Madison, Wisconsin

CITY OF MADISON
CITY ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
PLAN OF PROPOSED IMPROVEMENT

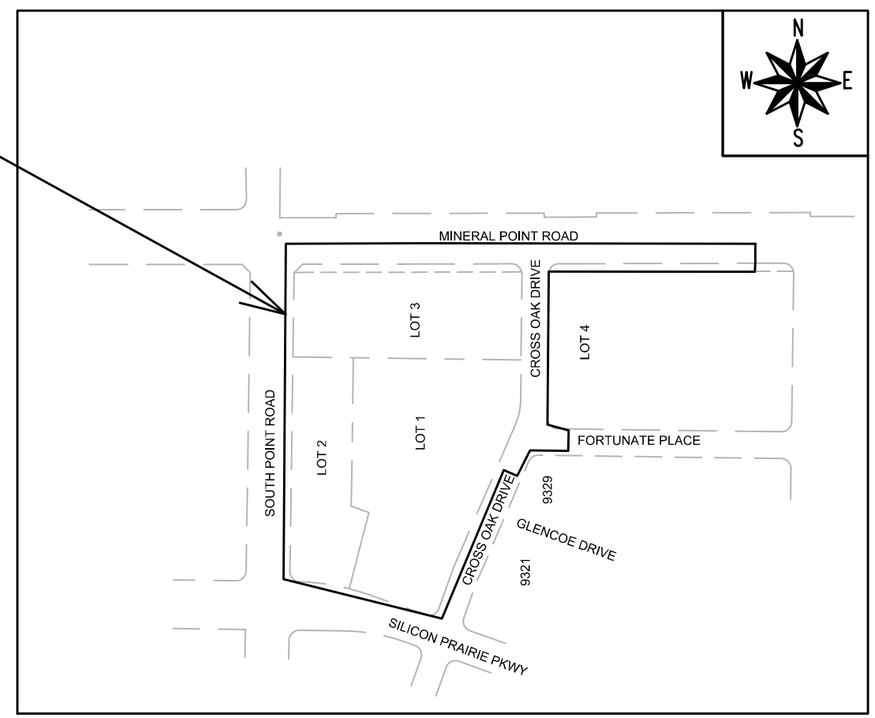
TWO POINTS CROSSING: UTILITIES ONLY

CITY PROJECT NO. 12567
CONTRACT NO. 8517

INDEX OF SHEETS

SHEET NO.	TC1-TC2	TRAFFIC CONTROL PLAN
SHEET NO.	U1-U3	UTILITY PLAN & PROFILES
SHEET NO.	U4	UTILITY PLAN & PROFILE (BY DEVELOPER)
SHEET NO.	USAN	SANITARY SEWER SCHEDULE
SHEET NO.	USTM	STORM SEWER SCHEDULE
SHEET NO.	W1-W4	WATER PLANS

PROJECT LOCATION



PUBLIC IMPROVEMENT PROJECT APPROVED

JUNE 2, 2020

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

W. Greg Fries — Apr 8, 2021

City Engineer — Date

SANITARY SEWER DESIGNED BY:

WISCONSIN MARK D. MODER E-33979 MADISON WI PROFESSIONAL ENGINEER

Apr 8, 2021

STORM SEWER DESIGNED BY:

WISCONSIN JANET SCHMIDT E-34681 MADISON WI PROFESSIONAL ENGINEER

Apr 8, 2021

TRAFFIC CONTROL PLAN DESIGNED BY:

WISCONSIN THOMAS A. MOHR E-42481 MADISON WI PROFESSIONAL ENGINEER

Apr 8, 2021

WATER DESIGNED BY:

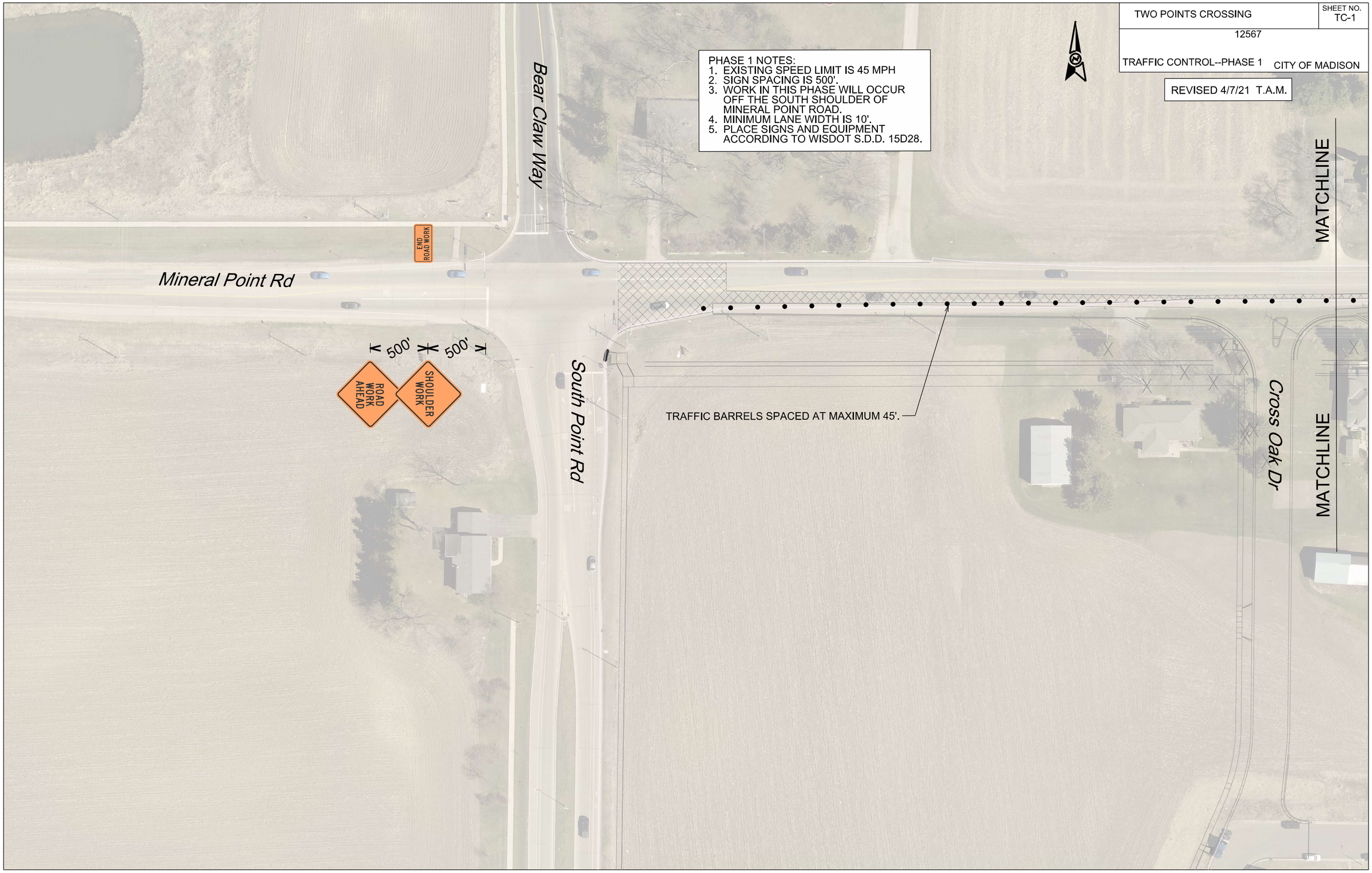
WISCONSIN PETER E. HOLMGREN E-42156 MADISON WI PROFESSIONAL ENGINEER

Apr 8, 2021

TWO POINTS CROSSING	SHEET NO. TC-1
12567	
TRAFFIC CONTROL--PHASE 1	CITY OF MADISON

REVISED 4/7/21 T.A.M.

PHASE 1 NOTES:
1. EXISTING SPEED LIMIT IS 45 MPH
2. SIGN SPACING IS 500'.
3. WORK IN THIS PHASE WILL OCCUR OFF THE SOUTH SHOULDER OF MINERAL POINT ROAD.
4. MINIMUM LANE WIDTH IS 10'.
5. PLACE SIGNS AND EQUIPMENT ACCORDING TO WISDOT S.D.D. 15D28.



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PLOT NAME:
REV. DATE:
ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

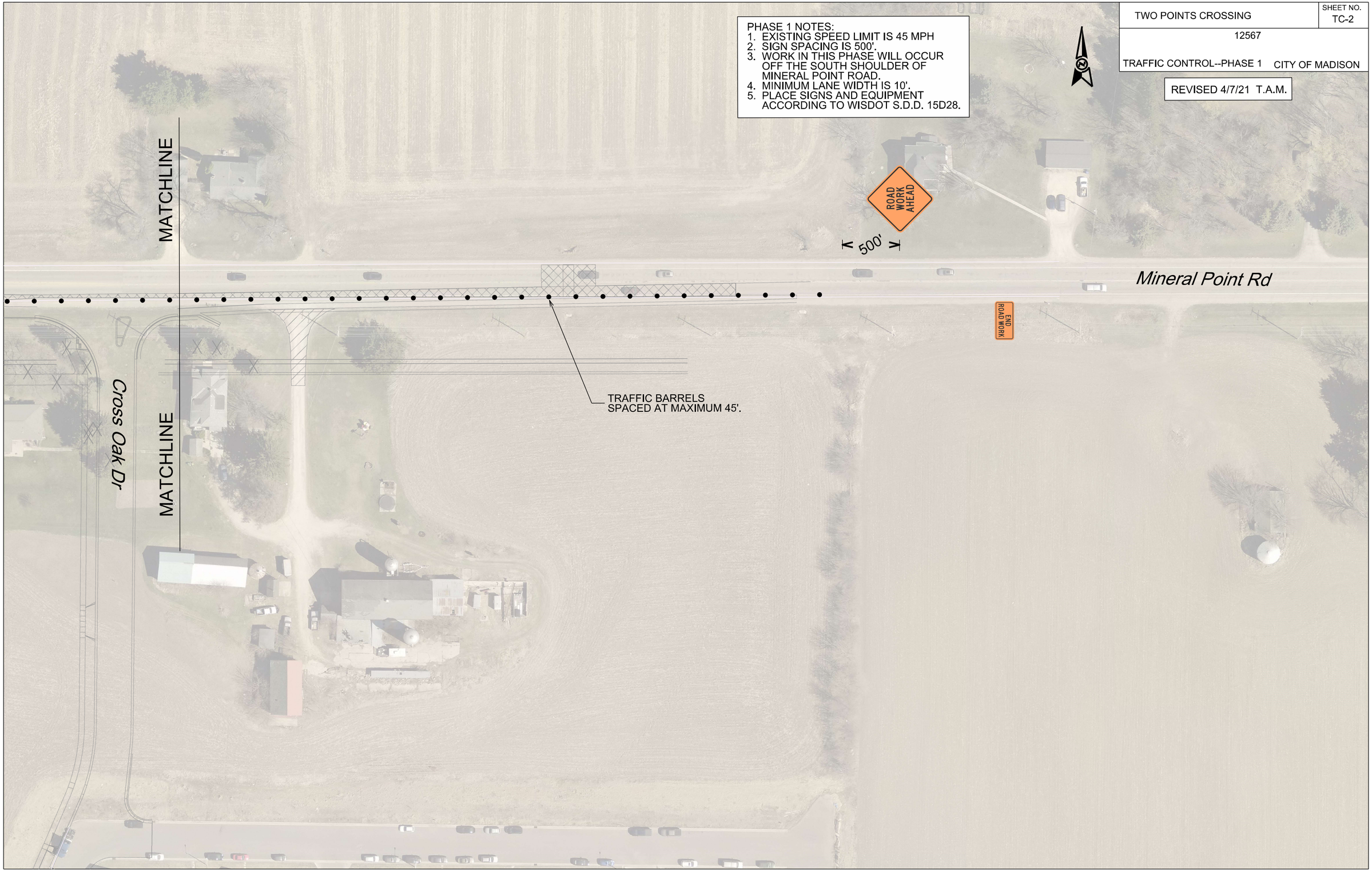
FILE NAME: $$....designfile....$$

DATE: $$...plottingdate...$$

TWO POINTS CROSSING	SHEET NO. TC-2
12567	
TRAFFIC CONTROL--PHASE 1 CITY OF MADISON	

REVISED 4/7/21 T.A.M.

PHASE 1 NOTES:
1. EXISTING SPEED LIMIT IS 45 MPH
2. SIGN SPACING IS 500'.
3. WORK IN THIS PHASE WILL OCCUR OFF THE SOUTH SHOULDER OF MINERAL POINT ROAD.
4. MINIMUM LANE WIDTH IS 10'.
5. PLACE SIGNS AND EQUIPMENT ACCORDING TO WISDOT S.D.D. 15D28.



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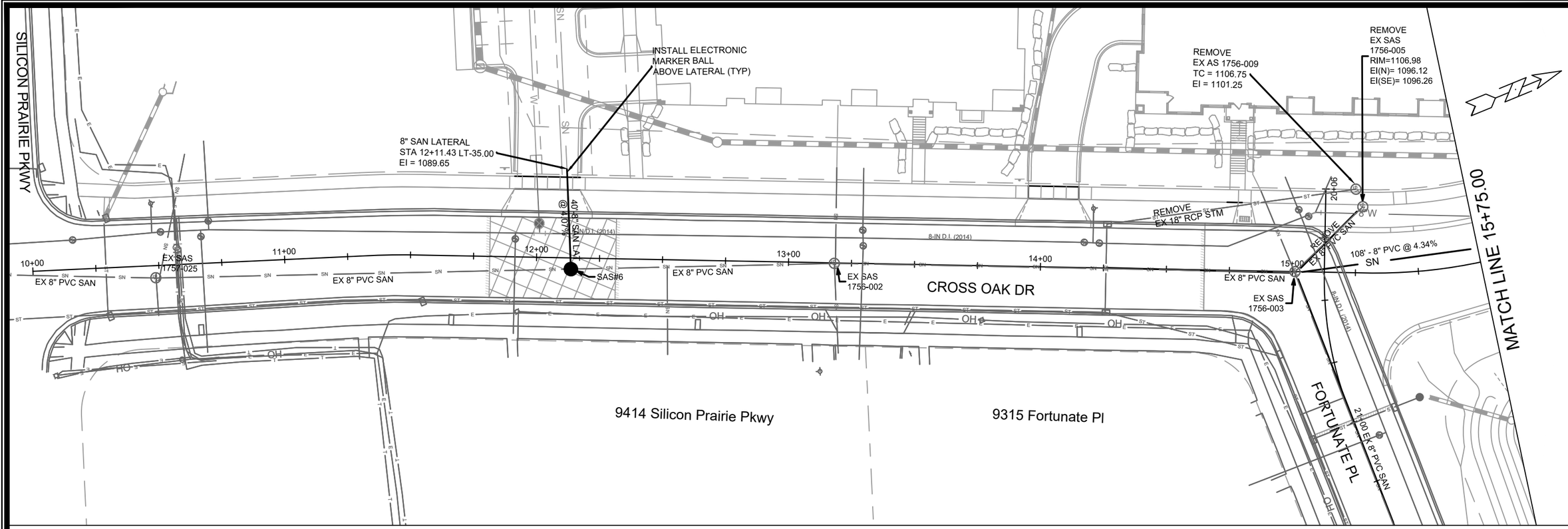

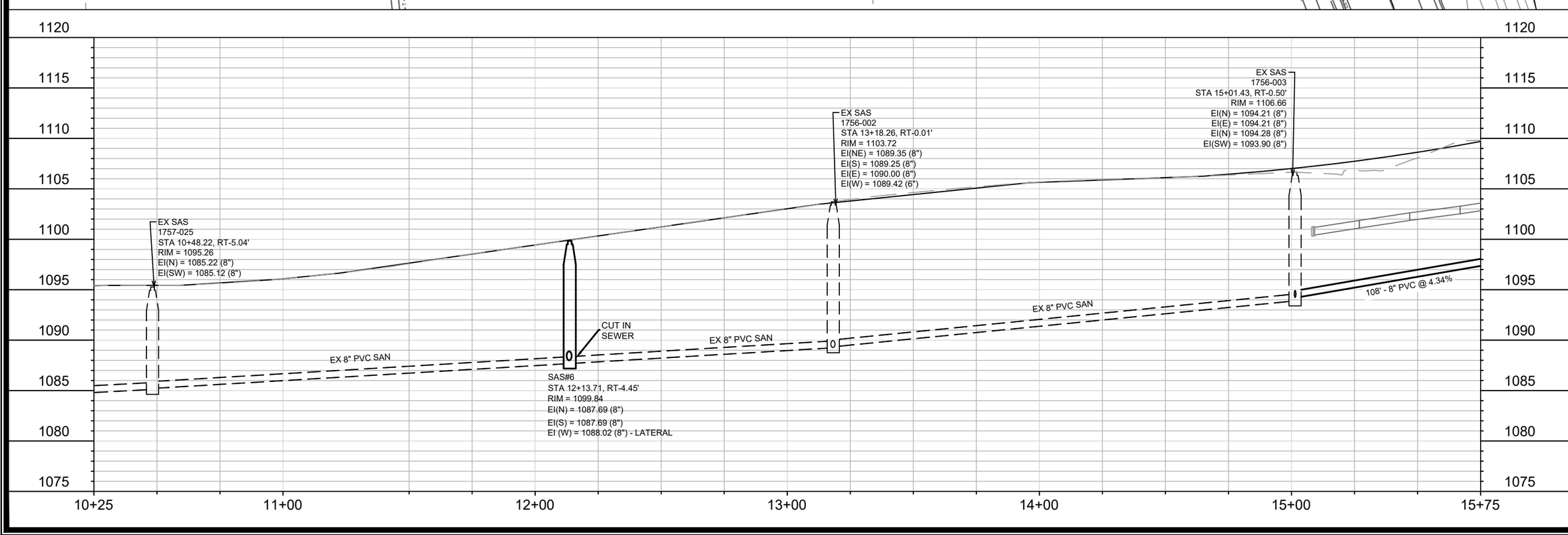

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12567

U-1

12567

MADISON, WI

8517

CONTRACT NO:

CROSS OAK DRIVE - UTILITIES PLAN & PROFILE

TWO POINTS CROSSING

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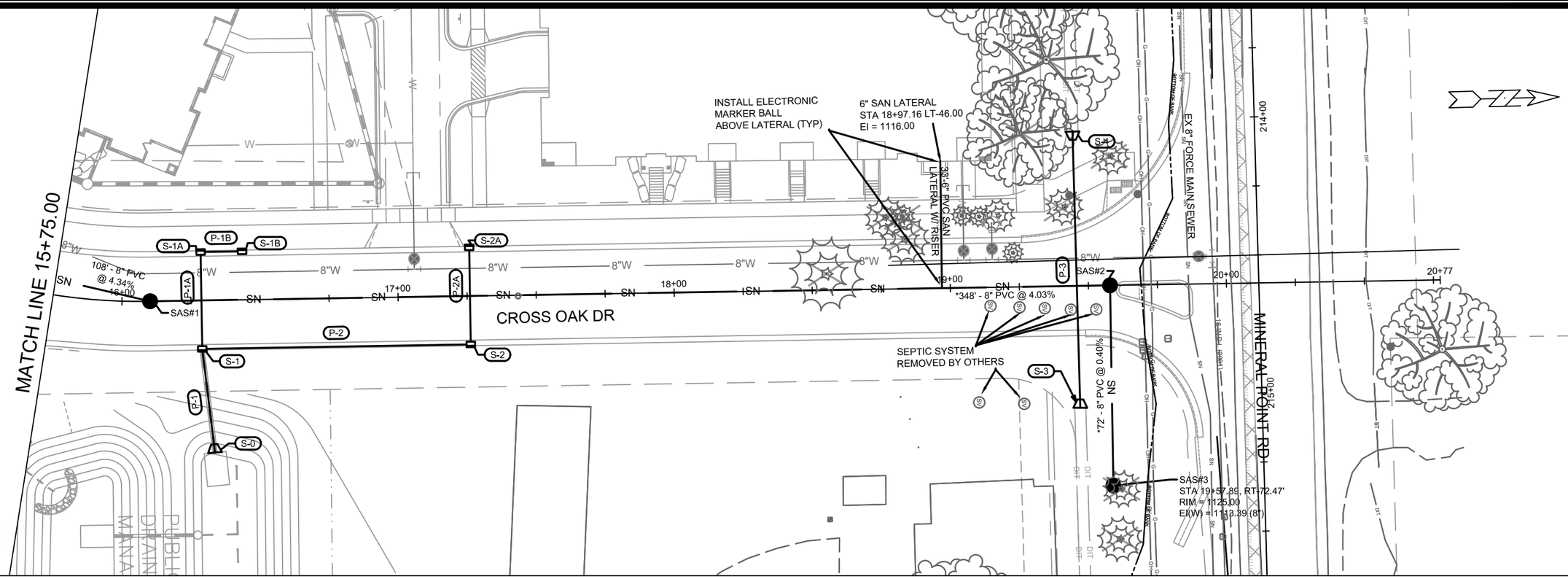
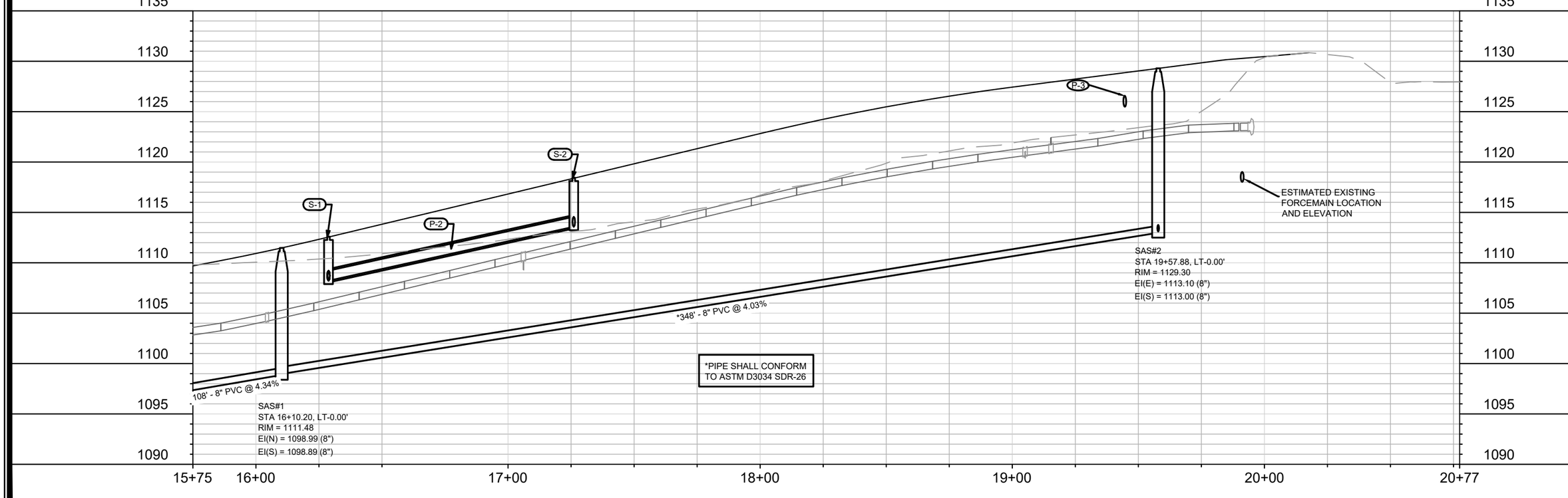
CITY OF MADISON WISCONSIN

12567

U-1





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MADISON, WI

8517

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CROSS OAK DRIVE - UTILITIES PLAN & PROFILE

TWO POINTS CROSSING

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CITY OF MADISON WISCONSIN

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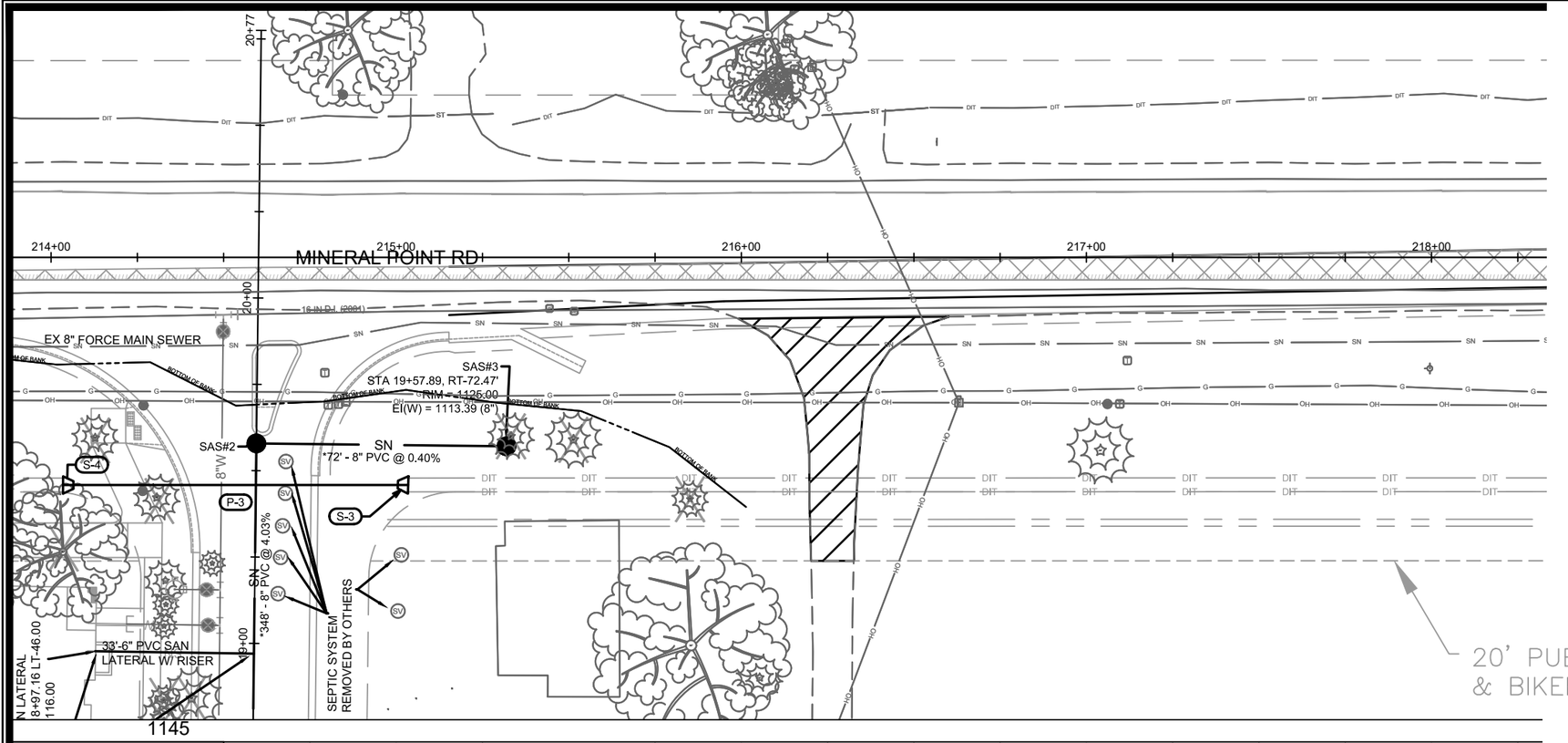

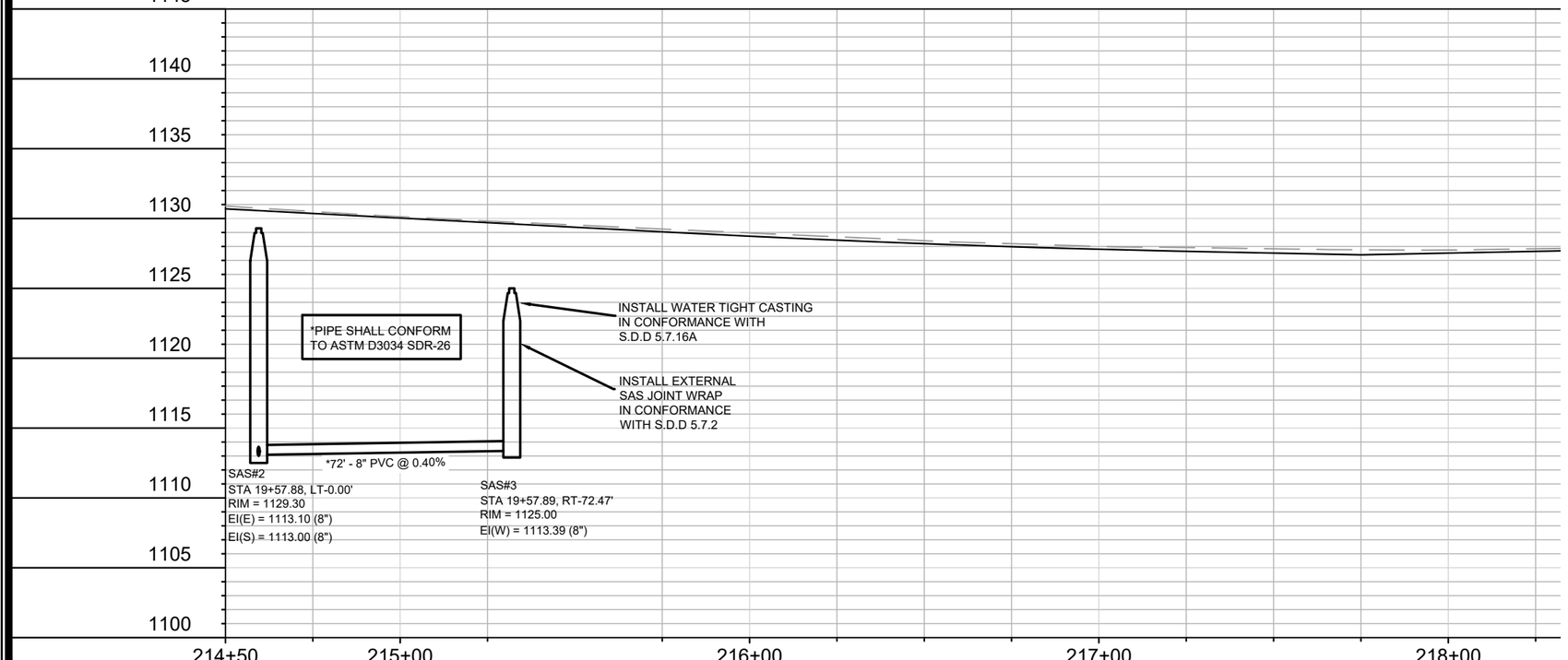

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12567

MADISON, WI

CONTRACT NO: 8517

MINERAL POINT ROAD - UTILITIES PLAN & PROFILE

TWO POINTS CROSSING

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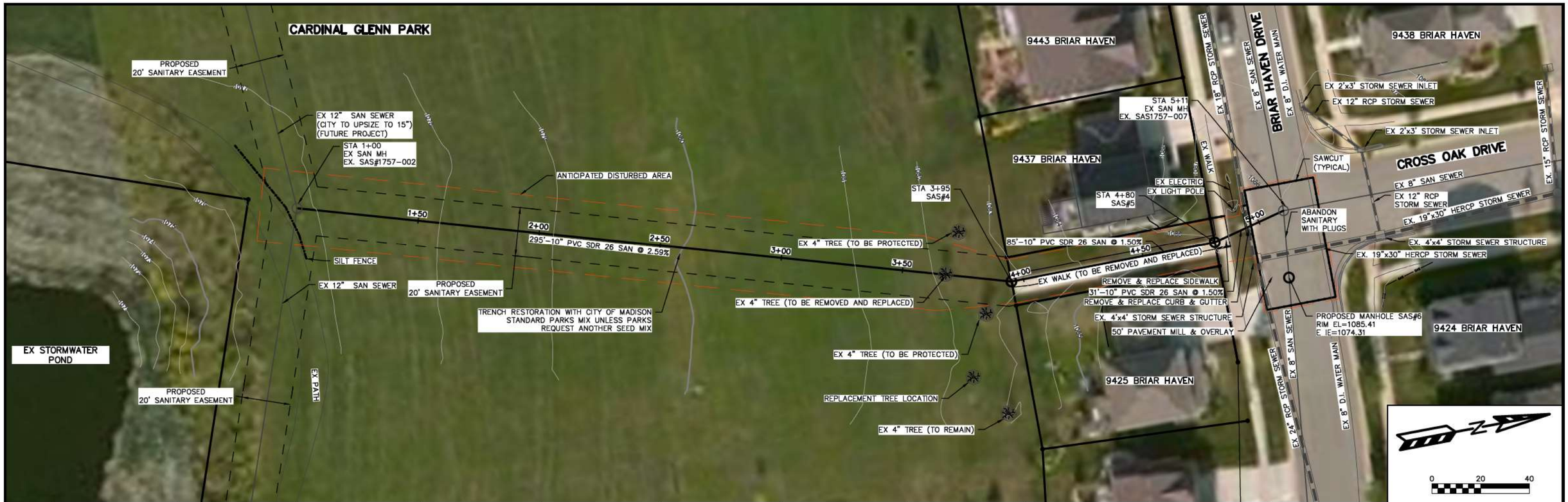
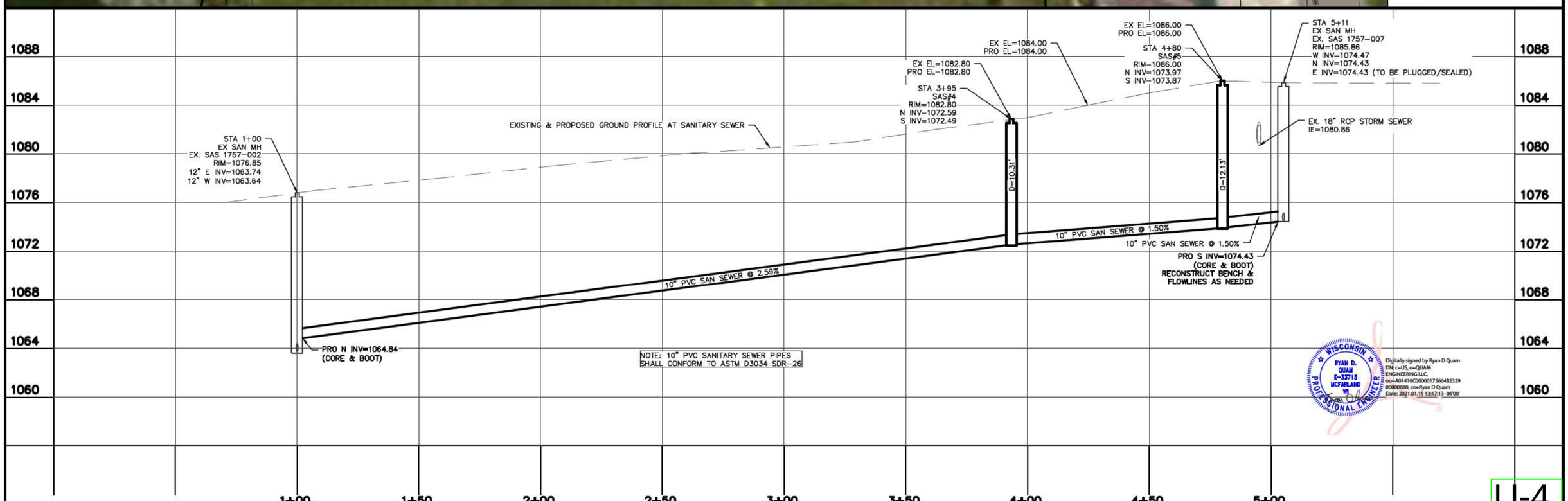
U-3

QUAM ENGINEERING, LLC 4604 Siggelkow Road, Suite A; McFarland, WI 53558 (608) 838-7750





WISCONSIN RYAN D. QUAM E-33715 MCFARLAND WI PROFESSIONAL ENGINEER

Digitally signed by Ryan D Quam
DN: c=US, o=QUAM ENGINEERING LLC, ou=A01410C0000017566 4B2329 00000880, cn=Ryan D Quam
Date: 2021.01.15 13:17:13 -06'00'

\WE-13-19\SANITARY SEWER\RELIEF SEWER-PARK.DWG

PROJECT # 12567 TWO POINTS CROSSING

RELIEF SEWER – CARDINAL GLENN PARK WE-13-19 09/16/2020

SANITARY SEWER SCHEDULE

TWO POINTS CROSSING	SHEET NO.
PROJECT NO. 12567	U-SAN
SANITARY SEWER SCHEDULE	
CITY OF MADISON	

PROPOSED SANITARY

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
CROSS OAK DRIVE						
SAS#1	16+10.20	CL	1111.48	1098.89	12.59	-
SAS#2	19+57.88	CL	1129.30	1113.00	16.30	-
SAS#3	19+57.89	RT-72.47	1123.75	1113.39	10.36	(1), (2)
SAS#6	12+13.71	RT-4.45	1099.84	1087.92	11.92	-
CARDINAL GLENN PARK						
SAS#4	3+95.00	CL	1082.80	1072.49	10.31	-
SAS#5	4+80.00	CL	1086.00	1073.87	12.13	-

PROPOSED SANITARY PIPES

FROM (DNSTM)	TO (UPSTM)	DWNSTRM E.I.	UPSTRM E.I.	PLAN LGTH (FT)	SLOPE (%)	PIPE SIZE	PVC TYPE	NOTES
EX SAS 1756-003	SAS#1	1094.21	1098.89	108	4.34%	8"	SDR-35	-
SAS#1	SAS#2	1098.99	1113.00	348	4.03%	8"	SDR-26	-
SAS#2	SAS#3	1113.10	1113.39	72	0.40%	8"	SDR-26	-
EX SAS 1757-002	SAS#4	1064.84	1072.49	295	2.59%	10"	SDR-26	-
SAS#4	SAS#5	1072.59	1073.87	85	1.50%	10"	SDR-26	-
SAS#5	EX SAS 1757-007	1073.97	1074.43	31	1.50%	10"	SDR-26	-

REMOVE SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
1756-005	15+27.00	LT-26.00	1106.98	1096.12	10.86	-

REMOVE SANITARY PIPES

REMOVE FROM	REMOVE TO	PAID (Y / N)	PAY LGTH (FT)	PIPE SIZE	NOTES
1756-003	1756-005	Y	35	8"	-

NOTES:

(1) PROVIDE EXTERNAL SAS WRAP IN CONFORMANCE WITH S.D.D. 5.7.2
(2) INSTALL LOCKING WATERTIGHT FRAME AND LID IN CONFORMANCE WITH S.D.D. 5.7.16A

STORM SEWER SCHEDULE

TWO POINTS CROSSING	SHEET NO.
PROJECT NO. 12567	U-STM
STORM SEWER SCHEDULE	
	CITY OF MADISON

PROPOSED STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
CROSS OAK DRIVE							
S-0	16+32.78	RT-55.13	12" RCP APRON END	-	1108.00	-	-
S-1	16+28.79	RT-17.50	H INLET	1112.61	1108.22	4.39	FP; W/ R-3067-7004-V
S-1A	16+28.79	LT-17.50	H INLET	1112.61	1108.40	4.21	FP; W/ R-3067-7004-V
S-1B	16+43.79	LT-17.50	H INLET	1113.51	1108.50	5.01	W/ R-3067-7004-V
S-2	17+26.06	RT-17.50	H INLET	1118.45	1113.57	4.88	W/ R-3067-7004-V
S-2A	17+26.06	LT-17.50	H INLET	1118.45	1113.77	4.68	W/ R-3067-7004-V
S-3	19+46.37	RT-44.12	12" RCP APRON END	-	1122.99	-	W/ GATE
S-4	19+45.20	LT-55.87	12" RCP APRON END	-	1127.69	-	W/ GATE

PROPOSED STORM PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PLAN (PAY) LGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE	TYPE	NOTES
P-1	S-0	S-1	1108.00	1108.22	38	37	0.59%	12"	TYPE I	-
P-1A	S-1	S-1A	1108.22	1108.40	35	33	0.55%	12"	TYPE I	-
P-1B	S-1A	S-1B	1108.40	1108.50	15	12	0.83%	12"	TYPE II	-
P-2	S-1	S-2	1108.22	1113.57	97	94	5.69%	12"	TYPE II	-
P-2A	S-2	S-2A	1113.57	1113.77	35	33	0.61%	12"	TYPE I	-
P-3	S-3	S-4	1122.99	1127.69	100	100	4.70%	12"	TYPE I	-

REMOVE STORM STRUCTURE

STRUCTURE NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
AS 1756-009	15+24.70	LT-33.27	3X3 SAS	1106.75	1101.25	5.50	-

REMOVE STORM PIPES

REMOVE FROM	REMOVE TO	PAID (Y / N)	PAY LGTH (FT)	PIPE SIZE	TYPE	NOTES
IN 1756-008	AS 1756-009	Y	102.00	18"	RCP	-

SPECIFIC NOTES:

STANDARD NOTES:

-PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN

- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

-ALL FIELD POURED SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.3. ALL PRECAST SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.5.

- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT ELIA E ACOSTA OF CITY ENGINEERING AT (608) 266-4096 FOR STORM SEWER PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO EACOSTA@CITYOFMADISON.COM.

-FOR SWM PRECAST APPROVALS CONTACT PHIL GAEBLER AT (608) 266-4059 OR EMAIL SWM SHOP DRAWINGS TO PGAEBLER@CITYOFMADISON.COM

REPLACE EX CURB PATCH/MILL & OVERLAY ASPHALT SECTION

STA. 11+99.0, 40.4 LT
8-IN MJ CAP

STA. 12+00.8, 13.5 LT
8-IN VALVE & BOX

STA. 15+08.6, 23.6 LT
8-IN 22-1/2° BEND
CUT-IN CONNECTION
REMOVE/SALVAGE EX 45° BEND

EXISTING SANITARY STRUCTURE TO BE REMOVED

INSULATION (TYP.)

MATCH LINE STA. 16+50

8-IN D.I. PIPE

8-IN D.I. (2014)

CROSS OAK DRIVE

FORTUNATE PLACE

STA. 16+04.4, 9.9 LT
8-IN 22-1/2° BEND

EXISTING SANITARY PIPE TO BE ABANDONED

STA. 12+04.5, 9.5 LT
8-IN SOLID SLEEVE
CUT-IN CONNECTION

STA. 12+01.0, 9.5 LT
8X8-IN TEE

PUBLIC STORM DRAINAGE & MANAGEMENT

8X8-IN TEE
12+01.0, 1093.3

8-IN SOLID SLEEVE
12+04.5, 1093.4

8-IN 22-1/2° BEND
15+08.6, 1101.2

8-IN 22-1/2° BEND
16+04.4, 1105.0

EX SAN

PROP SAN

PROPOSED TOP OF WATER MAIN (TYP.)

T.O.P. 1101.80

T.O.P. 1102.72

T.O.P. 1103.59

T.O.P. 1104.73

T.O.P. 1106.13

T.O.P. 1107.64

11+00 12+00 13+00 14+00 15+00 16+00 16+50

1125 1120 1115 1110 1105 1100 1095 1090 1085

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W-1

12567

MADISON, WI

8517

CONTRACT NO:

CROSS OAK DRIVE - WATER PLAN AND PROFILE

TWO POINTS CROSSING

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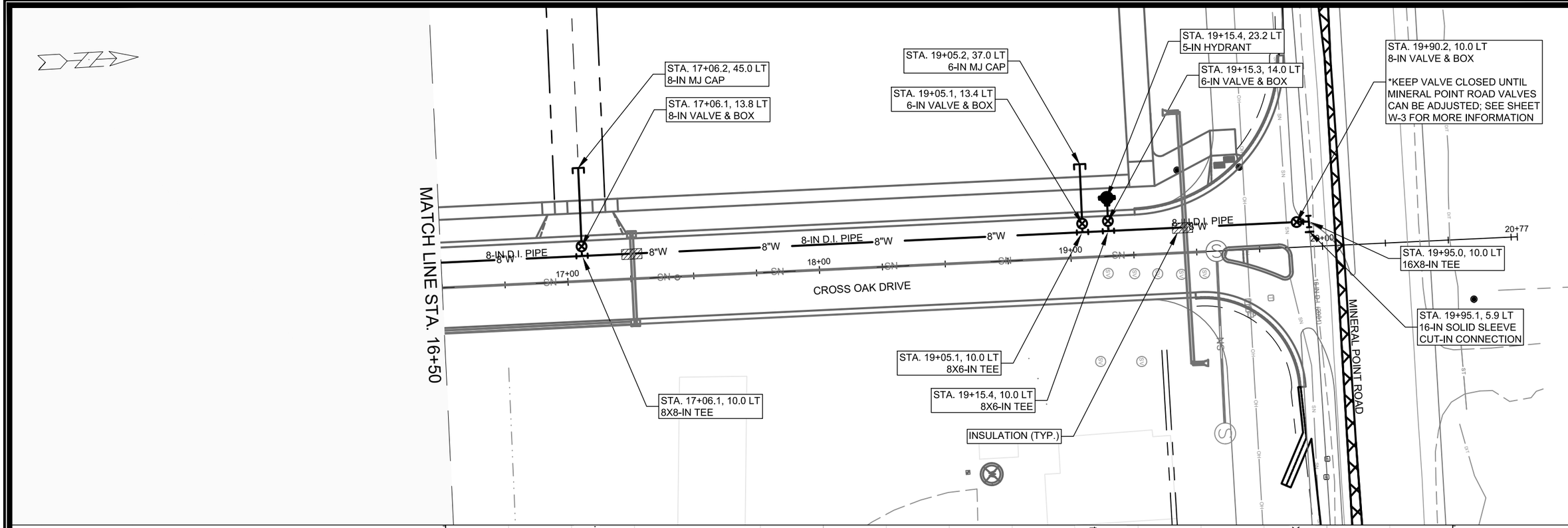
CITY OF MADISON WISCONSIN

12567

W-1



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W-2

12567

MADISON, WI

8517

CONTRACT NO:

CROSS OAK DRIVE - WATER PLAN AND PROFILE

TWO POINTS CROSSING

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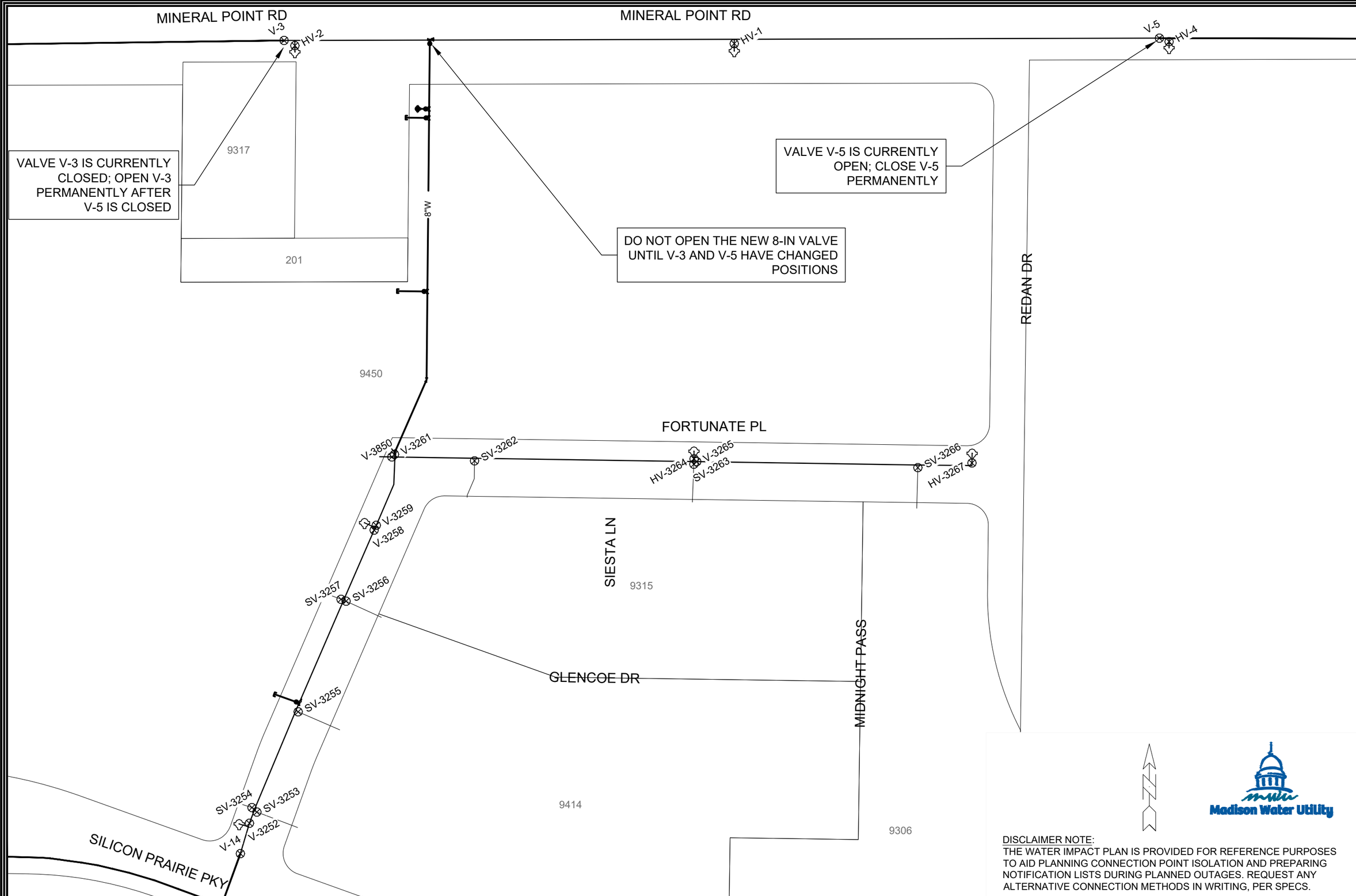
W-2



DISCLAIMER NOTE:
THE WATER IMPACT PLAN IS PROVIDED FOR REFERENCE PURPOSES TO AID PLANNING CONNECTION POINT ISOLATION AND PREPARING NOTIFICATION LISTS DURING PLANNED OUTAGES. REQUEST ANY ALTERNATIVE CONNECTION METHODS IN WRITING, PER SPECS.

Madison Water Utility

SCALE: ########
DESIGNED BY: PEH
MADISON WATER UTILITY
119 E OLIN AVE, MADISON, WI 53713
PRINTING DATE: 1/8/2021

CONTRACT NO: 8517

TWO POINTS CROSSING
WATER IMPACT PLAN
CITY OF MADISON, WISCONSIN

12567
W-3

Madison Water Utility

CONSTRUCTION NOTES:

1. CONSTRUCT NEW WATER MAIN 6.0' BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. INSULATE MAIN WITH POLYSTYRENE BOARD AT UTILITY CROSSINGS OR OTHER AREAS IDENTIFIED BY ENGINEER AS HAVING INADEQUATE COVER.
2. VERIFY SIZE OF EXISTING WATER SERVICES AND RECONNECT SERVICES AS INDICATED.
3. MINIMIZE DISRUPTION OF SERVICE TO CUSTOMERS. NOTIFY PER CONTRACT REQUIREMENTS OF ANY PLANNED WATER OUTAGE.
4. THE EXISTING UTILITIES SHOWN ON THIS REPRESENT THE BEST INFORMATION AVAILABLE TO THE WATER UTILITY AT THE TIME OF PLAN REPARATION. CONTRACTOR IS RESPONSIBLE OR HAVING EACH UTILITY LOCATED PRIOR TO COMMENCING WORK.

WN1	REPLACE THE EXISTING LEAD SERVICE WITH A NEW COPPER SERVICE.
WN-2	EXTEND AND RECONNECT THE EXISTING COPPER SERVICE TO THE NEW WATER MAIN.
WN-3	EXISTING SERVICE TO BE ABANDONED WHEN THE WATER MAIN IS CUT OFF.
WN-4	DISCONNECT FROM THE OLD WATER MAIN AND RECONNECT THE EXISTING COPPER WATER SERVICE LATERAL TO THE NEW WATER MAIN.
WN-5	RELOCATE THE EXISTING FIRE HYDRANT.
WN-6	ABANDON WATER VALVE ACCESS STRUCTURE.
WN-7	FURNISH AND INSTALL THE NEW TOP SECTION FOR THE WATER ACCESS STRUCTURE.
WN-8	ABANDON THE VALVE BOX.
WN-9	FURNISH THE DITCH, COMPACTION, AND ALL MATERIALS AND LABOR FOR THE INSTALLATION OF NEW SERVICE LATERAL.
WN-10	REMOVE AND SALVAGE EXISTING HYDRANT
WN-11	REPLACE THE EXISTING COPPER SERVICE WITH A COPPER SERVICE
WN-20+	SEE WATER IMPACT PLAN FOR CONNECTION POINT ISOLATION AND WATER SHUT-OFF NOTIFICATION INFORMATION.

ESTIMATE OF NEW MATERIALS*

DESCRIPTION	QUANTITY	UNIT
6-INCH WATER MAIN	40	LNFT
8-INCH WATER MAIN	560	LNFT
16-INCH WATER MAIN	~5	LNFT
6-INCH WATER VALVE	2	EACH
8-INCH WATER VALVE	3	EACH
8-IN 22.5° BEND	2	EACH
8-IN SOLID SLEEVE	1	EACH
16-IN SOLID SLEEVE	1	EACH
8X6-IN TEE	2	EACH
8X8-IN TEE	2	EACH
16X8-IN TEE	1	EACH
6-IN MJ CAP	1	EACH
8-IN MJ CAP	2	EACH
5-IN HYDRANT	1	EACH

** ESTIMATES OF MATERIALS ARE FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.*

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
TOLL FREE
811 OR 1-800-242-8511
FAX-A-LOCATE 1-800-338-3860
TDD (FOR HEARING IMPAIRED) 1-800-542-2289

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

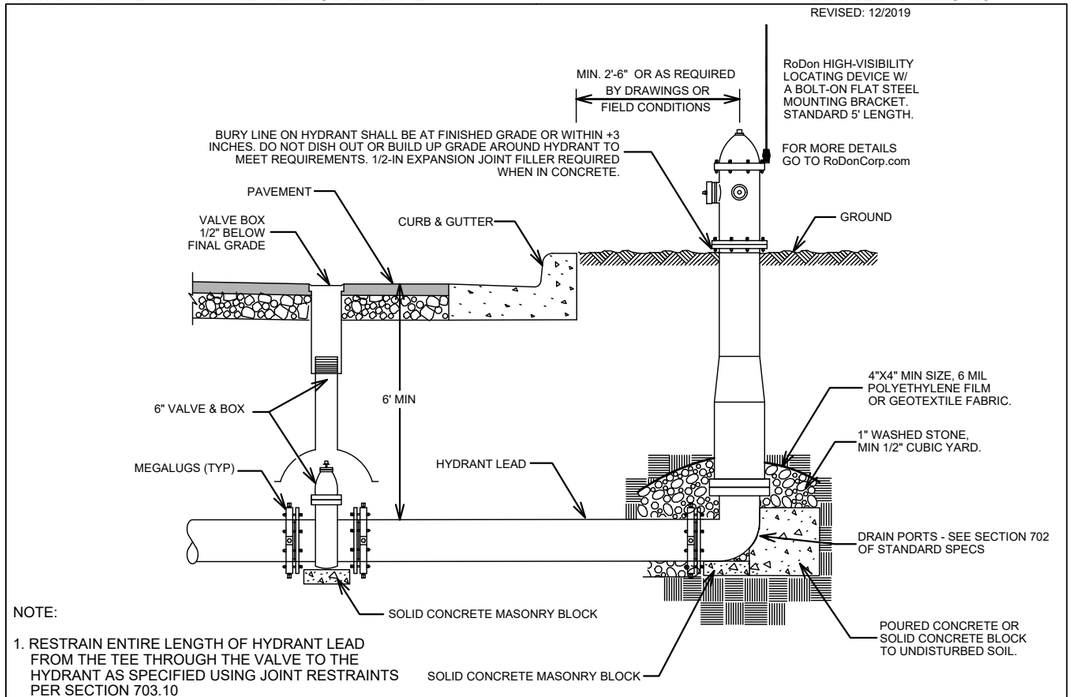
MEMBER ONE CALL SYSTEMS INTERNATIONAL

DISCLAIMER NOTE: UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING WORK.

PART VII - WATER MAINS AND SERVICE LATERALS

DETAIL DRAWING NO. **7.04**

REVISED: 12/2019



NOTE:

1. RESTRAIN ENTIRE LENGTH OF HYDRANT LEAD FROM THE TEE THROUGH THE VALVE TO THE HYDRANT AS SPECIFIED USING JOINT RESTRAINTS PER SECTION 703.10

CITY OF MADISON WATER UTILITY	NOT TO SCALE	TYPICAL HYDRANT INSTALLATION

SCALE: N/A
DESIGNED BY: PEH
MADISON WATER UTILITY
119 E OLIN AVE, MADISON, WI 53713
PRINTING DATE: 1/8/21

CONTRACT NO: 8517

TWO POINTS CROSSING
WATER ESTIMATE OF MATERIALS
CITY OF MADISON, WISCONSIN

CITY OF MADISON WISCONSIN

12567

W-4