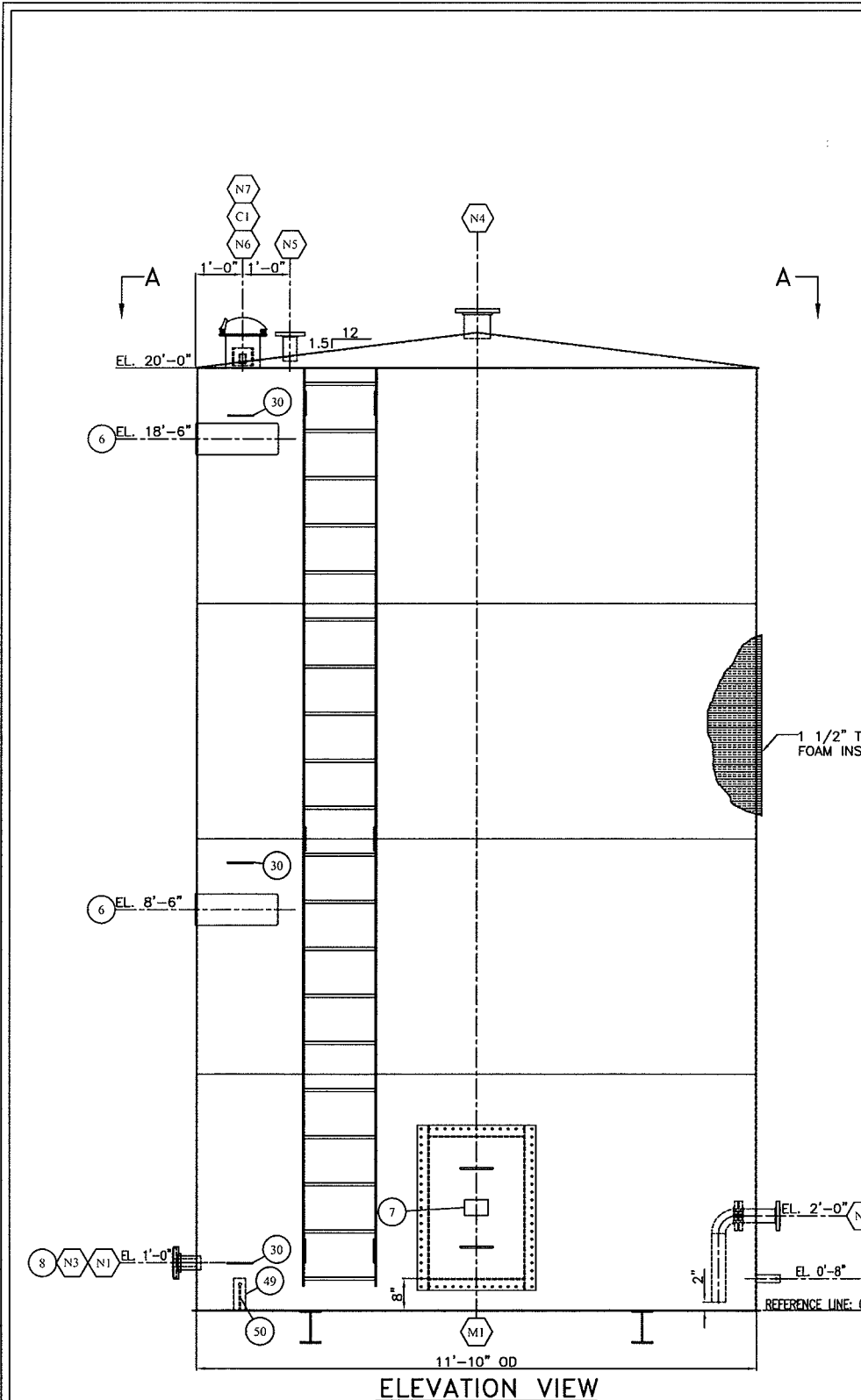


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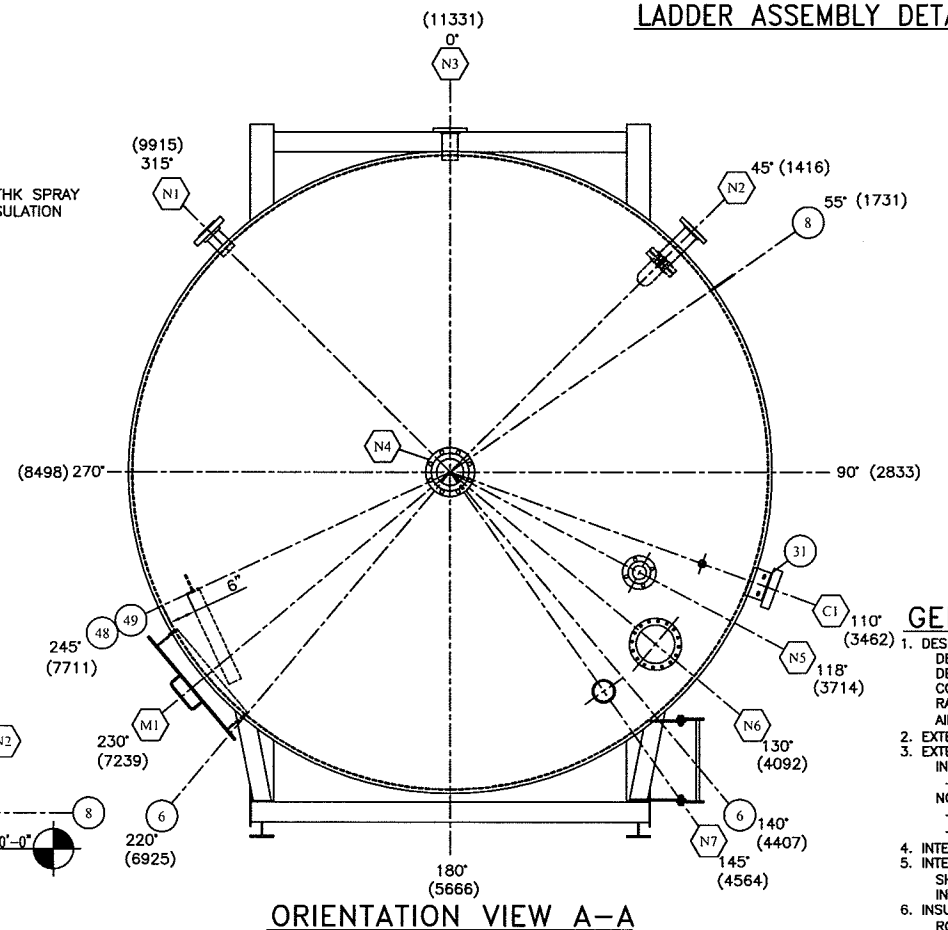
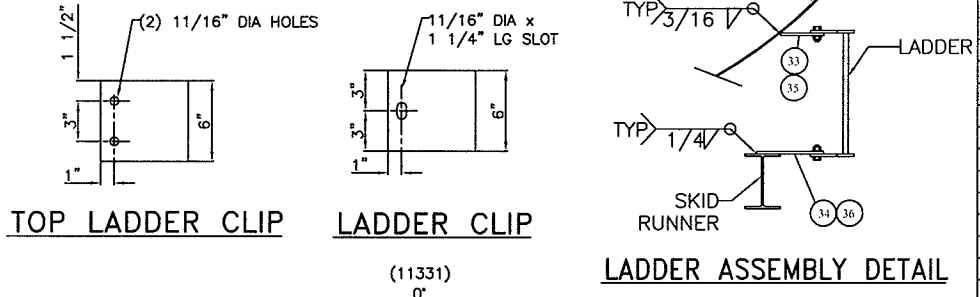
ELEVATION VIEW

### NOZZLE SCHEDULE

MARK	QTY	DESCRIPTION	NPS	CLASS	TYPE	PROJECTION		WELD DETAIL	WELD				BILL OF MATERIALS ITEM NUMBER
						INSIDE	OUTSIDE		A	B	C	D	
N1	1	INLET	3	300	RFSO	1"	6"	1,2	3/16	3/16	-	9,10	
N2	1	TRUCK OUT	3	150	RFSO	4"	6"	1,2	3/16	3/16	-	11,12,13,14,15,16,17	
N3	1	OUTLET	3	150	RFSO	1"	6"	1,2	3/16	3/16	-	10,11	
N4	1	VENT	6	150	RFSO	1"	6"	1,2	3/16	3/16	-	18,20	
N5	1	H LSD	3	150	RFSO	1"	6"	1,2	3/16	3/16	-	10,11,12,16,17,46,47	
N6	1	THIEF HATCH	8	API	API SO	1"	-	2	3/16	3/16	-	25,26	
N7	1	LG/INSTRUMENT	4	API	CPLG	1"	-	2	3/16	3/16	-	27,28	
C1	1	LG	1	3000	CPLG	1/4"	-	*2	3/16	3/16	-	29,30,31	
M1	1	MANWAY	24x36	API	FAB	1/2"	-	2	3/16	3/16	-	32	

### BILL OF MATERIALS

ITEM	QTY	REF.	PART No.	DESCRIPTION	MATERIAL	WEIGHT
1	4	SHELL	1-004869	3/16" THK x 60" W ROLL TO 11'-10" OD (CIRC=37'-2 1/8" LG)	SA-36	5700#
2	2	FLOOR	2-000078	1/4" THK x 12'-0" OD	SA-36	1155#
3A	1	ROOF	2-003570	3/16" THK x 12'-0" OD (12:1.5 SLOPE)	SA-36	435#
3B	1	ROOF	2-003571	3/16" THK x 12'-0" OD (12:1.5 SLOPE)	SA-36	435#
4	1	LADDER	1-010547	LADDER ASSEMBLY	-	200#
5	1	SKID	1-010546	L-TYPE SKID ASSEMBLY	-	2100#
6	2	SADDLES	-	SADDLE ASSEMBLY	-	160#
7	1	NAMEPLATE	2-000218	4" x 6" NAMEPLATE BRACKET	A-569	2#
8	1	GROUND LUG	2-000228	2" x 1/4" THK x 6" LG c/w HOLE (TEMPLATE #16)	SA-36	1#
9	1	N1	1-010686	3" x CLASS 300 RFSO FLG	SA-105-N	13#
10	3	N1,N3,N5	1-003363	3" PIPE SCH STD x 6 3/4" LG (COE,ROE)	SA-106-B	16#
11	5	N2,N3,N5	1-000895	3" x CLASS 150 RFSO FLG	SA-105-N	40#
12	2	N2,N5	1-001297	3" x CLASS 150 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
13	1	N2	1-000684	3" x 90" LR BW ELBOW SCH STD	SA-234-WPB	3#
14	1	N2	1-003363	3" PIPE SCH STD x 9 1/4" LG (CBE)	SA-106-B	4#
15	1	N2	1-003363	3" PIPE SCH STD x 1'-5 1/2" LG (BOE,ROE)	SA-106-B	12#
16	8	N2,N5	1-002627	5/8" DIA x 3 1/2" LG STUD	SA-193-B7M	-
17	16	N2,N5	1-001868	5/8" DIA NUT	SA-194-2HM	-
18	1	N4	1-000926	6" x CLASS 150 RFSO FLG	SA-105-N	20#
20	1	N4	1-003374	6" PIPE SCH STD x 7 1/4" LG (COE,ROE)	SA-106-B	15#
25	1	N6	1-004035	8" API THIEF HATCH CONNECTION ASSEMBLY (SOUR)	-	15#
26	1	N6	1-003017	ENARDO MODEL 660PT 8oz SOUR THIEF HATCH	-	20#
27	1	N7	1-008935	4" NPS API LINE COUPLING	-	2#
28	1	N7	1-008067	4" NPS PLUG	MI	2#
29	1	C1	1-011425	1" x CLASS 3000 STAINLESS FULL CPLG	SA-182-316L	1#
30	3	C1	2-000056	GAUGEBOARD TABS: 4" x 1/4" THK x 6 1/2" LG (TEMPLATE #14)	SA-36	6#
31	1	C1	1-001241	TGS-5010 LIQUID LEVEL GAUGE (SOUR) c/w GAUGE BOARD & BRACKETS (20FT)	-	-
32	1	M1	1-004041	24" x 36" MANWAY ASSEMBLY (SOUR)	-	120#
33	1	LADDER	2-002028	TOP LADDER CLIP: 6" x 3/8" THK x 8" LG c/w HOLES (SEE DETAIL)	SA-36	5#
34	1	LADDER	2-000048	TOP LADDER CLIP: 6" x 3/8" THK x 12" LG c/w HOLES (SEE DETAIL)	SA-36	8#
35	2	LADDER	2-002027	MID LADDER CLIP: 6" x 3/8" THK x 8" LG c/w SLOTS (SEE DETAIL)	SA-36	10#
36	2	LADDER	2-000046	MID LADDER CLIP: 6" x 3/8" THK x 12" LG c/w SLOTS (SEE DETAIL)	SA-36	16#
37	8	LADDER	1-000207	5/8" DIA x 2" LG BOLT	GR. 5	-
38	8	LADDER	1-001898	5/8" DIA NUT	GR. 5	-
39	1	LADDER	1-001576	DBI LAD-SAF 30 FLEXIBLE FALL ARREST SYSTEM	-	-
40	1	LADDER	1-008931	DBI SLEEVE & CARIBINER MODEL 6116502 FALL ARREST SYSTEM	-	-
47	1	N5	1-012073	3" SOR MODEL 704C-F3C-C-A1-B1-CSCV LEVEL SWITCH	-	-
48	1	ANODE	1-000079	3" x 22" ZINC ANODE 38LB	-	-
49	1	ANODE	2-000531	ANODE CLIP: 3" x 3/8" THK x 8" LG (TEMPLATE #15)	SA-240-304L	4#
50	1	ANODE	2-000780	ANODE GUSSET: 4" x 6" x 3/8" THK	SA-240-304L	2#
51	1	ANODE	1-006285	ANODE BOLT: 5/8" DIAMETER x 2" LONG	18.8SS NF	-

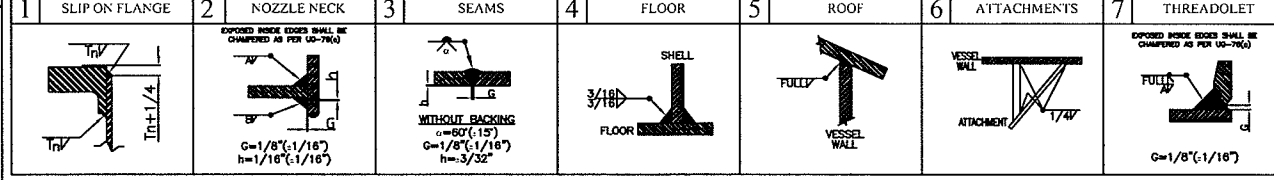


ORIENTATION VIEW A-A

### GENERAL NOTES

- DESIGNED TO API-12F (NOT STAMPED)  
DESIGN PRESSURE: 8 oz  
DESIGN VACUUM: 0.4 oz  
CORROSION ALLOWANCE: NIL  
RADIOGRAPHY: NIL  
AIR/SOAP LEAK TEST: 1.5 PSI MAXIMUM
- EXTERNAL SANDBLAST: SSPC-SP6 (COMMERCIAL)
- EXTERNAL FINISH:  
INSULATED AREAS:  
-TWO (2) COATS CLOVERDALE 71309 PRIMER (GREY)  
NON-INSULATED AREAS:  
-ONE (1) CLOVERDALE 71309 PRIMER (GREY)  
-ONE (1) COAT INDUSTRIAL ENAMEL (WHITE)
- INTERNAL SANDBLAST: SSPC-SP10 (NEAR WHITE)
- INTERNAL FINISH:  
SHELL, ROOF & FLOOR: DEVCO 253/253HS AS PER MANUFACTURER'S SPECS.  
INTERNAL PIPING: NIL
- INSULATION:  
ROOF & SHELL ONLY: 1 1/2" THK SPRAY FOAM INSULATION (WHITE)
- ALL BOLT HOLES TO STRADDLE CENTERLINE
- ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
- GOOSE NECK VENT TO BE SHIPPED LOOSE
- ALL OUTSIDE PROJECTIONS MEASURED ALONG CENTERLINE OF NOZZLE
- ALL INSIDE PROJECTIONS MEASURED ALONG SHORT-SIDE OF NOZZLE
- SHIPPING WEIGHT: 12,000 LBS
- SHIPPING DIMENSIONS: 12'-5" W x 13'-6" H x 24'-6" LG
- SERIAL NUMBER: 16044

WELD DETAIL NUMBER	REGISTERED WELDING PROCEDURE NUMBER			BACKWELD/GOUGE
	ROOT	HOT PASS	FILL & CAP	
1,2,4,5,6,7	BWM-19 (GMAW)	BWM-19 (GMAW)	BWM-19 (GMAW)	N/A
3	BWM-19 (GMAW)	BWM-3 (SAW)	BWM-3 (SAW)	N/A
*2	BWM-12 (GMAW)	BWM-12 (GMAW)	BWM-12 (GMAW)	N/A



REV. NO.	DATE	REVISION	BY	APP'D
0	11/17/11	ISSUED FOR FABRICATION	DDD	
1	02/09/12	AS BUILT	YZ	

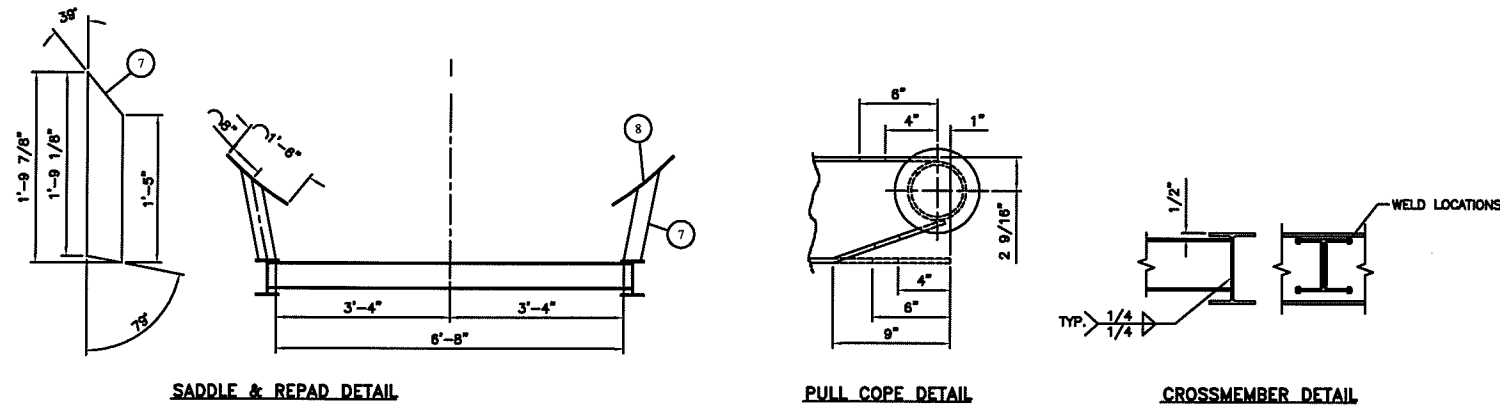
**BILTON**  
Welding & Manufacturing Ltd.  
BOX 6106  
5815 37 Street  
INNISFAIL, AB  
CANADA  
403-227-7799  
1-888-227-4923  
FAX 227-7796

**PENN WEST PETROLEUM LTD**  
400 BBL SINGLE WALL WATER STORAGE TANK  
11'-10" OD x 20'-0" HIGH

DATE: 11/17/11  
SHEET: 1 OF 1  
DRAWN BY: DDD  
PURCHASE ORDER: D1964  
LOCATION: WASKADA  
CRN DWG: N/A  
CRN NUMBER: N/A

SALE ORDER: 002609  
JOB ORDER: D1964  
DRAWING NO.: D1964-1  
REV. 1

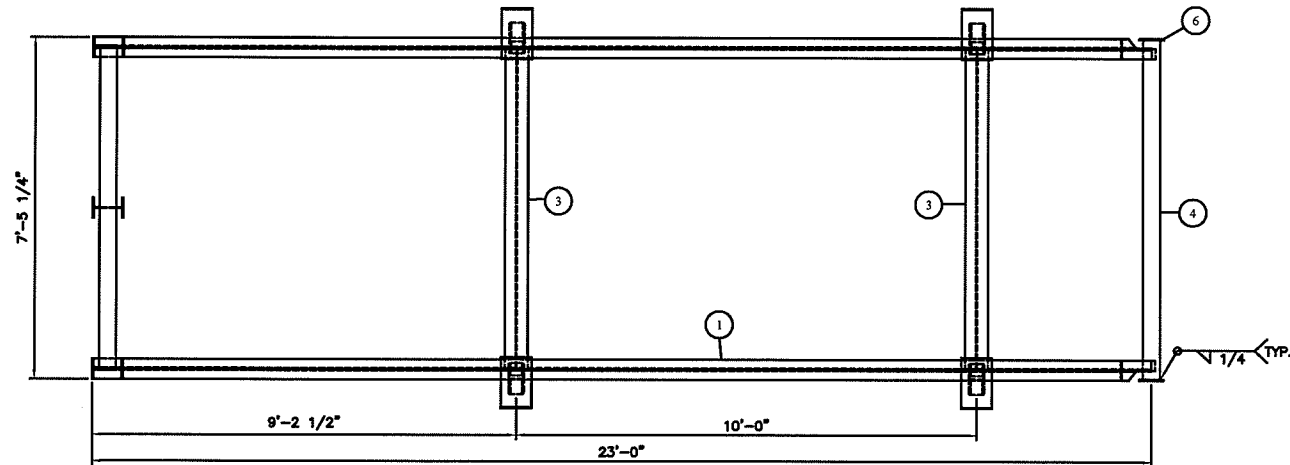
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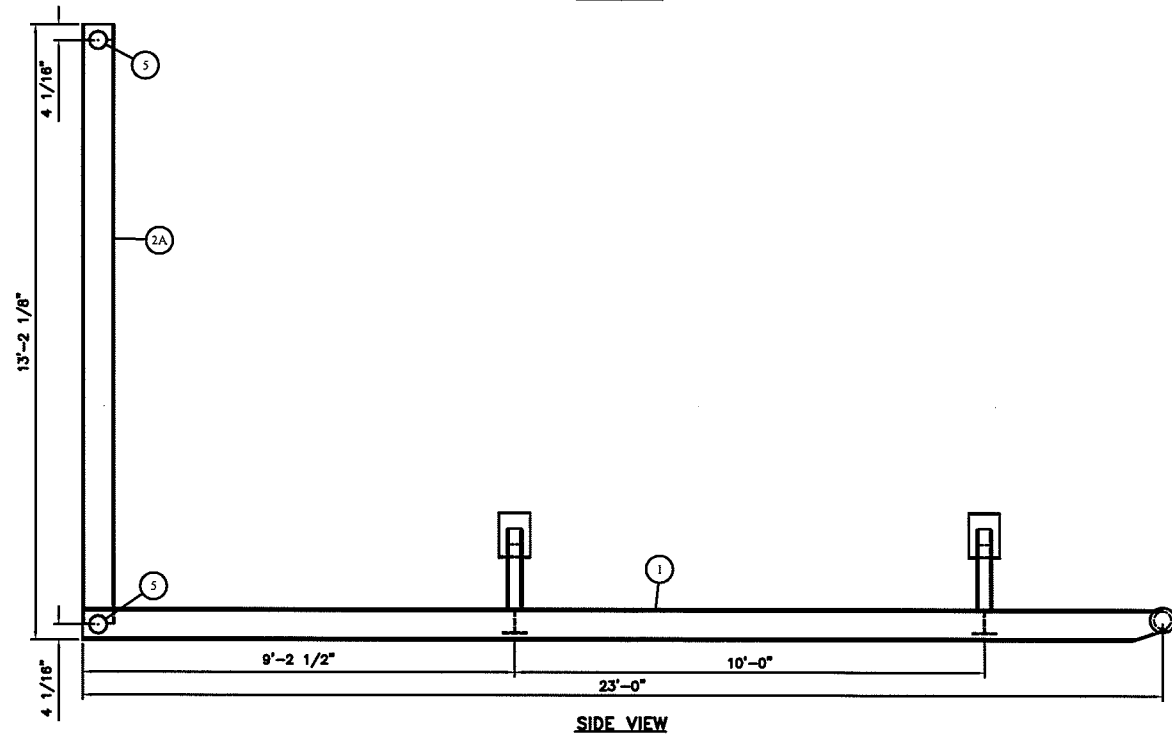
SADDLE & REPAD DETAIL

PULL COPE DETAIL

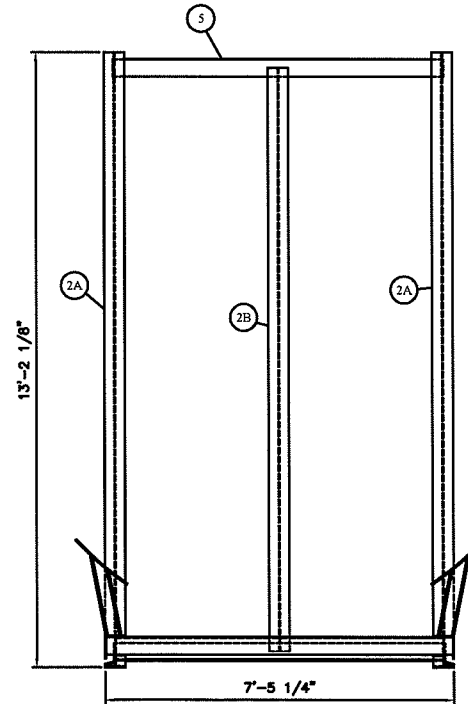
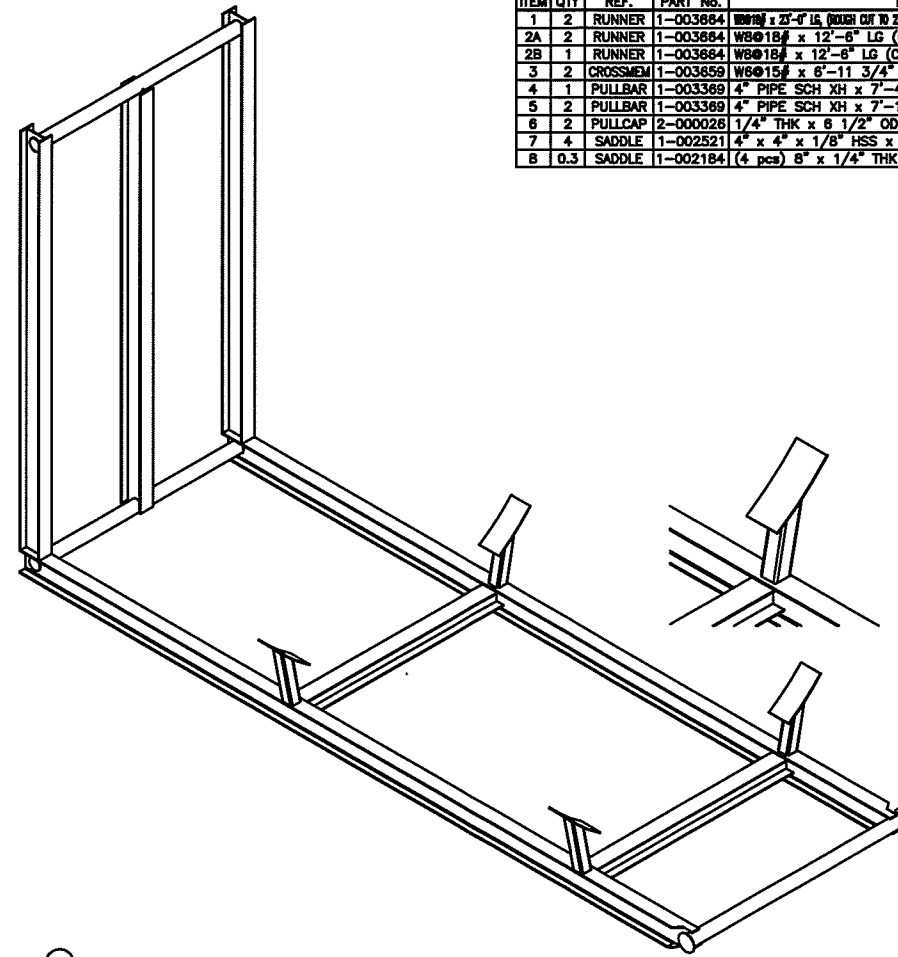
CROSSMEMBER DETAIL



TOP VIEW

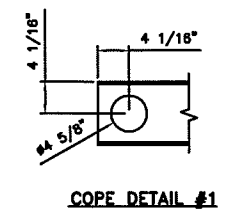


SIDE VIEW

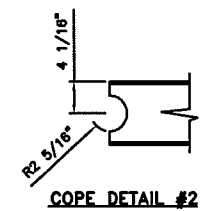


END VIEW

BILL OF MATERIALS						
ITEM	QTY	REF.	PART No.	DESCRIPTION	MATERIAL	WEIGHT
1	2		1-003884	WS@18 x 27'-0" LG, ROUGH CUT TO 27'-7" (COPE ONE END AS PER DETAIL #1)	SA-36	830#
2A	2		1-003884	WS@18 x 12'-6" LG (COPE ONE END AS PER DETAIL #1)	SA-36	450#
2B	1		1-003884	WS@18 x 12'-6" LG (COPE BOTH ENDS AS PER DETAIL #2)	SA-36	225#
3	2		1-003859	WS@15 x 6'-11 3/4" LG	SA-36	333#
4	1		1-003369	4" PIPE SCH XH x 7'-4 3/4" LG	SA-108B	85#
5	2		1-003369	4" PIPE SCH XH x 7'-1 1/4" LG	SA-108B	120#
6	2		2-000026	1/4" THK x 6 1/2" OD (TEMPLATE #12)	SA-36	5#
7	4		1-002521	4" x 4" x 1/8" HSS x 1'-9 7/8" LG (SEE DETAIL)	SA-36	32#
B	0.3		1-002184	(4 pcs) 8" x 1/4" THK x 1'-6" LG, ROLL TO 11'-10" ID	SA-36	40#



COPE DETAIL #1



COPE DETAIL #2

- GENERAL NOTES:**
- LADDER DESIGNED & FABRICATED TO:  
PIP AND OH&S REQUIREMENTS
  - WELD PROCEDURE: GM-1/MC-1
  - MPI REQUIRED PER 11.5.4.1 & 11.5.4.3 CSA W59 LATEST EDITION  
- 25% FILLET WELDS  
- 100% PULLBARS
  - EXTERNAL SANDBLAST: N/A
  - EXTERNAL FINISH: N/A
  - APPROXIMATE WEIGHT: 2,200 LBS

REV. NO.	DATE	REVISION	BY	APP'D
0	11/14/11	ISSUED FOR FABRICATION	DDD	

**BILTON**  
Welding & Manufacturing Ltd.

BOX 6106  
5815 37 Street  
INNISFAIL, AB  
CANADA  
403-227-7799  
1-888-227-4923  
FAX 227-7796

**BILTON WELDING & MANUFACTURING LIMITED**  
400 BBL STORAGE TANK  
STANDARD L SKID DETAIL

DATE: 01/17/11  
SHEET: 1 OF 1  
DRAWN BY: DDD  
PURCHASE ORDER: -  
LOCATION: -  
APP'D BY: -

SALE ORDER: -  
JOB ORDER: -  
11465  
DRAWING NO.:  
11465-1

SIZE: D  
REV.: 0

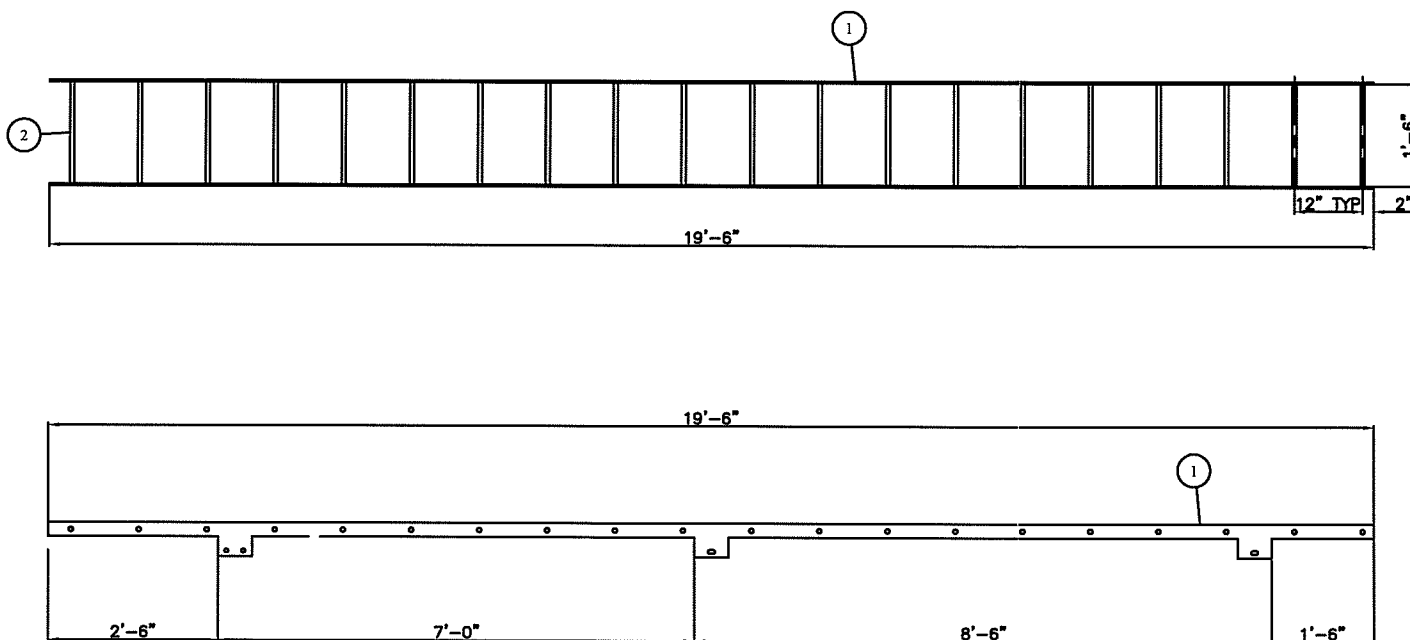
AS-BUILT

**GENERAL NOTES:**

1. LADDER DESIGNED & FABRICATED TO:  
PIP AND OH&S REQUIREMENTS
2. WELD PROCEDURE: GM-1/MC-1
3. EXTERNAL SANDBLAST: N/A
4. EXTERNAL FINISH: N/A
5. APPROXIMATE WEIGHT: 190 LBS

**BILL OF MATERIALS**

ITEM	QTY	REF.	PART No.	DESCRIPTION	MATERIAL	WEIGHT
1	2	LADDER	2-000044	RAIL: 3/8" THK x 234" LG	SA-36	140#
2	20	LADDER	1-006299	RUNGS: 3/4" HRR x 1'-6 3/4" LG	SA-36	48#



LADDER DETAILS

AS-BUILT

REV. NO.	DATE	REVISION	BY	APP'D
0	11/14/11	ISSUED FOR FABRICATION	DDD	

**BILTON**  
Welding & Manufacturing Ltd.

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**BILTON WELDING & MANUFACTURING LTD.**

400 BBL TANK LADDER DETAILS		
DATE: 01/17/11	SALE ORDER: -	
SHEET: 1 OF 1	JOB ORDER:	SIZE
DRAWN BY: DDD	11466	D
PURCHASE ORDER: -	DRAWING NO.:	REV.
LOCATION: -	11466-1	0
APP'D BY:		

FILE PATH: