

## PROVISIONS FOR CONVERSION TO EASEMENT

1. An easement, the full width of the existing right of way, is reserved for the Detroit Water and Sewerage Department (DWSD) for the purpose of installing, maintaining, repairing, removing, or replacing any sewers, water mains, fire hydrants and appurtenances, with the right of ingress and egress at any time to, and over said easement for the purpose above set forth. Any proposed fencing across the easement must have a gate installed to permit access for DWSD forces. The gate shall remain unlocked 24 hours a day, unless a guard is stationed near the gate to allow the DWSD ingress and egress at any time. The minimum dimensions of the gate or gates shall provide 15-foot vertical and 13 foot horizontal clearances for freedom of DWSD equipment movement.

Free and easy access to the sewers, water mains, fire hydrants and manholes and structures within the easement is required for DWSD equipment, including the use of backhoes, bull dozers, cranes or pipe trucks, and other heavy construction equipment, as necessary for the alteration or repair of the sewer and/or water main facilities.

DWSD retains the right to install suitable permanent main location guide posts over its water mains at reasonable intervals and at points of deflection.

2. Said owners of the adjoining property, for themselves, their heirs and assigns, agree that no building or structure of any nature whatsoever, including fences, porches, patios, balconies, etc., shall be built upon or over said easement, or that no grade changes or storage of materials shall be made within said easement without prior written approval and agreement with DWSD.

DWSD prohibits the use of heavy construction equipment or the storage of building material directly over or near DWSD facilities. DWSD also prohibits the use of cranes and balls or hydraulic rams for pavement removal where DWSD facilities are involved. If the water main and/or sewer facilities are broken or damaged as a result of any action on the part of the contractor, the contractor shall be liable for any and all costs incidental to the repair of such broken or damaged water main and/or sewer facilities.

3. If at any time in the future, the owners of any lots abutting on said conversion to easement shall request the removal and/or relocation of the aforementioned utilities in said easement, such owners shall pay all costs incidental to such removal and/or relocation. It is further provided that if sewers, water mains, and/or appurtenances in said easement shall break or be damaged as a result of any action on the part of the owner, or assigns, then in such event, the owner or assigns shall be liable for all costs incidental to the repair of such broken or damaged sewers and/or water mains, and shall also be liable for any and all claims for damages resulting from his action.



**Letter of Transmittal**

<b>Date:</b>
<b>Petition Map:</b>

**Type of Petition**

- |   |                                       |  |
|---|---------------------------------------|--|
| <input type="checkbox"/> Outright Vacation      | <input type="checkbox"/> Dedication   | <input type="checkbox"/> Berm Use          |
| <input type="checkbox"/> Conversion to Easement | <input type="checkbox"/> Encroachment | <input type="checkbox"/> Temporary Closing |

**Review Status**

The above petition has been received and reviewed by this office. Please see below for the review status as marked.

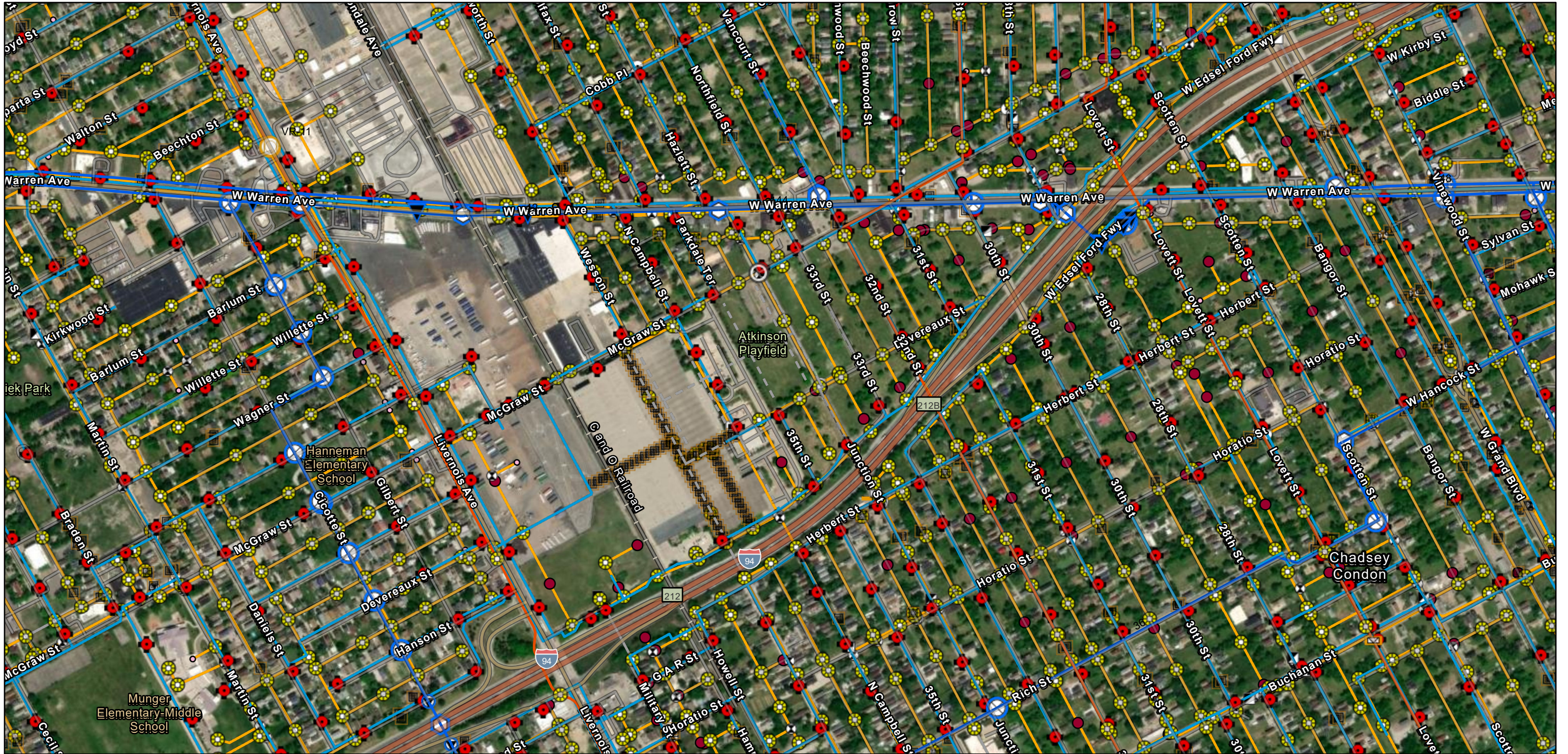
- |  |  |
|--|--|
| <input type="checkbox"/> Approved Subject to Attached Provisions | <input type="checkbox"/> Revise and Resubmit |
| <input type="checkbox"/> Not Approved                            |  |

**Additional Comments (if applicable):**

Attached is the DWSD provision related to the petition.

	Name	Title	Signature	Date
Reviewed by:			<i>Mohammad Siddique</i>	
Approved by:			<i>Mohammad Siddique</i> For Syed Ali	

# McGraw & Junction



11/26/2025

1:9,028

- |   |  |   |   |  |
|---|--|---|---|--|
| <p>Wastewater Control Devices - GLWA</p> <ul style="list-style-type: none"> <li> Regulator Gate</li> </ul> <p>Wastewater Structures - GLWA</p> <ul style="list-style-type: none"> <li> Chamber</li> <li> Manhole</li> </ul> <p>Wastewater Mains - GLWA</p> <ul style="list-style-type: none"> <li> GLWA Gravity Main</li> </ul> | <p>Transmission System Mains - GLWA</p> <ul style="list-style-type: none"> <li> Abandoned/Inactive Water Main</li> <li> Active Water Main</li> </ul> <p>Transmission System Valves - GLWA</p> <ul style="list-style-type: none"> <li> Blowoff</li> <li> Cone</li> <li> Gate</li> </ul> | <ul style="list-style-type: none"> <li> Manual Air</li> <li> Tapping Sleeve</li> <li> Distribution System Hydrant</li> </ul> <p>Distribution System Main</p> <ul style="list-style-type: none"> <li> Active</li> <li> Abandoned</li> <li> Wastewater Catch Basin</li> </ul> | <ul style="list-style-type: none"> <li> Wastewater Manhole</li> <li> Wastewater Fitting</li> <li> Bend/Slope Change</li> <li> Blind Connection</li> <li> Bulkhead/Cap</li> <li> Material/Size Change</li> <li> Crown/Main Point</li> <li> Crown/Main Point</li> </ul> | <ul style="list-style-type: none"> <li> Wastewater Lamp Hole</li> <li> Wastewater GravityMain</li> <li> Active</li> <li> Abandoned/Inactive/Retired</li> <li> Abandoned/Inactive/Retired</li> <li> Wastewater ForceMain</li> <li> Active</li> <li> Wastewater Regulator</li> </ul> |
|---|--|---|---|--|

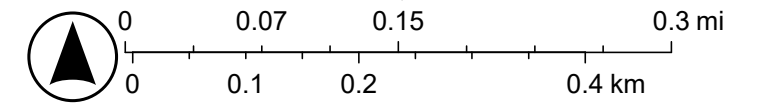
World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

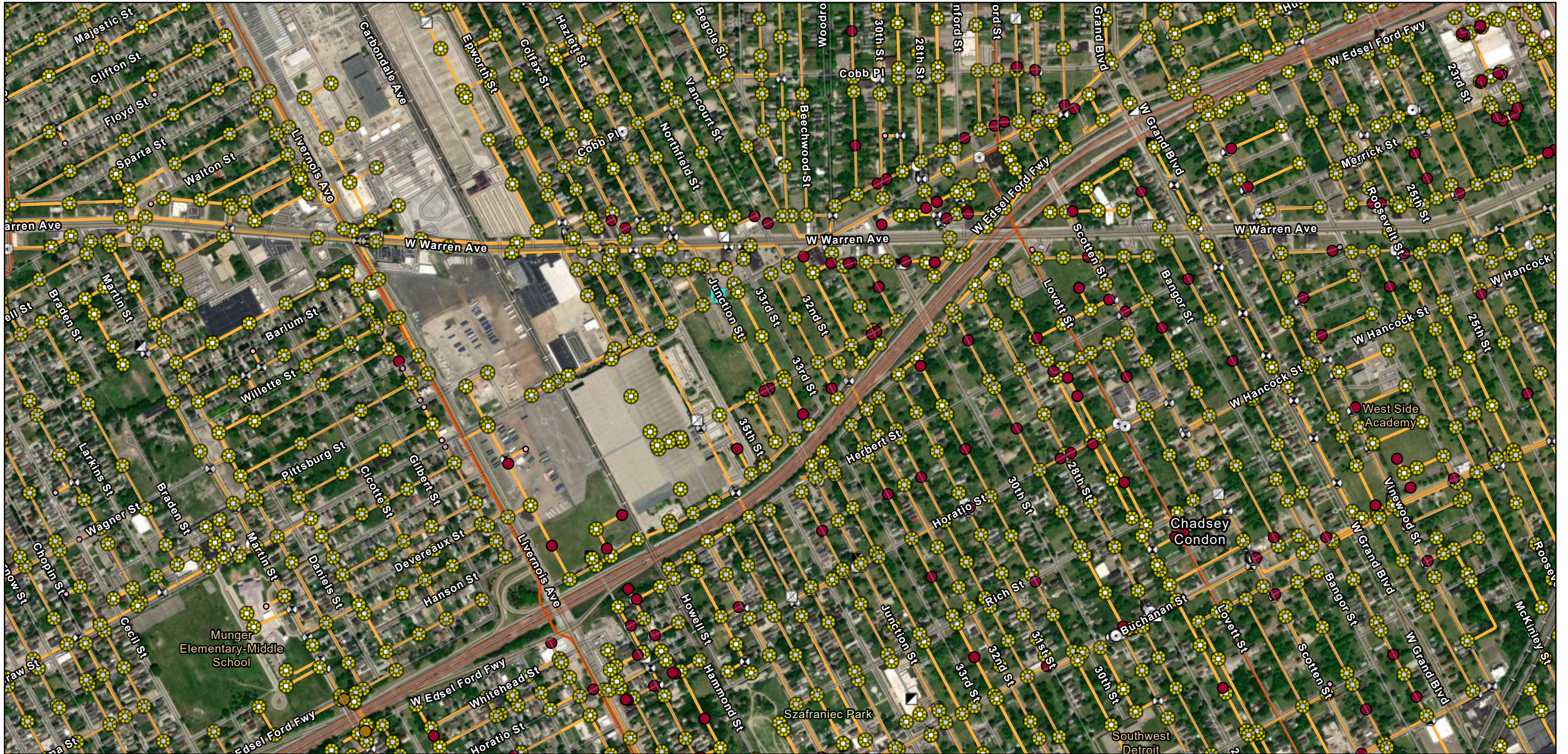
High Resolution 30cm Imagery

Citations



Vantor, DWSD, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

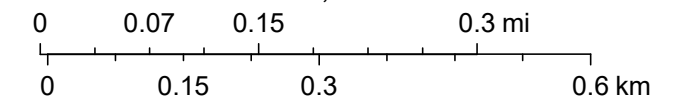
# McGraw & Junction



11/26/2025, 1:48:09 PM

1:11,285

- |                             |                      |                                |                              |                                |
|-----------------------------|----------------------|--------------------------------|------------------------------|--------------------------------|
| Wastewater Chamber (DWSD)   | Blind Connection     | Crown/Main Point               | Abandoned/Inactive/Retired   | Wastewater Sensors (GLWA)      |
| Wastewater Lamp Hole (DWSD) | Bulkhead/Cap         | Wastewater Regulator (DWSD)    | Wastewater Force Main (DWSD) | Ultrasonic Level Sensor        |
| Wastewater Manhole (DWSD)   | Coupling             | Wastewater Gravity Main (DWSD) | Active                       | Unknown                        |
| Wastewater Fitting (DWSD)   | Material/Size Change | Abandoned/Inactive/Retired     | Regulator Gate               | Wastewater Mains (GLWA)        |
| Bend/Slope Change           | Crown/Main Point     |                                |                              | GLWA Gravity Main              |
|                             |                      |                                |                              | DWSD Wastewater Flow Direction |



Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

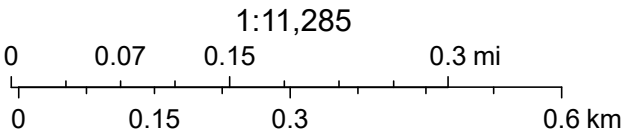
# McGraw & Junction



11/26/2025, 1:48:13 PM

Transmission System Mains (GLWA)    Distribution System Main

- Active Water Main
- - - Abandoned
- - - Abandoned/Inactive Water Main
- Active



Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



**Water & Sewerage  
Department**

Central Services Facility  
6425 Huber Street  
Detroit, MI 48211

DWSD Permits: 313-267-8000  
Emergencies: 313-267-7401  
detroitmi.gov/dwsd

**DWSD Permit Engineering Approval (Not A Construction Permit)**

Approval requested by:

Project Address/Location	D-Job No.	Property Type
<b>SMG Ordinance Project:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If Yes:</b> <input type="checkbox"/> Approved <input type="checkbox"/> Not Approved		

EGLE Part 41 Permit Required:  Yes  No    Part 41 Permit Obtained:  Yes  No  
 EGLE Act 399 Permit Required:  Yes  No    Act 399 Permit Obtained:  Yes  No

**Prop. Desc.**

Approver:

Approval Date:

*Jay McVaughn*

Water Section Map:

Sewer Section Map:

W-Main Loc:

Alley Width:

ROW Width:

ROW Permit Reqd\*:  No  Yes

T-Size:

Sewer Depth:

Inspection Deposit:

Water (D-Job) =

Sewer (D-Job) =

Water =

Sewer =

**Total =**

**Water Approval**

N/A

Additional  
Comments  
on Page 2

**Sewer Approval**

N/A

Additional  
Comments  
on Page 2

\*DPW determines ROW permit applicability;  
Applicant must verify if permit is needed

- All installations and materials as per DWSD specifications and standards.
- Place stop box and valves within city R.O.W. Upper section of stop box shall be locatable electronically and magnetically; stop box pipe shall be 3.5" diameter.
- Water service less than 3" to be k-copper type, and 3" and greater to be ductile iron pipe class 52.
- Tee to be used.
- Sewer Connection to be no higher than 18 inches above manhole bottom, otherwise drop connection is required.
- Applicable backflow prevention devices to be installed per City of Detroit Plumbing Code.
- Double detector check as per DWSD standard is required on fire line. Fire pump should not be reciprocating type pump. Fire pump must be equipped with automatic shutoff switch and pressure sensors to shut off the pump when suction pressure in the pipe drops to 20 psi or below.
- All Approvals, flow test reports, and/or Permits are valid for one (1) year. It is important that all work must be initiated before the expiration date.
- DWSD permit and inspection are required. No work to be undertaken prior to notifying DWSD's inspector as per Permit terms & conditions. Call for inspection 7 business days in advance at **(313) 267-8092**.



**Water & Sewerage  
Department**

---

Central Services Facility  
6425 Huber Street  
Detroit, MI 48211

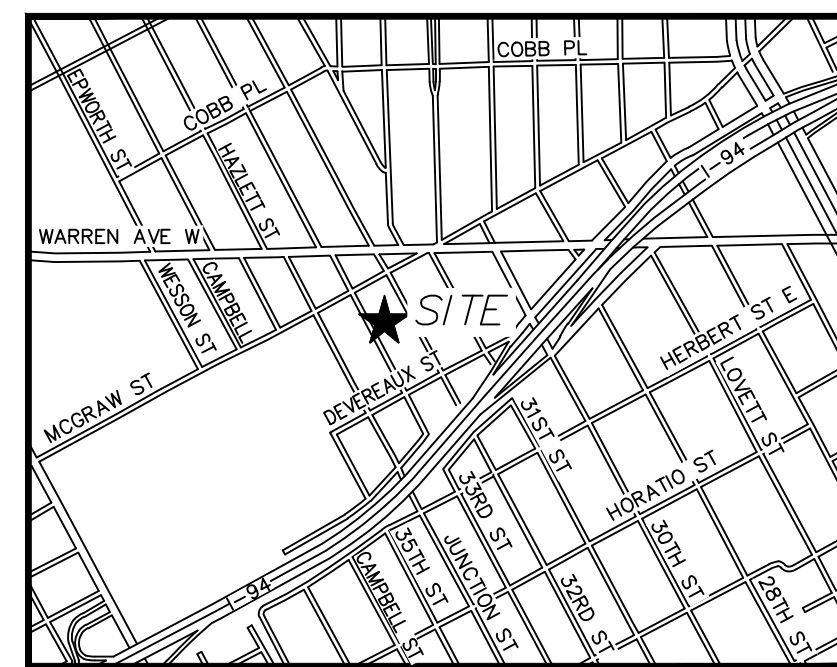
DWSD Permits: 313-267-8000  
Emergencies: 313-267-7401  
[detroitmi.gov/dwsd](http://detroitmi.gov/dwsd)

**Additional Water Approval Comments:**

**Additional Sewer Approval Comments:**

# SITE READINESS PROGRAM MANAGEMENT BLIGHT REMEDIATION McGRAW / JUNCTION SITE CITY OF DETROIT

## SEWER DEMO & UTILITY RELOCATION PLANS FOR DETROIT WATER AND SEWERAGE DEPARTMENT FACILITIES



**LOCATION MAP**  
( NOT TO SCALE )

**DETROIT  
WATER AND SEWERAGE DEPARTMENT  
SEWER FACILITIES ONLY**

**APPROVED**

Date: By Devyn McNaughton

Approved for: See attached

Connection for: \_\_\_\_\_

Pipe Class: \_\_\_\_\_

\_\_\_\_\_ C-700 or \_\_\_\_\_ C-76-CI III or \_\_\_\_\_ Cast Iron

Resident Inspector Deposit: \_\_\_\_\_

Sewer Assessment Due: \_\_\_\_\_

Remarks: \_\_\_\_\_

**APPROVED**

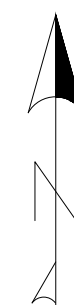
By Devyn.McNaughton at 5:27 pm, Mar 27, 2025

SHEET NO.	SHEET TITLE
C0.0	TITLE SHEET
C0.1	GENERAL NOTES
C1.0	DEMO PLAN SEWERS
C2.0	McGRAW STREET SEWER WEST
C2.1	McGRAW STREET SEWER EAST
C2.2	35TH STREET SEWER
C2.3	SEWER EAST OF 31ST STREET
C2.4	ALLEY SEWER WEST OF 31ST STREET
C3.0	McGRAW STREET SEWER RESTORATION
C3.1	35TH STREET SEWER RESTORATION
C3.2	31ST STREET SEWER RESTORATION
C4.0	SEWER STAGE 1 MOT PLAN
C4.1	SEWER STAGE 2 MOT PLAN
C5.0	MOT NOTES AND DETAILS
C5.1	MOT NOTES AND DETAILS
SD-1	DWSD SANITARY DETAILS
SD-2	DWSD SANITARY DETAILS
SD-3	RESTORATION DETAILS
SD-4	RESTORATION DETAILS
SD-5	SESC DETAILS
SD-6	SESC DETAILS



**SITE MAP**

1" = 80'



**NOTES**

1. LOCATIONS AND DIMENSIONS ARE APPROXIMATE. THIS IS NOT A LEGAL SURVEY.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS, SPECIFICATIONS, AND ORDINANCES OF THE CITY OF DETROIT, WAYNE COUNTY, AND THE STATE OF MICHIGAN, WHERE APPLICABLE.
3. THE CONTRACTOR SHALL ADHERE TO ALL SITE, LOCAL, COUNTY, AND STATE ORDINANCES GOVERNING HOURS OF OPERATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING THEIR OWN HEALTH AND SAFETY PLAN.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE WORK. PERMITS TO BE OBTAINED INCLUDE, BUT ARE NOT LIMITED TO, WAYNE COUNTY, AS APPLICABLE, PRIOR TO COMMENCING WORK.
6. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND CONTACT MISS DIG A MINIMUM OF 3 WORKING DAYS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT THE OWNER TO HAVE UTILITIES OUTSIDE OF THE PUBLIC RIGHT-OF-WAY IDENTIFIED AND LOCATED. THE CONTRACTOR SHALL NOT BEGIN UNDERGROUND WORK UNTIL THE SITE HAS BEEN MARKED BY REPRESENTATIVES OF ALL AFFECTED UTILITIES.
7. THE CONTRACTOR SHALL PROTECT, OR HAVE RELOCATED, ANY UTILITIES THAT INTERFERE WITH THE CONSTRUCTION. UTILITIES AND ASSOCIATED STRUCTURES SHALL NOT BE REMOVED UNLESS SPECIFIED ON PLANS.
8. THE CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL AND SIGNAGE, PER LOCAL UNIFORM TRAFFIC CONTROL REGULATIONS, TO MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES THROUGHOUT CONSTRUCTION. PROVIDE APPROPRIATE BARRICADES AROUND WORK AREAS FOR PEDESTRIAN AND VEHICULAR SAFETY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL NECESSARY CONSTRUCTION STAKING AND GRADE ALIGNMENT CONTROLS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT GRADE AND ALIGNMENT REFERENCES BY MEANS OF STAKES, STRINGLINES, OR OTHER APPROPRIATE MEANS.
10. THE CONTRACTOR SHALL USE APPROPRIATE MEANS, METHODS, AND EQUIPMENT AND TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING SITE FEATURES, SUCH AS, BUT NOT LIMITED TO, ROAD SIGNS, DRIVES, PAVEMENT, DITCHES, MANHOLES, UNDERGROUND UTILITIES, OVERHEAD UTILITIES, CULVERTS, GATES, FENCES, UTILITY POLES, OR UTILITY MARKERS, PUBLIC OR PRIVATE. ANY SITE FEATURE DAMAGE OR DISTURBANCE THAT OCCURS AS A RESULT OF THE CONTRACTOR'S MEANS, METHODS, OR EQUIPMENT SHALL BE REPAIRED AND/OR RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE THE SOLE JUDGE OF THE ACCEPTABILITY OF ANY SUCH REPAIRS OR REPLACEMENTS.
11. CONTRACTOR SHALL PROVIDE SUBMITTALS ON MATERIALS AND EQUIPMENT TO BE INCLUDED IN THE CONSTRUCTION PRIOR TO THE PRE-CONSTRUCTION MEETING. THE ENGINEER SHALL REVIEW SUBMITTALS TO VERIFY THAT THE MATERIALS ARE IN ACCORDANCE WITH THE SPECIFICATIONS. SUBMITTALS INCLUDE SUCH ITEMS AS PERMITS, SHOP DRAWINGS, CALCULATIONS, CUT SHEETS, AND QUALITY CONTROL CERTIFICATES.
12. ALL CONSTRUCTION SHALL BE COMPLETED TO THE ELEVATIONS AS NOTED ON THE PLANS. TOLERANCES OF ±0.1 FT ARE ACCEPTABLE IN LANDSCAPED/GRAVEL AREAS. TOLERANCES OF ±0.01 FT ARE ACCEPTABLE FOR PAVEMENT AND SEWER CONSTRUCTION.

**BENCH MARK DATA**  
( CITY OF DETROIT ) DATUM

BENCH MARK 7  
ARROW ON HYDRANT (2013), LOCATED ON THE NORTHWEST CORNER OF PARKDALE TERRACE AND MCGRAW STREET.  
ELEVATION=123.84'  
(SHOWN GRAPHICALLY)

BENCH MARK 8  
NAIL IN THE SOUTH FACE OF A LIGHT POLE (G.W. TAG NO. 82100), LOCATED ON THE SOUTHEAST CORNER OF 33RD STREET AND MCGRAW STREET.  
ELEVATION=123.43'  
(SHOWN GRAPHICALLY)



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

**SITE OWNER:**

CITY OF DETROIT  
CONTACT: FELISHA STUDDILL  
ADDRESS: 1301 THIRD ST.  
AVE SUITE 1301  
DETROIT, MI 48226

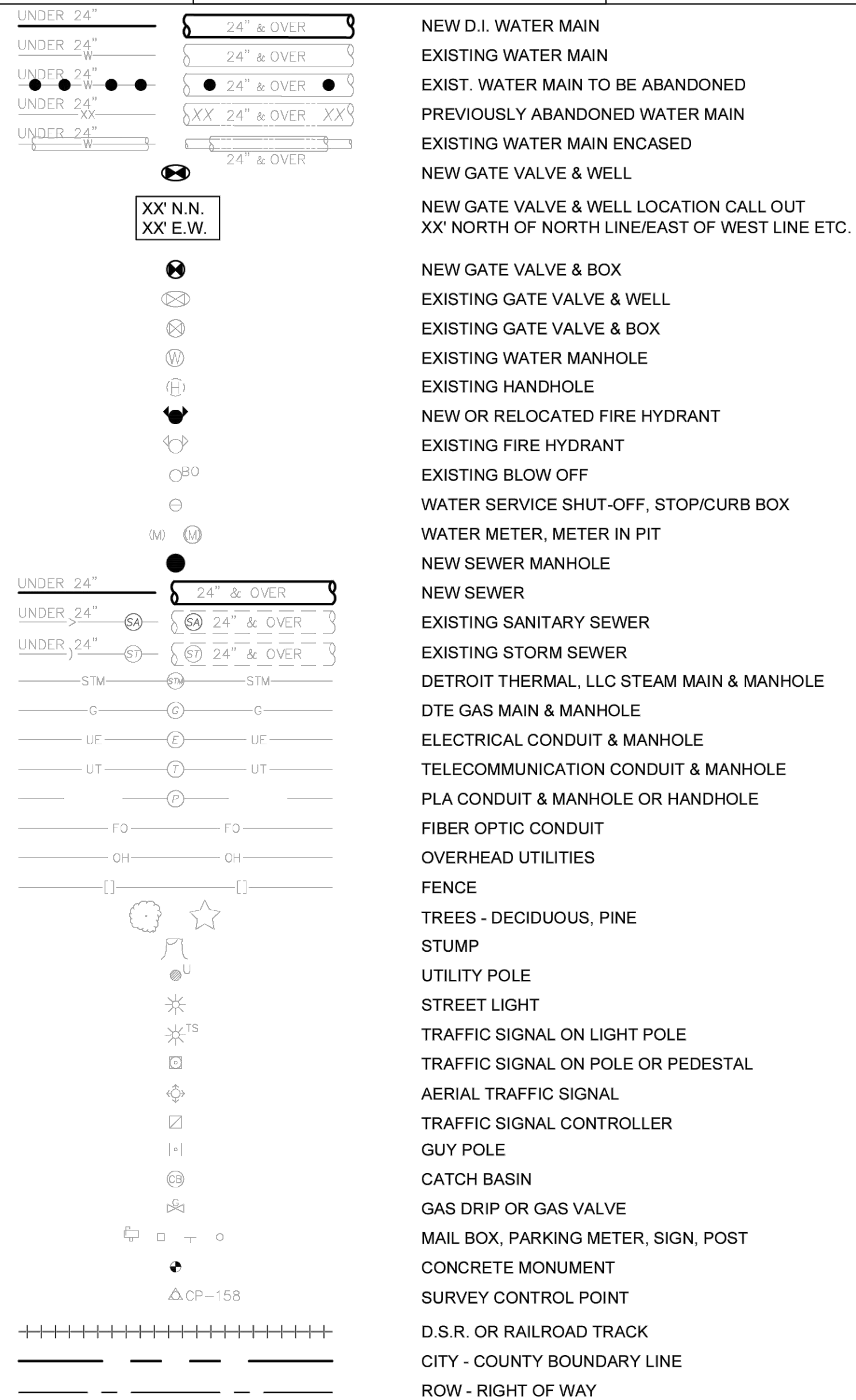


DAVID A. RZYZI, PE 07/24/2024  
REGISTERED PROFESSIONAL ENGINEER

PLAN REVISIONS				DEVELOPER		DESIGNED BY : DAVID RZYZI	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION					
1	07/24/24		EGLE PERMIT			DRAWN BY : KCC	DATE: 07/11/2024	JN:	TITLE SHEET-SEWER PLANS	C0.0
-	-	-	-			CHECKED BY : DAVID RZYZI				

W:\Projects\2023\401 2300001-00199\401 2300198.000\CAD\SHSTASK 300C0 0 COVER SHEET.dwg Last saved 7/31/2024 4:33 PM by KCook, plotted 7/31/2024 4:35 PM

**LEGEND**



**ABBREVIATIONS**

ASPH	ASPHALT PAVEMENT	PLD	PUBLIC LIGHTING DEPARTMENT
AC	ASBESTOS CEMENT PIPE	ROW	RIGHT OF WAY
C.E.D.	CITY ENGINEERING DIVISION	SAC	ASPHALT ABOVE CONCRETE
CONC.	CONCRETE	SPL/NPL/EPL/WPL	SOUTH/NORTH/EAST/WEST
DTE/D.E. CO	DETROIT EDISON COMPANY		PROPERTY LINE
DWSD	DETROIT WATER AND SEWERAGE DEPT.	PROP.	PROPOSED
EX.	EXISTING	STM	STORM
F.G.	FINISH GROUND	UN-DEAD	UNKNOWN MATERIAL - DEAD
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HDD	HORIZONTAL DIRECTIONAL DRILLING	WM	WATERMAIN
HMA	HOT MIX ASPHALT	WMR	WATERMAIN RESTORATION
HYD.	HYDRANT	WS	WATER SERVICE
I.E.	INVERT ELEVATION	WTR.	WATER
PLA	PUBLIC LIGHTING AUTHORITY		

**GENERAL NOTES**

- UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE TAKEN FROM SURVEY AND INFORMATION GATHERED FROM THE MAJOR SERVICE COMPANIES. NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS.
- BIDDER SHALL VERIFY TYPES AND LOCATIONS OF PAVEMENTS AND CURBS OF STREETS AND ALLEYS (ESPECIALLY AT INTERSECTIONS) WITH RESPECT TO THEIR INTERFERENCE WITH THE SEWER REPLACEMENT AND/OR INSTALLATION AND SHALL INCLUDE COST OF CROSSING AND RESTORATION USING THE RELEVANT UNIT PRICE ITEMS.
- ALL SIDEWALKS, DRIVEWAYS, SERVICE WALKS, CURBS, UTILITY POLES, TRAFFIC SIGNAL POLES, LIGHT POLES, TREES, LAWNS ETC., MAY NOT BE SHOWN ON THESE DRAWINGS. THE BIDDER SHALL VISIT THE PROJECT SITE AND MAKE THEIR OWN DETERMINATION OF THE SITUATION AND INCLUDE ALL WORK AND RESTORATION INVOLVING THESE IMPROVEMENTS USING THE RELEVANT UNIT PRICE ITEMS.
- LOCATIONS OF THE D.W.S.D. SEWERS AS SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. EXACT LOCATION AND DEPTH SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEWER CONSTRUCTION OR REPLACEMENT IN CLOSE PROXIMITY TO UTILITY POLES, CATCH BASINS, TREES, ETC., MAY REQUIRE TUNNELING AND/OR THE USE OF CARRIER PIPES. THE SUPPORT OF THESE STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT WORK AND THEREFORE INCLUDED IN THE UNIT PRICE OF THE PIPE INSTALLATION.
- DAMAGE TO EXISTING MANHOLES OCCURRING DURING SEWER INSTALLATION SHALL BE REPAIRED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO D.W.S.D. REPAIRING OF THE MANHOLE SHALL INCLUDE, BUT NOT BE LIMITED TO, BRICK REPLACEMENT, REMORTARING JOINTS AND ADJUSTING THE FRAMES AND COVERS TO GRADE. WORN FRAMES AND COVERS LOCATED IN THE PAVEMENT SHALL BE EXCHANGED FOR NEW FRAMES AND COVERS PER THE STANDARD DRAWINGS. REMOVAL AND REPLACEMENT OF FRAMES AND COVERS WILL BE REQUIRED AS DIRECTED BY THE ENGINEER. FRAMES AND COVERS SHALL BE SALVAGED AND RETURNED TO D.W.S.D. AT NO COST TO THE CONTRACTOR.
- IN COMPLIANCE WITH MICHIGAN PUBLIC ACT 53 OF THE ACTS OF 1974, THE CONTRACTOR SHALL NOTIFY, 3 WORKING DAYS (72 HOURS) IN ADVANCE OF CONSTRUCTION, ALL PUBLIC AND PRIVATE OWNERS HAVING EXISTING FACILITIES IN OR NEAR THE IMMEDIATE WORKING AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS AND NOTIFYING MISS DIG (PHONE 1-800-482-7171).
- ALL SIDEWALK AND SIDEWALK RAMP REPLACEMENT, IN THE CITY OF DETROIT RIGHT-OF-WAY, SHALL BE ADA COMPLIANT. IN ADDITION, THE SIDEWALK CROSS SLOPE SHALL NOT BE GREATER THAN 2% AND SHALL BE SLOPED TO ASSURE DRAINAGE TO THE STREET (TRY TO MAINTAIN A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW).
- THE BIDDER'S ATTENTION IS DIRECTED TO THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE REQUIREMENTS OF THE CITY ENGINEERING DIVISION OF THE DEPARTMENT OF PUBLIC WORKS (D.P.W.), CITY OF DETROIT.
- IF PARKING RESTRICTIONS ADJACENT TO THE CONTRACTOR'S WORK ZONE DO NOT ALLOW OVERNIGHT PARKING OR RESTRICT DAYTIME PARKING, THE CONTRACTOR SHALL PROVIDE ACCESS TO PRIVATE PROPERTIES DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, PROVIDING A TEMPORARY RAMP TO CROSS ANY TEMPORARY WATER PIPES OR EXCAVATIONS THAT MAY LIMIT ACCESS TO DRIVEWAYS.
- THE TRAFFIC REQUIREMENTS SET FORTH BY THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS (D.P.W.), TRAFFIC ENGINEERING DIVISION, THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES (WCDPS) AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) ARE INCLUDED IN THE CONTRACT SPECIFICATIONS. WHERE THE REQUIREMENTS CONFLICT, THE MOST STRINGENT WILL GOVERN.
- THE CONTRACTOR IS REFERRED TO THE DETAILED SPECIFICATIONS REGARDING "SHEETING AND BRACING" REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE SHEETING AND BRACING TO PROTECT ADJACENT PAVEMENT, CURBS, SIDEWALKS, PIPELINES, CONDUITS, THE WORK AND PERSONNEL. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGES AND INJURIES RESULTING FROM A FAILURE TO PROVIDE ADEQUATE SHEETING AND BRACING, AT NO ADDITIONAL COST TO D.W.S.D.
- IF A CRANE, BACKHOE OR A BOOM WILL BE USED IN THE VICINITY OF DETROIT EDISON OVERHEAD LINES, THE DETROIT EDISON COMPANY MUST BE NOTIFIED THREE WORKING DAYS PRIOR TO START.
- THE BIDDER'S ATTENTION IS DIRECTED TO THE CONTRACT SPECIFICATIONS REGARDING THE MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) REQUIREMENTS FOR UTILITY CUTS, TRENCHES AND PAVEMENT REPLACEMENT. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE M.D.O.T. AND MUST COMPLY WITH ALL THE REQUIREMENTS.
- THE BIDDER'S ATTENTION IS DIRECTED TO THE CONTRACT SPECIFICATIONS REGARDING THE WAYNE COUNTY REQUIREMENTS. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES (W.C.D.P.S.) AND MUST COMPLY WITH ALL THE REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY D.W.S.D.'S REPRESENTATIVE A MINIMUM OF TWO DAYS (48 HOURS) IN ADVANCE OF THE NEED TO OPEN OR CLOSE ANY VALVES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING SEWERS, DRAINS AND DRAINAGE DITCHES INCLUDING ANY PUBLIC OR PRIVATE UTILITY, OVERHEAD OR UNDERGROUND. IF ANY UTILITIES ARE DAMAGED DURING CONSTRUCTION THEY SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY, TO THE SATISFACTION OF THE ENGINEER, THE UTILITY OWNER AND THE AUTHORITIES HAVING JURISDICTION.
- ALL PREVIOUSLY ABANDONED OR LIVE UTILITIES, WATER MAINS, STORM SEWERS, AND COMBINED SEWERS MAY NOT BE SHOWN ON THE DRAWINGS. NO GUARANTEE IS MADE AS TO THEIR ACCURACY OR COMPLETENESS. SHOULD THE CONTRACTOR NEED MORE INFORMATION, A TIMELY REQUEST TO INDIVIDUAL UTILITY COMPANIES FOR THEIR FACILITY INFORMATION AND D.W.S.D. FOR WATER AND SEWER INFORMATION SHOULD BE MADE.
- ALL SEWER CONSTRUCTION SHALL BE PERFORMED WITH MATERIALS AND WORKMANSHIP OF THE HIGHEST QUALITY FOR THE PARTICULAR PURPOSE AND SHALL STRICTLY CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE DETROIT WATER AND SEWERAGE DEPARTMENT.
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWERS ARE NOT KNOWN. APPROXIMATE ELEVATIONS SHOWN ON THE PROFILES ARE BASED ON AVAILABLE RECORD DRAWINGS FROM THE DETROIT WATER AND SEWERAGE DEPARTMENT AND SURVEY CONDUCTED. ELEVATIONS OF THE PROPOSED SEWERS ARE SUBJECT TO CHANGE TO SUIT ACTUAL ELEVATIONS OF EXISTING SEWERS. WHERE APPLICABLE, CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SEWERS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING PROPOSED SEWERS CONNECTION LOCATIONS AND ELEVATIONS (IF ANY) FOR ENGINEERS REVIEW AND APPROVAL PRIOR TO START OF WORK.
- A MINIMUM CLEARANCE OF 18 INCHES VERTICALLY AND 3 FEET HORIZONTALLY SHALL BE MAINTAINED BETWEEN THE OUTSIDE SURFACE OF SEWERS AND OTHER UTILITIES. UNLESS OTHERWISE APPROVED BY THE ENGINEER AND D.W.S.D. IF A CONFLICT EXISTS BETWEEN THE SEWERS AND ANY OTHER UTILITY, THAT UTILITY AND ENGINEER SHOULD BE CONSULTED IMMEDIATELY. THE MINIMUM HORIZONTAL DISTANCE BETWEEN WATER MAIN AND SEWER SHALL BE 10 FEET UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ELEVATION DATUM IS CITY OF DETROIT DATUM. COORDINATE SYSTEM, IF SHOWN, IS CITY OF DETROIT HORIZONTAL SYSTEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDANCE AND CLEANUP OF STREET SPILLAGE OF EXCAVATED OR BACKFILL MATERIALS ENTERING OR LEAVING THE SITE. CLEANUP OF MAJOR SPILLS SHALL BE COMPLETED IMMEDIATELY. OTHER SPILLS SHALL BE CLEANED, CONTINUALLY. ALL CLEANUP SHALL BE COMPLETED TO THE FULL SATISFACTION OF THE CITY OF DETROIT AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDANCE AND CLEANUP OF MUD TRACKED ONTO ADJACENT CITY, COUNTY AND STATE STREETS FROM VEHICLES LEAVING THE JOB SITE. CLEANUP SHALL BE COMPLETED DAILY AND TO THE FULL SATISFACTION OF THE CITY OF DETROIT, COUNTY AND STATE AUTHORITIES.
- THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PROPERLY MOISTEN ALL SURFACES AS REQUIRED TO PREVENT SOILS FROM BECOMING AIRBORNE AND CREATING A NUISANCE TO NEIGHBORING FACILITIES. THE PUBLIC, AND ANY CONCURRENT WORK ACTIVITIES, THE FINAL DETERMINATION OF THE SUCCESS OF THESE DUST CONTROL MEASURES SHALL BE BY THE CITY OF DETROIT AUTHORITIES.
- ANY SITE DEWATERING NECESSARY TO MAINTAIN A SAFE AND EFFICIENT ENVIRONMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXCAVATED MATERIALS SHALL BE REMOVED FROM THE SITE AND PROPERLY AND LEGALLY DISPOSED OF AT AN OFF SITE LOCATION. NO EXCAVATED MATERIALS SHALL BE UTILIZED FOR ANY ON-SITE FILL REQUIREMENTS.
- THE CONTRACTOR SHALL TELEWISE ALL EXISTING SEWER MANHOLES, CATCHBASINS AND CATCHBASIN LEADS TO DETERMINE AND RECORD ALL CONNECTIONS TO THESE SEWERS.
- THE CONTRACTOR SHALL NOT ABANDON ANY EXISTING SEWER CONNECTION UNLESS SO DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RECONNECT ALL EXISTING SEWERS, EXISTING HOUSE LEADS AND ANY OTHER EXISTING DRAINAGE CONNECTIONS, THAT ARE NOT TO BE ABANDONED, TO THE NEW SEWERS AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS HAVING EXISTING FACILITIES IN OR NEAR THE IMMEDIATE WORKING AREA. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF VERIFYING THE LOCATIONS AND NOTIFYING ALL UTILITY OWNERS AND MISS DIG.
- THE CONTRACTOR SHALL VIDEOTAPE ALL STREETS PRIOR TO CONSTRUCTION PER THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION ACTIVITIES.
- TRAFFIC CONTROL MUST CONFORM TO ALL APPLICABLE CITY, COUNTY AND STATE REGULATIONS AND GUIDELINES.
- CURB OR CURB AND GUTTER CALLED OUT TO BE INSTALLED SHALL BE PLACED PER THE CITY OF DETROIT'S STANDARD DETAIL INCLUDED IN THESE PLANS.
- FOR RESTORATION ITEMS, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR IS TO COMPLETE ALL SURFACE RESTORATION PRIOR TO SUBSTANTIAL COMPLETION. IF TEMPORARY RESTORATION CONDITIONS EXIST THROUGH THE WINTER, OR LONGER THAN 6 WEEKS, COLD PATCH/TEMPORARY PAVEMENTS ARE PERMITTED AS DIRECTED BY THE ENGINEER.

**SOIL EROSION AND SEDIMENTATION CONTROL**

- REFER TO SPECIFICATION 01 57 13 IN DWSD SPECIFICATIONS FOR THE CONTRACTOR'S RESPONSIBILITIES CONCERNING SOIL EROSION AND SEDIMENTATION CONTROL. REFER TO SHEETS SD-5 AND SD-6 FOR SOIL EROSION AND SEDIMENTATION CONTROL DETAILS.
- THE CONTRACTOR SHALL ARRANGE HIS CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT THE CONSTRUCTION AREA WILL NOT BE SUSCEPTIBLE TO SOIL EROSION AND THAT THE CONSTRUCTION OPERATIONS WILL NOT CREATE ANY SILTATION PROBLEMS.
- THE CONTRACTOR SHALL EMPLOY NECESSARY MEANS AND METHODS TO PREVENT EXCAVATED AND LOOSE SOIL MATERIAL FROM BEING COLLECTED ON TIRES OF TRUCKS AND OTHER EQUIPMENT AND BEING DEPOSITED ON STREETS AND ROADS TO AND FROM THE CONSTRUCTION SITE.
- THE CONTRACTOR SHALL CONTROL DUST AT THE CONSTRUCTION SITE AND ON THE PUBLIC STREETS USED AS HAUL ROADS. THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW THE REGULATIONS OUTLINED BY THE CITY OF DETROIT FUGITIVE DUST ORDINANCE NO. 32-17 CHAPTER 22, ARTICLE 5.
- THE DISTANCE BETWEEN THE POINT OF COMPLETE BACK FILLING AND THE PIPE LAYING SHALL NOT EXCEED 40 FEET.
- THE CONTRACTOR SHALL EMPLOY POSITIVE MEANS TO PREVENT SOIL AND OTHER DEBRIS FROM ENTERING THE EXISTING STREET DRAINAGE SYSTEM. THE EXISTING CATCH BASIN AND DRAIN SYSTEM IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN TO AT LEAST THE CONDITIONS PRIOR TO CONSTRUCTION.
- IN ADDITION TO THE ABOVE REQUIREMENTS, THE CONTRACTOR'S ATTENTION IS DIRECTED SPECIFICALLY TO DIVISION 14E, "EROSION CONTROL PROGRAM" OF THE CITY ENGINEERING DEPARTMENT'S CURRENT "STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION." LOCATED AT: <https://detroitmi.gov/document/standard-specifications-paving-and-related-construction>
- THE CONTRACTOR SHALL PERFORM ALL ACTIVITIES NECESSARY TO COMPLY WITH THE TEMPORARY EROSION AND SEDIMENT CONTROL SPECIFICATION AND THE CITY ENGINEERING EROSION CONTROL PROGRAM.
- PERMITTEE AND CONTRACTORS ARE SUBJECT TO: PUBLIC ACT 451 OF 1994, AS AMENDED PART 201, IN THE EVENT OF EXCAVATION ENCOUNTERING ENVIRONMENTAL CONTAMINATION OR AN UNDERGROUND TANK IN MDOT AND/OR OTHER PROJECT RIGHT OF WAY, WORK WITHIN THE RIGHT OF WAY SHALL CEASE UNTIL ALL ACTIONS/NOTIFICATIONS SPECIFIED BY PART 201 HAVE BEEN COMPLETED.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT, WITH THE EXCLUSION OF THE GREEN STORM WATER INFRASTRUCTURE WORK.

**CITY OF DETROIT, DPW, CITY ENGINEERING DIVISION REQUIREMENTS**

- THE CONTRACTOR SHALL OBTAIN A CITY OF DETROIT STREET RIGHT-OF-WAY PERMIT FROM THE INSPECTION PERMIT OFFICE OF THE ENGINEERING DIVISION.
- THE CONTRACTOR SHALL COMPLY WITH ALL THE CITY ENGINEERING DIVISION STREET RIGHT-OF-WAY PERMIT REQUIREMENTS.
- NEW GATE VALVE WELLS, FIRE HYDRANTS AND ANY SURFACE ITEMS SHALL NOT BE LOCATED IN SIDEWALK RAMPS, LANDINGS AND/OR CROSSWALKS.
- ALL NEWLY CONSTRUCTED OR RECONSTRUCTED SIDEWALKS IN THE CITY OF DETROIT'S RIGHT-OF-WAY, SHALL HAVE A MAXIMUM 2% CROSS-SLOPE. IN ADDITION THERE SHALL BE A SUFFICIENT SLOPE ON THE SIDEWALK TO ASSURE DRAINAGE TO THE STREET (TRY TO MAINTAIN AT LEAST A 1% SLOPE IN THE DIRECTION OF FLOW).
- THE CONTRACTOR IS REQUIRED TO MEET D.P.W. ROADWAY PATCHING AND SIDE WALK PATCHING PER DIVISION 15 AND AS DETAILED IN THESE PLANS, AND ADA RAMP DETAILS PER MDOT STANDARD PLAN R-28-SERIES.
- THE CONSTRUCTION CONTRACTOR NEED TO SUBMIT THE CONSTRUCTION PHASING AND DURATION OF EACH PHASE IN ORDER TO MINIMIZE THE IMPACT TO VEHICULAR AND PEDESTRIAN TRAFFIC.
- WHENEVER SIDEWALKS ARE CLOSED, PEDESTRIAN DETOUR SIGNS NEED TO BE POSTED.



Know what's below.  
Call before you dig.

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		
-	-	-	-	-	-

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 100 GERRARD AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.274.6098  
EMAIL: ORBERTSON@ECC.ORG



TECHNICAL SKILL,  
CREATIVE SPIRIT.

DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

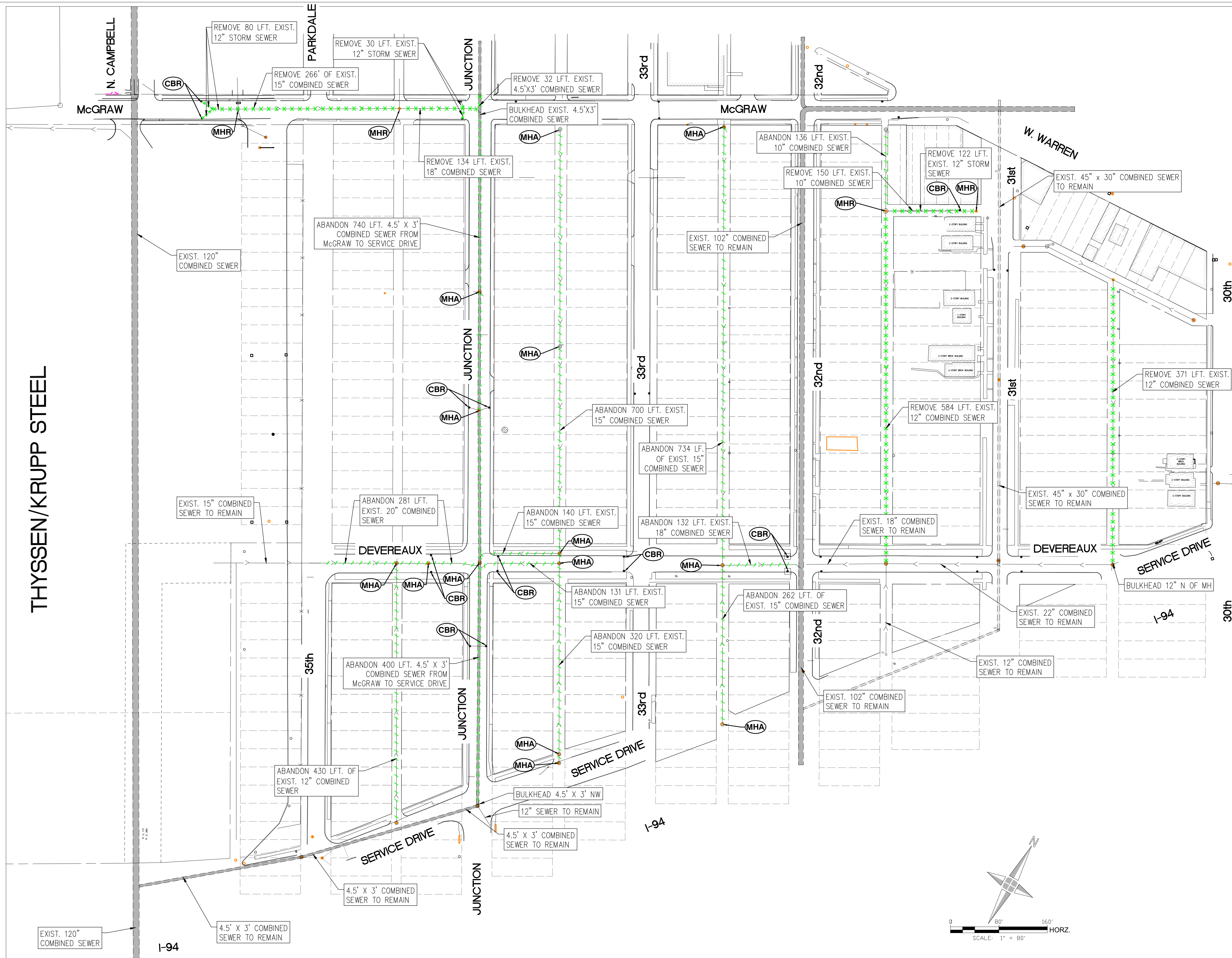
JUNCTION / McGRAW SITE READINESS PROJECT

SHEET

GENERAL NOTES

C0.1

THYSSEN/KRUPP STEEL



**NOTES:**

1. LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
2. ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
3. REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
4. EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
5. CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
6. CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
7. CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION. INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

**KEYED NOTES SHEET :**

- ABANDON EXISTING MH
- REMOVE EXISTING MH
- REMOVE EXISTING CB

**LEGEND**

- ABANDON COMBINED SEWER
- REMOVE COMBINED SEWER

DESCRIPTION OF ITEM	QTY.	PAY UNIT
Sewer, Removal, 4.5'x3'	32	Lft
Sewer, Removal, 18 inch	134	Lft
Sewer, Removal, 15 inch	266	Lft
Sewer, Removal, 12 inch	1187	Lft
Sewer, Removal, 10 inch	150	Lft
Manhole, Removal	3	Ea
Catch Basin, Removal	4	Ea
Sewer, Abandon, 4.5' x 3'	1140	Lft
Sewer, Abandon, 20 inch	281	Lft
Sewer, Abandon, 18 inch	132	Lft
Sewer, Abandon, 15 inch	2287	Lft
Sewer, Abandon, 10 inch	136	Lft
Manhole, Abandon	15	Ea
Sewer, Abandon, 12 inch	430	Lft

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT	3	08/15/24		UPDATED
2	08/07/24		DWSD REVIEW				

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GERRARD AVE. SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.237.4000  
 EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY : DAVID RYZYI  
 DRAWN BY : KCC  
 CHECKED BY : DAVID RYZYI

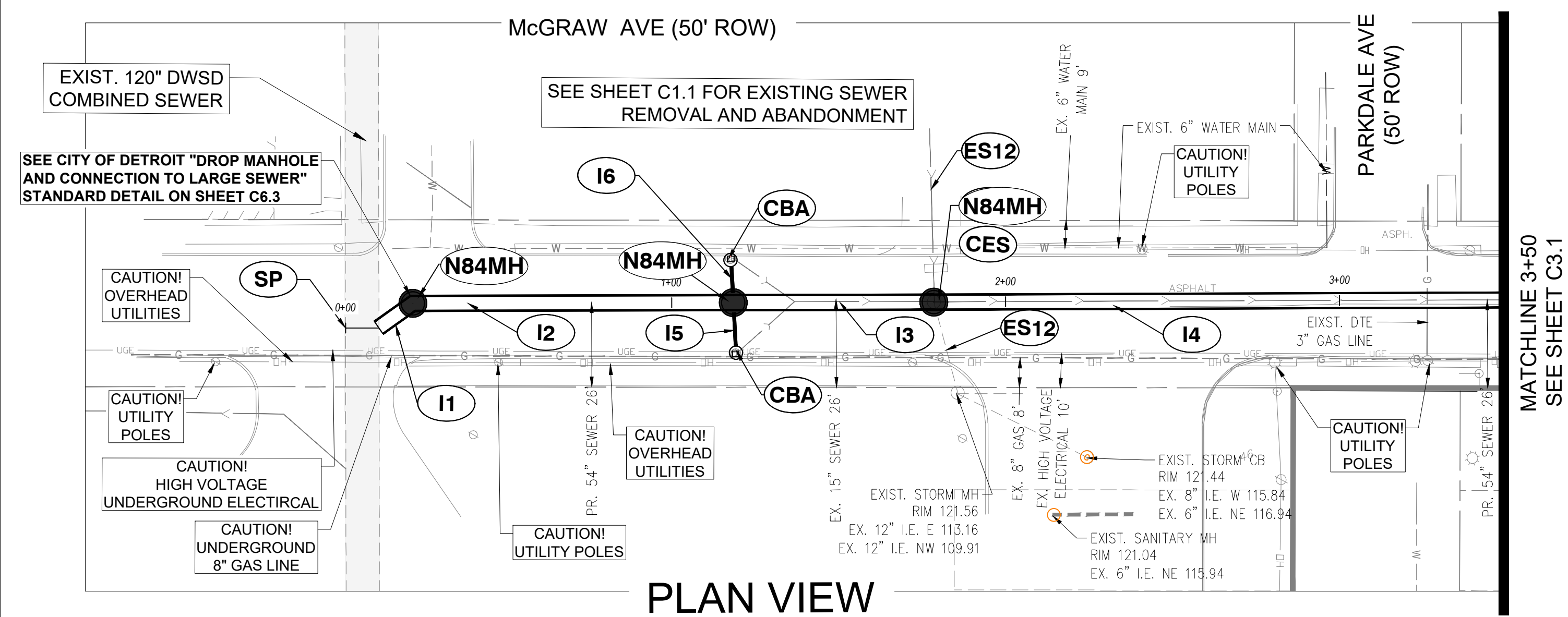
APPROVED BY :  
 DATE: 07/11/2024

CS:  
 JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
 DEMO PLAN SEWERS

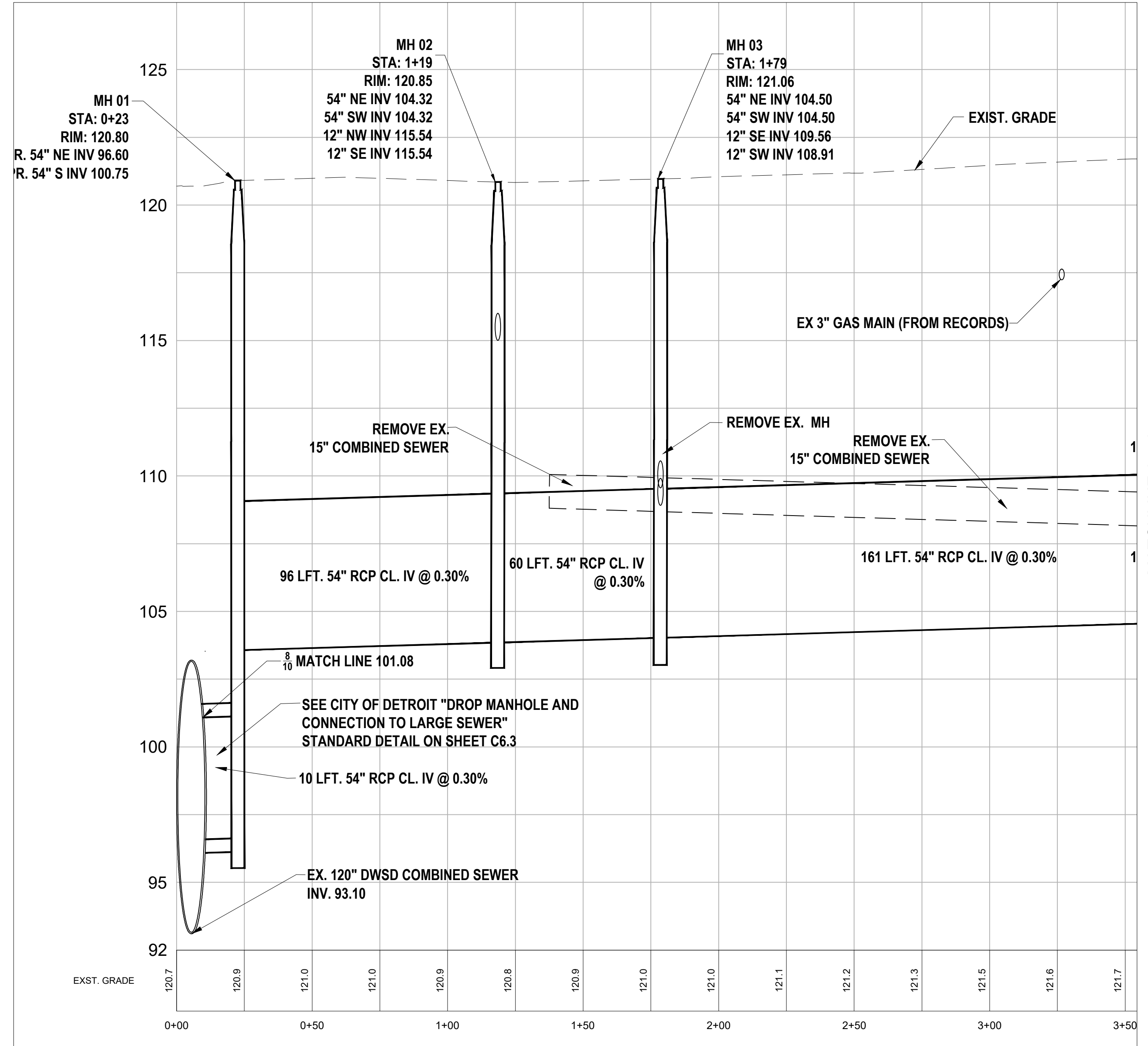
SHEET  
 C1.0

W:\Projects\2023\401.2300001-011991401.2300198.000\CAD\SHITS\TASK 300C3 0 SEWER AND WATER MAIN REMOVAL PLAN.dwg Last saved 8/15/2024 4:37 PM by NBarnett, plotted 8/15/2024 5:38 PM



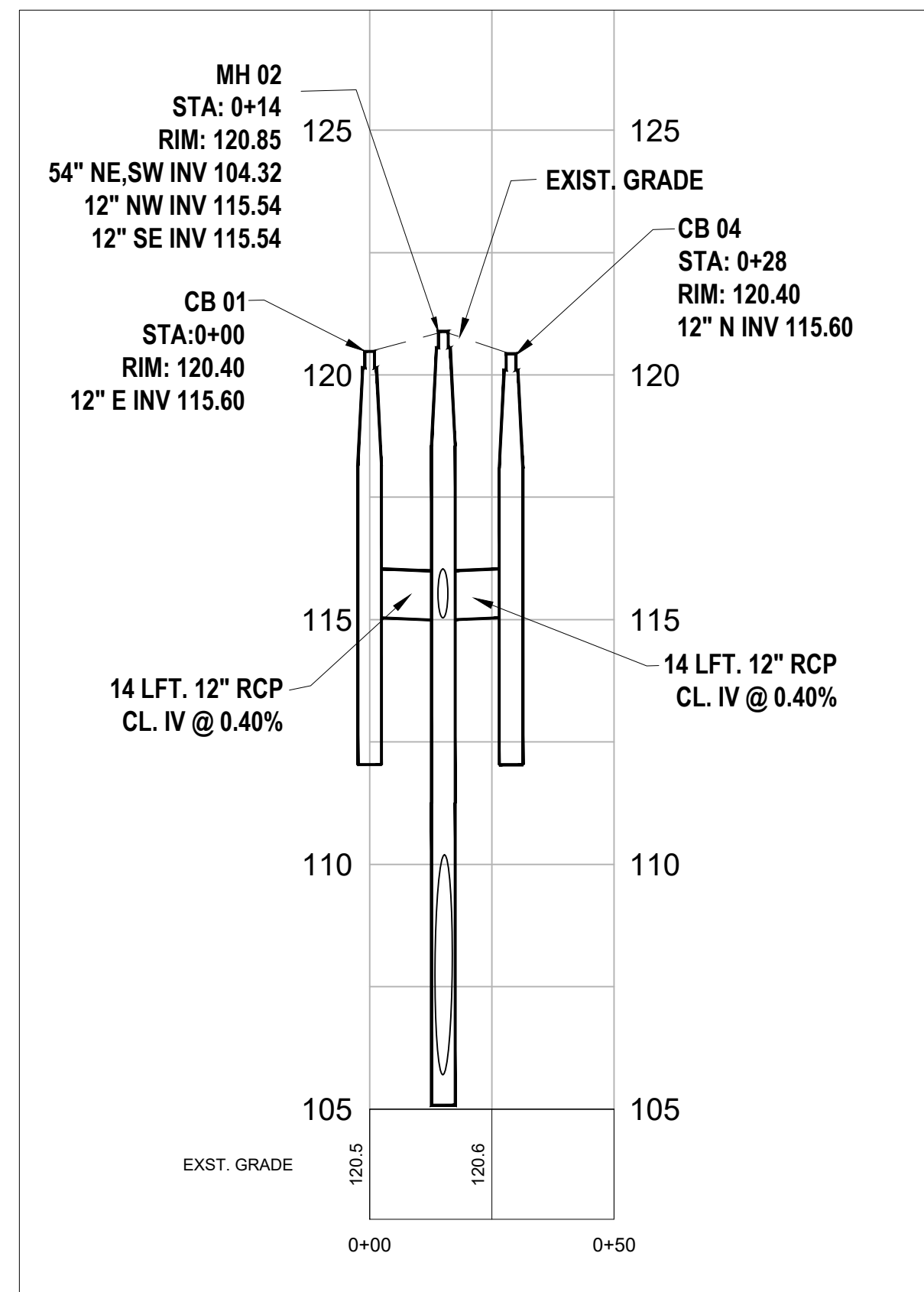
PLAN VIEW

MATCHLINE 3+50  
SEE SHEET C3.1

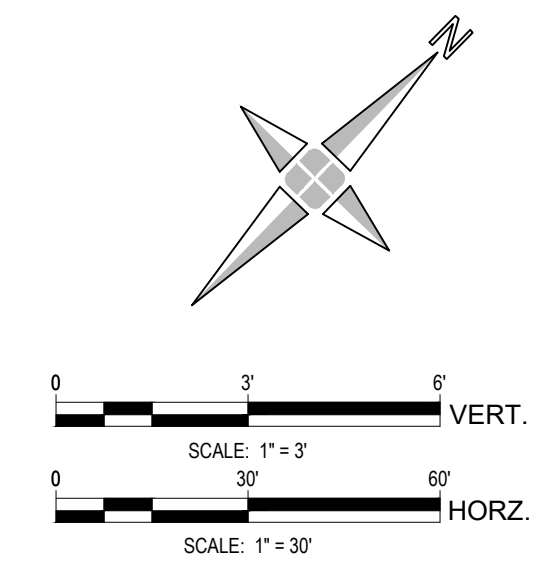


PROFILE VIEW

MATCHLINE 3+50  
SEE SHEET C3.1



PROFILE VIEW



**NOTES:**

- LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
- ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
- REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
- EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
- CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION, INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

**KEYED NOTES SHEET C3.0 :**

- SP** START POINT AT STA. 0+00
- ES12** EXISTING 12" VCP SEWER TO REMAIN
- ES18** EXISTING 18" VCP SEWER TO REMAIN
- CES** CONNECT EXISTING SEWER(S) TO NEW MANHOLE WITH FLEXIBLE BOOT
- CBA** REMOVE EXISTING CB AND INSTALL NEW TRAPPED CB TYPE A
- CBB** REMOVE EXISTING CB AND INSTALL NEW TRAPPED CB TYPE A
- I1** INSTALL 10 LF OF 54" CONCRETE SEWER PIPE
- I2** INSTALL 96 LF OF 54" CONCRETE SEWER PIPE
- I3** INSTALL 60 LF OF 54" CONCRETE SEWER PIPE
- I4** INSTALL 161 LF OF 54" CONCRETE SEWER PIPE
- I5** INSTALL 14 LF OF 12" CONCRETE SEWER PIPE
- I6** INSTALL 14 LF OF 12" CONCRETE SEWER PIPE
- N84MH** INSTALL NEW 84-INCH MANHOLE

Manhole, New, 84 inch	3	Ea
Catch Basin, Type A	2	Ea
Sewer, Open Cut Install, RCP, 12 inch	28	Lft
Sewer, Open Cut Install, RCP, 54 inch	327	Lft
Connect To Existing Sewer	1	Ea

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GERRARD AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.327.4600  
EMAIL: ORBERTSON@DBRA.ORG

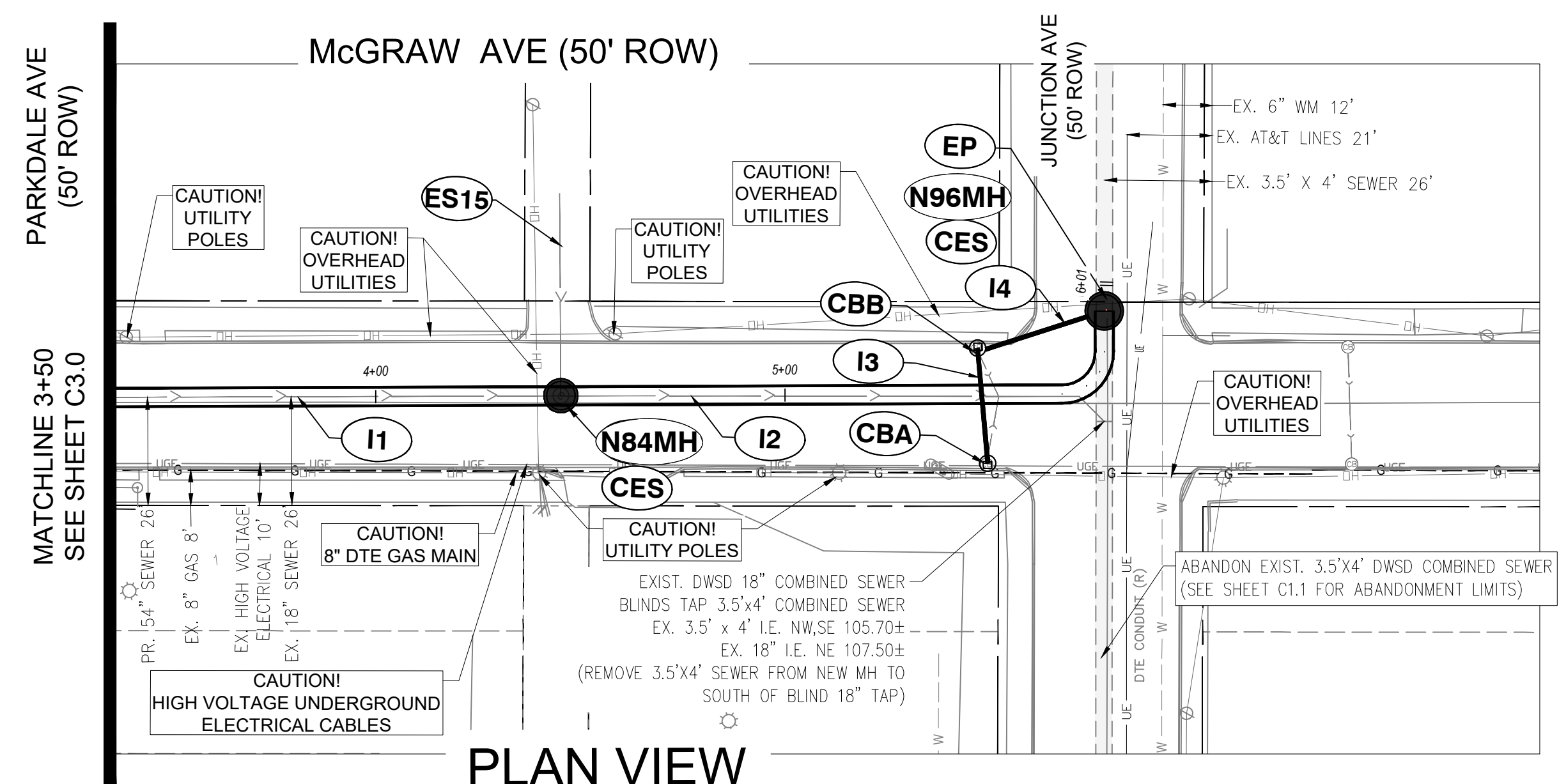


DESIGNED BY : **DAVID RYZYI**  
DRAWN BY : **KCC**  
CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
DATE: **07/11/2024**

CS:  
JN:

W:\Projects\2023\401 2300001-00199\401.2300198.000\CAD\SHITS\TASK 300C2 0 DESIGN PLANS.dwg Last saved 7/31/2024 3:50 PM by NBarnett, plotted 7/31/2024 4:11 PM



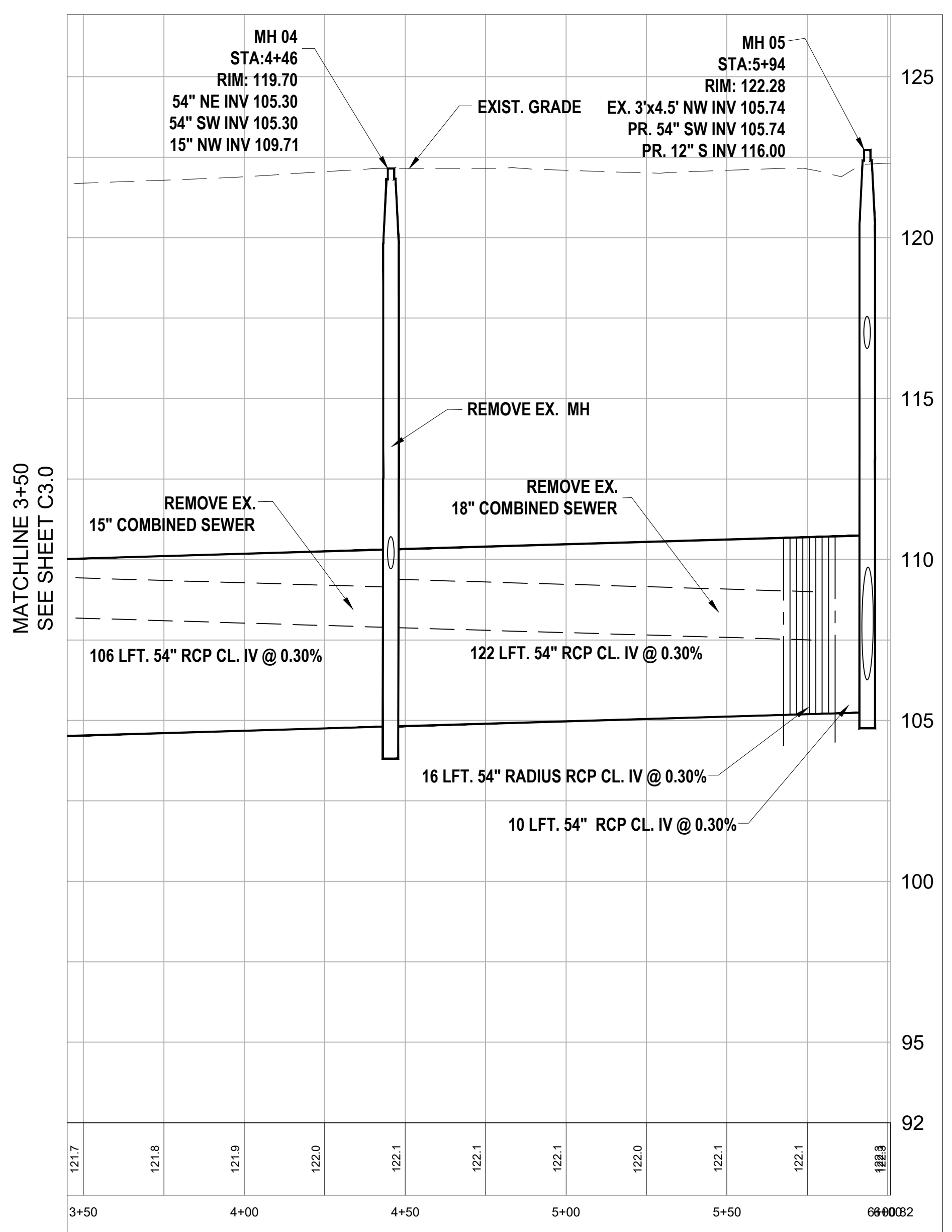
PLAN VIEW

NOTES:

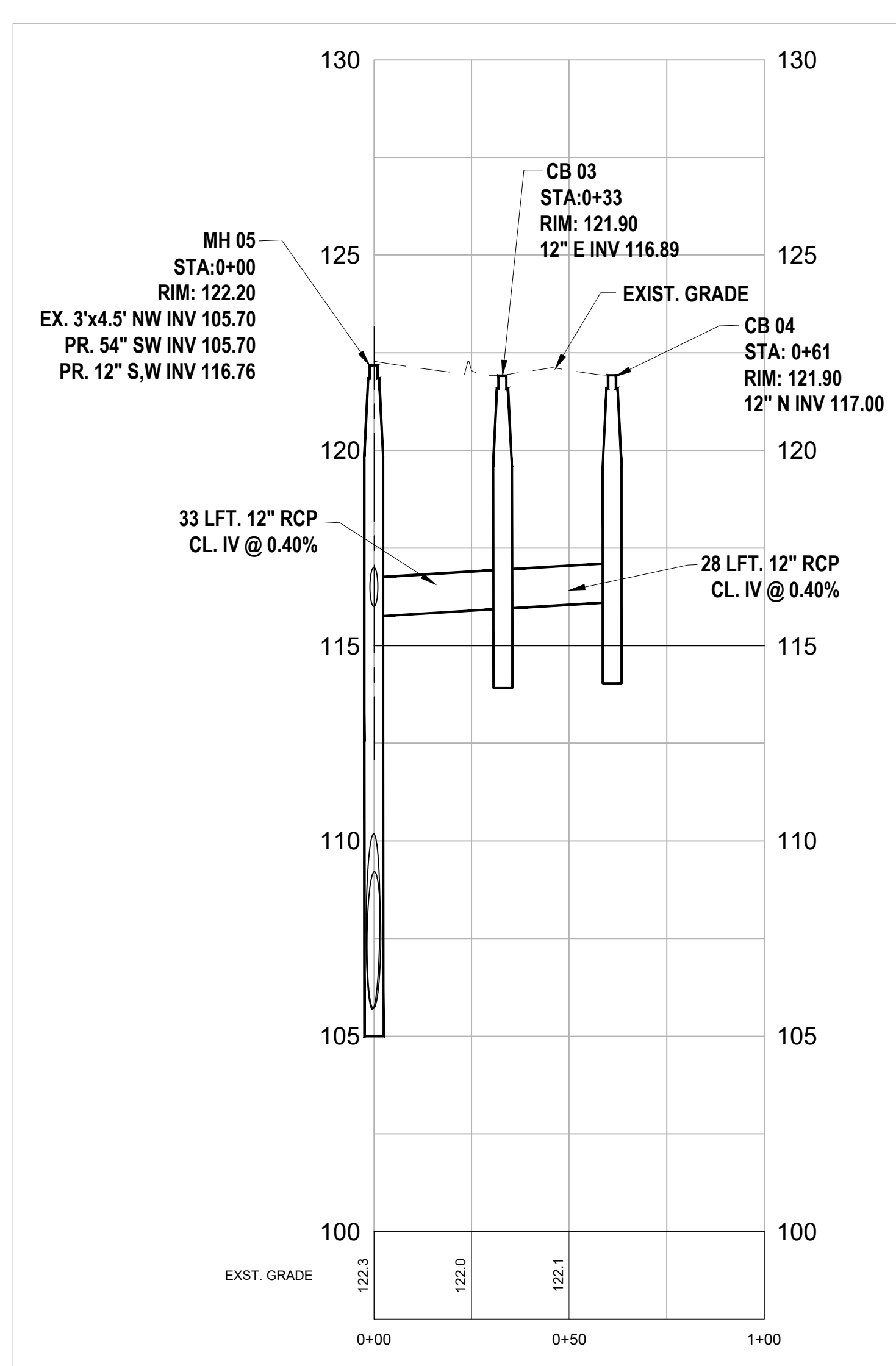
- LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
- ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
- REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
- EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
- CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION, INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

KEYED NOTES SHEET C3.1 :

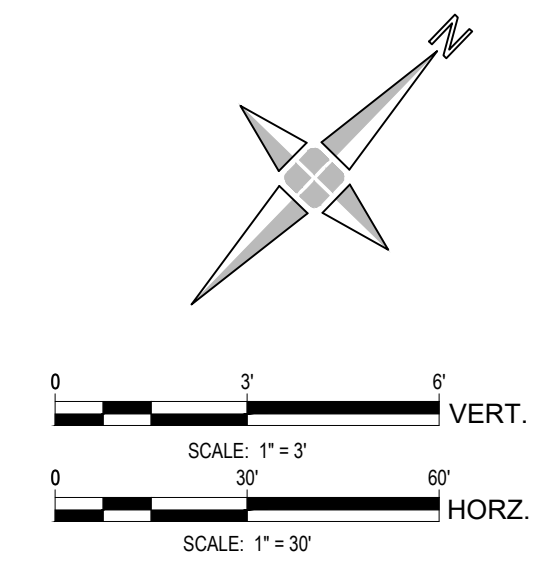
- EP** END POINT AT STA. 5+94
- ES15** EXISTING 15" VCP SEWER TO REMAIN
- CES** CONNECT EXISTING SEWER(S) TO NEW MANHOLE WITH FLEXIBLE BOOT
- CBA** REMOVE EXISTING CB AND INSTALL NEW TRAPPED CB TYPE A
- CBB** REMOVE EXISTING CB AND INSTALL NEW TRAPPED CB TYPE B
- I1** INSTALL 106 LF OF 54" CONCRETE SEWER PIPE
- I2** INSTALL 148 LF OF 54" CONCRETE SEWER PIPE
- I3** INSTALL 28 LF OF 12" CONCRETE SEWER PIPE
- I4** INSTALL 33 LF OF 12" CONCRETE SEWER PIPE
- N96MH** INSTALL NEW 96-INCH MANHOLE
- N84MH** INSTALL NEW 84-INCH MANHOLE



PROFILE VIEW



PROFILE VIEW



Item	Quantity	Unit
Manhole, New, 84 inch	1	Ea
Manhole, New, 96 inch	1	Ea
Catch Basin, Type A	1	Ea
Catch Basin, Type B	1	Ea
Sewer, Open Cut Install, RCP, 12 inch	61	Lft
Sewer, Open Cut Install, RCP, 54 inch	254	Lft
Connect To Existing Sewer	1	Ea

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GERRARD AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.337.4600  
EMAIL: ORBERTSON@DBRA.ORG

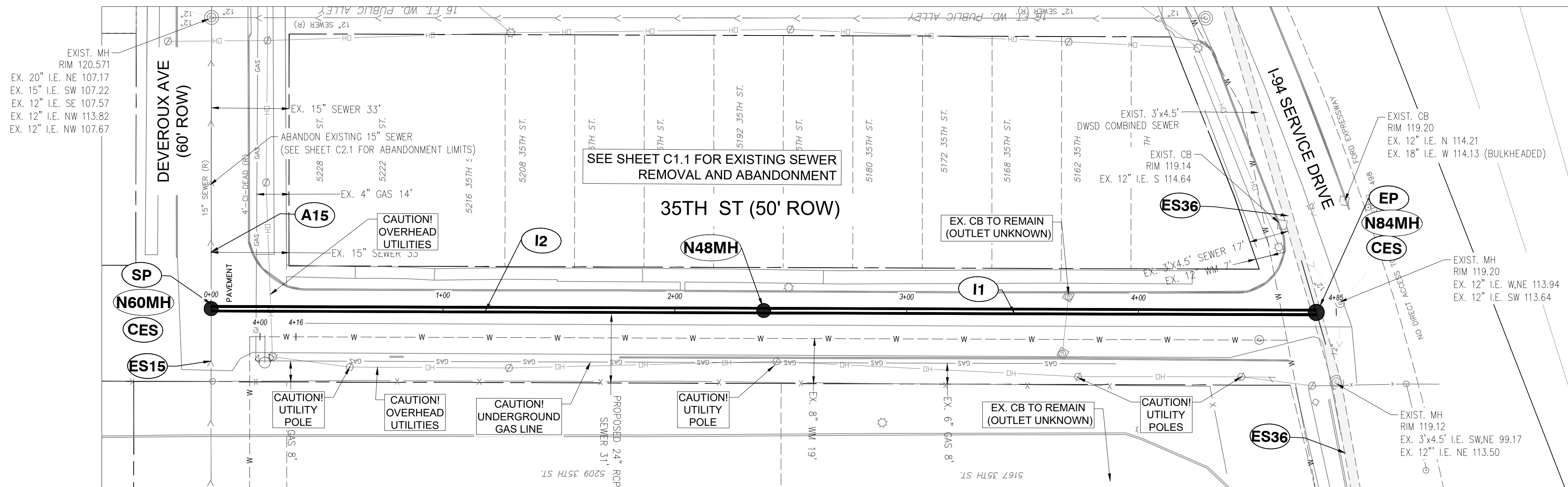


DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

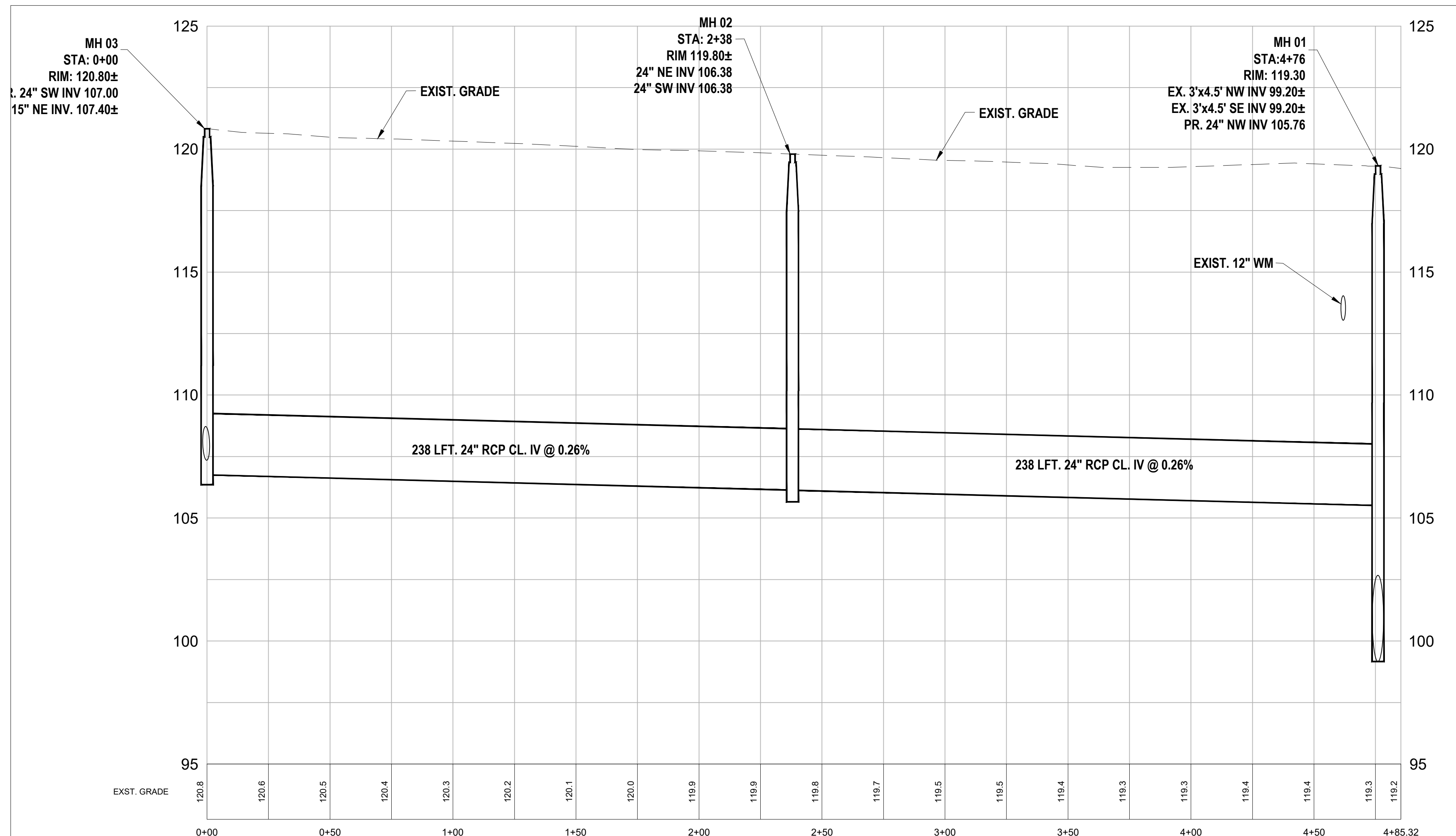
APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

W:\Projects\2023\401\_2300001-00199\401\_2300198.000\CAD\SHITS\TASK 300C2.0 DESIGN PLANS.dwg Last saved 7/31/2024 3:50 PM by NBarnett, plotted 7/31/2024 4:24 PM



PLAN VIEW



PROFILE VIEW

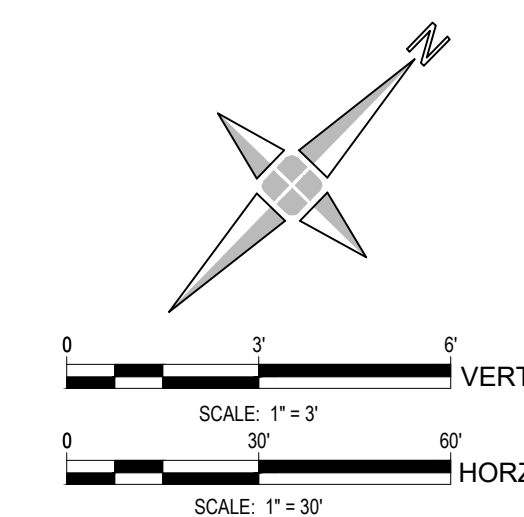
NOTES:

- LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
- ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
- REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
- EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
- CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION, INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

KEYED NOTES SHEET C3.2 :

- SP** START POINT AT STA. 0+00
- EP** END POINT AT STA. 4+76
- A15** ABANDON EXISTING 15" VCP SEWER
- ES36** ABANDON EXISTING 30" X54" VCP SEWER
- I1** INSTALL 238 LF OF 12" CONCRETE SEWER PIPE
- I2** INSTALL 238 LF OF 12" CONCRETE SEWER PIPE
- N48MH** INSTALL NEW 48-INCH DIAMETER MANHOLE
- N60MH** INSTALL NEW 60-INCH DIAMETER MANHOLE
- N84MH** INSTALL NEW 84-INCH DIAMETER MANHOLE
- ES15** EXISTING 15" VCP SEWER TO REMAIN
- CES** CONNECT EXISTING SEWER(S) TO NEW MANHOLE WITH FLEXIBLE BOOT

Manhole, New, 48 inch	1	Ea
Manhole, New, 60 inch	1	Ea
Manhole, New, 84 inch	1	Ea
Sewer, Open Cut Install, RCP, 24 inch	476	Lft
Connect To Existing Sewer	1	Ea



PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		

DEVELOPER  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GERRARD AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.237.4600  
 EMAIL: ORBERTSON@DBRA.ORG



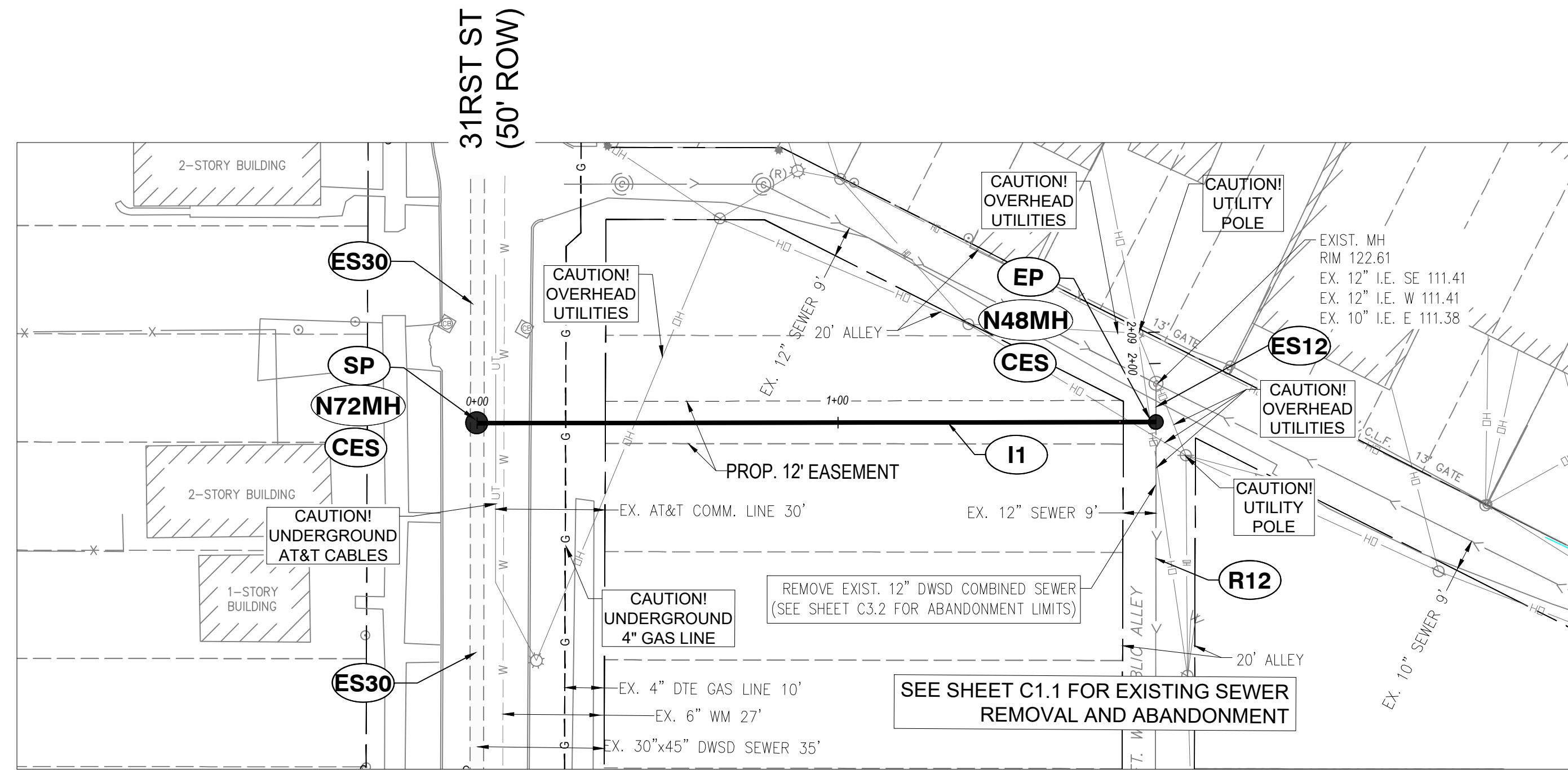
DESIGNED BY : DAVID RYZYI  
 DRAWN BY : KCC  
 CHECKED BY : DAVID RYZYI

APPROVED BY :  
 DATE: 07/11/2024

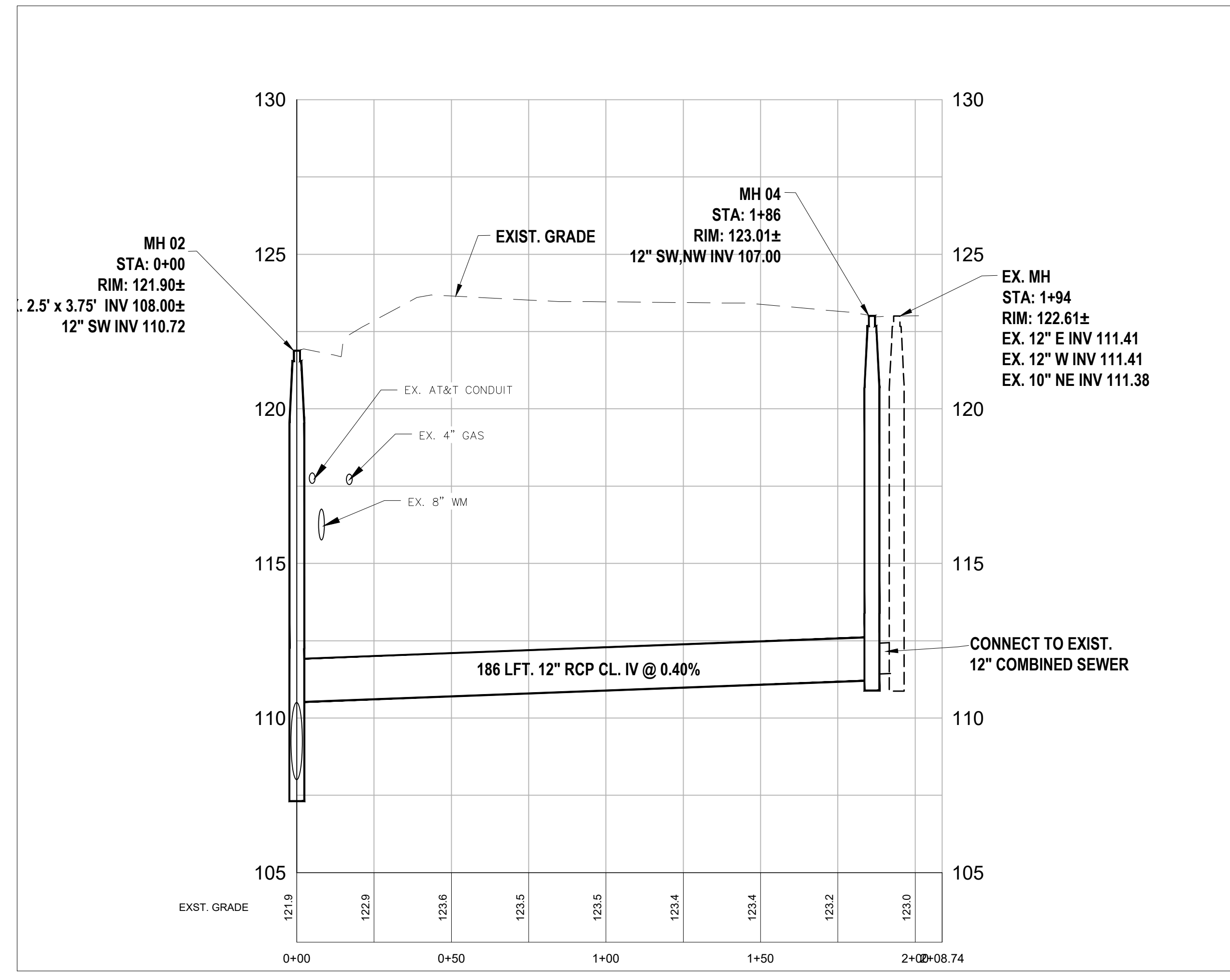
CS:  
 JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
 35TH STREET SEWER WEST

SHEET  
 C2.2



**PLAN VIEW**



**PROFILE VIEW**

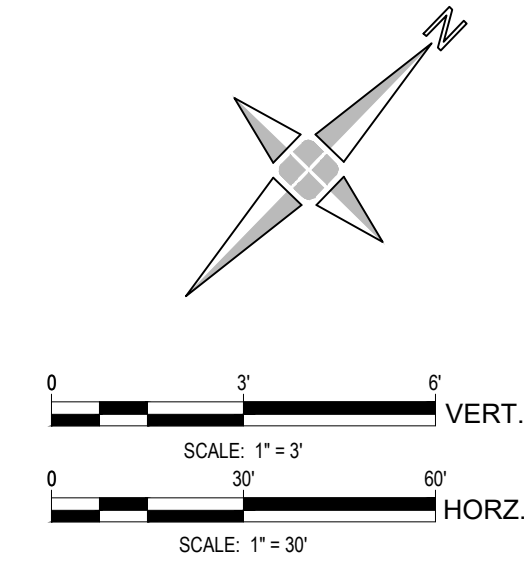
**NOTES:**

- LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
- ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
- REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
- EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
- CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION, INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

**KEYED NOTES SHEET C3.3:**

- SP** START POINT AT STA. 0+00
- EP** END POINT AT STA. 1+86
- R12** REMOVE EXISTING 12" VCP SEWER
- I1** INSTALL 186 LF OF 12" CONCRETE SEWER PIPE
- N48MH** INSTALL NEW 48-INCH DIAMETER MANHOLE
- N72MH** INSTALL NEW 72-INCH DIAMETER MANHOLE
- ES30** EXISTING 30"x 45" SEWER TO REMAIN

Manhole, New, 48 inch	1	Ea
Manhole, New, 72 inch	1	Ea
Sewer, Open Cut Install, RCP, 12 inch	186	Lft
Connect To Existing Sewer	1	Ea



PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGL PERMIT				

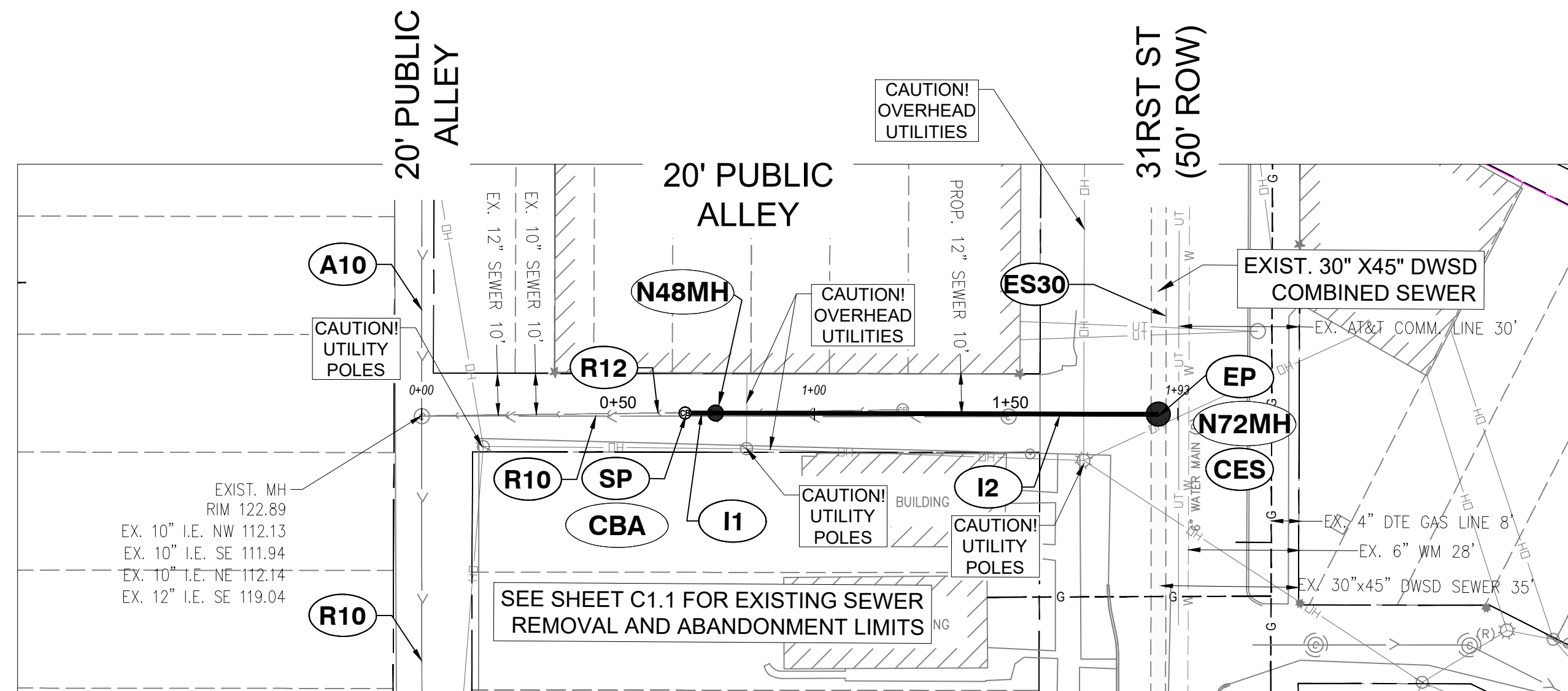
**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.337.4600  
 EMAIL: ORBERTSON@DBRA.ORG

**Mannik Smith GROUP**  
 TECHNICAL SKILL. CREATIVE SPIRIT.  
 DESIGNED BY: DAVID RYZYI  
 DRAWN BY: KCC  
 CHECKED BY: DAVID RYZYI

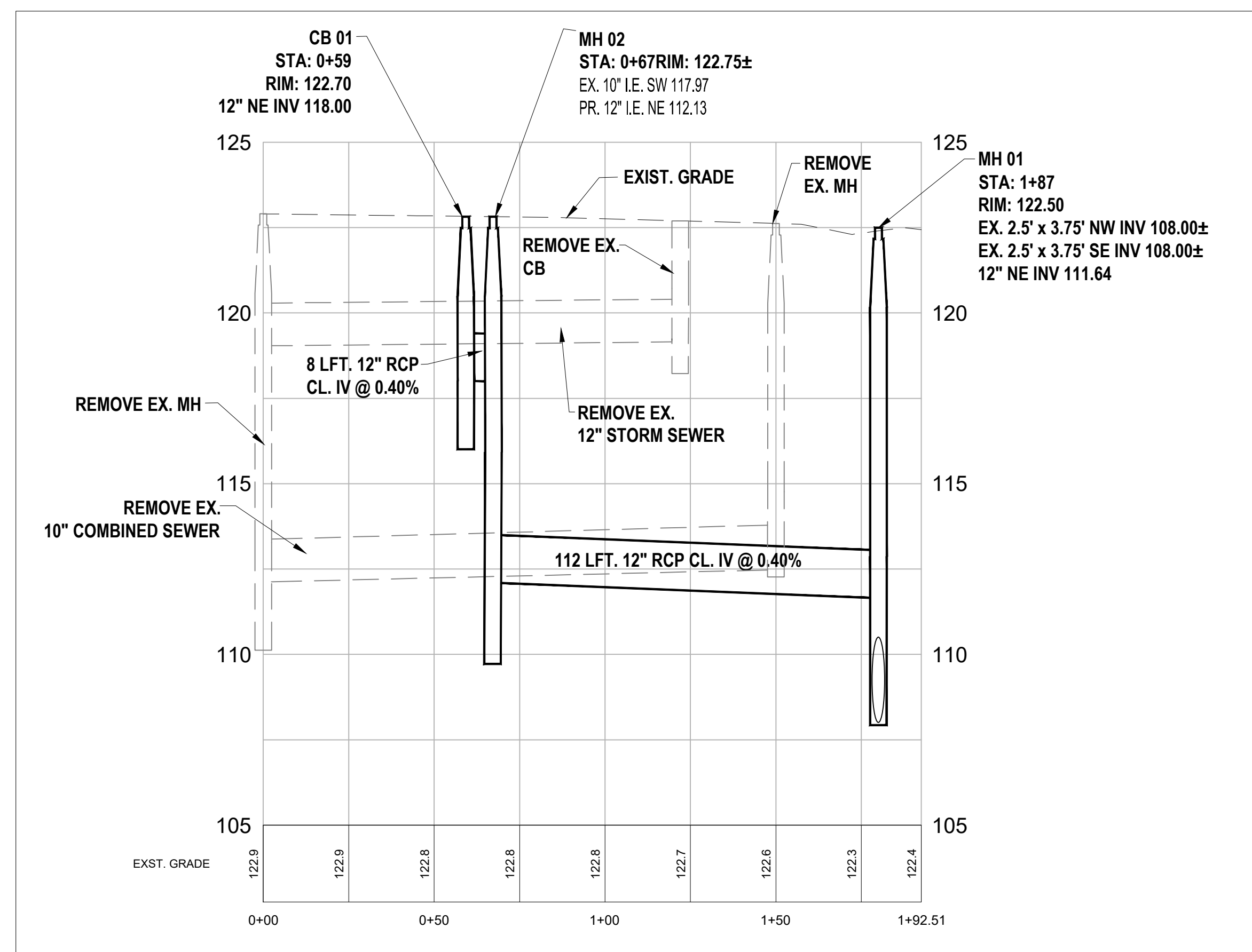
APPROVED BY:  
 DATE: 07/11/2024

CS:  
 JN:

W:\Projects\2023\401\_2300001-00199\401\_2300198.000\CAD\SHOTS\TASK\_300C2\_0 DESIGN PLANS.dwg Last saved 7/31/2024 3:50 PM by NBarnett, plotted 7/31/2024 4:16 PM



**PLAN VIEW**



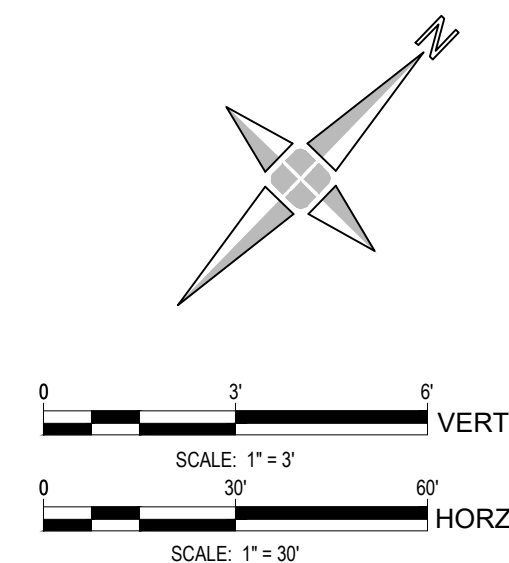
**PROFILE VIEW**

**NOTES:**

- LOCATE AND RECONNECT ALL LIVE LATERAL CONNECTIONS TO SEWER.
- ABANDONED SERVICES SHALL NOT BE RECONNECTED. DWSD WILL CONFIRM IF ABANDONED.
- REFER TO DRAWING NO. SR-25 FOR RESTORATION PLAN.
- EXISTING ELEVATIONS AND SLOPES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEWER FLOWS THROUGHOUT CONSTRUCTION, AS NEEDED, PER THE DWSD STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL PLACE SEWERS BACK IN TO SERVICE AT THE END OF EACH DAY UNLESS SUFFICIENT BYPASS PUMPING IS IN PLACE, AS APPROVED BY DWSD.
- CALCULATED INVERTS ARE DETERMINED BASED ON INTERPOLATION OF UPSTREAM AND DOWNSTREAM INVERTS OF THE PIPE IN THE ALLEY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING UTILITY POLES AND PROTECTING UTILITY LINES DURING CONSTRUCTION. CONTRACTOR SHALL FIELD INSPECT THE LOCATION OF UTILITY POLES AND HEIGHT OF EXISTING UTILITIES ON POLES TO DETERMINE BEST CONSTRUCTION PROCEDURES. USE OF EARTH RETENTION SYSTEMS REQUIRED DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN AND USE OF EARTH RETENTION SYSTEMS, THE BRACING OF UTILITY POLES, AND PROTECTION OF EXISTING WIRES DURING CONSTRUCTION SHALL BE INCIDENTAL TO ANY SEWER INSTALLATION WITHIN THE PROJECT SCOPE. ANY BRACING OF POLES OR PROTECTION OF UTILITY LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING GAS MAINS DURING CONSTRUCTION, INSTALLATION AND REMOVAL OF SEWERS WITHIN PROJECT LIMITS, IF NEEDED COORDINATE WITH DTE GAS.

**KEYED NOTES SHEET C3.3:**

- SP** START POINT AT STA. 0+67
- EP** END POINT AT STA. 1+87
- I1** INSTALL 8 LF OF 12" CONCRETE SEWER PIPE
- I2** INSTALL 112 LF OF 12" CONCRETE SEWER PIPE
- N48MH** INSTALL NEW 48-INCH DIAMETER MANHOLE
- N72MH** INSTALL NEW 72-INCH DIAMETER MANHOLE
- CBA** REMOVE EXISTING CB AND INSTALL NEW TRAPPED CB TYPE A
- CES** CONNECT EXISTING SEWER(S) TO NEW MANHOLE WITH FLEXIBLE BOOT
- ES10** EXISTING 12" VCP SEWER TO REMAIN
- ES30** EXISTING 30"X 45" SEWER TO REMAIN
- R12** REMOVE EXISTING 12" SEWER
- R10** REMOVE EXISTING 10" SEWER
- A10** ABANDON EXISTING 10" SEWER



Manhole, New, 48 inch	1	Ea
Manhole, New, 72 inch	1	Ea
Catch Basin, Type A	1	Ea
Sewer, Open Cut Install, RCP, 12 inch	120	Lft
Connect To Existing Sewer	1	Ea

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.377.4600  
 EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY : **DAVID RYZYI**  
 DRAWN BY : **KCC**  
 CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
 DATE: **07/11/2024**

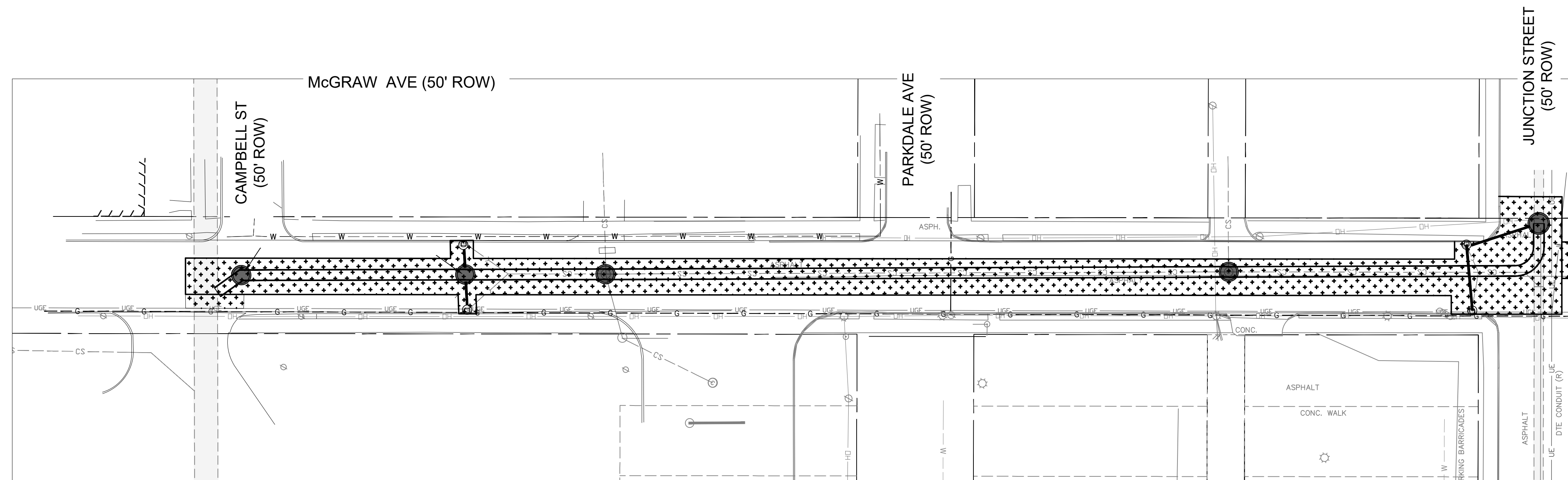
CS:  
 JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
 ALLEY SEWER WEST OF 31ST STREET


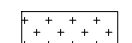
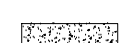
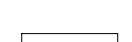



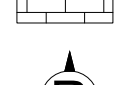


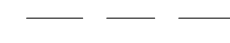





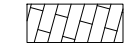
SHEET  
**C2.4**

**NOTES:**

- RESTORATION PLANS ARE OFFERED AS GENERAL GUIDANCE AND ARE NOT MEANT TO DEFINE COMPENSATION OR LIMITS OF WORK. RESTORATION IS TO BE COMPLETED PER THE PAY ITEMS OF THE CONTRACT AND ALL AREAS DISTURBED MUST BE RESTORED TO THE SATISFACTION OF DPW AND THEIR STANDARDS.



**RESTORATION LEGEND**

-  AGGREGATE BACKFILL ONLY
-  REPLACE BITUMINOUS OVER CONCRETE PAVEMENT
-  REPLACE CONCRETE PAVEMENT
-  MULCHED SEEDING
-  REPLACE DRIVEWAY, CONCRETE, 6-INCH
-  REPLACE SIDEWALK
-  REPLACE BRICK PAVEMENT
-  REPLACE ADA RAMP(S)  
(ARROW INDICATES RAMP DIRECTION)
-  REPLACE TREE
-  REPLACE CURB AND GUTTER
-  ESTIMATED PAVEMENT JOINT LOCATIONS  
BASED ON DPW DETAIL C-4382
-  REPLACE FENCE
-  STRUCTURE CONFLICT
-  ADJUST CASTING TO GRADE
-  STRUCTURE CONFLICT
-  STRUCTURE CONFLICT
-  REMOVE AND REPLACE BRICK PAVEMENT

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGL PERMIT				

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.337.4600  
 EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY : **DAVID RYZYI**  
 DRAWN BY : KCC  
 CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
 DATE: 07/11/2024


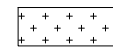

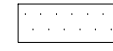

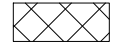
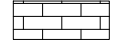










CS:  
 JN:

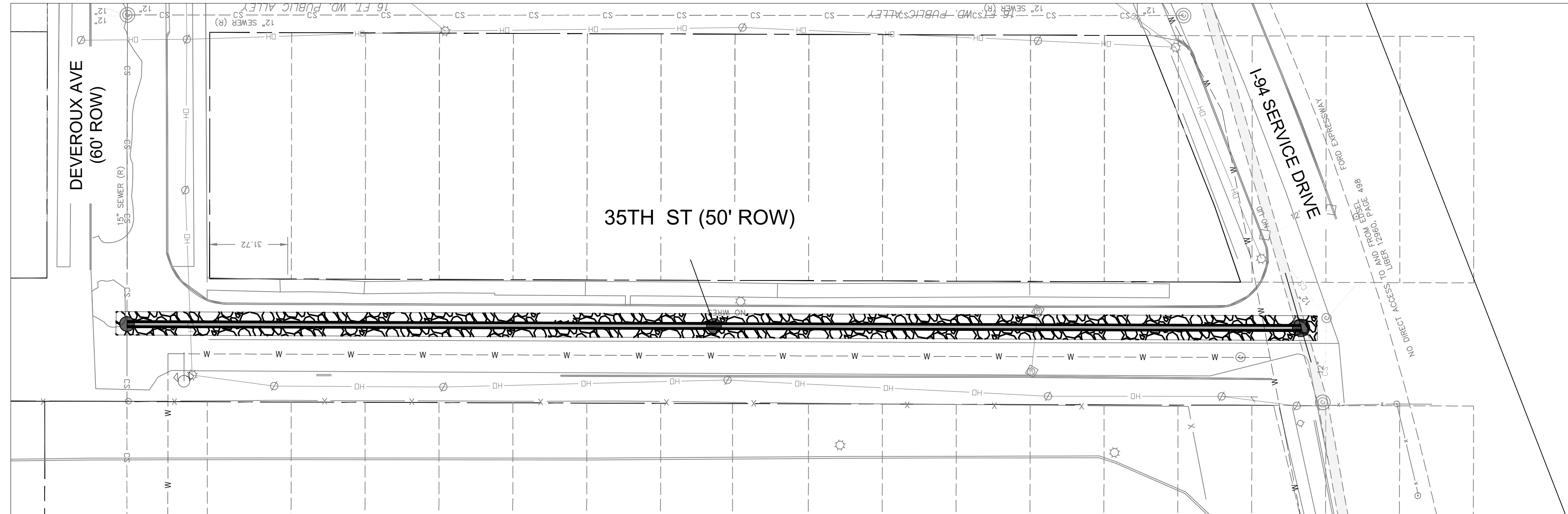
W:\Project\2023\401\_2300001-00199\401\_2300198\000\CAD\SH\TASK\_300\RESTORATION PLANS.dwg Last saved 7/25/2024 2:01 PM by KCCok, plotted 7/25/2024 2:51 PM

**NOTES:**

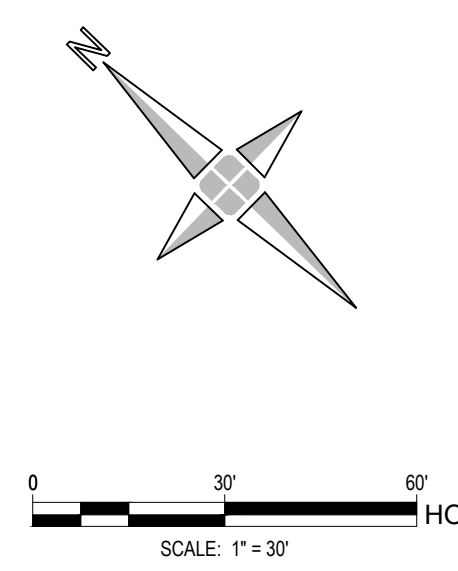
- RESTORATION PLANS ARE OFFERED AS GENERAL GUIDANCE AND ARE NOT MEANT TO DEFINE COMPENSATION OR LIMITS OF WORK. RESTORATION IS TO BE COMPLETED PER THE PAY ITEMS OF THE CONTRACT AND ALL AREAS DISTURBED MUST BE RESTORED TO THE SATISFACTION OF DPW AND THEIR STANDARDS.

**RESTORATION LEGEND**

-  AGGREGATE BACKFILL ONLY
-  REPLACE BITUMINOUS OVER CONCRETE PAVEMENT
-  REPLACE CONCRETE PAVEMENT
-  MULCHED SEEDING
-  REPLACE DRIVEWAY, CONCRETE, 6-INCH
-  REPLACE SIDEWALK
-  REPLACE BRICK PAVEMENT
-  REPLACE ADA RAMP(S)  
(ARROW INDICATES RAMP DIRECTION)
-  REPLACE TREE
-  REPLACE CURB AND GUTTER
-  ESTIMATED PAVEMENT JOINT LOCATIONS  
BASED ON DPW DETAIL C-4382
-  REPLACE FENCE
-  STRUCTURE CONFLICT
-  **A** ADJUST CASTING TO GRADE
-  **F** STRUCTURE CONFLICT
-  **P** STRUCTURE CONFLICT
-  REMOVE AND REPLACE BRICK PAVEMENT



**PLAN VIEW**



PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.337.4669  
 EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY : **DAVID RYZYI**  
 DRAWN BY : KCC  
 CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
 DATE: 07/11/2024


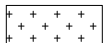
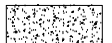
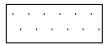


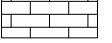




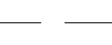





CS:  
 JN:

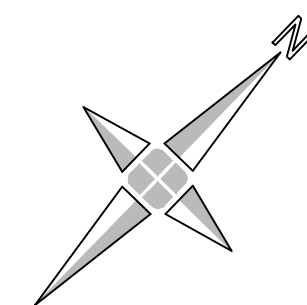
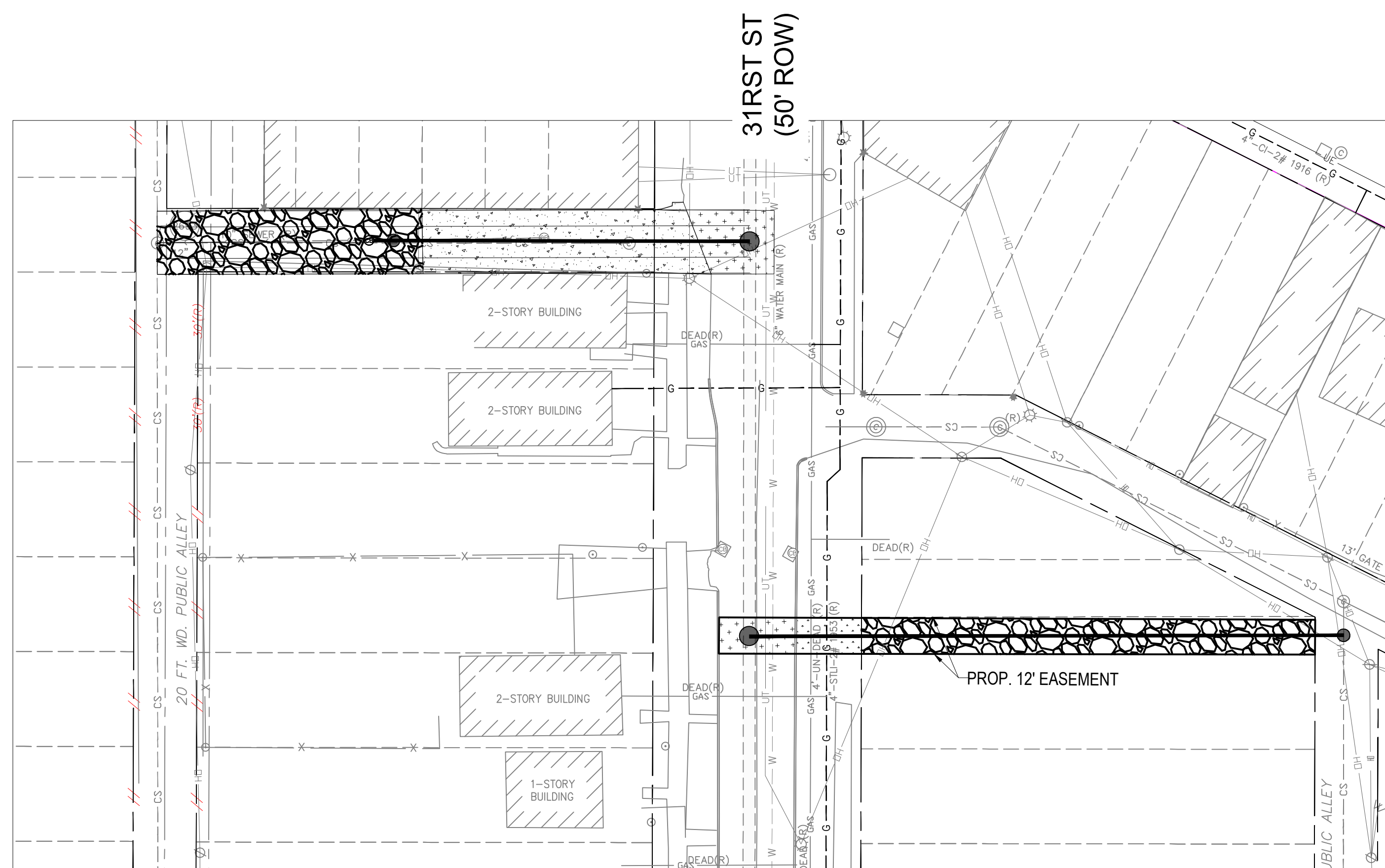
W:\Project\2023\401\_2300001-00199\401\_2300198\000\CAD\SHITS\TASK\_300\RESTORATION PLANS.dwg Last saved 7/25/2024 2:01 PM by KCCok, plotted 7/25/2024 2:51 PM

**NOTES:**

1. RESTORATION PLANS ARE OFFERED AS GENERAL GUIDANCE AND ARE NOT MEANT TO DEFINE COMPENSATION OR LIMITS OF WORK. RESTORATION IS TO BE COMPLETED PER THE PAY ITEMS OF THE CONTRACT AND ALL AREAS DISTURBED MUST BE RESTORED TO THE SATISFACTION OF DPW AND THEIR STANDARDS.

**RESTORATION LEGEND**

-  AGGREGATE BACKFILL ONLY
-  REPLACE BITUMINOUS OVER CONCRETE PAVEMENT
-  REPLACE CONCRETE PAVEMENT
-  MULCHED SEEDING
-  REPLACE DRIVEWAY, CONCRETE, 6-INCH
-  REPLACE SIDEWALK
-  REPLACE BRICK PAVEMENT
-  REPLACE ADA RAMP(S)  
(ARROW INDICATES RAMP DIRECTION)
-  REPLACE TREE
-  REPLACE CURB AND GUTTER
-  ESTIMATED PAVEMENT JOINT LOCATIONS  
BASED ON DPW DETAIL C-4382
-  REPLACE FENCE
-  STRUCTURE CONFLICT
-  (A) ADJUST CASTING TO GRADE
-  (F) STRUCTURE CONFLICT
-  (P) STRUCTURE CONFLICT
-  REMOVE AND REPLACE BRICK PAVEMENT



0 30 60  
SCALE: 1" = 30' HORZ.

**PLAN REVISIONS**

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGL PERMIT				

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.337.4600  
EMAIL: ORBERTSON@DBRA.ORG



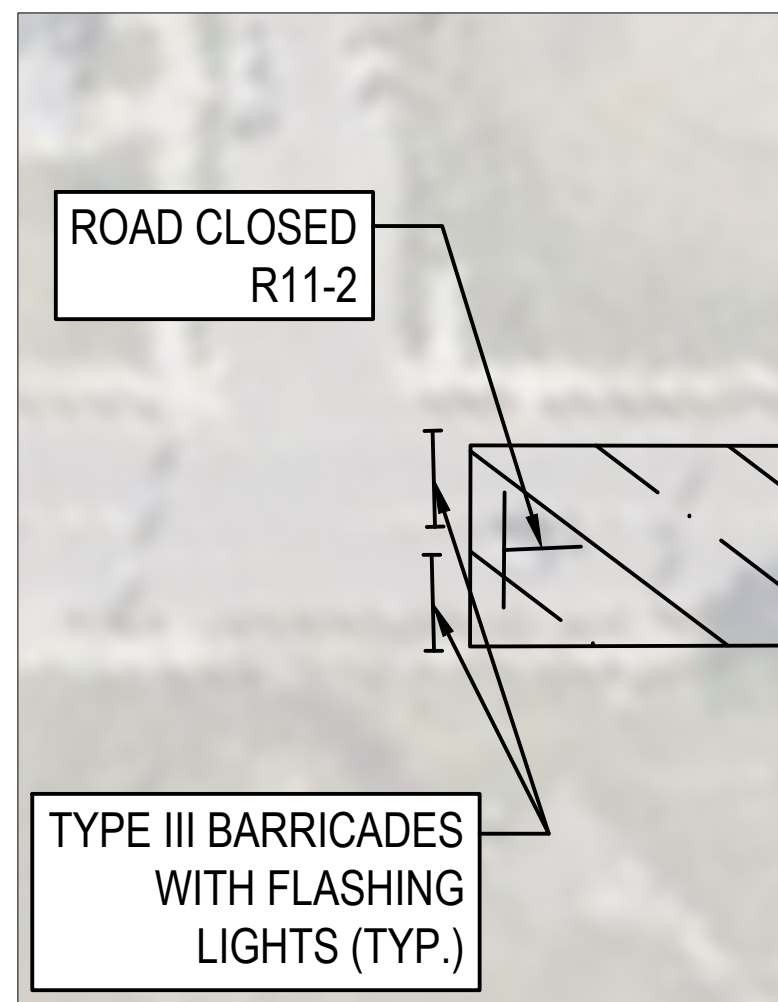
DESIGNED BY : **DAVID RYZYI**  
DRAWN BY : KCC  
CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
DATE: 07/11/2024

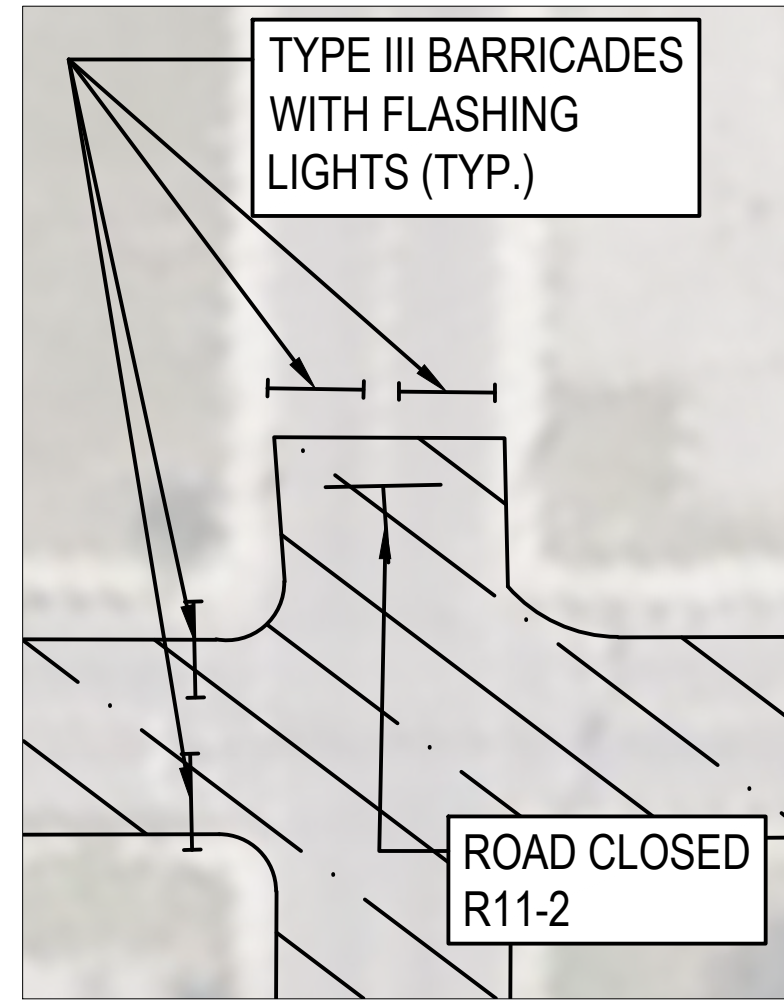
CS:  
JN:

W:\Project\2023\401.2300001-00199\401.2300198.000\CAD\SH\TASK 300RESTORATION PLANS.dwg Last saved 7/25/2024 2:01 PM by KCoak, plotted 7/25/2024 2:52 PM

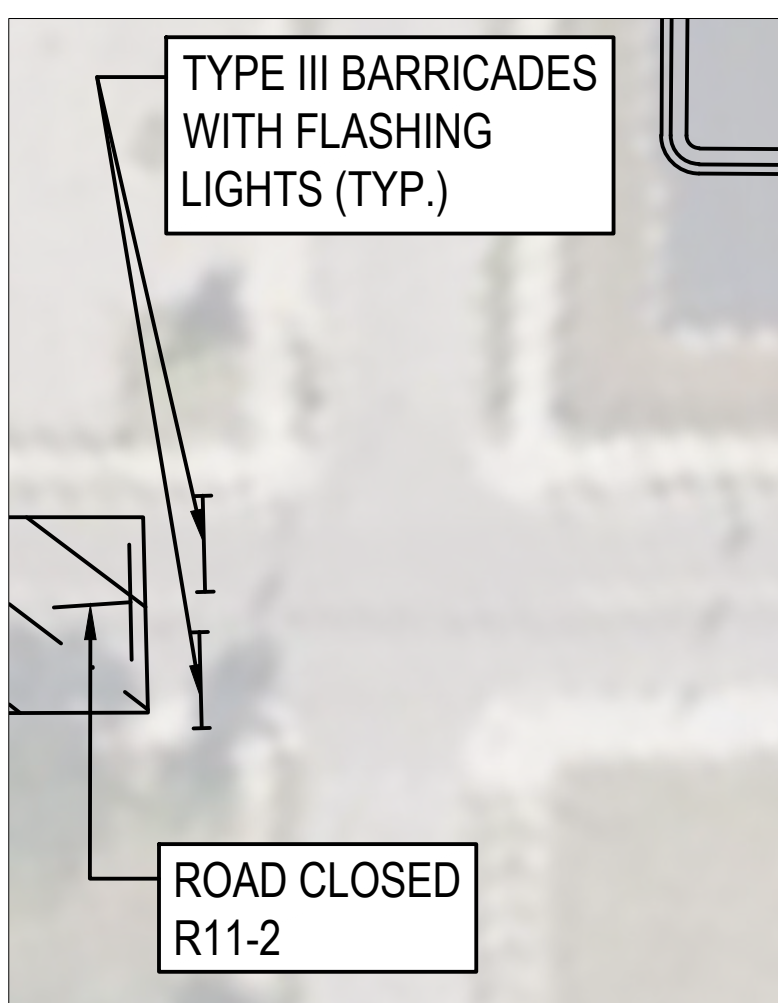




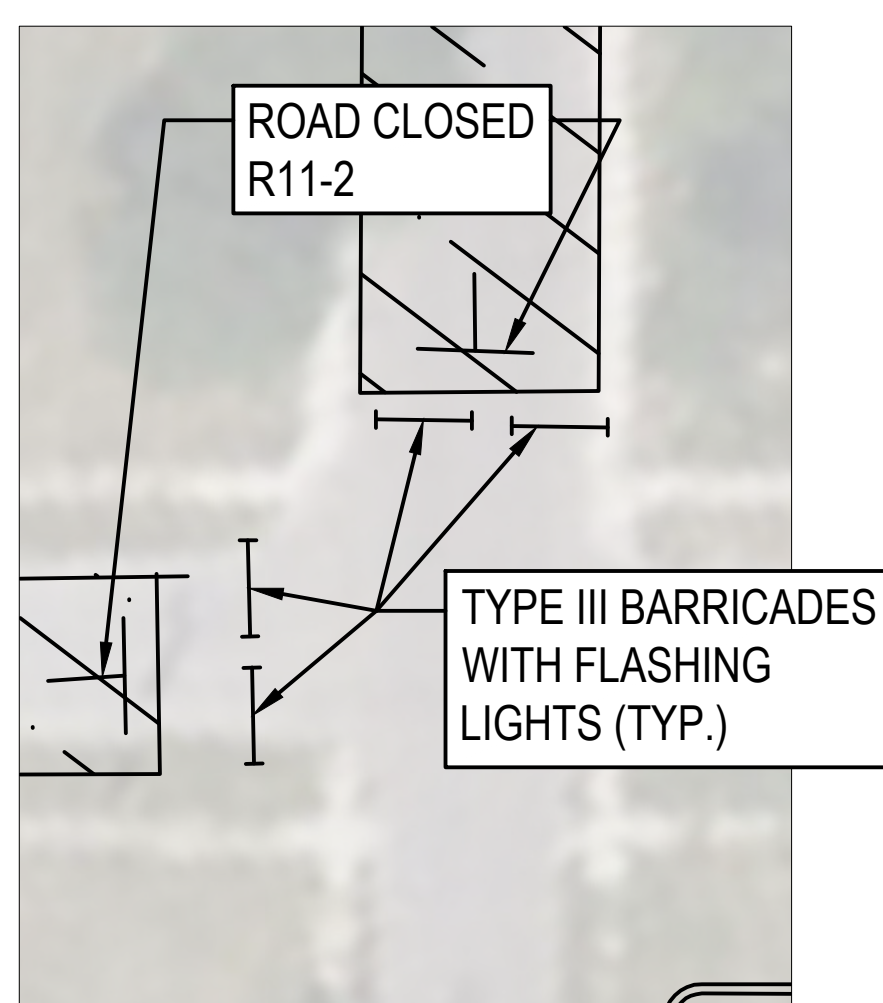
DETAIL 4.1.A  
SCALE: 1 IN = 30 FT



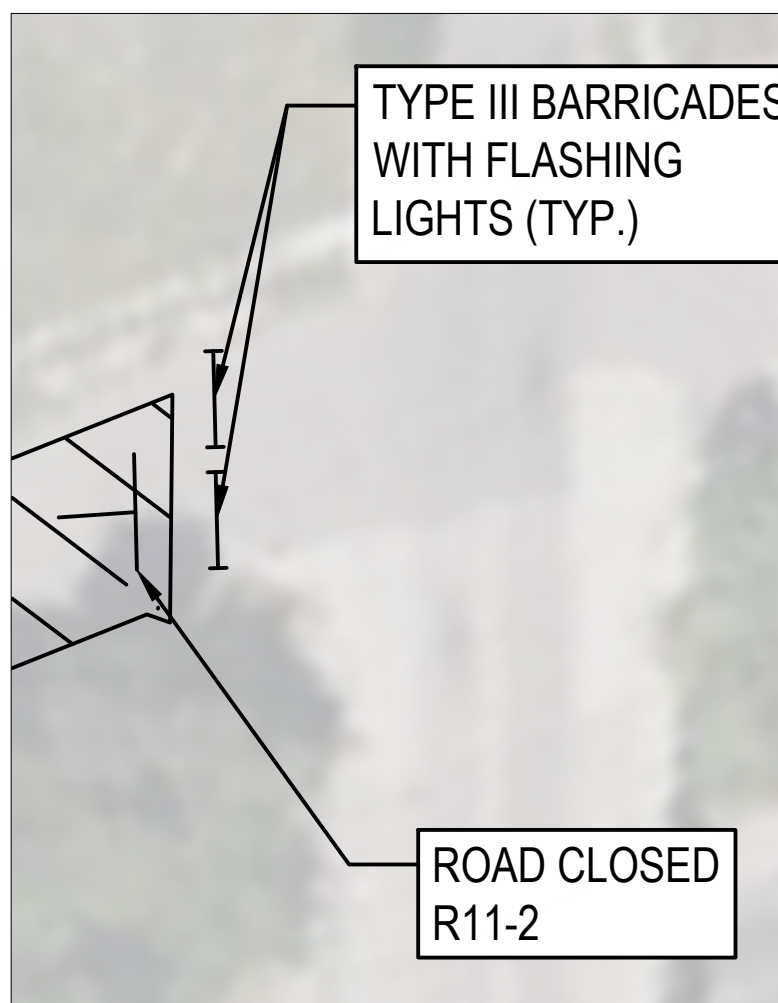
DETAIL 4.1.B  
SCALE: 1 IN = 30 FT



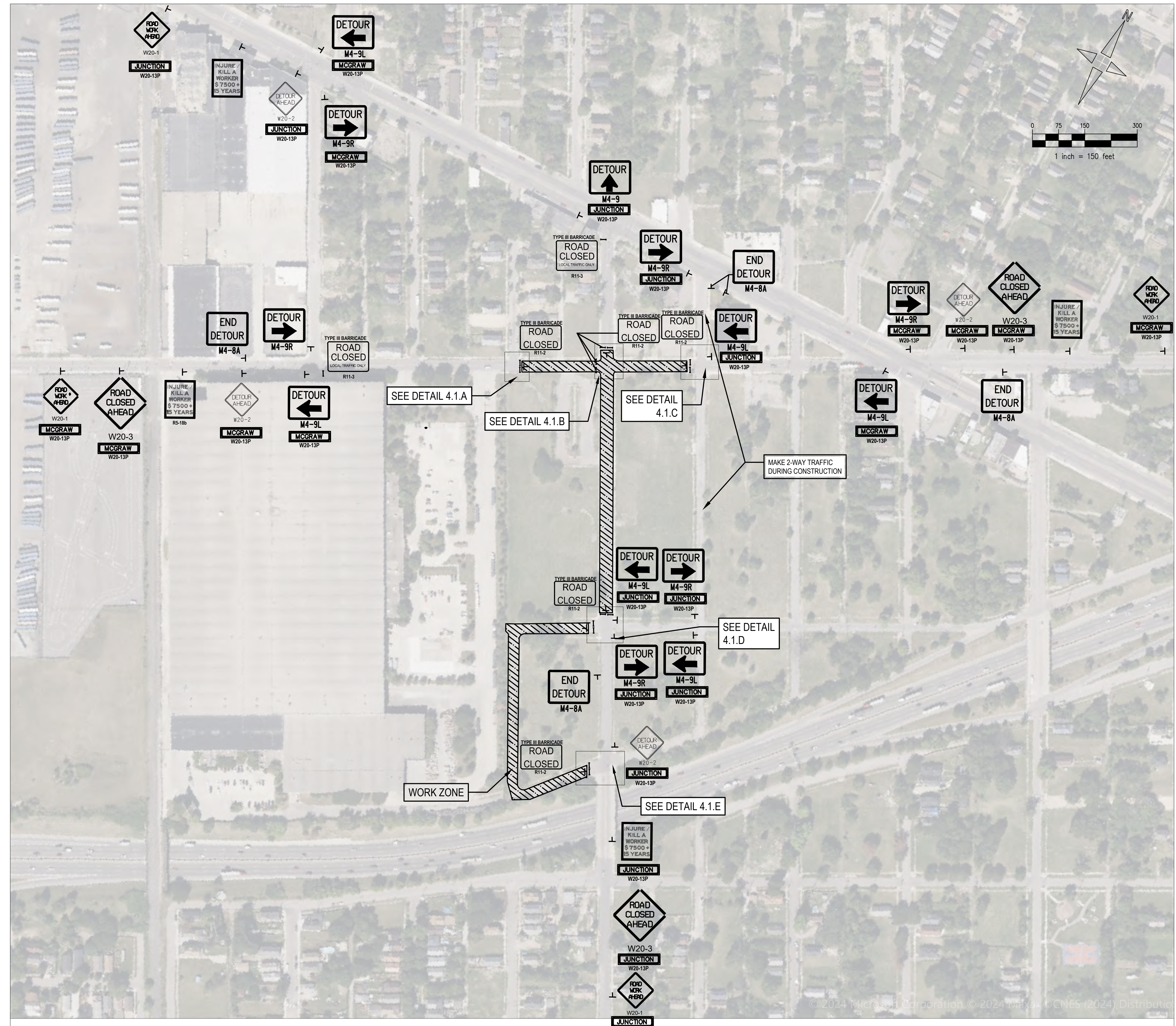
DETAIL 4.1.C  
SCALE: 1 IN = 30 FT



DETAIL 4.1.D  
SCALE: 1 IN = 30 FT



DETAIL 4.1.E  
SCALE: 1 IN = 30 FT



PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4600  
EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY: DAVID RYZYI  
DRAWN BY: KCC  
CHECKED BY: DAVID RYZYI

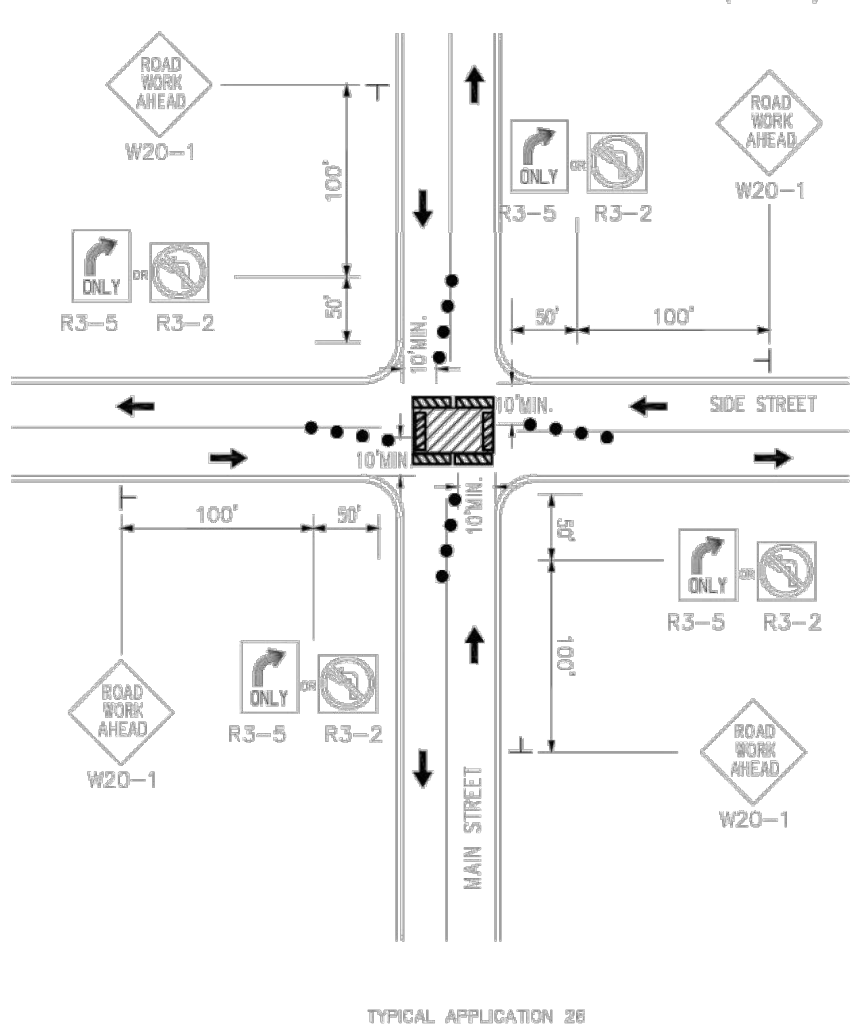
APPROVED BY:  
DATE: 07/11/2024

CS:  
JN:

JUNCTION / MCGRAW SITE READINESS PROJECT  
SEWER STAGE 2 MOT PLAN  
SHEET  
C4.1

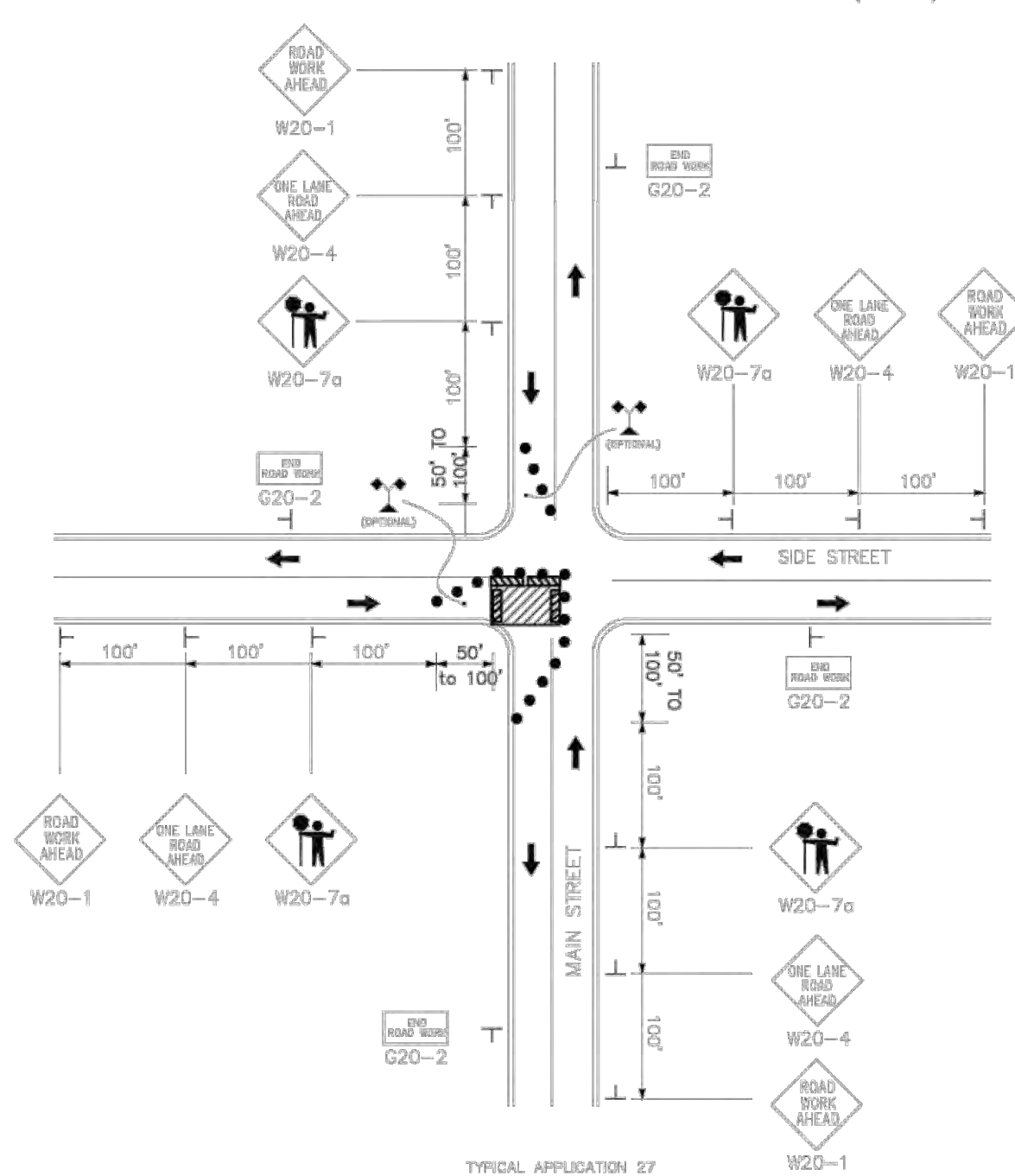
W:\Projects\2023\401\_2300001-00199\401\_2300198.000\CAD\SHOTS\TASK 300MOT PLANS.dwg Last saved 7/31/2024 3:49 PM by MKrcscki, plotted 7/31/2024 4:42 PM

FIGURE 6H-26 CLOSURE IN CENTER OF INTERSECTION (TA-26)



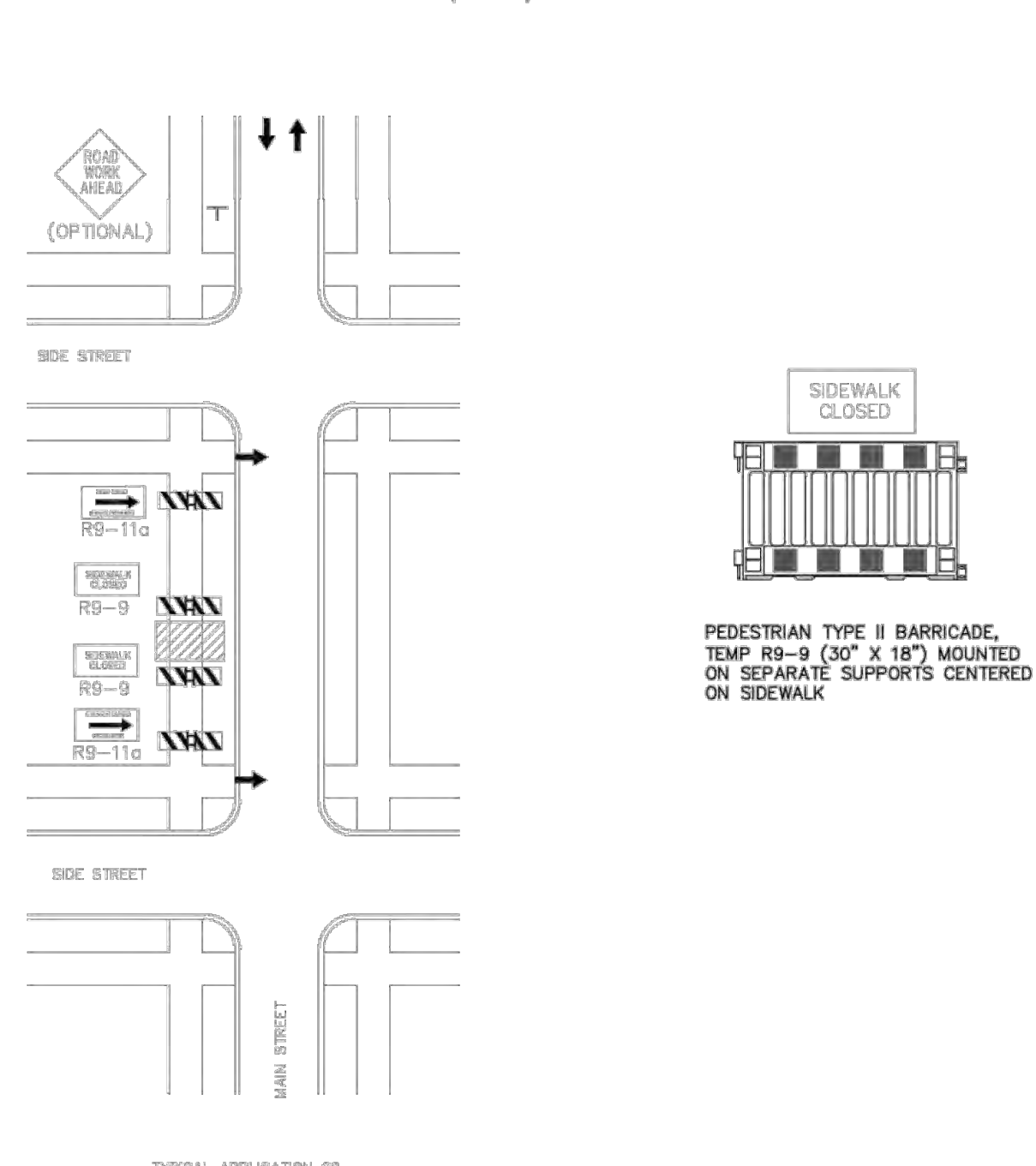
TYPICAL APPLICATION 26

FIGURE 6H-27 CLOSURE AT THE SIDE OF AN INTERSECTION (TA-27)



TYPICAL APPLICATION 27

FIGURE 6H-28 SIDEWALK DETOUR OR DIVERSION (TA-28)



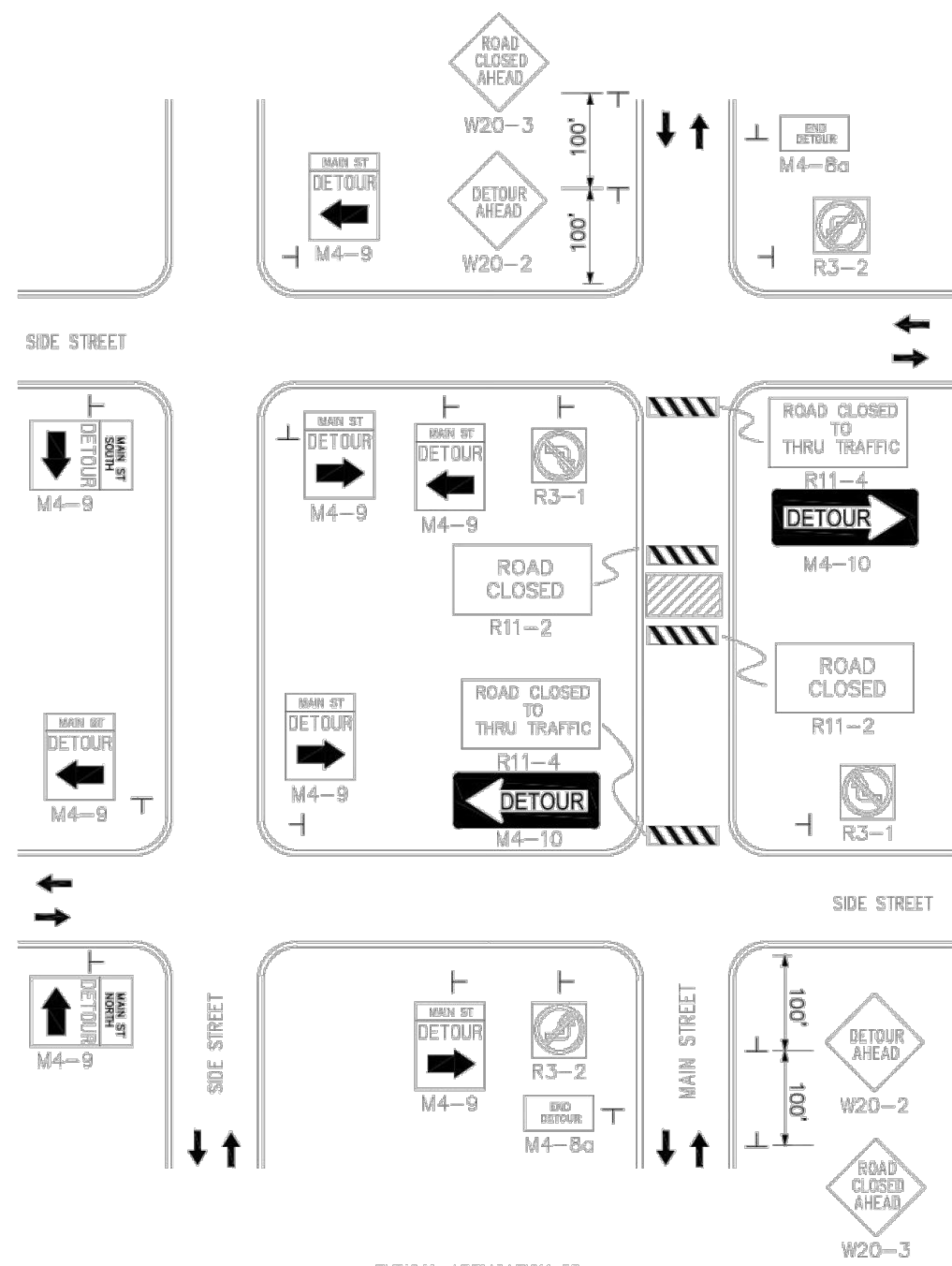
TYPICAL APPLICATION 28

MMUTCD 2009 EDITION  
TABLE 6H-2. MEANING OF SYMBOLS ON TYPICAL APPLICATION DIAGRAMS

	ARROW PANEL
	ARROW PANEL SUPPORT OR TRAILER (SHOWN FACING DOWN)
	CHANGEABLE MESSAGE SIGN OR SUPPORT TRAILER
	CHANNELIZING DEVICE
	CRASH CUSHION
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	TRAFFIC REGULATOR
	HIGH LEVEL WARNING DEVICE (FLAG TREE)
	LUMINAIRE
	PAVEMENT MARKINGS THAT SHOULD BE REMOVED FOR A LONG TERM PROJECT
	SIGN (SHOWN FACING LEFT)
	SURVEYOR
	TEMPORARY BARRIER
	TEMPORARY BARRIER WITH WARNING LIGHTS
	TRAFFIC OR PEDESTRIAN SIGNAL
	TRUCK MOUNTED ATTENUATOR
	TYPE III BARRICADE
	PEDESTRIAN TYPE II BARRICADE
	WARNING LIGHTS
	WORK SPACE
	WORK VEHICLE

FIGURE 6H-20 DETOUR FOR A CLOSED STREET (TA-20)

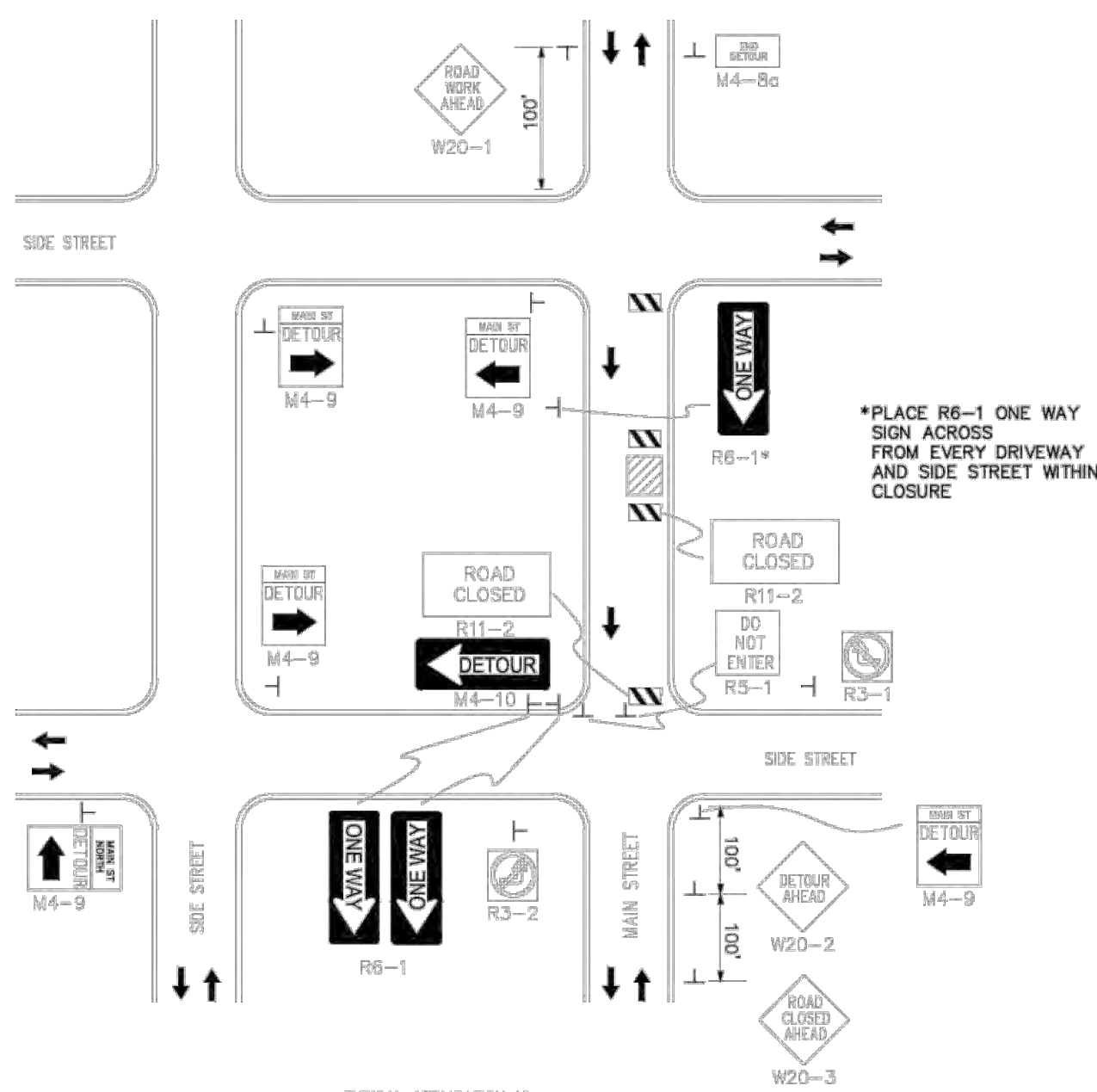
TO CLOSE OFF LOW-TRAFFIC-VOLUME, NON-THROUGH, INTERSECTING STREETS FOR SHORT TERM.



TYPICAL APPLICATION 20

NO TWO CONSECUTIVE STREETS MAY BE CLOSED AT THE SAME TIME.

FIGURE 6H-19 DETOUR FOR ONE TRAVEL DIRECTION (TA-19)



TYPICAL APPLICATION 19

NO TWO CONSECUTIVE STREETS MAY BE CLOSED AT THE SAME TIME.

PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL

PUBLIC SAFETY AND NORMALCY ARE OF PARAMOUNT CONCERN AND IMPORTANCE. BOTH PEDESTRIAN AND VEHICULAR TRAFFIC ARE TO BE MAINTAINED IN THEIR NORMAL MODE AS MUCH AS POSSIBLE. WHEN NORMAL PEDESTRIAN OR VEHICULAR TRAFFIC MUST BE DISTURBED, SAFETY PRECAUTIONS MUST BE IMPLEMENTED CONCURRENTLY.

FOR BOTH VEHICULAR AND PEDESTRIAN TRAFFIC, SAFETY PROTECTION ITEMS, SUCH AS, BUT NOT LIMITED TO, LIGHTED BARRELS, LIGHTED ARROWS, DIRECTION AND WARNING SIGNS, PORTABLE CONCRETE BARRIERS, TEMPORARY PAVEMENT MARKINGS, AND TEMPORARY FENCING MUST BE INSTALLED, MAINTAINED AND REMOVED AS NEEDED.

VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL AND SAFETY SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS, THE SPECIFICATIONS OF THE CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT AND THE REQUIREMENTS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION. IF THE THREE ENTITIES HAVE DIFFERENT REQUIREMENTS FOR THE SAME ITEM, THE MOST STRICT SHALL APPLY AS DETERMINED BY THE ENGINEER.

IN GENERAL, TRAFFIC CONTROL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CURRENT VERSION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD). THE CONTRACTOR MUST USE BARRICADES, SIGNS, ARROW BOARDS, TEMPORARY PAINT LINES, ETC., APPROPRIATELY.

THE CONTRACTOR SHALL PROVIDE/INSTALL A POSTED PEDESTRIAN DETOUR WHENEVER NORMAL PEDESTRIAN MOVEMENT IS DISRUPTED. AS A GUIDE, USE FIGURES 6H-28 & 6H-29 OF THE MMUTCD TO REGULATE PEDESTRIAN TRAFFIC AROUND CONSTRUCTION AREAS. SIGNS, TO DIRECT PEDESTRIANS TO THE SIDE AND BACK STREETS OR THE OTHER SIDE OF THE STREET, MUST BE INSTALLED AT LOCATIONS WHERE THE CROSSING IS SAFE.

SUPPLY SUFFICIENT NUMBER OF PEDESTRIAN TYPE II BARRICADES TO CONNECT THEM TOGETHER FROM EDGE OF SIDEWALK TO EDGE OF SIDEWALK SUCH THAT THERE ARE NO GAPS BETWEEN THE BARRICADES.

SUPPORTS FOR SIGNS PLACED BEHIND THE PEDESTRIAN TYPE II BARRICADE(S) MUST BE ENTIRELY LOCATED BEHIND THE BARRICADE(S).

NOTES

TEMPORARY LANE CLOSURE MAX 5 DAYS (PER BLOCK) TO INSTALL WATERMAIN.

CONTRACTOR TO RESTORE EXISTING LANE MARKING, PAVEMENT CURB, SIDEWALK AND ANY OTHER ITEMS EXIST DURING CONSTRUCTION TO ITS ORIGINAL OR BETTER CONDITION AS APPROVED BY THE CITY ENGINEER.

CONTRACTOR TO PROVIDE ACCESS TO ALL DRIVEWAYS AT ALL TIMES.

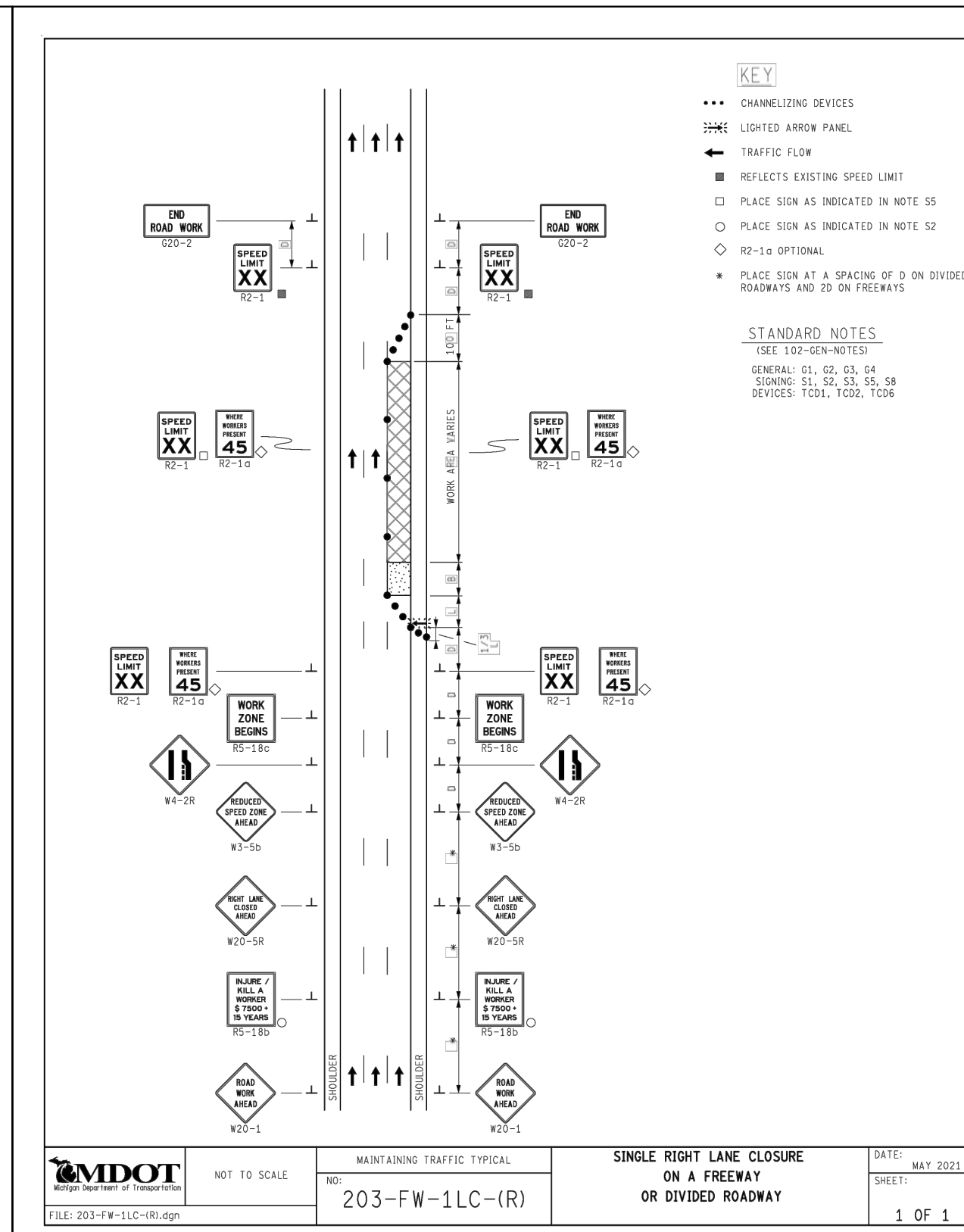
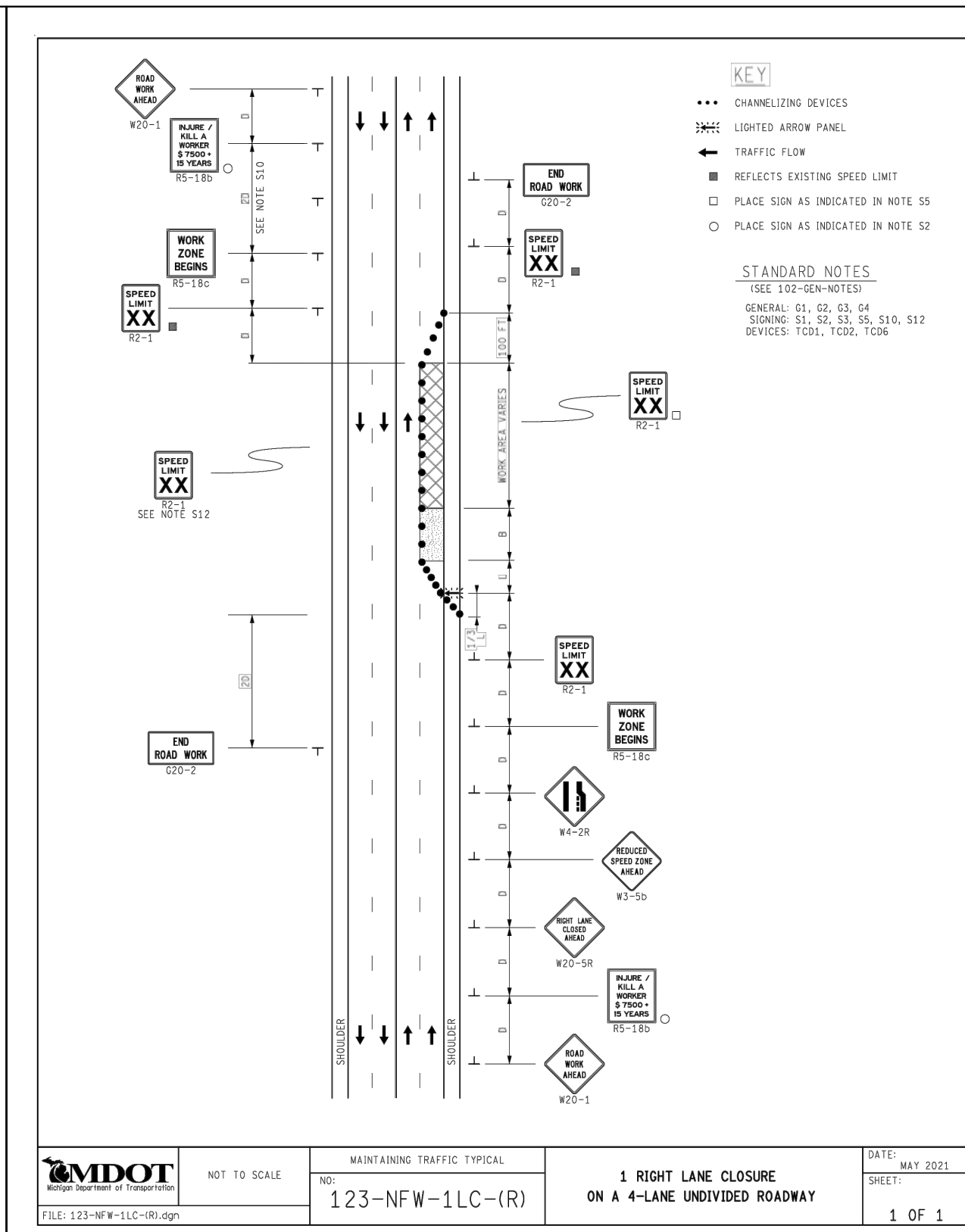
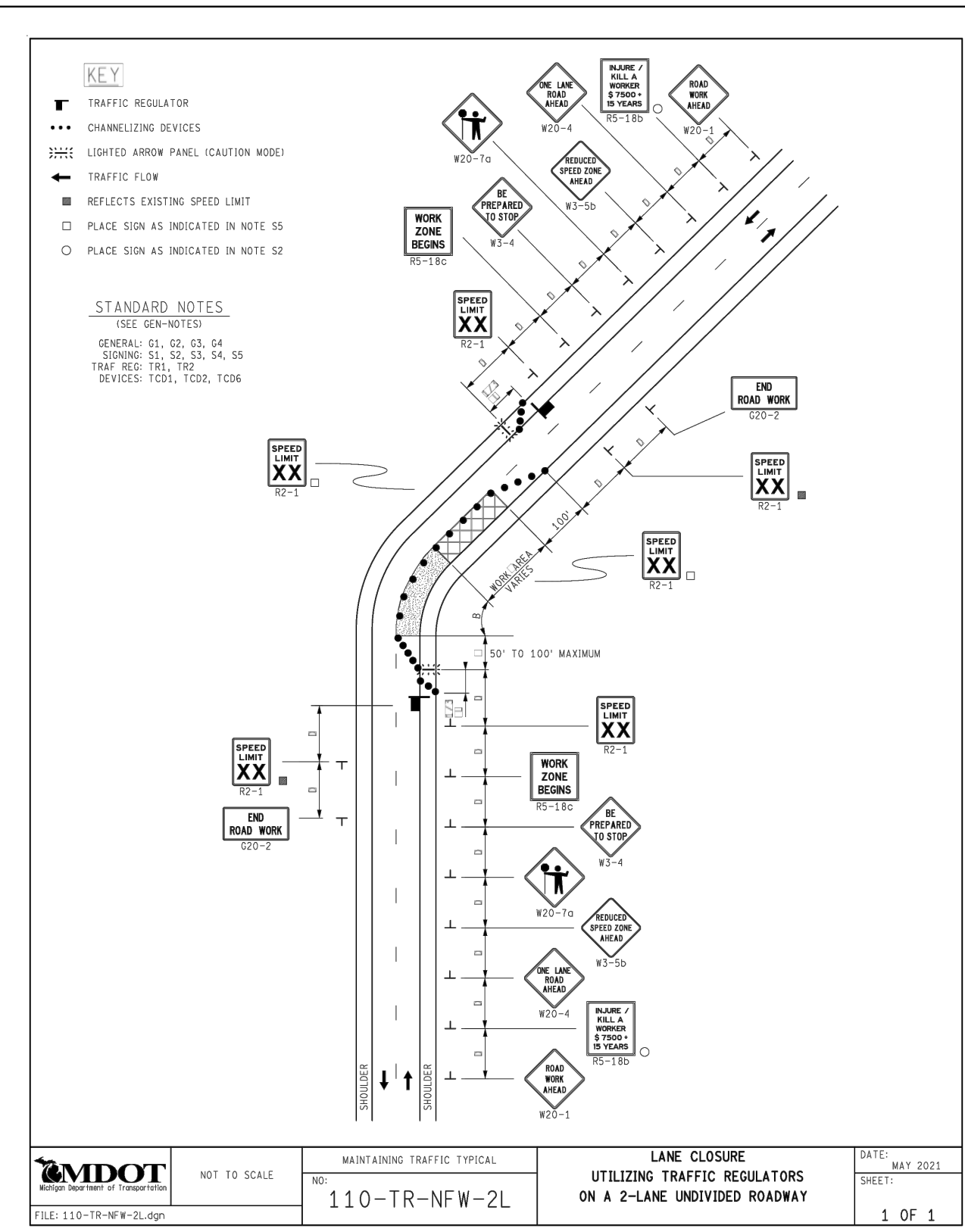
CONTRACTOR TO USE A FLAGGER FOR BOTH DIRECTIONS OF TRAFFIC MOVEMENT AT ALL TIMES.

CONTRACTOR TO MAINTAIN ONE LANE OF TRAFFIC ON CROSS STREETS WHEN CROSSING INTERSECTIONS.

CONTRACTOR TO RESTORE ALL WORK IN A BLOCK BEFORE MOVING ONTO THE NEXT BLOCK.

SIGN DESIGNATION IS SHOWN BELOW THE SIGN. SEE TABLE 6F-1 OF MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR SIGN SIZES OF EACH SIGN DESIGNATION.

PLAN REVISIONS				DEVELOPER		DESIGNED BY : DAVID RYZYI	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION					
1	07/24/24		EGLE PERMIT			DRAWN BY : KCC	DATE: 07/11/2024	JN:	MOT NOTES AND DETAILS	C5.0
						CHECKED BY : DAVID RYZYI				



**WARNING SIGNS**

- THE MINIMUM SIZE OF ALL DIAMOND SHAPED WARNING SIGNS IS 48" x 48".
- REFLECTORIZED SIGNING IS REQUIRED.
- ALL WARNING SIGNS MAY BE EQUIPPED WITH AN ORANGE OR DAY-GLO FLAG MOUNTED ABOVE THE SIGN.
- TYPE A WARNING LIGHTS WILL NOT BE REQUIRED WITH THE USE OF ROLL-UP SIGNS.

**TRAFFIC REGULATION NOTES**

- D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES.  
L = LENGTH OF TAPER  
L/2 & 3L = MINIMUM LENGTH OF TAPER  
B = LENGTH OF LONGITUDINAL BUFFER
- ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
- DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN THE TABLE, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET, TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S), 25 FEET IN THE DOWNSTREAM TAPER AREAS AND SHOULD NOT EXCEED 90 FEET WHEN USED FOR TANGENT CHANNELIZATION.
- WHEN BUFFER AREAS ARE ESTABLISHED, THERE SHALL BE NO EQUIPMENT OR MATERIALS STORED OR WORK CONDUCTED IN THE BUFFER AREA.
- FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
- WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
- ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDT WILL BE ALLOWED.
- ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHALL BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
- ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MUTTCD AND THE CURRENT EDITION OF THE MDT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
- WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
- WHEN INTERSECTING ROADS OR SIGNIFICANT GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
- ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
- THE HANDHELD (PADDLE) SIGNS REQUIRED BY THE MUTTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.
- ALL EXISTING PAVEMENT MARKINGS WHICH AREA IN CONFLICT WITH EITHER PROPOSED CHANGES IN TRAFFIC PATTERNS OR PROPOSED TEMPORARY TRAFFIC MARKINGS, SHALL BE REMOVED BEFORE ANY CHANGE IS MADE IN THE TRAFFIC PATTERN. EXCEPTION WILL BE MADE FOR DAYTIME-ONLY TRAFFIC PATTERNS THAT ARE ADEQUATELY DELINEATED BY OTHER TRAFFIC CONTROL DEVICES.
- THE LIGHTED ARROW PANEL SHALL BE LOCATED AT THE BEGINNING OF THE TAPER AS SHOWN, WHEN PHYSICAL LIMITATIONS RESTRICT ITS PLACEMENT AS INDICATED, THEN IT SHALL BE PLACED AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE.

**TRAFFIC REGULATION NOTES**

DISTANCE BETWEEN TRAFFIC SIGNS, "D"

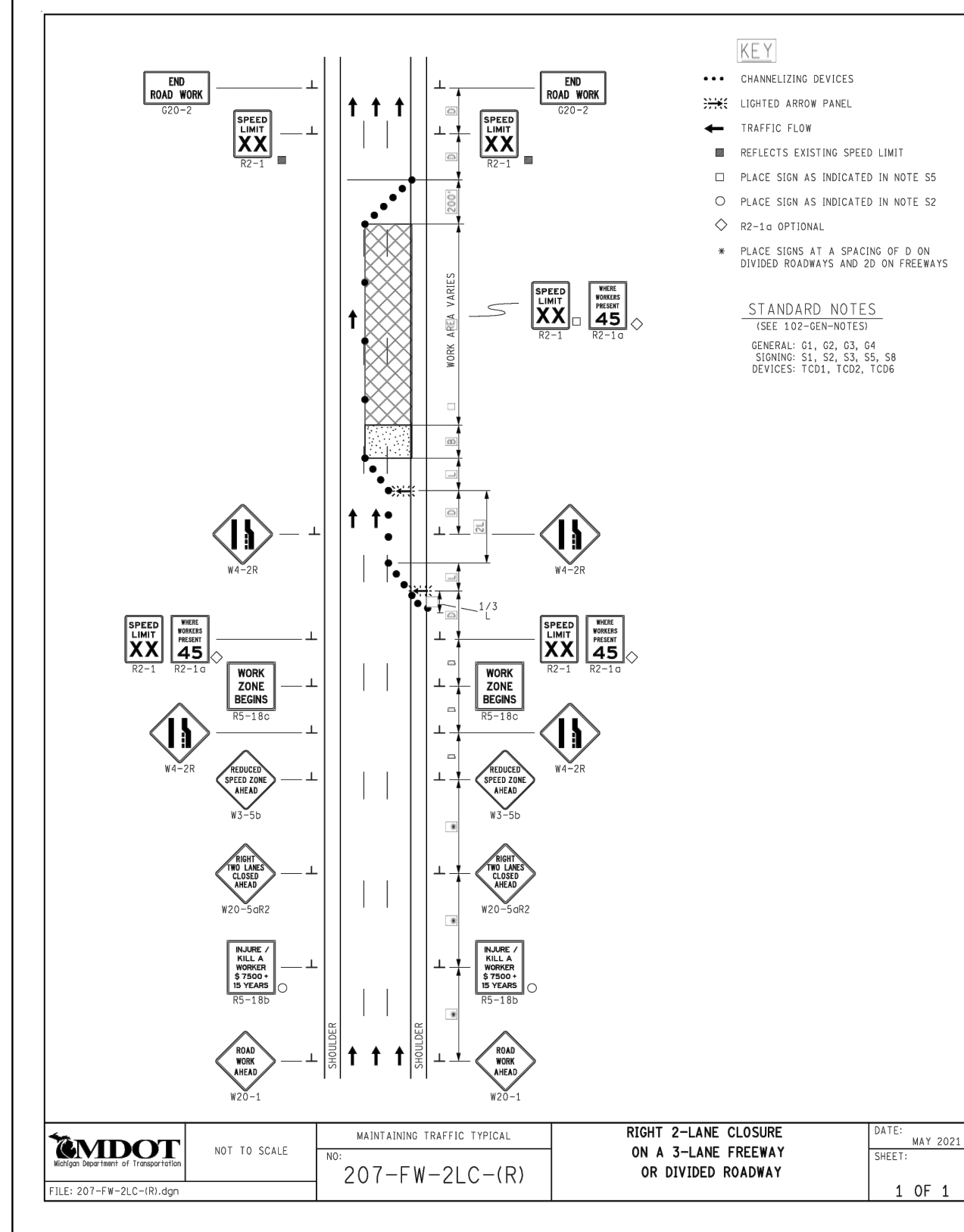
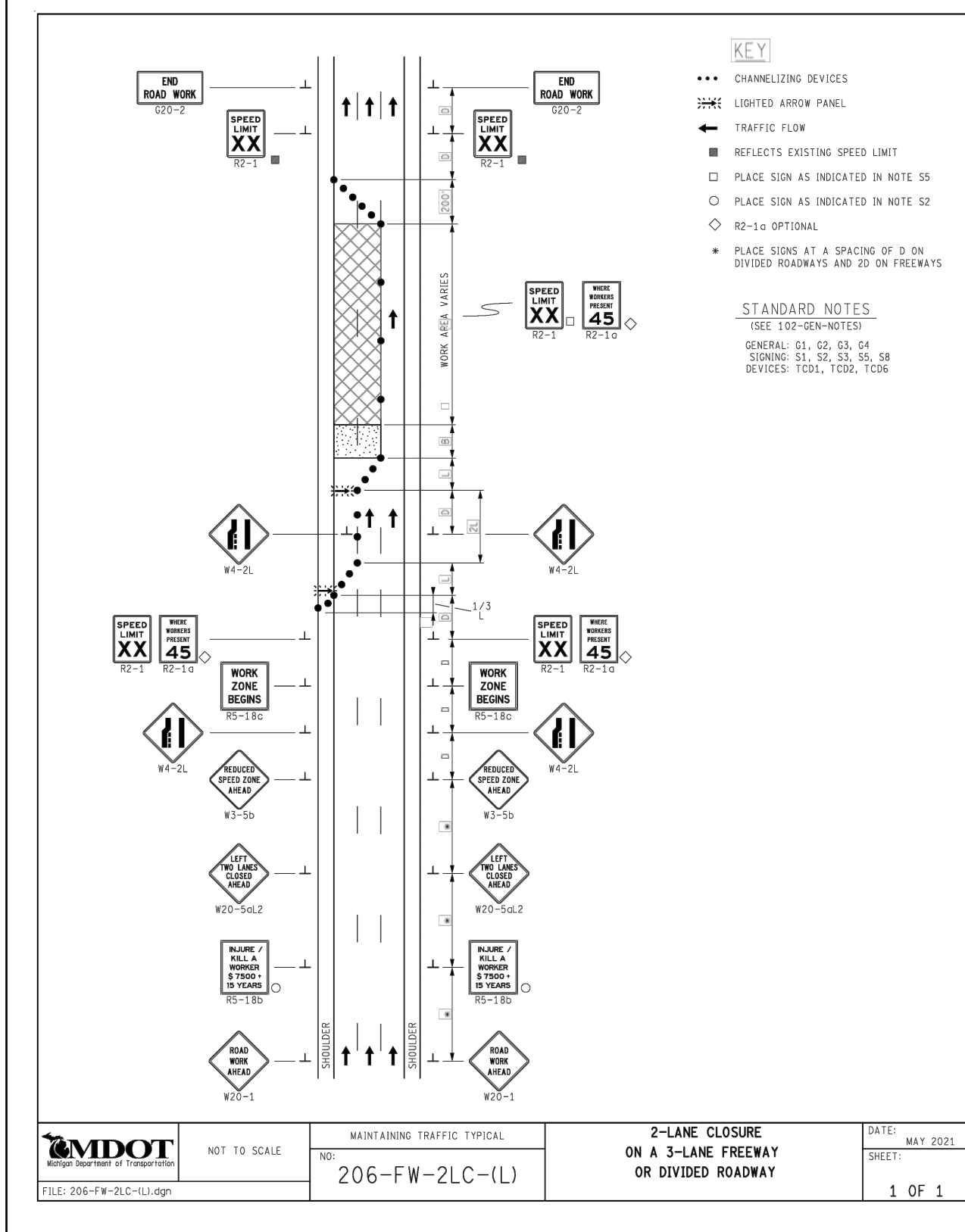
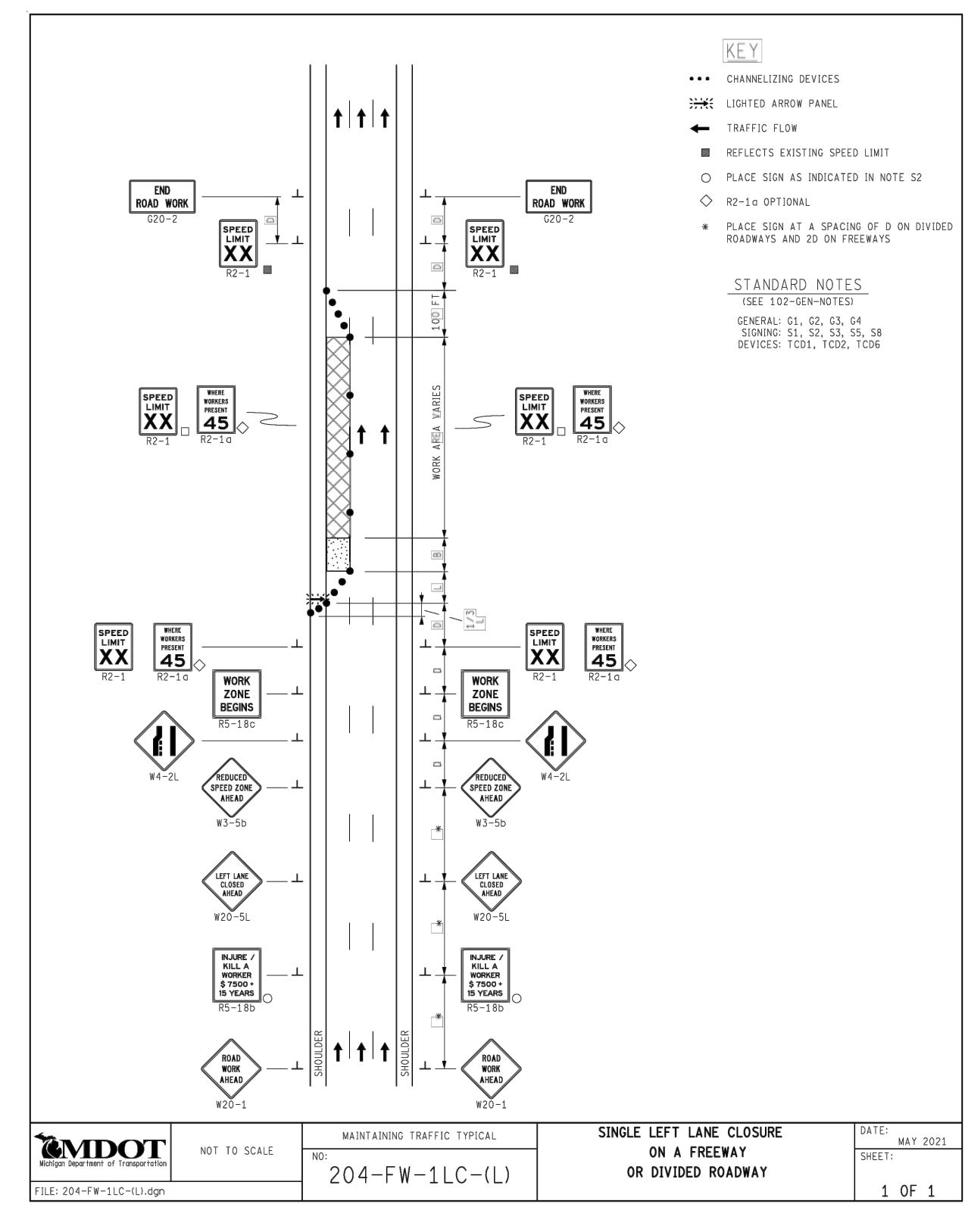
DISTANCES D (FEET)	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
250	300	350	400	450	500	550	600	650	700	750	

GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE, "B"

"B" LENGTHS B (FEET)	SPEED, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
133	150	167	183	200	217	233	250	267	283	300	317

MINIMUM MERGING TAPER LENGTH, "L" (FEET)

OFFSET (FEET)	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
1	11	15	21	27	33	40	47	54	61	68	75
2	21	30	41	54	69	86	105	126	149	174	201
3	32	45	62	80	103	131	161	193	228	265	304
4	42	60	82	107	137	172	210	250	293	339	387
5	53	75	103	134	170	210	254	301	351	403	457
6	63	90	123	160	200	243	290	339	390	442	496
7	73	105	143	187	235	286	340	397	455	514	574
8	84	120	164	214	267	323	381	440	500	560	620
9	94	135	184	240	299	359	420	482	545	608	671
10	105	150	205	267	331	397	464	532	600	668	735
11	115	165	225	294	363	433	504	575	646	716	785
12	125	180	245	320	395	471	548	625	701	776	850
13	136	195	266	347	428	511	594	676	757	836	913
14	146	210	286	374	460	547	634	719	803	885	965
15	157	225	307	400	495	591	686	779	870	959	1045



THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

$L^* = W \times S^2 / 60$  WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

$L^* = W \times S$  WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

L = MINIMUM LENGTH OF MERGING TAPER  
S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA  
W = WIDTH OF OFFSET

TYPES OF TAPERS

UPSTREAM TAPERS  
MERGING TAPER: L = MINIMUM  
SHIFTING TAPER: 1/2 L = MINIMUM  
SHOULDER TAPER: 1/3 L = MINIMUM  
2 TO 1 LANE ROAD TAPER: 3:00' (PER LANE)

DOWNSTREAM TAPERS  
(USE IS RECOMMENDED)  
3:00' (PER LANE)

MAXIMUM SPACING FOR CHANNELIZING DEVICES

WORK ZONE SPEED LIMIT	DAYTIME 42" DEVICE SPACING (FT)		NIGHTTIME 42" DEVICE SPACING (FT)	
	TAPER	TANGENT	TAPER	TANGENT
< 45 MPH	1 x SPEED LIMIT	2 x SPEED LIMIT	25 FEET	50 FEET
≥ 45 MPH	50 FEET	100 FEET	25 FEET	50 FEET

SIGN OUTLINE KEY

DASHED OUTLINES INDICATE A SIGN THAT EXISTS ON SITE, AND NEEDS TO BE COVERED.

SOLID OUTLINES INDICATE A SIGN THAT IS TO BE PLACED ON THE PROJECT.

EXIT

PLAN REVISIONS						DEVELOPER		DESIGNED BY :		APPROVED BY :		CS:		JUNCTION / McGRAW SITE READINESS PROJECT		SHEET	
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION	DAVID RYZYI	KCC	DATE:	07/11/2024	JN:	MOT NOTES AND DETAILS		C5.1		
1	07/24/24		EGLE PERMIT														

I.D. PIPE SIZE (INCHES)	18 OR LESS	21	24	30	36	42	48	54	60	66	72
MAXIMUM TRENCH WIDTH (FEET)	5.00	5.5	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

W (TRENCH WIDTH)  $\square$  5 FEET, WHEN PIPE I.D. IS 18" OR LESS  
W (TRENCH WIDTH)  $\square$  I.D.  $\square$  4 FEET, WHEN PIPE I.D. IS GREATER THAN 18"

**NOTES:**

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- REFER TO PAVEMENT RESTORATION DETAILS FOR BASE AND PAVEMENT WIDTH.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

**STANDARD TRENCH DETAIL FOR SEWER UNDER ROAD BED, PARKING LOTS, SIDEWALKS, DRIVEWAYS, CURBS, GRAVEL ROADS AND ALLEYS**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 1 OF 3
SANITARY SEWER TRENCH DETAIL		DATE 09/2018	DWG. No. 312333-01

I.D. PIPE SIZE (INCHES)	18 OR LESS	21	24	30	36	42	48	54	60	66	72
MAXIMUM TRENCH WIDTH (FEET)	5.00	5.5	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

W (TRENCH WIDTH)  $\square$  5 FEET, WHEN PIPE I.D. IS 18" OR LESS  
W (TRENCH WIDTH)  $\square$  I.D.  $\square$  4 FEET, WHEN PIPE I.D. IS GREATER THAN 18"

**NOTES:**

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

**STANDARD TRENCH DETAIL FOR SEWER UNDER BERMS, LAWNS, GRASSY AREAS, (OUTSIDE PAVEMENT INFLUENCE)**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 2 OF 3
SANITARY SEWER TRENCH DETAIL		DATE 09/2018	DWG. No. 312333-02

I.D. PIPE SIZE (INCHES)	18 OR LESS	21	24	30	36	42	48	54	60	66	72
MAXIMUM TRENCH WIDTH (FEET)	5.00	5.5	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

W (TRENCH WIDTH)  $\square$  5 FEET, WHEN PIPE I.D. IS 18" OR LESS  
W (TRENCH WIDTH)  $\square$  I.D.  $\square$  4 FEET, WHEN PIPE I.D. IS GREATER THAN 18"

**NOTES:**

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

**STANDARD TRENCH DETAIL FOR SEWER UNDER ROAD BED, PARKING LOTS, SIDEWALKS, DRIVEWAYS, CURBS, GRAVEL ROADS AND ALLEYS**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 3 OF 3
SANITARY SEWER TRENCH DETAIL		DATE 9/2018	DWG. No. 312333-03

**PLAN**

**SECTION**

**NOTE:**

- ALL NEW PIPE OPENINGS FOR PROPOSED MANHOLES SHALL BE MADE BY MANHOLE MANUFACTURER.

**WATERTIGHT RESILIENT CONNECTOR FOR CONNECTING PROPOSED PIPES TO EXISTING MANHOLES AND EXISTING PIPES TO PROPOSED MANHOLES**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 1 OF 1
SEWER PIPE CONNECTION WITH MANHOLE		DATE 9/2018	DWG. No. 333111-05

**STANDARD MANHOLE PRECAST**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 1 OF 1
STANDARD MANHOLE PRECAST		DATE 09/2018	DWG. No. 330561-02

**MANHOLE FRAME AND COVER WITH LOGO - SEWER**

**PLAN VIEW OF COVER**

**SECTION A-A**

**SAFETY LOCK @ 90° FULLY OPENED @ 120°**

**NOTE:**

EAST\_ORDAN 00104050L01 ERGO COVER AND FRAME OR APPROVED EQUAL.

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 1 OF 1
MANHOLE FRAME AND COVER WITH LOGO - SEWER		DATE 9/2018	DWG. No. 330561-03

**DISSIMILAR SEWER PIPE JOINT DETAIL**

**SIMILAR SEWER PIPE JOINT NOTES**

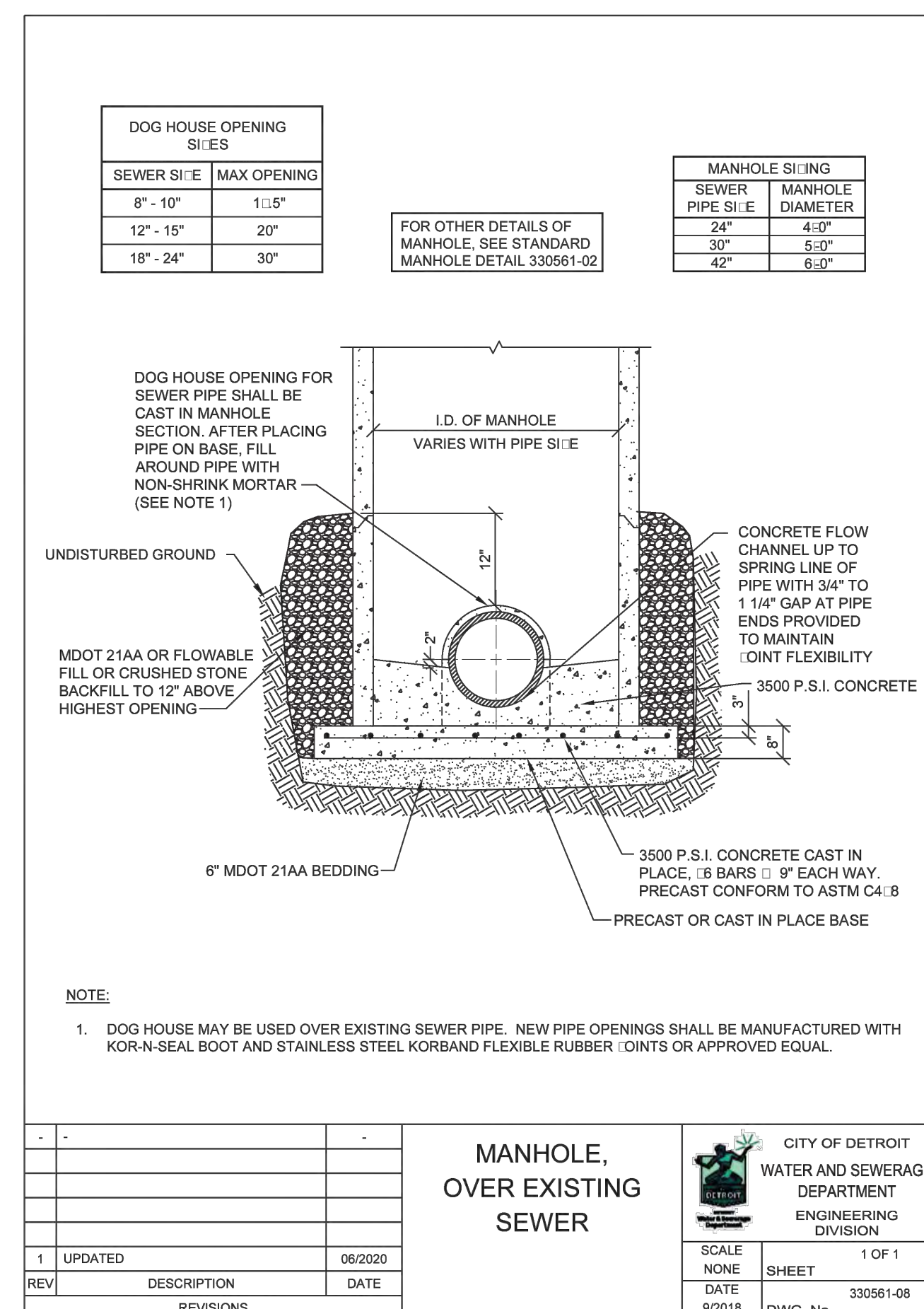
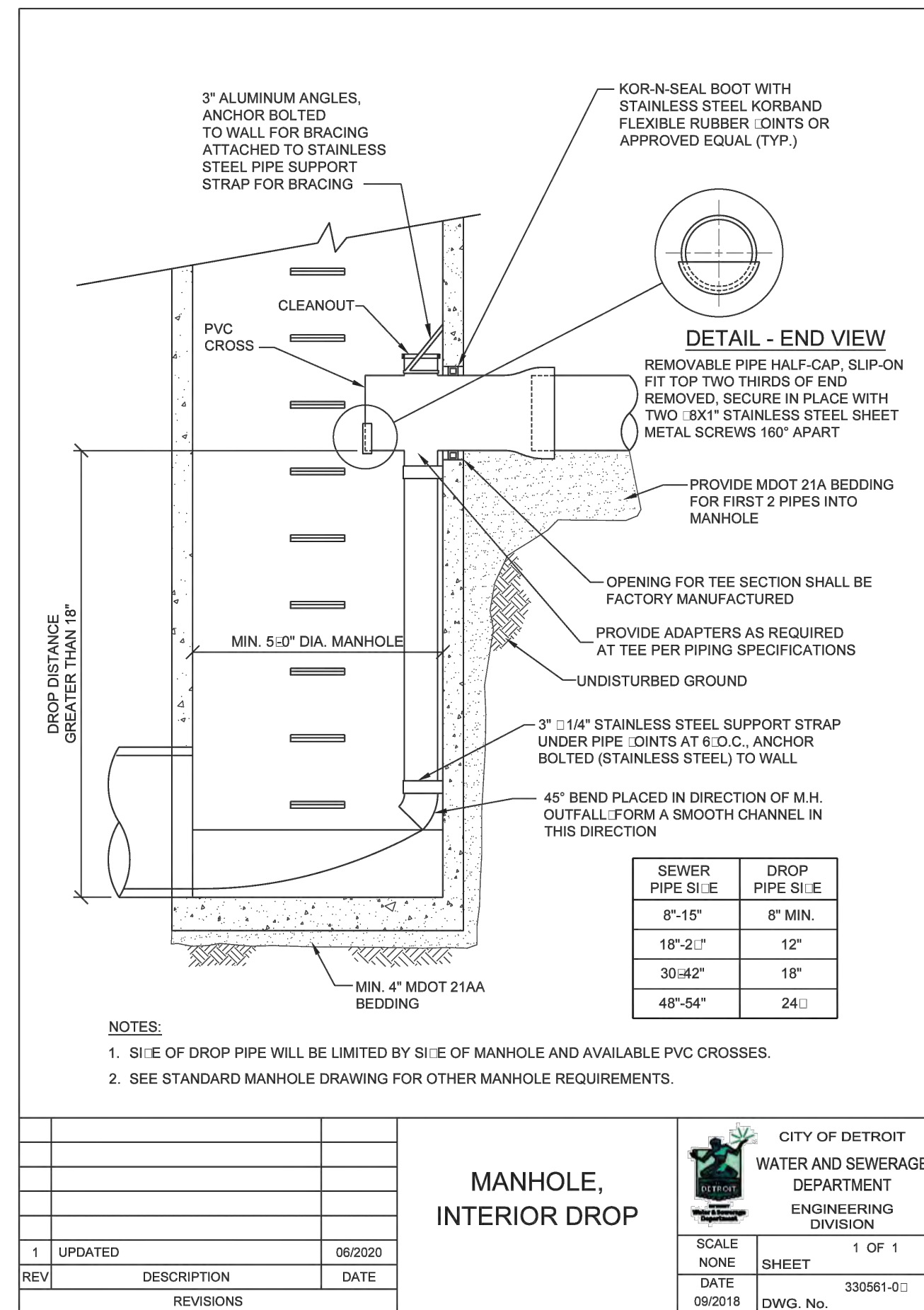
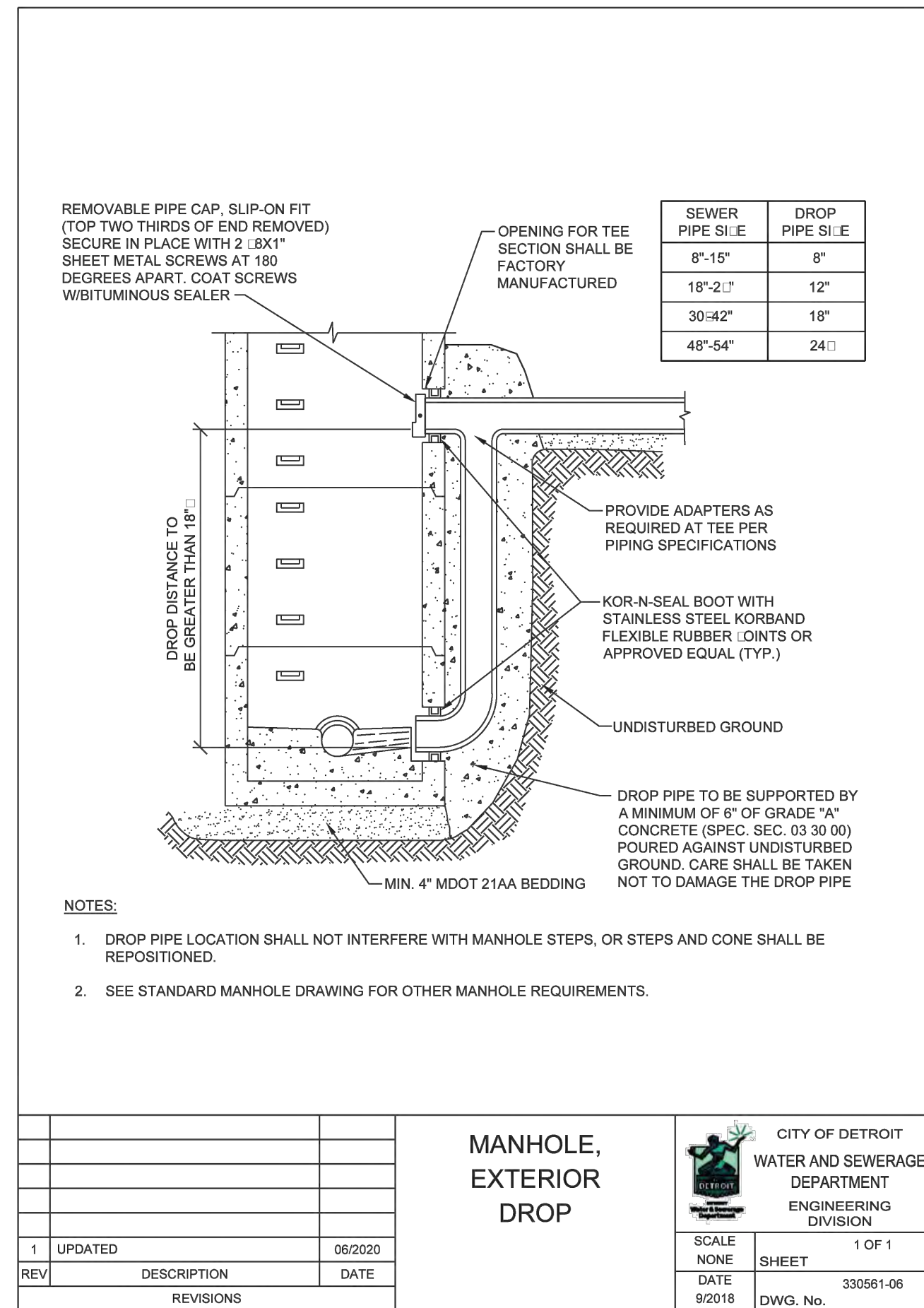
**NOTES:**

- DUCTILE IRON OR CAST IRON PIPE**  
WHERE EXISTING BELL SIZE IS DISSIMILAR AND CAN NOT BE CONNECTED BY STANDARD FITTINGS, A FERNOCO COUPLING WITH NON-SHEAR STAINLESS STEEL RINGS SHALL BE USED.
- PVC PIPE**  
WHERE PVC PIPE SIZE IS DISSIMILAR AND PVC COUPLINGS ARE NOT SUITABLE, A FERNOCO COUPLING WITH NON-SHEAR STAINLESS STEEL RINGS SHALL BE USED.
- CONCRETE PIPE**  
WHERE PIPE SIZE IS DISSIMILAR AND A NORMAL BELL AND SPIGOT GASKETED JOINT IS NOT PRACTICAL, A FERNOCO COUPLING WITH NON-SHEAR STAINLESS STEEL RINGS SHALL BE USED TO COMPLETE THE JOINT.

**SEWER PIPE JOINT DETAIL**

1	UPDATED	06/2020	
REV	DESCRIPTION	DATE	REVISIONS

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION		SCALE NONE	SHEET 1 OF 1
SEWER PIPE JOINT DETAIL		DATE 9/2018	DWG. No. 333111-04



PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGL PERMIT		

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.237.4699  
 EMAIL: ORBERTSON@DBRA.ORG

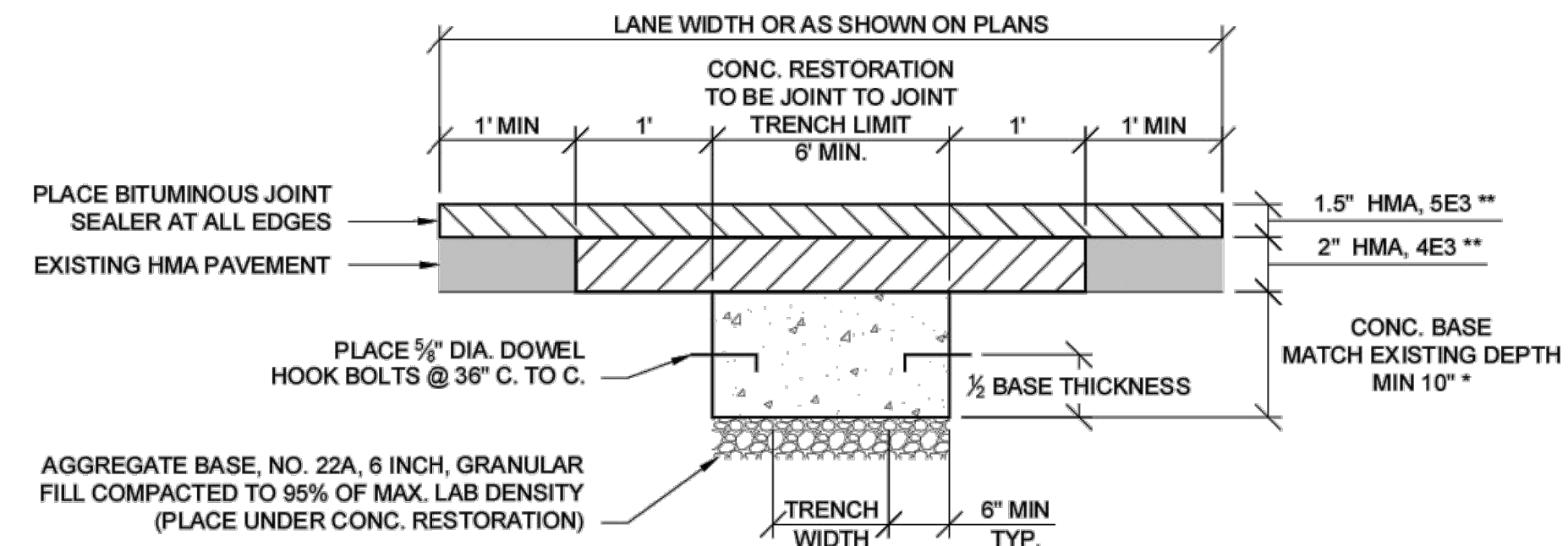
**DESIGNED BY :** DAVID RYZYI  
**DRAWN BY :** KCC  
**CHECKED BY :** DAVID RYZYI

**APPROVED BY :**  
 DATE: 07/11/2024

**CS:**  
**JN:**

W:\Projects\2023\4012300001-00199401\_230108.000\CAD\SHS\TASK 300DWSO WATER MAIN DETAILS.dwg Last saved 7/25/2024 1:49 PM by KCCok, plotted 7/25/2024 1:54 PM

**MAJOR STREETS**

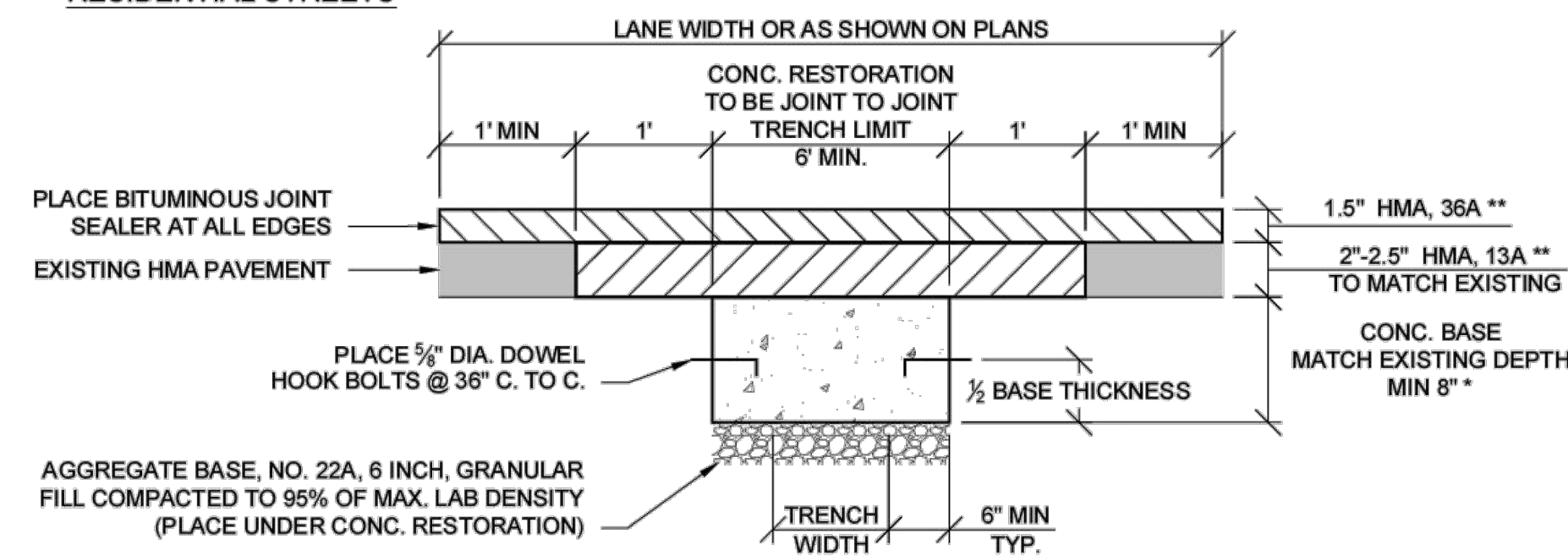


EXCEPTION:  
TO ABOVE HMA REPLACEMENT. WHEN PAVEMENT REPLACEMENT IS 100 FEET FROM EITHER SIDE OF AN UNDERPASS, REPLACE 10\"/>

\* BOTTOM OF CONCRETE REPLACEMENT SHALL BE LEVEL WITH BOTTOM OF EXISTING PAVEMENT. CONCRETE REPLACEMENT MAY EXCEED 10\"/>

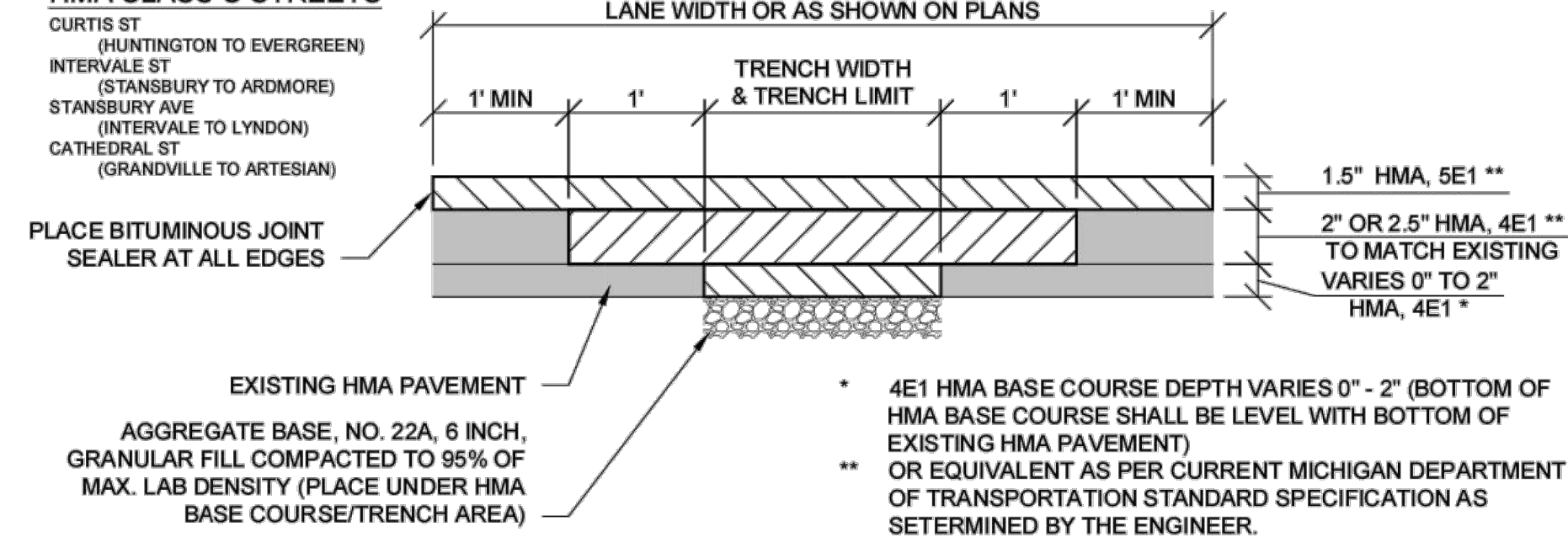
\*\* OR EQUIVALENT AS PER CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION AS DETERMINED BY THE ENGINEER.

**RESIDENTIAL STREETS**



**HMA SURFACE ON CONCRETE BASE  
UTILITY TRENCH CONSTRUCTION  
PAVEMENT RESTORATION**

**HMA CLASS C STREETS**



**HMA UTILITY TRENCH CONSTRUCTION  
PAVEMENT RESTORATION**

**PAVEMENT RESTORATION NOTES**

1. MILL (REMOVE) HMA PAVEMENT FOR MIN ONE LANE, OR ROAD WIDTH AS SHOWN ON PLANS. MILLING WITHIN THE TRENCH LIMIT IS INCIDENTAL TO THE WATER MAIN PIPE AND IS NOT PAID FOR SEPARATELY.
2. ALL PAVEMENT REMOVED WITHIN THE TRENCH LIMIT IS INCIDENTAL TO THE WATER MAIN PIPE AND IS NOT PAID FOR SEPARATELY.
3. ALL PAVEMENT CUTS SHALL BE TO THE NEAREST JOINT FOR CONCRETE AND EQUAL TO THE TRENCH LIMIT FOR HMA.
4. ALL REMOVALS SHALL BE SAWCUT STRAIGHT AND SQUARE (90 DEGREES).
5. CONCRETE RESTORATION PAVEMENT SHALL BE MDOT P1 MIX (3,500 PSI).
6. RESTORED CONCRETE PAVEMENT SHALL MATCH THICKNESS OF EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARD PLAN R-44-F.
7. RESTORED CONCRETE SHALL BE ANCHORED TO EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARD PLAN R-44-F.
8. APPLY HMA TACK COAT PER MDOT STANDARD SPECIFICATIONS SECTION 904.
9. RESTORED HMA PAVEMENT 3 1/2\"/>
10. BITUMINOUS JOINT SEALER SHALL BE PLACED AT ALL FINISHED HMA JOINTS.
11. 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/TED STANDARDS.
12. FOR OTHER RELATED SPECIFICATIONS (BACKFILL COMPACTION, MATERIALS, ETC...), REFER TO DIVISION 15 OF THE STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION.
13. NOTIFY THE CITY OF DETROIT ENGINEERING DEPARTMENT 24 HOURS PRIOR TO STARTING CONSTRUCTION.
14. 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.
15. THE CITY OF DETROIT REQUIRES ALL CONCRETE WORK TO BE STAMPED WITH A CONTRACTORS IDENTIFICATION STAMP.
16. EXISTING PAVEMENT SECTIONS SHALL BE VERIFIED PER THE GEOTECH REPORT OR EXISTING CONDITION PRIOR TO USE OF APPROPRIATE PAVEMENT RESTORATION DETAIL.

**PLAN REVISIONS**

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4600  
EMAIL: ORBERTSON@DBRA.ORG



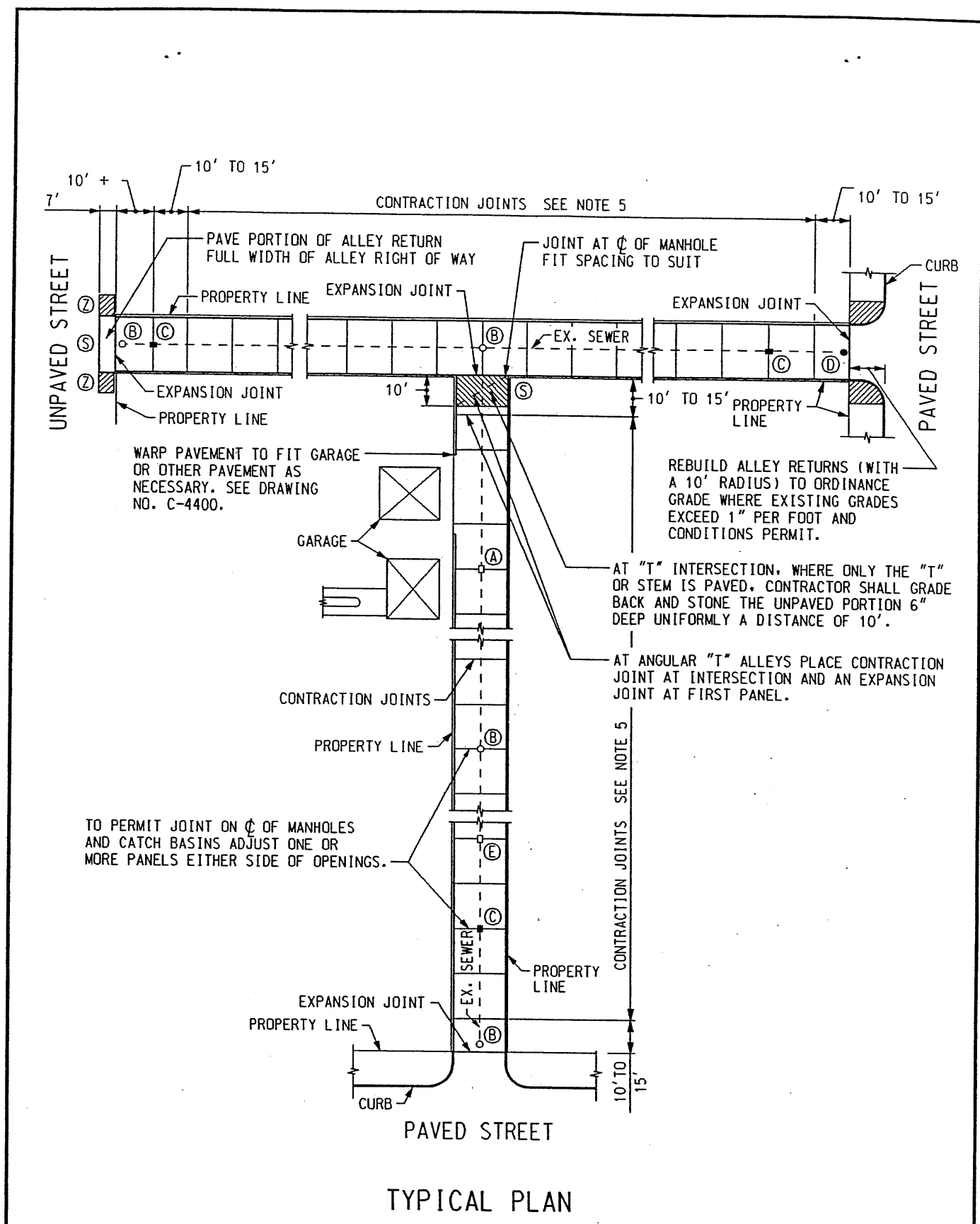
DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

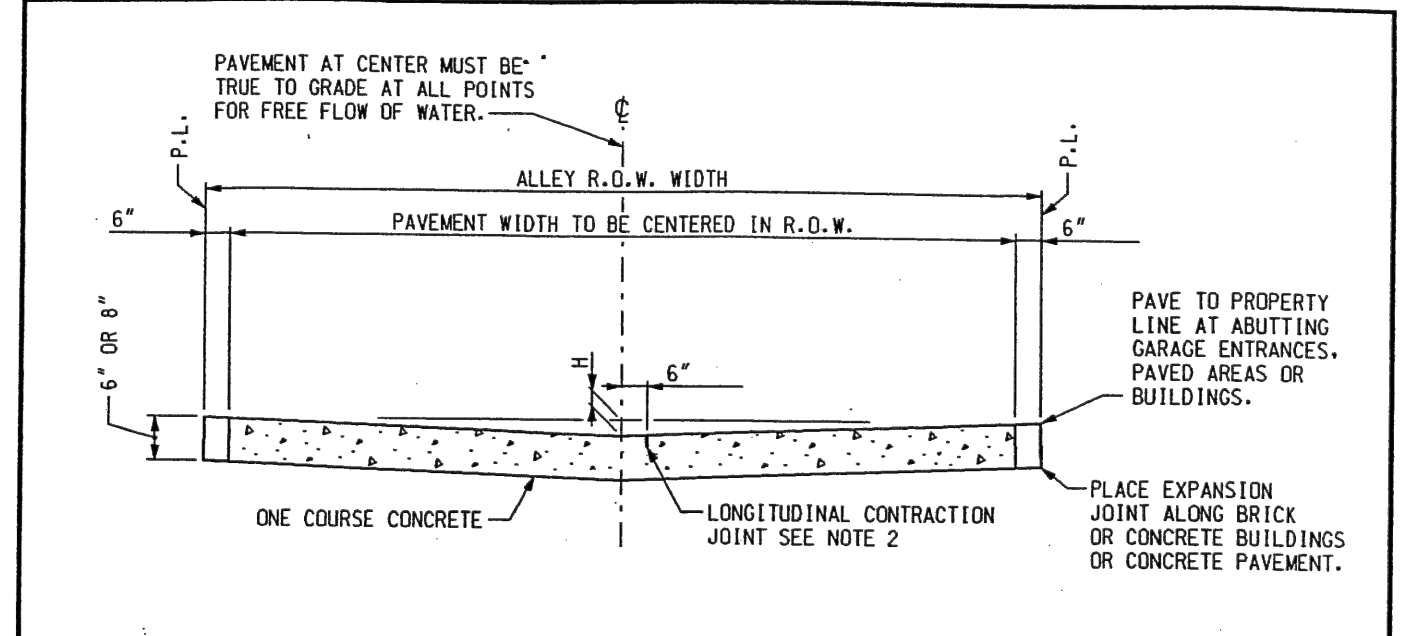
JUNCTION / McGRAW SITE READINESS PROJECT  
RESTORATION DETAILS

SHEET  
SD-3



REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	CITY OF DETROIT
	rev. K.S.M.	CITY ENGINEERING DIVISION, D.P.W.
DRAWN BY:	<i>David Haidar</i>	STANDARD PLAN FOR
M.F.S.	ENGINEER OF STREETS	TYPICAL PLAN AND SECTION FOR
CHECKED BY:	<i>Wynne Talley</i>	CONCRETE ALLEY PAVEMENT
	LEAD ENGINEER	DRAWING NO. C-4396 SHEET 1 OF 2
	CITY ENGINEER	PLAN DATE



ELEMENTS		
ALLEY WIDTH	R.O.W.	H
19'	20'	5"
17'	18'	4"
15'	16'	3"

**CONSTRUCTION SYMBOLS LEGEND**

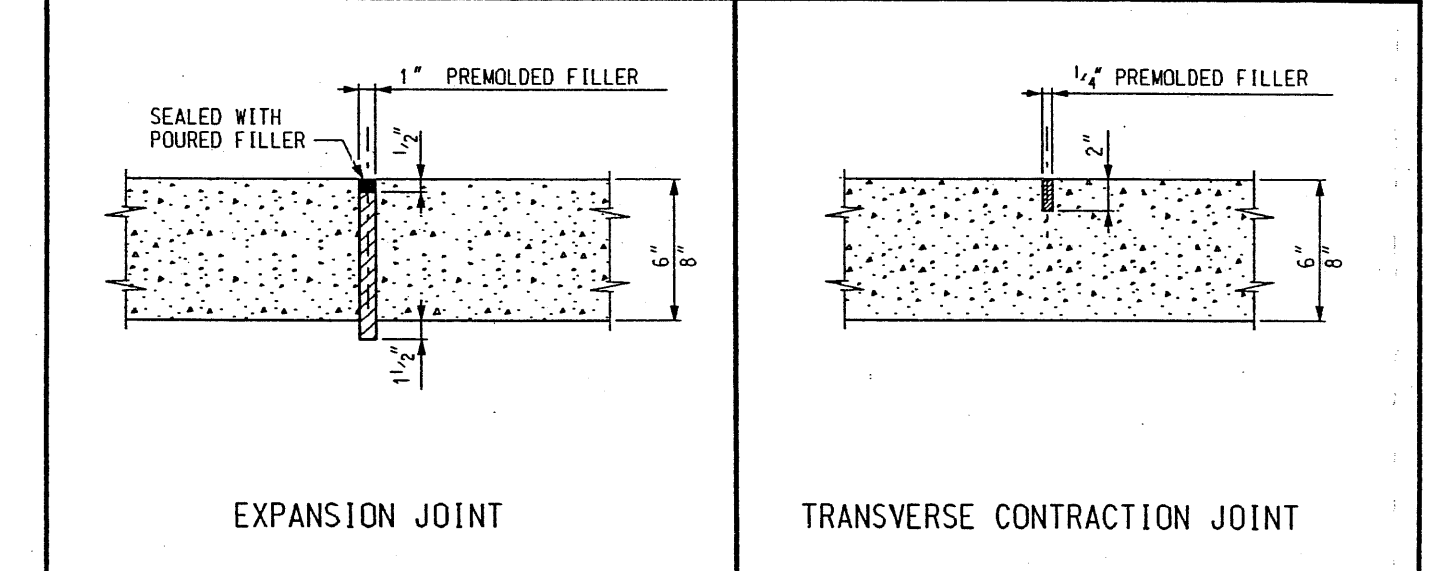
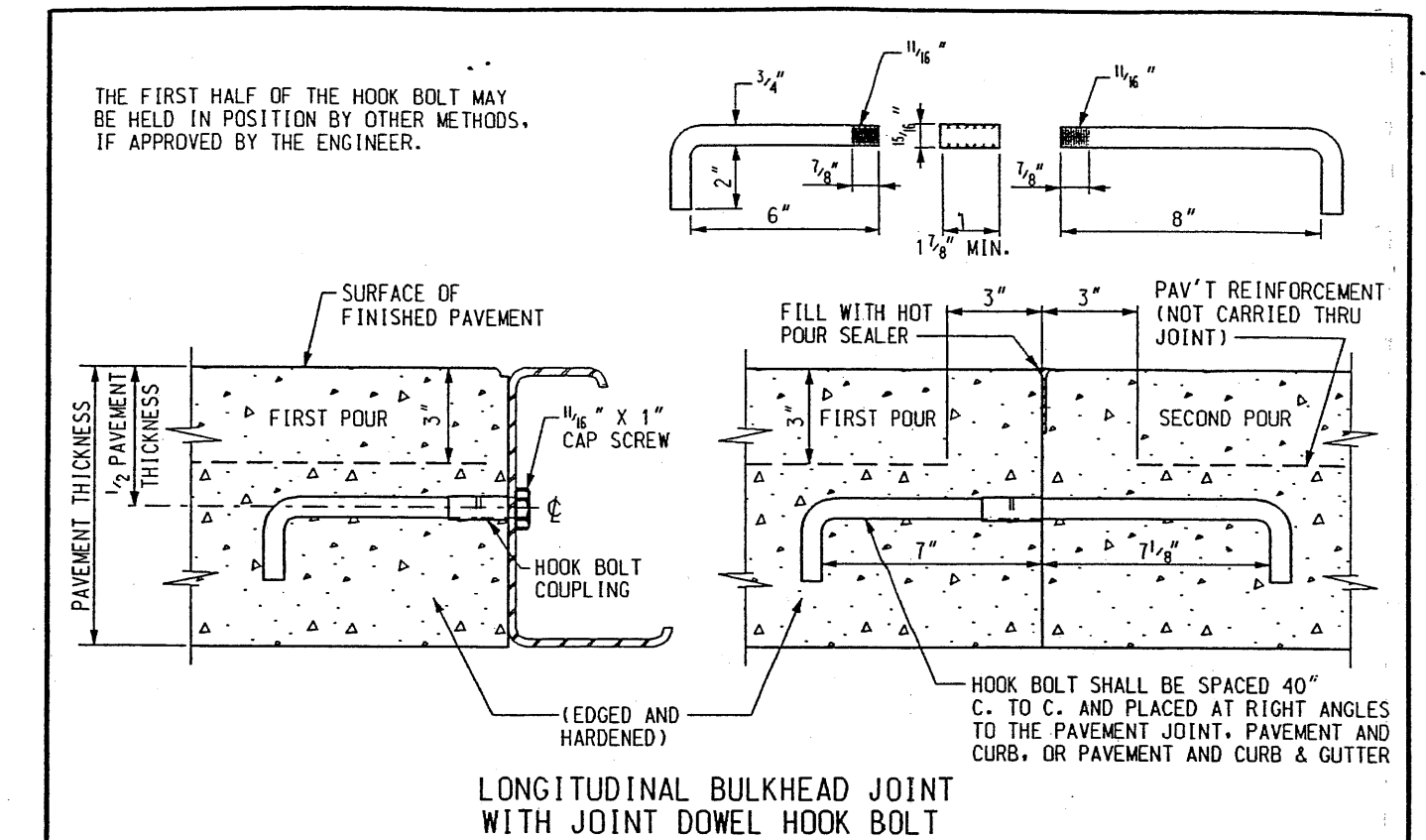
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING CATCH BASIN
- ▣ PROPOSED CATCH BASIN
- Ⓐ ADJUST EXISTING CATCH BASIN
- Ⓑ ADJUST EXISTING MANHOLE
- Ⓒ CONSTRUCT CATCH BASIN
- Ⓓ CONSTRUCT MANHOLE
- Ⓔ ABANDON EXISTING CATCH BASIN
- Ⓕ STONING AND GRADING
- Ⓖ CONSTRUCT STANDARD 6" CONCRETE SIDEWALK

**NOTES:**

- PLACE EXPANSION JOINTS AT ALL STREET PROPERTY LINES AND ALLEY INTERSECTIONS.
- LONGITUDINAL CONTRACTION JOINT TO BE CONSTRUCTED IN PAVEMENTS 17' AND OVER IN WIDTH UNLESS OTHERWISE NOTED ON PAVING PLAN.
- MAXIMUM SPACING BETWEEN EXPANSION JOINTS SHOULD NOT EXCEED 600 FEET.
- IF STREET IS ECONOMY PAVED THE AREA BETWEEN THE WALK AND EDGE OF PAVEMENT SHALL BE PAVED WITH 6" STONE BASE PLUS 2" OF COLD PATCH MATERIAL. THE WALK FLAG SHALL BE 6" THICK.
- CONTRACTION JOINTS SHALL BE SPACED AT 15' C. TO C. FOR SLAG AGGREGATE AND 6.0 m C. TO C. FOR NATURAL AGGREGATE.

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	CITY OF DETROIT
	rev. K.S.M.	CITY ENGINEERING DIVISION, D.P.W.
DRAWN BY:	<i>David Haidar</i>	STANDARD PLAN FOR
M.F.S.	ENGINEER OF STREETS	TYPICAL PLAN AND SECTION FOR
CHECKED BY:	<i>Wynne Talley</i>	CONCRETE ALLEY PAVEMENT
	LEAD ENGINEER	DRAWING NO. C-4396 SHEET 2 OF 2
	CITY ENGINEER	PLAN DATE



**LONGITUDINAL CONTRACTION JOINT**

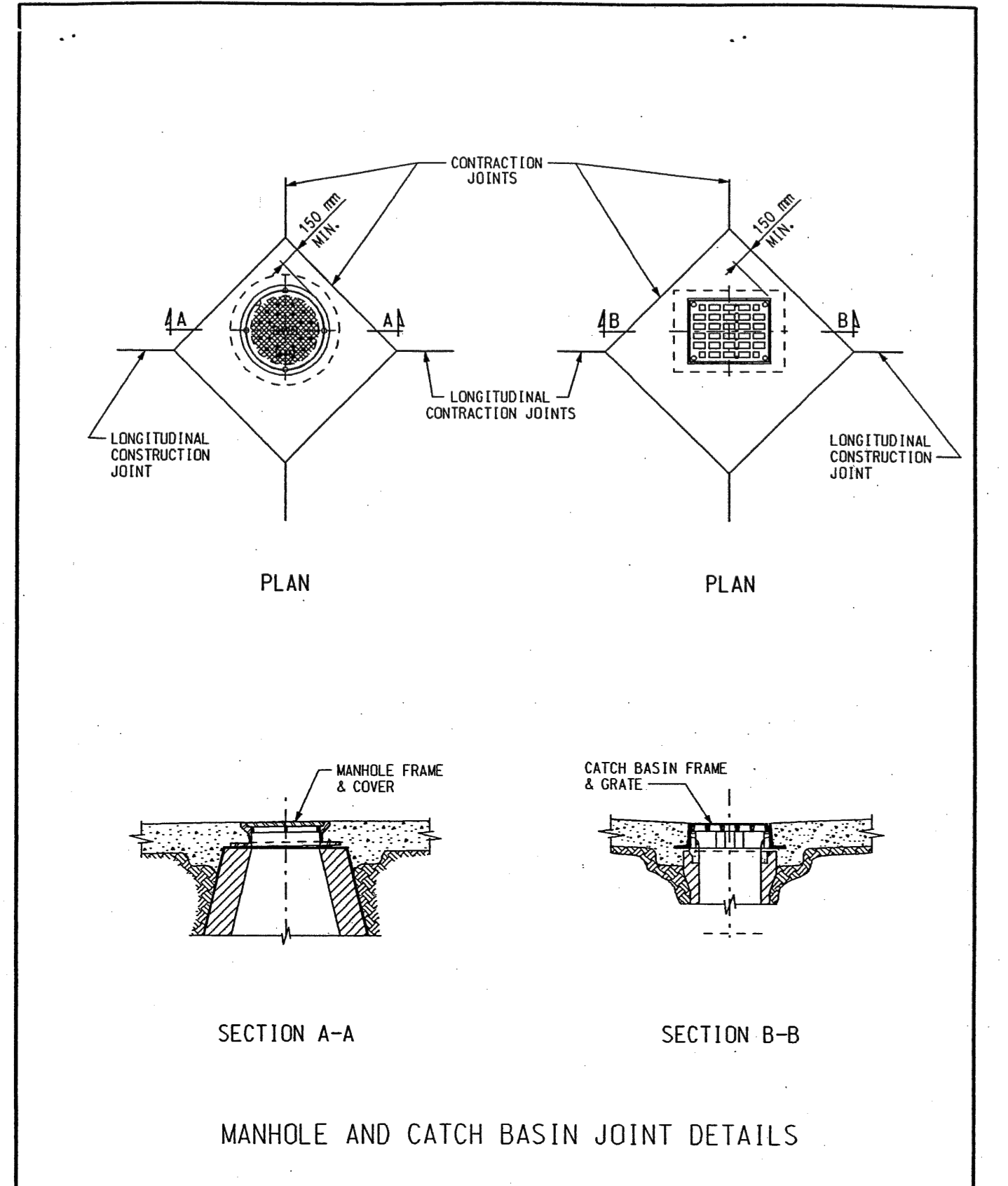
3/4" POURED FILLER

6"

NOTE: ALL DIMENSIONS ARE IN INCHES (\*) UNLESS OTHERWISE NOTED.

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	CITY OF DETROIT
	rev. K.S.M.	CITY ENGINEERING DIVISION, D.P.W.
DRAWN BY:	<i>David Haidar</i>	STANDARD PLAN FOR
M.F.S.	ENGINEER OF STREETS	DETAIL AND
CHECKED BY:	<i>Wynne Talley</i>	STANDARD JOINTS
	LEAD ENGINEER	DRAWING NO. C-4397 SHEET 2 OF 2
	CITY ENGINEER	PLAN DATE

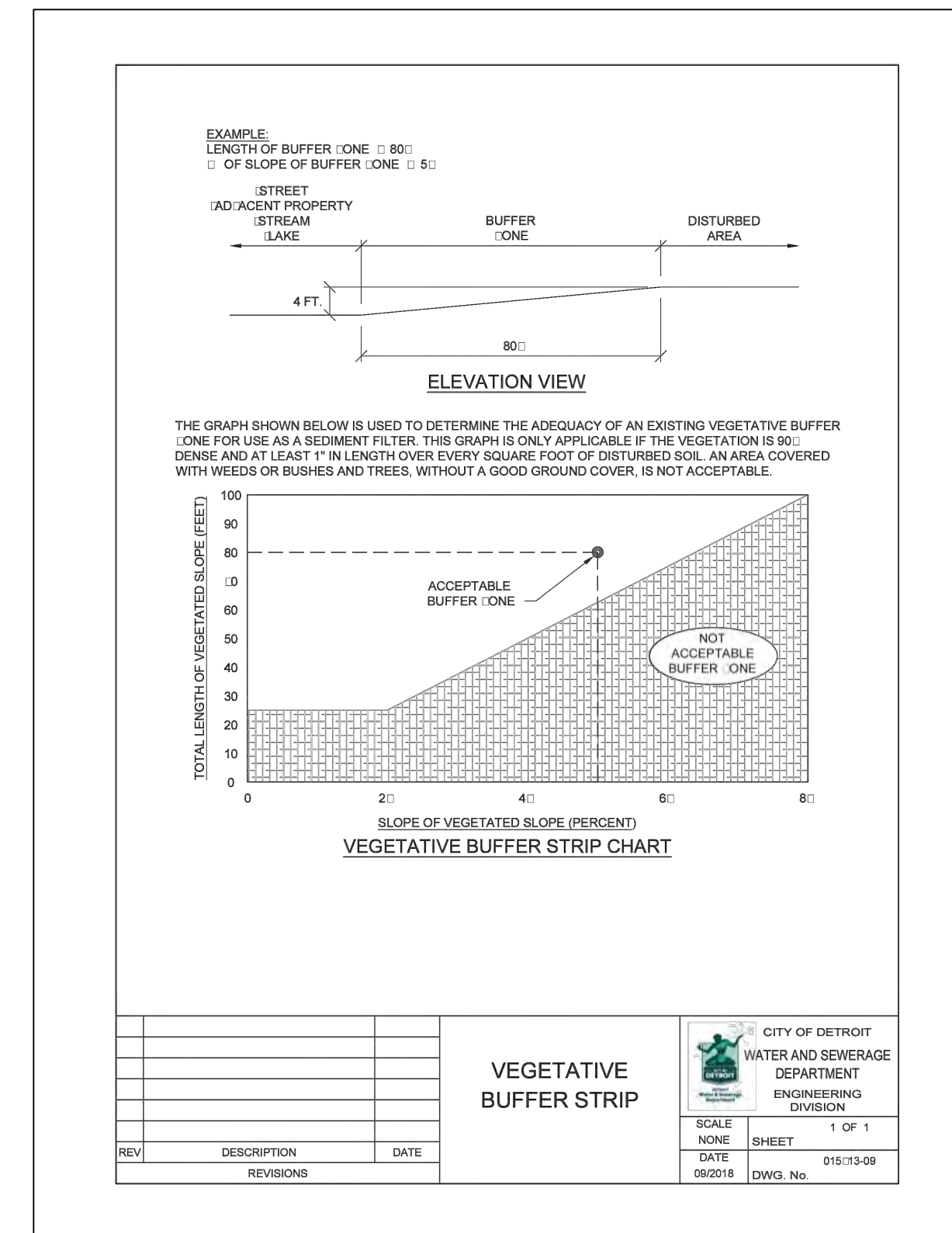
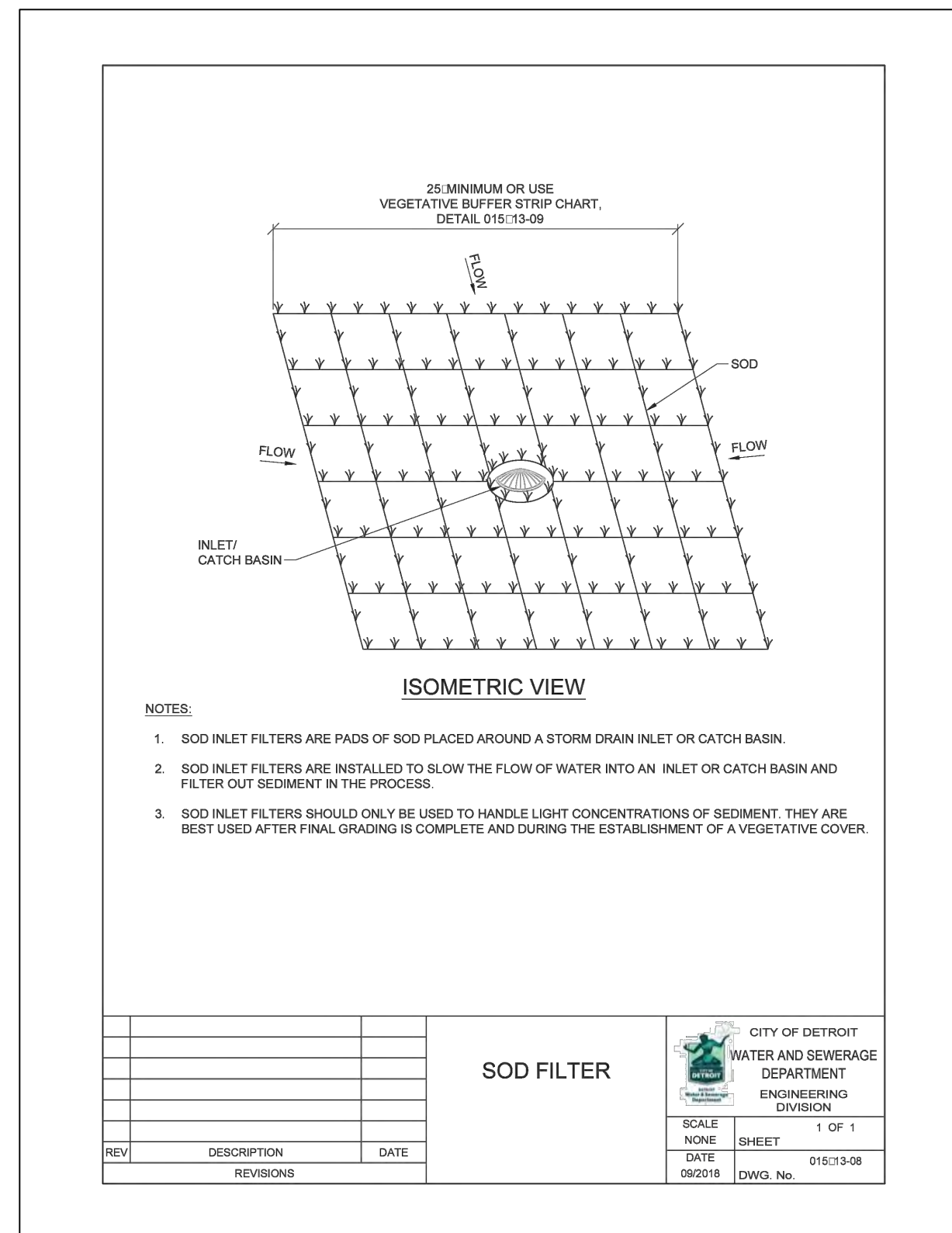
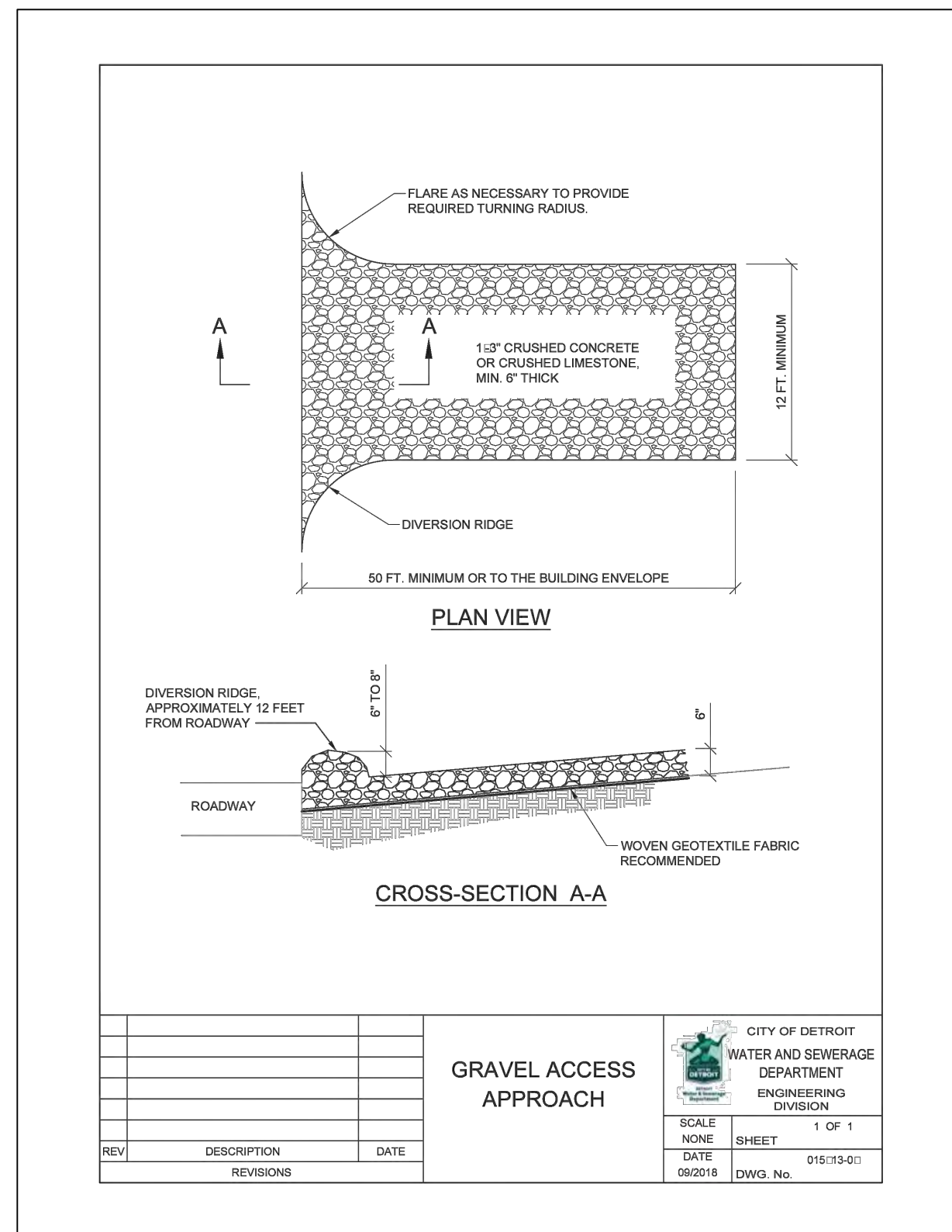


REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	CITY OF DETROIT
	rev. K.S.M.	CITY ENGINEERING DIVISION, D.P.W.
DRAWN BY:	<i>David Haidar</i>	STANDARD PLAN FOR
M.F.S.	ENGINEER OF STREETS	DETAIL AND
CHECKED BY:	<i>Wynne Talley</i>	STANDARD JOINTS
	LEAD ENGINEER	DRAWING NO. C-4397 SHEET 1 OF 2
	CITY ENGINEER	PLAN DATE

PLAN REVISIONS						DEVELOPER DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY CONTACT: ORZA ROBERTSON ADDRESS: 500 GRIFFIN AVE SUITE 2200 DETROIT, MI 48226 PHONE: 313.337.6500 EMAIL: ORBERTSON@DECC.ORG		DESIGNED BY : DAVID RYZYI	APPROVED BY : DATE: 07/11/2024	CS: JN:	JUNCTION / MCGRAW SITE READINESS PROJECT	SHEET SD-4
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE							
1	07/24/24		EGL PERMIT					DRAWN BY : KCC			RESTORATION DETAILS	
								CHECKED BY : DAVID RYZYI				

W:\Projects\2023\401 2300001-00199401 2300198.000\CAD\SHSTASK 3000\SD WATER MAIN DETAILS.dwg Last saved 7/25/2024 1:49 PM by KCook, plotted 7/25/2024 1:51 PM



**SOIL EROSION AND SEDIMENTATION CONTROL TEMPORARY FACILITIES**

THE CONTRACTOR SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH PART 81 OF ACT NO. 451 OF 1994, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 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.

ALL DISTURBED SURFACE AREA (INCLUDING UTILITY TRENCHES) SHALL BE TEMPORARILY GRADED AND/OR DITCHED TO DIRECT ALL WATER RUNOFF FROM SUCH AREAS TO SEDIMENTATION CONTROL DEVICES WHICH WILL PREVENT WATER CARRYING ERODED SOIL FROM ENTERING A WATERCOURSE, SEWER, OR ADJACENT LANDS. SUCH SEDIMENTATION CONTROL DEVICES SHALL INCLUDE (BUT NOT BE LIMITED TO) PROTECTIVE DITCHES, SEDIMENT TRAPS, SEDIMENT FILTERS, DITCH TRAPS, PIPE BARRIERS, AND FILTERS AS DETAILED AND REQUIRED AND WHERE INDICATED ON THE DRAWINGS. AFTER THE PROJECT WORK HAS BEEN COMPLETED, INSPECTED, AND APPROVED, THE CONTRACTOR SHALL REMOVE ALL SEDIMENTATION CONTROL DEVICES, MATERIAL, AND THEIR COLLECTED SILT AND DEBRIS AND RESTORE THE AREA IN ACCORDANCE WITH THE DRAWINGS.

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, 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.

REV	DESCRIPTION	DATE

**SOIL EROSION AND SEDIMENTATION CONTROL, TEMPORARY FACILITIES**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION

SCALE: NONE SHEET 1 OF 1  
DATE: 06/20/18 DWG. No. 015-13-10

**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 1/2 TO 1/2 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.

CONTRACTOR SHALL ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES PROTECT AGAINST LOSS OF SOIL BY THE ACTION OF WATER, ICE, GRAVITY OR WIND.

REV	DESCRIPTION	DATE

**SOIL EROSION AND SEDIMENTATION CONTROL, MAINTENANCE NOTES**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION

SCALE: NONE SHEET 1 OF 1  
DATE: 06/20/18 DWG. No. 015-13-11

**SUMMARY OF BASIC PRINCIPLES:**

- KEEP DISTURBED AREA AS SMALL AS POSSIBLE.
- STABILIZE AND/OR PROTECT DISTURBED AREAS AS SOON AS POSSIBLE.
- KEEP STORM WATER RUNOFF VELOCITIES LOW.
- RETAIN SEDIMENT WITHIN IMMEDIATE CONSTRUCTION AREA.

THE PURPOSE OF THIS PLAN IS TO SPECIFY METHODS FOR TEMPORARY EROSION CONTROL DURING CONSTRUCTION. IT IS INTENDED THAT MEASURES CALLED FOR IN THE SPECIFICATIONS AND SHOWN ON THESE STANDARD DETAILS PLANS BE STRICTLY ADHERED TO. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT CONSTRUCTION PROCEDURES UNDERTAKEN BE IN CONFORMANCE WITH THE STATE OF MICHIGAN ACT 451 OF 1994 PART 91, SOIL EROSION AND SEDIMENTATION CONTROL.

ALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE REGULARLY MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COLLECTED SILT AND SEDIMENTATION SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SILT TRAPS OR SEDIMENTATION CONTROL DEVICES. WHERE REQUIRED, THE CONTRACTOR SHALL REPLACE FILTER MATERIALS WHICH HAVE BECOME INEFFECTIVE DUE TO CONTAMINATION OR PHYSICAL DETERIORATION.

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 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 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:

- WET WEATHER SEASON (MARCH, APRIL, MAY) - 5 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.
- DRY WEATHER SEASON (JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER) - 10 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.
- COLD WEATHER SEASON (DECEMBER, JANUARY, FEBRUARY) - 15 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.

REV	DESCRIPTION	DATE

**SOIL EROSION AND SEDIMENTATION CONTROL, GENERAL NOTES**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION

SCALE: NONE SHEET 1 OF 1  
DATE: 06/20/18 DWG. No. 015-13-12

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		
-	-	-	-	-	-

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY

CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4698  
EMAIL: ORBER@SOUNDREC.ORG



DESIGNED BY : **DAVID RYZYI**

DRAWN BY : **KCC**

CHECKED BY : **DAVID RYZYI**

APPROVED BY :

DATE: **07/11/2024**

CS:

JN:

W:\Projects\2023\401 2300001-01199401 2300198.000\CAD\SHSTASK 300SESC STANDARD DETAILS.dwg Last saved 7/30/2024 3:17 PM by KCoak, plotted 7/30/2024 3:18 PM

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
1		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW TO AVOID OVERFLOW AND REDUCES PEAK FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
2		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
3		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
4		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
5		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 1-5)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 1 OF 1  
DATE: 09/2018  
DWG. No. 015/13-13

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
6		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
7		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
8		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
9		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
10		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 6-10)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 2 OF 1  
DATE: 09/2018  
DWG. No. 015/13-14

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
11		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
12		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
13		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
14		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
15		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 11-15)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 3 OF 1  
DATE: 09/2018  
DWG. No. 015/13-15

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
16		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
17		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
18		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
19		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
20		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 16-20)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 4 OF 1  
DATE: 09/2018  
DWG. No. 015/13-16

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
21		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
22		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
23		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
24		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
25		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 21-25)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 5 OF 1  
DATE: 09/2018  
DWG. No. 015/13-17

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
26		STORMWATER DETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*
27		STORMWATER FILTER STRIP: TRAPSEDIMENT AND DEBRIS. REDUCES TURBIDITY AND IMPROVES WATER QUALITY.	*						*
28		STORMWATER BIORETENTION: USES PLANTS AND SOIL TO FILTER AND TREAT STORMWATER. IMPROVES WATER QUALITY AND PROVIDES HABITAT.	*						*
29		STORMWATER INFILTRATION: REDUCES RUNOFF AND RECHARGES GROUNDWATER. FILTERS DEBRIS AND SEDIMENT.	*						*
30		STORMWATER RETENTION POND: PROVIDES STORAGE AND DELAYS FLOW. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 26-30)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 6 OF 1  
DATE: 09/2018  
DWG. No. 015/13-18

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		
-	-		-		

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 300 GORHAM AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4500  
EMAIL: ORBERTSON@DORCA.ORG



DESIGNED BY : **DAVID RYZYI**  
DRAWN BY : **KCC**  
CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
DATE: **07/11/2024**

CS:  
JN:

**JUNCTION / McGRAW SITE READINESS PROJECT**

**SESC DETAILS**

SHEET  
**SD-6**

**DETROIT  
WATER AND SEWERAGE DEPARTMENT  
WATER MAIN FACILITIES ONLY  
APPROVED**

THIS APPROVAL IS FOR CONNECTION TO STREET WATER MAIN ONLY, AND SHALL NOT RELIEVE THE BUILDER OR PLUMBING CONTRACTOR OF ANY RESPONSIBILITY TO COMPLY WITH ALL THE REQUIREMENTS OF THE WATER SERVICE AND SEWERAGE DEPARTMENT'S APPLICATION OF THIS DEPARTMENT DATE

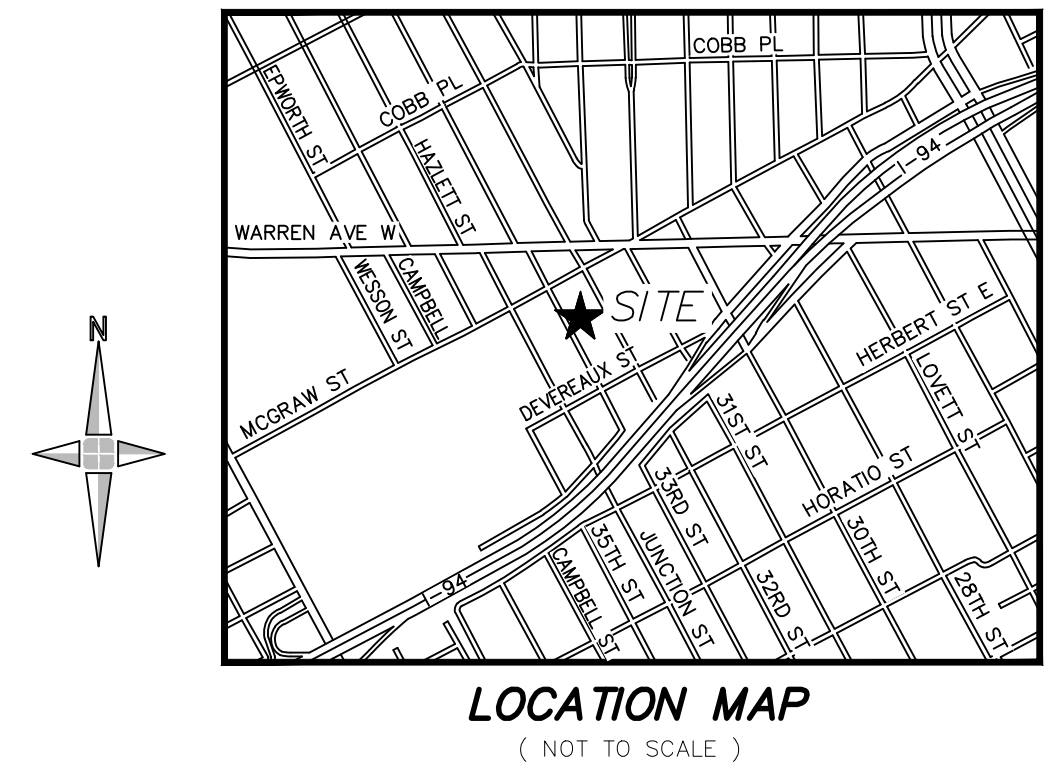
*Devyn McNaughton*

**APPROVED**

By Devyn.McNaughton at 5:44 pm, Mar 27, 2025

# SITE READINESS PROGRAM MANAGEMENT BLIGHT REMEDIATION JUNCTION / McGRAW SITE CITY OF DETROIT

## WATER MAIN DEMO & UTILITY RELOCATION PLANS FOR DETROIT WATER AND SEWERAGE DEPARTMENT FACILITIES

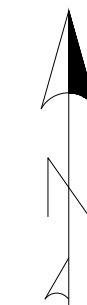


SHEET NO.	SHEET TITLE
C0.0	TITLE SHEET
C0.1	GENERAL NOTES
C0.2	GENERAL NOTES
C1.0	DEMO PLAN WATER MAIN
C2.0	McGRAW STREET WATER MAIN
C2.1	35TH STREET WATER MAIN
C3.0	McGRAW WATER MAIN RESTORATION
C3.1	35TH STREET WATER MAIN RESTORATION
C4.0	WATER MAIN STAGE MOT PLAN
C5.0	MOT NOTES AND DETAILS
C5.1	MOT NOTES AND DETAILS
SD-1	DWSD WATER MAIN DETAILS
SD-2	DWSD WATER MAIN DETAILS
SD-3	RESTORATION DETAILS
SD-4	RESTORATION DETAILS
SD-5	SESC DETAILS
SD-6	SESC DETAILS



**SITE MAP**

1" = 80'



**NOTES**

- LOCATIONS AND DIMENSIONS ARE APPROXIMATE. THIS IS NOT A LEGAL SURVEY.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS, SPECIFICATIONS, AND ORDINANCES OF DWSD, THE CITY OF DETROIT, WAYNE COUNTY, AND THE STATE OF MICHIGAN, WHERE APPLICABLE.
- THE CONTRACTOR SHALL ADHERE TO ALL SITE, LOCAL, COUNTY, AND STATE ORDINANCES GOVERNING HOURS OF OPERATION.
- THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING THEIR OWN HEALTH AND SAFETY PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE WORK. PERMITS TO BE OBTAINED INCLUDE, BUT ARE NOT LIMITED TO, DWSD, THE CITY OF DETROIT, WAYNE COUNTY, AND EGLE AS APPLICABLE, PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND CONTACT MISS DIG A MINIMUM OF 3 WORKING DAYS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT THE OWNER TO HAVE UTILITIES OUTSIDE OF THE PUBLIC RIGHT-OF-WAY IDENTIFIED AND LOCATED. THE CONTRACTOR SHALL NOT BEGIN UNDERGROUND WORK UNTIL THE SITE HAS BEEN MARKED BY REPRESENTATIVES OF ALL AFFECTED UTILITIES.
- THE CONTRACTOR SHALL PROTECT, OR HAVE RELOCATED, ANY UTILITIES THAT INTERFERE WITH THE CONSTRUCTION. UTILITIES AND ASSOCIATED STRUCTURES SHALL NOT BE REMOVED UNLESS SPECIFIED ON PLANS.
- THE CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL AND SIGNAGE, PER LOCAL UNIFORM TRAFFIC CONTROL REGULATIONS, TO MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES THROUGHOUT CONSTRUCTION. PROVIDE APPROPRIATE BARRICADES AROUND WORK AREAS FOR PEDESTRIAN AND VEHICULAR SAFETY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL NECESSARY CONSTRUCTION STAKING AND GRADE ALIGNMENT CONTROLS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT GRADE AND ALIGNMENT REFERENCES BY MEANS OF STAKES, STRINGLINES, OR OTHER APPROPRIATE MEANS.
- THE CONTRACTOR SHALL USE APPROPRIATE MEANS, METHODS, AND EQUIPMENT AND TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING SITE FEATURES, SUCH AS, BUT NOT LIMITED TO, ROAD SIGNS, DRIVES, PAVEMENT, DITCHES, MANHOLES, UNDERGROUND UTILITIES, OVERHEAD UTILITIES, CULVERTS, GATES, FENCES, UTILITY POLES, OR UTILITY MARKERS, PUBLIC OR PRIVATE. ANY SITE FEATURE DAMAGE OR DISTURBANCE THAT OCCURS AS A RESULT OF THE CONTRACTOR'S MEANS, METHODS, OR EQUIPMENT SHALL BE REPAIRED AND/OR RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE THE SOLE JUDGE OF THE ACCEPTABILITY OF ANY SUCH REPAIRS OR REPLACEMENTS.
- CONTRACTOR SHALL PROVIDE SUBMITTALS ON MATERIALS AND EQUIPMENT TO BE INCLUDED IN THE CONSTRUCTION PRIOR TO THE PRE-CONSTRUCTION MEETING. THE ENGINEER SHALL REVIEW SUBMITTALS TO VERIFY THAT THE MATERIALS ARE IN ACCORDANCE WITH THE SPECIFICATIONS. SUBMITTALS INCLUDE SUCH ITEMS AS PERMITS, SHOP DRAWINGS, CALCULATIONS, CUT SHEETS, AND QUALITY CONTROL CERTIFICATES.
- ALL CONSTRUCTION SHALL BE COMPLETED TO THE ELEVATIONS AS NOTED ON THE PLANS. TOLERANCES OF ±0.1 FT ARE ACCEPTABLE IN LANDSCAPED/GRAVEL AREAS. TOLERANCES OF ±0.01 FT ARE ACCEPTABLE FOR PAVEMENT AND SEWER CONSTRUCTION.
- ALL WORK ITEMS REQUIRED TO PERFORM THE SCOPE OF WORK SHALL FOLLOW DWSD STANDARD SPECIFICATIONS AND SHALL BE INCLUDED INTO THE PROJECT PAY ITEMS INCLUDING ALL SAW CUTTING, REMOVALS, INSTALLATIONS, BACKFILLING, TESTING, RESTORATION AND ANY OTHER ITEMS NECESSARY TO COMPLETE THE PROJECT. SECTION 01 02 00 PRICE AND PAYMENT PROCEDURES (MODIFIED) IS INCLUDED IN ADDENDUM 1 AND SUPERSEDES THE PRICE AND PAYMENT PROCEDURES WITHIN THE DWSD STANDARD SPECIFICATIONS.
- MAINTENANCE OF TRAFFIC FOR WATER AND SEWER PROJECTS WILL BE PAID FOR AS LUMP SUM INCLUDING ALL SIGNAGE, ARROW BOARDS, BARRICADES, CONCRETE BARRIERS, PROTECTIVE FENCING, AND ALL OTHER MOT DEVICES REQUIRED.

**BENCH MARK DATA**  
(CITY OF DETROIT) DATUM

BENCH MARK 7  
ARROW ON HYDRANT (2013), LOCATED ON THE NORTHWEST CORNER OF PARKDALE TERRACE AND MCGRAW STREET.  
ELEVATION=123.84'  
(SHOWN GRAPHICALLY)

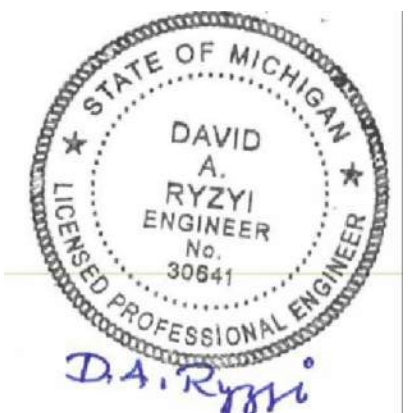
BENCH MARK 8  
NAIL IN THE SOUTH FACE OF A LIGHT POLE (G.W. TAG NO. 82100), LOCATED ON THE SOUTHEAST CORNER OF 33RD STREET AND MCGRAW STREET.  
ELEVATION=123.43'  
(SHOWN GRAPHICALLY)



Know what's below.  
Call before you dig.

**SITE OWNER:**

CITY OF DETROIT  
CONTACT: FELISHA STUDDILL  
ADDRESS: 1301 THIRD ST.  
AVE SUITE 1301  
DETROIT, MI 48226



DAVID A. RZYZI, PE 11/21/2024  
REGISTERED PROFESSIONAL ENGINEER

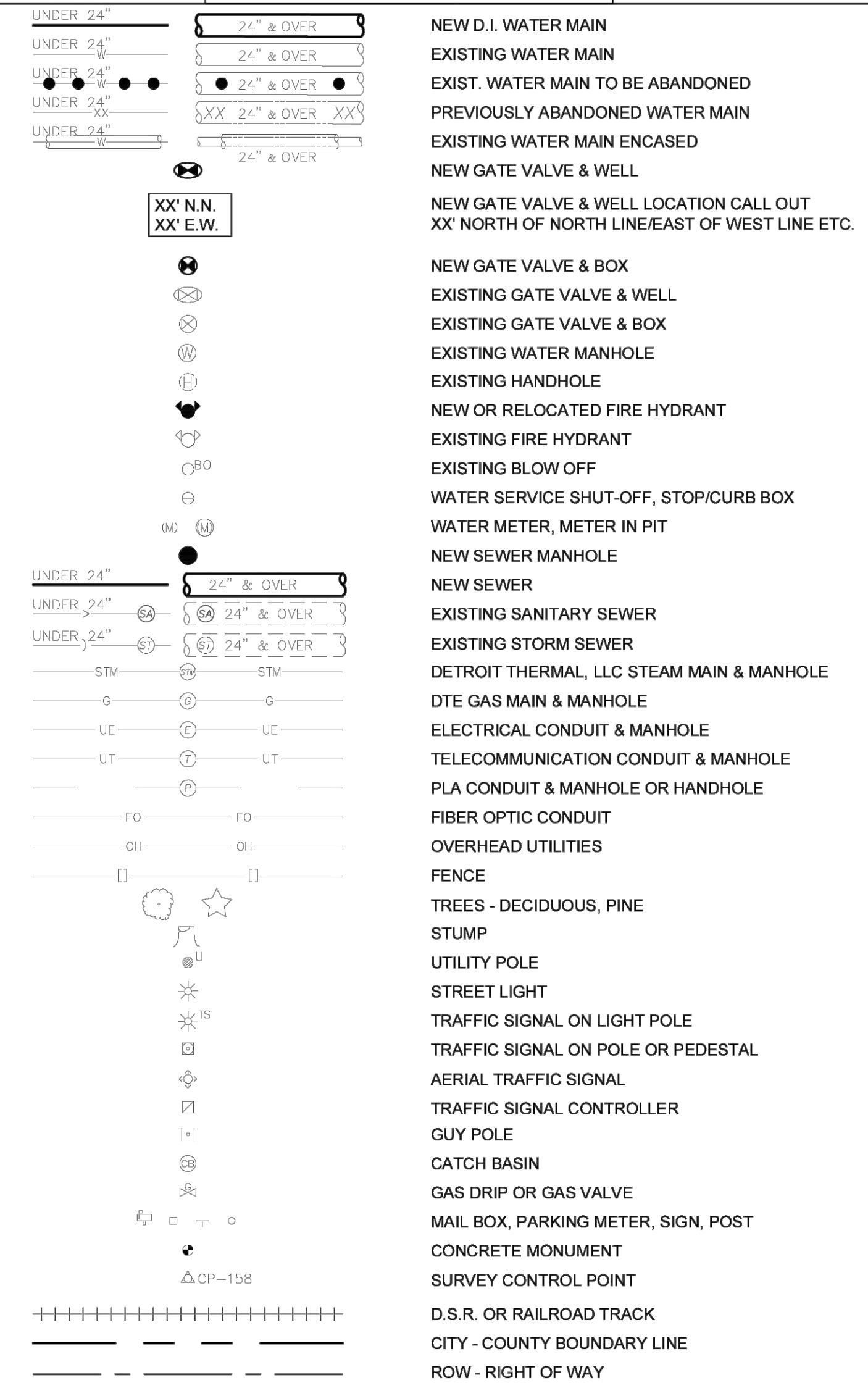
PLAN REVISIONS						DEVELOPER		DESIGNED BY :	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH		DESCRIPTION	DATE:	JN:		
2	08/07/24		DWSD REVIEW	4	10/11/24			ADDENDUM #1	KCC	07/11/2024		
3	08/27/24		ISSUED FOR BID	5	11/21/24		EGLRE REVIEW	DAVID RZYZI				

**GENERAL NOTES**

- THE COORDINATES AND ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON MICHIGAN STATE PLANE, NORTH AMERICAN DATUM OF 1983 (SOUTH ZONE), AND THE DETROIT CITY DATUM. UNITS ARE INTERNATIONAL FEET. THE SURVEYOR SHOULD OBTAIN CHECK MEASUREMENTS ON LOCAL DETROIT CITY BENCHMARKS FOR A CHECK ON THE CONVERSION TO DETROIT CITY DATUM.
- A DETAILED SURVEY OF THE STREETS INVOLVED IN THIS CONTRACT HAS BEEN CONDUCTED. UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE FROM FIELD MEASUREMENTS AND INFORMATION FURNISHED TO THE ENGINEER BY THE MAJOR SERVICE COMPANIES. NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS.
- THE CONTRACTOR TO VERIFY ALL EXISTING STRUCTURES AND UTILITIES IN THE FIELD PRIOR TO WORK COMMENCING IN THAT AREA.
- BIDDER SHALL VERIFY TYPES AND LOCATIONS OF PAVEMENTS AND CURBS OF STREETS AND ALLEYS (ESPECIALLY AT INTERSECTIONS) WITH RESPECT TO THEIR INTERFERENCE WITH THE WATER MAIN REPLACEMENT AND/OR INSTALLATION AND SHALL INCLUDE COST OF RESTORATION USING THE RELEVANT UNIT PRICE ITEMS.
- ALL SIDEWALKS, DRIVEWAYS, SERVICE WALKS, CURBS, UTILITY POLES, TRAFFIC SIGNAL POLES, LIGHT POLES, TREES, LAWNS, ETC., MAY NOT BE SHOWN ON THESE DRAWINGS. THE BIDDER SHALL VISIT THE PROJECT SITE AND MAKE THEIR OWN DETERMINATION OF THE SITUATION AND INCLUDE ALL WORK AND RESTORATION INVOLVING THESE ELEMENTS USING THE RELEVANT UNIT PRICE ITEMS.
- CONTRACTOR IS RESPONSIBLE FOR TREE TRIMMING AS REQUIRED PER PROJECT NEED IN CITY OF DETROIT STREET RIGHT-OF-WAYS AND SEWER EASEMENTS IN BACKYARDS AND ALLEYS. TREE TRIMMING MUST BE PERFORMED BY QUALIFIED PERSONNEL AND IN ADVANCE THAT MAY AFFECT OVERHANGING LIMBS OR BRANCHES. NOTIFY THE ENGINEER IN ADVANCE OF ANY TREE TRIMMING THAT WILL NEED TO BE PERFORMED SO THAT THE ENGINEER MAY NOTIFY THE APPLICABLE CITY OF DETROIT DEPARTMENT INSPECTOR.
- EXACT LOCATION AND DEPTH OF EXISTING WATER MAINS AT GATE VALVES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- WATER MAIN CONSTRUCTION OR REPLACEMENT IN CLOSE PROXIMITY TO UTILITY POLES, CATCH BASINS, TREES, ETC., MAY REQUIRE TUNNELING AND/OR THE USE OF CASING PIPES OR APPLYING BENDS TO OFFSET OBSTRUCTION WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT WORK AND INCLUDED IN THE UNIT PRICE OF THE PIPE INSTALLATION. THE SUPPORT OF THESE STRUCTURES IF NECESSARY SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT WORK AND INCLUDED IN THE UNIT PRICE OF THE PIPE INSTALLATION.
- UNLESS OTHERWISE NOTED AND SHOWN ON THE DRAWINGS, ALL SERVICE CONNECTIONS 3 INCHES AND LARGER ON EXISTING WATER MAINS ARE ASSUMED AS TAPPING SLEEVE AND VALVE CONNECTIONS AND SHALL BE RECONNECTED TO THE NEW WATER MAIN BY INSTALLING TEES, GATE VALVES AND GATE BOXES, ALL AT THE ESTABLISHED UNIT PRICE.
- THE CONTRACTOR SHALL REPLACE ALL EXISTING FITTINGS WITH NEW FITTINGS (AT ALL WATER MAIN CONNECTIONS), AT NO ADDITIONAL COST TO THE DWSD, UNLESS OTHERWISE NOTED ON DRAWINGS.
- THE CONTRACTOR SHALL CONNECT ALL EXISTING DUCTILE IRON, CAST IRON AND COPPER SERVICES ON PRIVATE PROPERTY TO THE NEW WATER MAIN THROUGH NEW WATER SERVICE LINE COMPONENTS IN THE PUBLIC RIGHT-OF-WAY. FOR SERVICES FOUR INCHES AND LARGER, INSTALL REQUIRED TEE, DI WATER MAIN PIPE, GATE VALVE AND GATE BOX. FOR THREE INCH SERVICES, INSTALL 4 INCH TEE, 4 INCH DI WATER MAIN PIPE, 4 INCH GATE VALVE, GATE BOX AND REDUCER. FOR SERVICES AT LEAST ONE INCH AND SMALLER THAN THREE INCHES, INSTALL CORPORATION STOP, COPPER TUBING, CURB STOP AND CURB BOX WITH FOOT PIECE SIZED FOR THE EXISTING SERVICE. FOR SERVICES SMALLER THAN ONE INCH, INSTALL 1 INCH CORPORATION STOP, 1 INCH COPPER TUBING, 1 INCH CURB STOP, CURB BOX WITH FOOT PIECE AND REDUCER. ALL LEAD WATER SERVICE LINES SHALL BE REPLACED WITH THE MINIMUM 1 INCH DIA. COPPER TUBING FROM THE NEW WATER MAIN TO WATER METERS INSIDE THE PROPERTIES.
- ALL RELATED PIPING AND APPURTENANCES SHALL HAVE WAX TAPE APPLICATION.
- EXISTING GATE VALVES AND GATE WELLS TO REMAIN THAT WERE DAMAGED DURING PIPE AND/OR VALVE INSTALLATION SHALL BE REPLACED WITH THE NEW VALVE AND/OR WELL BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO DWSD.
- DWSD STANDARD CONCRETE THRUST BLOCKS SHALL BE PLACED ON ALL FITTINGS, AND OLD THRUST BLOCKS REMOVED EXCEPT AS NOTED ON THE DRAWINGS. VERTICAL THRUST BLOCKS FOR TOP BENDS WILL REQUIRE REINFORCING STEEL. FOR VERTICAL THRUST BLOCKS AT VERTICAL BENDS, SEE DWSD STANDARD DETAIL SHEET. THE CONTRACTOR SHALL PLACE VERTICAL THRUST BLOCKS AT ALL VERTICAL BENDS 22-1/2 DEGREES AND LARGER
- THE CONTRACTOR SHALL PROVIDE TEMPORARY RESTRAINTS (BRACED PLUGS, CAPS, VALVES, ETC.) AS REQUIRED TO KEEP ALL EXISTING WATER MAINS IN SERVICE OR WITH MINIMAL SHUT DOWN TIME AS DIRECTED BY THE ENGINEER, UNLESS TEMPORARY SERVICES ARE PROVIDED. THE BIDDER SHALL INCLUDE THIS WORK IN THE UNIT PRICE OF THE PIPE INSTALLATION.
- IN COMPLIANCE WITH MICHIGAN PUBLIC ACT 53 OF THE ACTS OF 1974, THE CONTRACTOR SHALL NOTIFY, 3 WORKING DAYS (72 HOURS) IN ADVANCE OF CONSTRUCTION, ALL PUBLIC AND PRIVATE OWNERS HAVING EXISTING FACILITIES IN OR NEAR THE IMMEDIATE WORKING AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS AND NOTIFYING MISS DIG (PHONE: 811 OR 1-800-482-7171).
- ALL SIDEWALK AND SIDEWALK RAMP REPLACEMENT IN THE CITY OF DETROIT RIGHT-OF-WAY SHALL BE ADA COMPLIANT. IN ADDITION, THE SIDEWALK CROSS-SLOPE SHALL NOT BE GREATER THAN 2% AND SHALL BE SLOPED TO ASSURE DRAINAGE TO THE STREET (TRY TO MAINTAIN A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW). THE LONGITUDINAL SLOPE OF THE SIDEWALK RAMP SHALL NOT EXCEED 8% - THE CURRENT ADA STANDARD.
- MANHOLE COVERS, GATE BOXES, FIRE HYDRANTS AND ANY SURFACE ITEMS SHALL NOT BE LOCATED IN SIDEWALK RAMPS, LANDINGS OR CROSSWALKS. STOP BOXES SHALL BE LOCATED AT THE RIGHT-OF-WAY (PROPERTY LINE) WHICH IS 1' BEHIND THE BACK OF SIDEWALK IN MOST CASES.
- THE BIDDER'S ATTENTION IS DIRECTED TO THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE REQUIREMENTS OF THE CITY ENGINEERING DIVISION OF THE DEPARTMENT OF PUBLIC WORKS (D.P.W.), CITY OF DETROIT.
- CURB OR CURB AND GUTTER CALLED OUT TO BE INSTALLED SHALL BE PLACED PER THE CITY OF DETROIT'S STANDARD DETAIL INCLUDED IN THESE PLANS. FOUND AT: >HTTPS://DETROITMI.GOV/DOCUMENT/CITY-DETROIT-STREET-AND-ALLEY-STANDARDS
- IF PARKING RESTRICTIONS ADJACENT TO THE CONTRACTOR'S WORK ZONE DO NOT ALLOW OVERNIGHT PARKING OR RESTRICT DAYTIME PARKING, THE CONTRACTOR SHALL PROVIDE ACCESS TO PRIVATE PROPERTIES DURING ALL TIMES WITH A TEMPORARY PAVEMENT CONSTRUCTED OF 6 INCH AGGREGATE BASE COMPACTED IN PLACE. THIS INCLUDES, BUT IS NOT LIMITED TO, PROVIDING A TEMPORARY RAMP TO CROSS ANY TEMPORARY WATER PIPES OR EXCAVATIONS THAT MAY LIMIT ACCESS TO DRIVEWAYS. TEMPORARY PAVEMENT SHALL BE MAINTAINED AT ALL TIMES.
- THE TRAFFIC REQUIREMENTS SET FORTH BY THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS (D.P.W.), TRAFFIC ENGINEERING DIVISION, THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES (W.C.D.P.S.) AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) ARE INCLUDED IN THE CONTRACT SPECIFICATIONS. WHERE THE REQUIREMENTS CONFLICT, THE MOST STRINGENT WILL GOVERN.
- AT LOCATIONS WHERE THERE IS INSUFFICIENT VERTICAL (18") OR HORIZONTAL (3') CLEARANCE BETWEEN NEW WATER MAIN AND EXISTING UTILITIES, THE CONTRACTOR SHALL CONSTRUCT THE NEW WATER MAIN AS DIRECTED BY THE DWSD ENGINEER. THIS INCLUDES THE USE OF VERTICAL OR HORIZONTAL BENDS WHERE REQUIRED. THE USE OF BENDS SHALL BE INCIDENTAL TO THE WORK AND COSTS SHALL BE INCLUDED IN THE LINEAR FOOT UNIT PRICE OF PIPE INSTALLATION.
- NEW WATER MAINS ARE TO BE INSTALLED AT A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION MEASURED FROM OUTER EDGE OF WATER MAIN TO OUTER EDGE OF SANITARY AND/OR STORM SEWERS OR SEWER MANHOLES OR CATCH BASINS. IF TEN FEET (10') HORIZONTAL CLEARANCE CANNOT BE ATTAINED, THE NEW WATER MAIN SHALL BE INSTALLED AT THE LOCATION AS DIRECTED BY THE DWSD ENGINEER.
- A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION OUTER EDGE TO OUTER EDGE SHALL BE MAINTAINED AT ALL TIMES WHERE A WATER MAIN CROSSES A SANITARY OR STORM SEWER WITH A FULL LENGTH OF WATER MAIN PIPE CENTERED ON THE CROSSING SO THAT JOINTS ARE AS FAR FROM THE SEWER CROSSING AS POSSIBLE TO MINIMIZE POTENTIAL FOR CROSS CONTAMINATION. ACTUAL DEPTHS OF EXISTING WATER MAINS AND SEWERS SHALL BE VERIFIED IN THE FIELD. REFER TO DWSD STANDARD DETAIL NO. 312333-07.
- EXISTING WATER MAINS ARE TO BE REPLACED ACCORDING TO THE SIZE AND MATERIAL SHOWN IN THE SPECIFICATIONS AND ON THE DRAWINGS. DUCTILE IRON WATER MAINS ARE TO BE INSTALLED WITH AN 8-MIL POLYETHYLENE WRAP. HDPE PIPES ARE TO BE INSTALLED WITH TRACER WIRE AND GROUNDING. ALL MECHANICAL FITTINGS, BOLTS AND ACCESSORIES SHALL BE WRAPPED WITH WAX TAPE OR SIMILAR IN ADDITION TO POLYETHYLENE WRAP. FURTHER, INSTALLATION OF POLYETHYLENE WRAP SHALL MEET THE SPECIFICATION (AND/OR MANUFACTURERS) REQUIREMENTS INCLUDING OVERLAPPING AND JOINING INDIVIDUAL PIECES WITH APPROVED TAPE.
- THE MINIMUM BURIAL DEPTH FOR NEW WATER MAIN SHOULD NOT BE LESS THAN 5 FEET TO PROTECT FROM FREEZING. IF THE BURIAL DEPTH WILL BE LESS THAN 5 FEET, DWSD SHALL BE NOTIFIED AND INSULATION SHALL BE USED. THE FORM OF INSULATION AND LOCATION OF INSTALLATION MAY OR MAY NOT BE INDICATED ON THE DRAWINGS. REFER TO DWSD STANDARD DETAIL NO. 330700-01 FOR WATER MAIN TRENCH INSULATION.
- EXISTING WATER MAINS TO BE CUT AND ABANDONED FOR NEW WATER MAIN CONSTRUCTION SHALL BE BULK HEADED AND FILLED WITH PUMPED FLOWABLE FILL PER THE DETAILED SPECIFICATIONS. THE CONTRACTOR SHALL CUT AND CAP OR PLUG EXISTING WATER MAINS TO REMAIN IN SERVICE WHERE REQUIRED.
- THE CONTRACTOR IS REFERRED TO SPECIFICATION 31 50 00 "EXCAVATION SUPPORT SYSTEM" FOR SHEETING AND BRACING REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE SHEETING AND BRACING TO PROTECT ADJACENT PAVEMENT, CURBS, SIDEWALKS, PIPELINES, CONDUITS, THE WORK AND PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES AND INJURIES RESULTING FROM A FAILURE TO PROVIDE ADEQUATE SHEETING AND BRACING, AT NO ADDITIONAL COST TO DWSD.
- IF A CRANE, BACKHOE OR A BOOM WILL BE USED IN THE VICINITY OF ANY UTILITY OVERHEAD LINES, THE RESPECTIVE UTILITY STAKEHOLDER MUST BE NOTIFIED AND COORDINATED FOR CONSTRUCTION ACTIVITIES, AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION WORK.
- THE CONTRACTOR SHALL EXPOSE EXISTING WATER MAINS AT POINTS OF CONNECTION AND VERIFY THEIR LOCATION AND ELEVATION PRIOR TO PIPE LAYING.
- ALL BLOW-OFF ASSEMBLIES, PLUGS AND CAPS TO BE INSTALLED AND/OR REMOVED BY THE CONTRACTOR HAVE NOT BEEN SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL INSTALL AND/OR REMOVE BLOW-OFF ASSEMBLIES, PLUGS, AND CAPS WHERE NECESSARY AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO DWSD BLOW-OFF AND OTHER HARDWARE REMAINS THE PROPERTY OF DWSD UNLESS OTHERWISE PROVIDED FOR IN THE DRAWINGS.
- THE DRAWINGS INDICATE THE ARRANGEMENT, GENERAL DESIGN AND EXTENT OF THE WATER MAIN ALTERATIONS. THE MAINS AND CONNECTIONS ARE SHOWN, MORE OR LESS, IN DIAGRAM AND IN THEIR GENERAL LOCATIONS, EXCEPT WHERE IN CERTAIN CASES THE DRAWINGS MAY INCLUDE DETAILS GIVING THE EXACT LOCATION AND ARRANGEMENT. DUE TO THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, VALVES AND ACCESSORIES THAT ARE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND OTHER CONDITIONS AFFECTING ALL THE WORK AND SHALL ARRANGE AND PERFORM THEIR WORK UNDER THIS CONTRACT ACCORDINGLY, FURNISHING AND INSTALLING SUCH ITEMS OF MATERIAL AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO DWSD.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING SEWERS, WATER MAINS, DRAINS AND DRAINAGE DITCHES INCLUDING ANY PUBLIC OR PRIVATE UTILITY, OVERHEAD OR UNDERGROUND. IF ANY UTILITIES, DRAINS AND DRAINAGE DITCHES ARE DAMAGED DURING CONSTRUCTION, THEY SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DWSD, TO THE SATISFACTION OF THE ENGINEER, THE UTILITY OWNER AND THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL CONTACT INDIVIDUAL UTILITY COMPANY IMMEDIATELY FOLLOWING THE DAMAGE. DAMAGE TO OTHER UTILITIES- ELECTRIC, GAS, OIL, COMMUNICATIONS ETC. BOTH OVERHEAD AND UNDERGROUND IN MOST CASES BE PERFORMED BY THE INDIVIDUAL UTILITY COMPANIES AND NOT BY THE CONTRACTOR; HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ARRANGEMENTS AND PAYING FOR THE COST OF THE REPAIR.
- REFER TO SOIL EROSION AND SEDIMENTATION CONTROL NOTES AS SPECIFIED IN STANDARD DETAILS SHEET SD-4 AND SD-5.
- FOR RESTORATION ITEMS, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERING DIVISION STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION LATEST AVAILABLE STANDARD SPECIFICATIONS FOR CONSTRUCTION EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS AND SPECIFICATIONS.

- ACTUAL LOCATIONS, NUMBER AND SIZING OF ACCESS PITS FOR TRENCHLESS WATER MAIN INSTALLATION SHALL BE DETERMINED BY THE CONTRACTOR BASED ON HIS/HER MEANS AND METHOD AND DWSD PRIOR APPROVAL. CONTRACTOR IS RESPONSIBLE FOR SIZING, SPACING, NECESSARY SUPPORTING/BRACING WITH ASSOCIATED RESTORATION OF ACCESS PITS, TO THE SATISFACTION OF THE DWSD AND AT NO ADDITIONAL COST TO DWSD.
- DISTURBED PAVEMENT ACROSS INTERSECTIONS, DISTURBED PAVEMENT ACROSS THE STREET, DISTURBED SIDEWALK/SIDEWALK RAMPS AND DISTURBED DRIVEWAYS SHALL BE RESTORED WITH 6" AGGREGATE BASE COMPACTED IN PLACE INSTALLED THE SAME DAY. IT SHALL BE MAINTAINED UNTIL THE PERMANENT RESTORATION IS IN PLACE. ASPHALT COLD PATCH SHALL BE REQUIRED IF THE PERMANENT RESTORATION TAKES LONGER THAN 6 WEEKS. ALSO REFER TO AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE), BOOK 1 OF BIDDING DOCUMENTS CONTRACT TIMES FOR HARD SURFACE RESTORATION.
- COORDINATE SHUTDOWN OF THE EXISTING WATER MAIN WITH THE OWNER/ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE. IN ORDER TO MAKE CONNECTION AND INSTALL NEW VALVES, THE EXISTING MAIN MAY ONLY BE SHUT-DOWN FOR A MAXIMUM OF TEN (10) HOURS. NO ADDITIONAL SHUTDOWNS ARE PERMITTED UNLESS APPROVED IN WRITING BY THE OWNER. CONTRACTOR IS NOT ALLOWED TO PROCEED WITH A SHUT-DOWN OF ANY EXISTING WATER MAIN WITHOUT WRITTEN APPROVAL OF THE SHUT-DOWN REQUEST PLAN.
- CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS TO PRIVATE PROPERTIES THAT ARE DISTURBED DUE TO CONSTRUCTION OF PROPOSED IMPROVEMENTS, AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE DWSD.
- CONTRACTOR TO PERFORM WORK IN ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- STANDARD DETAILS SHOWN ON THE STANDARD DETAIL (SD) DRAWINGS SHALL BE APPLIED FOR ALL NEW CONSTRUCTION.
- DETAILS AND INFORMATION SHOWN ON THE TRAFFIC PLANNING (TP) DRAWINGS SHALL BE APPLIED FOR ALL NEW CONSTRUCTION AND RESTORATION.
- DWSD STANDARD DETAIL NO. 331417-01 AS SHOWN ON STANDARD DETAIL SHEET SHALL BE APPLIED FOR ALL SERVICE CONNECTIONS CONNECTED TO HDPE WATER MAIN, DUCTILE IRON WATER MAIN AND ALL LINED WATER MAIN.
- CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS (DPW) HAS PROVIDED SPEED HUMPS OR SPEED CUSHIONS IN SOME STREETS IN PROJECT AREA. DURING THE WATER MAIN INSTALLATION / REHABILITATION IN THESE STREETS THE EXISTING SPEED HUMPS/CUSHION MAY BE IN CONFLICT WITH THE WATER MAIN ALIGNMENT AND ACCESS PIT LOCATIONS. CONTRACTOR SHALL SCHEDULE AND COORDINATE WITH D.P.W. FOR USING ONLY D.P.W. APPROVED QUALIFIED CONTRACTOR FOR THE REMOVAL AND RE-INSTALLATION OF SPEED CUSHION AND/OR SPEED HUMP. THE D.W.S.D. CONTRACTOR WILL BE REIMBURSED BY DWSD FOR THE PAID WORK FROM THE PROVISIONAL ALLOWANCE AGAINST THE INVOICE APPROVED BY THE D.P.W.

**LEGEND**



**ABBREVIATIONS**

ASPH	ASPHALT PAVEMENT	PLD	PUBLIC LIGHTING DEPARTMENT
AC	ASBESTOS CEMENT PIPE	ROW	RIGHT OF WAY
C.E.D.	CITY ENGINEERING DIVISION	SAC	ASPHALT ABOVE CONCRETE
CONC.	CONCRETE	SPL/NPL/EPL/WPL	SOUTH/NORTH/EAST/WEST
DTE/D.E. CO	DETROIT EDISON COMPANY		PROPERTY LINE
DWSD	DETROIT WATER AND SEWERAGE DEPT.	PROP.	PROPOSED
EX.	EXISTING	STM	STORM
F.G.	FINISH GROUND	UN-DEAD	UNKNOWN MATERIAL - DEAD
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HDD	HORIZONTAL DIRECTIONAL DRILLING	VM	WATERMAIN
HMA	HOT MIX ASPHALT	VMR	WATERMAIN RESTORATION
HYD.	HYDRANT	WS	WATER SERVICE
I.E.	INVERT ELEVATION	WTR.	WATER
PLA	PUBLIC LIGHTING AUTHORITY		

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
2	08/07/24		DWSD REVIEW	4	10/11/24		ADDENDUM #1
3	08/27/24		ISSUED FOR BID	5	11/21/24		EGLE REVIEW

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 350 GERRARD AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.237.4099  
 EMAIL: ORBERTSON@MDCDC.ORG



DESIGNED BY : **DAVID RYZYI**  
 DRAWN BY : **KCC**  
 CHECKED BY : **DAVID RYZYI**

APPROVED BY :  
 DATE: 07/11/2024

CS:  
 JN:



Know what's below.  
 Call before you dig.

W:\Projects\2023\401.2300001.00199\401.2300198.000\AD\SH\TASK\_3000\01.GENERAL NOTES.dwg Last saved 8/27/2024 11:50 AM by KCCok, plotted 11/21/2024 1:47 PM

**SOIL EROSION AND SEDIMENTATION CONTROL**

1. REFER TO SPECIFICATION 01 57 13 IN DWSD SPECIFICATIONS FOR THE CONTRACTOR'S RESPONSIBILITIES CONCERNING SOIL EROSION AND SEDIMENTATION CONTROL. REFER TO SHEETS SD-5 AND SD-6 FOR SOIL EROSION AND SEDIMENTATION CONTROL DETAILS.
2. THE CONTRACTOR SHALL ARRANGE HIS CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT THE CONSTRUCTION AREA WILL NOT BE SUSCEPTIBLE TO SOIL EROSION AND THAT THE CONSTRUCTION OPERATIONS WILL NOT CREATE ANY SILTATION PROBLEMS.
3. THE CONTRACTOR SHALL EMPLOY NECESSARY MEANS AND METHODS TO PREVENT EXCAVATED AND LOOSE SOIL MATERIAL FROM BEING COLLECTED ON TIRES OF TRUCKS AND OTHER EQUIPMENT AND BEING DEPOSITED ON STREETS AND ROADS TO AND FROM THE CONSTRUCTION SITE.
4. THE CONTRACTOR SHALL CONTROL DUST AT THE CONSTRUCTION SITE AND ON THE PUBLIC STREETS USED AS HAUL ROADS. THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW THE REGULATIONS OUTLINED BY THE CITY OF DETROIT FUGITIVE DUST ORDINANCE NO. 32-17 CHAPTER 22, ARTICLE 5.
5. THE DISTANCE BETWEEN THE POINT OF COMPLETE BACK FILLING AND THE PIPE LAYING SHALL NOT EXCEED 40 FEET.
6. THE CONTRACTOR SHALL EMPLOY POSITIVE MEANS TO PREVENT SOIL AND OTHER DEBRIS FROM ENTERING THE EXISTING STREET DRAINAGE SYSTEM. THE EXISTING CATCH BASIN AND DRAIN SYSTEM IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN TO AT LEAST THE CONDITIONS PRIOR TO CONSTRUCTION.
7. IN ADDITION TO THE ABOVE REQUIREMENTS, THE CONTRACTOR'S ATTENTION IS DIRECTED SPECIFICALLY TO DIVISION 14E, "EROSION CONTROL PROGRAM" OF THE CITY ENGINEERING DEPARTMENT'S CURRENT "STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION." LOCATED AT: <https://detroitmi.gov/document/standard-specifications-paving-and-related-construction>
8. THE CONTRACTOR SHALL PERFORM ALL ACTIVITIES NECESSARY TO COMPLY WITH THE TEMPORARY EROSION AND SEDIMENT CONTROL SPECIFICATION AND THE CITY ENGINEERING EROSION CONTROL PROGRAM.
9. PERMITTEE AND CONTRACTORS ARE SUBJECT TO: PUBLIC ACT 451 OF 1994, AS AMENDED PART 201. IN THE EVENT OF EXCAVATION ENCOUNTERING ENVIRONMENTAL CONTAMINATION OR AN UNDERGROUND TANK IN MDOT AND/OR OTHER PROJECT RIGHT OF WAY, WORK WITHIN THE RIGHT OF WAY SHALL CEASE UNTIL ALL ACTIONS/NOTIFICATIONS SPECIFIED BY PART 201 HAVE BEEN COMPLETED.
10. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT, WITH THE EXCLUSION OF THE GREEN STORM WATER INFRASTRUCTURE WORK.

**RESTORATION NOTES**

**1 HARD AND SOFT SURFACE RESTORATION**

THE RESTORATION OF ALL SITE WORK ACROSS THIS PROJECT SHALL BE DEFINED TO INCLUDE HARD SURFACE AND SOFT SURFACE RESTORATION. HARD SURFACE AND SOFT SURFACE RESTORATION WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT INCLUDED IN THE RELATED UNIT PRICES OF WORK ITEMS. THE HARD AND SOFT SURFACE RESTORATION OF WORKING AREA BEYOND THE WATER MAIN OR SEWER SCOPE STATIONING AS SHOWN ON THE PROJECT PLANS SHALL ALSO BE INCLUDED IN THE UNIT PRICES OF RELATED WATER MAIN OR SEWER WORK ITEMS. THE HARD SURFACE AND SOFT SURFACE RESTORATION SHALL INCLUDE THE FOLLOWING:

- a. FURNISHING MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE FULL RESTORATION AND FINAL CLEAN-UP OF THE SITE INCLUDING BUT NOT LIMITED TO REPLACEMENT AND INSTALLATION OF SIDEWALKS, ADA RAMPS, DRIVEWAYS, CURB, CURB AND GUTTER, FULL AND/OR PARTIAL DEPTH HMA PAVEMENT, FULL AND/OR PARTIAL DEPTH CONCRETE PAVEMENT OF CITY OF DETROIT RESIDENTIAL AND MAJOR STREETS; WAYNE COUNTY ROADS AND MDOT ROADS, BRICK PAVERS, REGRADING, PLACING 4-INCH TOP SOIL, MULCHED SEEDING, SODDING, WATERING AND OTHER RESTORATION ITEMS.
- b. FURNISHING MATERIALS, LABOR, AND EQUIPMENT FOR WORK ASSOCIATED WITH FURNISHING, PLACING, AND PREPARATION OF BASE MATERIALS NECESSARY FOR THE INSTALLATION OF THE SURFACE CONCRETE, HMA, BRICK, ITEMS AS MENTIONED.
- c. ALL WORK UNDER THIS ITEM SHALL BE PERFORMED TO THE STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LOCAL JURISDICTION OR PERMITTING AGENCY WITH AUTHORITY IN THE RIGHT OF WAY WHERE THE WORK IS PERFORMED.
- d. HARD SURFACE AND SOFT SURFACE RESTORATION SHALL INCLUDE AND APPLY TO THE CITY OF DETROIT HMA RESIDENTIAL STREETS, CITY OF DETROIT HMA CLASS C STREETS, CITY OF DETROIT CONCRETE PAVING STREETS, CITY OF DETROIT RESIDENTIAL STREETS WITH HMA SURFACE OVER CONCRETE BASE, CITY OF DETROIT MAJOR STREETS WHICH SHALL BE CONSTRUCTED TO THE MINIMUM REQUIREMENTS AS IDENTIFIED IN THE CROSS-SECTION DETAILS IN THE DRAWINGS, PER THE DPW STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION, AND THE DPW STREET AND ALLEY STANDARD PLANS, AND THE ROADS UNDER THE WAYNE COUNTY AND MICHIGAN DEPARTMENT OF TRANSPORTATION JURISDICTION ABIDING BY THEIR STANDARDS AND PERMIT REQUIREMENTS.

THE FOLLOWING NON-EXHAUSTIVE LIST DESCRIBES TYPICAL WORK THAT IS INCLUDED WITH HARD SURFACE AND SOFT SURFACE RESTORATION.

**CONCRETE CURB AND CONCRETE CURB AND GUTTER**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR REMOVAL AND INSTALLATION OF CONCRETE CURB AND CONCRETE CURB AND GUTTER INCLUDING REMOVALS, PREPARATION OF SUBGRADE; FURNISHING REINFORCEMENT BARS, DOWELS, TIE BARS, JOINT FILLER, SEALANT, AND ACCESSORIES; FURNISHING, FORMING, FINISHING, CURING, AND SEALING CONCRETE CURB.

**AGGREGATE BASE**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE REMOVAL AND FURNISHING, PLACING, AND COMPACTING OF AGGREGATE BASE.

ALL AGGREGATE BASE MATERIAL AND PROCEDURES SHALL BE OF THE TYPE AND PLACED TO THE STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LOCAL JURISDICTION OR PERMITTING AGENCY WITH AUTHORITY IN THE RIGHT OF WAY WHERE THE WORK IS PERFORMED.

**CONCRETE BASE**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE REMOVAL AND INSTALLATION OF CONCRETE BASE INCLUDING REMOVAL, FURNISHING REINFORCEMENT BARS, DOWELS, TIE BARS, JOINT FILLER, SEALANT, AND ACCESSORIES; FURNISHING, FORMING, FINISHING, CURING, AND SEALING CONCRETE BASE. WHEN RESTORING WITHIN DETROIT DPW RIGHT OF WAY, THE CONCRETE BASE SHALL BE PLACED PER DPW REQUIREMENTS WHICH STATE THAT THE REMOVAL AND REPLACEMENT OF CONCRETE BASE MUST BE FROM EXISTING JOINT TO JOINT.

ALL CONCRETE BASE MATERIAL AND PROCEDURES SHALL BE OF THE TYPE AND PLACED TO THE STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LOCAL JURISDICTION OR PERMITTING AGENCY WITH AUTHORITY IN THE RIGHT OF WAY WHERE THE WORK IS PERFORMED.

**HMA PAVEMENT MILLING**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE REMOVAL OF HMA PAVEMENT MATERIALS INCLUDING MILLING, HAULING, AND DISPOSAL.

MILLING SHALL BE PERFORMED IN ACCORDANCE WITH DETROIT DPW REQUIREMENTS WHICH STATE TO MILL HMA PAVEMENT BEYOND THE AREA OF THE TRENCH REMOVAL IN ORDER TO DETERMINE LOCATION OF UNDER- LYING CONCRETE BASE PAVEMENT JOINTS AND SHALL BE A MINIMUM WIDTH OF ONE LANE, FULL ROADWAY, OR AS SHOWN ON THE PLANS.

**HMA PAVEMENT**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE INSTALLATION OF HMA PAVEMENT MATERIALS INCLUDING CLEANING AND PREPARING CONCRETE BASE; FURNISHING AND PLACING TACK COAT AND PRIME COAT; FURNISHING, PLACING, COMPACTING HMA PAVEMENT.

PERMANENT PAVEMENT MARKINGS ARE TO BE FURNISHED AND INSTALLED FOLLOWING THE ACCEPTANCE OF HMA PAVEMENT INSTALLATION AND ARE TO BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND MDOT PAVEMENT AND STANDARD MARKING PLANS AND MDOT STANDARD SPECIFICATIONS SECTION 811. A SURVEY OF EXISTING PAVEMENT

**CITY OF DETROIT, DPW, CITY ENGINEERING DIVISION REQUIREMENTS**

1. THE CONTRACTOR SHALL OBTAIN A CITY OF DETROIT STREET RIGHT-OF-WAY PERMIT FROM THE INSPECTION PERMIT OFFICE OF THE ENGINEERING DIVISION.
2. THE CONTRACTOR SHALL COMPLY WITH ALL THE CITY ENGINEERING DIVISION STREET RIGHT-OF-WAY PERMIT REQUIREMENTS.
3. NEW GATE VALVE WELLS, FIRE HYDRANTS AND ANY SURFACE ITEMS SHALL NOT BE LOCATED IN SIDEWALK RAMPS, LANDINGS AND/OR CROSSWALKS.
4. ALL NEWLY CONSTRUCTED OR RECONSTRUCTED SIDEWALKS IN THE CITY OF DETROIT'S RIGHT-OF-WAY, SHALL HAVE A MAXIMUM 2% CROSS-SLOPE. IN ADDITION THERE SHALL BE A SUFFICIENT SLOPE ON THE SIDEWALK TO ASSURE DRAINAGE TO THE STREET (TRY TO MAINTAIN AT LEAST A 1% SLOPE IN THE DIRECTION OF FLOW).
5. THE CONTRACTOR IS REQUIRED TO MEET D.P.W. ROADWAY PATCHING AND SIDE WALK PATCHING PER DIVISION 15 AND AS DETAILED IN THESE PLANS, AND ADA RAMP DETAILS PER MDOT STANDARD PLAN R-28-SERIES.
6. THE CONSTRUCTION CONTRACTOR NEED TO SUBMIT THE CONSTRUCTION PHASING AND DURATION OF EACH PHASE IN ORDER TO MINIMIZE THE IMPACT TO VEHICULAR AND PEDESTRIAN TRAFFIC.
7. WHENEVER SIDEWALKS ARE CLOSED, PEDESTRIAN DETOUR SIGNS NEED TO BE POSTED.

MARKINGS PRIOR TO THE WORK SHALL BE TAKEN WITH FINAL PLACEMENT TO BE IN-KIND OR AS STATED IN THE STANDARDS LISTED HEREIN.

ALL HMA MIXES AND PROCEDURES SHALL BE OF THE TYPE AND PLACED TO THE STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LOCAL JURISDICTION OR PERMITTING AGENCY WITH AUTHORITY IN THE RIGHT OF WAY WHERE THE WORK IS PERFORMED.

**CONCRETE PAVING**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE REMOVAL AND INSTALLATION OF CONCRETE PAVING INCLUDING REMOVAL, FURNISHING REINFORCEMENT BARS, DOWELS, TIE BARS, JOINT FILLER, SEALANT AND ACCESSORIES; FURNISHING, FORMING, FINISHING, CURING, AND SEALING CONCRETE PAVING.

**BRICK PAVERS**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE REMOVAL, SALVAGE, AND REPLACEMENT OF BRICK PAVING IN KIND INCLUDING PREPARATION OF SUBGRADE; FURNISHING AND COMPACTING BRICK PAVER SAND BASE; FURNISHING AND PLACING REPLACEMENT BRICKS, EDGE RESTRAINTS, AND JOINT SAND.

BRICK PAVERS LOCATED WITHIN THE EXCAVATION AREA ARE TO BE REMOVED, SALVAGED, AND REPLACED TO MATCH THE PATTERNS AND BRICK COLOR OF THE EXISTING ROADWAY.

IF DURING REMOVAL AND REPLACEMENT THE BRICK PAVERS ARE DAMAGED AND NEED TO BE REPLACED, THE REPLACEMENT BRICKS SHALL BE FURNISHED IN THE SAME SIZE, COLOR AND PATTERN OF THE EXISTING BRICKS AND TREATED TO MATCH AS CLOSELY AS POSSIBLE TO THE EXISTING ROADWAY BRICK PAVERS.

PERMANENT PAVEMENT MARKINGS TO BE REPLACED IN KIND ARE TO BE FURNISHED AND INSTALLED FOLLOWING THE ACCEPTANCE OF BRICK PAVER INSTALLATION AND ARE TO BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND MDOT PAVEMENT AND STANDARD MARKING PLANS AND MDOT STANDARD SPECIFICATIONS SECTION 811. A SURVEY OF EXISTING PAVEMENT MARKINGS PRIOR TO THE WORK SHALL BE TAKEN WITH FINAL PLACEMENT TO BE IN-KIND OR AS STATED IN THE STANDARDS LISTED HEREIN.

**SIDEWALKS AND INTEGRAL CURB ALONG THE SIDEWALK**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE INSTALLATION OF SIDEWALK INCLUDING PREPARATION OF SUBGRADE; FURNISHING AND COMPACTING SIDEWALK BASE; FURNISHING REINFORCEMENT BARS, DOWELS, TIE BARS, JOINT FILLER, SEALANT, AND ACCESSORIES; FURNISHING, FORMING, FINISHING, CURING, AND SEALING CONCRETE SIDEWALK.

**DRIVEWAYS AND INTEGRAL CURB ALONG THE DRIVEWAY**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE INSTALLATION OF RESIDENTIAL, COMMERCIAL, AND ALL OTHER DRIVEWAY INCLUDING PREPARATION OF SUBGRADE; FURNISHING REINFORCEMENT BARS, DOWELS, TIE BARS, JOINT FILLER, SEALANT AND ACCESSORIES; FURNISHING, FORMING, FINISHING, CURING, AND SEALING CONCRETE DRIVEWAY. ALL DRIVEWAY MATERIAL AND PROCEDURES SHALL BE OF THE TYPE AND PLACED TO THE STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LOCAL JURISDICTION OR PERMITTING AGENCY WITH AUTHORITY IN THE RIGHT OF WAY WHERE THE WORK IS PERFORMED.

**GRADING, PLACING 4-INCH-DEEP TOPSOIL, MULCHED SEEDING, SODDING AND WATERING (REFEREED TO ALSO AS SOFT SURFACE RESTORATION)**

THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE COMPLETION OF GRADING, PLACING 4-INCH TOPSOIL MULCHED SEEDING, SODDING, WATERING AND MAINTENANCE.

MAINTENANCE OF MULCHED SEEDING AND ALL REQUIREMENTS OF THE SPECIFICATIONS SHALL INCLUDE WATERING FOLLOWING PLACEMENT AND DAILY WATERING, IF NECESSARY, FOR THE FIRST TWO WEEKS.

**SODDING**

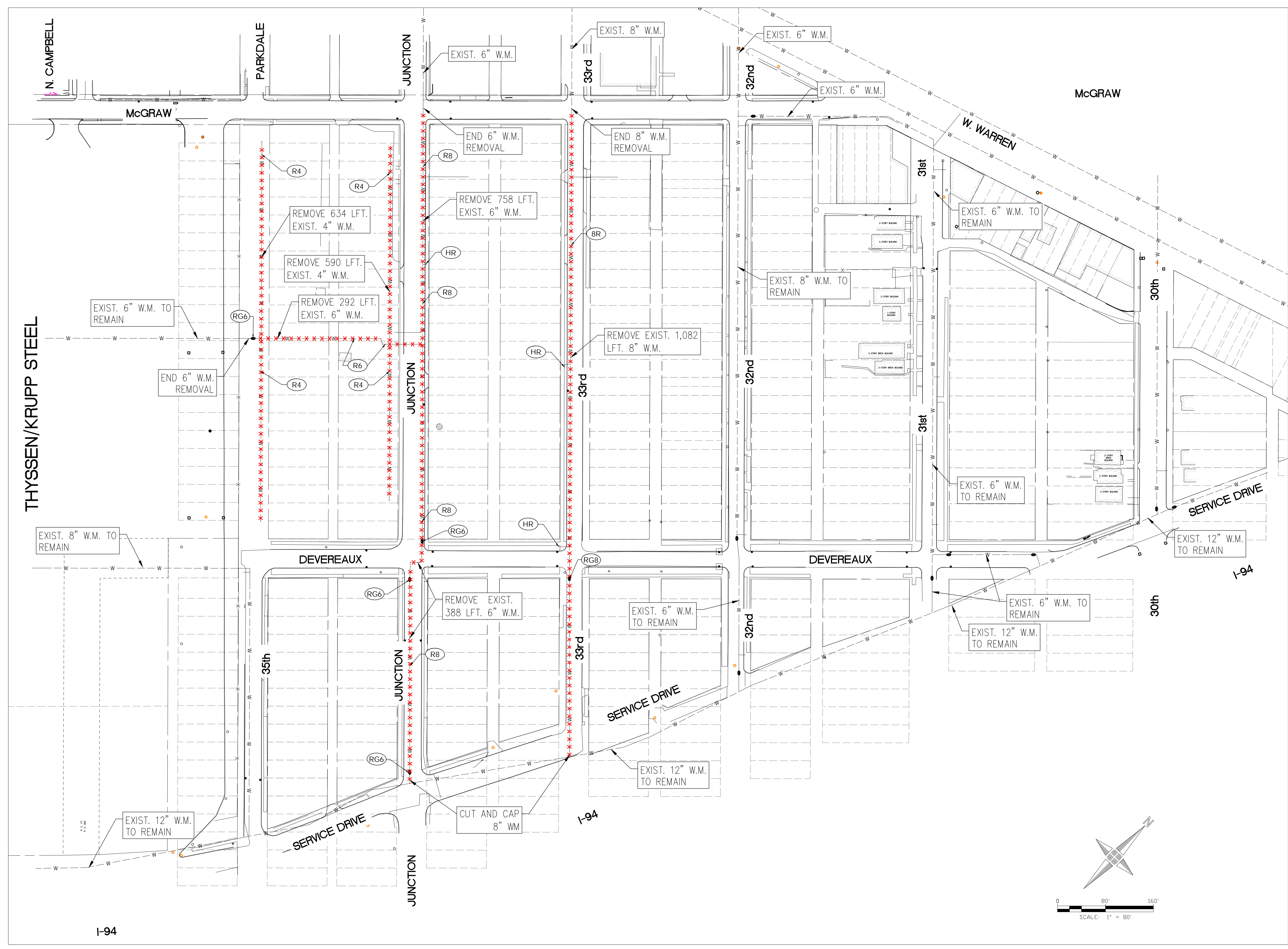
THE MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTAL MATERIALS NECESSARY FOR THE COMPLETION OF SOD INSTALLATION INCLUDING FURNISHING, PLACING, GRADING, MAINTENANCE, AND WATERING TOPSOIL AND SOD.

MAINTENANCE OF SOD AND ALL REQUIREMENTS OF THE SPECIFICATIONS SHALL INCLUDE WATERING WITHIN THE FIRST THIRTY (30) MINUTES FOLLOWING PLACEMENT AND DAILY FOR THE FIRST TWO WEEKS.



Know what's below.  
Call before you dig.

PLAN REVISIONS						DEVELOPER	 TECHNICAL SKILL. CREATIVE SPIRIT.	DESIGNED BY :	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH		DESCRIPTION	DATE:	JN:		
2	08/07/24		DWSD REVIEW	4	10/11/24			ADDENDUM #1		07/11/2024		GENERAL NOTES
3	08/27/24		ISSUED FOR BID	5	11/21/24		EGLLE REVIEW					



**NOTES:**

1. THE LOCATION OF SEWER LEADS FROM CATCH BASINS ARE NOT KNOWN. CONTRACTOR SHALL IDENTIFY DEPTH OF STORM AT CROSSINGS AND USE PIPE DEFLECTIONS AND/OR BENDS TO MAINTAIN CLEARANCES AS INDICATED IN LEGEND, ABBREVIATIONS, AND GENERAL NOTES SHEET, WHERE NECESSARY.
2. CONTRACTORS ARE ALLOWED TO OPERATE 16" AND SMALLER GATE VALVES. CONTRACTORS SHALL SUBMIT A SHUTDOWN REQUEST SKETCH FOR PLAN OF WATER MAIN SHUTDOWNS FOR THE AREA OF WORK.
3. THE CONTRACTOR SHALL REMOVE EXIST. WATER MAIN IN LOCATIONS WHERE PROPOSED WATER MAIN CROSSES THE EXIST. WATER MAIN IF FOUND AT THE SAME ELEVATIONS.
4. ACCESS TO ALL BUSINESSES MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. SHUTDOWNS MUST BE COORDINATED WITH DWSO FOR APPROVAL.
5. CONTRACTOR SHALL CONNECT TO EXISTING GATE VALVE WITH REMOVAL OF EXISTING WATER MAIN WHERE NEEDED.

**KEYED NOTES:**

- R4** REMOVE EXIST. 4-INCH WATER MAIN.
- R6** REMOVE EXIST. 6-INCH WATER MAIN.
- R8** REMOVE EXIST. 8-INCH WATER MAIN.
- RG6** REMOVE EXIST. 6-INCH GATE VALVE & WELL AS DIRECTED BY THE ENGINEER.
- RG8** REMOVE EXIST. 8-INCH GATE VALVE & WELL AS DIRECTED BY THE ENGINEER.
- HR** REMOVE FIRE HYDRANT

**LEGEND**

· · · · · REMOVE WATERMAIN

Fire Hydrant, Remove	4	Ea
Gate Valve and Well, Remove, 6 inch	3	Ea
Gate Valve and Well, Remove, 8 inch	1	Ea
Water Main, Remove, 4 inch	1392	Ft
Water Main, Remove, 6 inch	1438	Ft
Water Main, Remove, 8 inch	1082	Ft

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
2	08/07/24		DWSO REVIEW	4	10/11/24		ADDENDUM #1
3	08/27/24		ISSUED FOR BID	5	11/21/24		EGL REVIEW

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GERRARD AVE. SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.237.4000  
 EMAIL: ORROBERTSON@DBRA.ORG

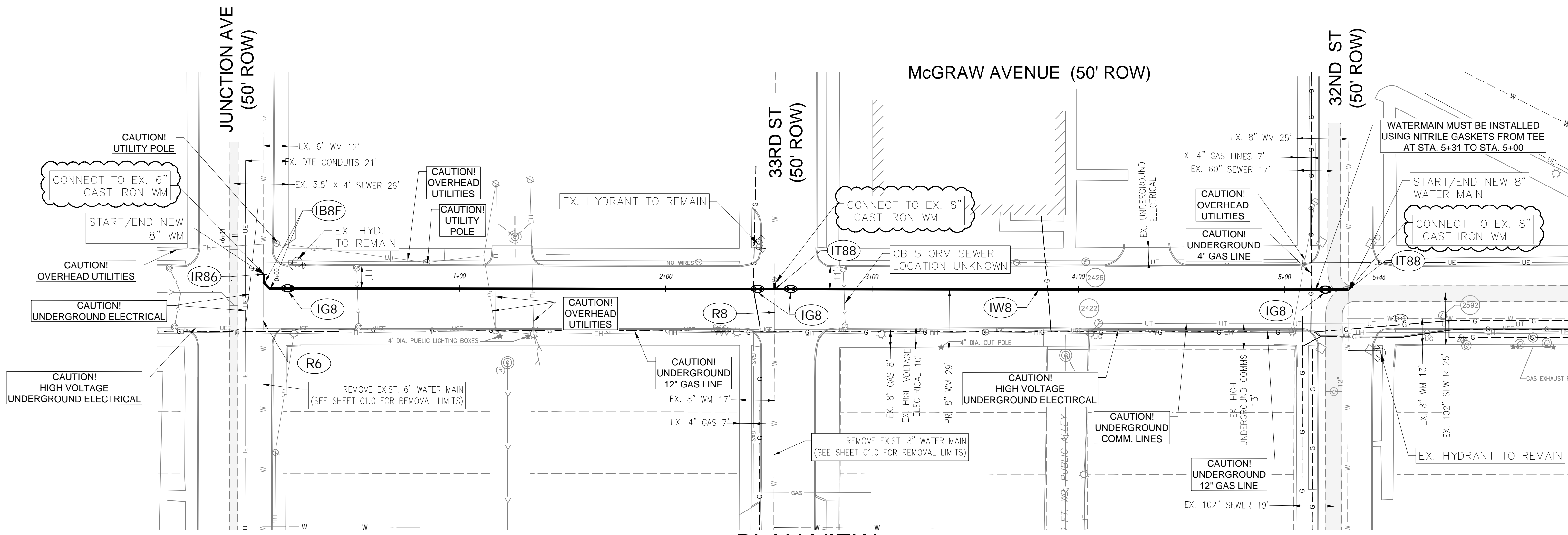


DESIGNED BY : **DAVID RYZYI**  
 DRAWN BY : **KCC**  
 CHECKED BY : **DAVID RYZYI**

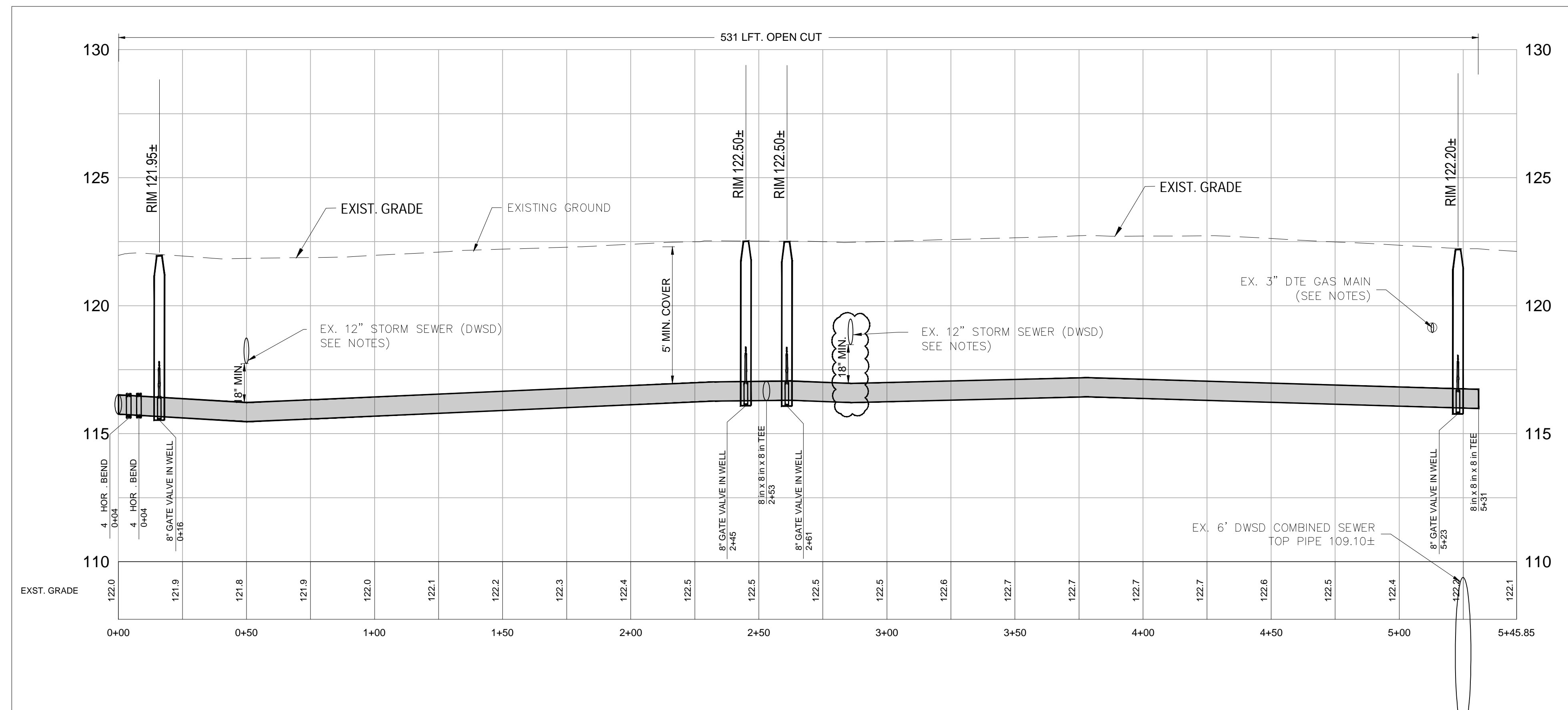
APPROVED BY :  
 DATE: **07/11/2024**

CS:  
 JN:

W:\Projects\2023\401.2300001.001991401.2300198.000CAD\SHITS\TASK\_300C3.0 SEWER AND WATER MAIN REMOVAL PLAN.dwg Last saved 11/21/2024 1:51 PM by KCook, plotted 11/21/2024 1:51 PM



**PLAN VIEW**



**PROFILE VIEW**

**NOTES:**

1. THE LOCATION OF SEWER LEADS FROM CATCH BASINS ARE NOT KNOWN. CONTRACTOR SHALL IDENTIFY DEPTH OF STORM AT CROSSINGS AND USE PIPE DEFLECTIONS AND/OR BENDS TO MAINTAIN CLEARANCES AS INDICATED IN LEGEND, ABBREVIATIONS, AND GENERAL NOTES SHEET, WHERE NECESSARY.
2. CONTRACTORS ARE ALLOWED TO OPERATE 16" AND SMALLER GATE VALVES. CONTRACTORS SHALL SUBMIT A SHUTDOWN REQUEST SKETCH FOR PLAN OF WATER MAIN SHUTDOWNS FOR THE AREA OF WORK.
3. THE CONTRACTOR SHALL REMOVE EXIST. WATER MAIN IN LOCATIONS WHERE PROPOSED WATER MAIN CROSSES THE EXIST. WATER MAIN IF FOUND AT THE SAME ELEVATIONS.
4. ACCESS TO ALL BUSINESSES MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. SHUTDOWNS MUST BE COORDINATED WITH DWSD FOR APPROVAL.
5. CONTRACTOR SHALL CONNECT TO EXISTING GATE VALVE WITH REMOVAL OF EXISTING WATER MAIN WHERE NEEDED.

**KEYED NOTES:**

- R6** REMOVE EXIST. 6-INCH WATER MAIN.
- R8** REMOVE EXIST. 6-INCH WATER MAIN.
- IW8** INSTALL 8-INCH WATER MAIN
- IG8** INSTALL 8-INCH DWSD GATE VALVE & CONSTRUCT/FURNISH & INSTALL WELL AS DIRECTED BY THE ENGINEER.
- IT88** INSTALL 8"x8" TEE.
- IB8F** INSTALL 8"-4 HORI ONTAL BEND.
- IR86** INSTALL 8"x6" REDUCER

DESCRIPTION OF ITEM	QTY.	PAY UNIT
Water Main, Open Cut, Ductile Iron, 8 inch	531	Ft
Gate Valve and Well, 8 inch	4	Ea

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
2	08/07/24		DWSD REVIEW	4	10/11/24		ADDENDUM #1
3	08/27/24		ISSUED FOR BID	5	11/14/24		EGL REVIEW

**DEVELOPER**  
 DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
 CONTACT: ORZA ROBERTSON  
 ADDRESS: 500 GRIFFIN AVE SUITE 2200  
 DETROIT, MI 48226  
 PHONE: 313.337.4509  
 EMAIL: ORDER@DMRDC.ORG

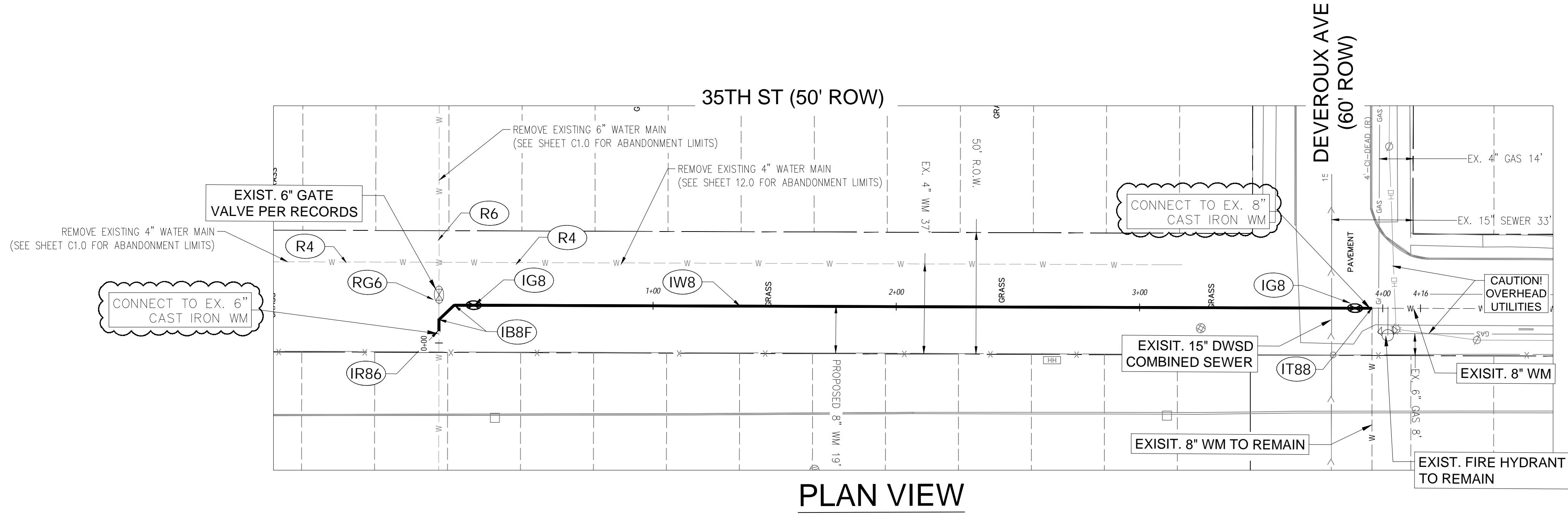


**DESIGNED BY :** DAVID RYZYI  
**DRAWN BY :** KCC  
**CHECKED BY :** DAVID RYZYI

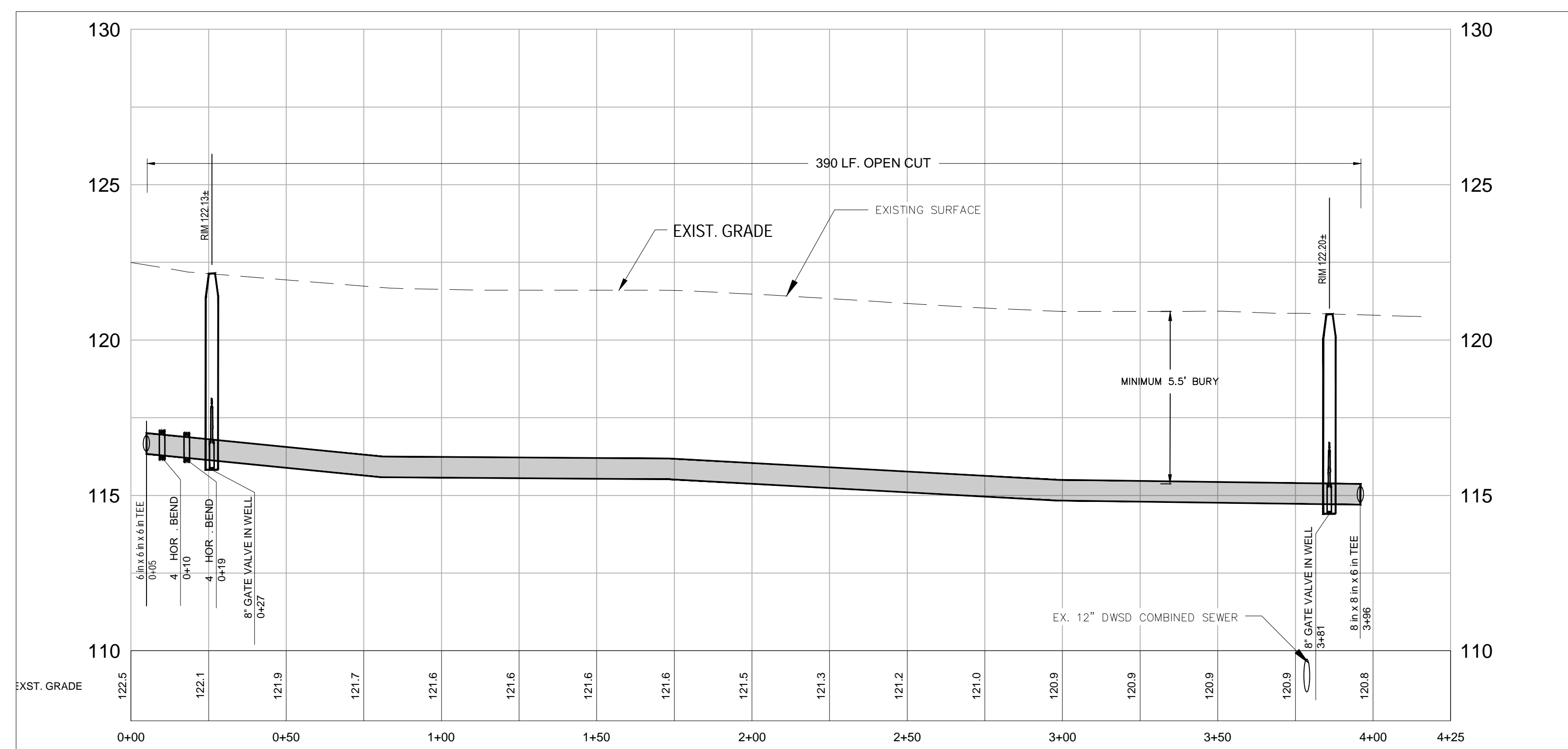
**APPROVED BY :**  
 DATE: 07/11/2024

**CS:**  
**JN:**

W:\Projects\2023\401.2300001-001991401.2300198.000\CAD\SHITS\TASK\_300C2.0 DESIGN PLANS.dwg Last saved 11/02/2024 11:32 AM by KCoak, plotted 11/21/2024 1:49 PM



**PLAN VIEW**



**PROFILE VIEW**

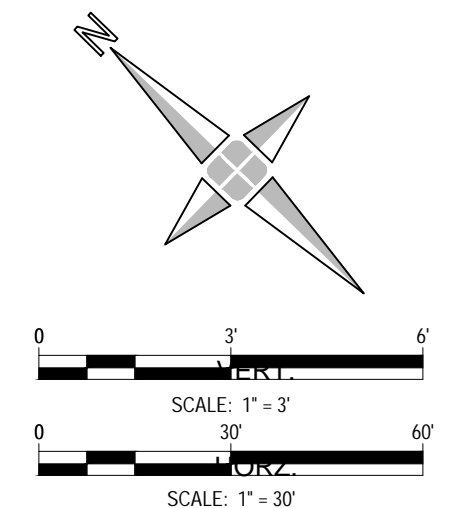
**KEYED NOTES: C2.0**

- R4** REMOVE EXIST. 4-INCH WATER MAIN.
- R6** REMOVE EXIST. 6-INCH WATER MAIN.
- IW8** INSTALL 8-INCH WATER MAIN
- IG8** INSTALL 8-INCH DWSD GATE VALVE & CONSTRUCT/FURNISH & INSTALL WELL AS DIRECTED BY THE ENGINEER.
- IT88** INSTALL 8"x8"x8" TEE.
- IB8F** INSTALL 8"-4" HORIZONTAL BEND.
- RG6** REMOVE EXIST. 6-INCH GATE VALVE & WELL AS DIRECTED BY THE ENGINEER.
- IR86** INSTALL 8"x6" REDUCER

**NOTES:**

1. THE LOCATION OF SEWER LEADS FROM CATCH BASINS ARE NOT KNOWN. CONTRACTOR SHALL IDENTIFY DEPTH OF STORM AT CROSSINGS AND USE PIPE DEFLECTIONS AND/OR BENDS TO MAINTAIN CLEARANCES AS INDICATED IN LEGEND, ABBREVIATIONS, AND GENERAL NOTES SHEET, WHERE NECESSARY.
2. CONTRACTORS ARE ALLOWED TO OPERATE 16" AND SMALLER GATE VALVES. CONTRACTORS SHALL SUBMIT A SHUTDOWN REQUEST SKETCH FOR PLAN OF WATER MAIN SHUTDOWNS FOR THE AREA OF WORK.
3. THE CONTRACTOR SHALL REMOVE EXIST. WATER MAIN IN LOCATIONS WHERE PROPOSED WATER MAIN CROSSES THE EXIST. WATER MAIN IF FOUND AT THE SAME ELEVATIONS.
4. ACCESS TO ALL BUSINESSES MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. SHUTDOWNS MUST BE COORDINATED WITH DWSD FOR APPROVAL.
5. CONTRACTOR SHALL CONNECT TO EXISTING GATE VALVE WITH REMOVAL OF EXISTING WATER MAIN WHERE NEEDED.

DESCRIPTION OF ITEM	QTY.	PAY UNIT
Water Main, Open Cut, Ductile Iron, 8 inch	390	Ft
Gate Valve and Well, 8 inch	2	Ea



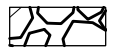

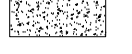
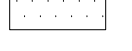
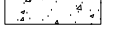
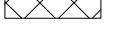


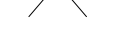

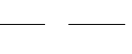






PLAN REVISIONS						DEVELOPER	DESIGNED BY :	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET		
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION	DATE:	JN:			35TH STREET WATER MAIN	C2.1
2	08/07/24		DWSD REVIEW	4	10/11/24		ADDENDUM #1	07/11/2024					
3	08/27/24		ISSUED FOR BID	5	11/14/24		EGL REVIEW						

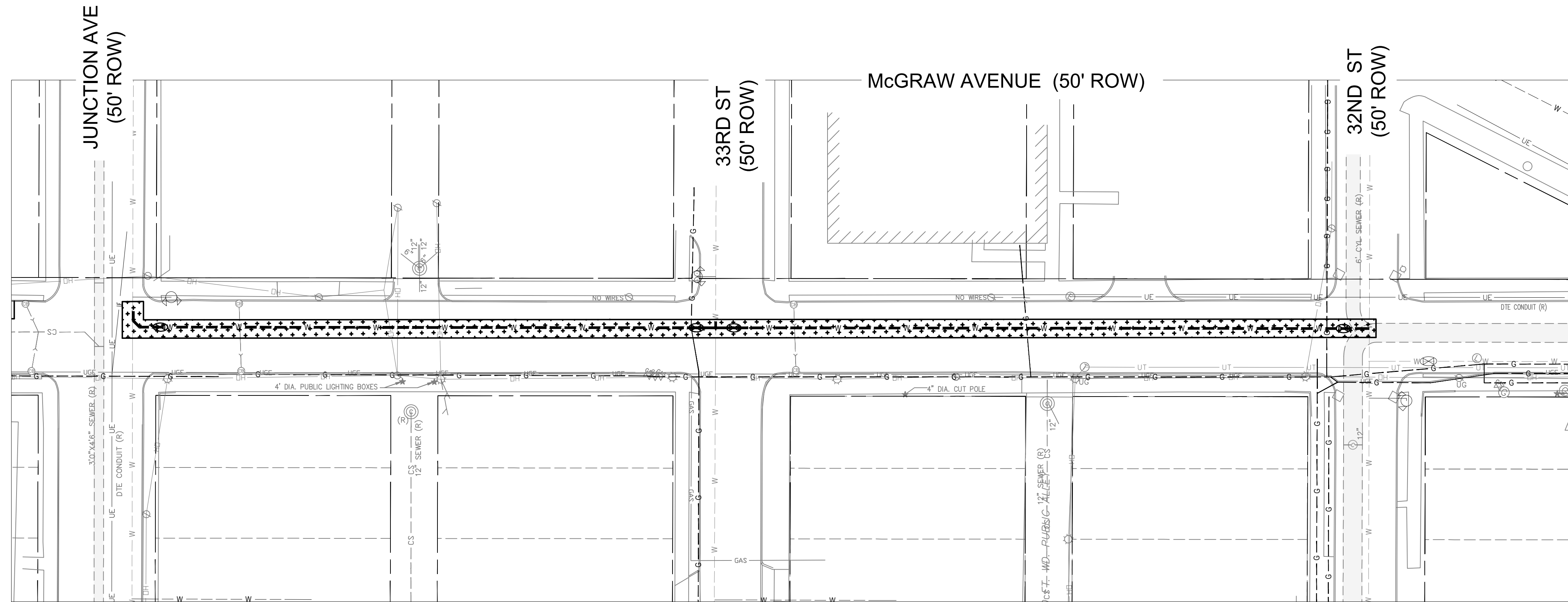
W:\Projects\2023\401.2300001.001991401.2300198.000\CAD\SHITS\TASK\_300\C2.0 DESIGN PLANS.dwg Last saved 11/09/2024 11:32 AM by KCoak, plotted 11/21/2024 1:47 PM

**NOTES:**

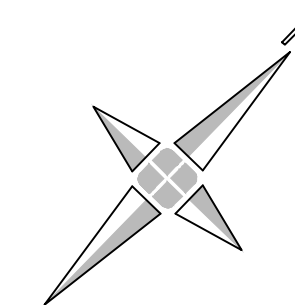
1. RESTORATION PLANS ARE OFFERED AS GENERAL GUIDANCE AND ARE NOT MEANT TO DEFINE COMPENSATION OR LIMITS OF WORK. RESTORATION IS TO BE COMPLETED PER THE PAY ITEMS OF THE CONTRACT AND ALL AREAS DISTURBED MUST BE RESTORED TO THE SATISFACTION OF DPW AND THEIR STANDARDS.

**RESTORATION LEGEND**

-  AGGREGATE BACKFILL ONLY
-  REPLACE BITUMINOUS OVER CONCRETE PAVEMENT
-  REPLACE CONCRETE PAVEMENT
-  MULCHED SEEDING
-  REPLACE DRIVEWAY, CONCRETE, 6-INCH
-  REPLACE SIDEWALK
-  REPLACE BRICK PAVEMENT
-  REPLACE ADA RAMP(S)  
(ARROW INDICATES RAMP DIRECTION)
-  REPLACE TREE
-  REPLACE CURB AND GUTTER
-  ESTIMATED PAVEMENT JOINT LOCATIONS  
BASED ON DPW DETAIL C-4382
-  REPLACE FENCE
-  STRUCTURE CONFLICT
-  (A) ADJUST CASTING TO GRADE
-  (F) STRUCTURE CONFLICT
-  (P) STRUCTURE CONFLICT
-  REMOVE AND REPLACE BRICK PAVEMENT



**PLAN VIEW**



0 30' 60'  
SCALE: 1" = 30' HORZ.

**PLAN REVISIONS**

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.337.4500  
EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY : **DAVID RYZYI**  
DRAWN BY : KCC  
CHECKED BY : **DAVID RYZYI**

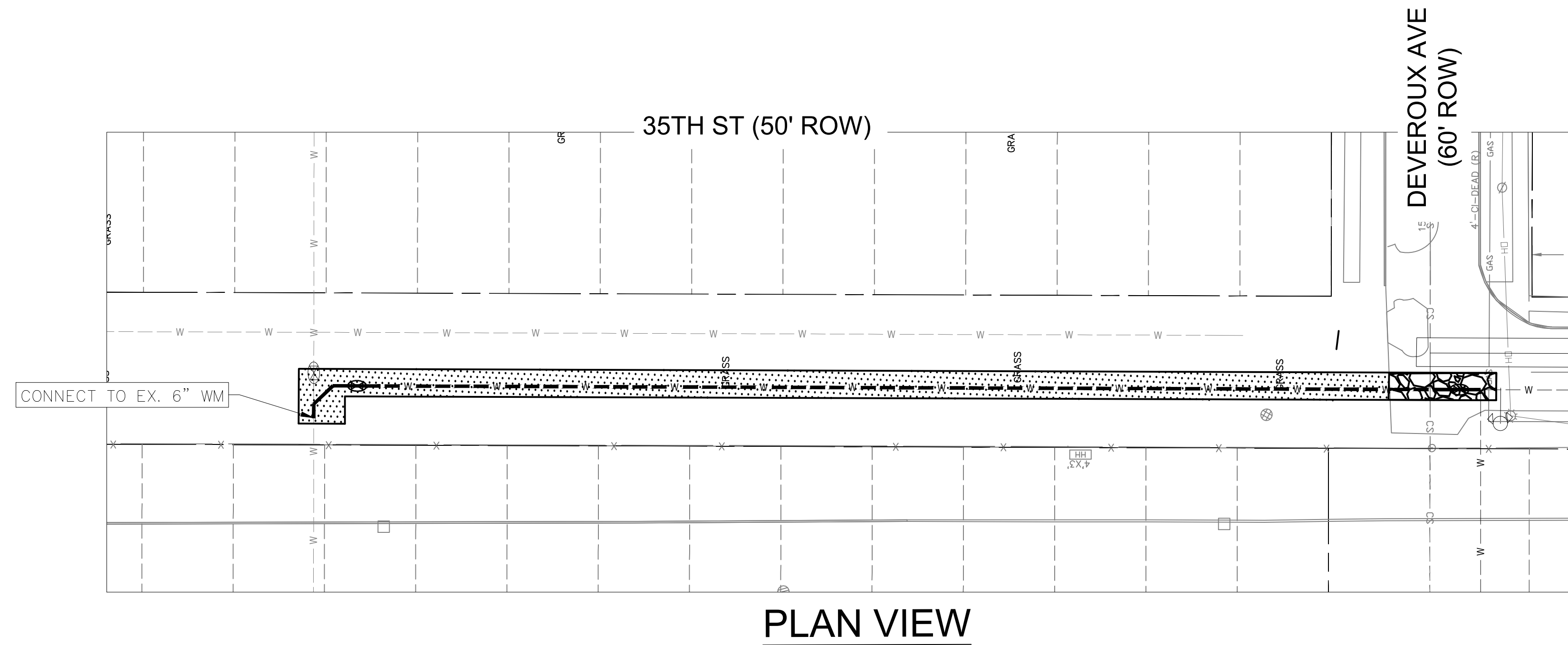
APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
McGRAW STREET WATER MAIN RESTORATION

SHEET  
**C3.0**


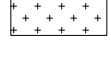
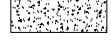
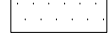
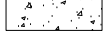

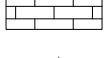



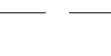





W:\Projects\2023\401\_2300001-00199\401\_2300198\000\CAD\SH\TASK\_300\RESTORATION PLANS.dwg Last saved 7/25/2024 2:01 PM by KCoak, plotted 7/25/2024 2:48 PM

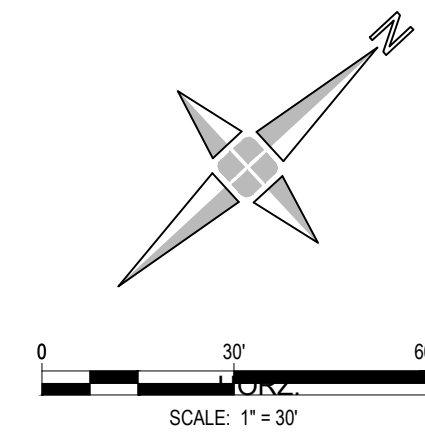


**NOTES:**

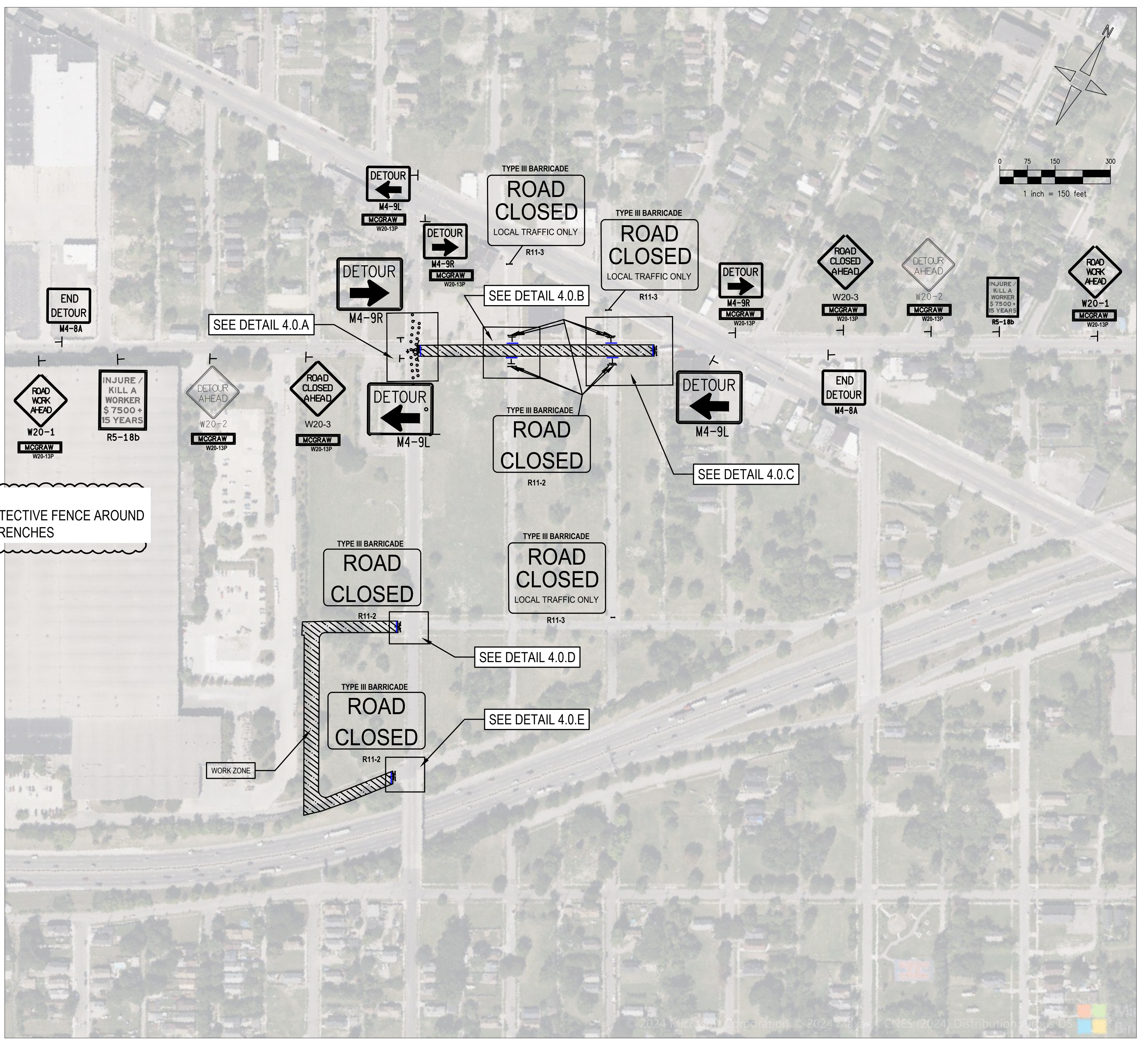
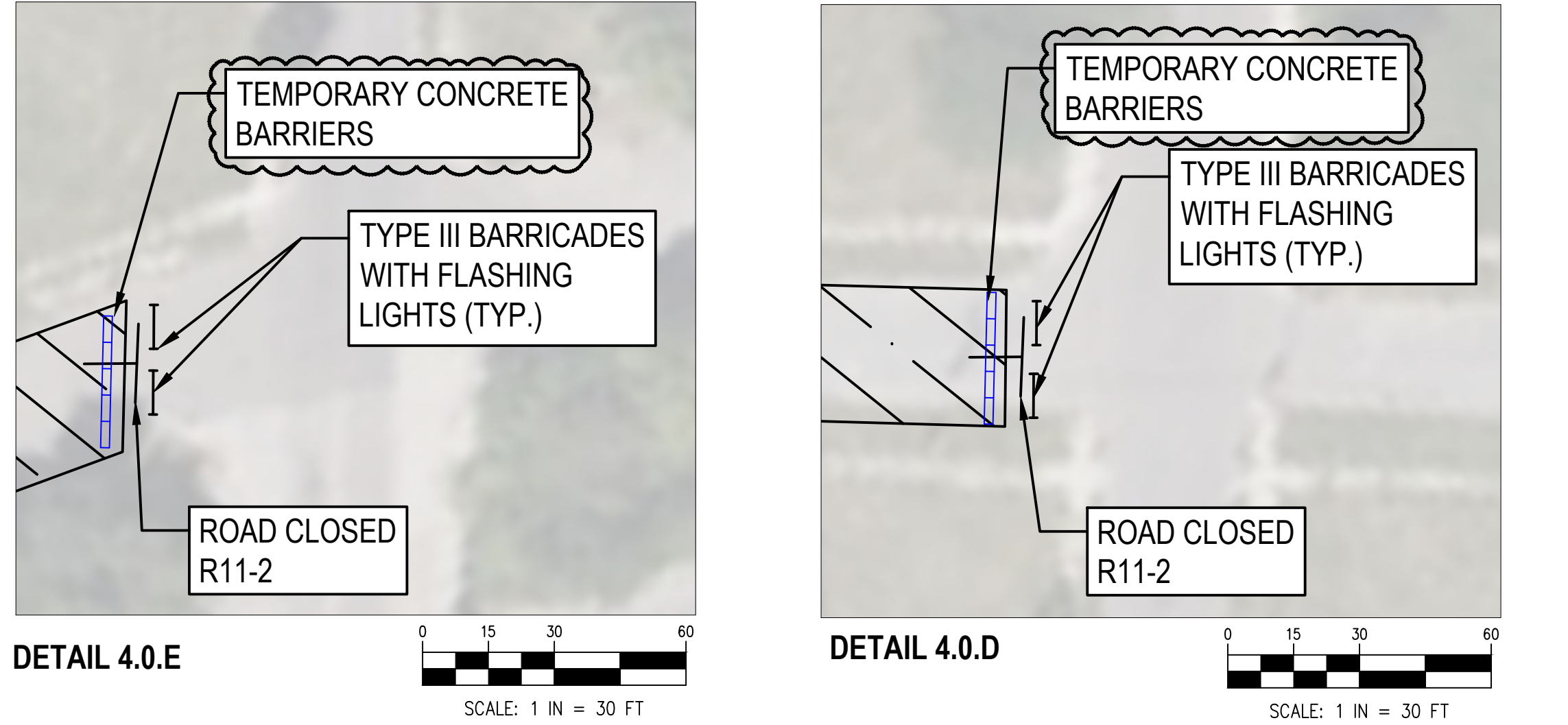
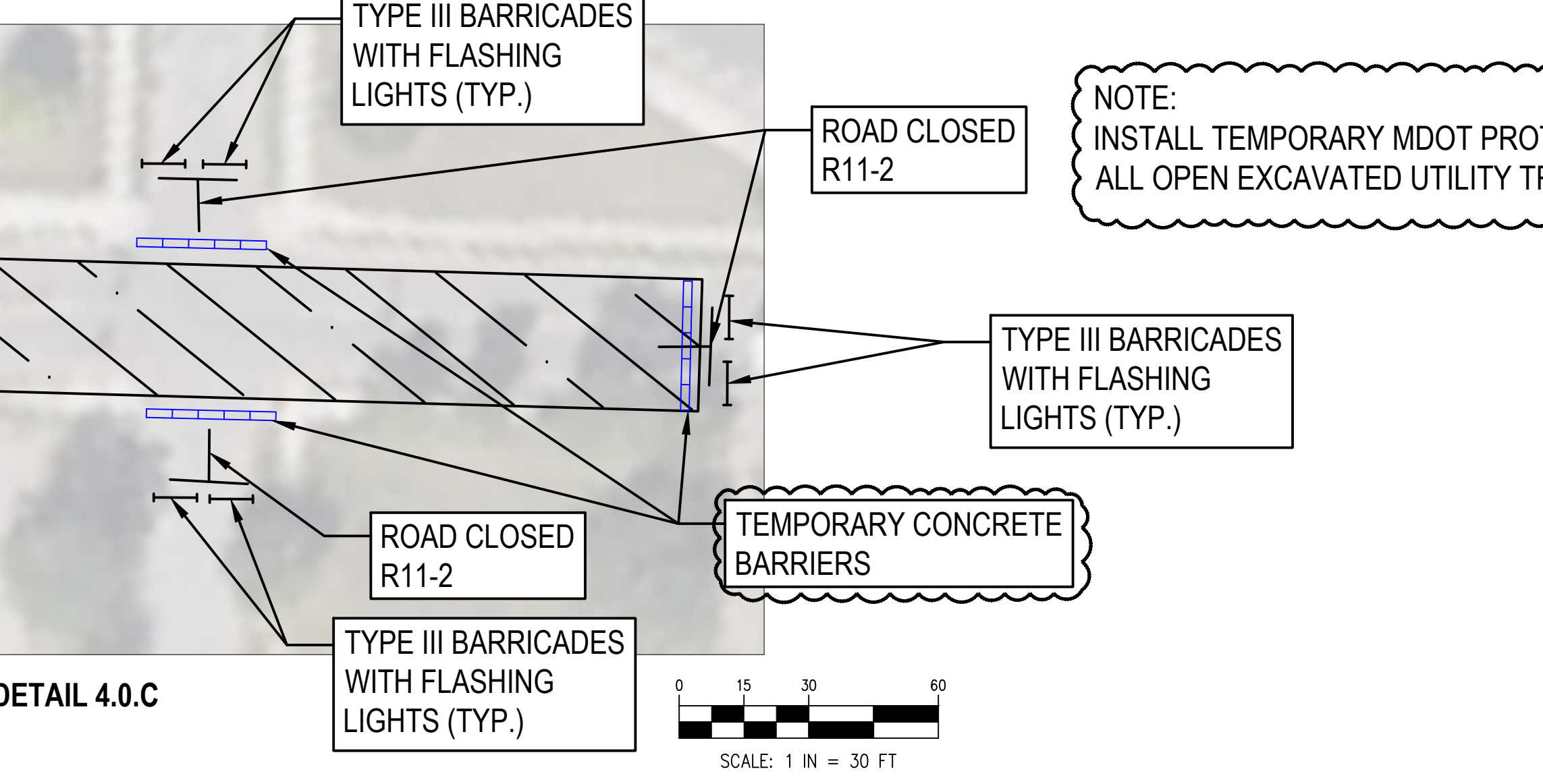
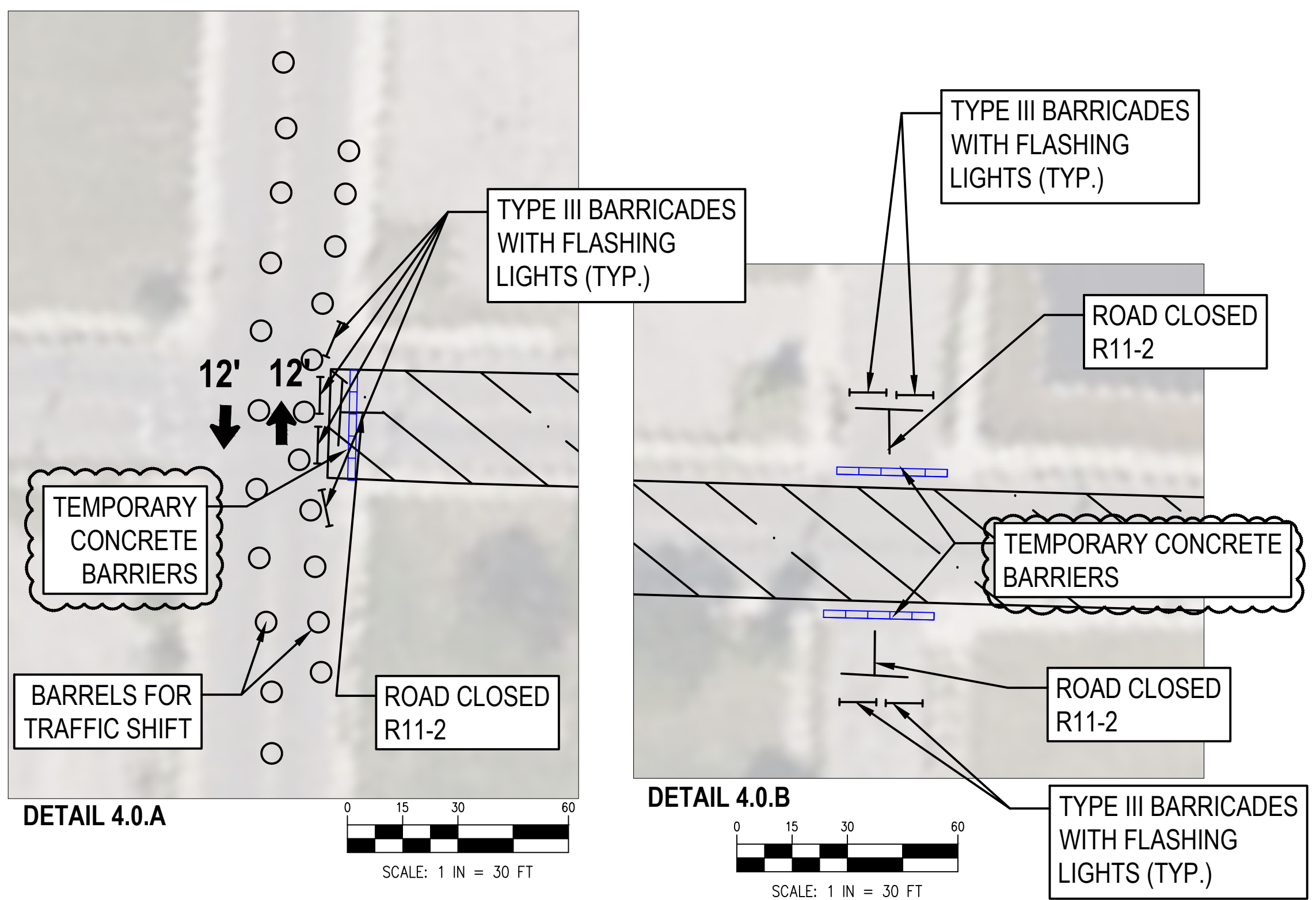
1. RESTORATION PLANS ARE OFFERED AS GENERAL GUIDANCE AND ARE NOT MEANT TO DEFINE COMPENSATION OR LIMITS OF WORK. RESTORATION IS TO BE COMPLETED PER THE PAY ITEMS OF THE CONTRACT AND ALL AREAS DISTURBED MUST BE RESTORED TO THE SATISFACTION OF DPW AND THEIR STANDARDS.

**RESTORATION LEGEND**

-  AGGREGATE BACKFILL ONLY
-  REPLACE BITUMINOUS OVER CONCRETE PAVEMENT
-  REPLACE CONCRETE PAVEMENT
-  MULCHED SEEDING
-  REPLACE DRIVEWAY, CONCRETE, 6-INCH
-  REPLACE SIDEWALK
-  REPLACE BRICK PAVEMENT
-  REPLACE ADA RAMP(S)  
(ARROW INDICATES RAMP DIRECTION)
-  REPLACE TREE
-  REPLACE CURB AND GUTTER
-  ESTIMATED PAVEMENT JOINT LOCATIONS  
BASED ON DPW DETAIL C-4382
-  REPLACE FENCE
-  STRUCTURE CONFLICT
-  (A) ADJUST CASTING TO GRADE
-  (F) STRUCTURE CONFLICT
-  (P) STRUCTURE CONFLICT
-  REMOVE AND REPLACE BRICK PAVEMENT



PLAN REVISIONS						DEVELOPER			DESIGNED BY :	APPROVED BY :	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION		DAVID RYZYI	DATE:	JN:		
1	07/24/24		EGLE PERMIT						KCC	07/11/2024		35TH STREET WATER MAIN RESTORATION	C3.1
-	-	-	-	-	-	-	-	-	DAVID RYZYI				



PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE
1	07/24/24		EGLE PERMIT	3	10/07/24
2	08/07/24		DWSD REVIEW		

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GERRARD AVE. SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.337.4000  
EMAIL: ORBERTSON@DBRA.ORG



DESIGNED BY: DAVID RYZYI  
DRAWN BY: KCC  
CHECKED BY: DAVID RYZYI

APPROVED BY:  
DATE: 07/11/2024

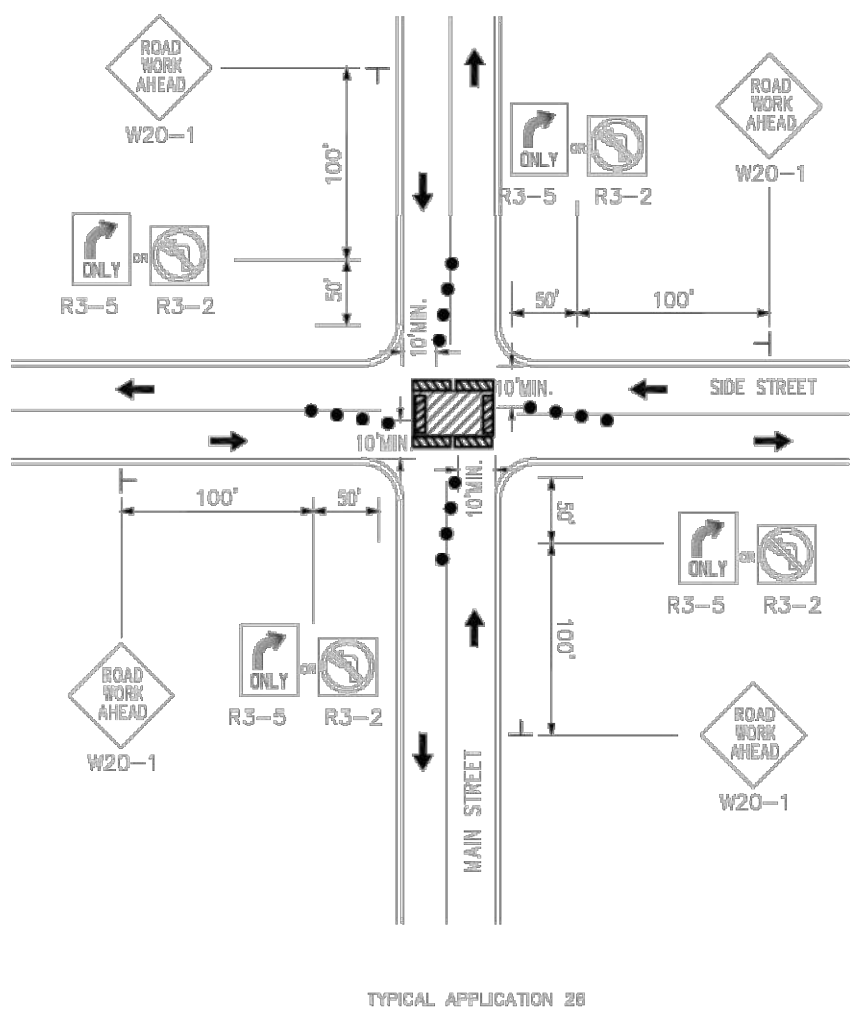
CS:  
JN:

JUNCTION / MCGRAW SITE READINESS PROJECT  
WATER MAIN MOT PLAN

SHEET  
C4.0

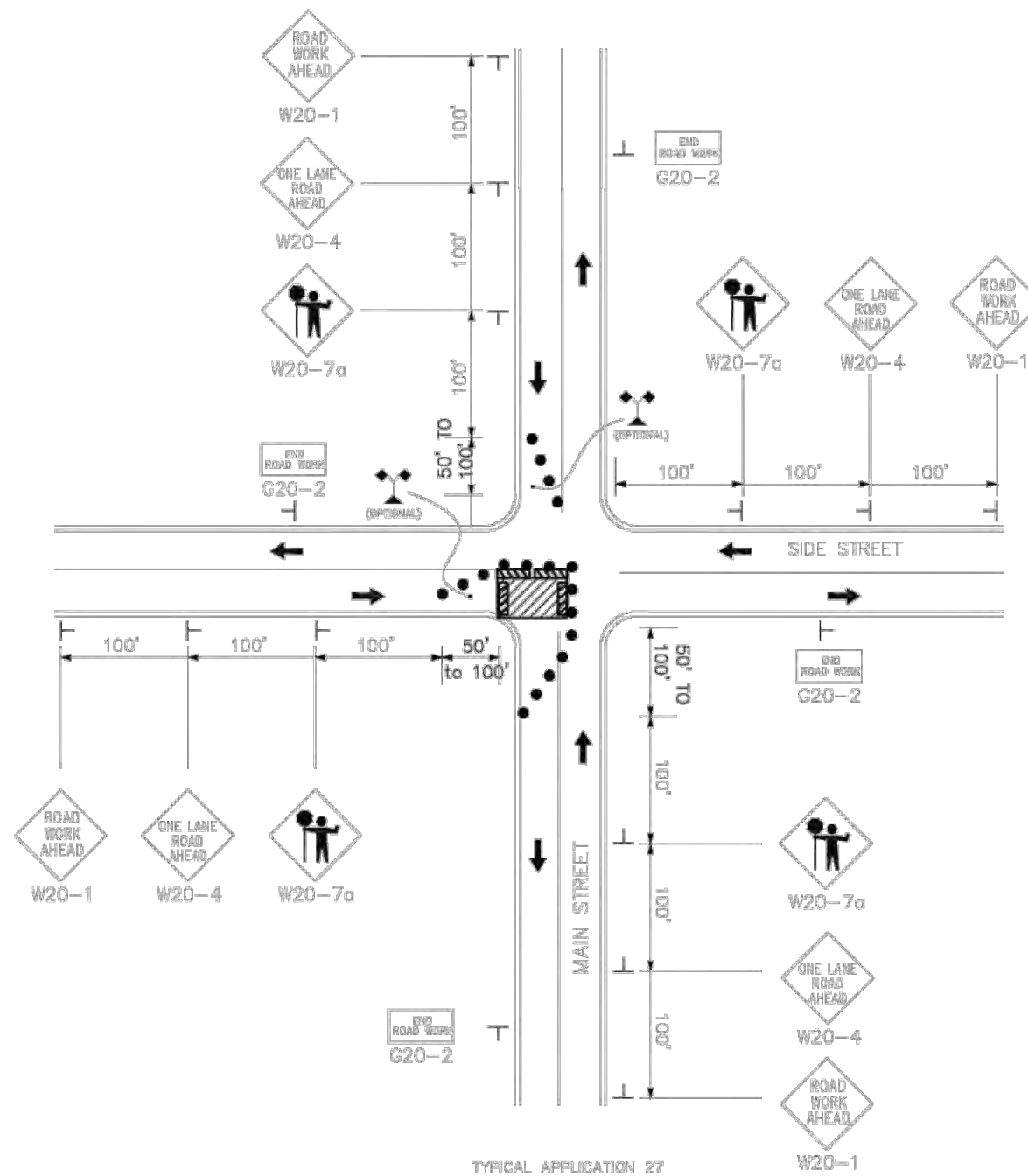
W:\Projects\2023\401 2300001-01191401 2300198.000\CAD\SHITASK 300MOT PLANS.dwg Last saved 10/10/2024 6:08 PM by KCoak, plotted 10/11/2024 3:29 PM

FIGURE 6H-26 CLOSURE IN CENTER OF INTERSECTION (TA-26)



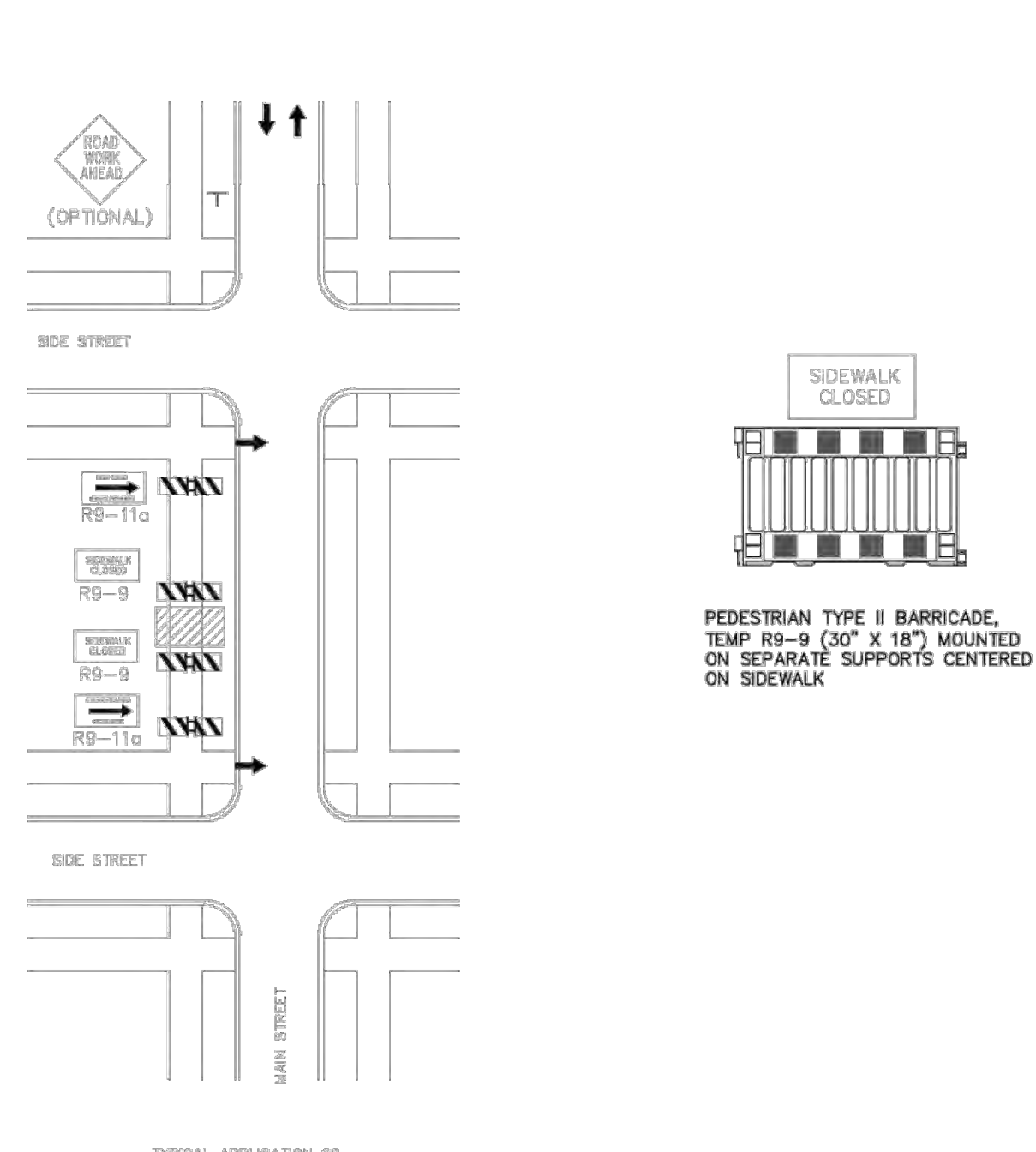
TYPICAL APPLICATION 26

FIGURE 6H-27 CLOSURE AT THE SIDE OF AN INTERSECTION (TA-27)



TYPICAL APPLICATION 27

FIGURE 6H-28 SIDEWALK DETOUR OR DIVERSION (TA-28)



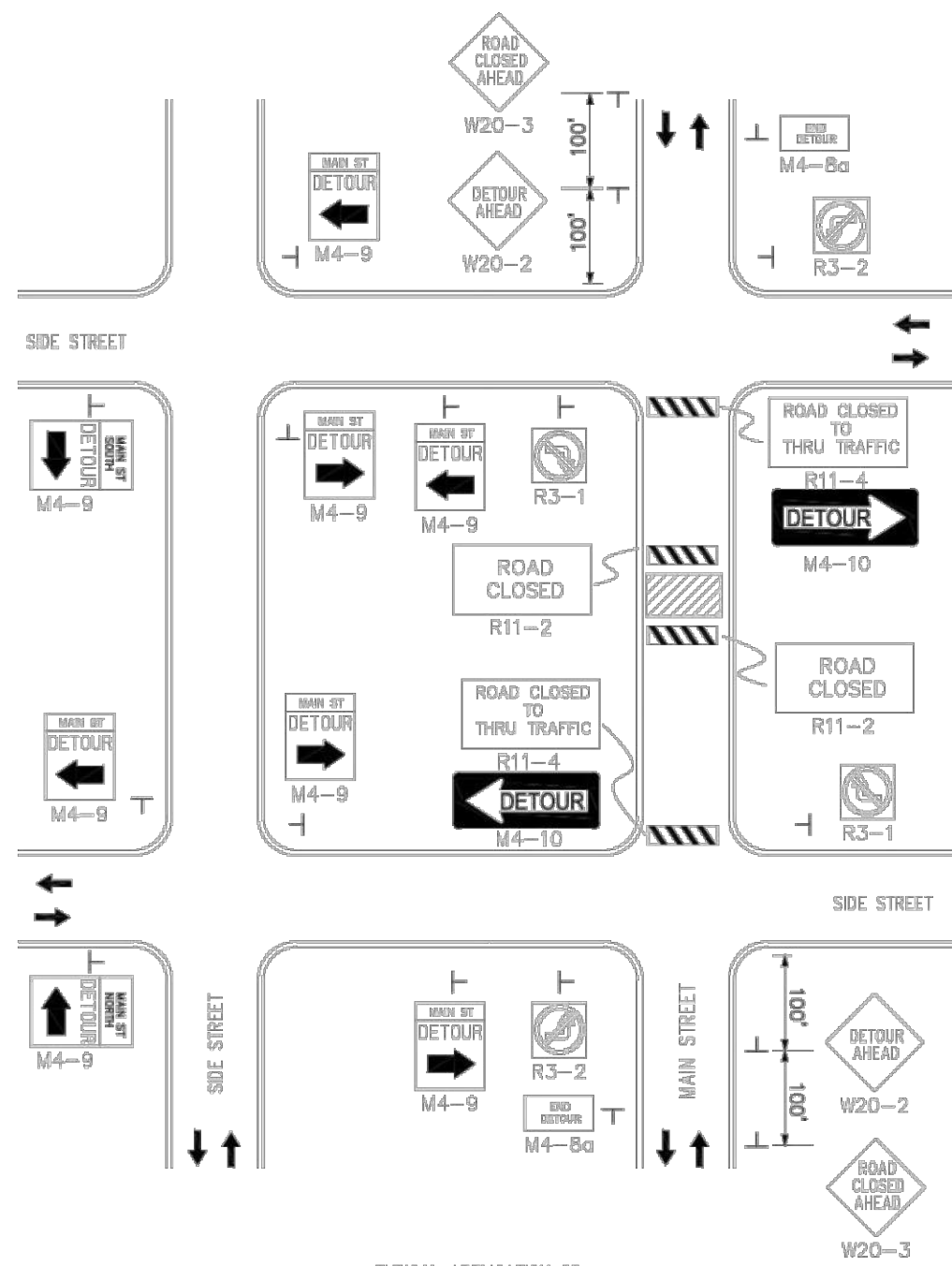
TYPICAL APPLICATION 28

MMUTCD 2009 EDITION  
TABLE 6H-2. MEANING OF SYMBOLS ON TYPICAL APPLICATION DIAGRAMS

	ARROW PANEL
	ARROW PANEL SUPPORT OR TRAILER (SHOWN FACING DOWN)
	CHANGEABLE MESSAGE SIGN OR SUPPORT TRAILER
	CHANNELIZING DEVICE
	CRASH CUSHION
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	TRAFFIC REGULATOR
	HIGH LEVEL WARNING DEVICE (FLAG TREE)
	LUMINAIRE
	PAVEMENT MARKINGS THAT SHOULD BE REMOVED FOR A LONG TERM PROJECT
	SIGN (SHOWN FACING LEFT)
	SURVEYOR
	TEMPORARY BARRIER
	TEMPORARY BARRIER WITH WARNING LIGHTS
	TRAFFIC OR PEDESTRIAN SIGNAL
	TRUCK MOUNTED ATTENUATOR
	TYPE III BARRICADE
	PEDESTRIAN TYPE II BARRICADE
	WARNING LIGHTS
	WORK SPACE
	WORK VEHICLE

FIGURE 6H-20 DETOUR FOR A CLOSED STREET (TA-20)

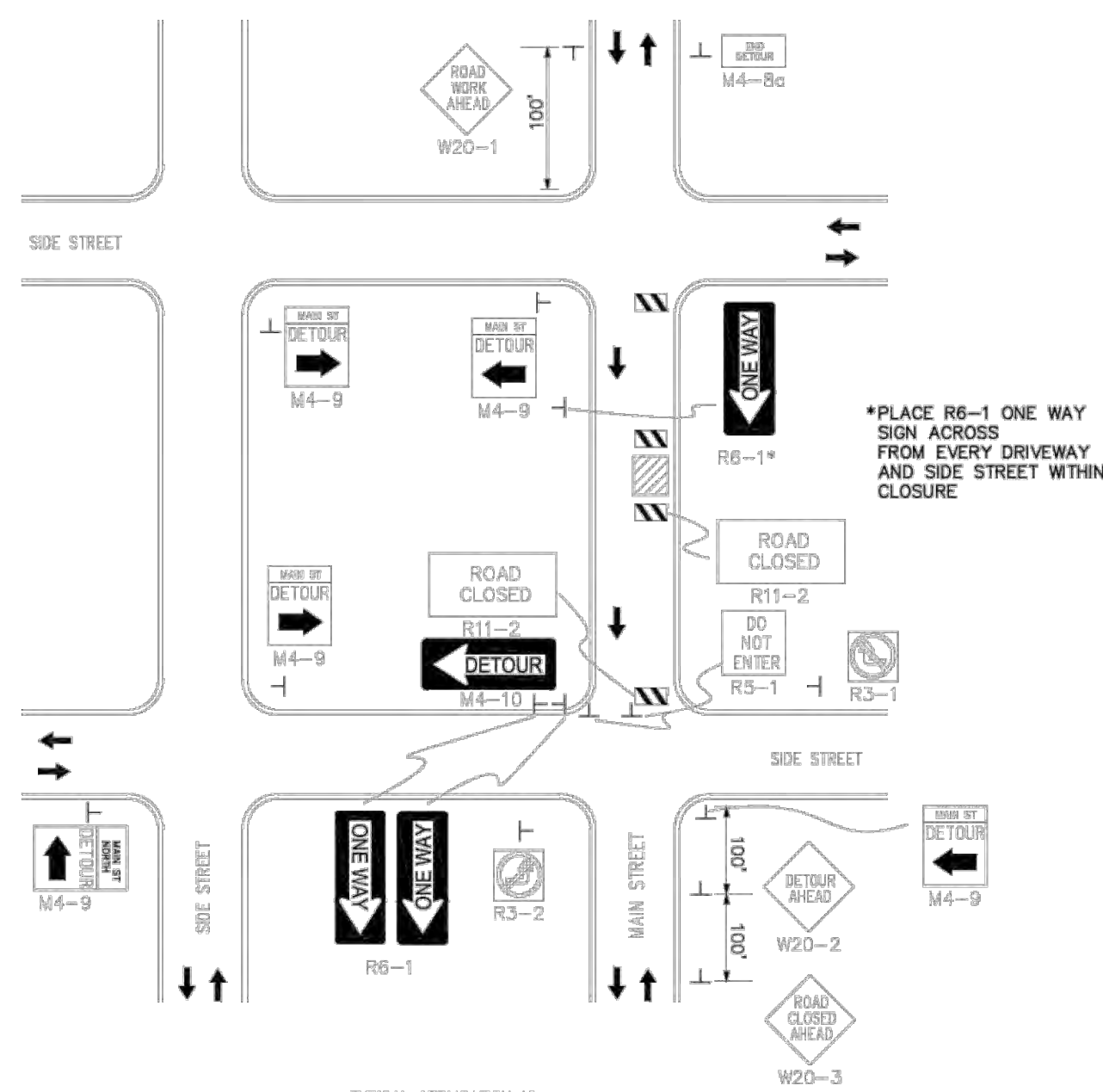
TO CLOSE OFF LOW-TRAFFIC-VOLUME, NON-THROUGH, INTERSECTING STREETS FOR SHORT TERM.



TYPICAL APPLICATION 20

NO TWO CONSECUTIVE STREETS MAY BE CLOSED AT THE SAME TIME.

FIGURE 6H-19 DETOUR FOR ONE TRAVEL DIRECTION (TA-19)



TYPICAL APPLICATION 19

NO TWO CONSECUTIVE STREETS MAY BE CLOSED AT THE SAME TIME.

PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL

PUBLIC SAFETY AND NORMALCY ARE OF PARAMOUNT CONCERN AND IMPORTANCE. BOTH PEDESTRIAN AND VEHICULAR TRAFFIC ARE TO BE MAINTAINED IN THEIR NORMAL MODE AS MUCH AS POSSIBLE. WHEN NORMAL PEDESTRIAN OR VEHICULAR TRAFFIC MUST BE DISTURBED, SAFETY PRECAUTIONS MUST BE IMPLEMENTED CONCURRENTLY.

FOR BOTH VEHICULAR AND PEDESTRIAN TRAFFIC, SAFETY PROTECTION ITEMS, SUCH AS, BUT NOT LIMITED TO, LIGHTED BARRELS, LIGHTED ARROWS, DIRECTION AND WARNING SIGNS, PORTABLE CONCRETE BARRIERS, TEMPORARY PAVEMENT MARKINGS, AND TEMPORARY FENCING MUST BE INSTALLED, MAINTAINED AND REMOVED AS NEEDED.

VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL AND SAFETY SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS, THE SPECIFICATIONS OF THE CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT AND THE REQUIREMENTS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION. IF THE THREE ENTITIES HAVE DIFFERENT REQUIREMENTS FOR THE SAME ITEM, THE MOST STRICT SHALL APPLY AS DETERMINED BY THE ENGINEER.

IN GENERAL, TRAFFIC CONTROL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CURRENT VERSION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD). THE CONTRACTOR MUST USE BARRICADES, SIGNS, ARROW BOARDS, TEMPORARY PAINT LINES, ETC., APPROPRIATELY.

THE CONTRACTOR SHALL PROVIDE/INSTALL A POSTED PEDESTRIAN DETOUR WHENEVER NORMAL PEDESTRIAN MOVEMENT IS DISRUPTED. AS A GUIDE, USE FIGURES 6H-28 & 6H-29 OF THE MMUTCD TO REGULATE PEDESTRIAN TRAFFIC AROUND CONSTRUCTION AREAS. SIGNS, TO DIRECT PEDESTRIANS TO THE SIDE AND BACK STREETS OR THE OTHER SIDE OF THE STREET, MUST BE INSTALLED AT LOCATIONS WHERE THE CROSSING IS SAFE.

SUPPLY SUFFICIENT NUMBER OF PEDESTRIAN TYPE II BARRICADES TO CONNECT THEM TOGETHER FROM EDGE OF SIDEWALK TO EDGE OF SIDEWALK SUCH THAT THERE ARE NO GAPS BETWEEN THE BARRICADES.

SUPPORTS FOR SIGNS PLACED BEHIND THE PEDESTRIAN TYPE II BARRICADE(S) MUST BE ENTIRELY LOCATED BEHIND THE BARRICADE(S).

NOTES

TEMPORARY LANE CLOSURE MAX 5 DAYS (PER BLOCK) TO INSTALL WATERMAIN.

CONTRACTOR TO RESTORE EXISTING LANE MARKING, PAVEMENT CURB, SIDEWALK AND ANY OTHER ITEMS EXIST DURING CONSTRUCTION TO ITS ORIGINAL OR BETTER CONDITION AS APPROVED BY THE CITY ENGINEER.

CONTRACTOR TO PROVIDE ACCESS TO ALL DRIVEWAYS AT ALL TIMES.

CONTRACTOR TO USE A FLAGGER FOR BOTH DIRECTIONS OF TRAFFIC MOVEMENT AT ALL TIMES.

CONTRACTOR TO MAINTAIN ONE LANE OF TRAFFIC ON CROSS STREETS WHEN CROSSING INTERSECTIONS.

CONTRACTOR TO RESTORE ALL WORK IN A BLOCK BEFORE MOVING ONTO THE NEXT BLOCK.

SIGN DESIGNATION IS SHOWN BELOW THE SIGN. SEE TABLE 6F-1 OF MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR SIGN SIZES OF EACH SIGN DESIGNATION.

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.6069  
EMAIL: ORBERTSON@DBRA.ORG

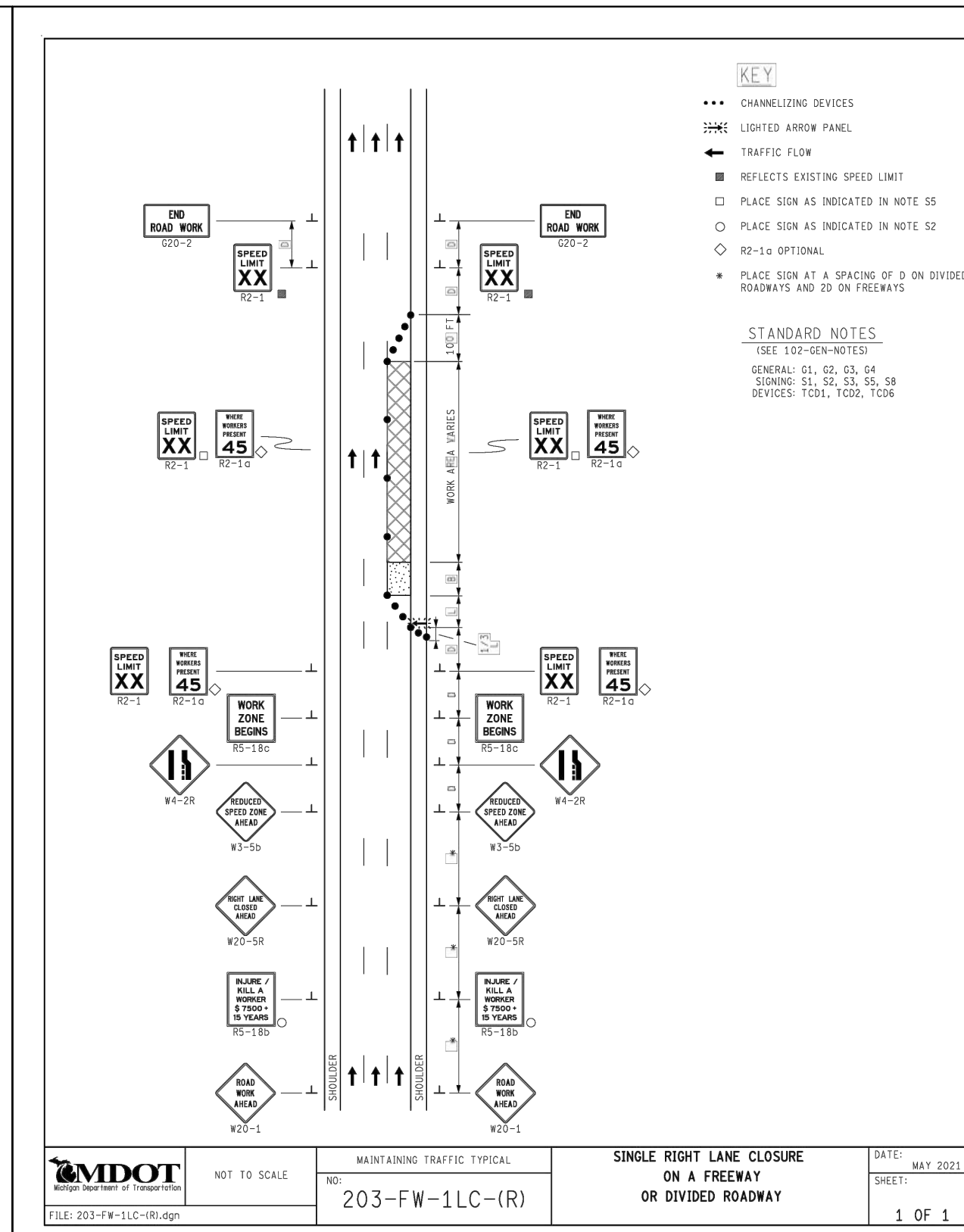
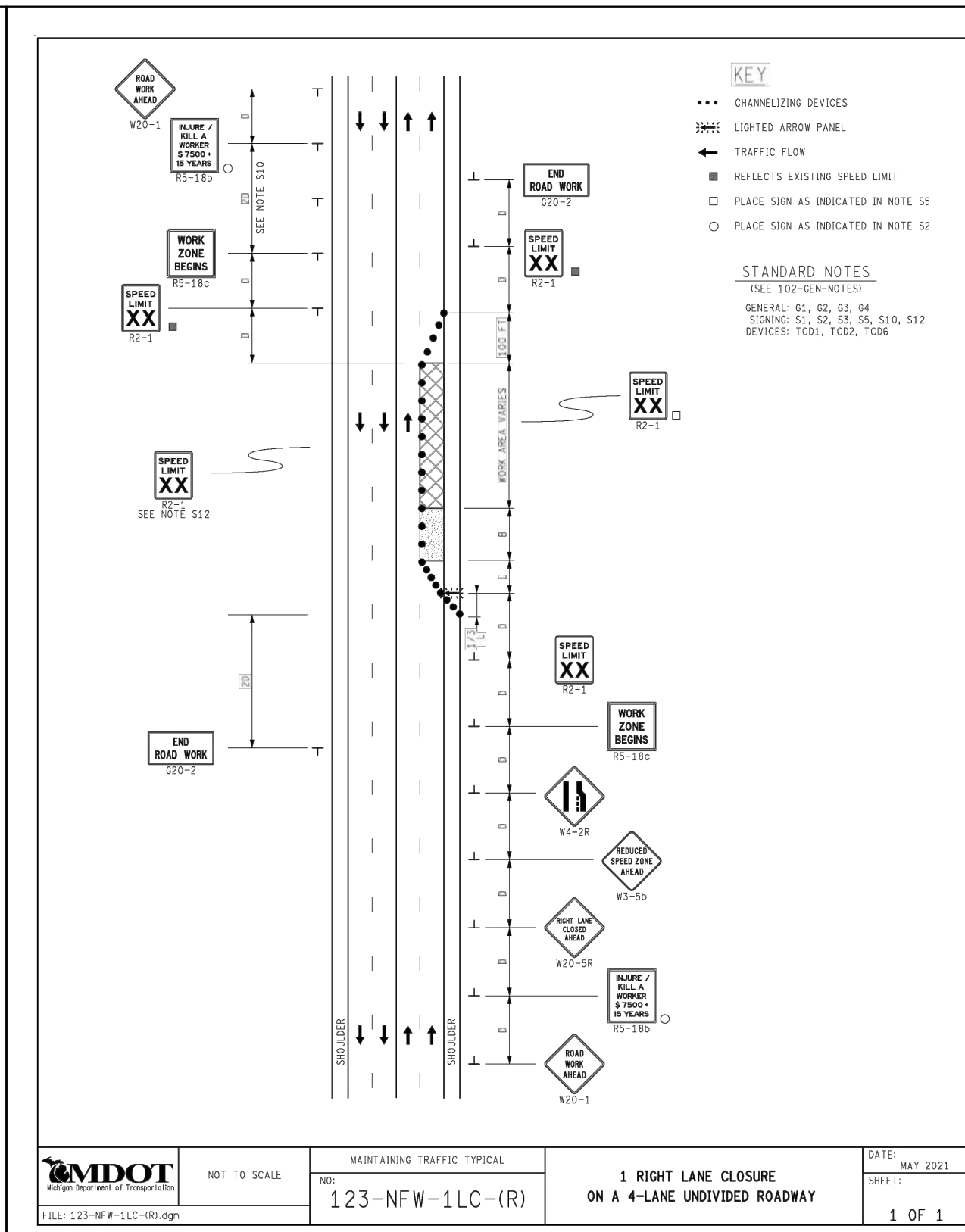
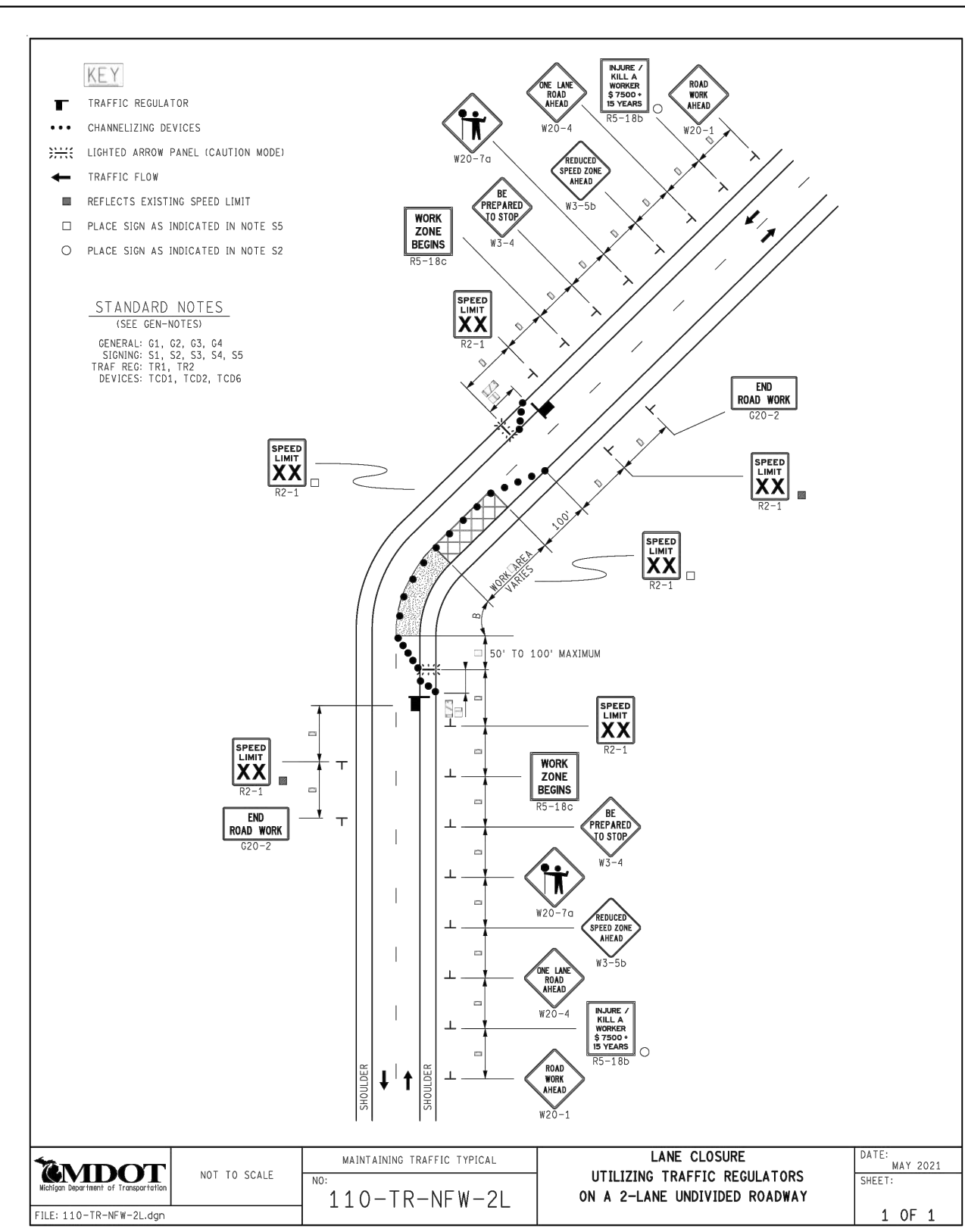


DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

W:\Projects\2023\401.2300001-00199\401.2300198.000\CAD\SHTS\TASK 300MOT NOTES.dwg Last saved 7/30/2024 12:26 PM by KCoak, plotted 7/31/2024 4:45 PM



**101-GEN-SPACING-CHARTS**

**DISTANCE BETWEEN TRAFFIC SIGNS, "D"**

DISTANCES	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
D (FEET)	250	300	350	400	450	500	550	600	650	700	750

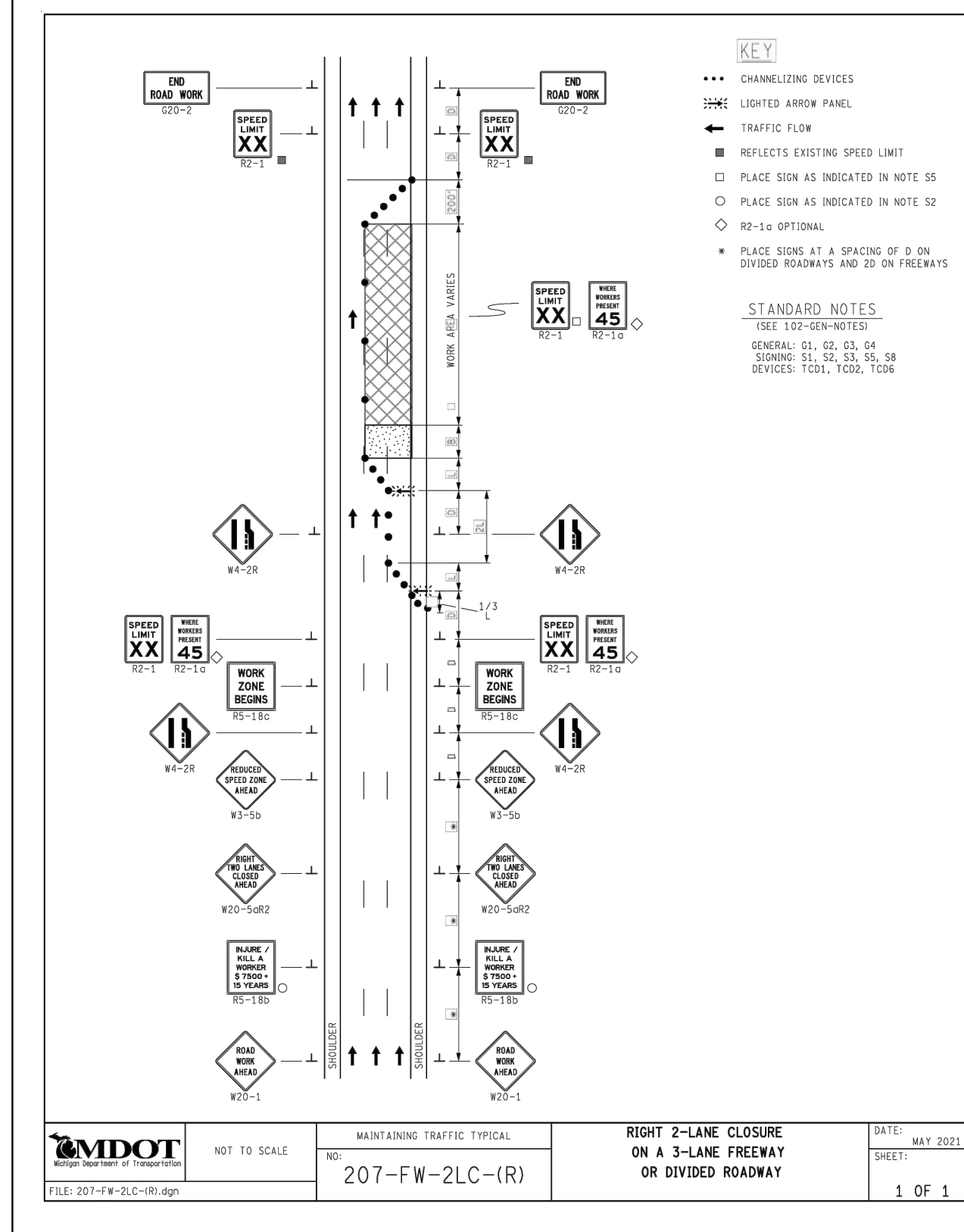
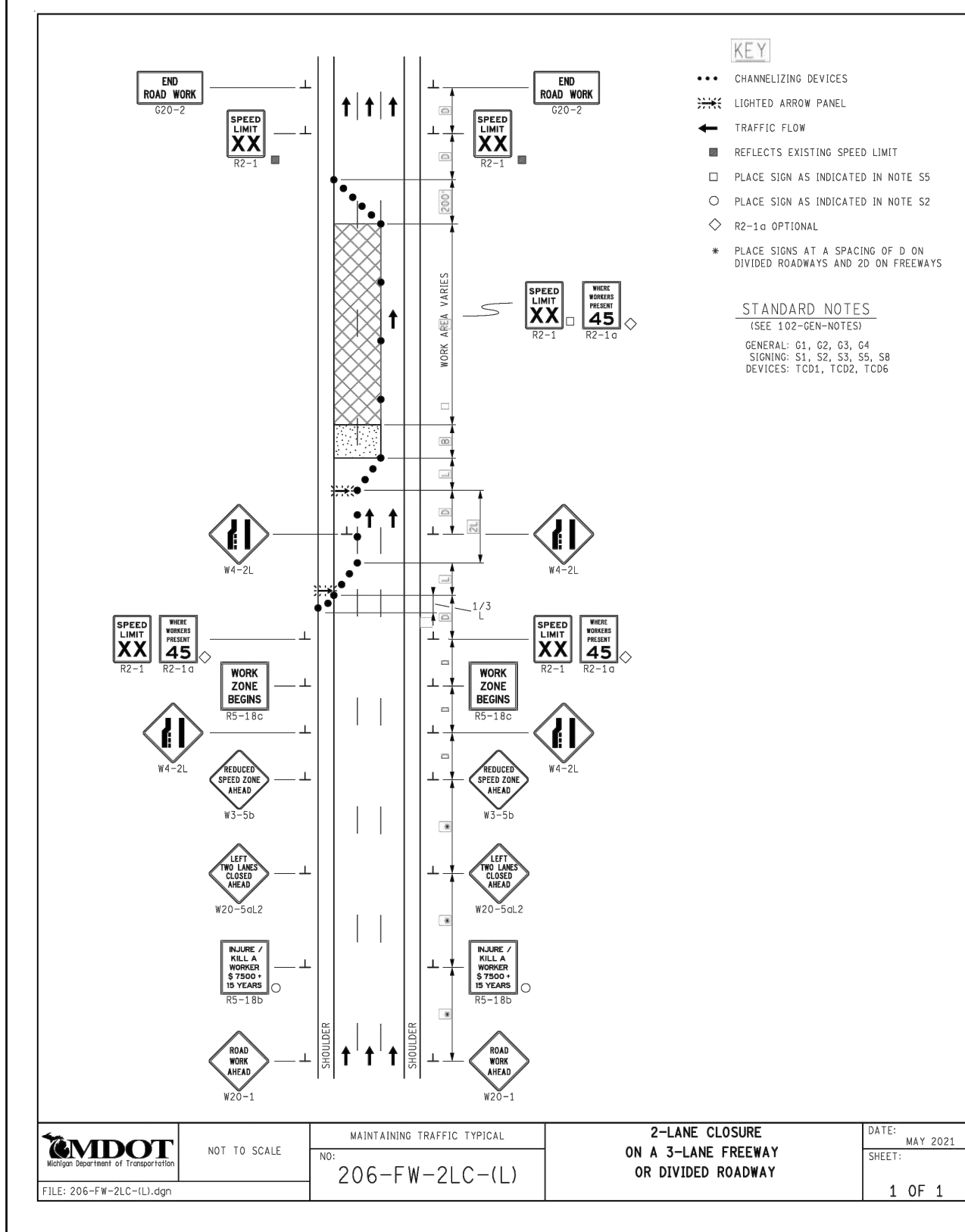
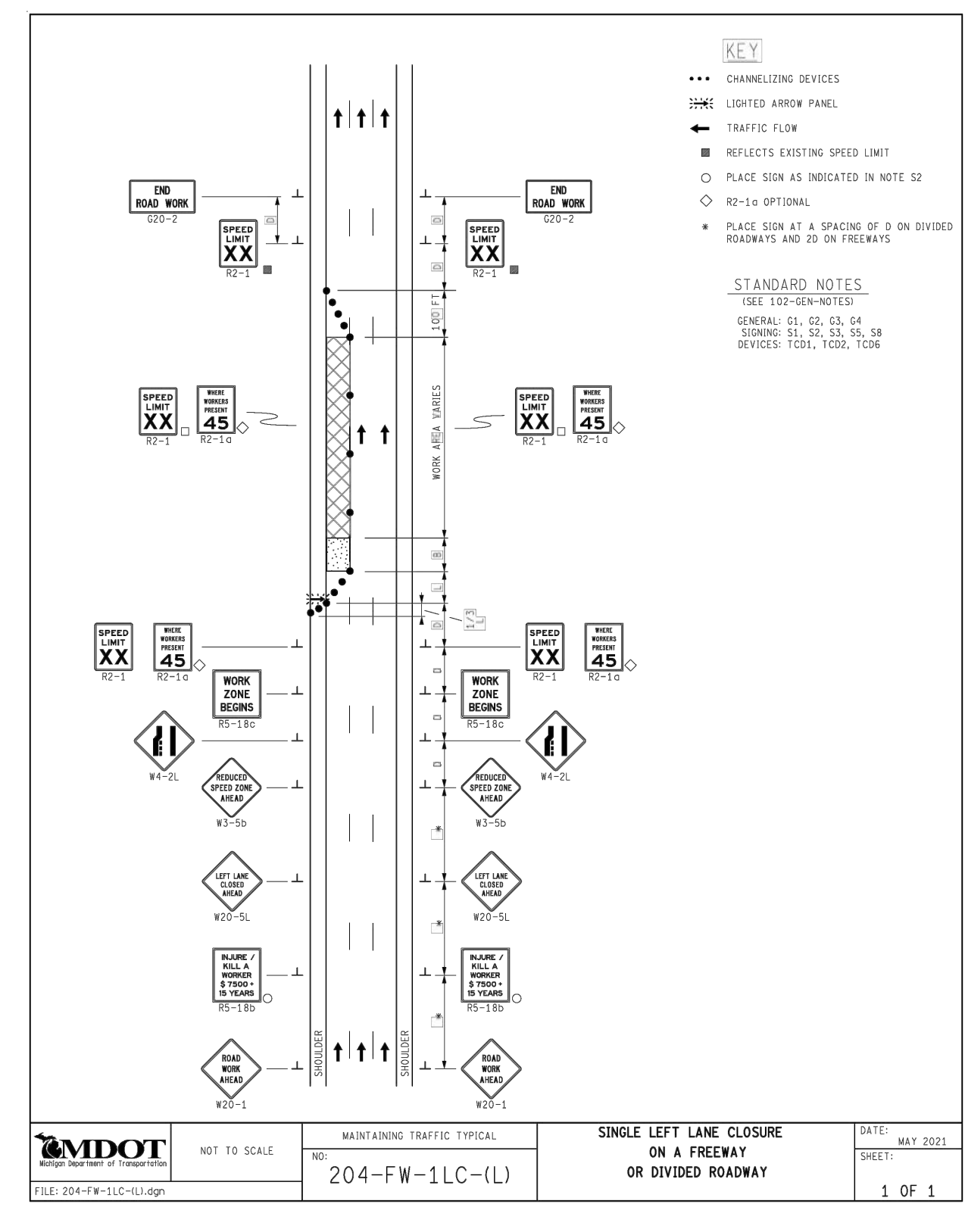
**GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE, "B"**

B (FEET)	SPEED, MPH (PRIOR TO WORK AREA)											
	20	25	30	35	40	45	50	55	60	65	70	75
B (FEET)	33	50	83	132	181	230	279	328	411	476	542	625

**MINIMUM MERGING TAPER LENGTH, "L" (FEET)**

OFFSET (FEET)	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
(1)	11	15	21	27	35	45	55	65	75	85	100
(2)	21	30	41	54	70	90	110	140	180	230	290
(3)	32	45	62	80	105	135	175	225	290	370	470
(4)	42	60	82	107	140	180	230	290	370	470	600
(5)	53	75	103	134	175	225	290	370	470	600	770
(6)	63	90	123	160	210	270	330	400	490	600	770
(7)	73	105	143	187	240	300	370	450	550	670	850
(8)	84	120	164	214	270	330	400	490	600	730	920
(9)	94	135	184	240	300	370	450	550	670	810	1010
(10)	105	150	205	267	330	400	490	600	730	880	1090
(11)	115	165	225	294	360	450	550	670	810	970	1190
(12)	125	180	245	320	400	490	600	730	880	1050	1290
(13)	136	195	266	347	430	520	630	770	930	1110	1370
(14)	146	210	286	374	460	560	680	830	1000	1190	1470
(15)	157	225	307	400	500	610	740	900	1090	1300	1600

NOT TO SCALE  
NO: 101-GEN-SPACING-CHARTS  
DATE: MAY 2021  
SHEET: 1 OF 3



**101-GEN-SPACING-CHARTS**

**THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:**

$L^* = W \times S^2 / 60$  WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

$L^* = W \times S^2$  WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

**TAPER LENGTH**

**UPSTREAM TAPERS**

- MINIMUM MERGING TAPER:  $L = 1/2 L$
- SHOULDER TAPER:  $L = 1/3 L$
- 2 TO 1 LANE ROAD TAPER:  $L = 3/4 L$
- 3 TO 1 LANE ROAD TAPER:  $L = 100'$  (PER LANE)

**DOWNSTREAM TAPERS (USE IS RECOMMENDED)**

**MAXIMUM SPACING FOR CHANNLEIZING DEVICES**

WORK ZONE SPEED LIMIT	DAYTIME 42" DEVICE SPACING (FT)		NIGHTTIME 42" DEVICE SPACING (FT)	
	TAPER	TANGENT	TAPER	TANGENT
< 45 MPH	1 x SPEED LIMIT	2 x SPEED LIMIT	25 FEET	50 FEET
≥ 45 MPH	50 FEET	100 FEET	25 FEET	50 FEET

**SIGN OUTLINE KEY**

DASHED OUTLINES INDICATE A SIGN THAT EXISTS ON SITE, AND NEEDS TO BE COVERED.

SOLID OUTLINES INDICATE A SIGN THAT IS TO BE PLACED ON THE PROJECT.

NOT TO SCALE  
NO: 101-GEN-SPACING-CHARTS  
DATE: MAY 2021  
SHEET: 2 OF 3

**WARNING SIGNS**

- THE MINIMUM SIZE OF ALL DIAMOND SHAPED WARNING SIGNS IS 48" x 48".
- REFLECTORIZED SIGNING IS REQUIRED.
- ALL WARNING SIGNS MAY BE EQUIPPED WITH AN ORANGE OR DAY-GLO FLAG MOUNTED ABOVE THE SIGN.
- TYPE A WARNING LIGHTS WILL NOT BE REQUIRED WITH THE USE OF ROLL-UP SIGNS.

**TRAFFIC REGULATION NOTES**

- D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES.  
 $L$  = LENGTH OF TAPER  
 $L_1$  &  $L_2$  = MINIMUM LENGTH OF TAPER  
B = LENGTH OF LONGITUDINAL BUFFER
- ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
- DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN THE TABLE, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNLEIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET, TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S), 25 FEET IN THE DOWNSTREAM TAPER AREAS AND SHOULD NOT EXCEED 90 FEET WHEN USED FOR TANGENT CHANNLEIZATION.
- WHEN BUFFER AREAS ARE ESTABLISHED, THERE SHALL BE NO EQUIPMENT OR MATERIALS STORED OR WORK CONDUCTED IN THE BUFFER AREA.
- FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
- WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
- ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDTOT WILL BE ALLOWED.
- ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHALL BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
- ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MUTTCD AND THE CURRENT EDITION OF THE MDTOT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
- WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
- WHEN INTERSECTING ROADS OR SIGNIFICANT GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
- ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
- THE HANDHELD (PADDLE) SIGNS REQUIRED BY THE MUTTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.
- ALL EXISTING PAVEMENT MARKINGS WHICH AREA IN CONFLICT WITH EITHER PROPOSED CHANGES IN TRAFFIC PATTERNS OR PROPOSED TEMPORARY TRAFFIC MARKINGS, SHALL BE REMOVED BEFORE ANY CHANGE IS MADE IN THE TRAFFIC PATTERN. EXCEPTION WILL BE MADE FOR DAYTIME-ONLY TRAFFIC PATTERNS THAT ARE ADEQUATELY DELINEATED BY OTHER TRAFFIC CONTROL DEVICES.
- THE LIGHTED ARROW PANEL SHALL BE LOCATED AT THE BEGINNING OF THE TAPER AS SHOWN, WHEN PHYSICAL LIMITATIONS RESTRICT ITS PLACEMENT AS INDICATED, THEN IT SHALL BE PLACED AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE.

PLAN REVISIONS						DEVELOPER DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY CONTACT: ORZA ROBERTSON ADDRESS: 500 GORHAM AVE SUITE 2200 DETROIT, MI 48226 PHONE: 313.237.6000 EMAIL: ORBERTSON@MDECC.ORG	DESIGNED BY: DAVID RYZYI	APPROVED BY:	CS:	JUNCTION / McGRAW SITE READINESS PROJECT	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION						
1	07/24/24		EGLE PERMIT			DRAWN BY: KCC	DATE: 07/11/2024				
						CHECKED BY: DAVID RYZYI				MOT NOTES AND DETAILS	C5.1

W:\Projects\2023\401 2300001-00199401.230108.000\CAD\SHOTS\TASK 300MOT NOTES.dwg Last saved 7/30/2024 12:26 PM by KCoak, plotted 7/31/2024 4:48 PM

UNLESS NOTED OTHERWISE ON DRAWINGS

MDOT CLASS II GRANULAR MATERIAL, PLACE AND COMPACT (IN MAX. 12" LIFTS) BY THE "CONTROLLED DENSITY METHOD" TO 98% PER SECTION 31 23 33, 3.10 B OF MAXIMUM UNIT WEIGHT

NOMINAL PIPE DIAMETER AS SPECIFIED ON PLANS

4" MIN. - 6" MAX MDOT CLASS II BEDDING

NOMINAL PIPE DIAMETER	MAXIMUM TRENCH WIDTH
LESS THAN 18"	30"
18" TO 24"	PIPE DIAMETER PLUS 18"
GREATER THAN 24"	PIPE DIAMETER PLUS 24"

NOTES:

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

STANDARD TRENCH DETAIL FOR WATER MAIN UNDER ROAD BED, PARKING LOTS, SIDEWALKS, DRIVEWAYS, CURBS, GRAVEL ROADS AND ALLEYS

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

UTILITY TRENCH, WATER MAIN		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 1 OF 3
DATE	9/2018	DWG. No. 312333-04

UNLESS NOTED OTHERWISE ON DRAWINGS

SELECTED EXCAVATED MATERIAL COMPACTED TO 90% OF MAXIMUM UNIT WEIGHT

MDOT CLASS II GRANULAR MATERIAL, PLACE AND COMPACT (IN MAX. 12" LIFTS) BY "CONTROLLED DENSITY METHOD" TO 98% PER SPECIFICATION 31 23 33, 3.10 B OF MAXIMUM UNIT WEIGHT

NOMINAL PIPE DIAMETER AS SPECIFIED ON PLANS

4" MIN. - 6" MAX MDOT CLASS II BEDDING

NOMINAL PIPE DIAMETER	MAXIMUM TRENCH WIDTH
LESS THAN 18"	30"
18" TO 24"	PIPE DIAMETER PLUS 18"
GREATER THAN 24"	PIPE DIAMETER PLUS 24"

NOTES:

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

STANDARD TRENCH DETAIL FOR WATER MAIN WITHIN INFLUENCE OF ROAD BED

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

UTILITY TRENCH, WATER MAIN		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 2 OF 3
DATE	9/2018	DWG. No. 312333-05

UNLESS NOTED OTHERWISE ON DRAWINGS

SELECTED EXCAVATED MATERIAL COMPACTED TO 90% OF MAXIMUM UNIT WEIGHT

MDOT CLASS II GRANULAR MATERIAL, PLACE AND COMPACT (IN MAX. 12" LIFTS) BY THE "CONTROLLED DENSITY METHOD" TO 98% PER SPECIFICATION 31 23 33, 3.10 B OF MAXIMUM UNIT WEIGHT

NOMINAL PIPE DIAMETER AS SPECIFIED ON PLANS

4" MIN. - 6" MAX MDOT CLASS II BEDDING

NOMINAL PIPE DIAMETER	MAXIMUM TRENCH WIDTH
LESS THAN 18"	30"
18" TO 24"	PIPE DIAMETER PLUS 18"
GREATER THAN 24"	PIPE DIAMETER PLUS 24"

NOTES:

- NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
- TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

STANDARD TRENCH DETAIL FOR WATER MAIN UNDER BERMS, LAWNS, GRASSY AREAS, (OUTSIDE PAVEMENT INFLUENCE)

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

UTILITY TRENCH, WATER MAIN		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 3 OF 3
DATE	9/2018	DWG. No. 312333-06

UNLESS NOTED OTHERWISE ON DRAWINGS

CONCRETE CRADLE UNDER VALVE EXTENDING TO SPRING LINE, VALVE TO REST ON A MORTAR BED

WATER MAIN

LIFTING HOLE PLUG WITH GROUT

PLAN

GATE WELL SIZING CHART	
MINIMUM GATE WELL INSIDE DIAMETER	WATER MAIN DIAMETER
5'	6" - 8"
6'	12" - 16"

GROOVED BASE - DETAIL

NOTES:

- MANHOLE STEPS SHALL BE INSTALLED IN WELL WALL WHERE HEIGHT FROM TOP OF PIPE TO TOP OF WELL EXCEEDS 5'-0".
- PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ALL THE REQUIREMENTS OF "SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE RISERS AND TOPS" ASTM C-418 WITH SINGLE OFF-SET JOINT CONFORMS TO ASTM C-443.
- EACH SECTION SHALL HAVE NOT MORE THAN TWO HOLES FOR HANDLING PURPOSES. THESE HOLES SHALL BE SATISFACTORILY PLUGGED WITH GROUT AFTER INSTALLATION.
- STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE 16" CEN. ON CEN. 45° FROM CENTERLINE OF WATER MAIN

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

GATE WELL, PRECAST		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 1 OF 2
DATE	9/2018	DWG. No. 330561-09

1" 11" E-1 STIK PRE-FORMED BUTYL SEALANT - 2 EACH COURSE (OUTSIDE AND INSIDE OF THREADED STUDS) CONFORMING TO FEDERAL SPECIFICATION SS-SS-10A AND AASHTO M-198 OR APPROVED EQUAL

FOUR CADMIUM COATED 5/8" DIA. THREADED STUDS WITH 3/4" (1 1/2" 1/8" THICK METAL WASHER, 3/4" (1 1/2" 1/16" THICK NEOPRENE SEALING WASHER AND NUTS, STUDS TO BE INSTALLED IN FOUR THREADED INSERTS PLACED WHEN CASTING ON CONE SECTION

STANDARD DWSD MANHOLE FRAME AND COVER, EAST JORDAN 00104050L01 ERGO COVER AND FRAME OR APPROVED EQUAL

FINAL GRADE

2" (MIN.) OR 6" CONCRETE GRADE RINGS WITH FINISH TOP AND BOTTOM SURFACES (8" DEEP), MAX. ADJUSTMENT 1/8"

PLUG LIFTING HOLES WITH GROUT (TYP.) AFTER SETTING GATE WELL

CIL OF WELL

CIL OF GATE VALVE

6" MIN. WALL THICKNESS

4" MAX.

PLACE TRACER WIRE IN LIFTING HOLES (TYP.)

CONTINUOUS 10 GA SOLID CORE COPPER WIRE, THIN INSULATION (TYP.)

LOOP WIRE, 6 FEET OF SLACK

1" CORPORATION STOPS WITH MUELLER THREADED INLET AND OUTLET

WATER MAIN

8" CONCRETE BASE

MIN. 4" MDOT 21AA BEDDING UNDER GATE WELL BASE

UNDISTURBED GROUND

CONCRETE CRADLE

KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER JOINTS, (OR APPROVED EQUAL) (TYP.)

SECTION THROUGH GATE WELL

NOTES:

- MANHOLE STEPS SHALL BE INSTALLED IN WELL WALL WHERE HEIGHT FROM TOP OF PIPE TO TOP OF WELL EXCEEDS 5'-0". TOP STEP SHALL NOT BE MORE THAN 18" BELOW MIN COVER OR AS DIRECTED. BOTTOM STEP SHALL NOT BE MORE THAN 18" ABOVE THE BENCH OR FLOOR LEVEL.
- STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE 16" CEN. ON CEN. 45° FROM CENTERLINE OF WATER MAIN.
- RUBBER JOINT RINGS FOR ADJUSTING RINGS NOT USED IN PAVEMENT AREAS.
- TRACING WIRE ON HOPE PIPE ONLY.

GATE WELL SIZING CHART	
MINIMUM GATE WELL INSIDE DIAMETER	WATER MAIN DIAMETER
5'	6" - 8"
6'	12" - 16"

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

GATE WELL, PRECAST		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 2 OF 2
DATE	9/2018	DWG. No. 330561-10

WELL WALL

GATE VALVE

D.I. PIPE

ELEVATION

SECTION A-A

VALVE TO REST ON MORTAR BED 3" MIN.

REFER TO DETAIL NO. 330561-10 FOR MORE INFORMATION ON PRECAST GATEWELL

CONCRETE CRADLE UNDER VALVE

EXIST. WELL BASE.

NOTE:

- SIZE AND REINFORCEMENT REQUIREMENTS TO BE PER MANUFACTURERS RECOMMENDATIONS.

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

VALVE, GATE, CRADLE SUPPORT, CONCRETE		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 1 OF 1
DATE	9/2018	DWG. No. 331419-01

TAPPING SLEEVE, VALVE AND WELL AS PER SPECIFICATIONS / PLANS

NEW D.I. WATER MAIN (RESTRAINED JOINTS OR THRUST BLOCK AT TAPPING SLEEVE)

SEE DETAIL "A"

NEW PIPE

EXISTING DWSD WATER MAIN

CONNECTION WITH EXISTING DWSD MAIN WITH TAPPING SLEEVE AND VALVE

PROVIDE THRUST BLOCK PER DETAIL NO. 331413-02

APPROVED COUPLING

NEW 10" MIN. BUTTERFLY OR GATE VALVE IN BOX OR WELL, AS PER SPECIFICATIONS / PLANS

NEW D.I. WATER MAIN (RESTRAINED JOINTS OR THRUST BLOCK AT TEE)

NEW PIPE

NEW PIPE

EXISTING DWSD WATER MAIN

RESTRAINED JOINT REQUIRED

CONNECTION AT EXISTING DWSD MAIN WITH TEE / VALVE

APPROVED COUPLING

5 FT. MIN. D.I. PIPE (VARIES)

APPROVED COUPLING

NEW D.I. EXIST. PIPE

NEW D.I. WATER MAIN

GAP SHALL BE WITHIN MANUFACTURERS TOLERANCES

NOTE: POLYWRAP ALL PIPE AND FITTINGS BEFORE BACKFILLING.

DETAIL "A"

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

CONNECTION WITH EXISTING WATER MAIN		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 1 OF 1
DATE	10/2018	DWG. No. 331413-08

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT

PLAN VIEW OF COVER

SECTION A-A

1 1/2"

Ø 26 1/4"

Ø 24"

Ø 35 7/8"

1 9/16"

SAFETY LOCK @ 90°

FULLY OPENED REMOVAL POSITION @ 120°

NOTE:

- EAST JORDAN 00104050L01 ERGO COVER AND FRAME OR APPROVED EQUAL.

1	UPDATED	5/2020
---	---------	--------

REV	DESCRIPTION	DATE
	REVISIONS	

GATE WELL FRAME AND COVER WITH LOGO - WATER MAIN		CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	NONE	SHEET 1 OF 1
DATE	9/2018	DWG. No. 330561-11

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY

CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4698  
EMAIL: ORBERTSON@MDECC.ORG

Mannik Smith GROUP  
TECHNICAL SKILL. CREATIVE SPIRIT.

DESIGNED BY : DAVID RYZYI

DRAWN BY : KCC

CHECKED BY : DAVID RYZYI

APPROVED BY :

DATE: 07/11/2024

CS:

JN:

JUNCTION / McGRAW SITE READINESS PROJECT

DWS WATER MAIN DETAILS

SHEET SD-1

**HYDRANT, 6 INCH INSTALLATION OFFSET**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

1	UPDATED	5/2020
REV	DESCRIPTION	DATE
REVISIONS		

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331419-02

**HYDRANT, 6 INCH INSTALLATION STRAIGHT AWAY**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

1	UPDATED	5/2020
REV	DESCRIPTION	DATE
REVISIONS		

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331419-03

**VALVE BOX INSTALLATION**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

1	UPDATED	5/2020
REV	DESCRIPTION	DATE
REVISIONS		

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331419-04

**THRUST BLOCK, TEES (TRADITIONAL) DWSD SIGNING**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SIZE OF PIPE (IN)	A (FT)	B MIN (FT)	C (FT)	D (FT)	E (FT)	F (FT)	G (FT)	H MIN (FT)	I (FT)
6X6	1.5	0.5	1.00	2.50	1.25	1.50	0.5	2.25	0.50
8X8	1.5	0.5	1.00	3.00	1.50	2.00	1.00	2.25	0.50
12X8	1.5	0.5	1.00	3.00	1.50	2.00	1.00	2.42	0.50
12X12	2.08	0.5	1.33	4.00	2.00	3.00	1.50	2.5	0.6
16X8	1.5	0.5	1.00	3.00	1.50	2.00	1.00	2.5	0.50
16X12	2.08	0.5	1.33	4.00	2.00	3.00	1.50	3.08	0.6
16X16	2.6	1.00	1.6	5.00	2.50	4.00	2.00	3.8	0.92

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331413-02

**THRUST BLOCK, VERTICAL BEND (TRADITIONAL) DWSD SIGNING**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SIZE OF PIPE (IN)	BEND IN DEGREE	F (FT)	G (FT)	H (FT)	I (FT)	J (FT)	K (FT)	L (FT)	M (FT)	N (FT)	O (FT)	P (FT)	Q (FT)	R (FT)	S (FT)	T (FT)		
6	22.5	1.583	1.33	1.8	1.33	2.6	3.00	0.00	0.33	0.25	3	8	5.0	10.6	4.0	15.06	1.50	0.55
8	45	1.583	1.33	1.8	1.33	2.6	3.00	0.33	0.33	0.25	4	8	5.5	13.0	4.0	11.62	1.50	0.60
8	45	1.8	1.50	2.50	1.00	4.00	0.50	0.50	0.25	4	12	5.5	13.0	4.0	18.44	1.50	0.60	
10	22.5	1.83	1.50	2.50	1.42	3.50	4.00	0.50	0.50	0.25	4	10	6.5	15.3	4.0	22.62	1.50	0.68
10	45	1.92	1.6	2.83	1.00	4.00	4.50	0.6	0.6	0.25	4	12	6.5	15.3	4.0	10.88	1.50	0.68
12	22.5	2.00	1.50	2.50	1.583	4.00	4.00	0.6	0.50	0.33	4	12	7.5	11.6	4.0	21.82	1.50	0.75
12	45	2.08	1.50	3.00	1.1	5.00	4.50	0.92	0.5	0.25	4	14	7.5	11.6	4.0	13.25	1.50	0.75
16	22.5	2.1	1.6	2.83	1.583	5.00	4.50	0.83	0.75	0.33	4	14	8.0	22.2	4.0	21.82	1.5	0.89

SCALE NONE SHEET 1 OF 2  
DATE 9/2018 DWG. No. 331413-04

**THRUST BLOCK, VERTICAL BEND (TRADITIONAL) DWSD SIGNING**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SIZE OF PIPE (IN)	BEND IN DEGREE	A (FT)	B (FT)	C (FT)
6	22.5	1.6	1.00	1.00
6	45	1.6	1.00	1.00
8	22.5	1.5	1.00	1.00
8	45	1.5	1.00	1.00
10	22.5	1.92	1.00	1.00
10	45	1.92	1.00	1.00
12	22.5	2.1	1.00	1.00
12	45	2.1	1.00	1.00
16	22.5	2.25	1.00	1.25
16	45	2.25	1.00	1.25

SCALE NONE SHEET 2 OF 2  
DATE 9/2018 DWG. No. 331413-05

**THRUST BLOCK, PLUGS AND CAPS (TRADITIONAL) DWSD SIGNING**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SIZE OF PIPE (IN)	A MIN (FT)	B MIN (FT)	C (FT)	D (FT)	E (FT)	F (FT)	G (FT)
6	1.92	0.5	1.1	2.50	1.25	1.50	0.15
8	1.92	0.5	1.1	3.00	1.50	2.00	1.00
12	2.08	0.5	1.33	4.00	2.00	3.00	1.50
16	2.6	1.00	1.6	5.00	2.50	4.00	2.00

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331413-03

**THRUST BLOCK, HORIZONTAL BEND (TRADITIONAL) DWSD SIGNING**

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION

SIZE OF PIPE (IN)	DEGREE OF BEND	A (FT)	B MIN (FT)	C (FT)	D (FT)	E (FT)	F (FT)	G (FT)	H MIN (FT)	I (FT)
6	45	1.5	0.5	1.00	2.00	1.00	1.50	0.5	1.92	1.33
6	90	1.5	0.5	1.00	2.50	1.25	1.50	0.5	1.92	1.1
8	45	1.5	0.5	1.00	2.33	1.1	2.00	1.00	1.92	1.33
8	90	1.5	0.5	1.00	3.33	1.6	2.50	1.25	1.92	1.08
12	22.5	1.5	0.5	1.00	2.50	1.25	2.00	1.00	2.00	1.33
12	45	2.08	0.5	1.33	3.50	1.5	2.50	1.25	2.33	1.33
12	90	2.08	0.5	1.33	5.50	2.5	3.00	1.50	2.33	1.6
16	22.5	2.6	1.00	1.6	3.33	1.6	2.50	1.25	3.00	1.1
16	45	2.6	1.00	1.6	5.33	2.6	3.00	1.50	3.00	2.50
16	90	2.6	1.00	1.6	6.00	3.00	5.00	2.50	3.00	2.6

SCALE NONE SHEET 1 OF 1  
DATE 9/2018 DWG. No. 331413-01

PLAN REVISIONS

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.377.6599  
EMAIL: ORBERTSON@MDECC.ORG

**Mannik Smith GROUP**  
TECHNICAL SKILL. CREATIVE SPIRIT.

DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

APPROVED BY :  
DATE: 07/11/2024

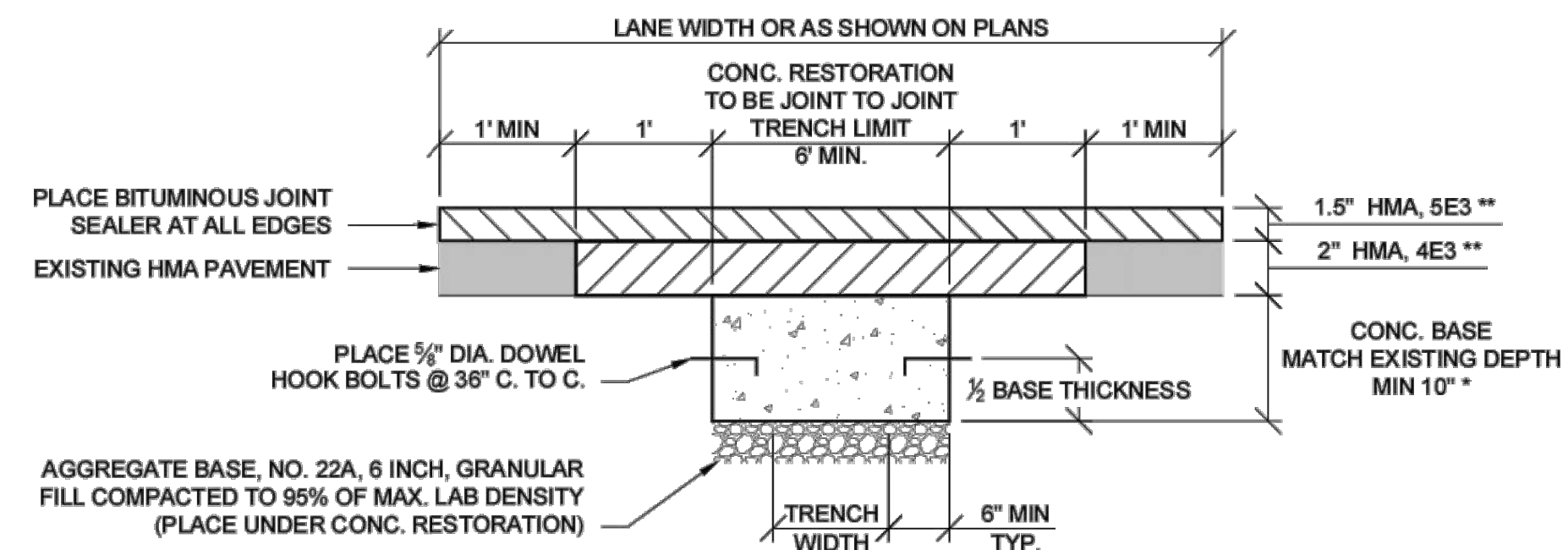
CS:  
JN:

JUNCTION / McGRAW SITE READINESS PROJECT

DWS WATER MAIN DETAILS

SHEET SD-2

**MAJOR STREETS**

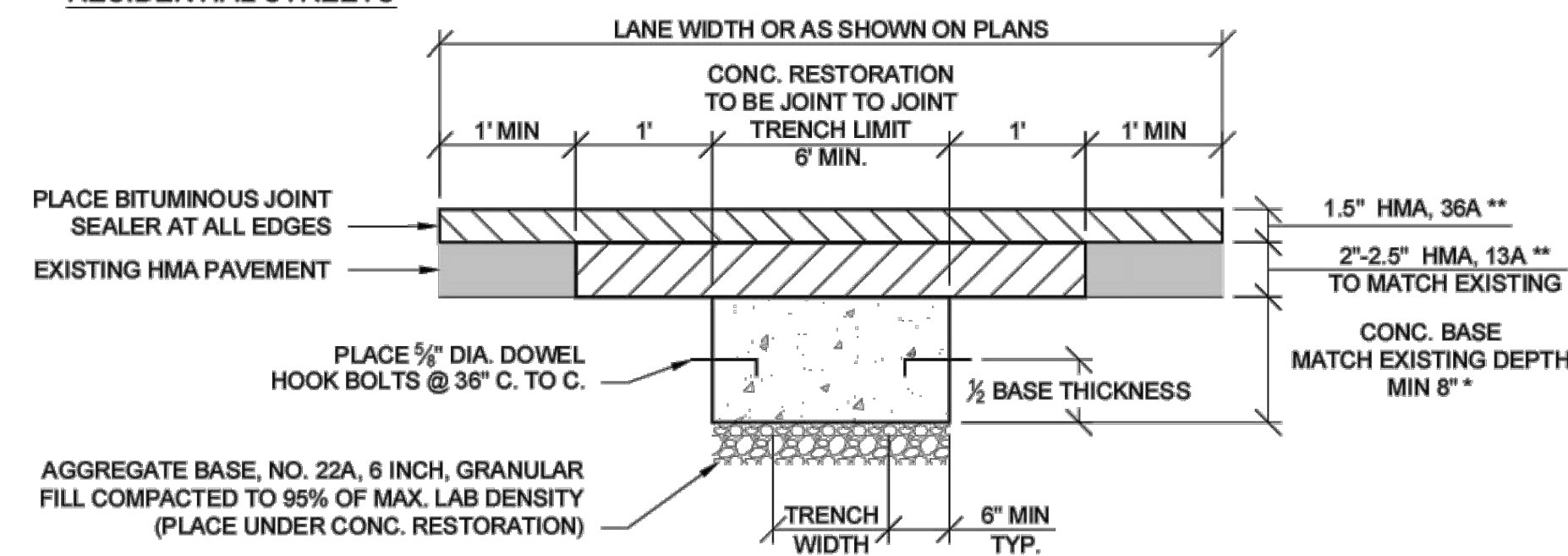


EXCEPTION:  
TO ABOVE HMA REPLACEMENT. WHEN PAVEMENT REPLACEMENT IS 100 FEET FROM EITHER SIDE OF AN UNDERPASS, REPLACE 10" CONCRETE BASE WITH TOP TOP OF CONCRETE LEVEL WITH TOP OF EXISTING CONCRETE AND REPLACE HMA SECTION AS EXISTING.

\* BOTTOM OF CONCRETE REPLACEMENT SHALL BE LEVEL WITH BOTTOM OF EXISTING PAVEMENT. CONCRETE REPLACEMENT MAY EXCEED 10" TO MEET THIS CRITERIA.

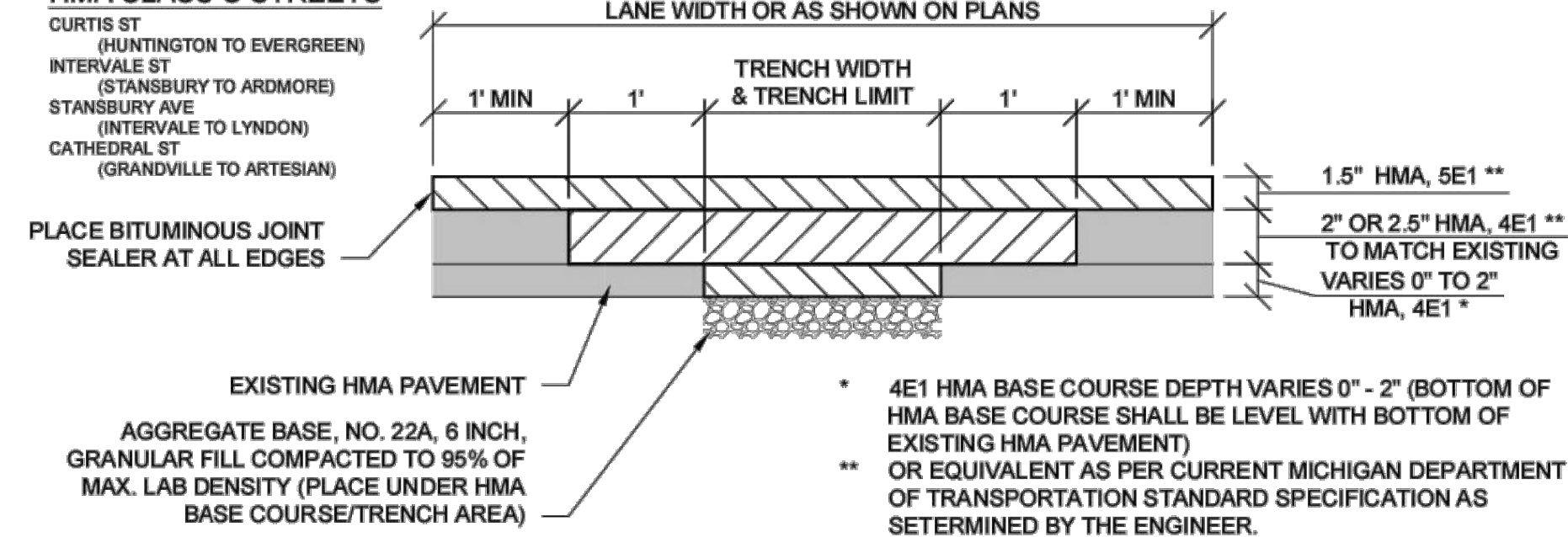
\*\* OR EQUIVALENT AS PER CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION AS DETERMINED BY THE ENGINEER.

**RESIDENTIAL STREETS**



**HMA SURFACE ON CONCRETE BASE  
UTILITY TRENCH CONSTRUCTION  
PAVEMENT RESTORATION**

**HMA CLASS C STREETS**



**HMA UTILITY TRENCH CONSTRUCTION  
PAVEMENT RESTORATION**

**PAVEMENT RESTORATION NOTES**

1. MILL (REMOVE) HMA PAVEMENT FOR MIN ONE LANE, OR ROAD WIDTH AS SHOWN ON PLANS. MILLING WITHIN THE TRENCH LIMIT IS INCIDENTAL TO THE WATER MAIN PIPE AND IS NOT PAID FOR SEPARATELY.
2. ALL PAVEMENT REMOVED WITHIN THE TRENCH LIMIT IS INCIDENTAL TO THE WATER MAIN PIPE AND IS NOT PAID FOR SEPARATELY.
3. ALL PAVEMENT CUTS SHALL BE TO THE NEAREST JOINT FOR CONCRETE AND EQUAL TO THE TRENCH LIMIT FOR HMA.
4. ALL REMOVALS SHALL BE SAWCUT STRAIGHT AND SQUARE (90 DEGREES).
5. CONCRETE RESTORATION PAVEMENT SHALL BE MDOT P1 MIX (3,500 PSI).
6. RESTORED CONCRETE PAVEMENT SHALL MATCH THICKNESS OF EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARD PLAN R-44-F.
7. RESTORED CONCRETE SHALL BE ANCHORED TO EXISTING CONCRETE PAVEMENT IN CONFORMANCE WITH MDOT STANDARD PLAN R-44-F.
8. APPLY HMA TACK COAT PER MDOT STANDARD SPECIFICATIONS SECTION 904.
9. RESTORED HMA PAVEMENT 3 1/2" TO MATCH EXISTING, IN 2 LIFTS:  
1ST LIFT - 2" MDOT HMA 4E3 (13A RESIDENTIAL, 4E1 CLASS C), COMPACTED  
2ND LIFT - 1 1/2" MDOT HMA 5E3 (36A RESIDENTIAL, 5E1 CLASS C), COMPACTED
10. BITUMINOUS JOINT SEALER SHALL BE PLACED AT ALL FINISHED HMA JOINTS.
11. 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/TED STANDARDS.
12. FOR OTHER RELATED SPECIFICATIONS (BACKFILL COMPACTION, MATERIALS, ETC...), REFER TO DIVISION 15 OF THE STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION.
13. NOTIFY THE CITY OF DETROIT ENGINEERING DEPARTMENT 24 HOURS PRIOR TO STARTING CONSTRUCTION.
14. 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.
15. THE CITY OF DETROIT REQUIRES ALL CONCRETE WORK TO BE STAMPED WITH A CONTRACTORS IDENTIFICATION STAMP.
16. EXISTING PAVEMENT SECTIONS SHALL BE VERIFIED PER THE GEOTECH REPORT OR EXISTING CONDITION PRIOR TO USE OF APPROPRIATE PAVEMENT RESTORATION DETAIL.

**PLAN REVISIONS**

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4600  
EMAIL: ORBERTSON@DBRA.ORG



TECHNICAL SKILL,  
CREATIVE SPIRIT.

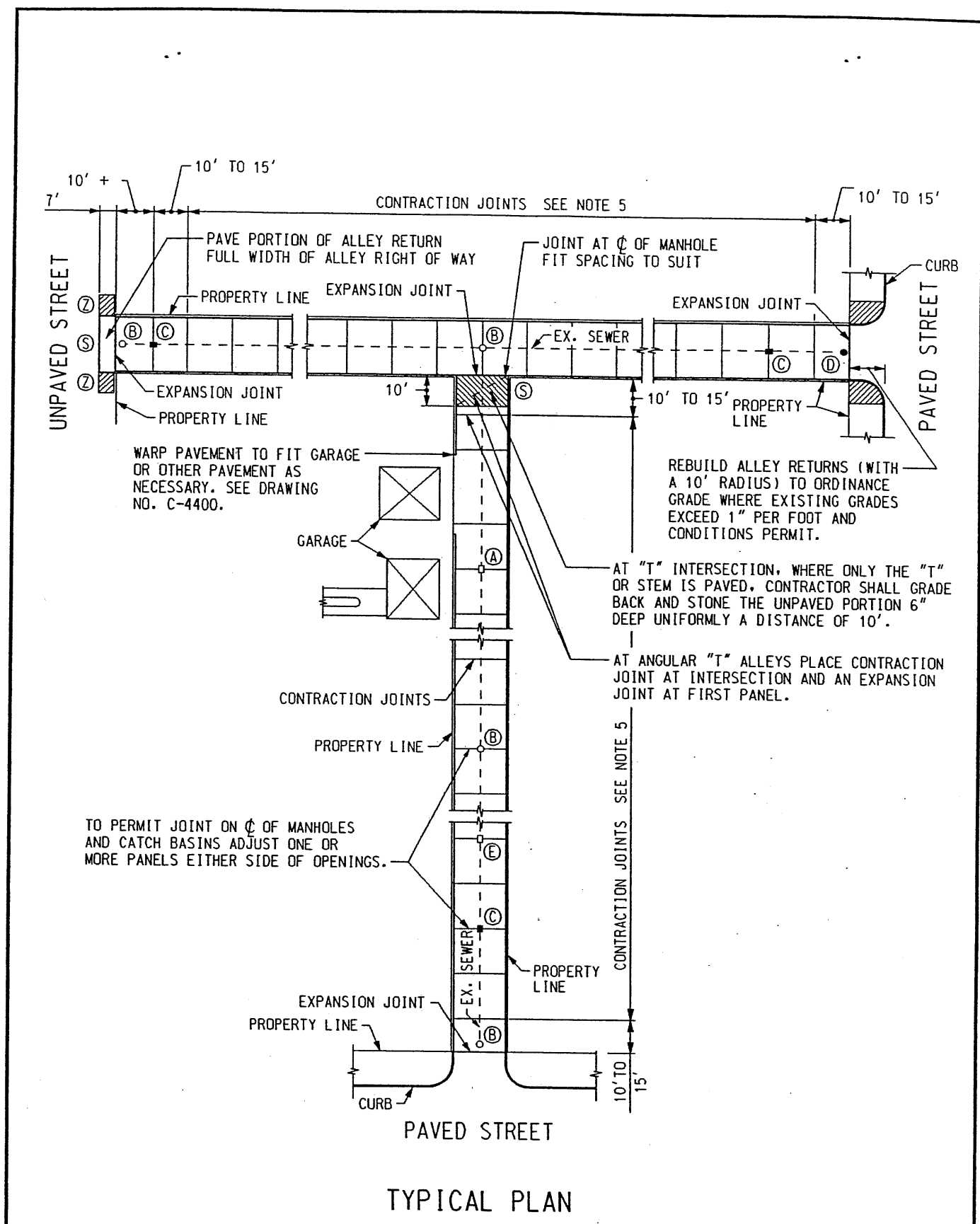
DESIGNED BY : DAVID RYZYI  
DRAWN BY : KCC  
CHECKED BY : DAVID RYZYI

APPROVED BY :  
DATE: 07/11/2024

CS:  
JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
RESTORATION DETAILS

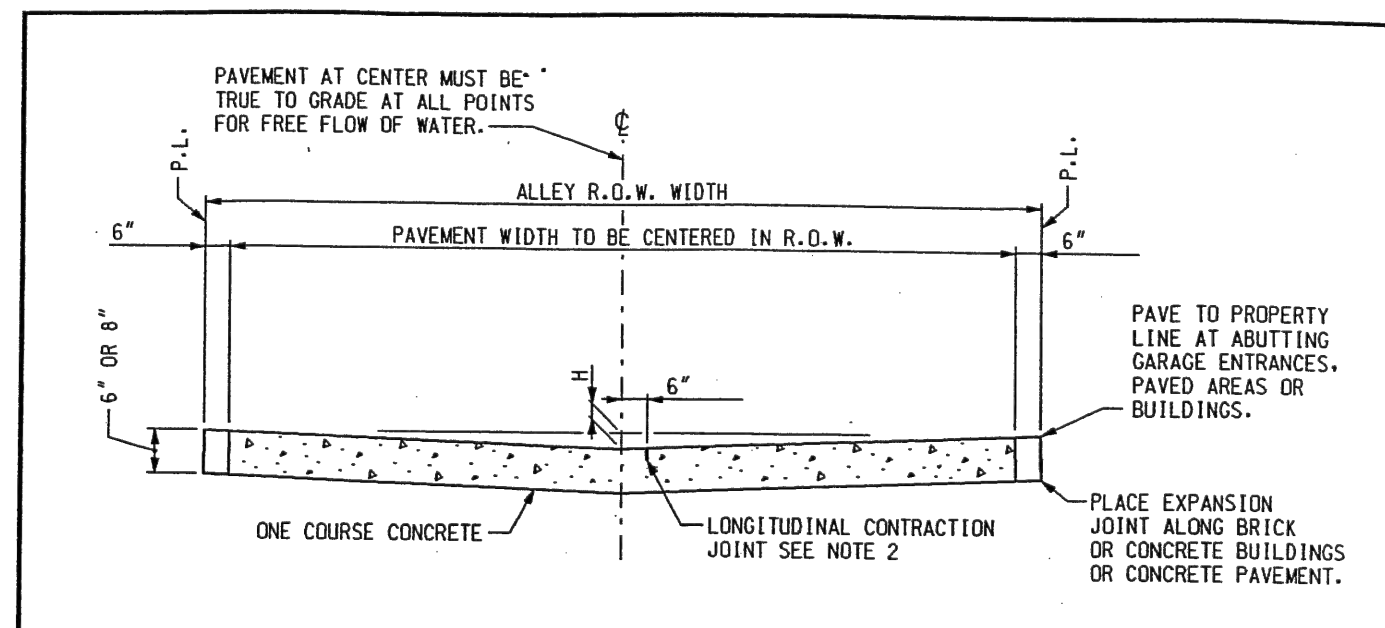
SHEET  
SD-3



TYPICAL PLAN

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	 Dadiw Haidar ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DIVISION, D.P.W. STANDARD PLAN FOR TYPICAL PLAN AND SECTION FOR CONCRETE ALLEY PAVEMENT
	rev. K.S.M. DRAWN BY: M.F.S. CHECKED BY:		



TYPICAL SECTION

ELEMENTS		
ALLEY WIDTH	PAV'T R.O.W.	H
19'	20'	5"
17'	18'	4"
15'	16'	3"

NOTES:

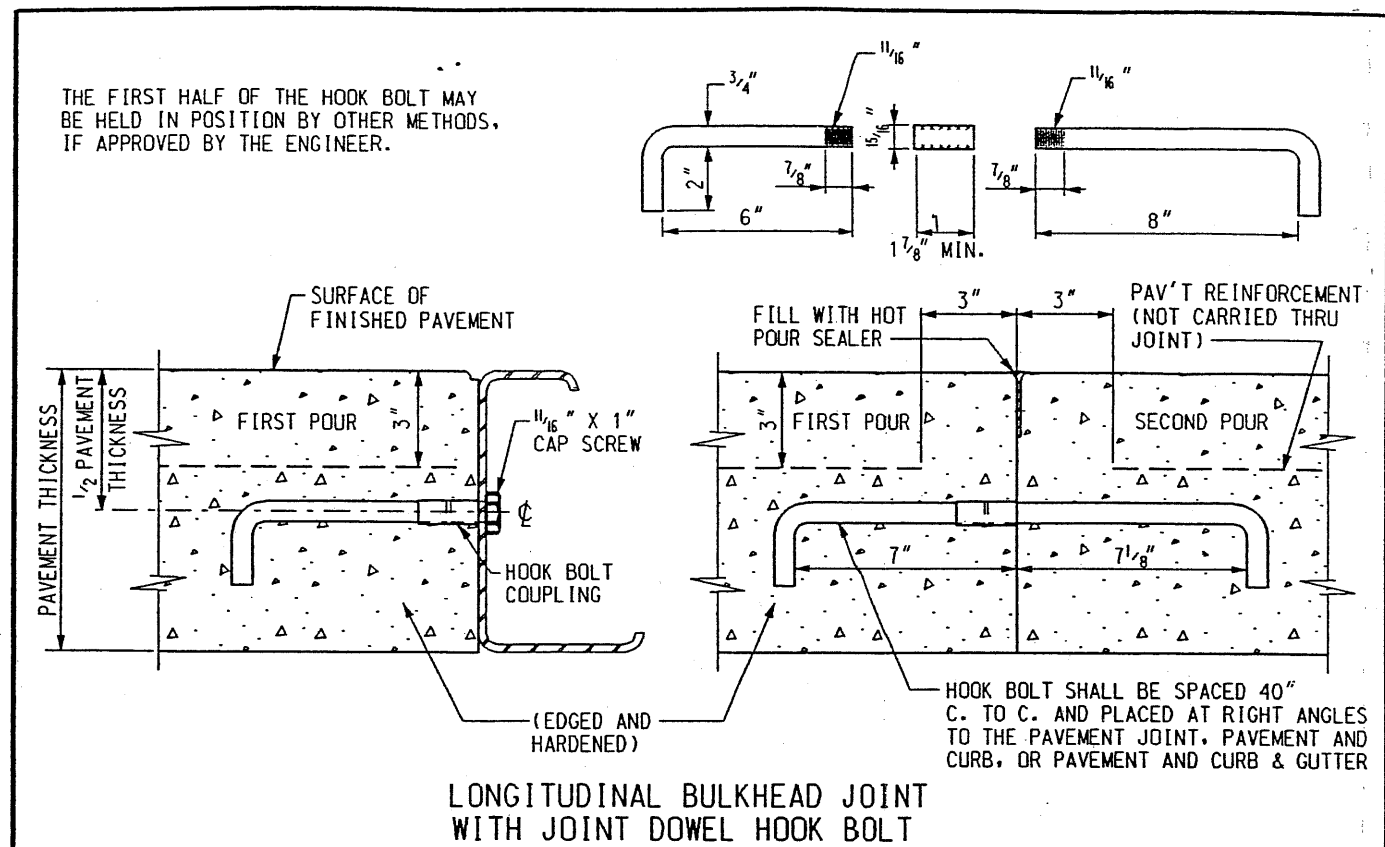
1. PLACE EXPANSION JOINTS AT ALL STREET PROPERTY LINES AND ALLEY INTERSECTIONS.
2. LONGITUDINAL CONTRACTION JOINT TO BE CONSTRUCTED IN PAVEMENTS 17' AND OVER IN WIDTH UNLESS OTHERWISE NOTED ON PAVING PLAN.
3. MAXIMUM SPACING BETWEEN EXPANSION JOINTS SHOULD NOT EXCEED 600 FEET.
4. IF STREET IS ECONOMY PAVED THE AREA BETWEEN THE WALK AND EDGE OF PAVEMENT SHALL BE PAVED WITH 6" STONE BASE PLUS 2" OF COLD PATCH MATERIAL. THE WALK FLAG SHALL BE 6" THICK.
5. CONTRACTION JOINTS SHALL BE SPACED AT 15' C. TO C. FOR SLAG AGGREGATE AND 6.0 m C. TO C. FOR NATURAL AGGREGATE.

CONSTRUCTION SYMBOLS LEGEND

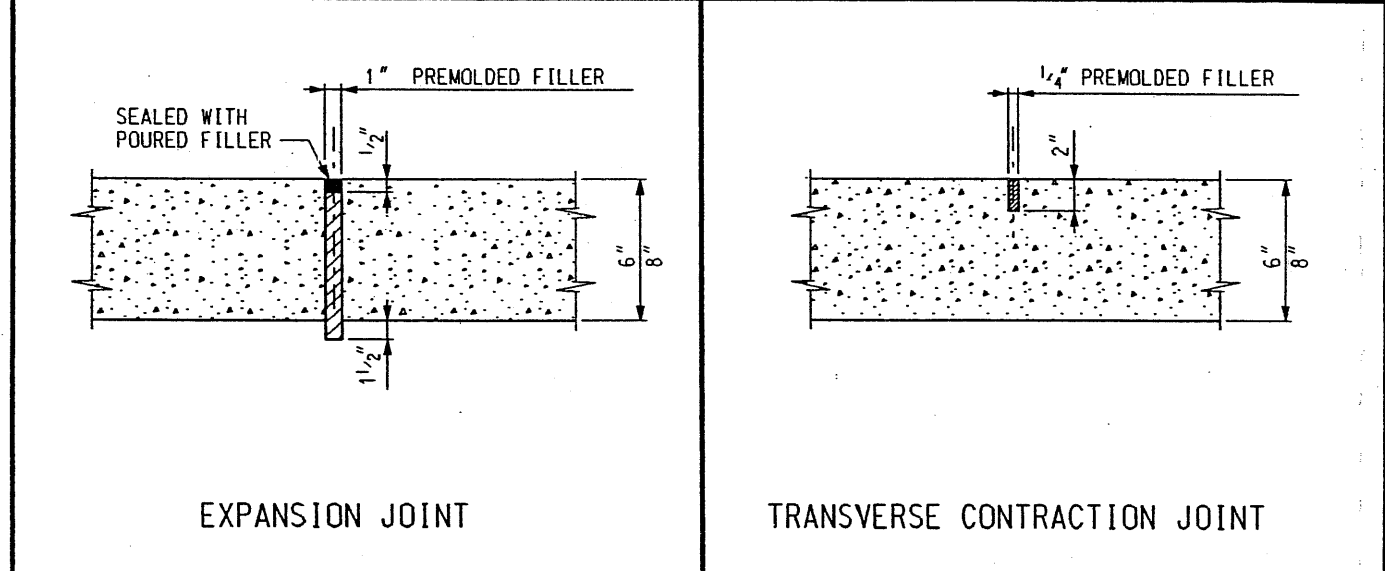
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING CATCH BASIN
- ▣ PROPOSED CATCH BASIN
- Ⓐ ADJUST EXISTING CATCH BASIN
- Ⓑ ADJUST EXISTING MANHOLE
- Ⓒ CONSTRUCT CATCH BASIN
- Ⓓ CONSTRUCT MANHOLE
- Ⓔ ABANDON EXISTING CATCH BASIN
- Ⓕ STONING AND GRADING
- Ⓖ CONSTRUCT STANDARD 6" CONCRETE SIDEWALK

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	 Dadiw Haidar ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DIVISION, D.P.W. STANDARD PLAN FOR TYPICAL PLAN AND SECTION FOR CONCRETE ALLEY PAVEMENT
	rev. K.S.M. DRAWN BY: M.F.S. CHECKED BY:		



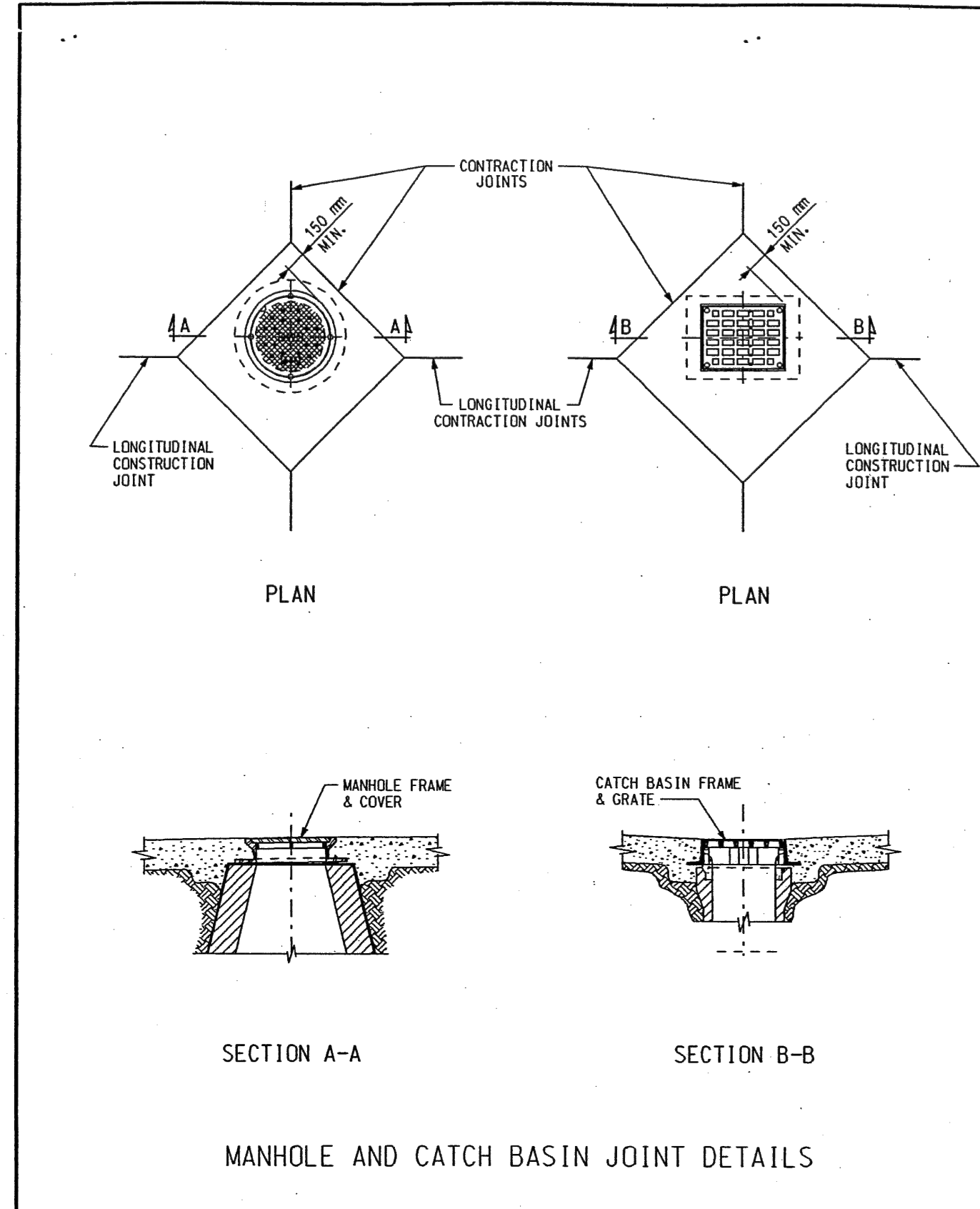
LONGITUDINAL BULKHEAD JOINT WITH JOINT DOWEL HOOK BOLT



NOTE:  
ALL DIMENSIONS ARE IN INCHES (\*) UNLESS OTHERWISE NOTED.

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	 Dadiw Haidar ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DIVISION, D.P.W. STANDARD PLAN FOR DETAIL AND STANDARD JOINTS
	rev. K.S.M. DRAWN BY: M.F.S. CHECKED BY:		



MANHOLE AND CATCH BASIN JOINT DETAILS

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

	APPROVED	 Dadiw Haidar ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DIVISION, D.P.W. STANDARD PLAN FOR DETAIL AND STANDARD JOINTS
	rev. K.S.M. DRAWN BY: M.F.S. CHECKED BY:		

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		

DEVELOPER  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.6500  
EMAIL: ORBERTSON@DECC.ORG

TECHNICAL SKILL. CREATIVE SPIRIT.

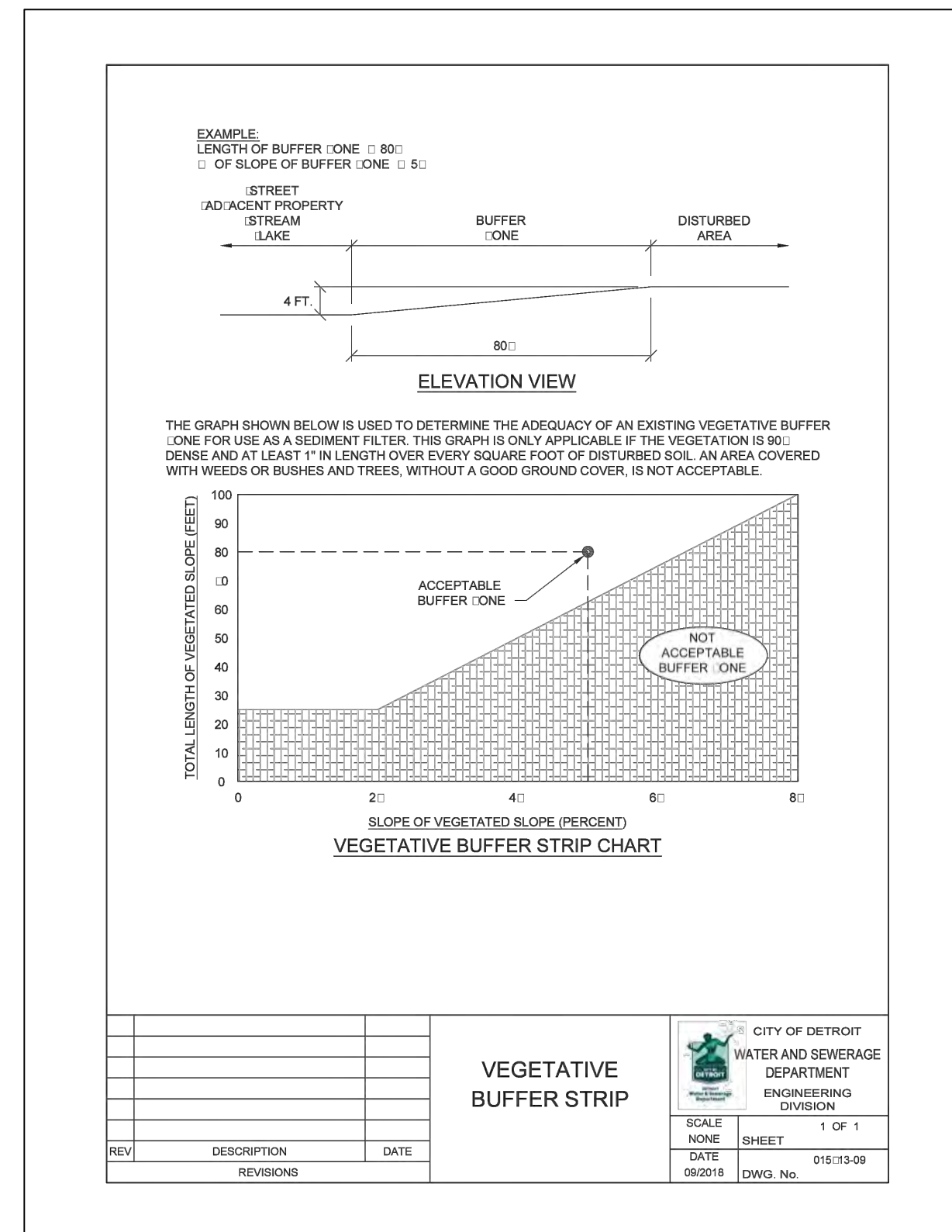
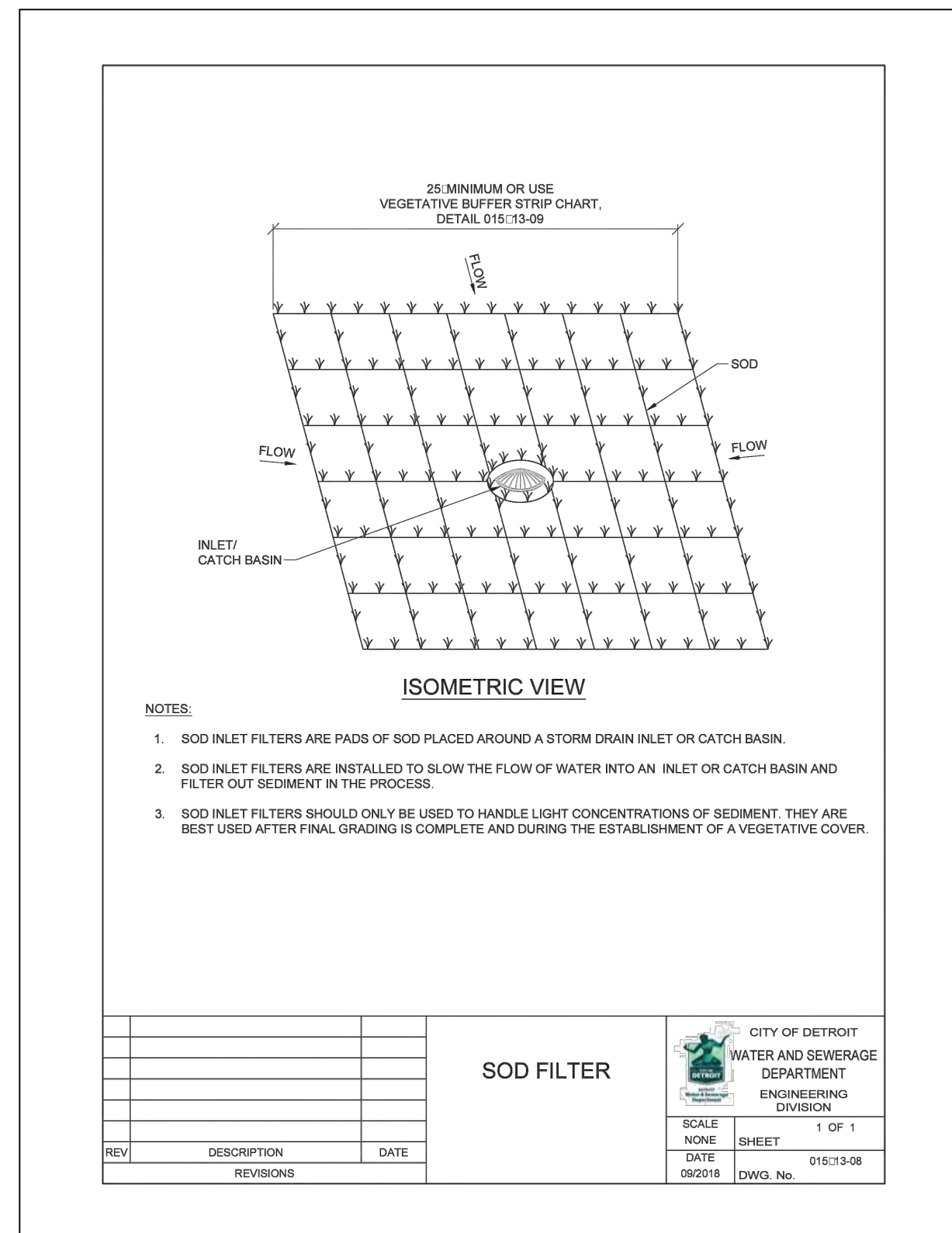
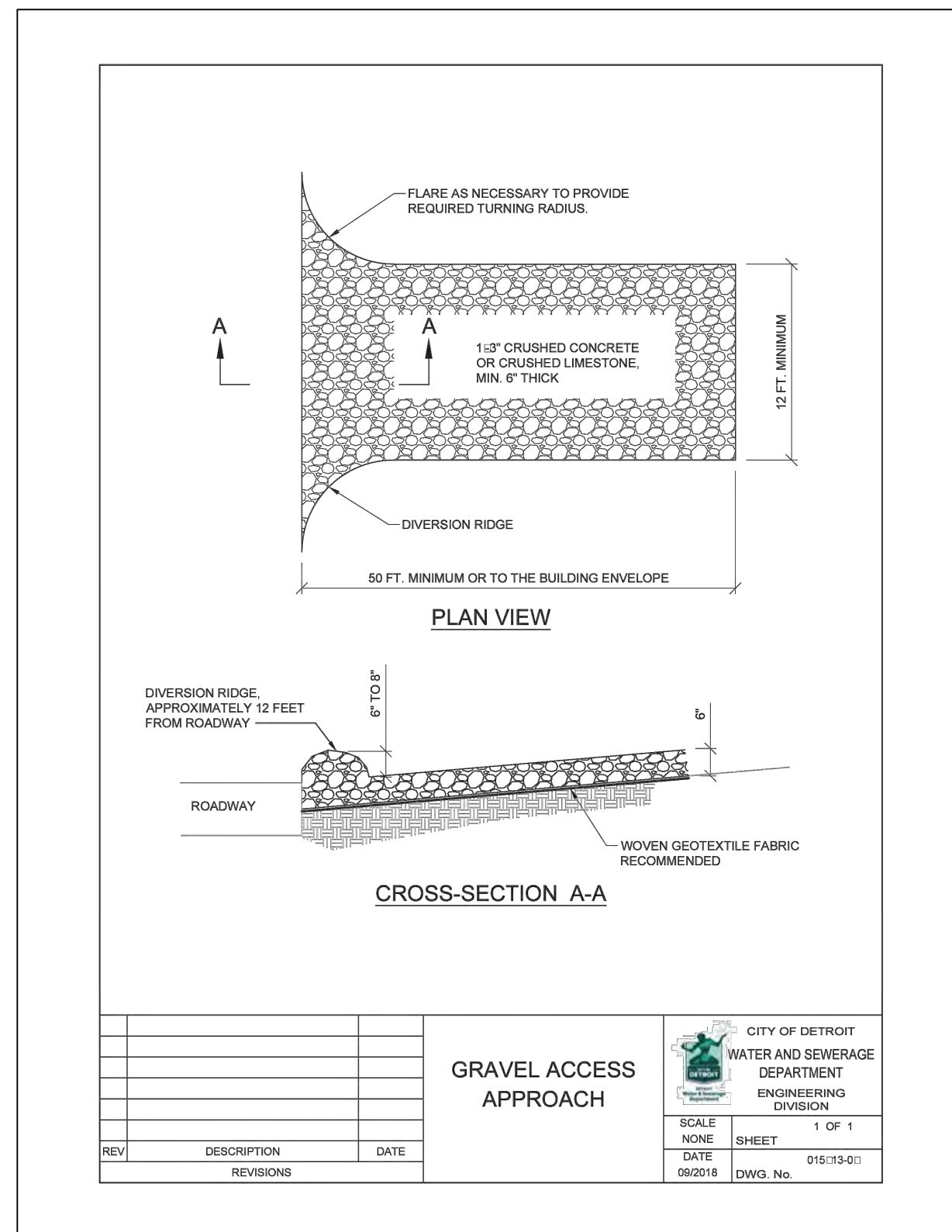
DESIGNED BY: DAVID RYZYI  
DRAWN BY: KCC  
CHECKED BY: DAVID RYZYI

APPROVED BY:  
DATE: 07/11/2024

CS:  
JN:

JUNCTION / McGRAW SITE READINESS PROJECT  
RESTORATION DETAILS  
SHEET SD-4

W:\Projects\2023\401 2300001-00199401 2300198.000\CAD\SHSTASK 3000\SDSD WATER MAIN DETAILS.dwg Last saved 7/25/2024 1:49 PM by KCoak plotted 7/25/2024 1:51 PM



**SOIL EROSION AND SEDIMENTATION CONTROL TEMPORARY FACILITIES**

THE CONTRACTOR SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH PART 81 OF ACT NO. 451 OF 1994, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 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.

ALL DISTURBED SURFACE AREA (INCLUDING UTILITY TRENCHES) SHALL BE TEMPORARILY GRADED AND/OR DITCHED TO DIRECT ALL WATER RUNOFF FROM SUCH AREAS TO SEDIMENTATION CONTROL DEVICES WHICH WILL PREVENT WATER CARRYING ERODED SOIL FROM ENTERING A WATERCOURSE, SEWER, OR ADJACENT LANDS. SUCH SEDIMENTATION CONTROL DEVICES SHALL INCLUDE (BUT NOT BE LIMITED TO) PROTECTIVE DITCHES, SEDIMENT TRAPS, SEDIMENT FILTERS, DITCH TRAPS, PIPE BARRIERS, AND FILTERS AS DETAILED AND REQUIRED AND WHERE INDICATED ON THE DRAWINGS. AFTER THE PROJECT WORK HAS BEEN COMPLETED, INSPECTED, AND APPROVED, THE CONTRACTOR SHALL REMOVE ALL SEDIMENTATION CONTROL DEVICES, MATERIAL, AND THEIR COLLECTED SILT AND DEBRIS AND RESTORE THE AREA IN ACCORDANCE WITH THE DRAWINGS.

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 SOODING OF ALL DISTURBED AREAS OF THE PROJECT.

IF SEASONAL CONDITIONS PREVENT FINAL CLEANING AND RESTORATION, 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.

**SOIL EROSION AND SEDIMENTATION CONTROL, TEMPORARY FACILITIES**

REV	DESCRIPTION	DATE

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION	SCALE NONE	SHEET 1 OF 1
DATE 06/2018	DATE 015-13-10	DWG. No.

**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 1/2 TO 1/2 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.

CONTRACTOR SHALL ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES PROTECT AGAINST LOSS OF SOIL BY THE ACTION OF WATER, ICE, GRAVITY OR WIND.

**SOIL EROSION AND SEDIMENTATION CONTROL, MAINTENANCE NOTES**

REV	DESCRIPTION	DATE

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION	SCALE NONE	SHEET 1 OF 1
DATE 06/2018	DATE 015-13-11	DWG. No.

**SUMMARY OF BASIC PRINCIPLES:**

- KEEP DISTURBED AREA AS SMALL AS POSSIBLE.
- STABILIZE AND/OR PROTECT DISTURBED AREAS AS SOON AS POSSIBLE.
- KEEP STORM WATER RUNOFF VELOCITIES LOW.
- RETAIN SEDIMENT WITHIN IMMEDIATE CONSTRUCTION AREA.

THE PURPOSE OF THIS PLAN IS TO SPECIFY METHODS FOR TEMPORARY EROSION CONTROL DURING CONSTRUCTION. IT IS INTENDED THAT MEASURES CALLED FOR IN THE SPECIFICATIONS AND SHOWN ON THESE STANDARD DETAILS PLANS BE STRICTLY ADHERED TO. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT CONSTRUCTION PROCEDURES UNDERTAKEN BE IN CONFORMANCE WITH THE STATE OF MICHIGAN ACT 451 OF 1994 PART 81, SOIL EROSION AND SEDIMENTATION CONTROL.

ALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE REGULARLY MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COLLECTED SILT AND SEDIMENTATION SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SILT TRAPS OR SEDIMENTATION CONTROL DEVICES. WHERE REQUIRED, THE CONTRACTOR SHALL REPLACE FILTER MATERIALS WHICH HAVE BECOME INEFFECTIVE DUE TO CONTAMINATION OR PHYSICAL DETERIORATION.

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 STONE SHOULD BE 6" DIAMETER OR LARGER, 2' 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 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:

- WET WEATHER SEASON (MARCH, APRIL, MAY) - 5 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.
- DRY WEATHER SEASON (JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER) - 10 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.
- COLD WEATHER SEASON (DECEMBER, JANUARY, FEBRUARY) - 15 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY.

**SOIL EROSION AND SEDIMENTATION CONTROL, GENERAL NOTES**

REV	DESCRIPTION	DATE

CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION	SCALE NONE	SHEET 1 OF 1
DATE 06/2018	DATE 015-13-12	DWG. No.

PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	07/24/24		EGLE PERMIT				
-	-	-	-	-	-	-	-

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY

CONTACT: ORZA ROBERTSON  
ADDRESS: 500 GRIFFIN AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4698  
EMAIL: ORBER15@DMREDC.ORG



DESIGNED BY : **DAVID RYZYI**

DRAWN BY : **KCC**

CHECKED BY : **DAVID RYZYI**

APPROVED BY :

DATE: **07/11/2024**

CS:

JN:

W:\Projects\2023\401.2300001-01199401.2300198.000\CAD\SHSTASK 300SESC STANDARD DETAILS.dwg Last saved 7/30/2024 3:17 PM by KCoak, plotted 7/30/2024 3:20 PM

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
1		STORMWATER DETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
2		STORMWATER INFILTRATION: REDUCES FLOW VOLUMES AND IMPROVES WATER QUALITY THROUGH NATURAL FILTERING AND SOIL ABSORPTION.	*						*
3		STORMWATER BIORETENTION: USES VEGETATION AND SOIL TO FILTER AND STORE STORMWATER, REDUCING FLOW VOLUMES AND IMPROVING WATER QUALITY.	*						*
4		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
5		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 1-5)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 1 OF 1  
DATE: 01/15/13-13  
DWG. No. 09/2018

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
6		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
8		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
9		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
10		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 6-10)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 2 OF 1  
DATE: 01/15/13-14  
DWG. No. 09/2018

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
11		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
12		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
13		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
14		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
15		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 11-15)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 3 OF 1  
DATE: 01/15/13-15  
DWG. No. 09/2018

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
16		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
18		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
19		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
20		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 16-20)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 4 OF 1  
DATE: 01/15/13-16  
DWG. No. 09/2018

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
21		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
22		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
23		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
24		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
25		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 21-25)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 5 OF 1  
DATE: 01/15/13-11  
DWG. No. 09/2018

**\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS.**

KEY	DETAILS	CHARACTERISTICS	A	B	C	D	E	F	G
26		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
28		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
29		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*
30		STORMWATER RETENTION POND: PROVIDES STORAGE FOR EXCESS FLOW VOLUMES TO AVOID OVERFLOW OF RECEIVING WATERWAYS. PROVIDES TIME FOR SEDIMENTATION AND FURTHER TREATMENT OF POLLUTANTS.	*						*

**SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (FROM 26-30)**

CITY OF DETROIT  
WATER AND SEWERAGE DEPARTMENT  
ENGINEERING DIVISION  
SCALE: NONE  
SHEET: 6 OF 1  
DATE: 01/15/13-18  
DWG. No. 09/2018

PLAN REVISIONS					
NO.	DATE	AUTH	DESCRIPTION	NO.	DESCRIPTION
1	07/24/24		EGLE PERMIT		
-	-	-	-	-	-

**DEVELOPER**  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
CONTACT: ORZA ROBERTSON  
ADDRESS: 300 GORHAM AVE SUITE 2200  
DETROIT, MI 48226  
PHONE: 313.237.4500  
EMAIL: ORBERTSON@DORCA.ORG



DESIGNED BY : **DAVID RYZYI**  
DRAWN BY : **KCC**  
CHECKED BY : **DAVID RYZYI**

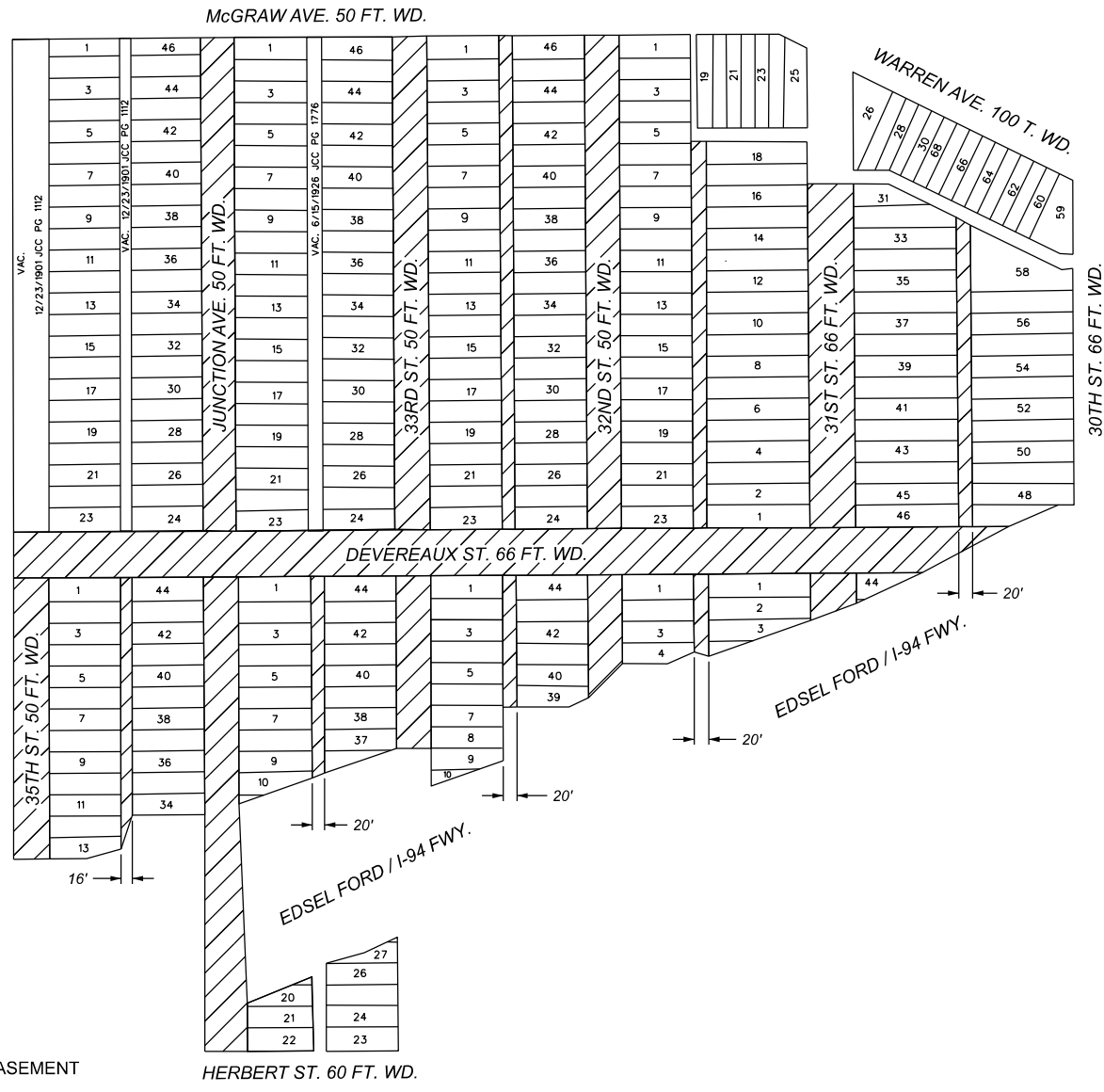
APPROVED BY :  
DATE: **07/11/2024**

CS:  
JN:

**JUNCTION / McGRAW SITE READINESS PROJECT**

**SESC DETAILS**

SHEET  
**SD-6**



(FOR OFFICE USE ONLY)

CARTO 13 A

<b>DRAWN BY</b>	AP
<b>DATE</b>	11/19/2025
<b>CHECKED</b>	LC/TS
<b>APPROVED</b>	GE

**REQUEST VACATION WITH EASEMENT  
OF THE PUBLIC ALLEYS AND STREETS  
BOUNDED BY  
McGraw Ave., W. Warren Ave.,  
30th St., I-94 Fwy., Herbert St.,  
Junction Ave., and 35th St.**

<b>CITY OF DETROIT CITY ENGINEERING DIVISION MAPS &amp; RECORDS BUREAU</b>	
<b>JOB NO.</b>	25-115
<b>DRWG. NO.</b>	

REVISED EXHIBIT A - MAP 25-4  
 OVERALL PLAN FOR VACATIONS OF R.O.W. FOR JUNCTION McGRAW AREA  
 DBRA SITE READINESS PROJECT

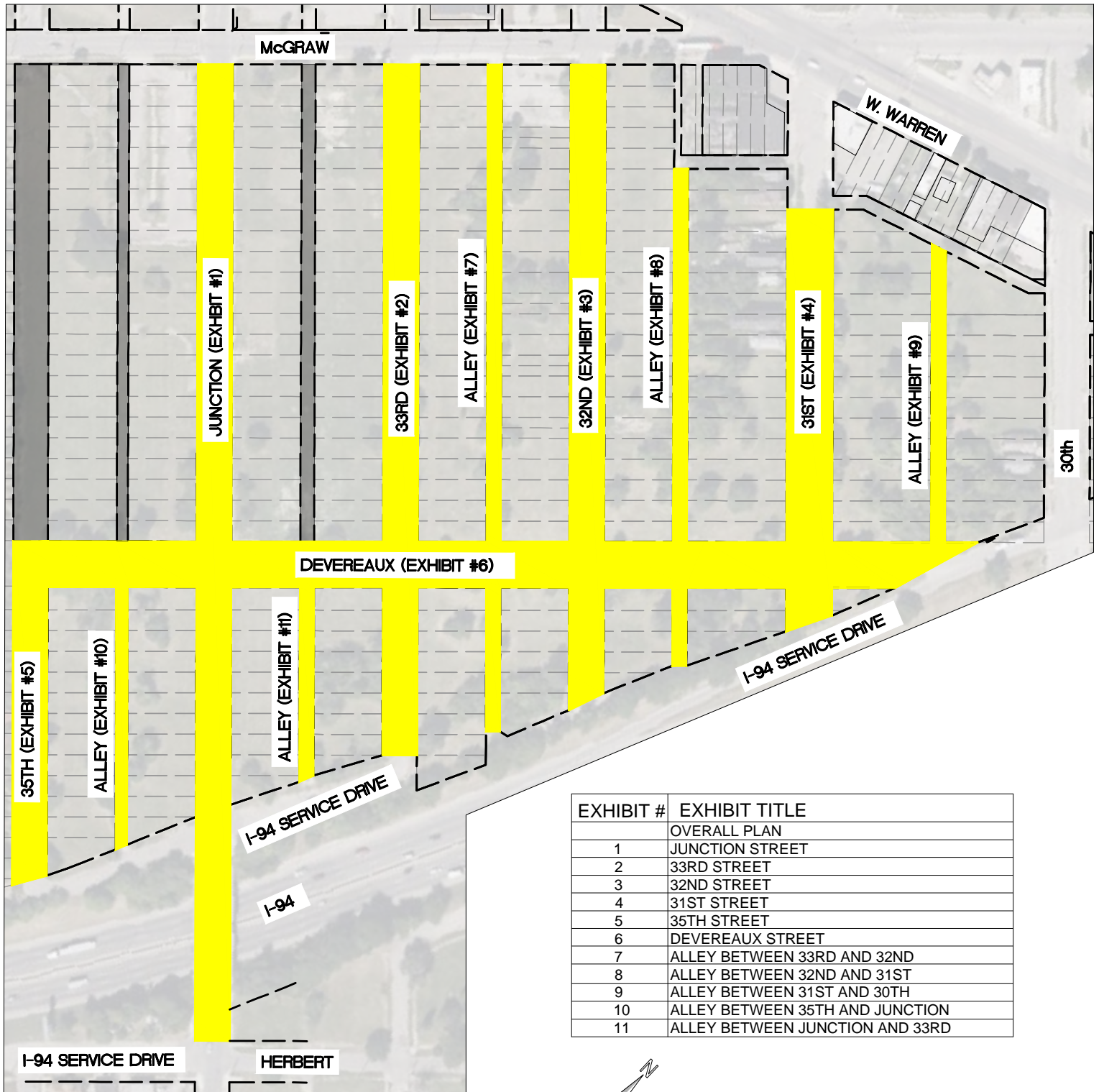
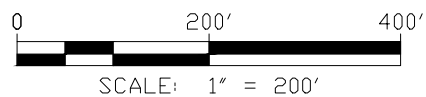
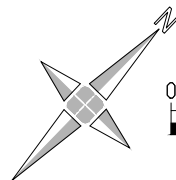


EXHIBIT #	EXHIBIT TITLE
	OVERALL PLAN
1	JUNCTION STREET
2	33RD STREET
3	32ND STREET
4	31ST STREET
5	35TH STREET
6	DEVEREAUX STREET
7	ALLEY BETWEEN 33RD AND 32ND
8	ALLEY BETWEEN 32ND AND 31ST
9	ALLEY BETWEEN 31ST AND 30TH
10	ALLEY BETWEEN 35TH AND JUNCTION
11	ALLEY BETWEEN JUNCTION AND 33RD

HATCH LEGEND

- VACATE R.O.W. AND RETAIN UTILITY EASEMENTS
- EXISTING VACATED R.O.W.



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

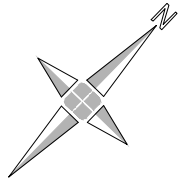
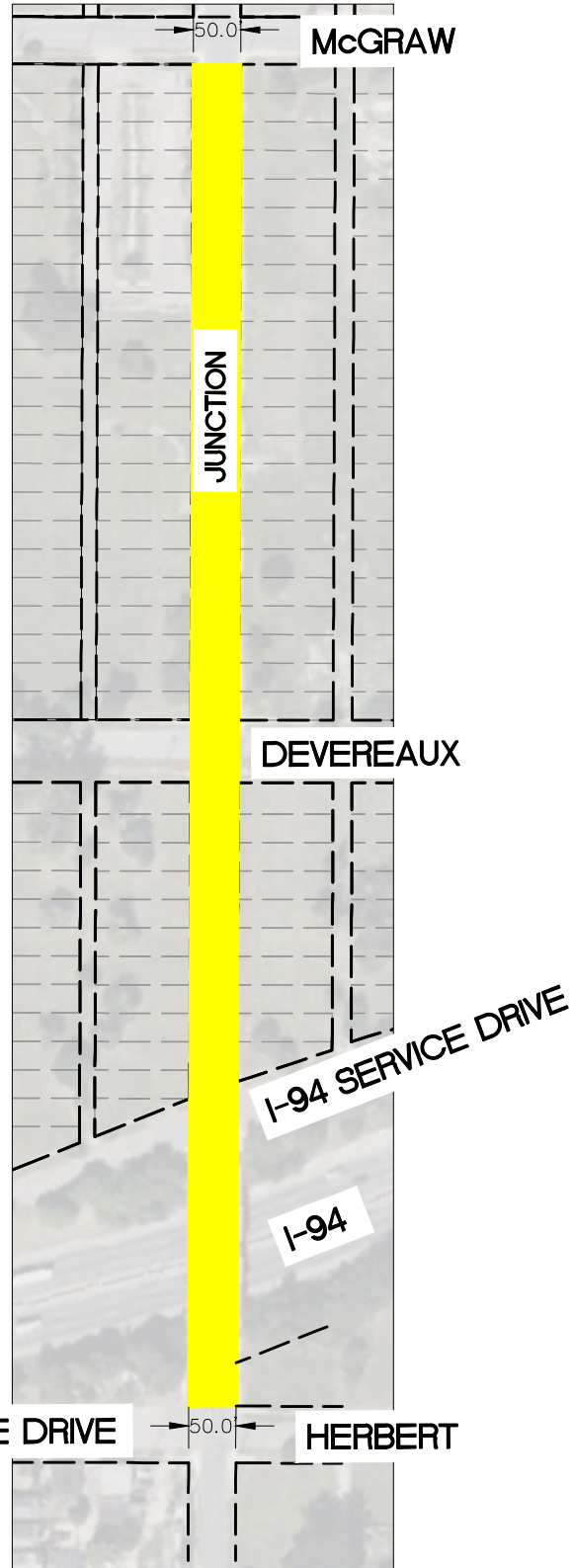
DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

OVERALL  
 PLAN

W:\projects\2023\401\_2300198\000\000\EXHIBIT\TASK\_3005\STREET AND ALLEY VACATION.dwg Last saved 09/11/2025 3:35 PM by KCook, plotted 11/17/2025 5:27 PM

# EXHIBIT 1 – VACATE JUNCTION STREET R.O.W. AND RETAIN UTILITY EASEMENTS

– VACATE 50' JUNCTION R.O.W. AND RETAIN UTILITY EASEMENTS FROM SOUTH R.O.W. LINE OF McGRAW TO NORTH R.O.W. LINE OF HERBERT.



SCALE: 1" = 200'

## LEGEND

VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

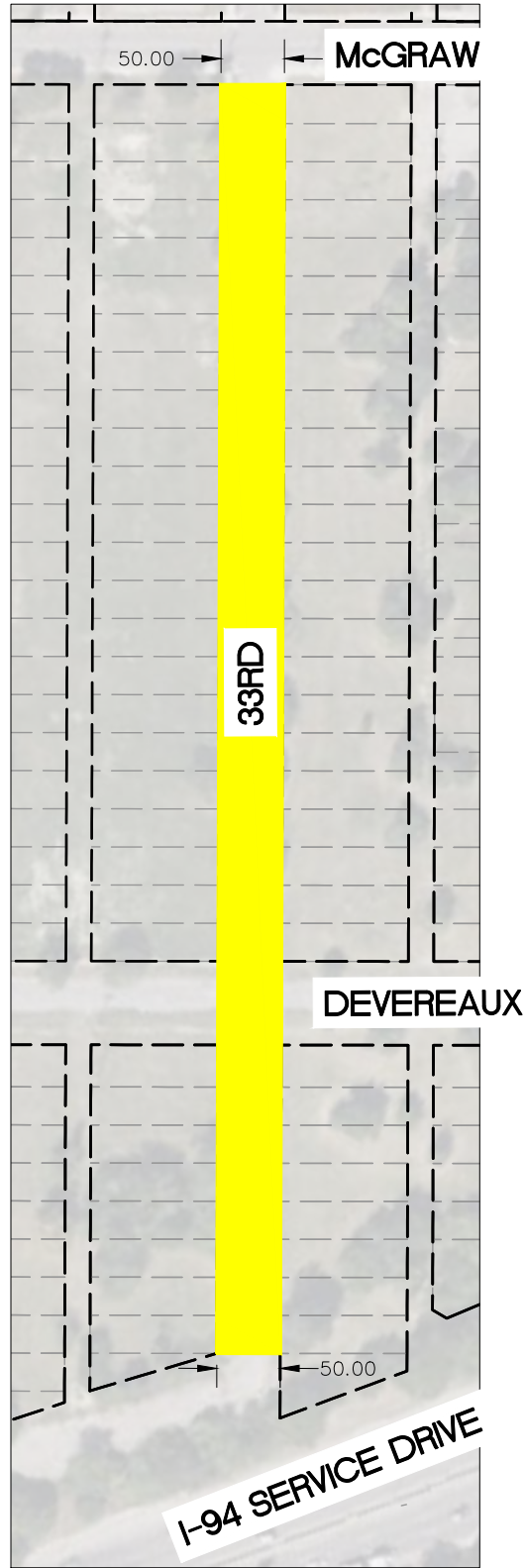
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\projects\2023\401\_2300001\_230001\00199401\_23001\810006\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 09/11/2025 3:28 PM by KCook, plotted 09/11/2025 3:29 PM

# EXHIBIT 2 – VACATE 33RD STREET R.O.W. AND RETAIN UTILITY EASEMENTS

–VACATE 50’ 33RD R.O.W. AND RETAIN UTILITY EASEMENTS FROM SOUTH R.O.W. LINE OF McGRAW STREET TO NORTH R.O.W. LINE OF I-94 SERVICE DRIVE.



## LEGEND

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

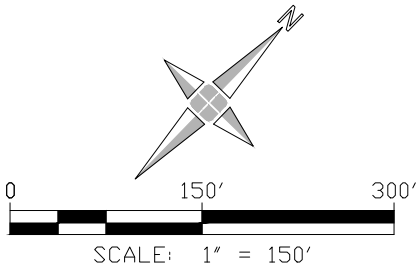
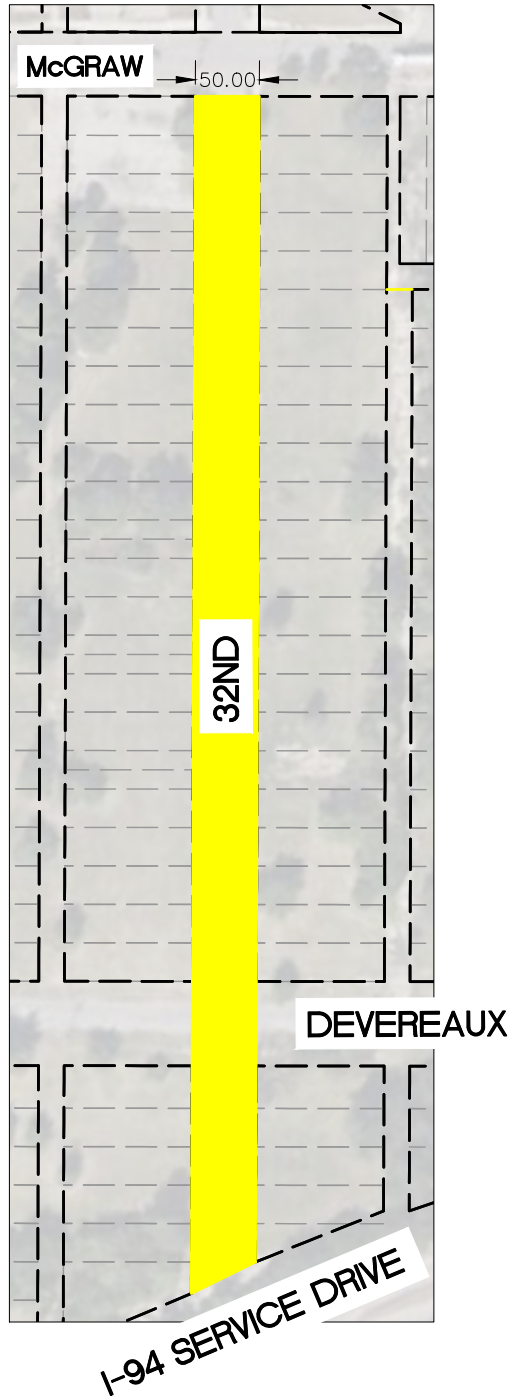
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 01/03/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC


W:\Projects\2023\401\_230001\1-00199401\_2300198\000\AD\EXHIBIT\TASK\_33RD\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCook, plotted 9/9/2025 9:51 AM

# EXHIBIT 3 – VACATE 32ND STREET R.O.W. AND RETAIN UTILITY EASEMENTS

–VACATE 50' 32ND R.O.W. AND RETAIN UTILITY EASEMENTS FROM SOUTH R.O.W. LINE OF MCGRAW STREET AND NORTH R.O.W. OF I-94 SERVICE DRIVE



## LEGEND

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

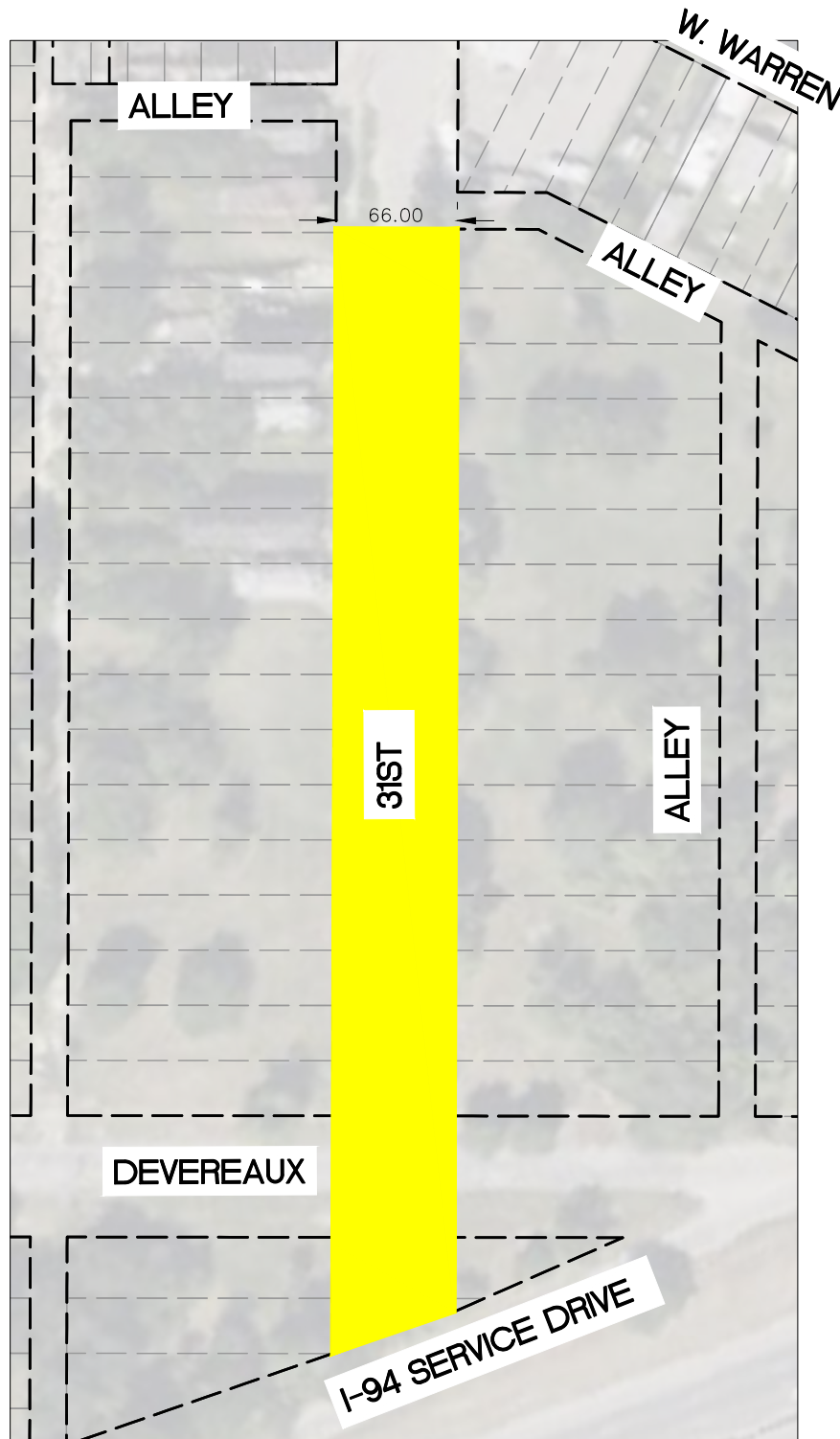
VACATIONS OF R.O.W. FOR  
 JUNCTION / MCGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_2300001\_00199401\_2300198\_0000\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCC, plotted 9/9/2025 9:51 AM

# EXHIBIT 4 – VACATE 31ST STREET R.O.W. AND RETAIN UTILITY EASEMENTS

–VACATE 66’ 31ST R.O.W. AND RETAIN EASEMENTS FROM SOUTH R.O.W. LINE OF EAST WEST ALLEY EAST OF 31RST STREET AND NORTH R.O.W. LINE OF I-94 SERVICE DRIVE.



## LEGEND

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

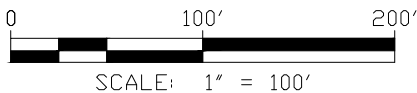
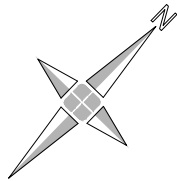
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_2300001\_1-00199401\_2300198-0000-AD-EXHIBIT-TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCook, plotted 9/9/2025 9:51 AM

# EXHIBIT 5 – VACATE 35TH STREET R.O.W. AND RETAIN UTILITY EASEMENTS

–VACATE 50’ 35TH R.O.W. AND RETAIN UTILITY EASEMENTS FROM NORTH R.O.W. LINE OF DEVEREAUX AND NORTH R.O.W. LINE OF I-94 SERVICE DRIVE



## LEGEND

VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

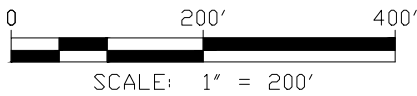
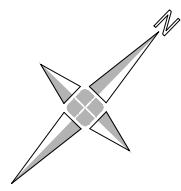
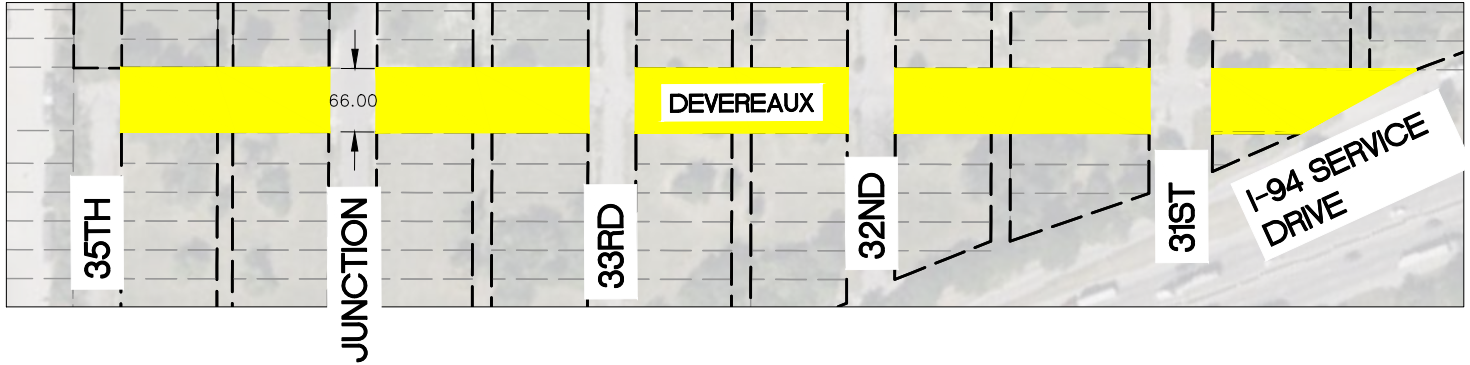
VACATIONS OF R.O.W. FOR  
 JUNCTION / MCGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_230001\1-00199401\_2300198\000\EXHIBIT\TASK\300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCCoak, plotted 9/9/2025 9:51 AM

# EXHIBIT 6 – VACATE DEVEREAUX STREET R.O.W. AND RETAIN UTILITY EASEMENTS

- VACATE 66’ DEVEREAUX R.O.W. AND RETAIN UTILITY EASEMENTS FROM EAST R.O.W. LINE OF 35TH STREET TO WEST R.O.W. LINE OF JUNCTION STREET
- VACATE 66’ DEVEREAUX R.O.W. AND RETAIN UTILITY EASEMENTS FROM EAST R.O.W. LINE OF JUNCTION STREET TO WEST R.O.W. LINE OF 33RD STREET
- VACATE 66’ DEVEREAUX R.O.W. AND RETAIN UTILITY EASEMENTS FROM EAST R.O.W. LINE OF 33RD STREET TO WEST R.O.W. LINE OF 32ND STREET
- VACATE 66’ DEVEREAUX R.O.W. AND RETAIN UTILITY EASEMENTS FROM EAST R.O.W. LINE OF 32ND STREET TO WEST R.O.W. LINE OF 31ST STREET
- VACATE 66’ DEVEREAUX R.O.W. AND RETAIN UTILITY EASEMENTS FROM NORTH R.O.W. LINE OF I-94 SERVICE DRIVE TO EAST R.O.W. LINE OF 31ST STREET



LEGEND	
	VACATE R.O.W. AND RETAIN UTILITY EASEMENTS

PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

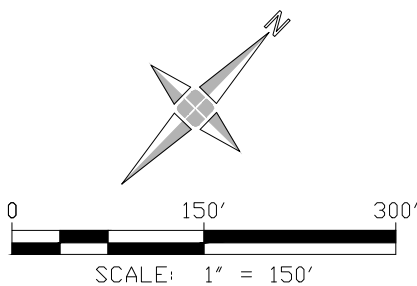
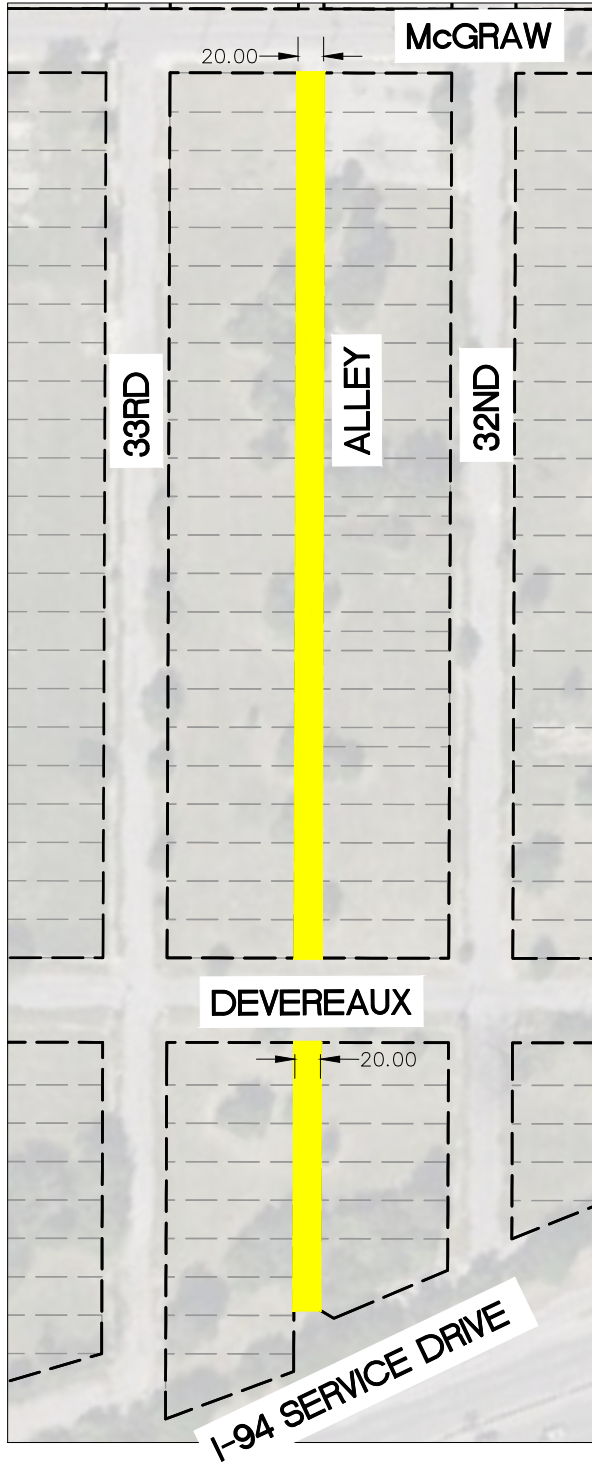
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE:	09/11/2025
PROJ. NO.:	2300198
DRAWN BY:	KCC
6 OF 11	

W:\Projects\2023\401\_230001-1-00199401\_2300198\_0000\AD\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/10/2025 9:43 AM by KCook, plotted 9/10/2025 9:51 AM

# EXHIBIT 8 – VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF NORTH–SOUTH ALLEY BETWEEN 33RD AND 32ND STREETS

–VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF 20’ ALLEY FROM SOUTH R.O.W. LINE OF McGRAW TO NORTH R.O.W. LINE OF DEVEREAUX AND SOUTH R.O.W. LINE OF DEVEREAUX TO NORTH R.O.W. LINE OF I-94 SERVICE DRIVE



## LEGEND

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
DETROIT BROWNFIELD REDEVELOPMENT AUTHORITY  
500 GRISWOLD AVE SUITE 2200  
DETROIT, MI 48226  
313.237.6098

VACATIONS OF R.O.W. FOR JUNCTION / McGRAW AREA  
DBRA SITE READINESS PROJECT

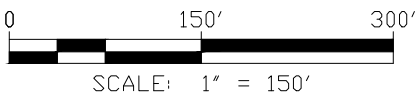
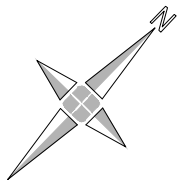
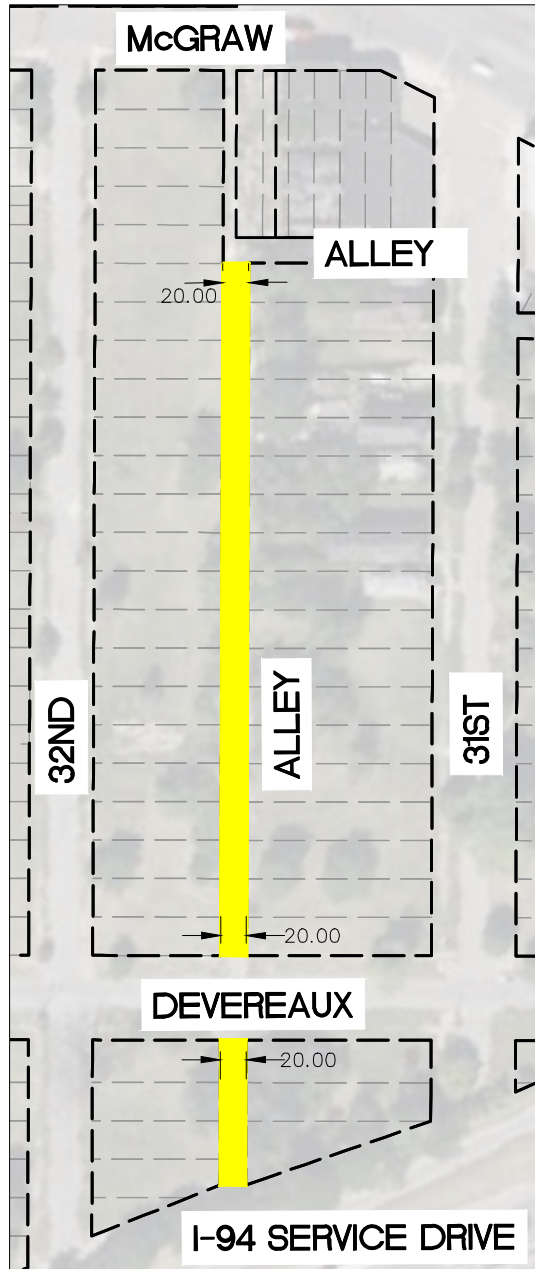
DATE: 09/11/2025  
PROJ. NO.: 2300198  
DRAWN BY: KCC

W:\Projects\2023\401\_230001\1-00199401\_2300198\000\AD\EXHIBIT\TASK\_33RD\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCook, plotted 9/9/2025 9:51 AM

**EXHIBIT 9 – VACATE AND RETAIN UTILITY EASEMENTS OF NORTH–SOUTH ALLEY BETWEEN 32ND AND 31ST STREET**

–VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF 20’ ALLEY FROM SOUTH R.O.W. LINE OF EAST–WEST ALLEY TO NORTH R.O.W. LINE OF DEVEREAUX

–VACATE R.O.W. AND RETAIN UTILITY EASEMENT OF 20’ ALLEY FROM SOUTH R.O.W. LINE OF DEVEREAUX TO NORTH R.O.W. LINE OF I-94 SERVICE DRIVE



**LEGEND**

VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

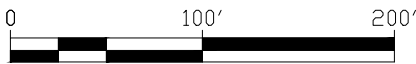
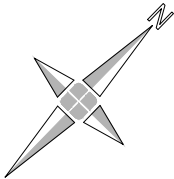
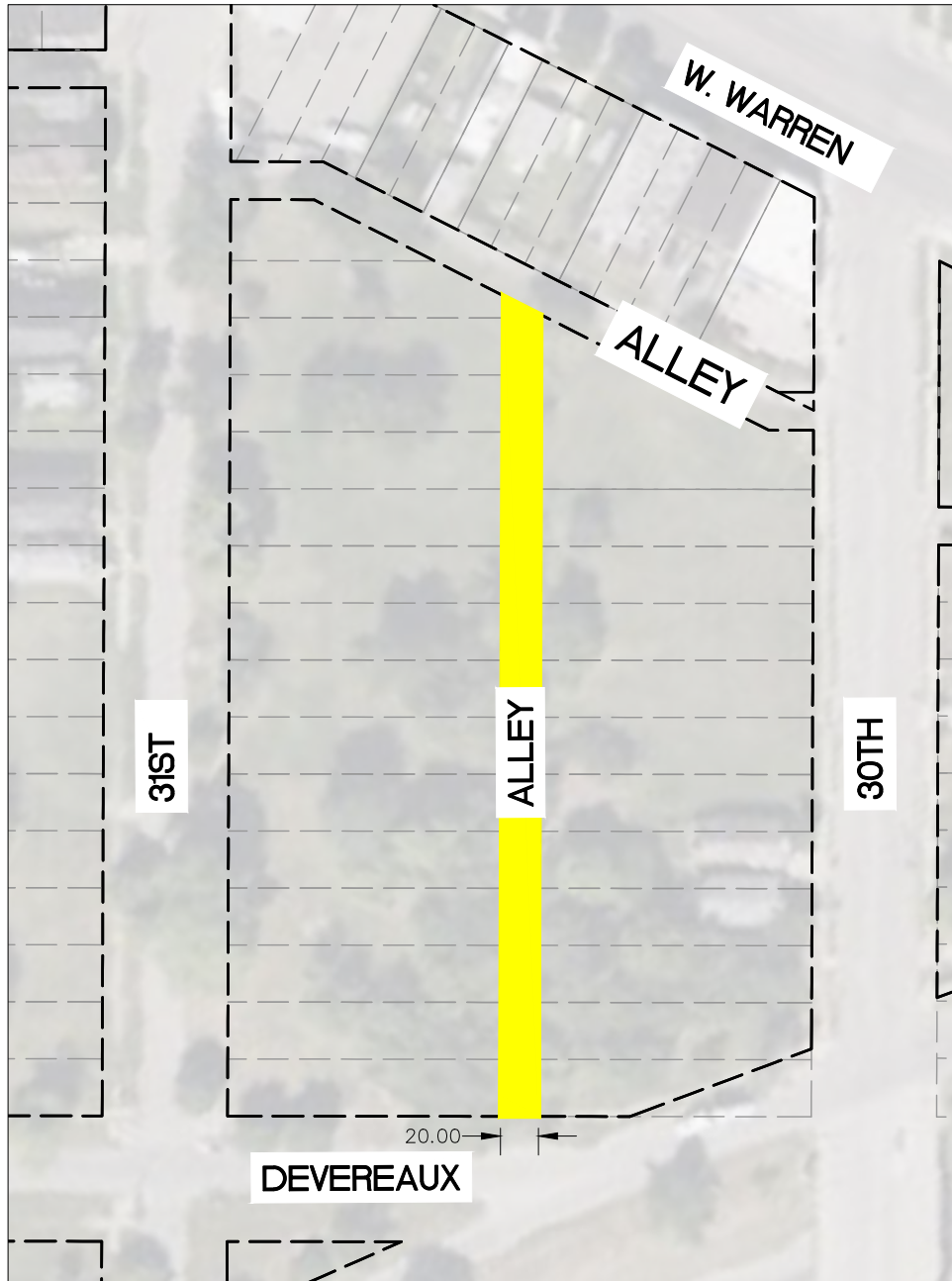
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\projects\2023\401\_2300001\_00199401\_2300198\_0006\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 10:10 AM by KCoak, plotted 9/9/2025 11:17 AM

# EXHIBIT 10 – VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF NORTH–SOUTH ALLEY BETWEEN 31ST AND 30TH STREET

–VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF 20’ ALLEY FROM SOUTH R.O.W. LINE OF NORTH EAST WEST ALLEY TO NORTH R.O.W. LINE OF DEVEREAUX



SCALE: 1" = 100'

## LEGEND

VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

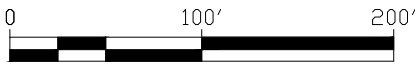
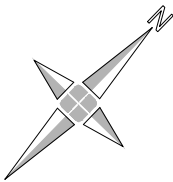
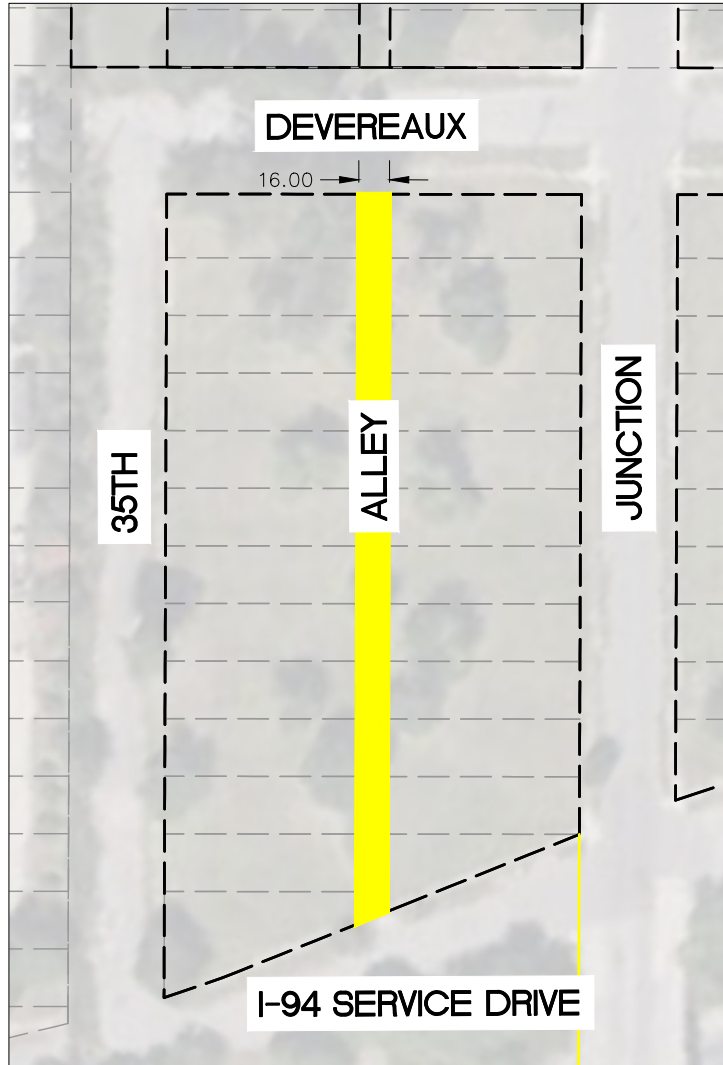
VACATIONS OF R.O.W. FOR  
 JUNCTION / MCGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_230001\401199401\_2300198\000\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCook, plotted 9/9/2025 9:51 AM

# EXHIBIT 11 – VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF NORTH–SOUTH ALLEY BETWEEN 35TH AND JUNCTION

–VACATE AND RETAIN UTILITY EASEMENTS OF 16' ALLEY FROM SOUTH R.O.W. LINE OF DEVEREAUX. TO NORTH R.O.W. LINE OF I-94 SERVICE DRIVE.



SCALE: 1" = 100'

## LEGEND

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

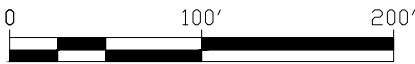
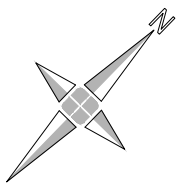
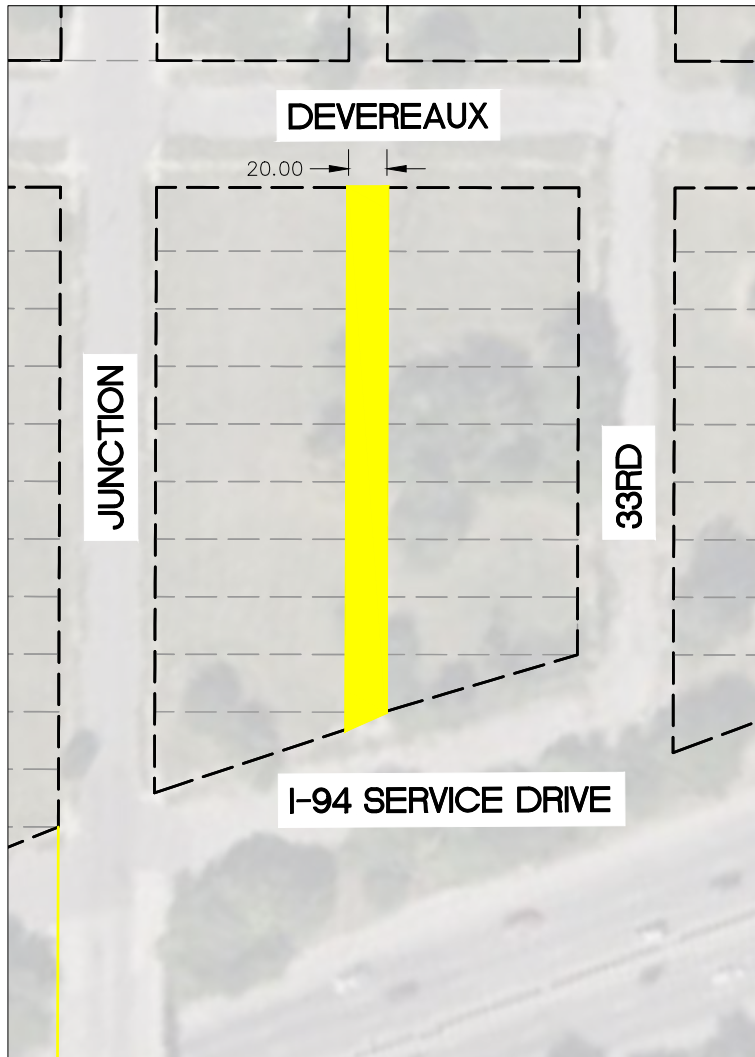
VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_230001\1-00199401\_2300198\000\AD\EXHIBIT\TASK\_300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCC, plotted 9/9/2025 9:51 AM

**EXHIBIT 12 – VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF NORTH–SOUTH ALLEY BETWEEN JUNCTION AND 33RD STREET**

– VACATE R.O.W. AND RETAIN UTILITY EASEMENTS OF 20’ ALLEY FROM SOUTH R.O.W. LINE OF DEVEREAUX TO NORTH R.O.W. LINE OF I-94 SERVICE DRIVE



SCALE: 1" = 100'

**LEGEND**

 VACATE R.O.W. AND RETAIN UTILITY EASEMENTS



PREPARED FOR:  
 DETROIT BROWNFIELD  
 REDEVELOPMENT AUTHORITY  
 500 GRISWOLD AVE SUITE 2200  
 DETROIT, MI 48226  
 313.237.6098

VACATIONS OF R.O.W. FOR  
 JUNCTION / McGRAW AREA  
 DBRA SITE READINESS PROJECT

DATE: 09/11/2025  
 PROJ. NO.: 2300198  
 DRAWN BY: KCC

W:\Projects\2023\401\_230001\1-00199401\_2300198\000\EXHIBIT\TASK\_3300\STREET AND ALLEY VACATION.dwg Last saved 9/9/2025 9:43 AM by KCC, plotted 9/9/2025 9:51 AM



November 17, 2025

**The Honorable City Council**

Attn: Office of the City Clerk  
200 Coleman A. Young Municipal Center  
2 Woodward Avenue  
Detroit, Michigan 48226

**RE: Petition to Outright Vacate with Sub-Surface Utility Easement Retained on Multiple Roads and Alleys South of McGraw, West of 30<sup>th</sup>, North of I-94 Service Drive and East of Campbell**

The Honorable City Council:

On behalf of the Detroit Brownfield Redevelopment Authority, we are petitioning the City of Detroit to:

**Vacate and Retain Sub-Surface Utility Easement the following Streets as shown on Exhibit A;**

- **Junction from McGraw to north edge of EB I-94 Service Drive/Herbert Street**
- **33<sup>rd</sup> Street from McGraw to I-94 Service Drive**
- **North South Alley between Junction and 33<sup>rd</sup> Street from Devereaux to I -94 Service Drive**
- **North South Alley between 33<sup>rd</sup> Street and 32<sup>nd</sup> Street from McGraw to I -94 Service Drive**
- **North South Alley between 32<sup>nd</sup> Street and 31<sup>st</sup> Street from East West Alley South of McGraw to I -94 Service Drive**
- **North South Alley between 31<sup>st</sup> Street and 30<sup>th</sup> Street from East West Alley South of Warren to Devereaux**
- **Devereaux from East ROW of 35<sup>th</sup> Street to West ROW of 32<sup>nd</sup> Street**
- **Devereaux from East ROW of 32<sup>nd</sup> Street to West ROW of 31<sup>st</sup> Street**
- **35<sup>th</sup> Street from North ROW of Devereaux to I-94 Service Drive**
- **32<sup>nd</sup> Street from McGraw to I-94 Service Drive**
- **31<sup>st</sup> Street from South Edge of East West Alley South of Warren to I-94 Service Drive**
- **Devereaux from East ROW of 31<sup>st</sup> Street to I-94 Service Drive.**

This request on behalf Detroit Brownfield Redevelopment Authority, which owns all the properties adjacent to these ROW's, is being proposed for future development planned on this site in connection with the DBRA Site Readiness Project. Previous sections of 35<sup>th</sup> Street and North South Alleys between 35<sup>th</sup> Street and 33<sup>rd</sup> Street from McGraw to Devereaux have been outright vacated.

Thank you,

Dave Ryzy P.E  
Mannik Smith Group Inc.



**TECHNICAL SKILL.  
CREATIVE SPIRIT.**

607 Shelby, Suite 300, Detroit, Michigan 48226 Tel: 313.961.9500 Fax: 313.961.9509 [www.MannikSmithGroup.com](http://www.MannikSmithGroup.com)