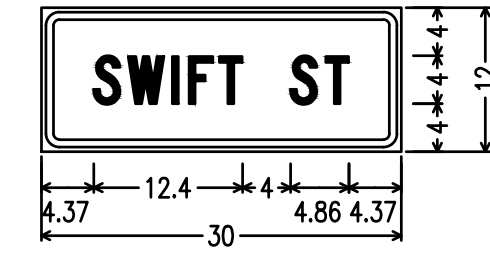
STAGE 1
MOT: FULL CLOSURE ON SWIFT ST/PONTIAC TR BETWEEN BROADWAY ST AND MOORE ST
DETOUR: WB PONTIAC TR/SB SWIFT ST ONE-WAY TRAFFIC TO BE DETOURED TO PONTIAC TR TO BARTON DR TO PLYMOUTH RD



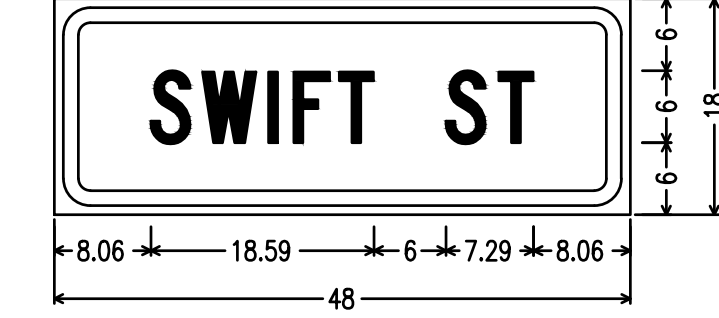
W20-12P;
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"PONTIAC", C 50% spacing;
"TR", C 50% spacing;



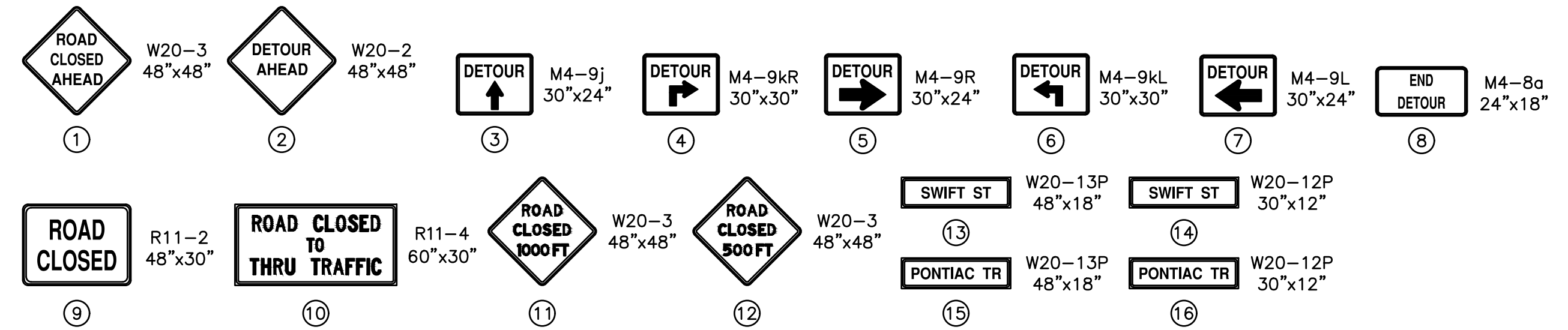
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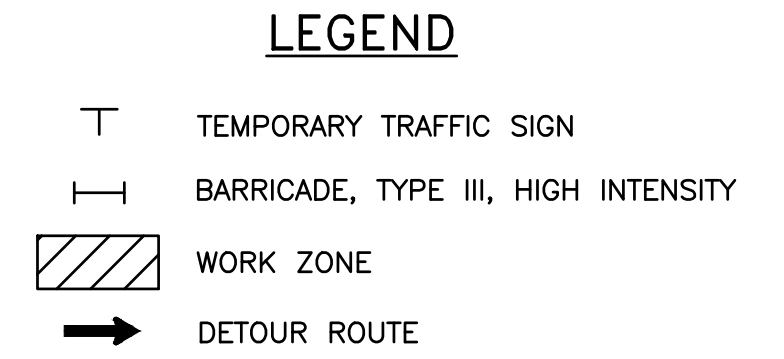
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"SWIFT", C, "ST", C;



W20-13P;
3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
"SWIFT", C, "ST", C;



- NOTES:
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.
 - PEDESTRIANS TO BE MAINTAINED UTILIZING THE CITY OF ANN ARBOR PEDESTRIAN TYPICALS.
 - MAINTAIN ACCESS TO LOCAL BUSINESSES/RESIDENTS.
 - SIGNAL TIMING AND PHASING MODIFICATIONS ARE ANTICIPATED FOR CONSTRUCTION. MODIFICATIONS MAY ALSO BE REQUIRED AT ADJACENT INTERSECTIONS. CONTRACTOR SHALL COORDINATE WORK WITH THE CITY.
 - WHEN THE ROADWAY IS CLOSED, TYPE III BARRICADES WILL BE PLACED FROM FACE OF CURB TO FACE OF CURB TO COMPLETELY BLOCK TRAFFIC FROM ENTERING THE ROAD.



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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 MAINTENANCE OF TRAFFIC - STAGE 1

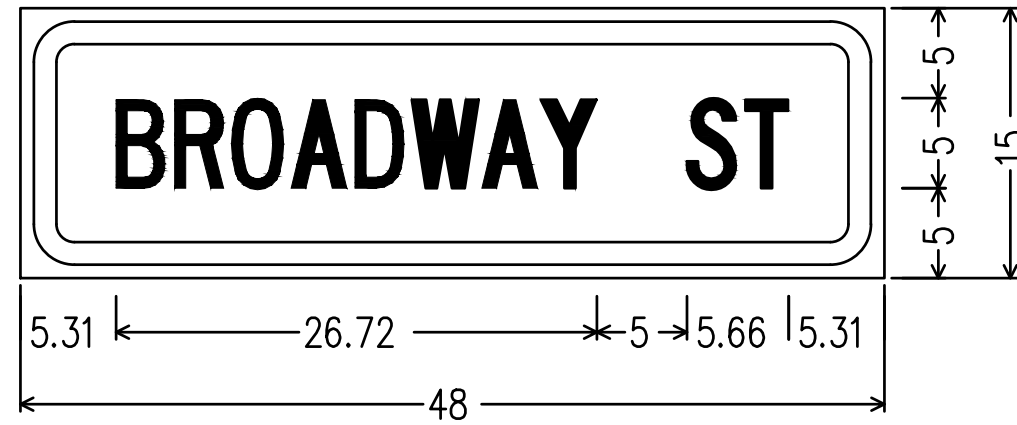
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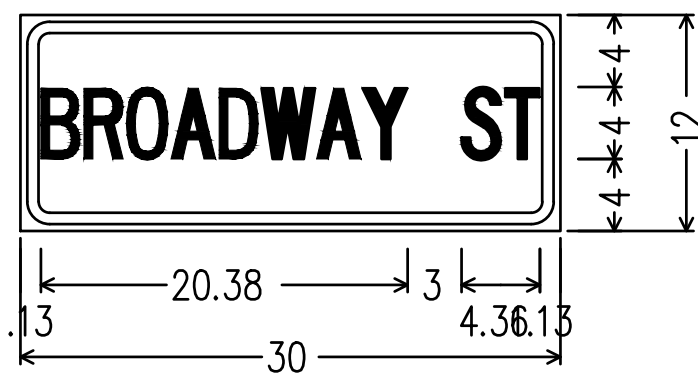
SHEET No. 45 OF 52

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-6647
 ANN ARBOR: 734.794.4410
 WWW.A2GOV.ORG

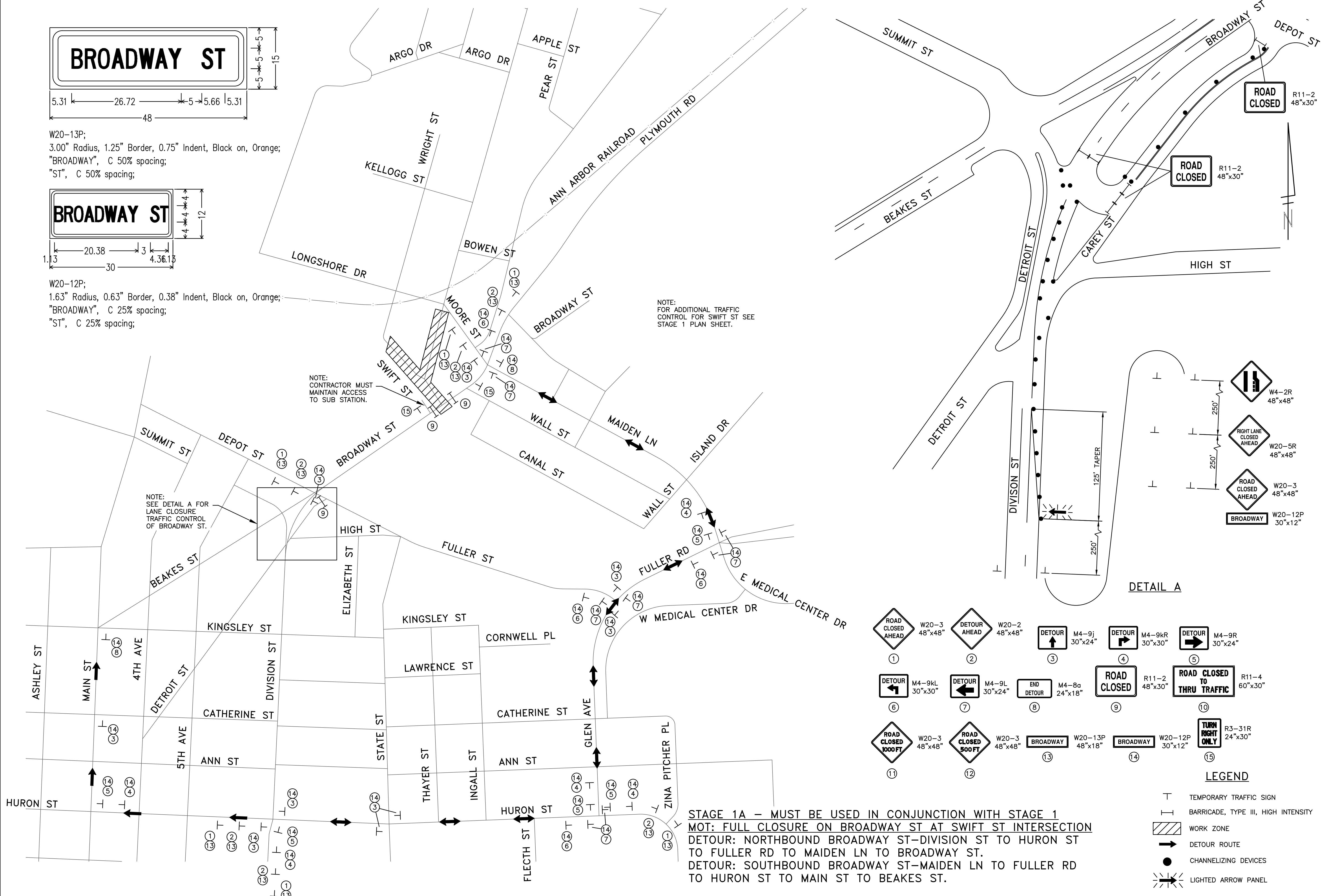
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W20-13P;
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"BROADWAY", C 50% spacing;
"ST", C 50% spacing;



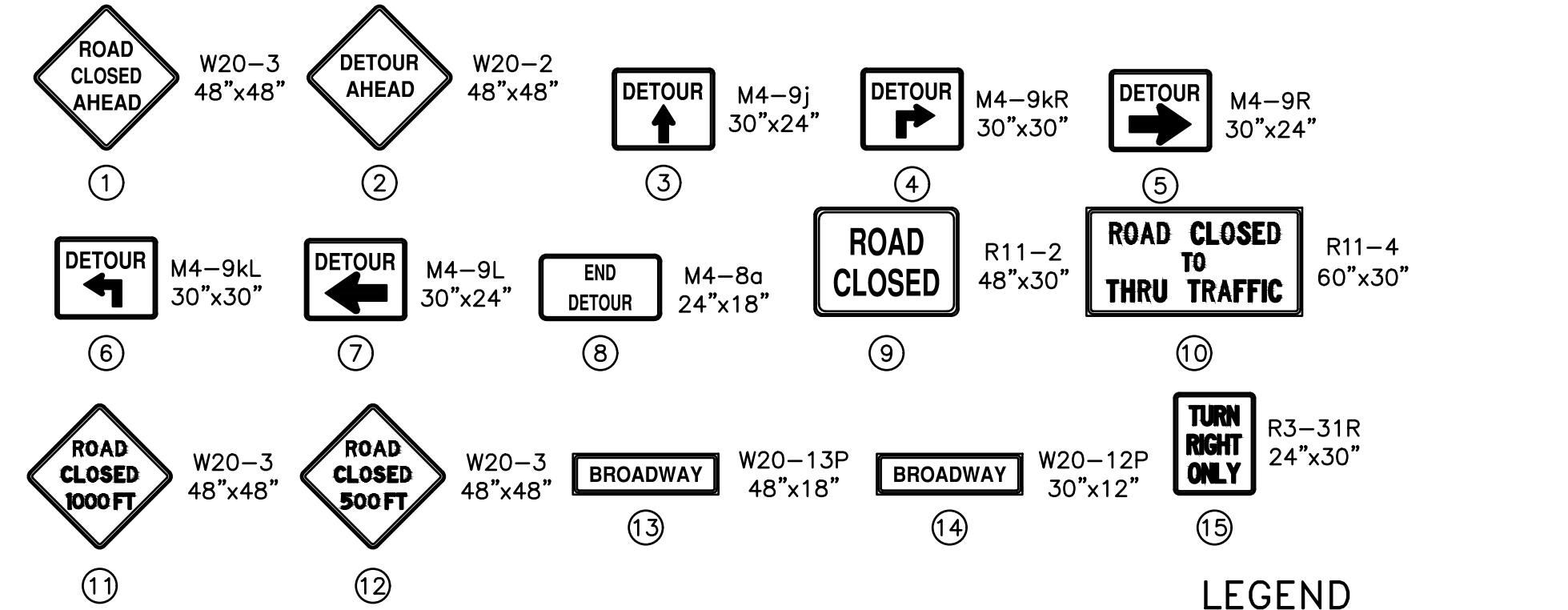
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"BROADWAY", C 25% spacing;
"ST", C 25% spacing;



NOTE:
FOR ADDITIONAL TRAFFIC CONTROL FOR SWIFT ST SEE STAGE 1 PLAN SHEET.

NOTE:
SEE DETAIL A FOR LANE CLOSURE TRAFFIC CONTROL OF BROADWAY ST.

NOTE:
CONTRACTOR MUST MAINTAIN ACCESS TO SUB STATION.



LEGEND

- T TEMPORARY TRAFFIC SIGN
- I BARRICADE, TYPE III, HIGH INTENSITY
- ▨ WORK ZONE
- DETOUR ROUTE
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL

STAGE 1A - MUST BE USED IN CONJUNCTION WITH STAGE 1 MOT: FULL CLOSURE ON BROADWAY ST AT SWIFT ST INTERSECTION
DETOUR: NORTHBOUND BROADWAY ST-DIVISION ST TO HURON ST TO FULLER RD TO MAIDEN LN TO BROADWAY ST.
DETOUR: SOUTHBOUND BROADWAY ST-MAIDEN LN TO FULLER RD TO HURON ST TO MAIN ST TO BEAKES ST.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 MAINTENANCE OF TRAFFIC - STAGE 1A

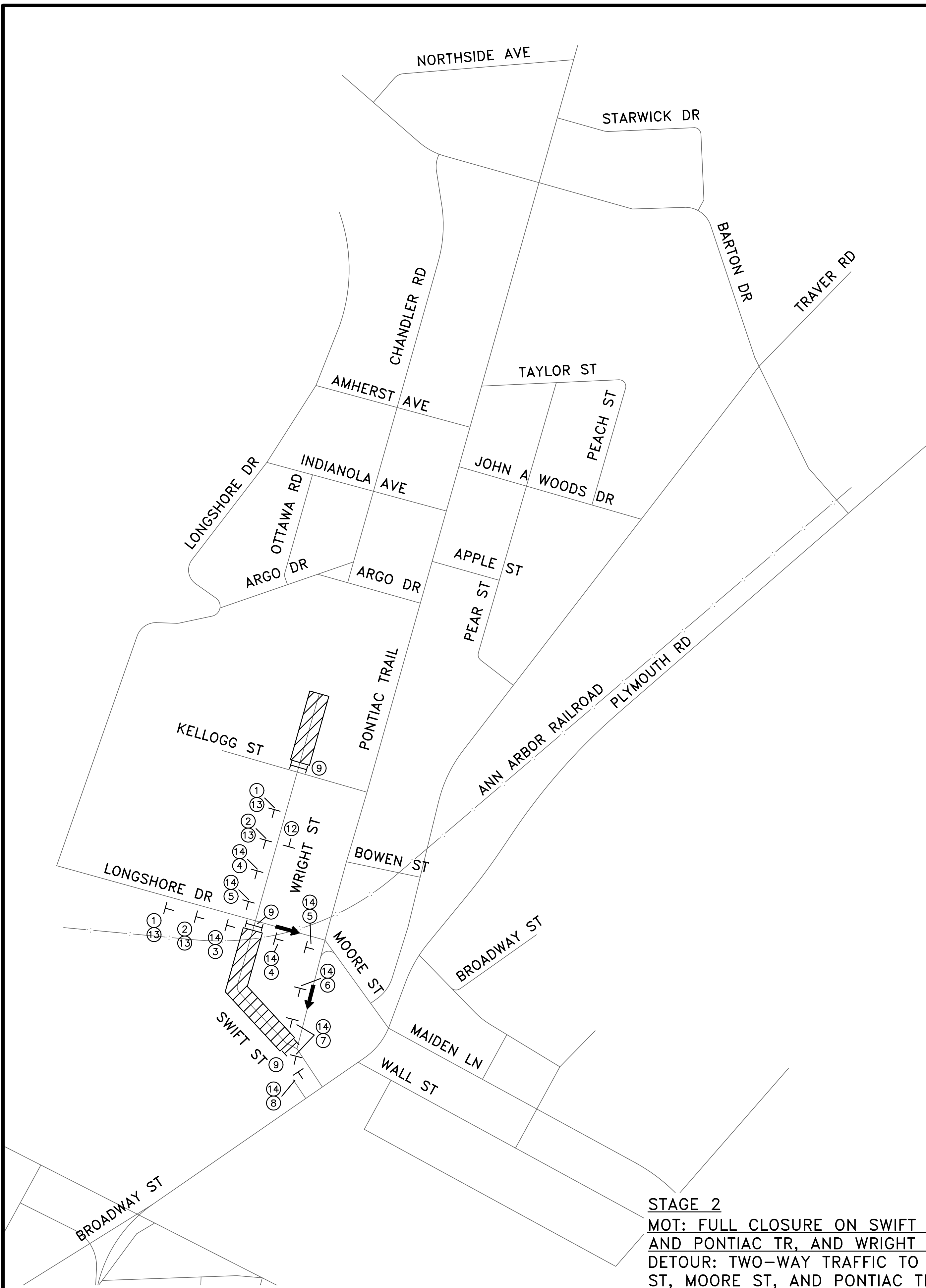
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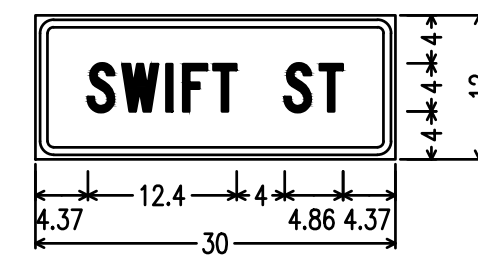
CITY OF ANN ARBOR
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 ANN ARBOR, MI 48106-6647
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SCALE PLAN: Custom
 DRAWING No.: 2022-032-46
 SHEET No.: 46 OF 52

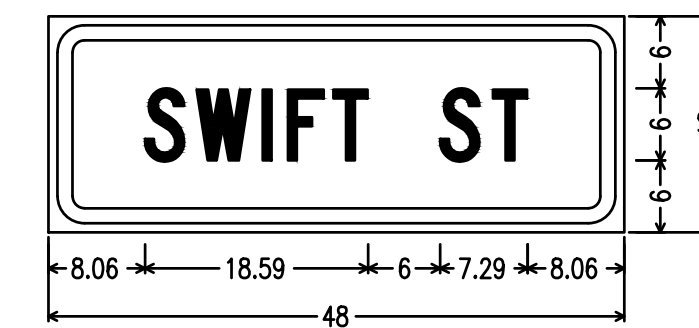
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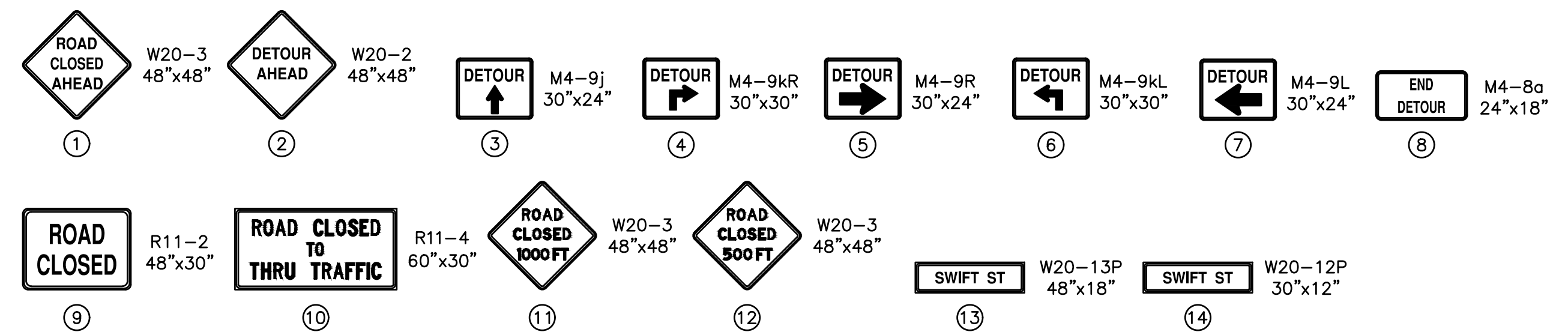
STAGE 2
MOT: FULL CLOSURE ON SWIFT ST/WRIGHT ST BETWEEN LONGSHORE AND PONTIAC TR, AND WRIGHT ST NORTH OF KELLOGG ST
DETOUR: TWO-WAY TRAFFIC TO BE DETOURED TO PORTIONS OF SWIFT ST, MOORE ST, AND PONTIAC TR



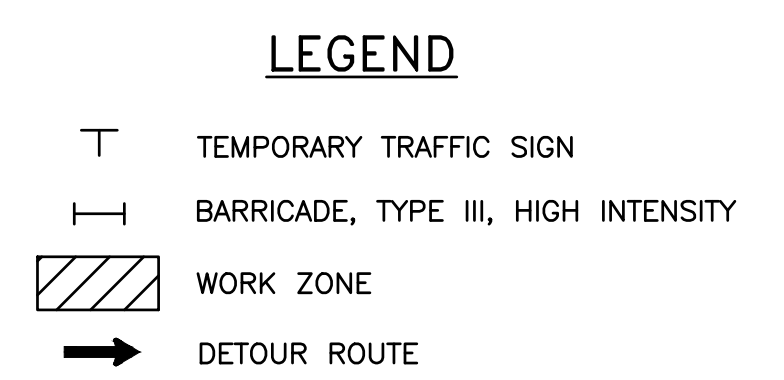
W20-12P;
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 SWIFT, C; *ST*, C;



W20-13P;
 3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
 SWIFT, C; *ST*, C;



- NOTES:**
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
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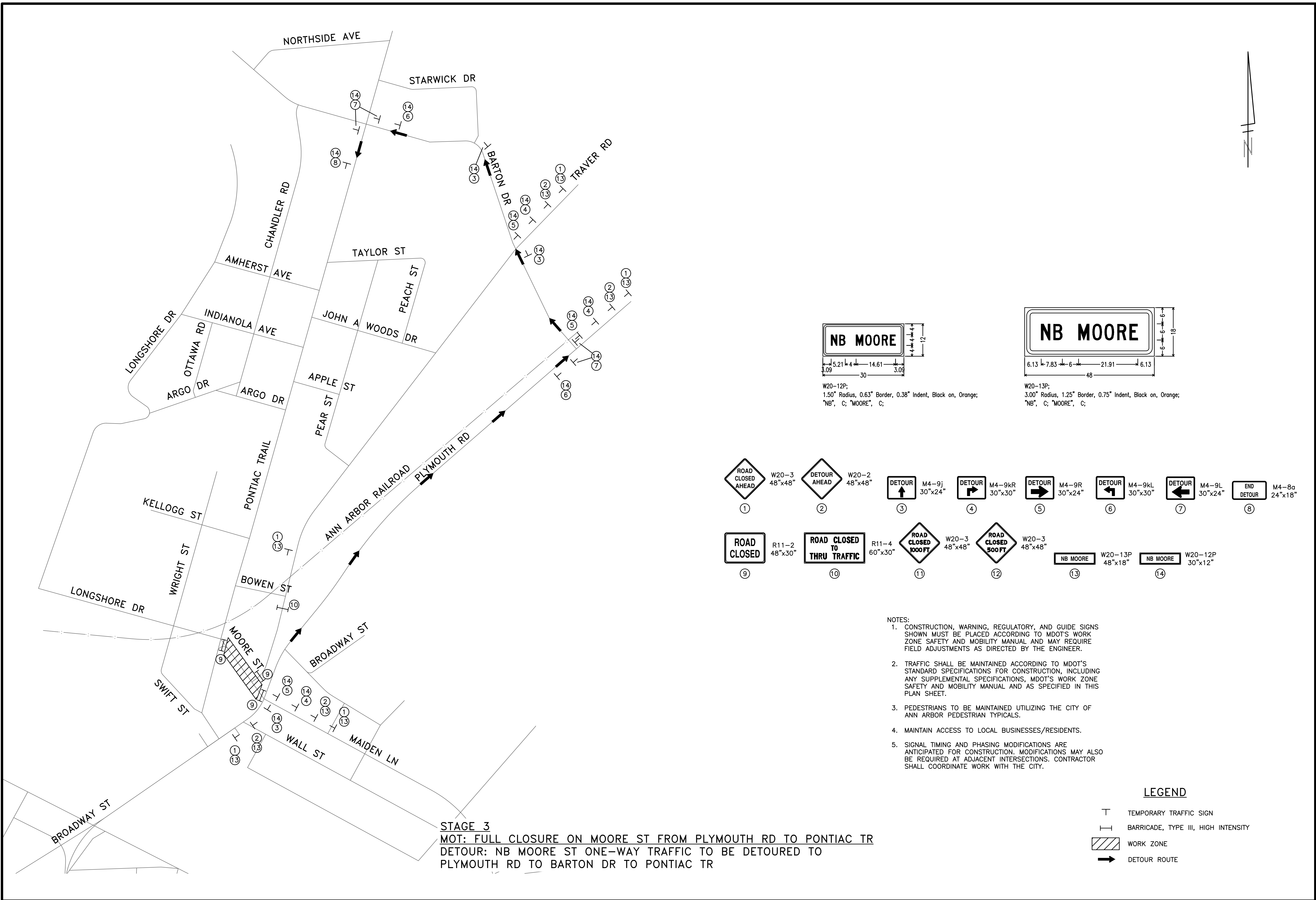


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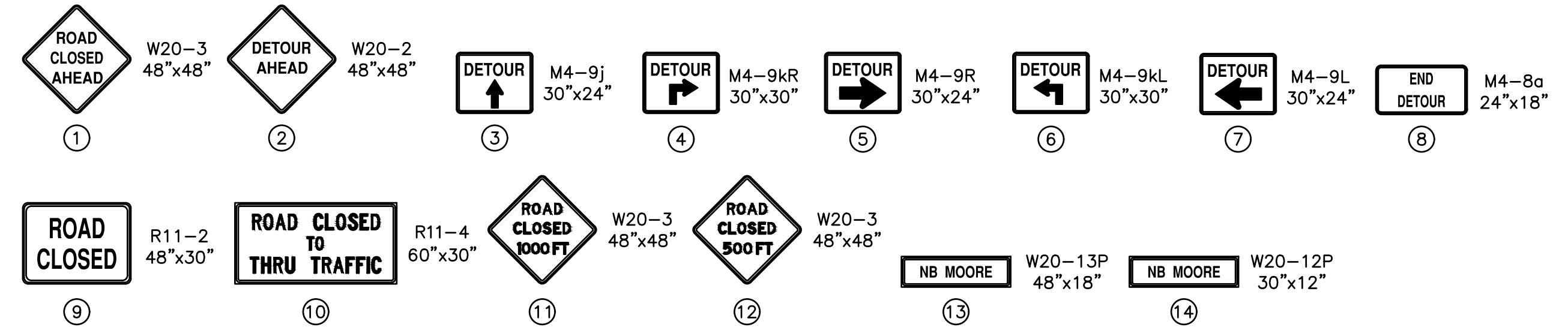
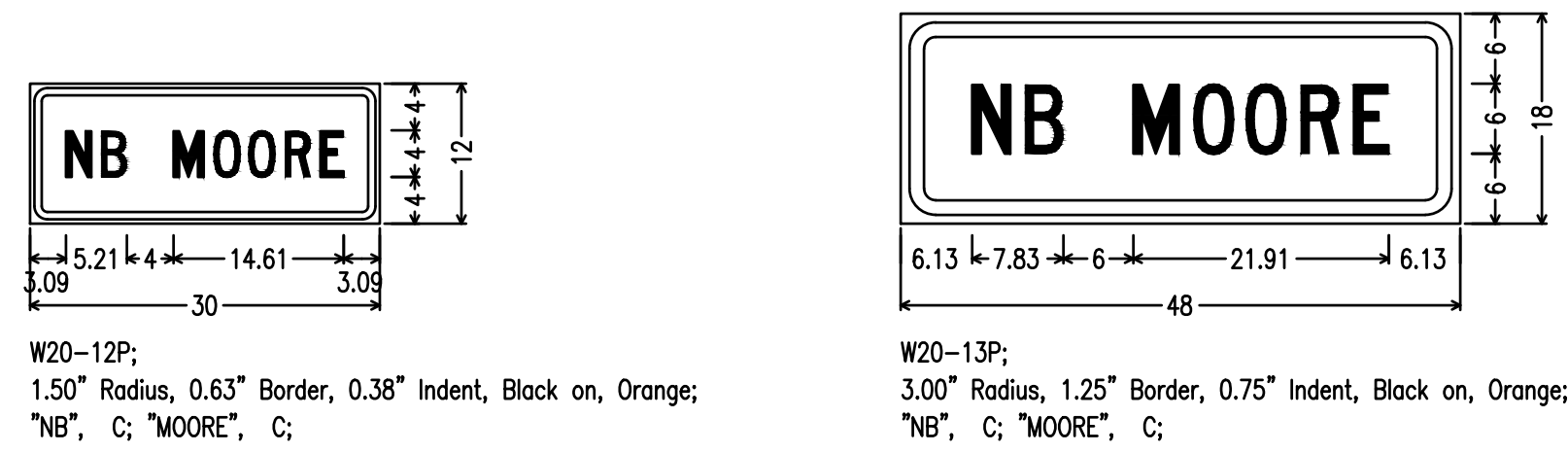
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PONTIAC, SWIFT, MOORE, & WRIGHT
INFRASTRUCTURE IMPROVEMENTS
 MAINTENANCE OF TRAFFIC - STAGE 2

SCALE PLAN: Custom
 DRAWING No. 2022-032-47
 SHEET No. 47 OF 52

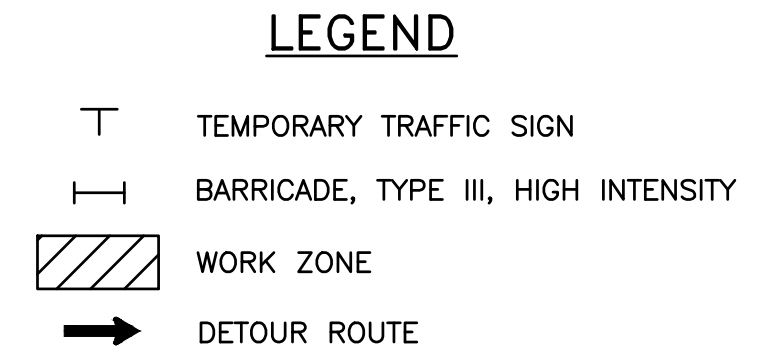
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STAGE 3
MOT: FULL CLOSURE ON MOORE ST FROM PLYMOUTH RD TO PONTIAC TR
DETOUR: NB MOORE ST ONE-WAY TRAFFIC TO BE DETOURED TO PLYMOUTH RD TO BARTON DR TO PONTIAC TR



- NOTES:**
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
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 - PEDESTRIANS TO BE MAINTAINED UTILIZING THE CITY OF ANN ARBOR PEDESTRIAN TYPICALS.
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811
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

PONTIAC, SWIFT, MOORE, & WRIGHT

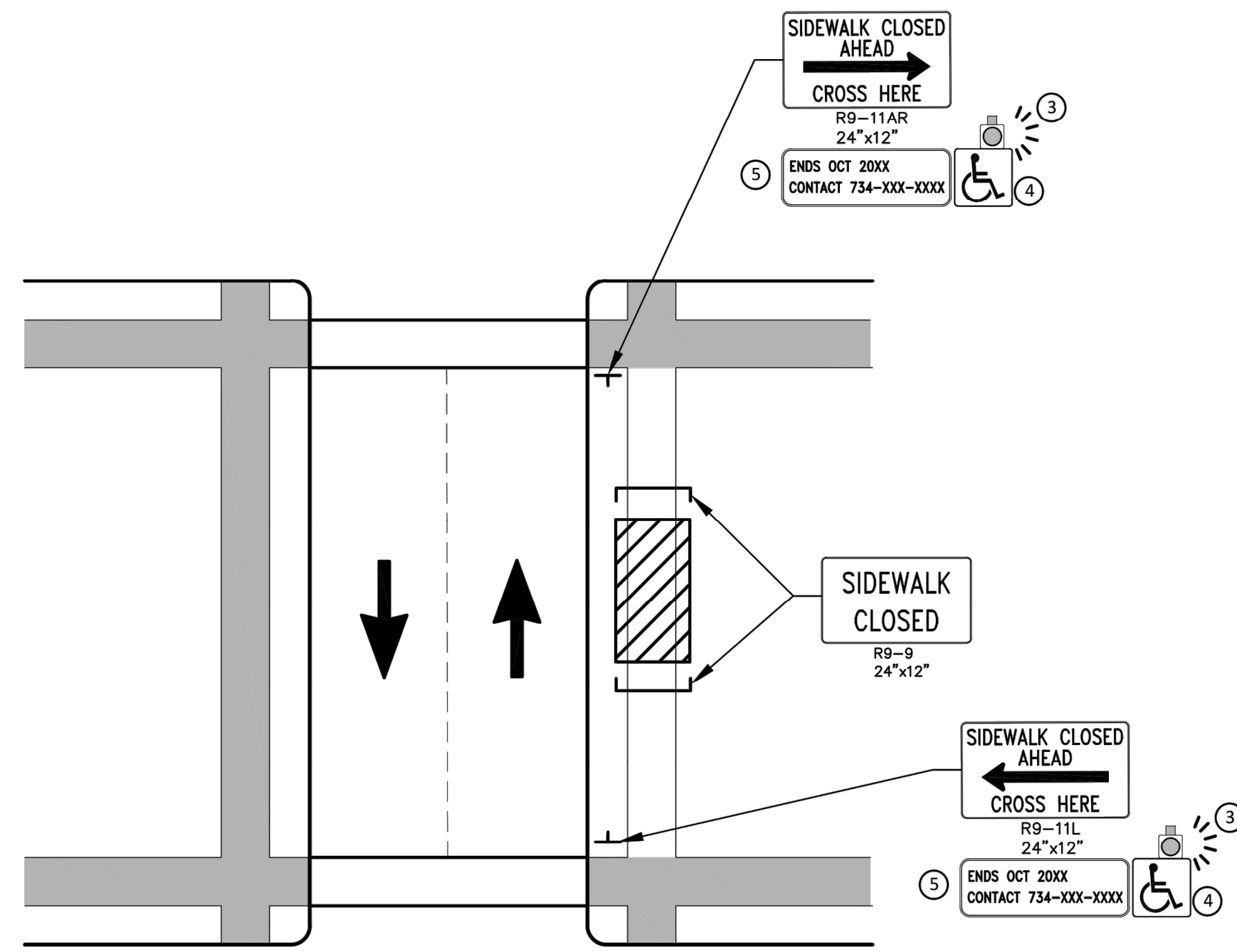
INFRASTRUCTURE IMPROVEMENTS

MAINTENANCE OF TRAFFIC - STAGE 3

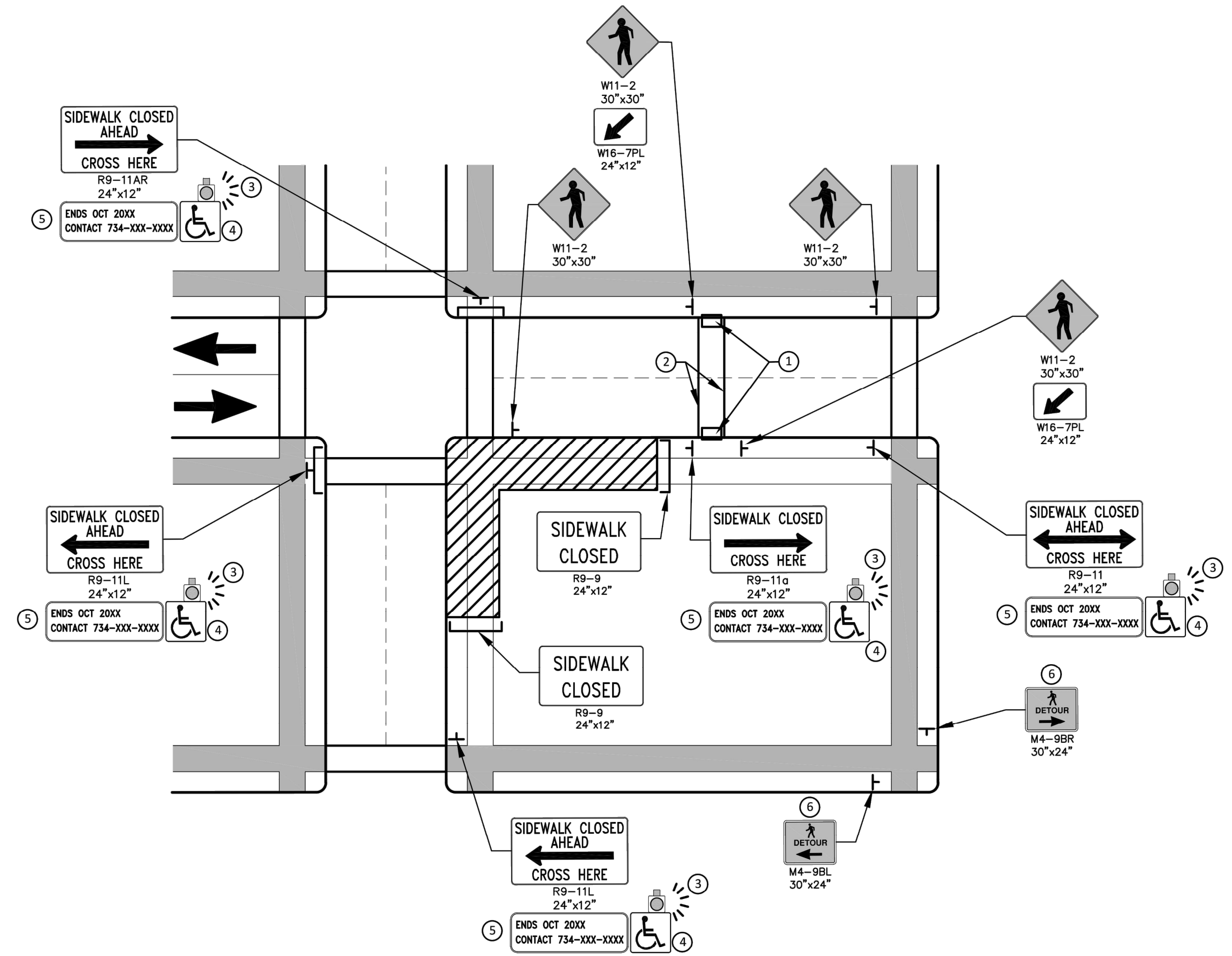
SCALE PLAN: Custom

DRAWING No. 2022-032-48

SHEET No. 48 OF 52



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 TRAF DEVICES."

LEGEND

- SIGN
- ▨ EXISTING PEDESTRIAN SURFACE
- ▨ WORK AREA
- ▨ PEDESTRIAN CHANNELIZATION DEVICE
- ▨ BARRIER
- ▨ SIDEWALK BARRICADE
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DEVICE



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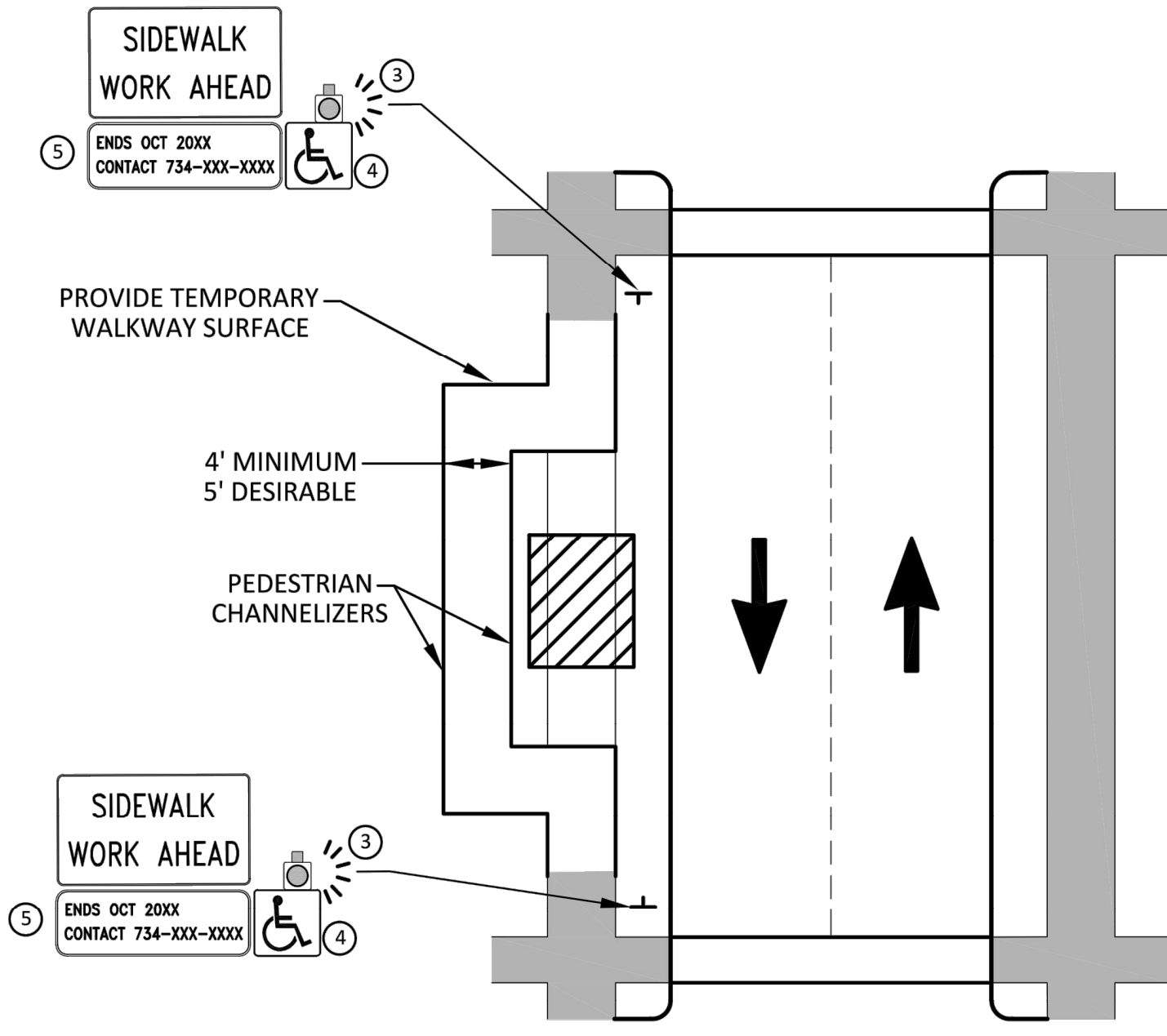
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1647
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IMPROVEMENTS
MOT PEDESTRIAN DETAILS 1

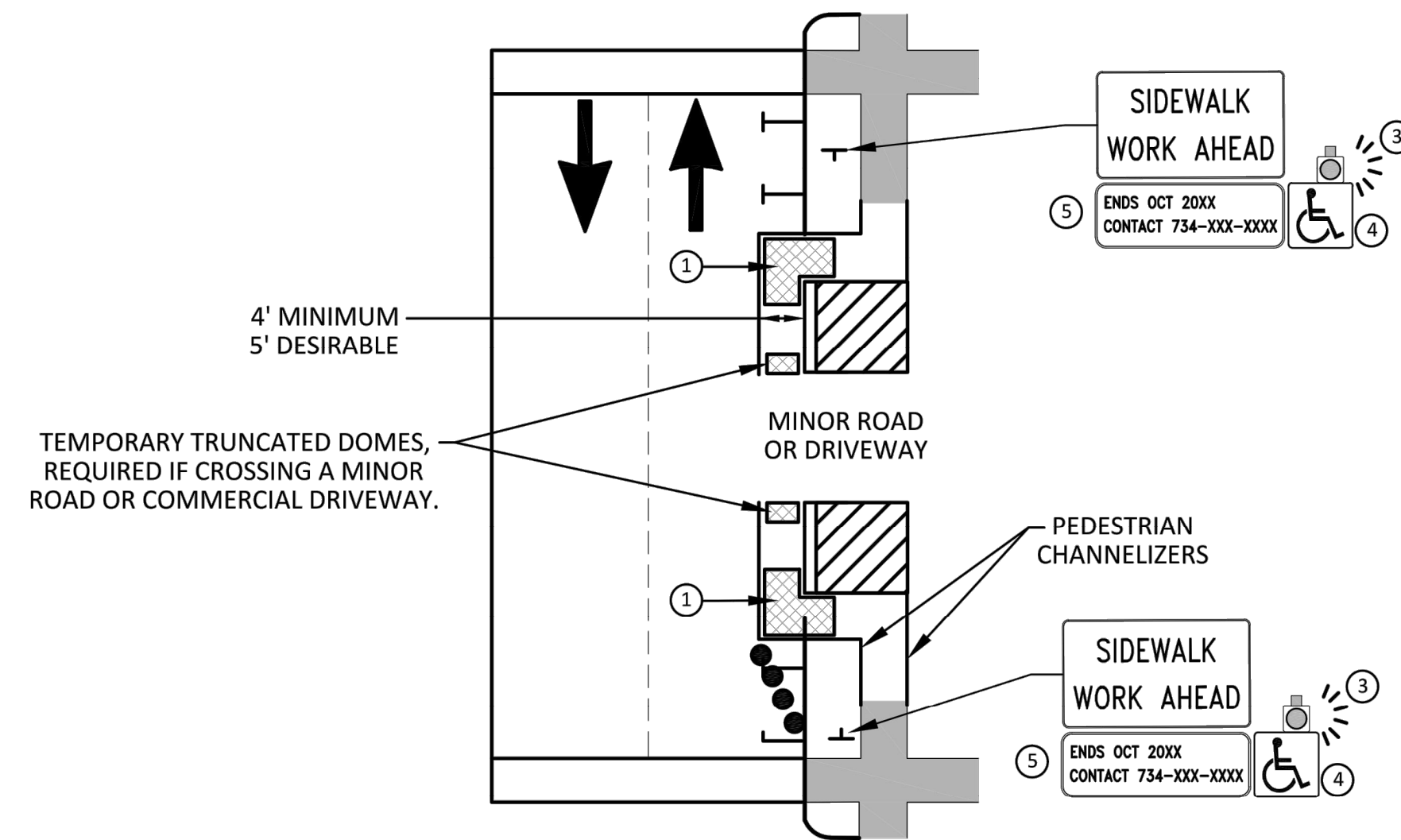
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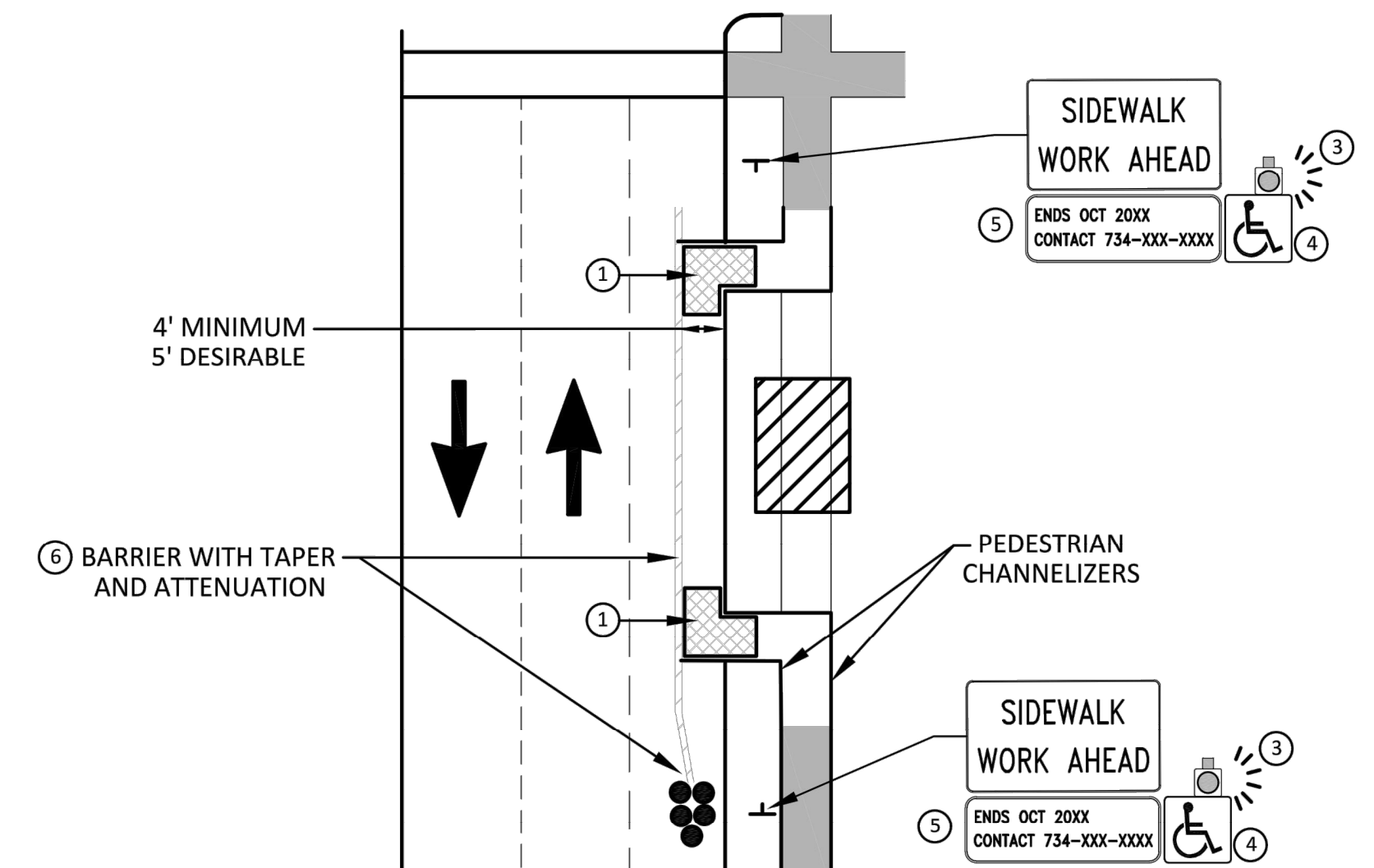


**BYPASS ON ADJACENT AVAILABLE
RIGHT OF WAY**
BYPASS TYPE A

NOTE: MAY ONLY BE USED ON ROADWAY WITH POSTED SPEED OF 45 MPH OR LESS.



**SIDEWALK BYPASS USING PARKING OR
SHOULDER ON LOW SPEED ROADWAY**
BYPASS TYPE B



**SIDEWALK BYPASS USING
SHOULDER OR PARKING LANE ON
HIGH SPEED ROADWAY**
BYPASS TYPE C

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.

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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.

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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.
- 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 SEE MMUTCD FOR GUIDANCE ON PLACEMENT AND USAGE OF BARRIER.

LEGEND

- SIGN
- ▨ EXISTING PEDESTRIAN SURFACE
- ▩ WORK AREA
- ▤ PEDESTRIAN CHANNELIZATION DEVICE
- ▧ BARRIER
-] SIDEWALK BARRICADE
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DEVICE



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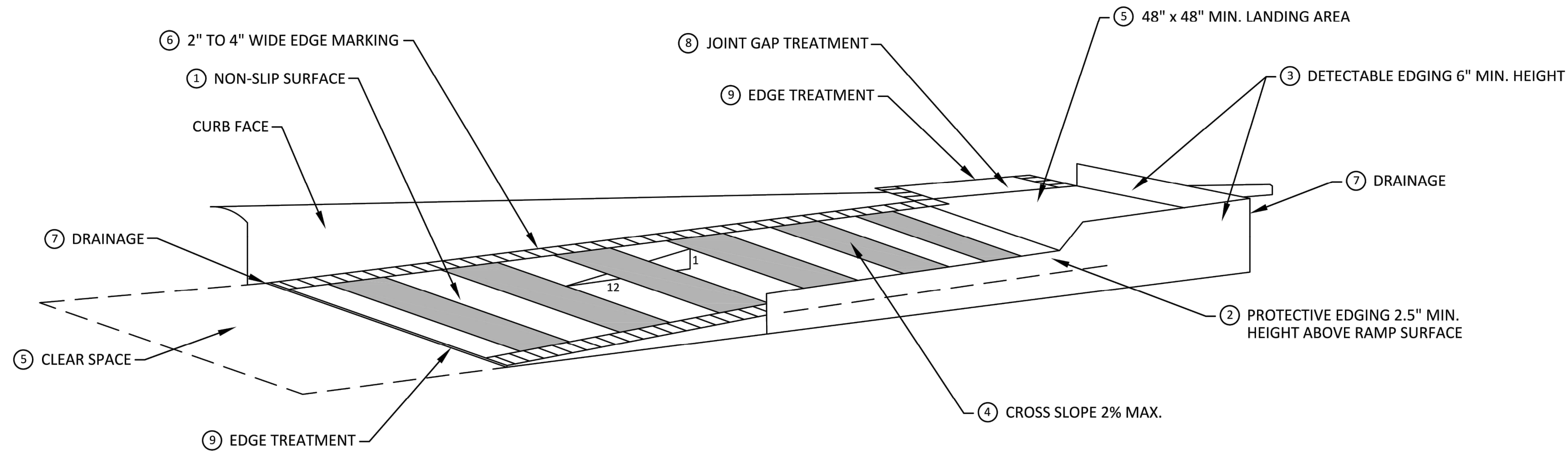


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IMPROVEMENTS
MOT PEDESTRIAN DETAILS 2**

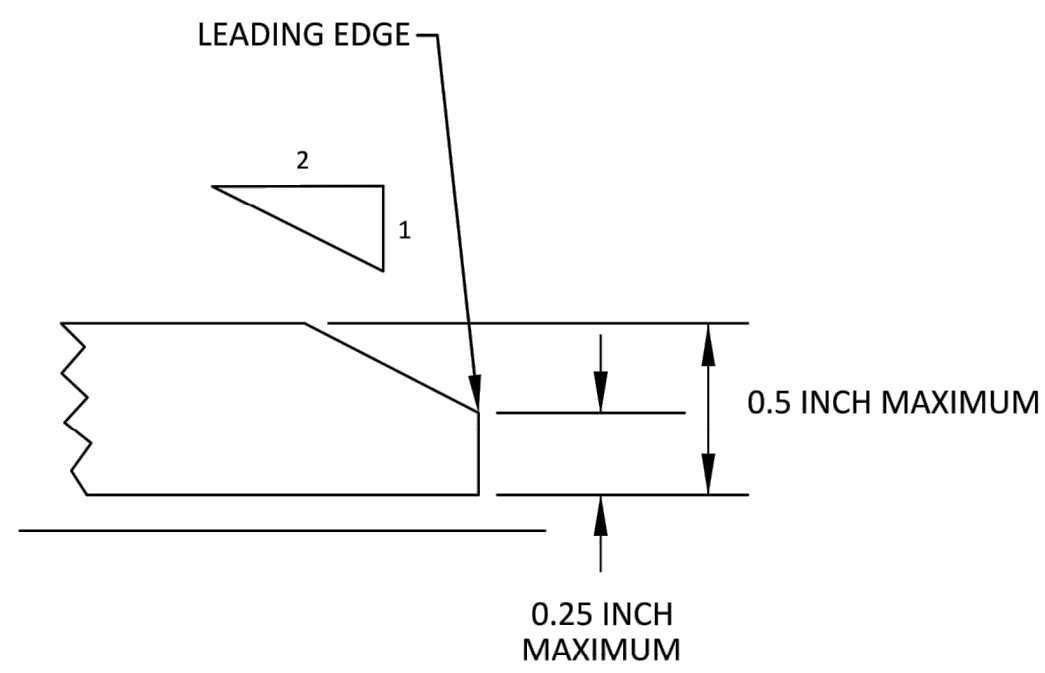
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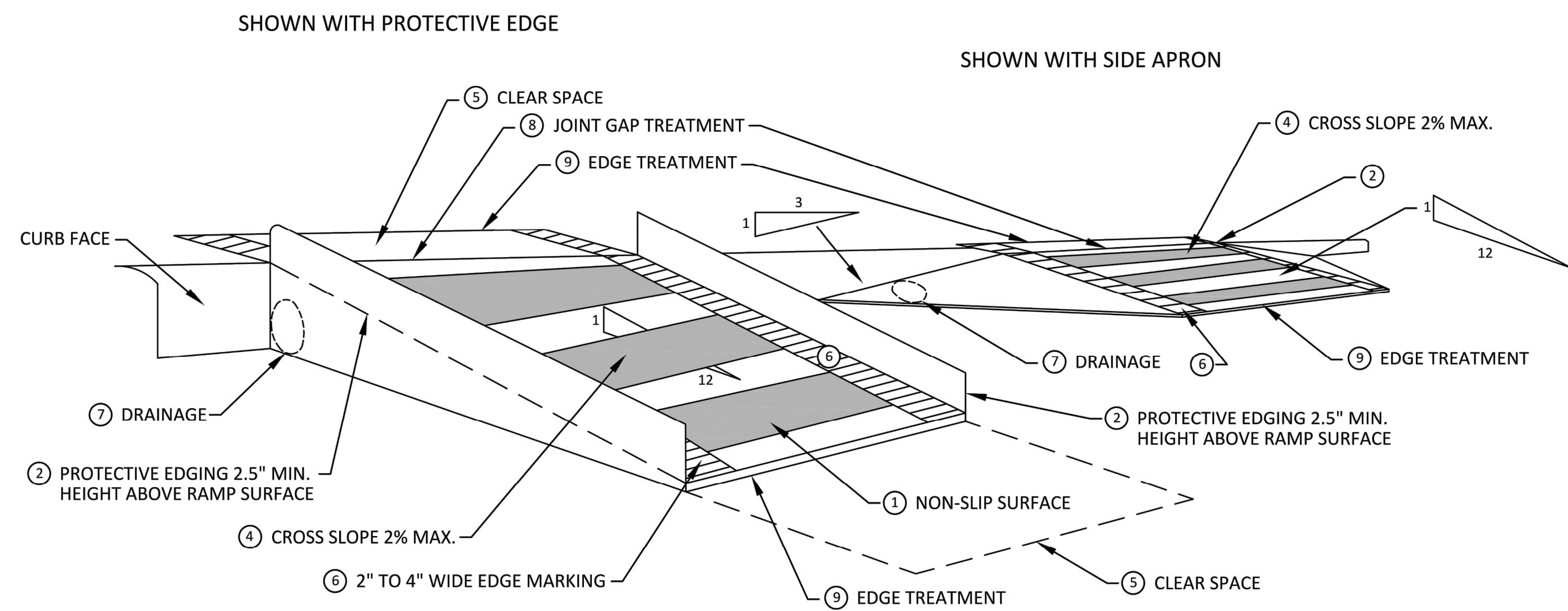
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**TEMPORARY CURB RAMP
PARALLEL TO CURB**



EDGE TREATMENT



**TEMPORARY CURB RAMP
PERPENDICULAR TO CURB**

SPECIFIC NOTES

- 1 CURB RAMP SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.
- 2 PROTECTIVE EDGING WITH A 2.5" MIN. HEIGHT ABOVE THE RAMP SHALL BE PLACED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3. PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- 3 DETECTABLE EDGING ANYTIME A HANDRAIL IS REQUIRED, AND ANYTIME THE PATH CHANGES DIRECTION. THIS INCLUDES A TURN ONTO THE RAMP FROM THE PATH. DETECTABLE EDGING MUST BEGIN A MAXIMUM OF 2.5" ABOVE THE RAMP SURFACE, AND EXTEND AT LEAST 6" ABOVE THE RAMP SURFACE. CONTRASTING COLOR SHALL BE PLACED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- 4 CURB RAMP AND LANDINGS SHALL HAVE A 2% MAX. CROSS SLOPE.
- 5 CLEAR SPACE OF 48" x 48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR, 2" TO 4" WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
- 7 WATER FLOW IN THE GUTTER SYSTEM SHALL NOT BE IMPEDED.
- 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHOULD BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2" HEIGHT.



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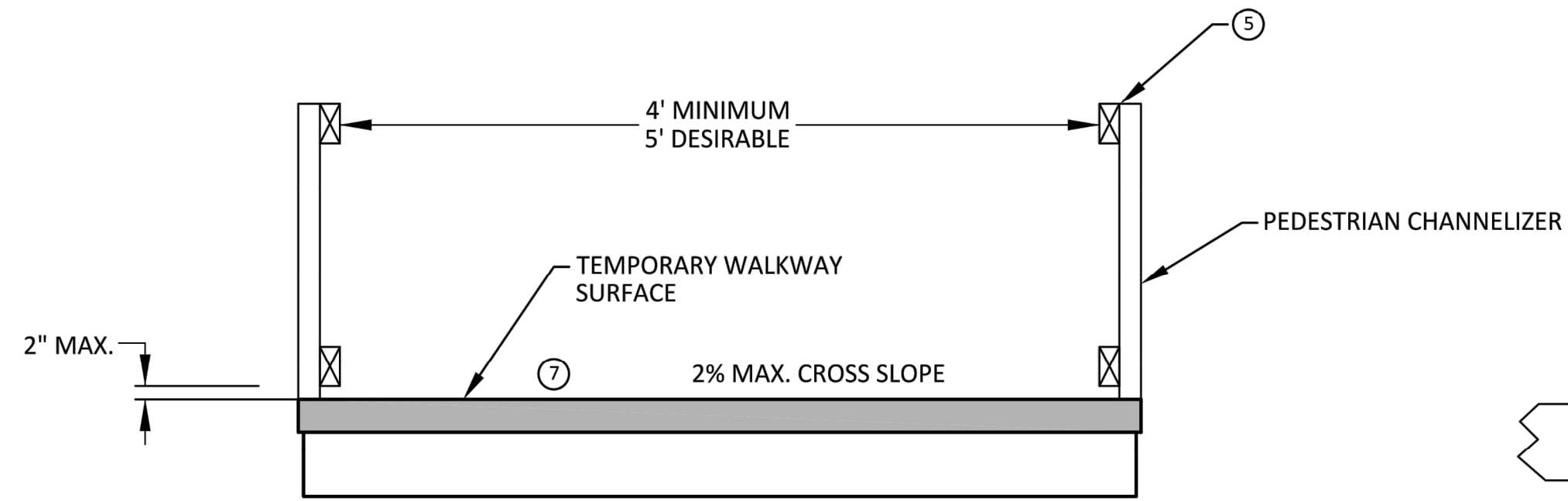


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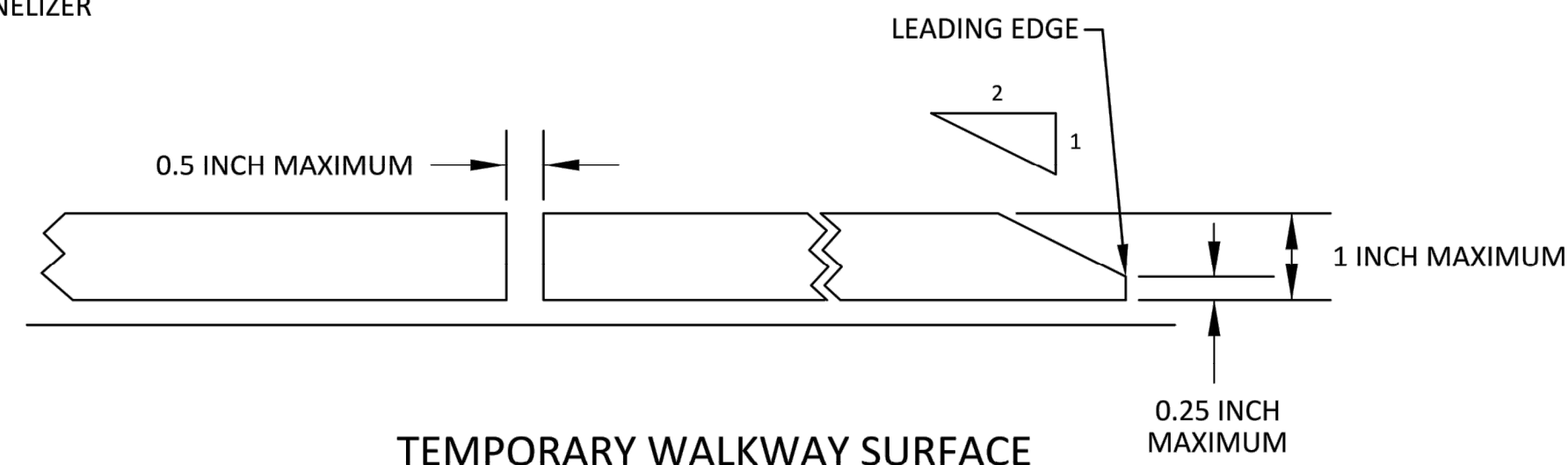
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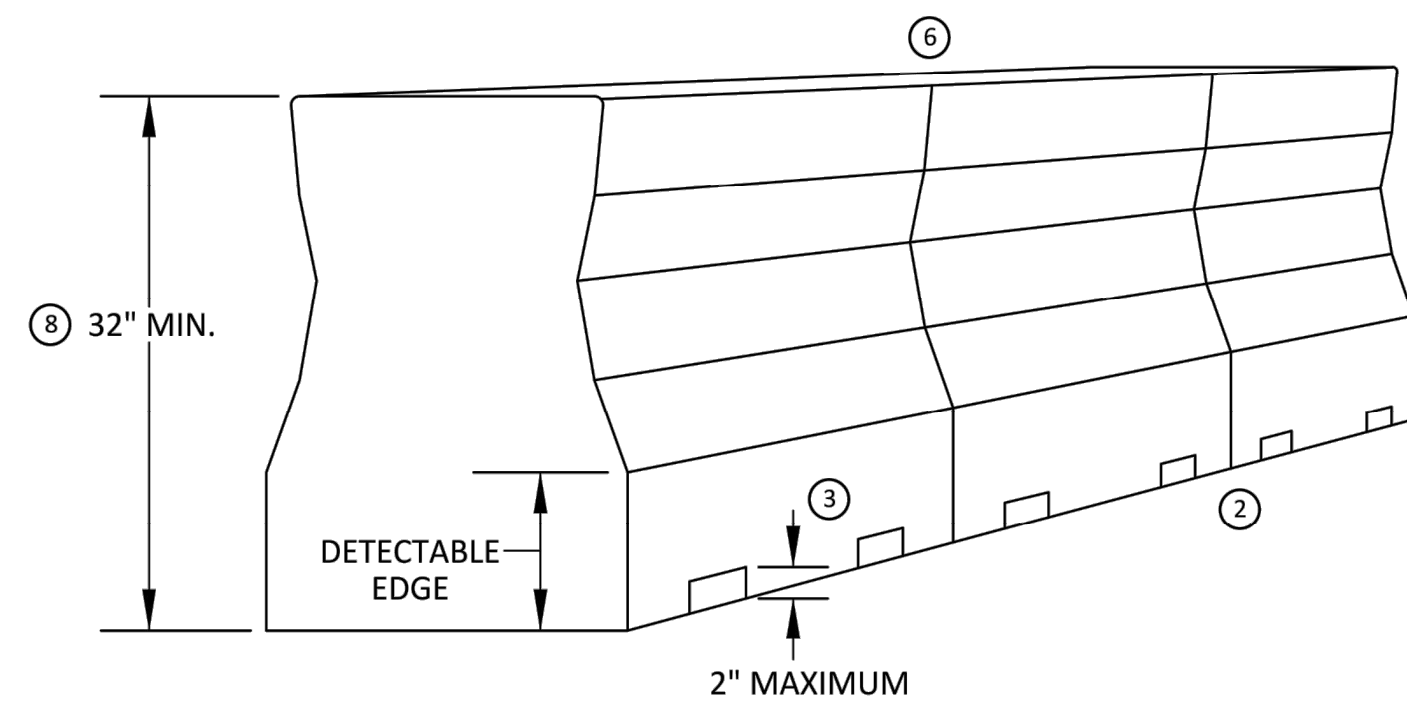
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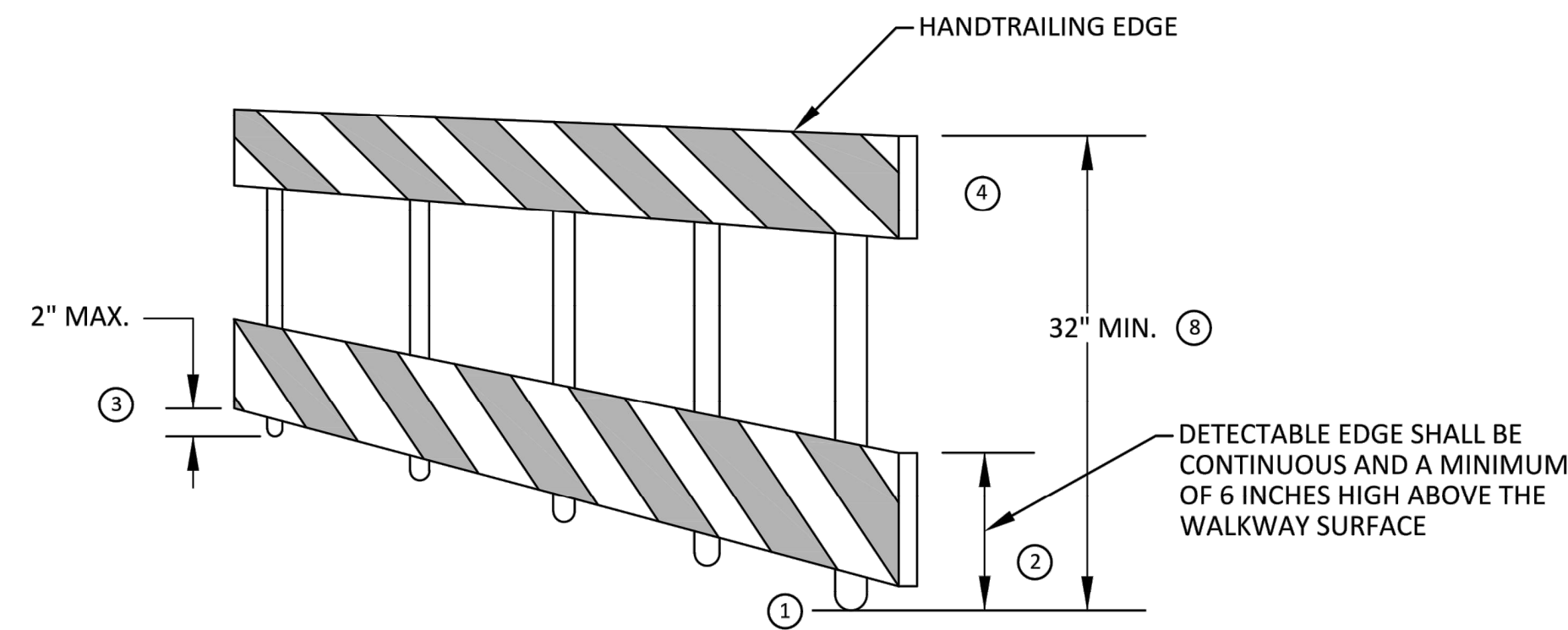
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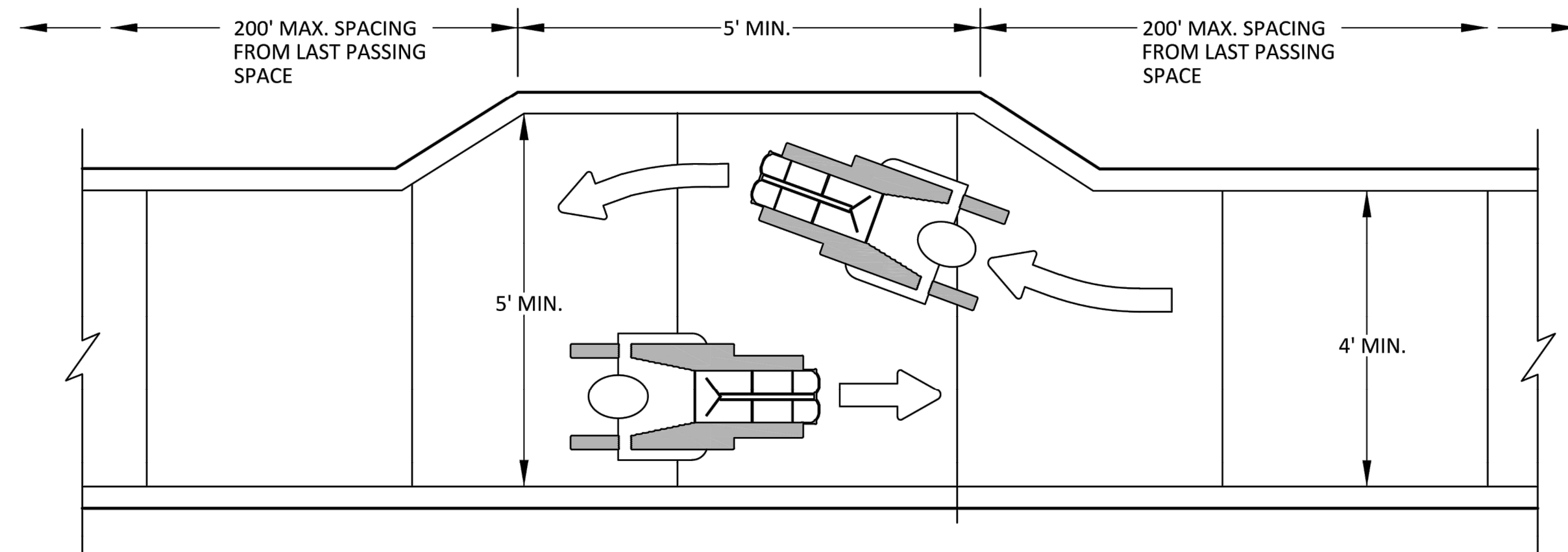
TEMPORARY WALKWAY SURFACE



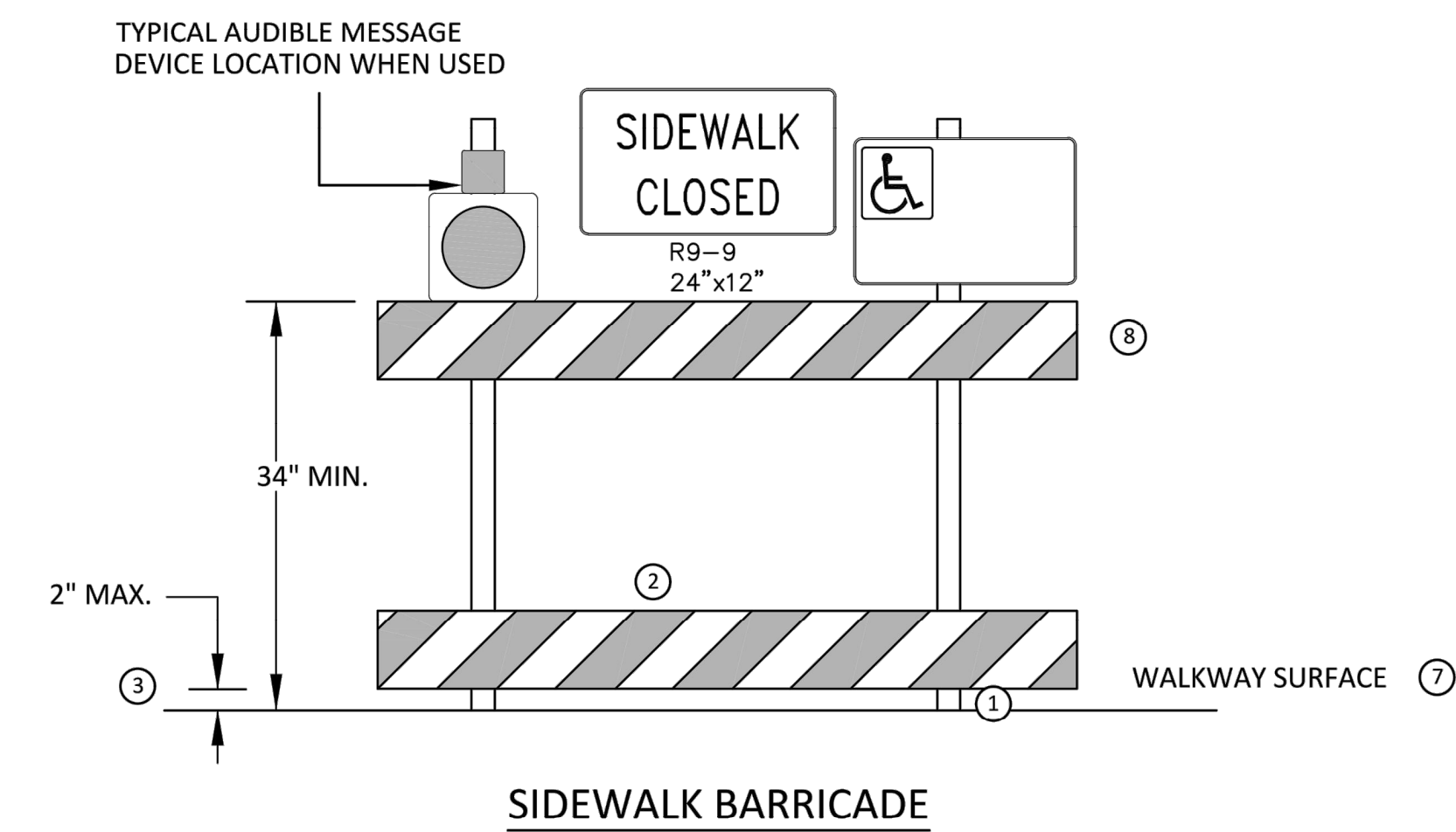
PEDESTRIAN CHANNELIZER USING A BARRIER
(MINIMUM REQUIREMENTS)



PEDESTRIAN CHANNELIZER
(MINIMUM REQUIREMENTS)



NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL



GENERAL NOTES

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIER'S APPLICATION.

BARRICADES SHALL BE PLACED CONTINUOUSLY ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE BEING CLOSED.

SPECIFIC NOTES

1 ANY TRIPPING HAZARD IN THE WALKWAY NEEDS A DETECTABLE EDGE. BALLAST SHALL BE LOCATED BEHIND OR INTERNAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHALL NOT EXTEND INTO THE 48 INCH MINIMUM WALKWAY CLEAR SPACE AND SHALL NOT EXCEED 0.5 INCHES IN HEIGHT ABOVE THE WALKWAY SURFACE.

2 DETECTABLE EDGES SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES IN HEIGHT ABOVE WALKWAY SURFACE AND HAVE COLOR MARKINGS CONTRASTING WITH THE WALKWAY SURFACE.

3 DEVICES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2 INCHES IS ALLOWED FOR DRAINAGE PURPOSES.

4 PROVIDE A HANDRAIL ON BOTH SIDES OF THE RAMP IF THE RAMP IS NOT EXPOSED TO VEHICLE TRAFFIC AND HAS A TOTAL RISE GREATER THAN 6 INCHES, AND A LENGTH GREATER THAN 72 INCHES.

- ENSURE THE HANDRAIL IS 1.25 AND 1.5 INCHES WIDE AND CONFIGURED TO BE A "GRASPABLE" CROSS-SECTION.

SEE CONSTRUCTION SUBSECTION 2.A FOR ADDITIONAL DETAILS.

WHEN THE RAMP IS EXPOSED TO TRAFFIC, IN LIEU OF HANDRAILS, USE A PROTECTIVE EDGE 2.5 INCHES MINIMUM HEIGHT ABOVE THE RAMP SURFACE OR 1:10 FLARE ON BOTH SIDES OF THE RAMP.

5 ALL DEVICES SHALL BE FREE OF SHARP OR ROUGH EDGES, AND FASTENERS (BOLTS) SHALL BE ROUNDED TO PREVENT HARM TO HANDS, ARMS OR CLOTHING OF PEDESTRIANS.

6 ALL DEVICES USED TO CHANNELIZE PEDESTRIAN FLOW SHOULD INTERLOCK SUCH THAT GAPS DO NOT ALLOW PEDESTRIANS TO STRAY FROM THE INTENDED CHANNELIZED PATH.

7 A WALKWAY SURFACE SHALL BE FIRM, STABLE, AND SLIP RESISTANT. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED.

8 LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS SHALL BE 32 INCHES IN HEIGHT OR GREATER.



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