THE CITY OF MARQUETTE

RECONSTRUCTION PROJECT FOR

CRESCENT AND FRONT STREET SANITARY

MQ25-304

STANDARDS:

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2012 VERSION, AND THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

DESIGN STANDARD

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH THE AASHTO; A POLICY ON GEOMETRIC DESIGN OF ROADS AND STREETS, 2011.

MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED OUT ON THE PLANS, THEY ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD PLAN GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

	R-1-G	DRAINAGE STRUCTURES
	R-7-F	COVER B
	R-8-D	COVER C
*	R-15-G	COVER K
	R-18-F	COVER Q
*	R-28-J	SIDEWALK RAMP AND DETECTABLE WARNING DETAILS
	R-29-I	DRIVEWAY OPENINGS & APPROACHES, AND CONC. SIDEWALKS
	R-30-G	CONCRETE CURB AND CONCRETE CURB & GUTTER
	R-83-C	UTILITY TRENCHES
	R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES
	R-105-D	GRADING CROSS-SECTIONS

TRAFFIC AND SAFETY STANDARD PLANS

*	WZD-100-A	GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS
*	WZD-125-E	TEMPORARY TRAFFIC CONTROL DEVICES
	0-MT-ALL-NONFWY	FULL SET OF NON-FREEWAY MAINTAIN. TRAFFIC TYP.

* SPECIAL DETAIL

UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL MISS DIG AT 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED.

THE FOLLOWING UTILITIES ARE LOCATED IN OR NEAR THE RIGHT-OF-WAY FOR THIS PROJECT:

SANITARY SEWER MAIN AND LATERALS
WATERMAIN AND WATER SERVICES
STORM SEWER MAIN
GAS MAIN AND SERVICES
UNDERGROUND TELEPHONE, ELECTRICAL, CABLE TV
OVERHEAD TELEPHONE, ELECTRICAL, CABLE TV, AND FIBER OPTICS

LEGEND

- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN/SERVICE
- EXISTING TELECOMMUNICATION CABLE
- EXISTING ELECTRIC CABLE
- EXISTING LIGHT POLE
- EXISTING SANITARY/STORM SEWER MANHOLE
- EXISTING POWER POLE
- GUY ANCHOR
- EXISTING CATCH BASIN
- EXISTING TRAFFIC SIGN
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- SOIL BORING LOCATION AND NUMBER
- EXISTING WATER SHUT OFF
- EXISTING CLEAN OUT
- PROPOSED SANITARY SEWER
- PROPOSED WATER MAIN
- PROPOSED STORM SEWER
- RIGHT OF WAY
- PROPERTY LINE, APPROXIMATE
- EXISTING CABLE TV CABLE
- PROPOSED CATCH BASIN
- PROPOSED MANHOLE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED 6" SIDEWALK
- PROPOSED 4" SIDEWALK
- PROPOSED ADA RAMP (6")
- PROPOSED 4" STAMPED CONCRETE
- PROPOSED DETECTABLE SURFACE
- HMA, 13A OR LVSP

LOCATION MAP

INDEX OF SHEETS

1	COVER SHEET
2	TYPICAL CROSS SECTIONS
3-5	PLAN AND PROFILE SHEETS
6	SESC PLAN AND INTERSECTION DETAIL
7	TRAFFIC CONTROL
8	UTILITY SCHEMATIC
9	STANDARD SANITARY DETAILS

PUBLIC UTILITIES

MARQUETTE BOARD OF LIGHT AND POWER
2200 WRIGHT STREET
MARQUETTE, MICHIGAN 49855
PH. (906) 228-0300

SPECTRUM MID-AMERICA, LLC
359 US-41 EAST
NEGAUNEE, MICHIGAN 49866
PH. (906) 228-2900

MARQUETTE WATER AND SEWER DEPARTMENT
1100 WRIGHT STREET
MARQUETTE, MICHIGAN 49855
PH. (906) 228-0444

AT&T
3255 US-41 WEST
MARQUETTE, MICHIGAN 49855
PH. (906) 221-2121

SEMCO ENERGY
34 US-41 EAST
NEGAUNEE, MICHIGAN 49866
PH. (906) 475-9901

PENINSULA FIBER NETWORK
1901 WEST RIDGE STREET #2
MARQUETTE, MICHIGAN 49855
PH. (906) 226-7102

CONTRACT FOR:
CRESCENT AND FRONT STREET SANITARY

MUNICIPAL APPROVAL:

Karen Kovacs 1/11/2024
KAREN KOVACS, CITY MANAGER DATE

PREPARED UNDER THE SUPERVISION OF:

1/10/24
JAMES R. COMPTON P.E. PROJECT ENGINEER DATE
P.E. NO. 6201042583

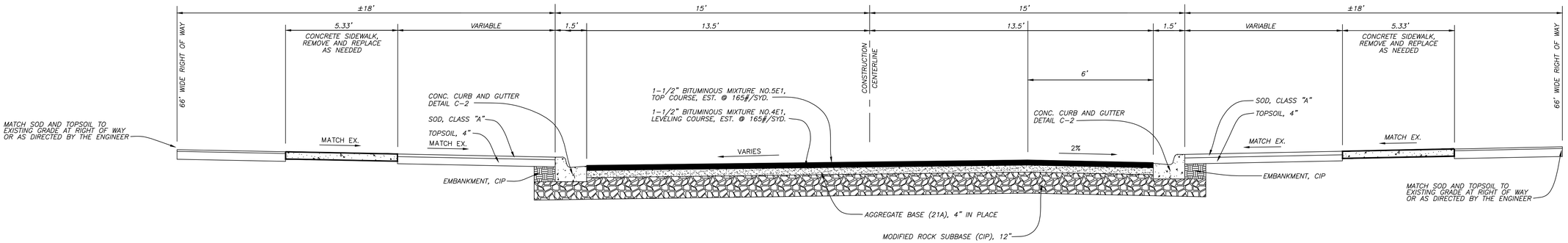
STATE OF MICHIGAN James R Compton License No. 6201042583 LICENSED PROFESSIONAL ENGINEER

MARQUETTE MICHIGAN

CITY OF MARQUETTE
CITY ENGINEER'S OFFICE
1100 WRIGHT STREET
MARQUETTE, MICHIGAN 49855
PH. (906) 228-0440

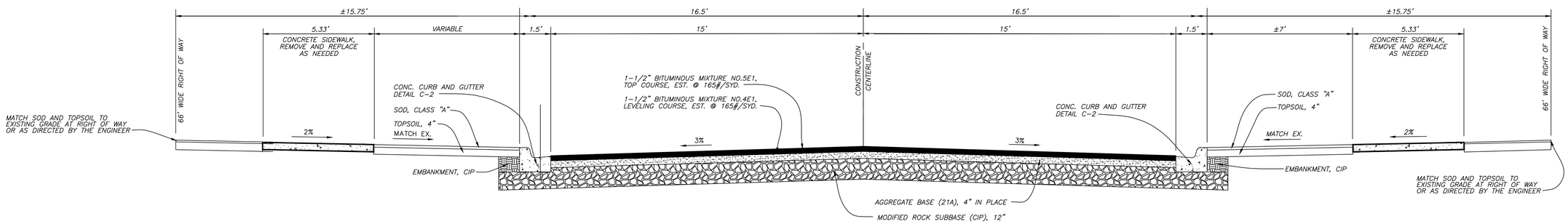
Michigan's One-Call
Utility Notification Organization
Three full days before you dig call the Miss Dig system
1-(800)-482-7171

CRESCENT STREET
TYPICAL STREET CROSS-SECTION
STATION 2+77 TO 4+61



NOTE: THE SLOPE TRANSITIONS TO MATCH THE EXISTING ASPHALT, SEE PROFILE SHEETS

FRONT STREET
TYPICAL STREET CROSS-SECTION
STATION 2+69 TO 3+32



CITY ENGINEER'S OFFICE **MARQUETTE, MICHIGAN** 300 WEST BARAGA AVE., MARQUETTE, MI 49855 PHONE (906)228-0440	**REVISIONS:** PRELIMINARY 06-25-09 INTERNAL REVIEW REVISIONS 10-06-09	**DESIGN BY: JAMES R. COMPTON P.E.** **DRAWN BY: JAMES R. COMPTON P.E.** **DATE: 6/1/23** **FILE NAME: MQ25-304.dwg**	**HOR. SCALE: N.A.** **VERT. SCALE: N.A.**	**CRESCENT AND FRONT ST. SANITARY SEWER** **MARQUETTE, MICHIGAN** **TYPICAL CROSS SECTIONS**	**PROJECT MQ25-304** **SHEET 2 OF 9**

SEWER SERVICE LATERAL TABLE

ADDRESS	LATERAL SIZE	8x4 WYE	4" LATERAL	CLEAN OUT	CONN. TO EX.	REMARKS
111 E. CRESCENT	4" SCH 40 PVC	1	51'	1	1	.
105 E. CRESCENT.	4" SCH 40 PVC	1	44'	1	1	.
900 N. FRONT.	4" SCH 40 PVC	1	41	1	1	.
112 E. CRESCENT	4" SCH 40 PVC	1	30'	1	1	.
824 N. FRONT.	4" SCH 40 PVC	2	59'	2	2	.
822 N. FRONT	4" SCH 40 PVC	1	32'	1	1	.
	TOTALS	7	257 FT	7	7	

GENERAL WORK ITEMS

1 LS – MOBILIZATION, MAX. $____
1 LS – PROJECT CLEANUP
1 LS – RESIDENT NOTIFICATION, MAX. $____
1 LS – MINOR TRAF DEVICES
3 EA – UTILITY EXPLORATION (SEWER)
2 EA – MONUMENT BOX, MODIFIED
0.5 TON – DUST PALLIATIVE, APPLIED

SANITARY SEWER CONSTRUCTION (THIS SHEET)

PSMH0001 – 2+67, 0'L FRONT ST. STATIONING
PSMH0002 – 3+60, 1'L FRONT ST. STATIONING

STATION 2+67, 0'L (PSMH0001)
1 EA – SANITARY MANHOLE, 4' DIA., (0–8')
4 FT – SANITARY MANHOLE, 4' DIA., DEPTH OVER 8'
1 EA – DR STRUCTURE COVER, TYPE Q, MODIFIED
93 FT – SEWER, SANITARY, 8 INCH

STATION 3+60, 1'L (PSMH0002)
1 EA – SANITARY MANHOLE, 4' DIA., (0–8')
4.2 FT – SANITARY MANHOLE, 4' DIA., DEPTH OVER 8'
1 EA – DR STRUCTURE COVER, TYPE Q, MODIFIED
221 FT – SEWER, SANITARY, 8 INCH

STATION 4+61, 6.5'R (EX MH746D) CRESCENT ST. STATIONING
1 EA – DR STRUCTURE, TAP, 8 INCH

NOTE: TYPE Q CASTINGS ARE MODIFIED TO INCLUDE A SELF LEVELING ASSEMBLY AS DESCRIBED IN CHAPTER 6 OF THE PROJECT SPECIFICATIONS.

Y = EXISTING WYE (VERIFY IF ACTIVE), A = EXISTING ABANDONED WYE
C = EXISTING CAPPED WYE

NOTES

POWER POLES, UNDERGROUND ELECTRIC, CABLE AND TELEPHONE UTILITIES CONFLICTING WITH PROPOSED WORK TO BE MOVED BY THE CORRESPONDING UTILITY COMPANY. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THOSE UTILITIES.

REMOVE EXISTING CONCRETE AND BITUMINOUS APRONS AND DRIVES AS SHOWN. CONCRETE REMOVAL PAID FOR AS "SIDEWALK, REM" AND BIT. REMOVAL PAID FOR AS "HMA SURFACE, REM"

REMOVE ROAD SURFACE AND MATERIAL BETWEEN EXISTING CURBS TO GRADE NEEDED FOR INSTALLATION OF PROPOSED CROSS SECTION. REMOVAL OF HMA PAID AS "HMA SURFACE, REM" AND REMOVAL OF OTHER MATERIAL IS PAID AS "EXCAVATION, EARTH".

REMOVE EXISTING CURB AND GUTTER, PAID FOR AS "CURB, REM."

ALL OTHER EARTH EXCAVATION SHALL BE INCIDENTAL TO UNDERGROUND UTILITY PLACEMENT.

ROCK REMOVAL QUANTITIES SHALL BE AS DETERMINED BY DETAIL ON DETAIL SHEET.

REMOVE AND REPLACE FENCES AS NEEDED TO INSTALL SERVICES AND AS DIRECTED BY ENGINEER. (INCLUDED IN WATER AND SANITARY LATERAL PLACEMENT UNLESS NOTED OTHERWISE)

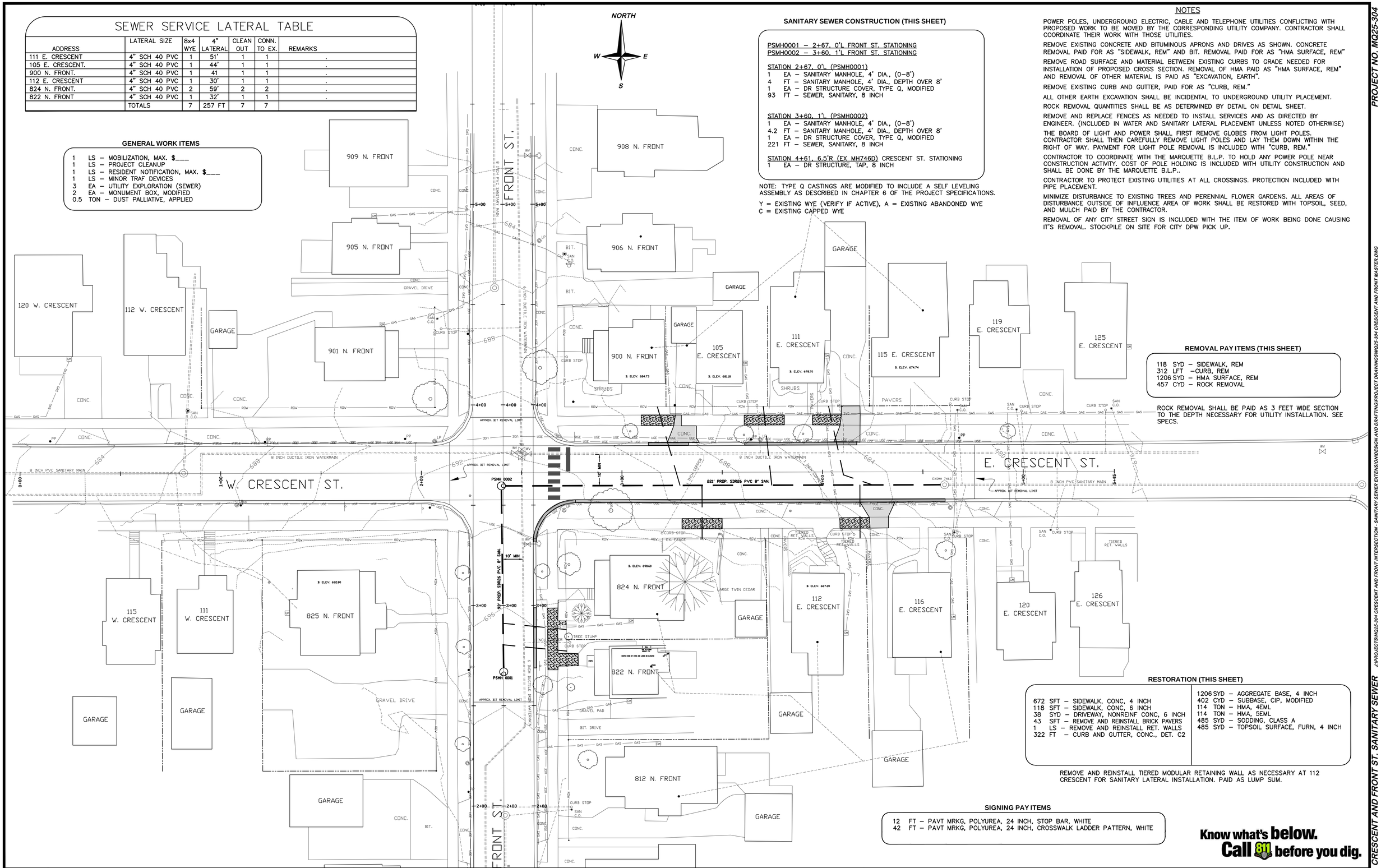
THE BOARD OF LIGHT AND POWER SHALL FIRST REMOVE GLOBES FROM LIGHT POLES. CONTRACTOR SHALL THEN CAREFULLY REMOVE LIGHT POLES AND LAY THEM DOWN WITHIN THE RIGHT OF WAY. PAYMENT FOR LIGHT POLE REMOVAL IS INCLUDED WITH "CURB, REM."

CONTRACTOR TO COORDINATE WITH THE MARQUETTE B.L.P. TO HOLD ANY POWER POLE NEAR CONSTRUCTION ACTIVITY. COST OF POLE HOLDING IS INCLUDED WITH UTILITY CONSTRUCTION AND SHALL BE DONE BY THE MARQUETTE B.L.P..

CONTRACTOR TO PROTECT EXISTING UTILITIES AT ALL CROSSINGS. PROTECTION INCLUDED WITH PIPE PLACEMENT.

MINIMIZE DISTURBANCE TO EXISTING TREES AND PERENNIAL FLOWER GARDENS. ALL AREAS OF DISTURBANCE OUTSIDE OF INFLUENCE AREA OF WORK SHALL BE RESTORED WITH TOPSOIL, SEED, AND MULCH PAID BY THE CONTRACTOR.

REMOVAL OF ANY CITY STREET SIGN IS INCLUDED WITH THE ITEM OF WORK BEING DONE CAUSING IT'S REMOVAL. STOCKPILE ON SITE FOR CITY DPW PICK UP.



REMOVAL PAY ITEMS (THIS SHEET)

118 SYD – SIDEWALK, REM
312 LFT –CURB, REM
1206 SYD – HMA SURFACE, REM
457 CYD – ROCK REMOVAL

ROCK REMOVAL SHALL BE PAID AS 3 FEET WIDE SECTION TO THE DEPTH NECESSARY FOR UTILITY INSTALLATION. SEE SPECS.

RESTORATION (THIS SHEET)

672 SFT – SIDEWALK, CONC, 4 INCH
118 SFT – SIDEWALK, CONC, 6 INCH
38 SYD – DRIVEWAY, NONREINF CONC, 6 INCH
43 SFT – REMOVE AND REINSTALL BRICK PAVERS
1 LS – REMOVE AND REINSTALL RET. WALLS
322 FT – CURB AND GUTTER, CONC., DET. C2

1206 SYD – AGGREGATE BASE, 4 INCH
402 CYD – SUBBASE, CIP, MODIFIED
114 TON – HMA, 4EML
114 TON – HMA, 5EML
485 SYD – SODDING, CLASS A
485 SYD – TOPSOIL SURFACE, FURN, 4 INCH

REMOVE AND REINSTALL TIERED MODULAR RETAINING WALL AS NECESSARY AT 112 CRESCENT FOR SANITARY LATERAL INSTALLATION. PAID AS LUMP SUM.

SIGNING PAY ITEMS

12 FT – PAVT MRKG, POLYUREA, 24 INCH, STOP BAR, WHITE
42 FT – PAVT MRKG, POLYUREA, 24 INCH, CROSSWALK LADDER PATTERN, WHITE

Know what's below.
Call 811 before you dig.

PROJECT NO. MQ25-304

J:\PROJECTS\MQ25-304 CRESCENT AND FRONT INTERSECTION - SANITARY SEWER EXTENSION\DESIGN AND DRAFTING\PROJECT DRAWINGS\MQ25-304 CRESCENT AND FRONT MASTER.DWG

CRESCENT AND FRONT ST. SANITARY SEWER

CITY ENGINEER'S OFFICE
MARQUETTE, MICHIGAN
1100 WRIGHT STREET, MARQUETTE, MI 49855
PHONE (906)228-0440

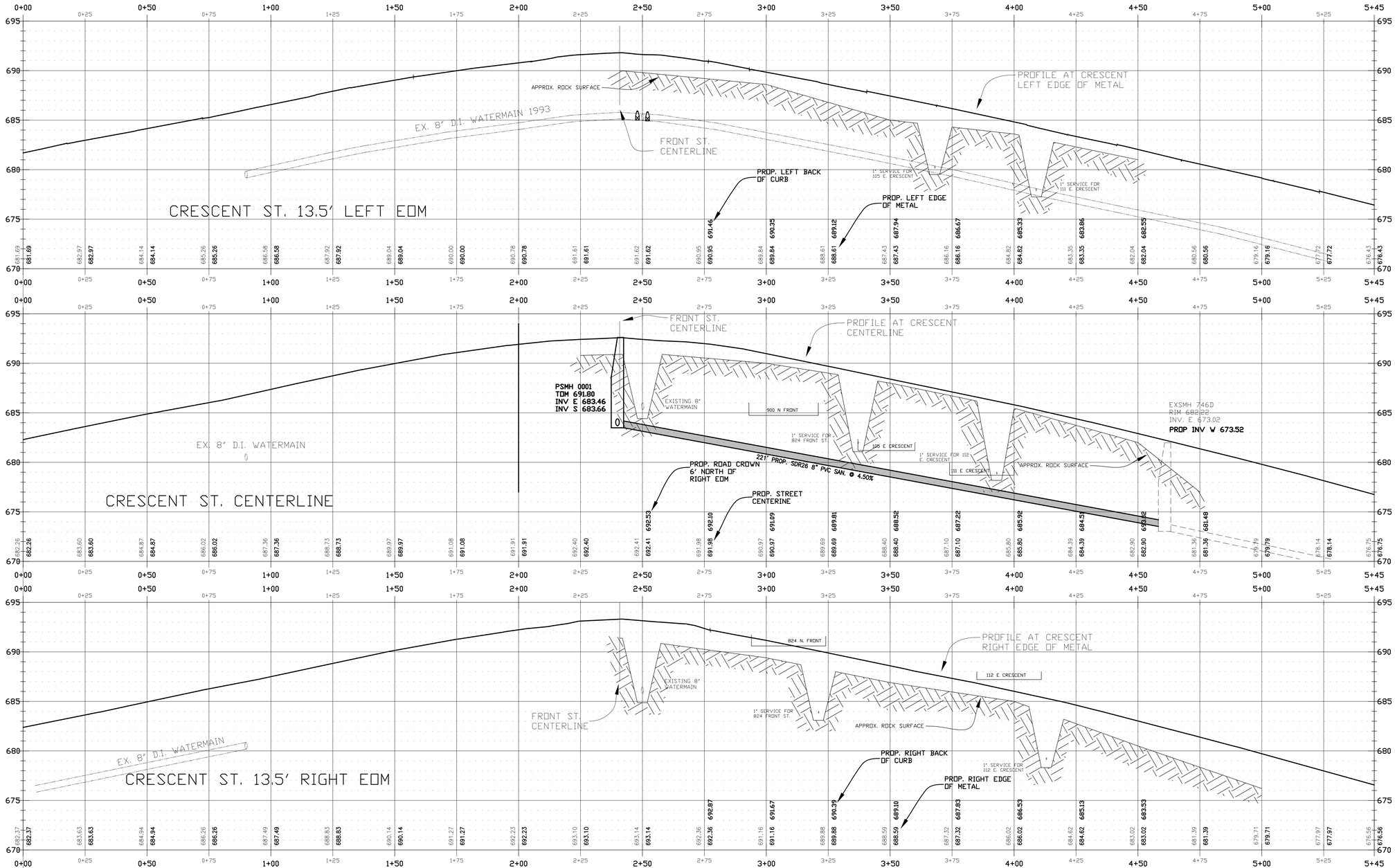
REVISIONS:
. 7-6-23 Internal review
. 12-7-23 San. Services Edits

DESIGN BY: JAMES R. COMPTON P.E.
DRAWN BY: JAMES R. COMPTON P.E.
DATE: 6/1/23
FILE NAME: MQ25-304.dwg

HOR. SCALE: 1" = 20'
VERT. SCALE: N.A.

CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
PROJECT PLAN

PROJECT MQ25-304
SHEET 3 OF 9



NORTH
W E
S

PROJECT NO. MQ25-304

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CRESCENT AND FRONT ST. SANITARY

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CITY ENGINEER'S OFFICE
MARQUETTE, MICHIGAN
1100 WRIGHT STREET, MARQUETTE, MI 49855
PHONE (906)228-0440

REVISIONS:

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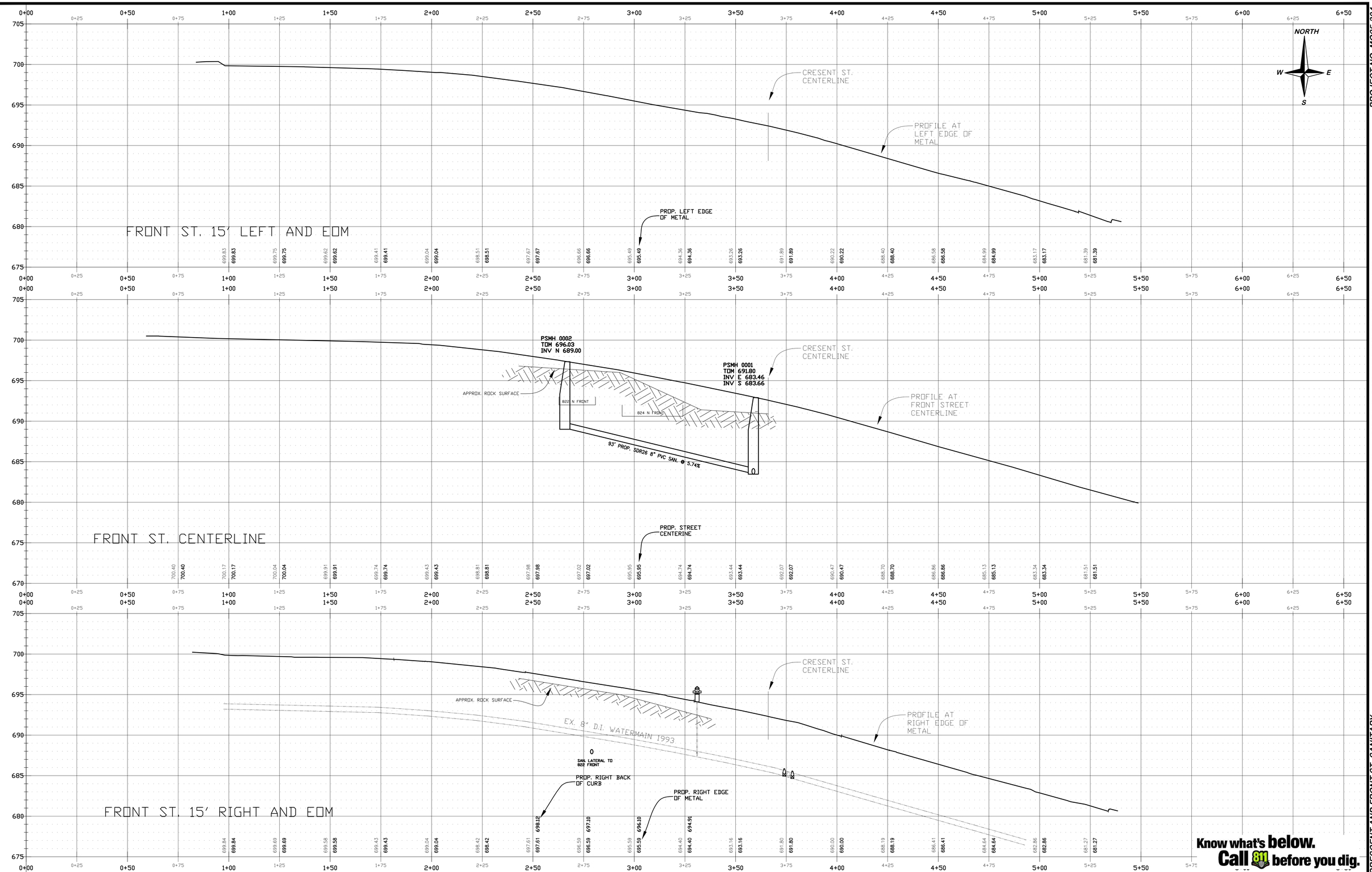
DRAWN BY: JAMES R. COMPTON P.E.
DATE: 6/1/23
FILE NAME: MQ25-304.dwg

HOR. SCALE: 1" = 20'
VERT. SCALE: 1"=5'

CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
PROJECT PLAN

PROJECT MQ25-304
SHEET 4 OF 9



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CRESCENT AND FRONT ST. SANITARY

CITY ENGINEER'S OFFICE
MARQUETTE, MICHIGAN
1100 WRIGHT STREET, MARQUETTE, MI 49855
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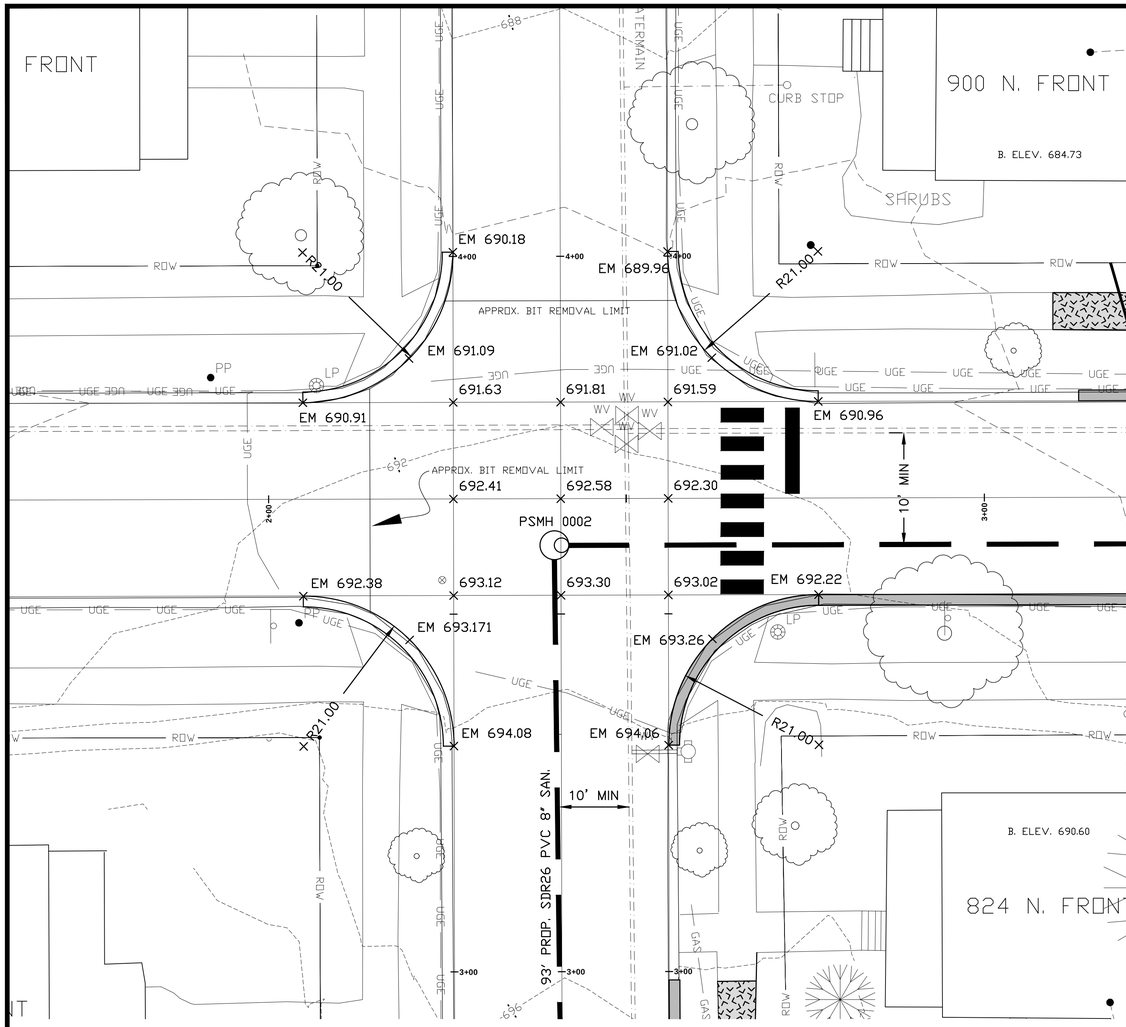
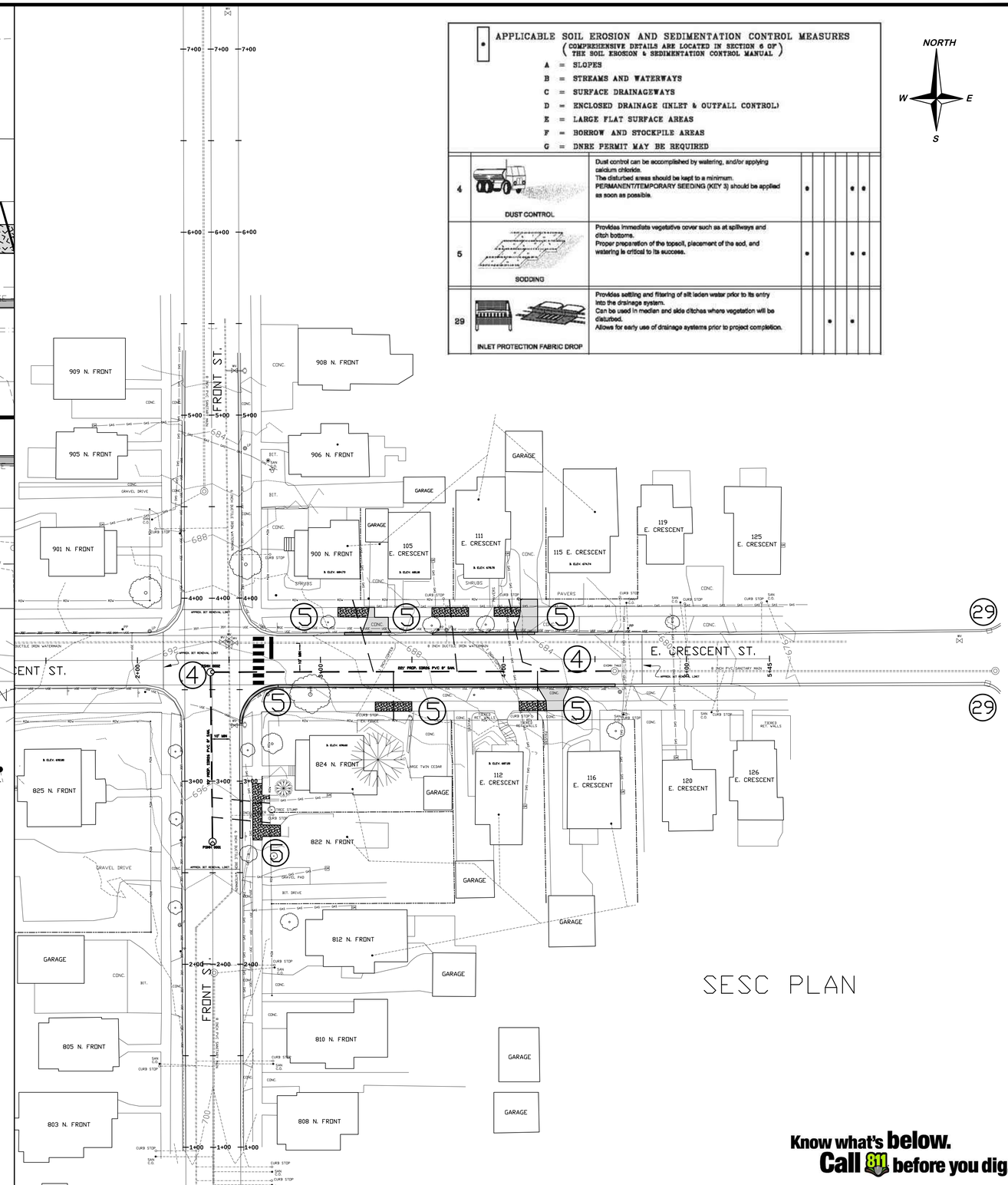
CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
FRONT ST. PROFILE

PROJECT MQ25-304
SHEET 5 OF 9



INTERSECTION DETAIL

•	APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (COMPREHENSIVE DETAILS ARE LOCATED IN SECTION 6 OF THE SOIL EROSION & SEDIMENTATION CONTROL MANUAL) A = SLOPES B = STREAMS AND WATERWAYS C = SURFACE DRAINAGEWAYS D = ENCLOSED DRAINAGE (INLET & OUTFALL CONTROL) E = LARGE FLAT SURFACE AREAS F = BORROW AND STOCKPILE AREAS G = DNRE PERMIT MAY BE REQUIRED					
4	DUST CONTROL	Dust control can be accomplished by watering, and/or applying calcium chloride. The disturbed areas should be kept to a minimum. PERMANENT/TEMPORARY SEEDING (KEY 3) should be applied as soon as possible.	•			•	•
5	SODDING	Provides immediate vegetative cover such as at spillways and ditch bottoms. Proper preparation of the topsoil, placement of the sod, and watering is critical to its success.	•			•	•
29	INLET PROTECTION FABRIC DROP	Provides settling and filtering of silt laden water prior to its entry into the drainage system. Can be used in median and side ditches where vegetation will be disturbed. Allows for early use of drainage systems prior to project completion.			•	•	



SESC PLAN

Know what's below. Call 811 before you dig.

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CRESCENT AND FRONT SANITARY

CITY ENGINEER'S OFFICE
MARQUETTE, MICHIGAN
1100 WRIGHT STREET, MARQUETTE, MI 49855
PHONE (906)228-0440

REVISIONS:

DESIGN BY: JAMES R. COMPTON P.E.
DRAWN BY: JAMES R. COMPTON P.E.
DATE: 6/1/23
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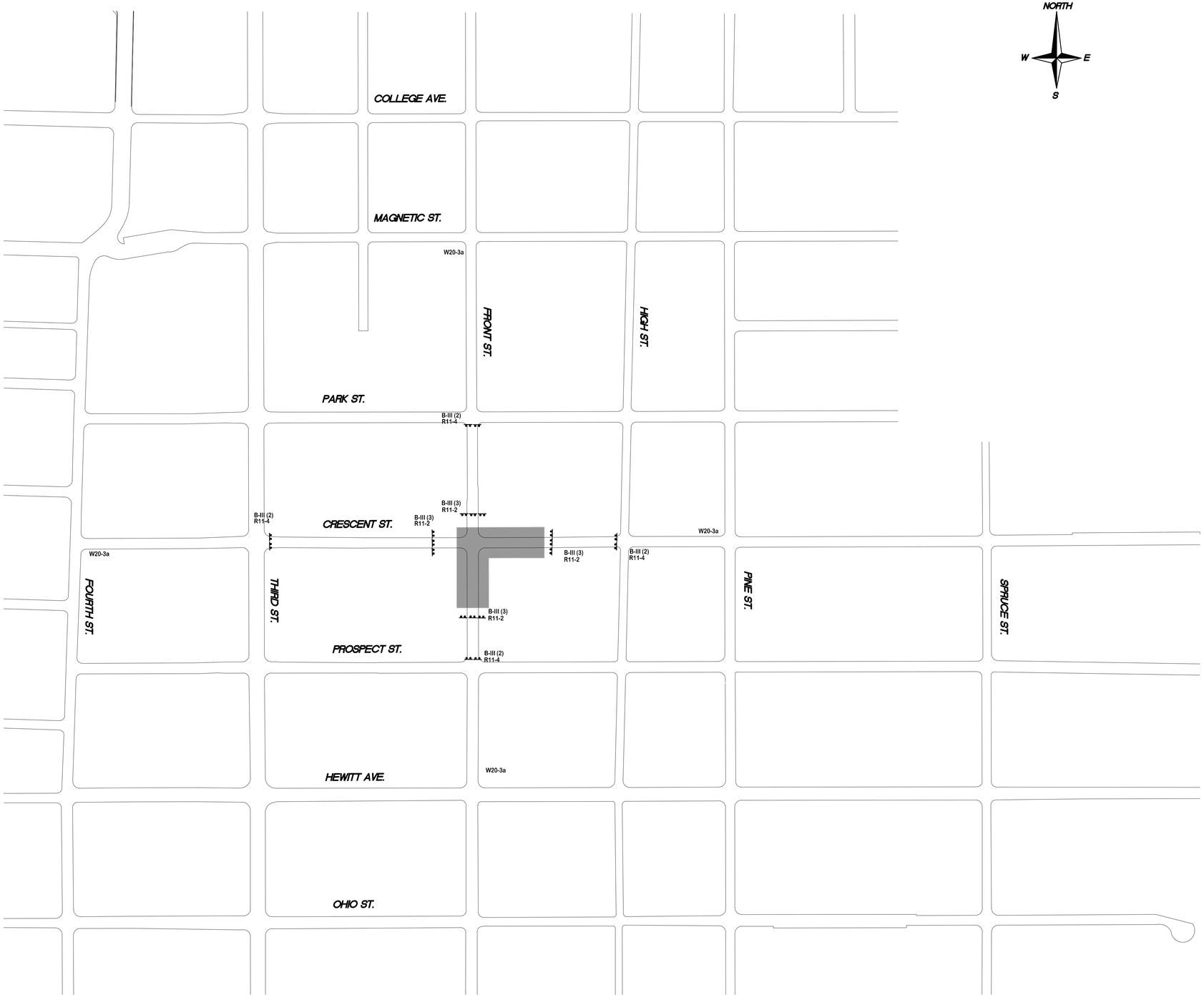
HOR. SCALE: 1" = 20'
VERT. SCALE: N.A.

CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
SESC PLAN AND INTERSECTION DETAIL

PROJECT MQ25-304
SHEET 6 OF 9



NOTES:

ALL INTERSECTIONS SHALL REMAIN OPEN TO THROUGH TRAFFIC FOR AS LONG AS POSSIBLE.

ALL REMOVED SIGNAGE AND POSTS ARE TO BE STOCKPILED ON SITE AND TURNED OVER TO THE CITY OF MARQUETTE PUBLIC WORKS DEPARTMENT.

ALL SIGNAGE WILL BE PLACED PER MICHGIAN DEPARTMENT OF TRANSPORTATION STANDARDS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

TEMPORARY SIGNING PAY ITEMS FOR PROJECT

20	EA – PLASTIC DRUM, HIGH INTENSITY, FURN
20	EA – PLASTIC DRUM, HIGH INTENSITY, OPER
154	SFT – SIGN, TYPE B, TEMP, PRISMATIC, FURN
154	SFT – SIGN, TYPE B, TEMP, PRISMATIC, OPER
20	EA – BARRICADE, TYPE 3, HIGH INTENSITY, LIGHTED, FURN
20	EA – BARRICADE, TYPE 3, HIGH INTENSITY, LIGHTED, OPER

TEMPORARY TRAFFIC CONTROL TOTAL FOR LOCAL STREETS

SIGN	TYPE	DESCRIPTION	MAX. NO. EACH	DIMENSIONS (INCHES)
		PLASTIC DRUM, LIGHTED	20	
B–III		BARRICADE, TYPE III, LIGHTED	20	
R11–2	IIB	ROAD CLOSED	4	48x30
R11–4	IIB	ROAD CLOSED TO THRU TRAFFIC	4	60x30
W20–3a	IIB	STREET CLOSED AHEAD	4	48x48

PROJECT NO. MQ25-304

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CRRESCENT AND FRONT SANITARY

CITY ENGINEER'S OFFICE
MARQUETTE, MICHIGAN
1100 WRIGHT STREET, MARQUETTE, MI 49855
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REVISIONS:

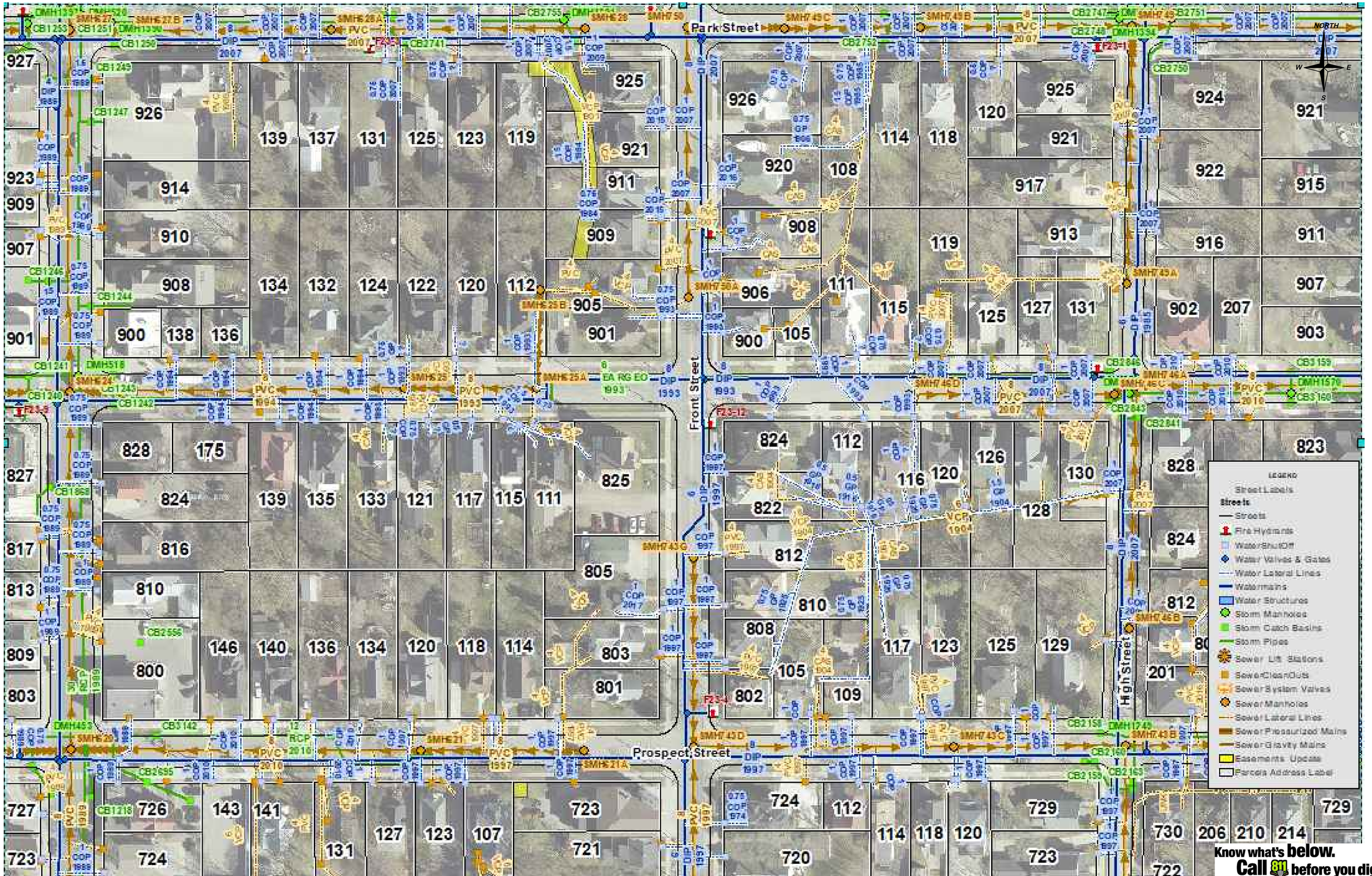
INTERNAL REVIEW	8-14-23
BIDDING	

DESIGN BY: JAMES COMPTON, PROJECT ENGINEER
DRAWN BY: JAMES COMPTON, PROJECT ENGINEER
DATE: AUGUST 14, 2023
FILE NAME: MQ25-304 BASE MASTER.dwg

HOR. SCALE: N.A.
VERT. SCALE: N.A.

CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
TRAFFIC CONTROL PLAN

PROJECT MQ25-304
SHEET 7 OF 9



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CRESCENT AND FRONT SANITARY

CITY ENGINEER'S OFFICE
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REVISIONS:

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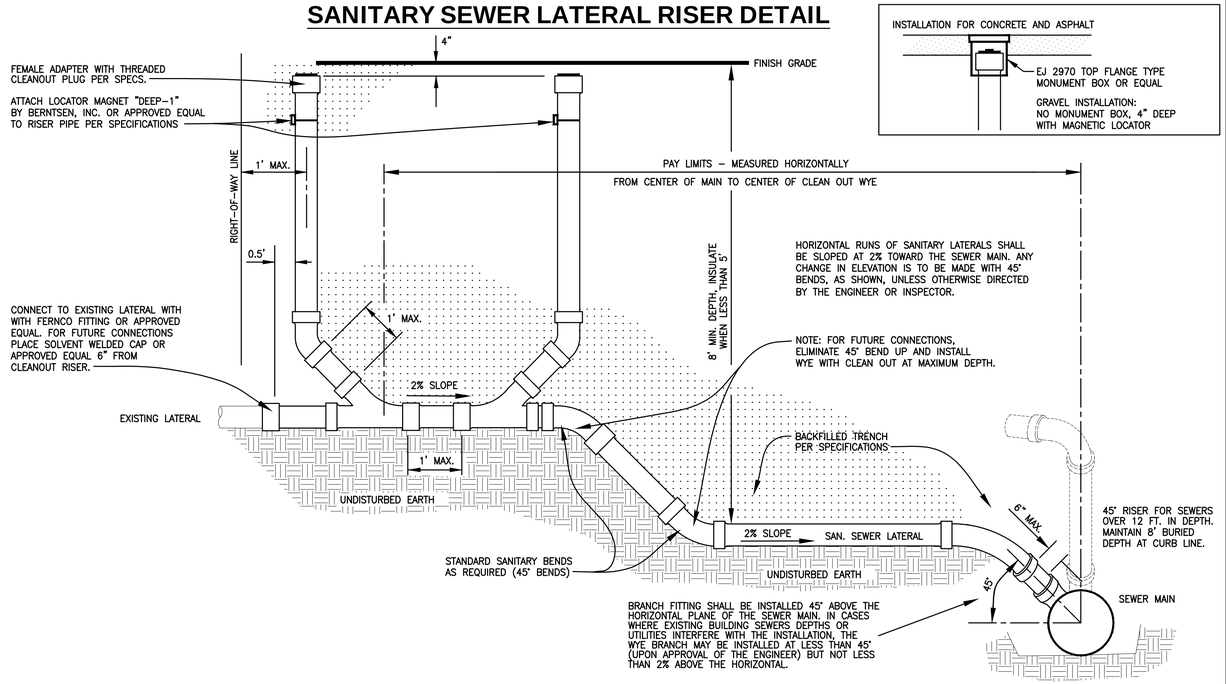
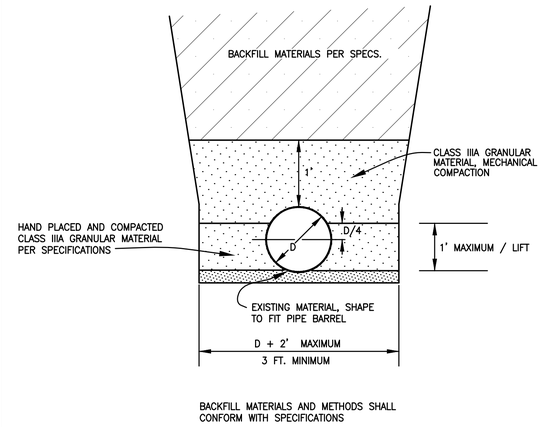
CRESCENT AND FRONT ST. SANITARY SEWER
MARQUETTE, MICHIGAN
UTILITY SCHEMATIC

PROJECT MQ25-304
SHEET 8 OF 9

SANITARY SEWER LATERAL RISER DETAIL

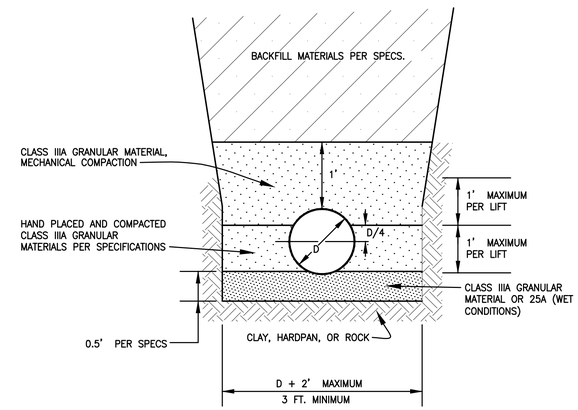


PIPE BEDDING DETAIL "G"
IN SAND AND GRAVEL



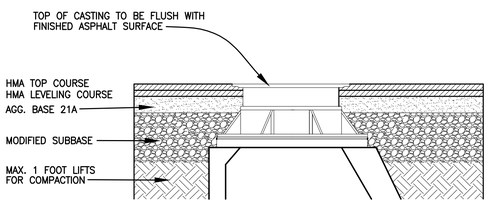
BACKFILL MATERIALS AND METHODS SHALL CONFORM WITH SPECIFICATIONS

PIPE BEDDING DETAIL "G"
IN CLAY, HARDPAN, AND ROCK OR WHERE NATURAL MATERIAL IS UNDERCUT DURING EXCAVATION



BACKFILL MATERIALS AND METHODS SHALL CONFORM WITH SPECIFICATIONS

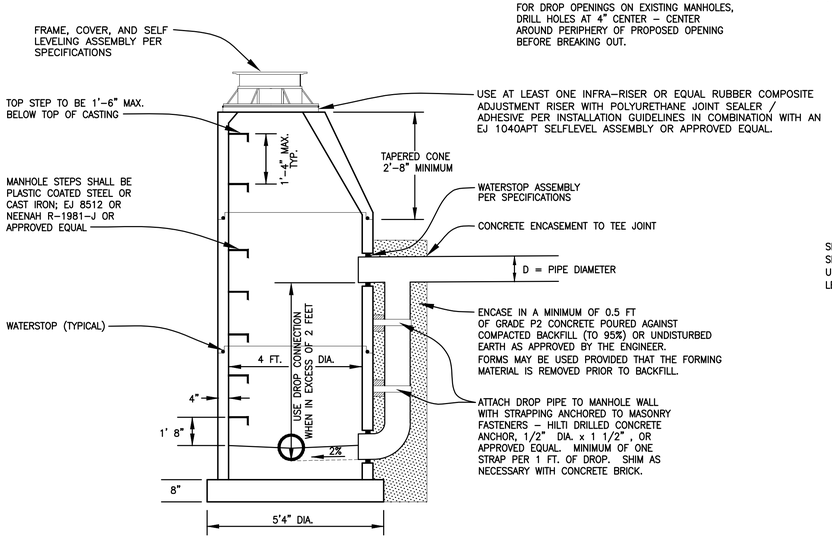
TYPICAL MANHOLE COVER INSTALLATION

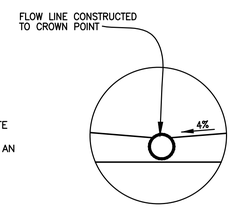


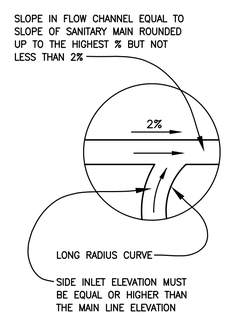
STANDARD CONCRETE DROP MANHOLE
REFER TO M.D.O.T. STANDARD PLANS FOR OTHER CONFIGURATIONS

DROP PIPE DIAMETER SHALL BE THE SAME DIAMETER AS THE INCOMING PIPE, UNLESS NOTED OTHERWISE.

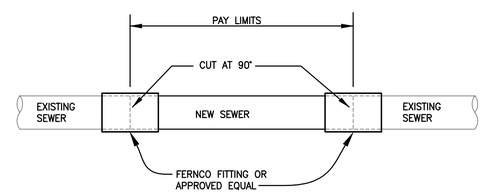
FOR DROP OPENINGS ON EXISTING MANHOLES, DRILL HOLES AT 4" CENTER – CENTER AROUND PERIPHERY OF PROPOSED OPENING BEFORE BREAKING OUT.







SANITARY SEWER LATERAL REPAIR DETAIL AND SANITARY SEWER POINT REPAIR

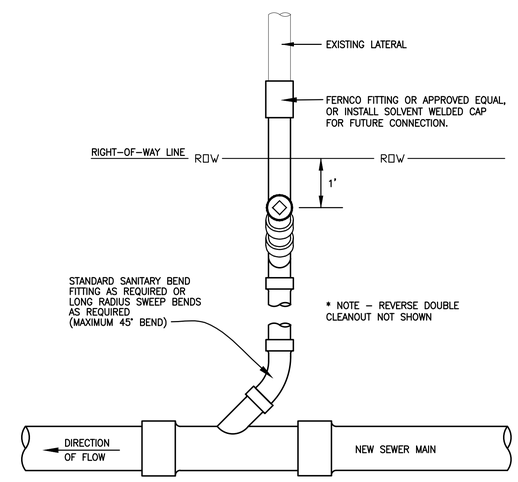


NOTE: ALL WORK MUST BE APPROVED BY THE ENGINEER PRIOR TO BACKFILL

Michigan's One-Call Utility Notification Organization

Three full days before you dig call the Miss Dig system 1-(800)-482-7171

PLAN VIEW OF SANITARY SEWER LATERAL



WYE SEWER LATERAL CONNECTION TO NEW MAIN

PROJECT NO. MQ25-304

CRESCENT AND FRONT ST. SANITARY SEWER

CITY ENGINEER'S OFFICE **MARQUETTE, MICHIGAN** 1100 WRIGHT STREET, MARQUETTE, MI 49855 PHONE (906)228-0440	**REVISIONS:** 7-6-23 Internal review	**DESIGN BY: JAMES R. COMPTON P.E.** **DRAWN BY: JAMES R. COMPTON P.E.** **DATE: 6/1/23** **FILE NAME: MQ25-304.dwg**	**HOR. SCALE: 1" = 20'** **VERT. SCALE: N.A.**	**CRESCENT AND FRONT ST. SANITARY SEWER** **MARQUETTE, MICHIGAN** **SANITARY DETAILS**	**PROJECT MQ25-304** **SHEET 9 OF 9**