

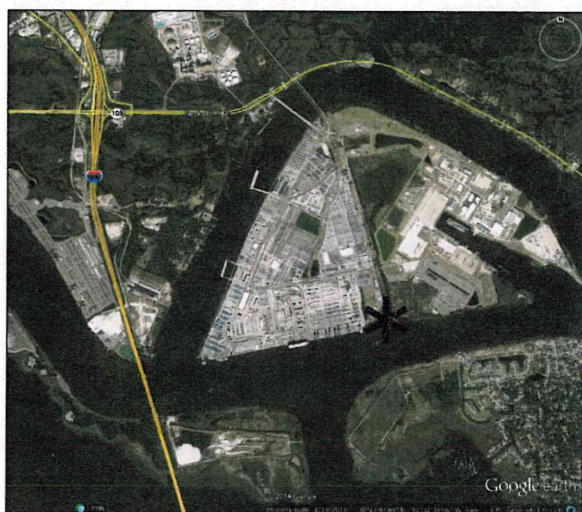
JEA CHUTE DESIGN FOR ARC-RITE

AT
341 U.S. 17
PALATKA, FL 32177

BY:

STANLEY ENGINEERING & CONSTRUCTION INC.

10365 Hood Rd. Suite 207 JACKSONVILLE, FLORIDA 32257 904 260-5770; FAX 904 260-5768



PROJECT LOCATION MAP

* INDICATES PROJECT LOCATION

THIS BUILDING IS NOT LOCATED IN THE WIND BORNE DEBRIS REGION

GENERAL NOTES:

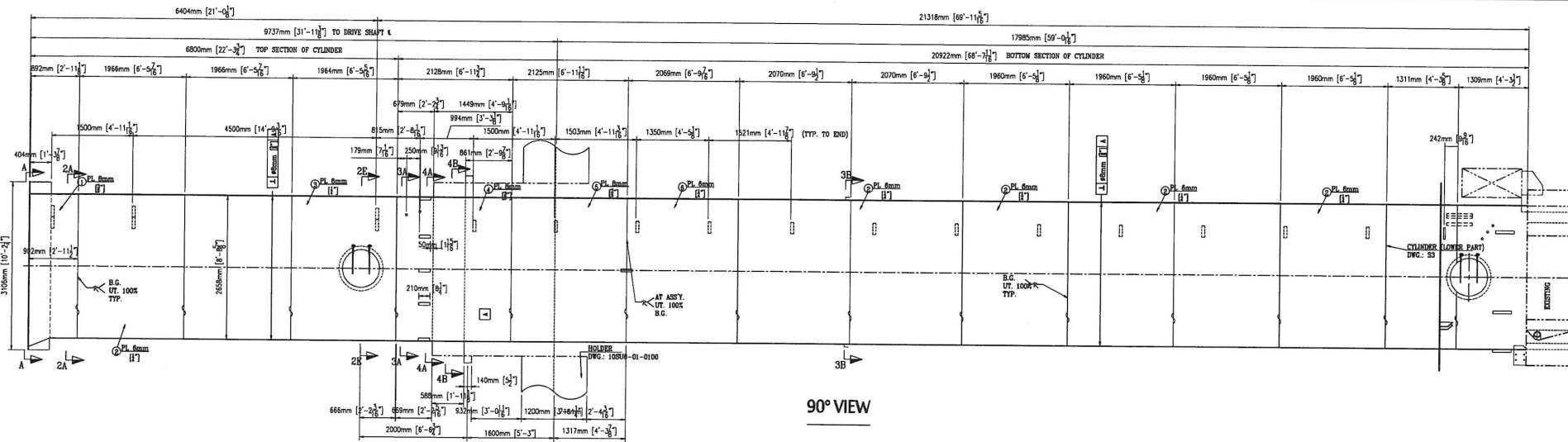
1. DO NOT SCALE DRAWINGS - DIMENSIONS SHALL GOVERN OVER PLAN AND ELEVATION DRAWINGS. LARGE SCALE DETAILS SHALL GOVERN OVER SMALL SCALE DETAILS.
2. IT IS INTENDED THAT THE CONTRACTOR PROVIDE A COMPLETE JOB AND ANY OMISSIONS IN THE NOTES OR CONTRACT DOCUMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF SUCH RESPONSIBILITY EXCEPT FOR ITEMS SPECIFICALLY NOTED.
3. THE GENERAL CONTRACTOR IS TO PROVIDE ALL LABOR AND MATERIALS TO EXECUTE THE WORK AS SHOWN ON THESE DRAWINGS WITH THE EXCEPTION OF ITEMS MARKED "NOT IN CONTRACT", "N.I.C.", OR "BY OTHERS".
4. THE CONTRACTOR SHALL REVIEW ALL PLANS, NOTES, GENERAL CONDITIONS, AND SPECIFICATIONS AND VERIFY ALL GOVERNING DIMENSIONS ON THE JOB SITE. ALL VARIANCES OR DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO COMMENCING WITH WORK. ANY VARIANCES OR DISCREPANCIES NOT REPORTED TO THE ARCHITECT SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL PROVIDE GENERAL CARPENTRY AND BLOCKING AS REQUIRED FOR THIS PROJECT WHICH MAY NOT FALL INTO THE JURISDICTION OF A SPECIFIC TRADE, BUT IS REQUIRED FOR THE PROPER JOB EXECUTION AND COMPLETION OF CONSTRUCTION.
6. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR OPERATIONS OR THE OPERATIONS OF ANY HIRED SUBCONTRACTORS WITHIN THE AREA OF WORK. METHODS OF REMOVAL MUST BE AGREEABLE TO THE OWNER.
7. THERE SHALL BE NO SUBSTITUTION OF MATERIALS SPECIFIED WITHOUT APPROVAL BY THE OWNER, ARCHITECT OR ENGINEER. MATERIALS MENTIONED BY MANUFACTURER SHALL NOT BE SUBSTITUTED UNLESS THE TERM "OR APPROVED EQUAL" IS NOTED. THE ARCHITECT OR ENGINEER SHALL APPROVE EQUALITY BASED UPON INFORMATION SUBMITTED BY THE CONTRACTOR.
8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE GOVERNMENTAL AGENCY HAVING JURISDICTION AND SHALL CONFORM TO ALL SAFETY AND SANITARY LAWS, CITY, COUNTY, STATE AND/OR FEDERAL ORDINANCES WHICH APPLY.
9. THE CONTRACTOR SHALL KEEP SUFFICIENT WORKMEN ON THE JOB SITE AT ALL TIMES TO PERFORM THE WORK IN THE MOST EXPEDITIOUS MANNER CONSISTENT WITH GOOD WORKMANSHIP, SOUND BUSINESS PRACTICE, AND IN THE BEST INTERESTS OF THE END USER.

LIST OF DRAWINGS:

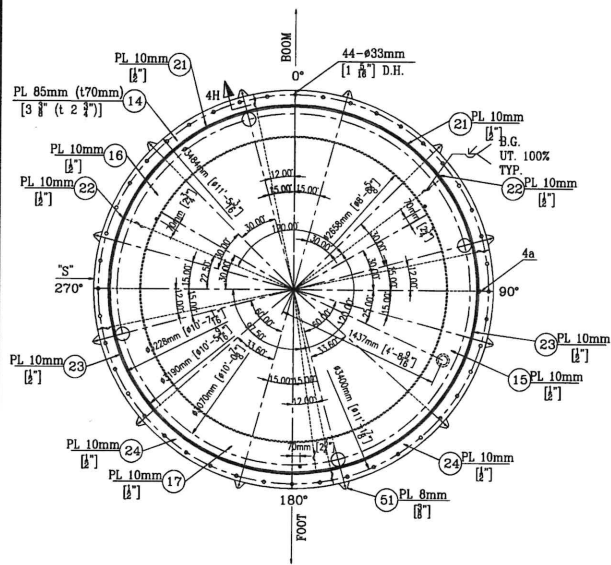
- X1 COVER SHEET - THIS SHEET
- S1 PLANS, SECTIONS & DETAILS
- S2 PLANS, SECTIONS & DETAILS
- S3 PLANS, SECTIONS & DETAILS
- S4 PLANS, SECTIONS & DETAILS

BILL OF MATERIALS				BILL OF MATERIALS			
NO.	DESCRIPTION	REQD.	MATL.	NO.	DESCRIPTION	REQD.	MATL.
1	3/8"x2'-11 1/8"x 27'-4 3/4" CIRCUM. (SHELL)	1	2202 S.S.	49	3/8"x1'-8 1/2"x2'-5 1/2" PLATE	1	2202 S.S.
2	1/4"x6'-5 7/16"x 27'-4 3/4" CIRCUM. (SHELL)	3	2202 S.S.	50	7/8" O.D. PIPE FOR CABLE PROTECTION	3	316 S.S.
3	3/8"x6'-11 11/16"x 27'-4 3/4" CIRCUM. (SHELL)	2	2202 S.S.	51	3/8"x2 3/4"x3 9/16" WITH 9/16" HOLES	12	2202 S.S.
4	1/4"x6'-9 1/2"x 27'-4 3/4" CIRCUM. (SHELL)	3	2202 S.S.	52	3/8"x2"x5 3/16" (M.H.)	4	2202 S.S.
5	1/4"x6'-5 1/8"x 27'-4 3/4" CIRCUM. (SHELL)	4	2202 S.S.	53	1/2"x7 7/8" O.D. PLATE WITH 2 3/4" THRU	2	2202 S.S.
6	3/8"x4'-3 5/8"x 27'-4 3/4" CIRCUM. (SHEL)	2	2202 S.S.	54	3/8"x8'-8 5/8" I.D.x 10'-0 7/16 O.D. (SIDE RING UPPER)	1	2202 S.S.
7	3/8"x8'-7 1/2" I.D.x 10'-2 5/16" O.D. (TOP RING UPPER)	1	2202 S.S.	55	3/8"x8'-8 5/8" I.D.x 10'-0 7/16 O.D. (SIDE RING UPPER)	1	2202 S.S.
8	3/8"x8'-7 1/2" I.D.x 10'-2 5/16" O.D. (TOP RING SIDES)	2	2202 S.S.	56	1/2"x1 3/8" LONG HEX C'SUNK BOLT AND NUTS	20	316 S.S.
9	1/2"x5 1/2"x1'-8 1/16" (BOLTED ON LIFTING EYES)	4	2202 S.S.	57	1/2"x1/2"x1'-7 3/16" SQUARE BARS (SEC 4F-4F)	8	316 S.S.
10	1 1/2"x1/2"x9 7/16" SQUARE BARS (INSIDE BOX)	16	2202 S.S.	58	1/8"x1/8" WITH 3/4" BOLT HOLES	4	2202 S.S.
11	3/8"x4"x3" ROLLED ANGLE W/ 105 1/8" I.D.	1	2202 S.S.	59	1/2"x9 1/2"x19 1/2" LIFTING LUG	1	316 S.S.
12	3/8"x3 9/16"x6'-4" (M.H. NOOZLE)	2	2202 S.S.	60	1" COUPLINGS FOR CONDUITS	1	316 S.S.
13	1/2"x1'-7 3/16"x10 3/8" PLATE (4C-4C)	1	2202 S.S.	61	1/4"x1 1/2"x1 1/2"x1'-4 1/2" ANGLES (CONDUIT SUPPORT)	10	316 S.S.
14	3 3/8" (TRIMED TO 2 3/4")x5 1/2" PLATE (DETAIL 4b)	1	A572-GR.50	62	3/8"x2"x21 1/2" (M.H.)	4	2202 S.S.
15	1/2"x8'-9" I.D.x10'-5 9/16" O.D. (SEC. 4B-4B SIDE RING)	1	2202 S.S.	63	3/8"x2"x7 1/2" (M.H.)	4	2202 S.S.
16	1/2"x8'-9" I.D.x10'-5 9/16" O.D. (SEC. 4B-4B SIDE RING)	1	2202 S.S.	64	1/4"x1 1/2"x1 1/2"x1'-1 3/4" ANGLES (CONDUIT SUPPORT)	5	316 S.S.
17	1/2"x8'-9" I.D.x10'-5 9/16" O.D. (SEC. 4B-4B BOT. RING)	1	2202 S.S.	65	1/4"x1 1/2"x1 1/2"x1'-6 7/8" ANGLES (CONDUIT SUPPORT)	3	316 S.S.
18	1/2"x8'-9" I.D.x10'-0 7/8" O.D. (SEC. 4A-4A SIDE)	1	2202 S.S.	66	5/8"x8'-9 5/16" I.D.x10'-0 5/8" O.D (STIFFNER RING)	1	316 S.S.
19	1/2"x8'-9" I.D.x10'-0 7/8" O.D. (SEC. 4A-4A BOT.)	1	2202 S.S.	67	5/8"x8'-9 5/16" I.D.x10'-0 5/8" O.D (STIFFNER RING)	1	316 S.S.
20	1/2"x8'-9 1/4" I.D.x10'-4 11/16" O.D. (BOTTOM RING)	1	2202 S.S.	68	1/2"x12"x8 11/16" (BOTTOM CLIP W/ HOLES)	2	2202 S.S.
21	1/2"x1'-7 3/16"x10'-6 3/8" O.D. (OUTER WALL-CIRC. BOX)	1	2202 S.S.	69	7/8"x7/8"x1'-2 5/8" SQUARE BARS (UPPER BOX AT TOP)	1	316 S.S.
22	1/2"x8'-9 1/4" I.D.x10'-7 1/16" O.D. (TOP RING)	1	2202 S.S.	70	1/4"x1 1/2"x1 1/2"x11 1/2" ANGLES (CONDUIT SUPPORT)	24	316 S.S.
23	1/2"x8'-9 1/4" I.D.x10'-7 1/16" O.D. (BOT. RING)	1	2202 S.S.	71	MOUNTING CUPS	6	2202 S.S.
24	1/2"x10'-7 1/16" I.D.x11'-5 3/16" O.D. (OUTER RING)	1	2202 S.S.	72	5/8"x3'-0 5/8"x8'-10 1/2" O.D. (DBL. PLATE AT FLANGE)	1	2202 S.S.
25	7/8"x9'-6 7/16" I.D.x10'-2 5/16" O.D. TOP PLATE RING	1	316 S.S.	73	1/2"x6 11/16"x1'-3 1/8" GUSSETS (UPPER BOX)	8	2202 S.S.
26	3/8"x1'-3 9/16"x8" LEANING PLATE (TOP OF STACK)	1	2202 S.S.	74	1/2"x10 15/16"x1'-7 1/2" (STIFFNERS INSIDE-BOX)	8	2202 S.S.
27	1/2"x7 1/8"x9 7/16" (LOADING ARM LUGS)	2	2202 S.S.	75	3"x2 3/8" I.D.x 4 13/16" O.D. SLEEVES	2	2202 S.S.
28	1/2"x7 1/8"x9 7/16" (LOADING ARM LUGS)	2	2202 S.S.	76	1/2"x2 3/4" I.D.x8 11/16" O.D. (LIFTING EYE RE-PADS)	2	2202 S.S.
29	5/8"x1'-3 7/16"x1'-8 3/4" (LOADING ARMS)	2	316 S.S.	77	7/8"x3 1/16 I.D.x5 1/2" O.D. RING (LOCKING PIN)	1	316 S.S.
30	3"x2 3/8" I.D.x 13/16" O.D. (LOADING ARM SLEEVES)	2	316 S.S.	78	3/8"x2"x6 11/16" (M.H.)	4	2202 S.S.
31	1/2"x1/2"x1'-7 1/2" SQUARE BARS (SEC 4E-4E, 4C-4C)	8	316 S.S.	79	3/8"x2"x5 1/2" (M.H.)	4	2202 S.S.
32	4"x20 1/2" SCH. 40 PIPE (HAND HOLES)	4	316 S.S.	80	3/8"x1 3/4"x1 3/4" (M.H.)	2	2202 S.S.
33	3/8"x2'-5" O.D. (M.H. COVERS)	2	2202 S.S.	81	3/4"-10x2" LG. HVY. BOLT HDG.	4	2202 S.S.
34	1/2"x1'-7 1/2"x10 3/8" PLATE (4F-4F)	1	2202 S.S.	82	3/4"-10x3" LG. HVY. BOLT HDG.	2	2202 S.S.
35	3/8"x2" I.D.x2'-5" O.D. (M.H. RING)	2	2202 S.S.	83	3/4"-10x4 3/4" LG. EYE BOLT	2	2202 S.S.
36	3/8"x8'-8 5/8" I.D.x 10'-0 7/16 O.D. (SIDE RING UPPER)	1	2202 S.S.	84	3/4"-10 HEX NYLON NUT	4	2202 S.S.
37	3/8"x1'-9 3/8"x10'-1 1/8" O.D.	2	2202 S.S.	85	3/4"-10 HVY. HEX NUT HDG.	4	2202 S.S.
38	3/8"x1'-9 3/8"x10'-1 1/8" O.D.	2	2202 S.S.	86	3/4" FLAT WASHER	8	2202 S.S.
39	3/8"x1'-9 3/8"x10'-1 1/8" O.D.	2	2202 S.S.	87	3/4" LOCK WASHER	2	2202 S.S.
40	3/8"x1'-9 3/8"x10'-1 1/8" O.D.	2	2202 S.S.	88	1/16" THICK GASKET- 2' I.D.x2'-2" O.D.	2	
41	1" COUPLINGS FOR CONDUITS	2	316 S.S.	89	3/4"-10 WING NUT	4	2202 S.S.
42	1 1/4" COUPLINGS FOR CONDUITS	1	316 S.S.				
43	1/2"x7 5/8"x1'-2 5/8" PLATE (SEC. C-C)	1	2202 S.S.				
44	13/16"x3 1/16" I.D.x5 1/2" O.D.	1	2202 S.S.				
45	3/8"x1'-2 3/16"x1'-0 3/16" TRIANGULAR PLATE	1	2202 S.S.				
46	3/8"x1'-1 3/8"x1'-3 1/8" DIAG. GUSSETS (UPPER BOX)	4	2202 S.S.				
47	7/8"x7/8"x1'-3 1/8" SQUARE BARS (UPPER BOX AT TOP)	7	316 S.S.				
48	3/8"x1'-8 1/2"x2'-3 5/8" PLATE	2	2202 S.S.				

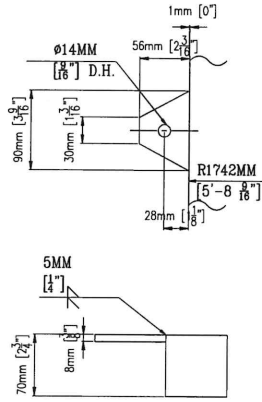
CONTROL NUMBER: 310007



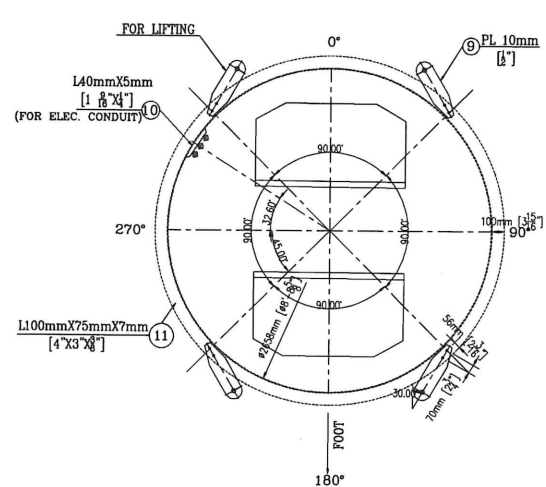
90° VIEW



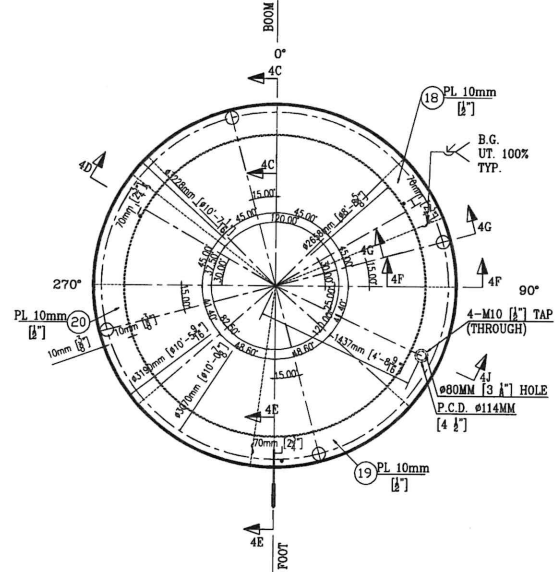
SECTION 4B-4B



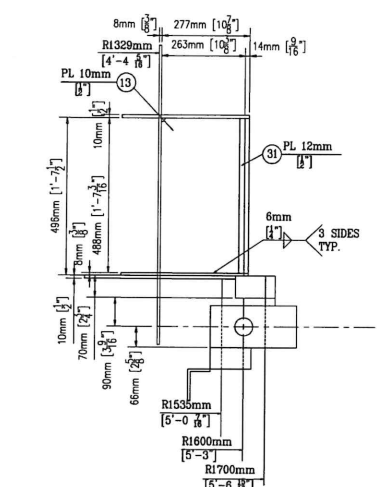
DETAIL 51



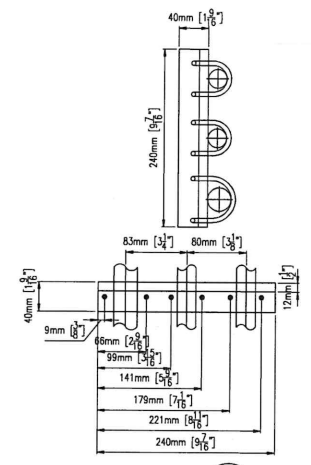
SECTION 3B-3B



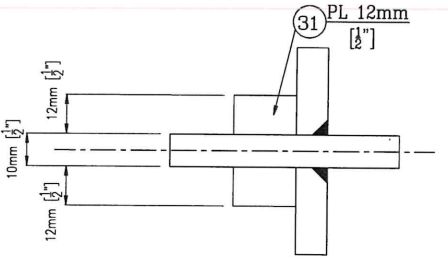
SECTION 4A-4A



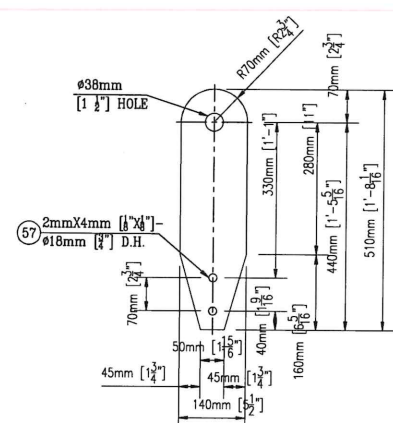
SECTION 4C-4C



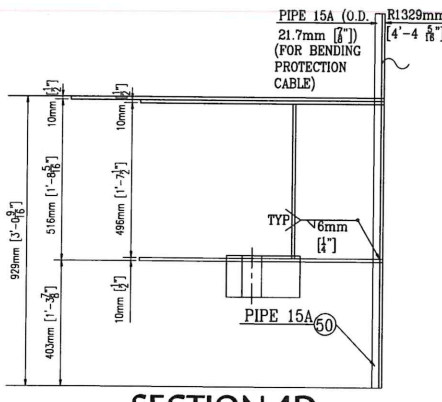
DETAIL 10



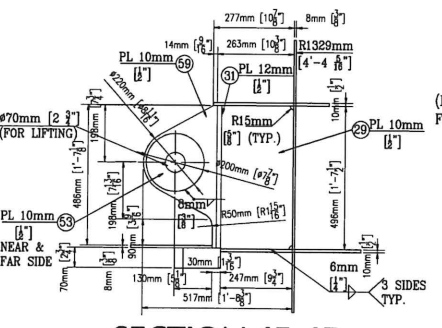
SECTION 4a



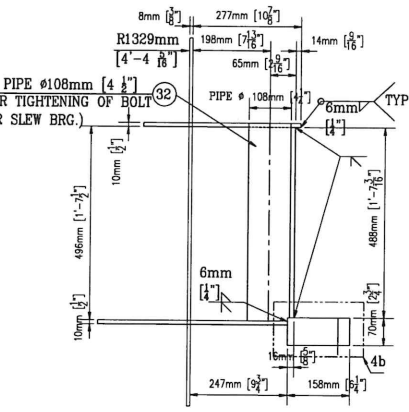
SECTION 9



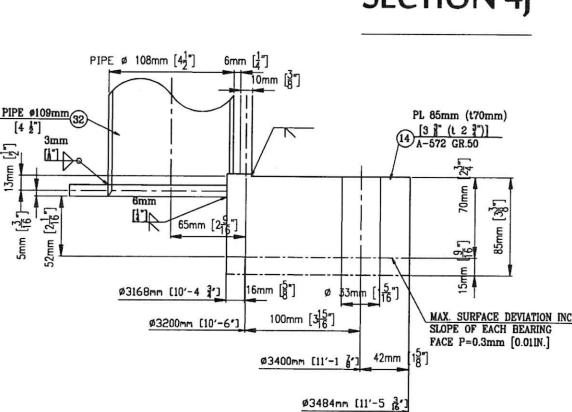
SECTION 4D



SECTION 4E-4E



SECTION 4G-4G

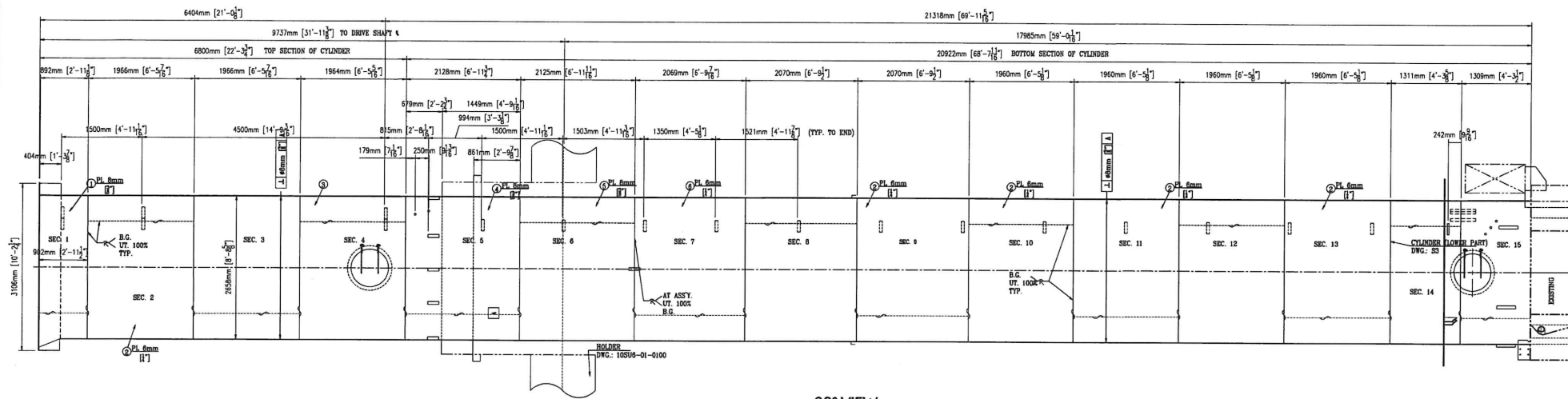


DETAIL 4b

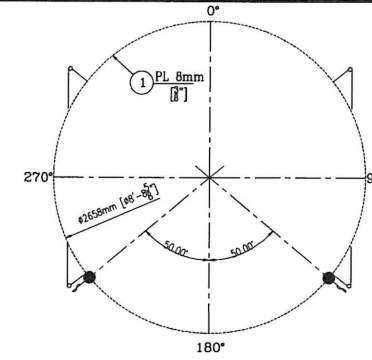
<U.T. 100%>

CONTROL NUMBER: 310010

REV. DATE:	DESCRIPTION:
ARC-RITE 341 U.S. 17 PALATKA, FL 32177	
STANLEY ENGINEERING AND CONSTRUCTION, INC. (804) 260-5770 FAX: (804) 260-5768 10365 Hood Rd. Suite 207, Jacksonville, FL 32257	
S E I	
SHEET TITLE: PIPE PLAN	
DESIGNED BY: N.E.S.	
CHECKED BY: N.E.S.	
DRAWN BY: J.W.V.	
DATE: 9/12/2014	
SCALE: AS NOTED	
SHEET SET S3	
PROJECT NO. 14-072	
SHEET NO. 3 OF 4	

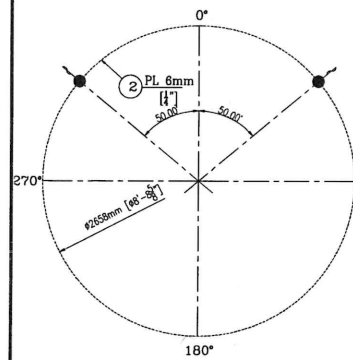


90° VIEW



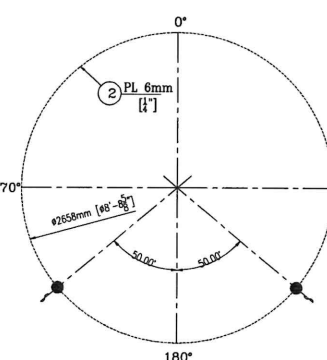
SEC. 1 SEAM WELD

8mm [5/16"] THICK PLATE



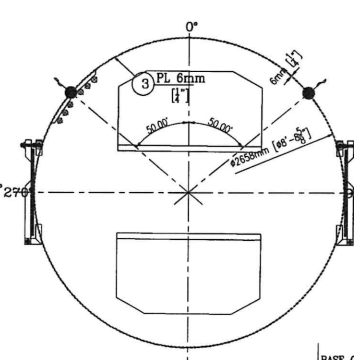
SEC. 2 SEAM WELD

6mm [1/4"] THICK PLATE



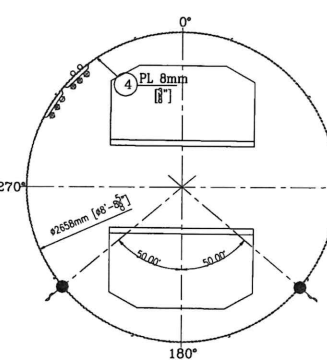
SEC. 3 SEAM WELD

6mm [1/4"] THICK PLATE



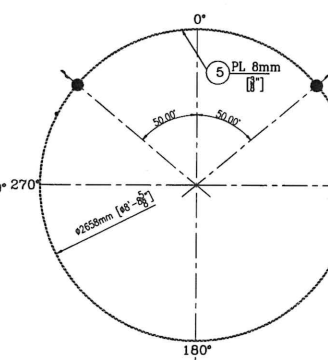
SEC. 4 SEAM WELD

6mm [1/4"] THICK PLATE



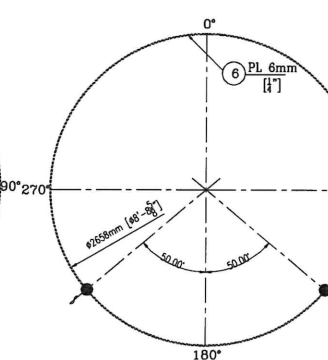
SEC. 5 SEAM WELD

8mm [3/8"] THICK PLATE



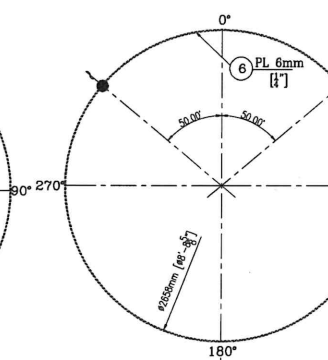
SEC. 6 SEAM WELD

8mm [3/8"] THICK PLATE



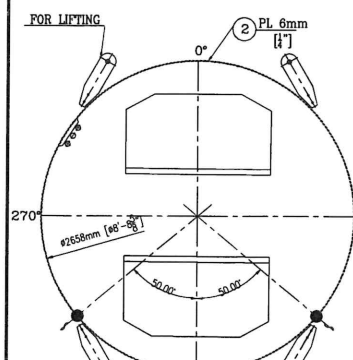
SEC. 7 SEAM WELD

6mm [1/4"] THICK PLATE



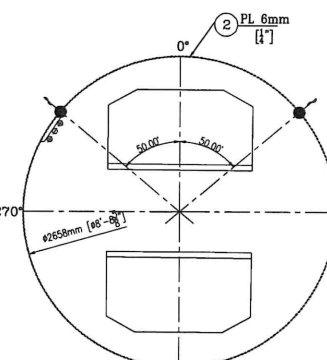
SEC. 8 SEAM WELD

6mm [1/4"] THICK PLATE



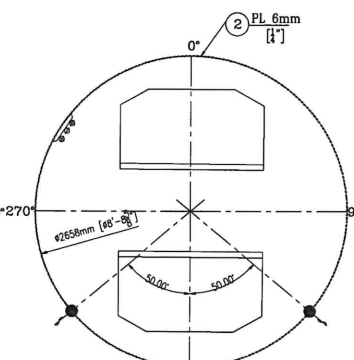
SEC. 9 SEAM WELD

6mm [1/4"] THICK PLATE



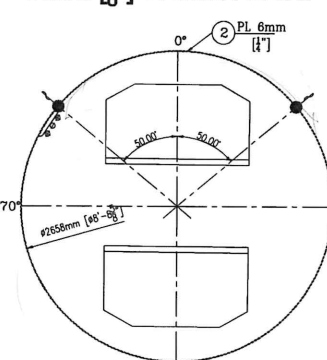
SEC. 10 SEAM WELD

6mm [1/4"] THICK PLATE



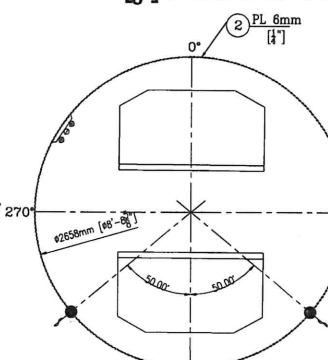
SEC. 11 SEAM WELD

6mm [1/4"] THICK PLATE



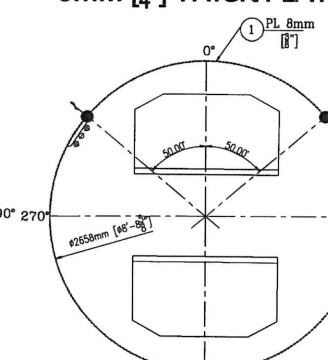
SEC. 12 SEAM WELD

6mm [1/4"] THICK PLATE



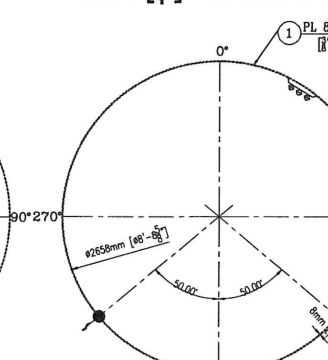
SEC. 13 SEAM WELD

6mm [1/4"] THICK PLATE



SEC. 14 SEAM WELD

8mm [3/8"] THICK PLATE



SEC. 15 SEAM WELD

8mm [3/8"] THICK PLATE

REV. DATE:

ARC-RITE
341 U.S. 17
PALATKA, FL 32177

STANLEY ENGINEERING AND CONSTRUCTION, INC.
(904) 260-5770 FAX: (904) 260-5785
10365 Hood Rd. Suite 207, Jacksonville, FL 32257

S E I

SHEET TITLE:

VERTICAL SEAM WELD PLAN

DESIGNED BY:

N.E.S.

CHECKED BY:

N.E.S.

DRAWN BY:

J.W.V.

DATE:

9/12/2014

SCALE:

AS NOTED

SHEET SET

S3

PROJECT NO.

14-072

SHEET NO.

4 OF 4

CONTROL NUMBER: 310011

1. Loads and Moments for Bucket elevator slewing part

TITLE : JEA Continuous Ship Unloader
 DIR : h0503\icsong\jeabucket slew.xls
 DOC. No.: 04120B2

DATE : 2000.02.14
 REV. NO.: 0
 USER : Y. C. SONG

(1) Data for Dead load

* Structural parts

No.	Description	Weight(z-dir.)	Remarks
1	Platform for holder	21000 kg	
2	Railing-platform for holder	500 kg	
3	Platform & stair w/grating	1850 kg	
4	Column w/platform & ladder	3000 kg	
5	Boom for electric hoist	450 kg	non-rotating parts
6	Electrical hoist	600 kg	
7	Railing for platform and stair	400 kg	
	Stair & platform - holder	1800 kg	
	Railing - holder	800 kg	
	Aux. cab	4000 kg	
Non-rotating(structural part), sub - total		34400 kg	
No.	Description	Weight(z-dir.)	Remarks
8	Discharge chute	3100 kg	
9	Railing-discharge chute platform	900 kg	
10	Wear plate	850 kg	
11	Circular platform	5800 kg	
12	Cylinder-upper and middle part	15000 kg	
13	Cylinder-lower part	5100 kg	rotating parts
14	Chain guide-cylinder	5000 kg	
15	Elevator foot (vertical)	4500 kg	
16	Elevator foot (horozontal)	8000 kg	
17	Ladder & support	500 kg	
Rotating(structural part), sub - total		48750 kg	
Structural part(nonrotating+rotating),sub-total		83150 kg	

* Mechanical parts

No.	Description	Weight(z-dir.)	Remarks
22	Movable chute outlet	1100 kg	
23	Spiral chute + deflection flap	10600 kg	non-rotating parts
Non-rotating(mechanical part), sub - total		11700 kg	
No.	Description	Weight(z-dir.)	Remarks
21	Bucket+chain+roller	30030 kg	
24	Disp. drive shaft + hyd. motor	9100 kg	
25	Disp. return shaft	1400 kg	
27	Disp. take-up system	2100 kg	
28	Chain guide at elevator's foot	2500 kg	
29	Do not use	0 kg	
30	Bow for take-up head	250 kg	
32	Hyd. power pack	6500 kg	
33	Hyd. cylinder - Horizontal	50 kg	rotating parts
34	Do not use	0 kg	
35	Do not use	0 kg	
36	Hyd. cylinder hinge	20 kg	
37	Loading arm, cleaning cyl., pipe, oil	1500 kg	
38	Slip ring & electric	2000 kg	
39	Slewing ring	3400 kg	
40	etc	550 kg	
Rotating(mechanical part), sub - total		59400 kg	
Mechanical part(nonrotating+rotating),sub-total		71100 kg	
Nonrotating parts(structural+mechanical) total		46100 kg	
Rotating parts(structural+mechanical) total		108150 kg	
Structural + Mechanical parts, total		154250 kg	