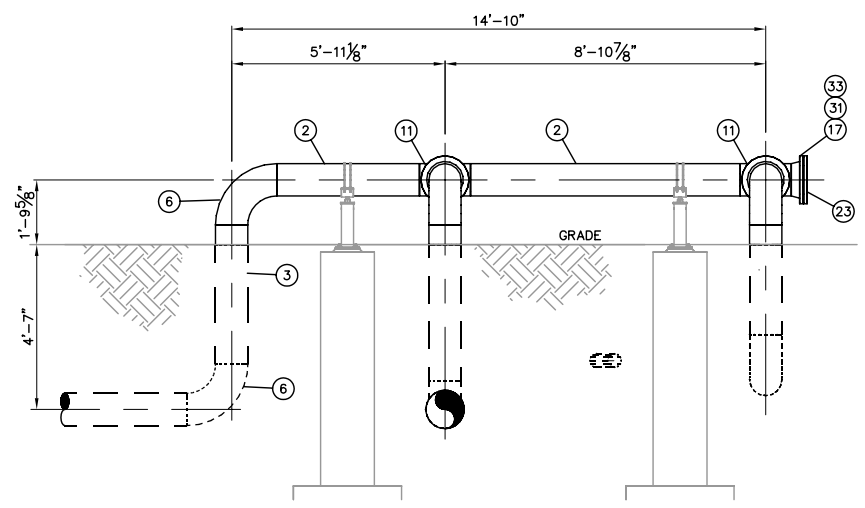
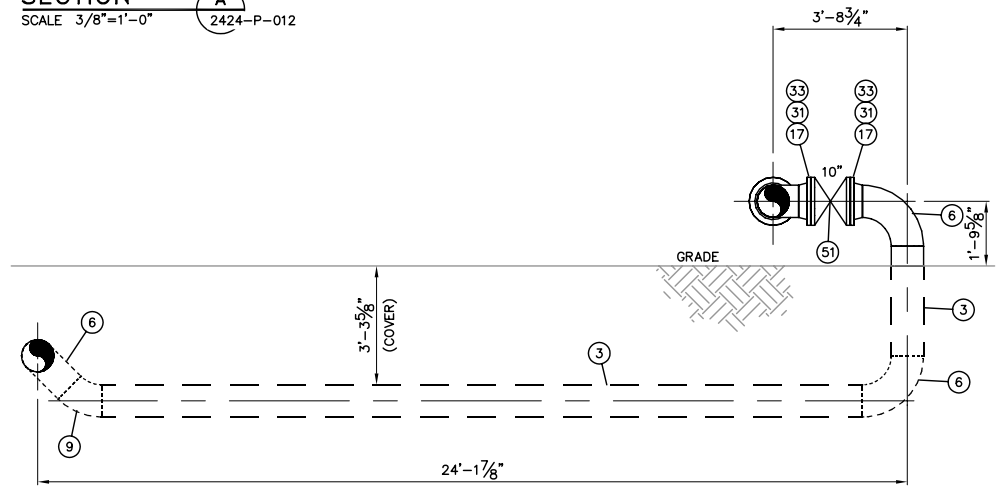


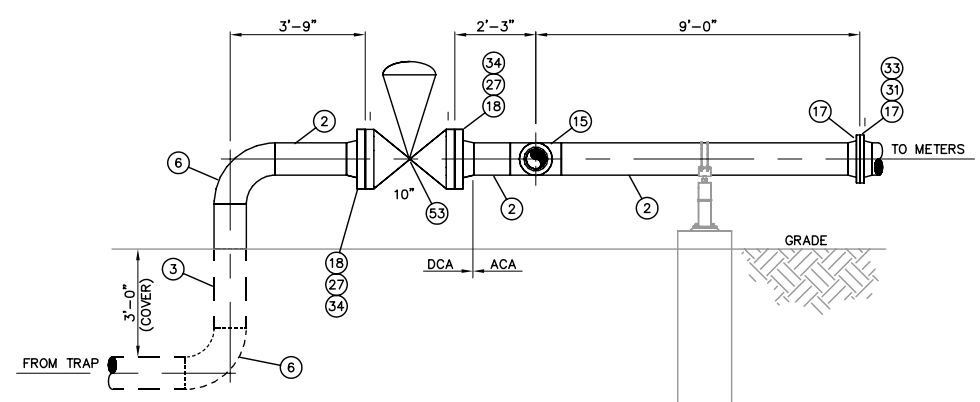
SECTION A
SCALE 3/8"=1'-0"
2424-P-012



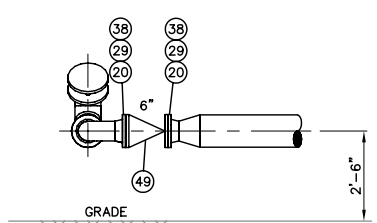
SECTION B
SCALE 3/8"=1'-0"
2424-P-012



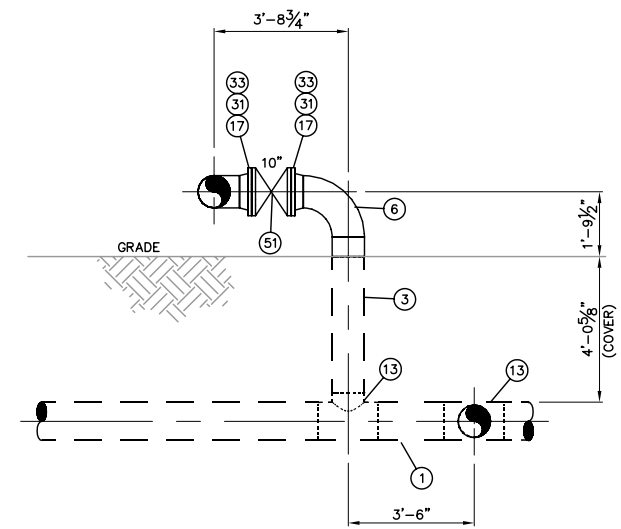
SECTION C
SCALE 3/8"=1'-0"
2424-P-012



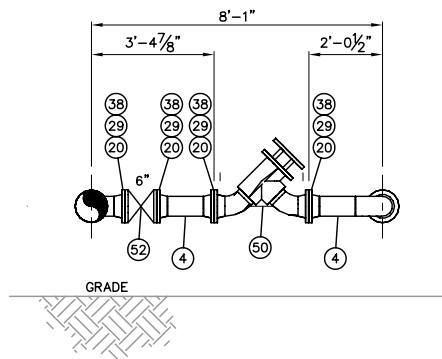
SECTION E
SCALE 3/8"=1'-0"
2424-P-012



SECTION G
SCALE 3/8"=1'-0"
2424-P-012



SECTION D
SCALE 3/8"=1'-0"
2424-P-012



SECTION H
SCALE 3/8"=1'-0"
2424-P-012

BILL OF MATERIAL				
MARK	QTY	SIZE	DESCRIPTION	LENGTH
45	2	2"	BALL VALVE, SERIES 800 WOG 3000#, FNPT, REDUCED PORT, 316 SS BALL AND TRIM, SS BODY, PTFE SEATS, API 6D OR ASME B16.34, FIRE SAFE DESIGN	3 1/8"
46	2	4"	DBL B&B PLUG VALVE, 150LB FLG, REGULAR PATTERN (EST WGT)	9"
47	6	6"	DBL B&B PLUG VALVE, 150LB FLG, REGULAR PATTERN (EST WGT)	10 1/2"
48	4	3/4"	BALL VALVE, SERIES 800 WOG 3000#, FNPT, REDUCED PORT, 316 SS BALL AND TRIM, SS BODY, PTFE SEATS, API 6D OR ASME B16.34, FIRE SAFE DESIGN	1 5/8"
49	1	6"	CHECK VALVE, ANSI 150, RFFE, FULL CONDUIT W/BONNET COVER, API 6D, 13 CR TRIM, SWING TYPE, HF SEAT	1'-2"
50	1	6"	RELIEF VALVE, ANSI 150, RFFE, RUPTURE PIN MODEL "D"	2'-7 3/8"
51	2	10"	GATE VALVE, ANSI 150, RFFE, FULL PORT, SLAB GATE, FABRICATED STEEL BODY, C.S. ENP GATE, VITON SEATS, API-6D, FIRE SAFE DESIGN	1'-1"
52	1	6"	GATE VALVE, ANSI 150, RFFE, FULL PORT, SLAB GATE, FABRICATED STEEL BODY, C.S. ENP GATE, VITON SEATS, API-6D, FIRE SAFE DESIGN	10 1/2"
53	1	10"	CONTROL VALVE, 600LB FLG	2'-5 5/8"

BILL OF MATERIAL				
MARK	QTY	SIZE	DESCRIPTION	LENGTH
1	1	12"	PIPE, API 5L, STD, GRADE B, ERW, DRL, PE, FBE COATED 14-16 MILS	1'-10"
2	1	10"	PIPE, API 5L, STD, GRADE B, ERW, DRL, PE	151'-8"
3	1	10"	PIPE, API 5L, STD, GRADE B, ERW, DRL, PE, FBE COATED 14-16 MILS	100'-10"
4	1	6"	PIPE, API 5L, STD, GRADE B, SMLS, DRL, PE	45'-1"
5	1	4"	PIPE, API 5L, STD, GRADE B, SMLS, DRL, PE	13'-6"
6	12	10"	ELL, 90° LR, ASTM A-234, BUTT WELD, STD WALL, WPB	
7	13	6"	ELL, 90° LR, ASTM A-234, BUTT WELD, STD WALL, WPB	
8	6	4"	ELL, 90° LR, ASTM A-234, BUTT WELD, STD WALL, WPB	
9	1	10"	ELL, 45° LR, ASTM A-234, BUTT WELD, STD WALL, WPB	
10	-	-	-	
11	5	10"	TEE, ASTM A-234, BUTT WELD, STD WALL, WPB	
12	4	6"	TEE, ASTM A-234, BUTT WELD, STD WALL, WPB	
13	2	12"x10"	TEE, REDUCING, ASTM A-234, BUTT WELD, STD WALL, WPB	
14	-	-	-	
15	1	10"x6"	TEE, REDUCING, ASTM A-234, BUTT WELD, STD WALL, WPB	
16	2	6"x4"	TEE, REDUCING, ASTM A-234, BUTT WELD, STD WALL, WPB	
17	9	10"	FLG, ANSI 150 RFWN, ASTM A-105, STD WALL, WPB	
18	2	10"	FLG, ANSI 600 RFWN, ASTM A-105, STD WALL, WPB	
19	-	-	-	
20	18	6"	FLG, ANSI 150 RFWN, ASTM A-105, STD WALL, WPB	
21	2	4"	FLG, ANSI 150 RFWN, ASTM A-105, STD WALL, WPB	
22	4	4"	FLG, ANSI 600 RFWN, ASTM A-105, STD WALL, WPB	
23	1	10"	FLG, RF BLIND 150LB, ASTM A-105	
24	2	4"	FLG, RF BLIND 150LB, ASTM A-105	
25	5	10"x6"	REDUCER, CONC., ASTM A-234, STD WALL, WPB	
26	4	6"x4"	REDUCER, CONC., ASTM A-234, STD WALL, WPB	
27	2	1 1/4"	(16) STUD BOLTS FOR 10" 600LB FLANGES, ASTM A-193, GR. B7 W/TWO (2) ASTM A-194, GR. 2H, HEAVY HEX NUTS EACH	8 3/4"
28	-	-	-	
29	18	3/4"	(8) STUD BOLTS FOR 6" 150LB FLANGES, ASTM A-193, GR. B7 W/TWO (2) ASTM A-194, GR. 2H, HEAVY HEX NUTS EACH	4 1/4"
30	4	5/8"	(8) STUD BOLTS FOR 4" 150LB FLANGES, ASTM A-193, GR. B7 W/TWO (2) ASTM A-194, GR. 2H, HEAVY HEX NUTS EACH	4"
31	7	7/8"	(12) STUD BOLTS FOR 10" 150LB FLANGES, ASTM A-193, GR. B7 W/TWO (2) ASTM A-194, GR. 2H, HEAVY HEX NUTS EACH	5"
32	4	7/8"	(8) STUD BOLTS FOR 4" 600LB FLANGES, ASTM A-193, GR. B7 W/TWO (2) ASTM A-194, GR. 2H, HEAVY HEX NUTS EACH	6"
33	7	10"	GASKET, ANSI 150, FLEXITALLIC SPIRAL WOUND, TYPE "CGI", 316 SS WINDINGS, FLEXITALLIC CGI CENTERING RING	
34	2	10"	GASKET, ANSI 600, FLEXITALLIC SPIRAL WOUND, TYPE "CGI", 316 SS WINDINGS, FLEXITALLIC CGI CENTERING RING	
35	-	-	-	
36	4	4"	GASKET, ANSI 150, FLEXITALLIC SPIRAL WOUND, TYPE "CGI", 316 SS WINDINGS, FLEXITALLIC CGI CENTERING RING	
37	4	4"	GASKET, ANSI 600, FLEXITALLIC SPIRAL WOUND, TYPE "CGI", 316 SS WINDINGS, FLEXITALLIC CGI CENTERING RING	
38	18	6"	GASKET, ANSI 150, FLEXITALLIC SPIRAL WOUND, TYPE "CGI", 316 SS WINDINGS, FLEXITALLIC CGI CENTERING RING	
39	2	2"	NIPPLE, ASTM A-106, MNPT, SCH. 160, GRADE B TBE	3"
40	4	3/4"	NIPPLE, ASTM A-106, MNPT, SCH. 160, GRADE B TBE	3"
41	6	2"	PLUG, ASTM A-106, MNPT, SCH. 160, GRADE B	
42	2	6"x2"	ELBOW-LET, THRD 3000LB FS, ASTM A-105	
43	4	6"x2"	THRED-O-LET, ASTM A-105, FNPT, 3000#, GRADE B	
44	10	6"x3/4"	THRED-O-LET, ASTM A-105, FNPT, 3000#, GRADE B	

NO	REVISION	DATE	APPR	BY
1	ISSUED FOR AS-BUILT	01/31/08	JRW	ADJ
0	ISSUED FOR CONSTRUCTION	7/18/07	JRW	ADJ

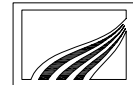
ENBRIDGE PIPELINES (ND)

BEAVER LODGE (ND) STATION

10" FROM TRENTON TIE-IN
SECTIONS AND MATERIALS

PROJECT: ENBRIDGE ND EXPANSION		
SCALE: AS NOTED	DATE: 5/2/07	DRAWN: ADJ
CHECK:	APPR:	DATE:

DWG. NO. 2424-P-014



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