



Packing Procedure- GTTP PWCU- Siemens Energy

1. Packing Procedure for below skids

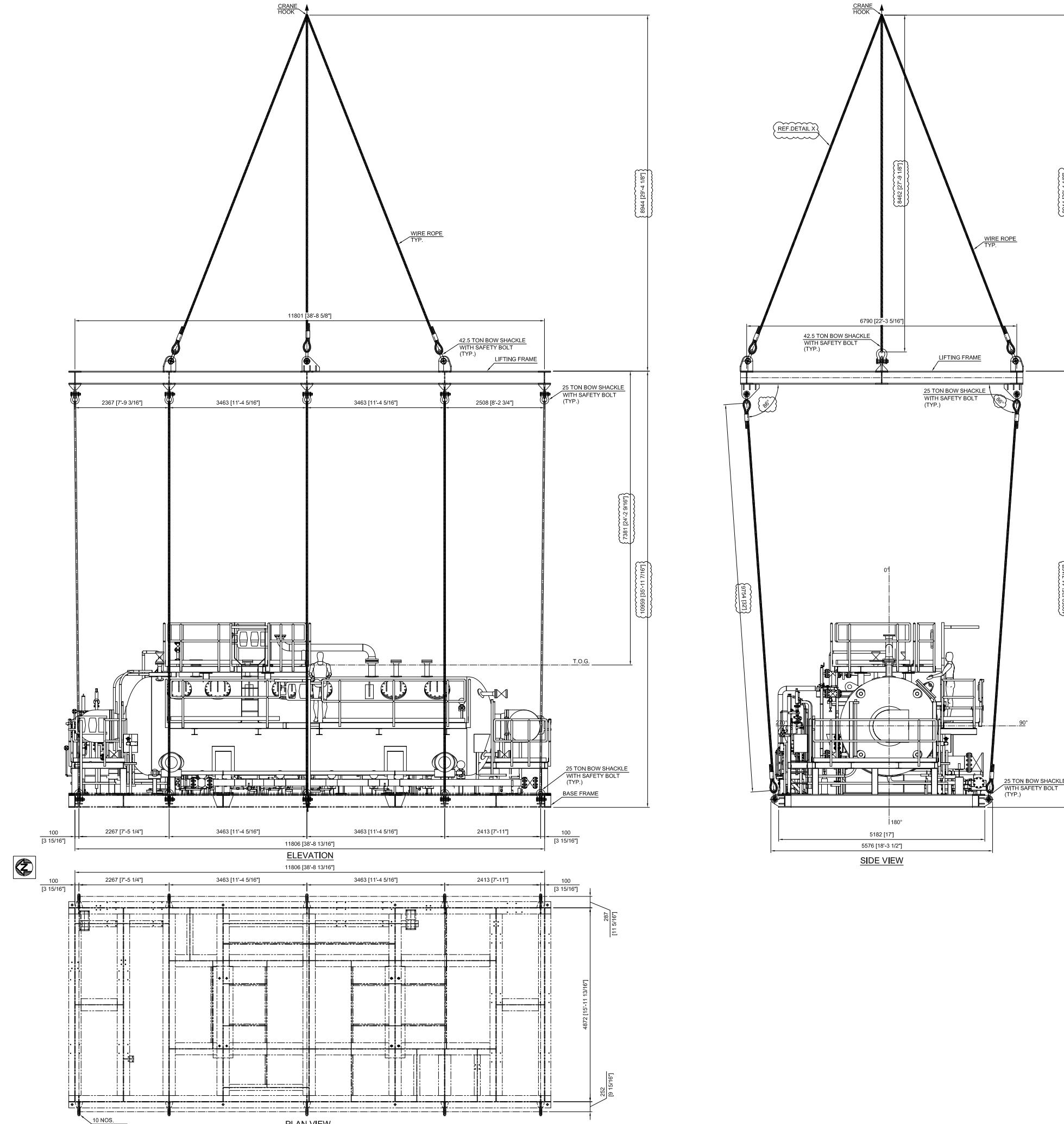
- Pump Skid-01
- Pump Skid -02

- The base of each box will be fabricated using ISPM15 compliant Pine wood planks & runners to ensure better load bearing capacity.
- The equipment to be packed will be bolted to the wooden base frame to arrest its movement in transit so as to ensure its safety.
- The 4 side walls & Top of each box will be fabricated using Moisture resistant grade 10mm Thick plywood aided with Pine wood batten support.
- Each box will be internally lined with waterproof HDPE lining & also externally covered at the top with HDPE lining.
- The base frame of the box will be covered with Aluminium Barrier foil sheet.
- The items inside the box will be soft wrapped using Bubble & stretch film.
- The sharp edges will be sparingly padded with Bubble sheet.
- Next a bag made from Aluminium barrier foil will be used to cover the entire equipment.
- This bag will then be heat sealed to the base frame aluminium barrier foil sheet after sucking out the air inside the box using blowers.
- After sucking the air the aluminium barrier foil bag will stick to the equipment post which it will be sparingly wrapped with stretch cling film.
- Sufficient desiccant bags will be placed inside the boxes for moisture absorption.
- Standard shipping marks like Fragile, Umbrella, Arrow, Siling, CG etc will be stencilled on 2 sides of each box.
- Sufficient cross wooden bracings will be provided inside the box to ensure smooth loading/unloading activities.
- One inspection window If required will be provided on one side of the box to help aide customs inspection.
- Finally, 12 L-Corners shall be externally nailed to each box for added strength.
- M S Angles to assist while lifting the packed cargo shall be provided for each box.
- One Packing list holder will be externally nailed to each box.
- Fumigation of box as per ISPM – 15 standards & its certification will be done.
- Please find attached packed skid Image packed by us to the utmost satisfaction of our clientele for your kind & immediate attention.



5.Packing Style and Sketch Drawing

I. Induced Gas Flotation (IGF)- Skid and Platform Handrail and Ladder



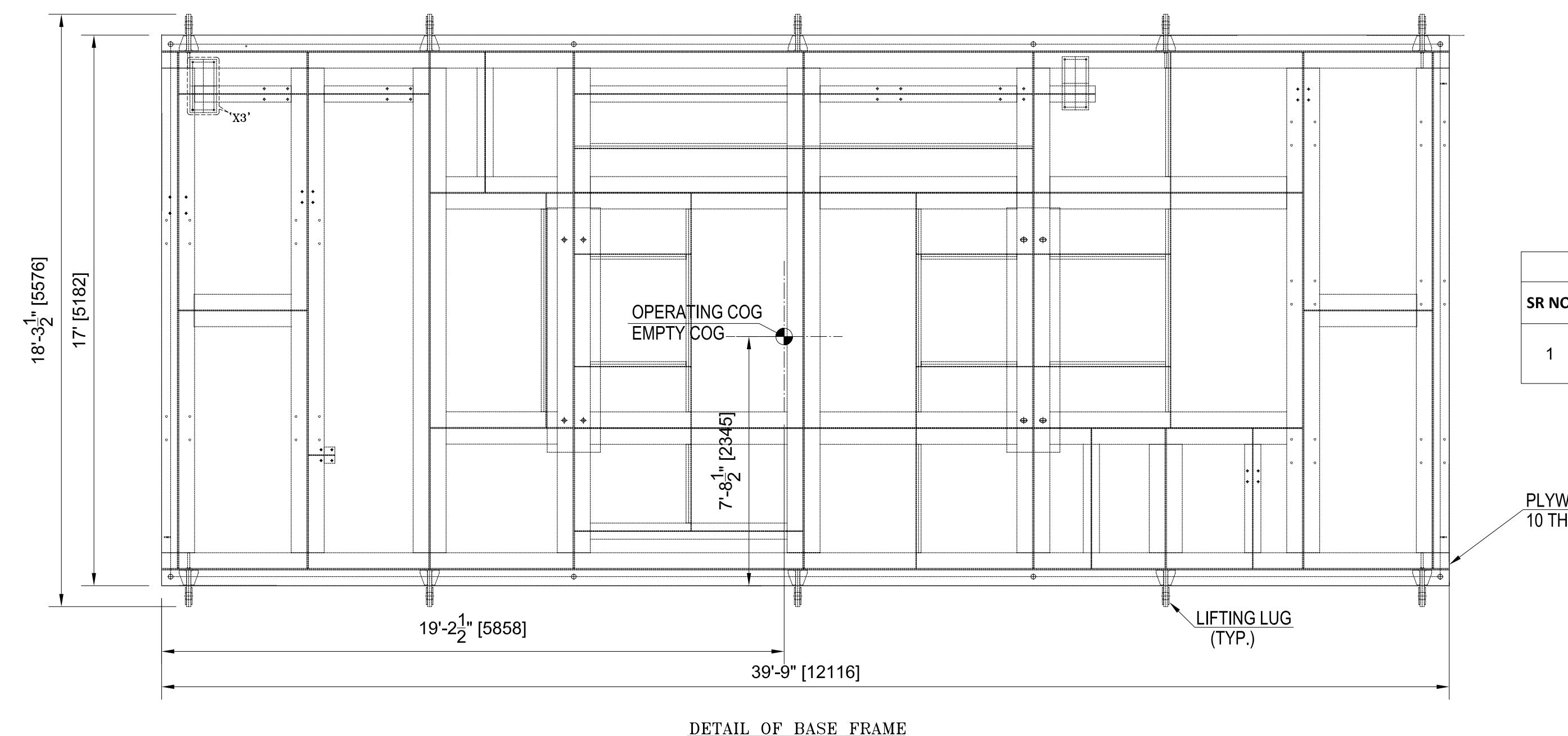
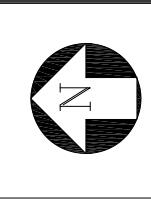
GENERAL NOTES:-					
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.					
2. ALL LIFTING TO BE CARRIED OUT AT SHOP.					
3. ALL STRUCTURE MATERIAL OF CONSTRUCTION IS CARBON STEEL AS PER					
4. BOW SHACKLE BN: G4163					
DETAIL : X ROPE TRUE LENGTH					
FOR LIFTING ARRANGEMENT BOM REFER LIFTING ARRANGEMENT DRAWING OF AWS FILTER (10-V-2401A/B/C)					

REV	DATE	DESCRIPTION	PREPD	CHKD	APP'D
1	31/05/2024	FC	MMP	MBK	AKK
0	08/01/2024	ISSUED FOR APPROVAL	MMP	MBK	AKK



VENDOR NAME	SIEMENS ENERGY
PURCHASER JOB CODE	PURCHASE ORDER NO. 0-8936-2
Golden Triangle Polymers Company LLC Golden Triangle Polymers Project	
ETHYLENE UNIT - 10	
EQUIPMENT NAME / ITEM TAG NO. QUENCH AREA PROCESS WATER CLEAN-UP UNIT/10-V-2400	
DOCUMENT TITLE LIFTING ARRANGEMENT DRAWING FOR IGF VESSEL (10-V-2400)	
COMPANY DWG. NO.	
CONTRACTOR DWG. NO. V-215A-201-A-PLN-701	
SCALE 1:40	
VENDOR DWG. NO. SEI-PLN-701	SHEET 01 OF 07
SIZE A	REV. 1

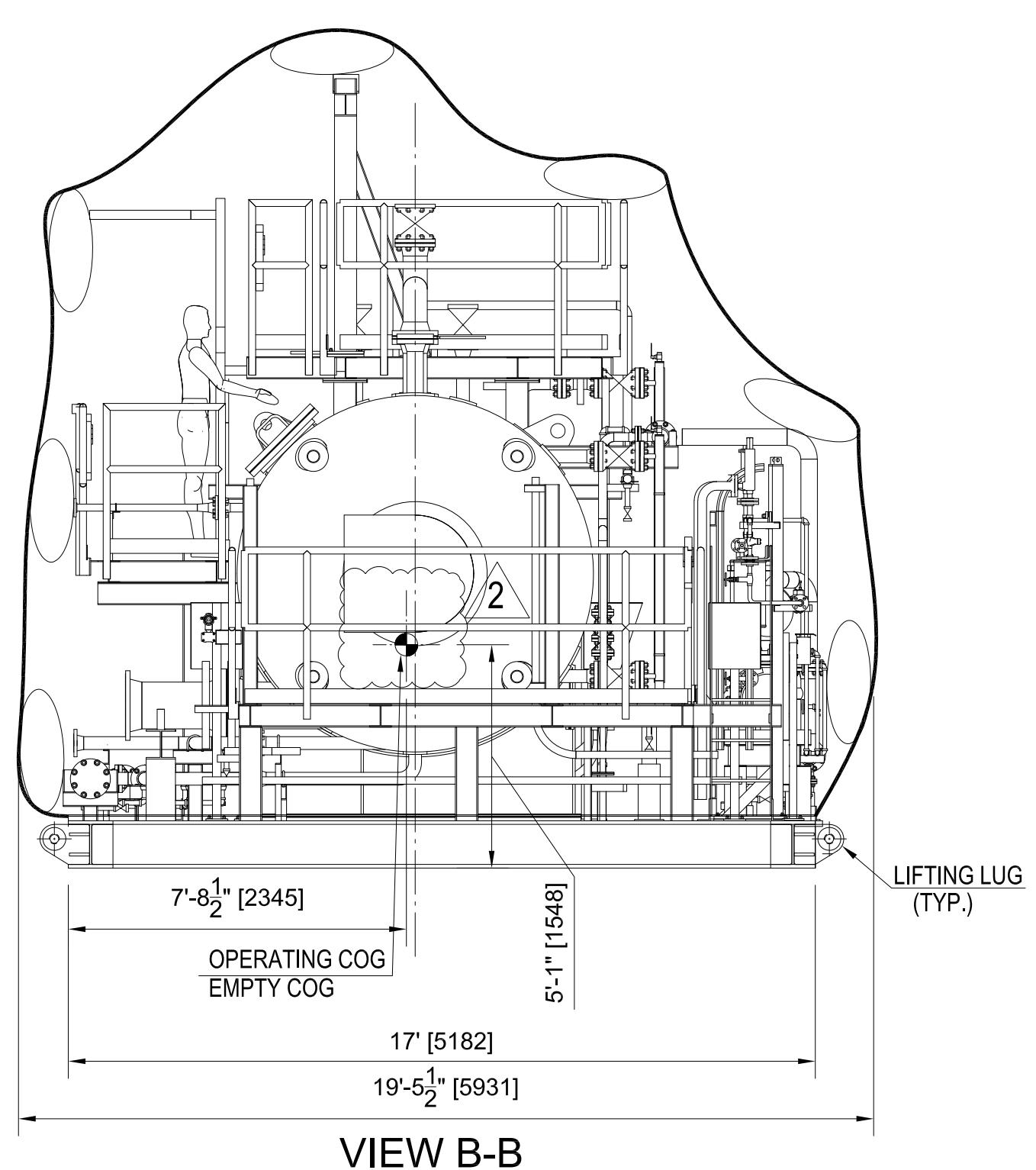
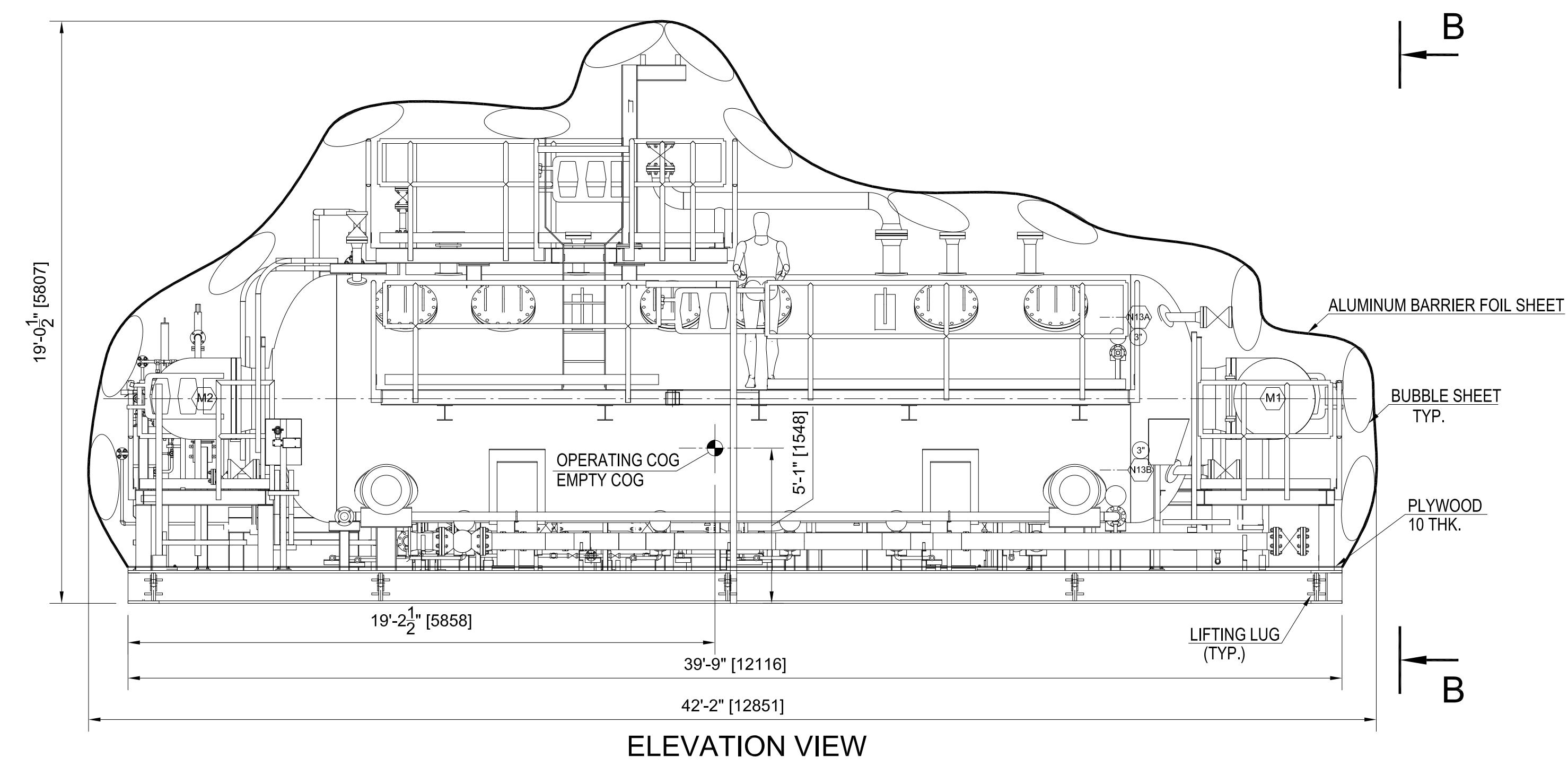
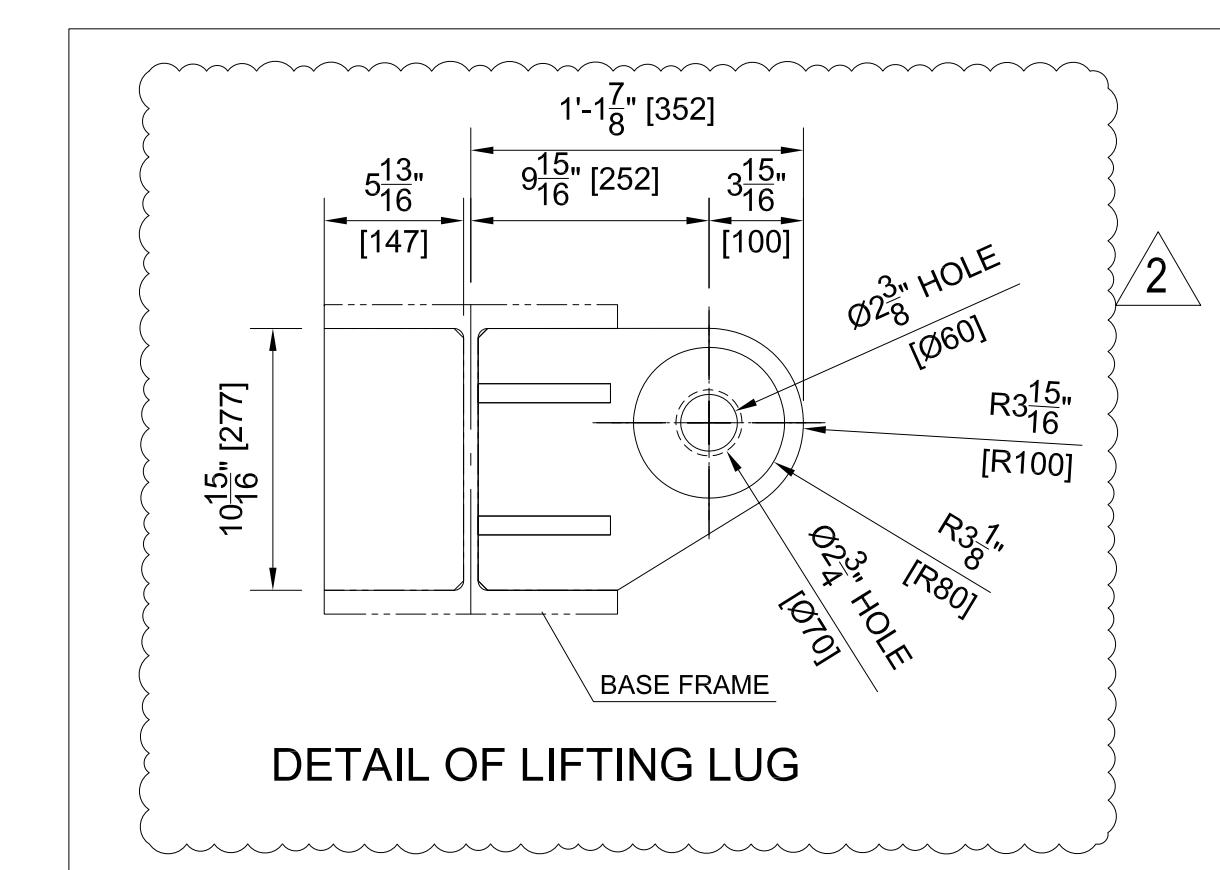
DWG. NO.	DESCRIPTION



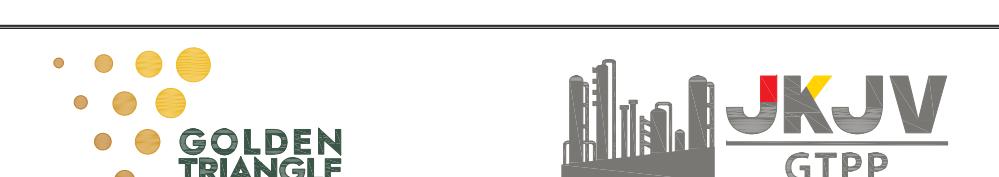
MATERIAL SPECIFICATION

- 1.Kiln Dried Pinewood as per ISPM 15 norms
- 2.Marine plywood which is moisture resistant upto 10 MM
- 3.Desiccant is clay based with high absorption capacity
- 4.HDPE is 185 to 200 gsm
- 5.Stretch Film is 22 micron
- 6.Bubble roll is 70 micron

SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Net Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	Induced Gas Flotation (IGF)- Skid and Platform Handrail and Ladder	42' 2" [12851] X 19' 5 1/2" [5931] X 19' 1/2" [5807] HT	43 Ton /94798.8 lbs	40.17*18.34 = 736.7178 sq ft	43/736.7178 = 0.058367 ton/ft ² /116.734 lbs/ft ²



2	20-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D



VENDOR NAME

SIEMENS
energy

PURCHASER JOB CODE PURCHASE ORDER NO.

0-8936-2 P-215A-201-A

Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO. 10-X-2400

DOCUMENT TITLE PACKING FOR IGF SKID (10-V-2400)

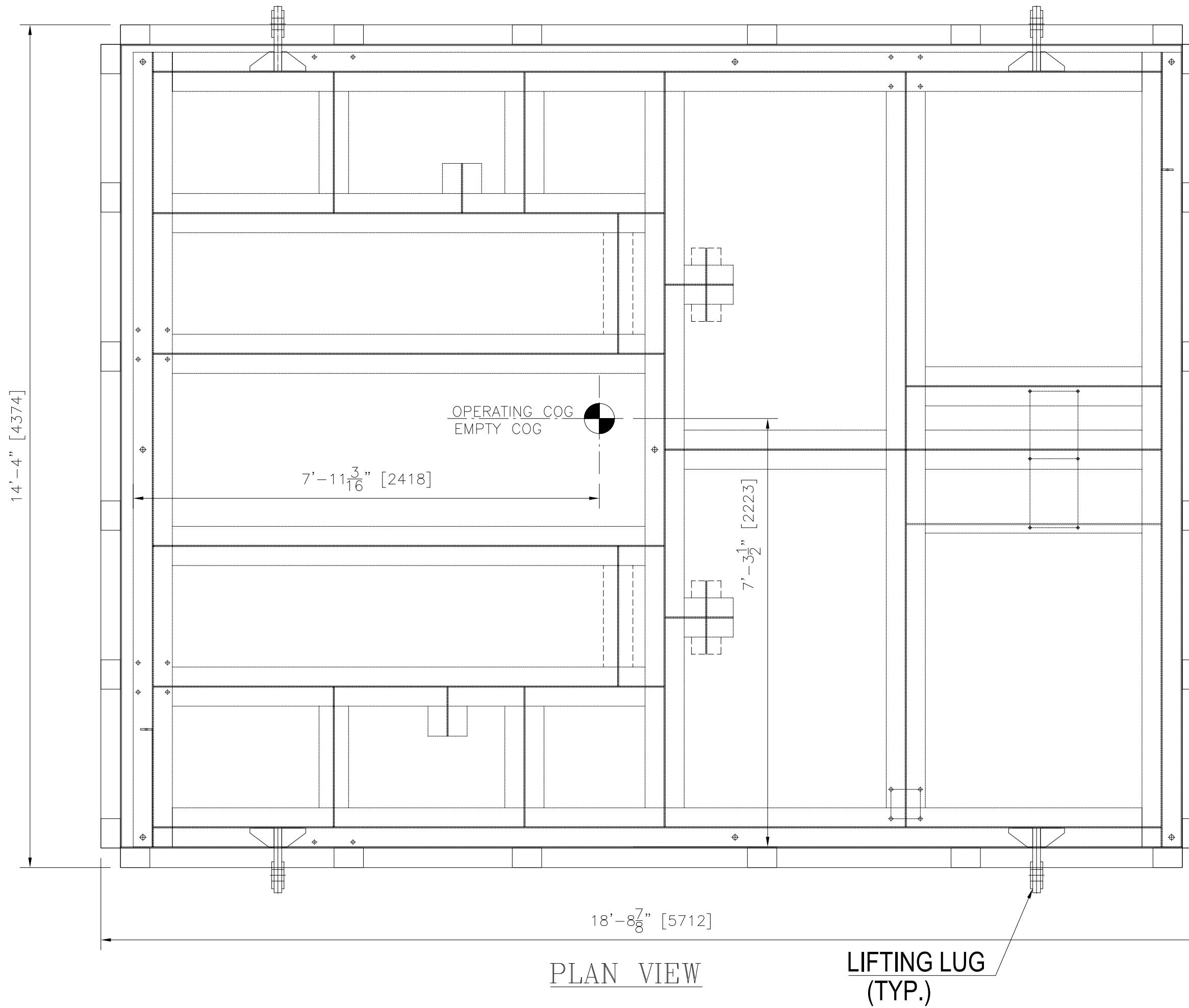
COMPANY DWG. NO.

CONTRACTOR DWG. NO. - SCALE 1:40

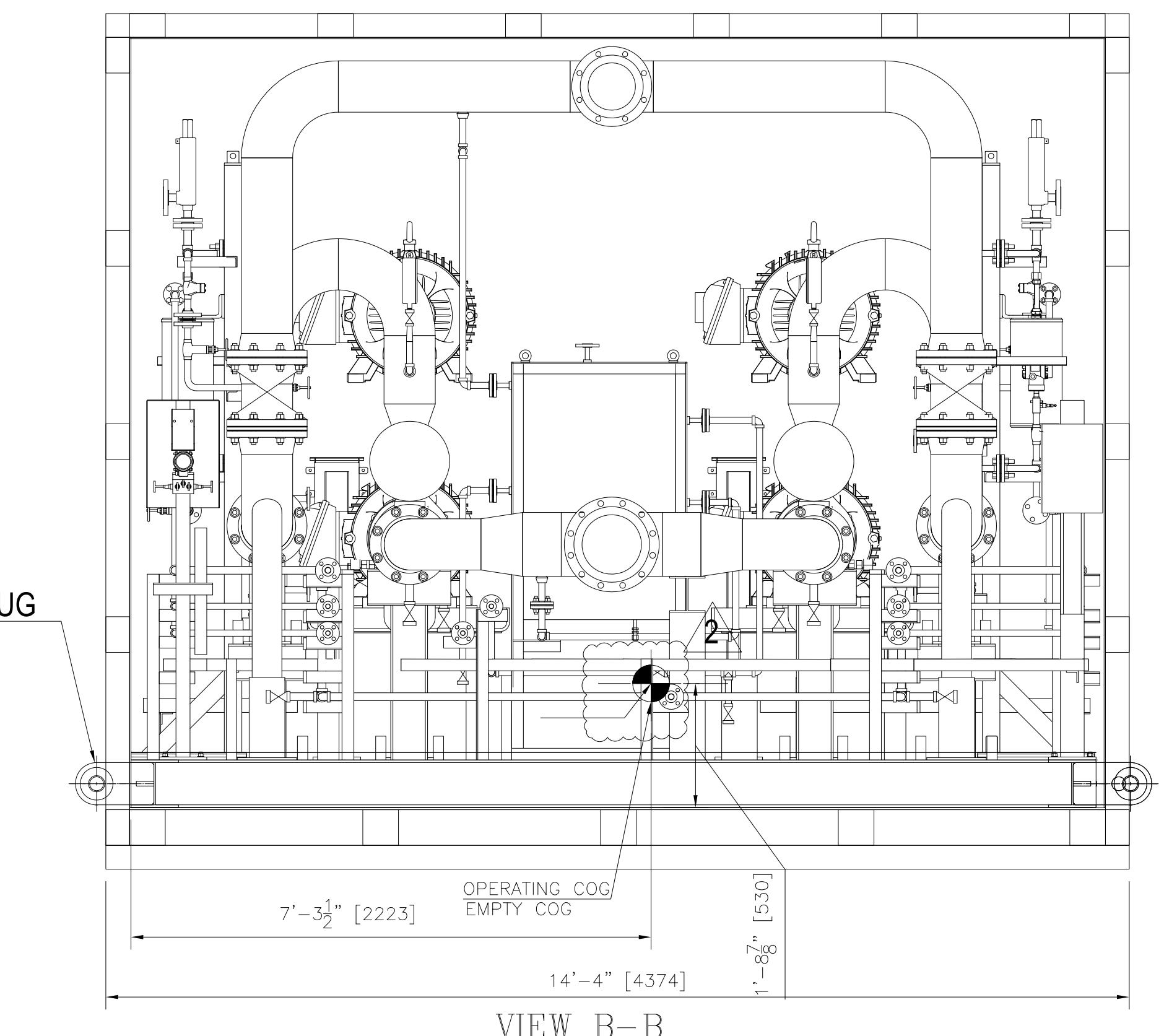
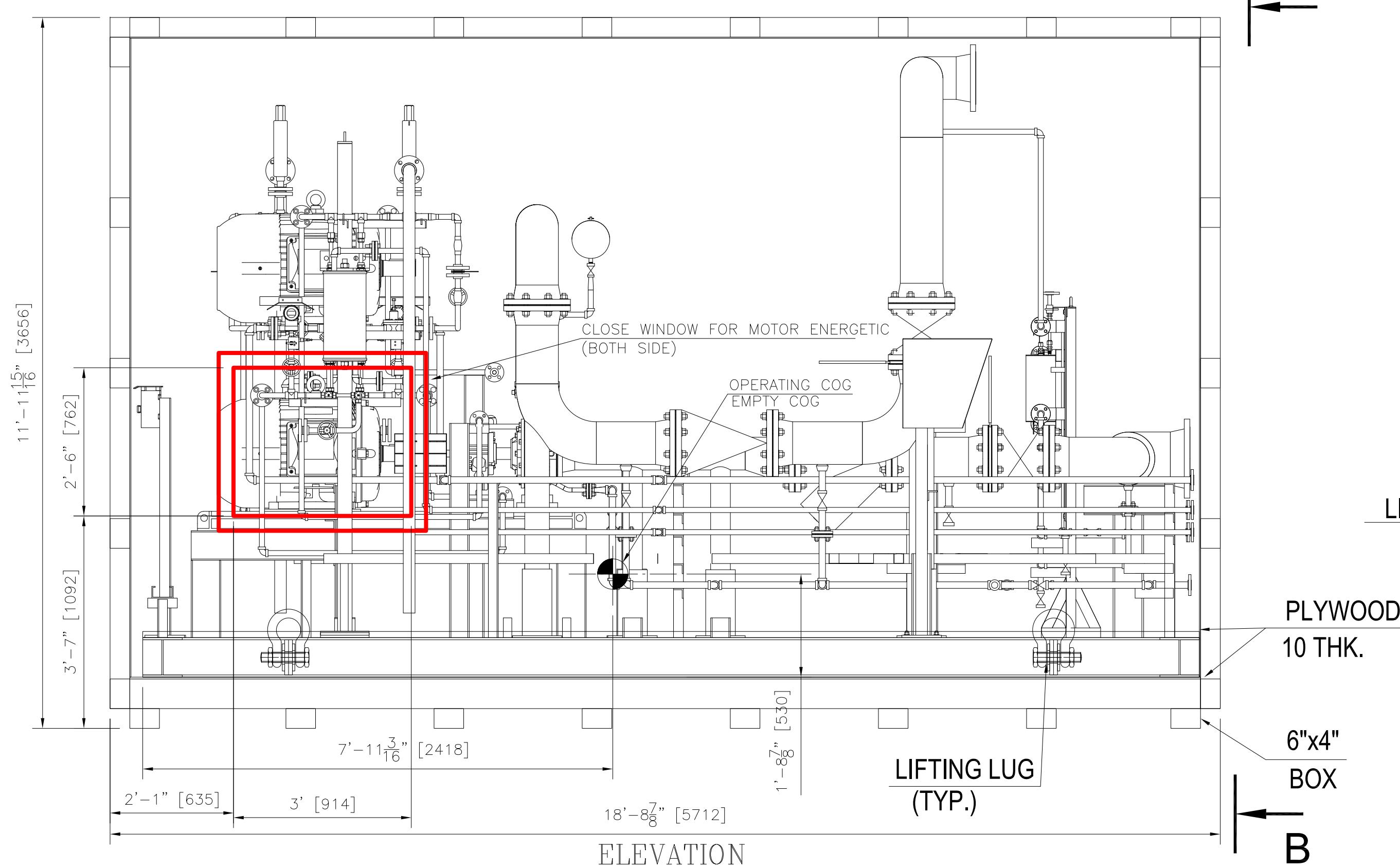
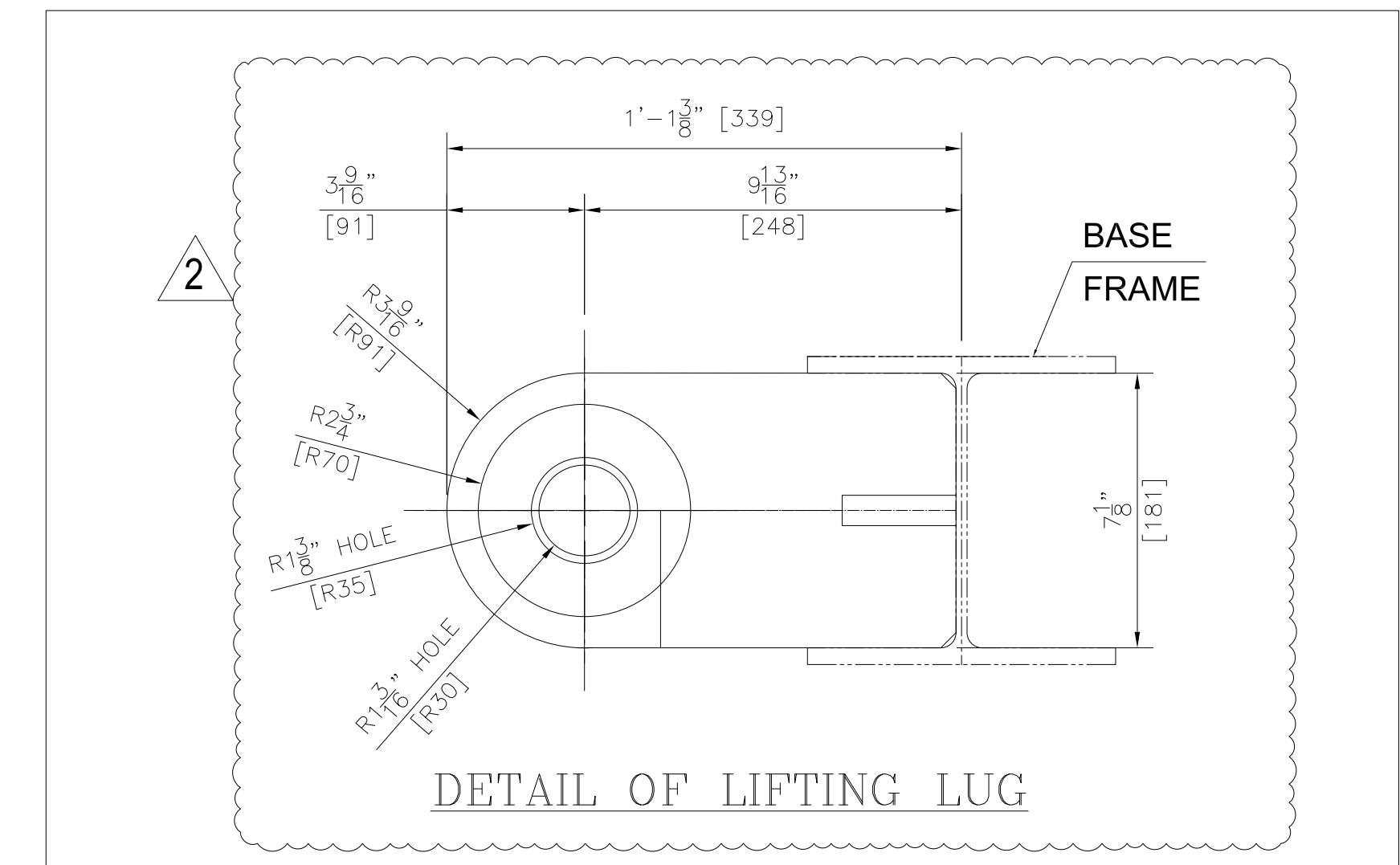
DWG. NO. - SHEET 01 OF 07 SIZE D REV. 2



II. Pump Skid -01- IGF Effluent Pump



SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	Pimp Skid-01 – IGF Effluent Pump	18' 7" [5712] X 14' 4" [4374] X 12' [3656] HT	18 Ton / 39683.2 lbs	19 x 15.42 = 292.98 sq ft	18/292.98 = 0.061438 ton/ft ² / 122.876 lbs/ft ²



REFERENCE DRAWINGS					
DWG. NO.	DESCRIPTION				
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0 04-06-2024 IFA	NT	RS	AM		
REV DATE	DESCRIPTION	PREP'D	CHK'D	APP'D	
JKJV GTPP					
VENDOR NAME					
SIEMENS energy					
PURCHASER JOB CODE		PURCHASE ORDER NO.			
0-8936-2		P-215A-201-A			
Golden Triangle Polymers Company LLC					
Golden Triangle Polymers Project					
ETHYLENE UNIT - 10					
EQUIPMENT NAME / ITEM TAG NO. 10-X-2400					
DOCUMENT TITLE PACKING FOR PUMP SKID 1 (10-P-2403/A/B)					
COMPANY DWG. NO.					
CONTRACTOR DWG. NO. -					
SCALE 1:20					
DWG. NO. -	SH. NO. 02 OF 07	SIZE D	REV. 2		



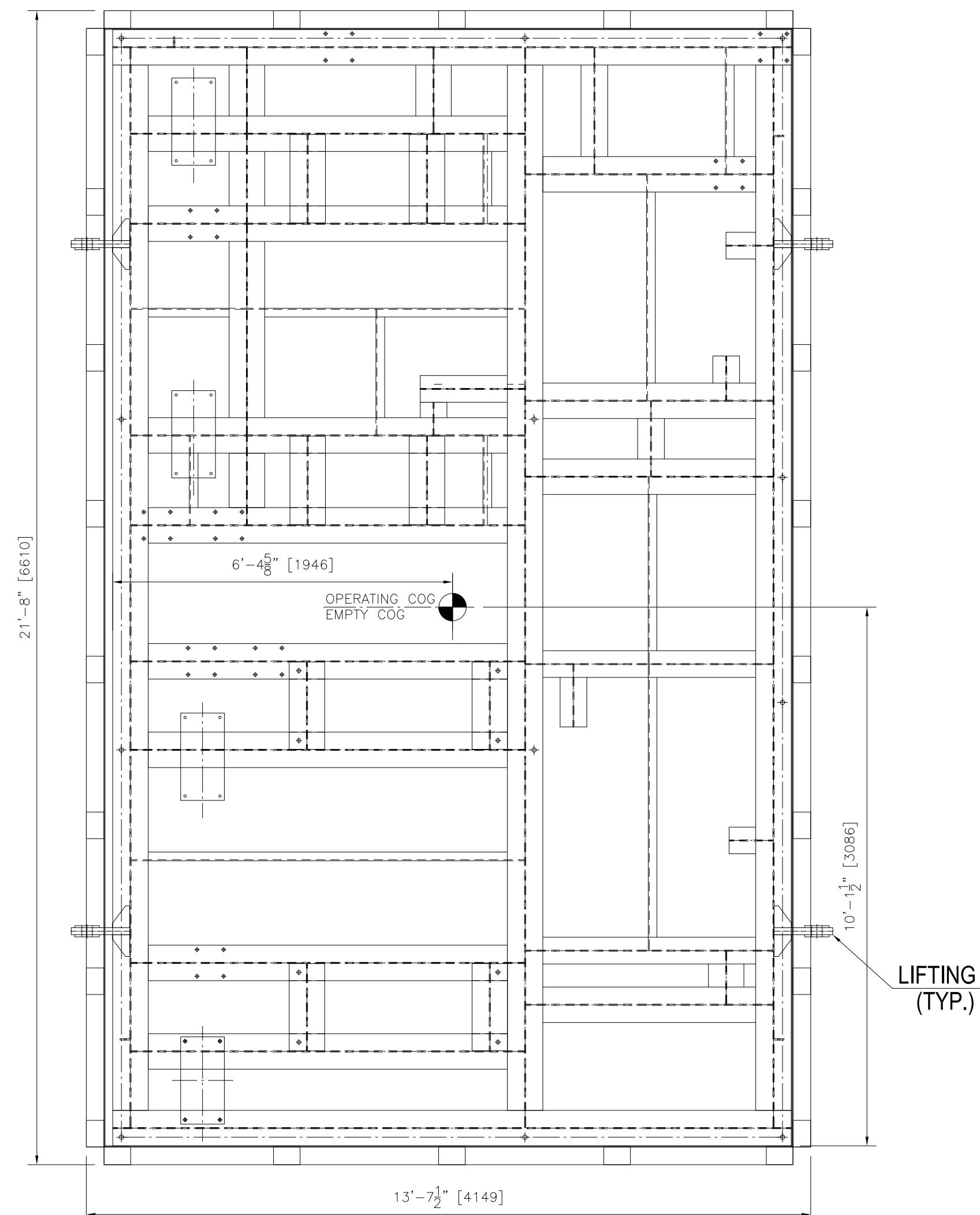
III. Pump Skid -02- Oil Pump



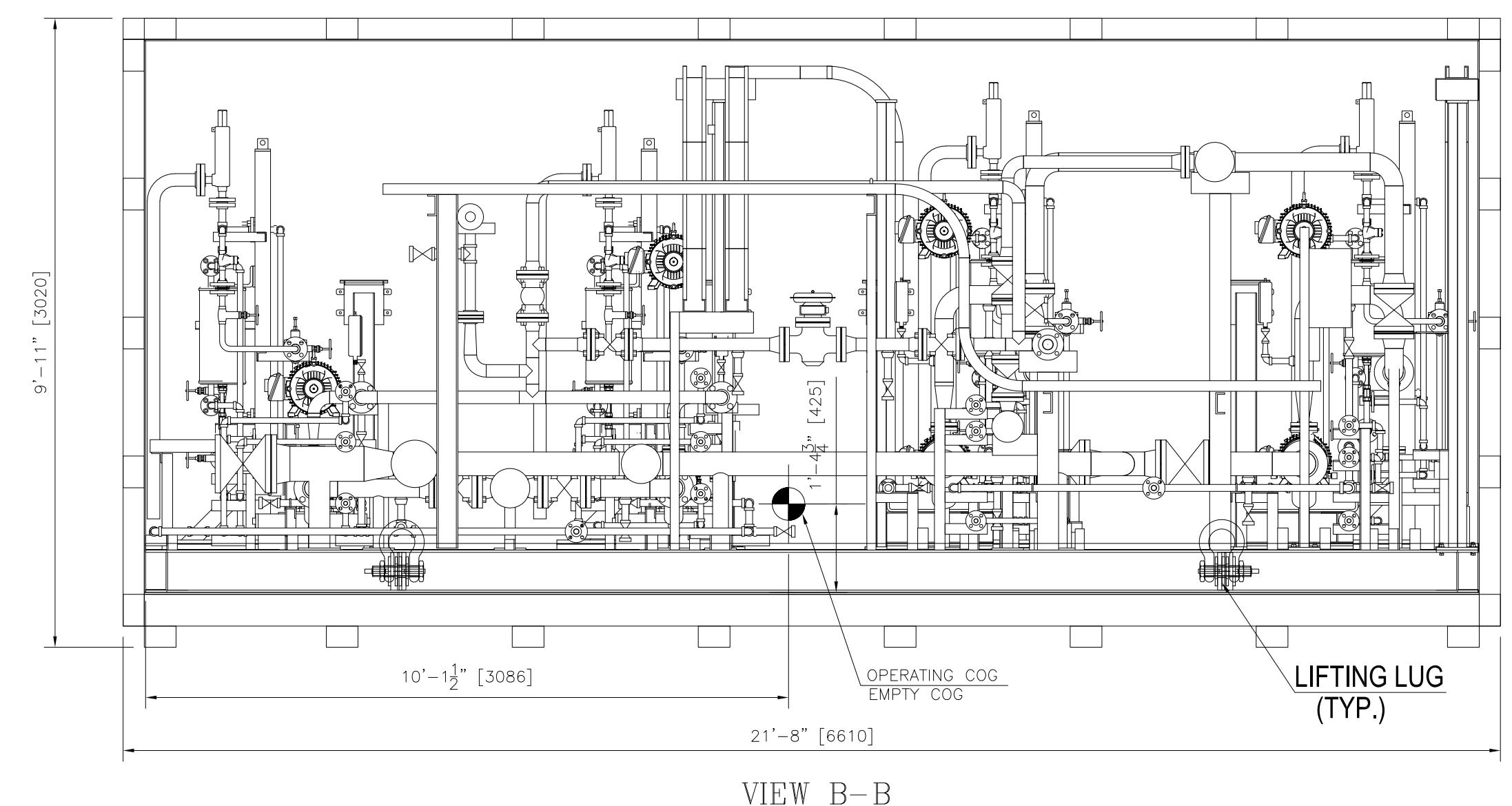
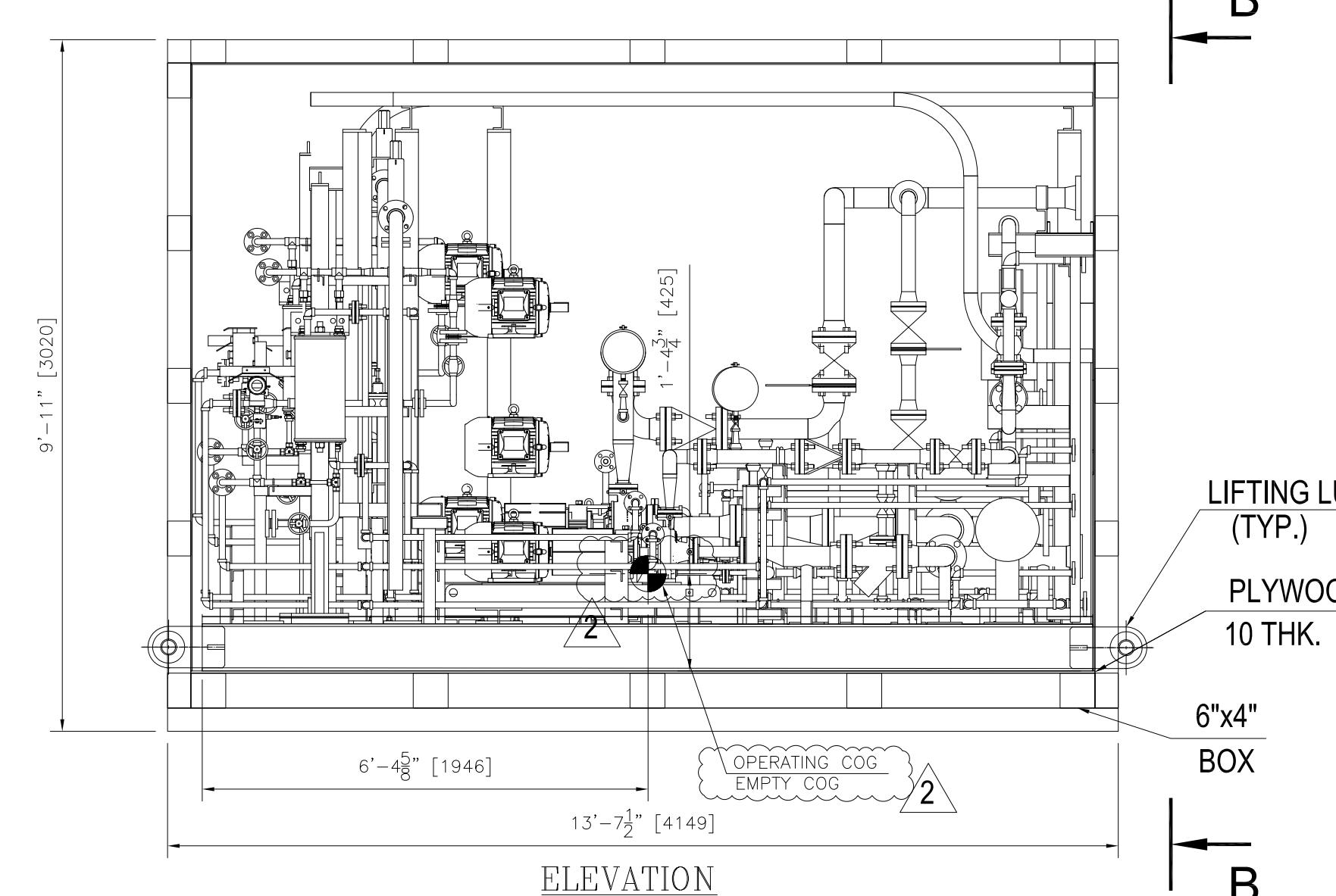
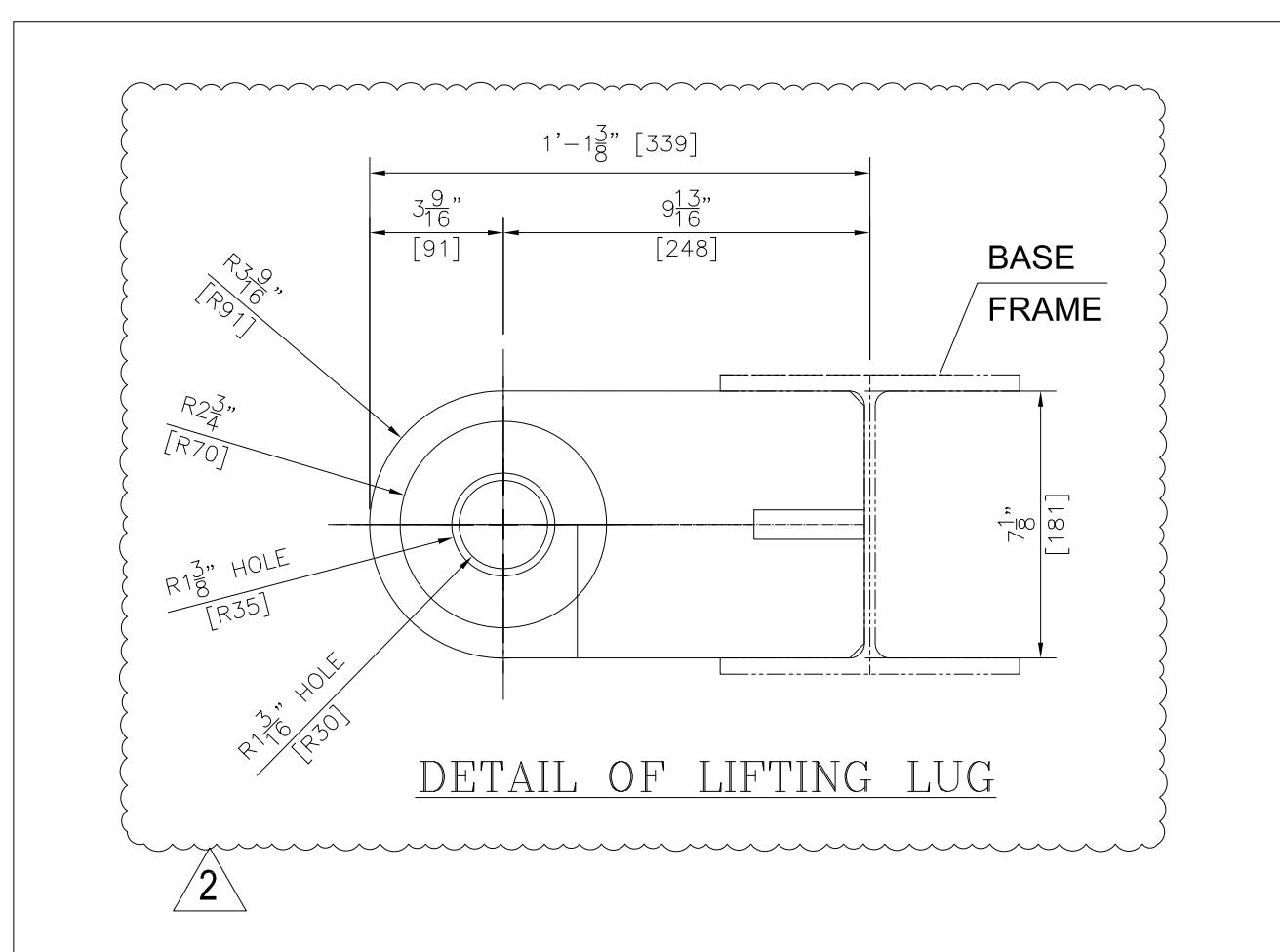
REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION
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N



SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	Pimp Skid-02- OIL PUMP	21' 8" [6610] X 13' 7 1/2" [4149] X 9'-11" [3020] HT	24 Ton / 52910.9 lbs	22 x14.34 = 315.48 sq ft	24/315.48 = 0.076075 ton/ft ² 152.15 lbs/ft ²



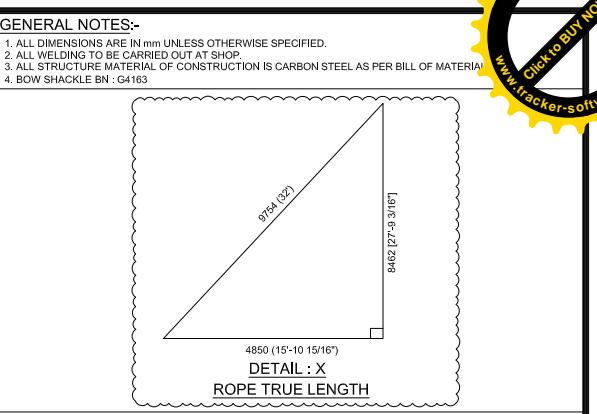
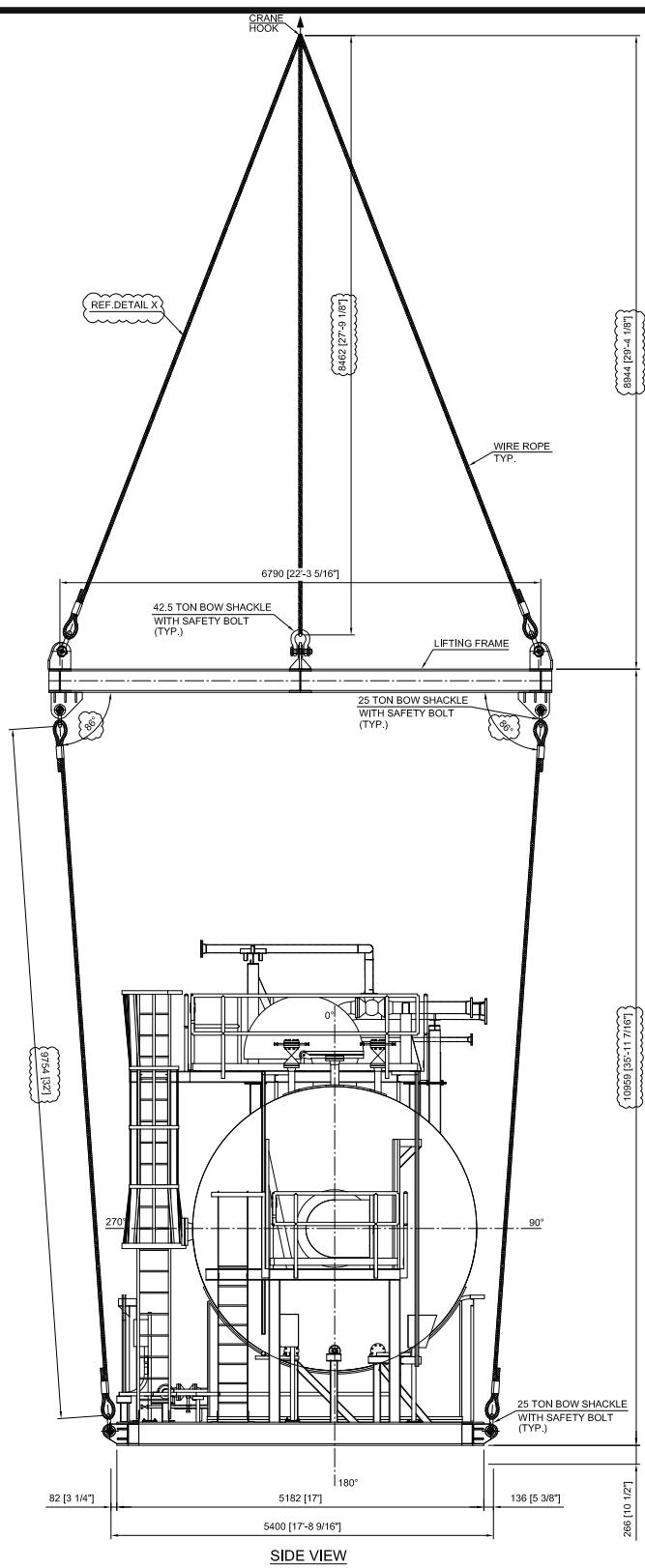
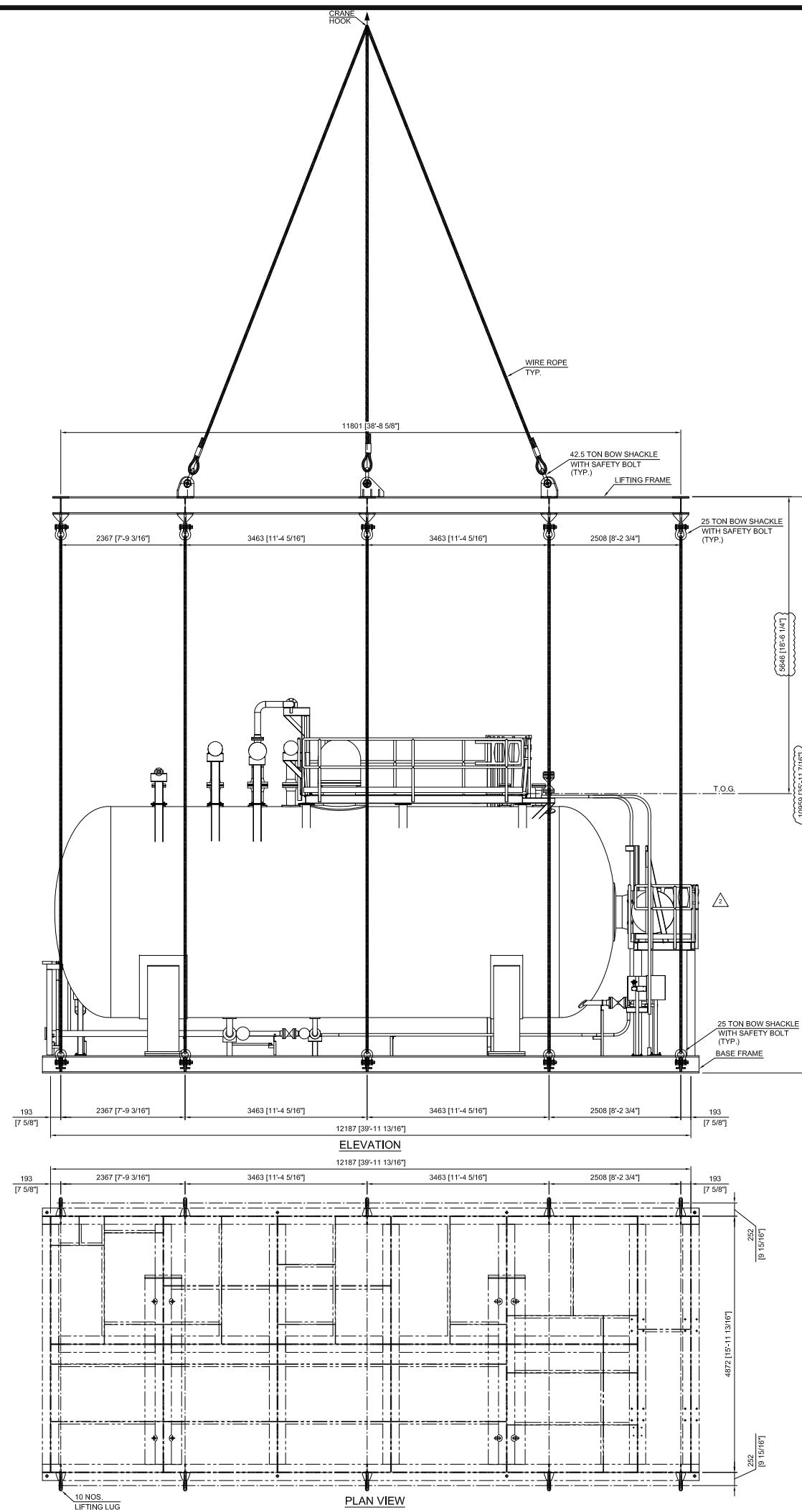
2	20-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APPD


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energy

PURCHASER JOB CODE	PURCHASE ORDER NO.
0-8936-2	P-215A-201-A
Golden Triangle Polymers Company LLC	
Golden Triangle Polymers Project	
ETHYLENE UNIT - 10	
EQUIPMENT NAME / ITEM TAG NO.	10-X-2400
DOCUMENT TITLE	WOODEN PACKING FOR PUMP SKID 2 (P-2402/A & P-2404/A/B)
COMPANY DWG. NO.	-
CONTRACTOR DWG. NO.	-
DWG. NO.	SH. NO.
-	03 OF 07
	SIZE
	D
	REV.
	2



IV. Backwash Return Skid and Platform Handrail and Ladder



FOR LIFTING ARRANGEMENT BOM REFER LIFTING ARRANGEMENT DRAWING OF AWS FILTER (10-V-2401A/B/C)

REV	DATE	FC	MMP	MBK	AKK
0	08/01/2024	ISSUED FOR APPROVAL	MMP	MBK	AKK



VENDOR NAME

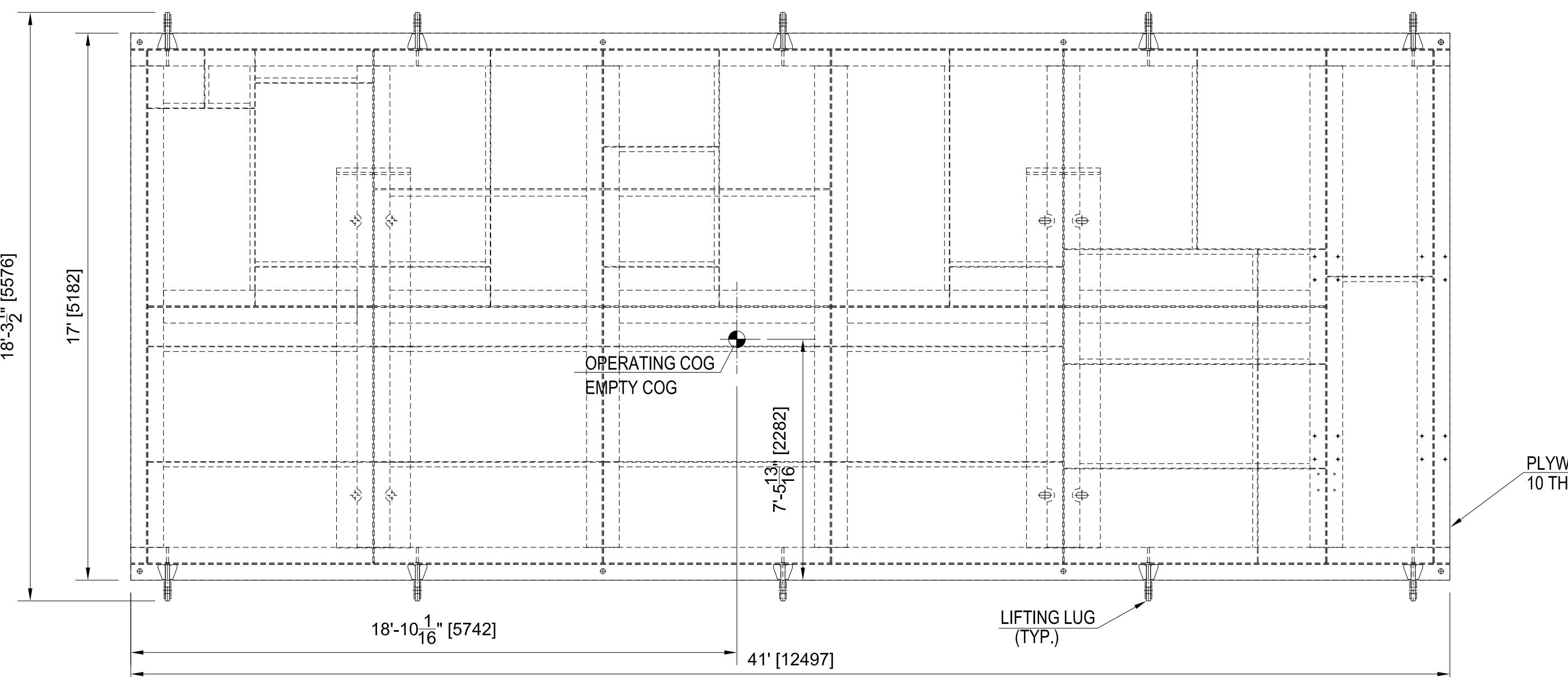
SIEMENS
ENERGY

PURCHASER JOB CODE PURCHASE ORDER NO.
0-8936-2 P-215A-201-A

Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

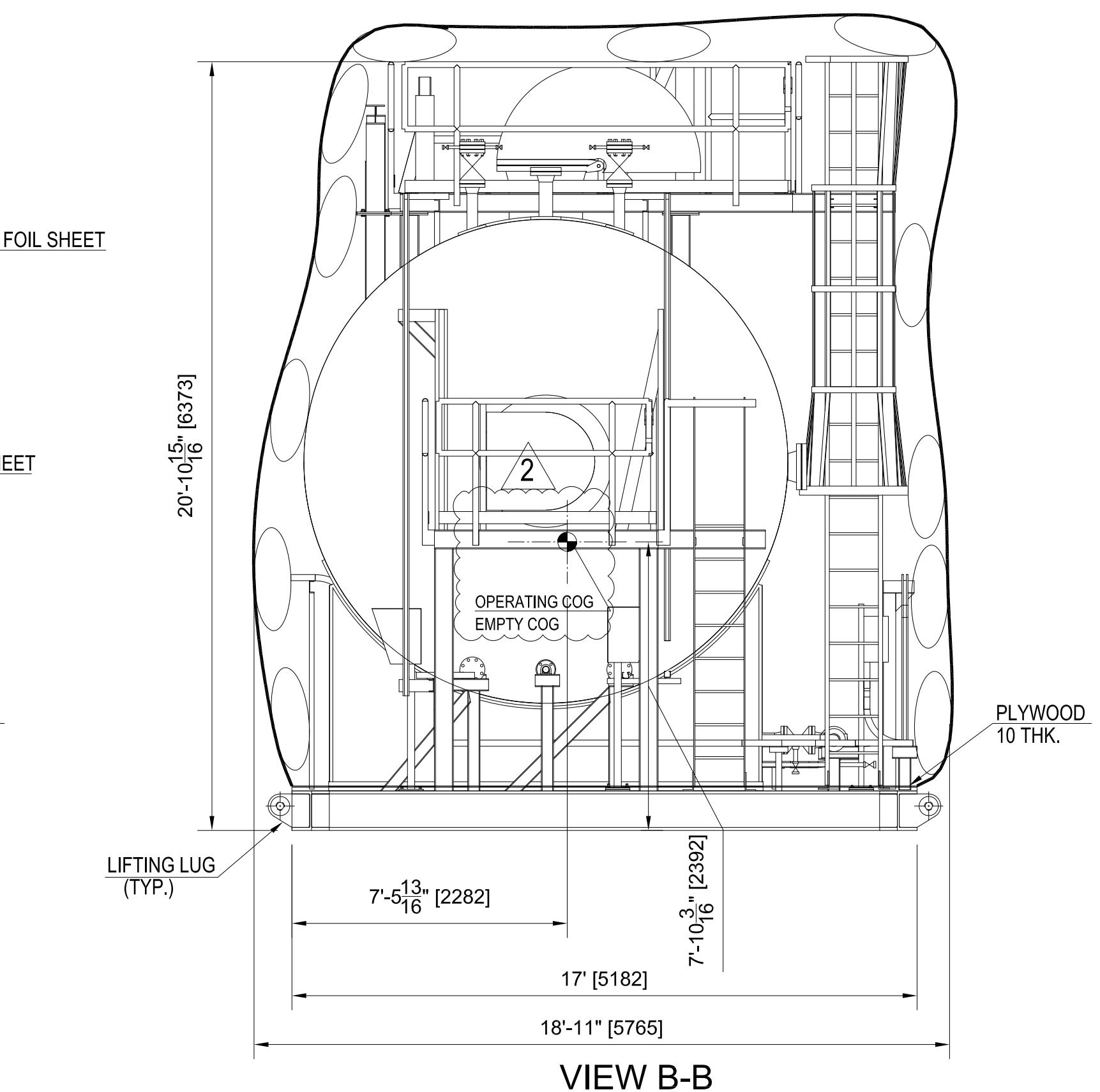
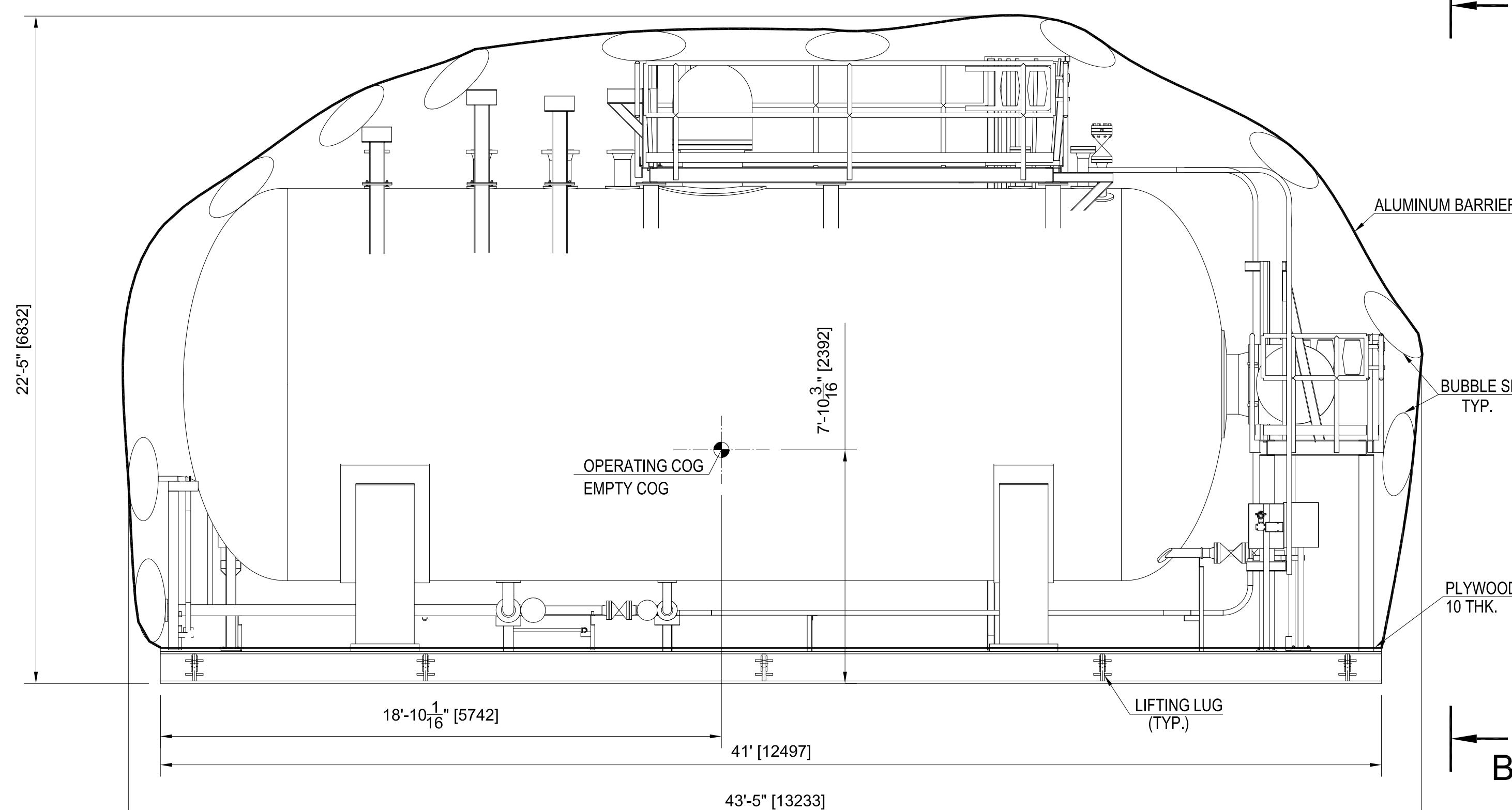
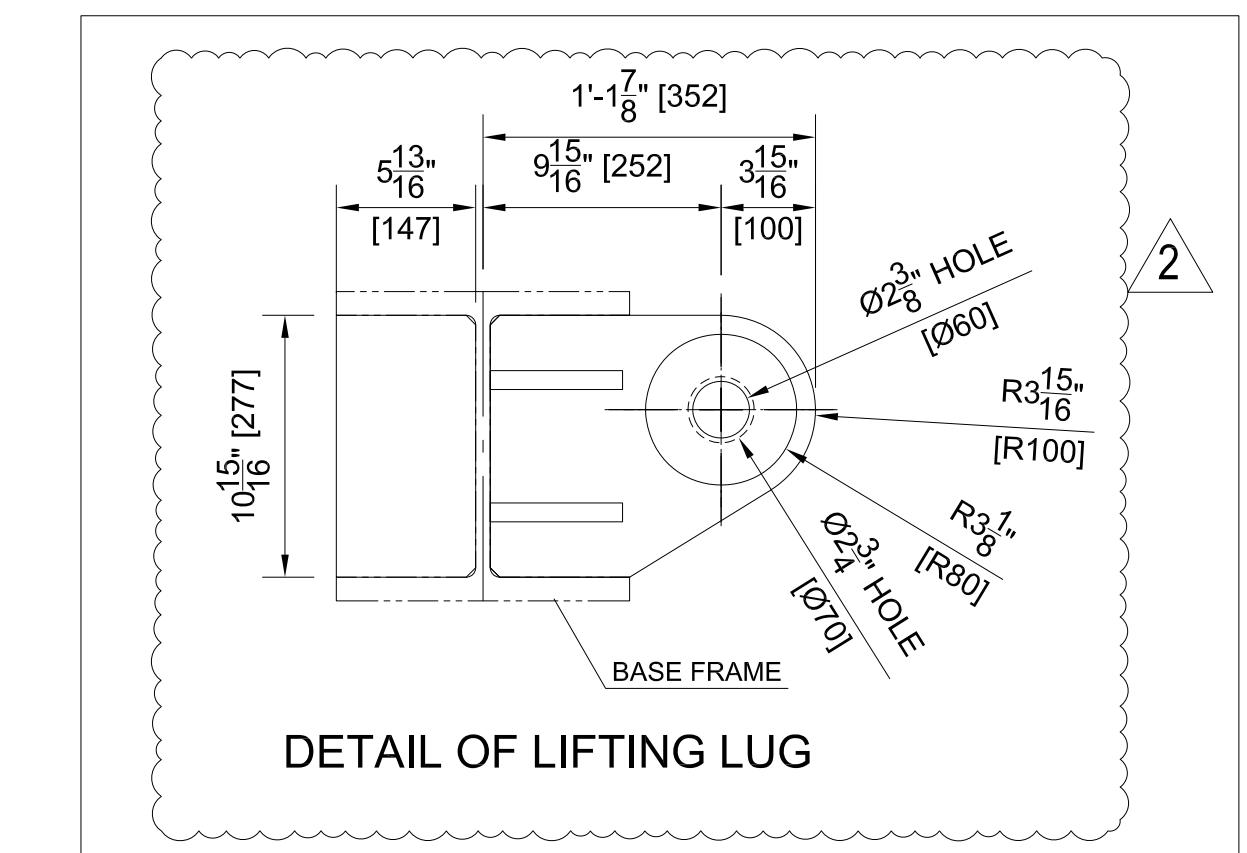
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DOCUMENT TITLE	LIFTING ARRANGEMENT DRAWING FOR BACKWASH RETURN DRUM (10-V-2402)
COMPANY DWG. NO.	-
CONTRACTOR DWG. NO.	- V-215A-201-A-PLN-701
DWG. NO.	- SEI-PLN-701
SHEET	03 of 07
SIZE	A
REV.	1



MATERIAL SPECIFICATION

- 1.Kiln Dried Pinewood as per ISPM 15 norms
- 2.Marine plywood which is moisture resistant upto 10 MM
- 3.Desiccant is clay based with high absorption capacity
- 4.HDPE is 185 to 200 gsm
- 5.Stretch Film is 22 micron
- 6.Bubble roll is 70 micron

SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	Backwash Return Skid and Platform Handrail and Ladder	43' 5" [13233] X 18' 11" [5765] X 22' 5" [6832]	62 Ton / 136687 lbs	41' X 18' 3 1/2" X 22' 9 5/8"	62/761.4828 = 0.08142 ton/ft ² / 162.84 lbs/ft ²



2	20-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D



SIEMENS
energy

PURCHASER JOB CODE PURCHASE ORDER NO.
0-8936-2 P-215A-201-A

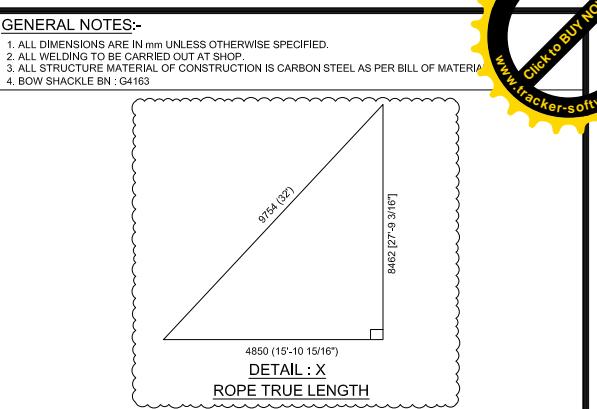
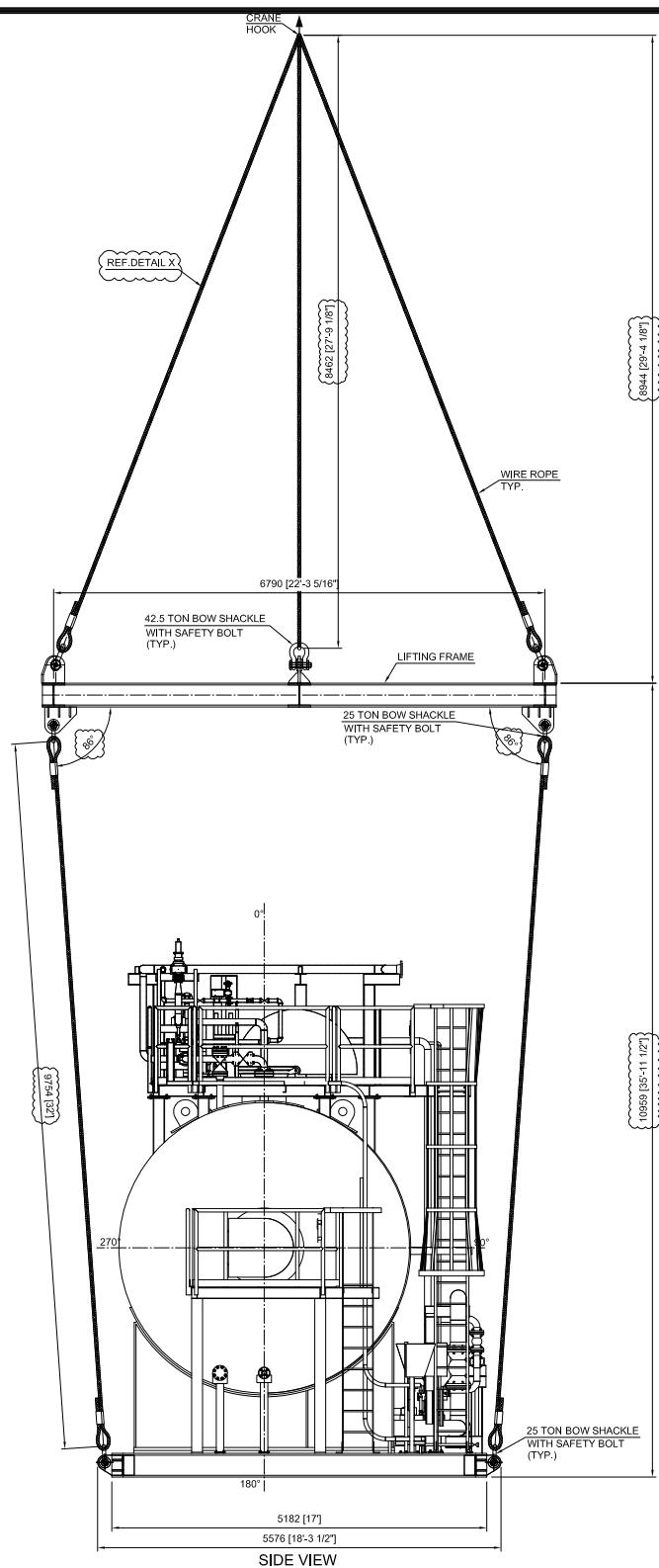
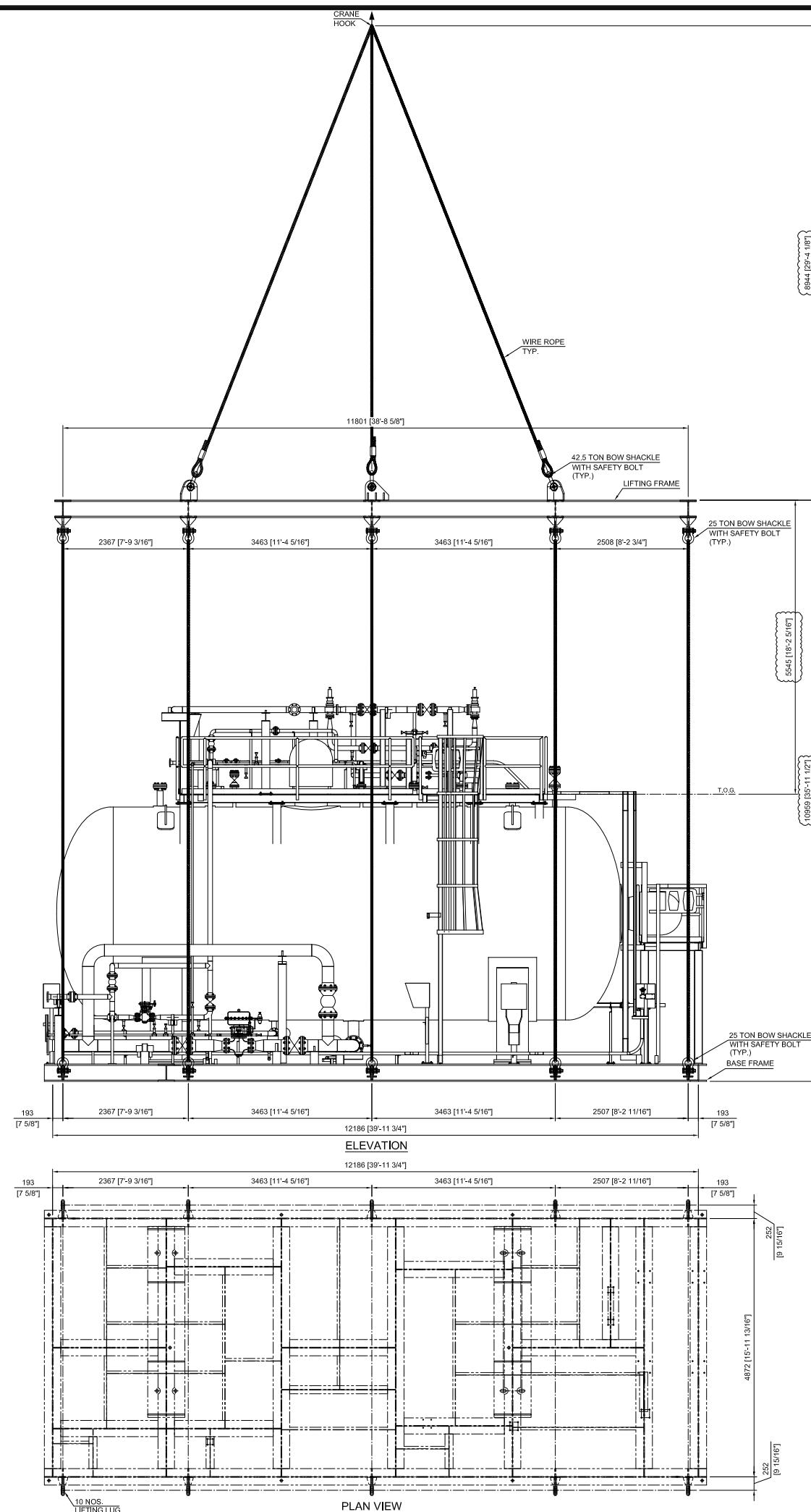
Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO.	10-X-2400
DOCUMENT TITLE	PACKING FOR BACKWASH RETURN DRUM (10-V-2402)
COMPANY DWG. NO.	-
CONTRACTOR DWG. NO.	-
DWG. NO.	SH. NO. SIZE REV.
	04 OF 07 D 2



V. **Backwash Surge Skid and Platform Handrail and Ladder**



FOR LIFTING ARRANGEMENT BOM REFER LIFTING ARRANGEMENT DRAWING OF AWS FILTER (10-V-2401A/B/C)

REV	DATE	FC	MMP	MBK	AKK
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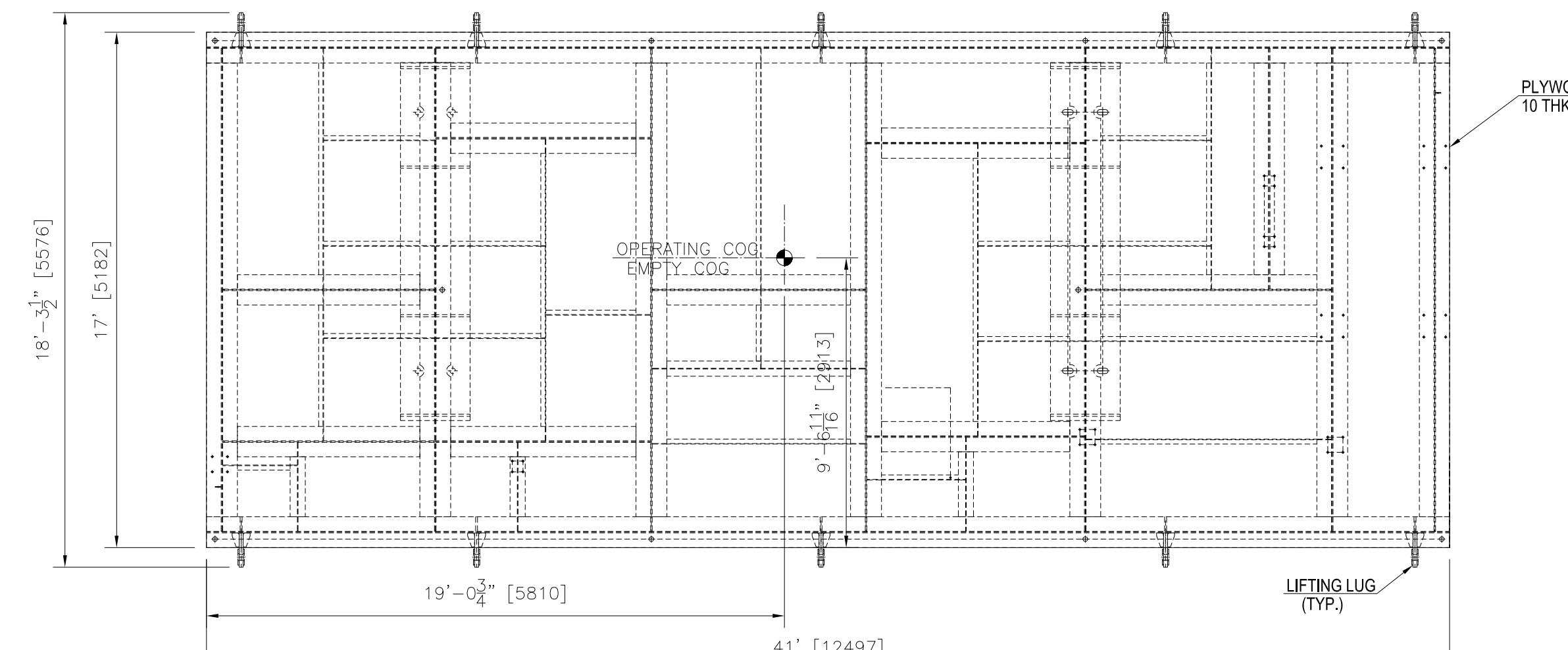
PURCHASER JOB CODE 0-8936-2	PURCHASE ORDER NO. P-215A-201-A
Golden Triangle Polymers Company LLC Golden Triangle Polymers Project	
ETHYLENE UNIT - 10	
EQUIPMENT NAME / ITEM TAG NO., QUENCH AREA PROCESS WATER CLEAN-UP UNIT/10-V-2403	
DOCUMENT TITLE LIFTING ARRANGEMENT DRAWING FOR BACKWASH SURGE DRUM (10-V-2403)	
COMPANY DWG. NO. - - -	
CONTRACTOR DWG. NO. - V-215A-201-A-PLN-701 SCALE 1:40	
DWG. NO. - SEI-PLN-701	SHEET 04 OF 07 SIZE A REV. 1



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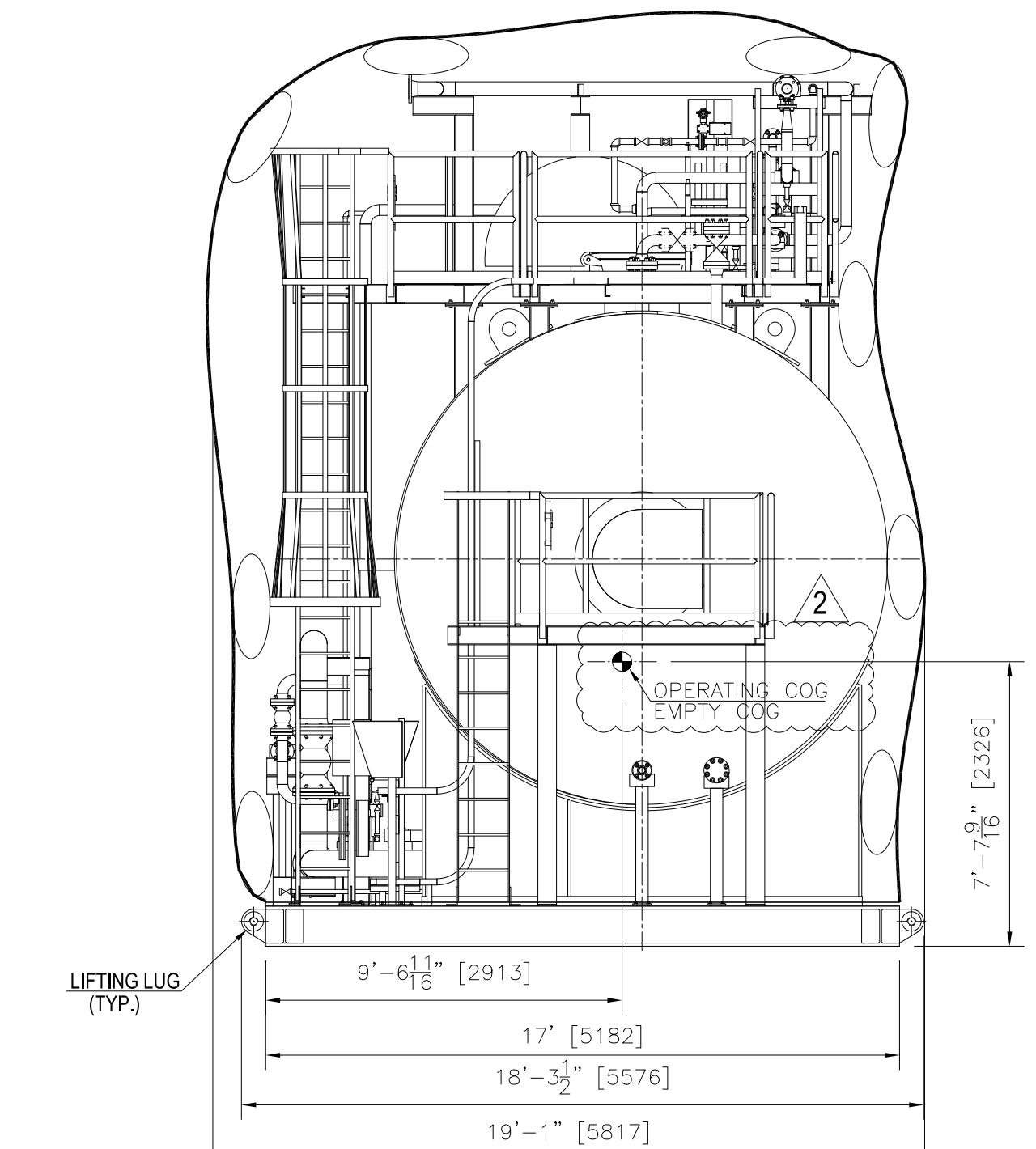
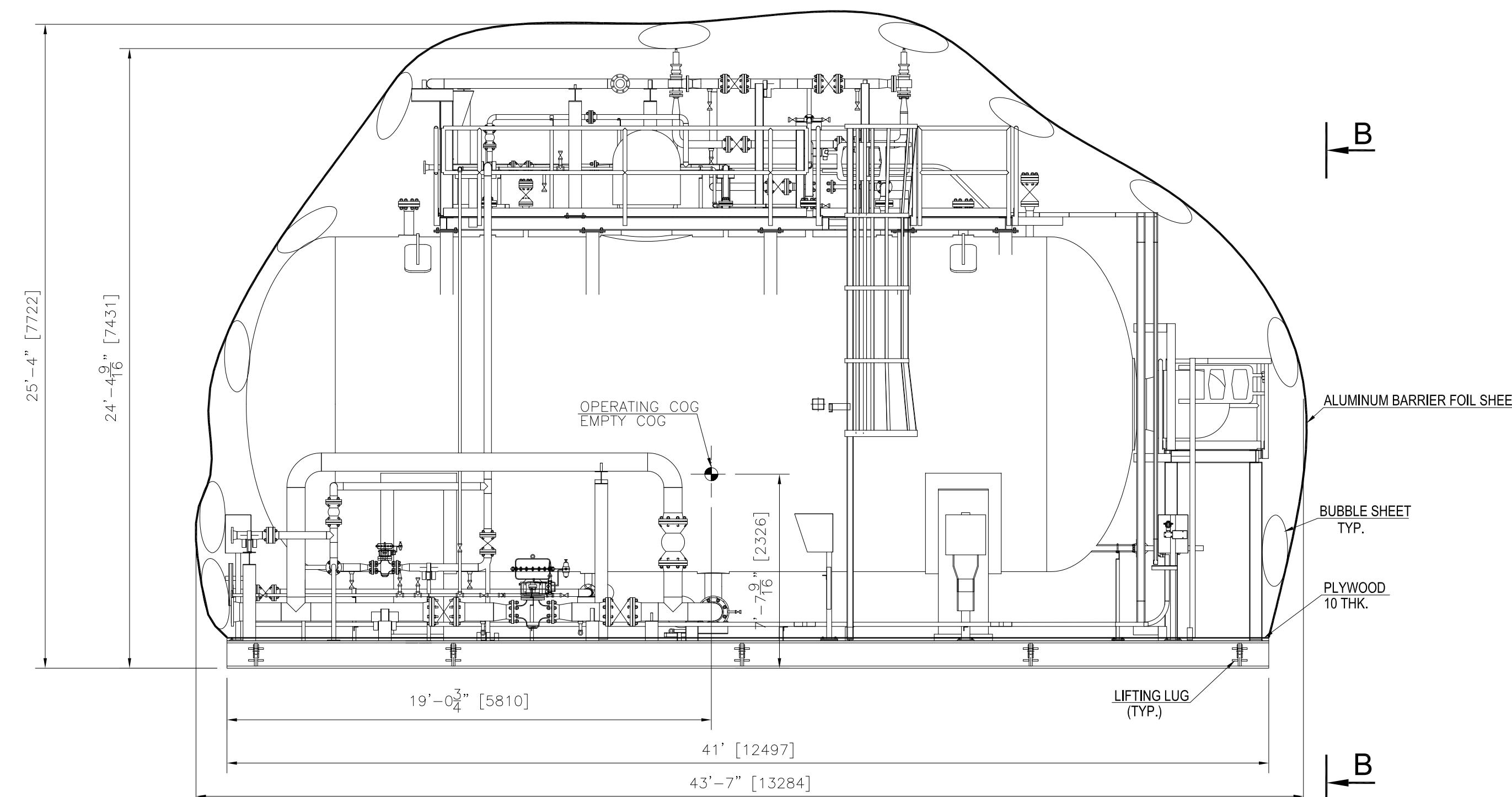
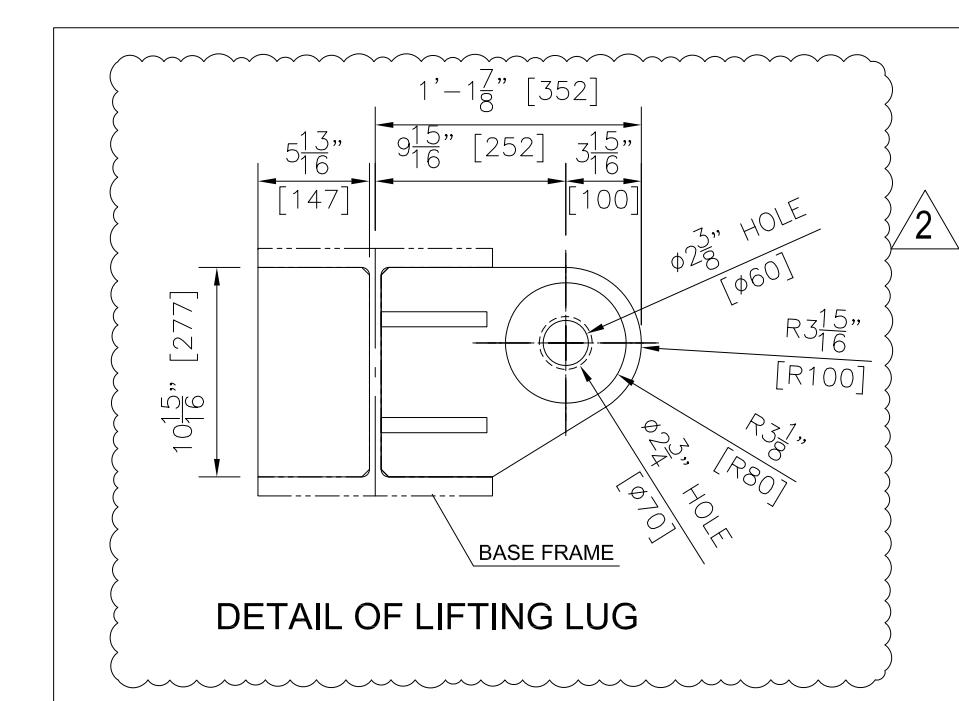
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MATERIAL SPECIFICATION

1.Klin Dried Pinewood as per ISPM 15 norms
2.Marine plywood which is moisture resistant upto 10 MM
3.Desiccant is clay based with high absorption capacity
4.HDPE is 185 to 200 gsm
5.Stretch Film is 22 micron
6.Bubble roll is 70 micron

SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	B/W SURGE Drum with skid and Platform Handrail and Ladder	43' 7" [13284] X 19' 1" [5817] X 25' 4" [7722]	62 Ton / 136687 lbs	41.34*18.42 = 761.4828 sq ft	62/761.4828 = 0.08142 ton/ ft ² / 162.84 lbs/ft ²



2	21-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D



VENDOR NAME

SIEMENS energy

PURCHASER JOB CODE PURCHASE ORDER NO.
0-8936-2 P-215A-201-A

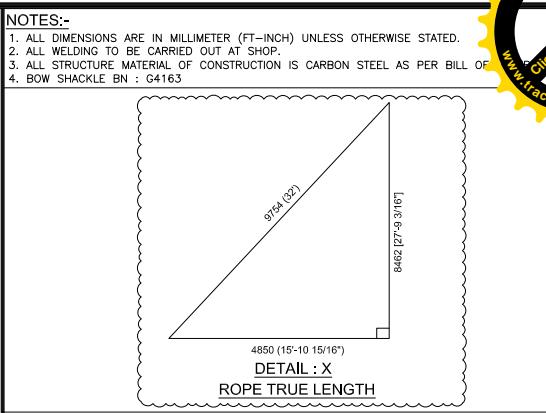
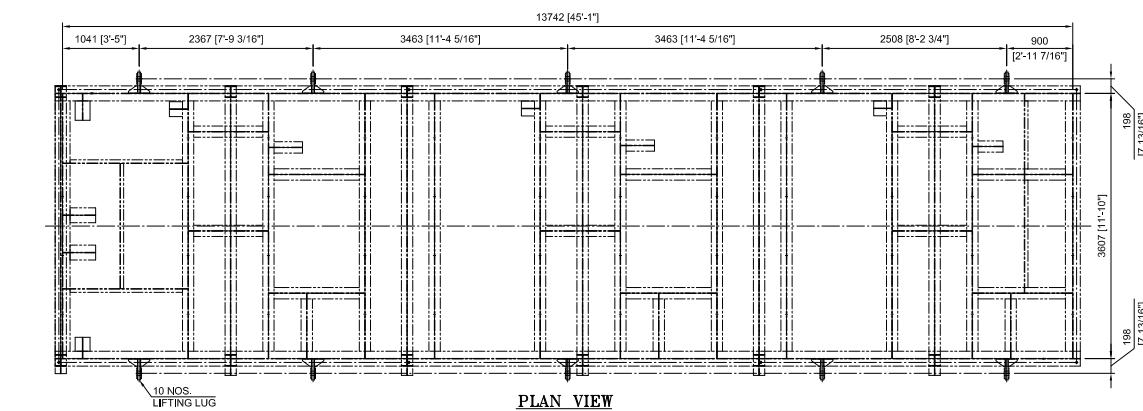
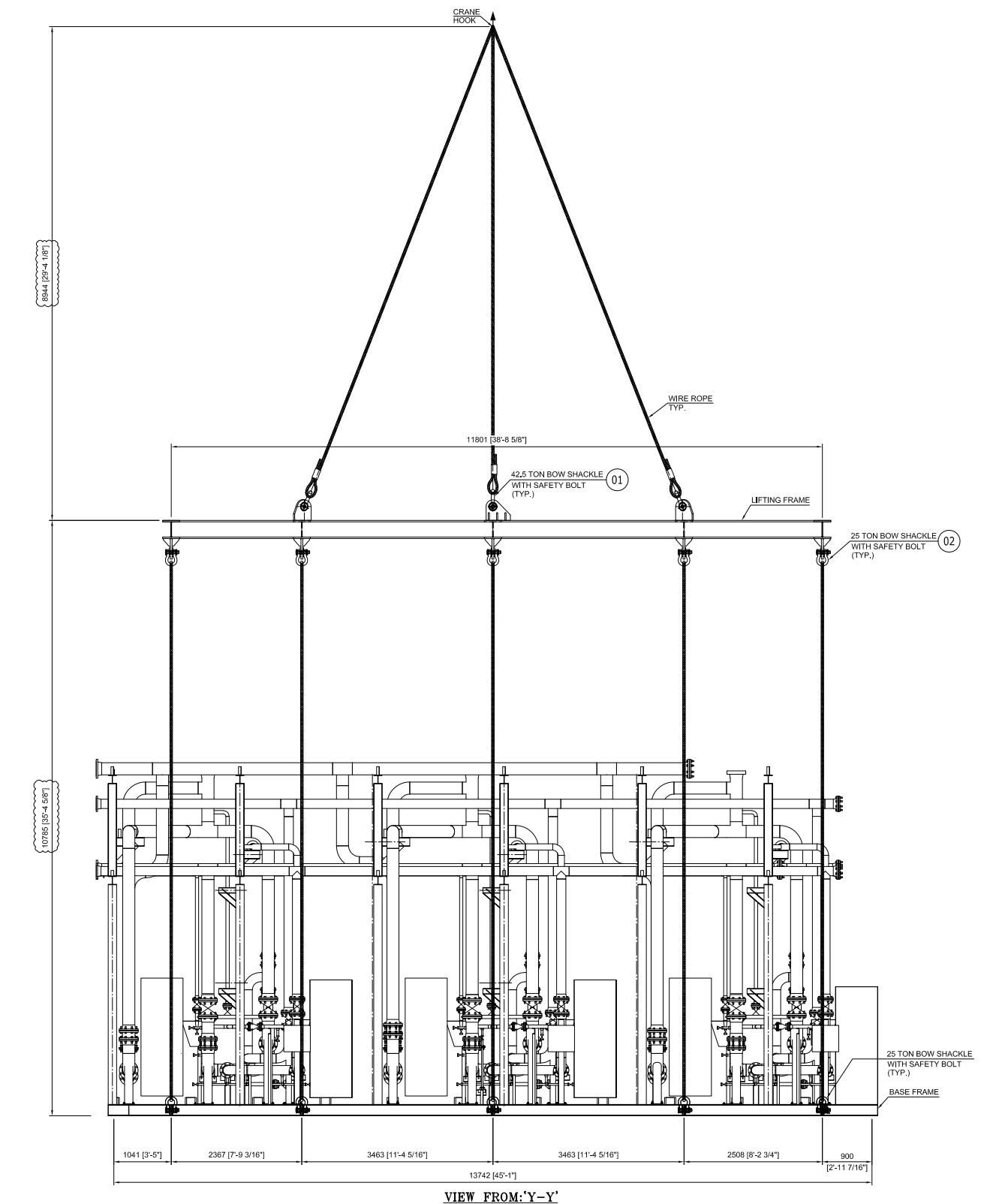
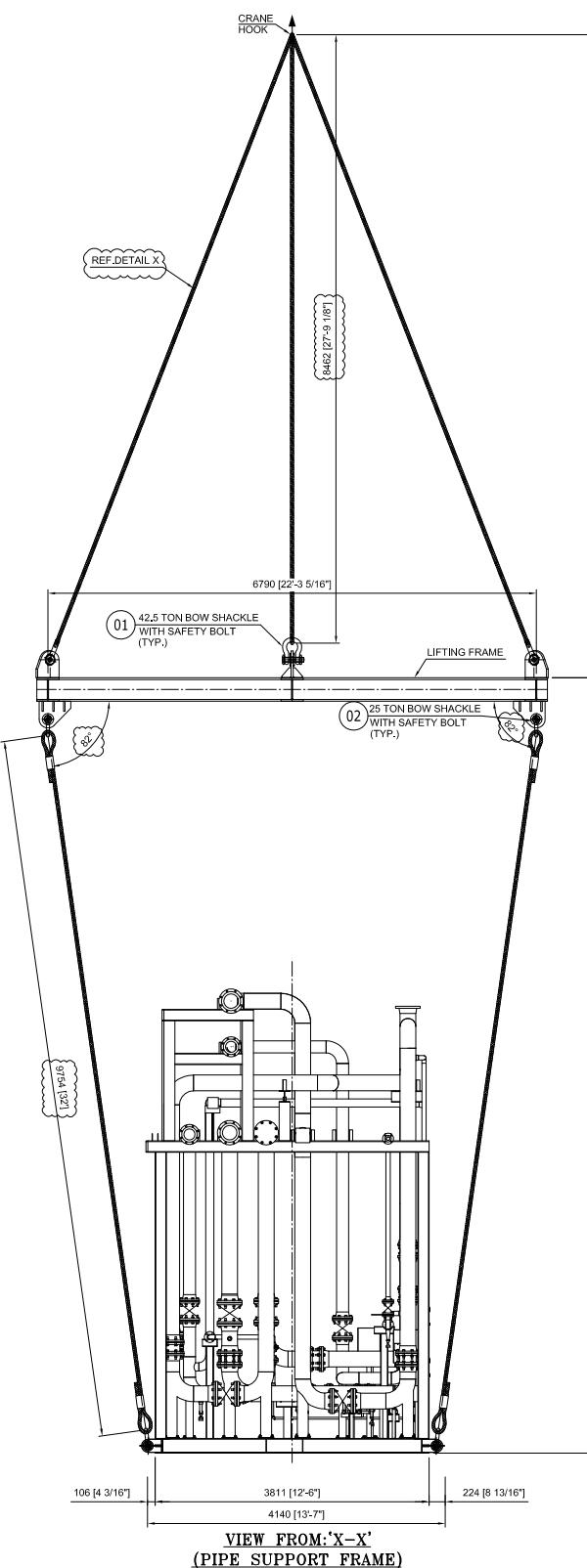
Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO.	10-X-2400
DOCUMENT TITLE	PACKING FOR BACKWASH SURGE DRUM (10-V-2403)
COMPANY DWG. NO.	-
CONTRACTOR DWG. NO.	-
DWG. NO.	SH. NO. 06 OF 07
	SIZE D
	REV. 2



VI. AWS Frontal Piping & Skid



FOR LIFTING ARRANGEMENT BOM REFER LIFTING ARRANGEMENT DRAWING OF AWS FILTER (10-V-2401A/B/C)

REV	DATE	FC	MMP	MBK	AKK
0	03/02/2024	ISSUED FOR APPROVAL	MMP	MBK	AKK



VENDOR NAME

SIEMENS
ENERGY

PURCHASER JOB CODE 0-8936-2	PURCHASE ORDER NO. P-215A-201-A
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Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO. QUENCH AREA PROCESS WATER CLEAN-UP UNIT/10-X-2400

DOCUMENT TITLE LIFTING ARRANGEMENT DRAWING FOR AWS FRONTAL PIPING

COMPANY DWG. NO. - -

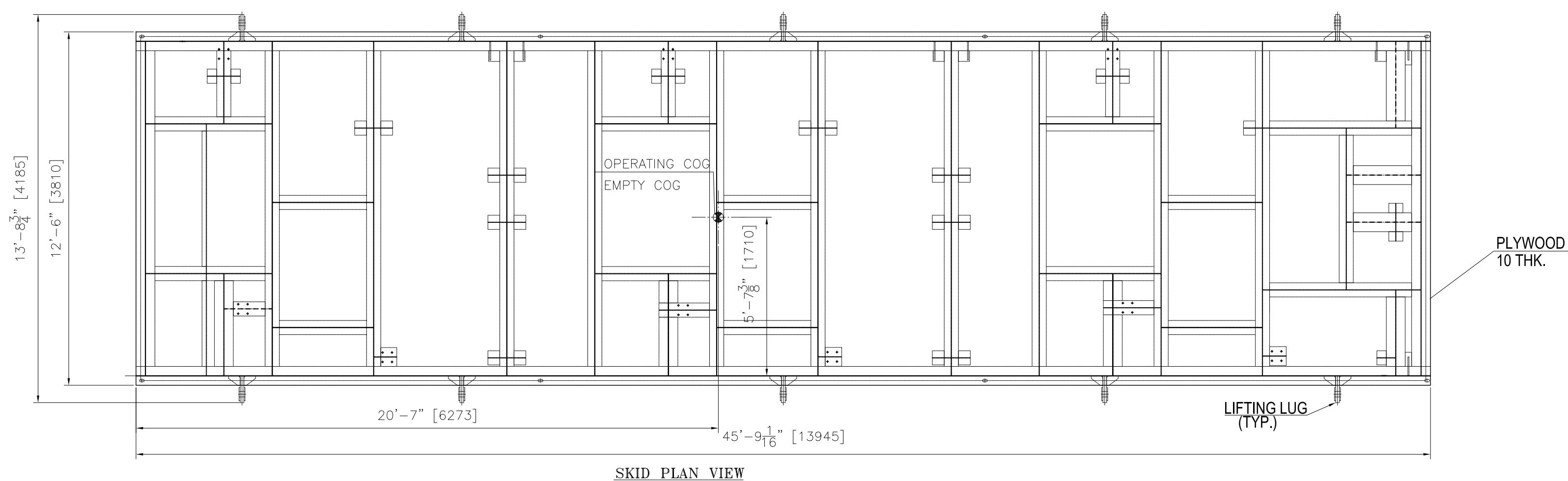
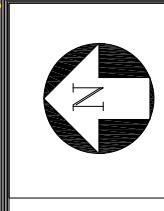
CONTRACTOR DWG. NO. - V-215A-201-A-PLN-701 SCALE 1:40

DWG. NO. - SEI-PLN-701 SHEET 05 OF 07 SIZE A REV. 1



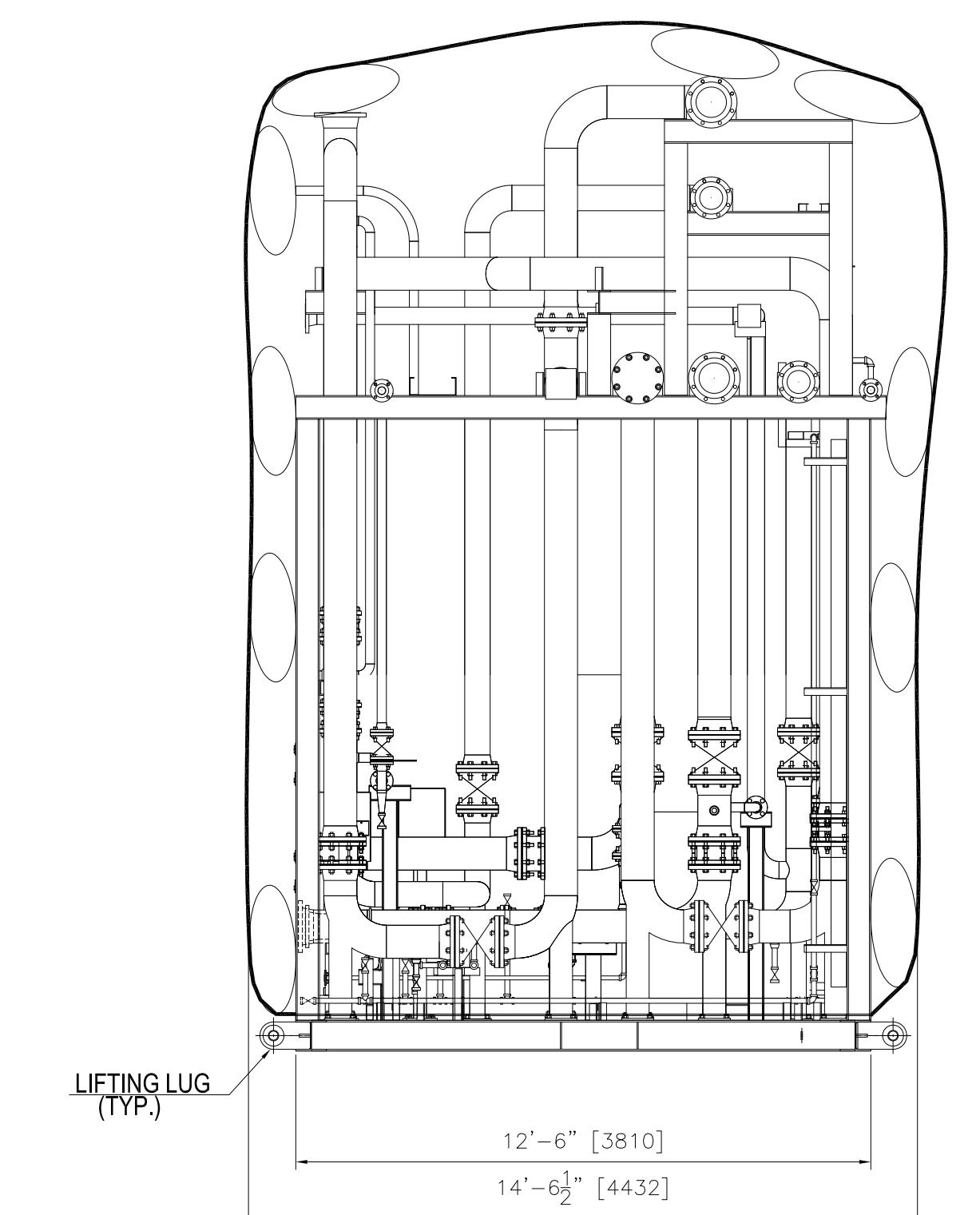
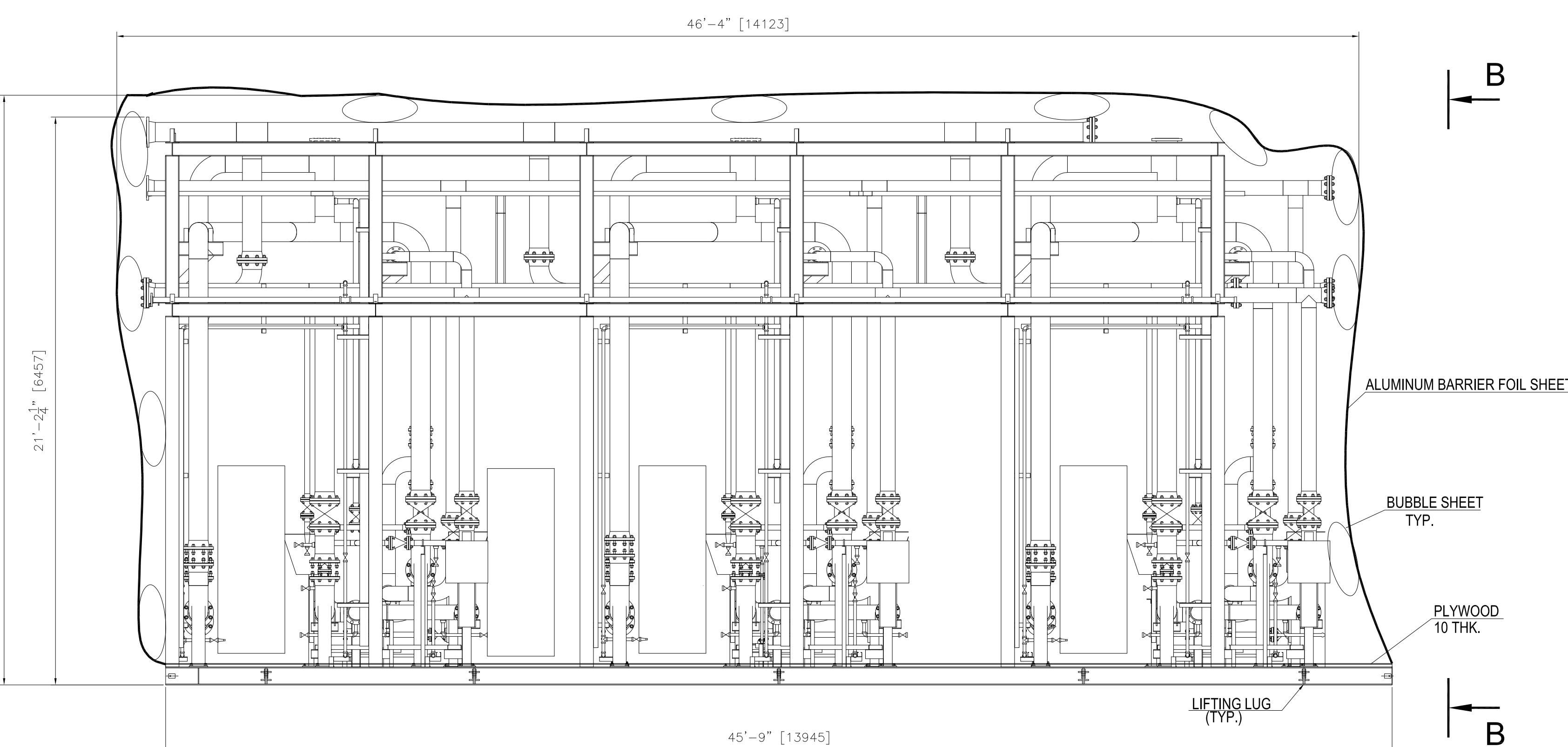
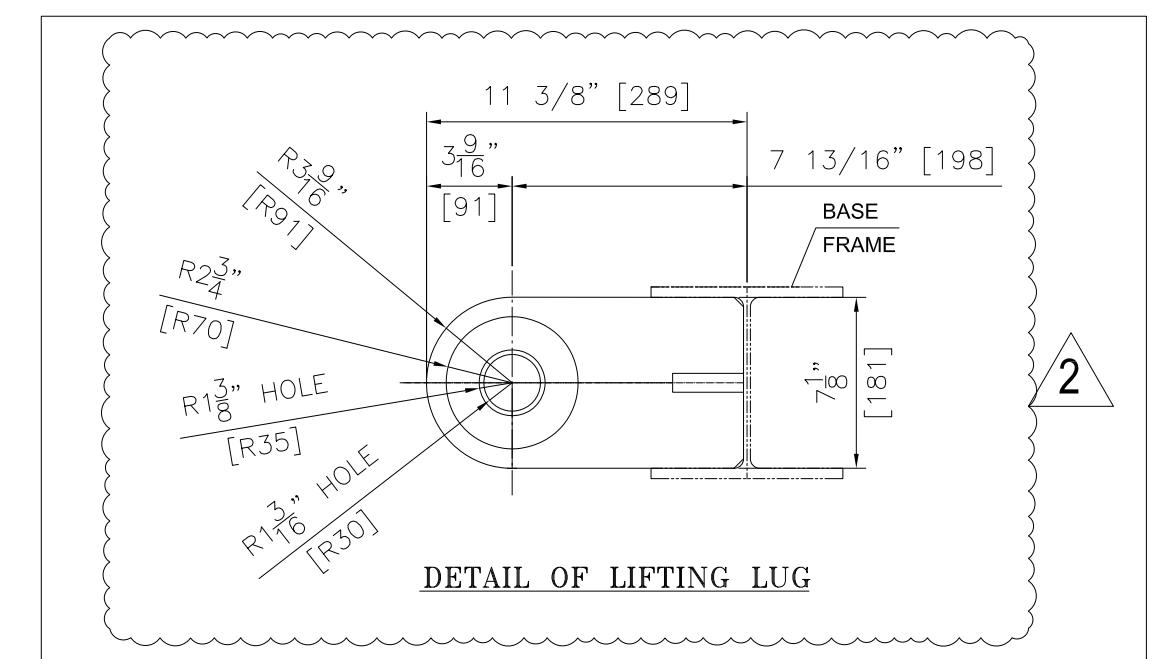
REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION



MATERIAL SPECIFICATION

- 1.Kiln Dried Pinewood as per ISPM 15 norms
- 2.Marine plywood which is moisture resistant upto 10 MM
- 3.Desiccant is clay based with high absorption capacity
- 4.HDPE is 185 to 200 gsm
- 5.Stretch Film is 22 micron
- 6.Bubble roll is 70 micron



1	20-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D



SIEMENS
energy

PURCHASER JOB CODE PURCHASE ORDER NO.

0-8936-2 P-215A-201-A

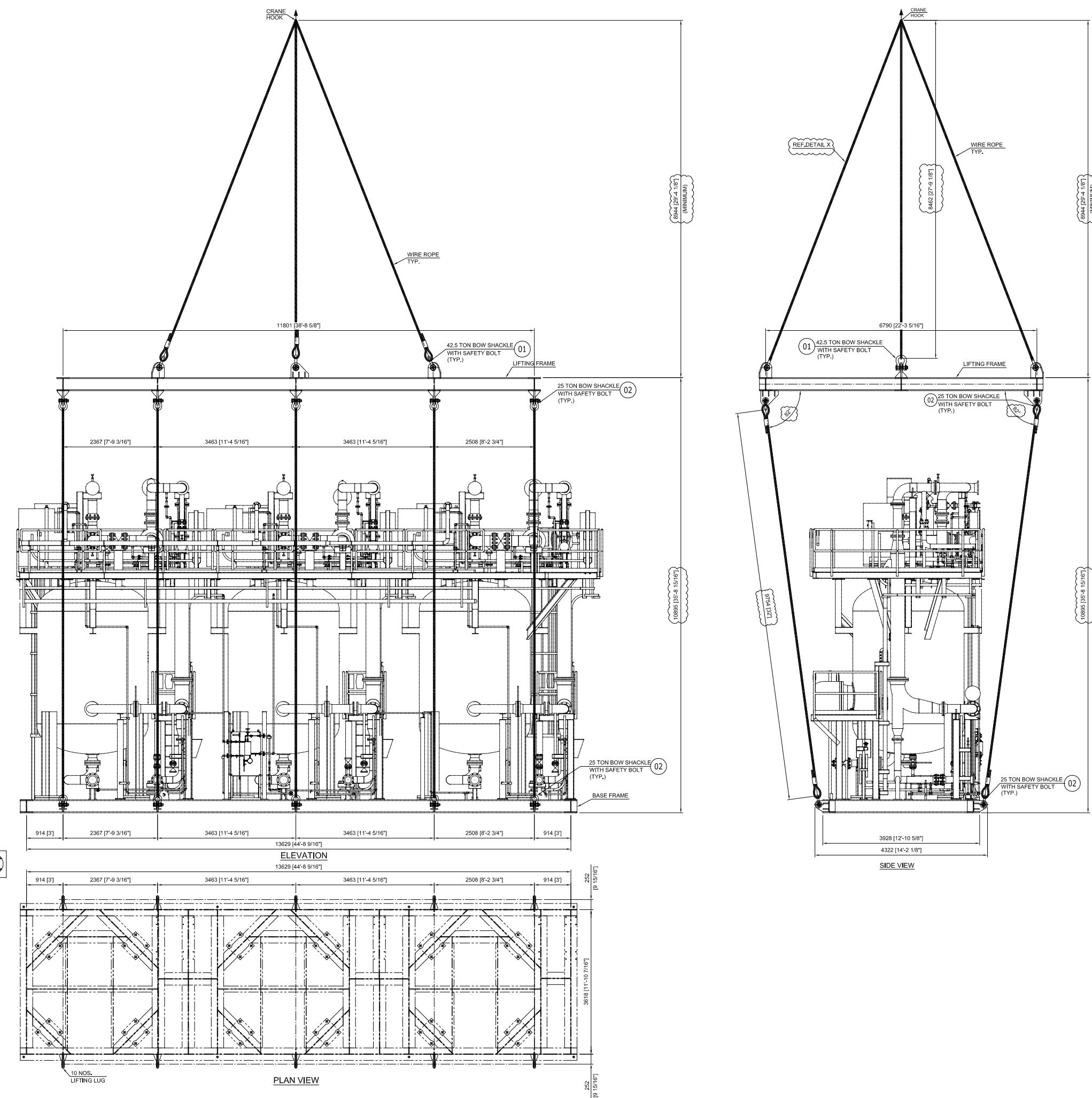
Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO.	10-X-2400
DOCUMENT TITLE	PACKING FOR AWS FRONTAL PIPING SKID
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CONTRACTOR DWG. NO.	-
DWG. NO.	-
SHEET	SIZE
05 OF 07	D REV. 2

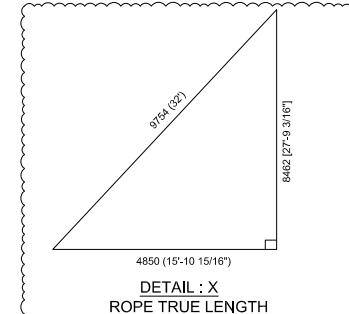


VII. AWS Skid Package



GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. ALL WELDING TO BE CARRIED OUT AT SHOP.
3. ALL STRUCTURE MATERIAL OF CONSTRUCTION IS CARBON STEEL AS PER BILL OF MATERIAL.
4. BOW SHACKLE BN : G4163



DETAIL : X
ROPE TRUE LENGTH

TYP. LIFTING ARRANGEMENT IS USED FOR
IGF VESSEL (10-V-2400)
BACKWASH RETURN DRUM (10-V-2402)
BACKWASH SURGE DRUM (10-V-2403)
AWS FRONTAL PIPING

PART. NO.	DESCRIPTION	QTY.	DIMENSIONS	MOC	REMARK
BILL OF MATERIAL					
05	TOP SIDE CENTER WIRE ROPE MAXIMUM FORCE IN PER ROPE = 784 kN	1	8462 [27'-9 3/16"] LG. PER ROPE	---	-
04	TOP SIDE WIRE ROPE MAXIMUM FORCE IN PER ROPE = 784 kN	4	9754 (32') LG. PER ROPE	---	-
03	BOTTOM SIDE WIRE ROPE MAXIMUM FORCE IN PER ROPE = 784 kN	10	9754 (32') LG. PER ROPE	---	-
02	BOW SHACKLE WITH SAFETY BOLT	20	25 TON	---	REF.NOTE 4
01	BOW SHACKLE WITH SAFETY BOLT	05	42.5 TON	---	REF.NOTE 4

REV.	DATE	FC	MMP	MBK	AKK
1	31/05/2024				
0	08/01/2024	ISSUED FOR APPROVAL	MMP	MBK	AKK
REV.	DATE	DESCRIPTION	PREPD	CHK'D	APP'D



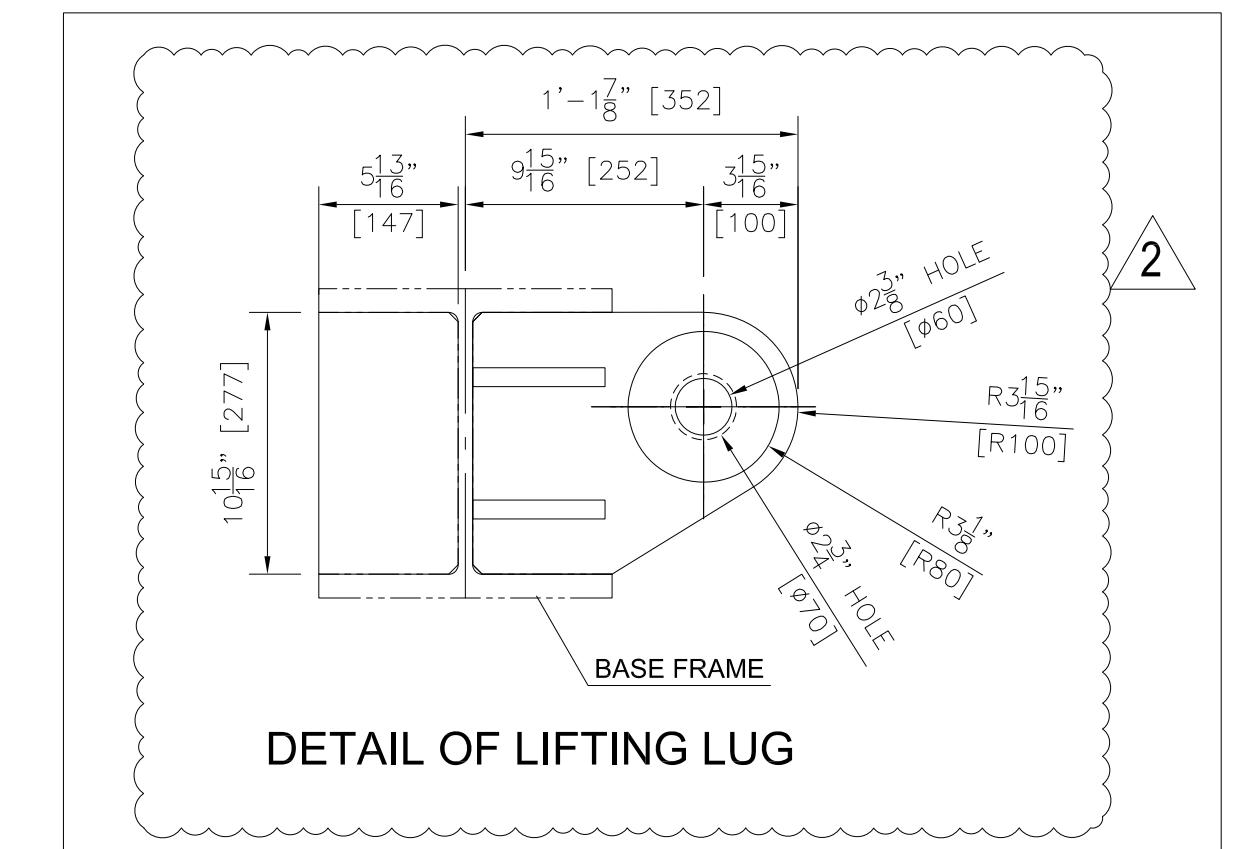
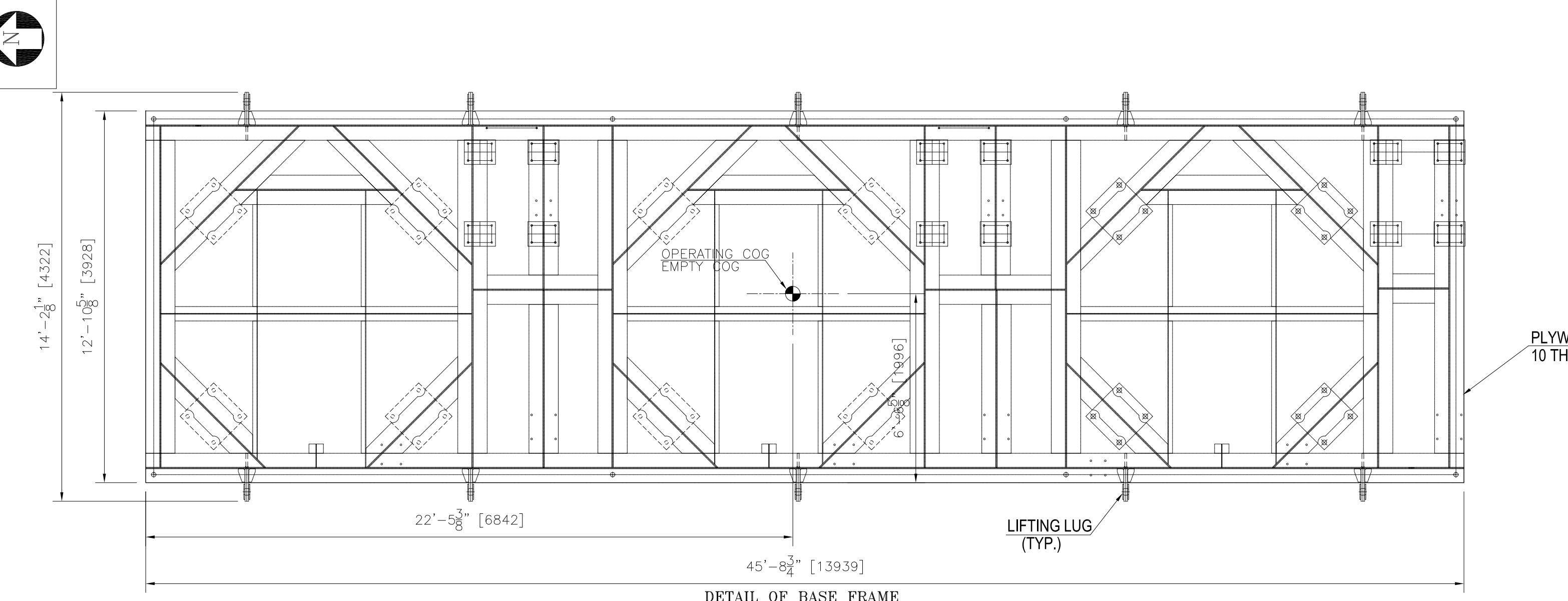
SIEMENS
energy

PURCHASER JOB CODE	PURCHASE ORDER NO.
0-8936-2	P-215A-201-A
Golden Triangle Polymers Company LLC Golden Triangle Polymers Project	
ETHYLENE UNIT - 10	
EQUIPMENT NAME / ITEM TAG NO. QUENCH AREA PROCESS WATER CLEAN-UP UNIT/10-V-2401	
DOCUMENT TITLE LIFTING ARRANGEMENT DRAWING FOR FOR AWS FILTER (10-V-2401A/B/C)	
COMPANY DWG. NO. - -	
CONTRACTOR DWG. NO. - V-215A-201-A-PLN-701 SCALE 1:40	
DWG. NO. - SEI-PLN-701 SHEET 02 OF 07 SIZE A REV. 1	



REFERENCE DRAWINGS

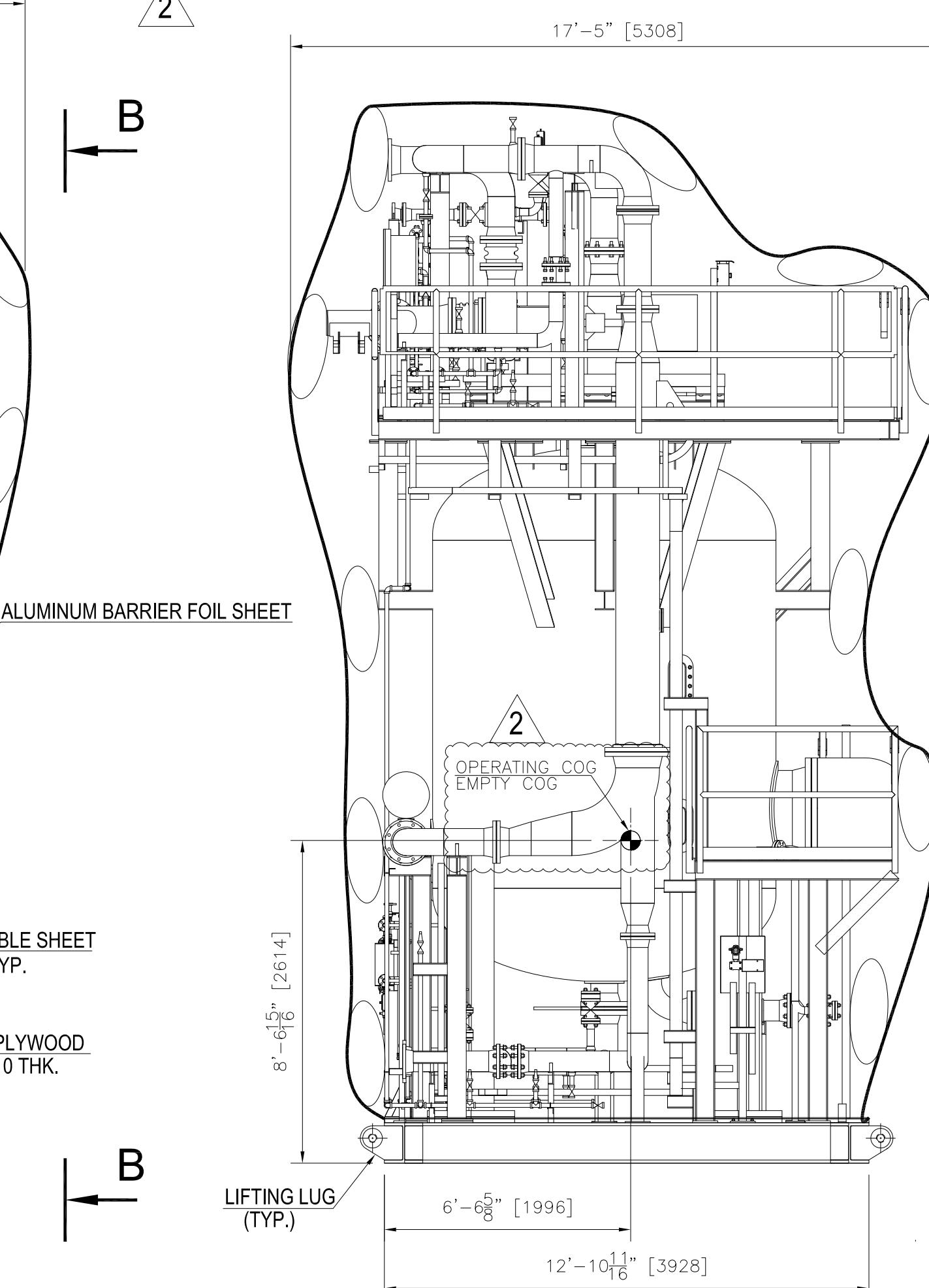
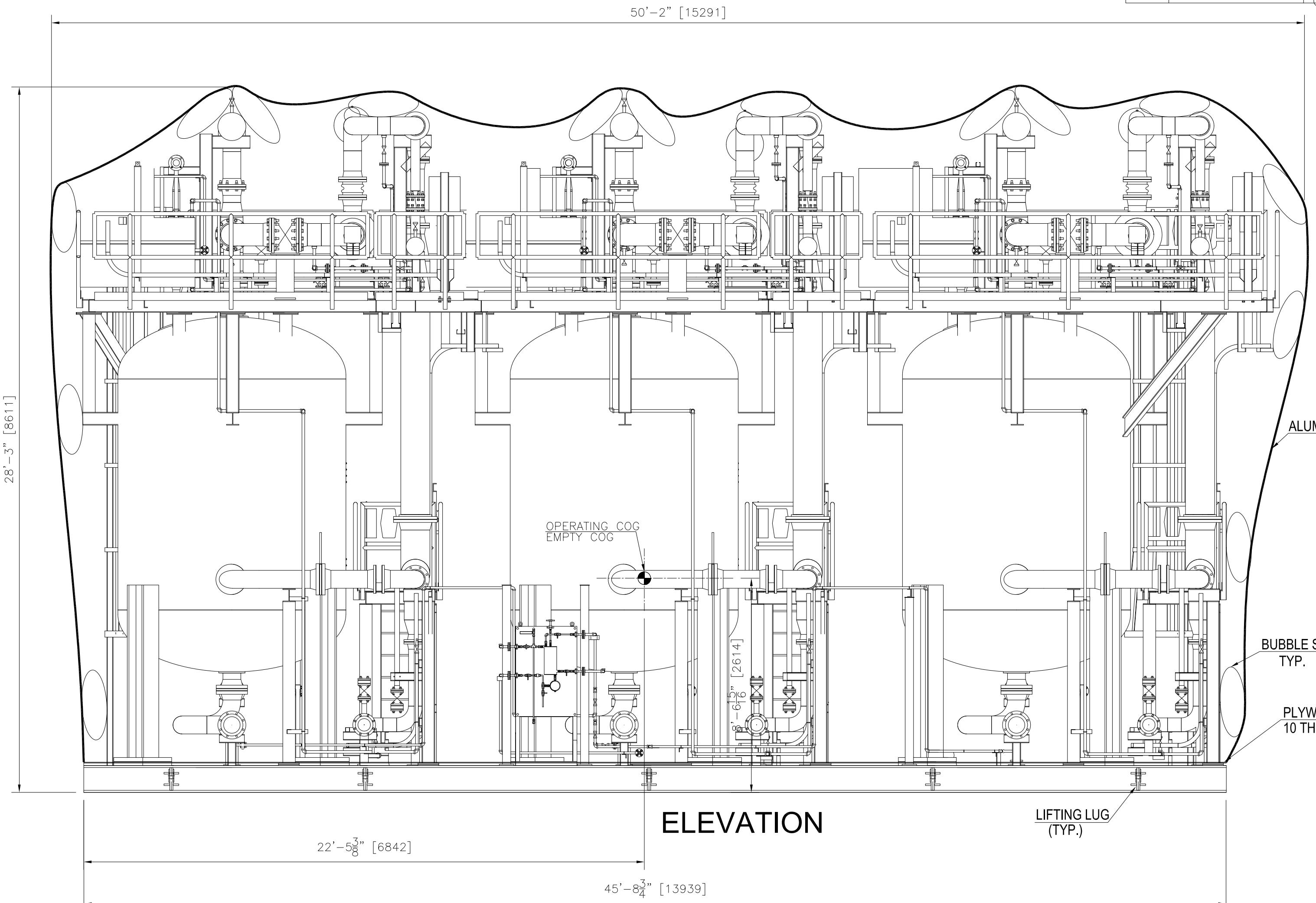
DWG. NO. DESCRIPTION



MATERIAL SPECIFICATION

- Kiln Dried Pinewood as per ISPM 15 norms
- Marine plywood which is moisture resistant upto 10 MM
- Desiccant is clay based with high absorption capacity
- HDPE is 185 to 200 gsm
- Stretch Film is 22 micron
- Bubble roll is 70 micron

SR NO	EQUIPMENT NAME	EXPECTED SIZE WITH PACKING	Wt. in Ton	BOTTOM SURFACE AREA	WT Per FT.
1	AWS SKID	50' 2" [15291] X 17' 5" [5308] X 28'-3" [8611] HT	85 Ton / 187393 lbs	49x17.75 = 869.75 sq ft	85/761.4828 = 0.11162 ton/ ft ² / 223.24 lbs/ft ²



2	21-06-2024	IFA	NT	JS	AM
0	04-06-2024	IFA	NT	JS	AM

REV DATE DESCRIPTION PREP'D CHK'D APPD

GOLDEN TRIANGLE POLYMERS COMPANY JKJV GTPP

VENDOR NAME
SIEMENS energy

PURCHASER JOB CODE PURCHASE ORDER NO.
0-8936-2 P-215A-201-A

Golden Triangle Polymers Company LLC
Golden Triangle Polymers Project

ETHYLENE UNIT - 10

EQUIPMENT NAME / ITEM TAG NO.	10-X-2400
DOCUMENT TITLE	PACKING FOR AWS SKID (10-V-2401 A/B/C)
COMPANY DWG. NO.	-
CONTRACTOR DWG. NO.	-
DWG. NO.	SH. NO. SIZE REV.
	07 OF 07 D 2



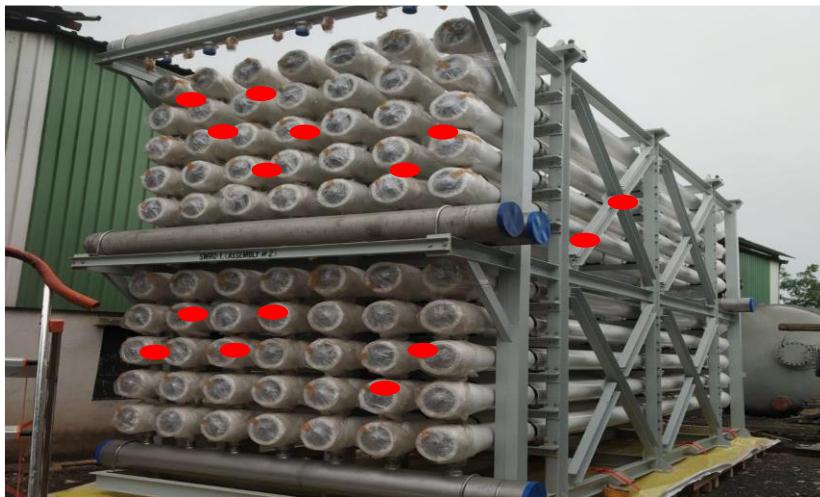
2. Packing Procedure for below skids

- **IGF Skid**
- **Backwash Surge Drum Skid**
- **Backwash Return Drum Skid**
- **AWS Frontal Skid**
- **AWS Skid**

- Step – 1: Base floor of each skid will be covered by way of bolting with 10mm thick Plywood.
- Step – 2: Critical components like Instruments, Valves, Pump, Motors etc. will be soft wrapped post Heat shrink wrapping. Soft wrapping will be done using Bubble sheet , stretch film & 3mm EPE foam wherever required and stretch film post Vaccum packing (silver aluminium foil).



- Step – 3: Sufficient desiccant bags shall be placed/tagged inside the skid as highlighted in **RED** for moisture absorption



- Step – 4: Entire skid will be covered with bag made from High Density Polyethylene cover.
- Step – 5: High density Polyethylene cover will be strapped to the packed skid at 8 points (4 Length wise straps + 4 width wise straps)

