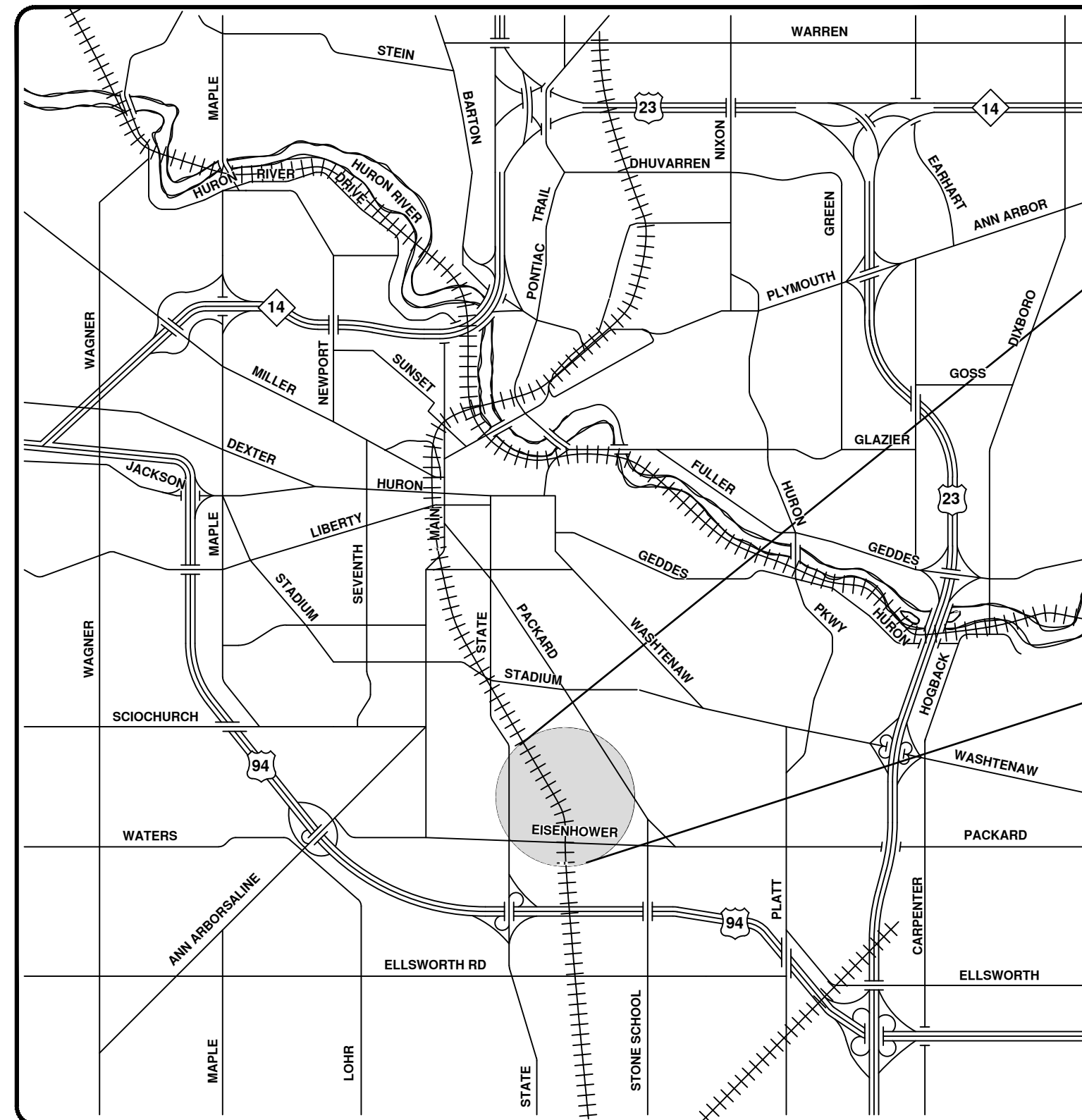


NOTES:

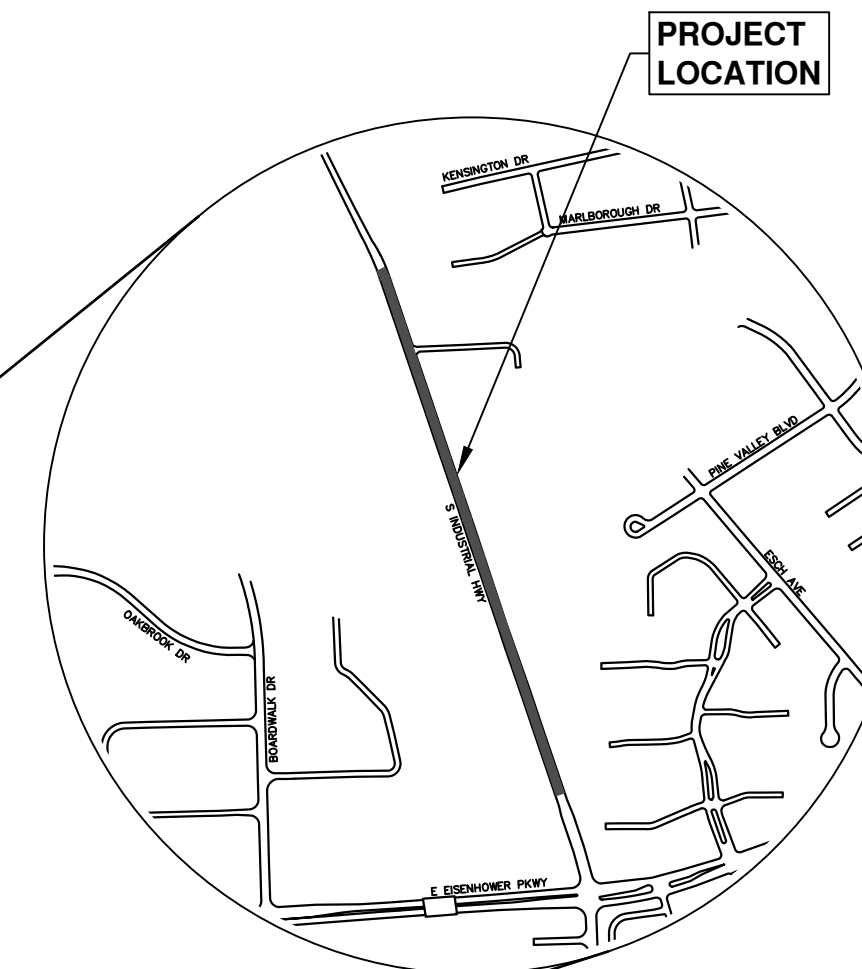
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EARTHWORK OPERATION WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY 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 CITY OF ANN ARBOR PUBLIC SERVICES AREA DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS ("STANDARDS"). THE OMISSION OF ANY STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR OF THEIR OBLIGATION TO CONSTRUCT ITEMS IN COMPLETE ACCORDANCE WITH THOSE STANDARDS.



VICINITY MAP



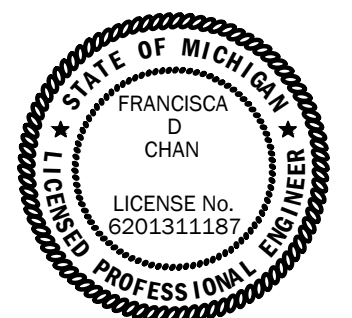
PROJECT LOCATION

Sheet List Table	
Sheet Number	Sheet Title
1	Cover Sheet
2	Standard Notes
3	Legend
4	Alternate Pedestrian Route (APR) Detour
5	Alternate Pedestrian Route (APR) Bypass
6	TPAR Ramps
7	TPAR Walkway Devices
Typical Sections	
8	Ex and Prop Sections - S Industrial
Detour Plan	
9	North Bound Detour Route
10	S Industrial - Eisenhower Pkwy
Maintenance of Traffic Phase I - S Industrial	
11	Sta. 0+00 - Sta. 17+00
12	Sta. 17+00 - Sta. 34+00
Maintenance of Traffic Phase II - S Industrial	
13	Sta. 0+00 - Sta. 17+00
14	Sta. 17+00 - Sta. 34+00
Removals - S Industrial	
15	Sta. 5+00 - Sta. 14+00
16	Sta 14+00 - Sta 23+00
17	Sta 23+00 - Sta 28+50
Water Main Plan and Profile - S Industrial	
18	Sta. 0+46 to Sta. 4+50
19	H-1, H-2, Service Connections 2565, 2500, 2459
20	Sta. 4+50 to Sta. 9+00
21	Sta. 9+00 to Sta. 10+06
Restoration - S Industrial	
22	Sta. 5+00 - Sta. 14+00
23	Sta. 14+00 - Sta. 23+00
24	Sta. 23+00 - Sta. 28+50
Pavement Markings - S Industrial	
25	Sta. 5+00 - Sta. 14+00
26	Sta. 14+00 - Sta. 23+00
27	Sta. 23+00 - Sta. 28+50

PREPARED UNDER THE SUPERVISION OF

FRANCISCA D CHAN, P.E. - MI LICENSE No. 6201311187
PROJECT MANAGER

3 / 26 / 2025
DATE



CITY OF ANIN ARBOR - PUBLIC SERVICES - ENGINEERING	Project Description and Limits:
--	---------------------------------

The S Industrial Water Main Replacement Project includes 1,000 ft of water main replacement and upsizing from a 12 inch to a 16 inch water main. In addition, 3 fire hydrants and 6 valves replacements and 2,500 syd of concrete road repair areas.

SHEET No.

DRAWING No.
2024013-1

OF 27

© S INDUSTRIAL WATER MAIN; RFP No. 25-19; 2024013



**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**

[illegible]

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. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
4. The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
5. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
6. Trenches for new water services shall be excavated to MIOASHA and City of Ann Arbor Public Works requirements.
7. City of Ann Arbor Public Works will install the corporation and copper service lead(s) to transfer the connection(s). If an existing water service is found to be failing or is not copper, the lead will be replaced to the curb box by Public Works.
8. For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Public Works.
9. The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.
10. Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.
11. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
12. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
13. All fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Public Works Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
14. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
15. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
16. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
17. The location of material stock piles and on-site staging areas to be approved by the Engineer.
18. All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Public Works Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
19. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer.

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.
4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

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

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.

- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.

- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.

- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).

- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.

- 1.6. COMPLETE ALL FINE GRADING.

- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.

- 1.8. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.

- ### 1.9. CLEAN OUT STORM SEWER SYSTEMS.

- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.

- 1.11. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

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

TEMPORARY SEEDING:

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

THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$5,000

S INDUSTRIAL BENCHMARKS		
BM #	ELEV	DESCRIPTION
1	823.050	FLANGE BOLT ON EAST SIDE OF HYDRANT, EAST SIDE OF INDUSTRIAL, IN FRONT OF BLDG. # 2505
2	823.472	RR SPIKE SET IN EAST SIDE OF UTILITY POLE, WEST SIDE OF INDUSTRIAL, BETWEEN BLDG #S 2464 & 2460
3	823.080	SPIKE SET IN EAST SIDE OF UTILITY POLE, WEST SIDE OF INDUSTRIAL, SOUTH OF BLDG #2420

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
WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE)

CONTACT INFORMATION		
PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
SANITARY		
STORM		
FORESTRY		
SIGNS SIGNALS STREET LIGHTS		MARK MORENO (734) 794-6361
FIBER OPTIC	CITY OF ANN ARBOR INFORMATION TECHNOLOGY LARCOM CITY HALL 301 E. HURON STREET ANN ARBOR, MI 48107	(734) 794-6550
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ADAM EGELER 734 929-8042 ADAM.EGELER@DTEENERGY.COM
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	STEPHEN BECK (248) 972-7511
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	CHRIS SHOUP (734) 263-7385 CS6558@ATT.COM
FIBER OPTIC	MCI/VERIZON 4401 STECKER STREET DEARBORN, MICHIGAN 48126	MARLON REDD (313) 588-0849 MARLON.REDD@VERIZON.COM
FIBER OPTIC	WINDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	DAVID BEGGS (810) 397-8956 DAVID.BEGGS@WINDSTREAM.COM
FIBER OPTIC	ADVANCED COMMUNICATIONS & DATA 1800 NORTH GRAND RIVER AVE LANSING, MI 48906	OSP@ACD.NET
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188

[illegible]

EXISTING LEGEND

EX = EXISTING		
FIRE HYDRANT	W	WATER MAIN
GATE VALVE IN BOX	WATER MAIN ABANDONED	
GATE VALVE IN WELL	S	STORM SEWER
STOP BOX	STORM SEWER ABANDONED	
WATER VAULT	SANITARY SEWER	
WELL	SANITARY SEWER ABANDONED	
CATCH BASIN (SQ)	GAS MAIN	GAS MAIN
CATCH BASIN (RD)	GAS MAIN (DEAD)	
STORM MANHOLE	ELECTRICAL OVER HEAD	
NON-CURB CATCH BASIN (SQ)	ELECTRICAL UNDER GROUND	
END SECTION	e duct bank	ELECTRICAL DUCT BANK
SANITARY MANHOLE	TELEPHONE OVER HEAD	
CLEAN-OUT	TELEPHONE UNDER GROUND	
POST	t duct bank	TELEPHONE DUCT BANK
PEDESTRIAN SIGNAL	cable tv	CABLE TV OVER HEAD
SIGN	CABLE TV UNDER GROUND	
HAND HOLE	fo	FIBER OPTIC
ORNAMENTAL LIGHT	fo duct bank	FIBER OPTIC DUCT BANK
FLOOD LIGHT		
UNKNOWN MANHOLE		BOUNDARY
TELEPHONE MANHOLE		BUILDING
TELEPHONE RISER		CENTERLINE OF DITCH
GAS VALVE		CENTERLINE/CROWN OF ROAD
GAS VENT	800	CONTOUR MAJOR
GAS BOX	799	CONTOUR MINOR
ELECTRICAL RISER		EDGE OF WATER
TRANSFORMER		FLOODPLAIN
UTILITY POLE		FENCE
LAMP POLE		GRAVEL
GUY ANCHOR		GUARDRAIL
GUY POLE		STONE WALL
MONITORING WELL		R.O.W.
MAILBOX		TREELINE
SOIL BORING		WETLAND
TRAVERSE POINT		EDGE OF BRUSH
BENCH MARK		HEDGE
IRON PIPE		
MON BOX		



TREE (DECIDUOUS)



TREE (CONIFEROUS)



SHRUB (DECIDUOUS)



STUMP



TREE TO REMAIN & PROTECT (DECIDUOUS)
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10



TREE TO REMAIN & PROTECT (CONIFEROUS)
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10

PROPOSED LEGEND

PROP = PROPOSED		
HYDRANT (PLAN)	W	WATER MAIN
WATER GATE VALVE IN WELL	R	STORM SEWER
WATER GATE VALVE IN BOX	S	SANITARY SEWER
WATER STOP BOX	FO	FIBER OPTIC
WATER VAULT	E	ELECTRICAL
INLET		CENTERLINE OF DITCH
HIGH CAPACITY INLET		CENTERLINE OF ROAD
INLET JUNCTION CHAMBER		FENCE
ROUND CATCH BASIN		GRAVEL
STORM MANHOLE		SILT FENCE
DRAIN ARROW		PROTECTIVE FENCE
FLARED END SECTION		GUARDRAIL
OVERFLOW		LOT/UNIT
SANITARY MANHOLE		CURB
CLEAN-OUT		TEMPORARY GRADING PERMIT
BARREL	800	CONTOUR MAJOR
SIGN	799	CONTOUR MINOR
PUSH BUTTON		WATER EASEMENT
HAND HOLE		STORM EASEMENT
		SANITARY EASEMENT
		R.O.W.
		LIMITS OF CONSTRUCTION
		LIMIT OF GRADING
		STONE WALL

DETECTABLE WARNING

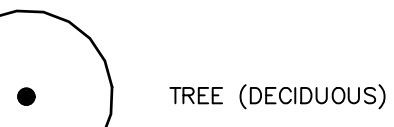
ASPHALT

CONCRETE PAVEMENT

CONCRETE RAMP

CONCRETE SIDEWALK

TURF RESTORATION



TREE (DECIDUOUS)



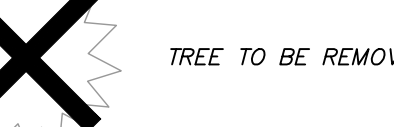
TREE (CONIFEROUS)



TREE TO BE REMOVED (DECIDUOUS)



TREE TO BE REMOVED (CONIFEROUS)



STUMP TO BE REMOVED



Know what's below.
Call before you dig.

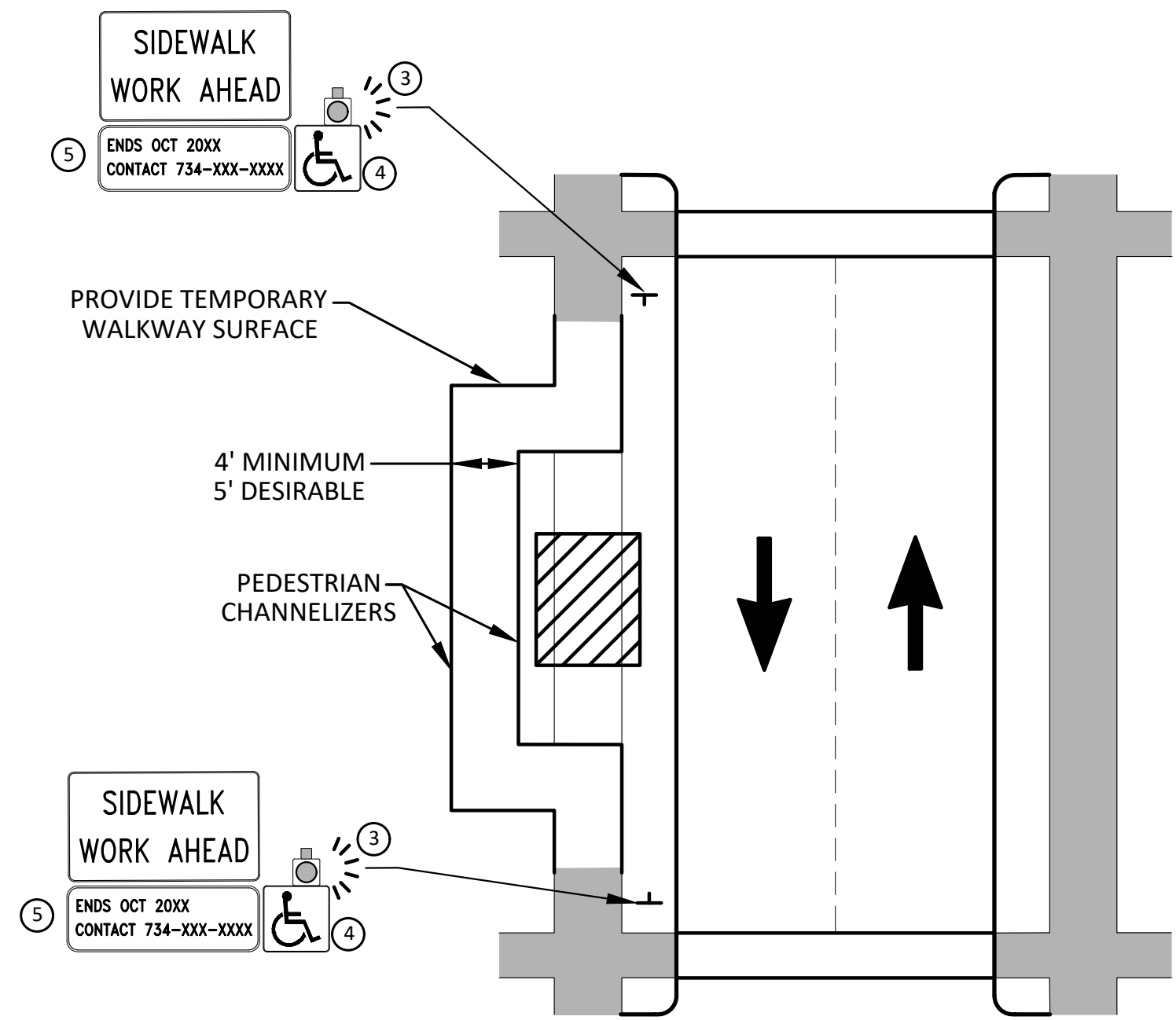
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
P.O. BOX 8647
734-794-4410
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
LEGEND

SCALE : NTS
DRAWING No.
2024013-3

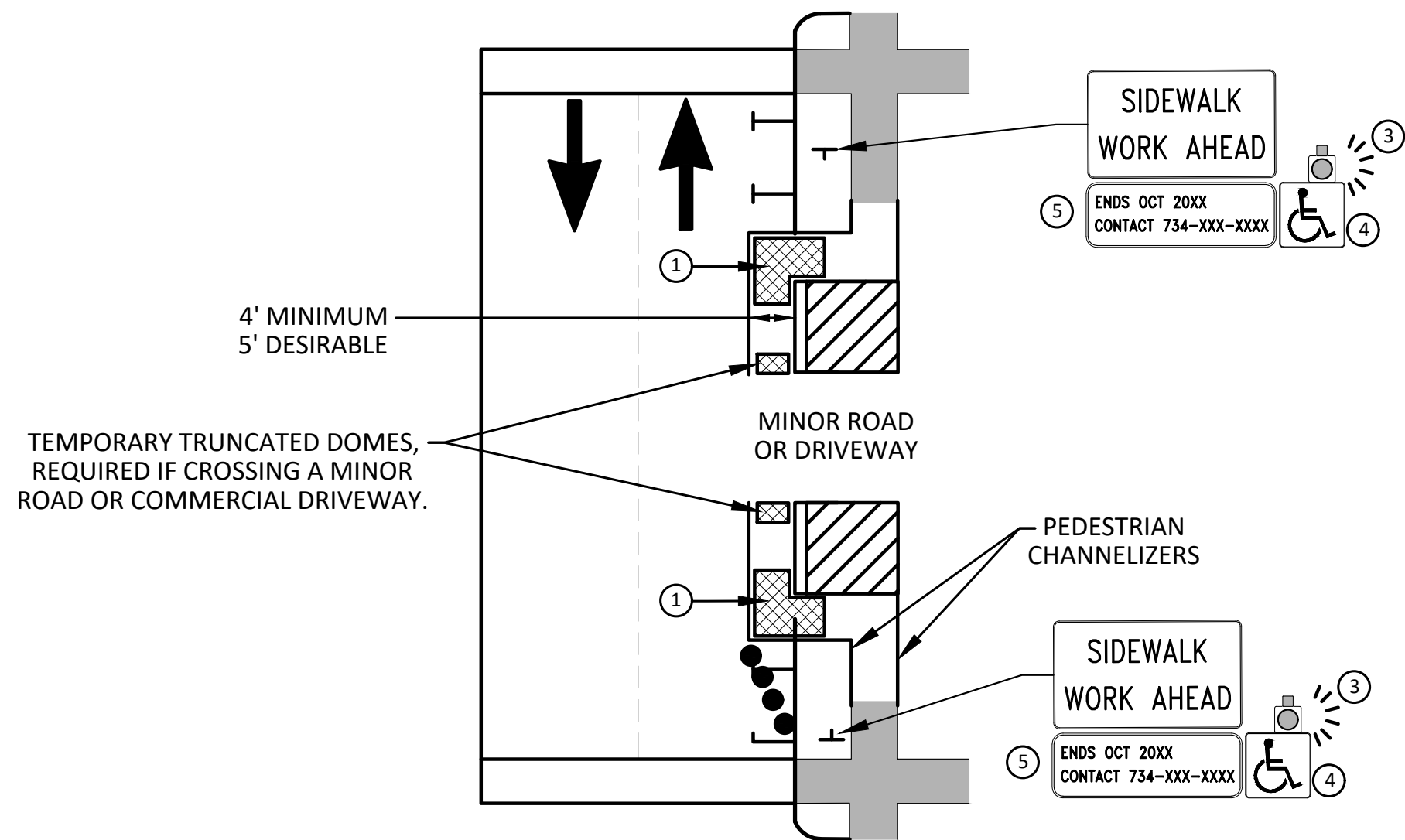
SHEET No.



BYPASS ON ADJACENT AVAILABLE
RIGHT OF WAY

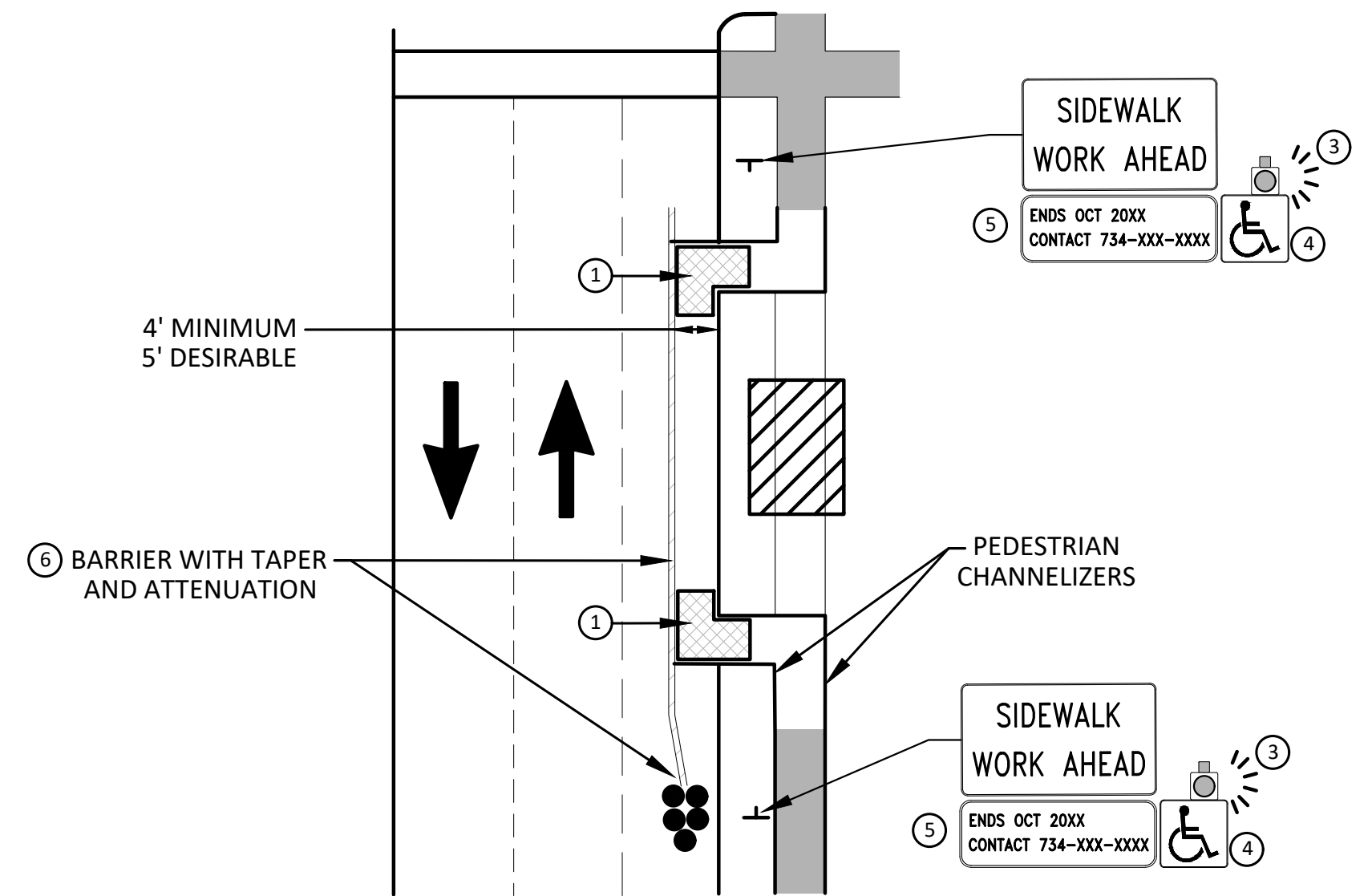
BYPASS TYPE A

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.

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 A TRAFFIC CONTROL DEVICE IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

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 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 TPAP 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 TPAP 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 MINUTOC FOR GUIDANCE ON PLACEMENT AND USAGE OF BARRIER.

LEGEND


-

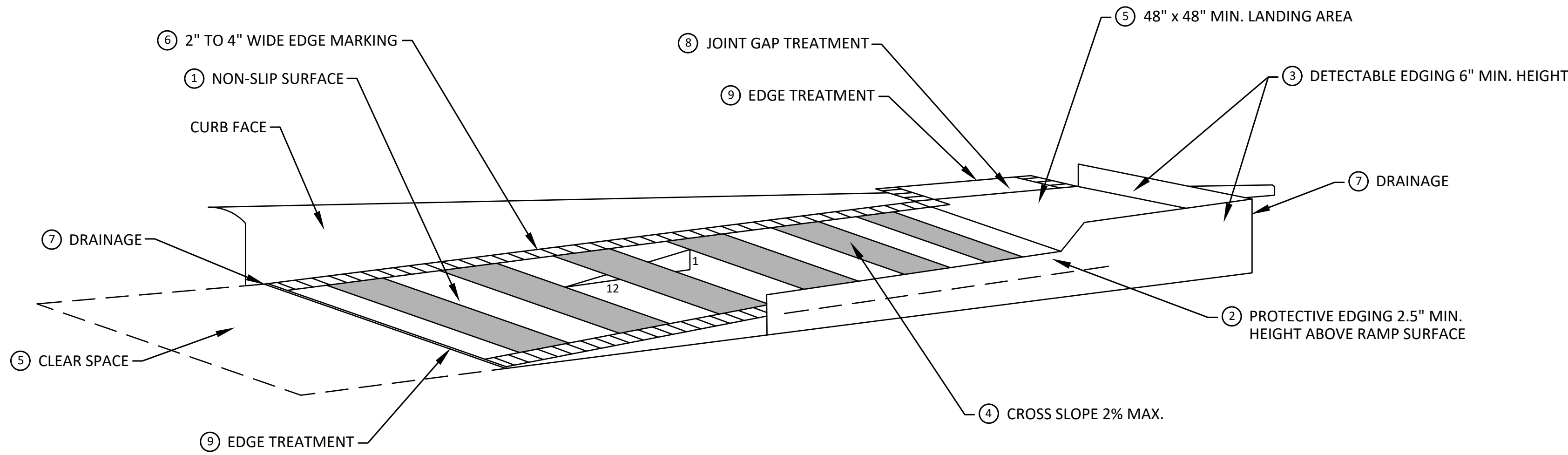


00	OUT FOR BID	3-26-25	A2D	FC
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

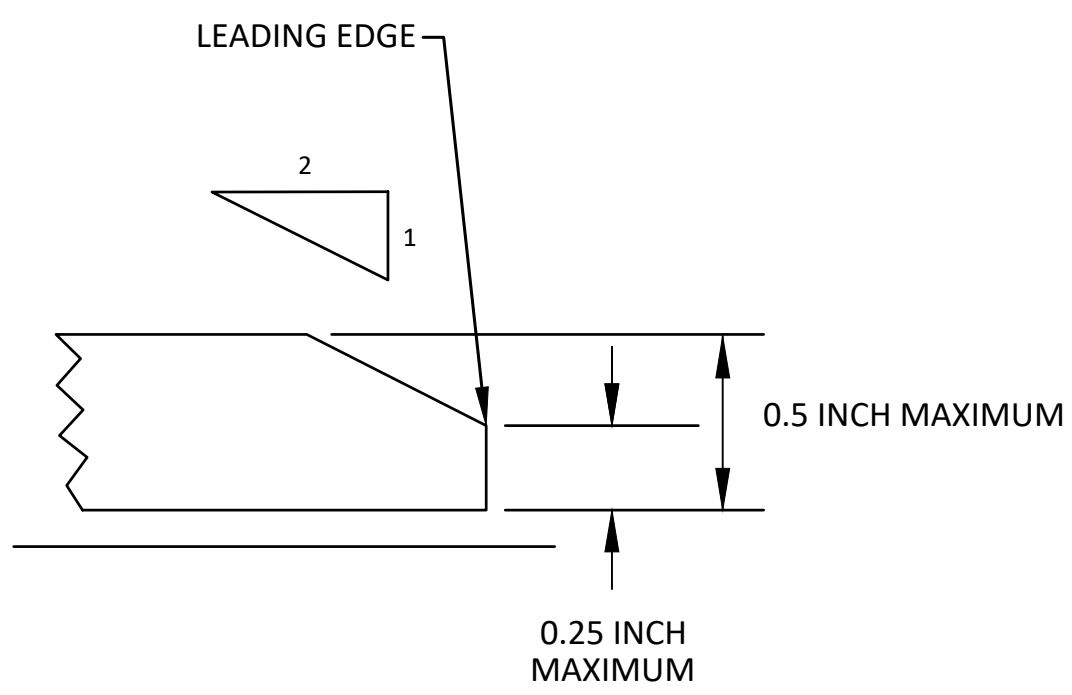
**CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org**



<p>SCALE : M.T.S.</p> 	<p>S INDUSTRIAL WATER MAIN</p> <p>ALTERNATE PEDESTRIAN ROUTE (APR) BYPASS</p>
<p>DRAWING No.</p> <p>2024013-5</p>	



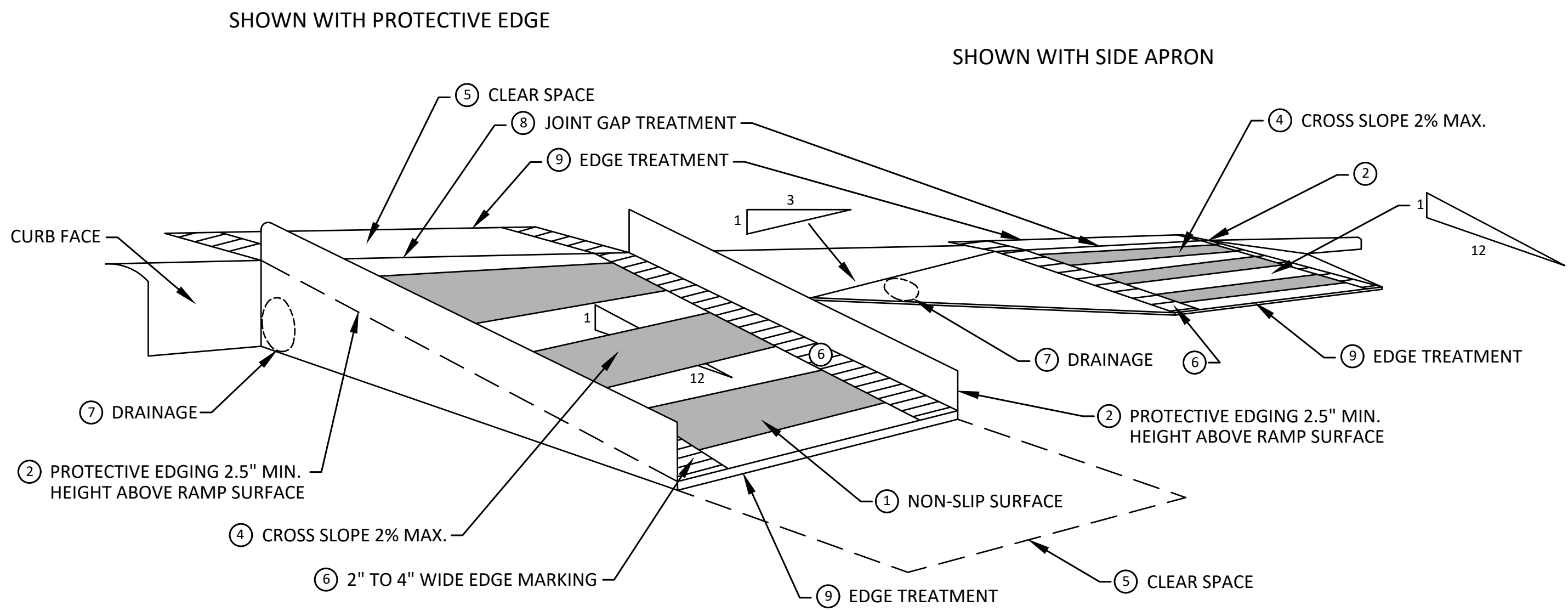
TEMPORARY CURB RAMP PARALLEL TO CURB



⑨ EDGE TREATMENT

SPECIFIC NOTES

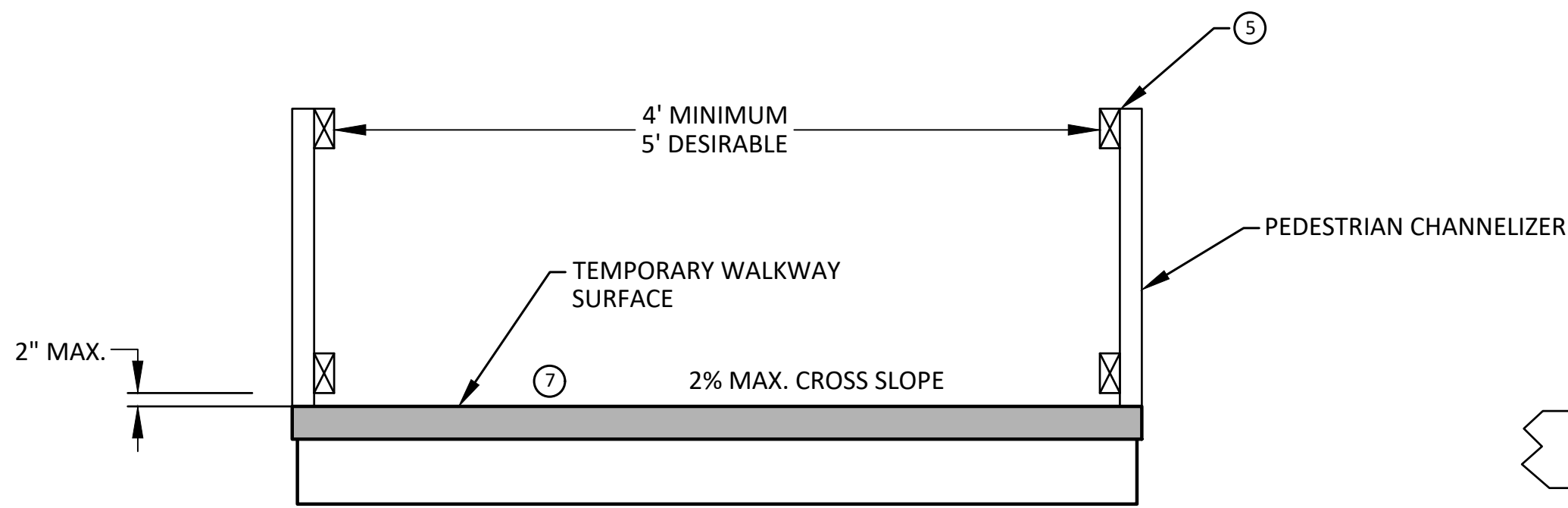
- 1 CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.
- 2 PROTECTIVE EDGING WITH A 2.5" MIN. HEIGHT ABOVE THE RAMP SHALL BE PLACED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDEWALK APRON SLOPE STEEPER THAN 1:3. PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS 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 RAMPS 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.



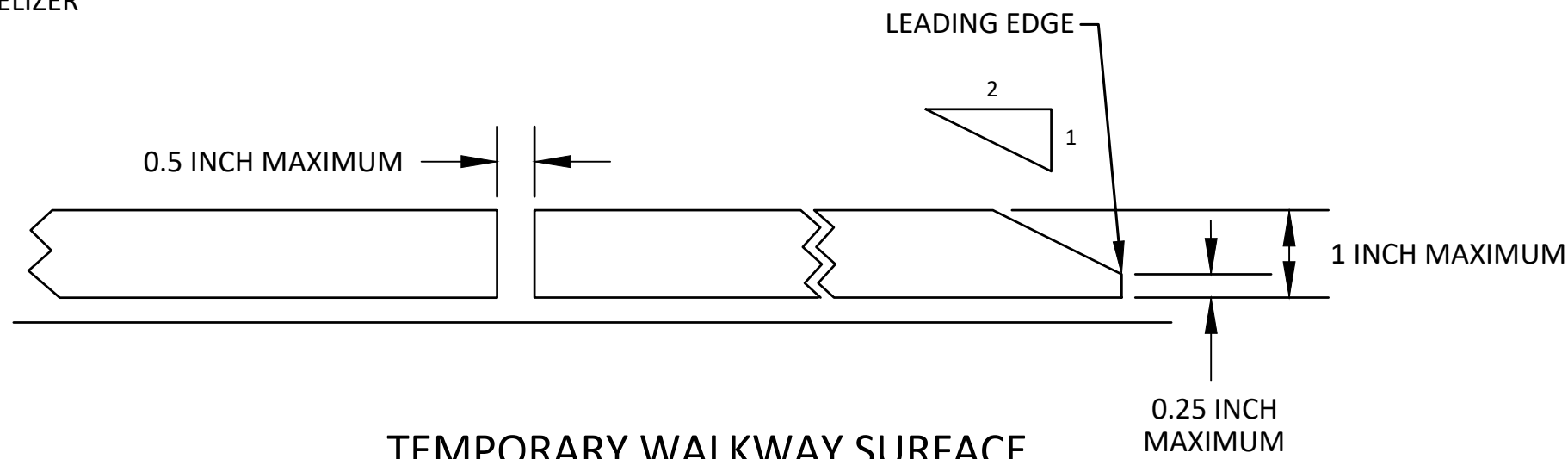
TEMPORARY CURB RAMP PERPENDICULAR TO CURE



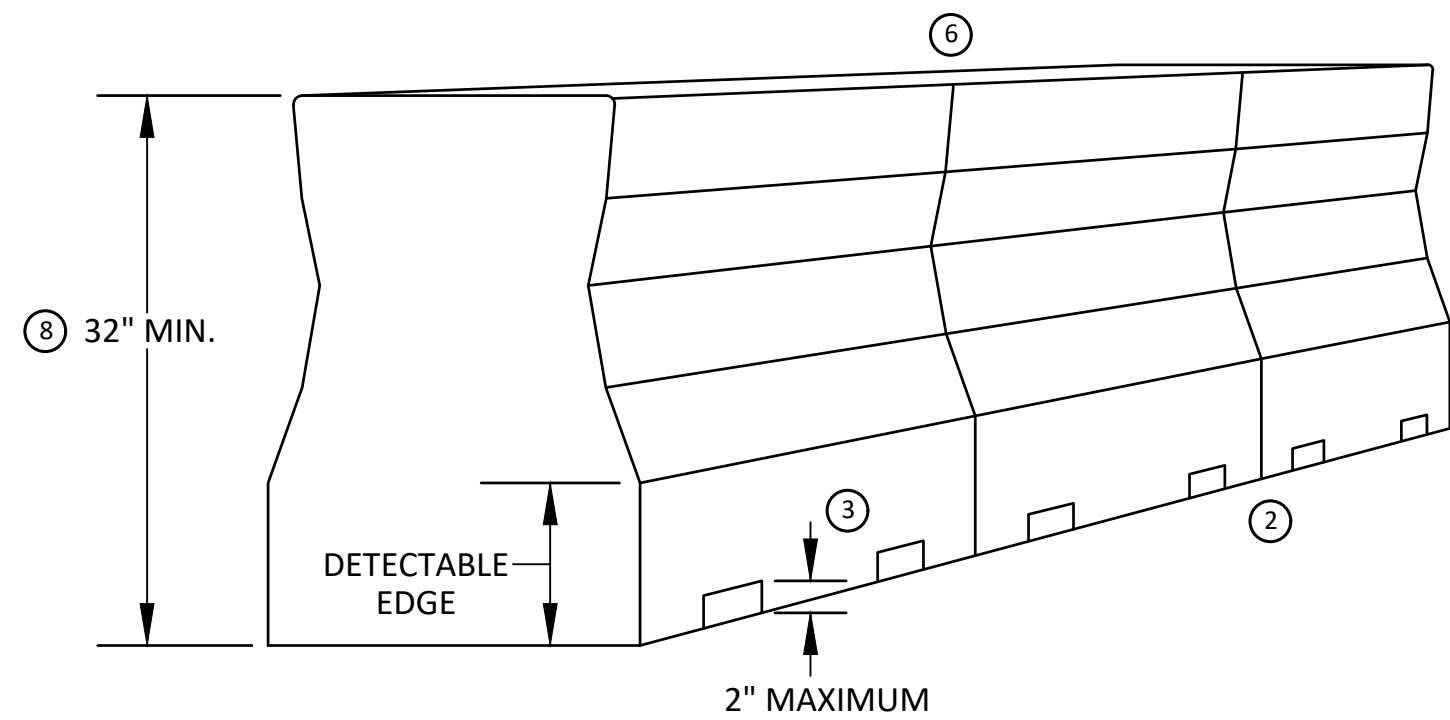
R:\2024013 S Industrial Maple\Plan Production\2024013Det.dwg Dwg Created: 8-Jan-25 -- _o2 standard bw.stb -- Plot Date: 26-Mar-25



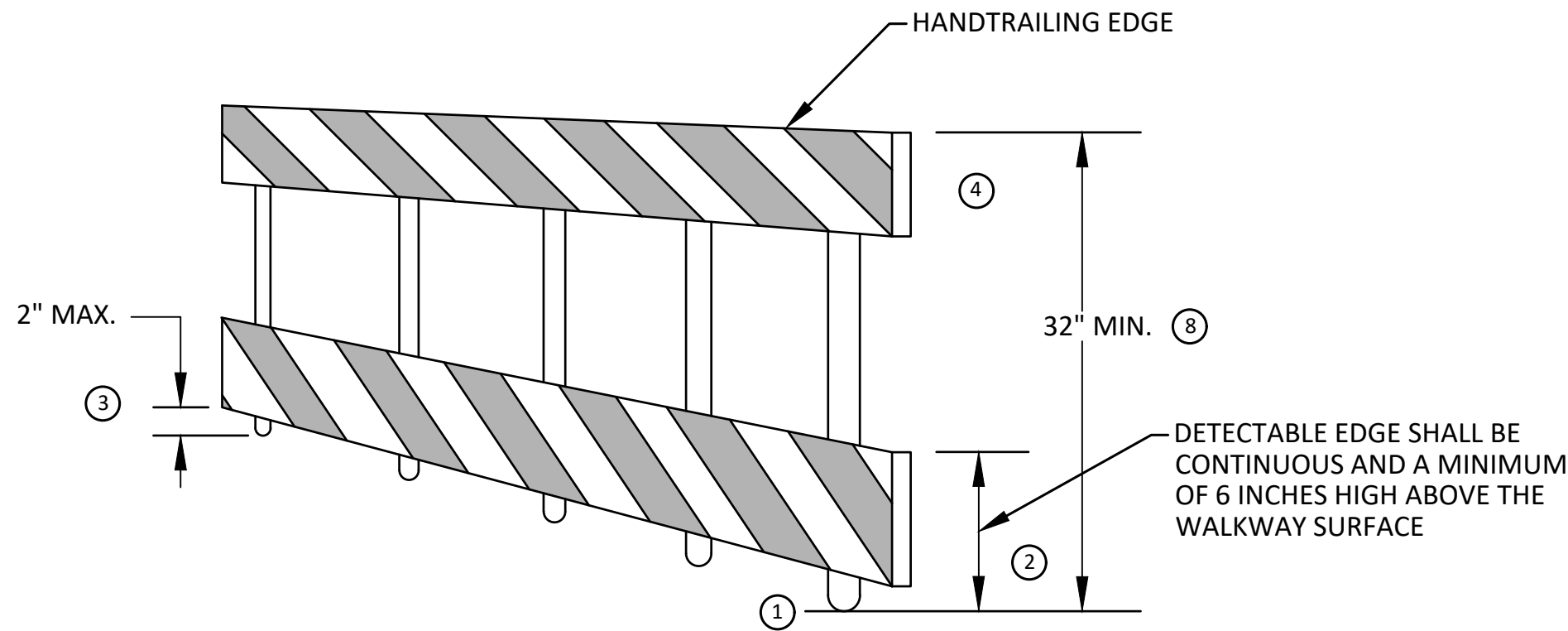
TEMPORARY PEDESTRIAN ACCESS



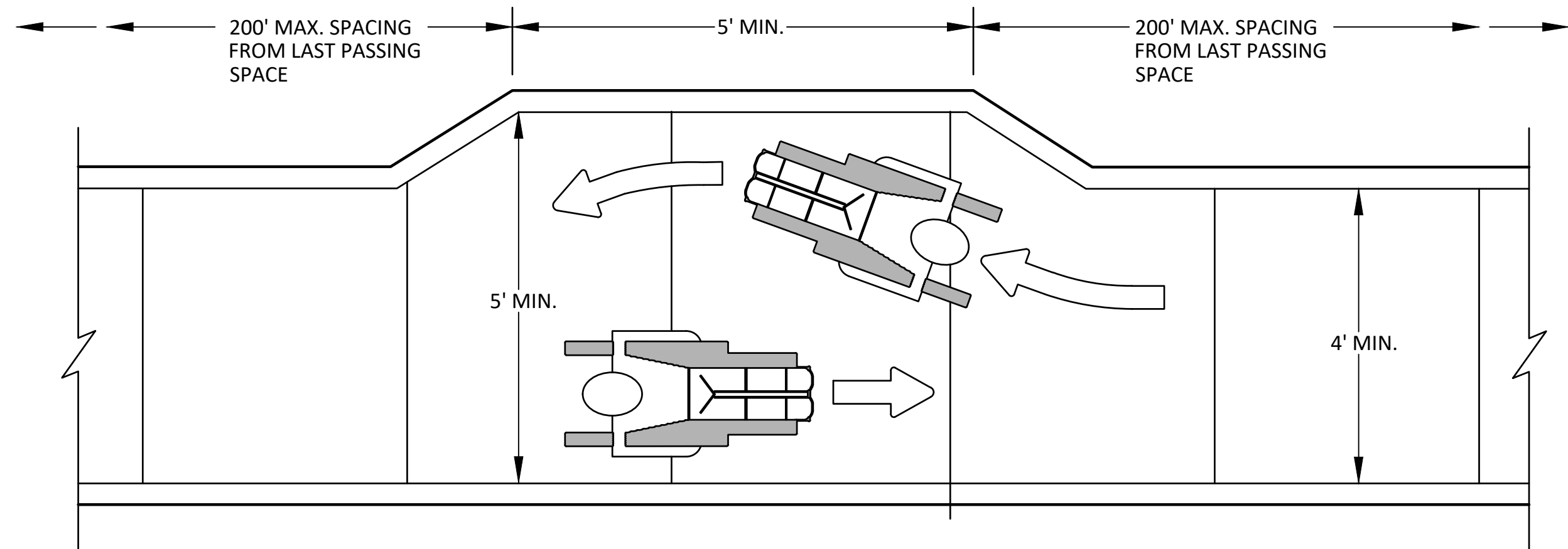
TEMPORARY WALKWAY SURFACE



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

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.

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.

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.

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.

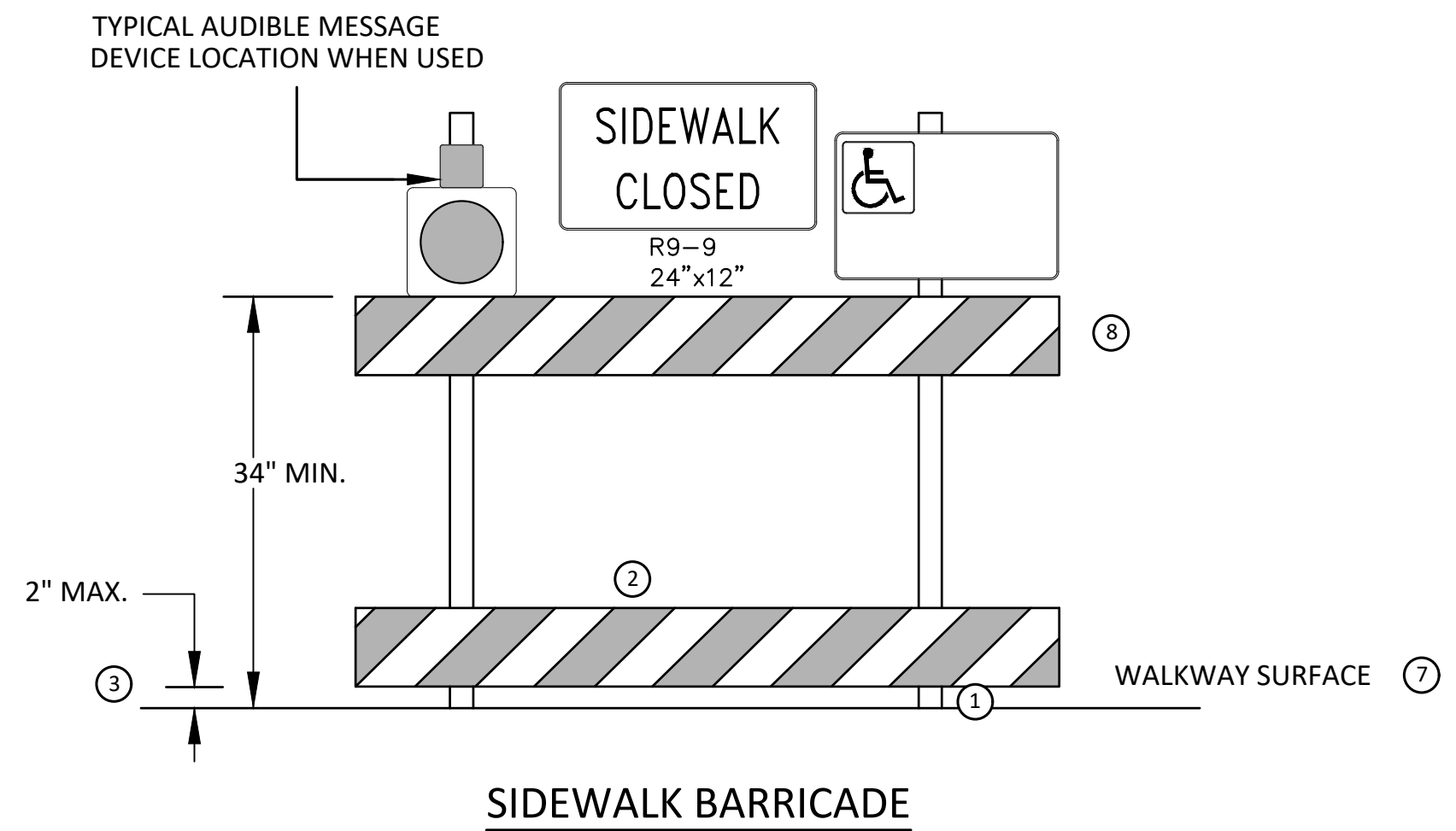
WHEN THE RAMP IS EXPOSED TO TRAFFIC, IN LIEU OF HANDRAILS, USE A PROTECTIVE EDGE 2.5 INCHES MINIMUM HEIGHT ABOVE THE RAMP SURFACE OR 1:10 FLARE ON BOTH SIDES OF THE RAMP.

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.

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

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

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



SIDEWALK BARRICADE



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

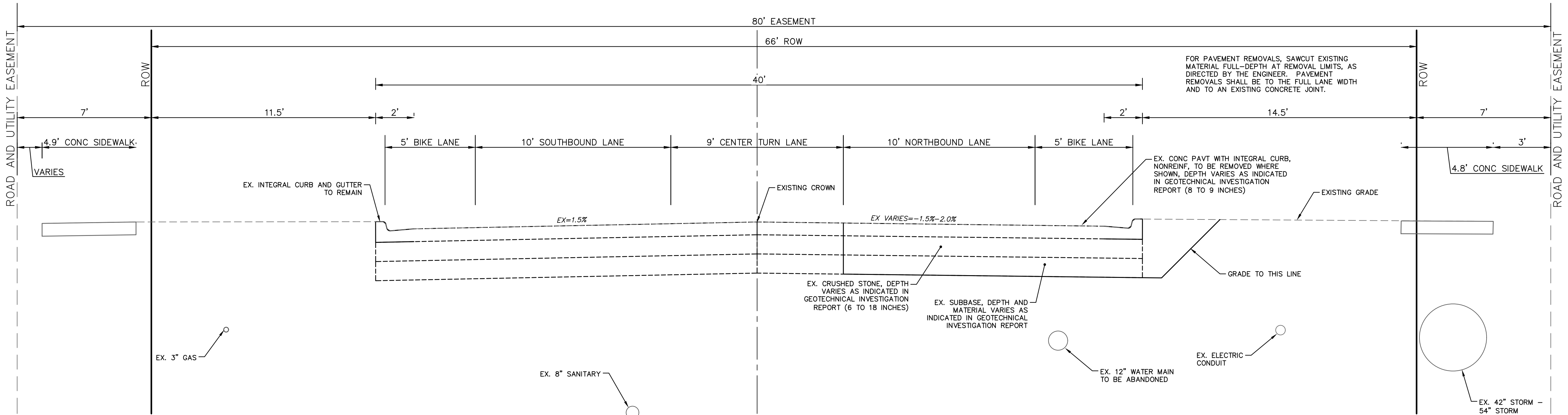


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
TPAR WALKWAY DEVICES

SCALE : N.T.S.
DRAWING No. 2024013-7

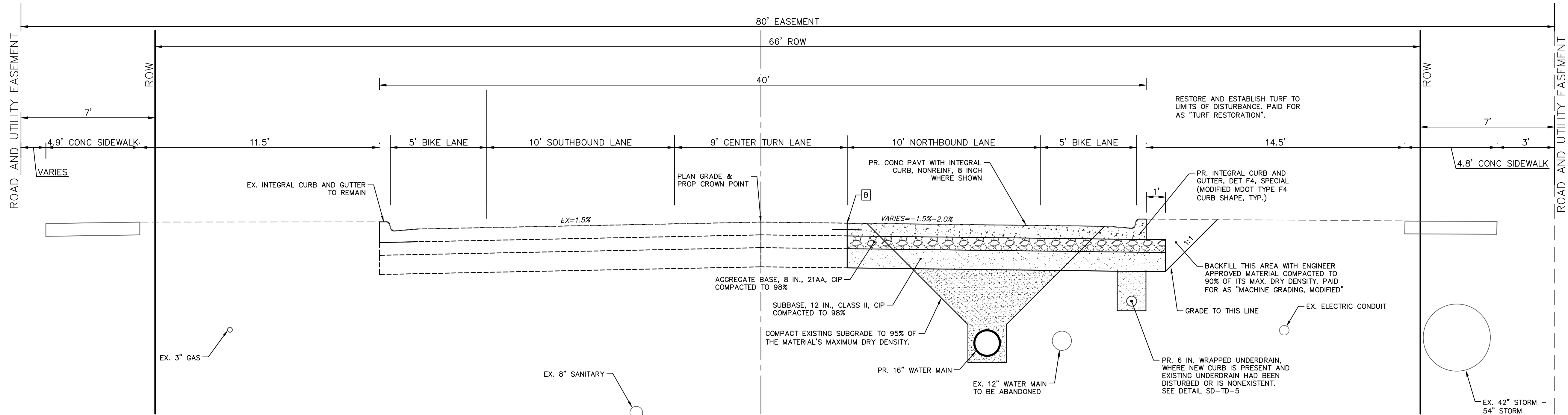
SHEET No.

R:\2024013 S Industrial Maple\Plan Production\2024013xsectn Industrial.dwg Dwg Created: 5-Mar-25 -- a2 standard bw.stb -- Plot Date: 26-Mar-25



**S INDUSTRIAL HIGHWAY
EXISTING SECTION**

STA. 5+00 to 28+50
N.T.S.

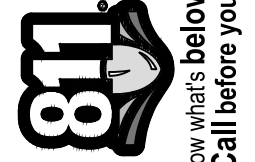


**S INDUSTRIAL HIGHWAY
PROPOSED SECTION**

STA. 5+00 TO 28+50
N.T.S.

CONCRETE JOINT LEGEND:

- B - LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)
- D - LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)
- Cp - TRANSVERSE CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-42-F SERIES, SYMBOL (Cp)



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
P.O. BOX 8647
734.784.4410
www.a2gov.org



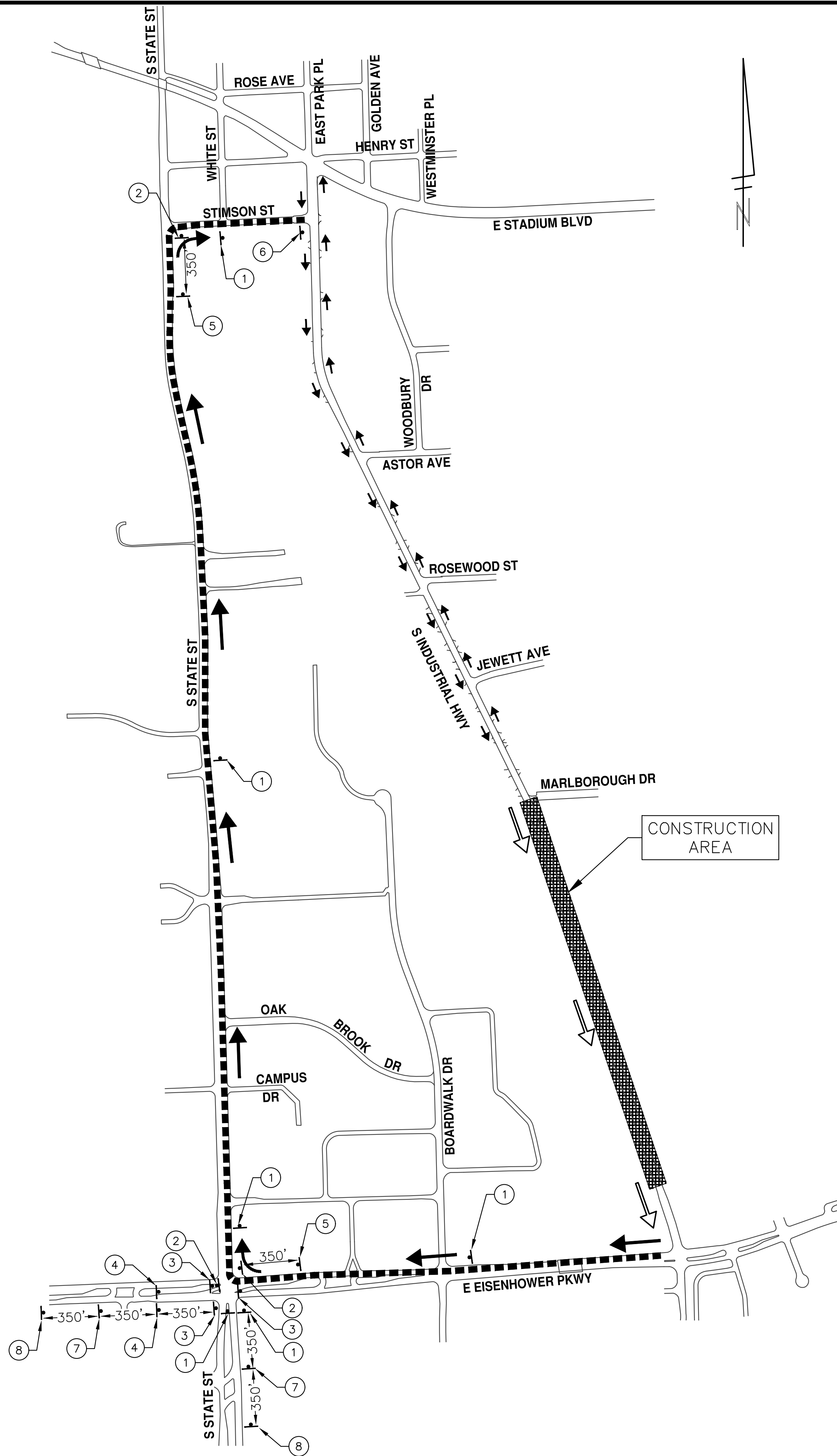
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
TYPICAL SECTIONS
EX AND PROP SECTIONS - S INDUSTRIAL



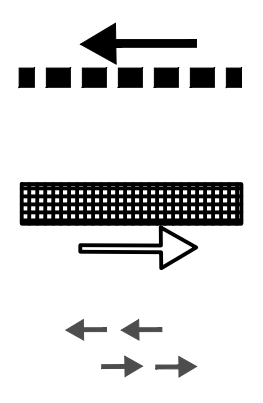
DRAWING No.
2024013-8












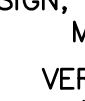




SHEET No.

1. DEPENDING ON THE DETOUR ROUTE THAT IS PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
2. THE CITY RESERVES THE RIGHT TO ORDER ADDITIONAL SIGNS AND PLACE THEM INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE OCCURRENCES.
3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
4. THE DETOUR IS TO BE IN PLACE DURING S. INDUSTRIAL WATER MAIN PROJECT. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR NORTH BOUND S. INDUSTRIAL HWY TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
5. REFERENCE THE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AND SIGNALS UNIT FOR MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.
6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER-APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONON NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".
10. ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TWO (2) TYPE A FLASHING LIGHTS AND ONE (1) DAY-GLOW ORANGE FLAG.
11. CITY TO BE NOTIFIED A MINIMUM OF 7 DAYS PRIOR TO IMPLEMENTING NORTH BOUND S. INDUSTRIAL HWY DETOUR. MESSAGE BOARDS TO BE PLACED 7 DAYS PRIOR TO IMPLEMENTATION OF DETOUR.



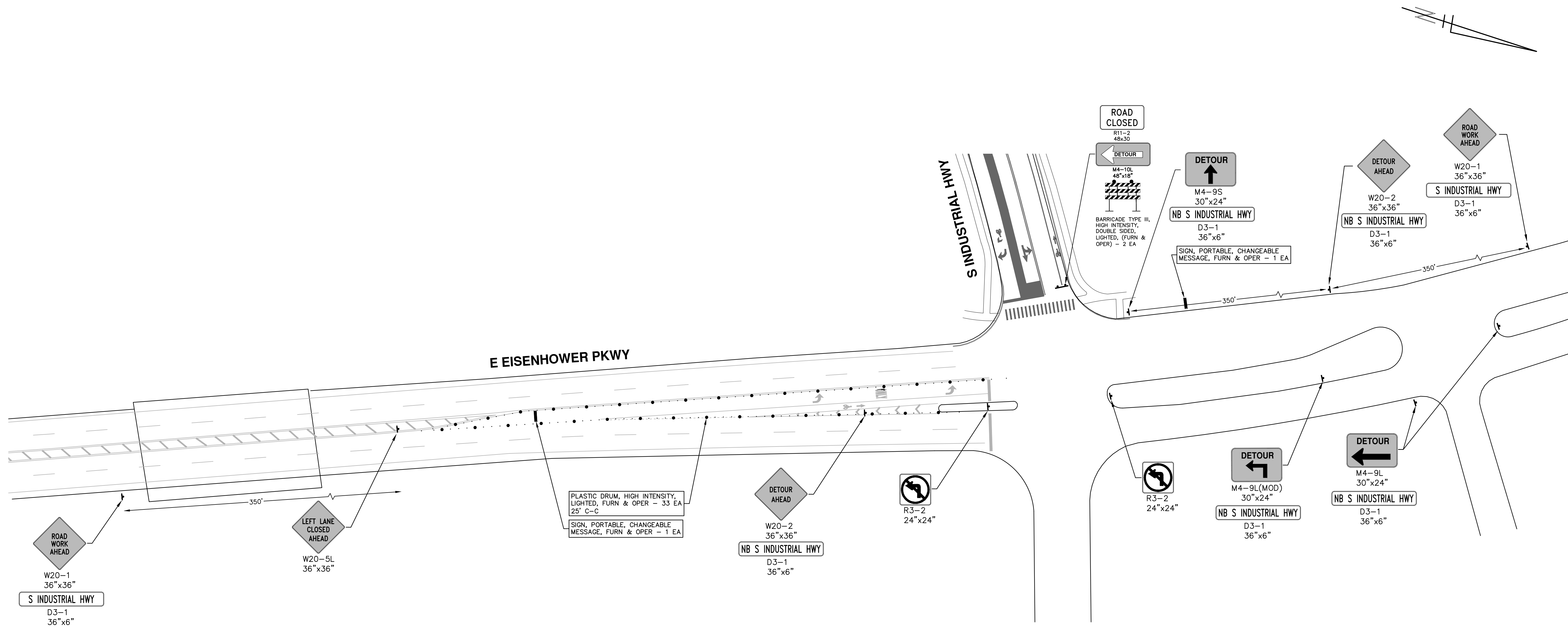
TWO-WAY TRAFFIC MAINTAINED

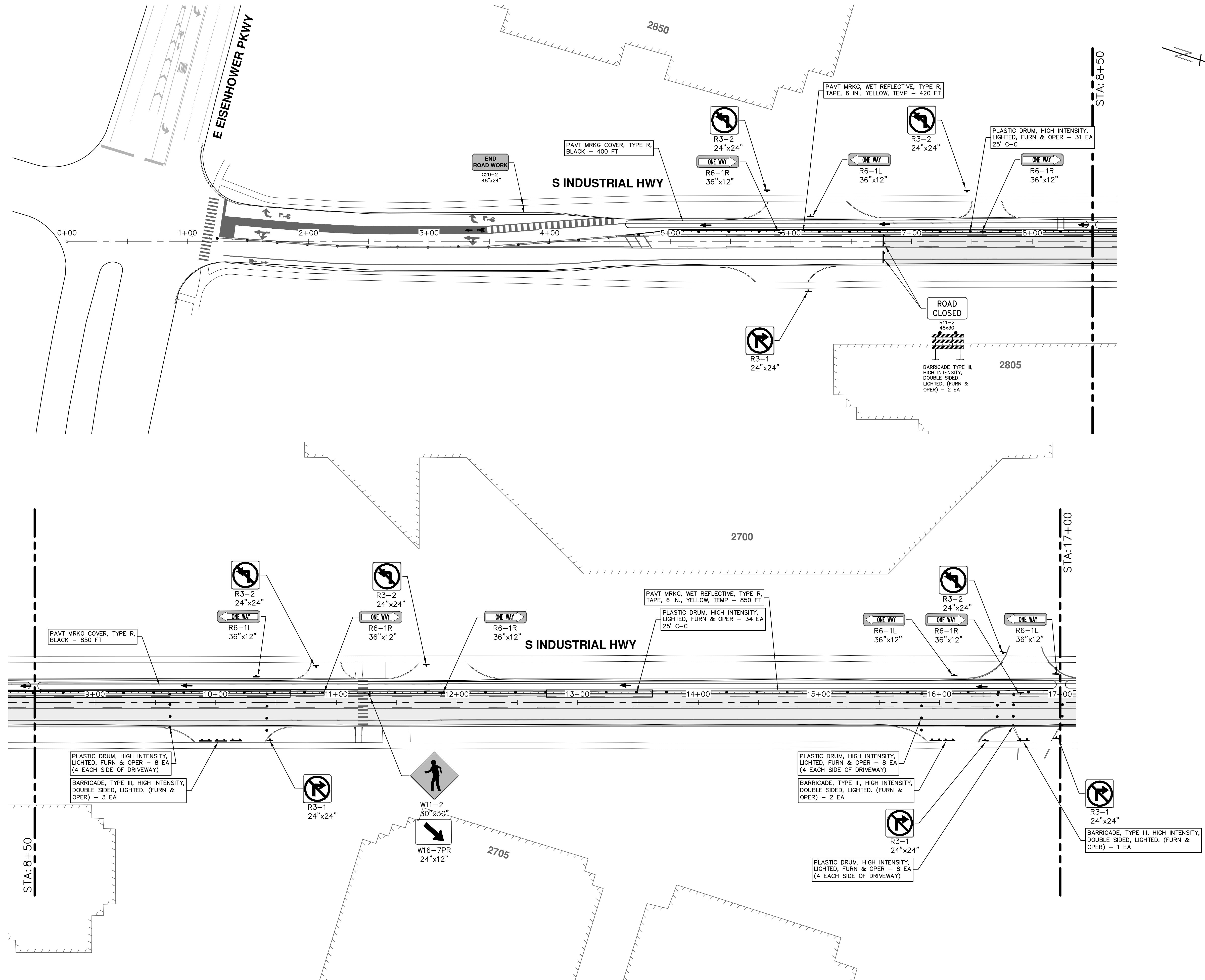


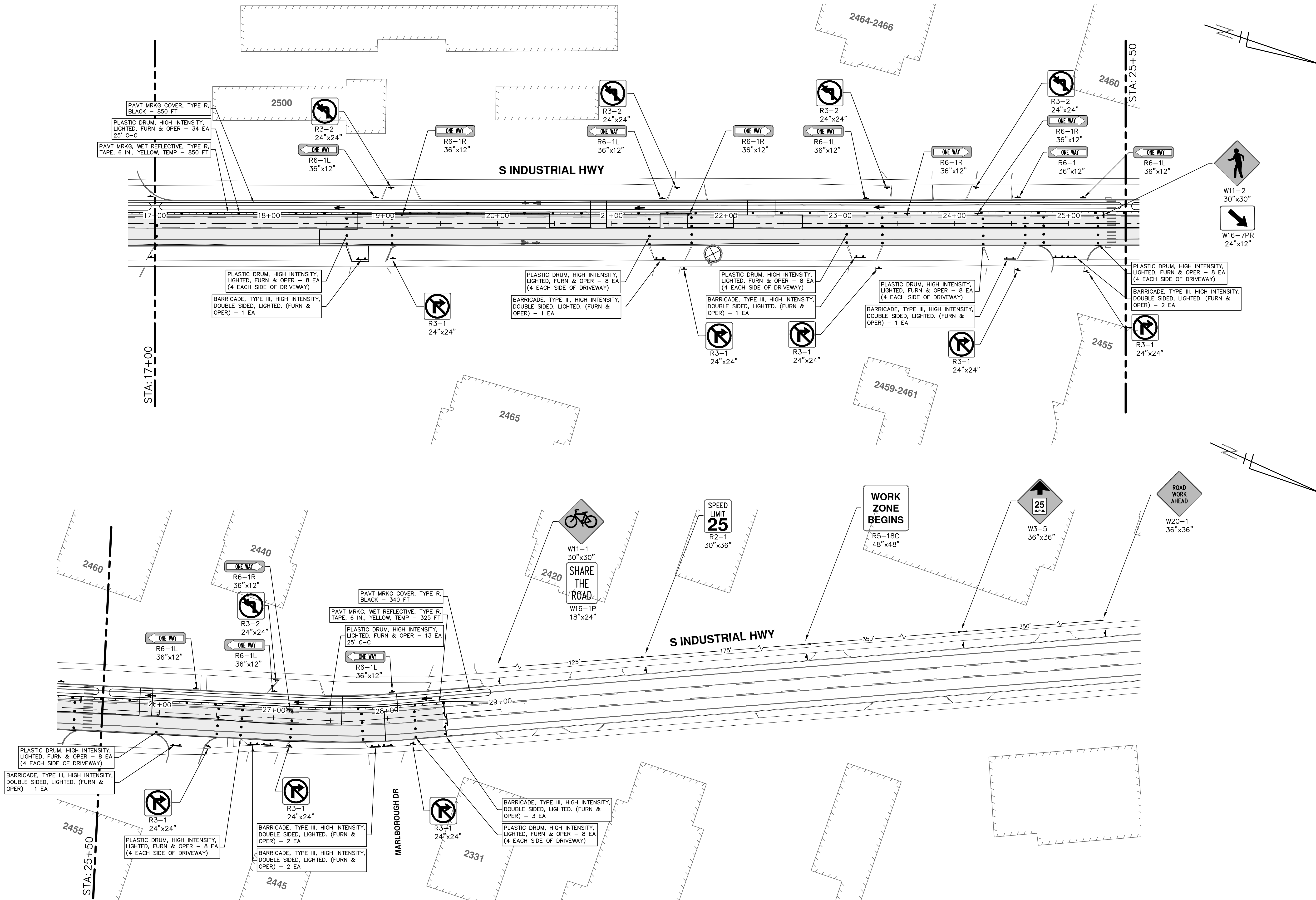
NORTH BOUND S. INDUSTRIAL HWY		
SIGN	NUMBER	QUANTITY
	D3-1 36"x6"	6
	M4-9S 30"x24"	6
	D3-1 36"x6"	3
	M4-9R 30"x24"	3
	D3-1 36"x6"	3
	M4-9L 30"x24"	3
	D3-1 36"x6"	2
	M4-9L (MOD) 30"x24"	2
	D3-1 36"x6"	2
	M4-9R (MOD) 30"x24"	2
	D3-1 36"x6"	1
	M4-8A 24"x18"	1
	D3-1 36"x6"	2
	W20-2 36"x36"	2
	D3-1 36"x6"	2
	W20-1 36"x36"	2
SIGN, PORTABLE, CHANGEABLE MESSAGE – 3 EACH		
VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING		

NOTE: PCMS LOCATIONS AND MESSAGES WILL BE
AS DIRECTED BY THE ENGINEER. TO BE PLACED
ONE WEEK PRIOR TO CONSTRUCTION.

*THE CONTRACTOR SHALL PLACE THE APPROPRIATE DATE AS APPROVED BY THE ENGINEER.

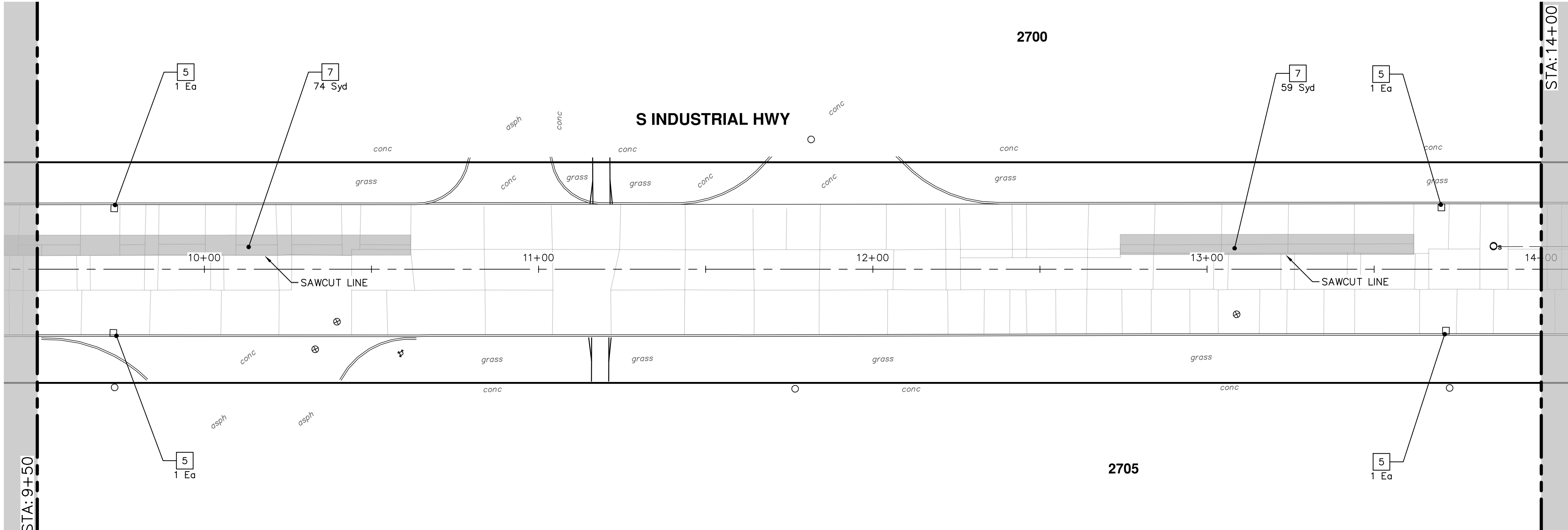
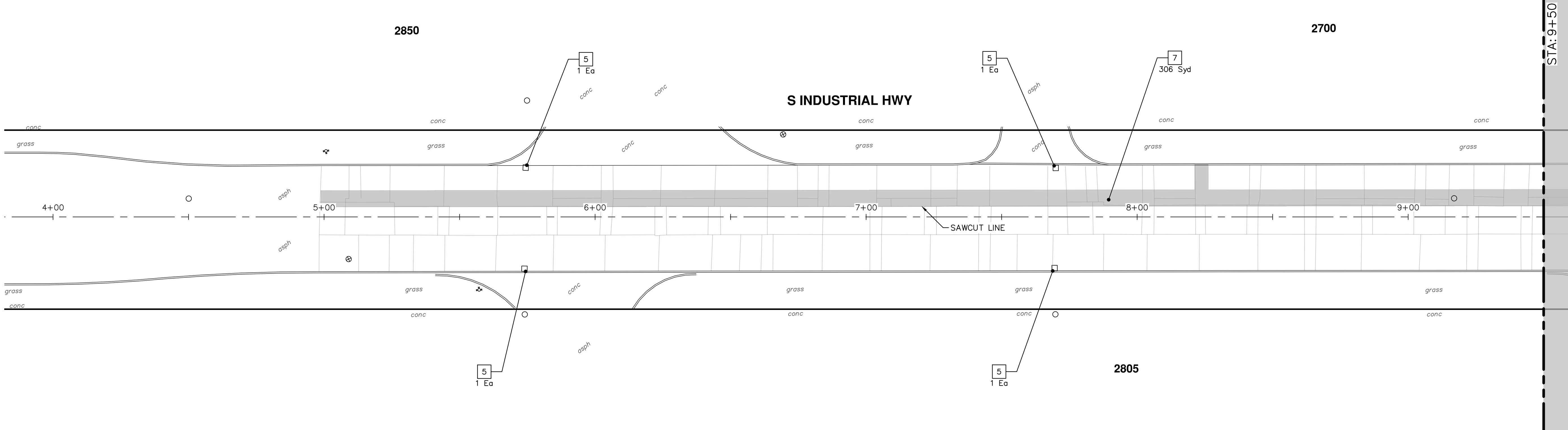






[illegible]

R:\2024013 S Industrial Maple\Plan Production\2024013Rem Industrial.dwg Dwg Created: 12-Mar-25 - _a2 standard bw.stb - Plot Date: 26-Mar-25




REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Remn *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Remn
3	HMA, Any Thickness, Remn *
4	Tree Protective Fence
5	Erosion Control, Inlet Protection, Fabric Drop
6	Tree, Remn, 6 In. – 12 In.
7	Concrete Pavt, Any Thickness, Remn

* SAWCUT FULL DEPTH AT
REMOVAL LIMITS AS DIRECTED BY
ENGINEER



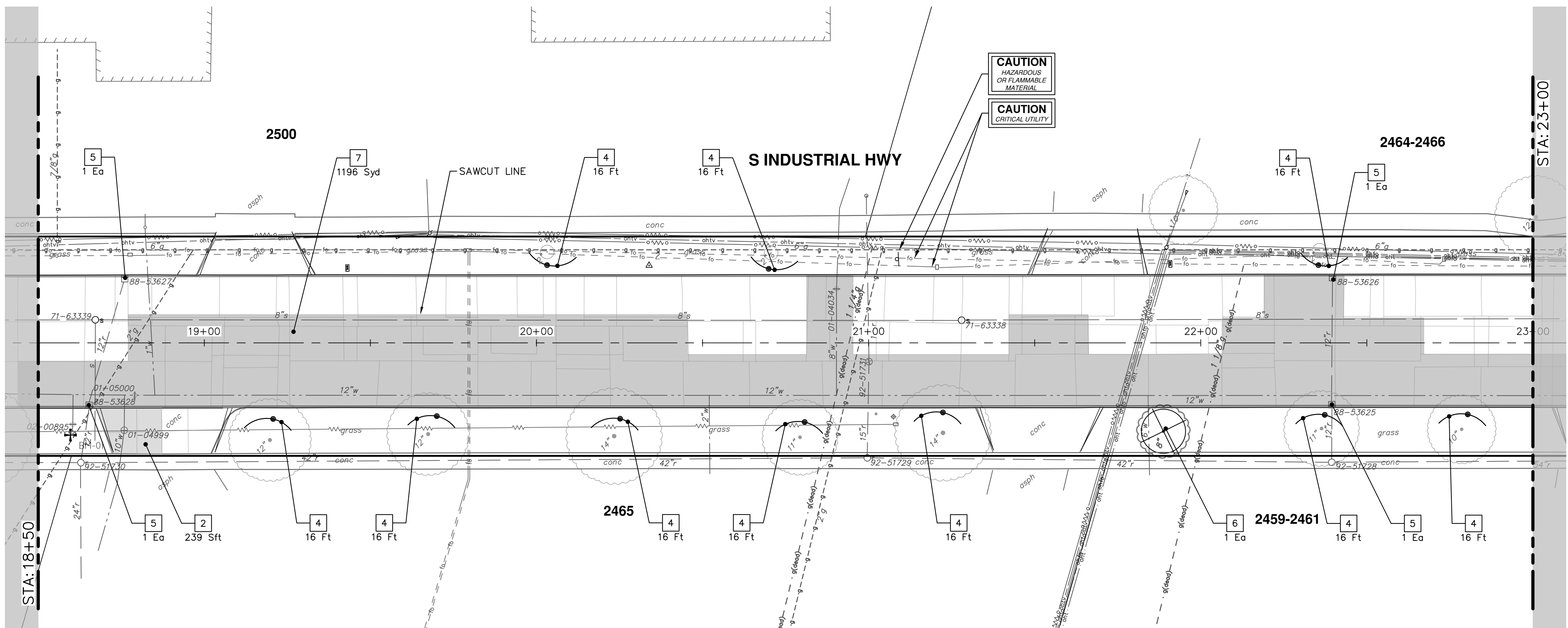
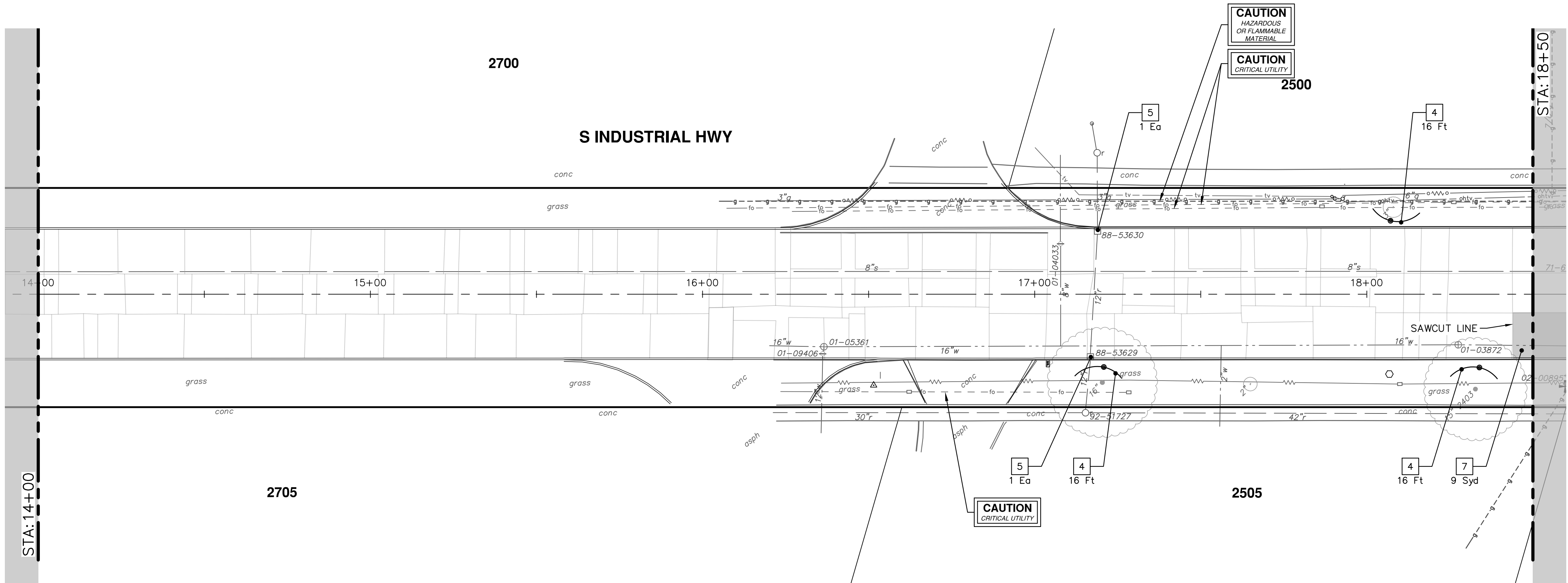
**CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org**

**S INDUSTRIAL WATER MAIN
REMOVALS - S INDUSTRIAL**

CITY OF
SCALE : 1" = 20'

DRAWING No.
2024013-15

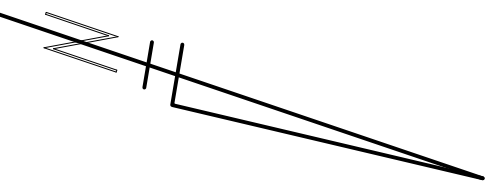


Know what's below.
Call before you dig.

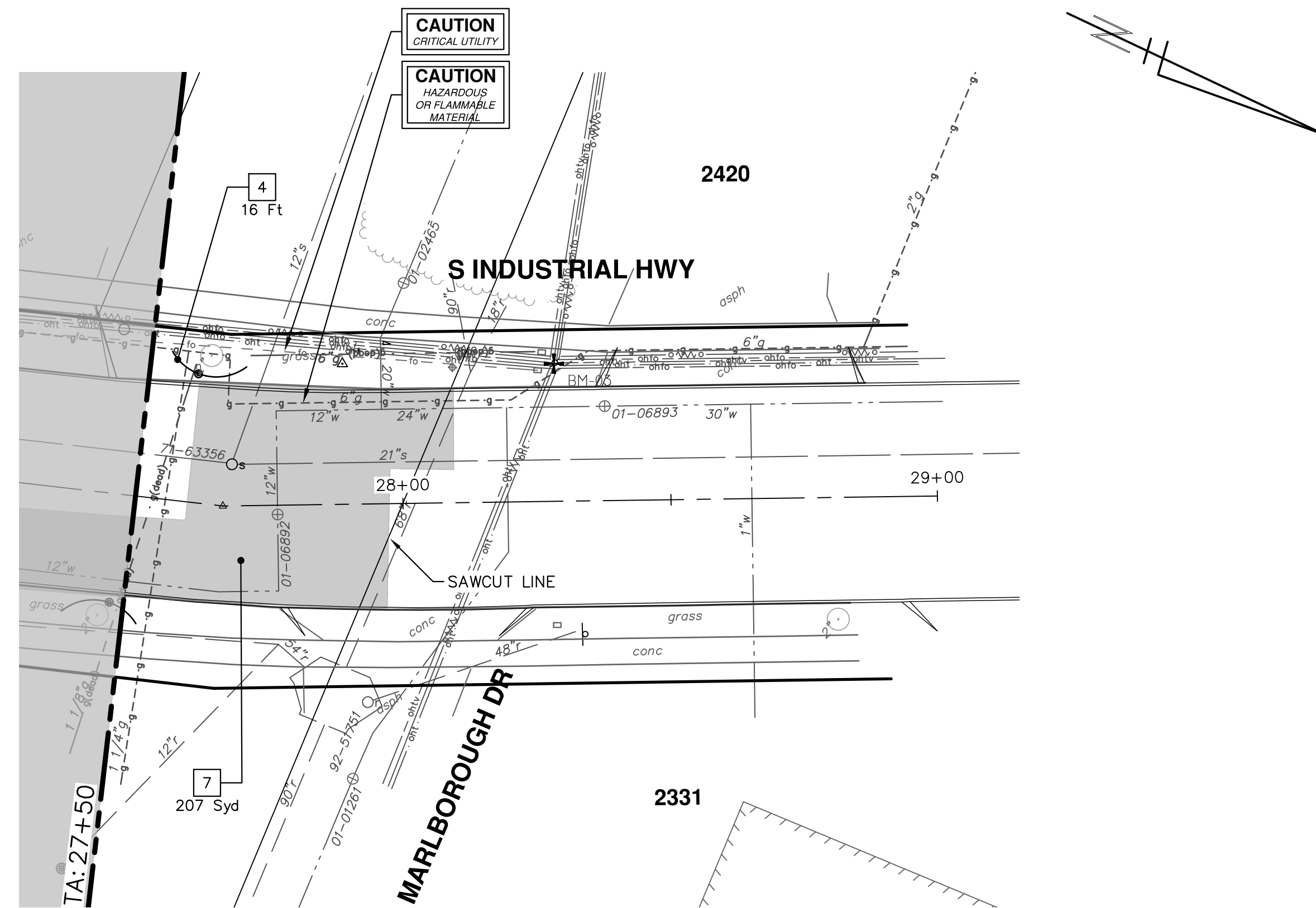
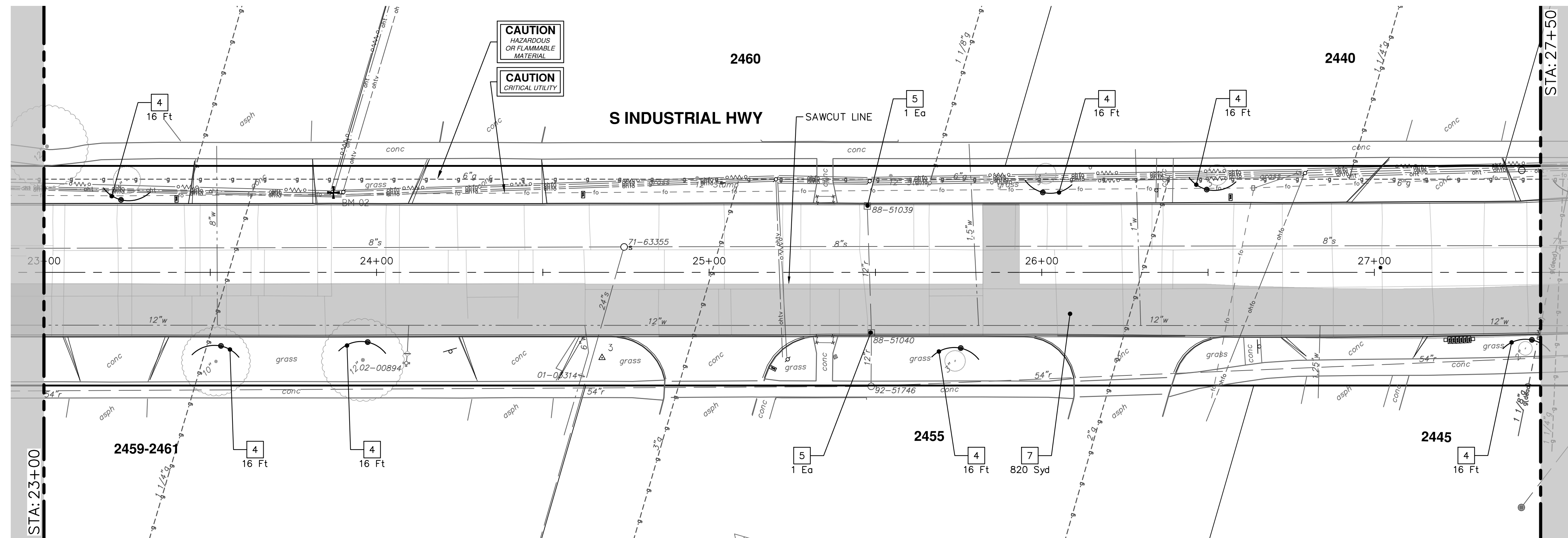


REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Tree Protective Fence
5	Erosion Control, Inlet Protection, Fabric Drop
6	Tree, Rem, 6 In. - 12 In.
7	Concrete Pavt, Any Thickness, Rem

* SAWCUT FULL DEPTH AT
REMOVAL LIMITS AS DIRECTED BY
ENGINEER

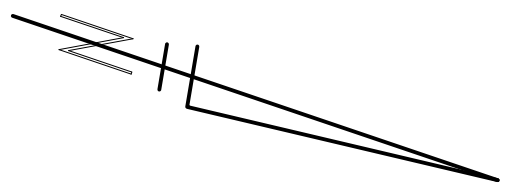


R:\2024013 S Industrial Maple\Plan Production\2024013Rem Industrial.dwg Dwg Created: 12-Mar-25 - _a2 standard bw.stb - Plot Date: 26-Mar-25




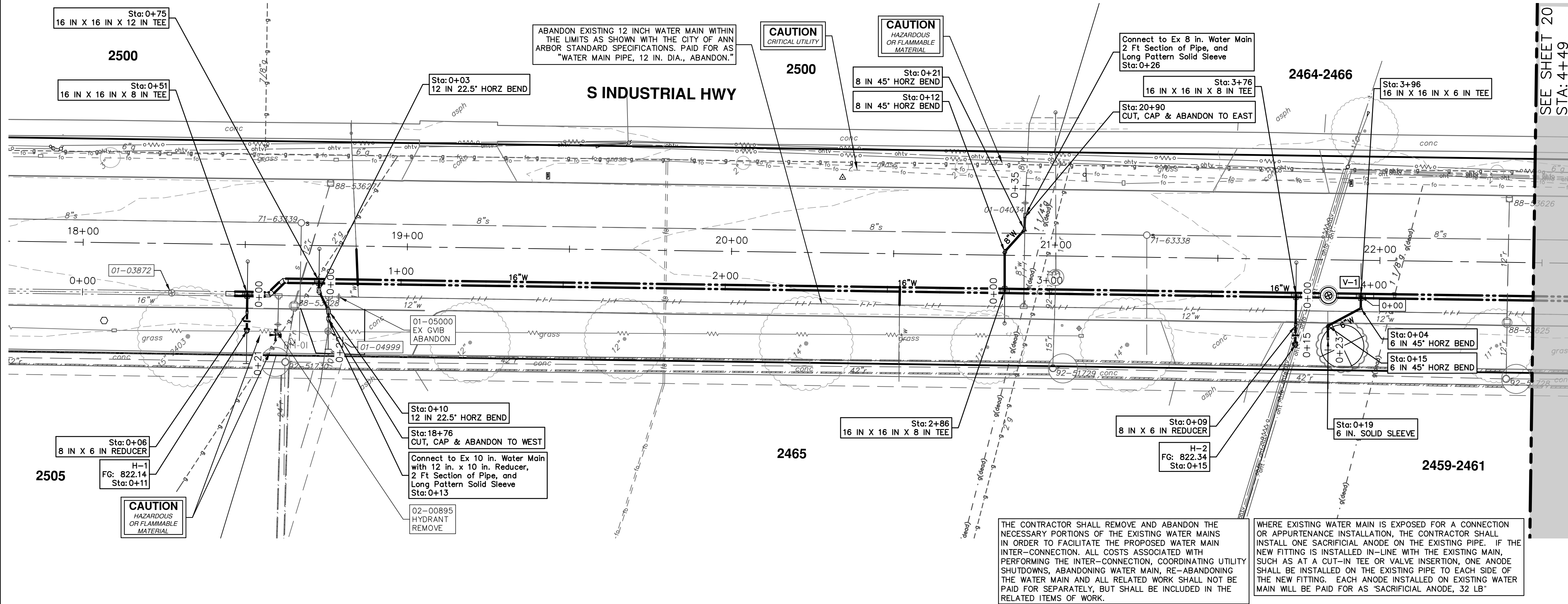
REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Tree Protective Fence
5	Erosion Control, Inlet Protection, Fabric Drop
6	Tree, Rem, 6 In. – 12 In.
7	Concrete Pavt, Any Thickness, Rem

* SAWCUT FULL DEPTH AT
REMOVAL LIMITS AS DIRECTED BY
ENGINEER

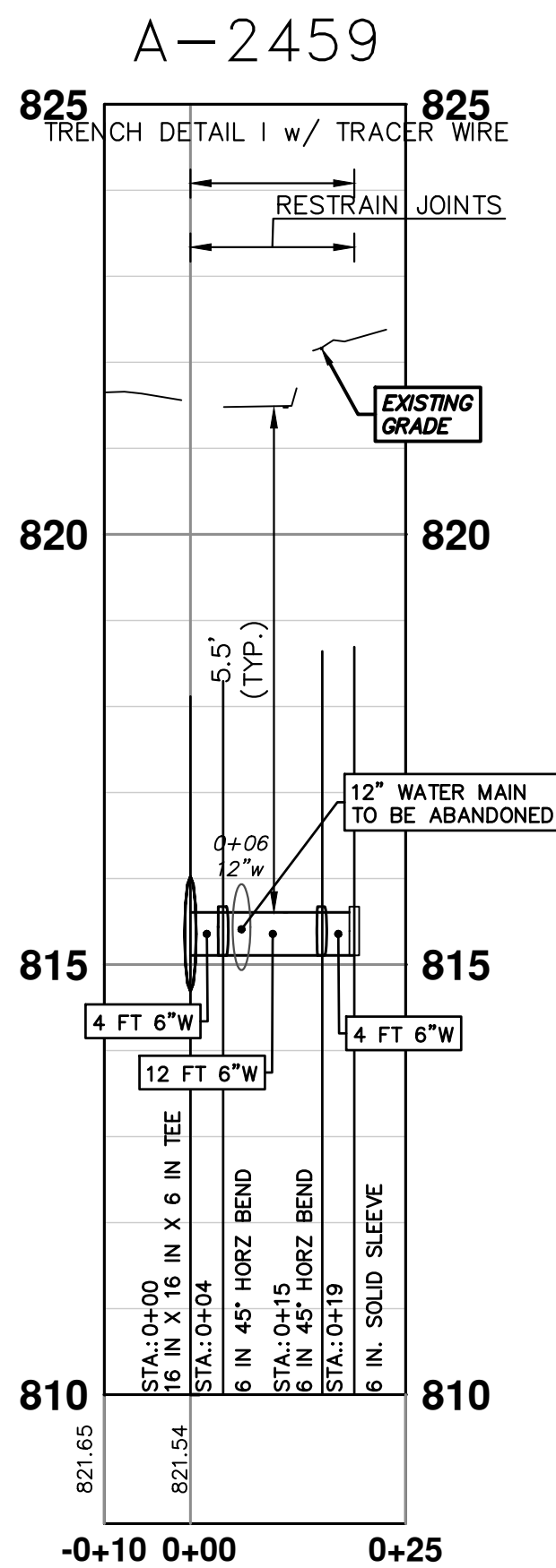
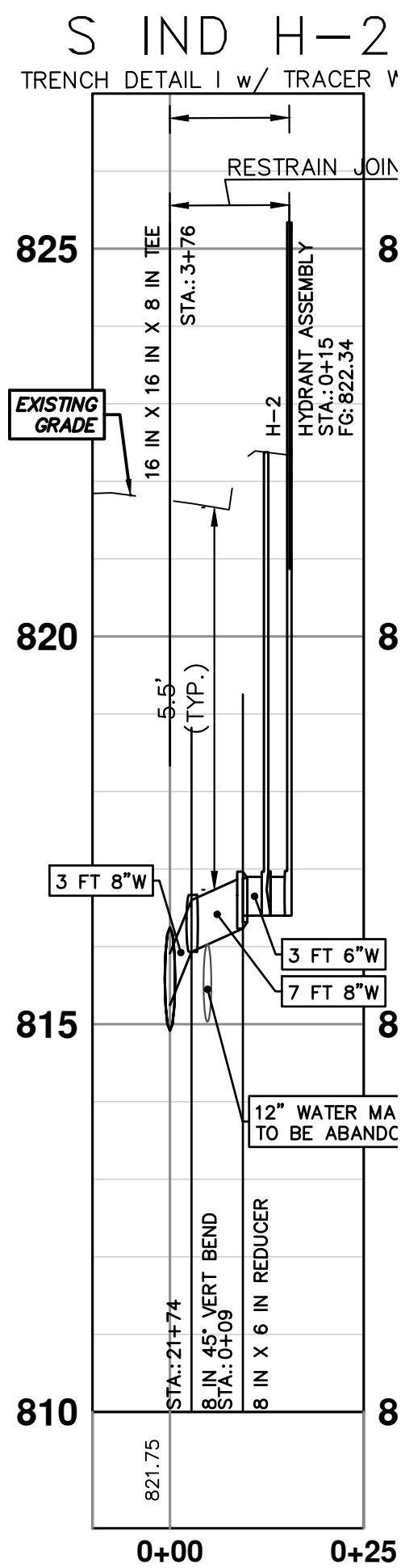
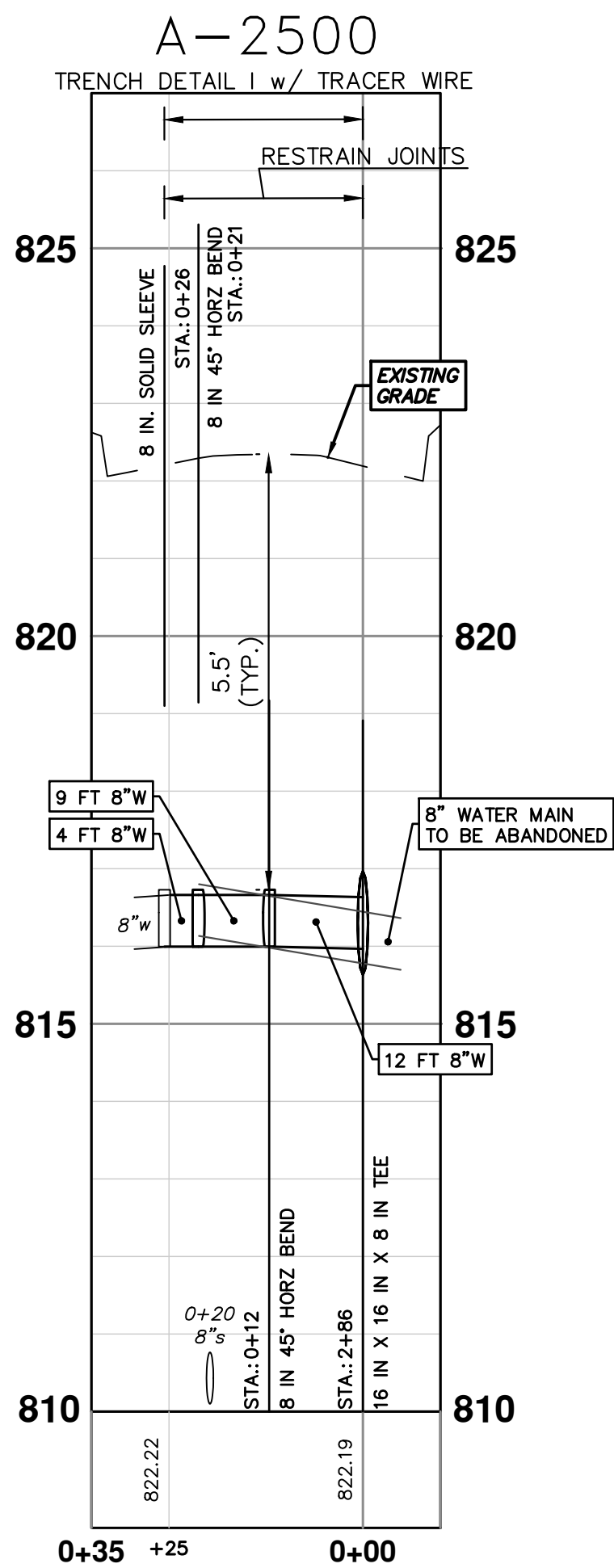
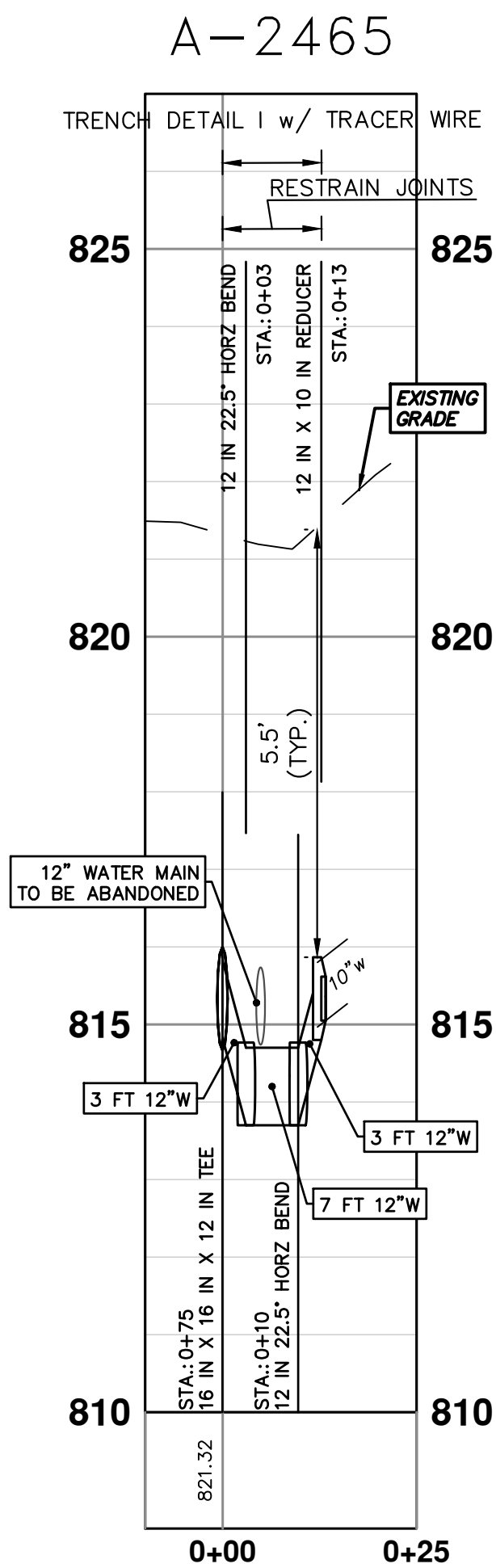
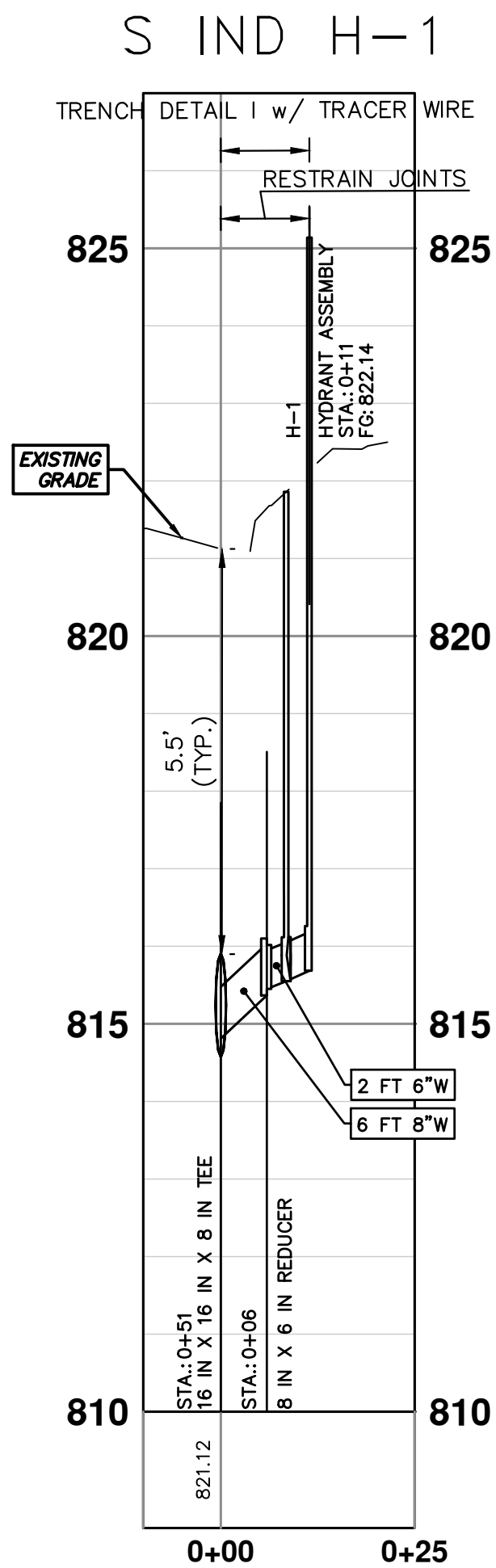


**S INDUSTRIAL WATER MAIN
REMOVALS - S INDUSTRIAL
STA 23+00 - STA 28+50**

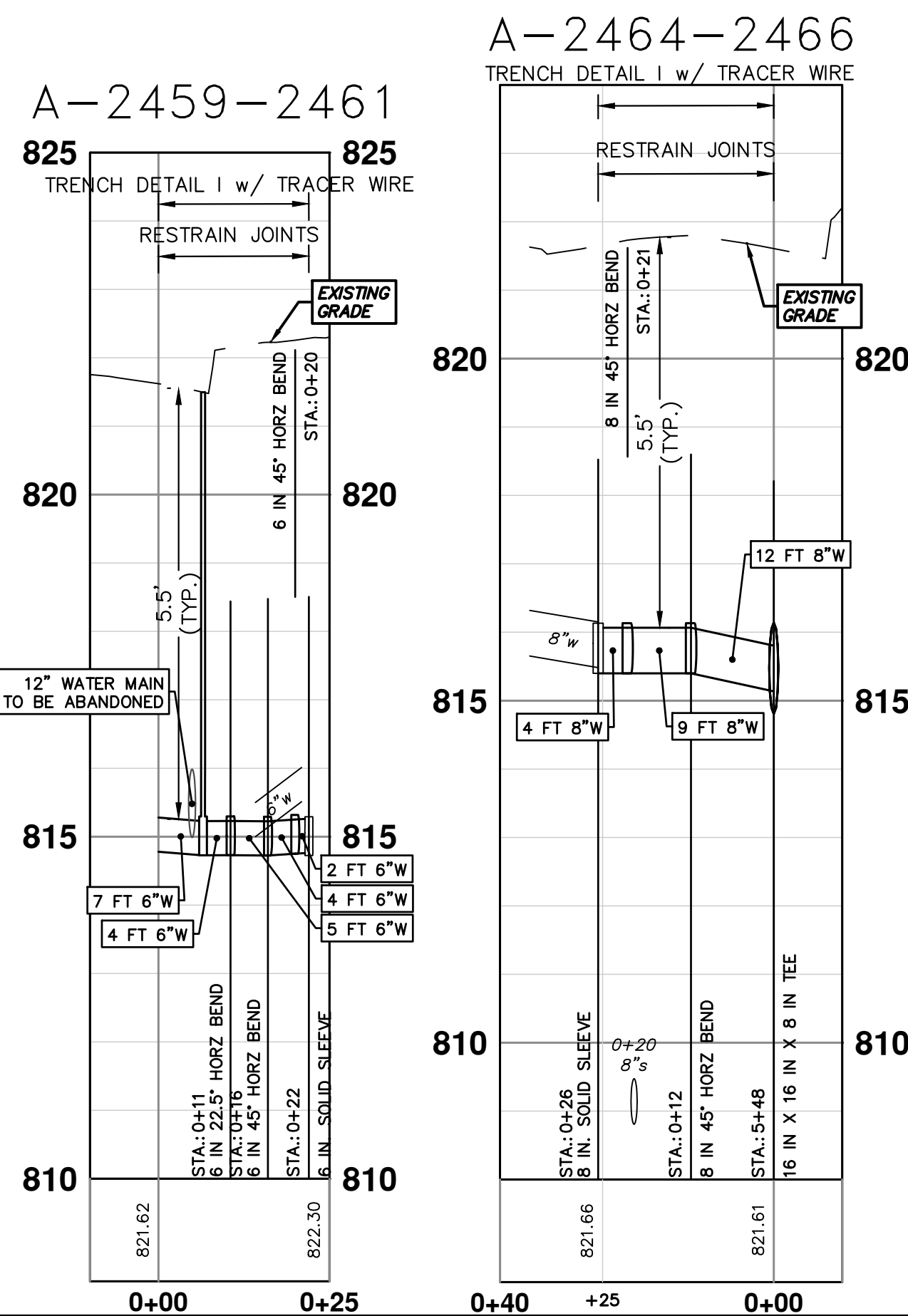
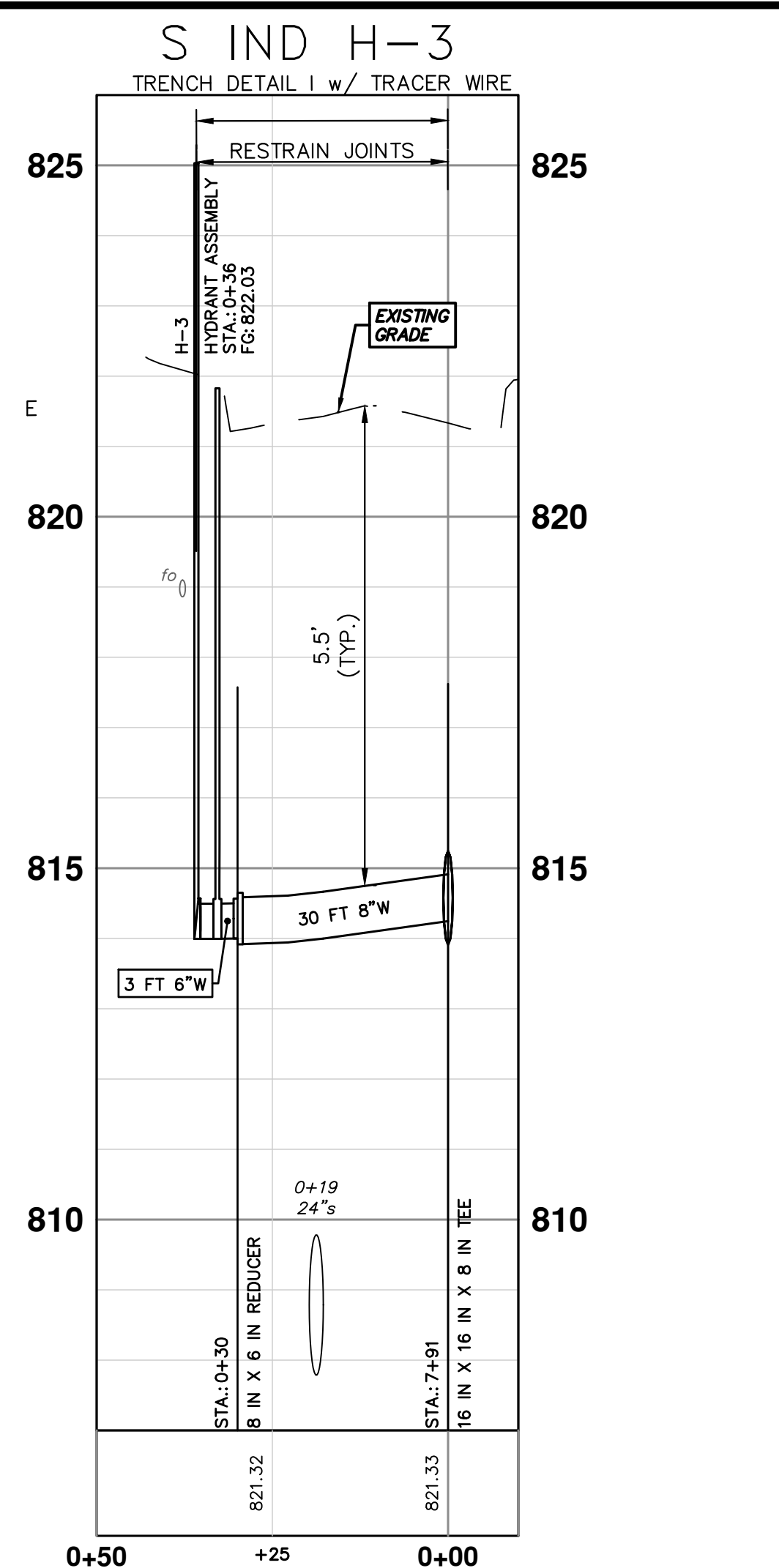
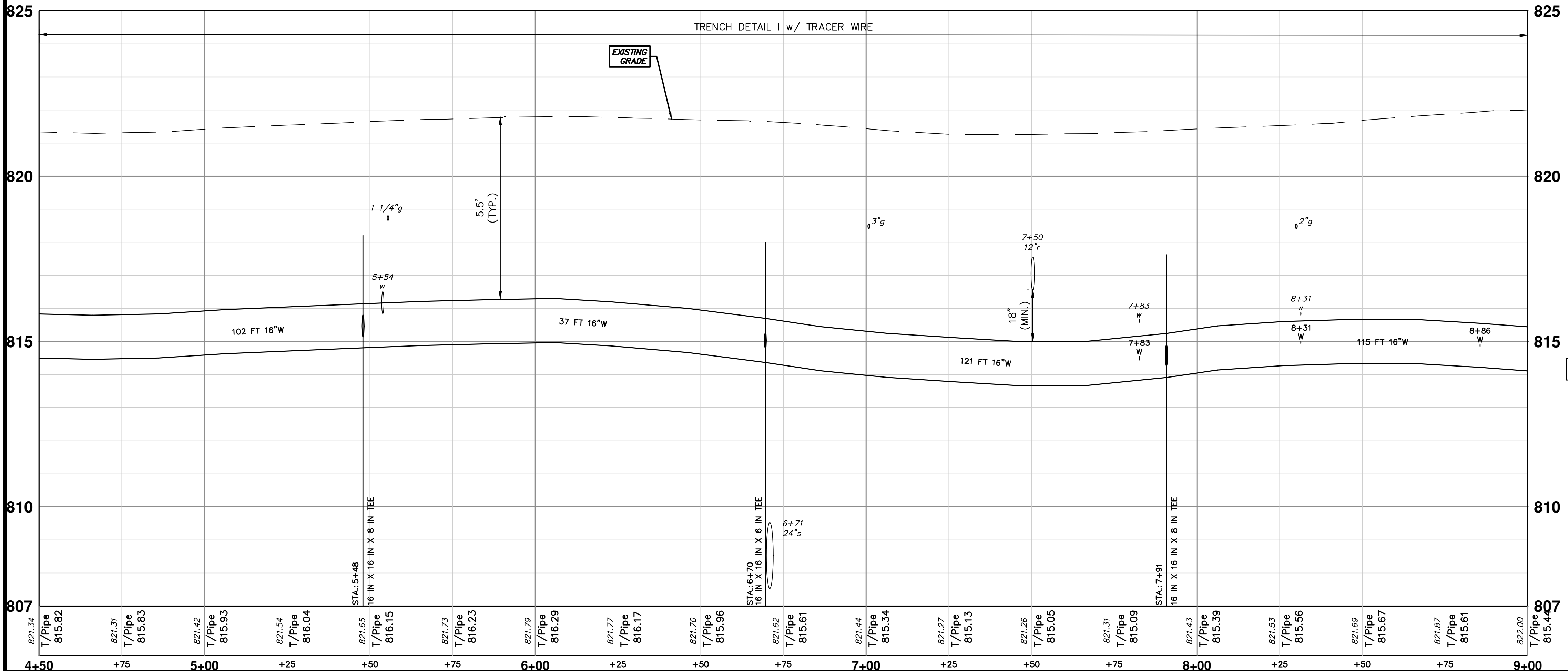
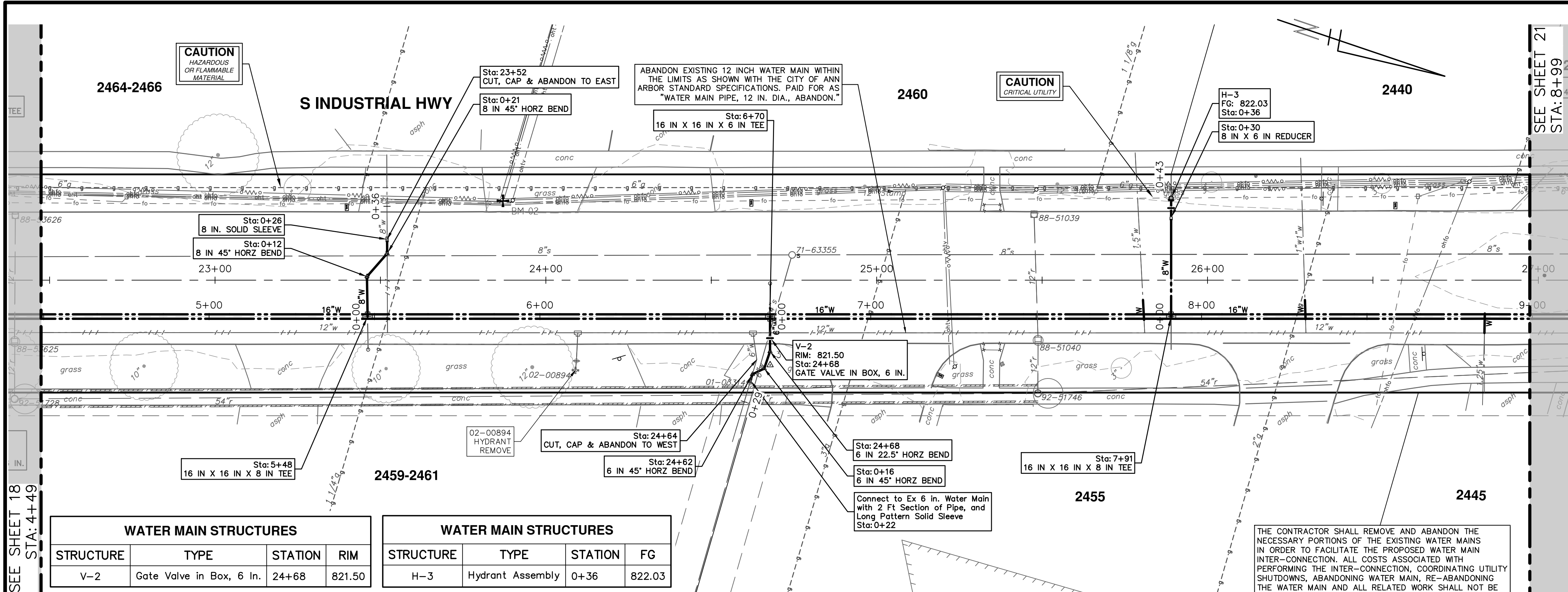
CITY OF
SCALE : 1" = 20'

DRAWING No.
2024013-17



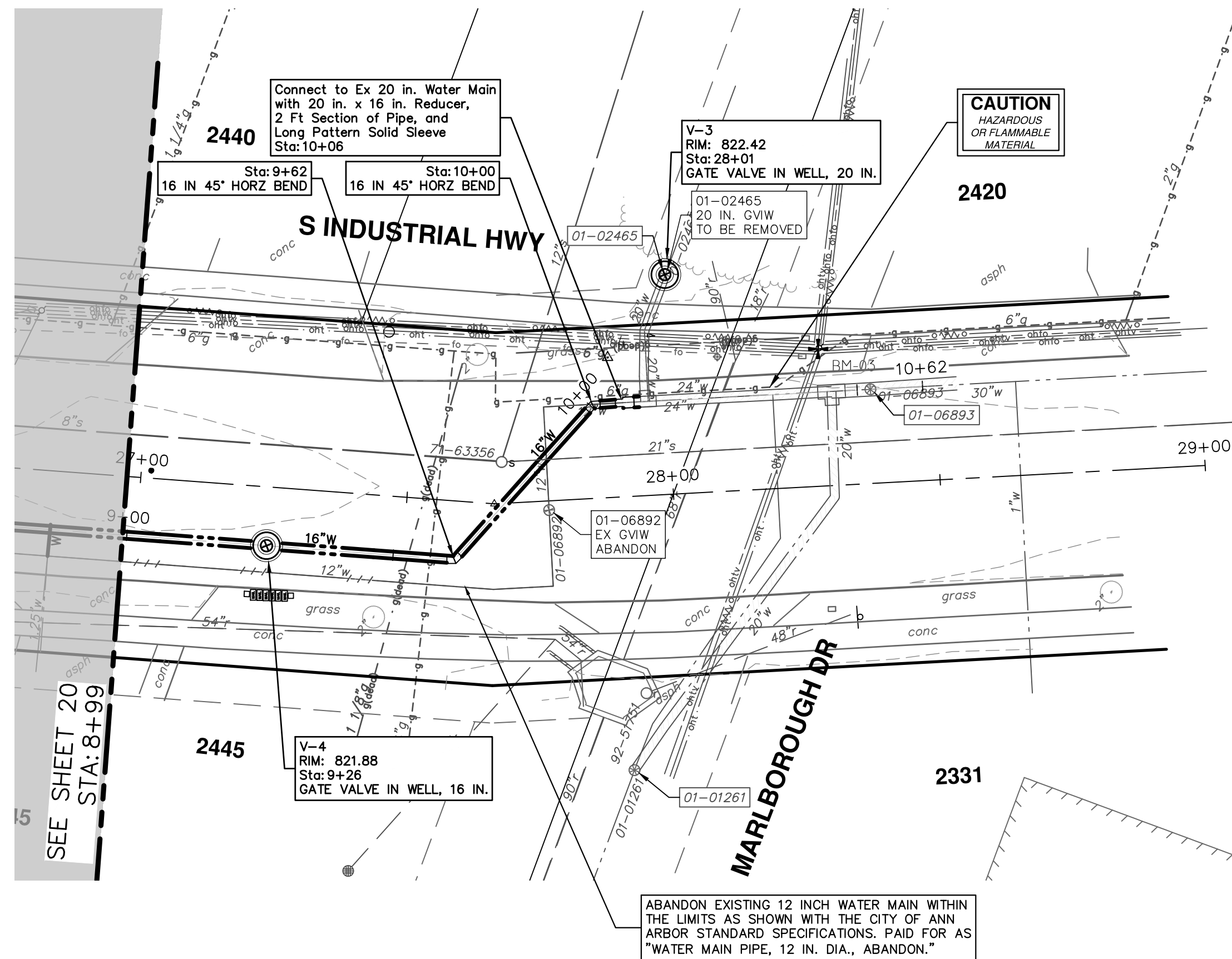
WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	FG
H-1	Hydrant Assembly	0+11	822.14
H-2	Hydrant Assembly	0+15	822.34



R:\2024013 S Industrial Maple\Plan Production\2024013Wat Industrial.dwg Dwg Created: 19-Mar-25 -- _a2 standard bw.stb -- Plot Date: 26-Mar-25



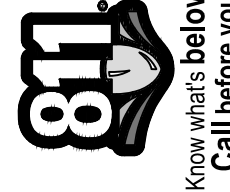
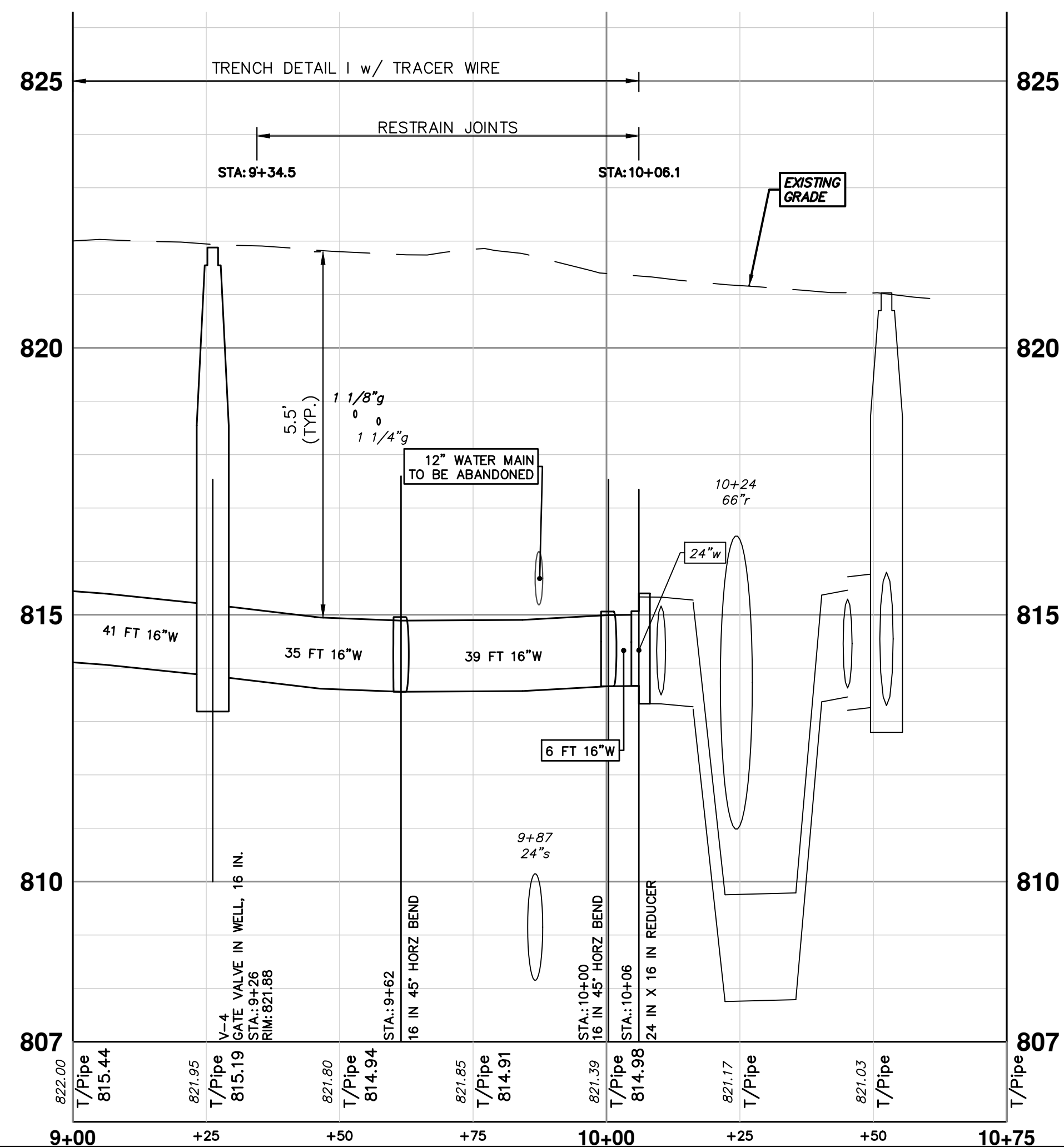
R:\2024013 S Industrial Maple\Plan Production\2024013Watr Industrial.dwg Dwg Created: 19-Mar-25 - _a2 standard bw.stb - Plot Date: 26-Mar-25



WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	RIM
V-4	Gate Valve in Well, 16 In.	9+26	821.88
V-3	Gate Valve in Well, 20 In.	28+01	822.42

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 NEW 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 CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

[illegible]

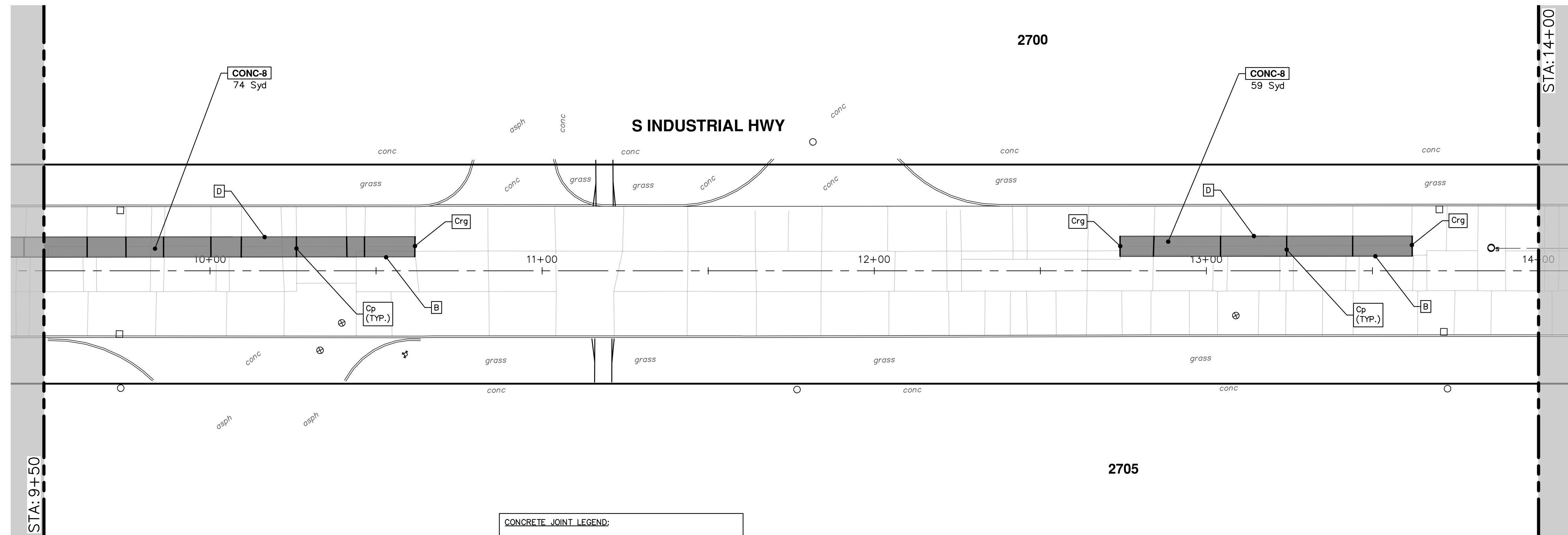
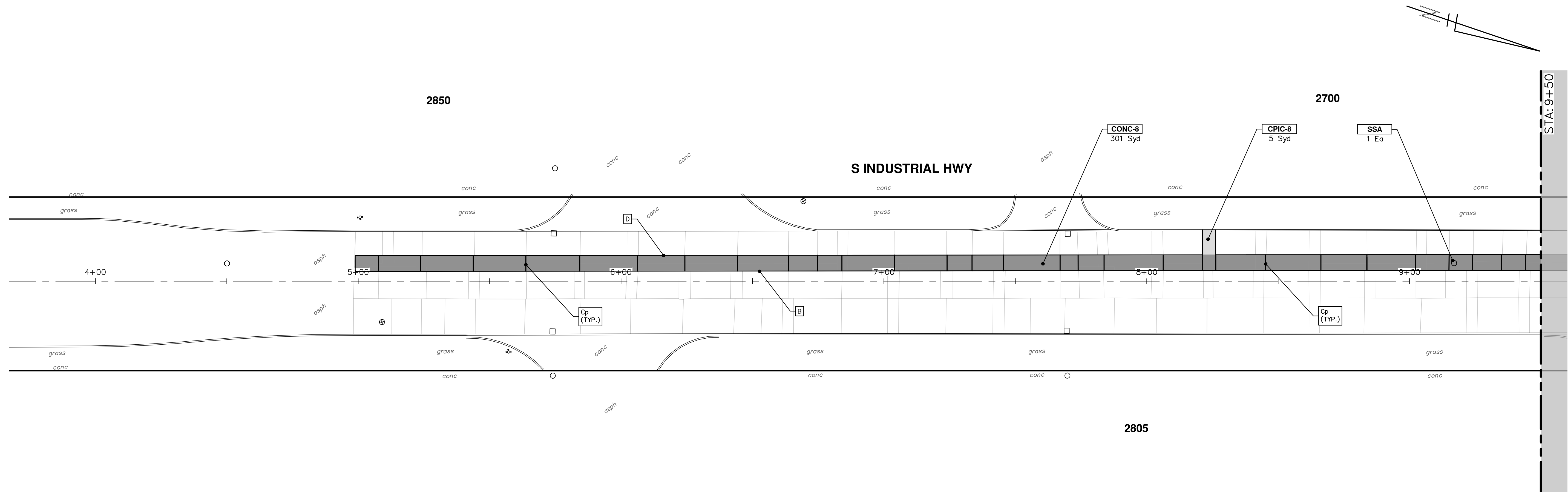
**CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org**







SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
WATER MAIN PLAN AND PROFILE - S INDUSTRIAL
STA. 9+00 TO STA. 10+06

CITY OF ANN ARBOR
 SCALE PLAN: 1" = 20'
 PROFILE: 1" = 2'
 DRAWING No.
2024013-21

R: \2024013 S Industrial Maple\Plan Production\2024013Prd Industrial.dwg Dwg Created: 19-Mar-25 - _a2 standard bw.stb - Plot Date: 26-Mar-25



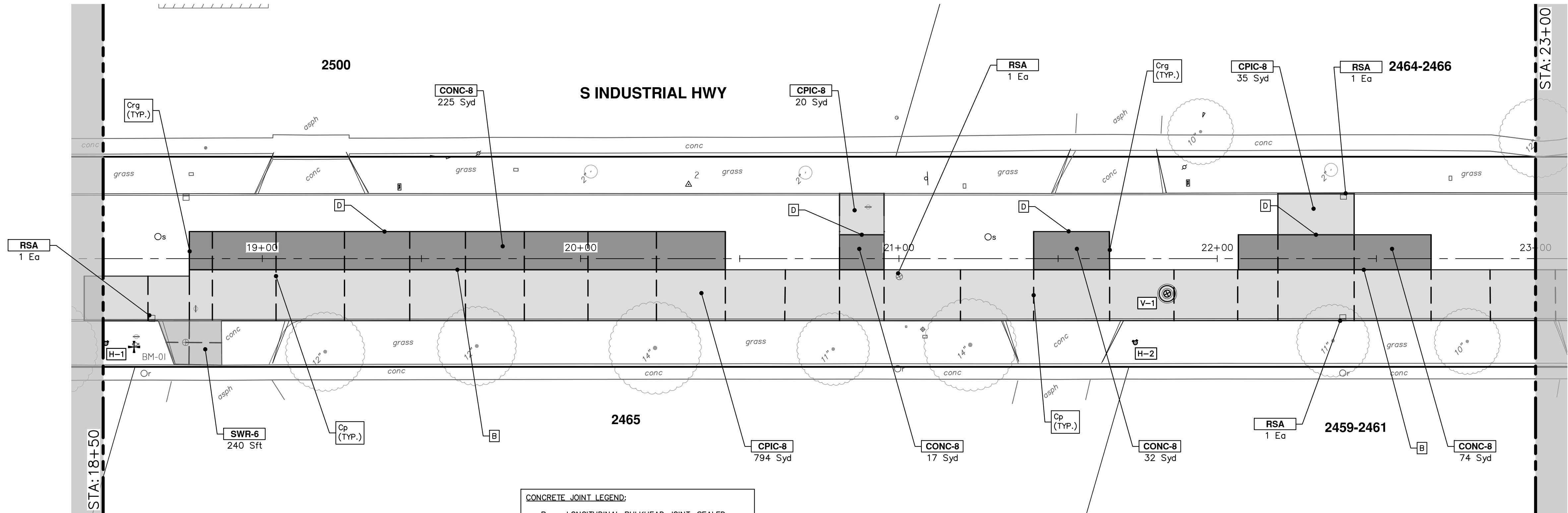
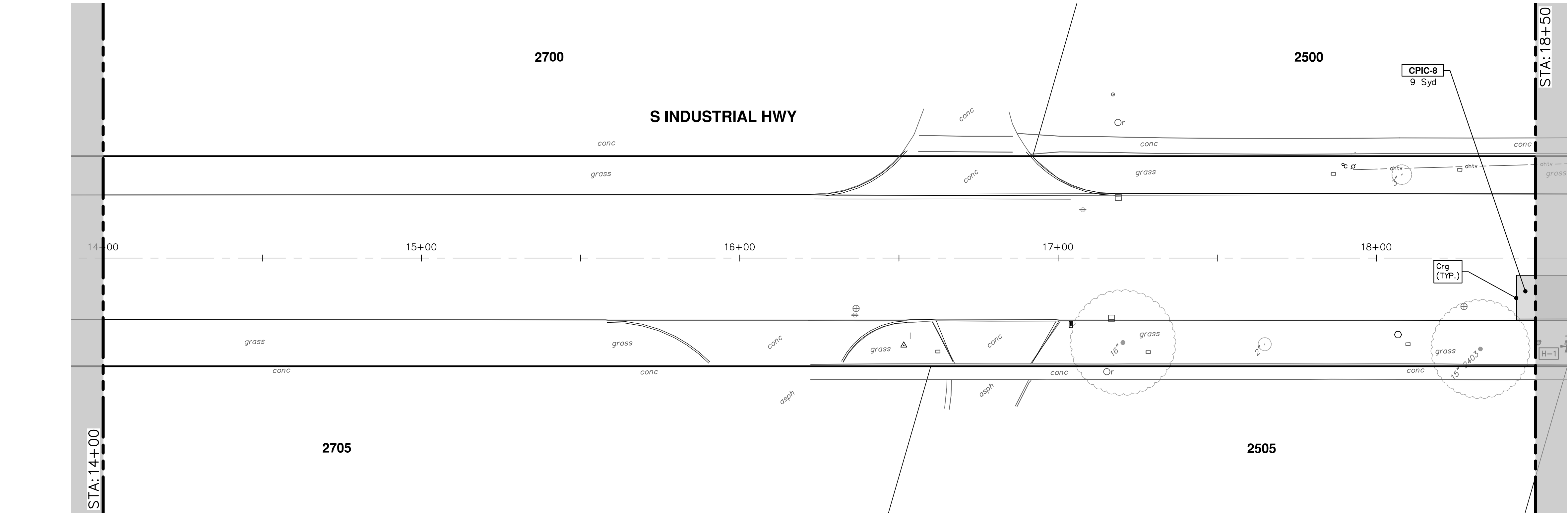
<u>JOINT LAYOUT KEY</u>	
	JOINT, CONTRACTION, Cp
	JOINT, CONTRACTION, Crg
	LONGITUDINAL JOINT, B
	LONGITUDINAL JOINT, D

CONCRETE JOINT LEGEND:

B	— LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)
D	— LONGITUDINAL LANE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)
Cp	— TRANSVERSE CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-42 SERIES, SYMBOL (Cp)
Crg	— CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-44 SERIES, SYMBOL (Crg)

CONSTRUCTION KEY	
KEY	DESCRIPTION
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
RSA	Storm Structure Cover, Adjust
SSA	Sanitary Structure Cover, Adjust
CPIC-8	Conc Pavt With Integral Curb, Non-Reinf, 8 In.
CONC-8	Conc Pavt, Non-Reinf, 8 In.

R:\2024013 S Industrial Maple\Plan Production\2024013Prd Industrial.dwg Dwg Created: 19-Mar-25 --_02 standard bw.stb -- Plot Date: 26-Mar-25



JOINT LAYOUT KEY	
	JOINT, CONTRACTION, Cp
	JOINT, CONTRACTION, Crg
	LONGITUDINAL JOINT, B
	LONGITUDINAL JOINT, D

CONCRETE JOINT LEGEND:	
B	LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)
D	LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)
Cp	TRANSVERSE CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-42 SERIES, SYMBOL (Cp)
Crg	CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-44 SERIES, SYMBOL (Crg)

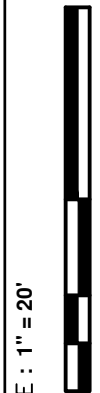
KEY	DESCRIPTION
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
RSA	Storm Structure Cover, Adjust
SSA	Sanitary Structure Cover, Adjust
CPIC-8	Conc Pavt With Integral Curb, Non-Reinf, 8 In.
CONC-8	Conc Pavt, Non-Reinf, 8 In.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
P.O. BOX 8647
734.764.4410
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
RESTORATION - S INDUSTRIAL

STA. 14+00 - STA. 23+00



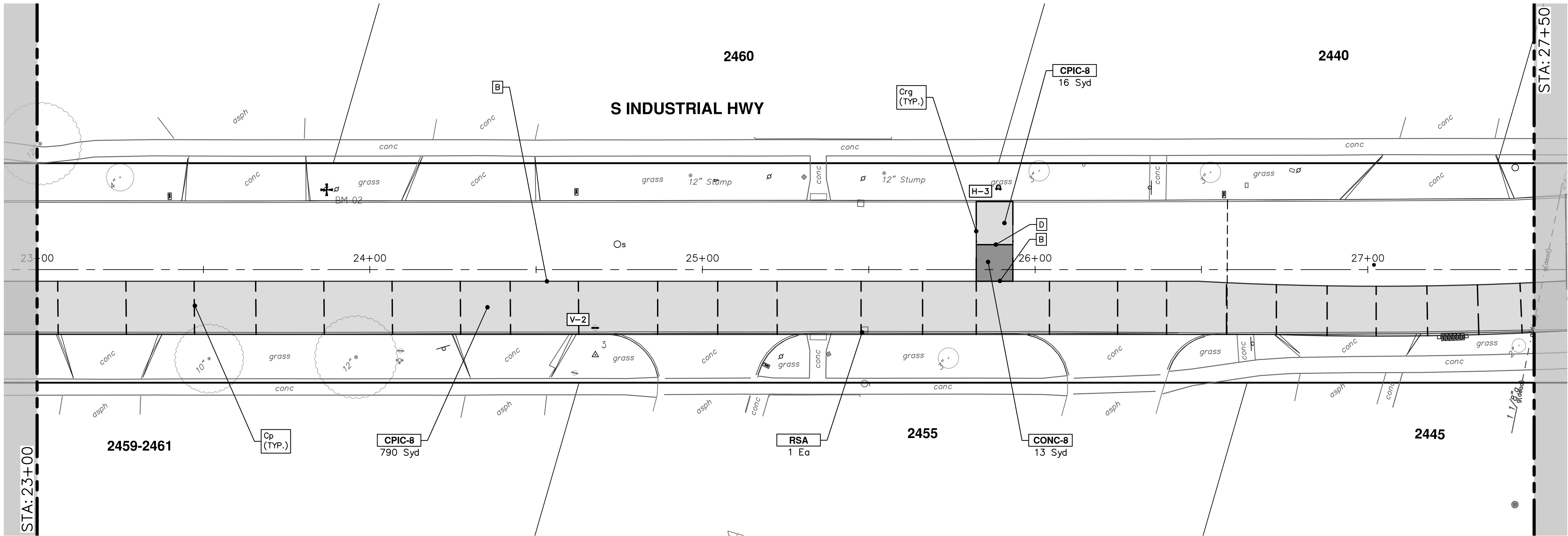
DRAWING No.
2024013-23

SHEET No.



Know what's below.
Call before you dig.

R:\2024013 S Industrial Maple\Plan Production\2024013Prd Industrial.dwg Dwg Created: 19-Mar-25 -- _02 standard bw.stb -- Plot Date: 26-Mar-25



CONSTRUCTION KEY	
KEY	DESCRIPTION
SWR-6	Conc, Sidewalk, Drive Approach, or Ramp, 6 In.
RSA	Storm Structure Cover, Adjust
SSA	Sanitary Structure Cover, Adjust
CPIC-8	Conc Pavt With Integral Curb, Non-Reinf, 8 In.
CONC-8	Conc Pavt, Non-Reinf, 8 In.

JOINT LAYOUT KEY	
---	JOINT, CONTRACTION, Cp
---	JOINT, CONTRACTION, Crg
---	LONGITUDINAL JOINT, B
---	LONGITUDINAL JOINT, D

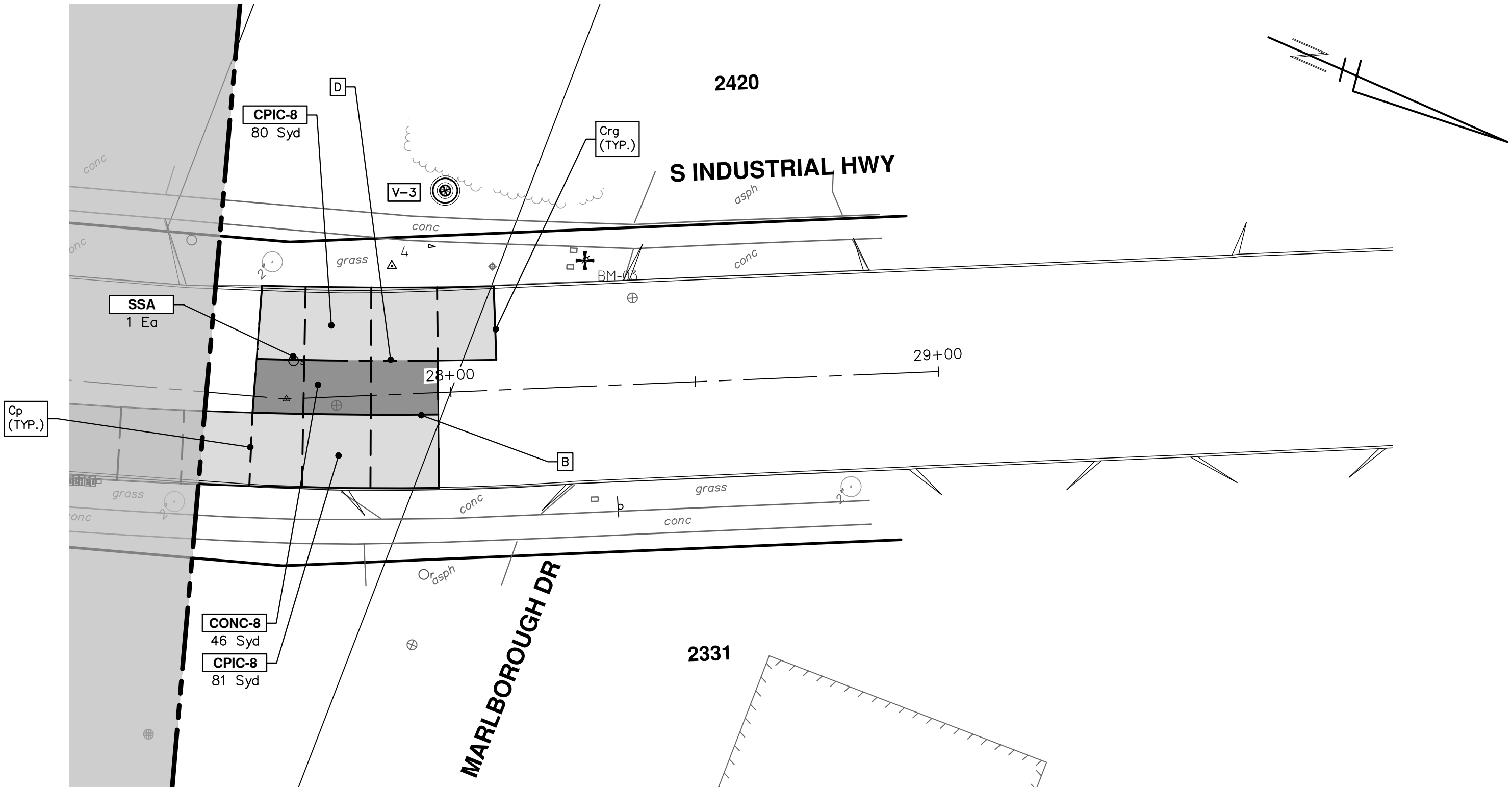
CONCRETE JOINT LEGEND:

B - LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)

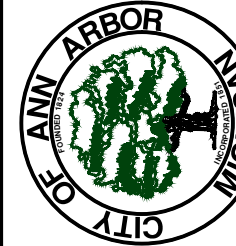
D - LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)

Cp - TRANSVERSE CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-42 SERIES, SYMBOL (Cp)

Crg - CONTRACTION JOINT WITH LOAD TRANSFER DEVICE, SEALED ACCORDING TO MDOT STANDARD PLAN R-44 SERIES, SYMBOL (Crg)




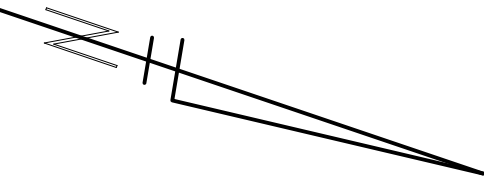
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
S INDUSTRIAL WATER MAIN
RESTORATION - S INDUSTRIAL
STA. 23+00 - STA. 28+50

SCALE : 1" = 20'
DRAWING No. 2024013-24

REV	DESCRIPTION	DATE	DRAWN	CHECKED
00	OUT FOR BID	3-26-25	A2D	FC



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

2700

2500

S INDUSTRIAL HWY

14+00 15+00 16+00 17+00 18+00

2705

2505

RECESSING PAVT MRKG, LONGIT - 6 FT
PAVT MRKG, POLYUREA, 6 INCH, WHITE - 6 FT
STA. 18+44 TO STA. 18+50

STA: 14+00

STA: 18+50

2500

2465

2464-2466

2459-2461

S INDUSTRIAL HWY

19+00 20+00 21+00 22+00 23+00

RECESSING PAVT MRKG, LONGIT - 210 FT
PAVT MRKG, POLYUREA, 6 IN., YELLOW - 210 FT
STA. 18+77 TO STA. 20+45

RECESSING PAVT MRKG, LONGIT - 30 FT
PAVT MRKG, POLYUREA, 6 IN., YELLOW - 30 FT
STA. 21+42 TO STA. 21+66

RECESSING PAVT MRKG, LONGIT - 14 FT
PAVT MRKG, POLYUREA, 6 INCH, WHITE - 14 FT
STA. 20+81 TO STA. 20+95

RECESSING PAVT MRKG, LONGIT - 75 FT
PAVT MRKG, POLYUREA, 6 IN., YELLOW - 75 FT
STA. 22+07 TO STA. 22+67

RECESSING PAVT MRKG, LONGIT - 24 FT
PAVT MRKG, POLYUREA, 6 INCH, WHITE - 24 FT
STA. 22+19 TO STA. 22+43

RECESSING PAVT MRKG, LONGIT - 529 FT
PAVT MRKG, POLYUREA, 6 IN., YELLOW - 529 FT
STA. 18+77 TO STA. 23+00

RECESSING PAVT MRKG, LONGIT - 450 FT
PAVT MRKG, POLYUREA, 6 INCH, WHITE - 450 FT
STA. 18+50 TO STA. 23+00

RECESSING PAVT MRKG, LONGIT - 18 FT
PAVT MRKG, POLYUREA, 6 IN., YELLOW - 18 FT
STA. 20+81 TO STA. 20+95

STA. 18+77
OFF: 4.1RL

STA. 19+45
OFF: 5.0LL

STA. 20+81
OFF: 5.0LL

STA. 20+85
OFF: 5.0LL

STA. 21+42
OFF: 5.1LL

STA. 21+66
OFF: 5.1LL

STA. 22+07
OFF: 5.1LL

STA. 22+19
OFF: 5.2LL

STA. 22+43
OFF: 5.2LL

STA. 22+67
OFF: 5.2LL

STA: 18+50

STA: 23+00

