



500 West Big Beaver  
Troy, MI 48084  
troymi.gov



## CITY COUNCIL AGENDA ITEM

Date: May 12, 2021

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Robert C. Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Kurt Bovensiepe, Public Works Director  
William J. Huotari, City Engineer

Subject: I-75 Segment 2 – PCO-056 City of Troy Watermain Betterments

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### **History**

City Council approved the design work associated with the replacement of the existing 12" cast iron water main that crosses I-75 between 14 Mile and Maple Road and the replacement of the existing 12" cast iron water main that crosses I-75 at Maple Road, by Resolution #2020-03-053-J-6, March 16, 2020.

The resulting construction and cost is detailed in PCO-056 City of Troy Watermain Betterments. The most opportune time to complete this work is while construction continues on I-75 as traffic control and the ability to coordinate and work within the confines of the construction zone are available.

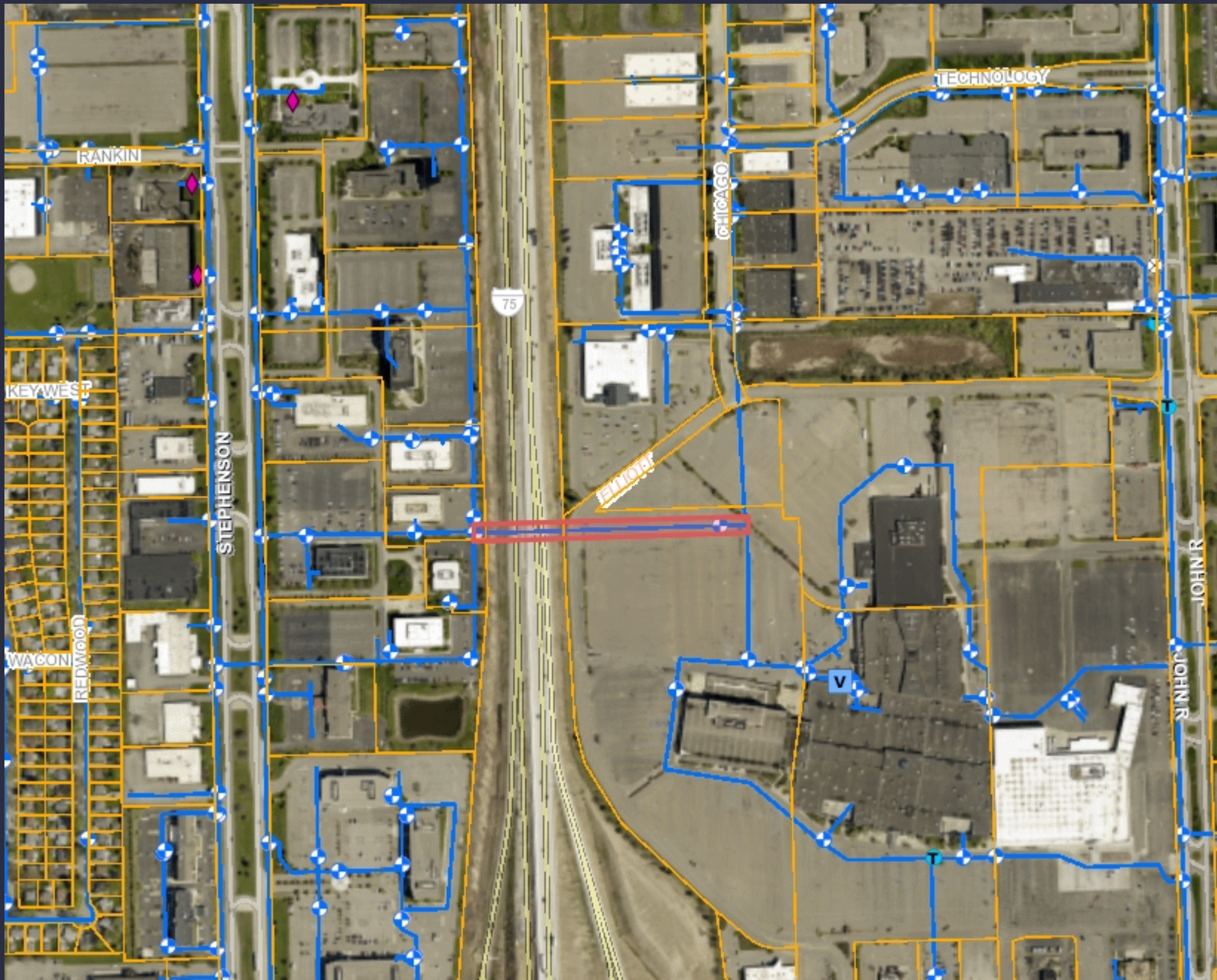
The water main work will replace 50+ year old water main with new water main under the new I-75 and Maple Road pavements. All work is anticipated to be complete by the end of June.

### **Financial**

PCO-056 provides the scope and cost for the water main work. The cost for the work is \$998,200. Funds are included in the Water Fund (I-75 Crossing at Oakland Mall Betterment – Project # 2021C0085 / Account # 591.537.555.7975.205025 and I-75 Crossing at Maple Betterment – Project # 2021C0086 / Account # 591.537.555.7972.205035).

### **Recommendation**

It is recommended that City Council approve PCO-056 City of Troy Watermain Betterments, as submitted by Walsh/Toebe, for the upgrade of two watermain within the I-75 Segment 2 project limits as part of the I-75 reconstruction project in the amount of \$998,200. In addition, we are requesting authorization to approve additional work, if needed, not to exceed 10% of the original cost due to unforeseen issues.



## Legend:

### Water Valve

- P Pressure Reducing Valve
- A Air Release Valve
- I Isolation Valve
- G Gate Valve
- B Butterfly Valve
- T Tapping Sleeve and Valve
- BO Blow Off Valve
- ◇ Post Indicator Valve
- ⊗ Service Valve
- V Vault

### Water Main

- Transmission Main
- Proposed, Out of Service or Standby
- Distribution Main

- P Water Pressure Reducing Valve
- Road Centerline Text

## Notes:

I75 Watermain Betterment - 14 Mile/Oakland Mall

Map Scale: 1=716

Created: May 13, 2021



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

## Legend:

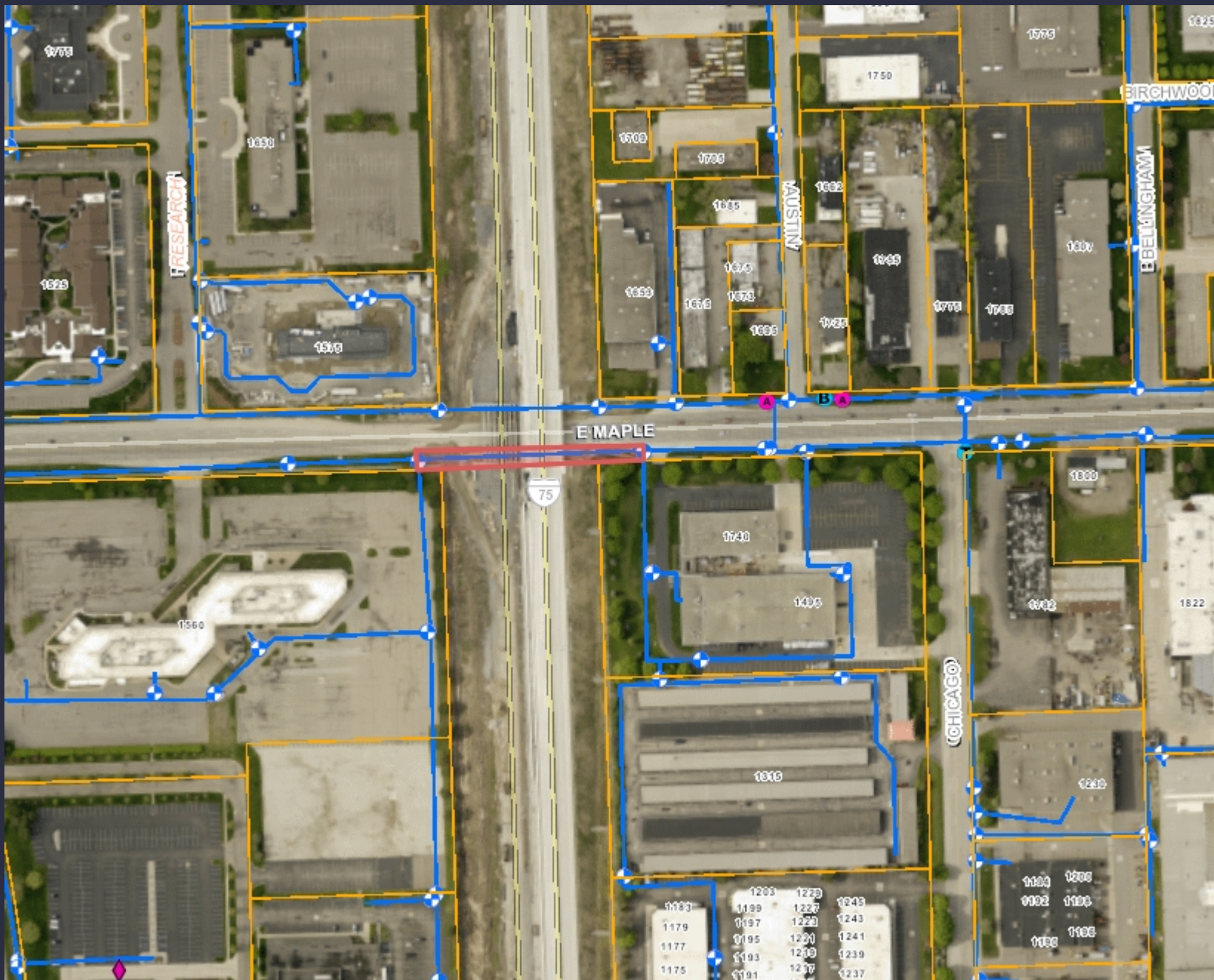
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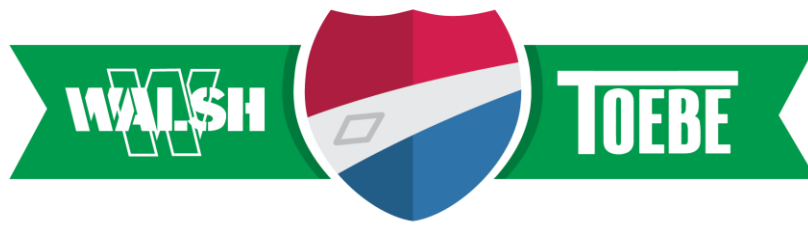
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- Road Centerline Text



## Notes:

I75 Watermain Betterment -  
Maple Road





February 15, 2021

W/T JV-218099-201

William Huotari  
City of Troy, MI City Engineer  
[HuotariWJ@troymi.gov](mailto:HuotariWJ@troymi.gov)

**RE: MDOT Project 201437 | I-75 Segment 2**  
PCO-056 City of Troy Watermain Betterments

Dear Mr. Huotari,

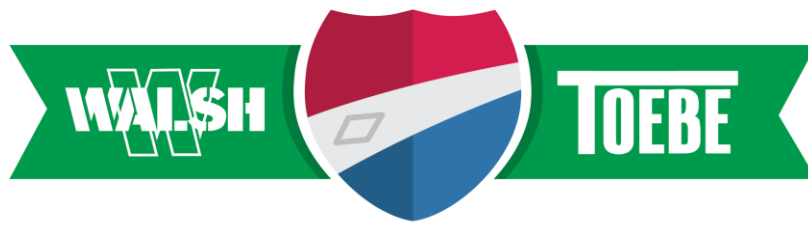
Walsh/Toebe JV (WTJV) respectfully submits this Potential Change Order (PCO) per Book 1, Section 13.4.1.2 and Book 1, Section 6.3.4 as requested by the City of Troy, MI to upgrade two watermain within the I-75 Segment 2 Project Limits.

Accordingly, W/T respectfully requests compensation from MDOT in accordance with Book 1, Section 13:

ITEM	DESCRIPTION	QTY	UOM	UNIT \$	AMOUNT
245-001	WATERMAIN BETTERMENTS	1	LS	\$998,200.00	\$998,200.00
TOTAL AMOUNT					\$998,200.00

The price includes all supervision, labor, materials, equipment, and subcontract work to complete all items in the approved design for added waterline betterments. Work is to be completed in the spring of 2021. Pricing is based on local businesses granting right of entry to enter their property to complete the work. If local businesses do not grant access or seek compensation WTJV reserves the right to request additional reimbursement from the City of Troy. If you have any questions, please feel free to contact me at (317) 538-8549.

Respectfully,  
**Walsh/Toebe Joint Venture**



Pete Jerrell  
Project Manager

Attachments 1 – PCO 056 Summary  
2 – Approved Plan Sheets



## WALSH/TOEBE JV

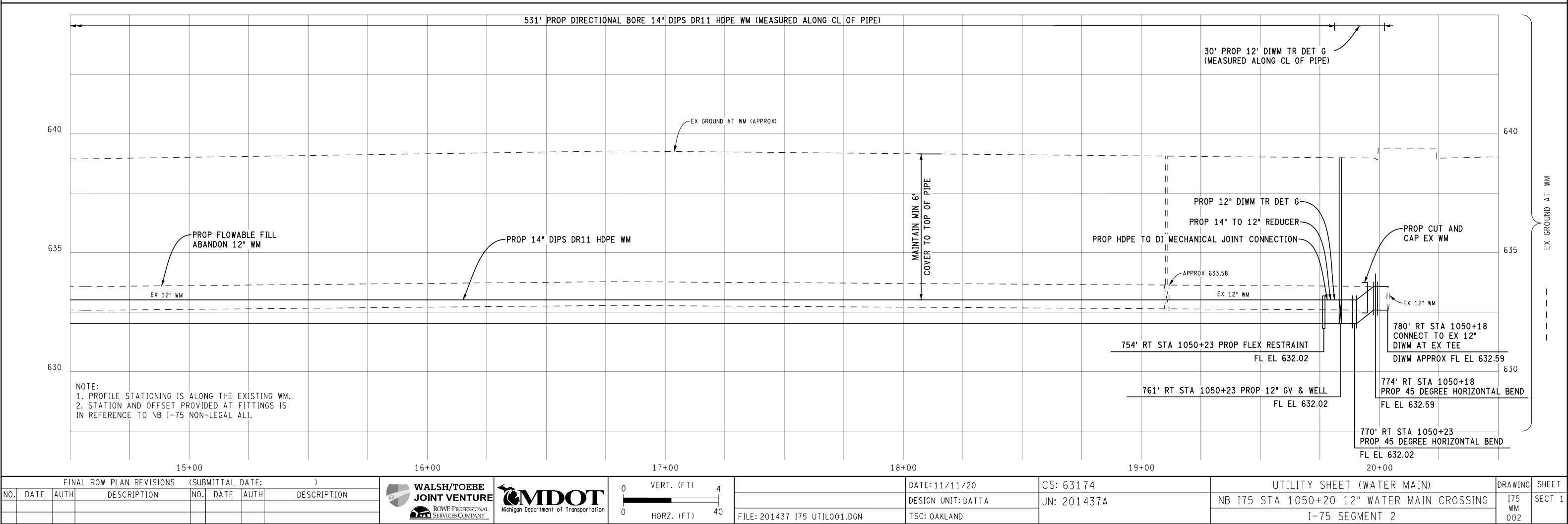
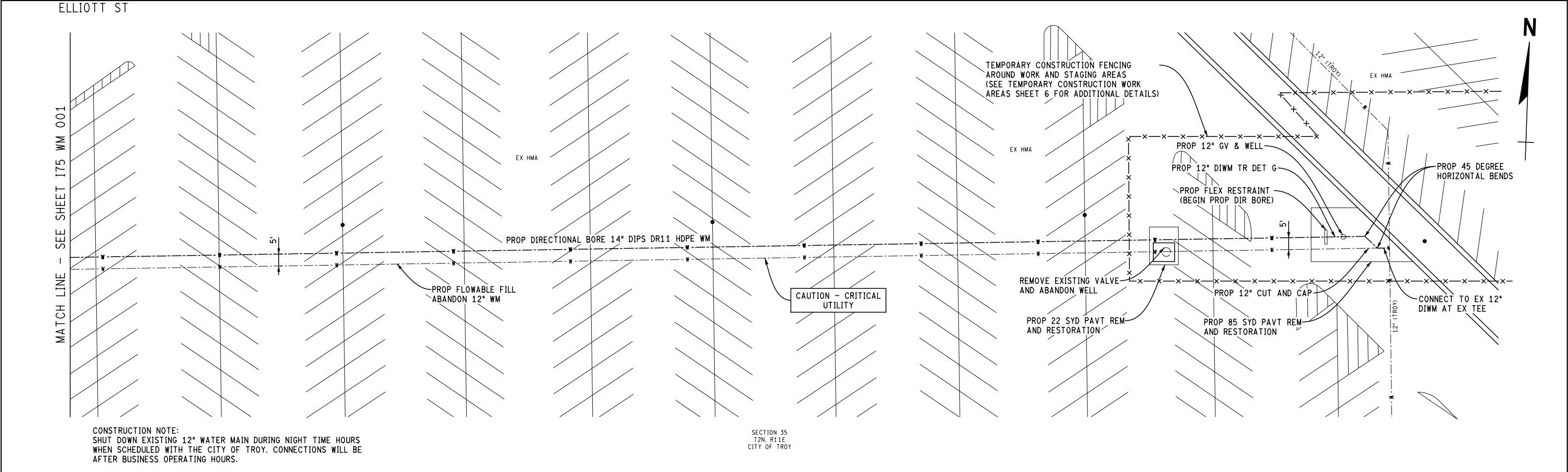
**PROJECT NAME:** I-75 SEGMENT 2 | 13 MILE TO COOLIDGE  
**MDOT JOB NUMBER:** 201437  
**CONTROL SECTION:** 63174  
**FEDERAL PROJECT NUMBER:** 1800433  
**WALSH/TOEBE JV NUMBER:** 218099  
**TITLE:** PCO 056 - Troy Watermain Betterments

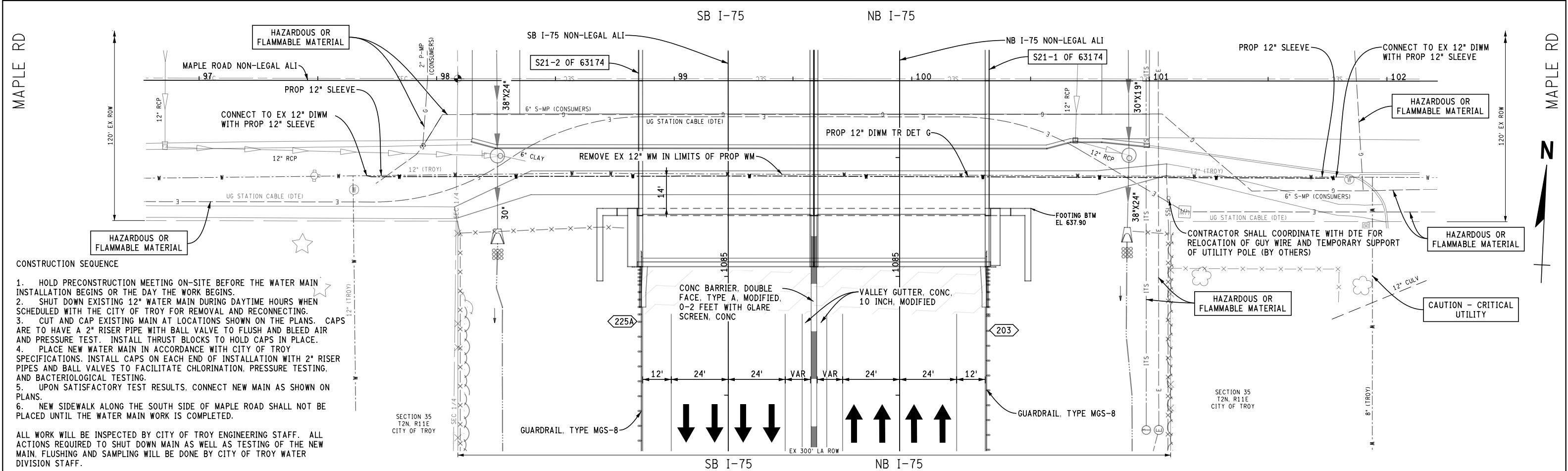
ITEM #	DESCRIPTION	QTY	Unit	TOTAL AMOUNT
245 001	ROADWAY  TROY WATERMAIN BETTERMENTS	1.0	LS	\$ 998,200
				\$ -

**COMMENTS:**

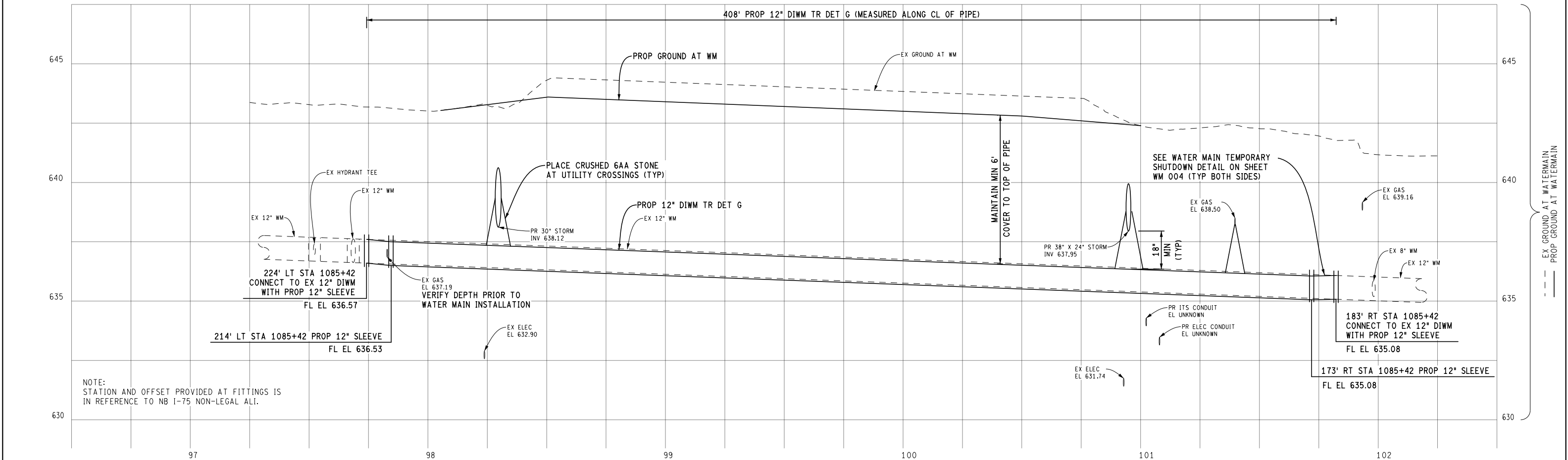
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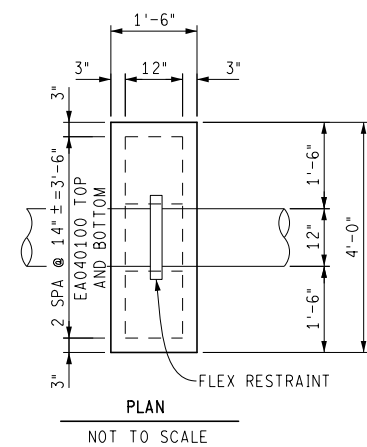




- CONSTRUCTION SEQUENCE**
1. HOLD PRECONSTRUCTION MEETING ON-SITE BEFORE THE WATER MAIN INSTALLATION BEGINS OR THE DAY THE WORK BEGINS.
  2. SHUT DOWN EXISTING 12" WATER MAIN DURING DAYTIME HOURS WHEN SCHEDULED WITH THE CITY OF TROY FOR REMOVAL AND RECONNECTING.
  3. CUT AND CAP EXISTING MAIN AT LOCATIONS SHOWN ON THE PLANS. CAPS ARE TO HAVE A 2" RISER PIPE WITH BALL VALVE TO FLUSH AND BLEED AIR AND PRESSURE TEST. INSTALL THRUST BLOCKS TO HOLD CAPS IN PLACE.
  4. PLACE NEW WATER MAIN IN ACCORDANCE WITH CITY OF TROY SPECIFICATIONS. INSTALL CAPS ON EACH END OF INSTALLATION WITH 2" RISER PIPES AND BALL VALVES TO FACILITATE CHLORINATION, PRESSURE TESTING, AND BACTERIOLOGICAL TESTING.
  5. UPON SATISFACTORY TEST RESULTS, CONNECT NEW MAIN AS SHOWN ON PLANS.
  6. NEW SIDEWALK ALONG THE SOUTH SIDE OF MAPLE ROAD SHALL NOT BE PLACED UNTIL THE WATER MAIN WORK IS COMPLETED.
- ALL WORK WILL BE INSPECTED BY CITY OF TROY ENGINEERING STAFF. ALL ACTIONS REQUIRED TO SHUT DOWN MAIN AS WELL AS TESTING OF THE NEW MAIN, FLUSHING AND SAMPLING WILL BE DONE BY CITY OF TROY WATER DIVISION STAFF.



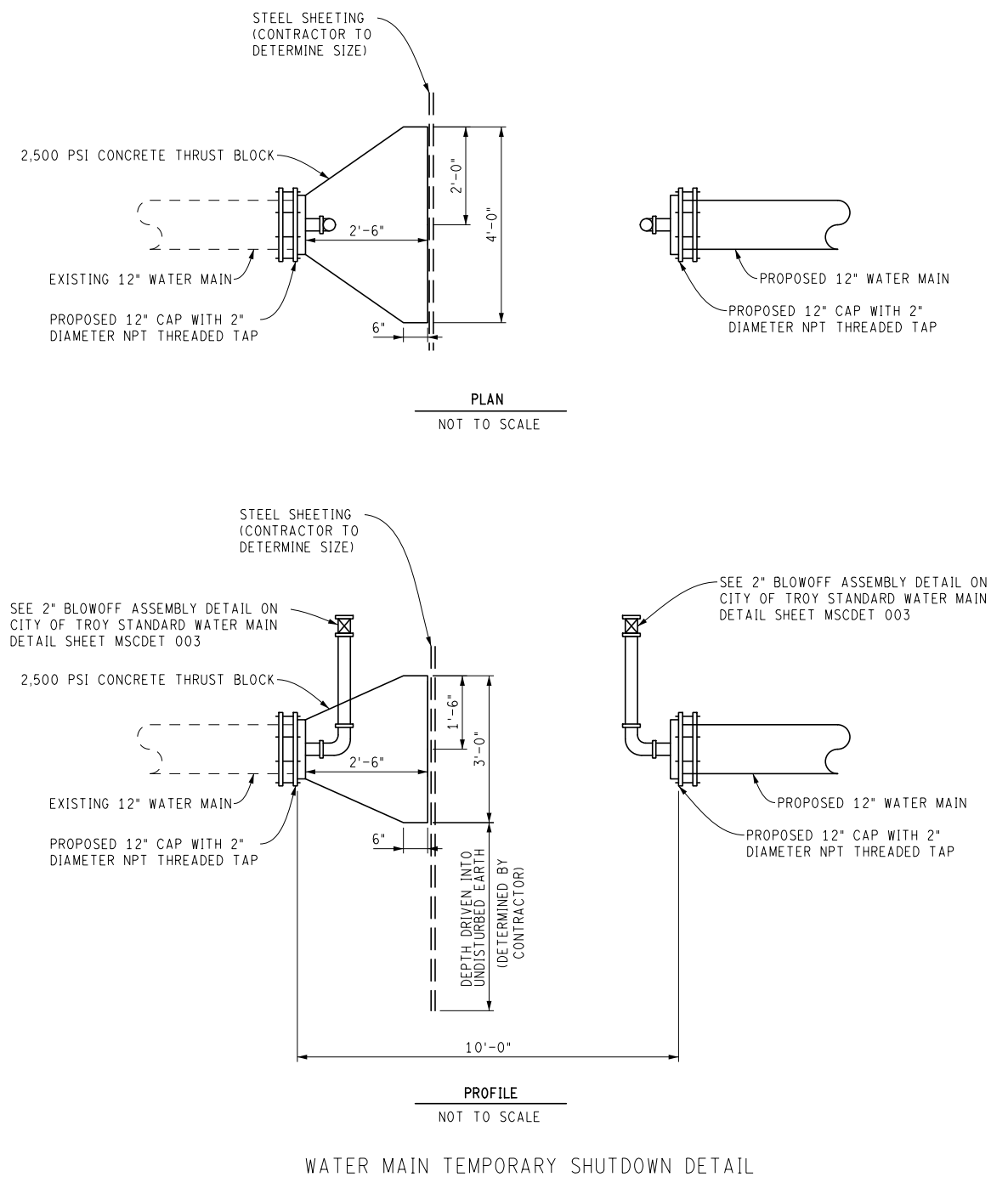
FINAL ROW PLAN REVISIONS (SUBMITTAL DATE: )						WALSH/TOEBE JOINT VENTURE		MDOT Michigan Department of Transportation		DATE: 11/11/20		CS: 63174		UTILITY SHEET (WATER MAIN)		DRAWING		SHEET	
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION			DESIGN UNIT: DATTA	JN: 201437A			MAPLE ROAD 12" WATER MAIN CROSSING		175	WM	003	SECT 1
										TSC: OAKLAND				I-75 SEGMENT 2					






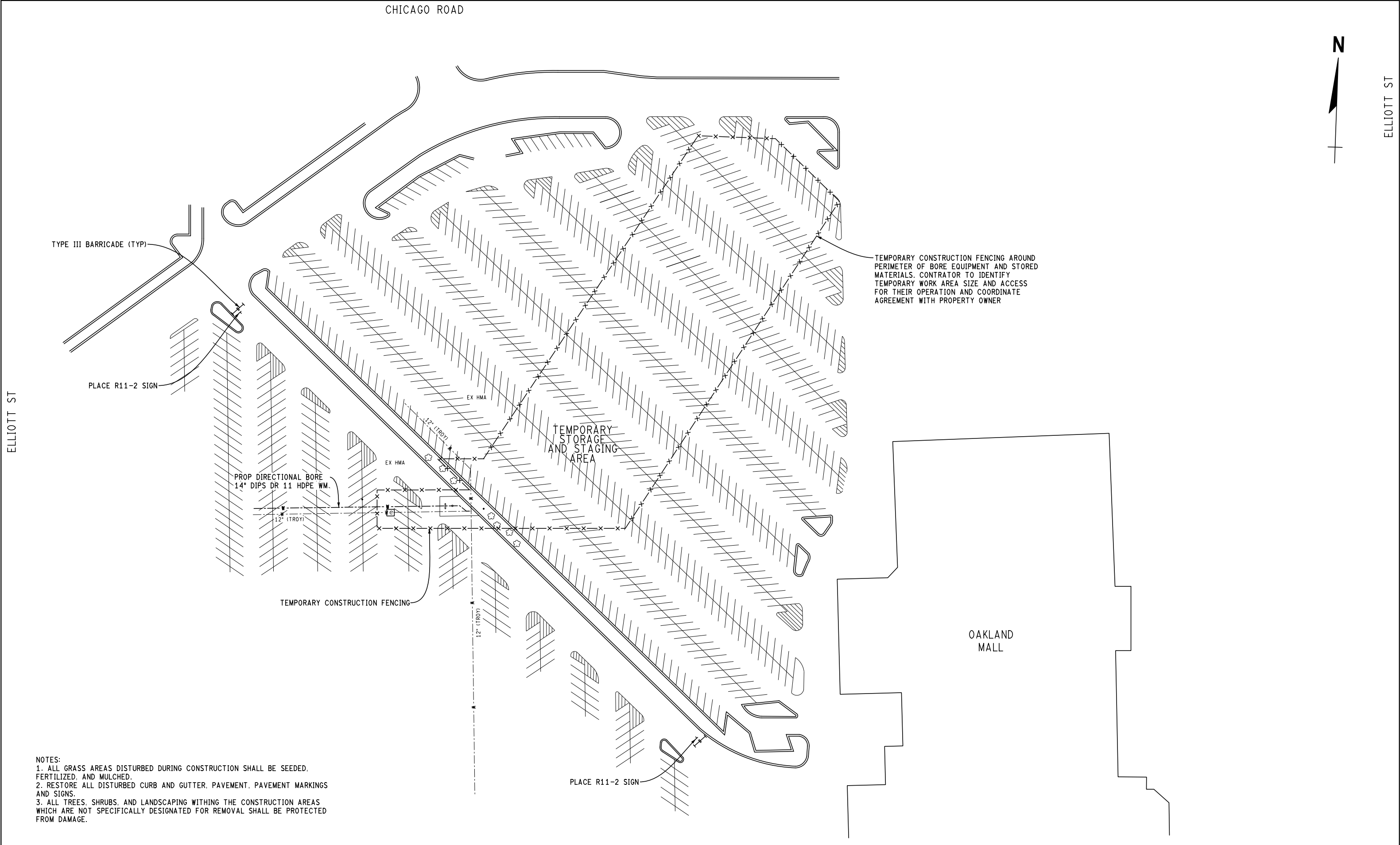
REINFORCEMENT, STEEL ONE ANCHOR BLOCK ONLY		
BAR	NO. REQ'D	TOTAL WEIGHT
EA040400	4	10.8
EA040505	4	14.8
EA040100	14	9.4
TOTAL (LBS)		35.0

NOTES:




1. INSTALL THE FLEX RESTRAINT AND ANCHOR BLOCK AT EACH END OF THE BORED PIPE AS APPROVED BY THE ENGINEER. PAYMENT FOR FLEX RESTRAINT ANCHOR BLOCK AND REBAR WILL NOT BE PAID FOR SEPARATELY BUT IS INCLUDED IN THE PAY ITEM FOR HDPE DIR BORE WM.
2. EXCAVATE THE TRENCH FOR THE ANCHOR BLOCK IN UNDISTURBED EARTH TO THE APPROXIMATE DIMENSIONS OF THE ANCHOR BLOCK.
3. INSTALL THE FLEX RESTRAINT DEVICE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. CONCRETE MUST BE GRADE S2. (APPROX 1.3 CYD CONC PER ANCHOR BLOCK)
5. REINFORCEMENT STEEL MUST BE EPOXY COATED.



FINAL ROW PLAN REVISIONS (SUBMITTAL DATE: )								 <b>WALSH/TOEBE JOINT VENTURE</b>  ROWE PROFESSIONAL SERVICES COMPANY	 <b>MDOT</b> Michigan Department of Transportation	NO SCALE		DATE: 11/11/20	CS: 63174	MISCELLANEOUS DETAILS		DRAWING	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION					DESIGN UNIT: DATTA	JN: 201437A	WATER MAIN DETAIL		175	SECT 1
														I-75 SEGMENT 2		WM	
												FILE: 201437 I75 UTIL001.DGN	TSC: OAKLAND				004



NOTES:  
1. ALL GRASS AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, FERTILIZED, AND MULCHED.  
2. RESTORE ALL DISTURBED CURB AND GUTTER, PAVEMENT, PAVEMENT MARKINGS AND SIGNS.  
3. ALL TREES, SHRUBS, AND LANDSCAPING WITHING THE CONSTRUCTION AREAS WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE.

FINAL ROW PLAN REVISIONS				(SUBMITTAL DATE: )				 <b>WALSH/TOEBE JOINT VENTURE</b>  ROWE PROFESSIONAL SERVICES COMPANY	 <b>MDOT</b> Michigan Department of Transportation	<b>NO SCALE</b>		DATE: 11/11/20	CS: 63174	UTILITY SHEET (WATER MAIN)		DRAWING	SHEET
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION					DESIGN UNIT: DATTA	JN: 201437A	NB I75 STA 1050+20 TEMPORARY WORK AREAS		I75 WM 006	SECT 1
											FILE: 201437_175_UTIL001.DGN	TSC: OAKLAND		I-75 SEGMENT 2			

