

BILL OF MATERIAL

ITEM	QTY.	DESCRIPTION	CAD REF.
1	46m	W 310 x 60	G4021-44W
2	18m	W 150 x 22	G4021-44W
3	7m	C 200 x 17	G4021-44W
4	30m	ANGLE 75 x 75 x 6	G4021-44W
5	2.2m	ANGLE 25 x 25 x 5	G4021-44W
6	30.0m ²	PL CHECKERED 6mm THK	A-35
7	1	PL CHECKERED 900 x 205 x 6	A-35
8	1	PL 375 x 277 x 23 (CUT TO SUIT)	A-35
9	21.7m	PLAT BAR 75 x 6	A-35
10	3.1	60# PIPE SMLS. SCH. 80	A106-B
11	1	60# PIPE CAP. 300# NPT	A-234 B
12	1	GRATING W30-102 (19 x 4.8) 688 LG. x 438 HD.	A-35
13	4	PL 2310 x 63 x 13 (CUT TO SUIT)	A-35
14	1	PL 283 x 110 x 13 (CUT TO SUIT)	A-35
15	2	PL 277 x 228 x 10 (CUT TO SUIT)	A-35
16	16	PL 277 x 191 x 10 (CUT TO SUIT)	A-35
17	4	HEX BOLT 19 x 3/4 LG.	GR. 8
18	4	HEX NUT 19	GR. 8
19	8	FLATWASHER 19	GR. 8
20	1	PL 330x219x6	A-35
21	1	PL 550x70x6 (CUT TO SUIT)	A-35
22	2m	W 100 x 19	G4021-44W

- ### NOTES
- ALL WELDS form CONTINUOUS FILLETS UNLESS NOTED OTHERWISE.
 - ALL JOINING MEMBERS TO BE COPED.
 - ALL CHECKERED PLATE JOINTS TO BE MADE ON SUPPORTING MEMBERS AND JOINED WITH CONTINUOUS FULL PENETRATION WELDS.
 - CHECKERED PLATE TO BE STITCH WELDED ON UNDERSIDE OF SKID (50-150 CENTRES) TO SUPPORTING MEMBERS AND AROUND THE SKID PERIMETER.
 - PAINTING SPECIFICATION
 - SKID
 - SANDBLAST: SSPC-SP6 COMMERCIAL BLAST.
 - PRIME: ONE ((1)) COAT CLOVERDALE RUSTEX 71029 PRIMER
 - FINISH: ONE ((1)) COAT CLOVERDALE ENAMEL, COLOR WARM GREY 2553
 - PIPE SUPPORTS
 - SANDBLAST: SSPC-SP6 COMMERCIAL BLAST.
 - PRIME: ONE ((1)) COAT CLOVERDALE RUSTEX 71029 PRIMER
 - FINISH: ONE ((1)) COAT CLOVERDALE ENAMEL, COLOR GLOSS BLACK
 - ALL GRATING TO BE BANNED AROUND PERIMETER.
 - SKID MANUFACTURER TO SPRAY A 100mm THK. LAYER OF INSULATION TO UNDERSIDE OF SKID.
 - ALL PIPE SUPPORTS ARE TO BE WELDED DIRECTLY TO CHECKERED PLATE AFTER PIPING IS IN PLACE.

PERMIT STAMPS						
1	POST CONSTRUCTION ISSUE	LS	RD8	07.02.08		
0	ISSUED FOR CONSTRUCTION	LS	R08	06.02.23		
REVISION						
NO.	PROJECT	DSN	DRN	CHK'D	APP'D	DATE
1	64185	LS	LS	R08		07.02.08
0	64185	LS	DRN	CHK'D	APP'D	06.02.23

GENERAL NOTES:

- The construction program for this skid is the responsibility of the contractor. The contractor shall ensure that all materials and workmanship are in accordance with the specification and drawings. The contractor shall be responsible for obtaining all necessary permits and approvals.
- The contractor shall ensure that the skid is installed on a level and stable foundation. The skid shall be supported by the manufacturer's recommended supports.
- The contractor shall ensure that the skid is protected from damage during transport and installation. The skid shall be stored in a dry and secure area until it is ready to be installed.
- The contractor shall ensure that the skid is installed in accordance with the manufacturer's instructions. The skid shall be connected to the building's main gas line in accordance with the relevant codes and standards.

BY	DATE
LS	06.02.13
LS	06.02.13
RD8	06.02.23
APP'D	
L.S.D.	11-17-63-06 WSM

bdj
Bower Danbeger Robeth
Engineering Ltd.

FORT ENERGY CORP.
CLEARWATER GAS PLANT
INLET SKID #2 (STOCK UNIT)
STRUCTURAL STEEL DETAILS
DRAWING NUMBER D-43874-S-01-04
SCALE AS NOTED
REV 1

BUILDING SPECIFICATIONS

DESIGN NOTES

1. THE BUILDING SHALL BE DESIGNED FOR MIN. WIND LOADS OF 160 KMPH, SNOW LOADS OF 2 KPA AND AS PER THE LATEST EDITION OF THE AUSTRIAN BUILDING CODES.
2. ALL BOLTS, SCREWS, ETC. USED FOR FASTENING ALUMINUM TO ALUMINUM AND ALUMINUM TO STEEL SHALL BE AUSTENITIC STAINLESS STEEL OR COBALT PLATED.
3. PROVIDE PRE-DRILLED RUBBER OR NEOPRENE GASKETS STRIPS DESIGNED TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION BETWEEN PANELS AND ADJOINING INSTALLATIONS.

GENERAL NOTES

- NOTES WHICH ARE APPLICABLE TO THIS JOB WHEN SHADDED.
- SIGNOTES WHICH ARE APPLICABLE WHEN SHADDED.

TYPE OF BUILDING

- SELF FINISHING - SHED
- SELF FINISHING - CABLE
- ROOF FINISHING - CABLE

- MATERIAL - WALL AND ROOF PANELS (22 GA. MIN)**
- GALVANIZED
- ALUMINUM
- PRE-PAINTED STEEL

- COLOR:** WALLS STONE GRAY OC-8305 ROOF STONE GRAY OC-8305
- DOORS STONE GRAY OC-8305 TRAIL STONE GRAY OC-8305

- ROOF SLOPE**
- 1:12
- 2:12
- 3:12
- 4:12
- 5:12

- INSULATION - FIBREGLASS**
- R-10
- R-12
- R-14
- 3 LB./CU.FT. DENSITY SOUND
- R-10
- R-12
- R-20
- 3 LB./CU.FT. DENSITY SOUND

- DOORS - 20 GA METAL, INSULATED (NOMINAL SIZES)**
- 1. 914x2134
- WS
- W6W
- PH
- LS
- DC
- SF
- CC
- CP
- 1200x2134
- WS
- W6W
- PH
- LS
- DC
- SF
- CC
- CP

- WINDOWS - HORIZONTAL SLIDING c/w SCREEN (DOUBLE GLAZED)**
- 1016x1016
- 1016x1270
- 1016x1524
- WIRE GLAZED

- LINING**
- 24 GA FLUTED ALUMINUM
- 22 GA PERFORATED ALUMINUM

- ERECTOR**
- ON SITE BY BUILDING MANUFACTURER
- AT FAB. SHOP BY BUILDING MANUFACTURER
- ON CONCRETE FOUNDATION (BY OTHERS)
- ON STRUCTURAL STEEL SHED (BY OTHERS)

- WALL LOUVERES (NOMINAL SIZES)**
- 2-305 SQ.
- STAMPED LOUVER c/w SLIDE CLOSURE AND SCREEN
- ADJUSTABLE LOUVER c/w MANUAL CONTROL AND SCREEN

- RIDGE VENTILATOR**
- RIDGE VENTILATOR c/w MANUAL CONTROLS AND BRIGSCREEN

- ROLL-UP DOORS / SECTIONAL O/H DOORS / SLIDING DOORS**
- STEEL ROLL-UP DOOR
- DIRECT DRIVE CHAIN HOIST
- STEEL SECTIONAL O/H DOOR
- GEARED CHAIN HOIST
- STEEL SLIDING DOOR
- MANUAL OPER. CHAIN HOIST
- INSULATED
- WINDOWS

- FANS - ROOF/WALL**
- ROOF
- WALL
- DETECTIVE GREEN FIN CAPABLE OF PROPAGATING A MIN. OF 13 AIR CHANGES/HOUR AT 1/8" SF c/w BACK DRAFT DAMPERS. ALL AIR HOUSING AND BERSCREENED. MOTOR TO BE CSA APPROVED. ALL ELECTRICAL WIRING TO BE IN CONFORMANCE WITH THE CANADIAN ELECTRICAL CODE. EXTERNALLY MOUNTED. FAN DOWN.

- POLYETHYLENE VAPOUR BARRIER**
- 2 MIL
- 4 MIL
- 6 MIL

- RIGID FRAME - ANCHOR BOLTS/GIRTS**
- COLUMN STEEL ANCHOR BOLT SIZES AND LOCATIONS TO BE SUBMITTED TO THE MANUFACTURER FOR APPROVAL. SEE FOUNDATION DRAWING TO ALLOW FOR COMPLETION OF FOUNDATION DRAWING. BUILDING DRAWING TO BE SUBMITTED WITHIN 5 DAYS AFTER AWARD OF CONTRACT.
- GIRTS TO BE LOCATED INSIDE BUILDING COLUMNS

- CRANE**
- 3 TON BRIDGE CRANE c/w MANUALLY OPERATED CHAIN HOIST
- MAN. HOOK HEIGHT _____

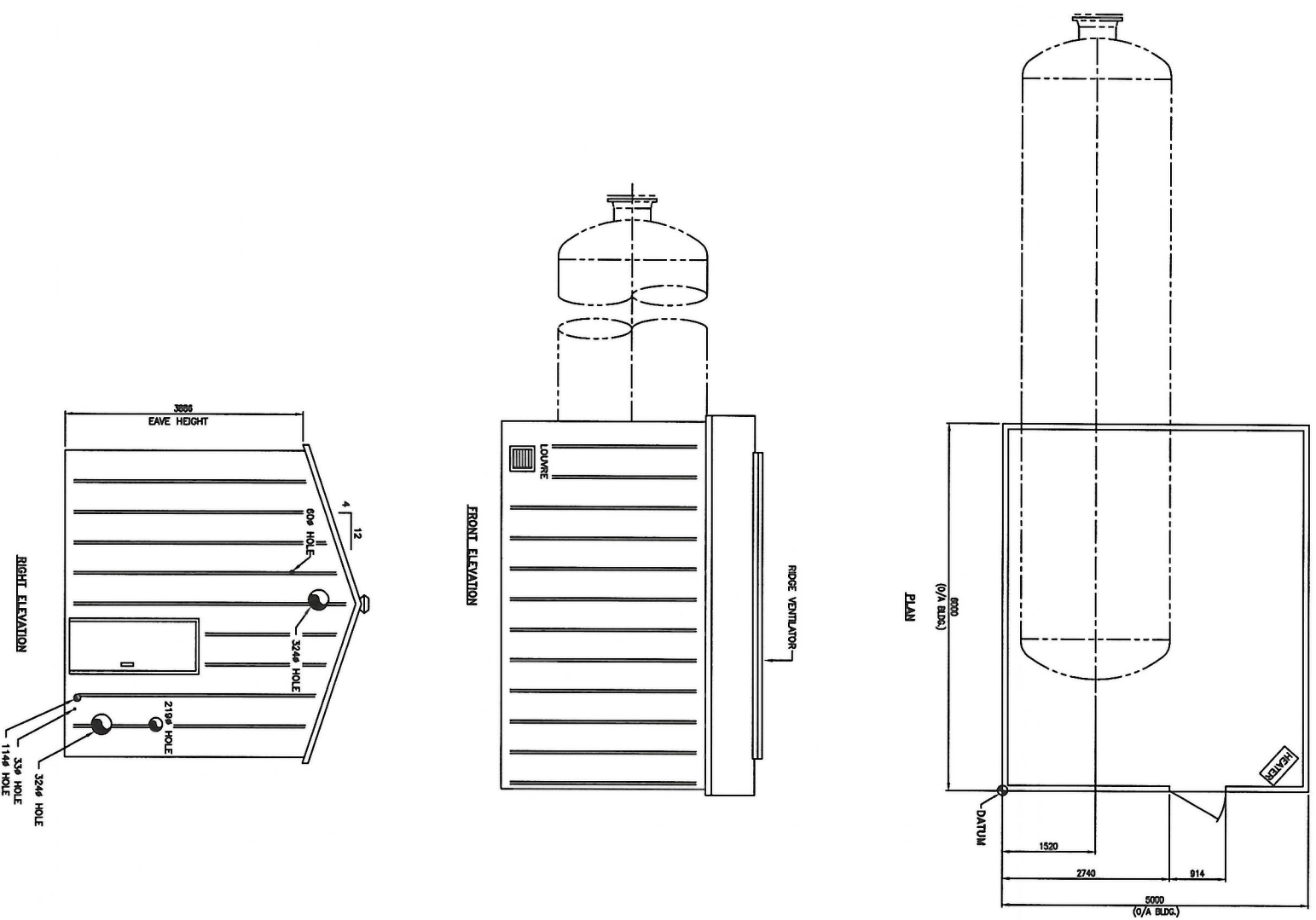
- EAVESTROUGH, DOWNSPOUT AND ICE RAKES**
- EAVESTROUGH
- DOWNSPOUT
- ICE RAKES

FORT ENERGY CORP.

CLEARWATER GAS PLANT
INLET SKID #2
BUILDING DETAILS

SCALE 1 : 50 DRAWING NUMBER D-43874-B-01-04

NOTE:
1. BUILDING DRAWING MUST BE APPROVED BY B.D.R. ENGINEERING LTD. BEFORE FABRICATION BEGINS.



PERMIT STAMP

NO.	ISSUED FOR INFORMATION	REVISION	PROJECT	DSN	LS	AV	ROB	CHK'D	APP'D	DATE
1	POST CONSTRUCTION ISSUE		64165	LS	AV					07.02.06
0	ISSUED FOR INFORMATION		64165	LS	LS					06.02.23

GENERAL NOTES

1. THE BUILDING SHALL BE DESIGNED FOR MIN. WIND LOADS OF 160 KMPH, SNOW LOADS OF 2 KPA AND AS PER THE LATEST EDITION OF THE AUSTRIAN BUILDING CODES.
2. ALL BOLTS, SCREWS, ETC. USED FOR FASTENING ALUMINUM TO ALUMINUM AND ALUMINUM TO STEEL SHALL BE AUSTENITIC STAINLESS STEEL OR COBALT PLATED.
3. PROVIDE PRE-DRILLED RUBBER OR NEOPRENE GASKETS STRIPS DESIGNED TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION BETWEEN PANELS AND ADJOINING INSTALLATIONS.

DESIGN	BY	DATE
LS	LS	06.02.13
LS	LS	06.02.13
ROB	ROB	06.02.23
LS	LS	11-17-83-06 WSM

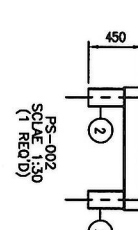
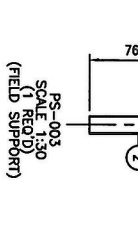
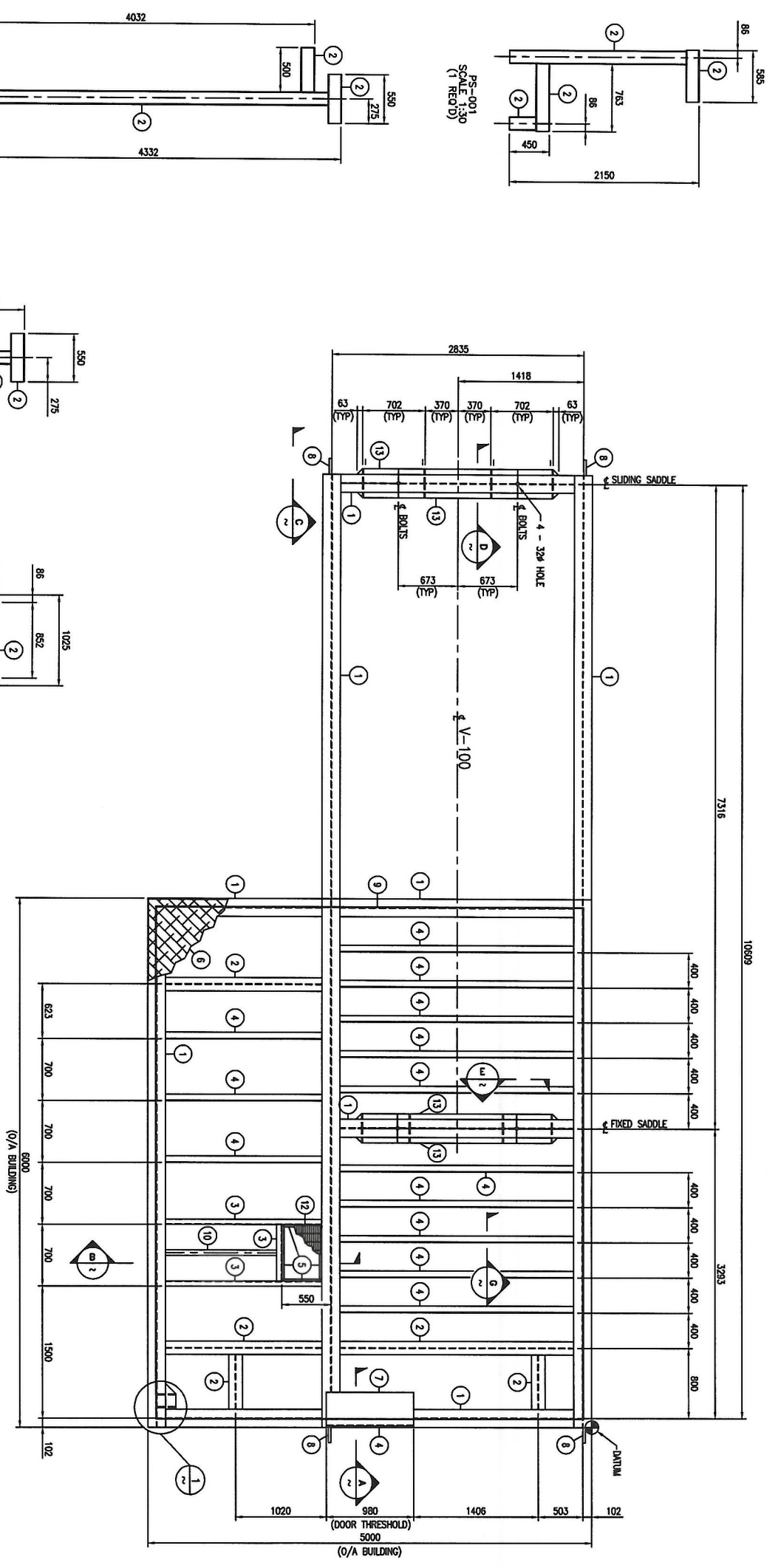


ITEM	QTY.	DESCRIPTION
1	4.5m	W 310 x 60
2	1.5m	W 150 x 22
3	4.5m	C 200 x 17
4	35.5m	ANGLE 75 x 75 x 6
5	2.2m	ANGLE 25 x 25 x 5
6	28.8m ²	PL CHECKERED 6mm THK
7	1	PL CHECKERED 800 x 305 x 6
8	4	FL 575 x 270 x 25 (CUT TO SUIT)
9	21.7m	FLAT BAR 76 x 6
10	1.7	60# PIPE SMLS. SCH. 80
11	1	60# PIPE CAP 300# HT
12	1	GRATING MSX-102 (19 x 4.8) 631 LG x 435 WD.
13	4	FL 227.5 x 80 x 13 (CUT TO SUIT)
14	4	FL 255 x 110 x 13 (CUT TO SUIT)
15	2	FL 277 x 208 x 10 (CUT TO SUIT)
16	18	FL 277 x 181 x 10 (CUT TO SUIT)
17	4	HEX BOLT 19 x 3 3/4 LG
18	4	HEX NUT 19
19	8	FLANWASHER 19

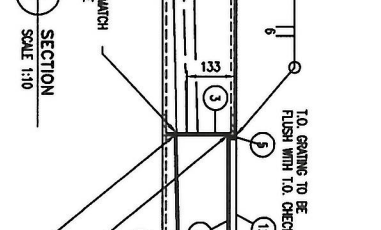
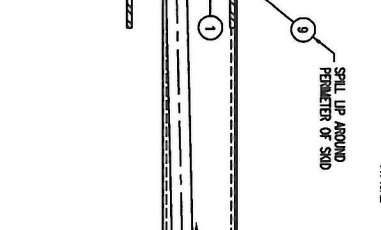
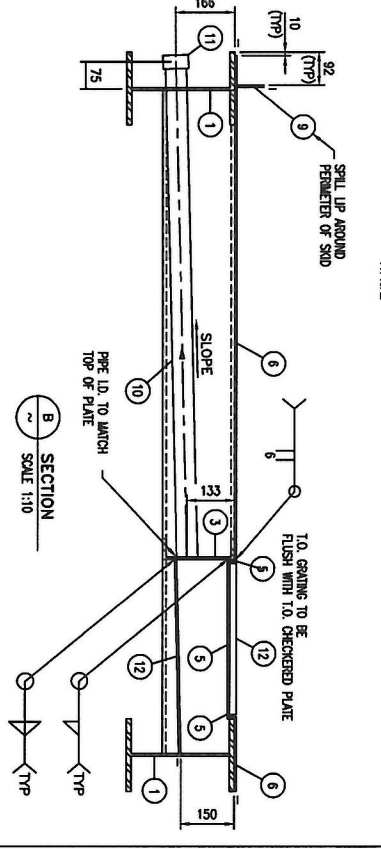
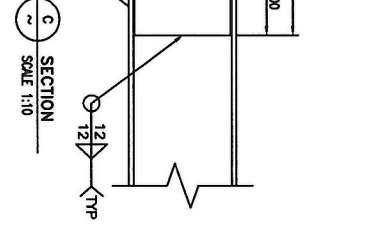
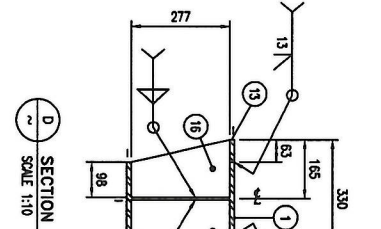
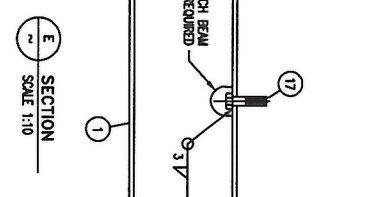
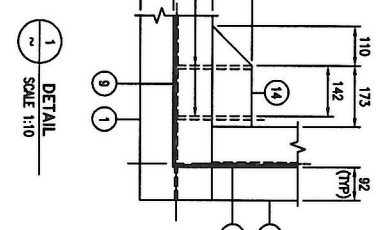
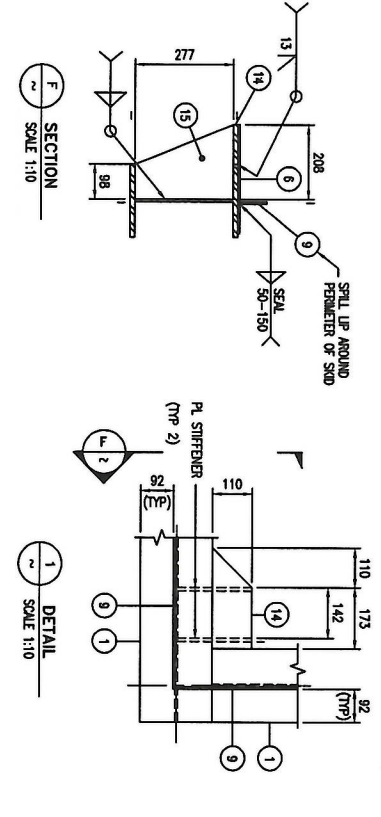
BILL OF MATERIAL

NOTES

1. ALL WELDS form CONTINUOUS FILLETS UNLESS NOTED OTHERWISE.
2. ALL JOINING MEMBERS TO BE COPED.
3. ALL CHECKERED PLATE JOINTS TO BE MADE ON SUPPORTING MEMBERS AND JOINED WITH CONTINUOUS FULL PENETRATION WELDS.
4. CHECKERED PLATE TO BE STITCH WELDED ON UNDERSIDE OF SKID (50-150 CENTRES) TO SUPPORTING MEMBERS AND AROUND THE SKID PERIMETER.
5. PAINTING SPECIFICATION
 SKID
 SANDBLAST: SSPC-SPE COMMERCIAL BLAST.
 PRIMER: ONE (1) COAT CLOVERDALE RUSTEX 71029 PRIMER
 FINISH: ONE (1) COAT CLOVERDALE ENAMEL, COLOR WARM GREY 2553
 PIPE SUPPORTS
 SANDBLAST: SSPC-SPE COMMERCIAL BLAST.
 PRIMER: ONE (1) COAT CLOVERDALE RUSTEX 71029 PRIMER
 FINISH: ONE (1) COAT CLOVERDALE ENAMEL, COLOR GLOSS BLACK
 ALL GRATING TO BE BANNED AROUND PERIMETER.
6. ALL GRATING TO BE BANNED AROUND PERIMETER.
7. SKID MANUFACTURER TO SPRAY A 100mm THK. LAYER OF INSULATION TO UNDERSIDE OF SKID.
8. ALL PIPE SUPPORTS ARE TO BE WELDED DIRECTLY TO CHECKERED PLATE AFTER PIPING IS IN PLACE.



PLAN SCALE 1:30 (O/A BUILDING)



NO.	ISSUED FOR CONSTRUCTION	REVISION
0	ISSUED FOR CONSTRUCTION	REVISION

GENERAL NOTES
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND THE DEPARTMENT OF ENVIRONMENT AND HERITAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND THE DEPARTMENT OF ENVIRONMENT AND HERITAGE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND THE DEPARTMENT OF ENVIRONMENT AND HERITAGE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES AND THE DEPARTMENT OF ENVIRONMENT AND HERITAGE.

DESIGN	BY	DATE
TVB	TVB	05.05.06
CHK'D <td>SW</td> <td>05.05.06</td>	SW	05.05.06
APP'D <td>SW</td> <td>05.05.18</td>	SW	05.05.18
L.S.D. <td>11-17-03-06</td> <td>WJSM</td>	11-17-03-06	WJSM

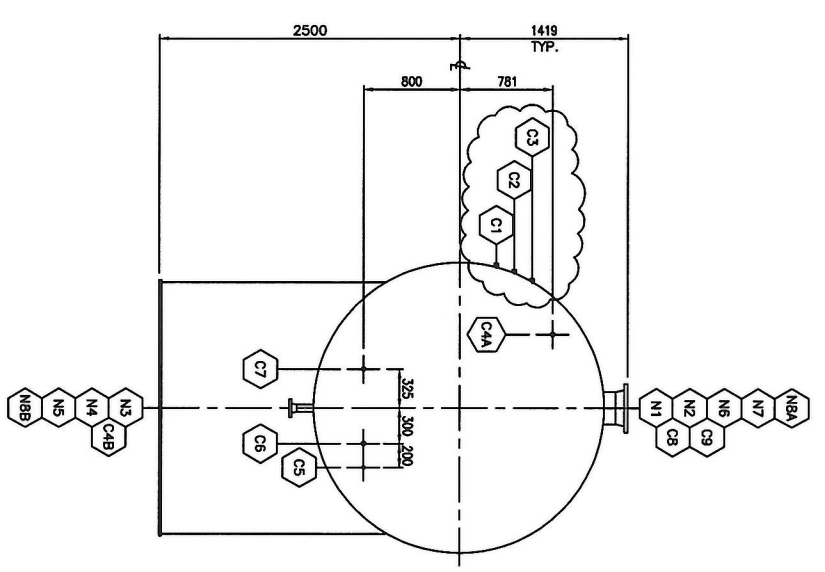
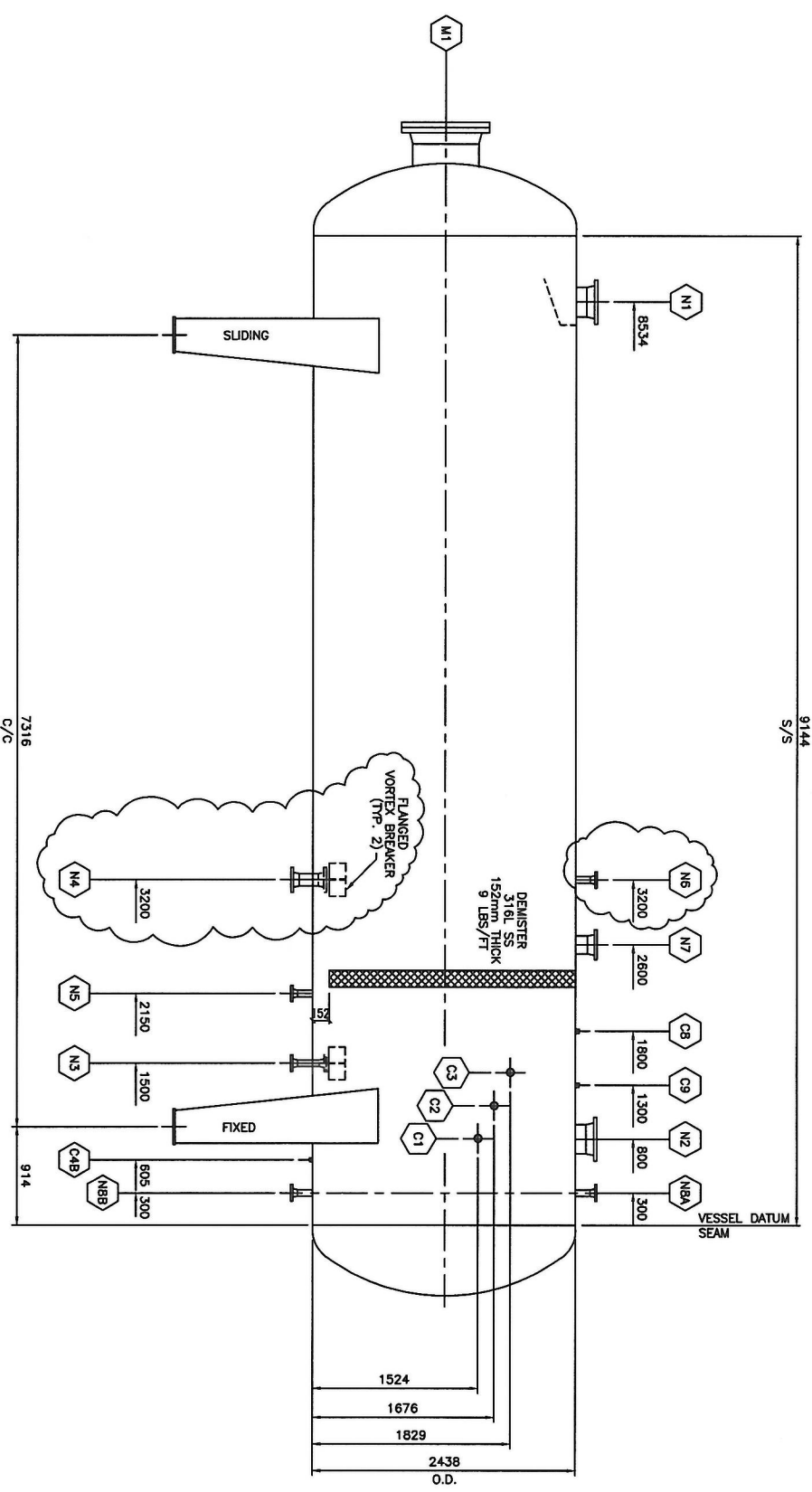


SCALE
AS NOTED
D-43874-S-01-01
REV
0

FORT ENERGY CORP.

CLEARWATER GAS PLANT
INLET SKID
STRUCTURAL STEEL DETAILS
DRAWING NUMBER

ITEM	QUANTITY	SIZE	RATING	TYPE	DESCRIPTION
M1	1	324	150 ANSI	RFWN	INLET
N2	1	324	150 ANSI	RFWN	GAS OUTLET
N3	1	60	150 ANSI	RFWN	LIQUID OUTLET
N4	1	114	150 ANSI	RFWN	LIQUID OUTLET
N5	1	60	150 ANSI	RFWN	DRAIN
N6	1	60	150 ANSI	RFWN	OVERHEADS INLET
N7	1	114	150 ANSI	RFWN	SPARE
N8A	1	60	150 ANSI	RFWN	LT
N8B	1	60	150 ANSI	RFWN	LT
C1	1	60	3000#	T.O.L	LSH
C2	1	60	3000#	T.O.L	LSH (FUTURE)
C3	1	60	3000#	T.O.L	LSH (FUTURE)
C4A	1	27	3000#	T.O.L	LG
C4B	1	27	3000#	T.O.L	LG
C5	1	21	3000#	T.O.L	PI
C6	1	27	3000#	T.O.L	TI
C7	1	33	3000#	T.O.L	PT
C8	1	33	3000#	T.O.L	SPARE
C9	1	33	3000#	T.O.L	SPARE
M1	1	610	150 ANSI	RFWN	MANWAY



ACCESSORIES	REQ'D	MATERIAL
DEMISTER/REMOVABLE SUPPLIED BY/INSTALLED BY	ONE	316L SS
TRAYS SUPPLIED BY/INSTALLED BY	---	---
TRAYS SUPT RINGS	---	---
EXTENDED DOWNCOMERS	---	---
BAFFLE WEIRS	---	---
INTERNAL HEAD	---	---
SKIRT ACCESS OPENING	---	---
PACKING SUPPORT PLATE	---	---
VORTEX BREAKER	2	316L SS
INLET BAFFLE	ONE	316L SS
D.C CLAMPING BARS	---	---
INTERNAL LADDER	---	---
INTERNAL NOZZLE RISER	---	---
REDISTRIBUTERS	---	---
LADDER W/NO GAGE/CLIPS	---	---
MANWAY DAVITS/HINGES	ONE	A-106B
LIFTING LUGS	---	---
BASE PLATES	---	---
OVERHEAD PIPE SUPPORTS	---	---
PIPE CLIPS & GUIDES	---	---
PLATFORM/CLIPS	---	---
PLATFORM DAVIT FOR TOP COVER/TRAYS	---	---
SKIRT	---	---
INSULATION RINGS/THICKNESS	---	---
SKIRT VENTS	---	---
FLOAT HOOD	---	---
DRAIN BOOT	---	---

NOTE:
 1. VESSEL TO BE INTERNALLY COATED AS PER FORT ENERGY CORP. PAINT SPECIFICATION.
 2. ALL THREADED CONNECTIONS TO BE STAINLESS STEEL.

NO.	ISSUED FOR APPROVAL	REVISION	PROJECT	DSN	DRN	CHK'D	APP'D	DATE
0	ISSUED FOR APPROVAL		43874	EB	EB			05.04.11
1	ISSUED FOR BID		43874	TVB	TVB			05.04.21
2	GENERAL REVISION		43784	TVB	TVB	SW		05.05.18
3	REVISED NS LOCATION		43874	EB	EB			05.05.24
4	REVISED N4, N6, C1, C2 AND C3 LOCATION		43874	TVB	TVB			05.05.25

PERMIT STAMP

DESIGN	BY	DATE
DESIGN	EB	05.03.21
DRAWN	EB	05.03.21
CHK'D	SW	05.05.18
APP'D		
L.S.D.	11-17-83-06	WEM

Fort Energy Corporation
 CLEARWATER
 GAS PLANT
 V-100 INLET SEPARATOR VESSEL SKETCH
 DRAWING NUMBER
 D-43874-SK-00-01

SCALE	REV
1 : 30	4