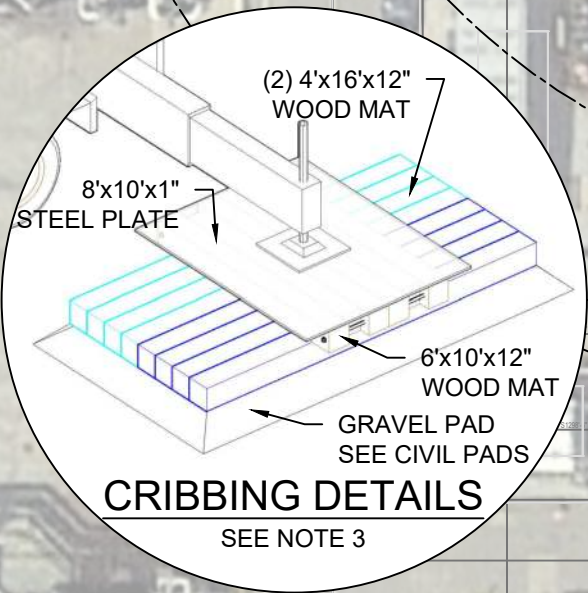


MAIN CRANE - LOAD ANALYSIS										
COMPONENT	MAX WEIGHT	AUX. BOOM NOSE	BLOCK	BALL	RIGGING	TOTAL WEIGHT	RADIUS	CAPACITY	% OF CAPACITY	
5C-3 COLUMN	30,000	0	1,900	0	1,640	33,540	150	47,000	71%	

TAIL CRANE - LOAD ANALYSIS										
COMPONENT	MAX WEIGHT	AUX. BOOM NOSE	BLOCK	BALL	RIGGING	TOTAL WEIGHT	RADIUS	CAPACITY	% OF CAPACITY	
5C-3 COLUMN	16,000	137	1,000	370	110	17,617	30	33,400	53%	



ELEVATION VIEW
LOOKING SOUTHEAST, TAIL CRANE NOT SHOWN FOR CLARITY

PLAN VIEW

GENERAL NOTES:	REV #	REVISIONS	DATE	REV BY	CHK BY
1. EXISTING SUPPORT SURFACE TO BE VERIFIED BY OTHERS. MAXIMUM OUTRIGGER LOADS PROVIDED IN THE FOLLOWING SHEETS.					
2. EXISTING COLUMN ASSUMED TO BE IDENTICAL TO REPLACEMENT COLUMN.					
3. BOTTOM LAYER ONLY REQUIRED ON REAR LEFT OUTRIGGER.					



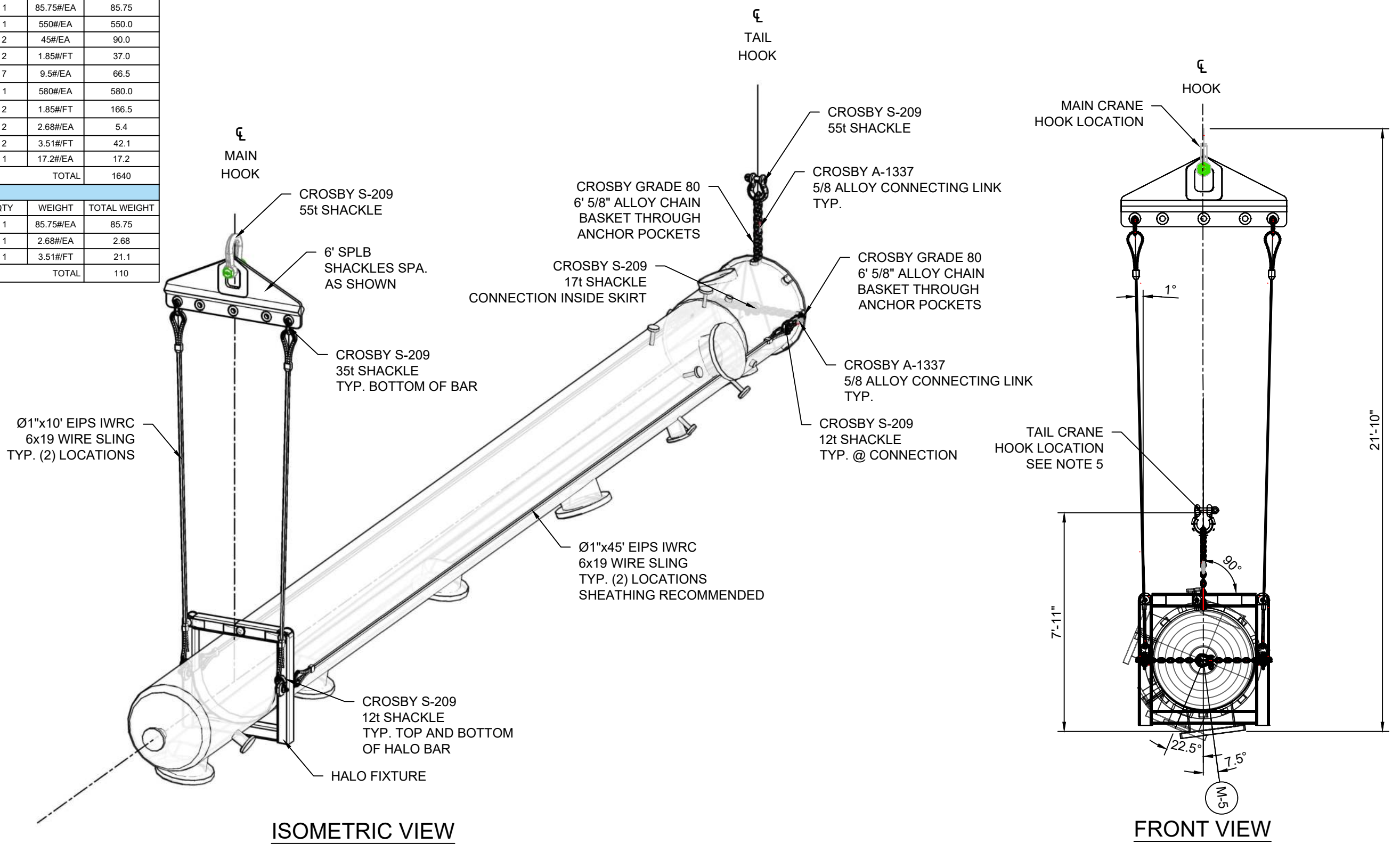
OFFICES:
SEATTLE DIVISION - 1821 180TH ST S.E. BOTHELL, WA 98031 (206) 784-1054
PORTLAND DIVISION - 5730 NE 138TH AVE PORTLAND, OR 97320 (503) 283-3111

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TITLE:	5C-3 SPONGE COLUMN REPLACEMENT	DATE:	2/17/2017
PROJECT:	PHILLIPS 66 2017 TA, FERNDALE, WA.	DRAWN BY:	M.A.
CUSTOMER:	PHILLIPS 66 REFINERY	APPROVED BY:	M.A.
DESCRIPTION:	SITE LAYOUT - EXISTING	SCALE:	AS SHOWN
		SHEET:	1 OF 2

RIGGING WEIGHTS - MAIN CRANE			
COMPONENT	QTY	WEIGHT	TOTAL WEIGHT
CROSBY S-2130 55t SHACKLE	1	85.75#/EA	85.75
6' SPLB	1	550#/EA	550.0
CROSBY S-209 35T SHACKLE	2	45#/EA	90.0
Ø1"x10' WIRE SLING	2	1.85#/FT	37.0
CROSBY S-209 12T SHACKLE	7	9.5#/EA	66.5
HALO FIXTURE	1	580#/EA	580.0
Ø1"x45' WIRE SLING	2	1.85#/FT	166.5
CROSBY A-1337 5/8 CON. LINK	2	2.68#/EA	5.4
CROSBY GR. 80 6' 5/8 ALLOY CHAIN	2	3.51#/FT	42.1
CROSBY S-209 17t SHACKLE	1	17.2#/EA	17.2
TOTAL			1640

RIGGING WEIGHTS - TAIL CRANE			
COMPONENT	QTY	WEIGHT	TOTAL WEIGHT
CROSBY S-2130 55t SHACKLE	1	85.75#/EA	85.75
CROSBY A-1337 5/8 CON. LINK	1	2.68#/EA	2.68
CROSBY GR. 80 6' 5/8 ALLOY CHAIN	1	3.51#/FT	21.1
TOTAL			110



GENERAL NOTES:	REV #	REVISIONS	DATE	REV BY	CHK BY
1. LOAD DIMENSIONS PER GENERAL PETROLEUM CORP. DWG. NO W-80001-3					
2. LOAD CENTER LOCATION ASSUMED TO BE SIMILAR TO NEW COLUMN.					
3. MINIMUM RIGGING COMPONENTS DETAILED. ALTERNATIVE RIGGING COMPONENTS MAY BE USED GIVEN THEY MEET OR EXCEED THE COMPONENTS DETAILED.					
4. SLING LENGTHS DETAILED SHALL BE USED.					
5. ADDITIONAL SLING MAY BE ADDED TO PROVIDE BLOCK CLEARANCE. SLING CAPACITY SHALL EXCEED 19.6 KIPS.					

REV #	REVISIONS	DATE	REV BY	CHK BY

NESS CAMPBELL
CRANE + RIGGING

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TITLE:	5C-3 SPONGE COLUMN REPLACEMENT
PROJECT:	PHILLIPS 66 2017 TA, FERNDALE, WA.
CUSTOMER:	PHILLIPS 66 REFINERY
DESCRIPTION:	RIGGING DETAILS - EXISTING

DATE:	2/13/2017
DRAWN BY:	M.A.
APPROVED BY:	M.A.
SCALE:	AS SHOWN
SHEET:	2 OF 2