

PLANS
FOR

SWINGING BRIDGE WATER LINE RELOCATION

TO SERVE

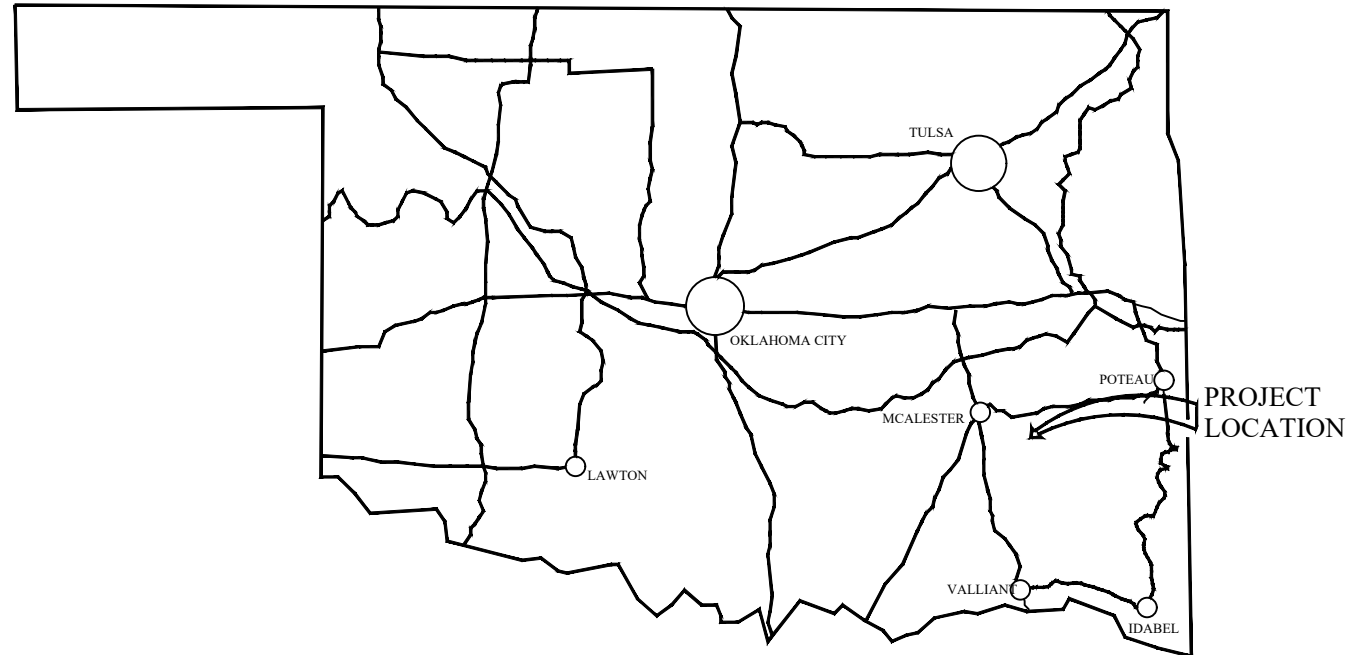
SARDIS LAKE WATER AUTHORITY WATER USERS

PREPARED FOR

PITTSBURG COUNTY - DISTRICT #2
PITTSBURG COUNTY, OKLAHOMA

MAY 2021

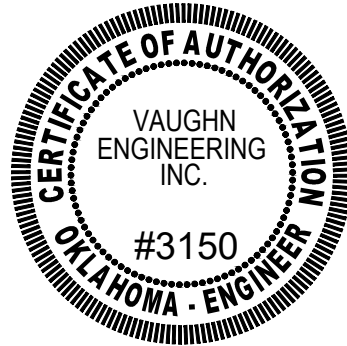
CONTENTS	
SHEET #	DESCRIPTION
1	TITLE-COVER SHEET
2	PROJECT LOCATION
3-4	LINE LAYOUT
5	TYPICAL DETAILS



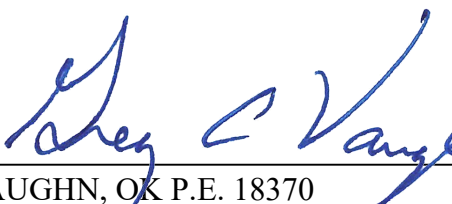
VICINITY MAP
N.T.S.

PREPARED BY:

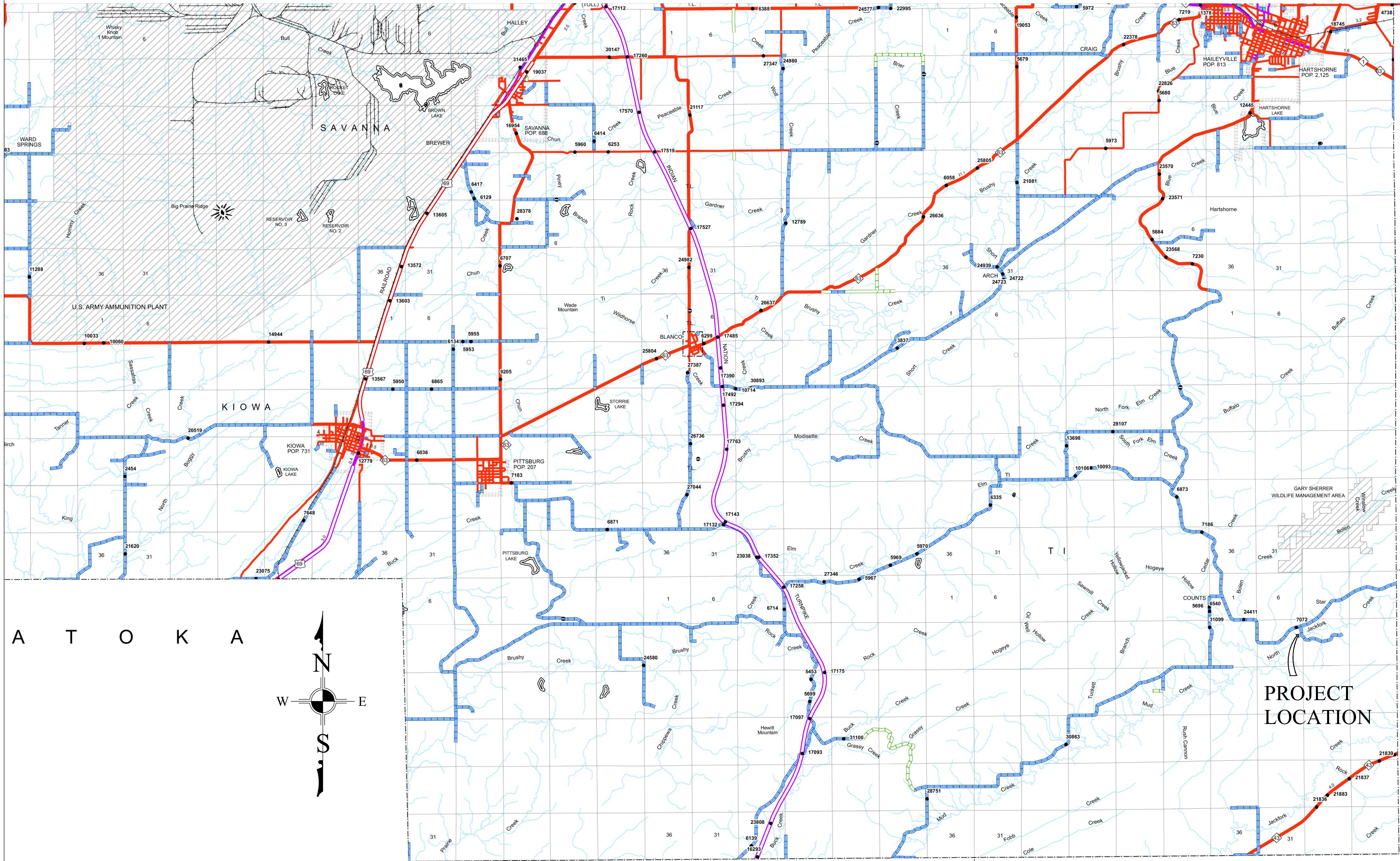
VAUGHN ENGINEERING, LLC
CONSULTING ENGINEERS
4100 SILVER CREEK ROAD
FORT WORTH, TEXAS 76108
TELEPHONE 817-975-1367



STACY COLE
CHAIRMAN OF THE BOARD


GREG A. VAUGHN, OK P.E. 18370
VAUGHN ENGINEERING, LLC





REV.	DATE:	DESCRIPTION

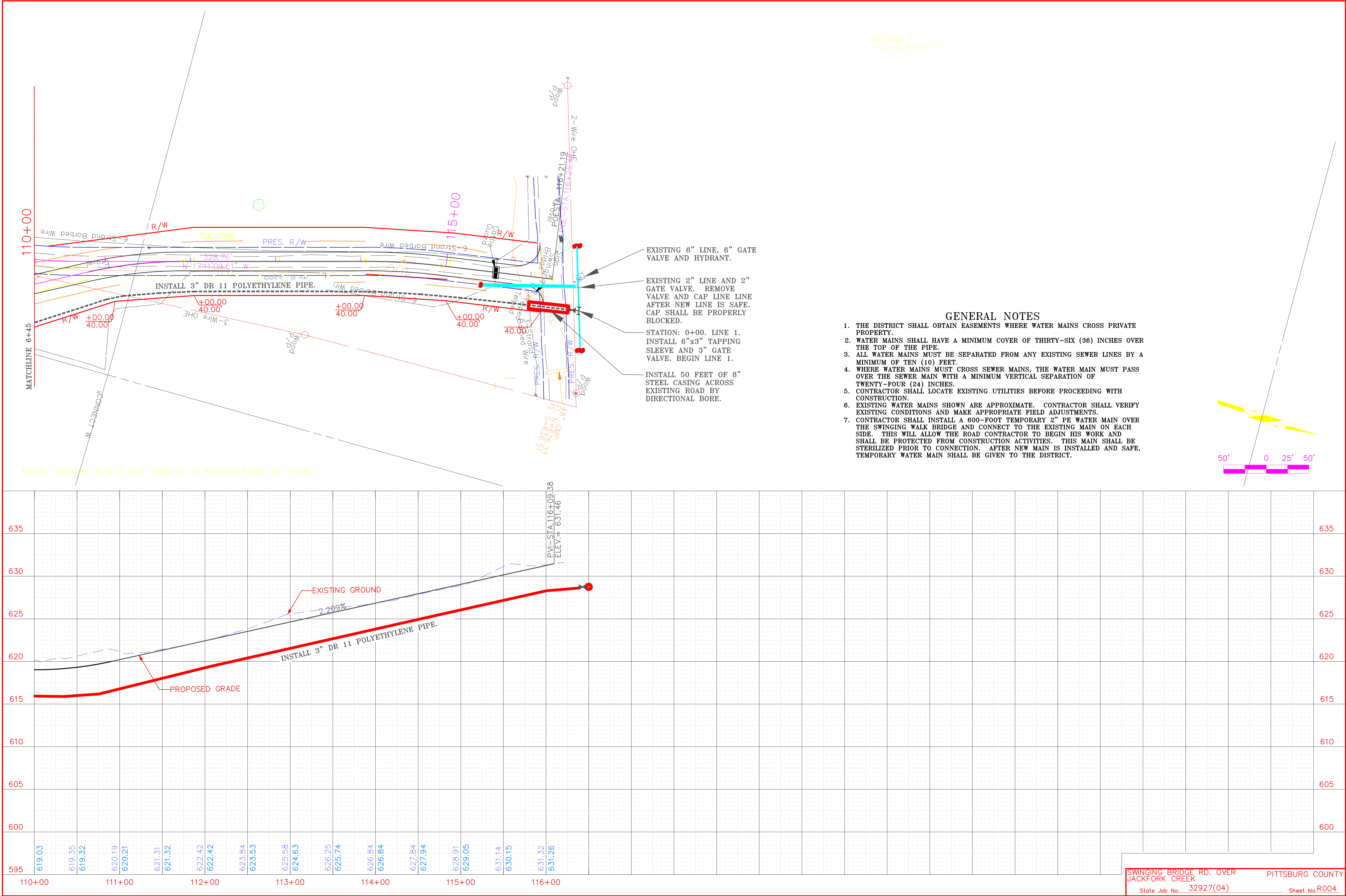
WATER LINE RELOCATION
FOR
SARDIS LAKE WATER AUTHORITY
PITTSBURG COUNTY, OKLAHOMA

VAUGHN ENGINEERING LLC
CONSULTING ENGINEERS
4100 SILVER CREEK ROAD
FORT WORTH, TEXAS 76108
(817) 975-1367
DESIGNING TOMORROW TODAY

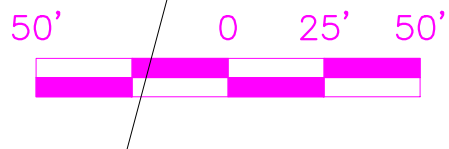


DRAWN BY: TJV
DATE: 5/21
JOB # 21192
CHECKED BY: GAV





- GENERAL NOTES
1. THE DISTRICT SHALL OBTAIN EASEMENTS WHERE WATER MAINS CROSS PRIVATE PROPERTY.
 2. WATER MAINS SHALL HAVE A MINIMUM COVER OF THIRTY-SIX (36) INCHES OVER THE TOP OF THE PIPE.
 3. ALL WATER MAINS MUST BE SEPARATED FROM ANY EXISTING SEWER LINES BY A MINIMUM OF TEN (10) FEET.
 4. WHERE WATER MAINS MUST CROSS SEWER MAINS, THE WATER MAIN MUST PASS OVER THE SEWER MAIN WITH A MINIMUM VERTICAL SEPARATION OF TWENTY-FOUR (24) INCHES.
 5. CONTRACTOR SHALL LOCATE EXISTING UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.
 6. EXISTING WATER MAINS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND MAKE APPROPRIATE FIELD ADJUSTMENTS.
 7. CONTRACTOR SHALL INSTALL A 600-FOOT TEMPORARY 2" PE WATER MAIN OVER THE SWINGING WALK BRIDGE AND CONNECT TO THE EXISTING MAIN ON EACH SIDE. THIS WILL ALLOW THE ROAD CONTRACTOR TO BEGIN HIS WORK AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. THIS MAIN SHALL BE STERILIZED PRIOR TO CONNECTION. AFTER NEW MAIN IS INSTALLED AND SAFE, TEMPORARY WATER MAIN SHALL BE GIVEN TO THE DISTRICT.



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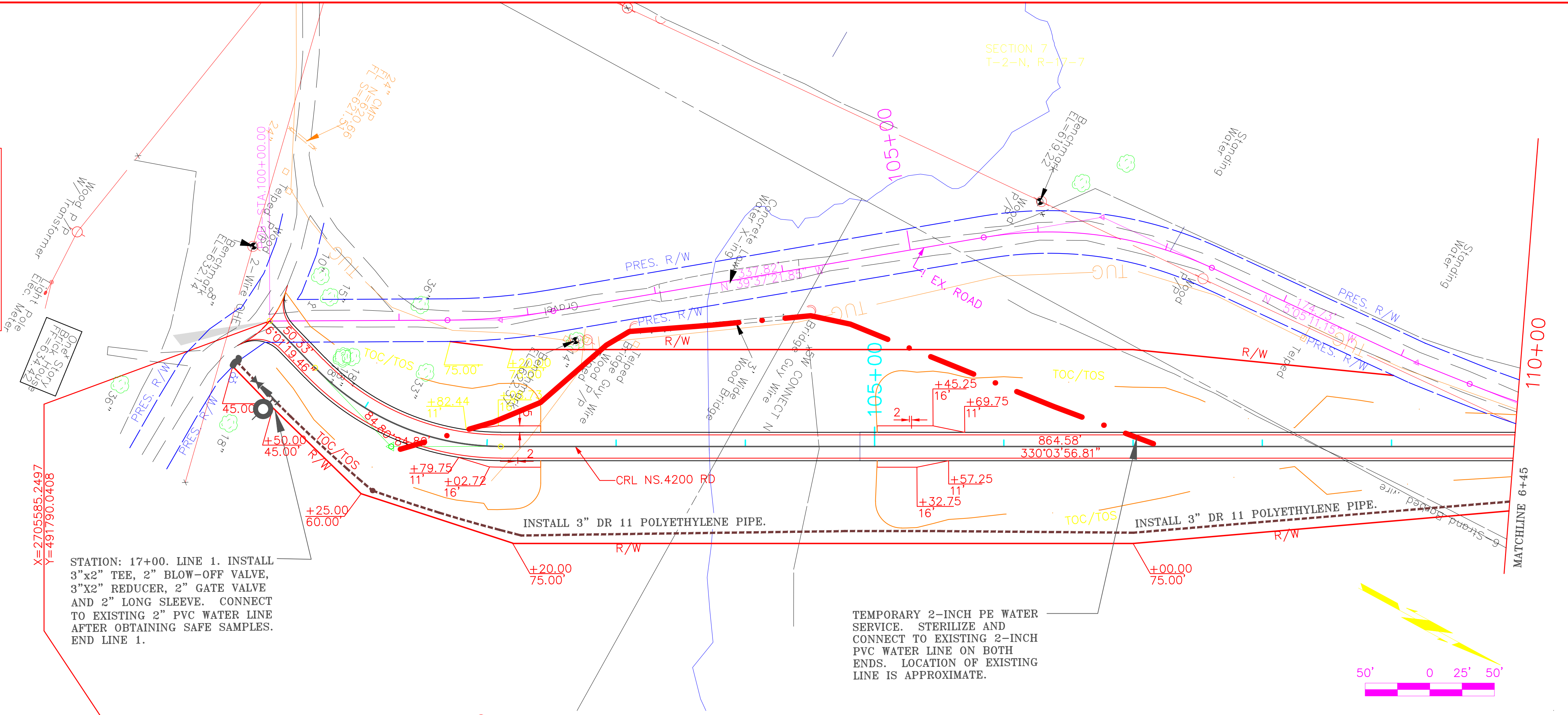
SURVEY DATA

1. HORIZONTAL CONTROL

A. HORIZONTAL CONTROL WAS ESTABLISHED THROUGH OPUS DATA COLLECTION. COORDINATE SYSTEM USED IS NGS OKLAHOMA STATE PLANE, NAD 83 (SOUTH ZONE).

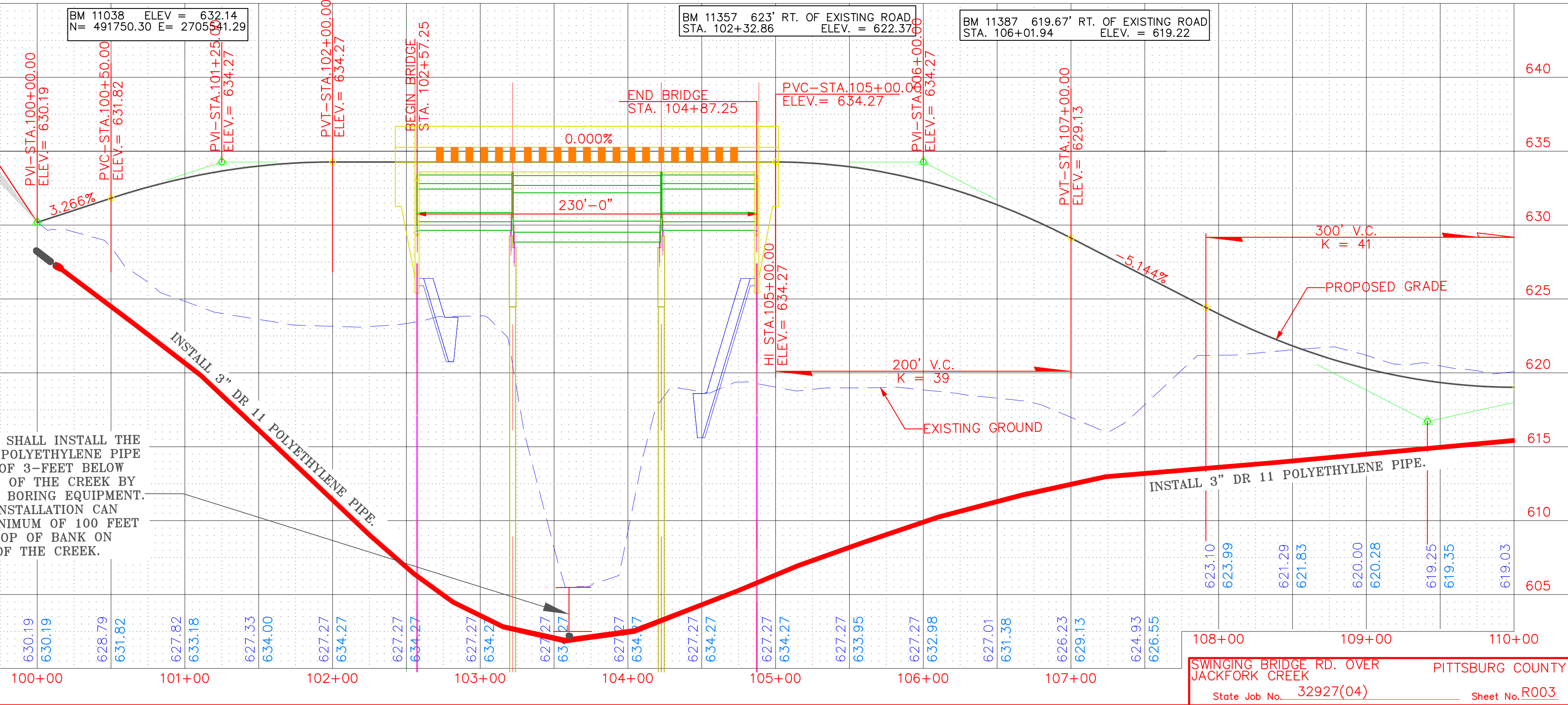
2. VERTICAL CONTROL

B. VERTICAL CONTROL WAS ESTABLISHED THROUGH OPUS DATA COLLECTION. DATUM USED IS NAVD 88.



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CONTRACTOR SHALL INSTALL THE NEW DR-11 POLYETHYLENE PIPE A MINIMUM OF 3- FEET BELOW THE BOTTOM OF THE CREEK BY DIRECTIONAL BORING EQUIPMENT. OPEN-CUT INSTALLATION CAN OCCUR A MINIMUM OF 100 FEET FROM THE TOP OF BANK ON EACH SIDE OF THE CREEK.



TITLE

SCALE: 1"=1000'-0"

REV.	DATE:	DESCRIPTION

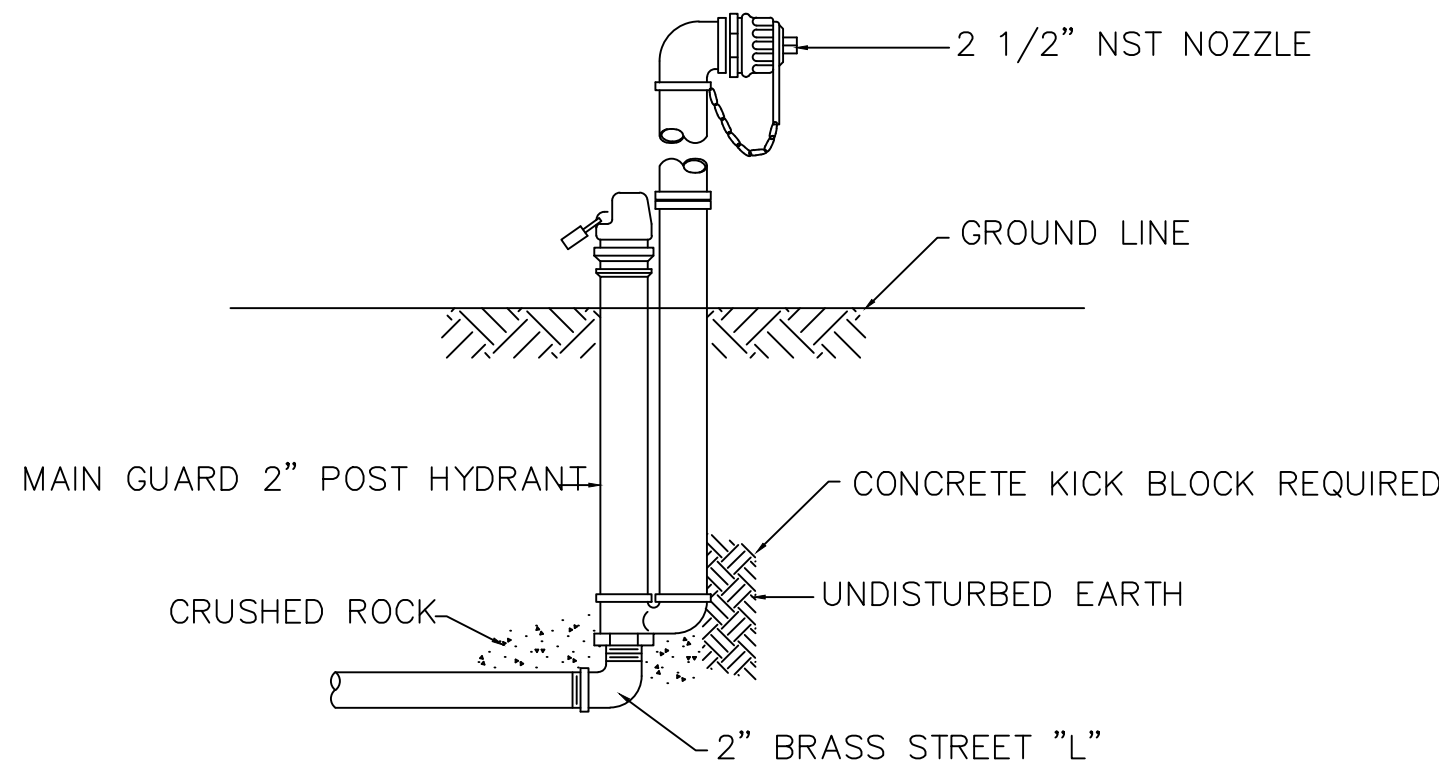
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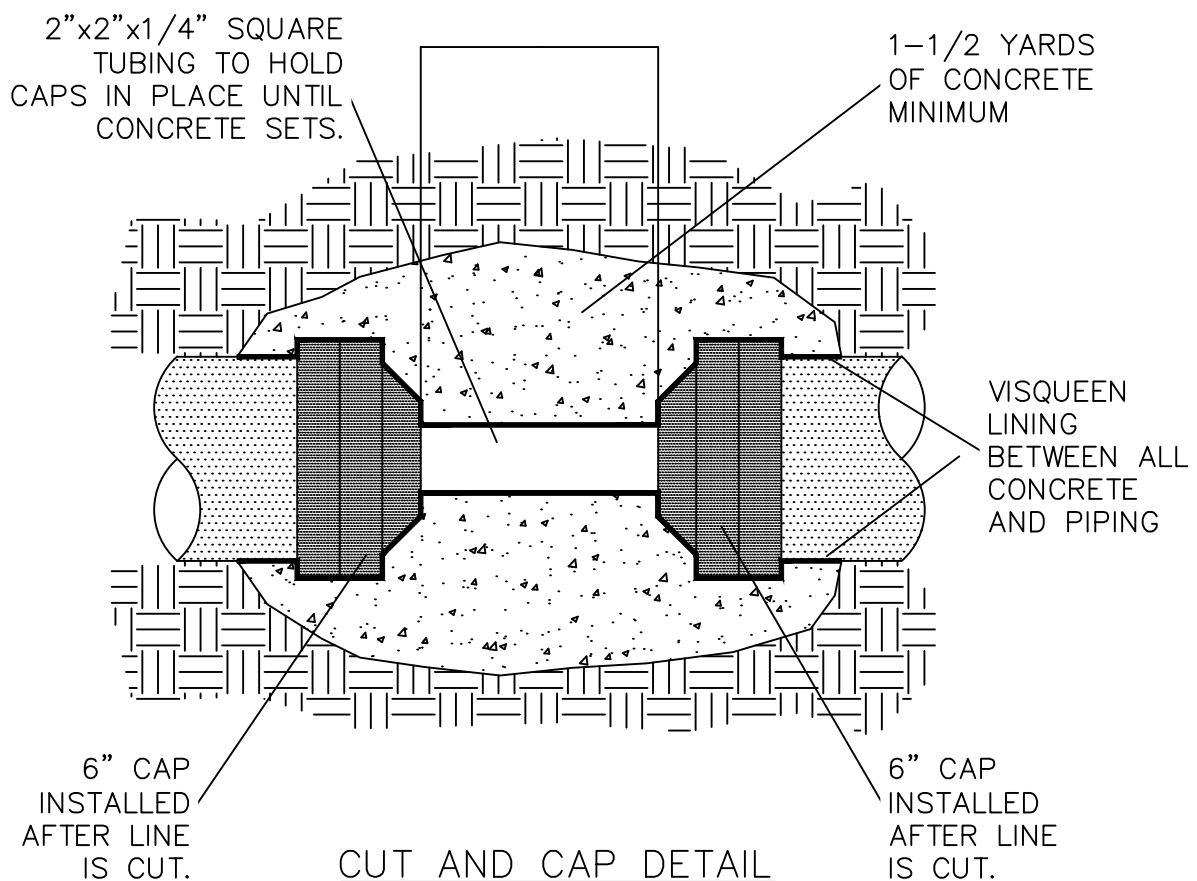


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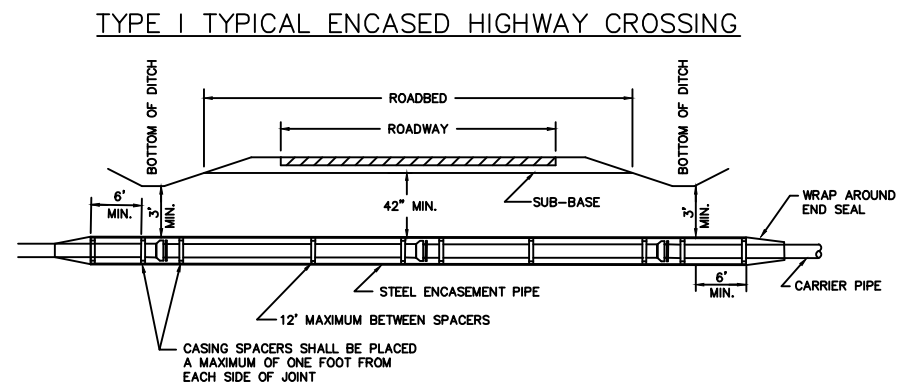
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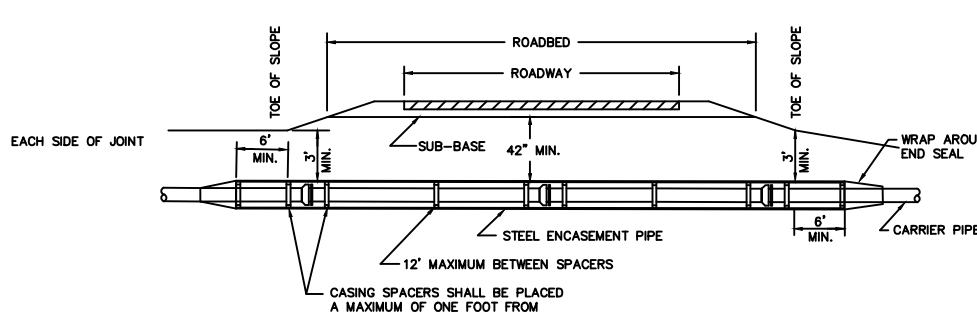
Typical Blow-off Valve Detail



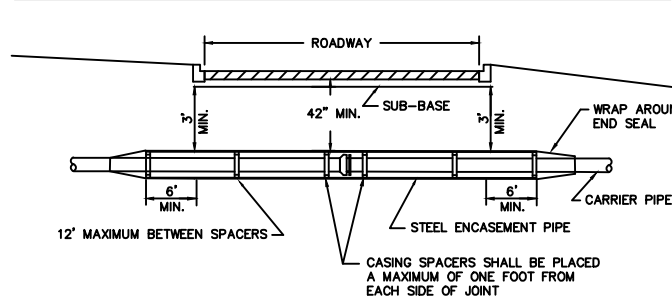
Cut and Cap Detail



Type II Typical Encased Highway Crossing



Type III Typical Encased Highway Crossing



- NOTES:
1. CARRY SPACERS SHALL BE PLACED AT A MINIMUM OF 12" ON EACH SIDE OF JOINT.
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WATER MAIN ENCASEMENT/ CARRIER PIPE SIZING DETAIL											
SDR 21 (CLASS 200) STEEL ENCASEMENT						DUCTILE IRON					
IN.	OD.	WALL THICK.	IN.	OD.	WALL THICK.	IN.	OD.	WALL THICK.	IN.	OD.	WALL THICK.
2	3.075	0.083	4	4.500	0.083	6	6.625	0.100	8	8.625	0.100
3	3.300	0.083	5	4.750	0.083	7	6.875	0.100	9	8.875	0.100
4	3.525	0.083	6	5.000	0.083	8	7.125	0.100	10	9.125	0.100
5	3.750	0.083	7	5.250	0.083	9	7.375	0.100	11	9.375	0.100
6	3.975	0.083	8	5.500	0.083	10	7.625	0.100	12	9.625	0.100
7	4.200	0.083	9	5.750	0.083	11	7.875	0.100	13	9.875	0.100
8	4.425	0.083	10	6.000	0.083	12	8.125	0.100	14	10.125	0.100
9	4.650	0.083	11	6.250	0.083	13	8.375	0.100	15	10.375	0.100
10	4.875	0.083	12	6.500	0.083	14	8.625	0.100	16	10.625	0.100
11	5.100	0.083	13	6.750	0.083	15	8.875	0.100	17	10.875	0.100
12	5.325	0.083	14	7.000	0.083	16	9.125	0.100	18	11.125	0.100
13	5.550	0.083	15	7.250	0.083	17	9.375	0.100	19	11.375	0.100
14	5.775	0.083	16	7.500	0.083	18	9.625	0.100	20	11.625	0.100
15	6.000	0.083	17	7.750	0.083	19	9.875	0.100	21	11.875	0.100
16	6.225	0.083	18	8.000	0.083	20	10.125	0.100	22	12.125	0.100
17	6.450	0.083	19	8.250	0.083	21	10.375	0.100	23	12.375	0.100
18	6.675	0.083	20	8.500	0.083	22	10.625	0.100	24	12.625	0.100
19	6.900	0.083	21	8.750	0.083	23	10.875	0.100	25	12.875	0.100
20	7.125	0.083	22	9.000	0.083	24	11.125	0.100	26	13.125	0.100
21	7.350	0.083	23	9.250	0.083	25	11.375	0.100	27	13.375	0.100
22	7.575	0.083	24	9.500	0.083	26	11.625	0.100	28	13.625	0.100
23	7.800	0.083	25	9.750	0.083	27	11.875	0.100	29	13.875	0.100
24	8.025	0.083	26	10.000	0.083	28	12.125	0.100	30	14.125	0.100
25	8.250	0.083	27	10.250	0.083	29	12.375	0.100	31	14.375	0.100
26	8.475	0.083	28	10.500	0.083	30	12.625	0.100	32	14.625	0.100
27	8.700	0.083	29	10.750	0.083	31	12.875	0.100	33	14.875	0.100
28	8.925	0.083	30	11.000	0.083	32	13.125	0.100	34	15.125	0.100
29	9.150	0.083	31	11.250	0.083	33	13.375	0.100	35	15.375	0.100
30	9.375	0.083	32	11.500	0.083	34	13.625	0.100	36	15.625	0.100
31	9.600	0.083	33	11.750	0.083	35	13.875	0.100	37	15.875	0.100
32	9.825	0.083	34	12.000	0.083	36	14.125	0.100	38	16.125	0.100
33	10.050	0.083	35	12.250	0.083	37	14.375	0.100	39	16.375	0.100
34	10.275	0.083	36	12.500	0.083	38	14.625	0.100	40	16.625	0.100
35	10.500	0.083	37	12.750	0.083	39	14.875	0.100	41	16.875	0.100
36	10.725	0.083	38	13.000	0.083	40	15.125	0.100	42	17.125	0.100
37	10.950	0.083	39	13.250	0.083	41	15.375	0.100	43	17.375	0.100
38	11.175	0.083	40	13.500	0.083	42	15.625	0.100	44	17.625	0.100
39	11.400	0.083	41	13.750	0.083	43	15.875	0.100	45	17.875	0.100
40	11.625	0.083	42	14.000	0.083	44	16.125	0.100	46	18.125	0.100
41	11.850	0.083	43	14.250	0.083	45	16.375	0.100	47	18.375	0.100
42	12.075	0.083	44	14.500	0.083	46	16.625	0.100	48	18.625	0.100
43	12.300	0.083	45	14.750	0.083	47	16.875	0.100	49	18.875	0.100
44	12.525	0.083	46	15.000	0.083	48	17.125	0.100	50	19.125	0.100
45	12.750	0.083	47	15.250	0.083	49	17.375	0.100	51	19.375	0.100
46	12.975	0.083	48	15.500	0.083	50	17.625	0.100	52	19.625	0.100
47	13.200	0.083	49	15.750	0.083	51	17.875	0.100	53	19.875	0.100
48	13.425	0.083	50	16.000	0.083	52	18.125	0.100	54	20.125	0.100
49	13.650	0.083	51	16.250	0.083	53	18.375	0.100	55	20.375	0.100
50	13.875	0.083	52	16.500	0.083	54	18.625	0.100	56	20.625	0.100
51	14.100	0.083	53	16.750	0.083	55	18.875	0.100	57	20.875	0.100
52	14.325	0.083	54	17.000	0.083	56	19.125	0.100	58	21.125	0.100
53	14.550	0.083	55	17.250	0.083	57	19.375	0.100	59	21.375	0.100
54	14.775	0.083	56	17.500	0.083	58	19.625	0.100	60	21.625	0.100
55	15.000	0.083	57	17.750	0.083	59	19.875	0.100	61	21.875	0.100
56	15.225	0.083	58	18.000	0.083	60	20.125	0.100	62	22.125	0.100
57	15.450	0.083	59	18.250	0.083	61	20.375	0.100	63	22.375	0.100
58	15.675	0.083	60	18.500	0.083	62	20.625	0.100	64	22.625	0.100
59	15.900	0.083	61	18.750	0.083	63	20.875	0.100	65	22.875	0.100
60	16.125	0.083	62	19.000	0.083	64	21.125	0.100	66	23.125	0.100
61	16.350	0.083	63	19.250	0.083	65	21.375	0.100	67	23.375	0.100
62	16.575	0.083	64	19.500	0.083	66	21.625	0.100	68	23.625	0.100
63	16.800	0.083	65	19.750	0.083	67	21.875	0.100	69	23.875	0.100
64	17.025	0.083	66	20.000	0.083	68	22.125	0.100	70	24.125	0.100
65	17.250	0.083	67	20.250	0.083	69	22.375	0.100	71	24.375	0.100
66	17.475	0.083	68	20.500	0.083	70	22.625	0.100	72	24.625	0.100
67	17.700	0.083	69	20.750	0.083	71	22.875	0.100	73	24.875	0.100
68	17.925	0.083	70	21.000	0.083	72	23.125	0.100	74	25.125	0.100
69	18.150	0.083	71	21.250	0.083	73	23.375	0.100	75	25.375	0.100
70	18.375	0.083	72	21.500	0.083	74	23.625	0.100	76	25.625	0.100
71	18.600	0.083	73	21.750	0.083	75	23.875	0.100	77	25.875	0.100
72	18.825	0.083	74	22.000	0.083	76	24.125	0.100	78	26.125	0.100
73	19.050	0.083	75	22.250	0.083	77	24.375	0.100	79	26.375	0.100
74	19.275	0.083	76	22.500	0.083	78	24.625	0.100	80	26.625	0.100
75	19.500	0.083	77	22.750	0.083	79	24.875	0.100	81	26.875	0.100
76	19.725	0.083	78	23.000	0.083	80	25.125	0.100	82	27.125	0.100
77	19.950	0.083	79	23.250	0.083	81	25.375	0.100	83	27.375	0.100
78	20.175	0.083	80	23.500	0.083	82	25.625	0.100	84	27.625	0.100
79	20.400	0.083	81	23.750	0.083	83	25.875	0.100	85	27.875	0.100
80	20.625	0.083	82	24.000	0.083	84	26.125	0.100	86	28.125	0.100
81	20.850	0.083	83	24.250	0.083	85	26.375	0.100	87	28.375	0.100
82	21.075	0.083	84	24.500	0.083	86	26.625	0.100	88	28.625	0.100
83	21.300	0.083	85	24.750	0.083	87	26.875	0.100	89	28.875	0.100
84	21.525	0.083	86	25.000	0.083	88	27.125	0.100	90	29.125	0.100
85	21.750	0.083	87	25.250	0.083	89	27.375	0.100	91	29.375	0.100
86	21.975	0.083	88	25.500	0.083	90	27.625	0.100	92	29.625	0.100
87	22.200	0.083	89	25.750	0.083	91	27.875	0.100	93	29.875	0.100
88	22.425	0.083	90	26.000	0.083	92	28.125	0.100	94	30.125	0.100
89	22.650	0.083	91	26.250	0.083	93	28.375	0.100	95	30.375	0.100
90	22.875	0.083	92	26.500	0.083	94	28.625	0.100	96	30.625	0.100
91	23.100	0.083	93	26.750	0.083	95	28.875	0.100	97	30.875	0.100
92	23.325	0.083	94	27.000	0.083	96	29.125	0.100	98	31.125	0.100
93	23.550	0.083	95	27.250	0.083	97	29.375	0.100	99	31.375	0.100
94	23.775	0.083	96	27.500	0.083	98	29.625	0.100	100	31.625	0.100
95	24.000	0.083	97	27.750	0.083	99	29.875	0.100			
96	24.225	0.083	98	28.000	0.083	100	30.125	0.100			
97	24.450	0.083	99	28.250	0.083						
98	24.675	0.083	100	28.500	0.083						
99	24.900	0.083									
100	25.125	0.083									

WALL THICKNESS

SPACING

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