

CITY OF ANN ARBOR ENGINEERING

PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR

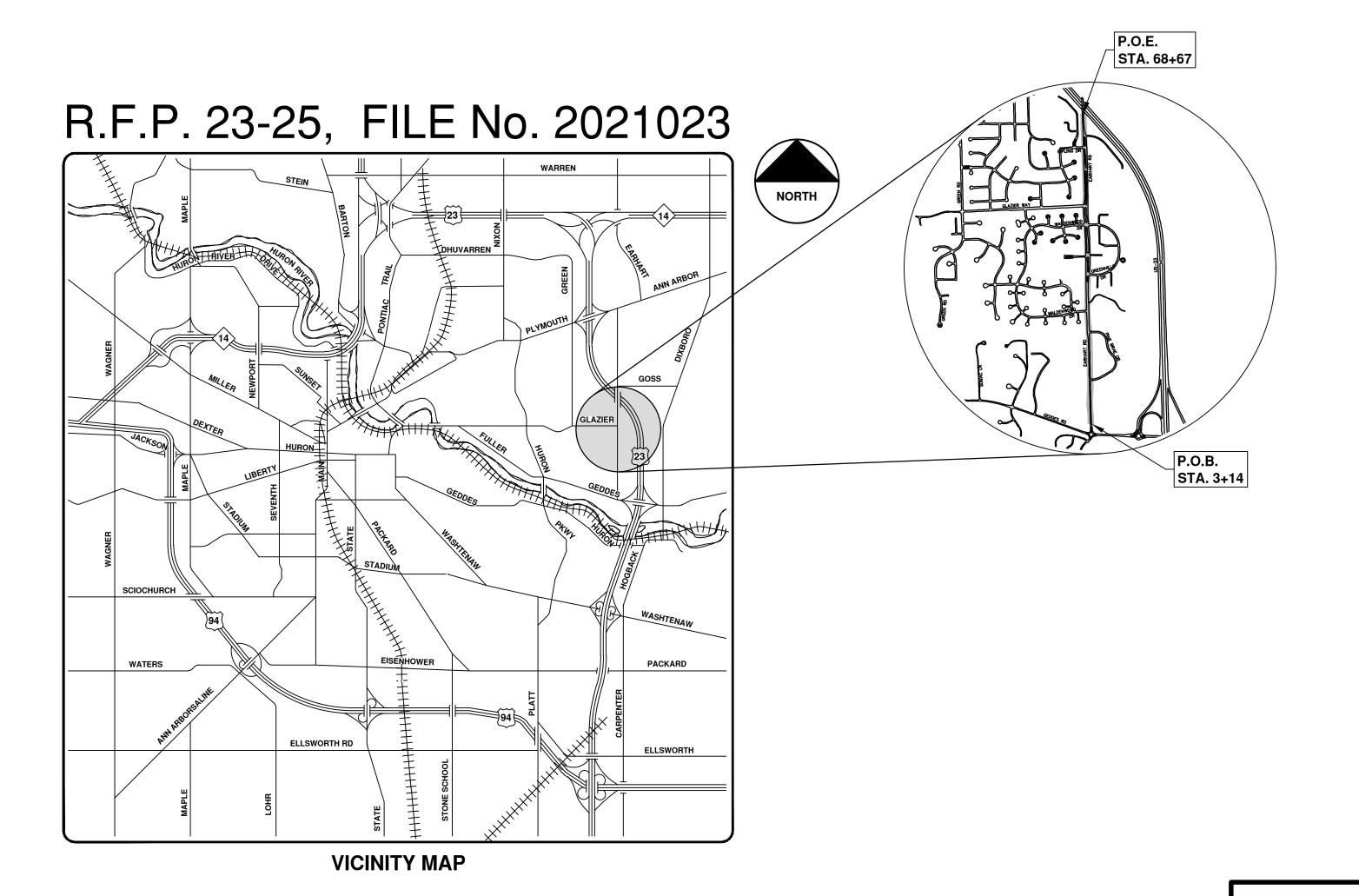
ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE

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

EARHART ROAD IMPROVEMENTS (GEDDES - US23)

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16	Sta. 0+00 Sta. 4+00
	Sta. 4+00 - Sta. 22+00
17	
18	Sta. 40+00 - Sta. 58+00 Sta. 58+00 - P.O.E.
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20	Sta. 0+00 Sta. 4+00
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27	Sta. 20+00 - Sta. 29+00
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31	Sta. 56+00 - Sta. 65+00
32	
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37	Sta. 17+50 - Sta. 21+50
38	Sta. 21+50 - Sta. 25+50
39	Sta. 25+50 - Sta. 29+50
40	Sta. 29+50 - Sta. 34+00
41	Sta. 34+00 - Sta. 43+00
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42	Sta. 43+00 - Sta. 52+00
42 43	Sta. 43+00 - Sta. 52+00 Sta. 52+00 - Sta. 61+00

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58	Sta. 29+00 - Sta. 38+00			
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70	Southbound 34+00 to 36+75			
71	Southbound 37+00 to 39+75			
72	Southbound 40+00 to 42+75			
73	Southbound 43+00 to 45+75			
74	Southbound 46+00 to 49+25			



NICHOLAS BAYLEY, P.E. - MI LICENSE No. 6201055228 4/27/2023



GENERAL 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. During non-working hours no more than ten (10) feet of trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the items of work being undertaken and will not be paid for separately.
- 4. The location of material stock piles and on—site staging areas shall be approved by the Engineer.
- 5. For mainline HMA Paving, the width of the mat for each pass of the paver shall be not less than 10.5', nor greater than 16', except as noted in the plans and as directed by the Engineer. The Engineer will direct the layout of all HMA Longitudinal Joints during construction.
- 6. All excavation required for roadway grading within the project limits, including proposed curbs, pavement and infiltration trench, shall be included in "Machine Grading, Modified, ____."
- 7. All excavation required for project grading within the project limits, including proposed sidewalks and sidewalk ramps, shall be included in "Sidewalk Grading" and "Sidewalk Ramp Grading".
- 8. Excavation and backfill behind curb and gutter shall be included in "Machine Grading, Modified, ____." All backfill under proposed concrete pavements such as drive approaches, ramps, sidewalk, etc., shall be MDOT Class II Granular Material, compacted to 95% of its max. dry density and will be paid for as "Subbase, CIP, Class II, Modified." Backfill for other areas must be approved by the Engineer and compacted to 95% of its max. dry density. No payment will be made for sub—base or aggregate base that extends beyond 12" behind the back of curb. Reference the Typical Cross Sections
- 9. Excavation and backfill for sidewalks and sidewalk ramps shall be included in "Sidewalk Grading" and "Sidewalk Ramp Grading". All backfill under proposed concrete pavements such as drive approaches, ramps, sidewalk, etc., shall be MDOT Class II Granular Material, compacted to 95% of its max. dry density and will be paid for as "Subbase, CIP, Class II, Modified." Backfill for other areas must be approved by the Engineer and compacted to 95% of its max. dry density. No payment will be made for sub—base or aggregate base that extends beyond 6" behind the back of walk. Reference the Typical Cross Sections.
- 7. 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 appropriate contract items and will be paid for at the corresponding contract unit price.
- 8. All Structures shall receive new castings, as specified on the Standard Casting Schedule. The existing castings shall be neatly stacked on—site in a single location so that City of Ann Arbor forces can retrieve them at a later date. The Contractor shall assist City forces by loading them into City trucks. All costs associated with storing, stockpiling, and loading castings into City vehicles shall be included in the item of work "Mobilization, Max. ____" and will not be paid for separately.
- 9. All fittings, hydrants, valves and castings removed during construction shall become the property of the City of Ann Arbor. The Contractor shall coordinate pick up by the City of Ann Arbor Public Works.

- 10. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structures sizes and/or types
- 11. Where pipes of different sizes or materials are joined, Engineer approved flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
- 12. 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.
- 13. In areas where edge drain cannot be installed in accordance with the details, the edge drain shall be installed at the depth as indicated on the plans, or as directed by the Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth less than 3.25' below the top of pavement.
- 14. Existing street name signs, guide, bus stop, and regulatory signs which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re—set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in the pay item "Minor Traf Devices".
- 15. All curb, sidewalk, driveway approach removals shall be approved by the Engineer before the work is performed.
- 16. Place 4" (minimum) thickness Class II Granular Material compacted to 95% of its max. dry density under concrete sidewalk as shown on the details. This work shall be included in the contract items "Subbase, CIP, Class II, Modified."
- 17. Place 8" (minimum) MDOT Dense Graded Aggregate 21AA, compacted to 95% of its max. dry density under drive approaches. This work shall be included in the contract item "Aggregate Base."
- 18. Prior to placing the adjacent paving pass on the leveling and wearing courses of HMA, the Contractor shall cut and remove 6" to 8" of the previously placed pavement by means of a coulter wheel. The Engineer reserves the right to reject any method(s) for cutting the pavement that does not provide a satisfactory edge as determined by the Engineer. Any method(s) employed by the Contractor shall be completely effective. The cut edge shall have a uniform bead of Craftco Joint Adhesive applied. The removal of this HMA material, cleaning the HMA surface and pavement edge, and condition of the resulting edge must be approved by the Engineer prior to proceeding with the placement of the succeeding pass of HMA. The base course of HMA will only have its edges tacked in accordance with standard paving practices. All costs associated with complying with these requirements will be included in the pay item "Edge Trimming".

EARHART ROAD BENCHMARKS						
BM # ELEV DESCRIPTION						
AA1033	814.118	CITY OF ANN ARBOR VERTICAL CONTROL STATION. BRASS DISC IN CENTER OF ROUNDABOUT				
1	814.540 EAST SIDE OF CONC. LIGHT BASE 55'+/- NORTH OF CL OF ENTRANCE TO CONCORDIA UNIV. MAINTENANCE BARN					
AA2032 843.380 CITY OF ANN ARBOR BENCH MARK						
2 883.330 SOUTH SIDE OF CONC. CROSS BASE JUST SOUTH OF ST PAUL LUTHERAN SCHOOL NW CORNER ENTRANCE OF SCHOOL DRIVEWAY.						
3 872.450 SOUTH FLANGE BOLT ON HYDRANT SE CORNER OF EARHART & PINE BRAE. 20'+/- FRO CL OF PINE BRAE, 36'+/- FROM CL OF EARHART. NEAR HOUSE #491						
4 855.970 NE BOLT ON CONC. BASE OF LIGHT POLE ON THE NW CORNER OF EARHART & WALDENWOOD, 75'+/- FROM CL OF EARHART.						
1	872.119	CHISEL "X" ON NE BOLT OF LAMP POST ON SOUTHSIDE OF SOUTH ENTRANCE TO GREENHILLS DRIVE AND 76'± EAST OF CENTERLINE OF EARHART ROAD.				
		TOP OF SW BOLT ON FLANGE OF HYDRANT, NW CORNER OF EARHART ROAD AND WALDENWOOD DRIVE.				
		BOAT SPIKE IN NE FACE OF UTILITY POLE AT SOUTHWEST CORNER OF GLAZIER WAY AND EARHART ROAD.				
5	892.352	RAILROAD SPIKE IN WEST FACE OF UTILITY POLE, EAST SIDE OF EARHART ROAD. 10' FROM BACK OF CURB AND 234'± NORTH OF CENTERLINE OF GLACIER HILLS DRIVE SOUTH				
6	RAILROAD SPIKE WEST FACE OF LITH ITY POLE AT THE SE CORNER OF FARHART R					
7	888.399	RAILROAD SPIKE WEST FACE OF UTILITY POLE ON EAST SIDE OF EARHART ROAD 8' FROM BACK OF CURB AND 148'± SOUTH OF CENTERLINE OF KIPLING DR.				
8	893.903	RAILROAD SPIKE WEST FACE OF UTILITY POLE ON THE EAST SIDE OF EARHART ROAD. 35'± FROM BACK OF CURB AND 95'± NORTH FROM CENTERLINE OF GLACIER HILLS DR. NORTH ENTRANCE				
9	892.060	CITY BENCHMARK #2009 DISC IN ROUND MONUMENT, 12.8'± S OF BACK OF CURB AND 13.1'± E OF BACK OF CURB IN THE SOUTH ISLAND AT THE INTERSECTION OF GLAZIER WAY & EARHART ROAD.				

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		
SANITARY	CITY OF ANN ARBOR PUBLIC WORKS	(734) 794–6350
STORM	W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD	(754) 754 5555
FORESTRY	ANN ARBOR, MI 48108	
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	
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397–4447
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SOUTHERLAND (313) 999-8300
PHONE AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103		STEVEN ALLSHOUSE (734) 996-5381
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016
FIBER OPTIC	WINDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	GREG SERICH (810) 244-3500
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188

PROVEMENTS (GEDDES - U

PUBLIC SERVICES - ENGIR EARHART ROAD IMPROVE

ITY OF ANN ARBOR - P
E: NTS

WING No.

SHEET No.

EXISTING LEGEND			PROPOSED LEGEND		
		WATER MAIN	∳+ HYDRANT (PLAN)	w	WATER MAIN
GATE VALVE IN BOX		WATER MAIN ABANDONED	♥ WATER GATE WELL		STORM SEWER
⊗ GATE VALVE IN WELL	<u> </u>	STORM SEWER	▼ REDUCER	s	SANITARY SEWER
	//	STORM SEWER ABANDONED	₩ATER GATE VALVE	F0	FIBER OPTIC
W WATER VAULT	<i>S</i>	SANITARY SEWER	WATER STOP BOX	F	ELECTRICAL
WELL		SANITARY SEWER ABANDONED			
			W WATER VAULT		CENTERLINE OF DITCH
CATCH BASIN (SQ)	g	GAS MAIN	INLET		CENTERLINE OF ROAD
⊕ CATCH BASIN (RD)	— g (DEAD)—— —— —— ——	GAS MAIN (DEAD)	DOUBLE INLET	////	FENCE
O STORM MANHOLE	°\\\0	ELECTRICAL OVER HEAD	INLET JUNCTION CHAMBER	:·:·:·	GRAVEL
☐ NON-CURB CATCH BASIN (SQ)		ELECTRICAL UNDER GROUND	ROUND CATCH BASIN		SILT FENCE
) END SECTION	e duct bank	ELECTRICAL DUCT BANK	STORM MANHOLE		PROTECTIVE FENCE
O SANITARY MANHOLE	· oht ·	TELEPHONE OVER HEAD	DRAIN ARROW	. • • • • • • •	GUARDRAIL
O CLEAN-OUT	tt	TELEPHONE UNDER GROUND	FLARED END SECTION		LOT/UNIT
• POST	t duct bank		SANITARY MANHOLE		CURB
PEDESTRIAN SIGNAL	T SUCCE BOTT	TELEPHONE DUCT BANK	⊚ CLEAN−OUT		TEMPORARY GRADING PERMI
♭ SIGN		CABLE TV OVER HEAD	• BARREL	800 <i></i>	CONTOUR MAJOR
☐ HAND HOLE		CABLE TV UNDER GROUND			
	fo	FIBER OPTIC	→ SIGN	799	CONTOUR MINOR
	fo duct bank	FIBER OPTIC DUCT BANK	PUSH BUTTON		WATER EASMENT
₩ FLOOD LIGHT			HAND HOLE		STORM EASEMENT
① UNKNOWN MANHOLE		BOUNDARY			SANITARY EASEMENT
TELEPHONE MANHOLE		BUILDING			R.O.W.
TELEPHONE RISER		CENTERLINE OF DITCH			LIMITS OF CONSTRUCTION
GAS VALVE		CENTERLINE/CROWN OF ROAD			LIMIT OF GRADING
O GAS VENT		CONTOUR MAJOR		احالحالحالحالحالحالحالحالحالحالحالحالحال	STONE WALL
⊞ GAS BOX	799	CONTOUR MINOR			STONE WALL
Ŭ ELECTRICAL RISER		EDGE OF WATER			DETECTABLE WARNING
		FLOODPLAIN			
		I LOODI LAIN			ASPHALT
Ø UTILITY POLE	—//—//—//—	FENCE			
○ LAMP POLE	:::	GRAVEL			CONCRETE
GUY ANCHOR		GUARDRAIL			CONCRETE
Q GUY POLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	STONE WALL			
MONITORING WELL		R. O. W.			SIDEWALK
■ MAILBOX		TREELINE			
SOIL BORING	ale ale				
△ TRAVERSE POINT	W//W//	WETLAND		(•)	TREE (DECIDUOUS)
		EDGE OF BRUSH			
		HEDGE			
• IRON PIPE		1123 32		ZMY	
• MON BOX				7 7	
		TREE (DECIDUOUS)		> • >	TREE (CONIFEROUS)
	• }	TREE (DECIDOOS)		7, 1	
				TW	
	My				
				$\{(\times)\}$	TREE TO BE REMOVED (DEC
	> • >	TREE (CONIFEROUS)			
	8, 3	SHRUB (DECIDUOUS)			TREE TO BE BELIEVED (CO.
					TREE TO BE REMOVED (CON
		STUMP		ν V ^ν	
		4		\times	
		R.L.			STUMP TO BE REMOVED
		TREE TO REMAIN & PROTECT (DECIDUOUS)	·)		
		CRITICAL ROOT ZONE (C.R.Z.) = DIAMETE	ER BREAST HEIGHT (INCHES) X 10		
	My c:	2.7.			
	7 C.		(5)		
	5 - 3	TREE TO REMAIN & PROTECT (CONIFEROUS CRITICAL ROOT ZONE (C.R.Z.) = DIAMETE	S) ER BREAST HEIGHT (INCHES) X 10		
		, , ,	,		

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE: NTS

EARHART ROAD IMPROVEMENTS (GEDDES

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

2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR. THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.

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

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

SEQUENCE OF EROSION CONTROL MEASURES:

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

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM

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

FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REQUIRED VALUE

ASTM D-4751

ASTM D-4491

REQUIRED VALUE

ASTM D-4751

ASTM D-4491

TEST METHOD

40 US SIEVE

40 GAL/MIN/SQ FT 0.55 SEC -1

TEST METHOD

20 US SIEVE

200 GAL/MIN/SQ FT 1.5 SEC-1

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

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

REGULAR FLOW SILTSACK

PROPERTIES

GRAB TENSILE STRENGTH GRAB TENSILE ELONGATION

APPARENT OPENING SIZE

HI-FLOW SILTSACK

PROPERTIES GRAB TENSILE STRENGTH GRAB TENSILE ELONGATION

APPARENT OPENING SIZE

OIL-ABSORBANT SILTSACK

PUNCTURE MULLEN BURST TRAPEZOID TEAR

FLOW RATE PERMITTIVITY

MULLEN BURST RAPEZOID TEAR

FLOW RATE PERMITTIVITY

- 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.

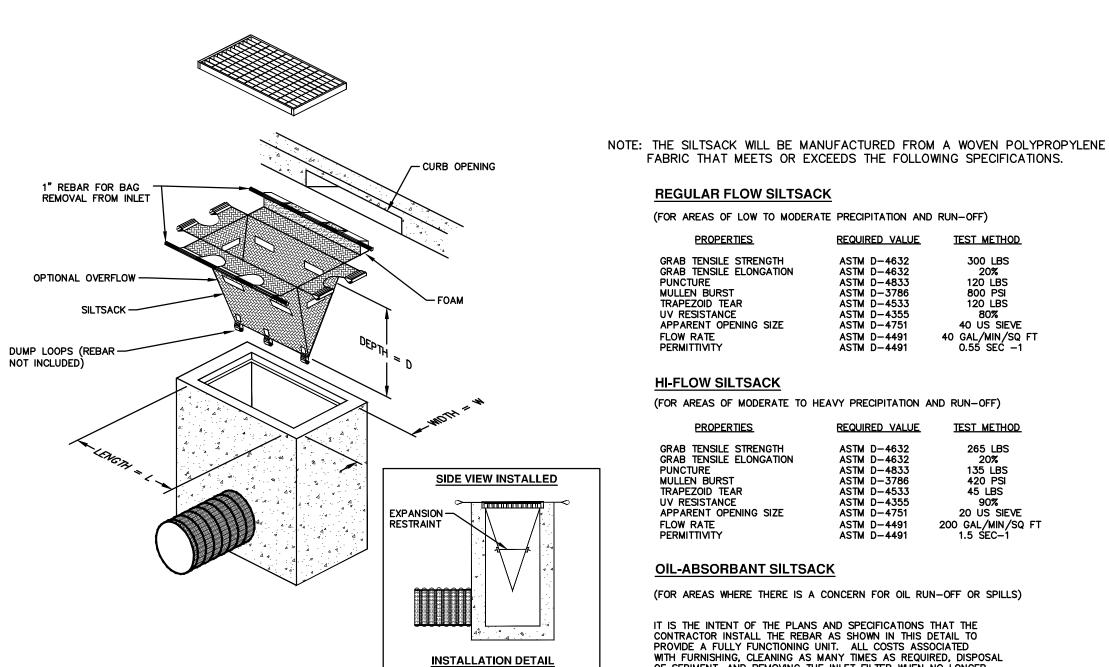
TEMPORARY SEEDING:

- 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 = \$17.500.

> IMPERVIOUS PROJECT AREA 2.19 AC - EARHART ROAD

TOTAL AREA OF PROPOSED DISTURBANCE 2.45 AC - EARHART ROAD

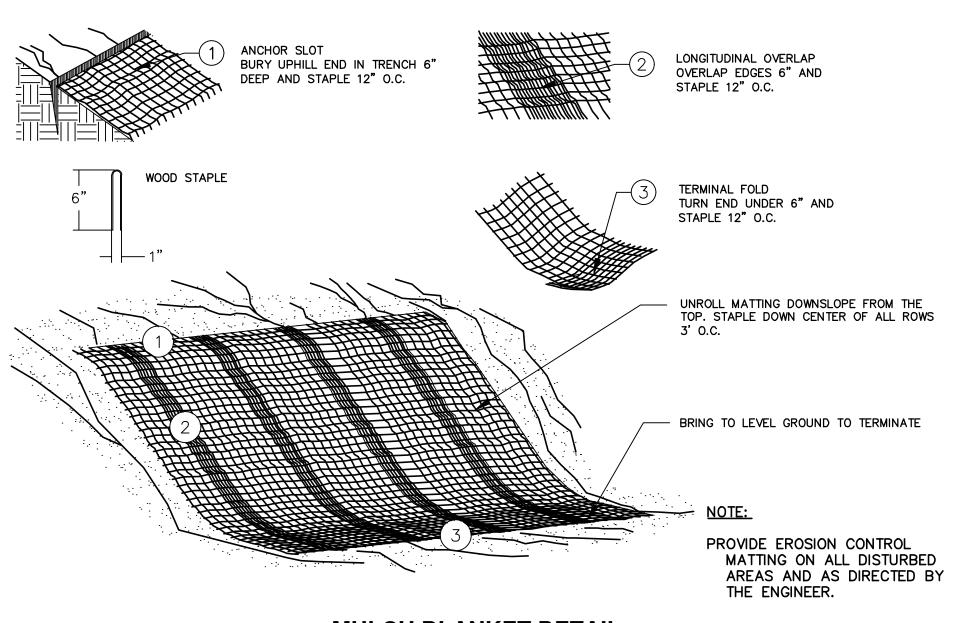


SILTSACK DETAIL

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

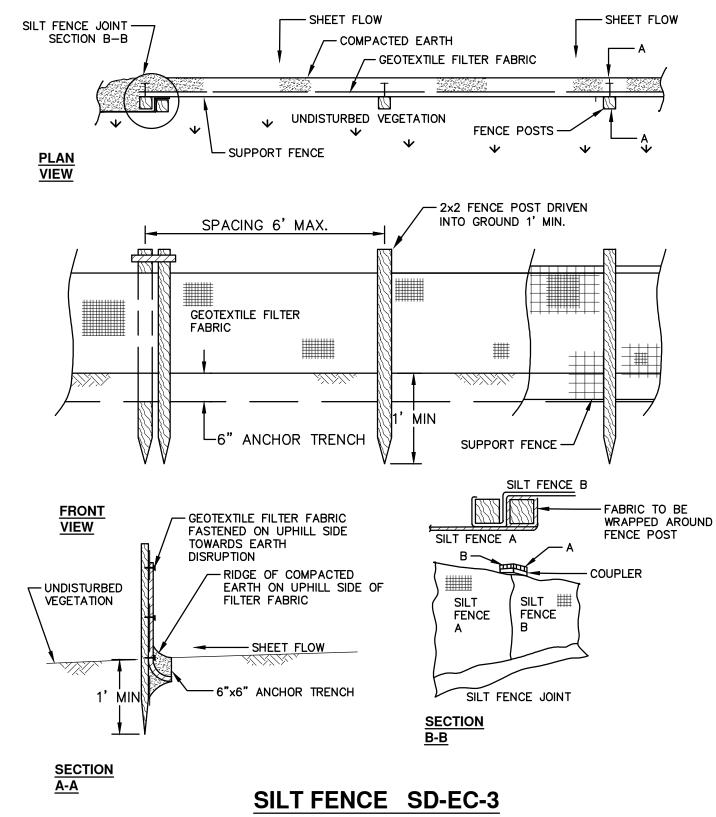
IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS THAT THE CONTRACTOR INSTALL THE REBAR AS SHOWN IN THIS DETAIL TO WITH FURNISHING, CLEANING AS MANY TIMES AS REQUIRED, DISPOSAL OF SEDIMENT, AND REMOVING THE INLET FILTER WHEN NO LONGER NEEDED IS INCLUDED IN THE ITEM OF WORK AND WILL NOT BE

PAID FOR SEPARATELY.



MULCH BLANKET DETAIL

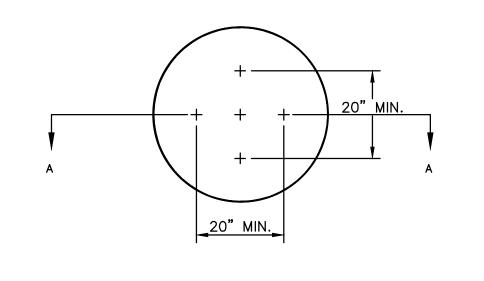
APPLIES TO ALL AREAS TO BE PERMANENTLY RESTORED WITH GRASS. SEE LANDSCAPE PLANS FOR MORE DETAILS.





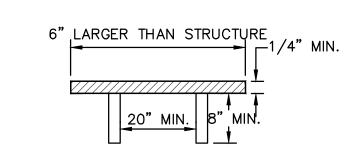
ANN ARB

SHEET No. 4 OF 74



NOTE: PLATE MAY BE CIRCULAR, SQUARE OR RECTANGULAR

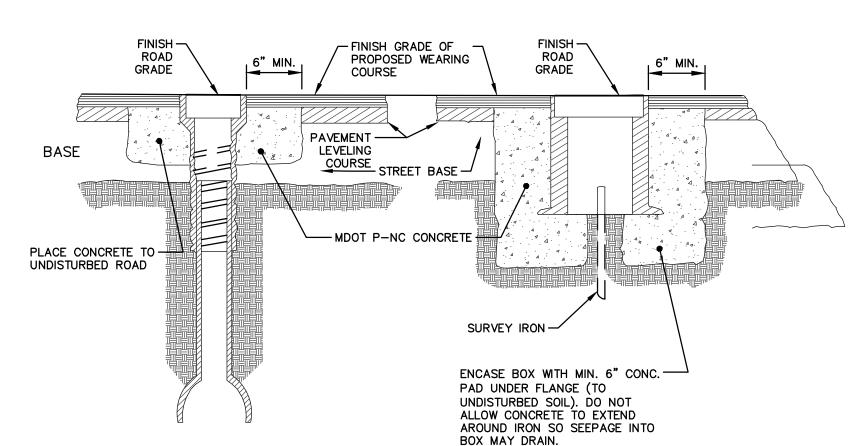
SECTION A - A



1/4" MIN. THICKNESS AND SUFFICIENT TO CARRY THE CONSTRUCTION LOAD.

STRUCTURE PLATE SD-GU-8

WATER OR GAS VALVE BOX ADJUSTMENT

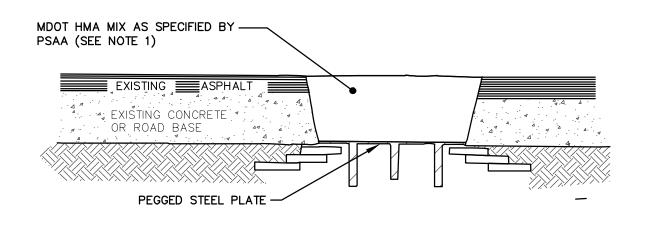


MONUMENT BOX ADJUSTMENT

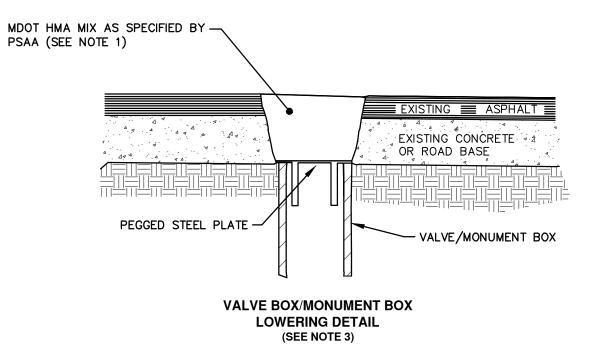
NOTES:
1. GAS VALVE BOXES TO BE ADJUSTED BY THE GAS COMPANY

- 2. PLACE CENTER OF [MONUMENT] BOX OVER SURVEY IRON.
- 3. RAISE CASTING TO PROPOSED FINISH STREET GRADE AFTER PLACEMENT OF LEVELING COURSE(S) AND PRIOR TO PLACING FINAL

VALVE AND MONUMENT BOX ADJUSTMENT SD-GU-6



MANHOLE LOWERING DETAIL

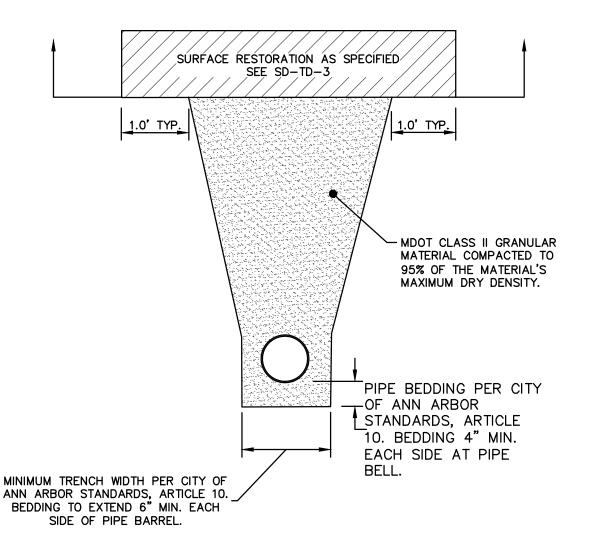


NOTES:

1. IF TRAFFIC IS TO BE MAINTAINED ON THE ROADWAY BEFORE OR AFTER THE COLD MILLING OPERATION, THE STRUCTURE SHALL BE LOWERED TO THE EXTENT THAT A MINIMUM OF THREE(3) INCHES ASPHALT MATERIAL MOOT HMA MIX AS

- PLATE IS A MINIMUM OF FOUR(4) INCHES BELOW THE PROPOSED ROAD GRADE AND THE RESULTING VOID SHALL BE FILLED WITH MOOT HMA MIX AS SPECIFIED BY PSAA OR ENGINEER APPROVED EQUAL.
- 3. WHERE A MONUMENT IS TO BE LOWERED, THE CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF 48 HOURS WRITTEN NOTICE SO THAT THE MONUMENT CAN BE PROPERLY WITNESSED OR PROTECTED. FAILURE TO DO SO SHALL

MANHOLE & VALVE/MONUMENT BOX LOWERING SD-GU-9



NOTES:

MORTAR JOINT

OUTLET PIPE -

AS SPECIFIED

MORTAR JOINT -

MIN. 4" 21AA STONE

NOTES:

(EDGE-OF-METAL)

FIRST PIPE JOINT

BEDDING AND BACKFILL UNDER BASE AND TO

- 1. ALL TRENCH EXCAVATION, BEDDING, BACKFILLING, AND SURFACE RESTORATION SHALL COMPLY WITH CITY OF ANN ARBOR STANDARDS, ARTICLE 10.
- 2. TRENCH DETAILS SHOW TYPE OF BACKFILL AND TRENCHING REQUIREMENTS ONLY.
- 3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. AND CITY STANDARDS.
- 4. PIPE BEDDING THICKNESS UNDER CONCRETE PIPE 66" OR LARGER SHALL BE INCREASED TO 6".
- 5. SEE SD-TD-1B FOR SANITARY BEDDING AREA DETAIL. SEE SD-TD-4 FOR EDGE DRAIN BEDDING AND BACKFILL.
- 6. SURFACE RESTORATION SHALL NOT BE INCLUDED IN THE UNIT PRICE FOR PIPE AND WILL BE PAID FOR SEPARATELY.

UTILITY TRENCH - TYPE IA EXCLUDING SANITARY SEWER AND EDGE DRAIN SD-TD-1A

CASTING AS SPECIFIED

CASTING AND BRICK(S) POINTED WITH MORTAR

-PRECAST INTEGRAL BASE

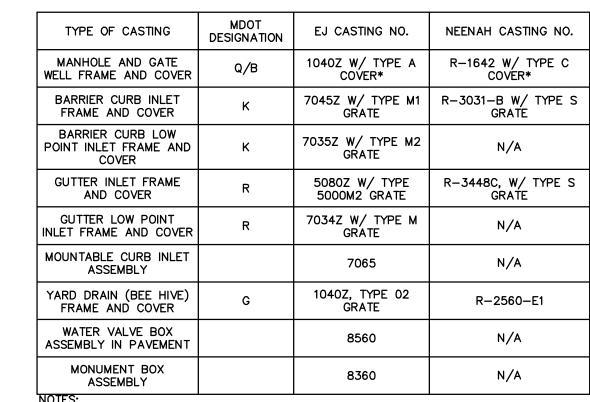
SHALL BE MINIMUM 3000 PSI REINFORCED CONCRETE

BRICK COURSES FOR ADJUSTING

CASTING TO FINISH GRADE OR PRECAST ADJUSTMENT RINGS.

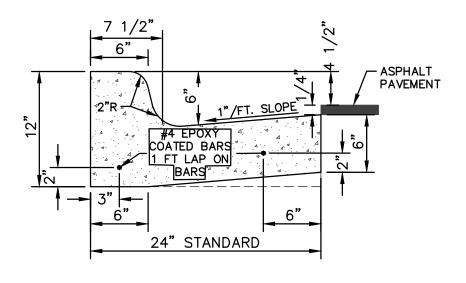
-MIN.(1)-MAX.(3)

-6" WRAPPED EDGE DRAIN



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

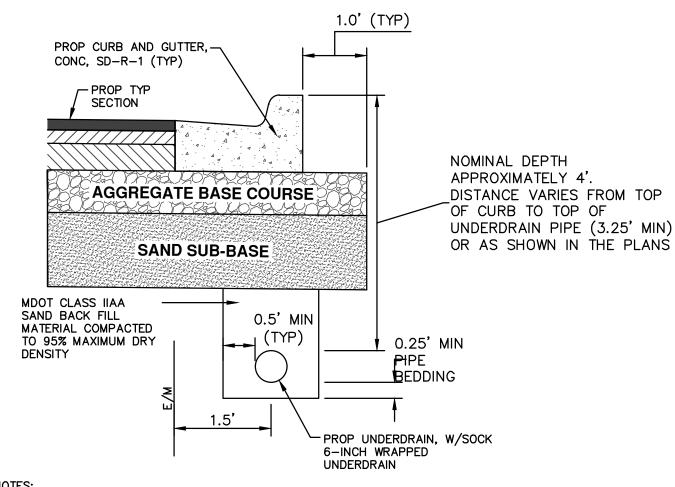
STANDARD CASTING SCHEDULE SD-GU-1



NOTES:

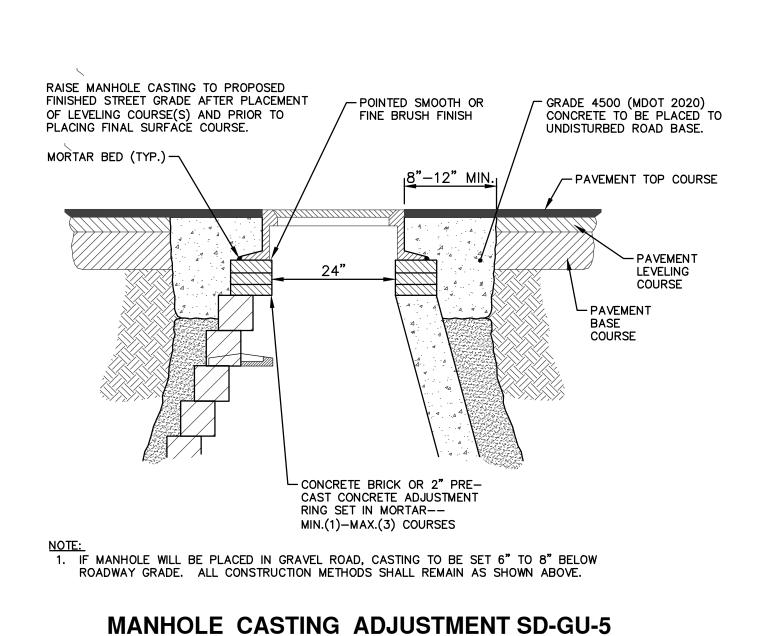
- 1. BARRIER CURB AND GUTTER ON ASPHALT STREETS SHALL CONFORM TO THIS DETAIL.
- 2. BARRIER CURB AND GUTTER ON CONCRETE STREETS SHALL CONFORM TO MDOT CURB AND GUTTER DETAIL F3.

CONCRETE CURB AND GUTTER SD-R-1



NOTES:

- 1. IN AREAS WHERE EDGE DRAIN CANNOT BE INSTALLED IN ACCORDANCE WITH THE DETAIL, THE EDGE DRAIN SHALL BE INSTALLED AT THE DEPTH AS INDICATED ON THE PLANS, OR AS DIRECTED BY ENGINEER. IN NO CASE SHALL THE EDGE DRAIN BE INSTALLED AT A GRADE LESS THAN 0.50% OR AT DEPTH OF LESS THAN 2' BELOW TOP OF PROPOSED PAVEMENT.
- 2. FOR PAVEMENT BASE AND SUBBASE THICKNESS, SEE TYPICAL PAVEMENT CROSS-SECTION(S)
- 3. TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY
- 5. EDGE DRAINS SHALL BE CONNECTED TO A DRAINAGE STRUCTURE AND WILL EXTEND A MINIMUM OF 100
- 6. ADDITIONAL LENGTHS OF EDGE DRAIN MAY BE REQUIRED BY THE ENGINEER BASED ON EXISTING SITE



SPECIFIED BY PSAA. OR ENGINEER APPROVED EQUAL, REMAINS TO SUPPORT TRAFFIC. 2. IF THE ROADWAY BEING MILLED IS CLOSED TO TRAFFIC, THE STRUCTURE SHALL BE LOWERED SUCH THAT THE STEEL

RESULT IN THE ENGINEER.REPLACING SAID MONUMENT AT THE CONTRACTORS EXPENSE.

PRECAST SINGLE INLET SD-ST-3

2. FRONT EDGE OF INLET CASTING SHALL BE FLUSH WITH FRONT EDGE OF GUTTER

6" 24" DIA.

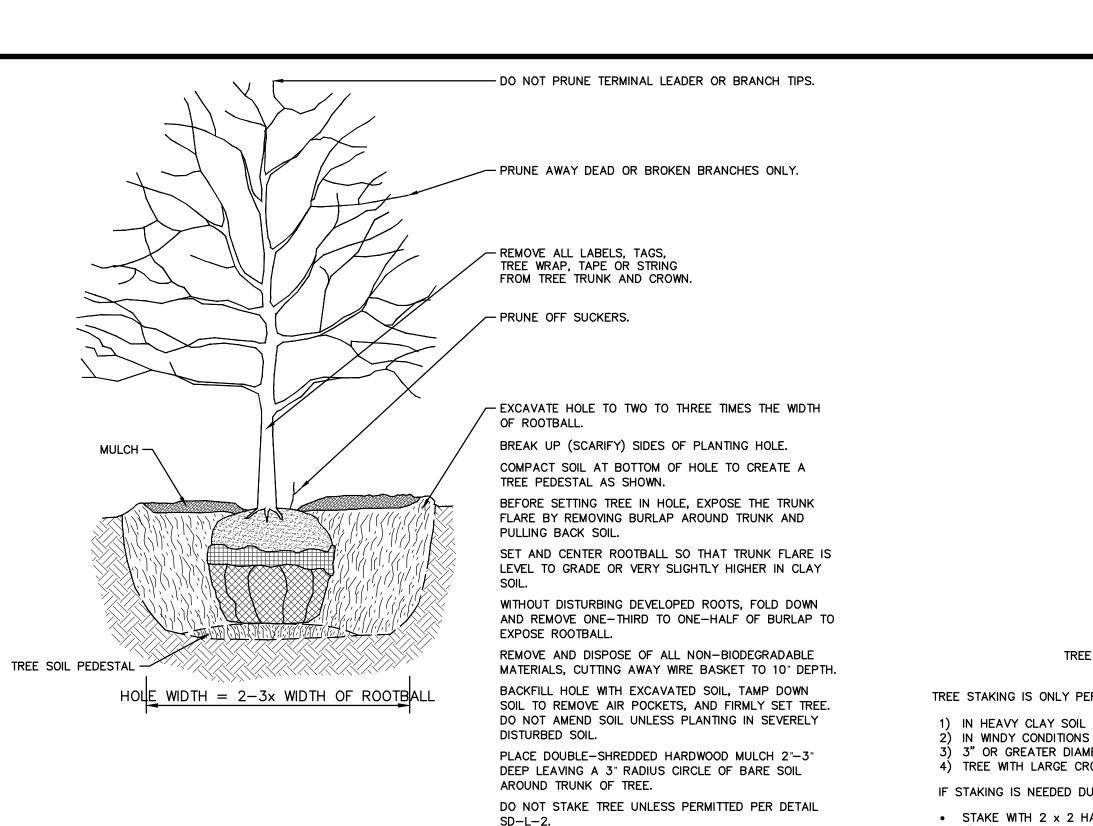
1. MAY BE USED WITH SINGLE OUTLET PIPE AND SINGLE INLET PIPE.

4. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS FEET UPSLOPE FROM THE STRUCTURE. CONDITIONS, INCLUDING CONDITION OF THE SUBGRADE.

SHEET No.

5 OF 74

TYPICAL EDGE DRAIN TRENCH SD-TD-4



NO UTILITIES SHALL BE PERMITTED IN OR UNDER THE

CONTRACTION JOINT REQ'D

WHEN WIDTH EXCEEDS 16'

DRIVE

1/2" EXPANSION JOINT

OR 21AA DENSE GRADED

-6" CLASS II GRANULAR MATERIAL

CITY OF ANN ARBOR STANDARDS.

AGGREGATE COMPACTED PER

- MATCH EX.

© EDGE

OF GUTTER

TOP OF CURB

┌ 1/4" PER

MAX.

\ FOOT (2%) T-

PLANTING HOLE EXCEPT WHERE TREE TUNNELING IS

PERMITTED PER SD-L-4.

TREE PLANTING SD-L-1

HEIGHT OF CURB SHALL

TAPER TO O" AT PT

FLOW LINE -

CURB & GUTTER. END $3"\pm$ T = 8" FOR OTHER USES

PER TABLÉ A, ARTICLE 6 OF CITY STANDARDS

PAVEMENT

CARRY 2 EA. – #4 EPOXY —

FROM EXP. JOINT

`(TYP.)

-1/2" EXPANSION JOINT - CONTRACTION JOINTS

CONTRACTION JOINTS -

3/8" PER FOOT -

SEC. A-A

(3% MIN. - 13% MAX.)

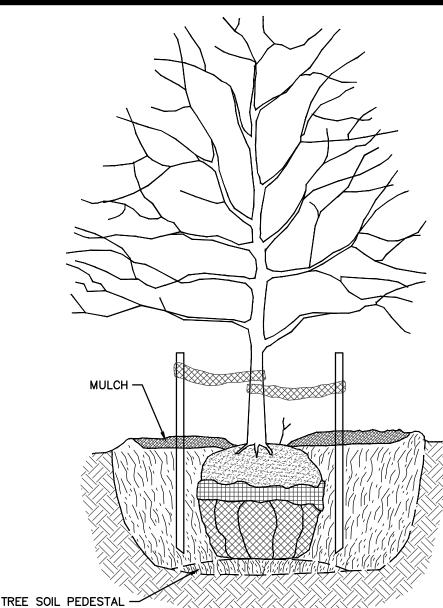
COATED RE-BAR THROUGH T = 6" FOR SINGLE FAMILY OR DUPLEX USES

1. MINIMUM REQUIREMENT FOR DRIVE APPROACH TO BE MDOT 3500 CONCRETE.

2. R (RADIUS) AND W1 (OPENING WIDTH) AND W2 (CURB CUT WIDTH) AS REQUIRED

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.



TREE STAKING IS ONLY PERMITTED UNDER ONE OR MORE OF THE FOLLOWING CIRCUMSTANCES:

- 1) IN HEAVY CLAY SOIL
- 3) 3" OR GREATER DIAMETER TREE TRUNK
- 4) TREE WITH LARGE CROWN

IF STAKING IS NEEDED DUE TO THESE CONDITIONS:

- STAKE WITH 2 x 2 HARDWOOD STAKES, OR APPROVED EQUAL, DRIVEN 6"-8" OUTSIDE OF ROOTBALL.
- LOOSELY STAKE TREE TRUNK TO ALLOW FOR TRUNK FLEXING.
- STAKE TREES JUST BELOW FIRST BRANCH WITH 2"-3" WIDE BELT-LIKE NYLON OR PLASTIC STRAPS (2 PER TREE ON OPPOSITE SIDES OF TREE).
- CONNECT STRAPS FROM TREE TO STAKE HORIZONTALLY.
- DO NOT USE ROPE OR WIRE THROUGH A HOSE.
- REMOVE ALL STAKING MATERIALS AFTER 1 YEAR.

<u>12"</u>

SD-DDA-1 THROUGH SD-DDA-7.

FOR ALL OTHER USES.

DRIVE APPROACHES.

1. STANDARD SIDEWALK WIDTH SHALL BE 5'. 2. STANDARD SLAB LENGTH SHALL BE 5'.

EXTENSION

TREE STAKING SD-L-2

SIDEWALKS IN THE DDA SHALL BE CONSTRUCTED PER DETAILS

3. MINIMUM SLAB LENGTH SHALL BE 3' AND MAXIMUM 7'.

5. SIDEWALK THICKNESS (T1) SHALL BE INCREASED AT DRIVE

APPROACHES TO 6" FOR SINGLE OR DUPLEX USES AND TO 8"

7. MINIMUM BASE THICKNESS (T2) SHALL BE INCREASED TO 6" AT

BASE IS STABLE AND FREE OF ORGANIC OR DELETERIOUS

INTERSECTIONS AS DIRECTED AND SHALL COMPLY WITH THE

RIGHT-OF-WAY TO PROTECT AND SAVE TREES, SLOPES, ETC.,

11. EXPANSION AND CONTRACTION JOINTS SHALL BE PROVIDED PER

SIDEWALK AND CURB & GUTTER JOINT SPACING DETAIL SD-R-10.

CURVES IN THE SIDEWALK SHALL HAVE A MINIMUM 5' RADIUS,

REQUIREMENTS OF MDOT DETAIL R-28 (LATEST VERSION).

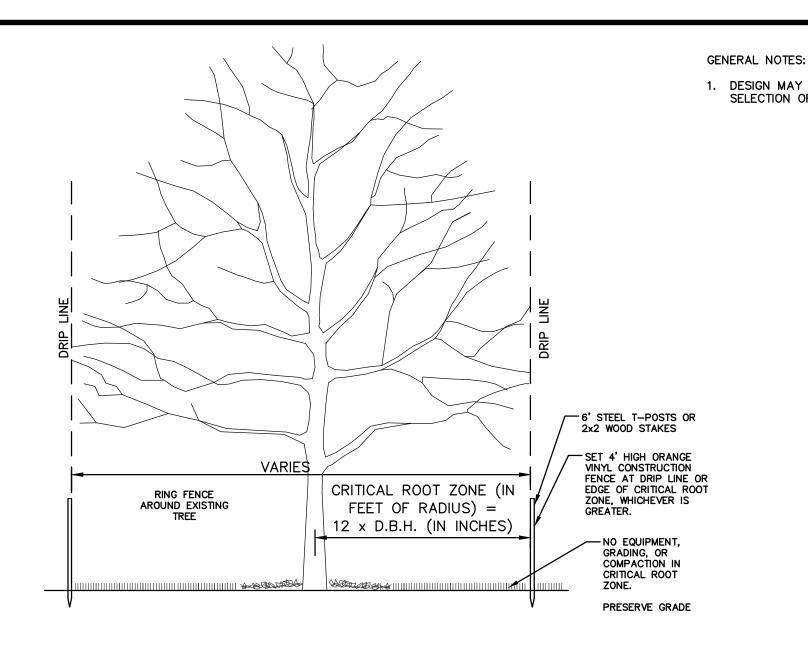
9. SIDEWALK RAMPS SHALL BE CONSTRUCTED AT STREET

10. If SIDEWALKS ARE APPROVED TO MEANDER WITHIN THE

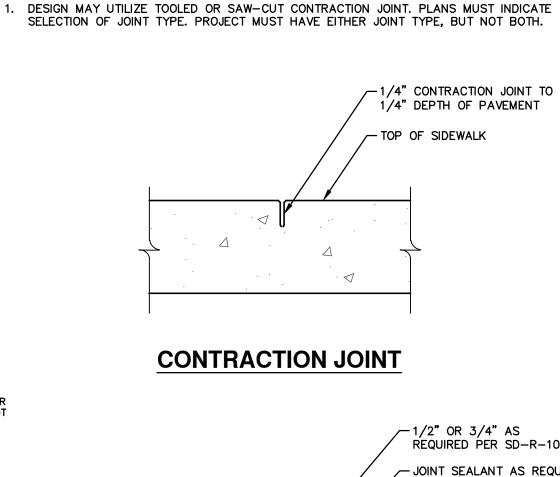
WITH A MINIMUM 3' LAWN EXTENSION.

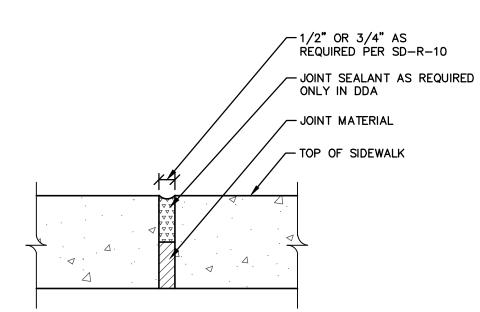
4. MINIMUM SIDEWALK THICKNESS (T1) SHALL BE 4".

6. MINIMUM BASE THICKNESS (T2) SHALL BE 4".



TREE PROTECTION SD-L-3





SIDEWALK CURB AND GUTTER JOINTS SD-R-11

- CURB OPENING

DEBRIS BARRIER

SIDE VIEW INSTALLED

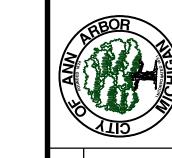
INSTALLATION DETAIL

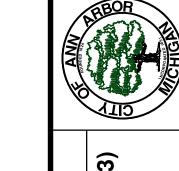
RESTRAINT

OBSTRUCT

OUTLET PIPE

EXPANSION JOINT





CITY

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.

12" - CLASS II GRANULAR MATERIAL OR 21AA DENSE GRADED AGGREGATE COMPACTED PER CITY OF ANN ARBOR STANDARDS. 8. NATIVE MATERIAL IS ACCEPTABLE FOR SIDEWALK REPLACEMENT IF GUTTER CONTRACTION JOINTS -----1/2" EXPANSION JOINTS -

-

3/4" EXPANSION JOINTS

CONC. DRIVEWAY 5'OR AS SPECIFIED ■ R.O.W.

1. MAXIMUM SPACING BETWEEN ALL EXPANSION JOINTS SHALL BE 300'. 2. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALKS AT THE EXTENSION OF ALL PROPERTY LINES. 3. EXPANSION JOINTS SHALL BE PLACED AT DRIVE APPROACH EDGES

PER STANDARD DRIVE APPROACH DETAILS SD-R-6 THROUGH SD-R-8. 4. EXPANSION JOINTS SHALL BE PLACED AT SIDEWALK INTERSECTIONS AS

5. EXPANSION JOINTS SHALL BE PLACED IN CURB AND GUTTER AT PC AND PT OF INTERSECTION RADII. 6. CONTRACTION JOINT SPACING FOR CURB AND CURB SHALL BE 10'

STANDARD AND 8' MINIMUM. 7. CONTRACTION JOINTS FOR SIDEWALKS SHALL BE PLACED AT ALL SLAB ENDS (5' TYPICAL, 3' MINIMUM TO 7' MAXIMUM).

SIDEWALK CROSS SECTION SD-R-9

SIDEWALK AND CURB & GUTTER JOINT SPACING SD-R-10

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

REBAR FOR BAG -REMOVAL FROM INLET

OVERFLOW OPENINGS -

INLET FILTER -

DUMP LOOPS -

INLET PROTECTION SD-SESC-1

SHEET No. 6 OF 74

ALSO PROVIDE SHAKESPEARE OPAB-2035 ANCHOR BOLT KIT FOR EACH LIGHT POLE. ANCHOR BOLTS TO BE HOT-DIPPED GALVANIZED, 30" LONG, WITH 4" HOOK, AND A 4" PROJECTION ABOVE FOUNDATION.

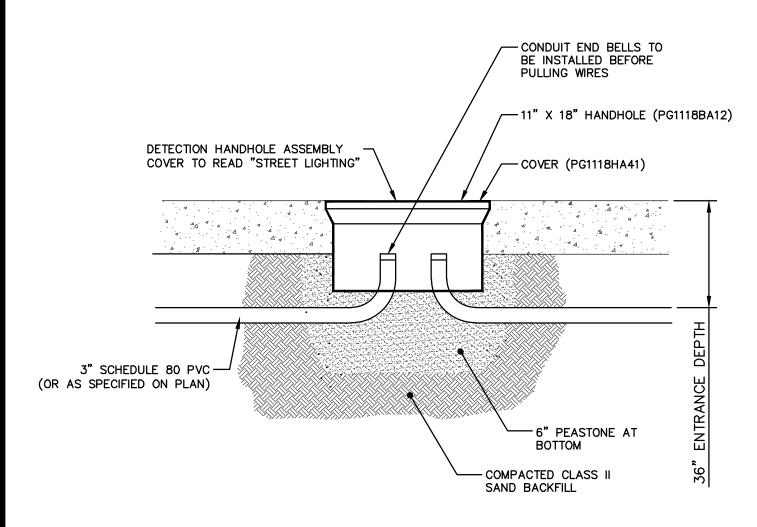
ANCHOR BOLT PROJECTION DETAIL

NOTES:

1. HOLE TO BE AUGERED. MINIMIZE DISTURBANCE OF IN—SITU SOILS DURING AUGERING.

- 2. CONTRACTOR TO PROVIDE PREFABRICATED ANCHOR BOLT BUILD-UP.
- 3. THE CITY WILL INSPECT THE AUGERED HOLE AND THE ANCHOR BOLT BUILD-UP AND PROVIDE WRITTEN APPROVAL PRIOR TO THE PLACEMENT OF CONCRETE.
- 4. NO WATER IS TO BE IN HOLE AT TIME OF CONCRETE PLACEMENT.
- 5. CONCRETE SHALL BE VIBRATED DURING PLACEMENT.
- 6. CONTRACTOR WILL PROVIDE NECESSARY CONDUIT FOR CONDUCTOR ENTRY.
- 7. COPPER CLAD GROUND ROD (1 REQUIRED) TO BE 5/8" DIA. x 8'-0".
- 8. CONDUIT TO EXTEND 1-2" ABOVE BASE. CABLES TO EXTEND 6" OUTSIDE OF HAND HOLE.
- 9. GROUND CABLE SHALL BE #6 SOFT BARE COPPER WIRE WELDED TO GROUND ROD WITH 24" SLACK ABOVE FOUNDATION TOP. "THE NEUTRAL AT THE POLE IS TO BE CONNECTED TO THIS GROUND CABLE.

STREETLIGHT FOUNDATION SD-SL-1



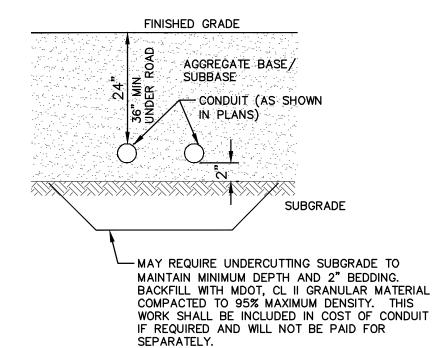
INSTALLATION NOTE:

THE CONDUIT SHALL BE LOWERED TO A MINIMUM ENTRANCE DEPTH OF 36" BELOW TOP OF THE HANDLE OVER A DISTANCE OF 10 FT. ON EACH SIDE OF THE HANDHOLE ASSEMBLY

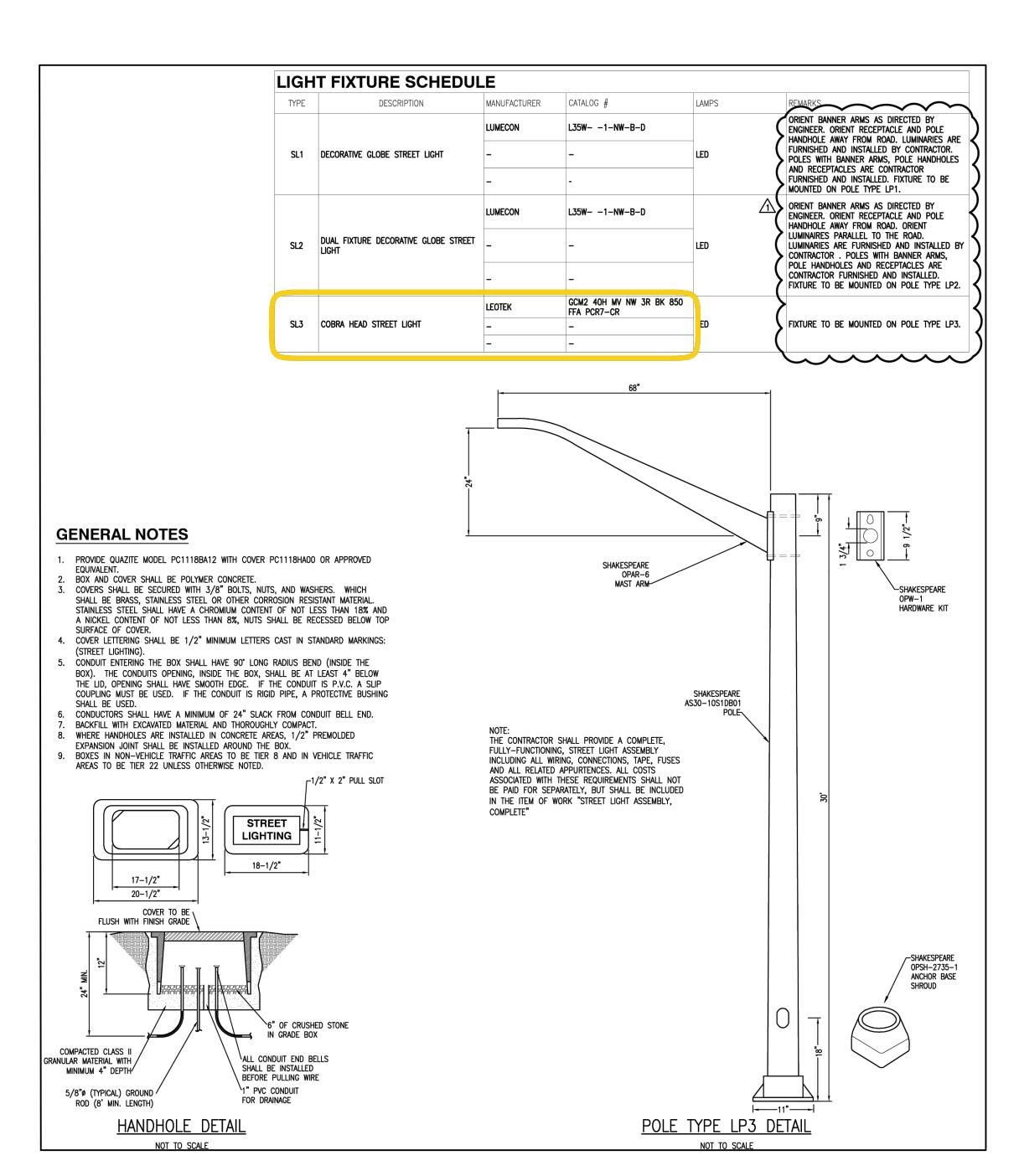
IF THE CONDUIT HAS TO ENTER THE HANDHOLE AT A DEPTH GREATER THAN 36" DEEP DUE TO CONFLICT, THEN 90 DEGREE SWEEPS SHALL BE PROVIDED."

ELECTRICAL HANDHOLE ASSEMBLY SD-E-3

BACKFILL CONDUIT AND HANDHOLE W/CLASS II SAND. IF PLACED IN GREENBELT, PLACE 4" OF TOP SOIL.



CONDUIT PLACEMENT DETAIL SD-E-2



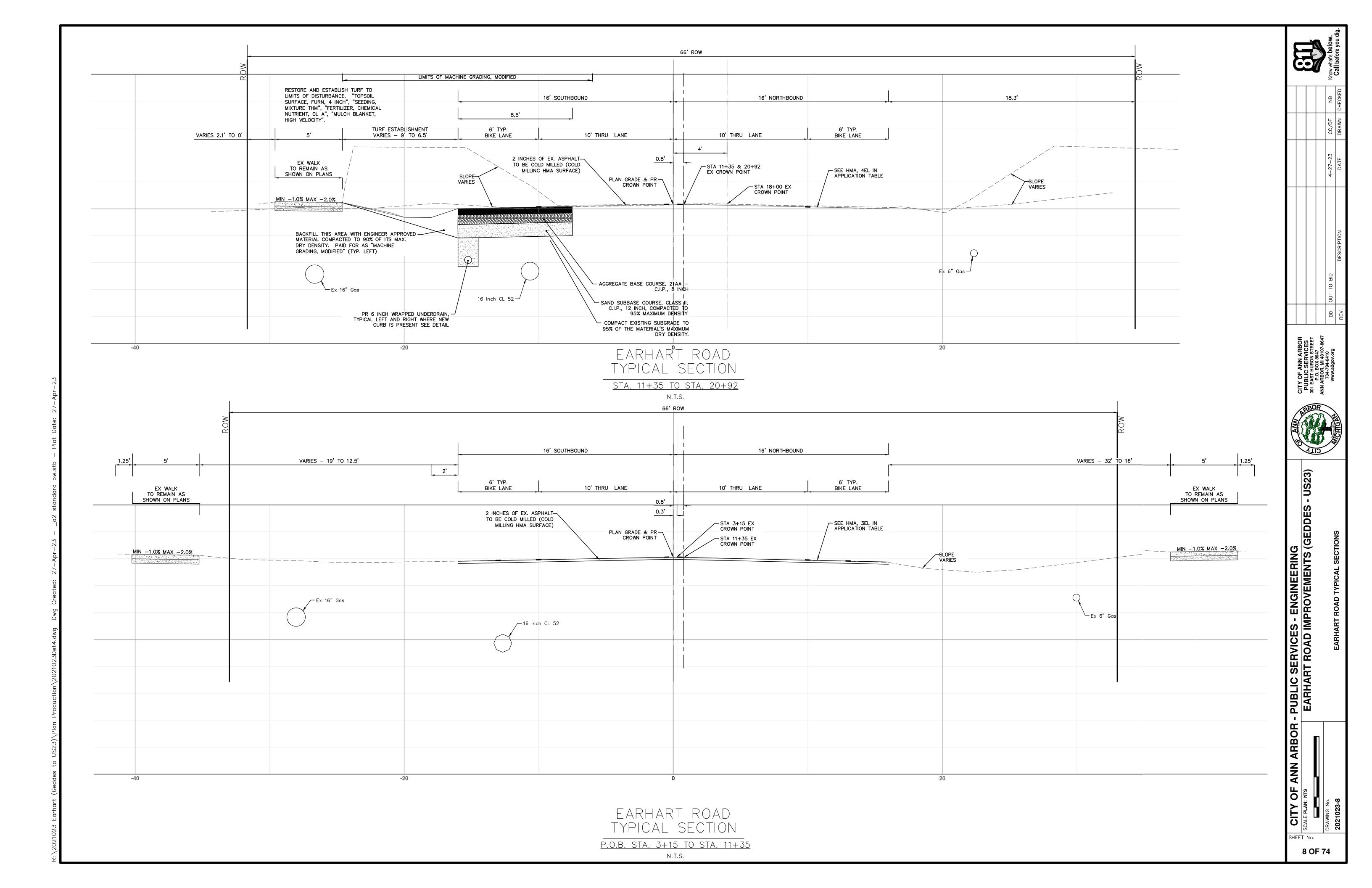
COBRA HEAD STREET LIGHT

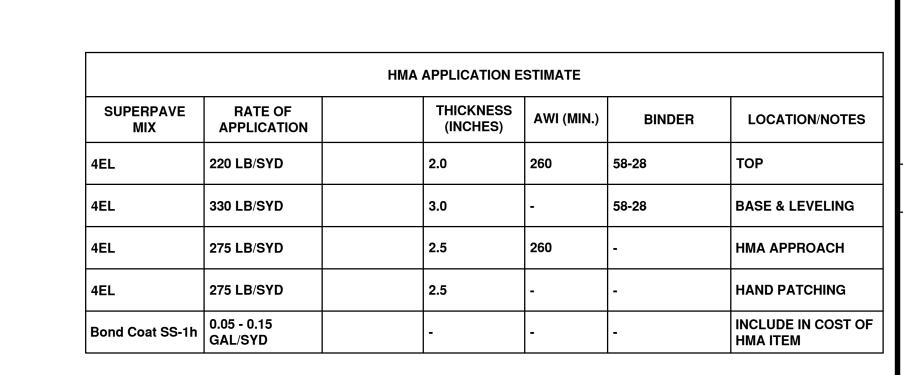
ANN ARBOR

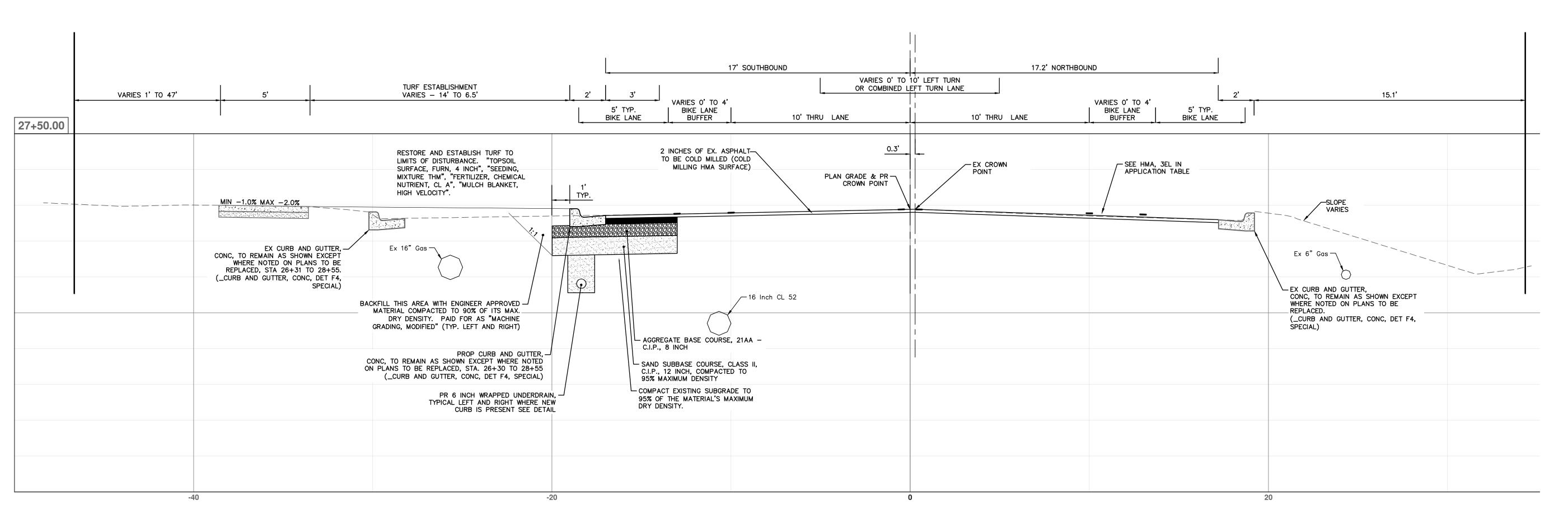
SHEET No. 7 OF 74

OF

CITY







EARHART ROAD Typical section STA. 20+92 TO STA. 31+00 P.O.E.

N.T.S.

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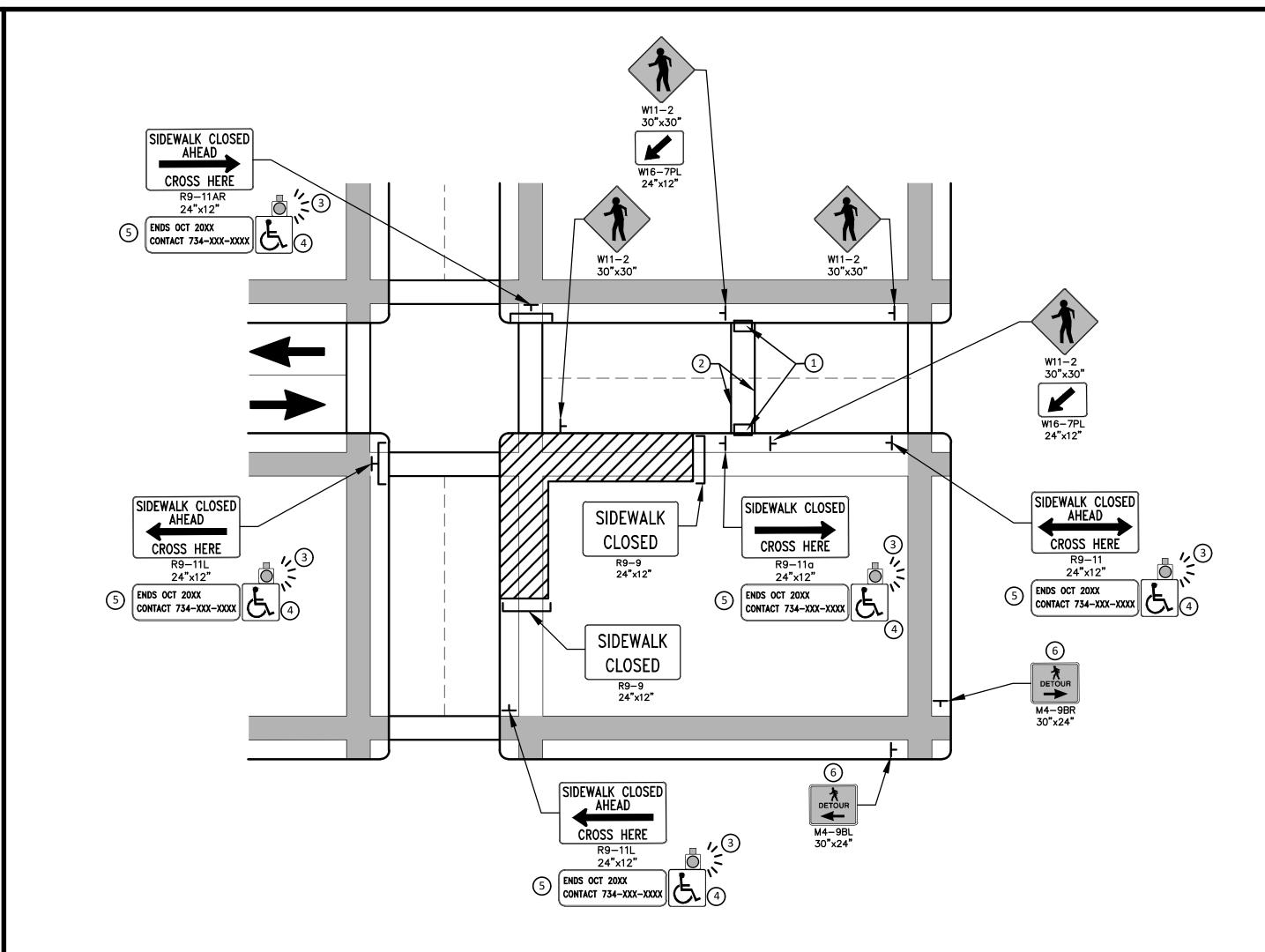


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
SCALE PLAN: NTS

EARHART ROAD IMPROVEMENTS (GEDDES

SHEET No.

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:

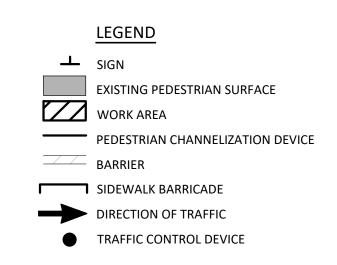
- 1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
- 2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
- 3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR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





(GEDDI **IMPROVEMENTS**

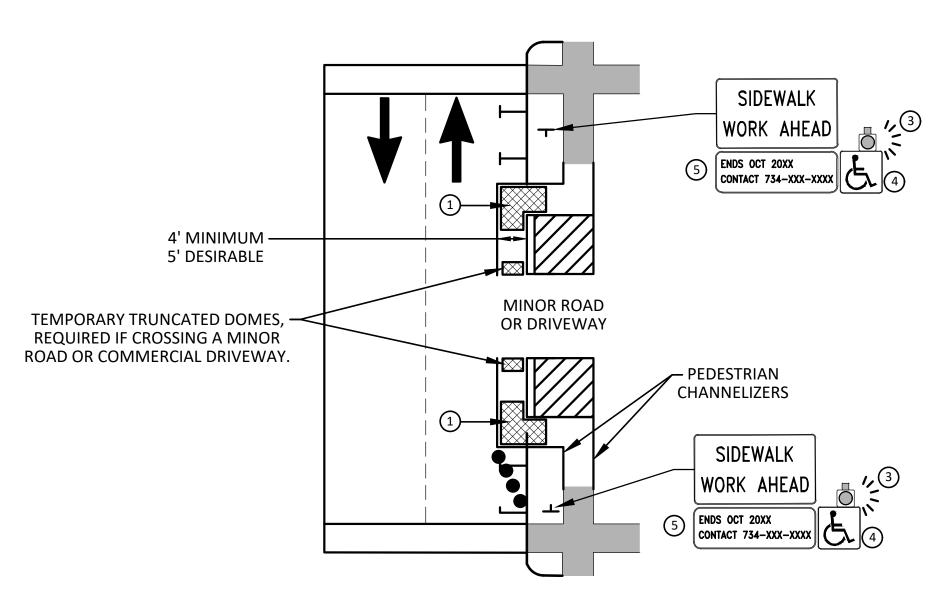
ROAD

ARB

BYPASS ON ADJACENT AVAILABLE RIGHT OF WAY

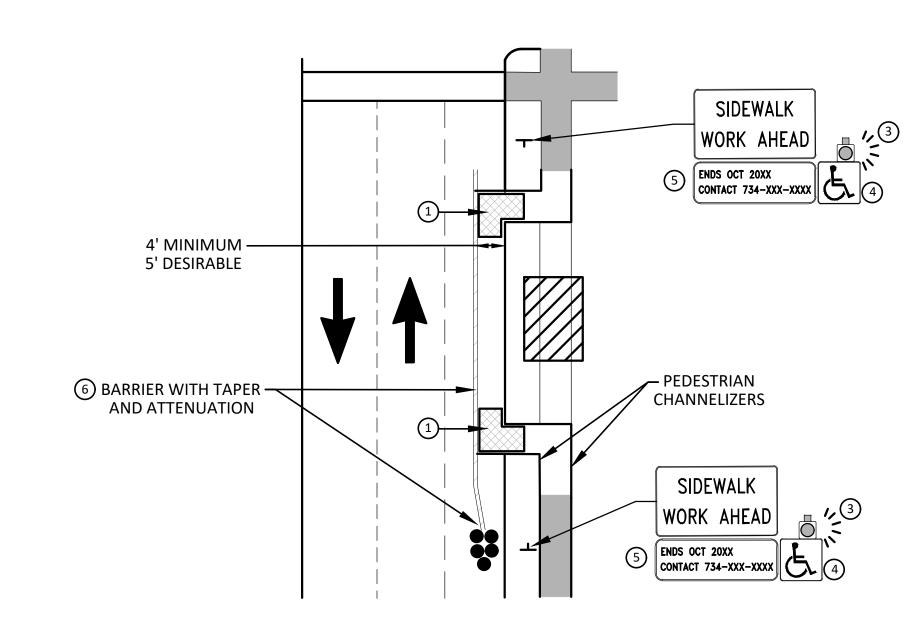
BYPASS TYPE A

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.

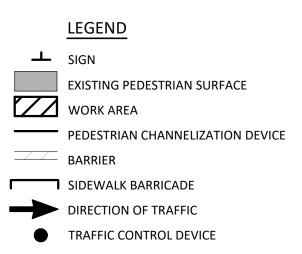
WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF A TRAFFIC CONTROL DEVICE IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES 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.
- 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.
- 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.



PUBLIC SERVICES - ENGINEERING

EARHART ROAD IMPROVEMENTS (GEDDES - US23)

SCALE: N.T.S.

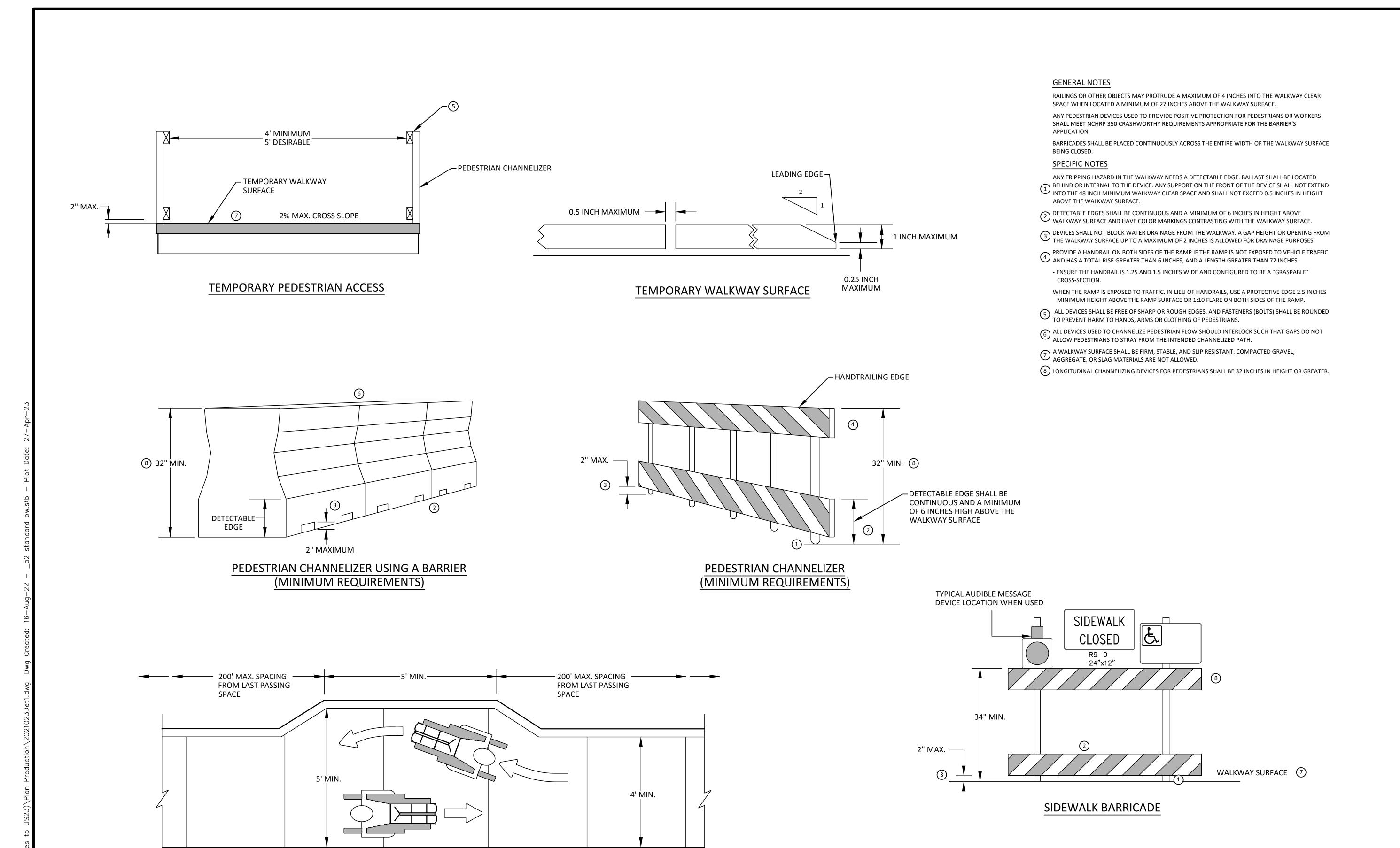
BRAWING No.

CTY OF ANN ARBOR - PUBLIC SERVICE

EARHART ROAD

ALTERNATE

EARHART ROAD IMPROVEMENTS (GEDDES CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

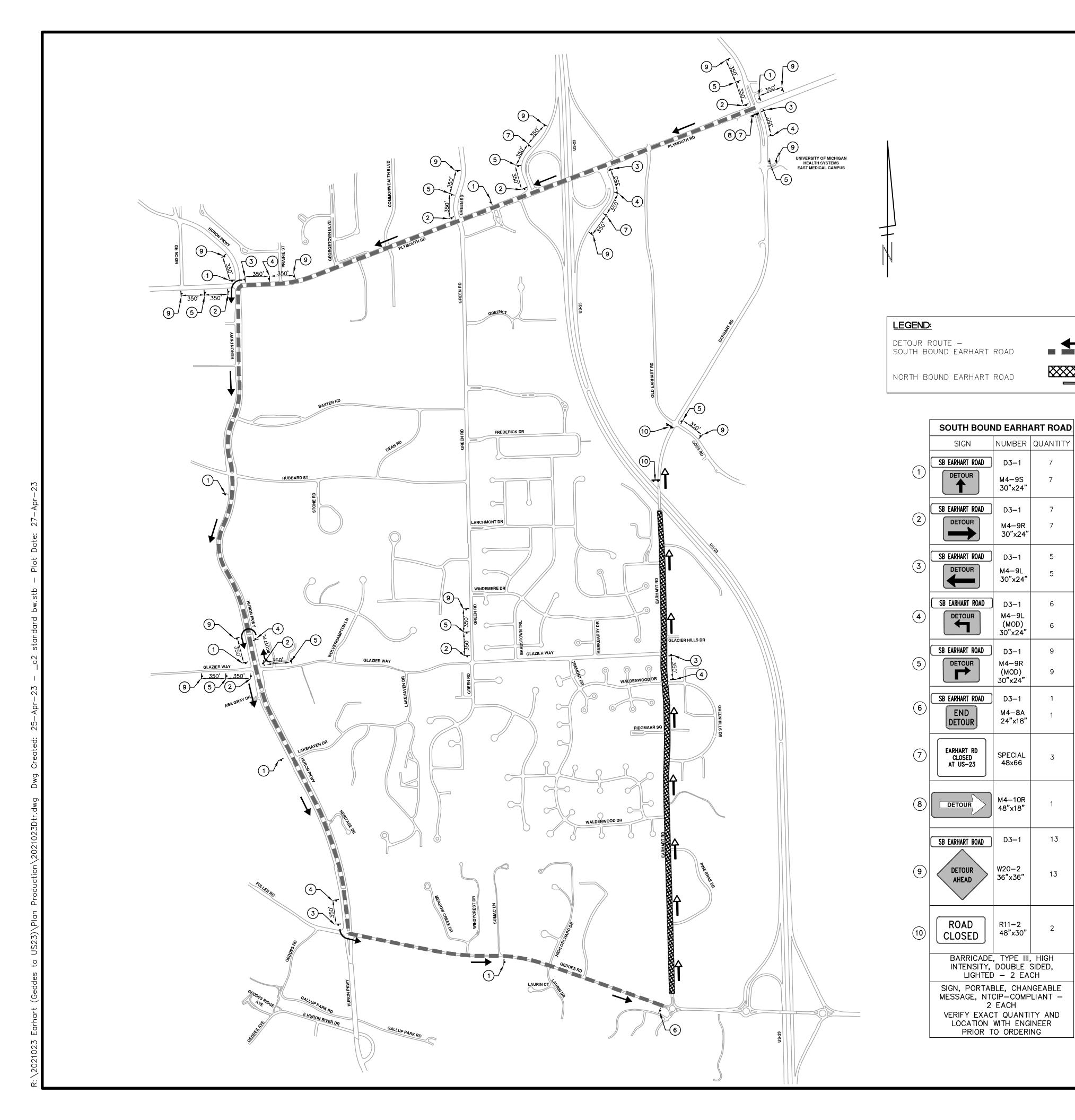


NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL



EARHART ROAD IMPROVEMENTS (GEDDES

OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING



DETOUR CONSTRUCTION NOTES:

| NUMBER | QUANTITY

30"x24"

30"x24"

30"x24"

(MOD) 30"x24"

(MOD) 30"x24"

D3-1

24"x18"

SPECIAL 48x66

36"x36"

48"x30"

13

- 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 EARHART ROAD IMPROVEMENTS. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR SOUTH BOUND EARHART ROAD TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND
- 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
- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE
- 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 LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY SIGN, TYPE B, FURNISH AND OPERATE"
- 10. ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TWO (2) TYPE A FLASHING LIGHTS AND ONE (1) DAY-GLOW ORANGE
- 11. CITY TO BE NOTIFIED A MINIMUM OF 7 DAYS PRIOR TO IMPLEMENTING SOUTH BOUND EARHART ROAD DETOUR. MESSAGE BOARDS TO BE PLACED 7 DAYS PRIOR TO IMPLEMENTATION OF DETOUR.

PRCMS MESSAGE PHASING							
PRIOR TO CONS	STRUCTION	DURING CONSTRUCTION					
EARHART ROAD CONSTRUCTION		SB GEDDES ROAD CLSD AT US-23					
MONTH DATE	*	FOLLOW POSTED DETOUR					

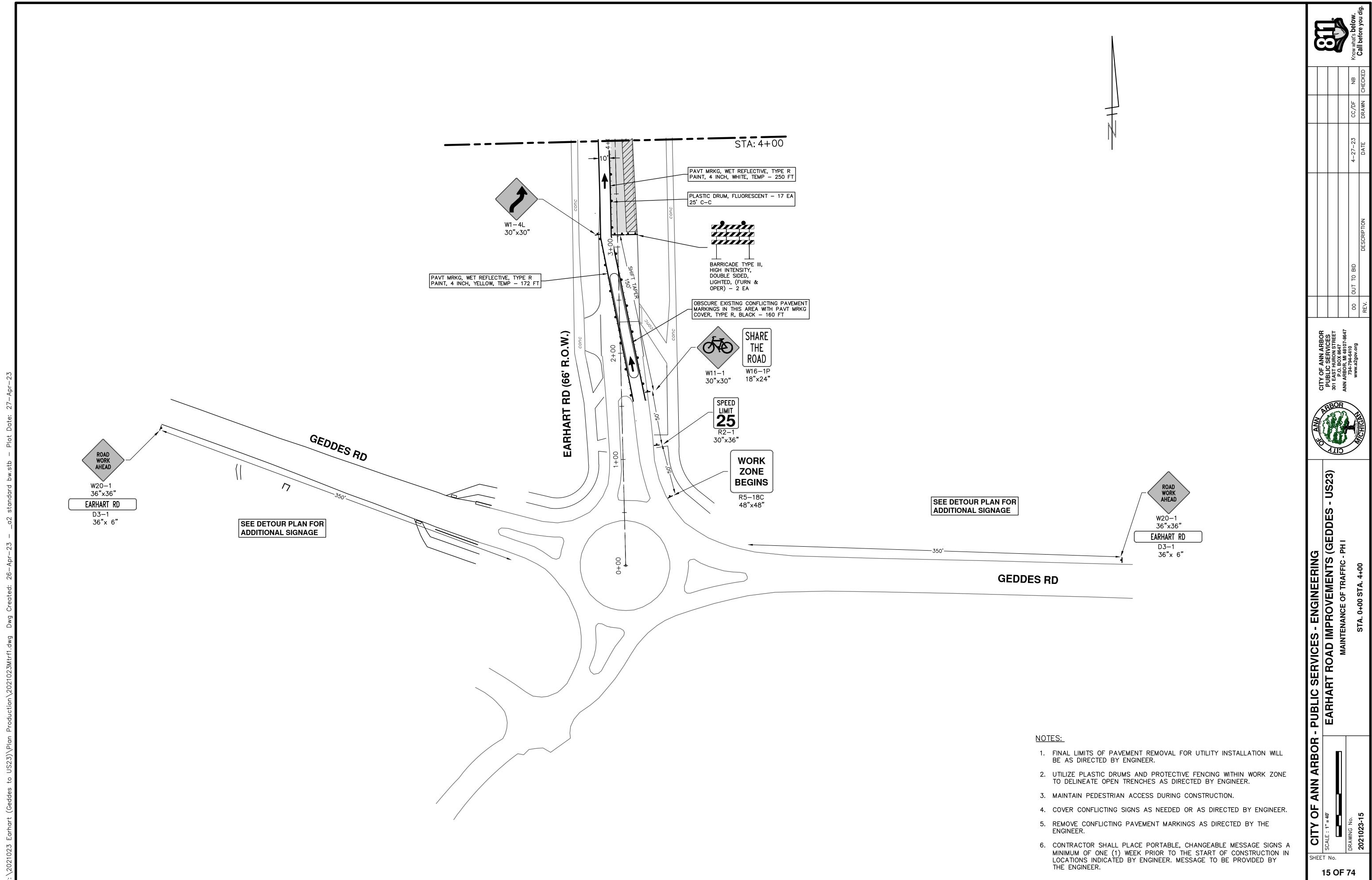
NOTE: PRCMS LOCATIONS AND MESSAGES WILL BE AS DIRECTED BY THE ENGINEER. TO BE PLACED ONE WEEK PRIOR TO CONSTRUCTION.

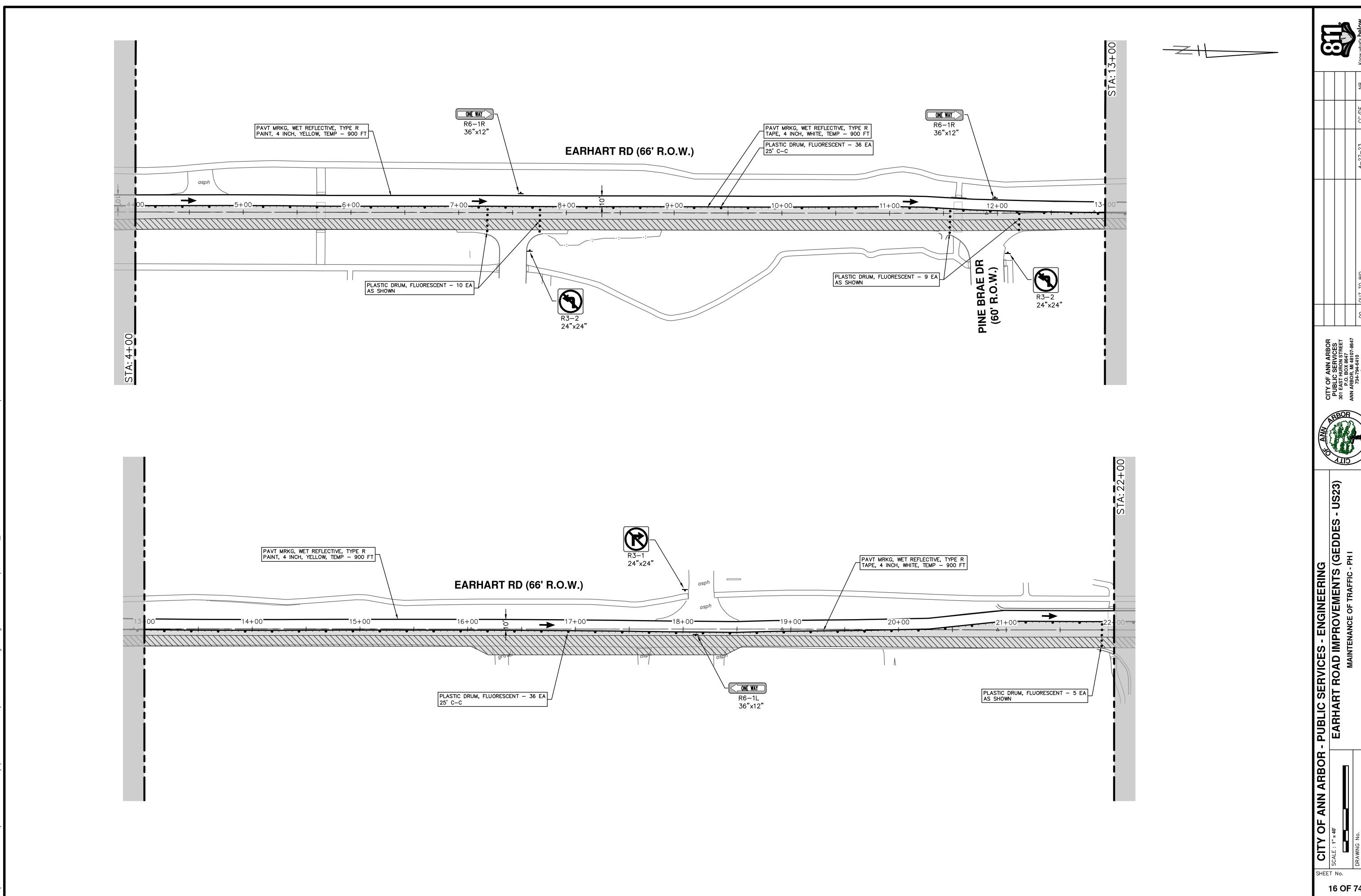
*THE CONTRACTOR SHALL PLACE THE APPROPRIATE DATE AS APPROVED BY THE ENGINEER.



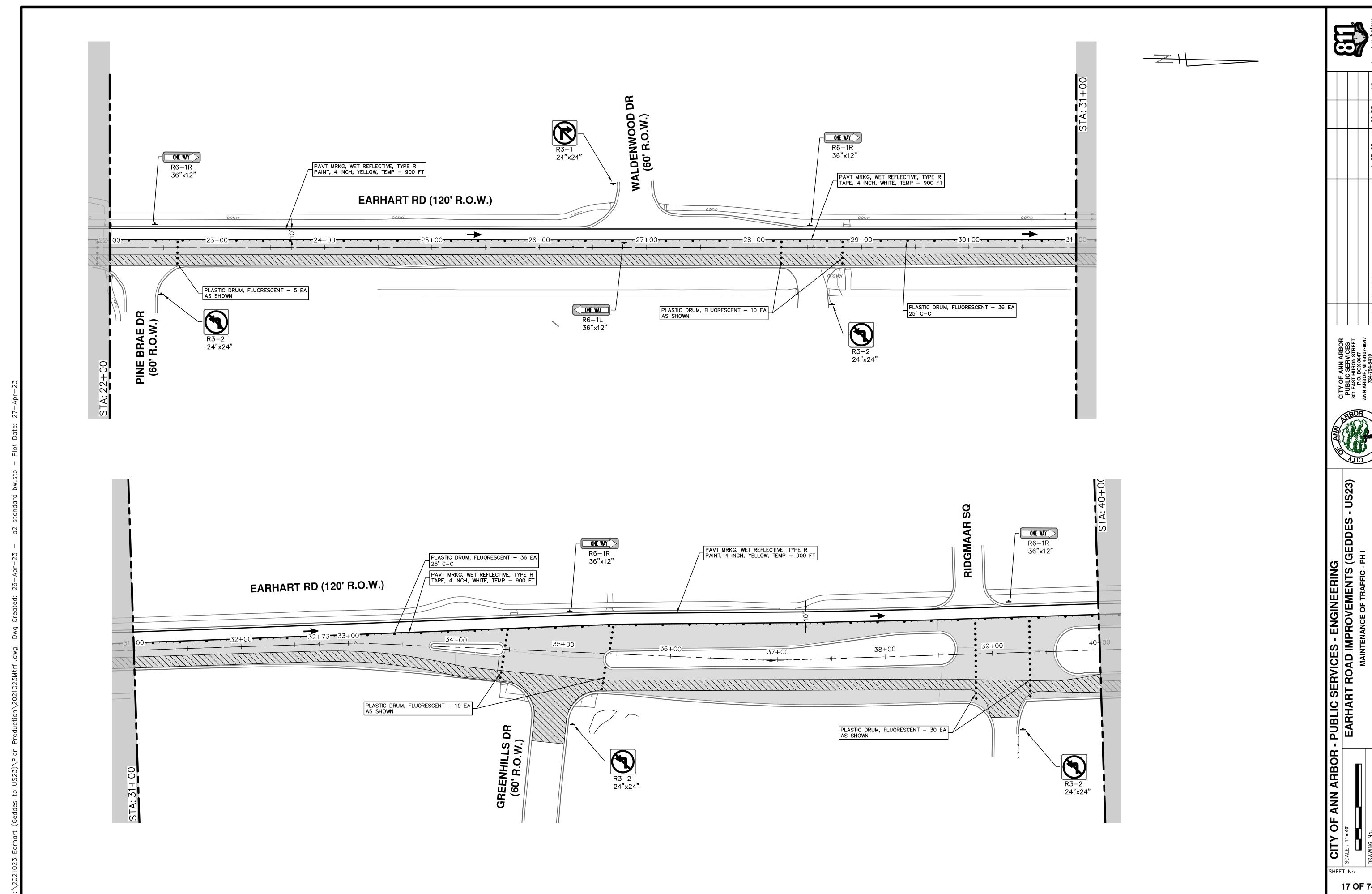
CITY OF ANN ARBOR

SHEET No.

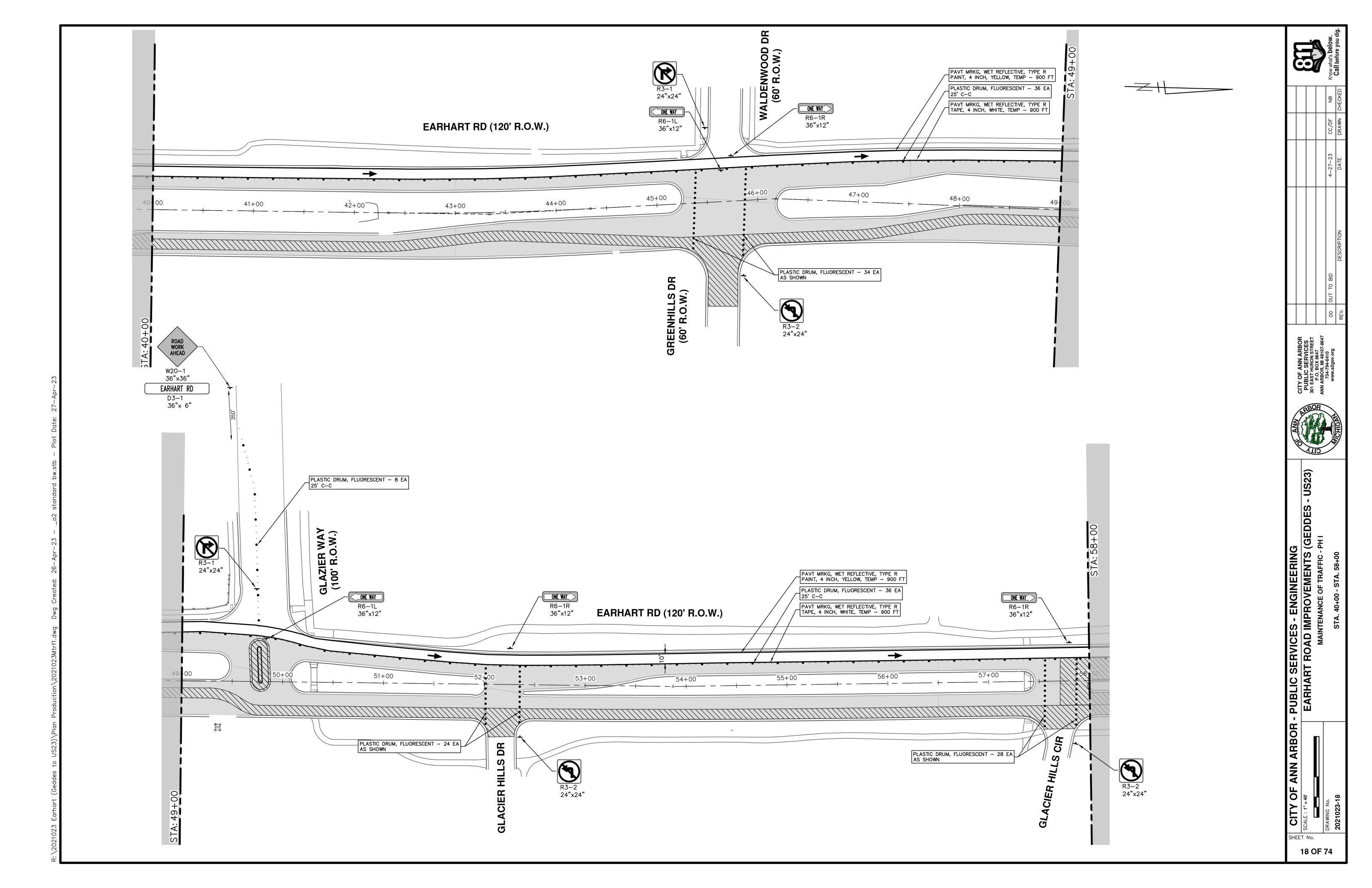


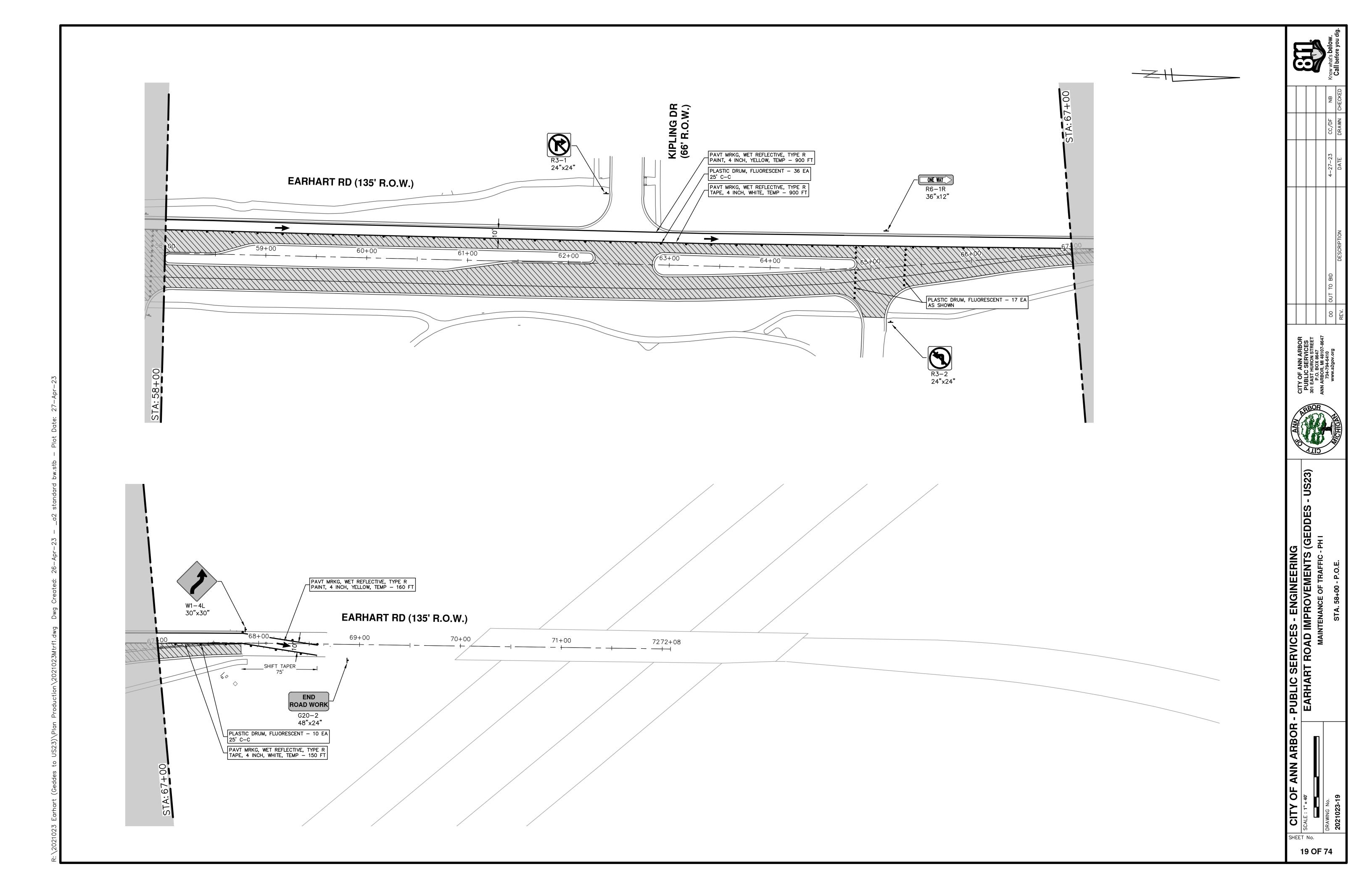


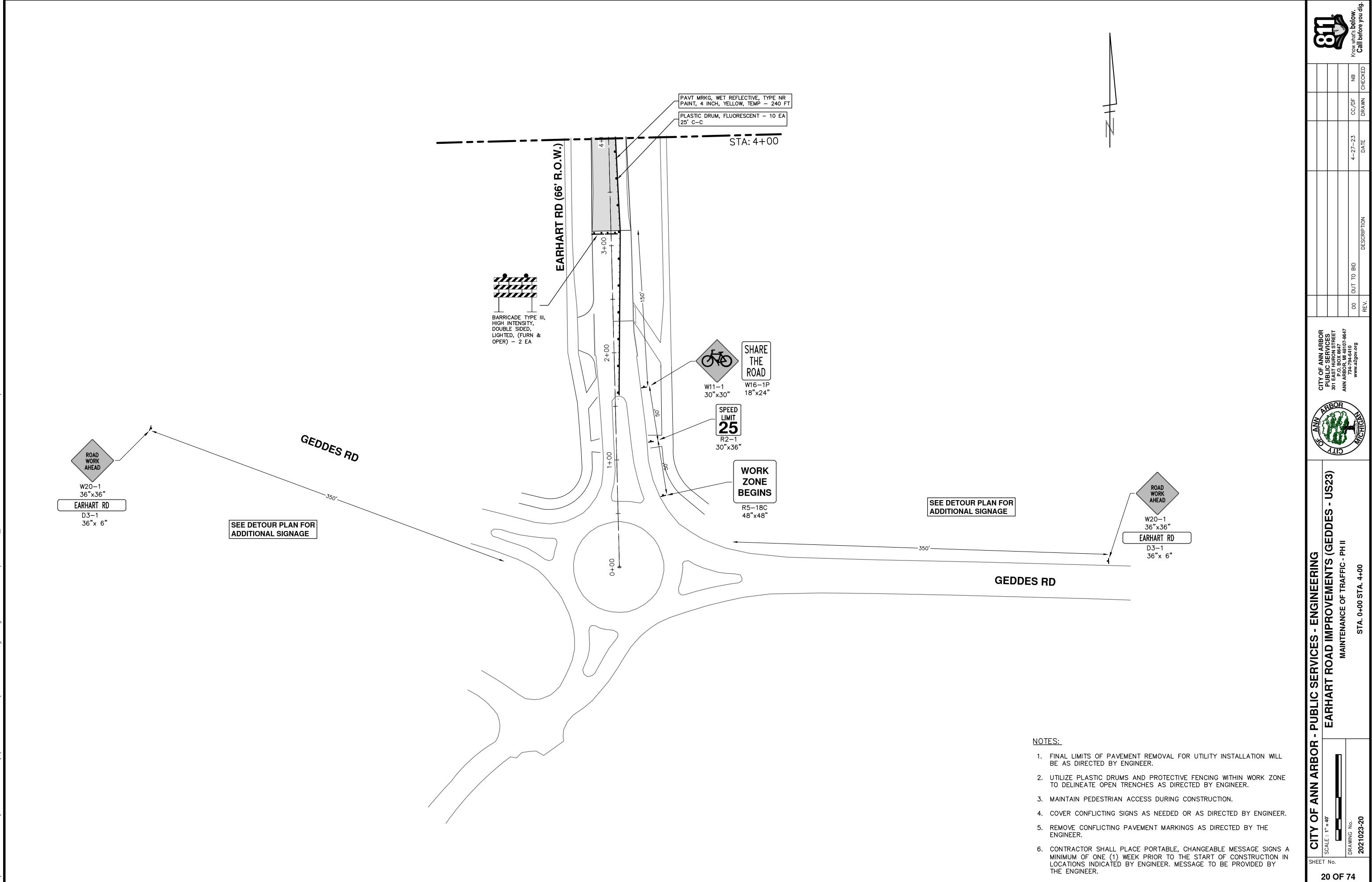


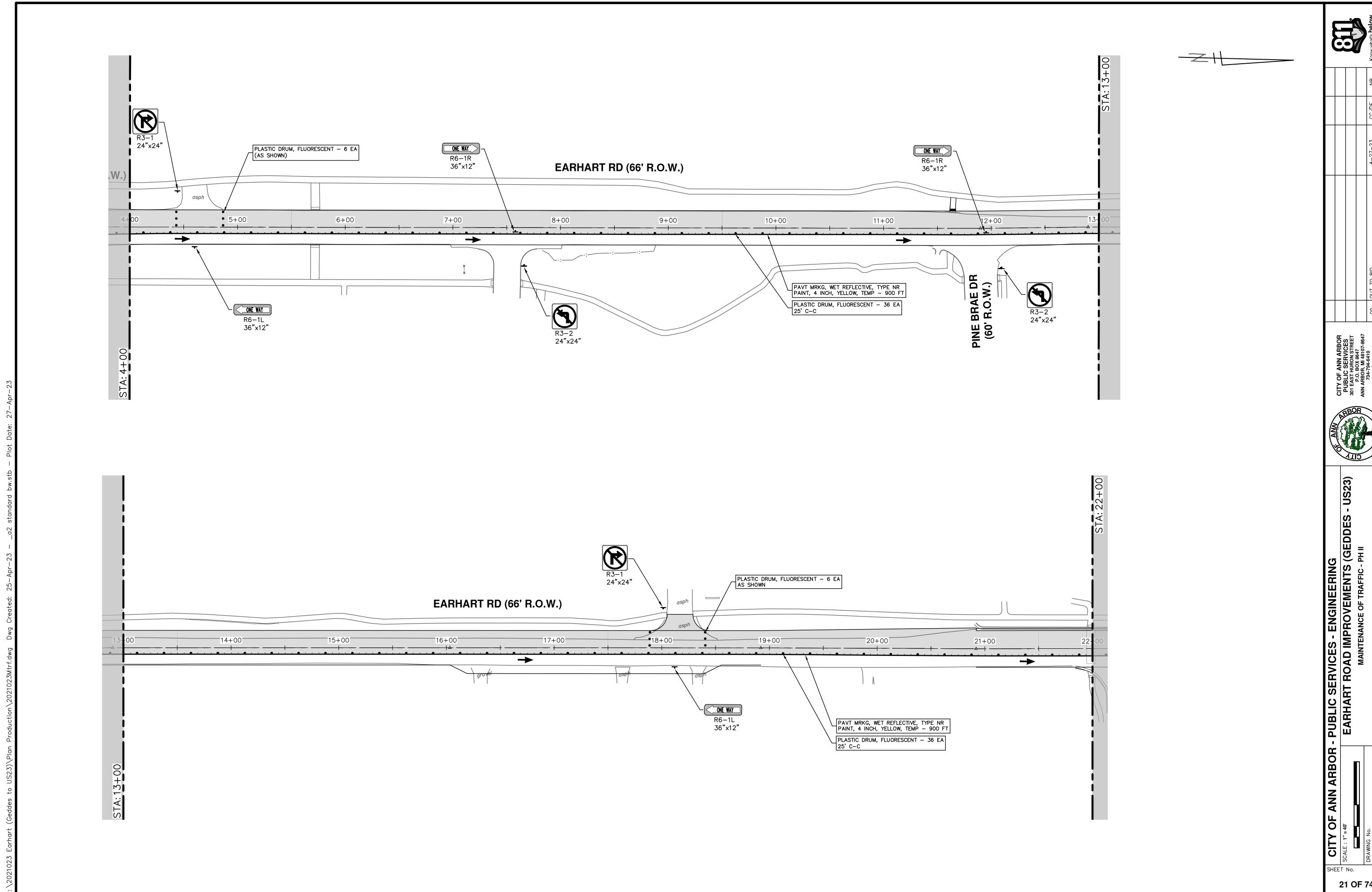


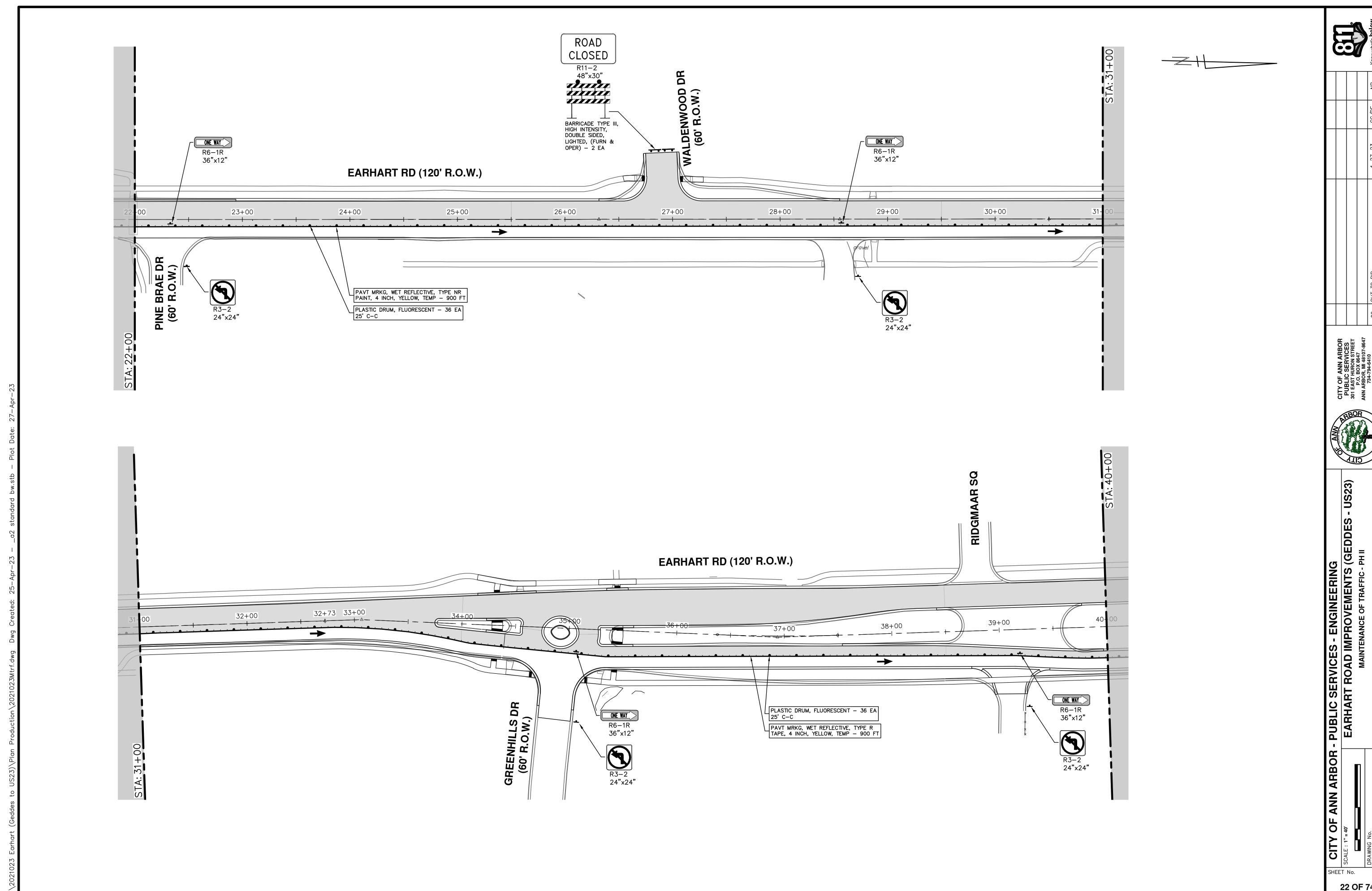


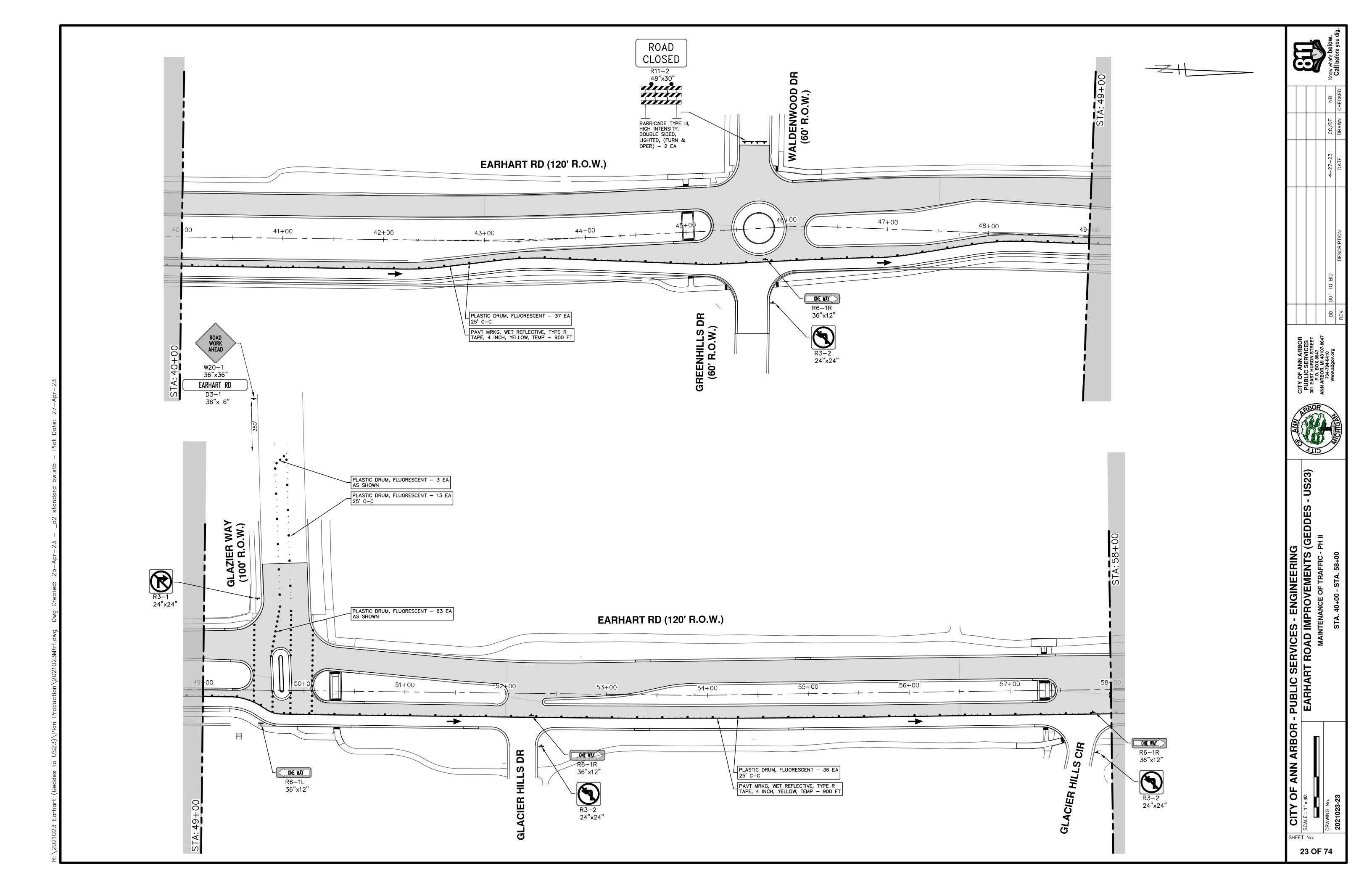


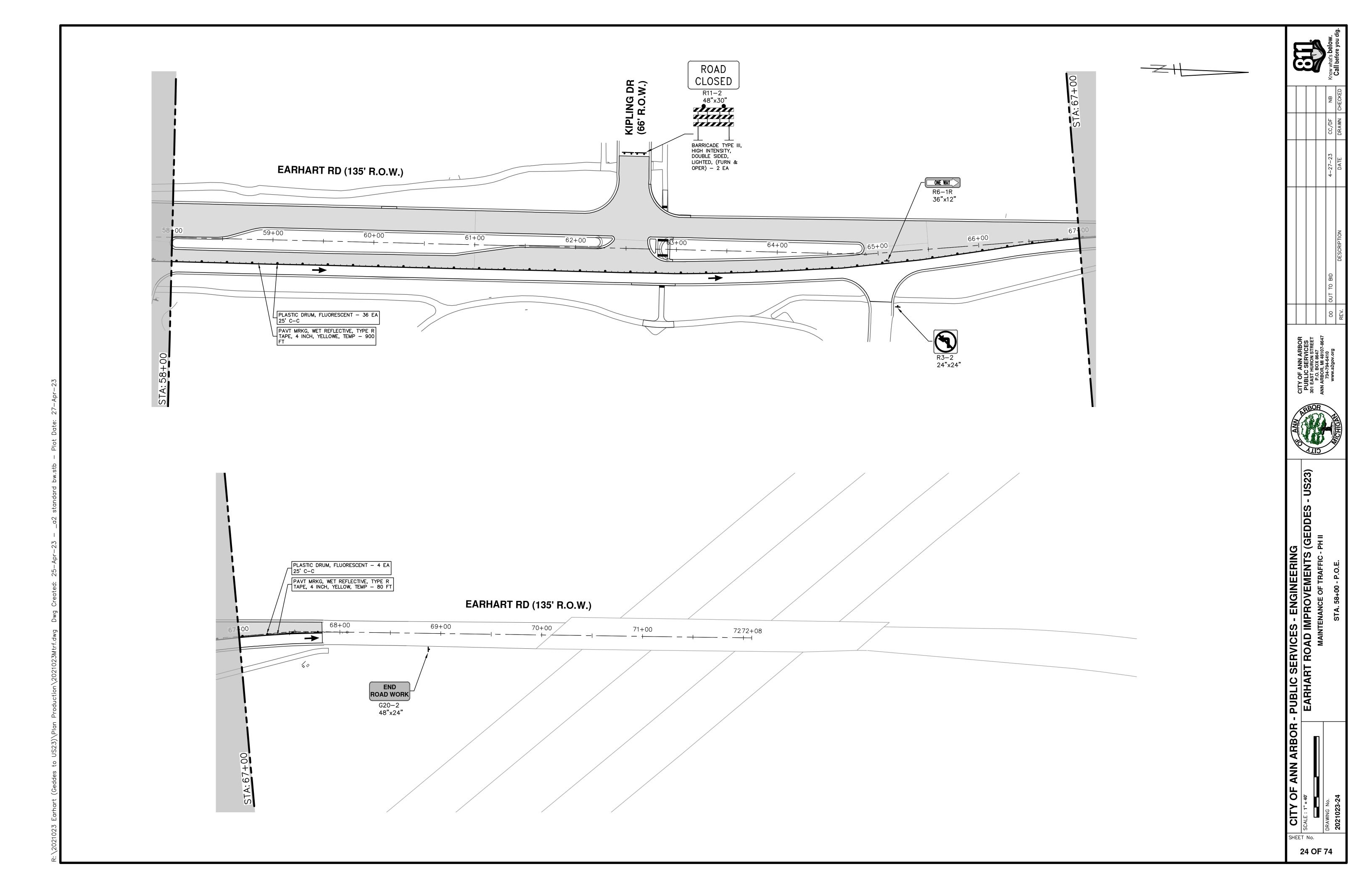


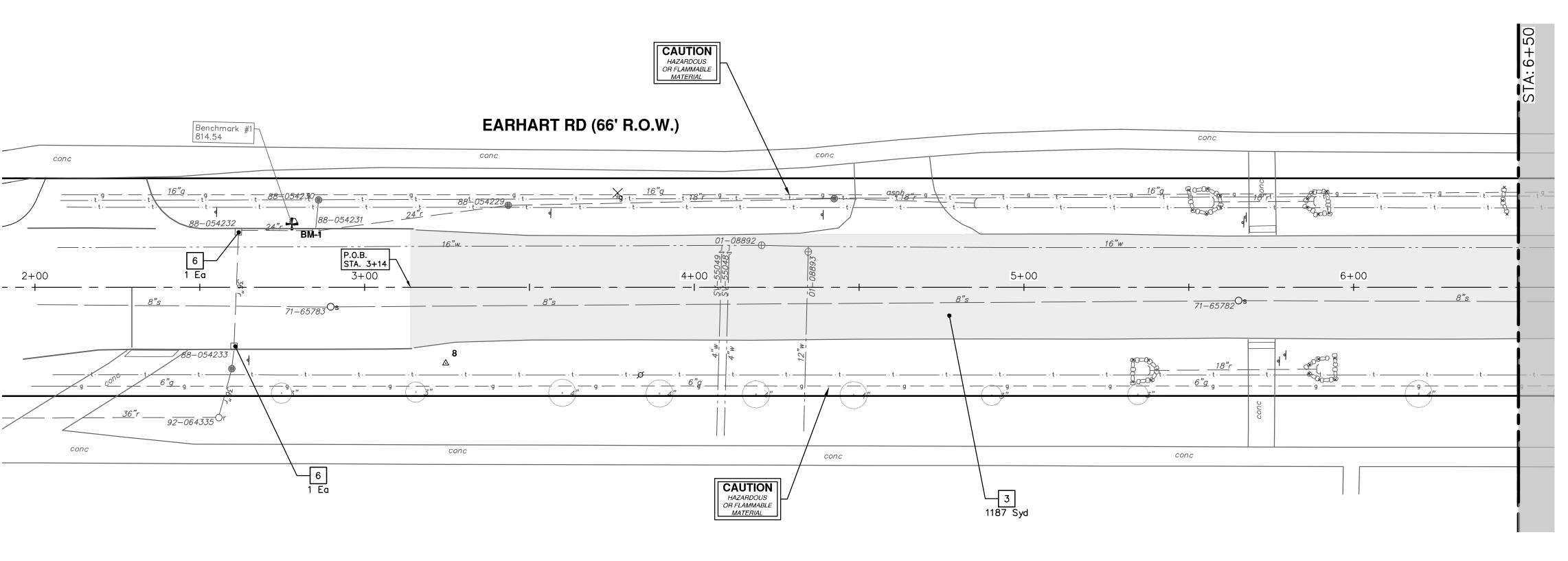


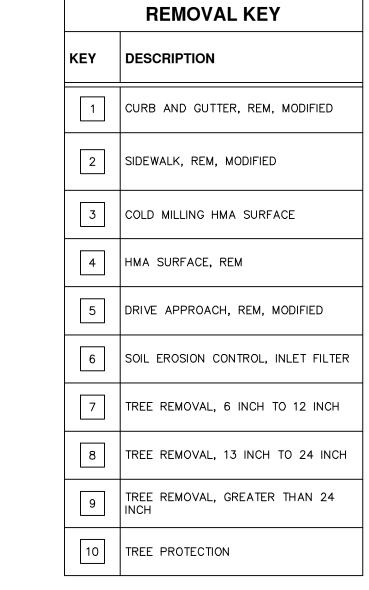




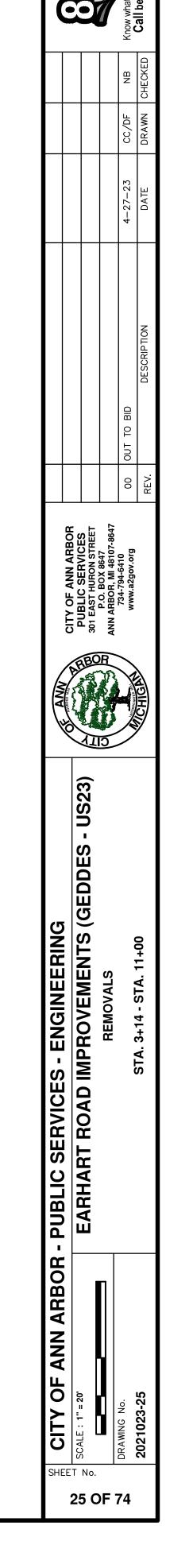




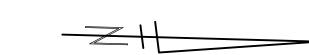


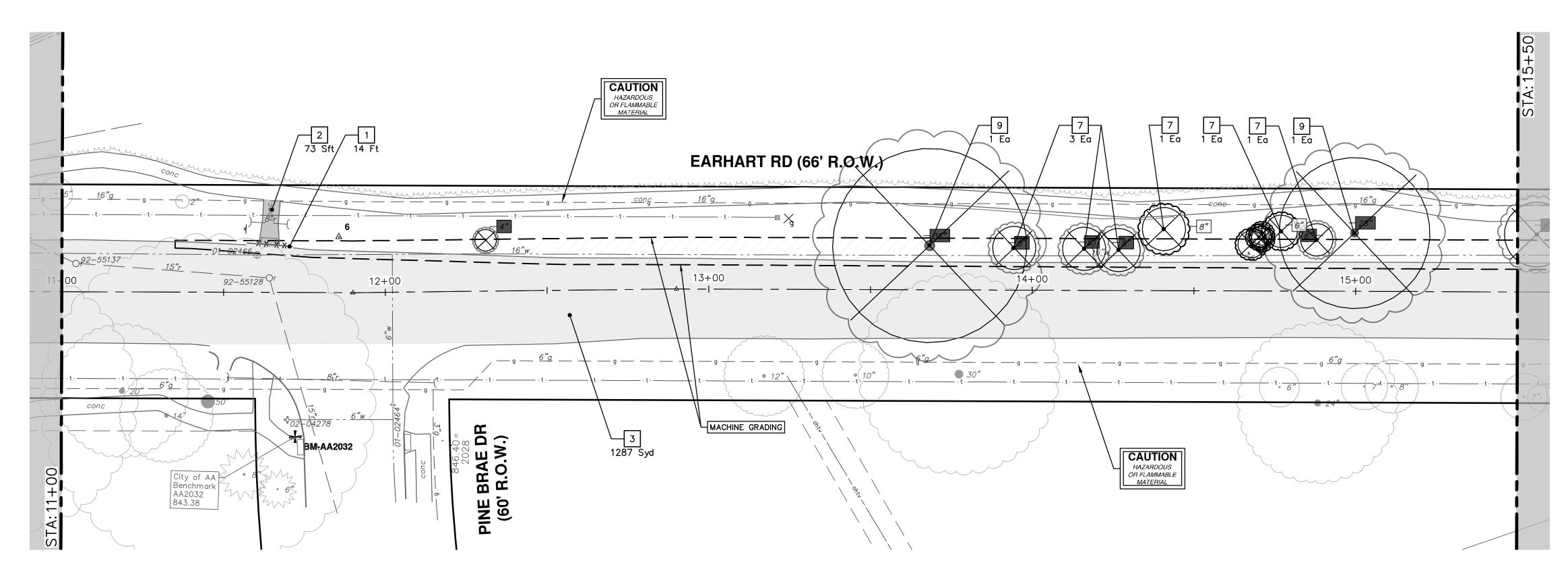


Benchmark #1 814.54	EARHART RD (66' R.O.W.)	conc	conc
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2+00 1 Ea P.O.B. STA. 3+14 3+00 71-65783 Os 71-65783	4+00 (S)	5+00 	6+00
$\frac{88-054233}{g}$ $\frac{6"g}{g}$ $\frac{36"r}{g^{2}-0643\overline{35}}$ or $\frac{36"r}{g^{2}-0643\overline{35}}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		18"r
conc Co	CAUTIOI HAZARDOUS OR FLAMMABL MATERIAL	5 └ /	conc
			0
conc	3 HA OR F	EARHART RD (66' R.O.W.)	STATION ON NO SOUND SOUN
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7+00	8+00	8"s 9+00	10+00



conc	1580 Syd CAU HAZA OR FLA MAT Conc	EARHART RD (66' R.O.W.)	onio onio onio onio onio onio onio onio	STA: 11+00
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		16"w onto other		16"w
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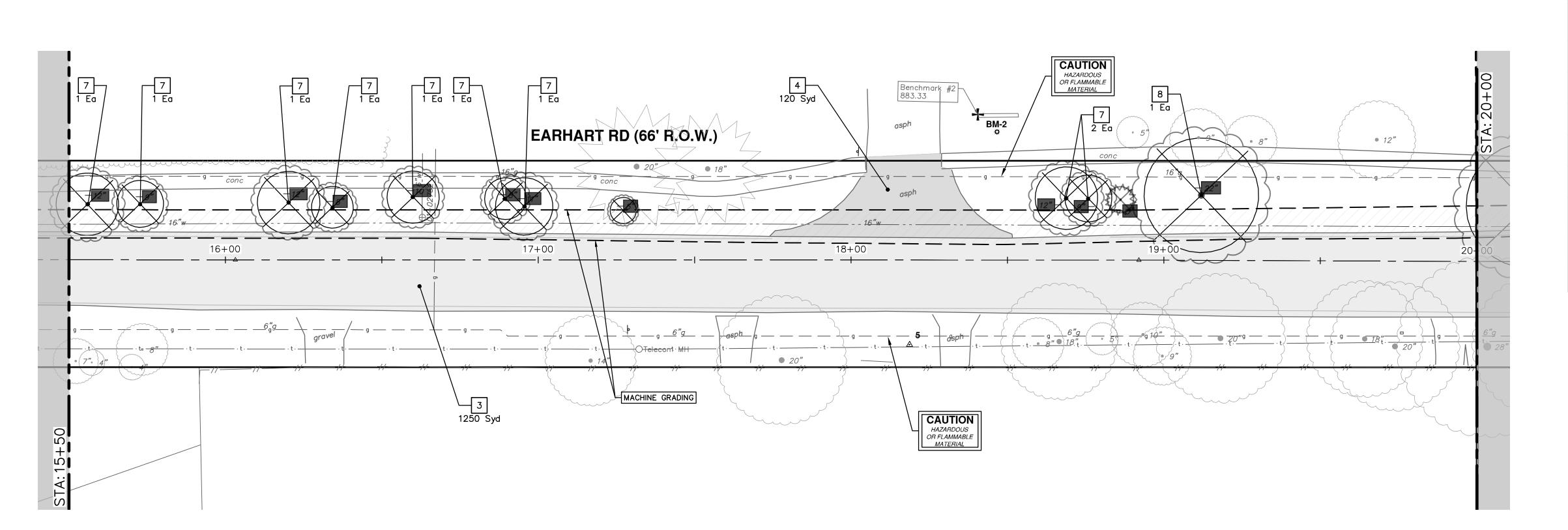




	TREE REMOVAL TABLE					
	Tag No.	Size	Species	Northing	Easting	
		36"		284414.7151	13308565.9089	
		8"		284440.8826	13308565.8666	
		8"		284473.1677	13308565.6274	
		8"		284462.4934	13308565.5318	
		6"		284534.3033	13308560.7022	
		8"		284486.9813	13308558.7283	
		6"		284523.2160	13308558.3802	
		28"		284545.8926	13308558.2864	
		12"		284602.2434	13308557.1213	
		9"		284619.0833	13308556.5501	
		8"		284680.5390	13308556.0928	
		12"		284666.5199	13308554.9597	
		11"		284741.8037	13308554.2470	
		10"		284706.2605	13308552.1806	
		8"		284735.7861	13308551.9235	
		22"		284958.0876	13308545.2038	

			TRI	EE REMC	VAL TABLE	
	,	Tag No.	Size	Species	Northing	Easting
			12"		284915.0050	13308547.2100
			9"		284922.0220	13308547.1310
L						

REMOVAL KEY



KEY	DESCRIPTION
1	CURB AND GUTTER, REM, MODIFIED
2	SIDEWALK, REM, MODIFIED
3	COLD MILLING HMA SURFACE
4	HMA SURFACE, REM
5	DRIVE APPROACH, REM, MODIFIED
6	SOIL EROSION CONTROL, INLET FILTER
7	TREE REMOVAL, 6 INCH TO 12 INCH
8	TREE REMOVAL, 13 INCH TO 24 INCH
9	TREE REMOVAL, GREATER THAN 24 INCH
10	TREE PROTECTION



00	00 OUT TO BID	4-27-23	CC/DF	NB
REV.	DESCRIPTION	DATE	DRAWN CHECKE	CHECKE

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	

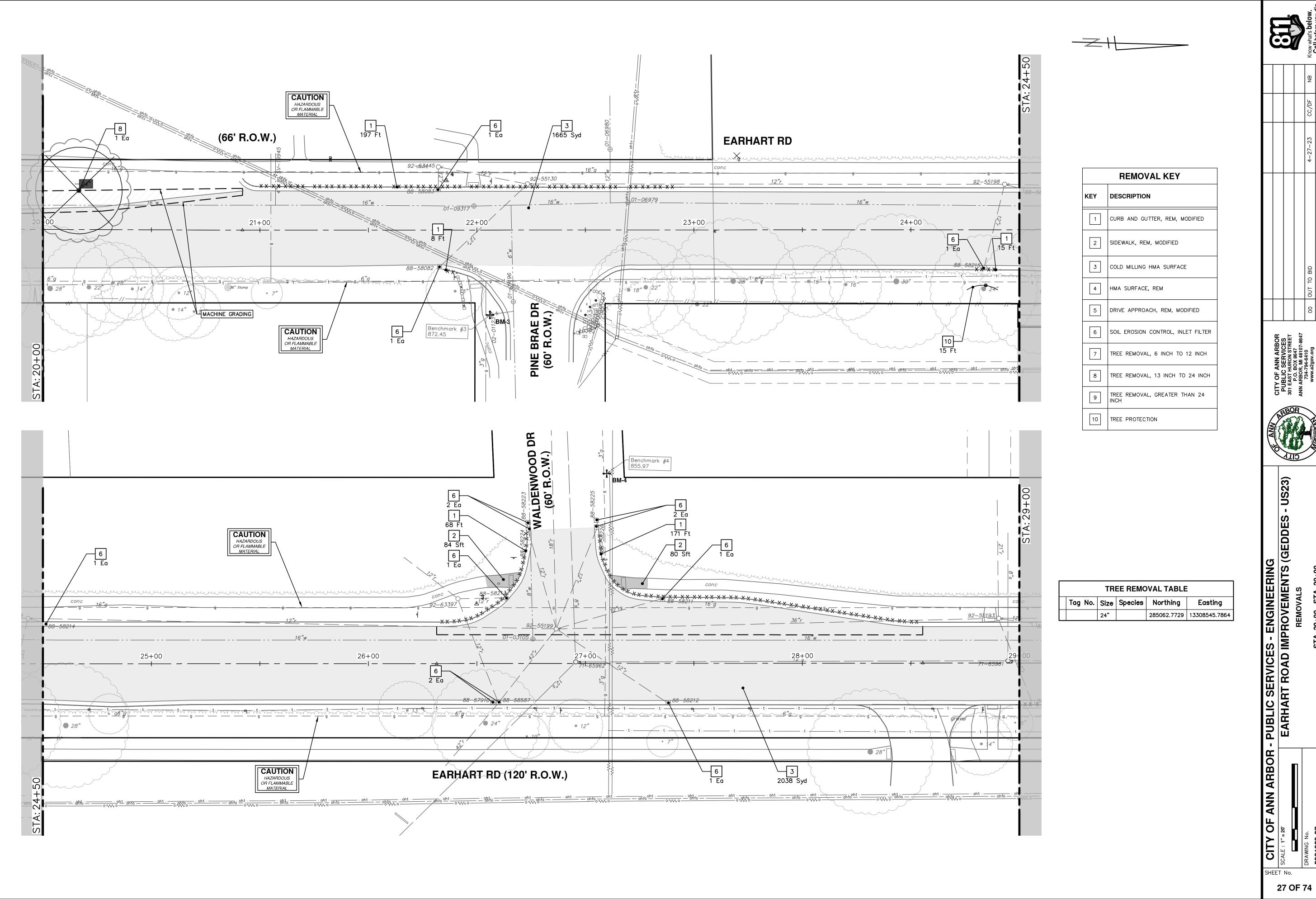


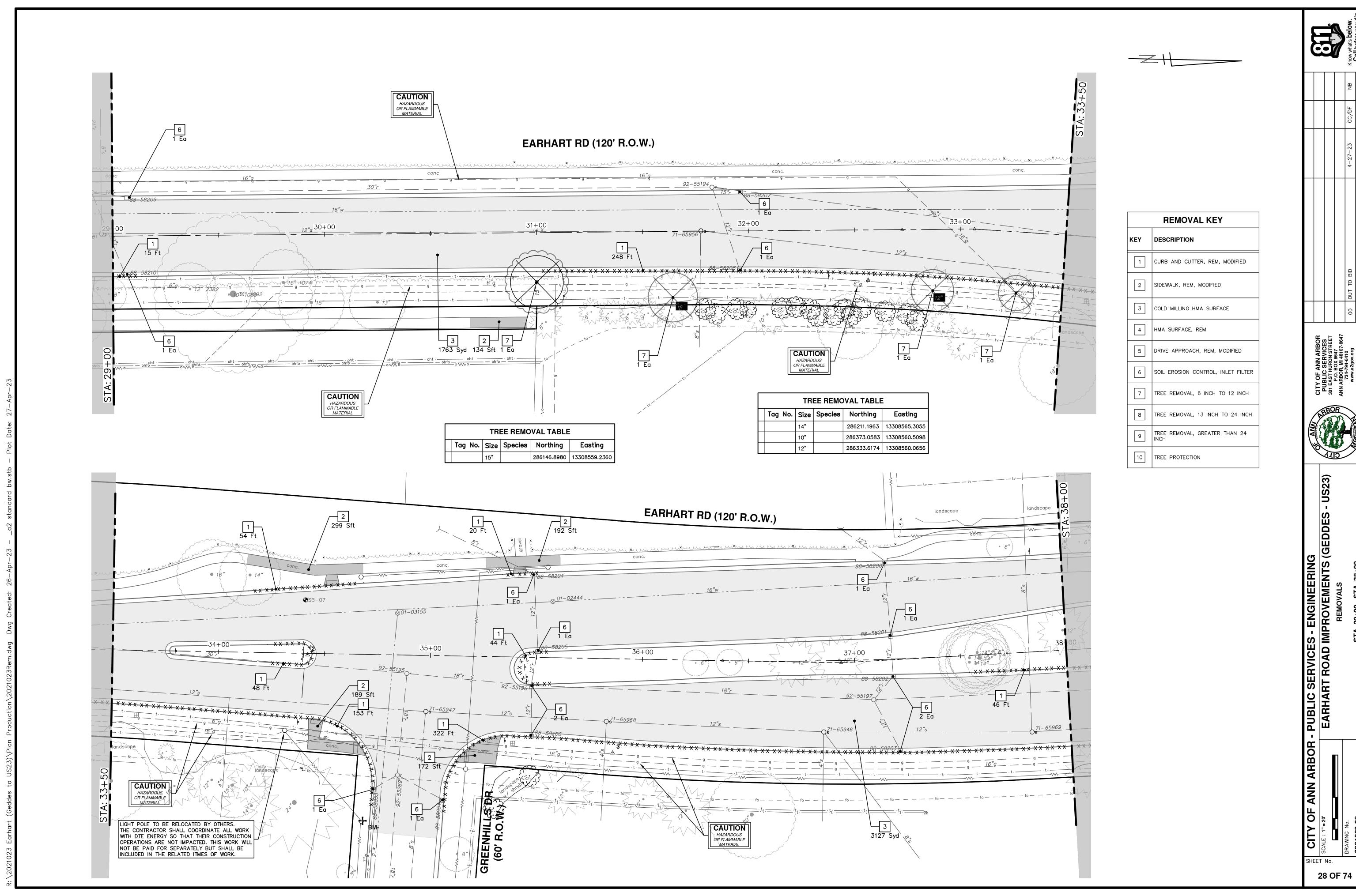
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE: 1" = 20

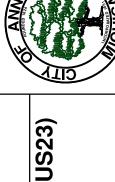
EARHART ROAD IMPROVEMENTS (GEDDES

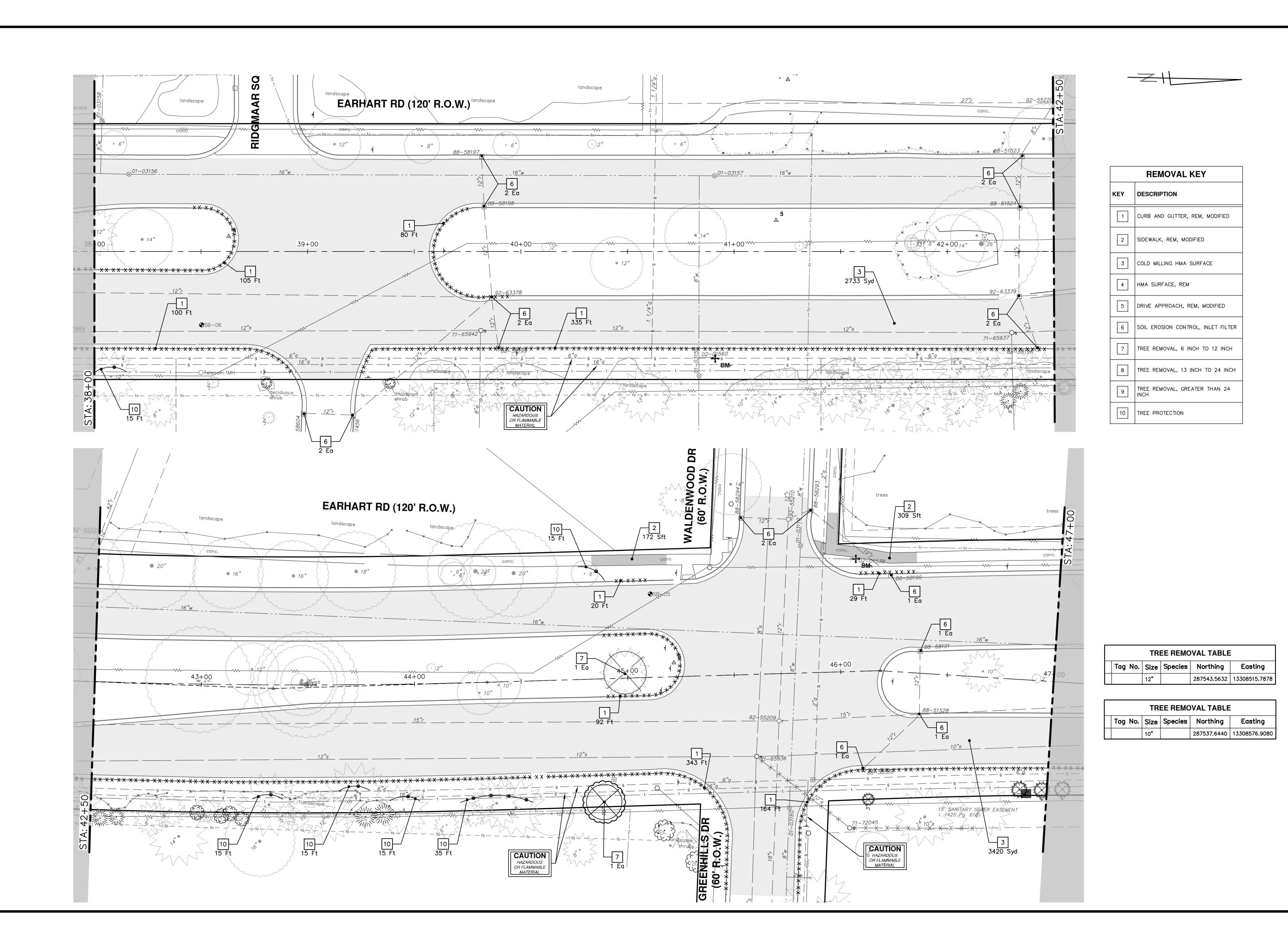
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Know what's below.

		4-27-23 CC/DF NB	DATE DRAWN CHECKED
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CITY OF ANN AR PUBLIC SERVIC 301 EAST HURON ST P.O. BOX 8647 ANN ARBOR, MI 48107 734-794-6410 www.a2gov.org



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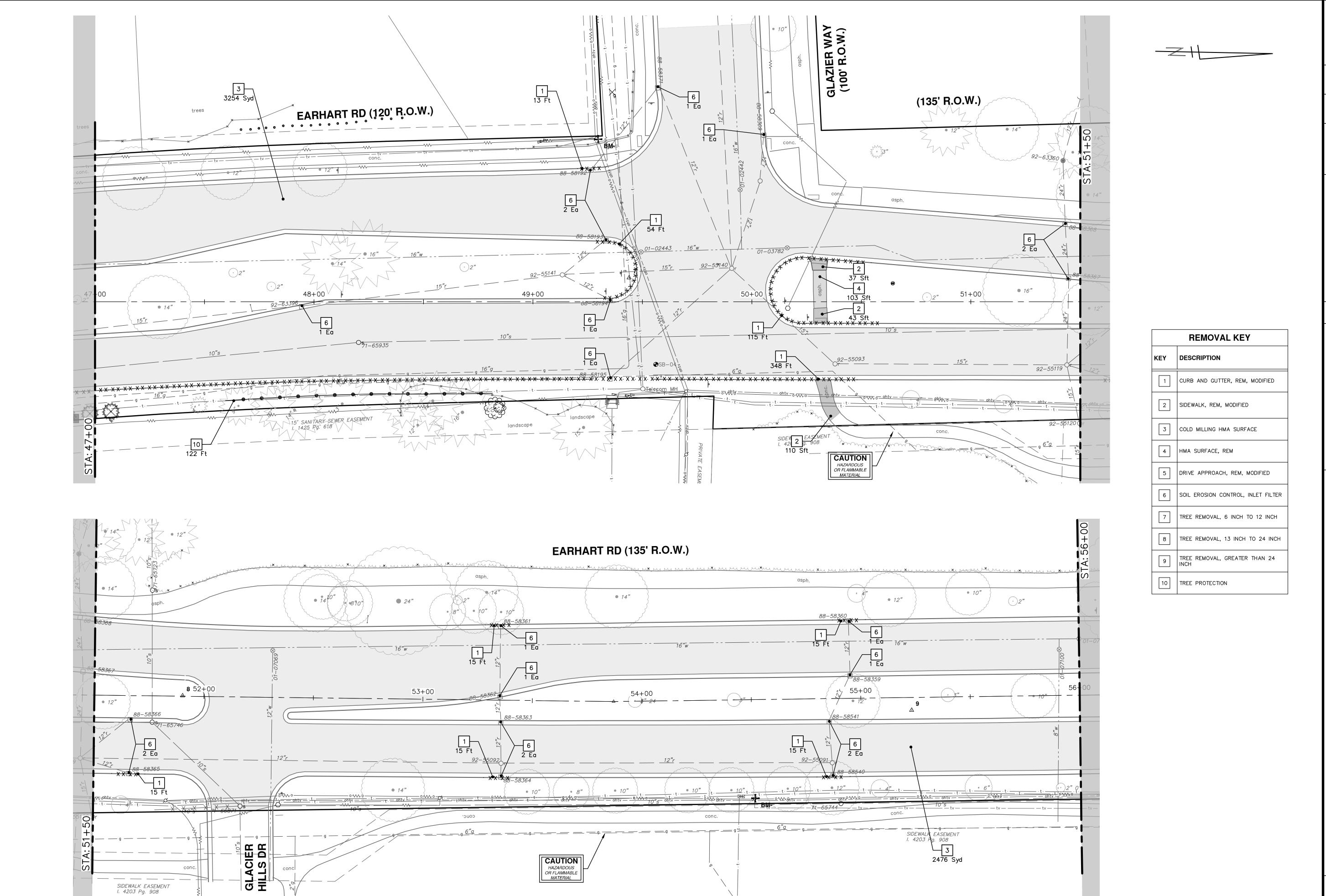
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SHEET No. **29 OF 74**

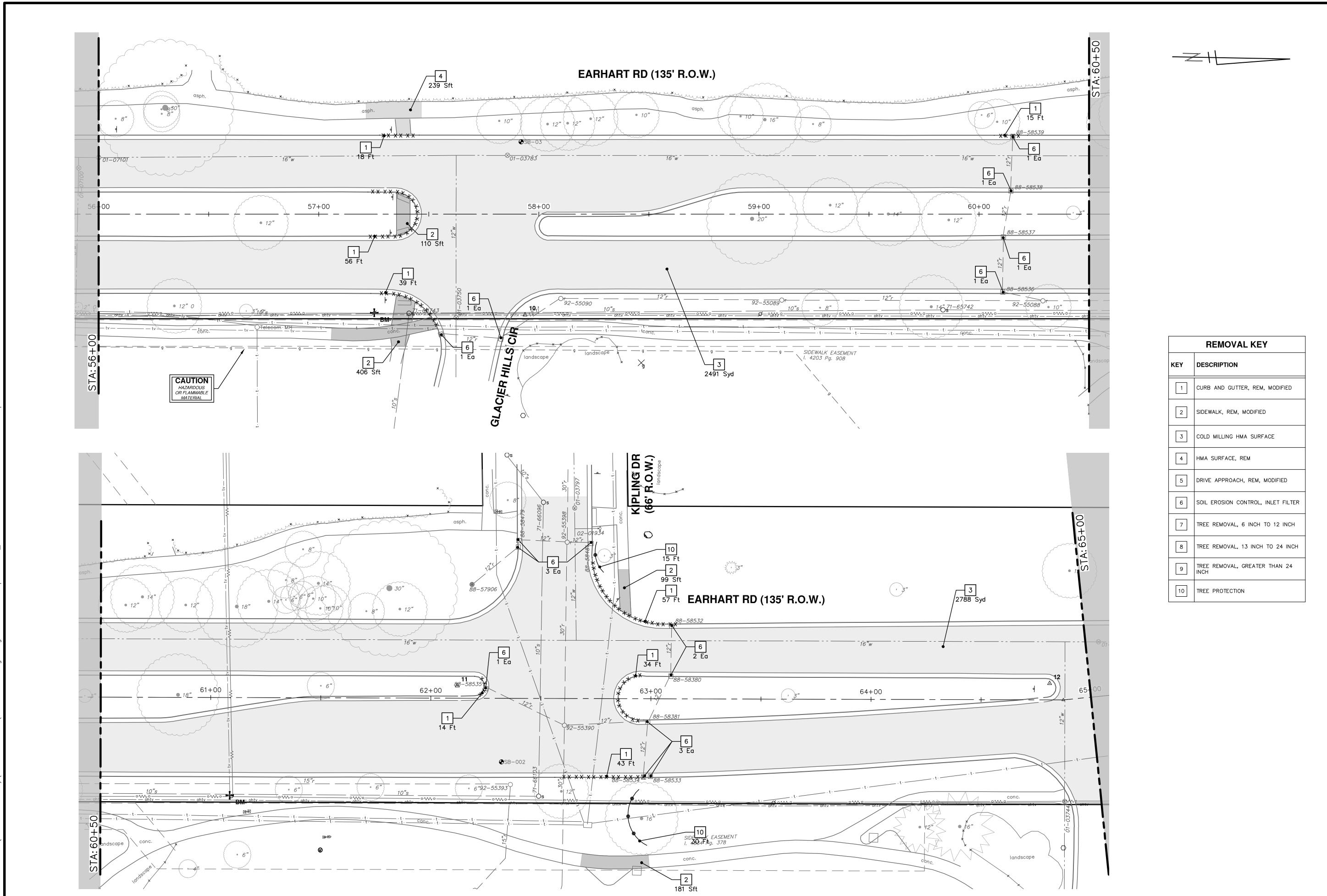


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

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EARHART ROAD IMPROVEMENTS (GEDDES

REMOVALS SHEET No. 30 OF 74

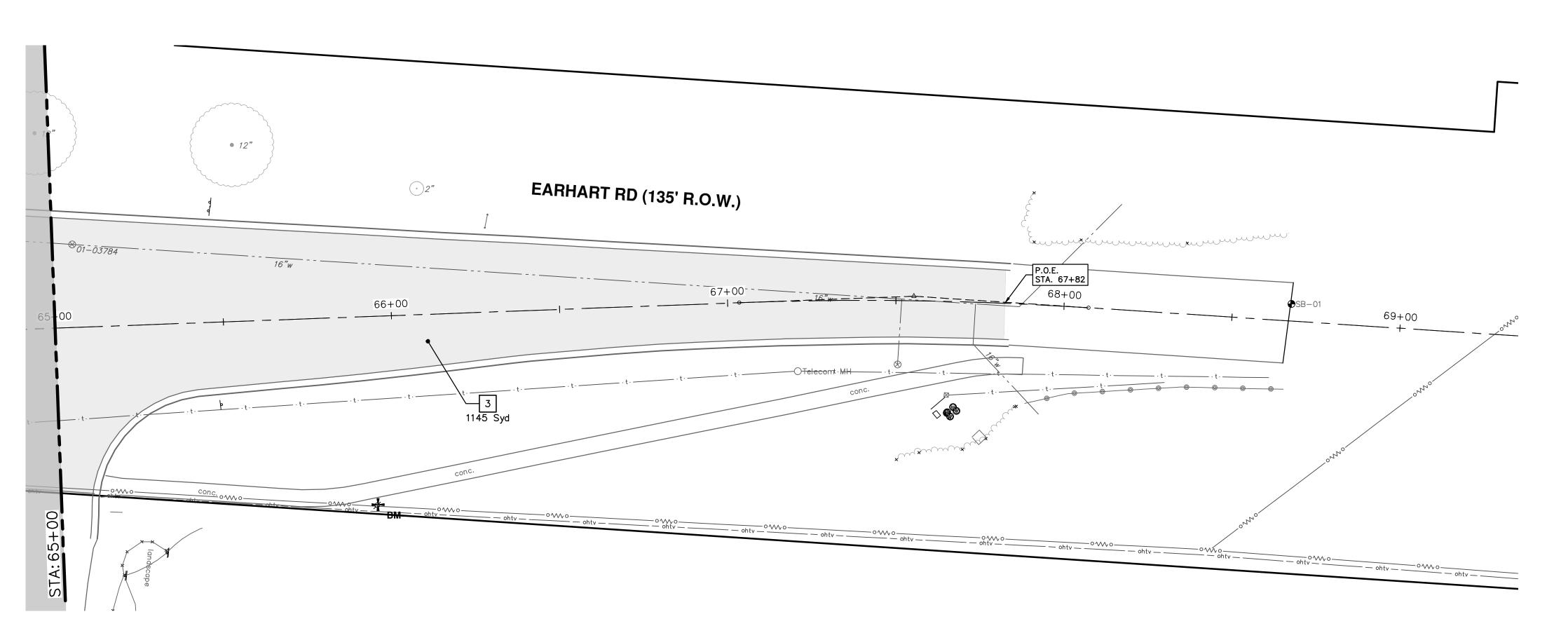


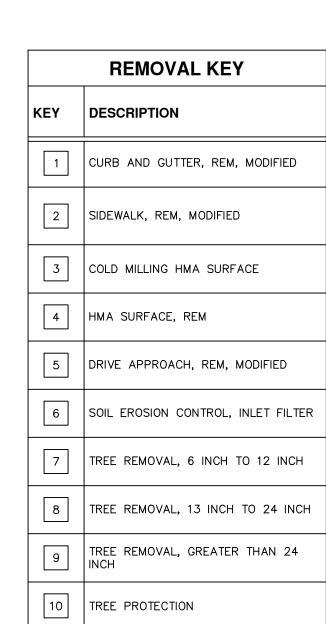
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE: 1" = 20

EARHART ROAD IMPROVEMENTS (GEDDES

REMOVALS





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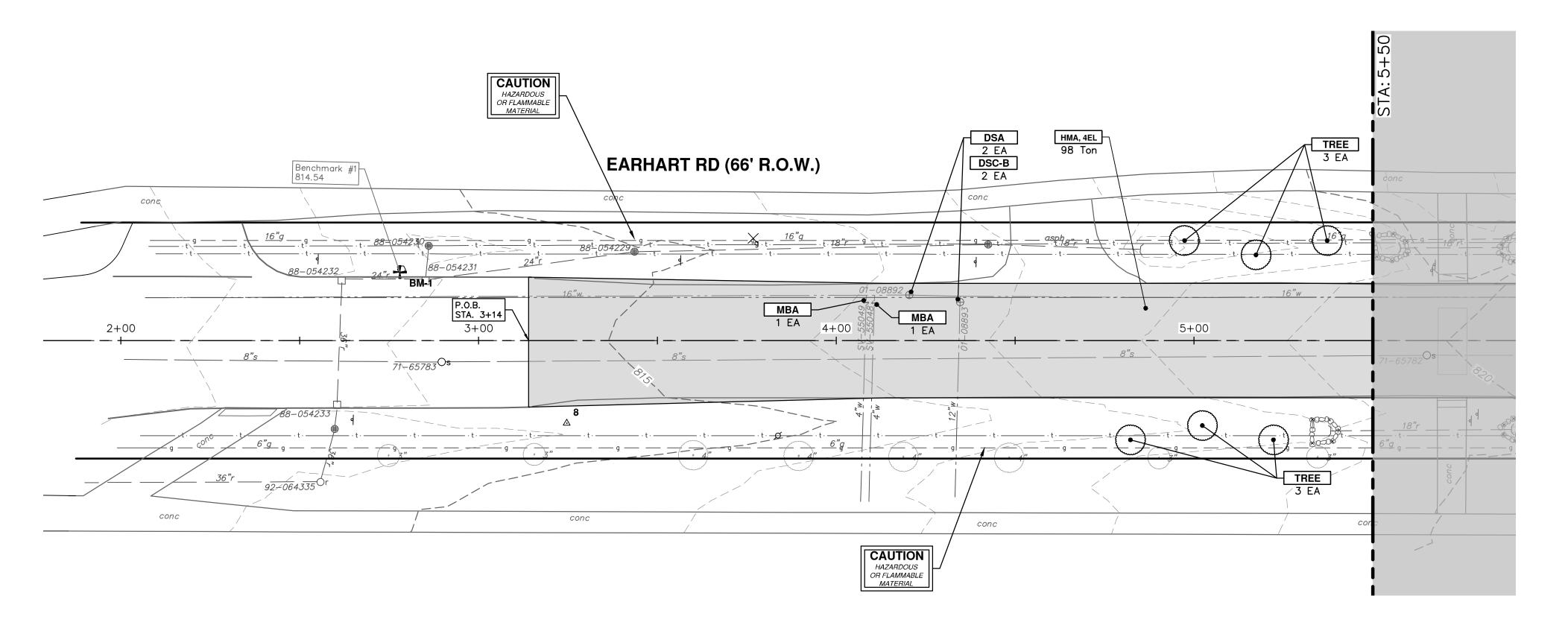
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

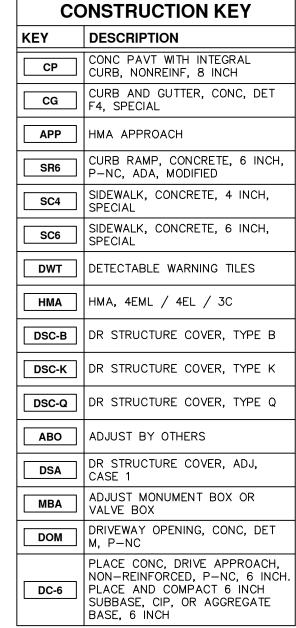
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EARHART ROAD IMPROVEMENTS (GEDDES

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	TED AS A MIX OF SPECIES WITH THE TREES INTERMIXED WITH MEDIUM AND
TOTAL TREES SHOWN LARGE SHADE TREES (L)	= 90 = 50
LATIN NAME (MATURE SIZE) — Gleditsia triacanthos inermis Gymnocladus dioicus (L) — Liquidambar styraciflua (M) Liriodendron tulipifera (L) — Nyssa sylvatica (M) — Black Ostrya virginiana (M) — Iror Quercus rubra (L) — Red or Quercus macrocarpa (L) — Amelanchier canadensis, tre Celtis occidentalis (L) — Ha Cercis canadensis (S) — Re Cornus florida (S) — floweri	s 'Skyline' (L) — Honeylocust Kentucky coffeetree — Sweetgum Tuliptree kgum nwood ak Bur oak ee form (S) — Serviceberry ackberry

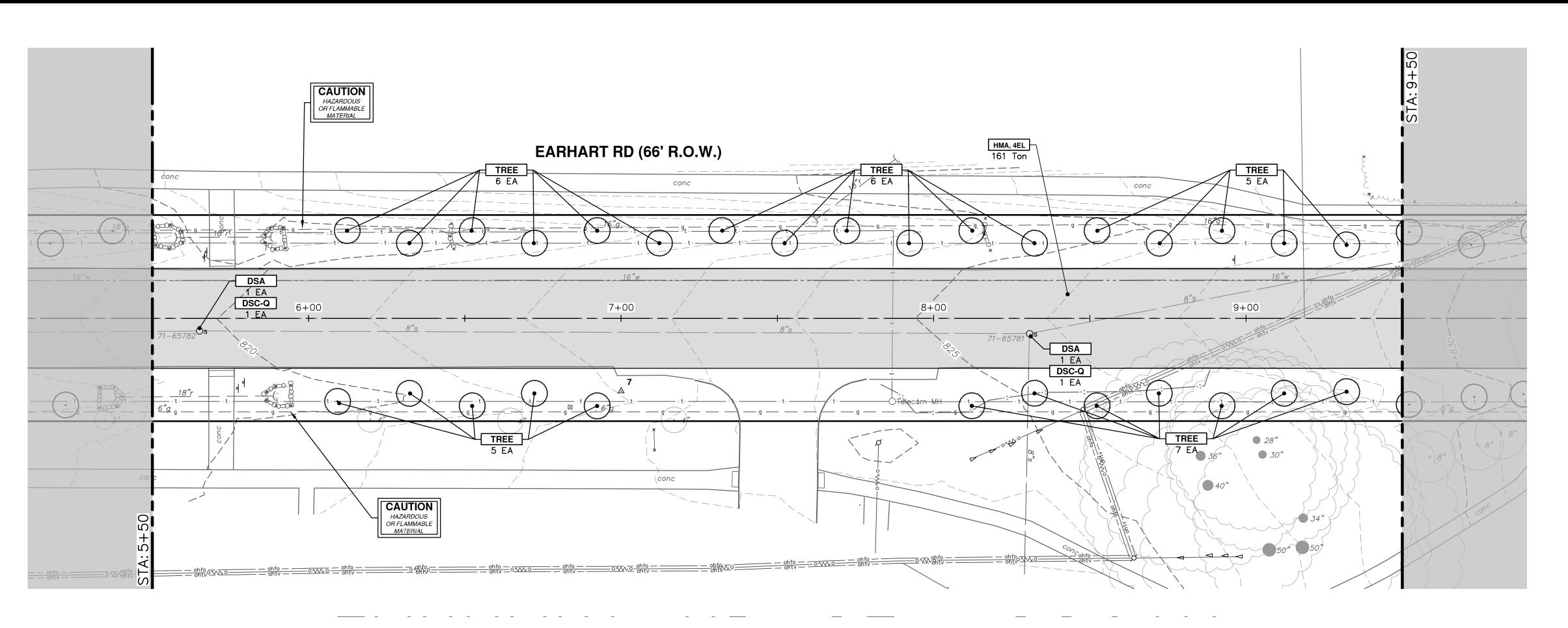
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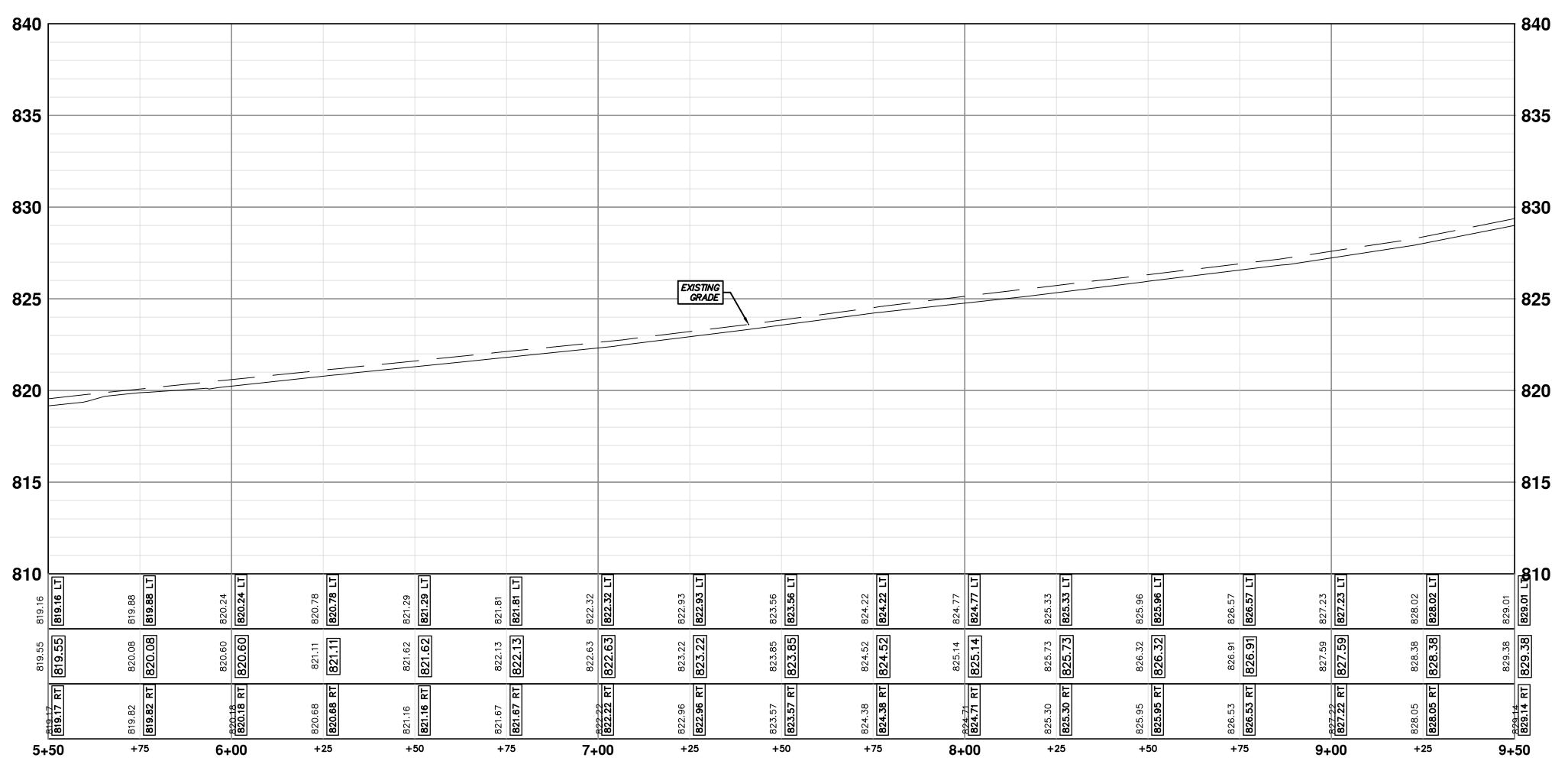
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- PUBLIC SERVICES - ENGINEERING
EARHART ROAD IMPROVEMENTS (GEDDI ROAD PLAN & PROFILE STA. 3+14 - STA 5+50

CITY OF ANN ARBOR

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







KEY	DISTRUCTION KEY DESCRIPTION
СР	CONC PAVT WITH INTEGRAL CURB, NONREINF, 8 INCH
CG	CURB AND GUTTER, CONC, DET F4, SPECIAL
APP	HMA APPROACH
SR6	CURB RAMP, CONCRETE, 6 INCH, P-NC, ADA, MODIFIED
SC4	SIDEWALK, CONCRETE, 4 INCH, SPECIAL
SC6	SIDEWALK, CONCRETE, 6 INCH, SPECIAL
DWT	DETECTABLE WARNING TILES
НМА	HMA, 4EML / 4EL / 3C
DSC-B	DR STRUCTURE COVER, TYPE B
DSC-K	DR STRUCTURE COVER, TYPE K
DSC-Q	DR STRUCTURE COVER, TYPE Q
АВО	ADJUST BY OTHERS
DSA	DR STRUCTURE COVER, ADJ, CASE 1
МВА	ADJUST MONUMENT BOX OR VALVE BOX
DOM	DRIVEWAY OPENING, CONC, DET M, P-NC
DC-6	PLACE CONC, DRIVE APPROACH, NON-REINFORCED, P-NC, 6 INCH. PLACE AND COMPACT 6 INCH SUBBASE, CIP, OR AGGREGATE BASE, 6 INCH

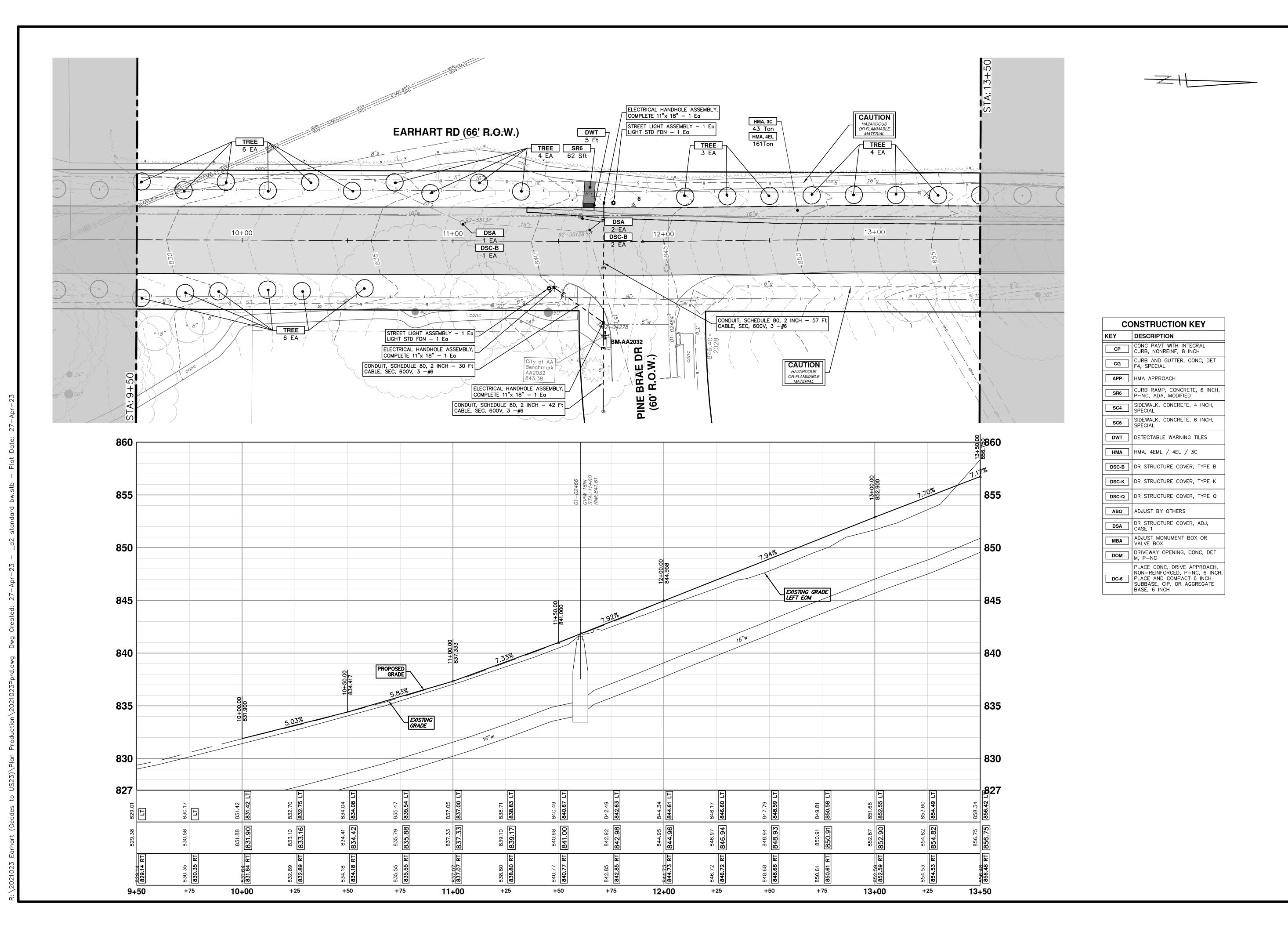
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1"= 20' PROFILE: 1"= 2' EARHART ROAD IMPROVEMENTS (GEDDES

PRAWING NO.





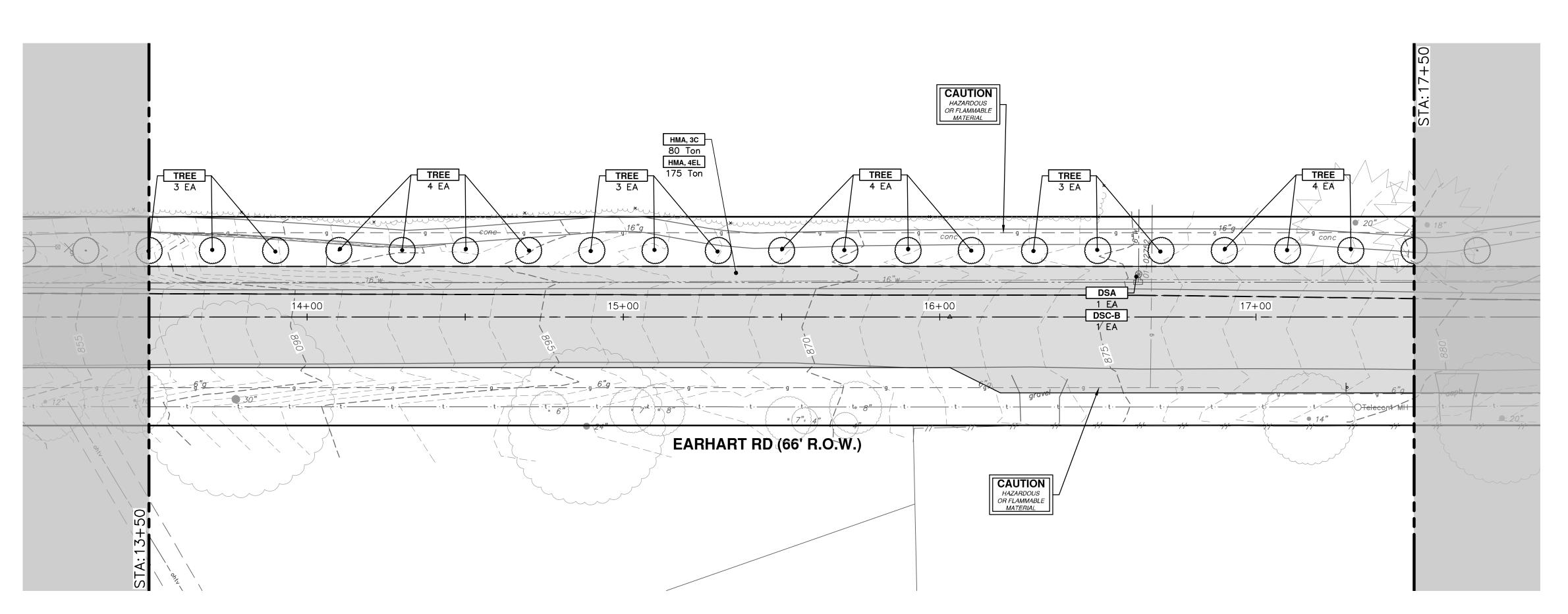
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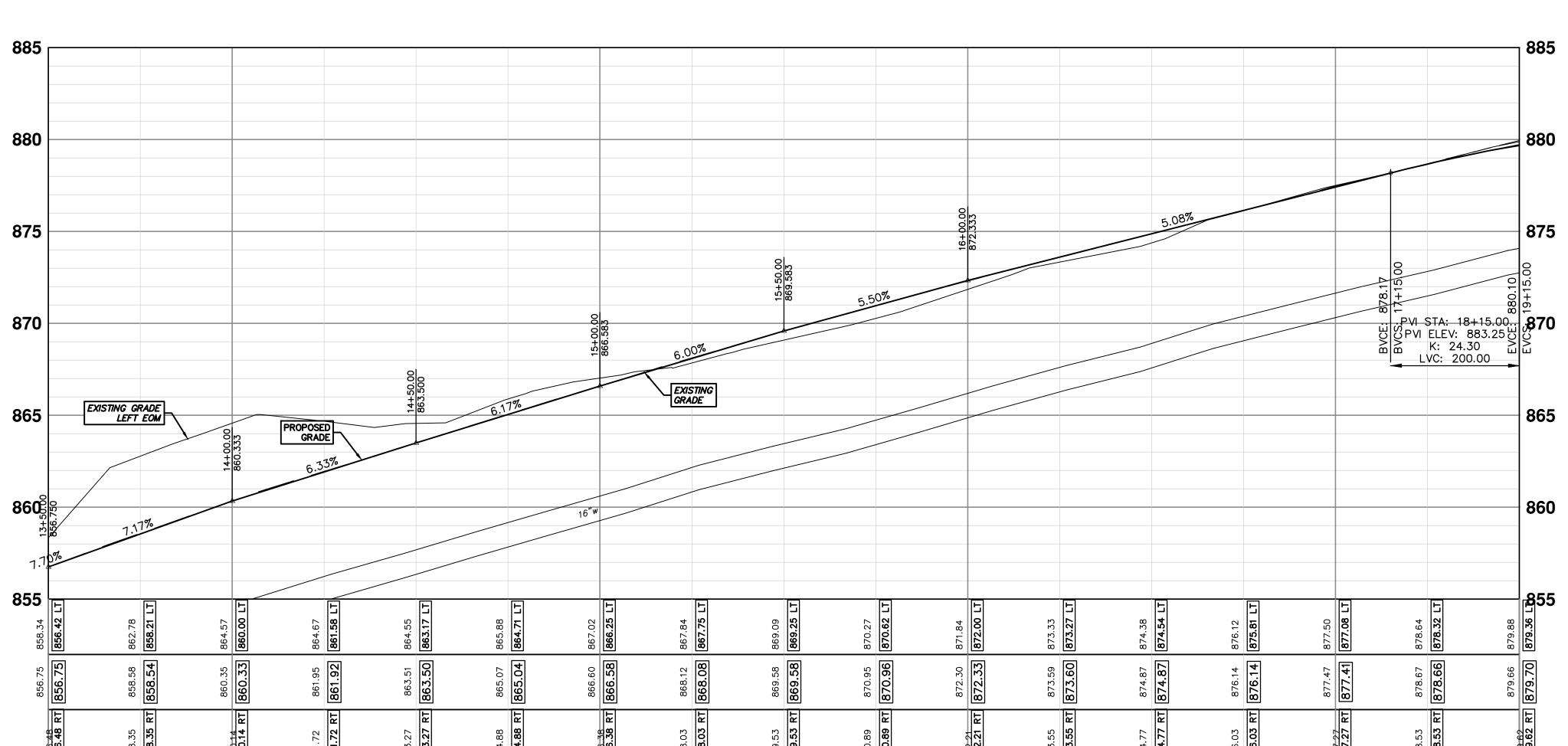


- PUBLIC SERVICES - ENGINEERING
EARHART ROAD IMPROVEMENTS (GEDDI ROAD PLAN & PROFILE

CITY OF ANN ARBOR
SCALE PLAN: 1"= 20' PROFILE: 1"= 2'

SHEET No.





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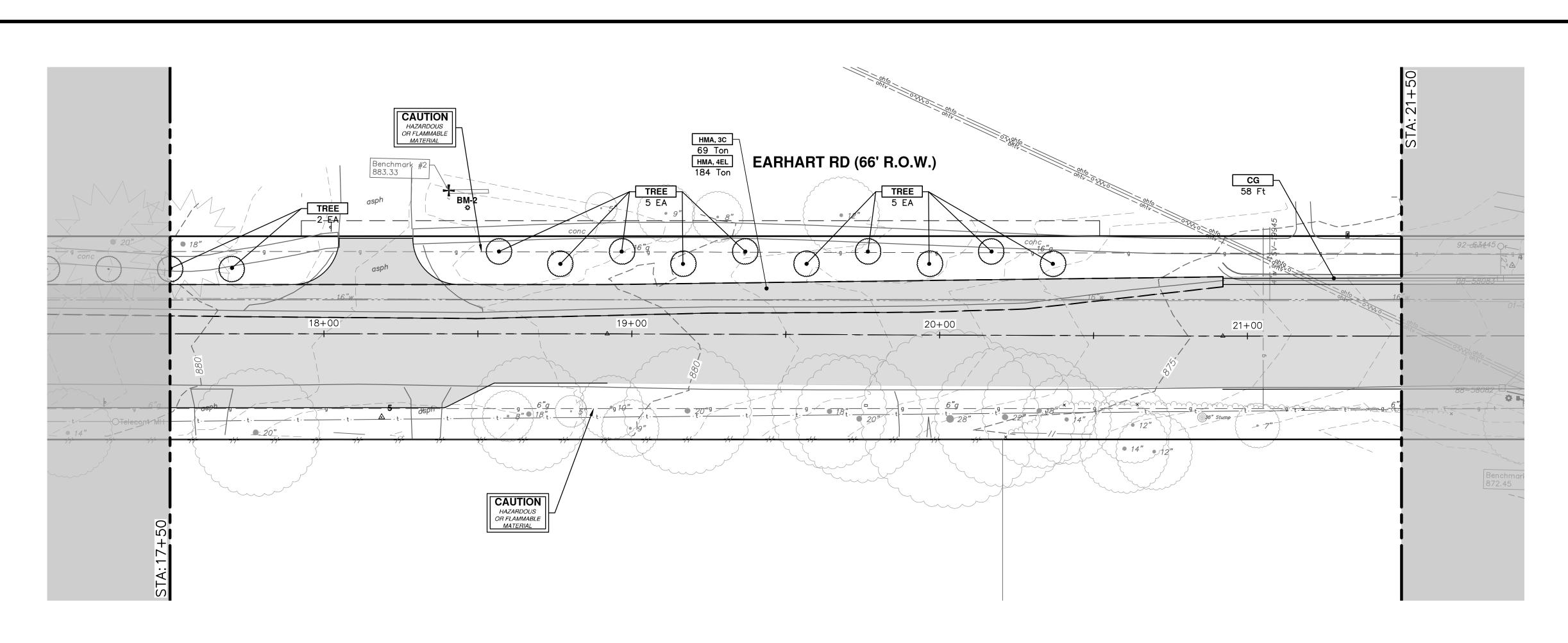
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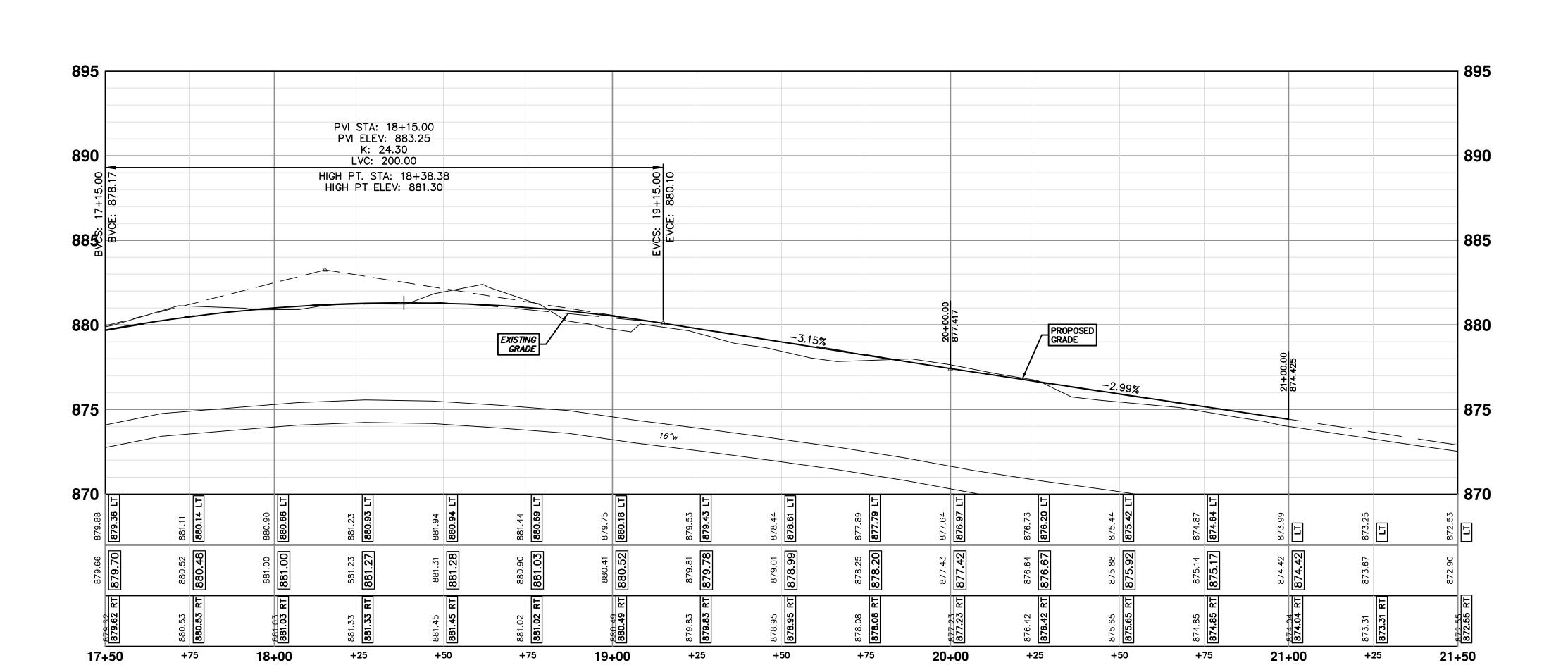


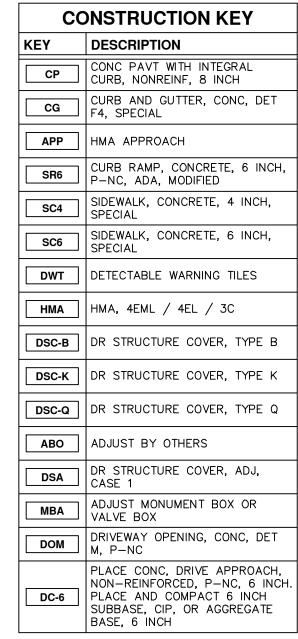
CONSTRUCTION KEY			
KEY	DESCRIPTION		
СР	CONC PAVT WITH INTEGRAL CURB, NONREINF, 8 INCH		
CG	CURB AND GUTTER, CONC, DET F4, SPECIAL		
APP	HMA APPROACH		
SR6	CURB RAMP, CONCRETE, 6 INCH, P-NC, ADA, MODIFIED		
SC4	SIDEWALK, CONCRETE, 4 INCH, SPECIAL		
SC6	SIDEWALK, CONCRETE, 6 INCH, SPECIAL		
DWT	DETECTABLE WARNING TILES		
НМА	HMA, 4EML / 4EL / 3C		
DSC-B	DR STRUCTURE COVER, TYPE B		
DSC-K	DR STRUCTURE COVER, TYPE K		
DSC-Q	DR STRUCTURE COVER, TYPE Q		
АВО	ADJUST BY OTHERS		
DSA	DR STRUCTURE COVER, ADJ, CASE 1		
МВА	ADJUST MONUMENT BOX OR VALVE BOX		
DOM	DRIVEWAY OPENING, CONC, DET M, P-NC		
DC-6	PLACE CONC, DRIVE APPROACH, NON-REINFORCED, P-NC, 6 INCH PLACE AND COMPACT 6 INCH SUBBASE, CIP, OR AGGREGATE BASE, 6 INCH		

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EARHART ROAD IMPROVEMENTS (GEDDES - US23)	CITY OF ANN ARBOR PUBLIC SERVICES ON EACH HIDDAN STREET					
ROAD PLAN & PROFILE	ANN ARBOR, MI 48107-8647					
	734-794-6410 www.a2gov.org	00 OUT TO BID		4-27-23	cc/DF	NB Know what's below .
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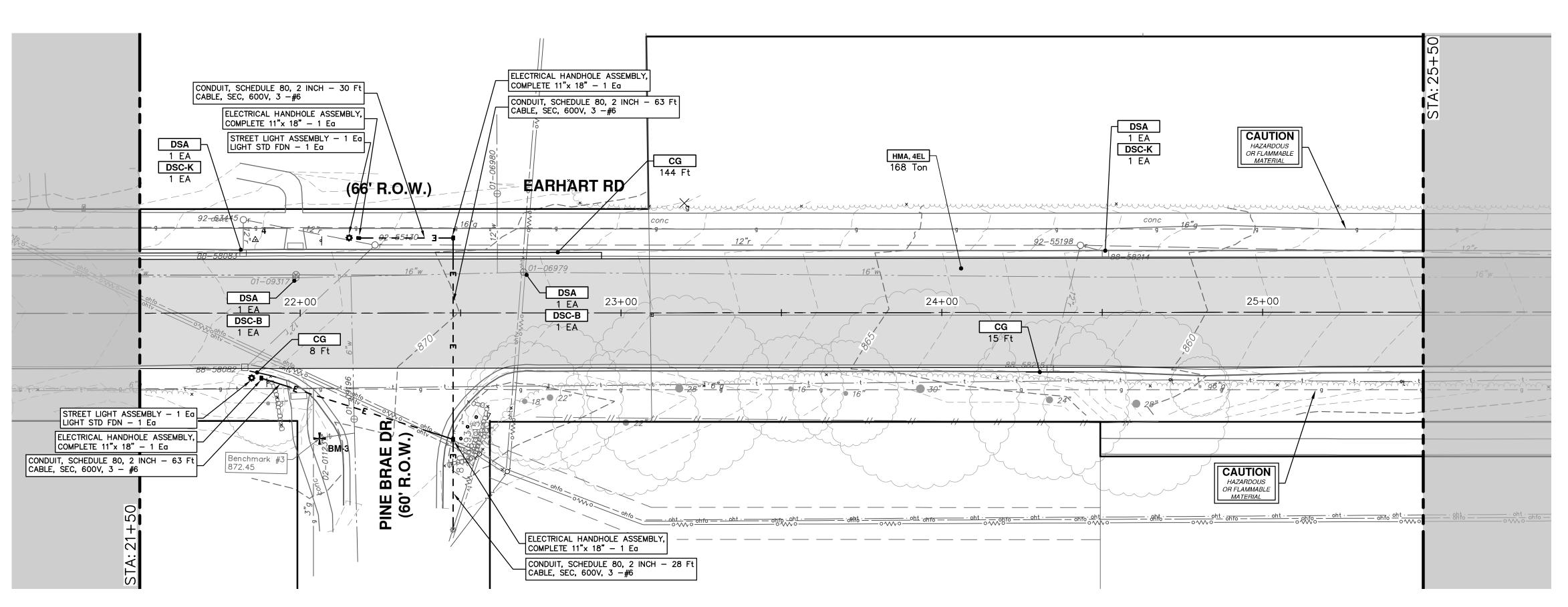
N ARBOR - PUBLIC SERVICES - ENGINEERING	EARHART ROAD IMPROVEMENTS (GEDDES - US	ROAD PLAN & PROFILE	CTA 13.50 CTA 17.50
N ARBOF	PROFILE: 1" = 2'		











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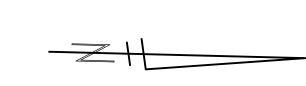
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CC	NSTRUCTION KEY
KEY	DESCRIPTION
СР	CONC PAVT WITH INTEGRAL CURB, NONREINF, 8 INCH
CG	CURB AND GUTTER, CONC, DET F4, SPECIAL
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DSC-B	DR STRUCTURE COVER, TYPE B
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SERVICES - ENGINEERING	CITY OF ANN ABBOD						6
RT ROAD IMPROVEMENTS (GEDDES - US23)	PUBLIC SERVICES 301 EAST HURON STREET						
ROAD PLAN & PROFILE	P.O. BOX 8647 ANN ARBOR, MI 48107-8647						
	734-794-6410 www.a2gov.org	00	OUT TO BID	4-27-23	CC/DF	a B B	Know what's b
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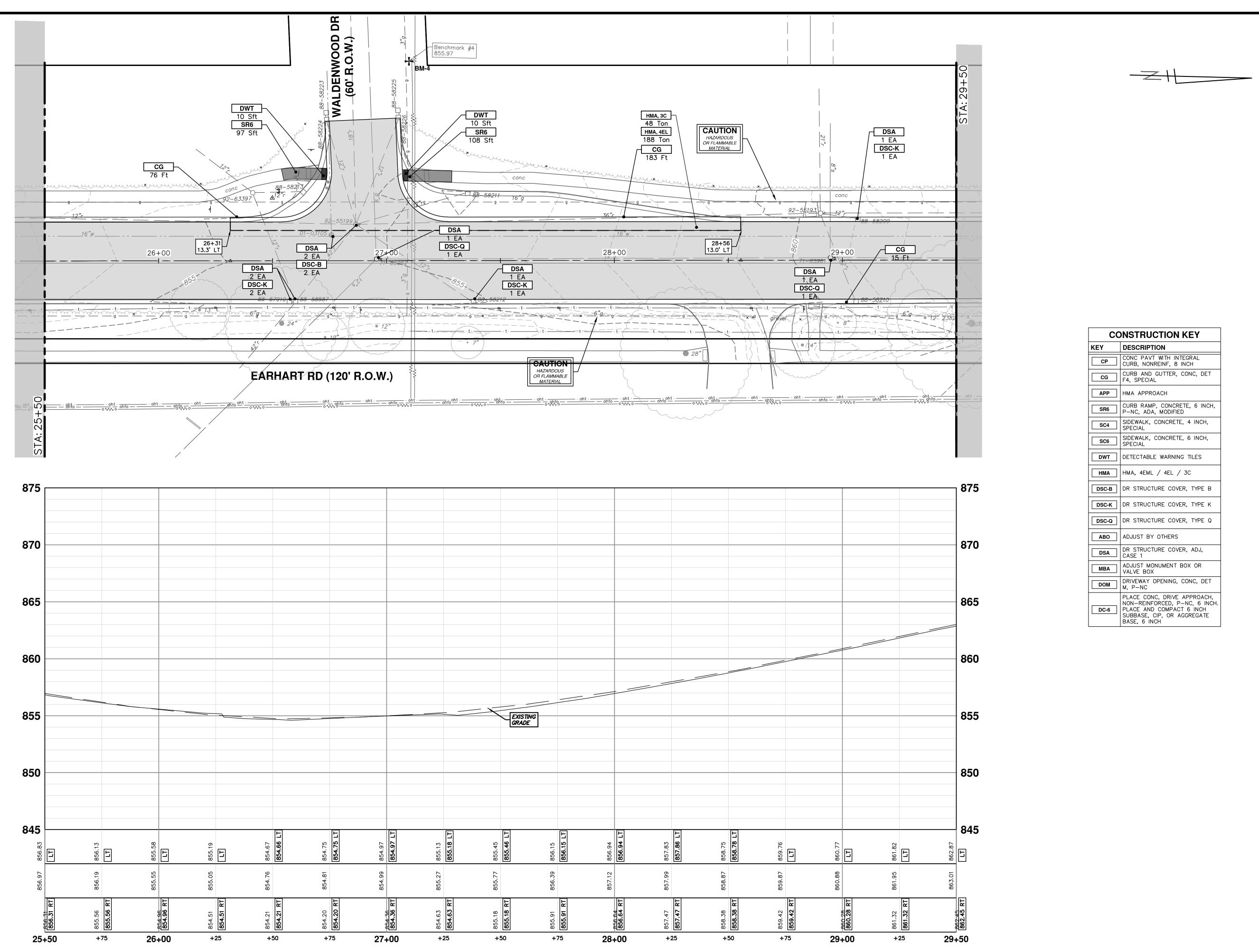
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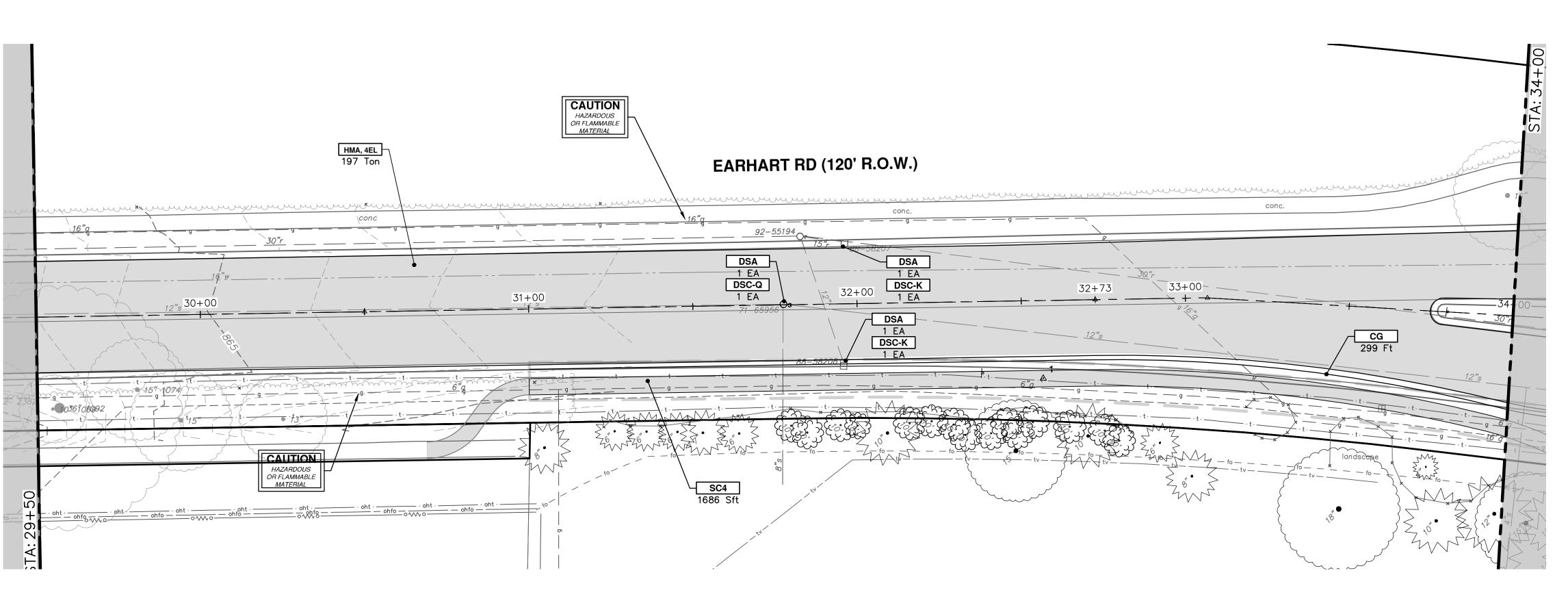
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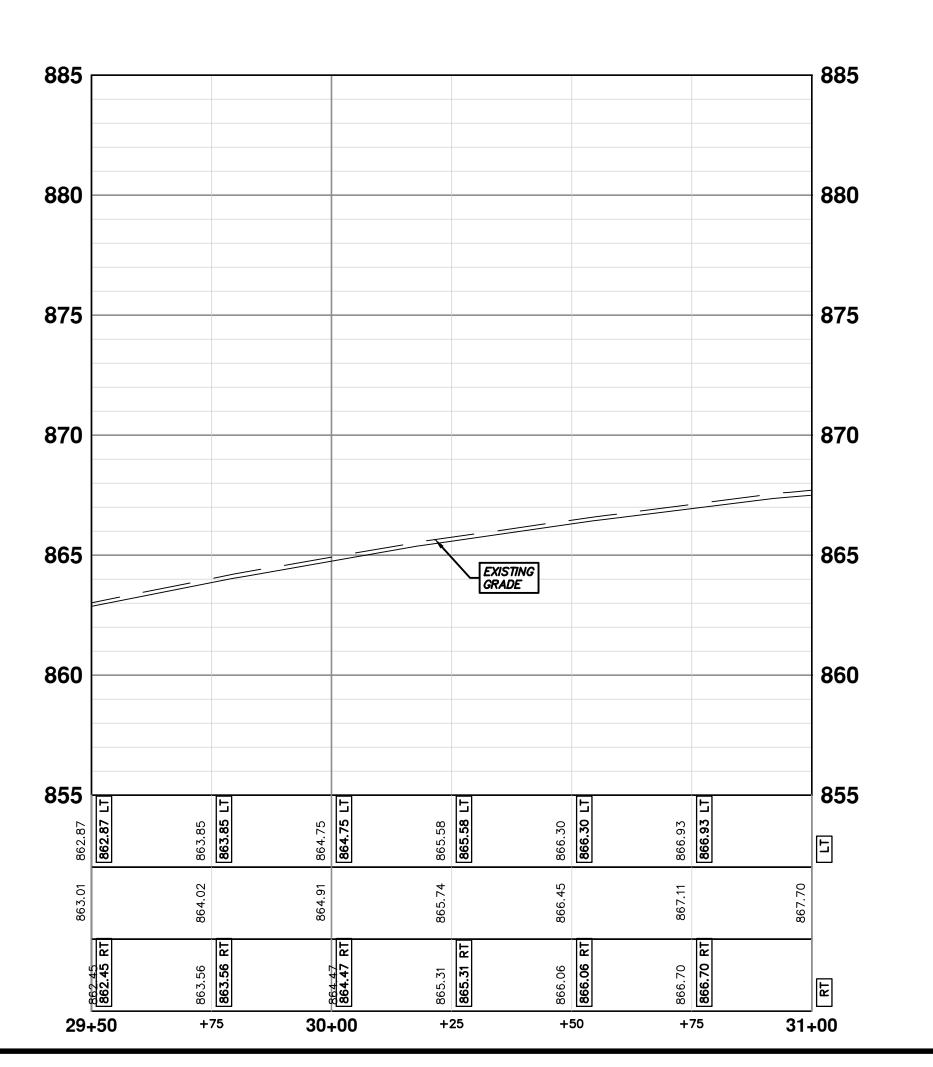
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GEDDES - US23)

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1" = 20' PROFILE: 1" = 2' EARHART ROAD IMPROVEMENTS (CARMING NO. ROAD PLAN & PROFILE PRAWING NO.

SHEET No.





CC	NSTRUCTION KEY
KEY	DESCRIPTION
СР	CONC PAVT WITH INTEGRAL CURB, NONREINF, 8 INCH
CG	CURB AND GUTTER, CONC, DET F4, SPECIAL
APP	HMA APPROACH
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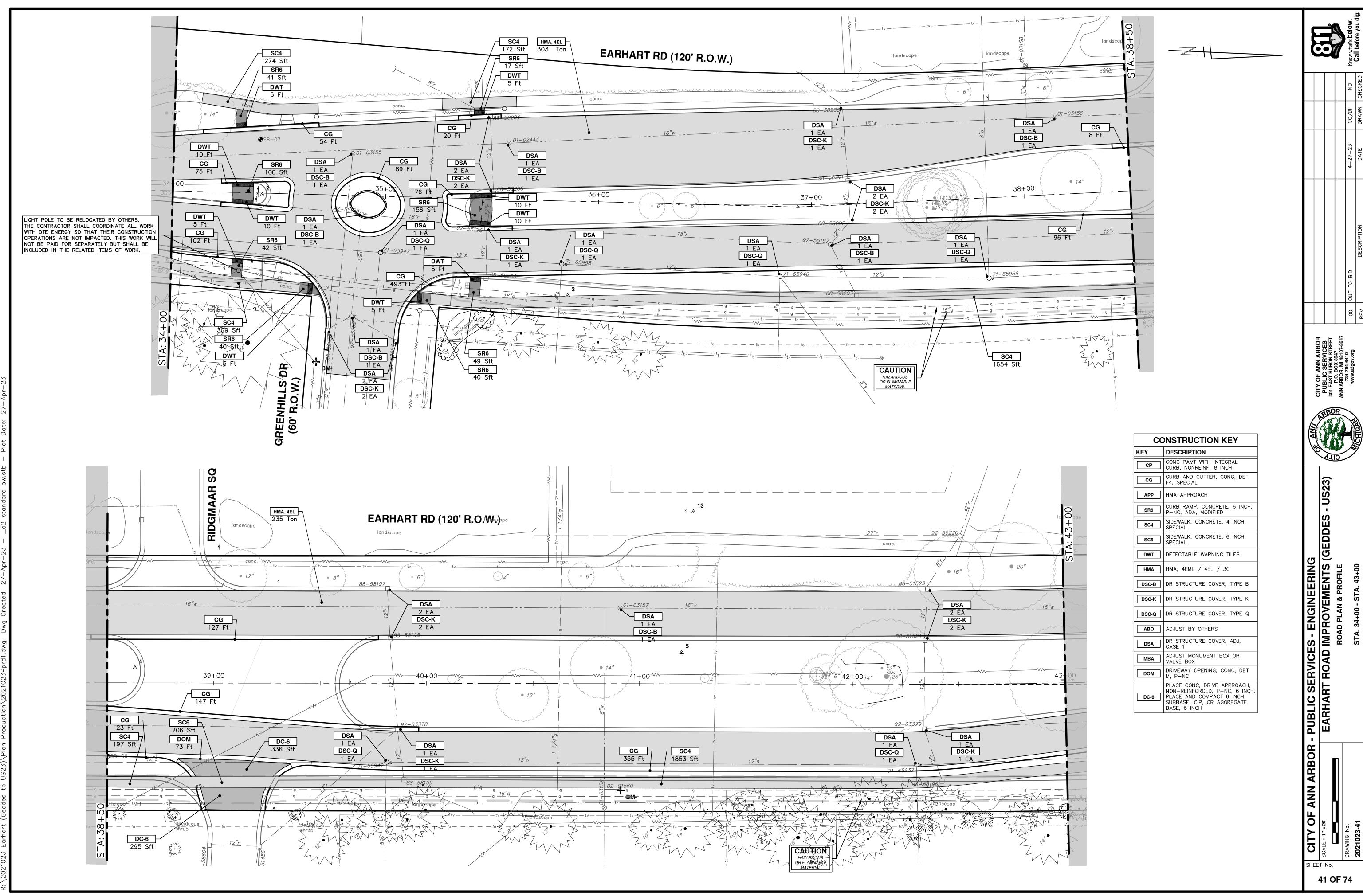
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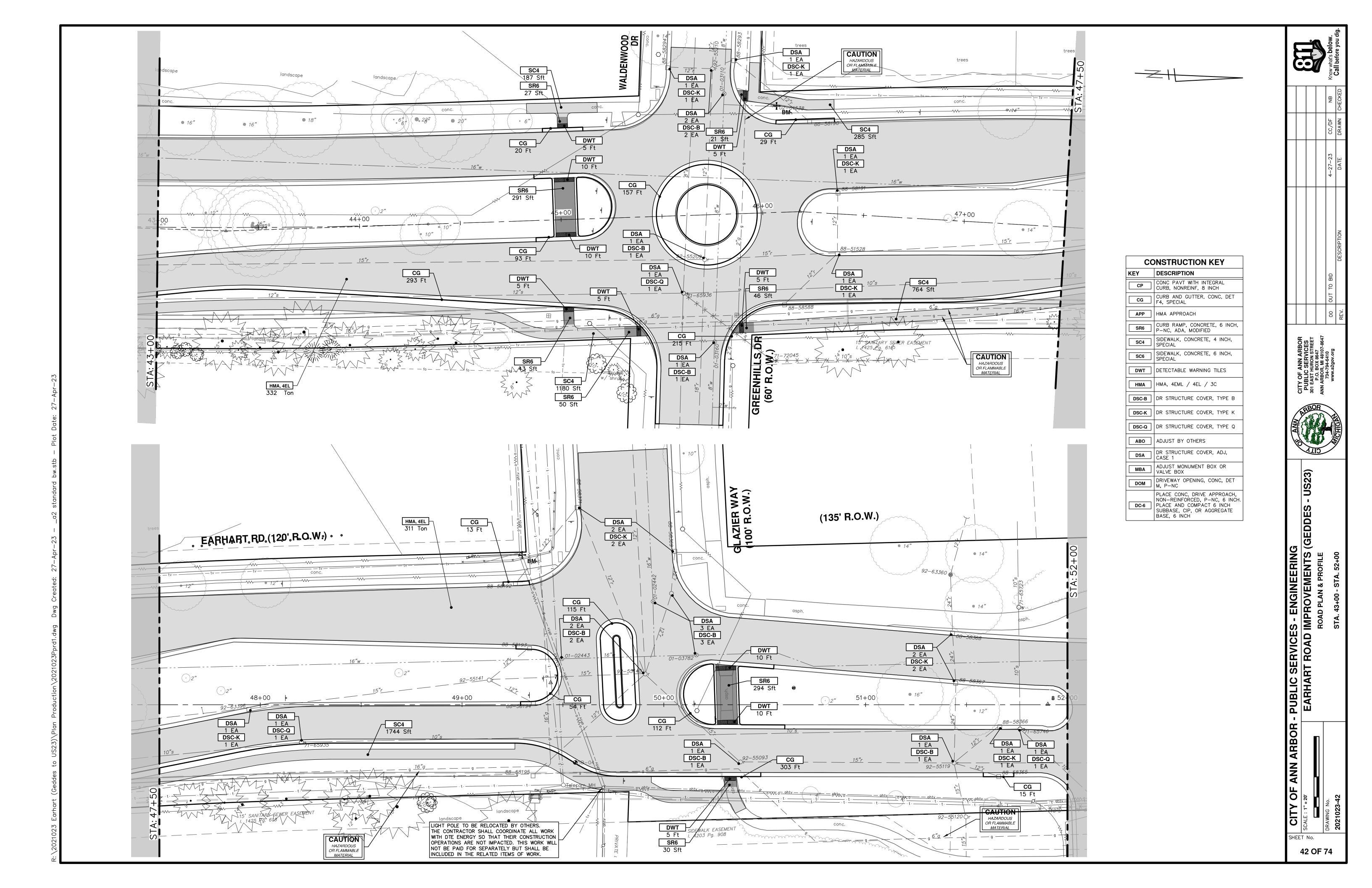


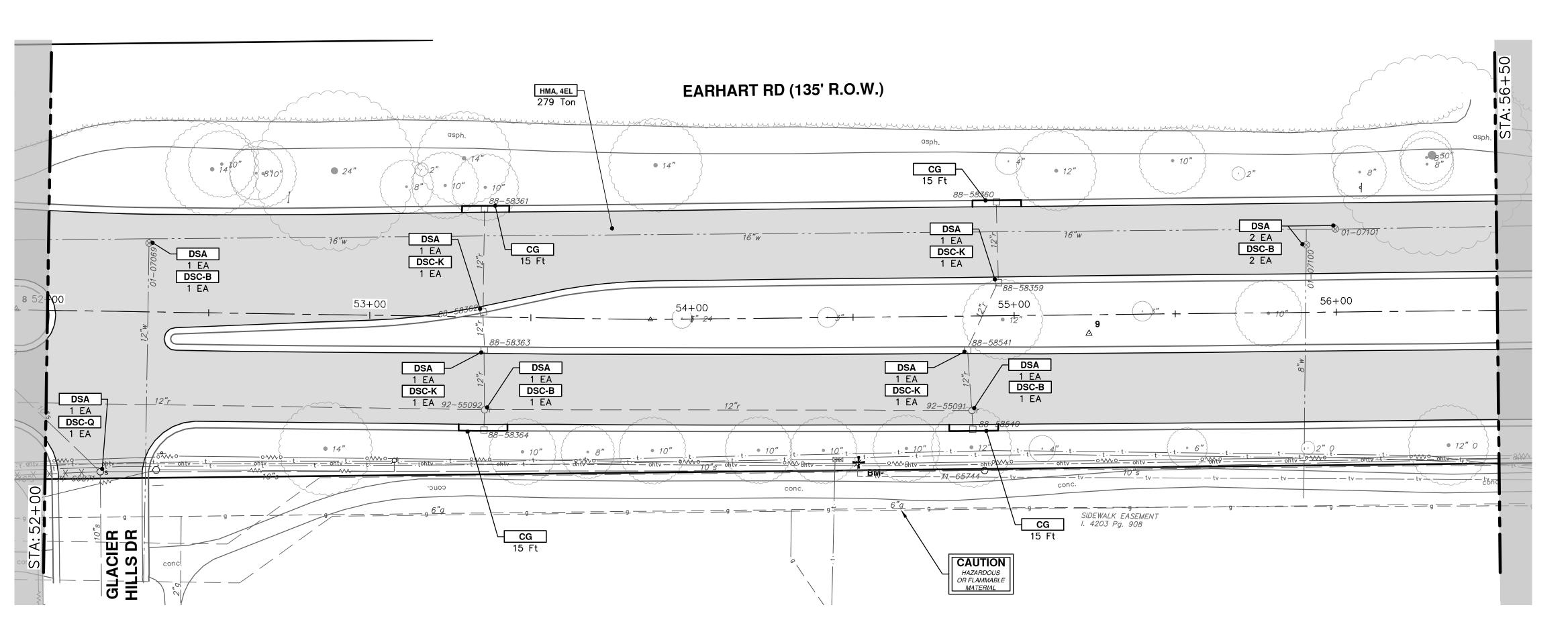
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

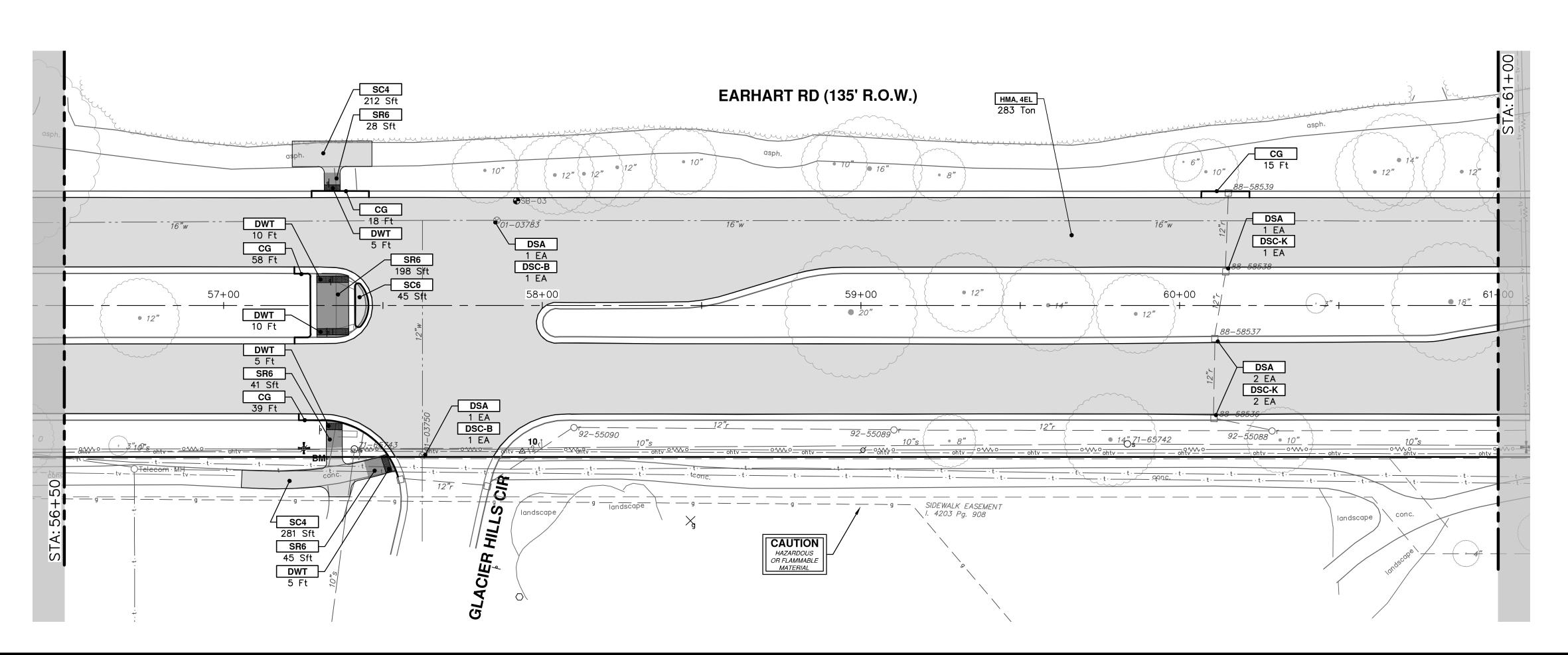
SCALE PLAN: 1" = 20' PROFILE: 1" = 2' EARHART ROAD IMPROVEMENTS (GEDDES | LOAD PLAN & PROFILE |

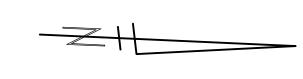
ROAD PLAN & PROFILE











CC	ONSTRUCTION KEY
KEY	DESCRIPTION
СР	CONC PAVT WITH INTEGRAL CURB, NONREINF, 8 INCH
CG	CURB AND GUTTER, CONC, DET F4, SPECIAL
APP	HMA APPROACH
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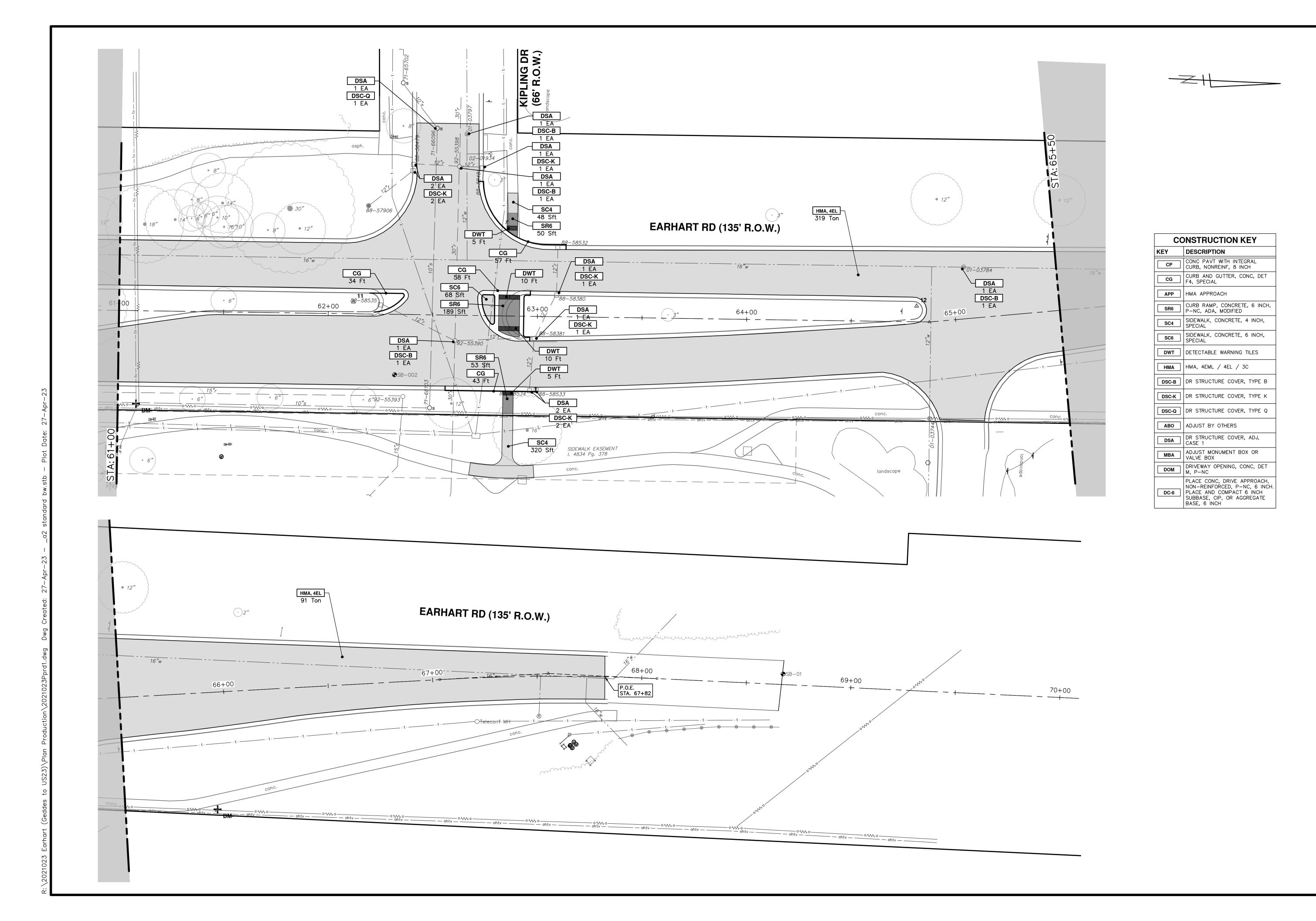
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CALE: 1" = 20"

EARHART ROAD IMPROVEMENTS (GEDD)

ROAD PLAN & PROFILE



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

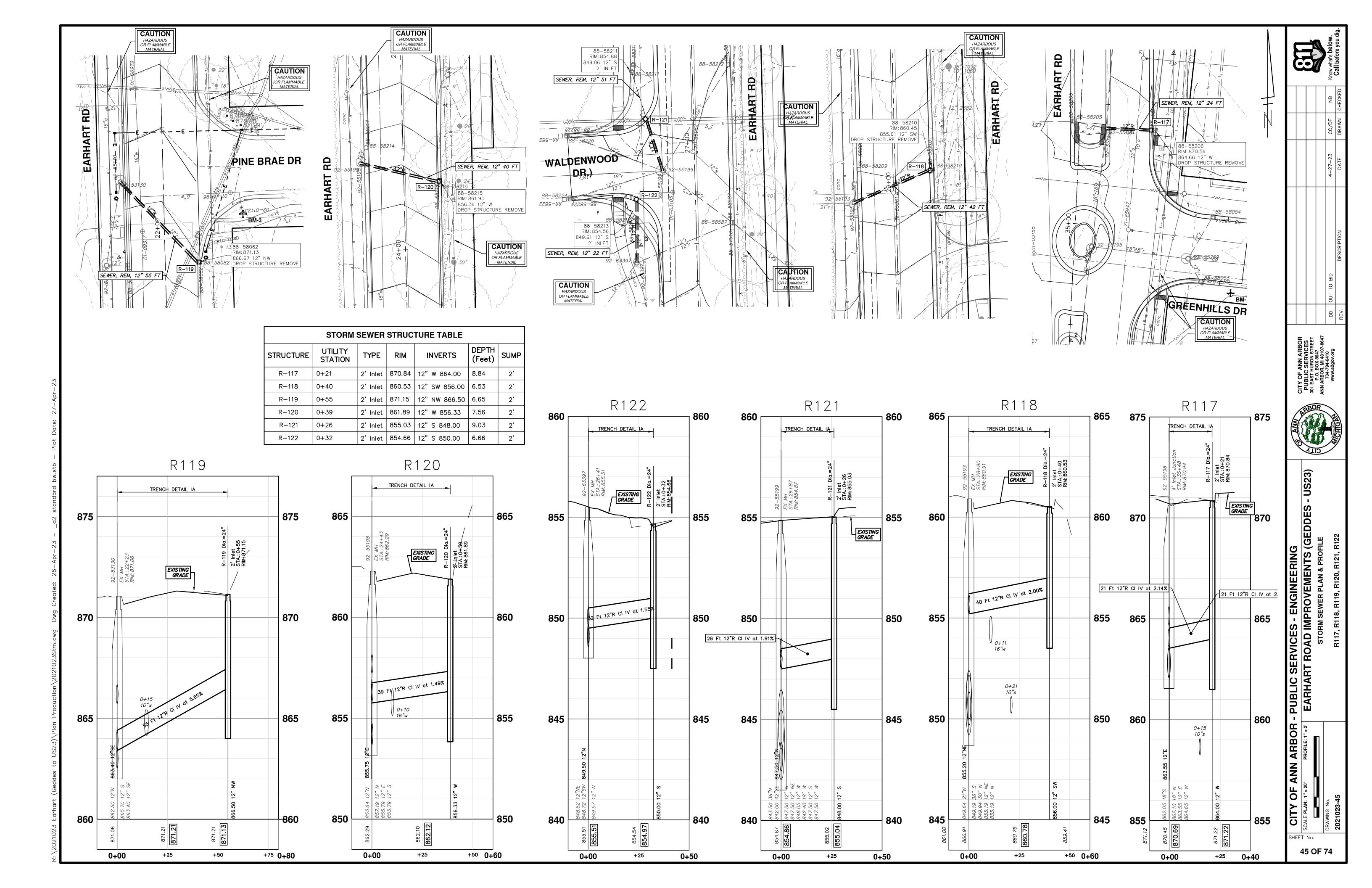
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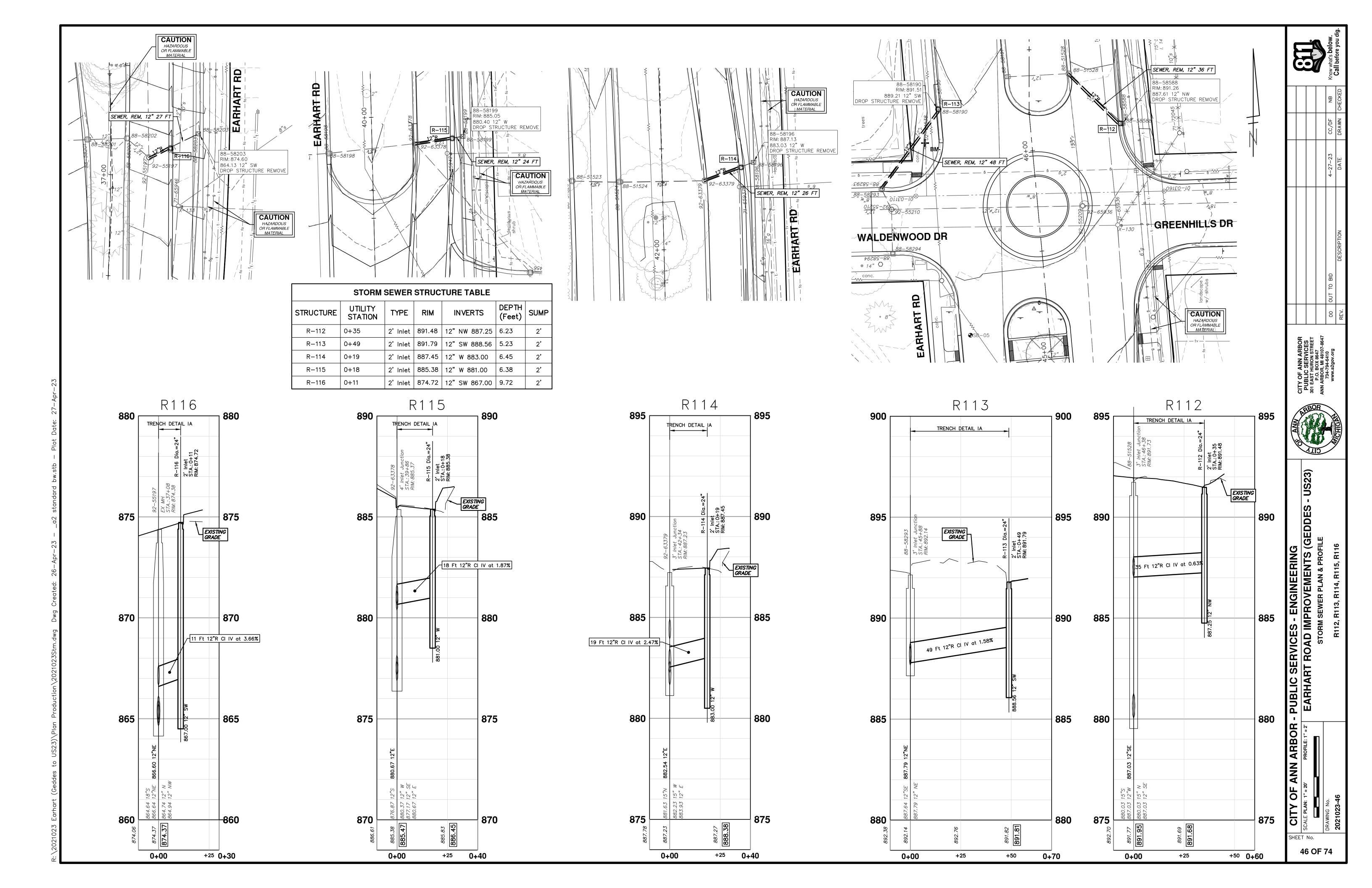
EARHART ROAD IMPROVEMENTS (GEDDES

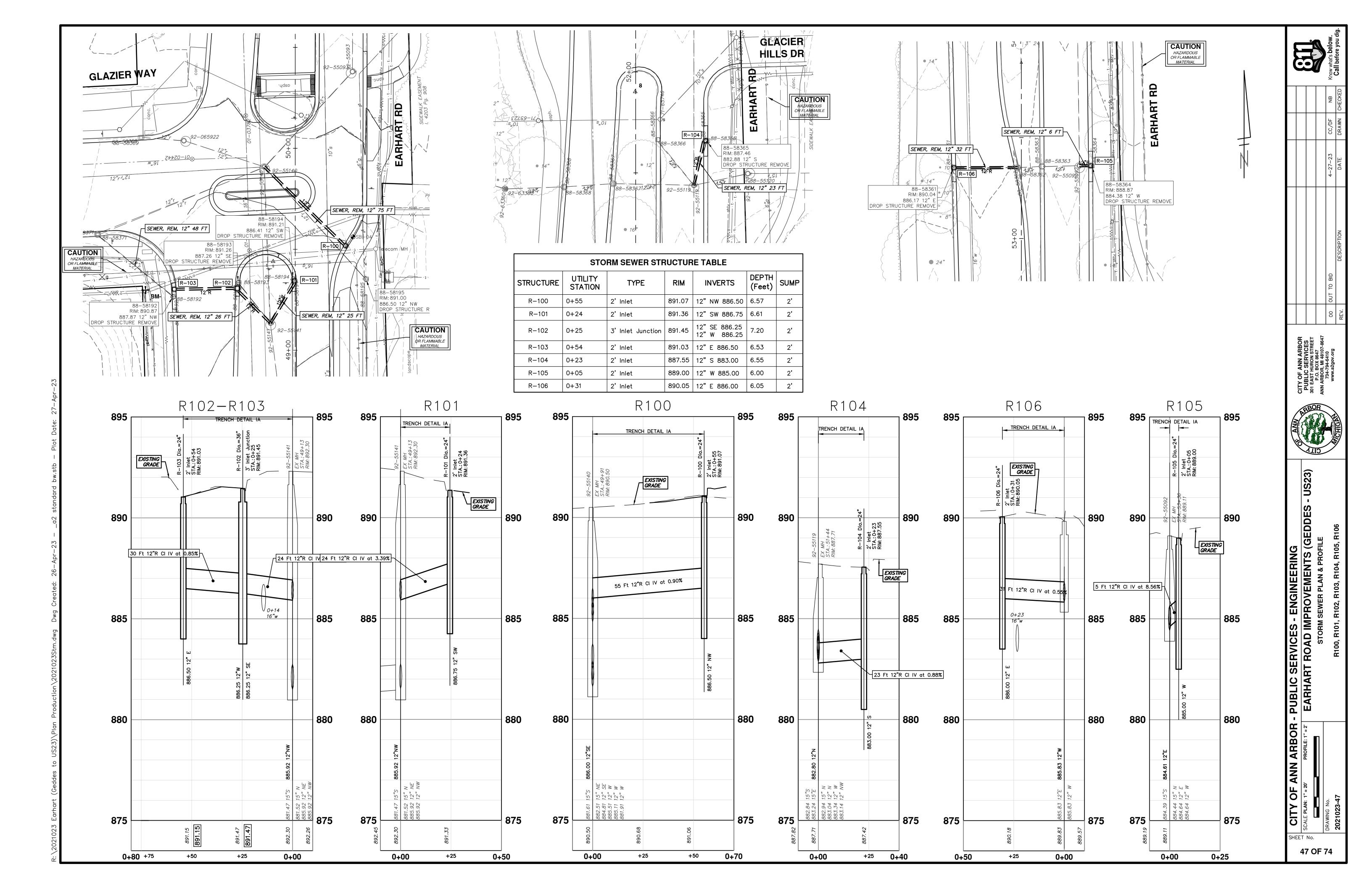
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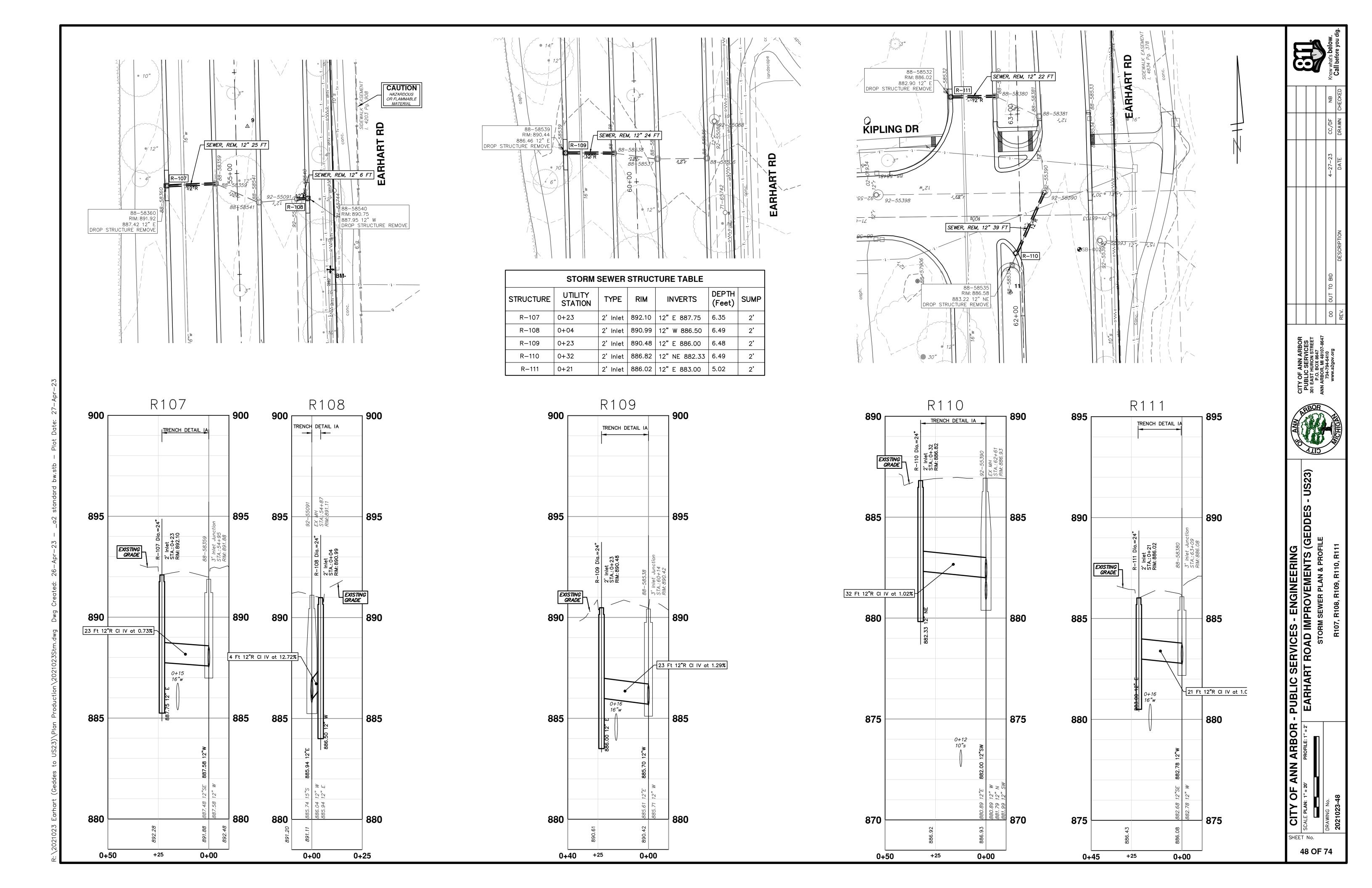
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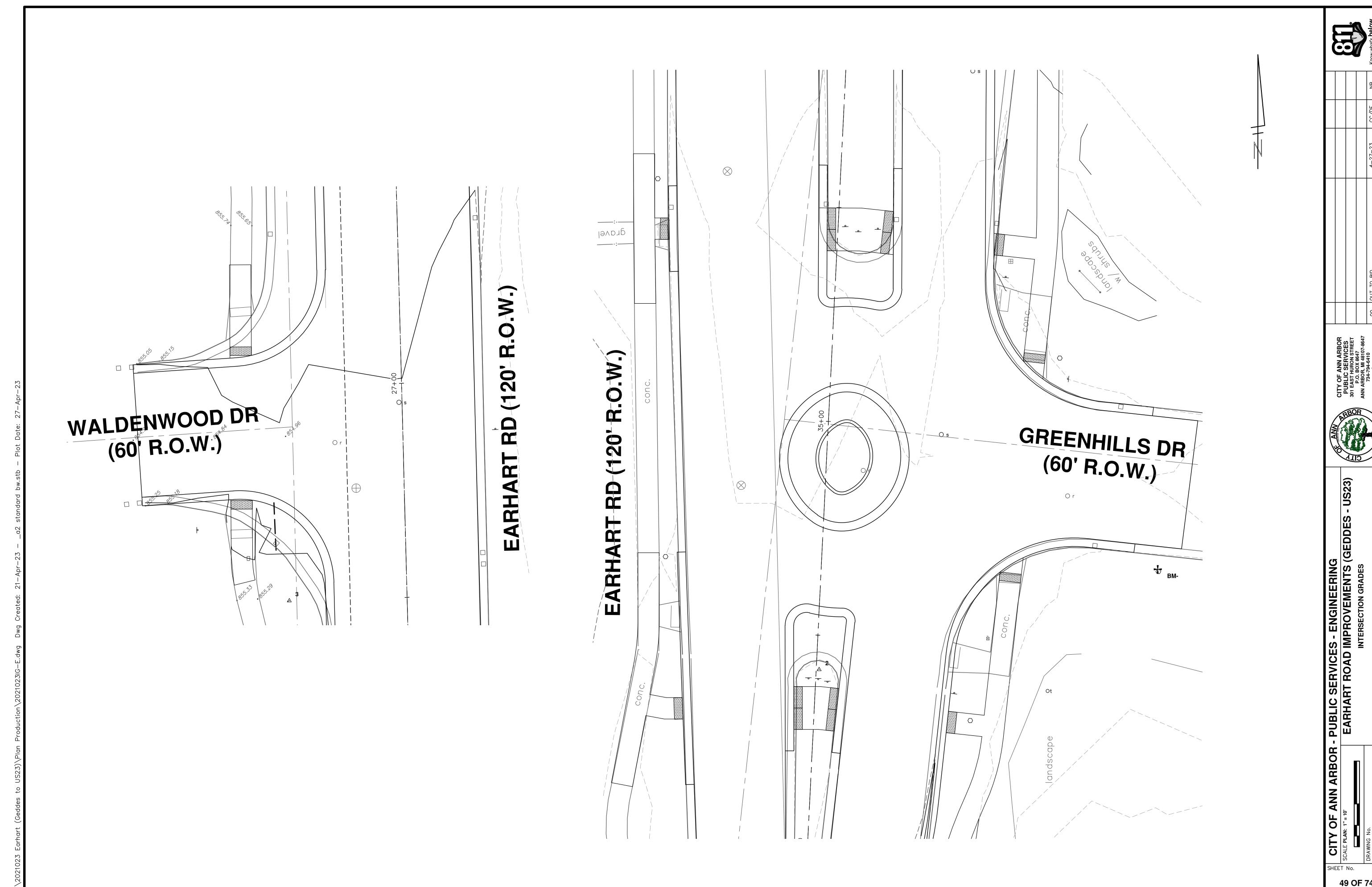
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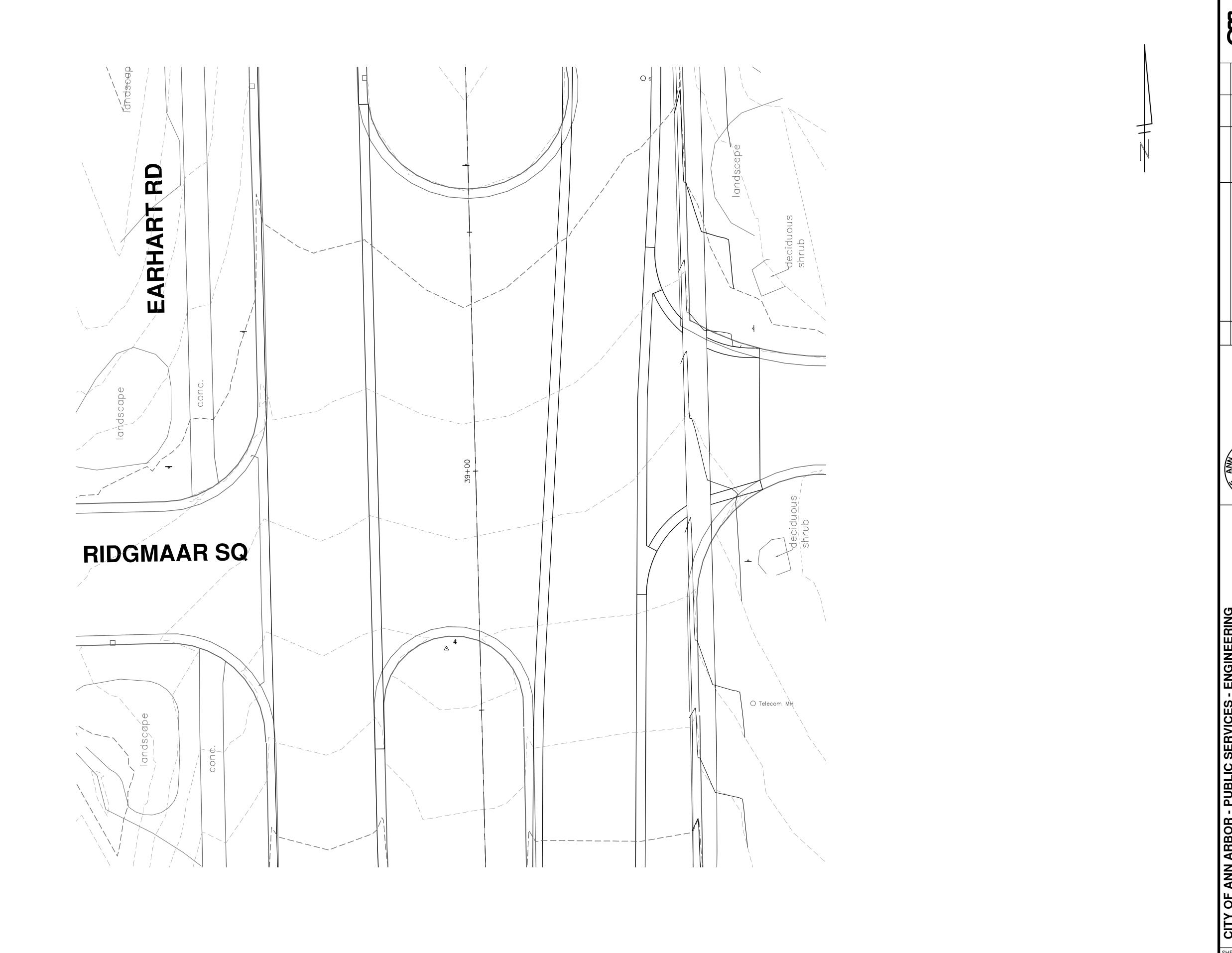












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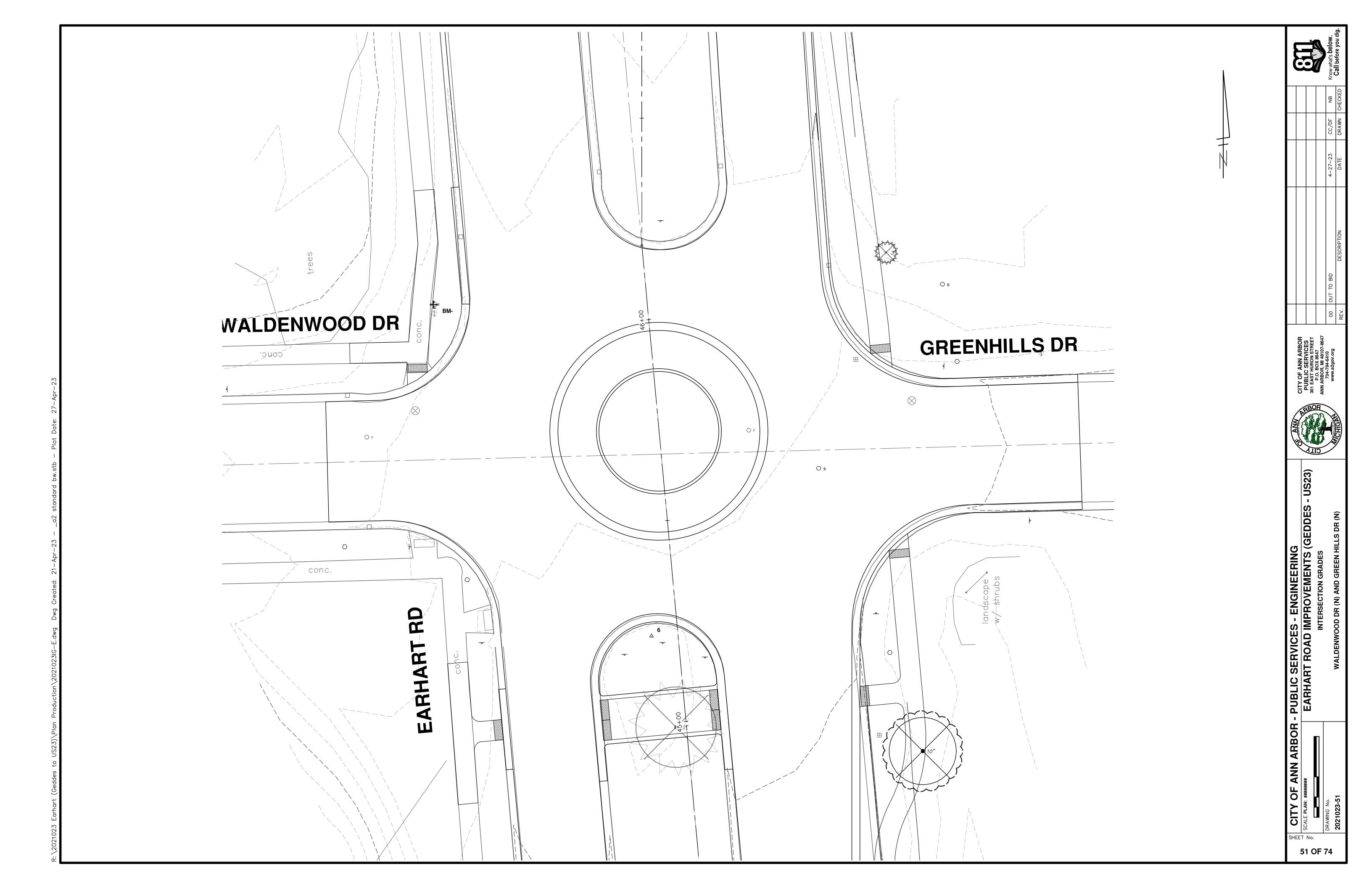
SCALE PLAN: 1" = 10*

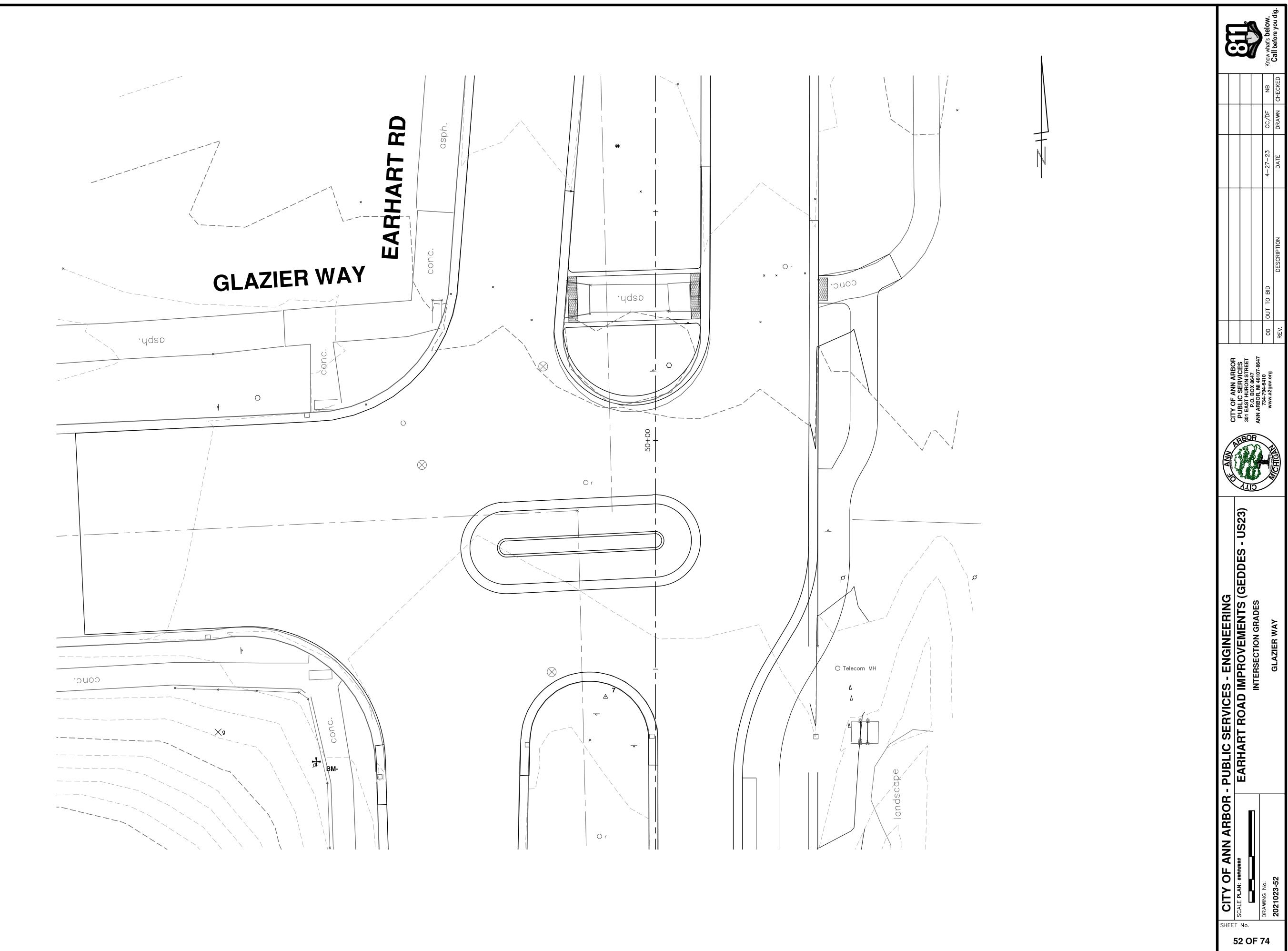
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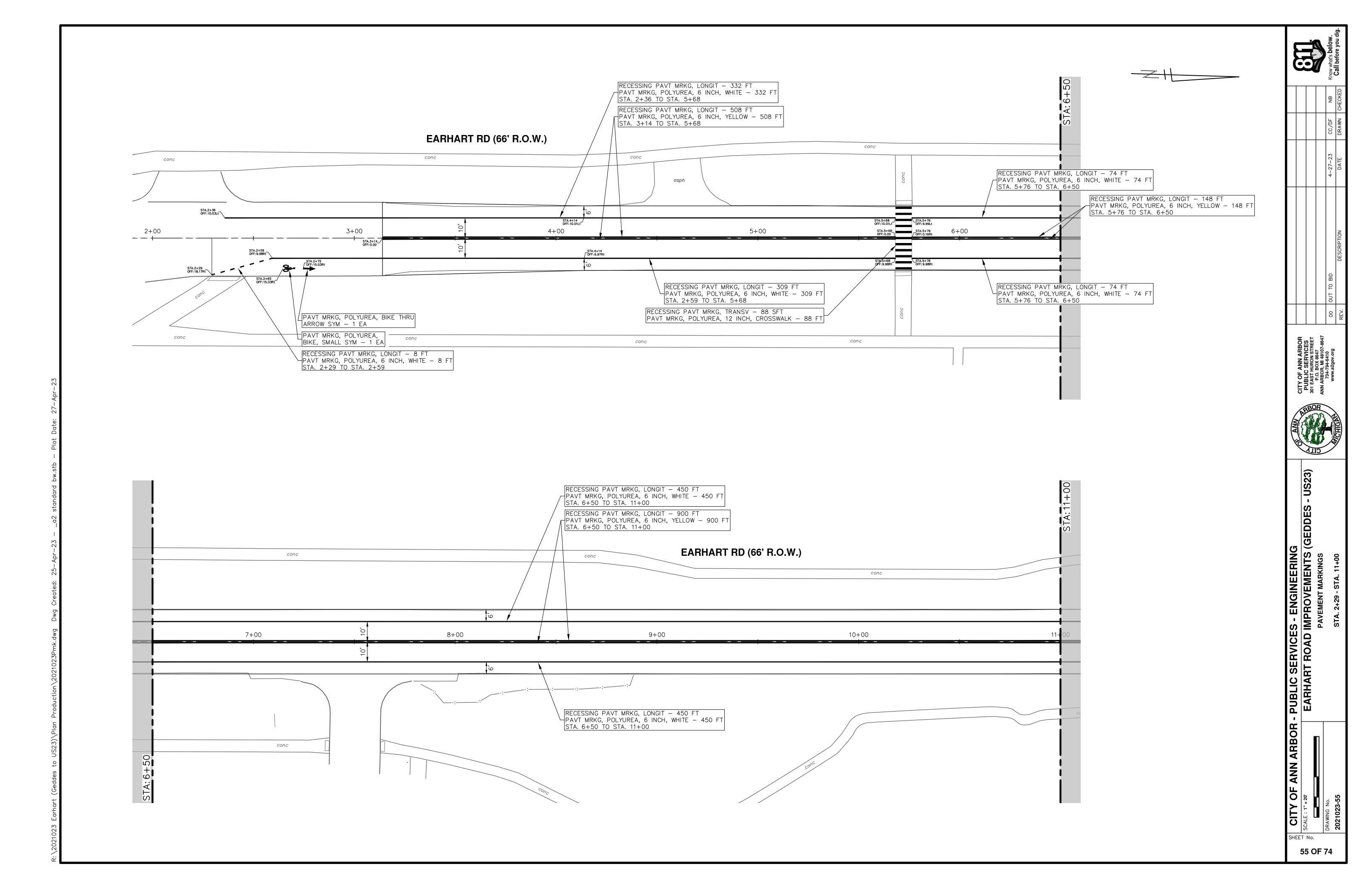
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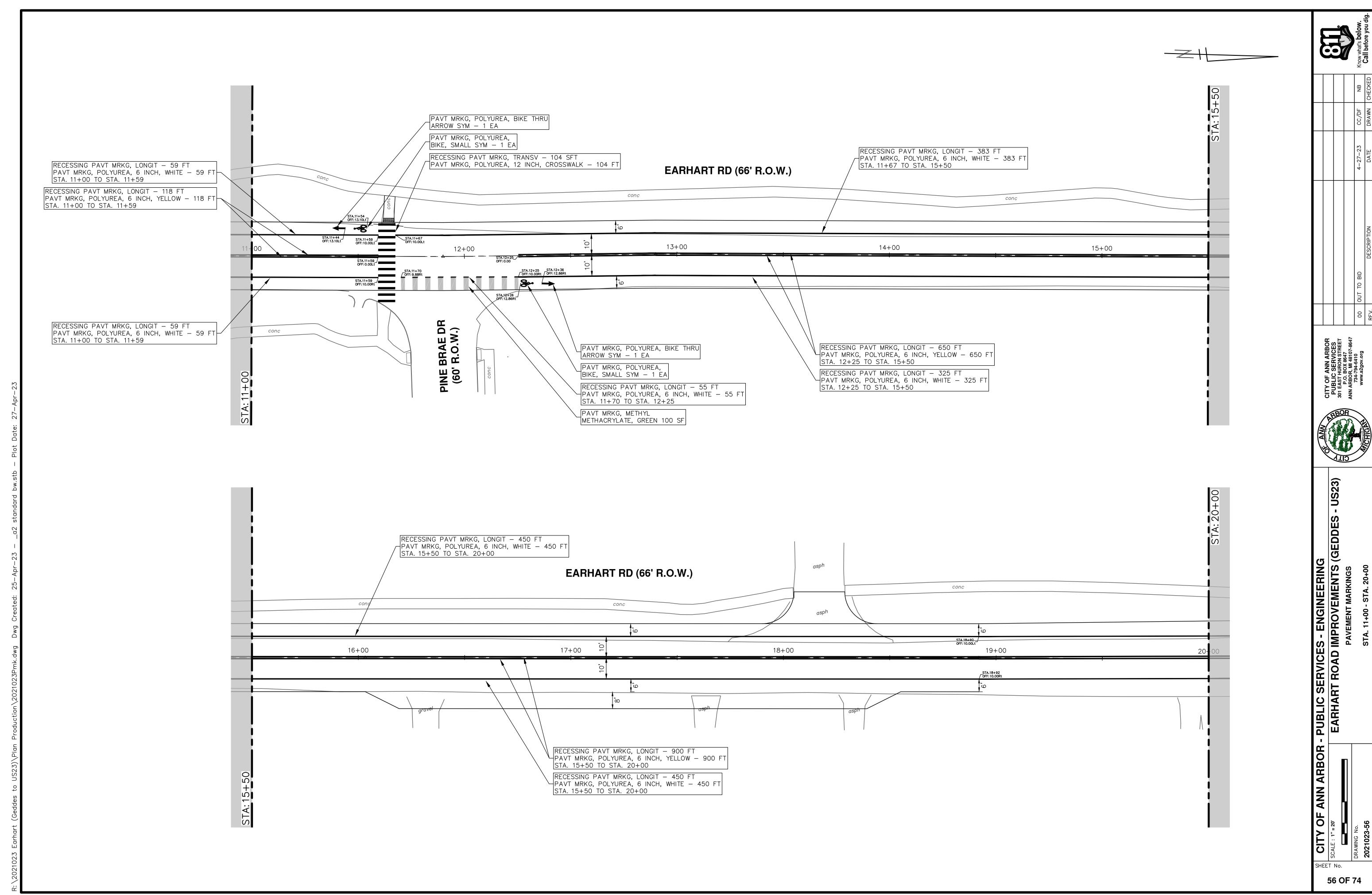
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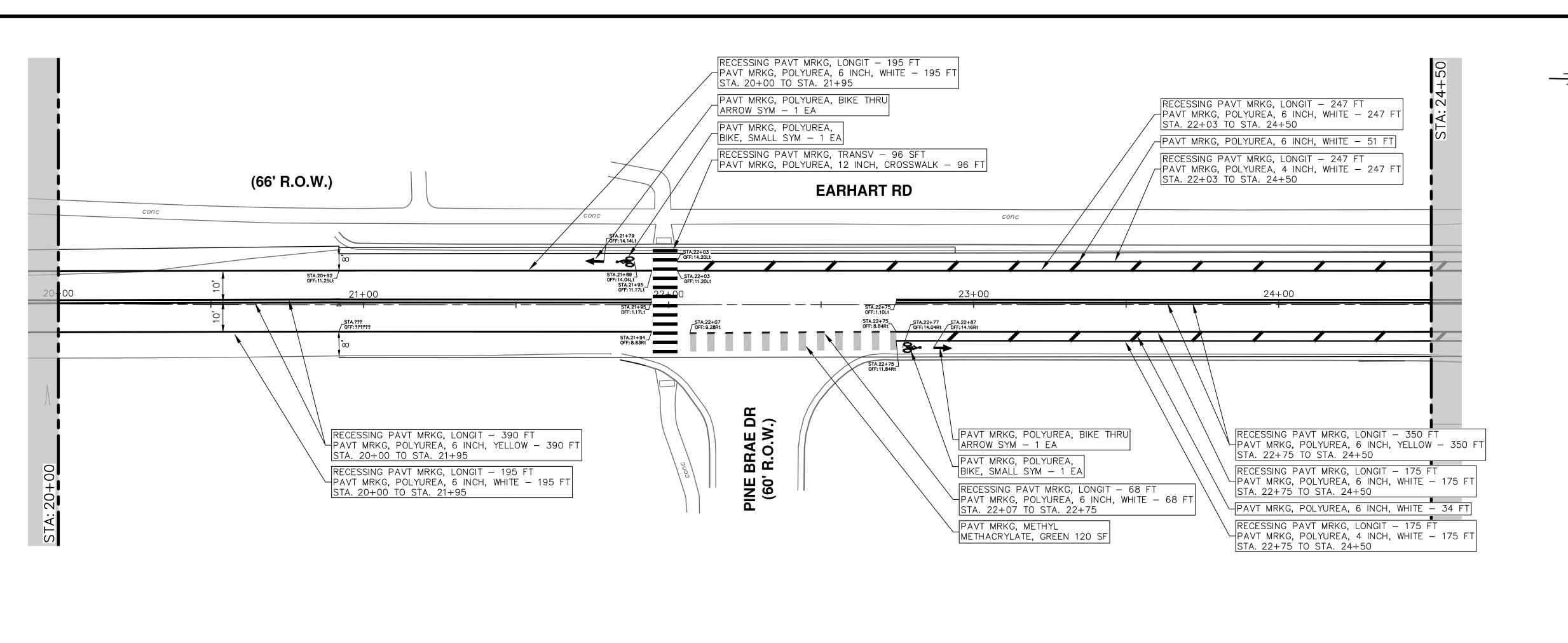
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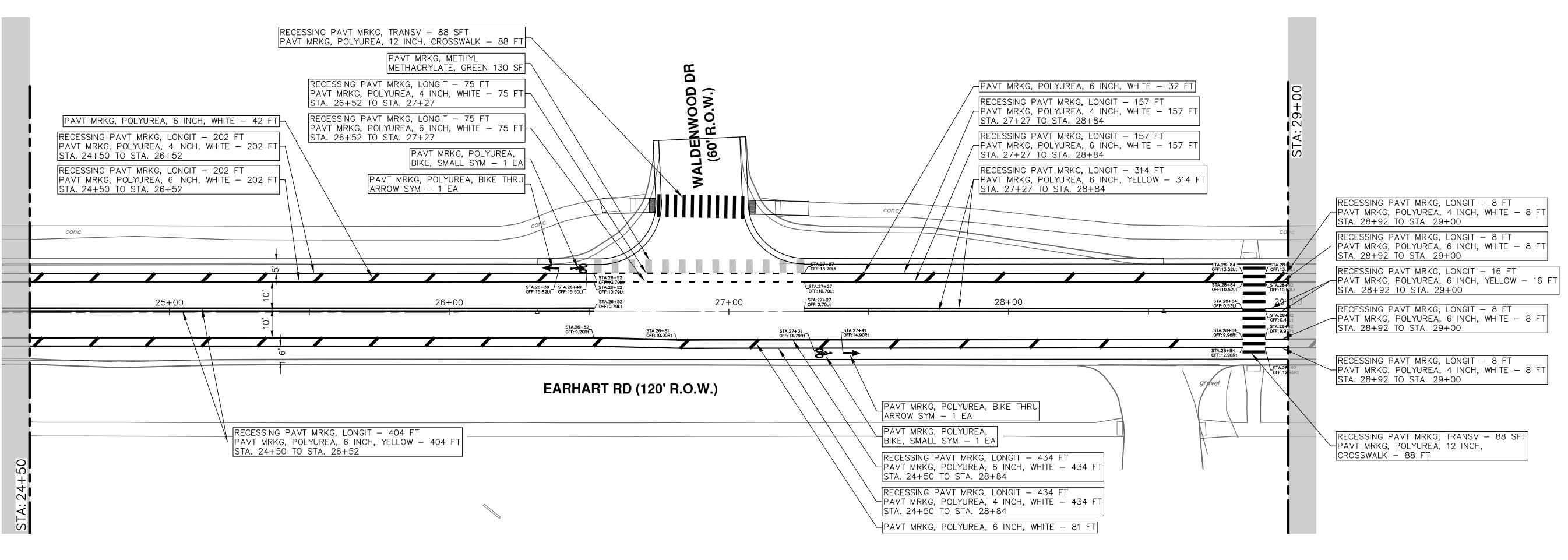
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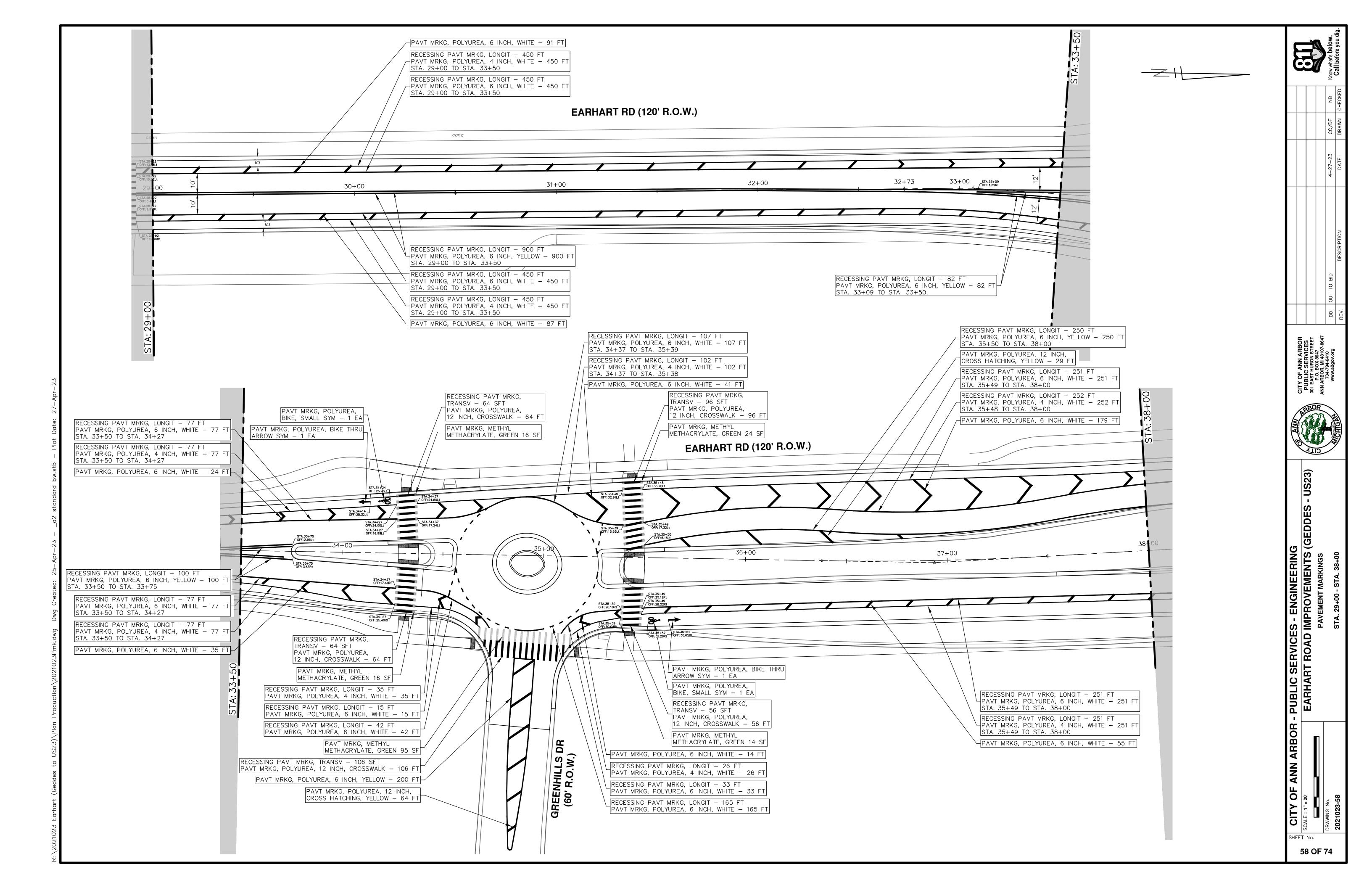


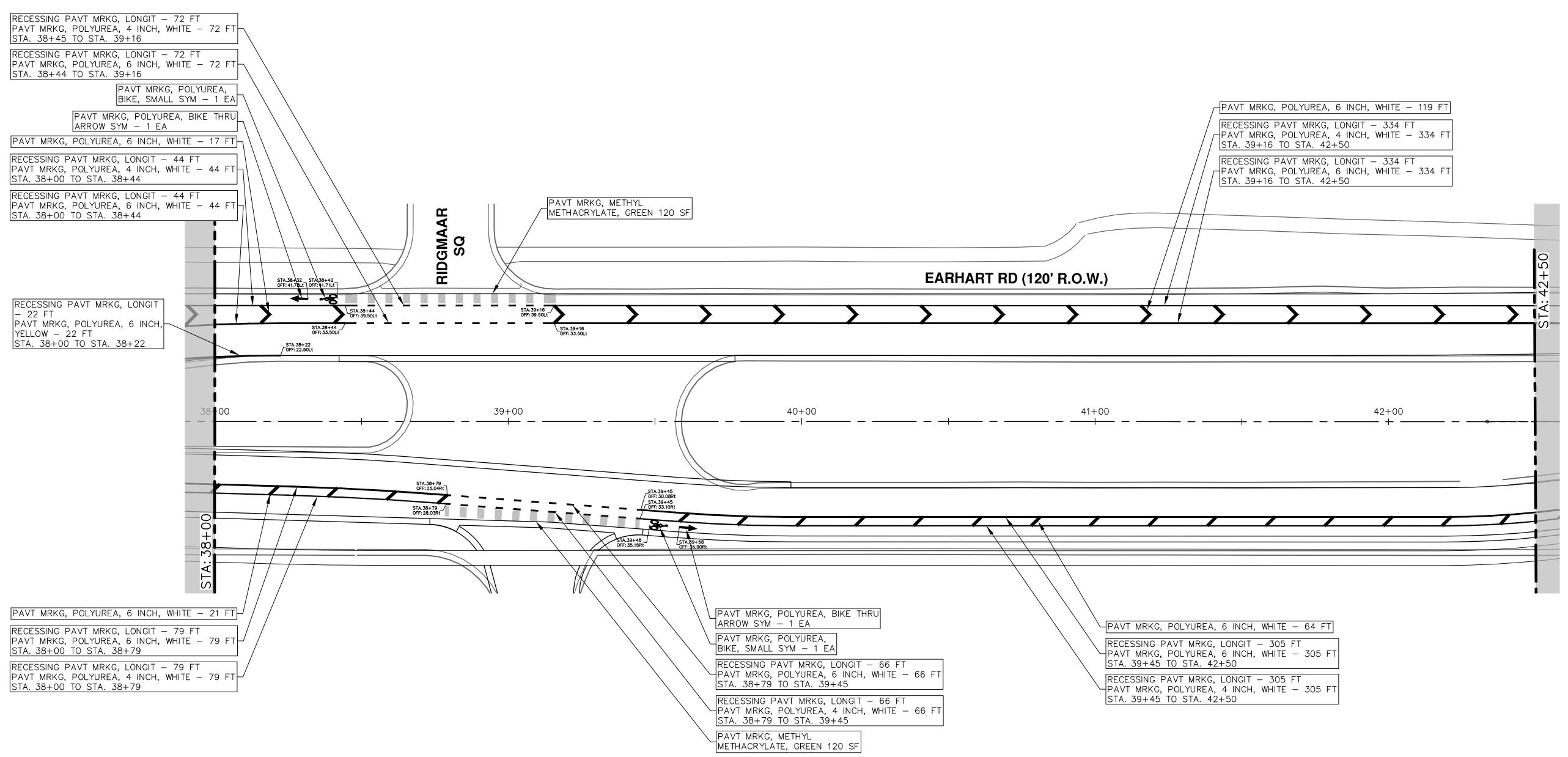


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ANN ARBOR

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

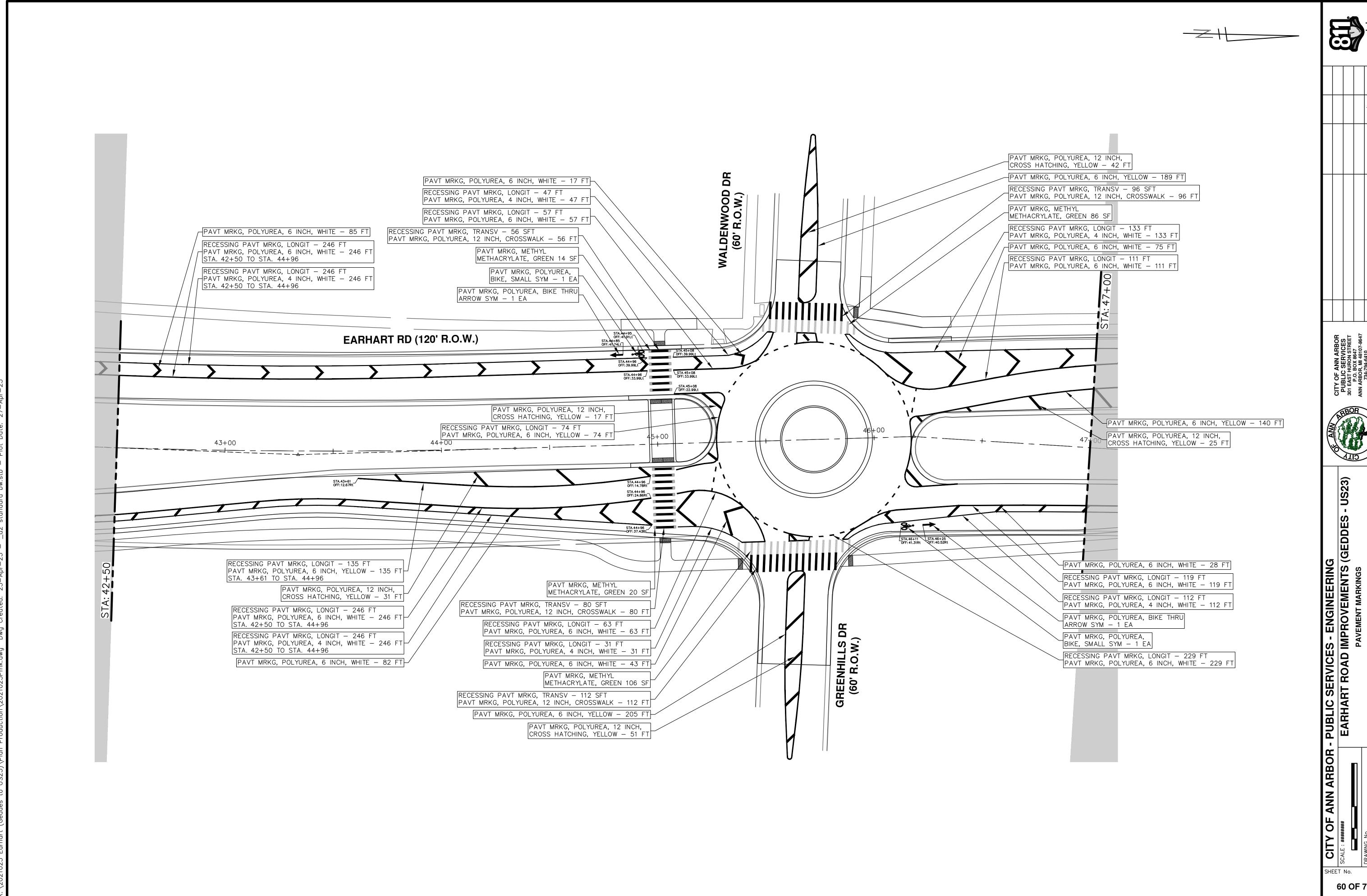
SCALE: 1" = 20'

EARHART ROAD IMPROVEMENTS (GEDDES

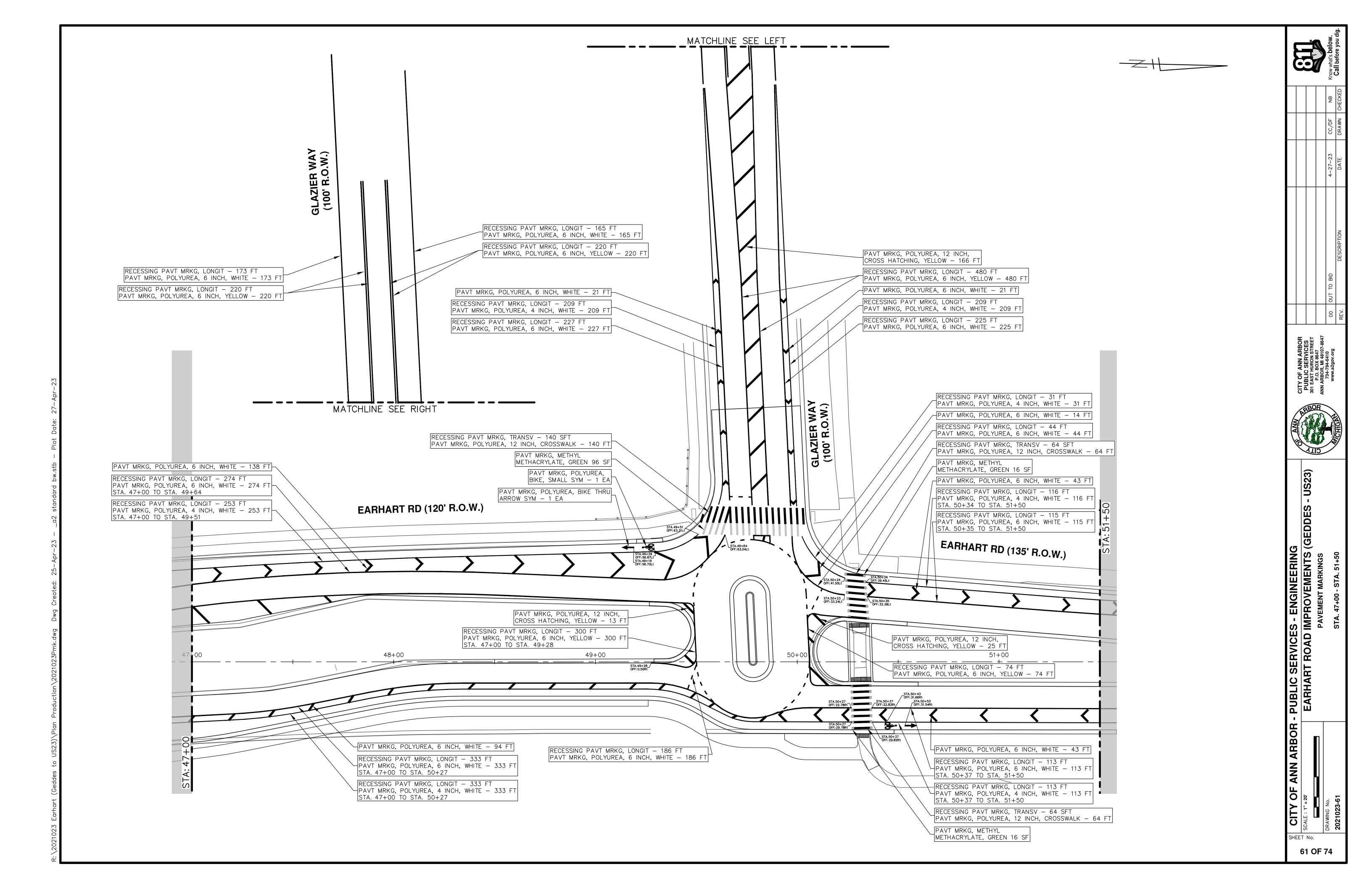
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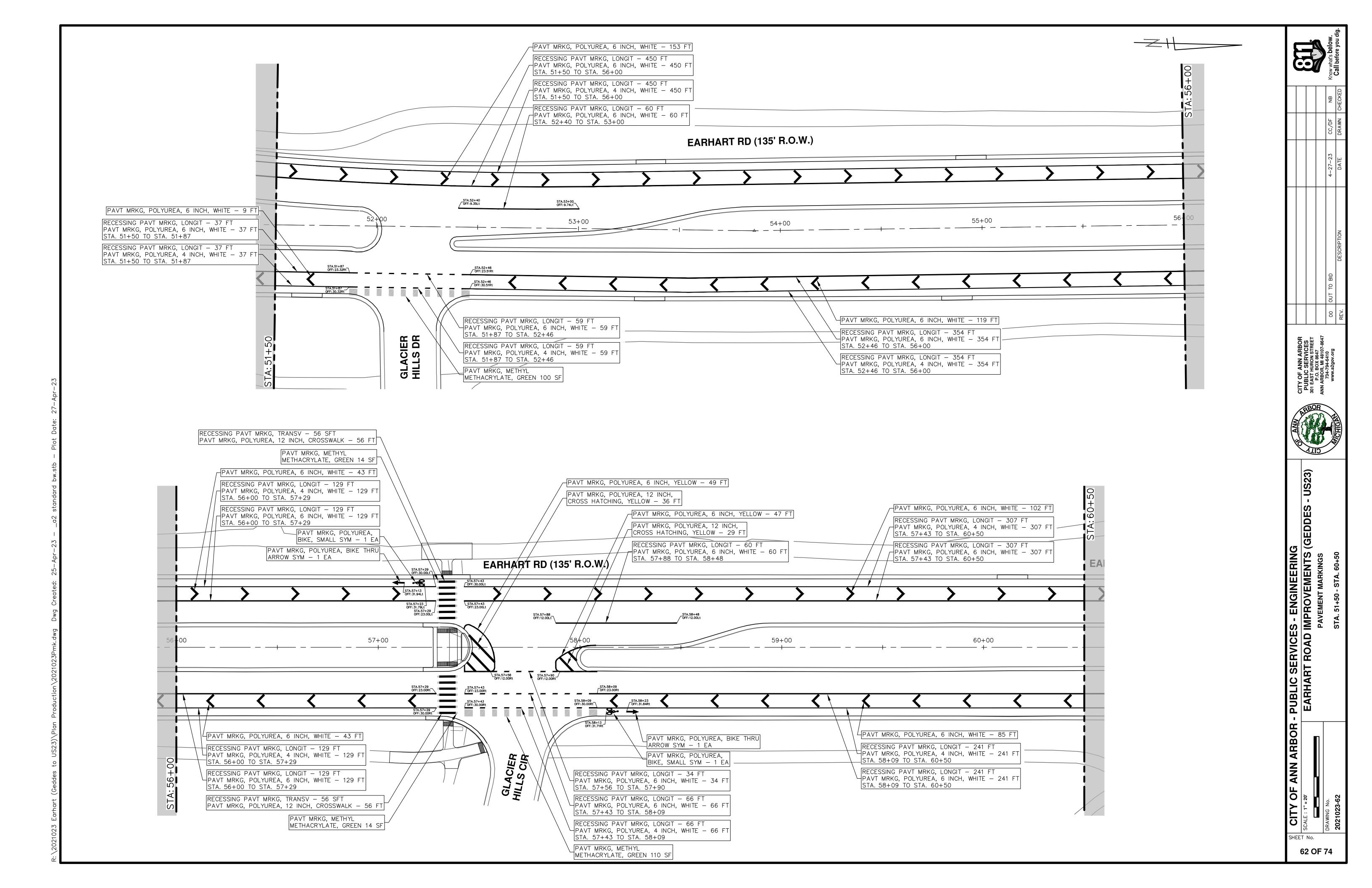
PAVEMENT MARKINGS

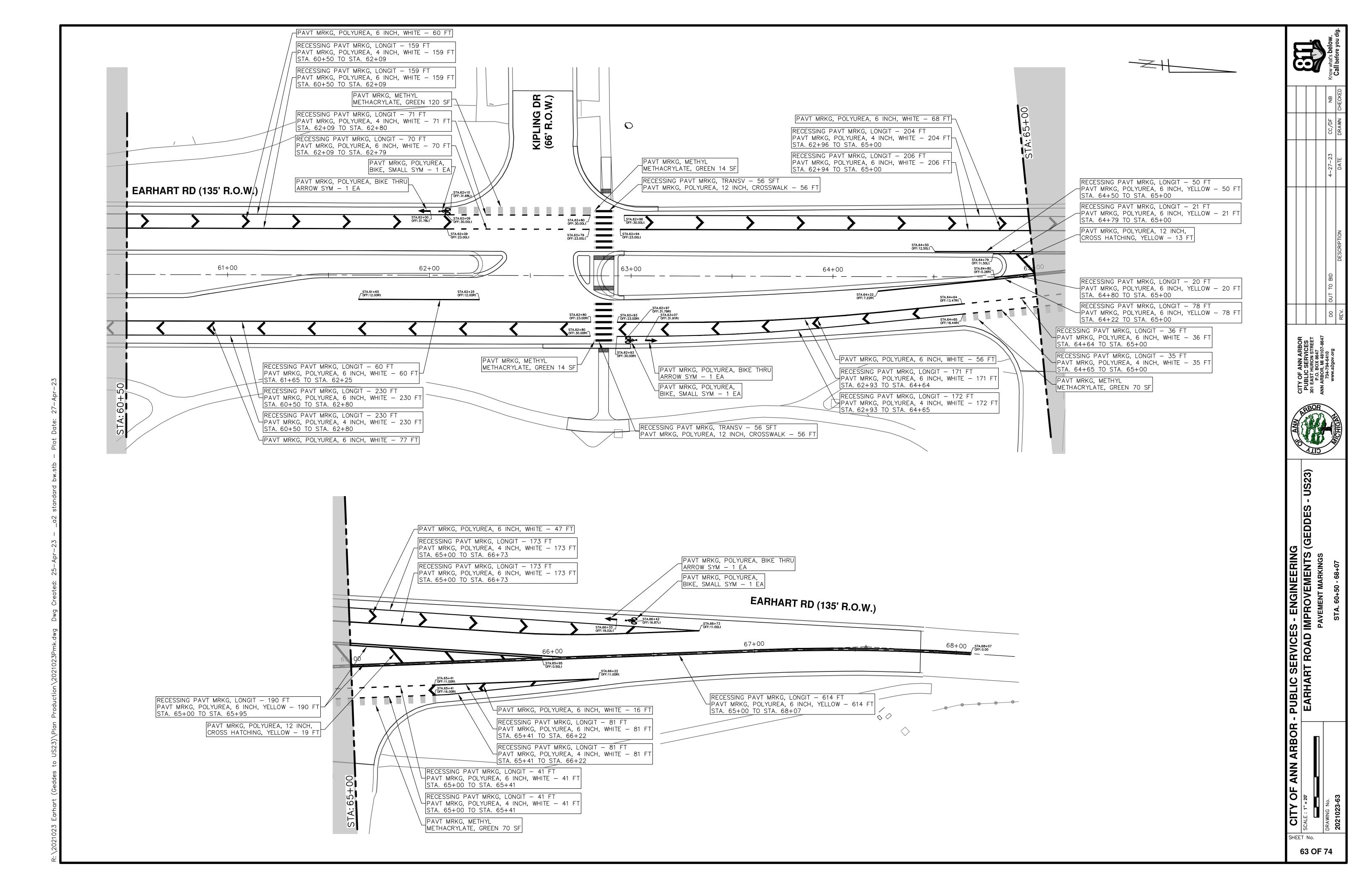
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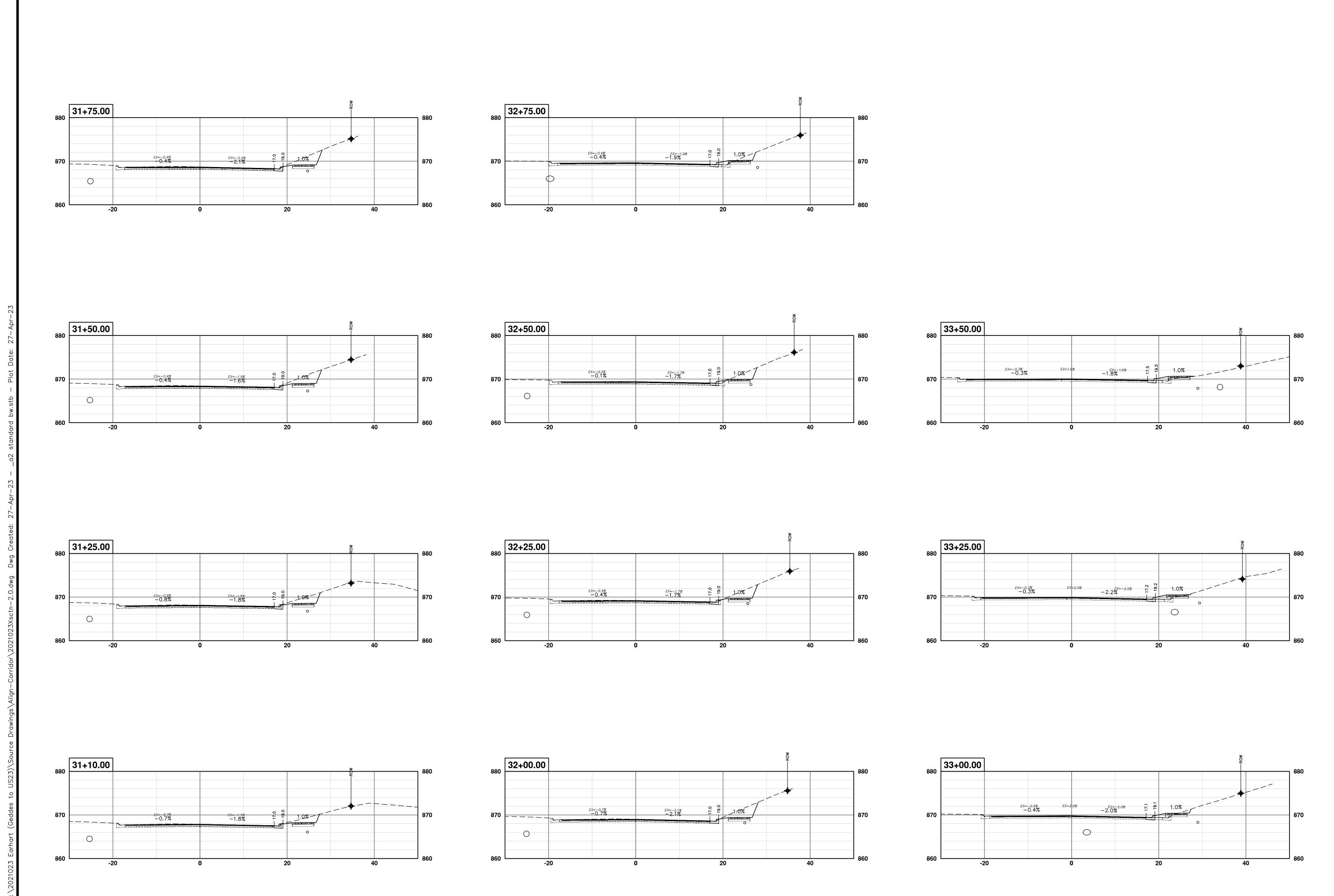












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T ROAD IMPROVEMENTS (GEI CROSS SECTIONS NORTHBOUND 31+10 TO 33+50

TY OF ANN	NARBOR	TY OF ANN ARBOR - PUBLIC SEF
PLAN: 1" = 10'	PROFILE: 1" = 10'	EARHART
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123-64		

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CITY OF ANN ARE	SCALE PLAN: 1" = 10' PR	DRAWING No.	2021023-64
۸RE	PROFILE		

