



GREAT LAKES WATER AUTHORITY

CONTRACT NO. GLWA-XX-XXX

HUBBELL-SOUTHFIELD CSO FACILITY IMPROVEMENTS

ENGINEERS



GLWA BOARD OF DIRECTORS

Mark Miller
John J. Zech
Jaye Quadrozzi
Freman Hendrix
Brian Baker
Gary Brown

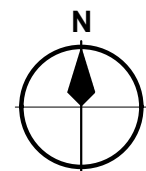
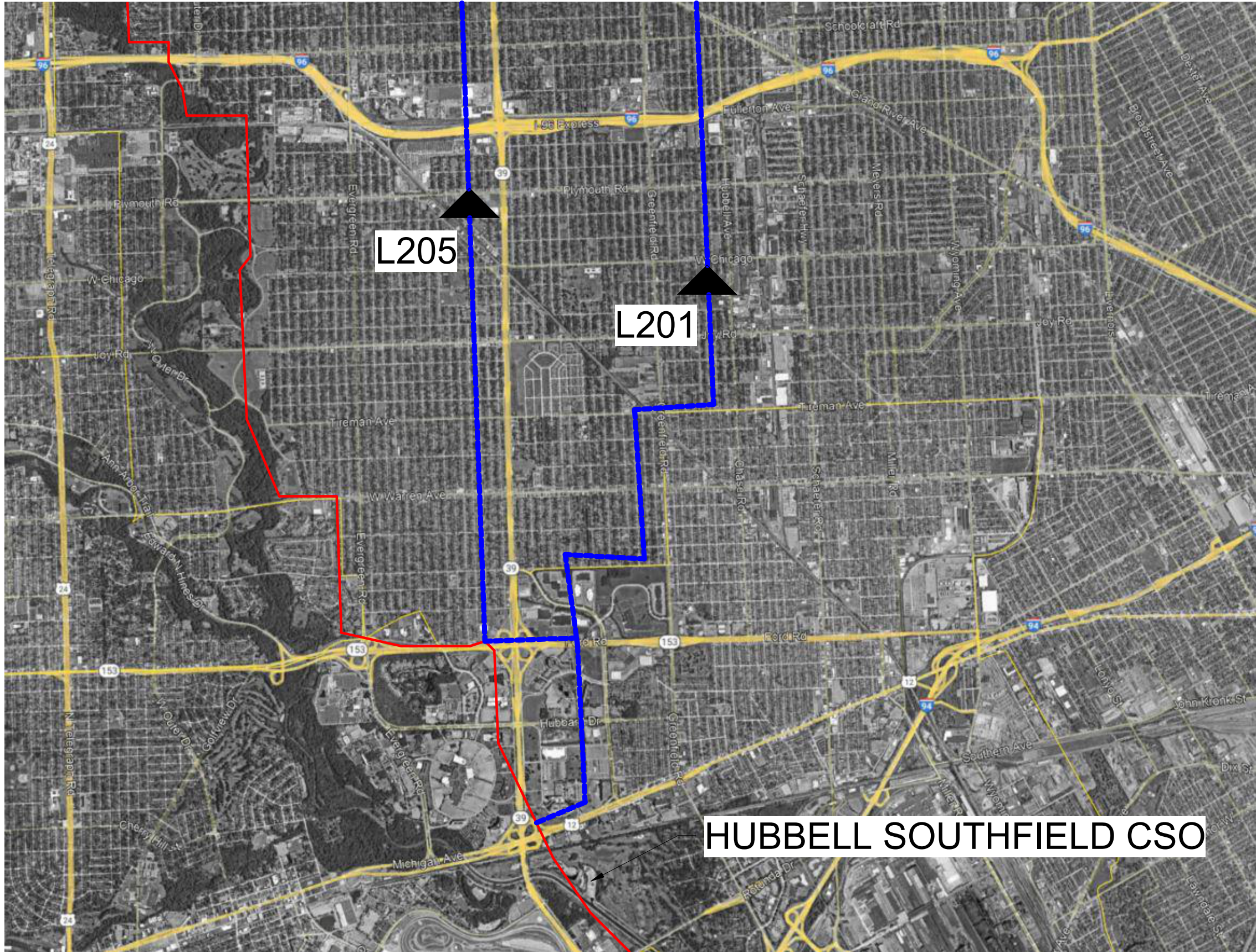
GLWA STAFF

Suzanne Coffey, P.E.
Chief Executive Officer
Navid Mehram, P.E.
Chief Operating Officer, Wastewater Operations
Christopher Nastally, P.E.
Director - Wastewater Engineering
Philip Kora, P.E.
Manager - Life Cycle Project Management

60% SUBMITTAL
NOT FOR CONSTRUCTION

OCTOBER 2024

PLOT DATE: 10/4/2024 2:40:52 PM



LEVEL SENSOR SITES

NOT TO SCALE

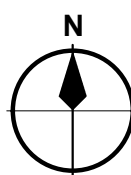
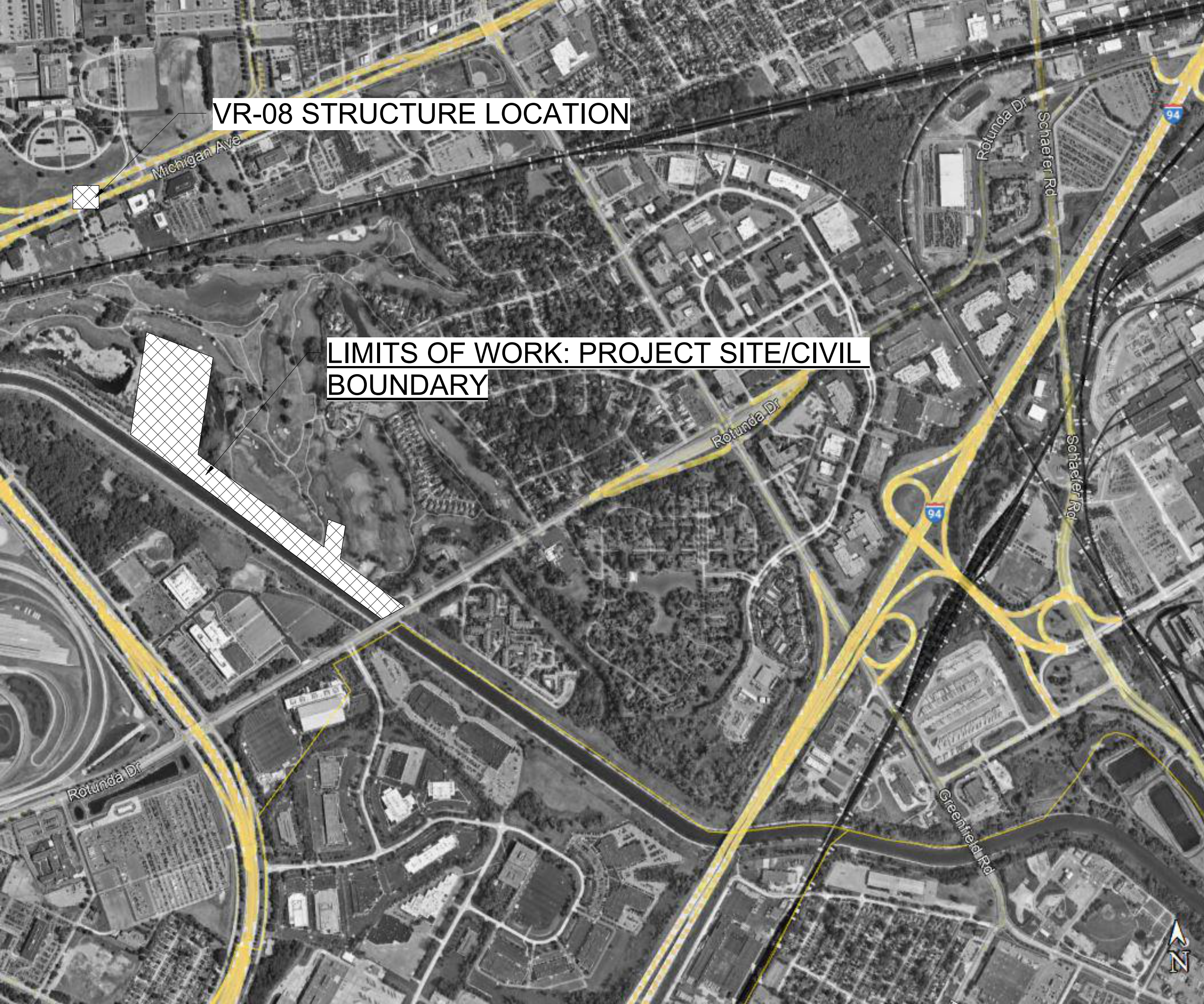
CITY OF DETROIT AUTHORITY HAVING JURISDICTION

L201: LOCATED AT W CHICAGO AND HUBBELL AVE. REFER TO SHEET C01-201
L205: LOCATED AT CAPTIAL AND SOUTHFIELD RD. REFER TO SHEET C01-202

LEVEL SENSOR LEGEND



LEVEL SENSOR SITE



SITE LOCATION MAP - HUBBELL-SOUTHFIELD CSO BASIN & VR-08 STRUCTURE

NOT TO SCALE

16450 ROTUNDA DR, DEARBORN, MI 48120
CITY OF DEARBORN AUTHORITY HAVING JURISDICTION

PATH: Autodeskt Docs://GLW2033-Hubbell/CLW2033_HSCSO_G_R22.rvt

No.	DESCRIPTIONS/REVISIONS	CHK'D	APPR	DATE
2	60% SUBMITTAL			10/2024
1	30% SUBMITTAL			05/2024

DESIGNED BY:	S.LYNCH
DRAWN BY:	S.LYNCH
CHECKED BY:	D.WHITE
APPROVED BY:	

SEAL/STAMP

FACILITY

HUBBELL-SOUTHFIELD CSO FACILITY
IMPROVEMENTS

PROJECT TITLE

LOCATION PLANS

SCALE:
As Indicated

DATE:
OCTOBER 2024



SUB CONSULTANT



SECTION MAP	TOWN	RANGE	SECTION	Q	QQ
12 H	2 S	10 E	24	1	

EGLE PERMIT No.

XXXXXX

GLWA CONTRACT No.

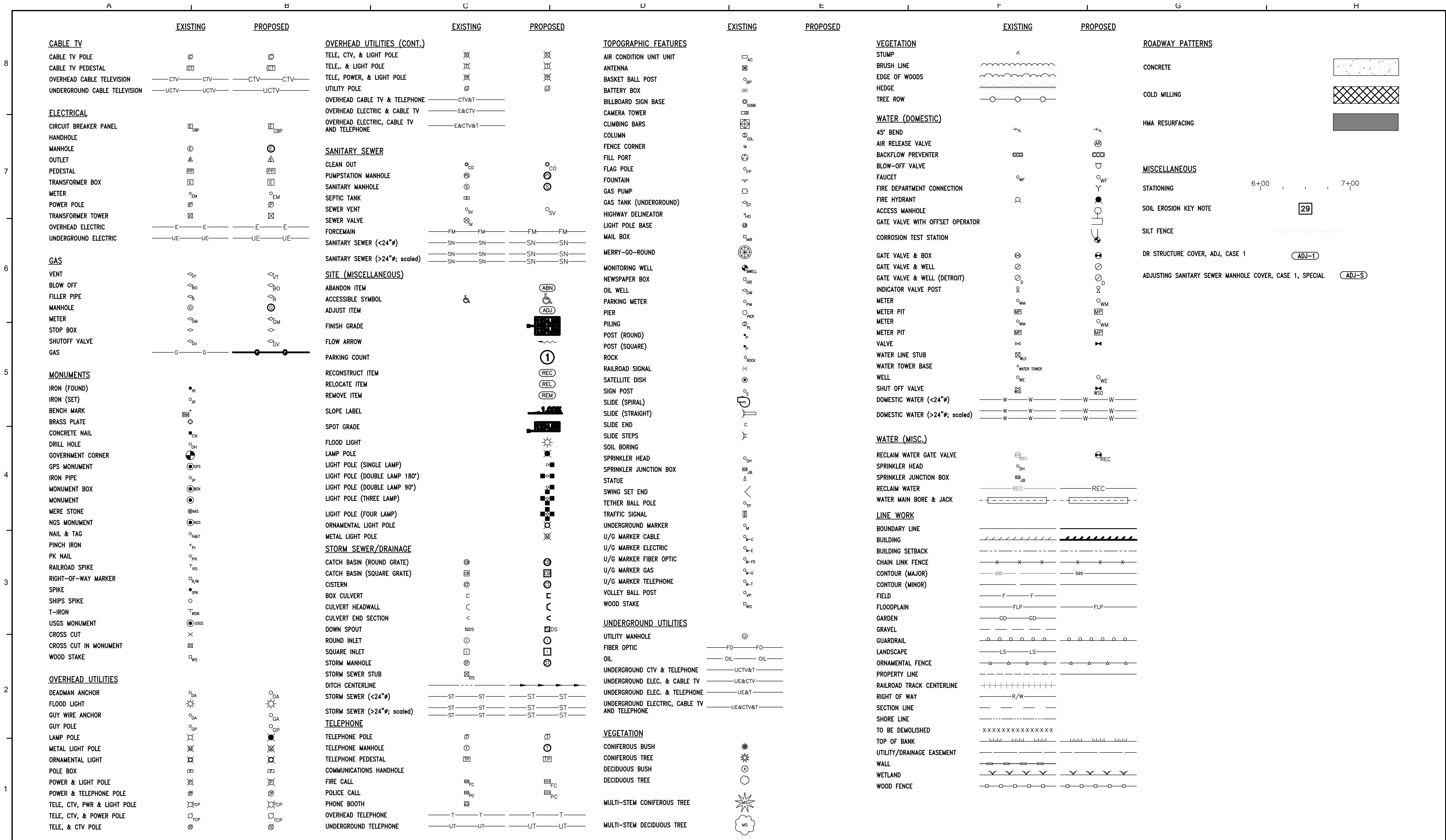
2103225

GLWA CIP No.

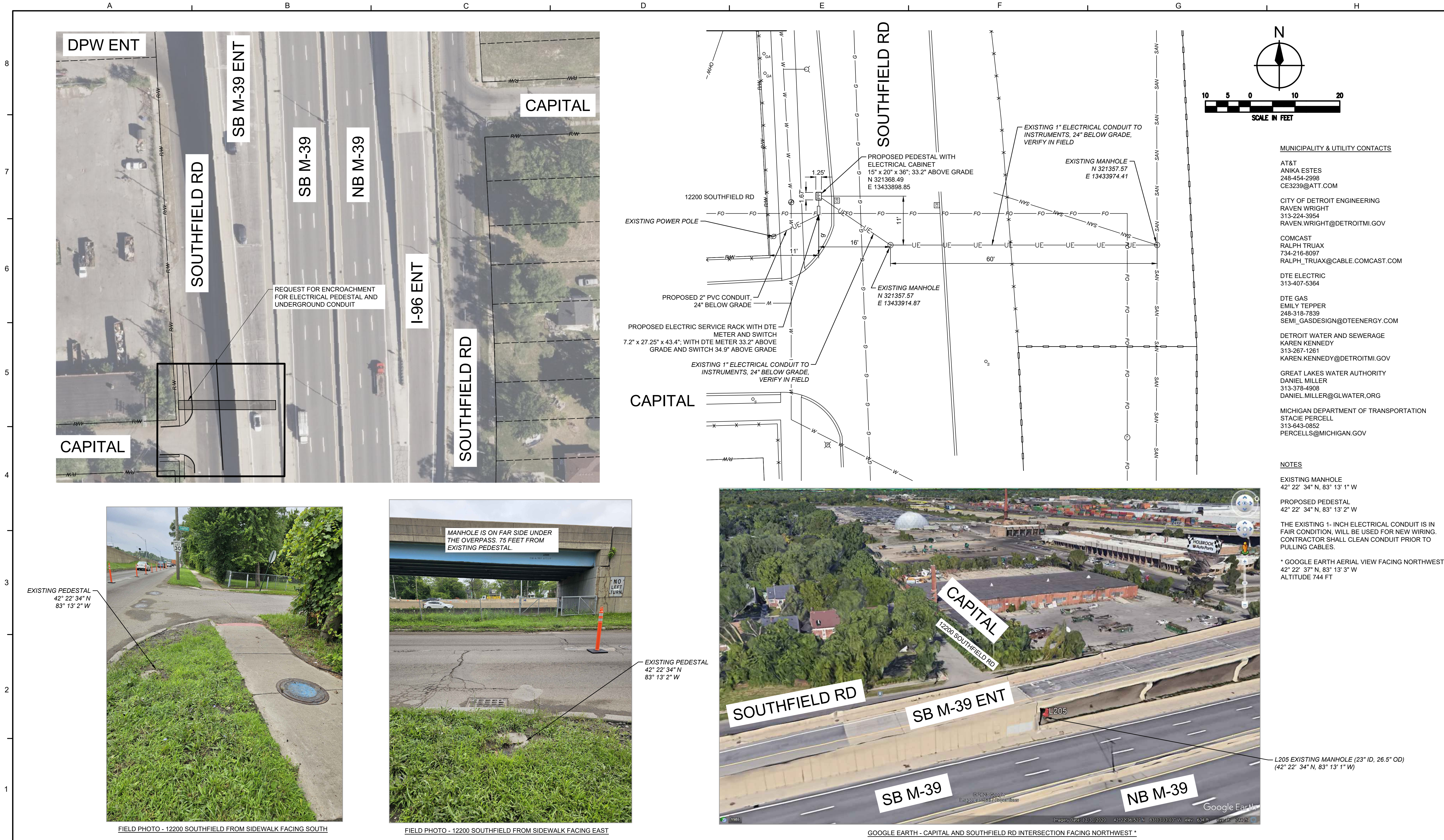
273001

DRAWING No.

G00-004



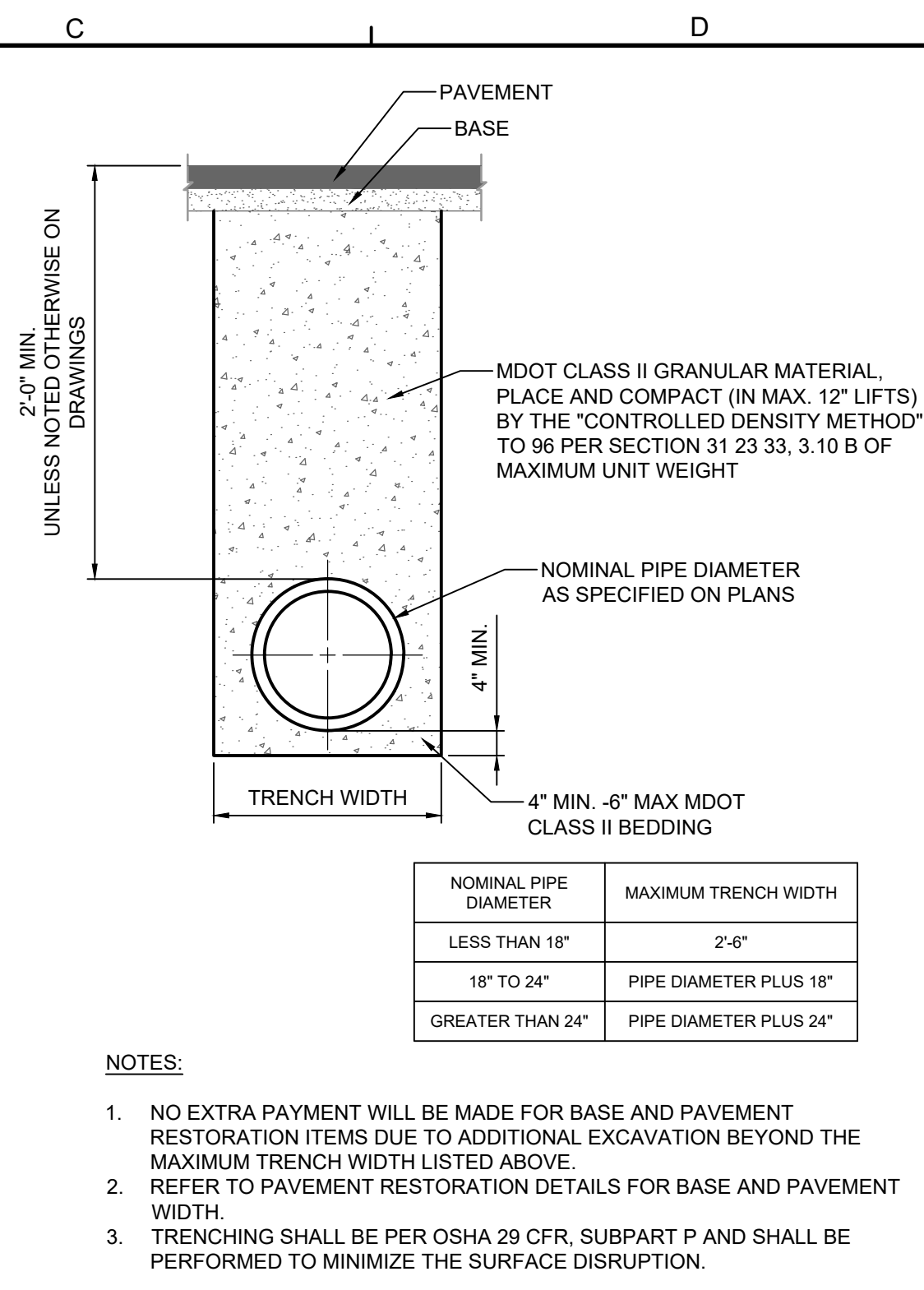
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				DESIGNED BY:	SEAL/STAMP	FACILITY	FIRM NAME	 GLWA Great Lakes Water Authority				EGLE PERMIT No.	
				G.PRENGER								XXXXXX	
				DRAWN BY:								GLWA CONTRACT No.	
				D.GARLINGTON								2103225	
				CHECKED BY:								GLWA CIP No.	
					273001								
				APPROVED BY:	PROJECT TITLE	SUB CONSULTANT	SECTION MAP 12 H TOWN 2 S RANGE 10 E SECTION 24 1 Q QQ				DRAWING No.		
											C01-202		
											BID/IFC/RECORD STATUS		



					DESIGNED BY:	SEAL/STAMP	FACILITY	 WADE TRIM	 GLWA Great Lakes Water Authority	EGLE PERMIT No.								
					L.DWYER					XXXXXX								
					DRAWN BY:					GLWA CONTRACT No.								
					D.HEROLDJACKSON					2103225								
					CHECKED BY:					GLWA CIP No.								
					K.LEFEVRE	273001												
					APPROVED BY:	SCALE: AS NOTED	DATE: OCTOBER 2024	 Applied Science, Inc.	DRAWING No.									
1	60% SUBMITTAL			10/2024	J.MICHALSKI				C01-501									
No.	DESCRIPTIONS/REVISIONS	CHK'D	APPR	DATE														
A	I	B			I				C	D	I	E	I	F	I	G	I	H



UTILITY TRENCH - WATER MAIN

SOIL EROSION AND SEDIMENTATION CONTROL MAINTENANCE NOTES

THE CONTRACTOR SHALL INSPECT SOIL EROSION AND SEDIMENTATION CONTROL DEVICES WEEKLY AND WITHIN 24 HOURS OF A SIGNIFICANT RAIN EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

MAINTENANCE INCLUDES ALL WORK NECESSARY FOR PROPER OPERATION OF THE DEVICES. DEVICES WHICH CAN NOT BE REPAIRED MAY NEED TO BE REPLACED. MAINTENANCE OF THE DEVICES SHALL BE PERFORMED WITHIN 24 HOURS OF INSPECTION.

- SEDIMENT SHALL BE REMOVED AS NECESSARY TO MAINTAIN THE EFFECTIVENESS OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

SEDIMENT DEPOSITED ALONG SILT FENCE SHALL BE REMOVED WHEN IT REACHES 1/4 TO 1/3 THE HEIGHT OF THE FENCE.

TURF ESTABLISHMENT MEASURES SHALL BE MAINTAINED AS WOULD ANY OTHER DEVICES PRIOR TO ESTABLISHMENT OF PERMANENT TURF.

ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

THE CONTRACTOR SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH PART 91 OF ACT NO. 451 OF 1994, OF THE MICHIGAN COMPILED LAWS ENTITLED "SOIL EROSION AND SEDIMENTATION CONTROL" UNDER THE CONTROL OF THE LOCAL PERMIT AGENCY CHARGED WITH ADMINISTERING THE PROVISIONS OF THIS ACT. THE CONTRACTOR SHALL FOLLOW THE PROCEDURES DELINEATED BELOW AND CONSTRUCT AND MAINTAIN THE FACILITIES SHOWN ON THE DRAWINGS TO CONTROL WATER AND WIND EROSION DURING CONSTRUCTION OF THIS PROJECT.

IF POSSIBLE, NO GRUBBING SHOULD BE DONE WITHIN 30' OF AN ACTIVE WATERCOURSE.

AGGREGATES PLACED IN STREAMS SHOULD CONTAIN A MINIMUM OF FINES. AS A GENERAL RULE FOR DAMS IN SMALL STREAMS, AT LEAST 50% OF STONE SHOULD BE 6" DIAMETER OR LARGER. 3" OR LARGER STONE SHALL BE USED FOR LINING STREAM BOTTOMS WHERE LINING IS REQUIRED.

ALL TEMPORARY EROSION CONTROL FACILITIES SHOULD BE REMOVED BY THE CONTRACTOR AT THE COMPLETION OF THE CONSTRUCTION UNLESS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE. CARE SHALL BE TAKEN DURING REMOVAL TO MINIMIZE SILTATION IN NEARBY DRAINAGE COURSES.

SURFACE DISRUPTION IN ADVANCE OF CONSTRUCTION INCLUDING CLEARING, GRADING OR SIGNIFICANT SOD REMOVAL SHALL BE LIMITED AS FOLLOWS, UNLESS PERMISSION IS OTHERWISE OBTAINED FROM THE GOVERNING AGENCY.

- IN ROADWAY AREAS TEMPORARY AGGREGATE SURFACING SHALL BE PLACED IMMEDIATELY AFTER THE BACKFILLING OPERATION HAS BEEN COMPLETED. POSITIVE DUST CONTROL MEASURES SHALL BE TAKEN AT ALL TIMES.

PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN 5 DAYS OF FINAL EARTH CHANGE. FINAL CLEANUP AND RESTORATION WILL CONSIST OF FINAL GRADING, TOPSOILING, SEEDING AND MULCHING AND/OR SODDING OF ALL DISTURBED AREAS OF THE PROJECT.

IF SEASONAL CONDITIONS PREVENT FINAL CLEANING AND RESTORATION, OF THE CONTRACTOR SHALL PROCEED WITH TEMPORARY STABILIZATION OF THE DISTURBED AREA. TEMPORARY STABILIZATION SHALL CONSIST OF ROUGH GRADING THE DISTURBED AREA IN ACCORDANCE WITH THESE SPECIFICATIONS. TEMPORARY STABILIZATION MATERIALS SHALL BE REMOVED AND DISPOSED OF AND FINAL CLEANUP AND RESTORATION SHALL BE COMPLETED NOT LATER THAN 5 DAYS AFTER SEASONAL CONDITIONS ALLOW PERFORMANCE OF THE REQUIRED WORK.

						DESIGNED BY:	SEAL/STAMP	FACILITY HUBBELL-SOUTHFIELD CSO FACILITY IMPROVEMENTS PROJECT TITLE CIVIL CIVIL DETAILS SCALE: AS NOTED	FIRM NAME  WADE TRIM	 GLWA Great Lakes Water Authority	EGLE PERMIT No.
					L.DWYER	XXXXXX					
					DRAWN BY:	GLWA CONTRACT No.					
					D.HEROLDJACKSON	2103225					
					CHECKED BY:	GLWA CIP No.					
					K.LEFEVRE	273001					
					APPROVED BY:						DRAWING No.
					J.MICHALSKI						C01-502
1	60% SUBMITTAL			10/2024				DATE: OCTOBER 2024			
No.	DESCRIPTIONS/REVISIONS	CHK'D	APPR	DATE							

*BOTTOM OF CONCRETE REPLACEMENT SHALL BE LEVEL WITH BOTTOM OF EXISTING PAVEMENT. CONCRETE REPLACEMENT MAY EXCEED 10" TO MEET THIS CRITERIA
**OR EQUIVALENT AS PER CURRENT MDOT STANDARD SPECIFICATION AS DETERMINED BY THE ENGINEER

GRANULAR FILL COMPACTED TO 95% OF MAX. LAB DENSITY



NOT TO SCALE

1. MILL (REMOVE) HMA PAVEMENT WITHIN AND BEYOND THE AREA OF TRENCH PAVEMENT REMOVAL IN ORDER TO DETERMINE LOCATION OF UNDERLYING CONCRETE BASE JOINTS. MILL MINIMUM TO 1' BEYOND NEAREST CONCRETE JOINT.
2. EXTEND UTILITY TRENCH CONCRETE PAVEMENT REMOVAL TO ALL CONCRETE PAVEMENT JOINTS AND/OR CURBS ADJACENT TO THE TRENCH AREA.
3. CONCRETE PAVEMENT CUTS SHALL BE MINIMUM 3' WIDE.
4. ALL PAVEMENT CUTS SHALL BE MINIMUM 1' WIDER THAN TRENCH WIDTH.
5. ALL REMOVALS SHALL BE SAWCUT STRAIGHT AND SQUARE (90 DEGREES)
6. CONCRETE RESTORATION PAVEMENT SHALL BE MDOT P1 MIX (3,500 PSI)
7. RESTORED CONCRETE PAVEMENT SHALL MATCH THICKNESS OF EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARDS DETAIL R-44-F.
8. RESTORED CONCRETE SHALL BE ANCHORED TO EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARD DETAIL R-44-F.
9. APPLY HMA TACK COAT PER MDOT STANDARD SPECIFICATIONS SECTION 904.
10. RESTORE HMA PAVEMENT 3 ½" TO MATCH EXISTING, IN 2 LIFTS:
FIRST LIFT - 2" MDOT HMA 4E3 (13A RESIDENTIAL), COMPACTED, EXTENDED 1' BEYOND BASE CONCRETE REPAIR.
SECOND LIFT - 1 ½" MDOT HMA 5E3 (36A RESIDENTIAL), COMPACTED, EXTENDED 1' BEYOND FIRST LIFT.
11. BITUMINOUS JOINT SEALER SHALL BE PLACED AT ALL FINISHED HMA JOINTS.
12. ALL DISTURBED PAVEMENT MARKINGS AND OTHER ASSETS, INCLUDING BIKE LANE DELINEATORS, WILL HAVE TO BE REPLACED AT THE COST OF THE PERMIT HOLDER, AND SHALL CONFORM TO THE LATEST CED/TD STANDARDS.
13. FOR OTHER RELATED SPECIFICATIONS (BACKFILL, COMPACTION, MATERIALS, ETC.) REFER TO DIVISION 15 OF THE CITY OF DETROIT STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION.
14. NOTIFY THE CITY OF DETROIT ENGINEERING DEPARTMENT 24 HOURS PRIOR TO STARTING CONSTRUCTION.
15. ANY OPEN EXCAVATIONS ARE TO BE STEEL PLATED, IF EXCAVATIONS ARE IN THE PAVEMENT, THE PLATES ARE TO BE SPIKED AND RAMPED WITH COLD PATCH. CONTACT THE CITY WITH LOCATION OF THE STEEL PLATE.
16. THE CITY OF DETROIT REQUIRES ALL CONCRETE WORK TO BE STAMPED WITH CONTRACTORS IDENTIFICATION STAMP.

					DESIGNED BY:	SEAL/STAMP	FACILITY	FIRM NAME				EGLE PERMIT No.					
					D.GARLINGTON							XXXXXX					
					DRAWN BY:							GLWA CONTRACT No.					
					D.GARLINGTON							2103225					
					CHECKED BY:							GLWA CIP No.					
3	90% SUBMITTAL			12/2024	K.COOK	APPROVED BY:	CIVIL CITY OF DETROIT DETAILS	SUB CONSULTANT				273001					
2												DRAWING No.					
1												C01-505					
No.	DESCRIPTIONS/REVISIONS	CHK'D	APPR	DATE	K.COOK		DATE: OCTOBER 2024					BID/IFC/RECORD STATUS					
A		I		B		C		D		E		F		G		H	

