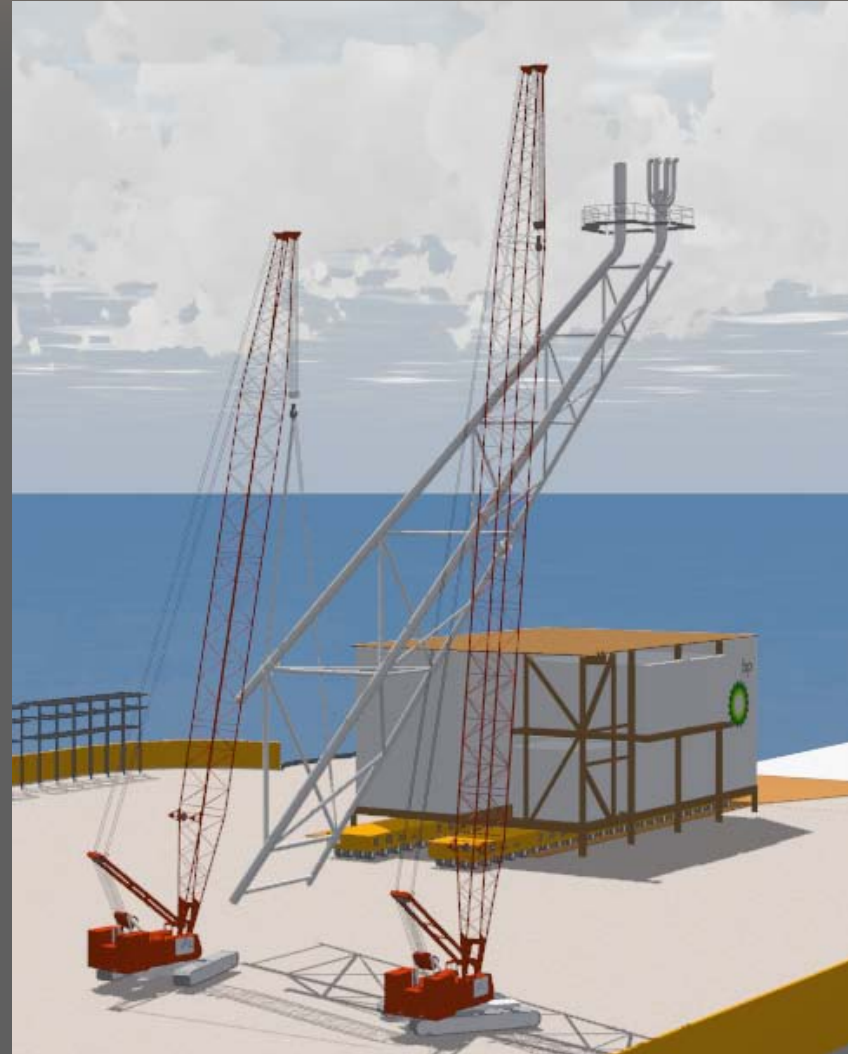


Twin 888 Flare Lift

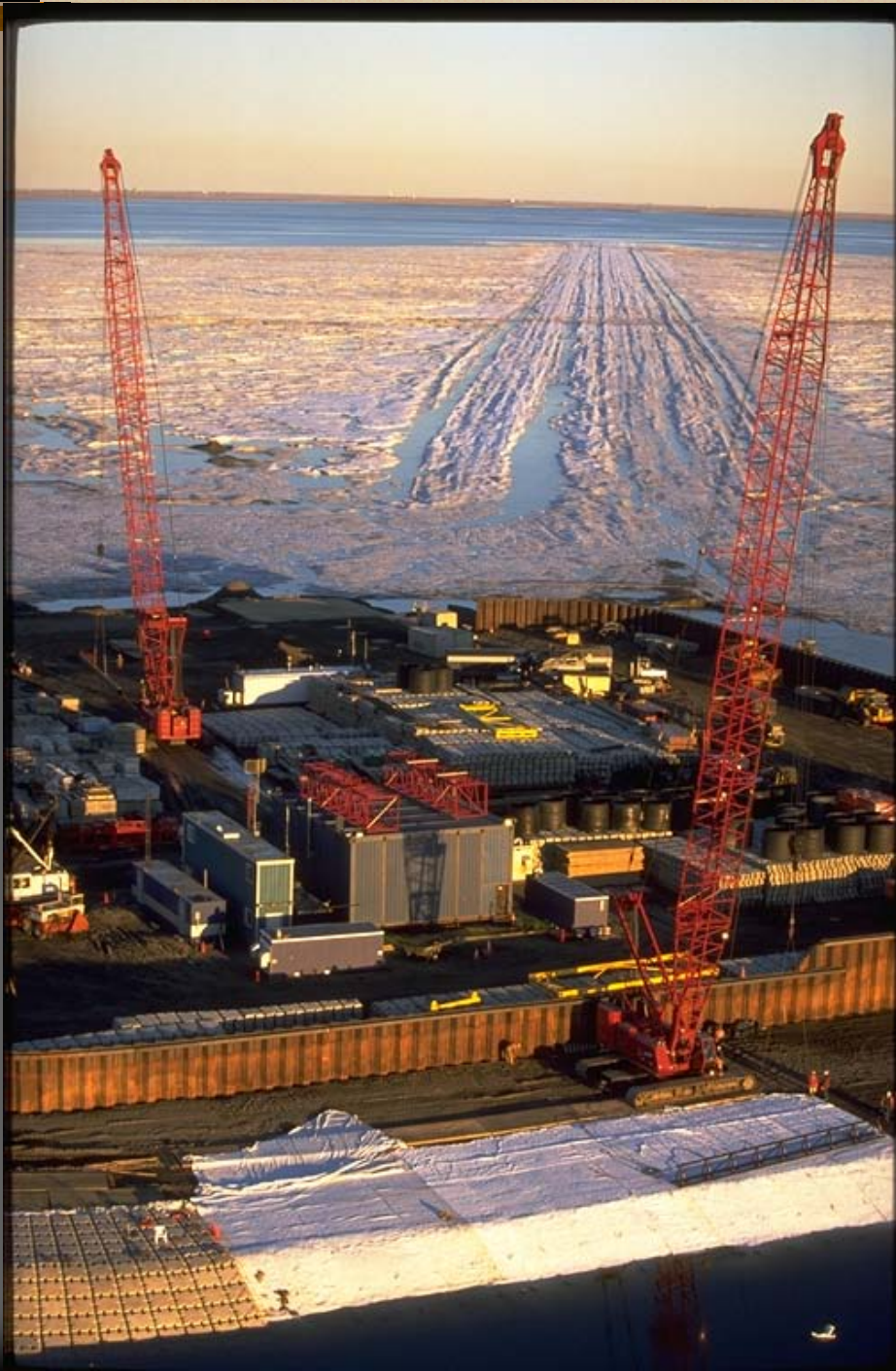
- ➡ Two 888 cranes available
- ➡ Close to capacity limits
- ➡ Massive complex flare lift
- ➡ Complicated rigging
- ➡ Manitowoc approves walking
- ➡ Careful study of tilt-up lift
- ➡ Mate with platform trailers



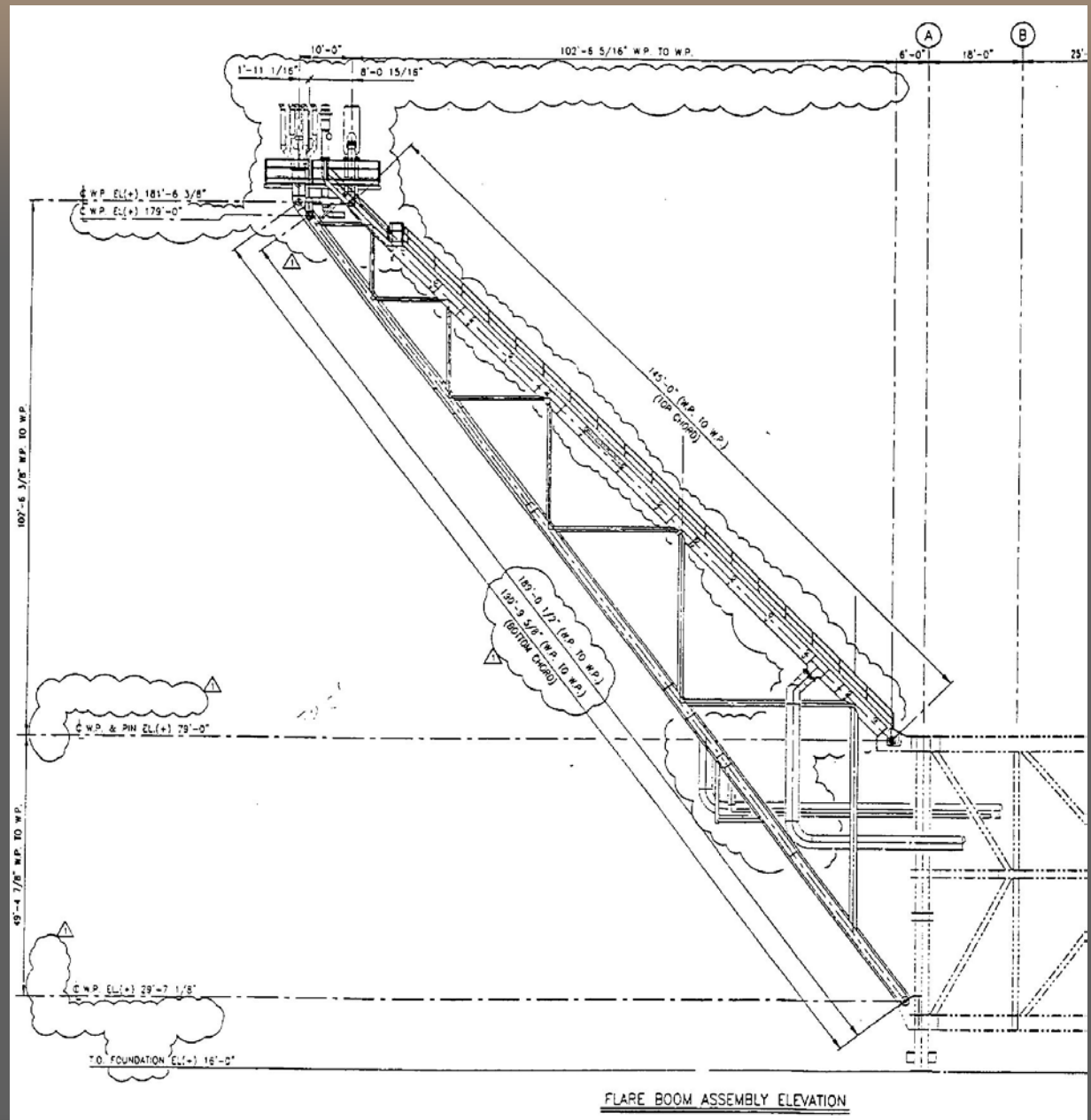
B.P. Northstar Island



Northstar Island



B.P. Flare diagram 1



SCALE = 3/32" = 1'-0"

Flare Base Pictures 1-2



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NORTHSTAR FLARE BOOM

Picture No.:



Flare Pictures 3-4



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Picture No.:

Inspection #:

Date:



NORTHSTAR FLARE BOOM (LOWER END)

Picture No.:



FLARE BOOM (TOP END)

Flare Ladder & Lug



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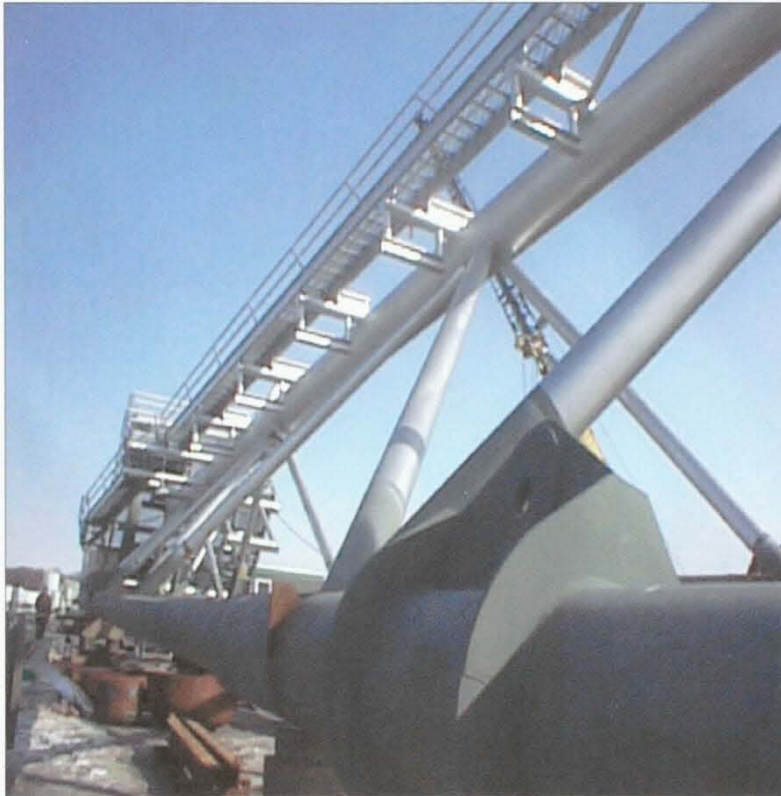
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Picture No.:

Inspection #:

Date:



NORTHSTAR FLARE BOOM (LOWER LIFTING POINT)

Picture No.:



LOWER LIFTING POINT (SIDE VIEW)

Flare Tip



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Inspection #:

Date:



NORTHSTAR FLARE BOOM (TOP END)

Picture No.:



Flare Tip & Platform



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Picture No.:

Inspection #:

Date:



NORTHSTAR FLARE BOOM (FLARE TIP ATTACHMENT)

Picture No.:



FLARE ATTACHMENT MOUNTING LOCATION

Compressor Bldg. Views



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Picture No.: Inspection #: Date:



COMP. FACILITY (WEST SIDE)

Picture No.:



COMP. FACILITY (NORTH & WEST CORNER)

Flare Connection Pin & Lug



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Picture No.:

Inspection #:

Date:



TOP LIFT LUG LOCATION

Picture No.:



COMP. FACILITY (WEST SIDE)

Upper Flare Connection Point



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Picture No.:

Inspection #:

Date:



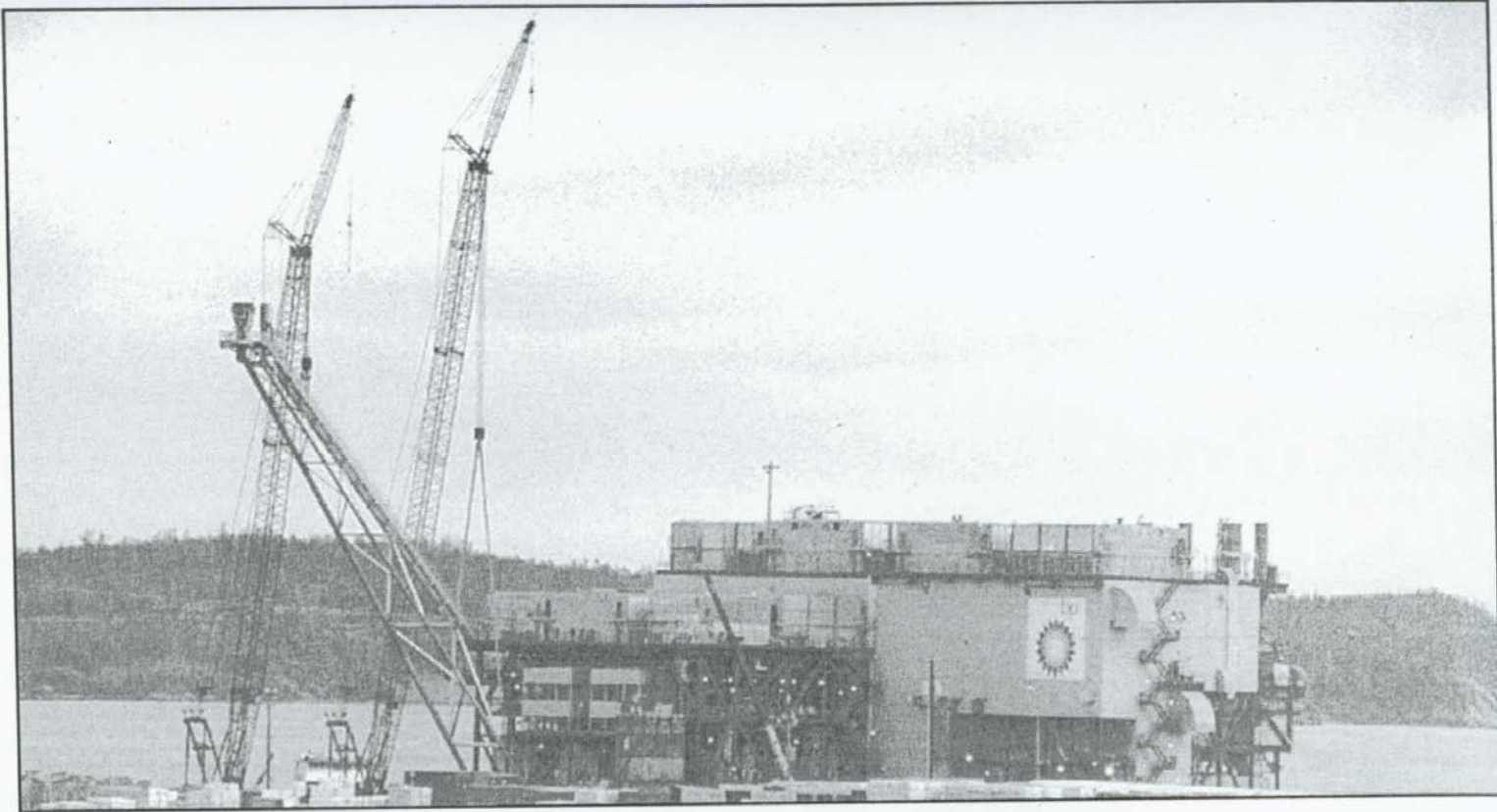
FLARE BOOM TOP MOUNTING LOCATION

Picture No.:



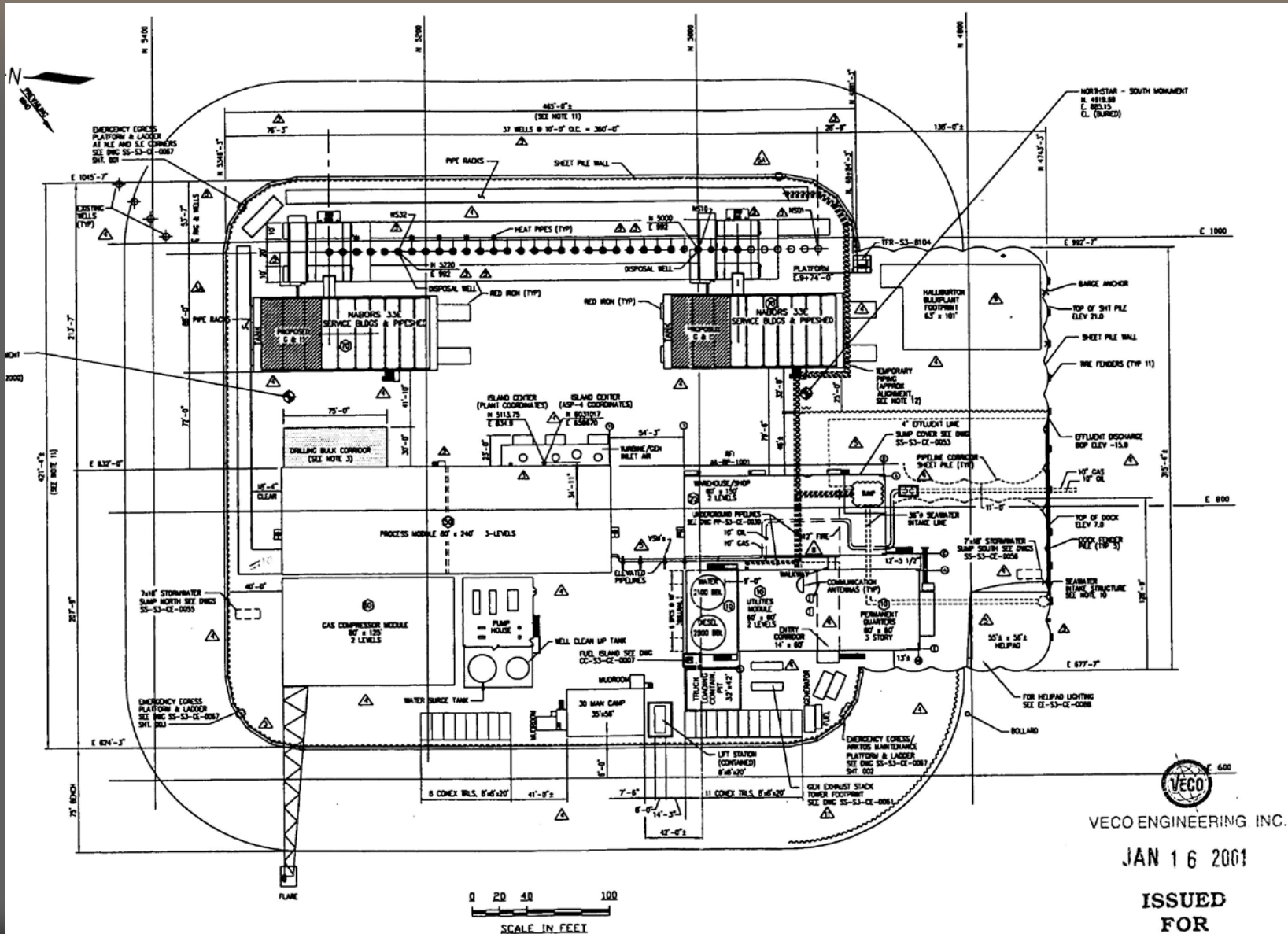
FLARE BOOM TOP MOUNTING BRACKET

Flare Test Lift



NORTHSTAR MODULES/ANCHORAGE — View of the Northstar modules from downtown Anchorage. The flare boom being held in place is 186 feet long, and towers 172 feet above ground.

Plot Plan with Flare location



Mats, Plywood & Plates

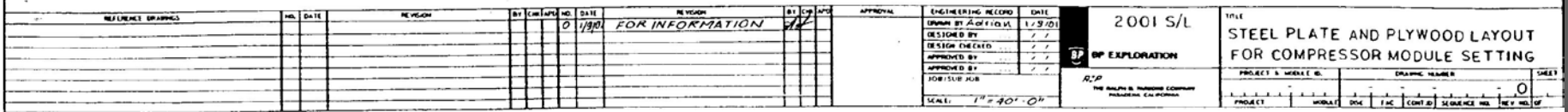
Northstar

Description	Section (in.)	Width (ft.)	Length (ft.)	Quantity	Existing Use
Timbers	4"	12"	20'	34	Stock Piled / New
Timbers	8"	8"	20'	8	Stock Piled / New
Timbers	8"	8"	20'	13	Dunnage / Reusable
Timbers	12"	12"	16'	39	Stock Piled / New
Timbers	12"	12"	20'	2	Stock Piled / New
Rig Mats (groups of 4)	6"	8'	16'	4	Stock Piled / Reusable
Rig Mats	6"	8'	16'	1	Stock Piled / New
Rig Mats	6"	6'	18'	4	Stock Piled / New
Rig Mats	6"	8'	18'	3	Stock Piled / New
Rig Mats	6"	8'	23'	3	Stock Piled / New
Rig Mats	6"	9'	26'	4	Stock Piled / New
Crane Mats	6"	6'	20'	1	Stock Piled / New
Crane Mats	6"	8'	20'	6	Stock Piled / New
Plate Steel	1/2"	8'	20'	12	Ice Bridges / Reusable

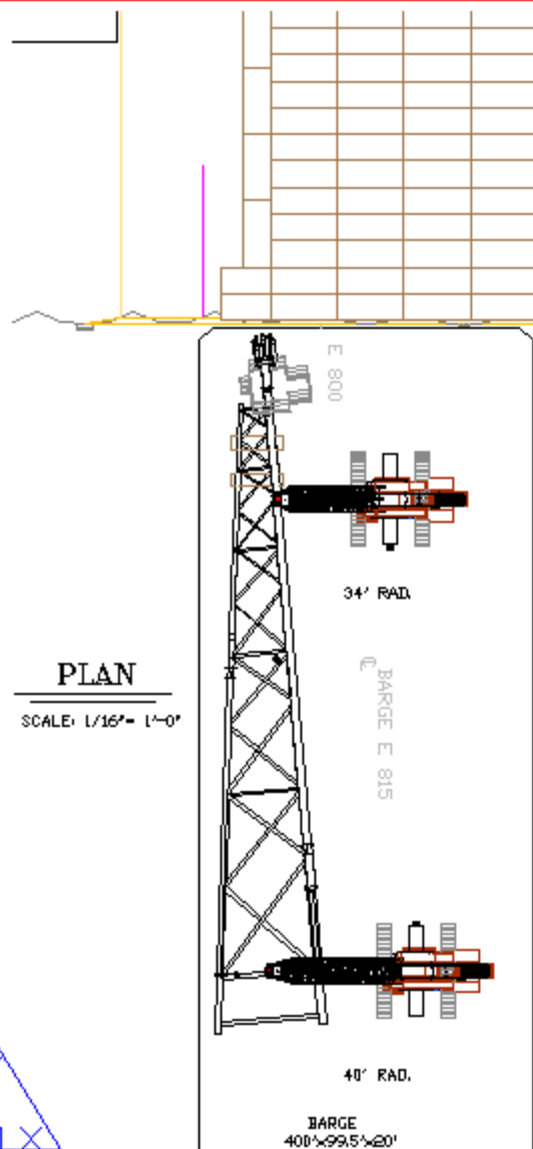
Westdock Staging Area

Description	Section (in.)	Width (ft.)	Length (ft.)	Quantity	Existing Use
Plywood	1/2"	4'	8'	1188	Stock Piled / New
Plywood	1 1/8	4'	8'	72	Stock Piled / Reusable
Planks	2"	12"	20'	15	Stock Piled / Reusable
Timbers	12"	12"	20'	30	Stock Piled / Reusable
Rig Mats (groups of 4)	6"	8'	20'	57	Stock Piled / New
Crane Mats	6"	8"	20'	55	Stock Piled / Reusable
Crane Mats	8"	9'	40'	1	Stock Piled / Reusable
Crane Mats	12"	8'	20'	25	Stock Piled / Reusable
Crane Mats	12"	8'	30'	31	Stock Piled / Reusable
Plate Steel	1/2"	8'	20'	50	Stock Piled / Reusable

*



Barge Unloading at dock



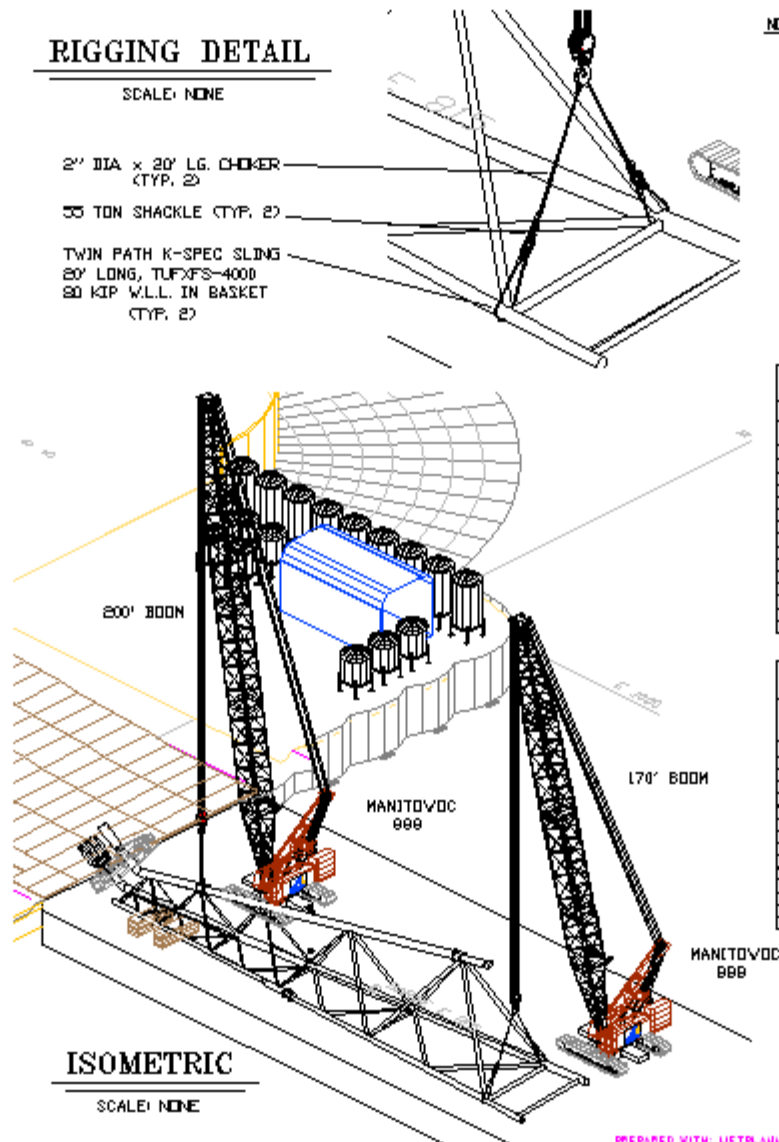
RIGGING DETAIL

SCALE: NONE

2' DIA x 20' LG. CHOKER
(TYP. 2)

35 TON SHACKLE (TYP. 2)

TWIN PATH K-SPEC SLING
20' LONG, TUF-XFS-4000
80 KIP W.L.L. IN BASKET
(TYPE 2)



ISOMETRIC

SCALE: NONE

NOTES

- 1) POSITION 888'S IN RELATION TO FLARE AS SHOWN
- 2) THE MANITOWOC 888'S WILL RAISE THEIR RESPECTIVE END OF THE FLARE 10' AND SWING TO THE RIGHT. THE CRANES WILL THEN TOUCH DOWN THEIR LOAD AND REPOSITION THEMSELVES AND REPEAT THE SWINGING OPERATION UNTIL THE POSITION SHOWN IN Dwg. FLARE-2 IS ATTAINED.
- 3) THE OBJECTIVE IS TO CENTER THE FLARE TIP ON THE 90' MAT RUNWAY SO THAT A CRANE MAY STRADDLE THE TIP ON EACH SIDE AND HAVE ROOM TO WALK.
- 4) ANOTHER OBJECTIVE IS TO FREE AREA AROUND THE FLARE BASE SO THAT THE SCHUEBLE PPU AND 3 AXLE LINES MAY MOVE FORWARD TO HANDLE THE BASE.

MULTIPLY 999-9999S BY TOTAL BASIC CREDIT 444444 CREDIT/ CUMULATIVE				
DAY	SCORE POINT	ON-THE-SPOT SCORE	300-CAP-LESS	500-LESS
99-97	99.00	97.000	99.000	
99-94	98.00	96.000	98.000	
99-91	97.00	95.000	97.000	
99-88	96.00	94.000	96.000	
99-85	95.00	93.000	95.000	
99-82	94.00	92.000	94.000	
99-79	93.00	91.000	93.000	
99-76	92.00	90.000	92.000	
99-73	91.00	89.000	91.000	
99-70	90.00	88.000	90.000	
99-67	89.00	87.000	89.000	
99-64	88.00	86.000	88.000	
99-61	87.00	85.000	87.000	
99-58	86.00	84.000	86.000	
99-55	85.00	83.000	85.000	
99-52	84.00	82.000	84.000	
99-49	83.00	81.000	83.000	
99-46	82.00	80.000	82.000	
99-43	81.00	79.000	81.000	
99-40	80.00	78.000	80.000	
99-37	79.00	77.000	79.000	
99-34	78.00	76.000	78.000	
99-31	77.00	75.000	77.000	
99-28	76.00	74.000	76.000	
99-25	75.00	73.000	75.000	
99-22	74.00	72.000	74.000	
99-19	73.00	71.000	73.000	
99-16	72.00	70.000	72.000	
99-13	71.00	69.000	71.000	
99-10	70.00	68.000	70.000	
99-07	69.00	67.000	69.000	
99-04	68.00	66.000	68.000	
99-01	67.00	65.000	67.000	

FLARE TIP	154,000
888 BLOCK	4,500
10 P.O.L.	2,000
RIGGING	2,000
	<hr/>
	161,250

$$\frac{161,250}{178,000} = 90.6 \% \text{ CAPACITY}$$

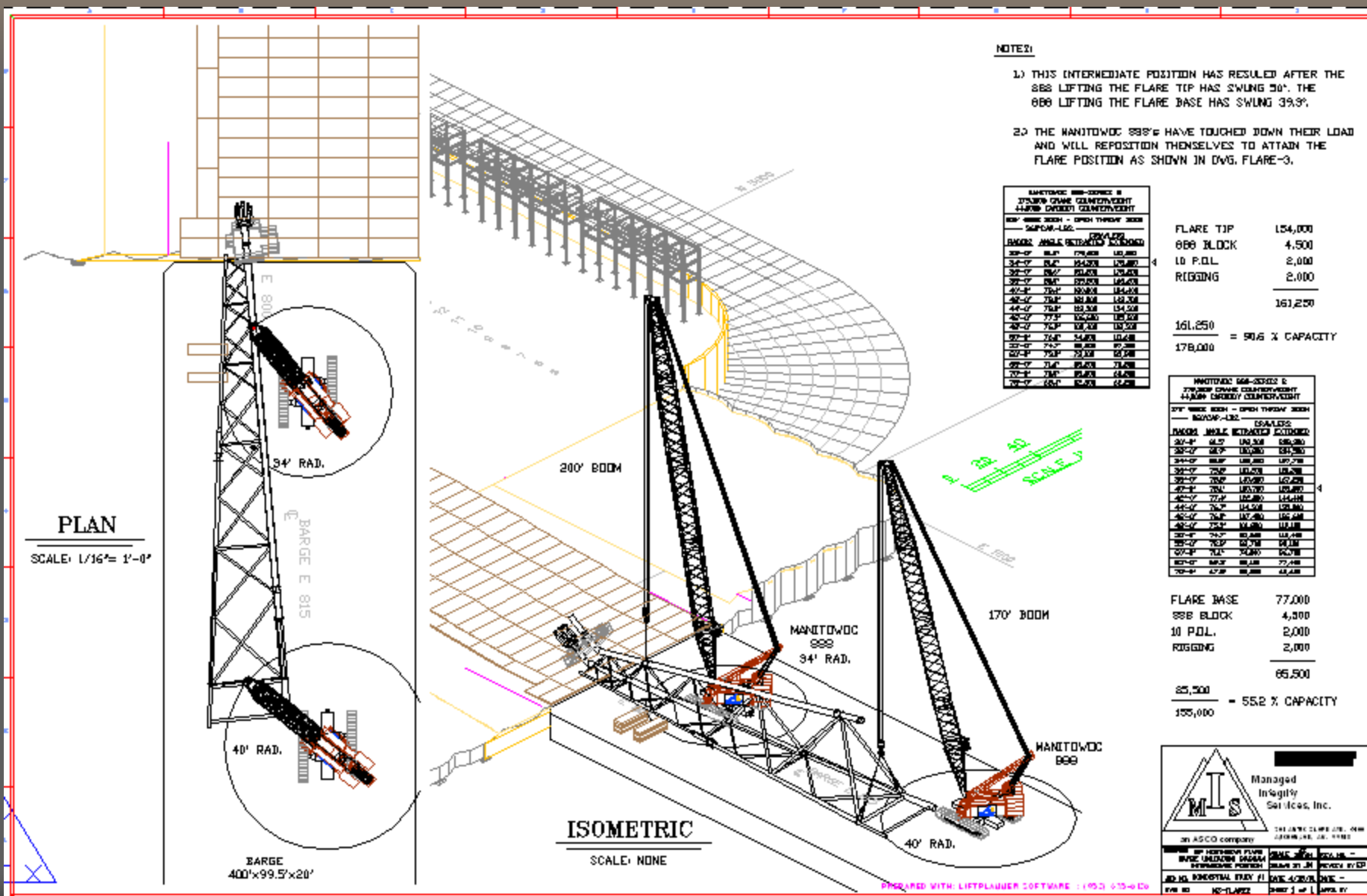
HARTFORD GUN-SPORE & STURMAN GUN-SPORE-BOAT 44/40MM CAPACITY COUNTER-BOAT				
STW: BASIC BOOM - ORION THERM-BOAT - 50/40MM-LUG.				
RANGE		ORANGE		
ANGLE		EXTENDED		
300-4"	80.3"	298,380	298,380	298,380
320-4"	90.0"	298,450	298,450	298,450
340-4"	90.0"	298,520	298,520	298,520
360-4"	90.0"	298,590	298,590	298,590
380-4"	90.0"	298,660	298,660	298,660
400-4"	90.0"	298,730	298,730	298,730
420-4"	90.0"	298,800	298,800	298,800
440-4"	90.0"	298,870	298,870	298,870
460-4"	90.0"	298,940	298,940	298,940
480-4"	90.0"	299,010	299,010	299,010
500-4"	90.0"	299,080	299,080	299,080
520-4"	90.0"	299,150	299,150	299,150
540-4"	90.0"	299,220	299,220	299,220
560-4"	90.0"	299,290	299,290	299,290
580-4"	90.0"	299,360	299,360	299,360
600-4"	90.0"	299,430	299,430	299,430
620-4"	90.0"	299,500	299,500	299,500
640-4"	90.0"	299,570	299,570	299,570
660-4"	90.0"	299,640	299,640	299,640
680-4"	90.0"	299,710	299,710	299,710
700-4"	90.0"	299,780	299,780	299,780
720-4"	90.0"	299,850	299,850	299,850
740-4"	90.0"	299,920	299,920	299,920
760-4"	90.0"	300,000	300,000	300,000
780-4"	90.0"	300,070	300,070	300,070
800-4"	90.0"	300,140	300,140	300,140
820-4"	90.0"	300,210	300,210	300,210
840-4"	90.0"	300,280	300,280	300,280
860-4"	90.0"	300,350	300,350	300,350
880-4"	90.0"	300,420	300,420	300,420
900-4"	90.0"	300,490	300,490	300,490
920-4"	90.0"	300,560	300,560	300,560
940-4"	90.0"	300,630	300,630	300,630
960-4"	90.0"	300,700	300,700	300,700
980-4"	90.0"	300,770	300,770	300,770
1000-4"	90.0"	300,840	300,840	300,840
1020-4"	90.0"	300,910	300,910	300,910
1040-4"	90.0"	300,980	300,980	300,980
1060-4"	90.0"	301,050	301,050	301,050
1080-4"	90.0"	301,120	301,120	301,120
1100-4"	90.0"	301,190	301,190	301,190
1120-4"	90.0"	301,260	301,260	301,260
1140-4"	90.0"	301,330	301,330	301,330
1160-4"	90.0"	301,400	301,400	301,400
1180-4"	90.0"	301,470	301,470	301,470
1200-4"	90.0"	301,540	301,540	301,540
1220-4"	90.0"	301,610	301,610	301,610
1240-4"	90.0"	301,680	301,680	301,680
1260-4"	90.0"	301,750	301,750	301,750
1280-4"	90.0"	301,820	301,820	301,820
1300-4"	90.0"	301,890	301,890	301,890
1320-4"	90.0"	301,960	301,960	301,960
1340-4"	90.0"	302,030	302,030	302,030
1360-4"	90.0"	302,100	302,100	302,100
1380-4"	90.0"	302,170	302,170	302,170
1400-4"	90.0"	302,240	302,240	302,240
1420-4"	90.0"	302,310	302,310	302,310
1440-4"	90.0"	302,380	302,380	302,380
1460-4"	90.0"	302,450	302,450	302,450
1480-4"	90.0"	302,520	302,520	302,520
1500-4"	90.0"	302,590	302,590	302,590
1520-4"	90.0"	302,660	302,660	302,660
1540-4"	90.0"	302,730	302,730	302,730
1560-4"	90.0"	302,800	302,800	302,800
1580-4"	90.0"	302,870	302,870	302,870
1600-4"	90.0"	302,940	302,940	302,940
1620-4"	90.0"	303,010	303,010	303,010
1640-4"	90.0"	303,080	303,080	303,080
1660-4"	90.0"	303,150	303,150	303,150
1680-4"	90.0"	303,220	303,220	303,220
1700-4"	90.0"	303,290	303,290	303,290
1720-4"	90.0"	303,360	303,360	303,360
1740-4"	90.0"	303,430	303,430	303,430
1760-4"	90.0"	303,500	303,500	303,500
1780-4"	90.0"	303,570	303,570	303,570
1800-4"	90.0"	303,640	303,640	303,640
1820-4"	90.0"	303,710	303,710	303,710
1840-4"	90.0"	303,780	303,780	303,780
1860-4"	90.0"	303,850	303,850	303,850
1880-4"	90.0"	303,920	303,920	303,920
1900-4"	90.0"	304,000	304,000	304,000
1920-4"	90.0"	304,070	304,070	304,070
1940-4"	90.0"	304,140	304,140	304,140
1960-4"	90.0"	304,210	304,210	304,210
1980-4"	90.0"	304,280	304,280	304,280
2000-4"	90.0"	304,350	304,350	304,350
2020-4"	90.0"	304,420	304,420	304,420
2040-4"	90.0"	304,490	304,490	304,490
2060-4"	90.0"	304,560	304,560	304,560
2080-4"	90.0"	304,630	304,630	304,630
2100-4"	90.0"	304,700	304,700	304,700
2120-4"	90.0"	304,770	304,770	304,770
2140-4"	90.0"	304,840	304,840	304,840
2160-4"	90.0"	304,910	304,910	304,910
2180-4"	90.0"	304,980	304,980	304,980
2200-4"	90.0"	305,050	305,050	305,050
2220-4"	90.0"	305,120	305,120	305,120
2240-4"	90.0"	305,190	305,190	305,190
2260-4"	90.0"	305,260	305,260	305,260
2280-4"	90.0"	305,330	305,330	305,330
2300-4"	90.0"	305,400	305,400	305,400
2320-4"	90.0"	305,470	305,470	305,470
2340-4"	90.0"	305,540	305,540	305,540
2360-4"	90.0"	305,610	305,610	305,610
2380-4"	90.0"	305,680	305,680	305,680
2400-4"	90.0"	305,750	305,750	305,750
2420-4"	90.0"	305,820	305,820	305,820
2440-4"	90.0"	305,890	305,890	305,890
2460-4"	90.0"	305,960	305,960	305,960
2480-4"	90.0"	306,030	306,030	306,030
2500-4"	90.0"	306,100	306,100	306,100
2520-4"	90.0"	306,170	306,170	306,170
2540-4"	90.0"	306,240	306,240	306,240
2560-4"	90.0"	306,310	306,310	306,310
2580-4"	90.0"	306,380	306,380	306,380
2600-4"	90.0"	306,450	306,450	306,450
2620-4"	90.0"	306,520	306,520	306,520
2640-4"	90.0"	306,590	306,590	306,590
2660-4"	90.0"	306,660	306,660	306,660
2680-4"	90.0"	306,730	306,730	306,730
2700-4"	90.0"	306,800	306,800	306,800
2720-4"	90.0"	306,870	306,870	306,870
2740-4"	90.0"	306,940	306,940	306,940
2760-4"	90.0"	307,010	307,010	307,010
2780-4"	90.0"	307,080	307,080	307,080
2800-4"	90.0"	307,150	307,150	307,150
2820-4"	90.0"	307,220	307,220	307,220
2840-4"	90.0"	307,290	307,290	307,290
2860-4"	90.0"	307,360	307,360	307,360
2880-4"	90.0"	307,430	307,430	307,430
2900-4"	90.0"	307,500	307,500	307,500
2920-4"	90.0"	307,570	307,570	307,570
2940-4"	90.0"	307,640	307,640	307,640
2960-4"	90.0"	307,710	307,710	307,710
2980-4"	90.0"	307,780	307,780	307,780
3000-4"	90.0"	307,850	307,850	307,850
3020-4"	90.0"	307,920	307,920	307,920
3040-4"	90.0"	308,000	308,000	308,000
3060-4"	90.0"	308,070	308,070	308,070
3080-4"	90.0"	308,140	308,140	308,140
3100-4"	90.0"	308,210	308,210	308,210
3120-4"	90.0"	308,280	308,280	308,280
3140-4"	90.0"	308,350	308,350	308,350
3160-4"	90.0"	308,420	308,420	308,420
3180-4"	90.0"	308,490	308,490	308,490
3200-4"	90.0"	308,560	308,560	308,560
3220-4"	90.0"	308,630	308,630	308,630
3240-4"	90.0"	308,700	308,700	308,700
3260-4"	90.0"	308,770	308,770	308,770
3280-4"	90.0"	308,840	308,840	308,840
3300-4"	90.0"	308,910	308,910	308,910
3320-4"	90.0"	308,980	308,980	308,980
3340-4"	90.0"	309,050	309,050	309,050
3360-4"	90.0"	309,120	309,120	309,120
3380-4"	90.0"	309,190	309,190	309,190
3400-4"	90.0"	309,260	309,260	309,260
3420-4"	90.0"	309,330	309,330	309,330
3440-4"	90.0"	309,400	309,400	309,400
3460-4"	90.0"	309,470	309,470	309,470
3480-4"	90.0"	309,540	309,540	309,540
3500-4"	90.0"	309,610	309,610	309,610
3520-4"	90.0"	309,680	309,680	309,680
3540-4"	90.0"	309,750	309,750	309,750
3560-4"	90.0"	309,820	309,820	309,820
3580-4"	90.0"	309,890	309,890	309,890
3600-4"	90.0"	309,960	309,960	309,960
3620-4"	90.0"	310,030	310,030	310,030
3640-4"	90.0"	310,100	310,100	310,100
3660-4"	90.0"	310,170	310,170	310,170
3680-4"	90.0"	310,240	310,240	310,240
3700-4"	90.0"	310,310	310,310	310,310
3720-4"	90.0"	310,380	310,380	310,380
3740-4"	90.0"	310,450	310,450	310,450
3760-4"	90.0"	310,520	310,520	310,520
3780-4"	90.0"	310,590	310,590	310,590
3800-4"	90.0"	310,660	310,660	310,660
3820-4"	90.0"	310,730	310,730	310,730
3840-4"	90.0"	310,800	310,800	310,800
3860-4"	90.0"	310,870	310,870	310,870
3880-4"	90.0"	310,940	310,940	310,940
3900-4"	90.0"	311,010	311,010	311,010
3920-4"	90.0"	311,080	311,080	311,080
3940-4"	90.0"	311,150	311,150	311,150
3960-4"	90.0"	311,220	311,220	311,220
3980-4"	90.0"	311,290	311,290	311,290
4000-4"	90.0"	311,360	311,360	311,360
4020-4"	90.0"	311,430	311,430	311,430
4040-4"	90.0"	311,500	311,500	311,500
4060-4"	90.0"	311,570	311,570	311,570
4080-4"	90.0"	311,640	311,640	311,640
4100-4"	90.0"	311,710	311,710	311,710
4120-4"	90.0"	311,780	311,780	311,780
4140-4"	90.0"	311,850	311,850	311,850
4160-4"	90.0"	311,920	311,920	311,920
4180-4"	90.0"	312,000	312,000	312,000
4200-4"	90.0"	312,070	312,070	312,070
4220-4"	90.0"	312,140	312,140	312,140
4240-4"	90.0"	312,210	312,210	312,210
4260-4"	90.0"	312,280	312,280	312,280
4280-4"	90.0"	312,350	312,350	312,350
4300-4"	90.0"	312,420	312,420	312,420
4320-4"	90.0"	312,490	312,490	312,490
4340-4"	90.0"	312,560	312,560	312,560
4360-4"	90.0"	312,630	312,630	312,630
4380-4"	90.0"	312,700	312	

FLARE BASE	77,000
808 BLOCK	4,500
10 P.D.L.	2,000
RIGGING	2,000
	<hr/> 85,500

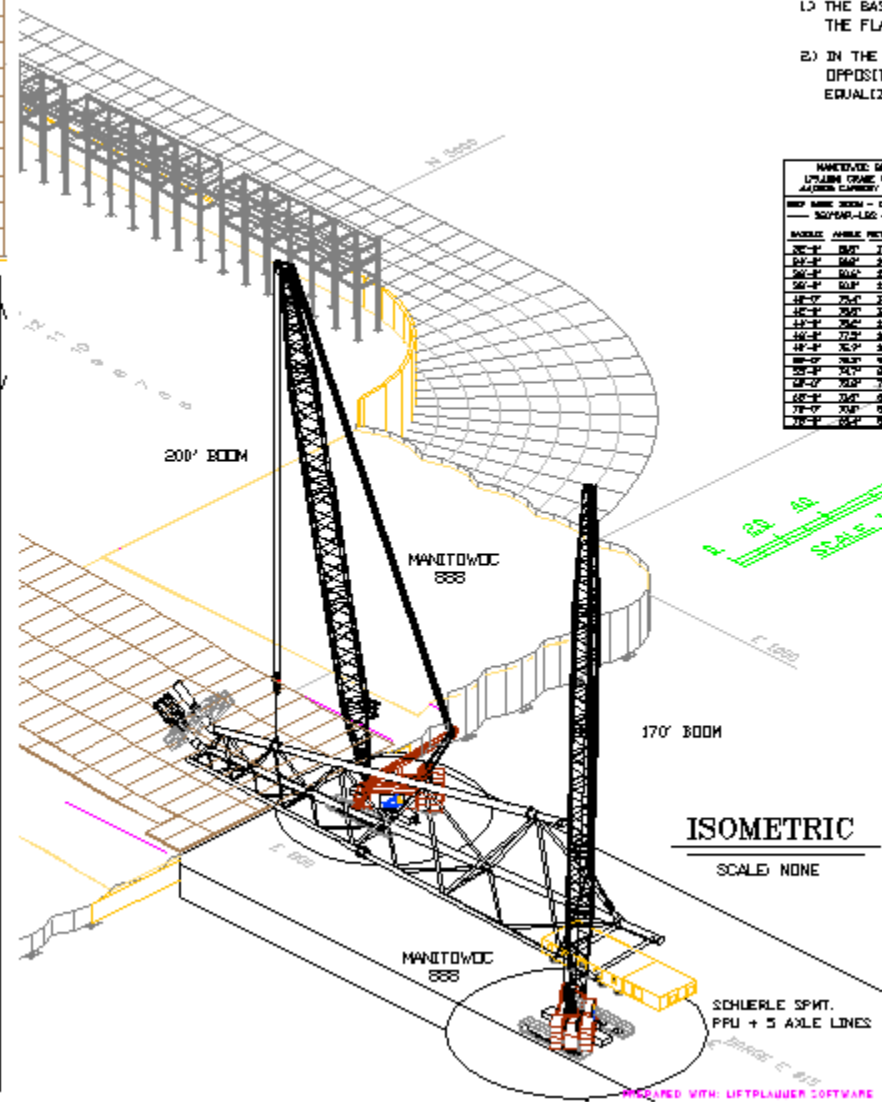
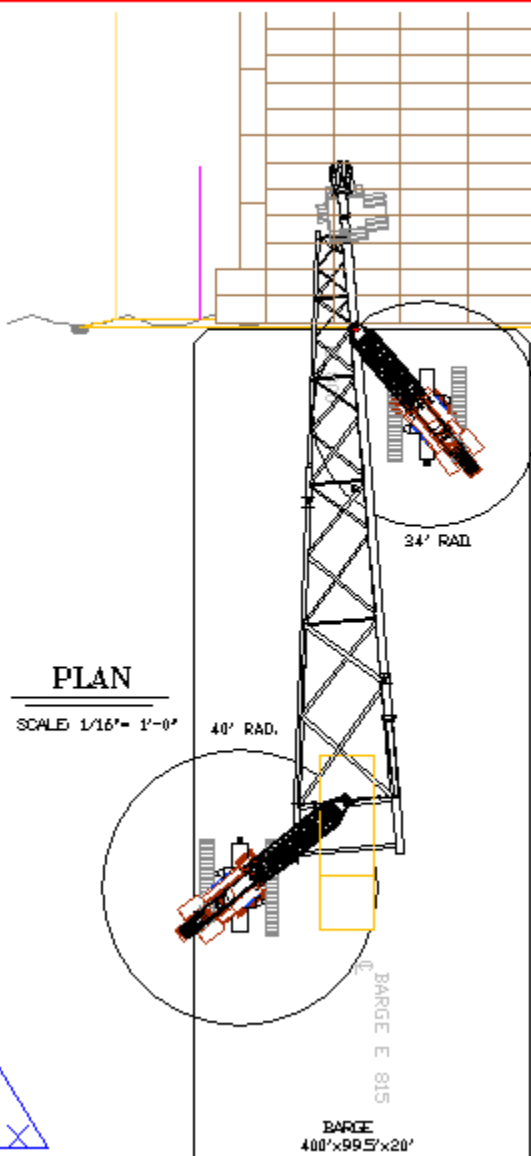
$$\frac{85,500}{155,000} = 55.2\% \text{ CAPACITY}$$



Maneuvering the Flare at dock



Positioning the SPMT at base



NOTES:

- 1.) THE BASE 888 HAS REPOSITIONED ITSELF TO RAISE THE FLARE BASE ONTO THE SCHUERLE SPMT.
- 2.) IN THE NEXT ACTIVITY THE BASE 888 WILL REPOSITION OPPOSITE THE TOP 888 FOR RIGGING OF THE EQUALIZER BEAM AND ASSOCIATED RIGGING.

MANHATTAN 880-3333-8				
UP LANE		CITY/ST/COAST		
ADDRESS CATEGORY		COUNTRY		
REF NAME ADDR -		CITY/THRUST ADDR		
501/PM-L66		DRAWINGS		
BASELINE	ANAL	RETACTED	SCHEMATIC	
28-3	50-1	173-038	18-038	
13-3	50-1	173-038	173-038	
13-3	50-1	173-038	173-038	
56-3	50-1	173-038	166-038	
14-7	75-4	230-038	18-038	
14-7	75-4	230-038	143-038	
14-7	75-4	230-038	18-038	
14-7	77-3	206-038	165-038	
14-7	75-3	206-038	110-038	
88-0	75-3	206-038	110-038	
75-3	75-3	206-038	62-038	
75-3	75-3	206-038	62-038	
14-7	75-4	230-038	75-038	
75-3	75-3	206-038	62-038	
75-3	75-3	206-038	62-038	

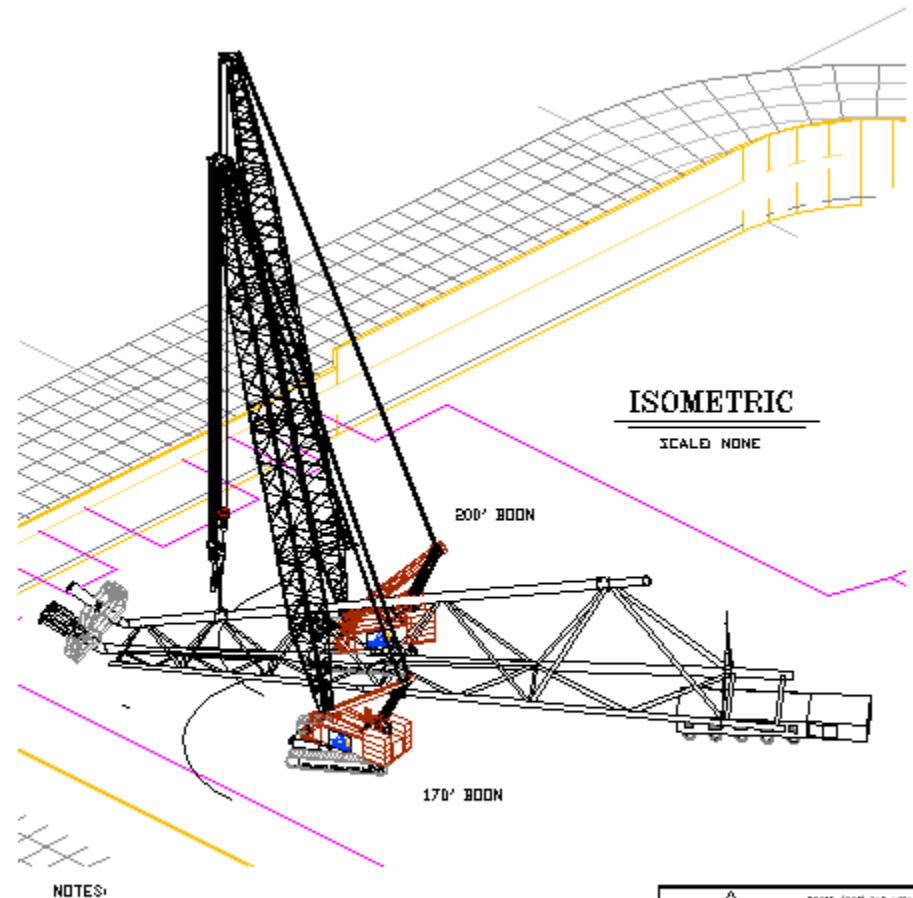
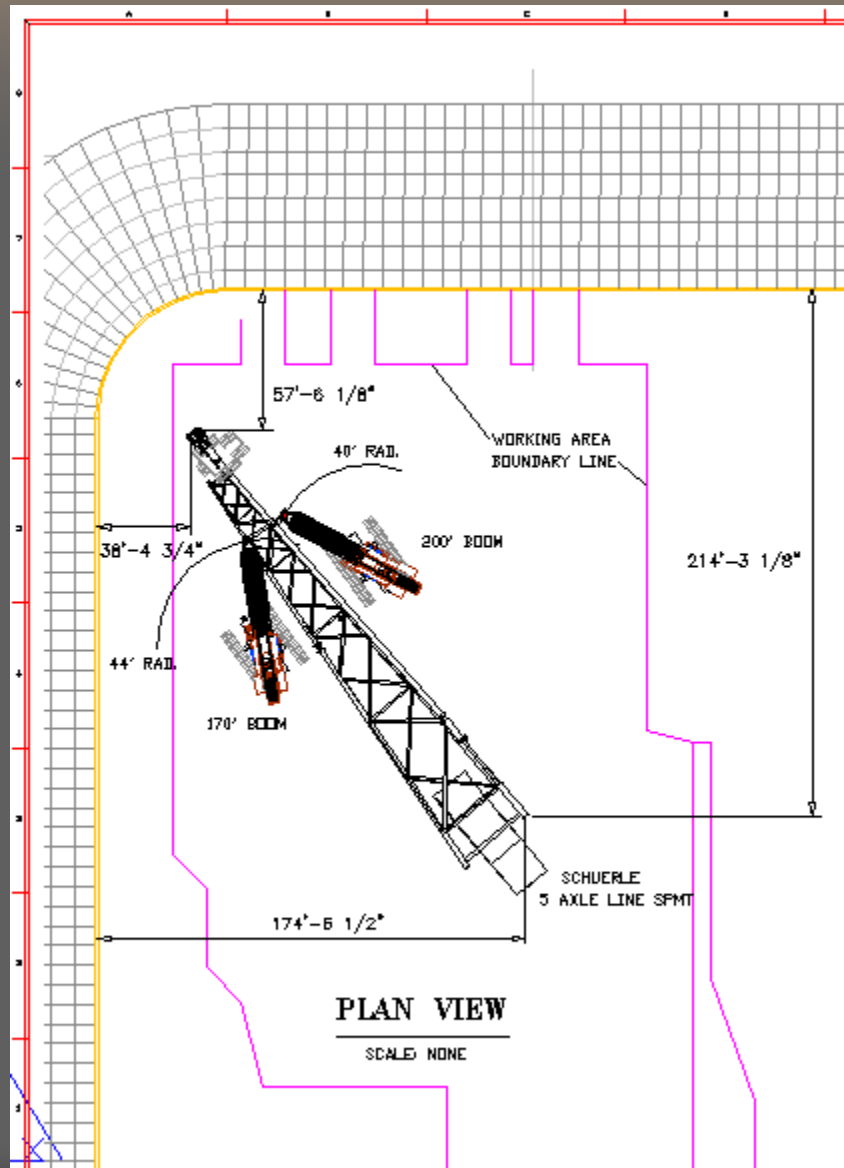
FLARE TIP	134,000
800 BLOCK	4,500
10 P.O.L.	2,000
RIGGING	2,000

$$\frac{161,250}{178,000} = 90.6 \% \text{ CAPACITY}$$
[illegible]

FLARE BASE	77,000
SSS BLOCK	4,500
10 P.O.L.	8,000
RIGGING	2,000

$$\frac{83,500}{151,000} = 55.2 \% \text{ CAPACITY}$$


The Flare "Parking Spot"



Managed Integrity Services, Inc.
an ASCO company

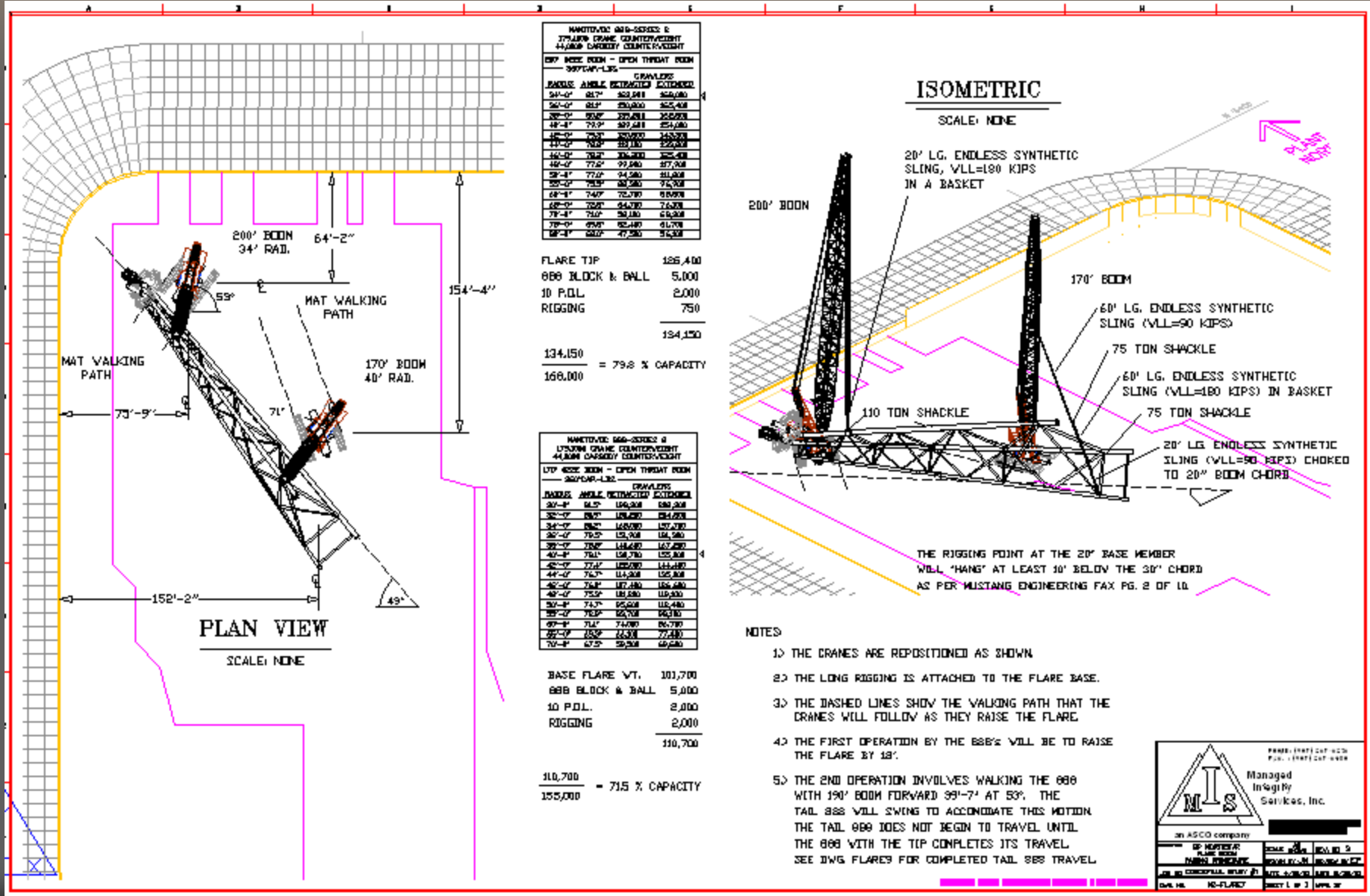
PROJECT: FLARE
NO. OF TOWER CRANES: 2
NO. OF CRANES: 2
NO. OF CRANES: 2

DATE: 10/1/00
BY: J. L. WILSON
CHECKED: J. L. WILSON

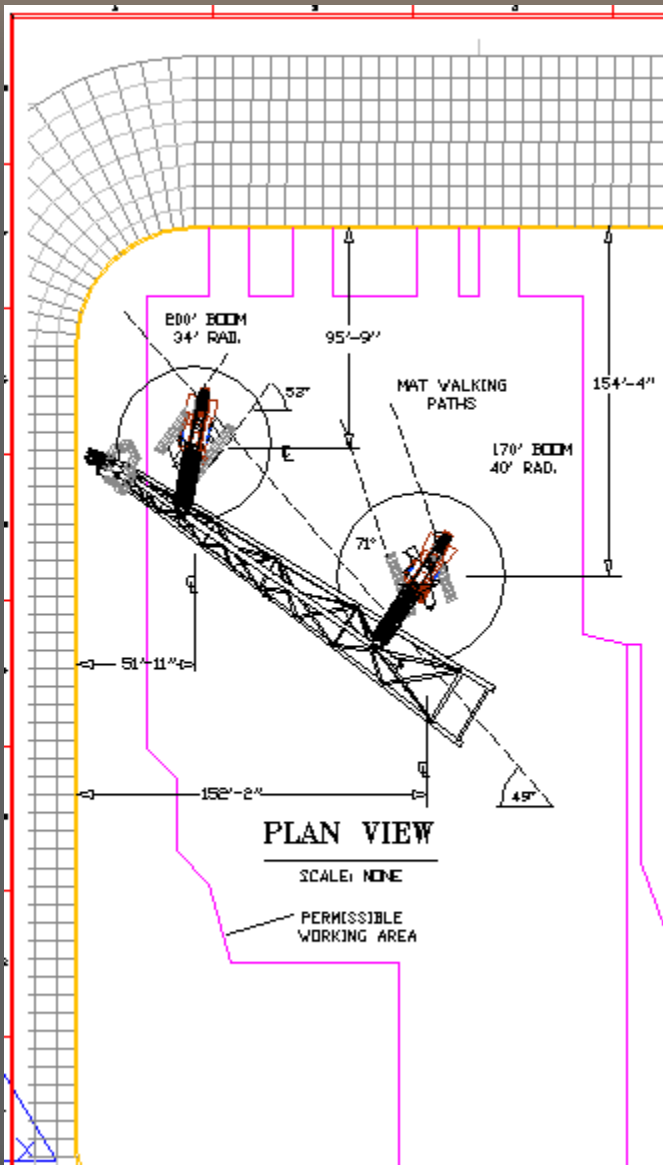
PROJECT: FLARE
NO. OF TOWER CRANES: 2
NO. OF CRANES: 2
NO. OF CRANES: 2

DATE: 10/1/00
BY: J. L. WILSON
CHECKED: J. L. WILSON

Working Area & Crane travel paths



Midway Crane positions



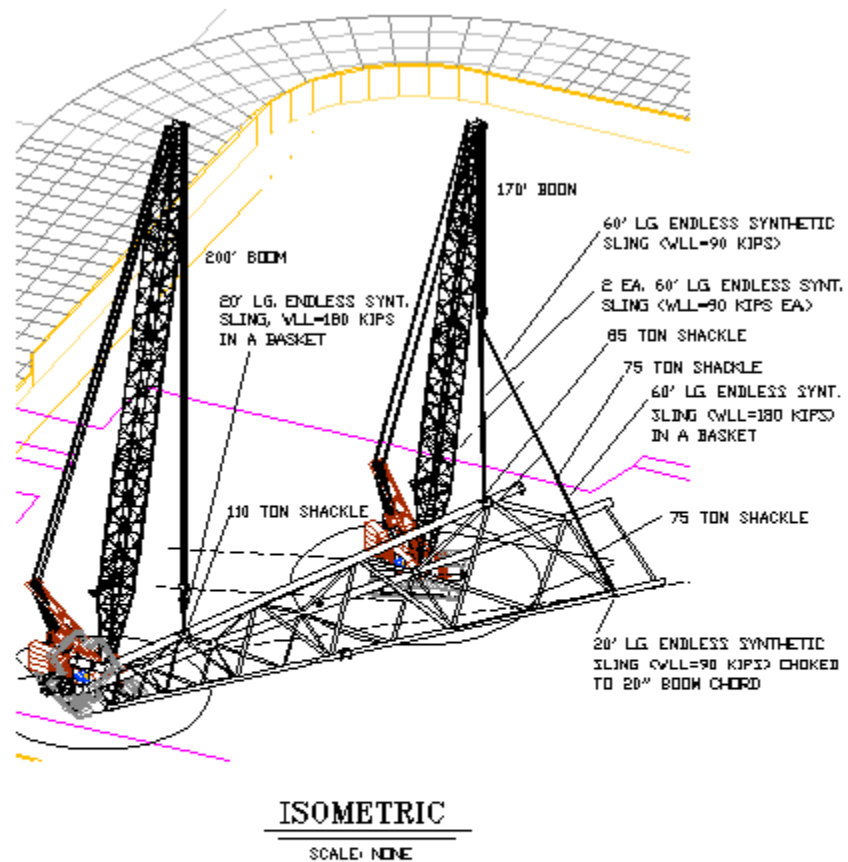
MAGNETIC DISK CONTAINS 175380 BYTES, FORMATS, SECTORS, 444000 CAPACITY, COUNTRY:INDIA				
DISK ACCESS MODE - OPEN THROUGH DISK DRIVE UNIT-L.S.				
CHANGES				
PARMID	AMBL	RETRACTED	COUNTRY	
34-07	93-7	163-200	35-000	
35-07	93-7	163-200	35-000	
36-07	93-7	163-200	35-000	
40-07	79-7	129-600	25-000	
41-07	79-7	129-600	25-000	
44-07	79-7	129-600	25-000	
47-07	79-7	129-600	25-000	
52-07	79-7	129-600	25-000	
53-07	79-7	129-600	25-000	
54-07	79-7	129-600	25-000	
55-07	79-7	129-600	25-000	
56-07	79-7	129-600	25-000	
57-07	79-7	129-600	25-000	
58-07	79-7	129-600	25-000	
59-07	79-7	129-600	25-000	
60-07	79-7	129-600	25-000	
61-07	79-7	129-600	25-000	
62-07	79-7	129-600	25-000	
63-07	79-7	129-600	25-000	
64-07	79-7	129-600	25-000	
65-07	79-7	129-600	25-000	
66-07	79-7	129-600	25-000	
67-07	79-7	129-600	25-000	
68-07	79-7	129-600	25-000	
69-07	79-7	129-600	25-000	
70-07	79-7	129-600	25-000	
71-07	79-7	129-600	25-000	
72-07	79-7	129-600	25-000	
73-07	79-7	129-600	25-000	
74-07	79-7	129-600	25-000	
75-07	79-7	129-600	25-000	
76-07	79-7	129-600	25-000	
77-07	79-7	129-600	25-000	
78-07	79-7	129-600	25-000	
79-07	79-7	129-600	25-000	
80-07	79-7	129-600	25-000	
81-07	79-7	129-600	25-000	
82-07	79-7	129-600	25-000	
83-07	79-7	129-600	25-000	
84-07	79-7	129-600	25-000	
85-07	79-7	129-600	25-000	
86-07	79-7	129-600	25-000	
87-07	79-7	129-600	25-000	
88-07	79-7	129-600	25-000	
89-07	79-7	129-600	25-000	
90-07	79-7	129-600	25-000	
91-07	79-7	129-600	25-000	
92-07	79-7	129-600	25-000	
93-07	79-7	129-600	25-000	
94-07	79-7	129-600	25-000	
95-07	79-7	129-600	25-000	
96-07	79-7	129-600	25-000	
97-07	79-7	129-600	25-000	
98-07	79-7	129-600	25-000	
99-07	79-7	129-600	25-000	
100-07	79-7	129-600	25-000	

FLARE TIP	126.40
888 BLOCK & BALL	5.00
10 P.O.L.	8.00
RIGGING	75.00
	<hr/> 134.40
134.150	
168.000	= 79.8 % CAPACITY

[illegible]

BASE FLARE WT.	101,700
BBB BLOCK	5,000
10 POL.	2,000
RIGGING	2,000
	<hr/> 110,700

$$\frac{110,700}{155,000} = 71.5 \% \text{ CAPACITY}$$



ISOMETRIC

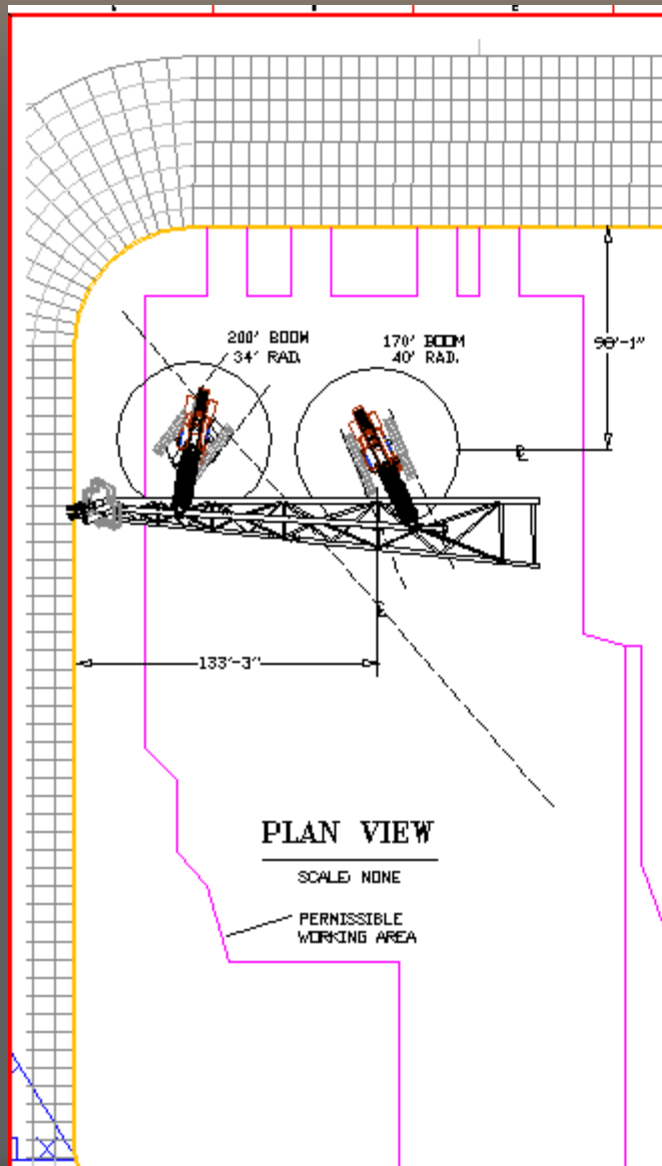
SCALE: NONE

NOTES

- 1.) THE DASHED LINES SHOW THE WALKING PATH THAT THE
CRANES WILL FOLLOW AS THEY RAISE THE FLARE.
- 2.) THE TOP 888 HAS WALKED FORWARD 29'-7" AT 53",
TAIL 888 HAS SWUNG TO ACCOMMODATE THIS MOTION.
THE TAIL 999 DOES NOT BEGIN TO TRAVEL UNTIL
THE 888 AT THE TOP HAS COMPLETED ITS TRAVEL.
SEE DWG. FLARE.



Final lifting position



MAN-TRAINING 99-B-00025-2				
3770-000 GRAMM COUNTY TOWNSHIP				
44-0000 C. ARBERRY COLUMBIAN TOWN				
BPO MEET ROOM - OPEN THURSDAY 10AM				
24MT-AP-LIST				
PACELS	ANGLE	DETERMINATION	EXTENSION	
24-1-0	75-0	303,500	1,09,400	
26-1-0	75-0	293,000	1,09,400	
26-2-0	75-0	307,000	1,09,400	
44-1-0	75-0	307,000	1,09,400	
44-2-0	75-0	307,000	1,09,400	
44-3-0	75-0	307,000	1,09,400	
44-4-0	75-0	307,000	1,09,400	
44-5-0	75-0	307,000	1,09,400	
44-6-0	75-0	307,000	1,09,400	
44-7-0	75-0	307,000	1,09,400	
44-8-0	75-0	307,000	1,09,400	
44-9-0	75-0	307,000	1,09,400	
44-10-0	75-0	307,000	1,09,400	
44-11-0	75-0	307,000	1,09,400	
44-12-0	75-0	307,000	1,09,400	
44-13-0	75-0	307,000	1,09,400	
44-14-0	75-0	307,000	1,09,400	
44-15-0	75-0	307,000	1,09,400	
44-16-0	75-0	307,000	1,09,400	
44-17-0	75-0	307,000	1,09,400	
44-18-0	75-0	307,000	1,09,400	
44-19-0	75-0	307,000	1,09,400	
44-20-0	75-0	307,000	1,09,400	
44-21-0	75-0	307,000	1,09,400	
44-22-0	75-0	307,000	1,09,400	
44-23-0	75-0	307,000	1,09,400	
44-24-0	75-0	307,000	1,09,400	
44-25-0	75-0	307,000	1,09,400	
44-26-0	75-0	307,000	1,09,400	
44-27-0	75-0	307,000	1,09,400	
44-28-0	75-0	307,000	1,09,400	
44-29-0	75-0	307,000	1,09,400	
44-30-0	75-0	307,000	1,09,400	
44-31-0	75-0	307,000	1,09,400	
44-32-0	75-0	307,000	1,09,400	
44-33-0	75-0	307,000	1,09,400	
44-34-0	75-0	307,000	1,09,400	
44-35-0	75-0	307,000	1,09,400	
44-36-0	75-0	307,000	1,09,400	
44-37-0	75-0	307,000	1,09,400	
44-38-0	75-0	307,000	1,09,400	
44-39-0	75-0	307,000	1,09,400	
44-40-0	75-0	307,000	1,09,400	
44-41-0	75-0	307,000	1,09,400	
44-42-0	75-0	307,000	1,09,400	
44-43-0	75-0	307,000	1,09,400	
44-44-0	75-0	307,000	1,09,400	
44-45-0	75-0	307,000	1,09,400	
44-46-0	75-0	307,000	1,09,400	
44-47-0	75-0	307,000	1,09,400	
44-48-0	75-0	307,000	1,09,400	
44-49-0	75-0	307,000	1,09,400	
44-50-0	75-0	307,000	1,09,400	
44-51-0	75-0	307,000	1,09,400	
44-52-0	75-0	307,000	1,09,400	
44-53-0	75-0	307,000	1,09,400	
44-54-0	75-0	307,000	1,09,400	
44-55-0	75-0	307,000	1,09,400	
44-56-0	75-0	307,000	1,09,400	
44-57-0	75-0	307,000	1,09,400	
44-58-0	75-0	307,000	1,09,400	
44-59-0	75-0	307,000	1,09,400	
44-60-0	75-0	307,000	1,09,400	

FLARE TIP	125,400
SES BLOCK	5,000
10 P.O.L	2,000
RIGGING	750

$$\frac{134,150}{168,000} = 79.8\% \text{ CAPACITY}$$

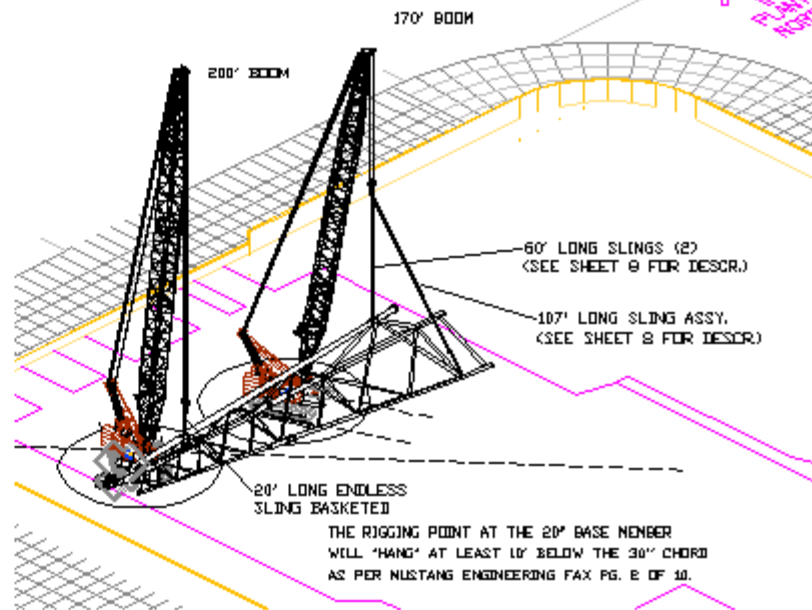
MATHWORK 999-30000-1				
L750000 GRAVE COUNTRY EIGHT				
44-0000 CANNON CITY COUNTEYPRESENT				
L70 40000 30000 - OPEN THIRTEENTH				
304000-LOSS				
RADIIUS		CHANGES		
RADIUS	ANGLE	EXTRACTED	EXTENDED	
307-4"	61.9°	576.580	680.580	
309-7"	80.9°	599.920	698.480	
310-5"	84.6°	600.000	697.000	
302-0"	79.9°	595.000	687.000	
307-0"	73.9°	585.000	1627.000	
407-4"	74.9°	580.700	1555.000	
402-0"	77.4°	580.800	1441.400	
44-0"	79.7°	574.000	1350.000	
407-0"	79.9°	574.000	1350.000	
40-0"	78.0°	570.000	1310.000	
90-0"	74.9°	565.000	1110.000	
90-0"	70.9°	637.000	907.000	
90-0"	67.9°	621.000	777.000	
20-0"	67.9°	621.000	574.000	

BASE FLARE WT.	101,700
SSS BLOCK	5,000
10 P.O.L.	2,000
RIGGING	2,000

$$\frac{110,700}{155,000} = 71.5 \% \text{ CAPACITY}$$

ISOMETRIC

SCALE NONE

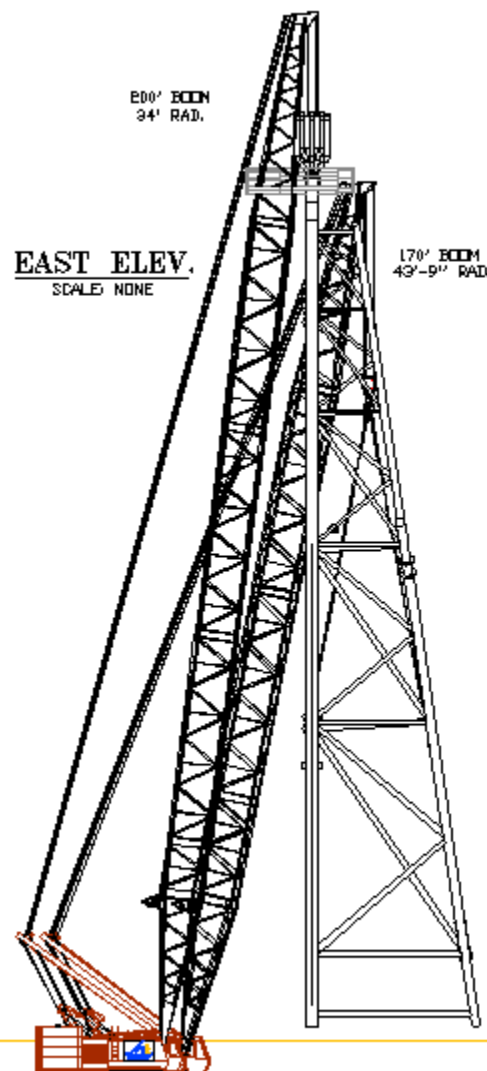


NOTES

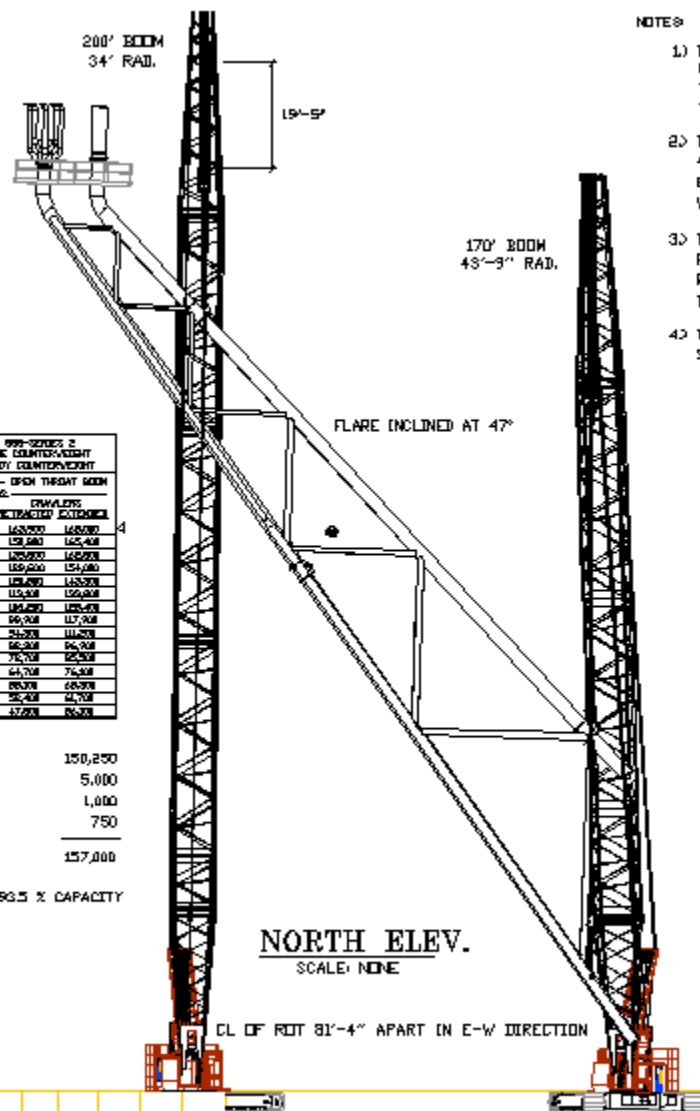
- 1) THE CRANES ARE REPOSITIONED FOR RAISING AS SHOWN.
- 2) THE TAIL SSB HAS WALKED BACKWARD 56'-4" AT 7%.
- 3) THE NEXT PHASE OF THE OPERATION INVOLVES THE TIP 680 RAISING WHILE THE 680 SWINGS AND ALLOWS THE BASE RIGGING TO SEEK EQUILIBRIUM, KEEPING THE BASE LOW UNTIL A FLARE ANGLE OF 47° IS ATTAINED WILL PRESERVE MAXIMUM CLEARANCE WITH THE BOOM.



Erected position

[illegible]

FLARE TIP	150,250	
688 BLOCK	5,000	
10 P.O.L.	1,000	
RIGGING	750	
	<u>157,000</u>	
<u>157,000</u>		= 93.5 % CAPACITY
168,000		



- 1) THE CRANES HAVE RAISED THE FLARE SO THAT THE PIN ELEV. IS 80'-0". THIS IS 1'-0" ABOVE THE SET ELEV. OF 79'-0". THIS SHOWS THAT THERE IS SUFFICIENT ROOM FOR ALIGNMENT.
- 2) THE FLARE IS SHOWN INCLINED AT AN ANGLE OF 47° FOR ALIGNMENT. THERE IS 19'-5" OF LINE BEFORE THE TOP SHEAVE AND HOOK BLOCK SHEAVE WOULD TWO-BLOCK.
- 3) THE POSITION OF THE 800 LIFTING THE BASE HAS REMAINED THE SAME. THE UNUSUAL LEG RIGGING HAS RE-ALIGNED ITSELF AND DECREASED THE RADIUS OF THE CRANE TO 43'-9".
- 4) THE CRANES HOLD THIS POSITION AS THE SCHUERLE SPMT'S APPROACH WITH THE COMPRESSOR BLDG.

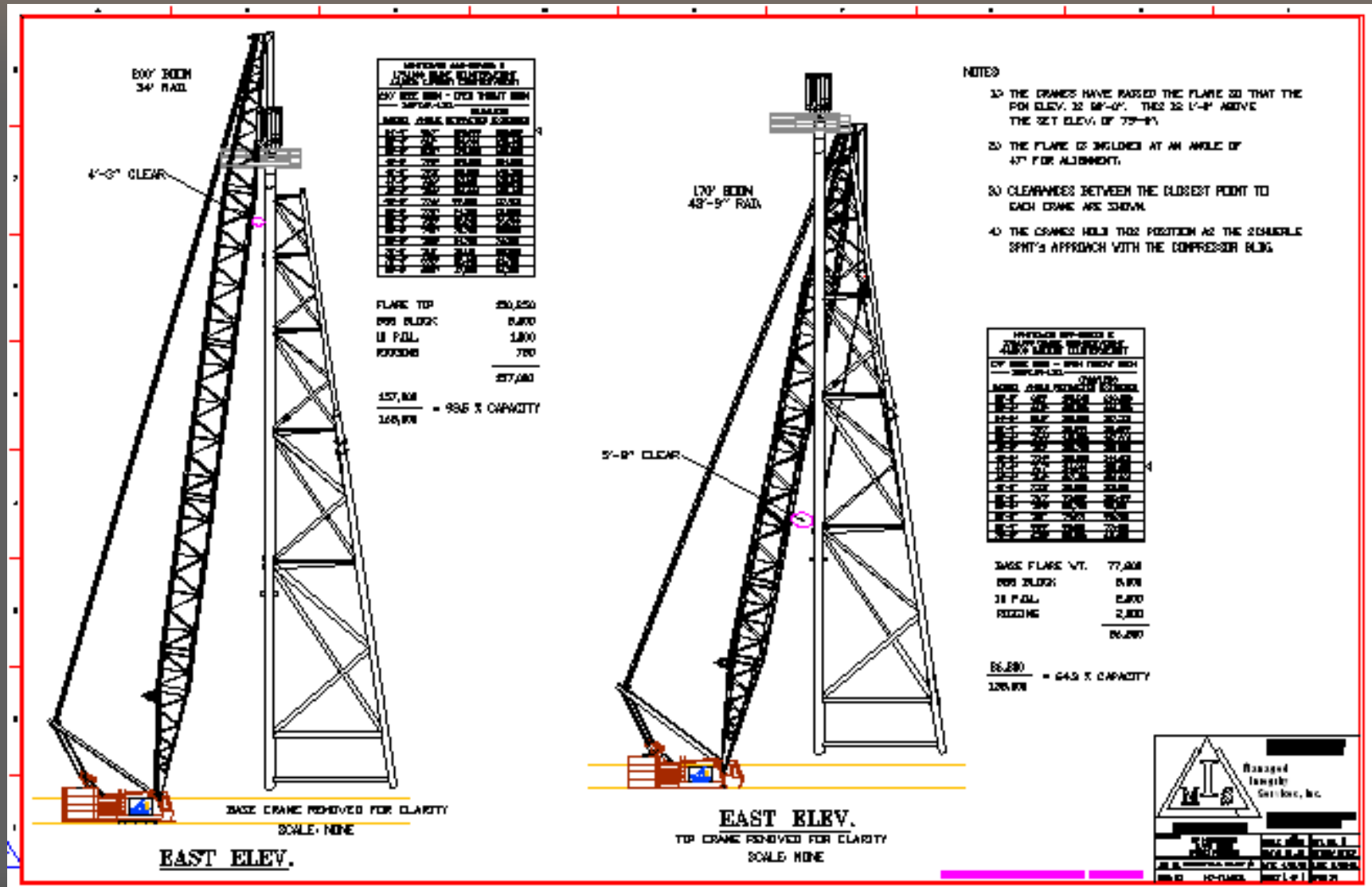
[illegible]

BASE FLARE WT.	77,800
SSS BLOCK	5,000
10 P.O.L.	2,000
RIGGING	2,000
	<hr/> 86,800

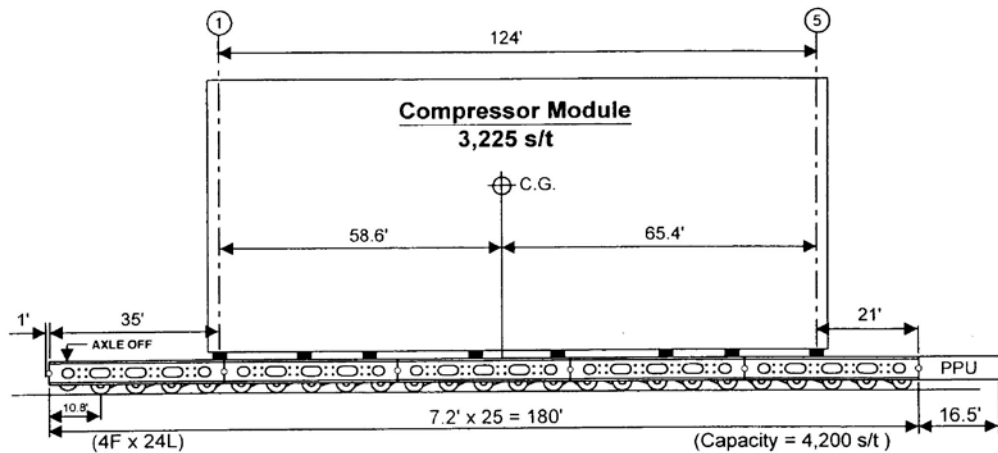
$$\frac{86,800}{135,000} = 64.3 \% \text{ CAPACITY}$$



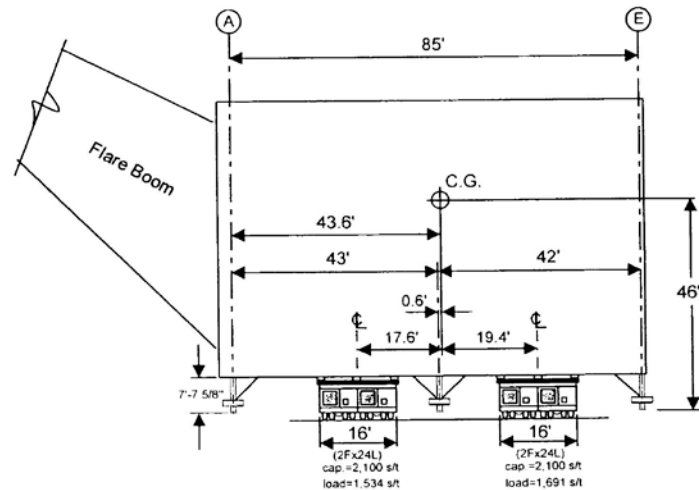
Clearances at each crane



SPMTs with Comp Module



SIDE VIEW
(LOOKING EAST)



END VIEW
(LOOKING NORTH)

**NORTHSTAR DEVELOPMENT
COMPRESSOR
MODULE TRANSPORTATION
W / FLARE BOOM INSTALLED
AND W/O TRANSPORTATION BEAMS**

Rev.0 02/15/01

200' BOOM
54' RAD.

170' BOOM
43'-9" RAD.

ISOMETRIC
SCALE: NONE

PLAN VIEW
WITH PERMISSIBLE WORKING AREAS
SCALE: NONE

Managed Integrity Services, Inc.
an ASCO company

PROJECT: 1000000000
CLIENT: 1000000000
DATE: 10/1/2000
DRAWN BY: JH
CHECKED BY: JH
SCALE: 1/8" = 1'-0"
SHEET: 1 OF 1

[illegible]

PREPARED WITH: LIFTPLANNER SOFTWARE : 19921003-00

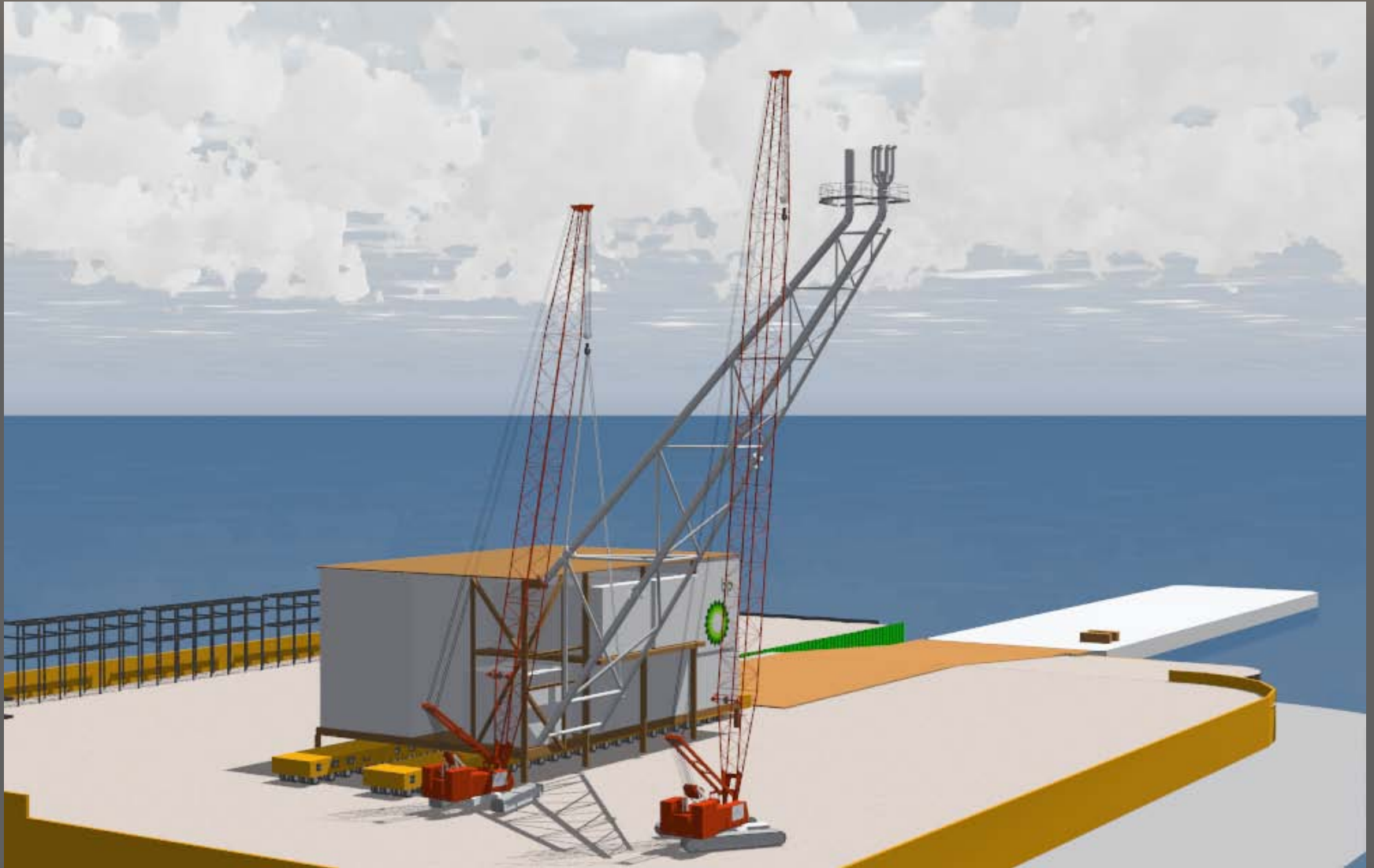
Inspecting the Flare tip



Judy Patrick

NORTHSTAR MODULES/ANCHORAGE — Workers climb up the boom to inspect the integrity of the piping and flare tips while it is in place.

Flare tip mated with Compressor Bldg.



Northstar Island 2004



Northstar Island 2004



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