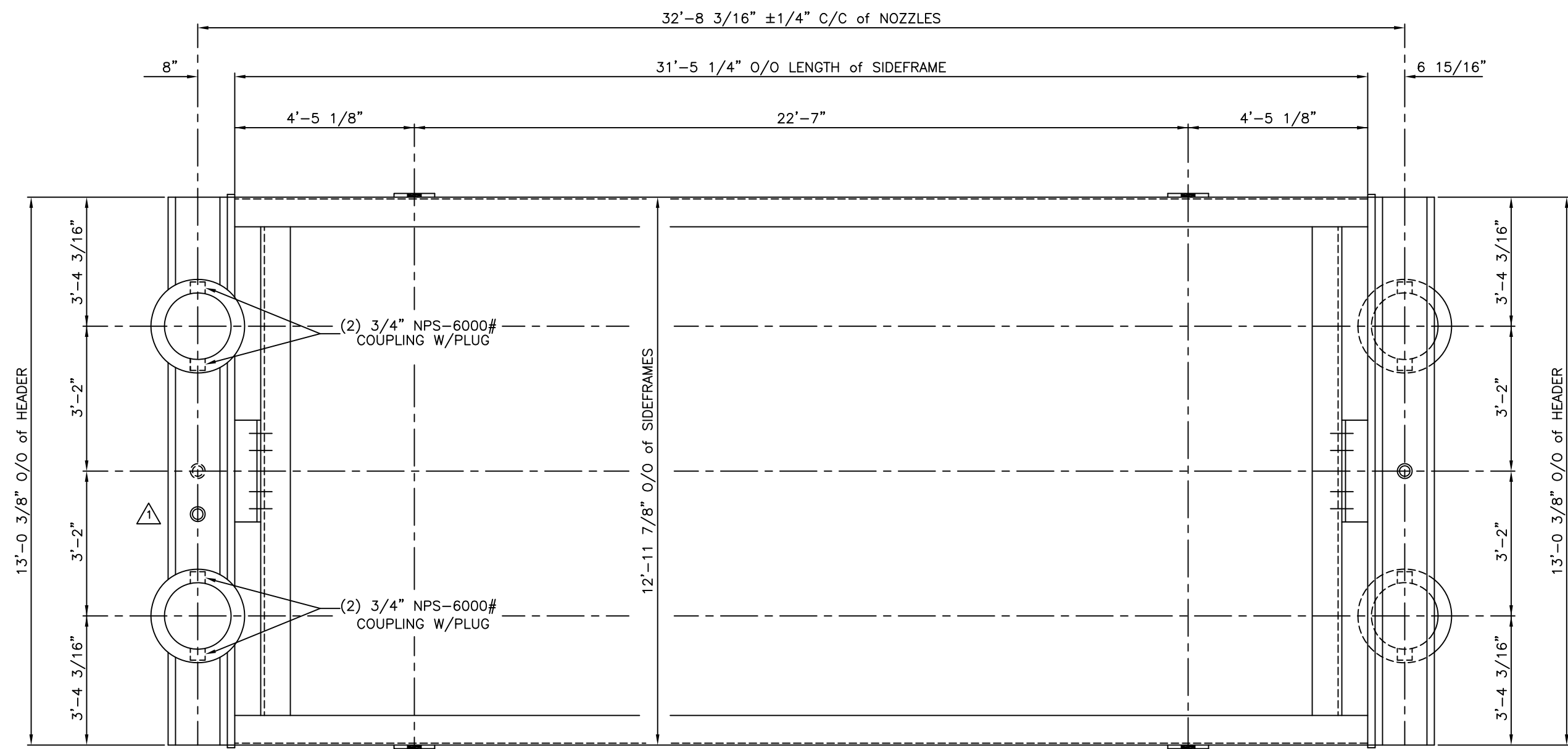
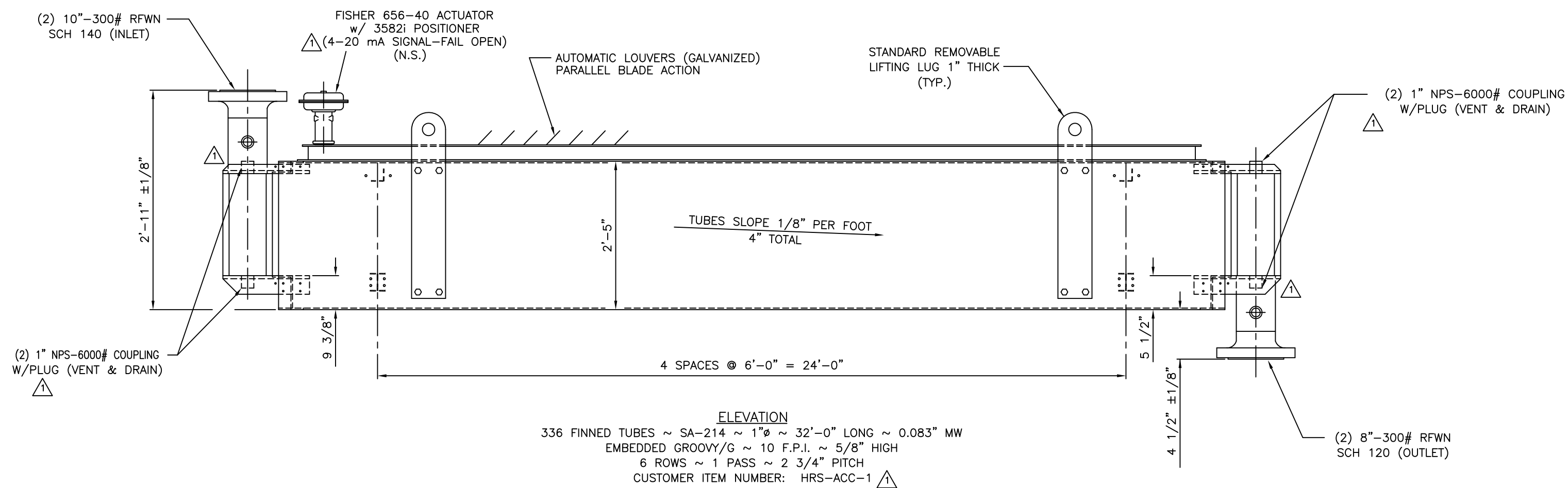




PLAN VIEW



ELEVATION

NOTES:

- TUBES EXPANDED INTO TUBESHEET IN ACCORDANCE WITH API-661, 7th ED. 2013, PARA. 9.3.3.
- TUBE ACCESS PLUG THREADS TO BE COATED WITH A SUITABLE THREAD LUBRICANT.
- HEADER PLUG TORQUE: 142 ft-lbs (MIN.), 272 ft-lbs (MAX.).
- BUNDLE WEIGHT: 24,400 lbs ±10% /BUNDLE.
- TOTAL QUANTITY REQUIRED FOR THE REFERENCED ITEM: 3 BUNDLE(S).

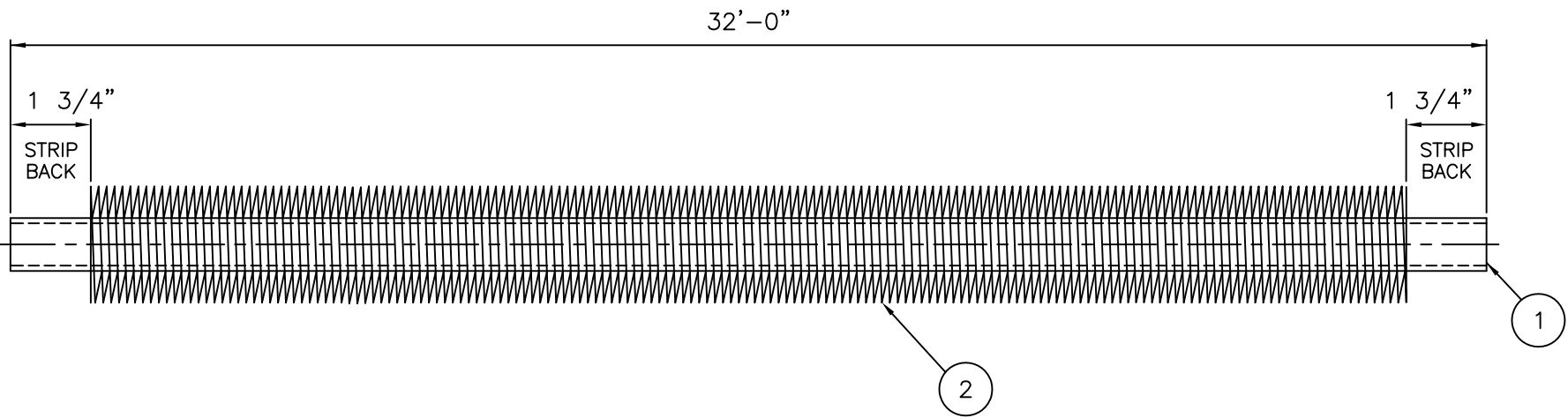
REFERENCE DRAWINGS

HEADERS: 10746010HDR
FINNED TUBES: 10746010FT
NAMEPLATE: 10746010NP

						Kelvion Thermal Solutions Tulsa Port of Catoosa Catoosa, Oklahoma, USA 	KELVION JOB NO: R-10746-1 CUST. P.O. NO: PO18100F-REVISED:2 CUST. ITEM NO: HRS-ACC-1  SERVICE: STEAM CONDENSER			
1	CUST. ITEM NO., TYPO, VENT & DRAIN	10/3/16	SEH		CUSTOMER					
0	ORIGINAL ISSUE	9/6/16	SEH	RPK	FREW PROCESS			HESPERIA, CA		
NO.	DESCRIPTION	DATE	DWN.	APPROVED	TITLE		SCALE	DWG. NO.	REV.	
REVISIONS					BUNDLE OUTLINE	NONE	10746010BO	1		



HESPERIA, CA



BILL OF MATERIAL: 3 IDENTICAL SECTIONS REQ'D. FOR THIS ITEM

MARK NO.	QTY. EACH	QTY. TOTAL	DESCRIPTION	MATERIAL	WT.(lbs)
1	336	1008	TUBE O.D. : 1" TUBE WALL THICKNESS : 0.083" MW TUBE LENGTH : 32'-0"	SA-214	28842
2	N/A	N/A	ALUMINUM FIN STRIP THICKNESS : 0.016" WIDTH : 0.637"	B209 1100-O	12386
N/A	N/A	N/A	ALUMINUM STRIP SPACER TUBE O.D. : 1" TUBE PITCH : 2 3/4" LIN. FT. : 2331'-0"	B209 1100-O	280

NOTES FOR PURCHASING :
- NO SPARES INCLUDED

NOTES FOR FINNING :

FINNING INFORMATION	
FIN TYPE	EMBEDDED-GROOVY/G
FINS PER INCH	10
FIN HEIGHT	5/8"

1	CUST. ITEM NO.	10/3/16	SEH	
0	ORIGINAL ISSUE	9/7/16	SEH	RPK
NO.	DESCRIPTION	DATE	DWN.	APPROVED
REVISIONS				

Kelvion
Thermal Solutions
Tulsa Port of Catoosa
Catoosa, Oklahoma, USA



KELVION JOB NO: R-10746-1
CUST. P.O. NO: P018100F-REVISED:2
CUST. ITEM NO: HRS-ACC-1 
SERVICE: STEAM CONDENSER

CUSTOMER

FREW PROCESS

HESPERIA, CA

TITLE

FIN TUBE DETAIL

SCALE

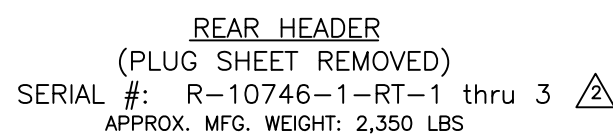
NONE

DWG. NO.

10746010FT

REV.

1



BILL OF MATERIAL FOR: <u>3</u> IDENTICAL SECTIONS REQ'D. FOR THIS ITEM					
MK NO.	QTY. EACH	TOTAL QTY.	DESCRIPTION	MAT'L SPEC	WT.
1	2	6	1" x 15 5/8" x 164 3/8"	SA516-70	4366
2	2	6	1" x 15 3/8" x 164 3/8"	SA516-70	4296
3	2	6	7/8" x 9 1/2" x 164 3/8"	SA516-70	2323
4	2	6	3/4" x 7 3/8" x 164 3/8"	SA516-70	1545
5	2	6	7/8" x 9 1/4" x 13 5/8"	SA516-70	187
6	2	6	3/4" x 7 1/8" x 15 1/8"	SA516-70	137
7	1	3	3/8" x 9 1/2" x 164 3/8"	SA516-70	498
8	1	3	3/8" x 7 3/8" x 164 3/8"	SA516-70	386
9	2	6	10"-300# RFWN SCH 140	SA105	600
10	2	6	10" NPS x 5 1/4" LG. SCH 140	SA106-B	273
11	2	6	8"-300# RFWN SCH 120	SA105	414
12	2	6	8" NPS x 5 1/2" LG. SCH 120	SA106-B	167
13	4	12	1"-6000# THREADED BLIND COUPLING w/37.5° BEVEL, w/3" ROUND HEAD PLUG	SA105	26
14	8	24	3/4"-6000# THREADED BLIND COUPLING w/37.5° BEVEL, w/3" ROUND HEAD PLUG	SA105	24
15	1	3	NAMEPLATE RE: DWG. 10746010NP	304 S.S.	N/A
16	1	3	NAMEPL. BRKT. RE: DWG. MSTR000NPB	SA36	N/A
17	672	2016	P-9-8 (REF DWG.: MSTR000PLG)~ZINC PLATED	SA105	N/A
18	672	2016	G-9 (REF DWG.: MSTR000PGA)~ZINC PLATED	A-1008	N/A

△¹ TOTAL WT. = 15242#

NOTES FOR PURCHASING :

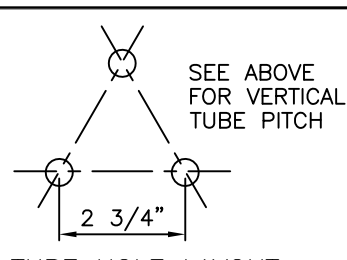
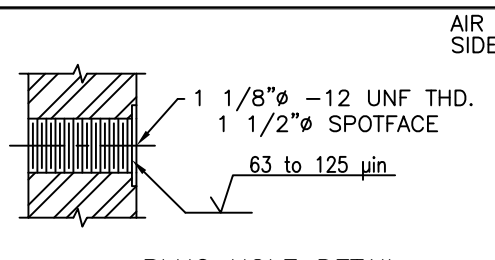
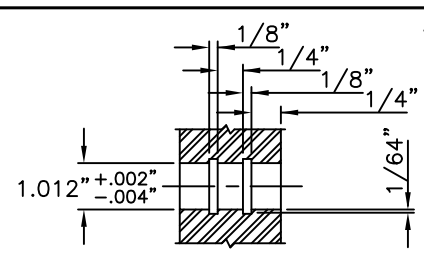
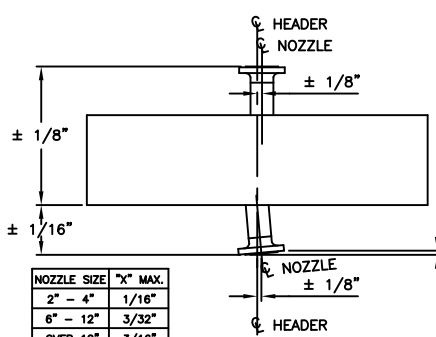
- 1) PLUG GASKETS SHALL BE IN THE FULLY ANNEALED CONDITION WITH A MAXIMUM HARDNESS OF 68 HRB FOR CARBON STEEL.
- 2) WHEN ORDERING PLUGS & PLUG GASKETS, ADD 10% TO THE TOTAL NUMBER OF PLUGS & PLUG GASKETS REQUIRED.
- 3) FLANGE FACING SHALL BE 125 Ra TO 250 Ra.

IMPACT TESTING REQUIREMENTS			
PART	REQ'D.		EXEMPTION CRITERIA OR CV VALUE FOR TEST
	YES	NO	
PLATE		x	UG-20(f)
NOZZLE PIPE		x	UG-20(f)
FLANGE		x	UCS-66(c)

GENERAL NOTES :

- 1) 3 SECTION(S) REQUIRED 336 TUBES
6 ROWS 1 PASS TUBE WALL : 0.083" MW (0.071" UNDER FIN)
TUBE MATERIAL : SA-214 CORROSION ALLOWANCE : 1/16"
DESIGN PRESSURE : 340 psig HYDROTEST PRESSURE : 442 psig
 Δ DESIGN TEMPERATURE : 475°F M.D.M.T. : 25°F
M.A.W.P.(HOT & CORRODED) : 340 psig

2) DESIGNED IN ACCORDANCE WITH ASME SECT. VIII, DIV. 1, ED. 2015
3) ASME CODE STAMP AND NATIONAL BOARD NUMBER REQUIRED.
4) FLANGES, BOLT HOLES TO STRADDLE NATURAL CENTERLINE.
 Δ 5) MANUFACTURING TOLERANCES PER API-661, 7th EDITION, 2013.
6) FOR DESIGN CALCULATIONS REF. DOC. : 10746010C11 & C21
7) FOR WELDING DETAILS AND PWHT & NDT REQUIREMENTS REF. DOC. : 10746000WIM
8) FOR FINISH REF. DOC. : 10746000ATS



2	TYPO	10/19/16	SEH	
1	ITEM #, DESIGN TEMP, VENT/DRAIN	10/3/16	SEH	RPK
0	ORIGINAL ISSUE	9/6/16	SEH	RPK
NO.	DESCRIPTION	DATE	DWN.	APPROVED
REVISIONS				

Kelvion
Thermal Solutions
Tulsa Port of Catoosa
Catoosa, Oklahoma, USA



KELVION JOB NO: R-10746-1
CUST. P.O. NO: P018100F-REVISED:2
CUST. ITEM NO: HRS-ACC-1
SERVICE: STEAM CONDENSER

CUSTOMER	FREW PROCESS
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100	100

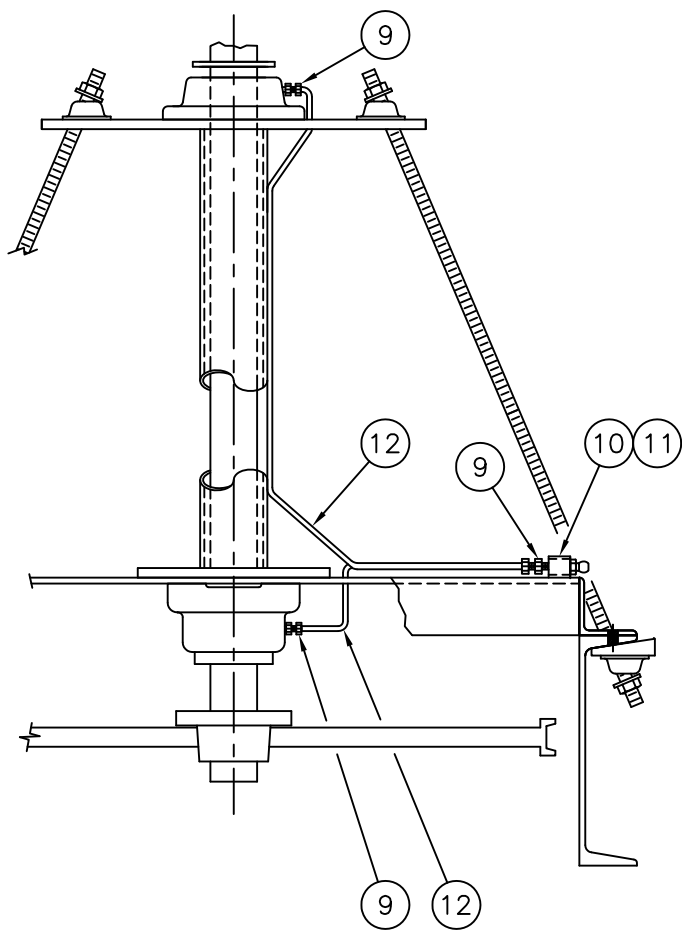
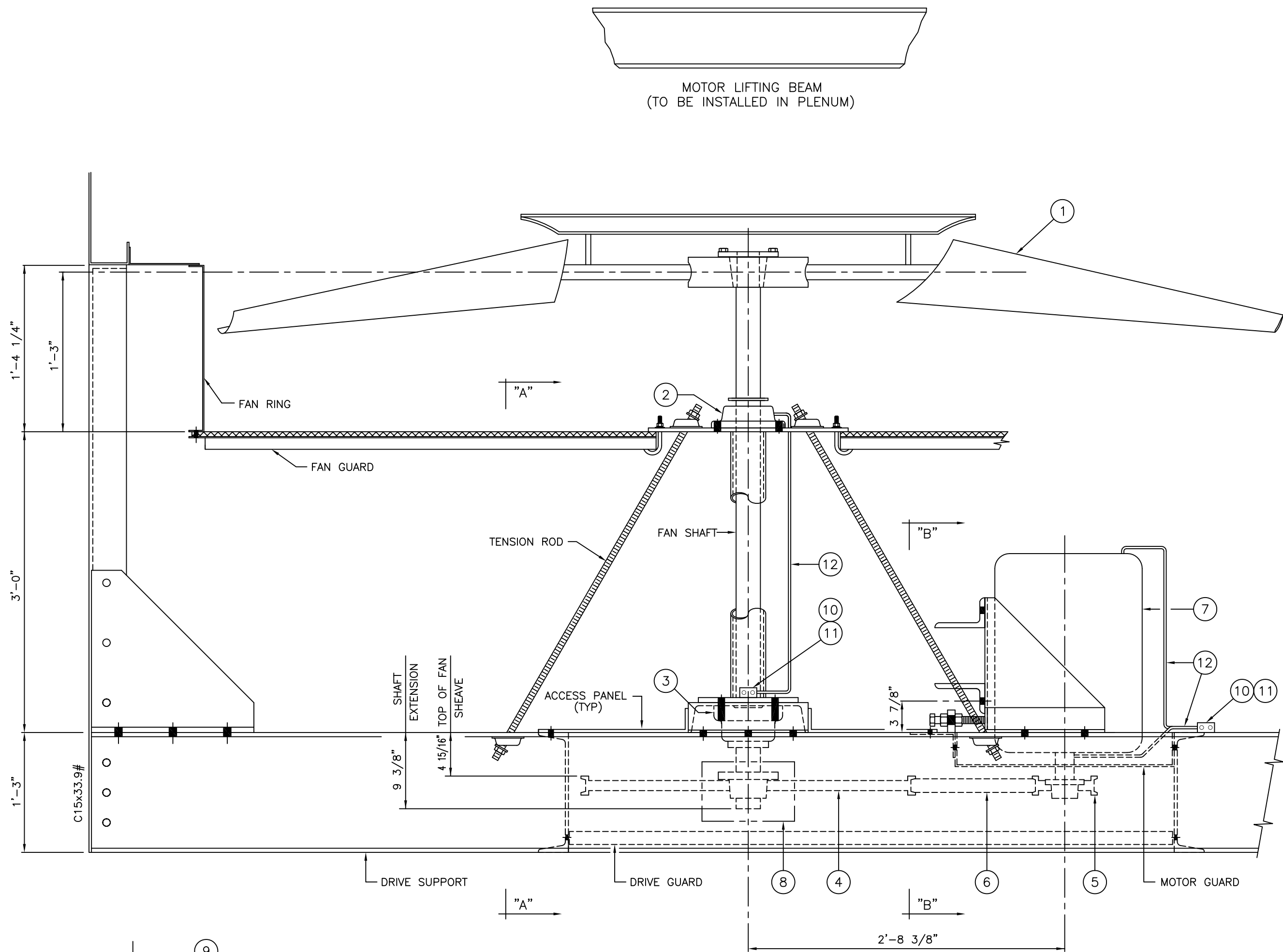
HESPERIA, CA

TITLE		HEADER DETAIL	
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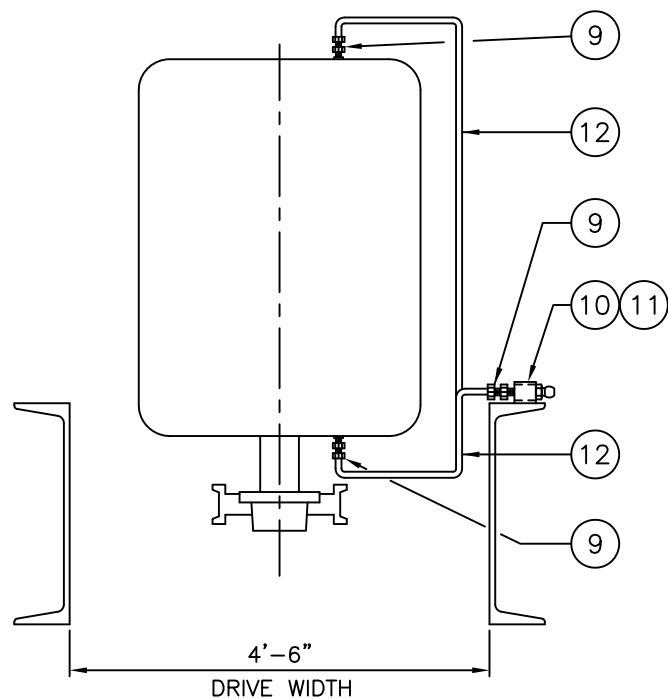
SCALE NONE	DWG. NO.
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10746010HDR

REV. 2



SECTION "A-A"



SECTION "B-B"

6 ASSEMBLIES REQUIRED AS SHOWN

FAN DRIVE BILL OF MATERIAL			
MARK NO.	QTY EACH	TOTAL QTY	DESCRIPTION
1	1	6	FAN: <u>MANUAL</u> CLASS, SERIES OR TYPE: <u>MOORE 10000HD EC-60VE</u> FAN DIA: <u>12'-0"</u> NO. OF BLADES: <u>9</u> BLADE MATL: <u>ALUMINUM</u> AMB. AIR TEMP: <u>97°F @ ELEV: 3191FT.</u> ROTATION: ☒ CW ☐ CCW (FACING DISCHARGE) ACFM: <u>150300</u> STATIC PRESSURE (H2O): <u>0.703"</u> FAN RPM: <u>184</u> FAN HP: <u>26.00</u> KEYWAY SIZE: <u>3/4" x 3/8"</u> QD BUSHING BORE: <u>2 15/16"</u> FAN BLADE ANGLE: <u>21.8°</u>
2	1	6	UPPER SHAFT BEARING: MODEL NO.: <u>DODGE TYPE "SCM" SIZE: 2 15/16"</u>
3	1	6	LOWER SHAFT BEARING: MODEL NO.: <u>DODGE or TIMKEN TYPE "E" SIZE: 2 15/16"</u>
4	1	6	FAN SHEAVE: <u>(4) GROOVE 5V-50.0 J</u> KEYWAY SIZE: <u>3/4" x 3/8"</u> QD BUSHING BORE: <u>2 15/16"</u>
5	1	6	MOTOR SHEAVE: <u>(4) BANDED GROOVE 5V-8.0 E</u> KEYWAY SIZE: <u>5/8" x 5/16"</u> QD BUSHING BORE: <u>2 3/8"</u>
6	1	6	BELT: <u>(4) 5VX-1700 BANDED (GATES OR EQUAL)</u>
7	1	6	MOTOR: <u>TECO MAX E2 OR EQUAL</u> HP: <u>40</u> RPM: <u>1160</u> ENCLOSURE: <u>TEFC</u> VOLT/PHASE/CYCLE: <u>460/3/60</u> FRAME: <u>364T</u>
8	-	3	VIBRATION SWITCH: <u>BENTLEY NEVADA VELOMITOR 2300/20_KIT-001-02-00</u>
9	8	48	MALE CONNECTOR: <u>BI-LOK 316SS #DCT 4-2</u>
10	2	12	LUBE JUNCTION BLOCK <u>BHR-2A-BG</u>
11	2	12	1/4"-28 x 3" TEK5 HWH(ZINC PLATED) SELF TAPPING SCREW
12	1	6	1/4"Ø x 0.020" STAINLESS STEEL TUBING 20'-0"

NOTES FOR PURCHASING:

FANS

- FAN BLADES TO BE DYNAMICALLY BALANCED OR MOMENT BALANCED AGAINST A MASTER BLADE.
- FAN HUB TO BE DESIGNED TO PREVENT A NEGATIVE AIR FLOW.
- FAN HUB TO BE DYNAMICALLY BALANCED.

BELTS

- DESIGNED WITH A 1.4 SERVICE FACTOR.

MOTORS

- MOTOR BEARINGS SHALL BE RATED FOR A BELT PULL OF 1068 LBS.
- ADVISE MFR OF SHAFT-DOWN APPLICATION.
- ⚠ -MOTORS SHALL BE PREMIUM EFFICIENCY.

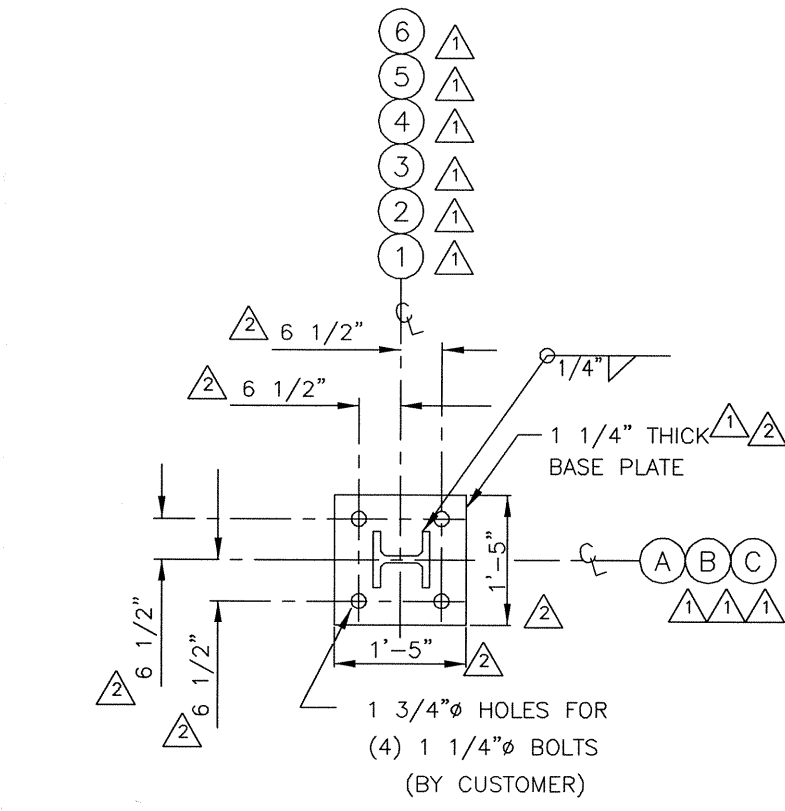
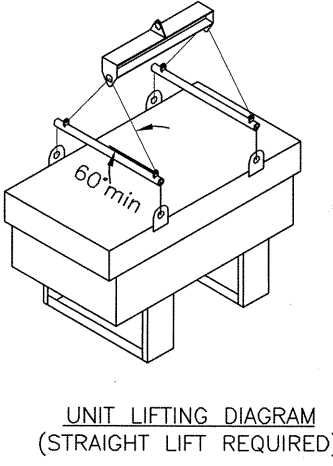
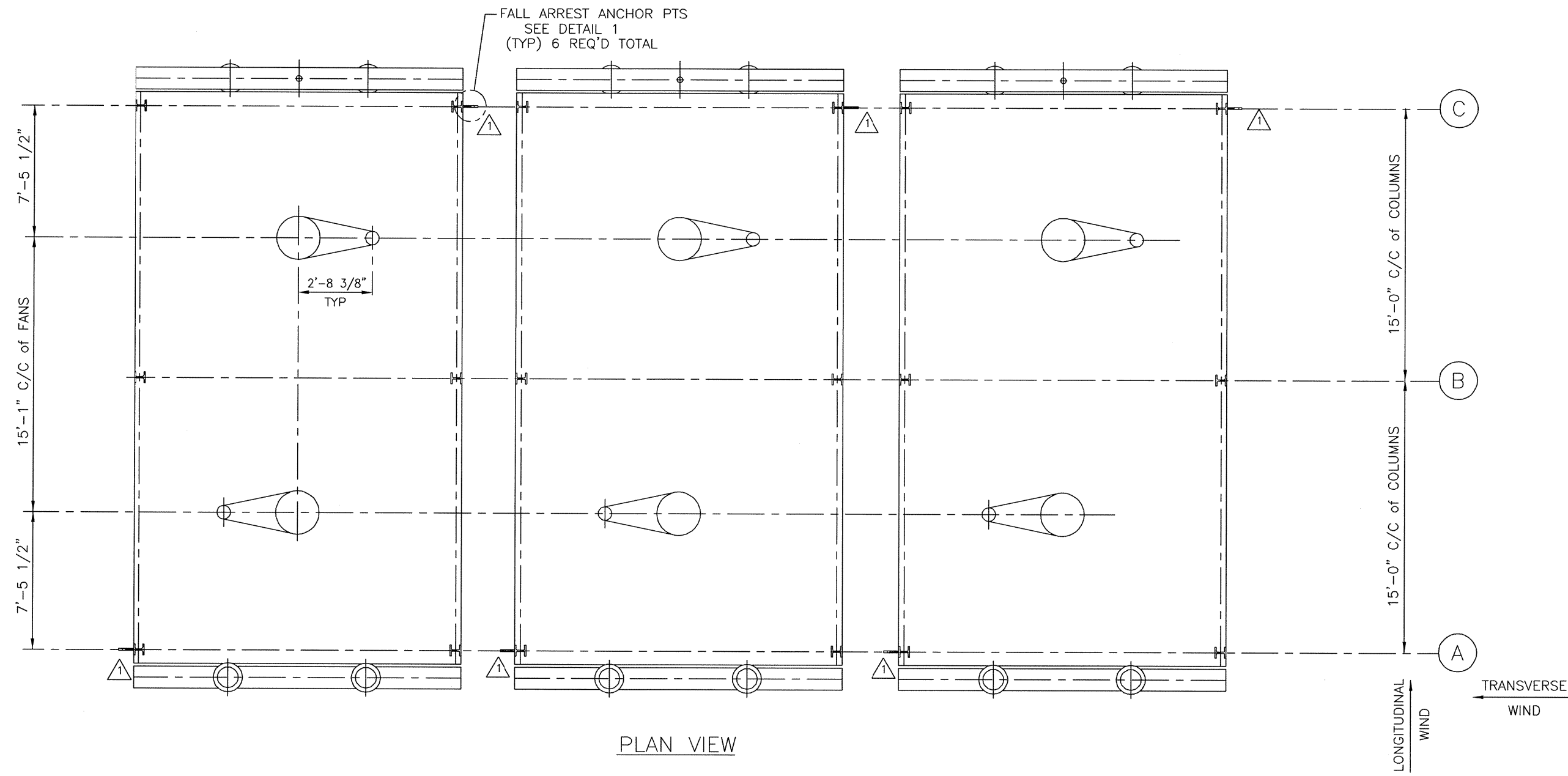
NOTES FOR ASSEMBLY:

- ⚠ -FAN TIP CLEARANCE PER API-661, 7th EDITION, 2013, PARA. 7.2.3.6.
- BELT TENSION SHALL BE DETERMINED USING THE FOLLOWING INFORMATION:
 - RIB/STRAND DEFLECTION DISTANCE: 0.38"
 - RIB/STRAND DEFLECTION FORCE: 14 to 15 LBS.
 - BELT MASS: 156.52 g/m, WIDTH: 4mm/#R, SPAN: 625mm.
- MOTOR REMOVAL BEAM REQUIRED.
- AFTER RUN-IN REMOVE VIBRATION TRANSMITTER AND CRATE FOR SHIPMENT.

NOTES FOR DETAIL:

- MOUNTING PLATE FOR BENTLEY NEVADA MONITORING KIT IS IN KELVION SCOPE OF SUPPLY.
- ALL OTHER COMPONENTS OF KIT WILL SHIP CRATED FOR FIELD ASSEMBLY BY OTHERS.

						Kelvion Thermal Solutions Tulsa Port of Catoosa Catoosa, Oklahoma, USA 	KELVION JOB NO: R-10746-1 CUST. P.O. NO: PO18100F-REVISED:2 CUST. ITEM NO: HRS-ACC-1 ⚠ SERVICE: STEAM CONDENSER			
1	CUST. ITEM NO., MOTOR & ASSEMBLY NOTES	10/3/16	SEH		CUSTOMER					
0	ORIGINAL ISSUE	9/7/16	SEH	RPK	FREW PROCESS			HESPERIA, CA		
NO.	DESCRIPTION	DATE	DWN.	APPROVED	TITLE		SCALE	DWG. NO.	REV.	
REVISIONS					FAN DRIVE ASSEMBLY (MANUAL)		NONE	10746010MFD	1	



LOAD REACTIONS	
LOAD POINT	1 thru 6
DEAD LOAD	7500
LIVE LOAD	0
OPERATING LOAD	2500
TRANSVERSE WIND SHEAR	4200
LONGITUDINAL WIND SHEAR	2275
TRANSVERSE WIND VERTICAL	± 6150
LONGITUDINAL WIND VERTICAL	± 2200
** EARTHQUAKE SHEAR	15750
EARTHQUAKE VERTICAL	± 29750
SNOW LOAD	0

LOAD POINT	1 thru 6
DEAD LOAD	9500
LIVE LOAD	0
OPERATING LOAD	2500
TRANSVERSE WIND SHEAR	5000
LONGITUDINAL WIND SHEAR	2000
TRANSVERSE WIND VERTICAL	± 6750
LONGITUDINAL WIND VERTICAL	± 500
** EARTHQUAKE SHEAR	14750
EARTHQUAKE VERTICAL	± 28500
SNOW LOAD	0

LOAD POINT	1 thru 6
DEAD LOAD	7500
LIVE LOAD	0
OPERATING LOAD	2500
TRANSVERSE WIND SHEAR	4200
LONGITUDINAL WIND SHEAR	2275
TRANSVERSE WIND VERTICAL	± 6150
LONGITUDINAL WIND VERTICAL	± 2200
** EARTHQUAKE SHEAR	15750
EARTHQUAKE VERTICAL	± 29750
SNOW LOAD	0

NOTES FOR LOADING CHART:

1) ALL LOADS ARE IN POUNDS.

2) OPERATING LOADS INCLUDE LOAD OF HEADERS & TUBES FULL OF WATER & DOWNWARD NOZZLE LOADS PER API-661, 7th ED., 2013, FIGURE 6 & TABLE 4.

3) WIND LOADS ARE PER 2013 CALIFORNIA BUILDING CODE & CUSTOMER DOC #: 191607.67.7500 PAGE 59 USING:
 $qz = (0.00256)(Kz)(Kzt)(Kd)(V)^2$
 $F = (qz)(G)(Cf)(Af)$
 $V = 115$ MPH
 $Kz = 0.94$
 $Kzt = 1.0$
 $Cf = 1.3$
 $C = EXPOSURE CATEGORY$
 $F = DESIGN WIND FORCE$
 $Af = AREA PROJECTED TO WIND$

(VERTICAL WIND LOADS RESULTS FROM OVERTURNING MOMENT)

4) EARTHQUAKE LOADS ARE PER 2013 CALIFORNIA BUILDING CODE & CUSTOMER DOC #: 191607.67.7500 PAGE 59 USING:
 $V = CsW$
 $Cs = \frac{Sps}{R/I}$
 $Ss = 1.5g$
 $Fo = 1.0$
 $Sms = 1.5$
 $Sps = 1.0$
 $S1 = 0.6g$
 $Fv = 1.5$
 $Swt = 0.9$
 $Sdt = 0.6$
 $I = 1.25$
 $R = 1.5$ (STEEL ORDINARY CONCENTRICALLY BRACED FRAME)
 $W = DEAD LOAD + OPERATING LOAD$
 $SITE CLASS = D$
 $SDC = D$

V = TOTAL DESIGN LATERAL FORCE
(VERTICAL EARTHQUAKE LOADS RESULTS FROM OVERTURNING MOMENT ASSUMING THE SHEAR LOAD AT CENTER OF GRAVITY)

5) SNOW LOADS ARE PER 2013 CALIFORNIA BUILDING CODE & CUSTOMER DOC #: 191607.67.7500 PAGE 59 USING:
 $pf = (0.7)(Ce)(Ct)(I)(pg) = 4.6$ PSF
 $Ce = 1.0$
 $Ct = 1.2$
 $I = 1.1$
 $pg = 5$ PSF
 $pf = FLAT ROOF SNOW LOAD$

GENERAL NOTES:

1) PROVISION FOR MINIMUM LATERAL MOVEMENT FOR TUBE BUNDLES ARE 1/4" IN BOTH DIRECTIONS OR 1/2" IN ONE DIRECTION.

2) STRUCTURAL STEEL DESIGNED PER AISC/OSHA REQUIREMENTS AND APPLICABLE SPECIFICATIONS.

3) REFERENCE DWGS:
10746010HDR ~ HEADER DETAIL
10746010BO ~ BUNDLE OUTLINE
10746010FT ~ FINNED TUBE DETAIL
10746010MFD ~ FAN DRIVE ASSEMBLY
10746000ATS ~ ASSEMBLY, TESTING & SHIPPING
10746-1-FE ~ FIELD ERECTION

4) TEMPORARY HEADER SHIPPING BRACES (PAINTED ORANGE) SHALL BE REMOVED PRIOR TO UNIT START-UP.

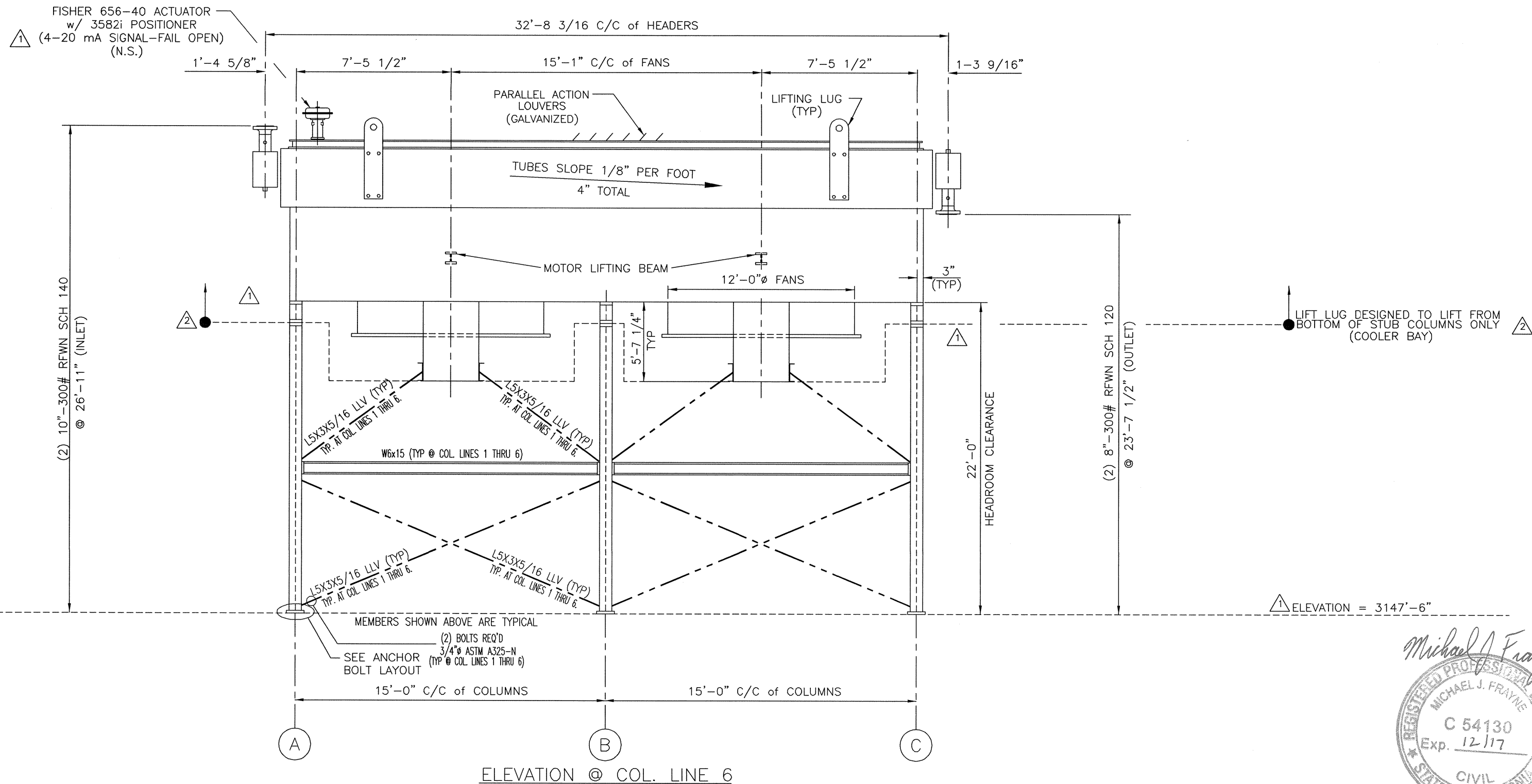
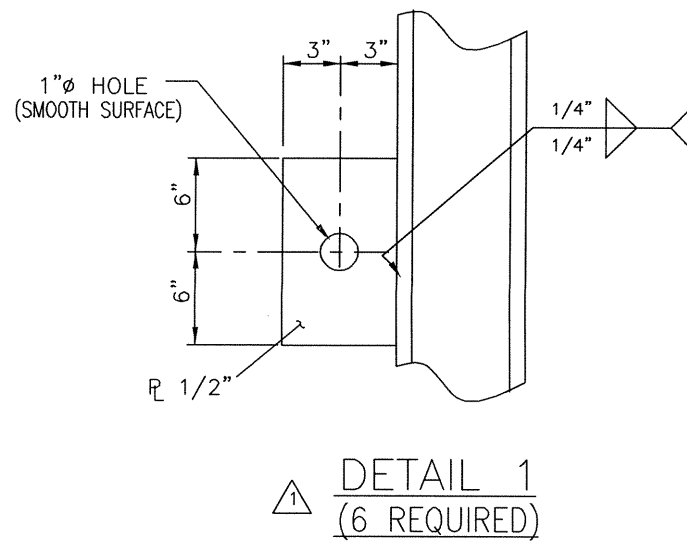
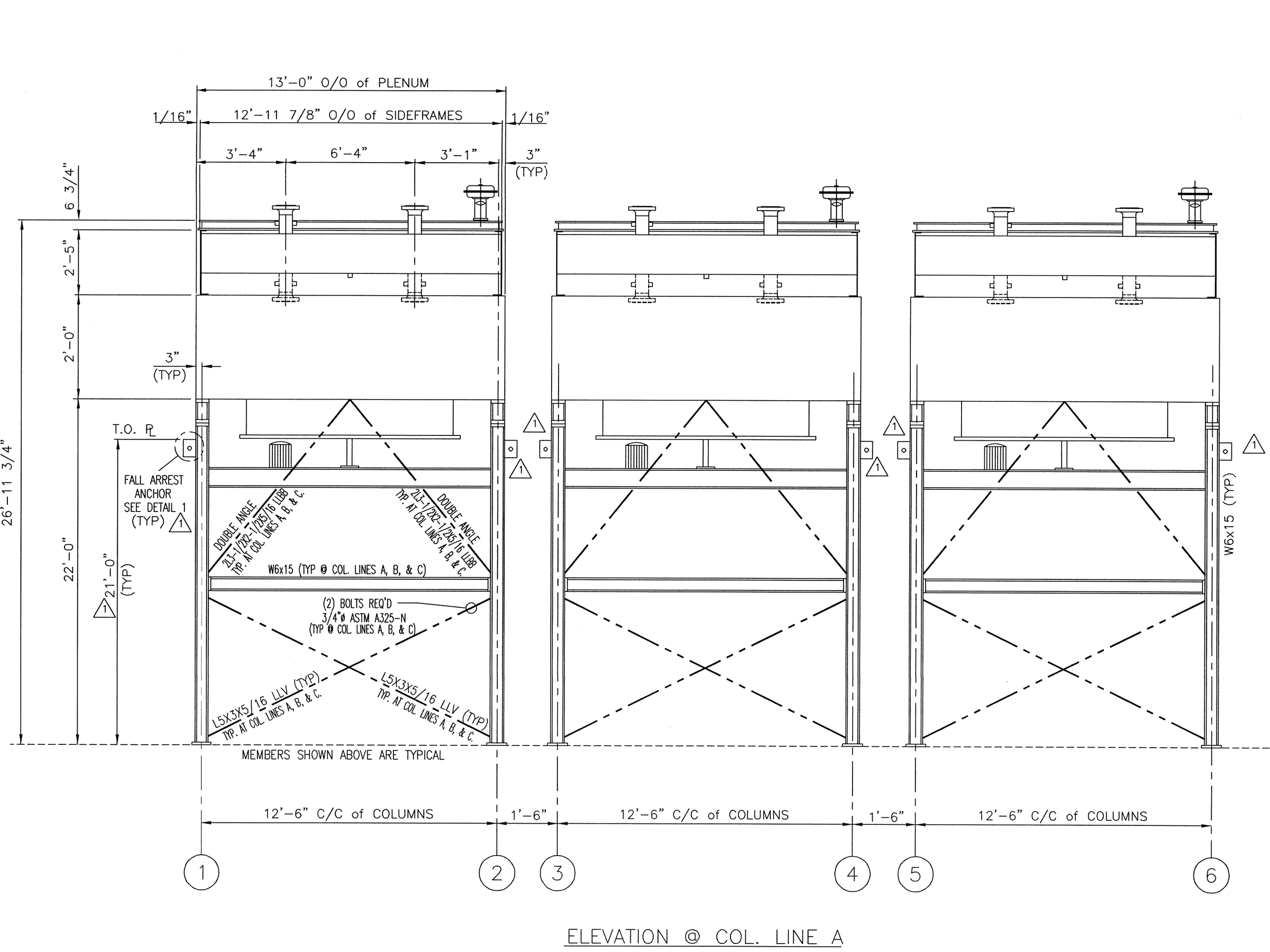
5) PROFESSIONAL ENGINEER'S STAMP (REGISTERED IN CALIFORNIA) IS REQUIRED FOR THE STRUCTURAL ANALYSIS OF THE AIR COOLED HEAT EXCHANGER INCLUDING SUPPORTING SUB STRUCTURE.

6) BRACKETS REQUIRED ON COLUMNS, AS SHOWN ON PLAN VIEW, FOR FALL PROTECTION ANCHORAGE POINTS TO RESIST A 5,000 LB FACTORED VERTICAL GRAVITY LOAD PER CALIFORNIA OSHA CH4, ARTICLE 24/1670.

7) LIFTING LUGS ARE DESIGNED w/ 2 1/8" HOLE FOR A 2" SHACKLE PIN FROM A 1 3/4" SHACKLE (25 TON WORKING LOAD SCREW PIN ANCHOR SHACKLE). SHACKLES PROVIDED BY OTHERS.

8) FOR BASE PLATE SHEAR LUGS: MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 4,000PSI. PIER DIMENSIONS ARE ASSUMED TO BE 30"x30".

9) SHEAR LUGS SHALL BE SUPPLIED BY KELVION TO TRANSFER THE SHEAR FORCES TO THE FOUNDATIONS.



				Kelvion Thermal Solutions Tulsa Port of Catoosa Catoosa, Oklahoma, USA		KELVION JOB NO: R-10746-1 CUST. P.O. NO: P018100F-REVISED:2 CUST. ITEM NO: HRS-ACC-1 SERVICE: STEAM CONDENSER	
				CUSTOMER		HESPERIA, CA	
				FREW PROCESS		SCALE NONE	
				PLAN & ELEVATION		DWG. NO. 10746010PE	
				REV. 2			

NO.	DESCRIPTION	DATE	APPROVED	P.E. STRUCTURAL APP'D	TITLE
2	MAX LIFTING, PE STAMP, NOTE 8	12/7/16	SEH	K	MJF
1	FALL ARREST ANCHOR PTS, ITEM #	10/4/16	SEH	RPK	MJF
0	ORIGINAL ISSUE	9/7/16	SEH	RPK	MJF
REVISIONS					

CERTIFIED FINAL

12/12/16

CIVIL ONLY

Michael J. Framme

REGISTERED PROFESSIONAL ENGINEER

MICHAEL J. FRAMME

C 54130

Exp. 12/17

CIVIL

STATE OF CALIFORNIA



Date	9/1/2016	Rev.	0	By	rhen
Proposal	31648RHEN	Item No.	A		
Job No.	R-10746	Item No.	1		

Kelvion

1 Customer	FREW PROCESS	Cust. PO No.	PO18100F-Revised:2
2 Address	NOBLESVILLE, IN	Plant Location	HESPERIA, CA

3	Service STEAM CONDENSER										Weight/Bay		73,300 lbs.							
4	1 Model		3-1332T144				Forced Draft		No. of Bays		3		No. of Fan Cells / Bay		2					
5	Dimensions		L	33' 0"	W	40' 0"	H	27'10"				Grade Mounted		Shop Assembled Unit(s)						
6	PERFORMANCE																			
7	Customer Item						STM-1													
8	Fluid Circulated						STEAM													
9	Heat Exchanged						Btu/hr		81,348,000.0											
10	U External - Bare						Btu/hr-ft²·°F		6.998 - 146.76											
11	CLMTD						°F		65.7											
12	External Surface						ft²		177,092.0											
13	Bare Tube Surface						ft²		8,444.6											
14	TUBE SIDE																			
15	Total Flow						lbs/hr		84,500.00											
16							IN						OUT							
17	Vapor						"		84,500.00						0.00					
18	Liquid						"		0.00						84,500.00					
19	Steam						"		0.00						0.00					
20	Non-Condensable						"		0.00						0.00					
21	Temperature						°F		226.8						225.4					
22	Pressure						psia		19.7						0.6					
23	Pressure Drop						psi		Allowed:		0.5				Calculated:		19.1			
24	Density		L V		lbs/ft³		59.46 (AVG)				0.0488									
25	Viscosity		L V		cP		0.259				0.013				0.261		0.013			
26	Vapor Molecular Weight						18.0						18.0							
27	Specific Heat		L V		Btu/lb·°F		1.010 (Avg)				0.504 (Avg)									
28	Thermal Conductivity		L V		Btu/hr-ft·°F		0.3933 (Avg)				0.0148 (Avg)									
29	Fouling Resistance IS						hr-ft²·°F/Btu		0.00100											
30	AIR SIDE																			
31	Temperature In - Out						°F		97.0 - 195.61						(Min. Amb. = 25.0)					
32	Elev		3,191 ft		Air Quantity		lbs/hr		3,425,769.0											
33	CONSTRUCTION																			
34	Design Press.		psig		- Temp.		°F		340 - 434						(MDMT = 25.0)					
35	Codes						ASME VIII/1 w/ stamp													
36	No. Bundles - Tubes / Bundle						3 - 336													
37	No. Rows - Passes / Bundle						6 - 1													
38	Header Type - Corrosion Allowance						PLUG BOX* - 1/16" [1-V/1-D (1"-6000# cplgs) per header and 1-PI/1-TI (3/4"-6000# cplg) per nozzle]													
39	Header Material						SA-516 Gr 70													
40	Shoulder Plug /Gasket Material						SA-105 / SOFT IRON													
41	Nozzles In - Out - Series / Bundle						10"(2) - 8"(2) - 300# WN RF													
42	Tube Material						SA-214													
43	Tube O.D. - BWG - Length						1" -0.083" MIN (0.071" UNDER FINS) -32'													
44	Fin Material - Bond Type						ALUMINUM - GROOVY/G													
45	Fin Height - No. Fins / Inch				Tri	Pitch	5/8" - 10.0 - 2-3/4"													
46	* SLOPE BUNDLE 1/8" /FT																			
47	FAN				MECHANICAL EQUIPMENT								MISCELLANEOUS							
48	Mfr. MOORE				SPEED REDUCER				DRIVER				1) Auto Lvrs (3582i positioner)							
49	Model 10KHDEC-60VE MAN ADJ				Type BANDED V-BELT				Type ELECTRIC MOTOR				2) Guards: Fan, Belt							
50	hp/fan	26.00	No. of Fans	6	Mfr. Gates or equal				Mfr. Siemens, Reliance, Teco				3) B/N Velomitor 2200 Vib Trans/bay							
51	Dia.	12.0	No. of Blades	9	Model No. 5VX				hp/Driver 40				4) Struc Prep: HD Galvanized							
52	RPM	184	Pitch	21.8°	Ratio 6.32::1				Enclosure TEFC				5) N2 Purge Bundle Interior							
53	Tip Speed		6,937.0		ft/min		Service Factor 1.40		Service Factor 1.15											
54	ACFM/Fan		150,300.0		No. of Belts 5		RPM 1,160													
55	Blade Material		ALUMINUM		Support: Suspended		V 460 P 3 C 60													
56	Static Pressure		0.703		inH₂O		Premium Effic.													
57	SPL/Fan @ 3 ft = 85.0 dBA																			