

DESIGNED FOR



MASON COUNTY PUD #1
SHELTON, WASHINGTON

PROJECT

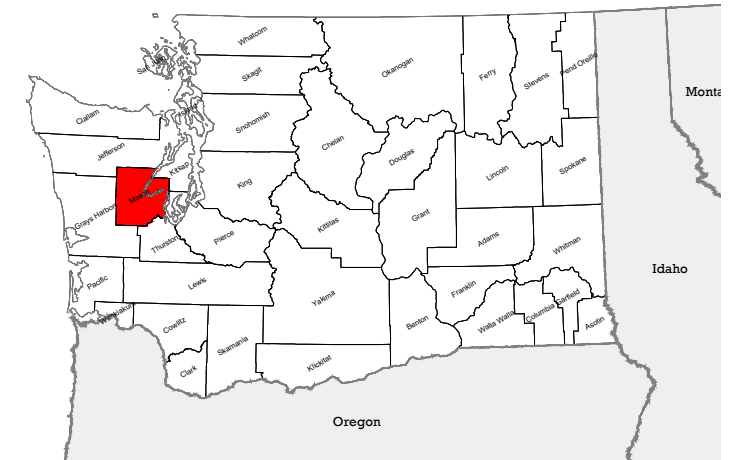
JORSTAD SUBSTATION URD FEEDERS

DISTRIBUTION LINE CHARACTERISTICS

DESIGN	UG 12.47KV (2 CIRCUITS)
CONDUCTOR	500 MCM 3 PHASE
PROJECT LENGTH: 2.4 MILES	
PULL CALCULATION GENERAL ASSUMPTIONS: LUBRICATED COF: 0.20 SIDEWALL PRESSURE MAX: 500 LBS PULLING TENSION MAX: 3,000 LBS	

* THE INFORMATION SHOWN IN THIS TABLE SHALL BE TREATED AS GENERAL INFORMATION ABOUT THE OVERALL PROJECT AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.

LOCATION



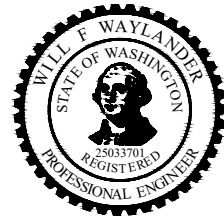
MASON COUNTY, WASHINGTON

ENGINEERED BY



1550 E. REPUBLIC ROAD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
WA# 604 082 498
© 2026 Toth and Associates, Inc.

Drawings and specifications in this set are not intended for use on other projects at this site or other sites without written approval of the engineer



WILL F WAYLANDER - ENGINEER
WA# 25033701



1-800-424-5555

www.callbeforeyoudig/washington

**ISSUED FOR
BID
NOT RELEASED
FOR CONSTRUCTION**



PROJECT PLAN

0 1/16 1/8
NOTE: DRAWING REPRODUCTION AND SCALING MAY CHANGE THE INDICATED GRAPHIC SCALES
H. SCALE: 1" = 1/8 Mile

BASIS OF BEARING
NAD83 (2011), WASHINGTON
STATE PLANE,
SOUTH ZONE





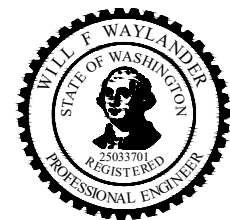
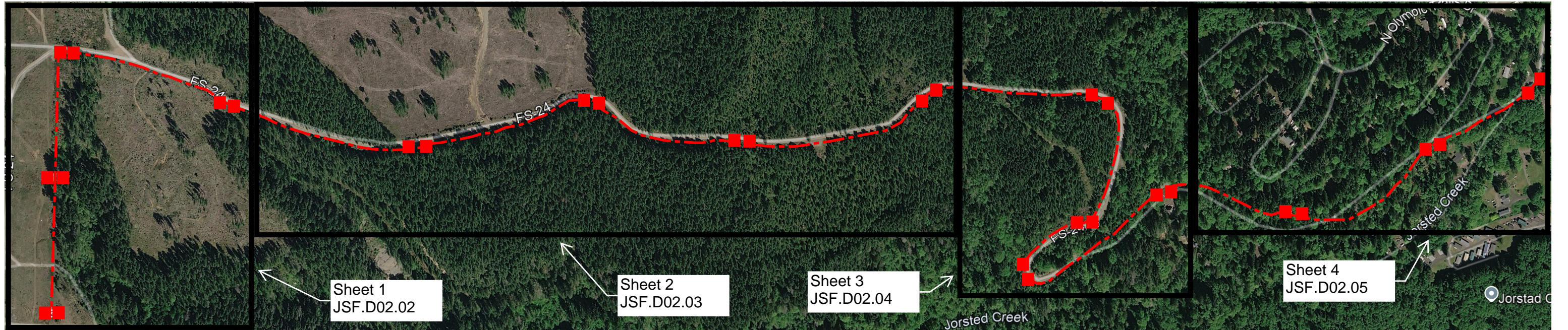
VICINITY MAP

NOTE: DRAWING REPRODUCTION AND SCALING MAY CHANGE THE INDICATED GRAPHIC SCALES
H. SCALE: 1" = 6 Miles



U:\2025-24-43\adams\bid\project\washington\mason county - aud 1\24\substation\substation\feeders\urdf\urdf\urdf\urdf.dwg, 27, 2610, 41, All/rev

MASON COUNTY PUD 1				NO	REVISION	DATE	BY
JORSTAD SUBSTATION URD FEEDERS DISTRIBUTION LINE DRAWING INDEX				A	ISSUED FOR 90% REVIEW	3/26/26	BDR
				B	ISSUED FOR BID	4/16/26	BDR
COVER SHEET & INDEX		DESCRIPTION		REV	DATE	REVISION PURPOSE	
JSF.D00.01		COVER SHEET		B	4/16/2026	ISSUED FOR BID	
JSF.D00.02		DRAWING INDEX		B	4/16/2026	ISSUED FOR BID	
PLAN DETAILS		DESCRIPTION	STR	REV	DATE	REVISION PURPOSE	
JSF.D02.01		COVER PAGE		B	4/16/2026	ISSUED FOR BID	
JSF.D02.02		PLAN DETAILS	1-7	B	4/16/2026	ISSUED FOR BID	
JSF.D02.03		PLAN DETAILS	8-15	B	4/16/2026	ISSUED FOR BID	
JSF.D02.04		PLAN DETAILS	16-23	B	4/16/2026	ISSUED FOR BID	
JSF.D02.05		PLAN DETAILS	24-29	B	4/16/2026	ISSUED FOR BID	
STAKING SHEETS		DESCRIPTION		REV	DATE	REVISION PURPOSE	
JSF.D03.01		STAKING SHEET		B	4/16/2026	ISSUED FOR BID	
JSF.D03.02		STAKING SHEET		B	4/16/2026	ISSUED FOR BID	
JSF.D03.03		STAKING SHEET		B	4/16/2026	ISSUED FOR BID	
JSF.D03.04		CONSTRUCTION UNIT SUMMARY		B	4/16/2026	ISSUED FOR BID	
ANCILLARY DRAWINGS		DESCRIPTION	TYPE	REV	DATE	REVISION PURPOSE	
JSF.D04.01		CONDUIT ELBOW	UP7.04	B	4/16/2026	ISSUED FOR BID	
JSF.D04.02		UNDERGROUND THREE PHASE PRIMARY 575 VAULT AND COVER	V57	B	4/16/2026	ISSUED FOR BID	
JSF.D04.03		TRENCHING GUIDES	UR2-2 (42" x 24")	B	4/16/2026	ISSUED FOR BID	
JSF.D04.04		CONDUIT	UP8	B	4/16/2026	ISSUED FOR BID	
MATERIAL LIST		DESCRIPTION		REV	DATE	REVISION PURPOSE	
JSF.D09.01		MATERIAL LIST		B	4/16/2026	ISSUED FOR BID	



WILL F WAYLANDER - ENGINEER
WA# 25033701

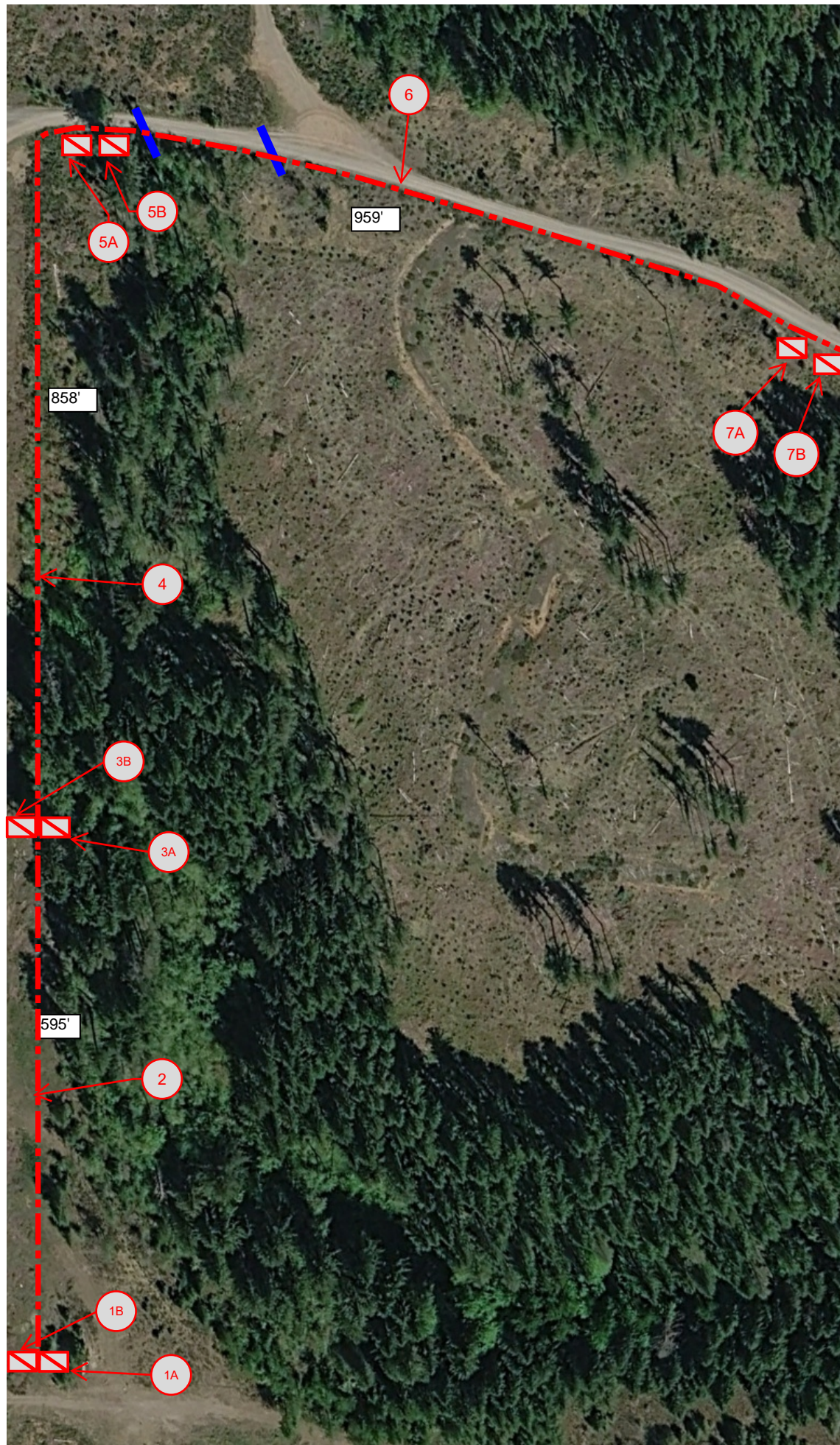
**ISSUED FOR
BID
NOT RELEASED
FOR CONSTRUCTION**

NOTES:
CONTRACTOR TO FURNISH ADDITIONAL
CONDUIT ELBOWS WHEN REQUIRED. MATERIAL
ADDITIONS TO BE TRACKED AND REPORTED TO
MCPUD BY CONTRACTOR.

DATE	REVISION	#
03/26/2026	ISSUED FOR 90% REVIEW	A
04/16/2026	ISSUED FOR BID	B

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
WA# 604 082 498
© 2026 Toth and Associates, Inc.

DWN. BY: BR	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CKD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD 1 SHELTON, WASHINGTON
DATE: 02/19/2026	TITLE: PLAN DETAILS
SHEET NO.:	JSF.D02.01



1A 1B
VAULT:
ADD:
(2) V57

5A 5B
VAULT:
ADD:
(2) V57, (12) UP7.04.90.3

2
TRENCH/CONDUIT:
ADD:
(595') UR2-2 (42" x 24"),
(6 x 595') UP8-3, (595') UP8-2

6
TRENCH/CONDUIT:
ADD:
(979') UR2-2 (42" x 24"),
(6 x 979') UP8-3, (959') UP8-2,
(1) UP7.04.90.2

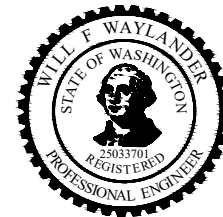
NOTE: POTENTIAL CULVERT CROSSING IN SPAN.

3A 3B
VAULT:
ADD:
(2) V57

7A 7B
VAULT:
ADD:
(2) V57, (12) UP7.04.90.3

4
TRENCH/CONDUIT:
ADD:
(874') UR2-2 (42" x 24"),
(6 x 874') UP8-3, (858') UP8-2

ISSUED FOR BID
NOT RELEASED FOR CONSTRUCTION



WILL F WAYLANDER - ENGINEER
WA# 25033701

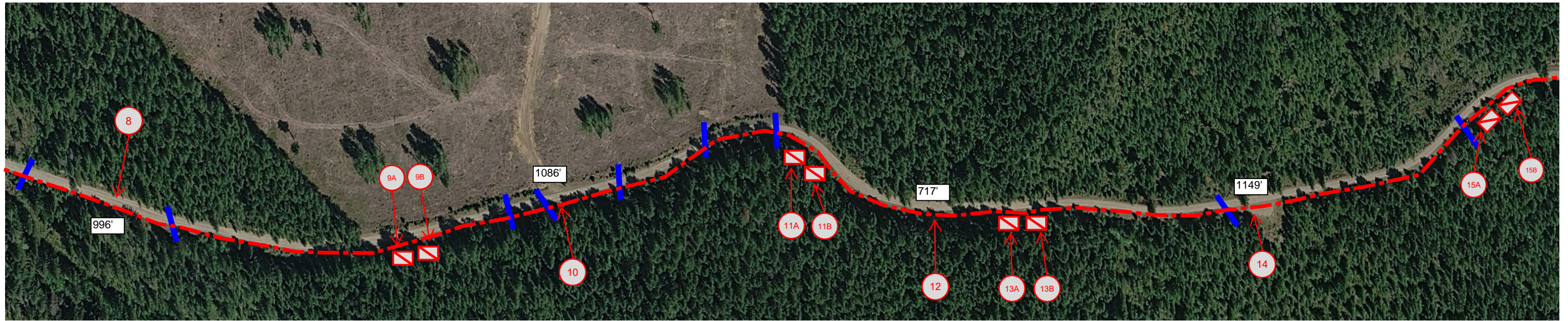
Legend
(6) 3" Conduit: - - - - -
(1) 2" Conduit: - - - - -
(1) Vault: □

DATE	REVISION	#
03/26/2026	ISSUED FOR 90% REVIEW	A
04/16/2026	ISSUED FOR BID	B

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
WA# 604 082 498
© 2026 Toth and Associates, Inc.

DWN. BY: BR	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CKD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD 1 SHELTON, WASHINGTON
DATE: 02/19/2026	TITLE: PLAN DETAILS
SHEET NO. JSF.D02.02	

NOTES:
TRENCH SHALL FOLLOW EDGE OF ROAD WHERE APPLICABLE. VAULT SHALL BE PLACED OFF ROAD AT EDGE OF EASEMENT.
90° PRIMARY CONDUCTOR CONDUIT OUT OF EDGE OF ROAD TO VAULT LOCATIONS.
CIRCUIT 1 CONDUIT SHALL ENTER ALL A VAULTS.
CIRCUIT 2 CONDUIT SHALL ENTER ALL B VAULTS.
CONDUIT SHALL BE INSTALLED A MINIMUM OF 6 INCHES UNDER CULVERTS WHERE APPLICABLE.
FIBER WILL STAY IN EDGE OF ROAD ALIGNMENT.



8 TRENCH/CONDUIT:
 ADD:
 (1016') UR2-2 (42" x 24"),
 (6 x 1016') UP8-3,
 (996') UP8-2

NOTE: POTENTIAL CULVERT CROSSING IN SPAN.

9A 9B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

10 TRENCH/CONDUIT:
 ADD:
 (1106') UR2-2 (42" x 24"),
 (6 x 1106') UP8-3,
 (1086') UP8-2,

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

11A 11B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

12 TRENCH/CONDUIT:
 ADD:
 (724') UR2-2 (42" x 24"),
 (6 x 724') UP8-3,
 (717') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

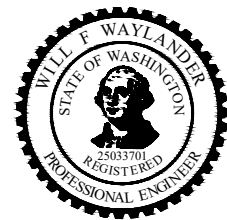
13A 13B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

14 TRENCH/CONDUIT:
 ADD:
 (1156') UR2-2 (42" x 24"),
 (6 x 1156') UP8-3,
 (1149') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

15A 15B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

NOTES:
 TRENCH SHALL FOLLOW EDGE OF ROAD WHERE APPLICABLE. VAULT SHALL BE PLACED OFF ROAD AT EDGE OF EASEMENT.
 90° PRIMARY CONDUCTOR CONDUIT OUT OF EDGE OF ROAD TO VAULT LOCATIONS.
 CIRCUIT 1 CONDUIT SHALL ENTER ALL A VAULTS.
 CIRCUIT 2 CONDUIT SHALL ENTER ALL B VAULTS.
 CONDUIT SHALL BE INSTALLED A MINIMUM OF 6 INCHES UNDER CULVERTS WHERE APPLICABLE.
 FIBER WILL STAY IN EDGE OF ROAD ALIGNMENT.



WILL F WAYLANDER - ENGINEER
 WA# 25033701

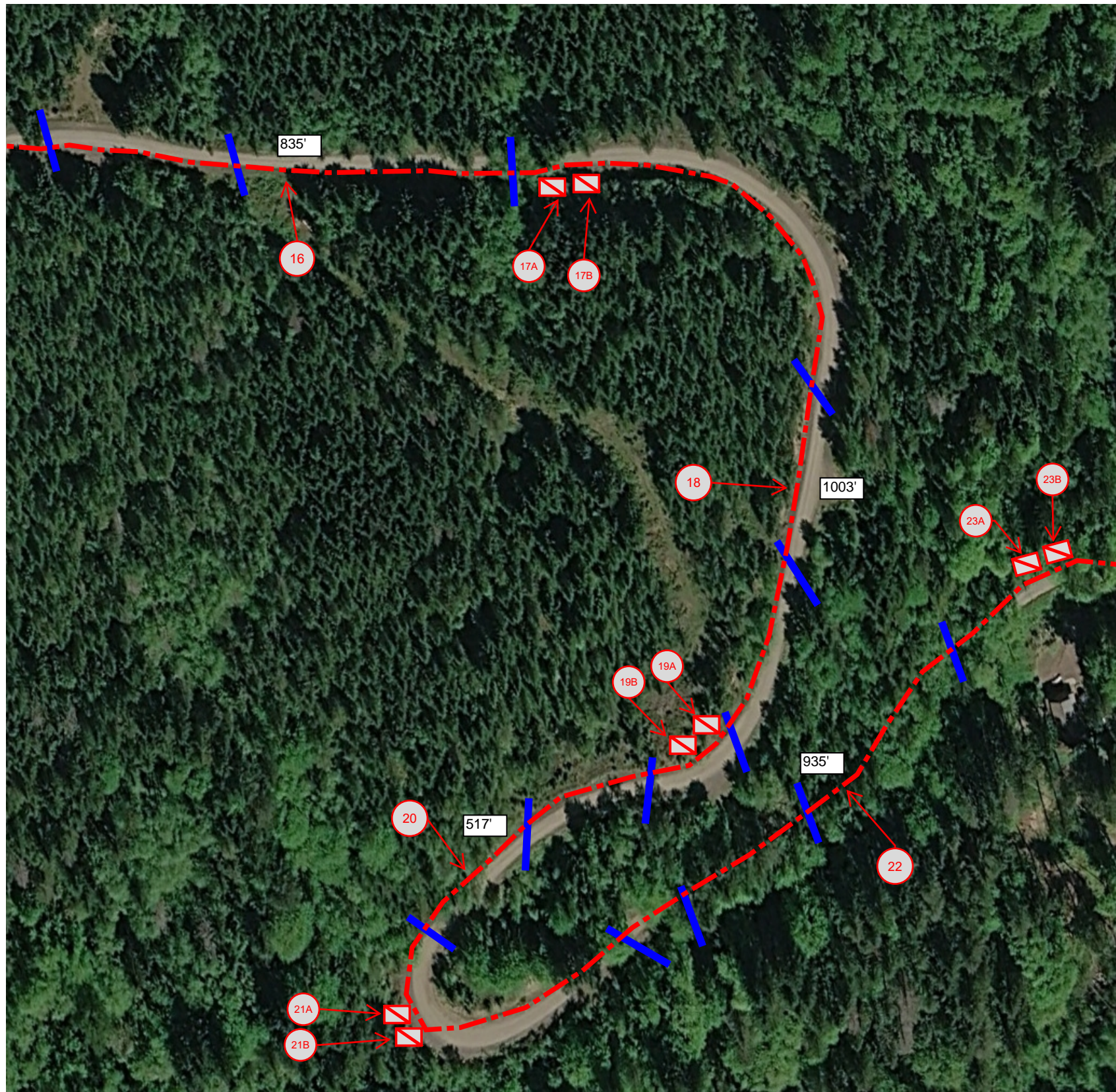
**ISSUED FOR
 BID
 NOT RELEASED
 FOR CONSTRUCTION**

Legend
 (6) 3" Conduit: - - - - -
 (1) 2" Conduit: - - - - -
 (1) Vault:

DATE	REVISION	#
03/26/2026	ISSUED FOR 90% REVIEW	A
04/16/2026	ISSUED FOR BID	B

TOTH & ASSOCIATES
 1550 E REPUBLIC RD
 SPRINGFIELD, MO 65804
 Ph: 417-888-0645 Fax: 417-888-0657
 www.tothassociates.com
 CERTIFICATE OF AUTHORITY:
 WA# 604 082 498
 © 2026 Toth and Associates, Inc.

DWN. BY: BR	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CKD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD 1 SHELTON, WASHINGTON
DATE: 02/19/2026	TITLE: PLAN DETAILS
SHEET NO.:	JSF.D02.03



16 TRENCH/CONDUIT:
 ADD:
 (845') UR2-2 (42" x 24"),
 (6 x 845') UP8-3,
 (835') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

17A 17B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

18 TRENCH/CONDUIT:
 ADD:
 (1013') UR2-2 (42" x 24"),
 (6 x 1013') UP8-3,
 (1003') UP8-2

NOTE: CULVERT CROSSINGS IN SPAN.

19A 19B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

20 TRENCH/CONDUIT:
 ADD:
 (525') UR2-2 (42" x 24"),
 (6 x 525') UP8-3,
 (517') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

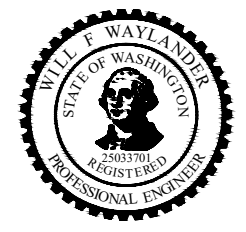
21A 21B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

22 TRENCH/CONDUIT:
 ADD:
 (943') UR2-2 (42" x 24"),
 (6 x 943') UP8-3,
 (935') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

23A 23B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

NOTES:
 TRENCH SHALL FOLLOW EDGE OF ROAD WHERE APPLICABLE. VAULT SHALL BE PLACED OFF ROAD AT EDGE OF EASEMENT.
 90° PRIMARY CONDUCTOR CONDUIT OUT OF EDGE OF ROAD TO VAULT LOCATIONS.
 CIRCUIT 1 CONDUIT SHALL ENTER ALL A VAULTS.
 CIRCUIT 2 CONDUIT SHALL ENTER ALL B VAULTS.
 CONDUIT SHALL BE INSTALLED A MINIMUM OF 6 INCHES UNDER CULVERTS WHERE APPLICABLE.
 FIBER WILL STAY IN EDGE OF ROAD ALIGNMENT.



WILL F WAYLANDER - ENGINEER
 WA# 25033701

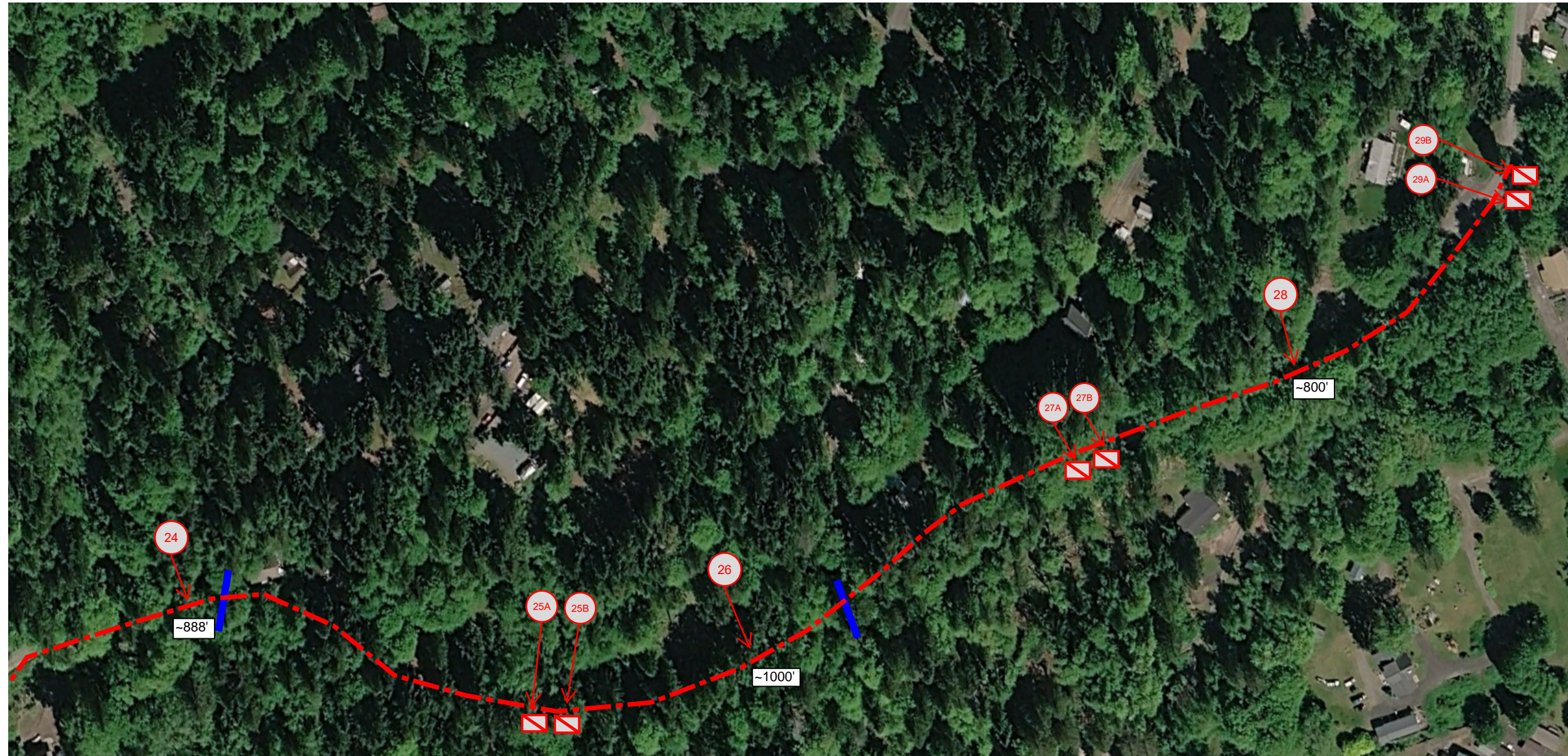
ISSUED FOR BID
NOT RELEASED FOR CONSTRUCTION

Legend
 (6) 3" Conduit: - - - - -
 (1) 2" Conduit: - - - - -
 (1) Vault: [Symbol]

DATE	REVISION	#
03/26/2026	ISSUED FOR 90% REVIEW	A
04/16/2026	ISSUED FOR BID	B

TOTH & ASSOCIATES
 1550 E REPUBLIC RD
 SPRINGFIELD, MO 65804
 Ph: 417-888-0645 Fax: 417-888-0657
 www.tothassociates.com
 CERTIFICATE OF AUTHORITY:
 WA# 604 082 498
 © 2026 Toth and Associates, Inc.

DWN. BY: BR	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CKD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD 1 SHELTON, WASHINGTON
DATE: 02/19/2026	TITLE: PLAN DETAILS
	SHEET NO: JSF.D02.04



24 TRENCH/CONDUIT:
 ADD:
 (904') UR2-2 (42" x 24"),
 (6 x 904') UP8-3,
 (888') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

25A 25B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

26 TRENCH/CONDUIT:
 ADD:
 (1016') UR2-2 (42" x 24"),
 (6 x 1016') UP8-3,
 (1000') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

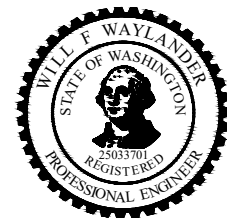
27A 27B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

28 TRENCH/CONDUIT:
 ADD:
 (816') UR2-2 (42" x 24"),
 (6 x 816') UP8-3,
 (800') UP8-2

NOTE: POTENTIAL CULVERT CROSSINGS IN SPAN.

29A 29B VAULT:
 ADD:
 (2) V57, (12) UP7.04.90.3

NOTES:
 TRENCH SHALL FOLLOW EDGE OF ROAD WHERE APPLICABLE. VAULT SHALL BE PLACED OFF ROAD AT EDGE OF EASEMENT.
 90° PRIMARY CONDUCTOR CONDUIT OUT OF EDGE OF ROAD TO VAULT LOCATIONS.
 CIRCUIT 1 CONDUIT SHALL ENTER ALL A VAULTS.
 CIRCUIT 2 CONDUIT SHALL ENTER ALL B VAULTS.
 CONDUIT SHALL BE INSTALLED A MINIMUM OF 6 INCHES UNDER CULVERTS WHERE APPLICABLE.
 FIBER WILL STAY IN EDGE OF ROAD ALIGNMENT.



WILL F WAYLANDER - ENGINEER
 WA# 25033701

**ISSUED FOR
 BID
 NOT RELEASED
 FOR CONSTRUCTION**

Legend
 (6) 3" Conduit: - - - - -
 (1) 2" Conduit: - - - - -
 (1) Vault: [Red Square with White X]

DATE	REVISION	#
03/26/2026	ISSUED FOR 90% REVIEW	A
04/16/2026	ISSUED FOR BID	B

TOTH & ASSOCIATES
 1550 E REPUBLIC RD
 SPRINGFIELD, MO 65804
 Ph: 417-888-0645 Fax: 417-888-0657
 www.tothassociates.com
 CERTIFICATE OF AUTHORITY:
 WA# 604 082 498
 © 2026 Toth and Associates, Inc.

DWN. BY: BR	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CKD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD 1 SHELTON, WASHINGTON
DATE: 02/19/2026	TITLE: PLAN DETAILS
SHEET NO. JSF.D02.05	

MASON COUNTY PUD 1			CONSTRUCTION NOTES: FIELD ROUTE CONDUIT, USE ELBOWS AS REQUIRED.	NO	REVISION	DATE	BY
				A	ISSUED FOR 90% REVIEW	3/26/26	BDR
JORSTAD SUBSTATION URD FEEDERS DISTRIBUTION LINE STAKING SHEET				B	ISSUED FOR BID	4/16/26	BDR

STRUCTURE NO.	STATION (FT)	AHEAD SPAN (FT)	PI / LINE ANGLE	CONDUCTOR & CONDUIT	POLE CLASS & LENGTH	PRIMARY DISTRIBUTION ASSEMBLIES	SECONDARY DISTRIBUTION ASSEMBLIES	TRANSFORMERS, SWITCHGEARS, VAULTS, SECTORS	UNDERGROUND DISTRIBUTION ASSEMBLIES	FOUNDATIONS & PADS	GROUNDING ASSEMBLIES	GUYING & ANCHOR ASSEMBLIES	CONDUCTOR ACCESSORIES	MISC. ASSEMBLIES	CONSTRUCTION NOTES
1	0+00							(2) V57							
2		595		(3570) UP8-3 (595) UP8-2					(595) UR2-2 (42" x 24")						
3	5+95							(2) V57							
4		858		(5244) UP8-3 (858) UP8-2					(874) UR2-2 (42" x 24")						
5	14+53			(12) UP7.04.90.3				(2) V57							
6		959		(5874) UP8-3 (959) UP8-2					(979) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
7	24+12			(12) UP7.04.90.3				(2) V57							
8		996		(6096) UP8-3 (996) UP8-2					(1016) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
9	34+08			(12) UP7.04.90.3				(2) V57							
10		1086		(6636) UP8-3 (1086) UP8-2					(1106) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
11	44+94			(12) UP7.04.90.3				(2) V57							
12		717		(4344) UP8-3 (717) UP8-2					(724) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
13	52+11			(12) UP7.04.90.3				(2) V57							
14		1149		(6936) UP8-3 (1149) UP8-2					(1156) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.

MASON COUNTY PUD 1			CONSTRUCTION NOTES: FIELD ROUTE CONDUIT, USE ELBOWS AS REQUIRED.	NO	REVISION	DATE	BY
				A	ISSUED FOR 90% REVIEW	3/26/26	BDR
JORSTAD SUBSTATION URD FEEDERS DISTRIBUTION LINE STAKING SHEET				B	ISSUED FOR BID	4/16/26	BDR

STRUCTURE NO.	STATION (FT)	AHEAD SPAN (FT)	PI / LINE ANGLE	CONDUCTOR & CONDUIT	POLE CLASS & LENGTH	PRIMARY DISTRIBUTION ASSEMBLIES	SECONDARY DISTRIBUTION ASSEMBLIES	TRANSFORMERS, SWITCHGEARS, VAULTS, SECTORS	UNDERGROUND DISTRIBUTION ASSEMBLIES	FOUNDATIONS & PADS	GROUNDING ASSEMBLIES	GUYING & ANCHOR ASSEMBLIES	CONDUCTOR ACCESSORIES	MISC. ASSEMBLIES	CONSTRUCTION NOTES
15	63+60			(12) UP7.04.90.3				(2) V57							
16		835		(5070) UP8-3 (835) UP8-2					(845) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
17	71+95			(12) UP7.04.90.3				(2) V57							
18		1003		(6078) UP8-3 (1003) UP8-2					(1013) UR2-2 (42" x 24")						CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
19	81+98			(12) UP7.04.90.3				(2) V57							
20		517		(3150) UP8-3 (517) UP8-2					(525) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
21	87+15			(12) UP7.04.90.3				(2) V57							
22		935		(5658) UP8-3 (935) UP8-2					(943) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
23	96+50			(12) UP7.04.90.3				(2) V57							
24		888		(5424) UP8-3 (888) UP8-2					(904) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
25	105+38			(12) UP7.04.90.3				(2) V57							
26		1000		(6096) UP8-3 (1000) UP8-2					(1016) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.
27	115+38			(12) UP7.04.90.3				(2) V57							
28		800		(4896) UP8-3 (800) UP8-2					(816) UR2-2 (42" x 24")						POTENTIAL CULVERT CROSSINGS IN SPAN. CONDUIT WILL BE PLACED A MINIMUM OF SIX INCHES BELOW CULVERT.

MASON COUNTY PUD 1 JORSTAD SUBSTATION URD FEEDERS DISTRIBUTION LINE STAKING SHEET			CONSTRUCTION NOTES: FIELD ROUTE CONDUIT, USE ELBOWS AS REQUIRED.	NO	REVISION	DATE	BY
				A	ISSUED FOR 90% REVIEW	3/26/26	BDR
				B	ISSUED FOR BID	4/16/26	BDR

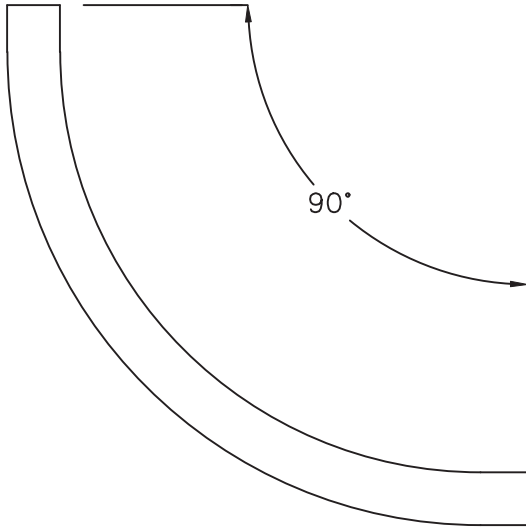
STRUCTURE NO.	STATION (FT)	AHEAD SPAN (FT)	PI / LINE ANGLE	CONDUCTOR & CONDUIT	POLE CLASS & LENGTH	PRIMARY DISTRIBUTION ASSEMBLIES	SECONDARY DISTRIBUTION ASSEMBLIES	TRANSFORMERS, SWITCHGEARS, VAULTS, SECTORS	UNDERGROUND DISTRIBUTION ASSEMBLIES	FOUNDATIONS & PADS	GROUNDING ASSEMBLIES	GUYING & ANCHOR ASSEMBLIES	CONDUCTOR ACCESSORIES	MISC. ASSEMBLIES	CONSTRUCTION NOTES
29	123+38			(12) UP7.04.90.3				(2) V57							

MASON COUNTY PUD 1
JORSTAD SUBSTATION URD FEEDERS
DISTRIBUTION LINE STAKING SHEET SUMMARY

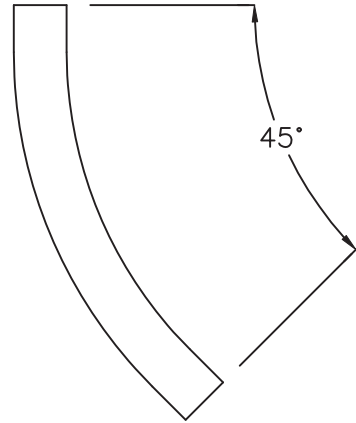


NO.	REVISION
A	ISSUED FOR 90% REVIEW
B	ISSUED FOR BID

QTY	CONDUCTOR & CONDUIT	QTY	POLE CLASS & LENGTH	QTY	PRIMARY DISTRIBUTION ASSEMBLIES	QTY	SECONDARY DISTRIBUTION ASSEMBLIES	QTY	TRANSFORMERS, SWITCHGEARS, VAULTS, SECTORS	QTY	UNDERGROUND DISTRIBUTION ASSEMBLIES	QTY	FOUNDATION & PADS	QTY	GROUNDING ASSEMBLIES	QTY	GUYING & ANCHOR ASSEMBLIES	QTY	CONDUCTOR ACCESSORIES	QTY	MISCELLANEOUS ASSEMBLIES
75072	UP8-3							30	V57	12512	UR2-2 (42" x 24")										
12338	UP8-2																				
162	UP7.04.90.3																				
1	UP7.04.90.2																				
30	UP7.04.45.3																				
5	UP7.04.45.2																				
30	UP7.04.30.3																				
5	UP7.04.30.2																				
72	UP7.04.22.3																				
12	UP7.04.22.2																				
144	UP7.04.11.3																				
24	UP7.04.11.2																				

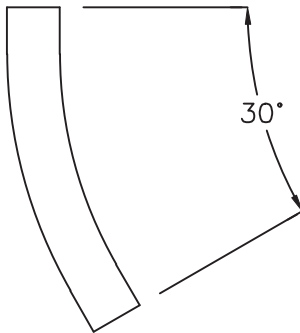


UP7.04.90

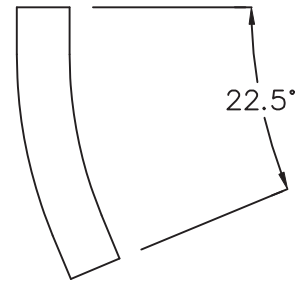


UP7.04.45

.1 = 1"
.2 = 2"
.3 = 3"



UP7.04.30



UP7.04.22

ITEM	QTY.	MATERIAL
	1	Conduit, elbow

DESIGN PARAMETERS:

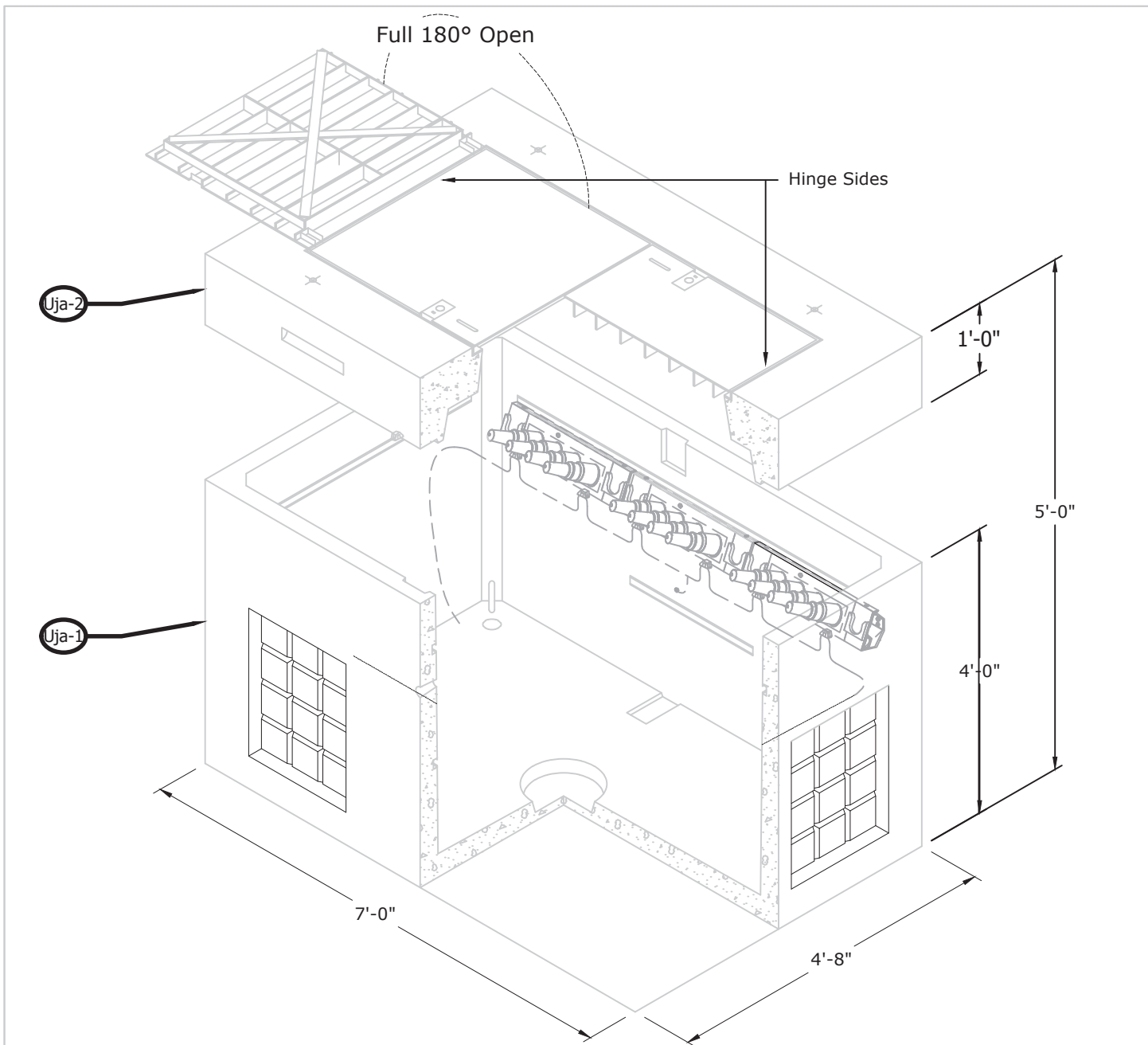
SEE SECTION 8.1 FOR
MINIMUM BENDING RADIUS.

CONDUIT ELBOW

AUG 2016

RUS

UP7.04



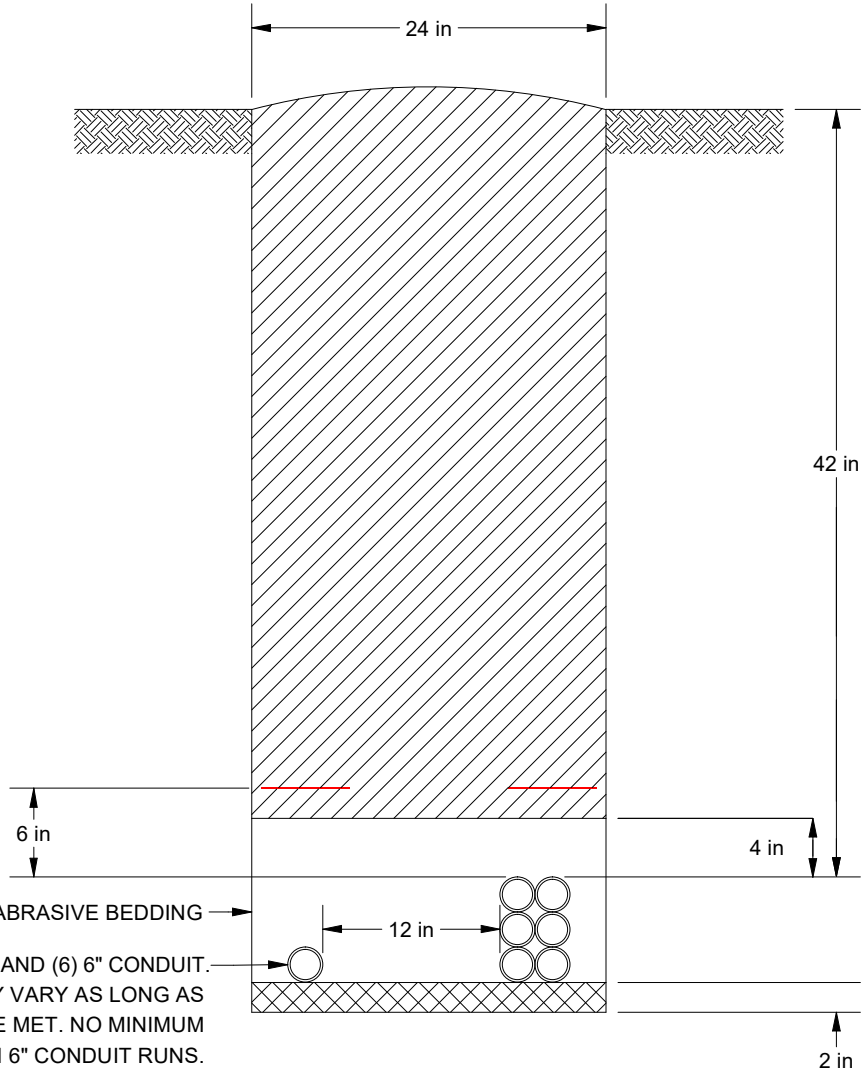
V57			
ITEM	QTY	DESCRIPTION	ITEM#
Uja-1	10	VAULT, 575LA, UFER GROUND (SELF-GROUNDING)	76006575

VC57			
ITEM	QTY	DESCRIPTION	ITEM#
Uja-2	10	VAULT COVER, DBL DOOR, 575-LA, NON SLIP	76006554



CONSTRUCTION STANDARDS
 UNDERGROUND
 THREE-PHASE PRIMARY
 575 VAULT AND COVER

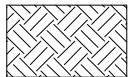
REVISIONS			
DATE	ENGR	OPS	
3/18/25	JJW	OPS	



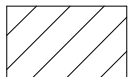
NOTES:

1. RED HIGH VOLTAGE WARNING TAPE AND ORANGE FIBER OPTIC WARNING TAPE SHALL BE PLACED IN ALL TRENCHES THAT CONTAIN ADSS AND PRIMARY CONDUCTOR. TAPE MUST BE BURIED 6" ABOVE CONDUIT
2. BOTTOM OF TRENCH SHALL BE AS FLAT AND LEVEL AS POSSIBLE. CONDUIT SHALL BE BEDDED ON SAND OR CLEAN SOIL, FREE OF ROCKS AND DEBRIS. CONDUIT SHALL BE INSTALLED IN NON-ABRASIVE BEDDING.
3. BACKFILL SHALL BE THOROUGHLY COMPACTED AND SHOULD NOT CONTAIN UNUSUALLY LARGE AMOUNTS OF ROCK, CONSTRUCTION DEBRIS, OR ORGANIC REFUSE. LIFTS SHALL NOT BE GREATER THAN 12 INCHES. FILL MATERIAL AND COMPACTION METHOD TO BE APPROVED IN WRITING BY STATE.
4. ALL SOIL SURFACES DISTURBED BY WORK PERFORMED TO BE RE-SEEDED AT 50 LBS AN ACRE WITH NON INVASIVE PASTURE MIX CONTAINING 35% PERENNIAL RYEGRASS, 52% TALL FESCUE, 13% NEW ZEALAND WHITE CLOVER. SEEDED AREAS TO BE COVERED IN STRAW.
5. DURING CONSTRUCTION, NO EQUIPMENT IS PERMITTED ON SLOPES GREATER THAN 25% WITHOUT WRITTEN AUTHORIZATION.

LEGEND:



UNDISTURBED EARTH



COMPACTED BACKFILL
UNLESS OTHERWISE
SPECIFIED



BEDDING SAND
OR CLEAN SOIL

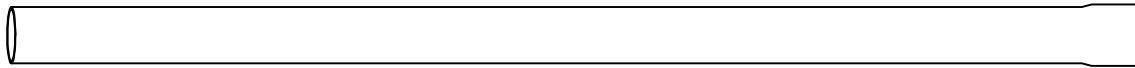
DATE	REVISION	#
04/16/2026	ISSUED FOR BID	B

TOOTH
& ASSOCIATES

1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com



CERTIFICATE OF AUTHORITY:
WA# 604 082 498
© 2026 Toth and Associates, Inc.

DWN. BY: CQ	PROJECT: JORSTAD SUBSTATION URD FEEDERS
CRD. BY: EAN	LOCATION: MASON COUNTY
APPD. BY: WFW	CLIENT: MASON COUNTY PUD NO. 1 SHELTON, WA
DATE: 02/24/2026	TITLE: UR2-2 TRENCHING GUIDES
	SHEET NO. JSF.D04.03



ITEM	QTY.	MATERIAL
Ugc		Conduit, Underground

		UNDERGROUND CONDUIT	
		AUG 2016	
		RUS	UP8

ITEM NO.	ITEM TOTAL	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>JORSTAD SUBSTATION URD FEEDERS MASTER MATERIAL LIST REV B - ISSUED FOR BID</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>			
		MATERIAL DESCRIPTION	VENDOR	PART NO.	UNIT COST
1177	12338	CONDUIT, 2" PVC SCH 40	---	COND2	\$ 2.07
1178	75072	CONDUIT, 3" PVC SCH 40	---	COND3	\$ 4.15
1233	72	CONDUIT, PVC ELBOW 22-1/2 DEG.3IN.STD	---	ELX22-1/2STD	\$ 18.00
1234	5	CONDUIT, PVC ELBOW 30 DEG. 2IN.	---	EL2X30XSTD	\$ 1.86
1235	30	CONDUIT, PVC ELBOW 30 DEG. 3 IN.	---	EL3X30XSTD	\$ 18.00
1238	5	CONDUIT, PVC ELBOW 45 DEG. 2 IN.	---	EL2X45	\$ 6.00
1239	30	CONDUIT, PVC ELBOW 45 DEG. 3 IN.	---	EL3X45	\$ 18.00
1242	162	CONDUIT, PVC ELBOW 90 DEG 3" 36" SWEEP	CARLON	UA9FLB	\$ 39.80
1251	1	CONDUIT, PVC ELBOW 90 DEG. 2 IN. RAD 36	---	EL2X36	\$ 23.00
1299	A.R.	FOAM, DUCT SEALANT KIT	POLYWATER	FST-250KIT	\$ 89.62
1415	12512	TAPE, WARNING URD RED	---	22-126	\$ 0.01
1430	12338	WARNING TAPE, ORANGE, UNDERGROUND FRIBER OPTIC	PANDUIT	HTU-FO-M	\$ 0.02
1801	12	CONDUIT, PVC ELBOW 22-1/2 DEG 2IN STD	CARLON	UA5AJB	\$ 21.43
1802	24	CONDUIT, PVC ELBOW 11-1/4 DEG 2IN STD	CARLON	UA3DJB	\$ 27.41
1803	144	CONDUIT, PVC ELBOW 11-1/4 DEG 3IN STD	CARLON	UA3DLB	\$ 36.00
1806	30	VAULT,UFER GROUND (SELF GROUNDING)	COLUMBIA PRECAST	575 Vault	\$ 4,425.00