
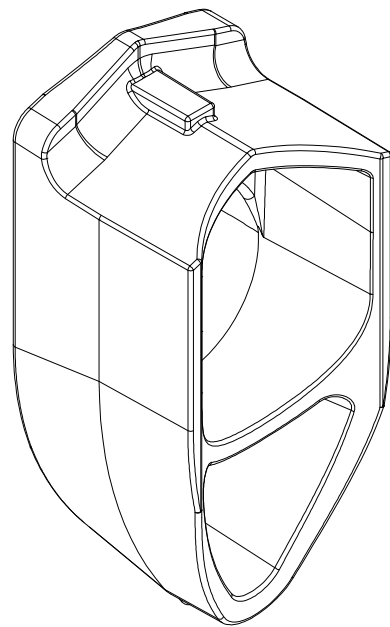
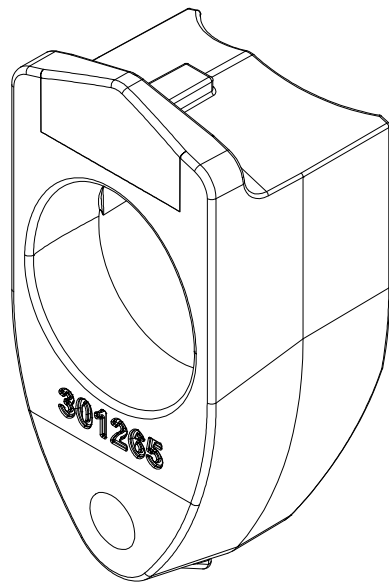
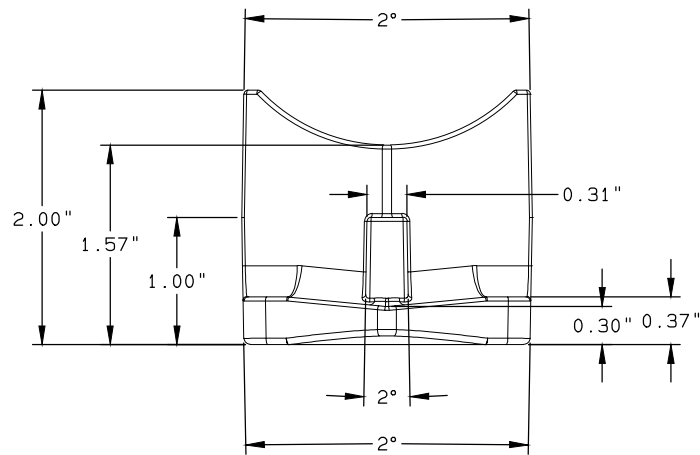


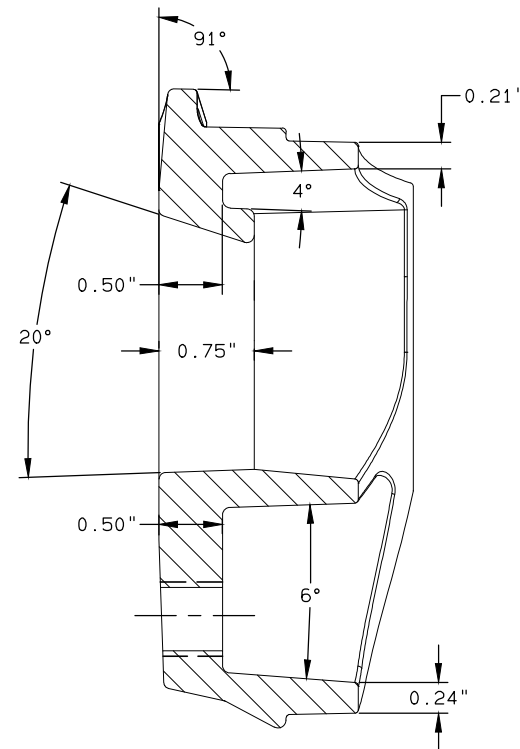
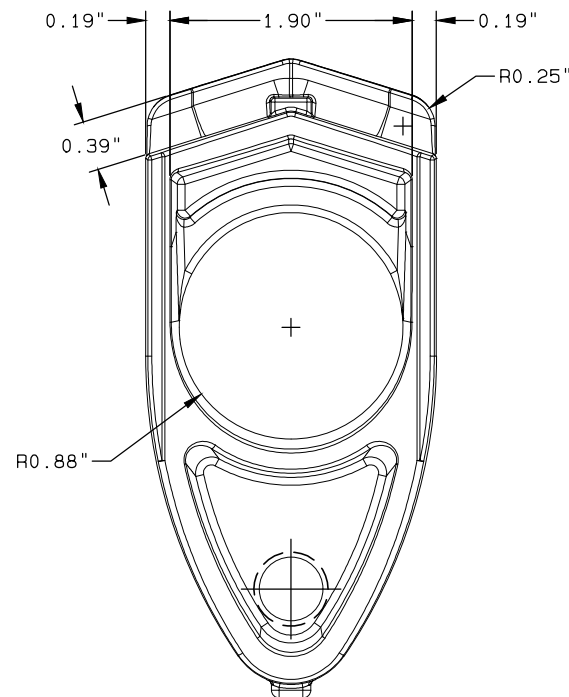
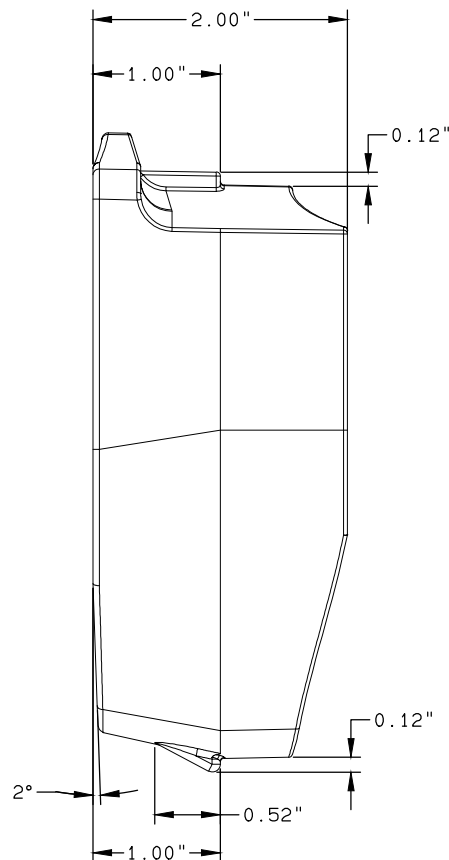
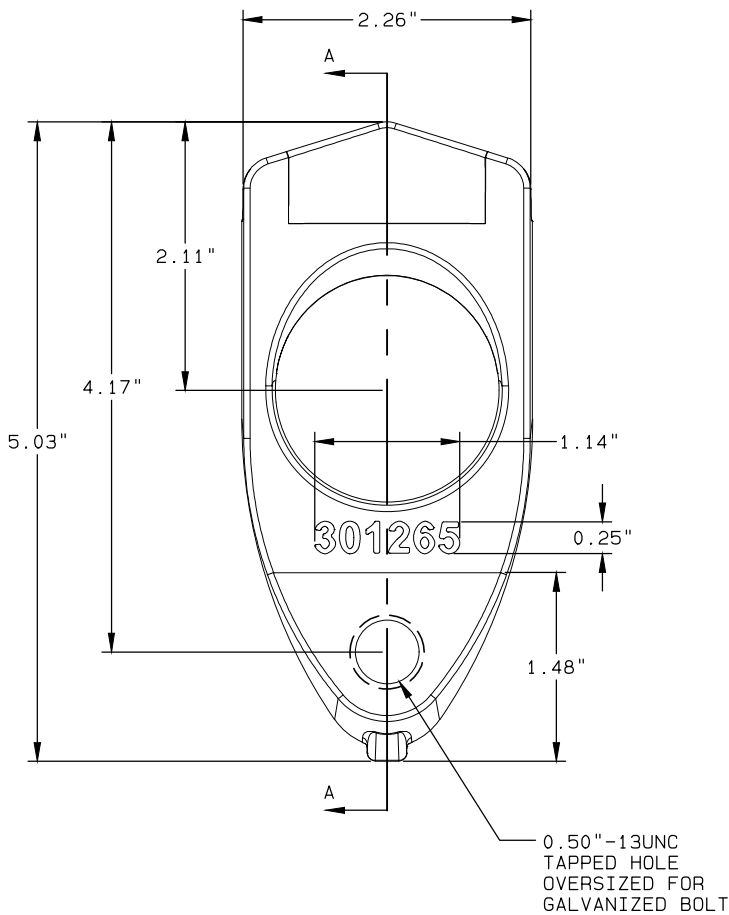
NOTE: FIELD ASSEMBLE
COMPONENTS AS SHOWN

BILL OF MATERIAL (SHIP SEQ=0)		
VALMONT PART NO	DESCRIPTION	QTY PER ASSY
1093814	SPIKE BENT PLATE	1
AS46553	SPIKE PIPE	1
3G00005	SPIKE CAP	1
AS43322	U-BOLT	2

DUPLICATE DRAWING DISTRIBUTION					TMF_10'_ LIGHTNING SPIKE ASSEMBLY						
					DWG SIZE B		CLASS CODE (1) 4		CLASS NO. (3) 999		
					DRAWN LD70	ENGR	DATE 06/11/21	SCALE CNC			
					P.A. CHK		SHOP CHK				
					NSE 06/25/21		CD17 08/02/21				
					OTHER SPECIFICATIONS						
					M-1						
REV ID	DATE	REV BY	CHK BY	REVISION DESCRIPTION	MATERIAL	THICKNESS	WEIGHT 64#				
ORDER NO. STANDARD		CUSTOMER STANDARD			DESCRIPTION LIGHTNING SPIKE					DWG NO. 1093811	

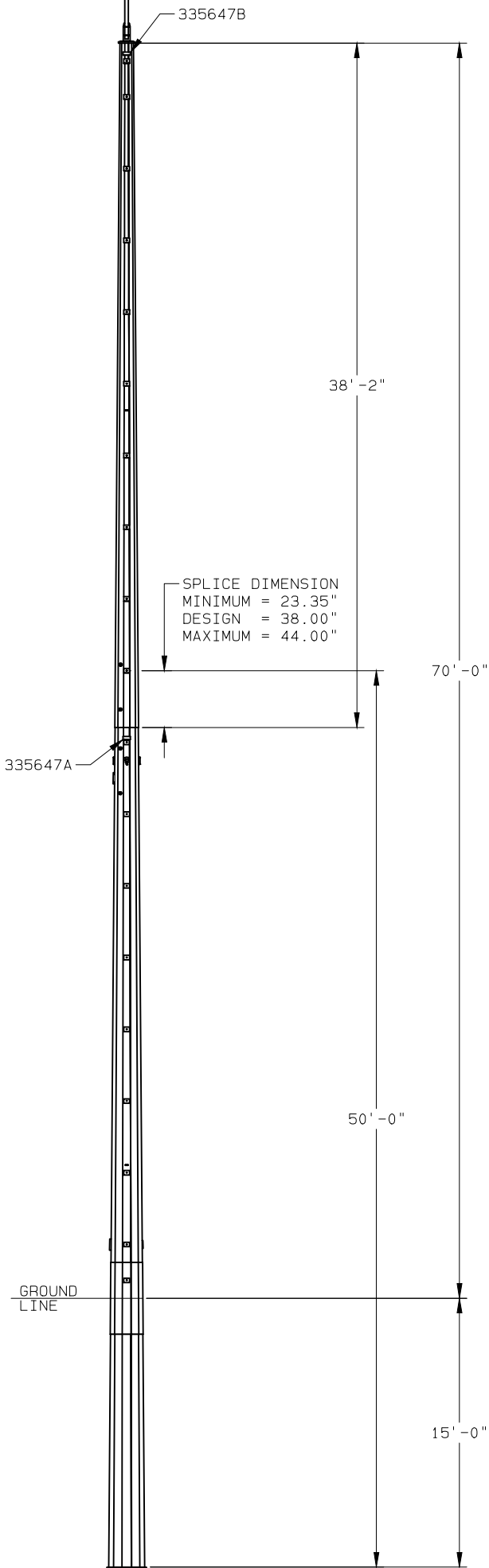


- NOTES:
1. MATERIAL CONFORMS TO VALMONT S-241 & ASTM DESIGNATION: A27 GRADE 65-35 FOR CAST STEEL.
 2. THIS PART WAS CREATED USING A 3D MODEL. FOR MORE DETAILED INFORMATION SEE THE 3D MODEL.
 3. TOLERANCES SHALL BE THE FOLLOWING UNLESS OTHERWISE SPECIFIED.
LINEAR DIMENSIONS = +/- 0.03"
ANGULAR DIMENSIONS = +/- 1 DEGREE

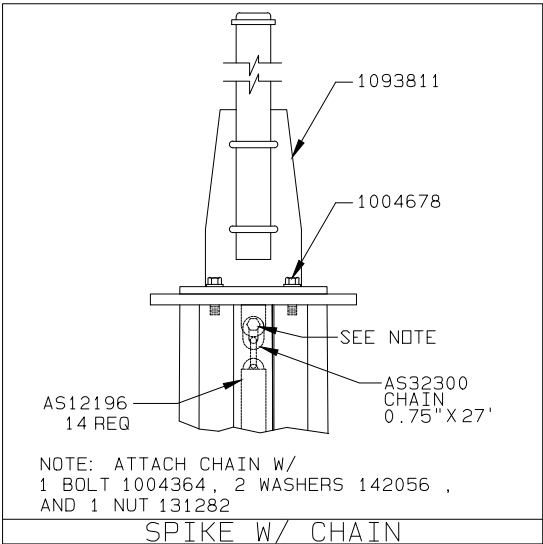
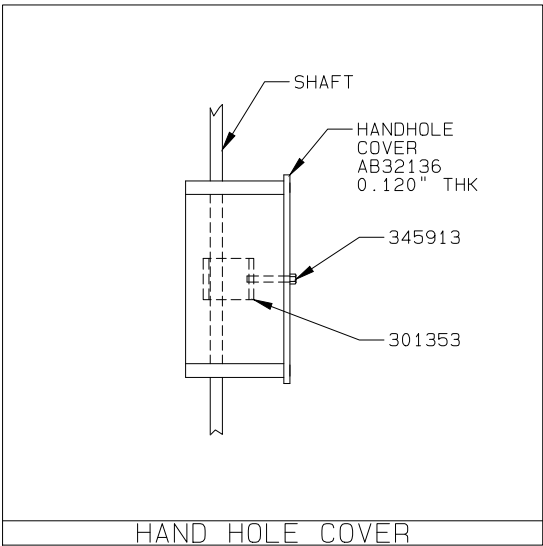
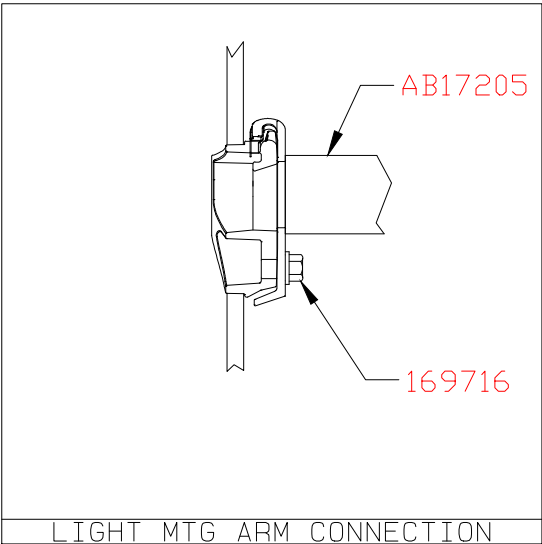
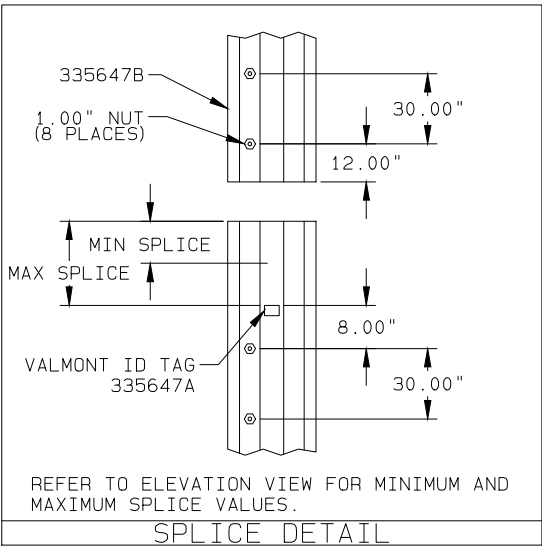


SECTION A-A

L	01/28/13	ADDED NEW S-SPEC IN NOTE	NA5	PROD. CODE (2)	04	S. CODE (1)	28	ELC (7)	02	STD. IND. (1)	15	UGM (2)	PC	SHIP FLAG (1)	29	CLASS CODE (1)	E	CLASS NO (3)	108	36	VALMONT®
K	04/25/12	ADD OVERSIZED FOR GALV BOLT	TLG	SPP1C000000000050200A270R050302280088																	
J	04/05/12	THREADED HOLE WAS 12UNC	TLG	DWG. SIZE (1) <u>B</u> PURC. L. T. (5) <u>87</u> CONTROL (1) <u>102</u> MATL. COST (5.4) <u>07</u> PL. CODE (1) <u>41</u> WEIGHT (7) <u>2.21</u> 104																	
H	10/11/05	CHANGED PROD DESCRIPTION	RDS9																		
G	04/27/05	UPDATED TO NEW EAGLE ALLOY PART.AML2		SPECIFICATIONS																	
F	05/29/02	CHANGED MATERIAL	AML2																		
E	05/25/02	ADDED 0.25" TO THICKNESS	AML2	DATE 6/18/66				DRAWN DHO				CHECKED				301265					
D	10/19/01	REDESIGN PF PART	JAP1																		
A	12/11/98	TOP TO HOLE DIM WAS 4.25	TRK3	FINISH: N/A		WELD: N/A		DUPLICATE DRAWING DISTRIBUTION		*	04		*	38			PART NUMBER				
REF. (107)	DATE	REVISION DESCRIPTION		TOL.: NOTED		OTHER: M-45				*	37		*	40							



ELEVATION VIEW
SEE FABRICATION DRAWINGS
FOR ADDITIONAL DETAILS



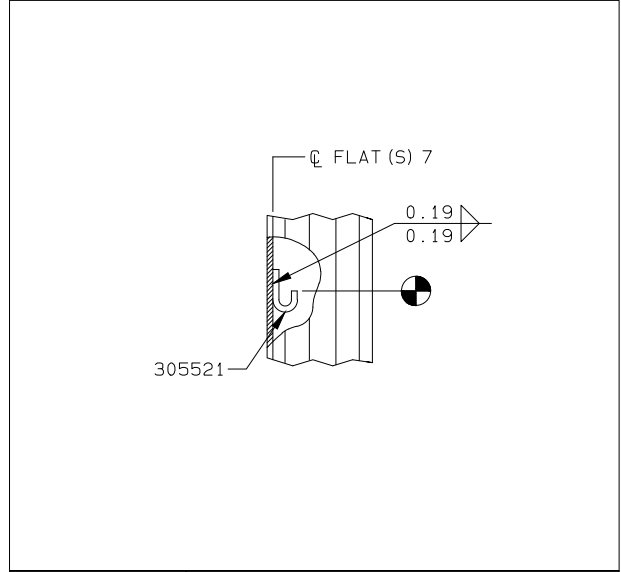
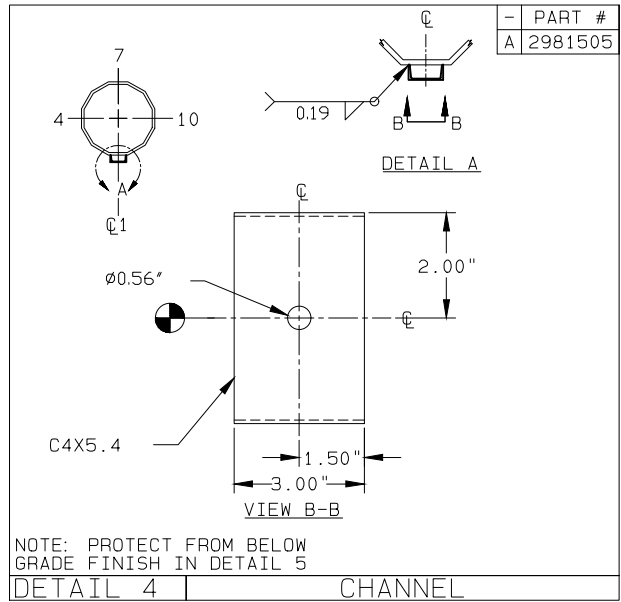
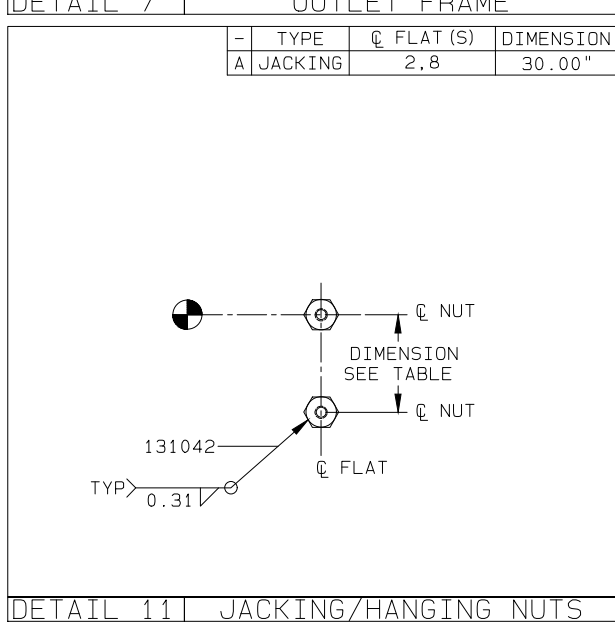
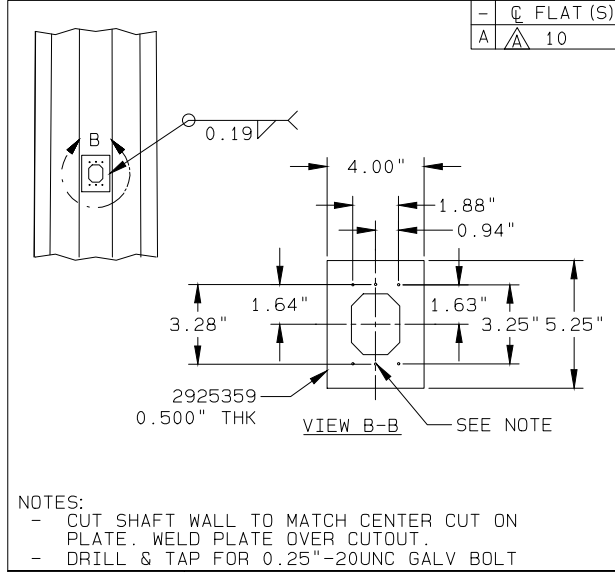
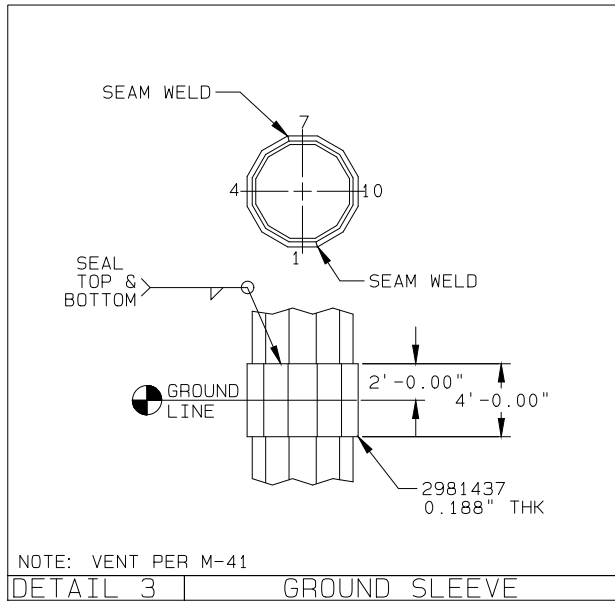
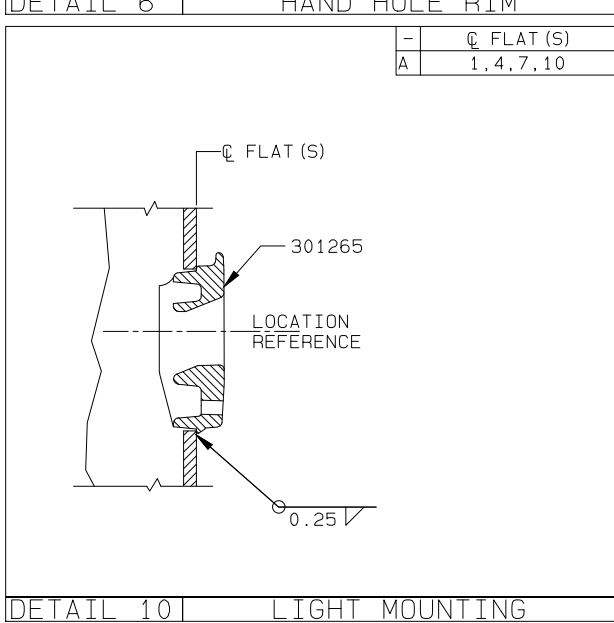
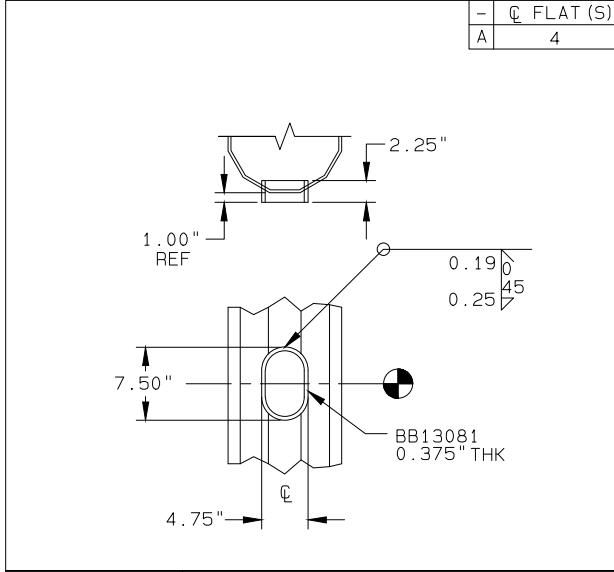
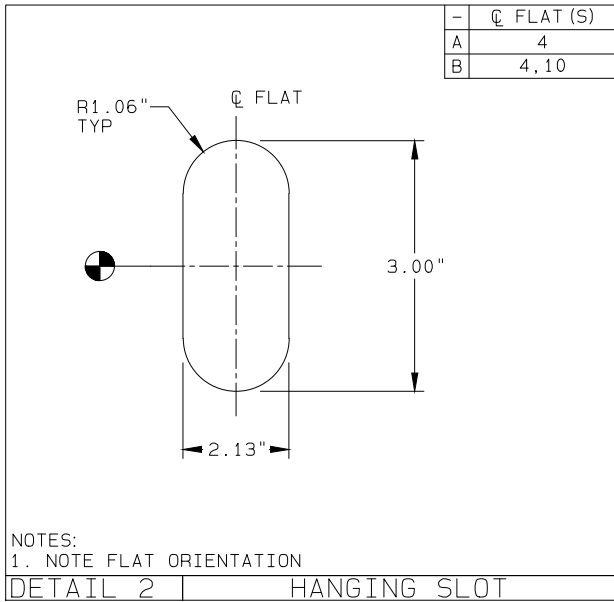
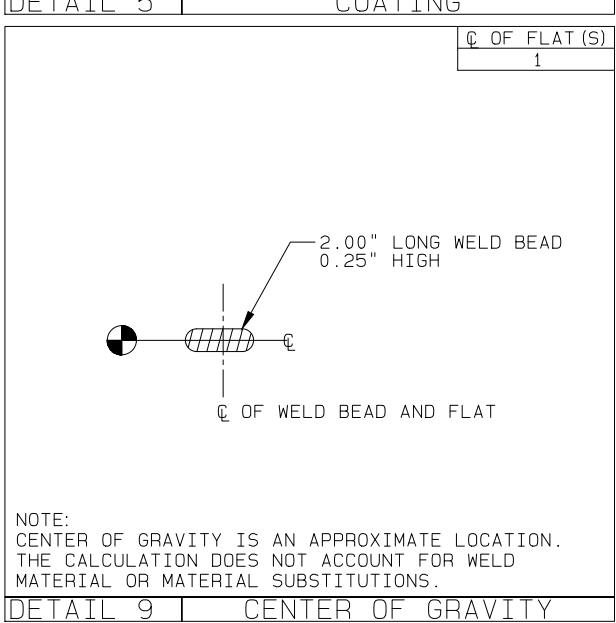
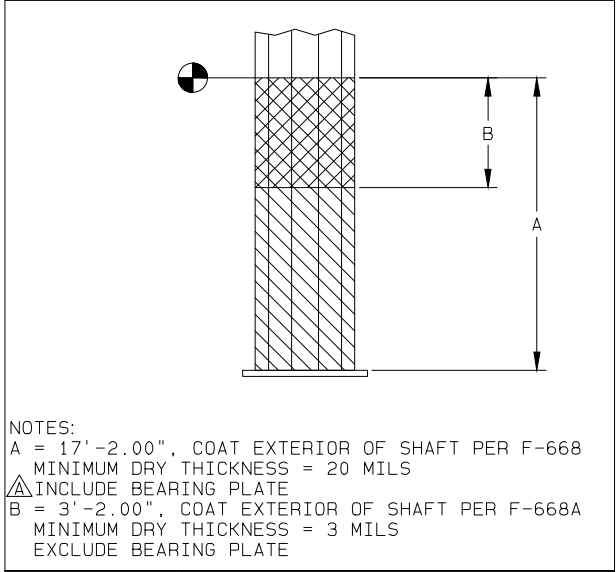
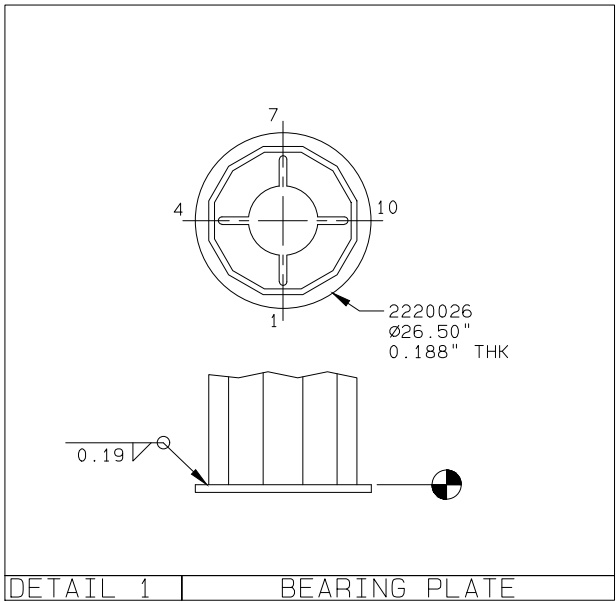
- NOTES:
- POLE SHAFT-GOVERNING REACTIONS.
MOMENT = 2,840 IN-KIPS
SHEAR = 7,466 #
VERTICAL = 4,432 #
 - COMPONENT IDENTIFICATION: VALMONT ID TAG LOCATIONS ARE INDICATED BY CALLOUTS ON DRAWING. THE VALMONT ID TAG CONTAINS INFORMATION FOR INTERNAL TRACKING AND FIELD ASSEMBLY. ONLY THE VALMONT PART NUMBER NEEDS TO MATCH FOR FIELD ASSEMBLY. ALL OTHER IDENTIFICATION IS FOR INTERNAL USE.
A = MANUFACTURING SITE (ONE CHARACTER)
B = VALMONT PART NUMBER (SEVEN CHARACTERS)
C = VALMONT ORDER NUMBER (SIX CHARACTERS)
D = VALMONT SHOP ORDER NUMBER (SEVEN CHARACTERS)
E = VALMONT SHOP ORDER LOT/BATCH NUMBER (ONE OR MORE CHARACTERS)
A-BBBBBBB
CCCCC
DDDDDD-E
 - ASSEMBLY AND ERECTION GUIDELINES: SEE VALMONT TRANSMISSION INSTALLATION GUIDELINE I002 (WWW.VALMONTUTILITY.COM/I002).
 - SLIP JOINT JACKING FORCE
MINIMUM = 25,000#
MAXIMUM = 90,000#

BILL OF MATERIAL (SHIPPING SEQ.=1 FOR ALL)								
VALMONT PART NUMBER	DESCRIPTION					UNIT WEIGHT (LBS)	QTY PER STR	
335647A	SECTION ASSEMBLY					2,959	1	
335647B	SECTION ASSEMBLY					1,027	1	
AB32136	HAND HOLE COVER					1	2	
301353	HH BACK-UP BAR					1	2	
AB17205	LIGHT MOUNTING ARM					6	4	
AS32300	3/4" X 27'-0" CHAIN DAMPENER KIT					145	3	
AS12196	CHAIN INSULATION					4	14	
1093811	LIGHTNING SPIKE					64	1	
VALMONT PART NUMBER	DESCRIPTION						QTY PER STR	
	HARDWARE SIZE (IN)				GENERAL	FINISH		ASTM SPEC
	BOLT		NUT	WSHR				
	DIA	LONG						
345913					SCREW	SS		2
169716	0.50	1.00				HDGV	A325	4
1004364	0.75	5.00				HDGV	A325	1
1004678	0.63	1.50				HDGV	A325	4
131282			0.75		DH, LOCK	HDGV	A563	1
142056				0.75	CS, FLAT	HDGV	F436	2

PROPRIETARY INFORMATION	
THESE DOCUMENTS, DRAWINGS, AND/OR CALCULATIONS AND ALL INFORMATION RELATED TO THEM ARE THE EXCLUSIVE PROPERTY AND THE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES, INC. AND ARE FURNISHED SOLELY UPON THE CONDITIONS THAT THEY WILL BE RETAINED IN STRICTEST CONFIDENCE AND SHALL NOT BE DUPLICATED, USED, OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE, IN ANY WAY, WITHOUT THE PRIOR WRITTEN PERMISSION OF VALMONT INDUSTRIES, INC.	

DUPLICATE DRAWING DISTRIBUTION				PED61551670FT_STATIC_MAST_(SM01)_61551_			
DWG SIZE D				CLASS CODE (1) 1 CLASS NO. (3) 450			
				DRAWN	ENGR	DATE	SCALE
				WC7	S071	02/25/25	NONE
				P.A. CHK	SHOP CHK		
				KLK2	2/28/25	JMW0	3/17/25
				OTHER SPECIFICATIONS			
REV ID	DATE	REV BY	CHK BY	REVISION DESCRIPTION		MATERIAL	THICKNESS
							WEIGHT
							4,571#
ORDER NO.		CUSTOMER		DESCRIPTION		DWG NO.	
615516		SUBSTATION ENTERPRISE		70FT STATIC MAST (SM01), 61551		335647Z	


LOCATION DIMENSION		
FROM LARGE END	FROM SMALL END	DETAIL
	0' - 7.00"	2-B
	3' - 8.00"	12
45' - 10.00"	4' - 4.00"	4-A
45' - 0.00"		11-A
44' - 0.00"		10-A
44' - 0.00"		8
44' - 0.00"		6-A
42' - 0.00"		4-A
38' - 0.00"		4-A
34' - 0.00"		4-A
30' - 0.00"		4-A
26' - 0.00"		4-A
27' - 6.81"		9
22' - 0.00"		4-A
18' - 0.00"		7-A
18' - 0.00"		6-A
18' - 0.00"		4-A
17' - 0.00"		5
16' - 0.00"		4-A
15' - 0.00"		GL
15' - 0.00"		3
0' - 7.00"		2-A
0' - 0.00"		1

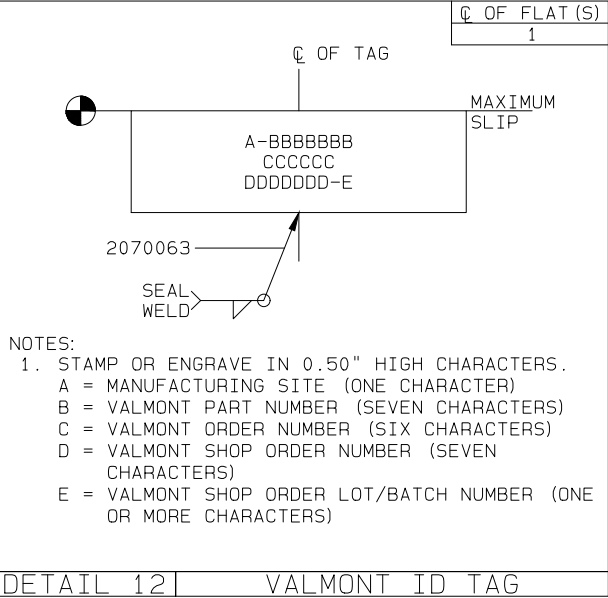


BILL OF MATERIAL (SHIP SEQ=0)		
VALMONT PART NO	DESCRIPTION	QTY PER ASSY
2981434	SHAFT	1
2220026	BEARING PLATE	1
2981437	GROUND SLEEVE	2
2981505	CHANNEL	9
BB13081	HANDHOLE RIM	2
2925359	OUTLET PLATE	1
305521	J HOOK	1
301265	1 BOLT SIMPLEX	4
131042	1.00" NUT	4
2070063	IDENTIFICATION TAG	1

- FLATS 1 AND 12 ARE ADJACENT TO SEAM WELD.
- ALL CROSS SECTION VIEWS AND ORIENTATION REFERENCES ARE FROM SMALL END OF THE TUBE.
- ALIGN WITH FLATS AT SMALL END UNLESS OTHERWISE NOTED.

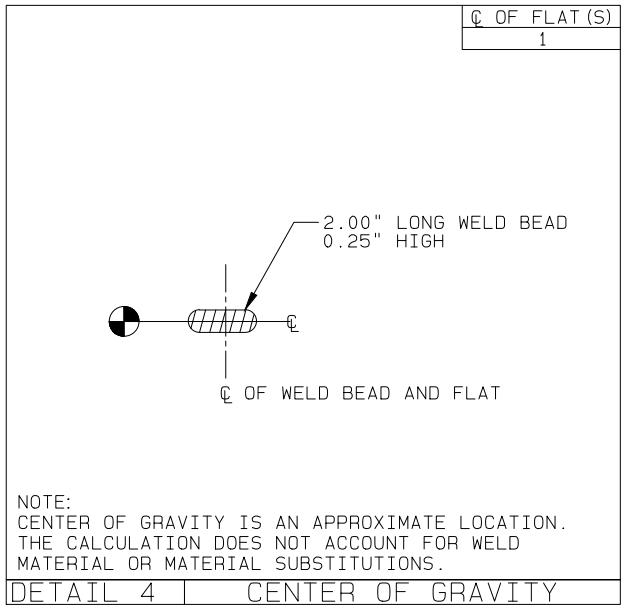
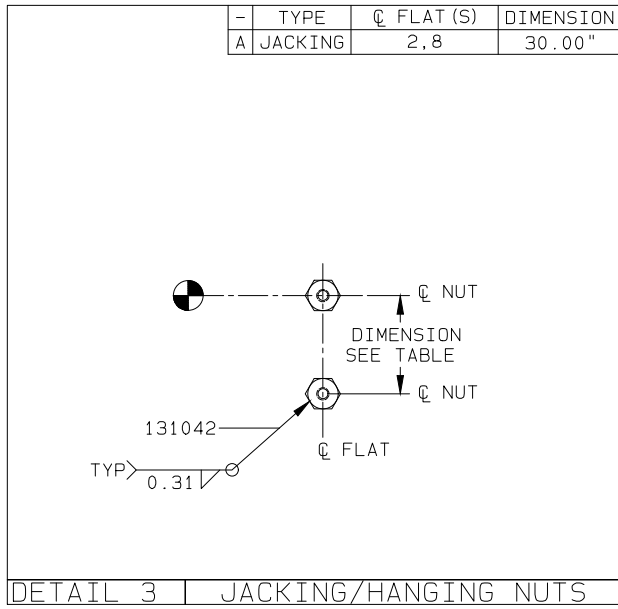
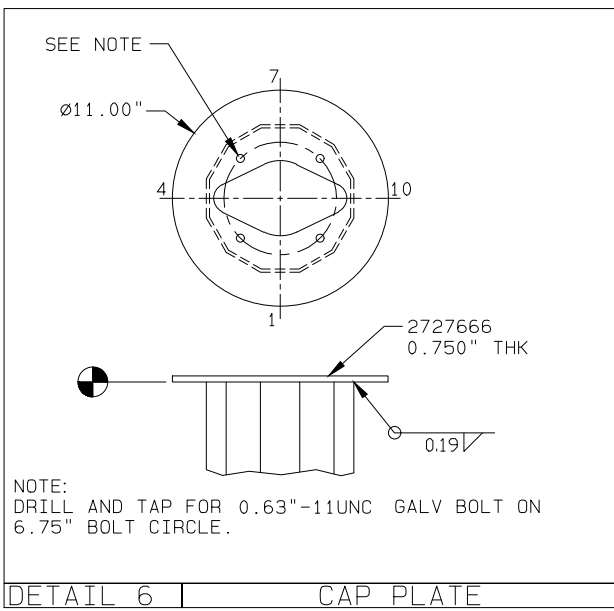
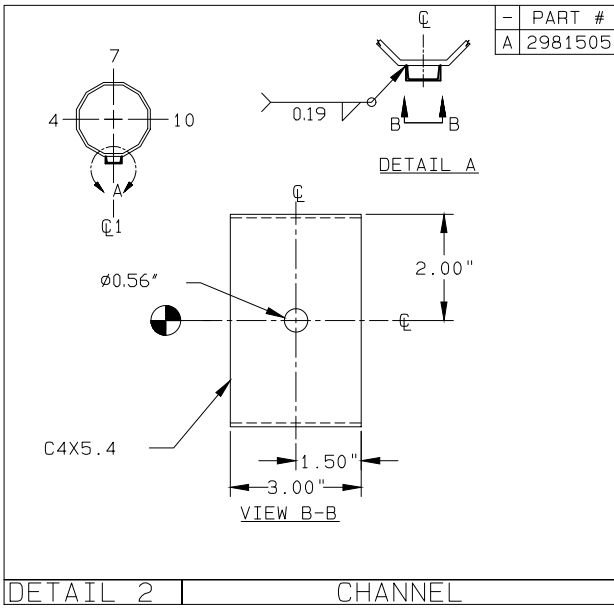
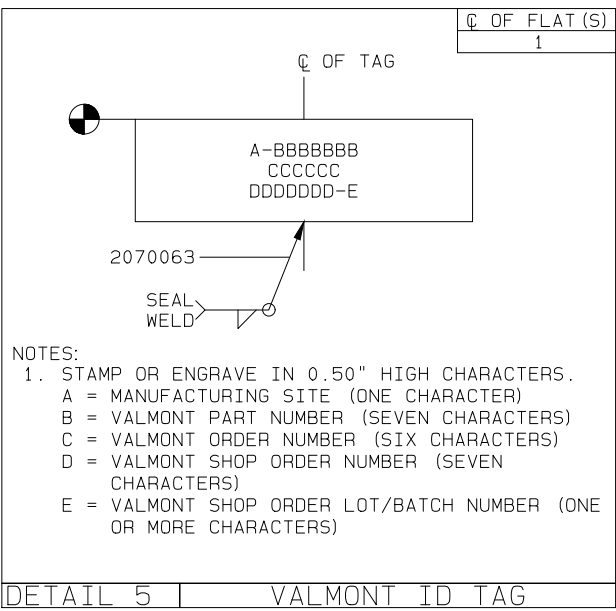
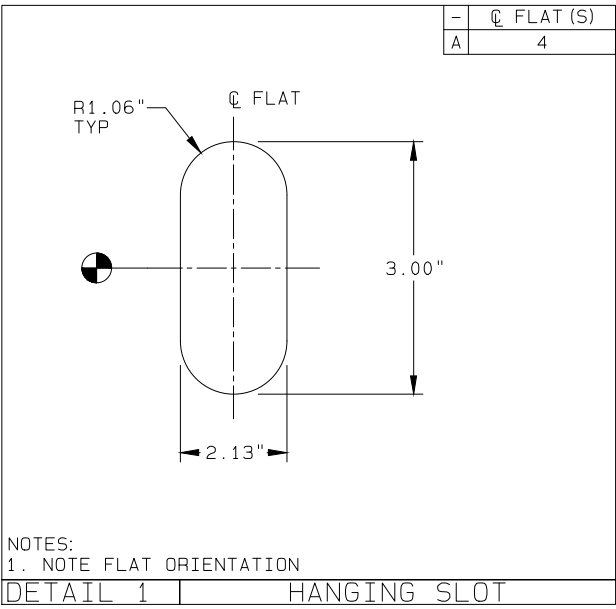
LOCATION SYMBOL KEY		SHAFT INFO (MEASURED ACROSS FLATS)						
LOCATION REFERENCE		SHAPE	LENGTH	BASE OD	TOP OD	TAPER	THK	ASTM
		12-SIDED	50' - 0.00"	24.09"	14.99"	0.182	0.250"	A572

DUPLICATE DRAWING DISTRIBUTION				IMF_SEC_ASSY_24"BD_15"ID_50'-0"LG_						
				DWG SIZE D		CLASS CODE (1) 1		CLASS NO. (3) 400		
					DRAWN WC7	ENGR S071	DATE 02/25/25	SCALE NONE		
					P.A. CHK		SHOP CHK			
					KLK2		2/28/25 JMW0 3/17/25			
					OTHER SPECIFICATIONS					
					F-1,F-668A,M-1,W-21					
A 03/18/25		WC7	JRJ	REVISED PER ENGINEERING						
REV ID	DATE		REV BY	CHK BY	REVISION DESCRIPTION					
ORDER NO. 615516		CUSTOMER SUBSTATION ENTERPRISE				DESCRIPTION SECTION ASSEMBLY				DWG NO. 335647A



LOCATION DIMENSION		
FROM LARGE END	FROM SMALL END	DETAIL
	0'- 0.00"	6
	0'- 6.00"	5
	1'- 0.00"	2-A
35'- 2.00"		2-A
31'- 2.00"		2-A
27'- 2.00"		2-A
23'- 2.00"		2-A
19'- 2.00"		2-A
	20'- 5.75"	4
15'- 2.00"		2-A
11'- 2.00"		2-A
7'- 2.00"		2-A
3'- 6.00"		3-A
3'- 2.00"		2-A
0'- 7.00"		1-A

1. FLATS 1 AND 12 ARE ADJACENT TO SEAM WELD.
2. ALL CROSS SECTION VIEWS AND ORIENTATION REFERENCES ARE FROM SMALL END OF THE TUBE.
3. ALIGN WITH FLATS AT LARGE END UNLESS OTHERWISE NOTED.



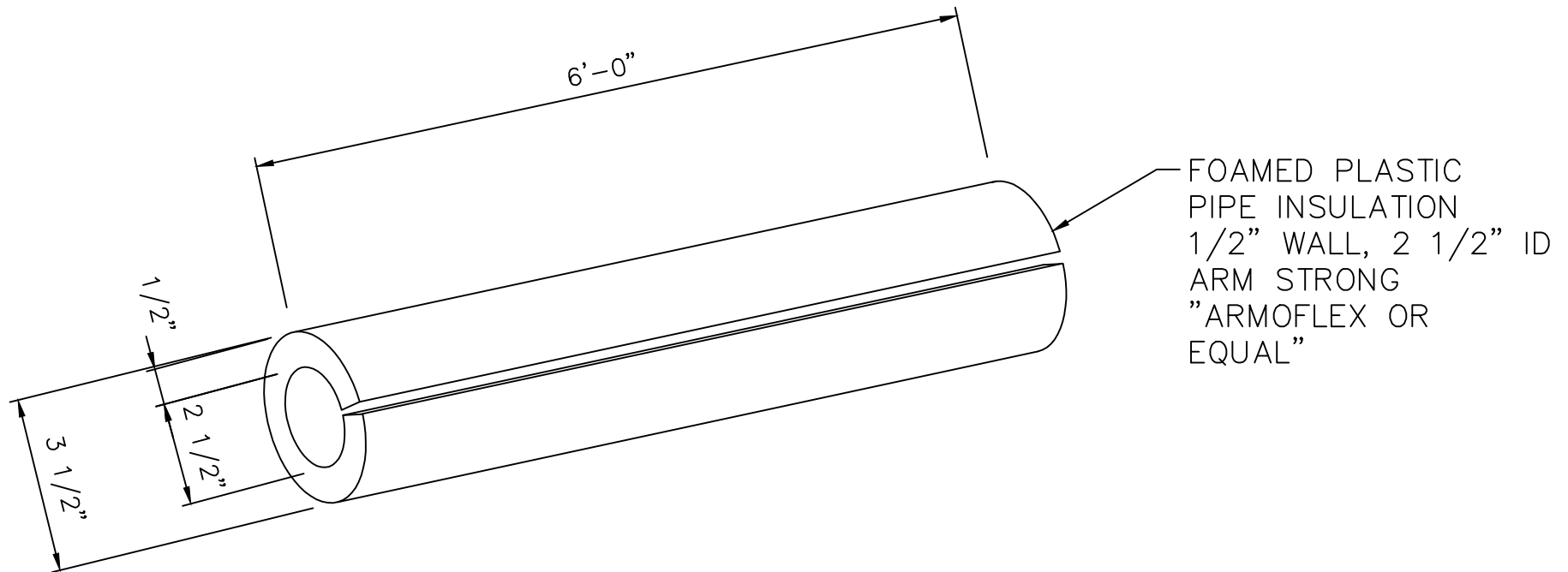
BILL OF MATERIAL (SHIP SEQ=0)		
VALMONT PART NO	DESCRIPTION	QTY PER ASSY
2981435	SHAFT	1
2981505	CHANNEL	10
131042	1.00" NUT	4
2070063	IDENTIFICATION TAG	1
2727666	GROUND WIRE PLATE	1

DUPLICATE DRAWING DISTRIBUTION				TMF_SEC_ASSY_16"BD_9"ID_38'-2"LG_-----			
DWG SIZE D				CLASS CODE (1) 1 CLASS NO. (3) 400			
REV ID	DATE	REV BY	CHK BY	REVISION DESCRIPTION	MATERIAL	THICKNESS	WEIGHT
615516							1,027#
ORDER NO. 615516		CUSTOMER SUBSTATION ENTERPRISE			DESCRIPTION SECTION ASSEMBLY		DWG NO. 335647B

LOCATION SYMBOL KEY		SHAFT INFO (MEASURED ACROSS FLATS)						
LOCATION REFERENCE	SHAPE	LENGTH	BASE OD	TOP OD	TAPER	THK	ASTM	
	12-SIDED	38'-2.00"	15.94"	9.00"	0.182	0.188"	A572	



AS12196



GMF INSULATION PIPE 2 1/2" ID X 1/2" WALL X 6'

A	03/10/20	Add Information JRJ3/JRJ3
---	----------	---------------------------

REV	DATE	DESCRIPTION
-----	------	-------------

DRAWN	CHECKED	DATE	SCALE
KAE	JB	05-27/09	NONE

TOLERANCE	THICK	0.500
-----------	-------	-------

MATERIAL	-	FINISH	NONE
----------	---	--------	------

WEIGHT	4
--------	---

4



VALMONT
TULSA

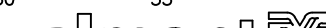

AS12196

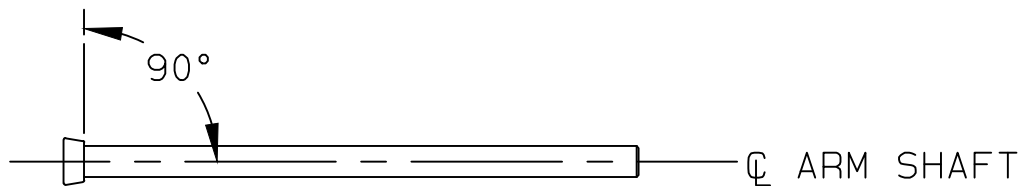
AS32300

NOTE:

PURCHASE CHAIN AS FOLLOWS:

3/4" X 27 FOOT LONG, CAMBELL CHAIN
PART NO. 0121232, SYSTEM 3 PROOF
COIL, GALVANIZED

			GMF_CHAIN_3/4" X 27' LONG 5LB/FT 5 10 15 20 25 30 35				 
			DRAWN	CHECKED	DATE	SCALE	
REV	DATE	DESCRIPTION	JC106	JH	12-18-13	NONE	
TOLERANCE 5001 THICK .78			MATERIAL N/A		FINISH GALV.	WEIGHT 145	AS32300



BILL OF MATERIAL

PART NUMBER

QTY

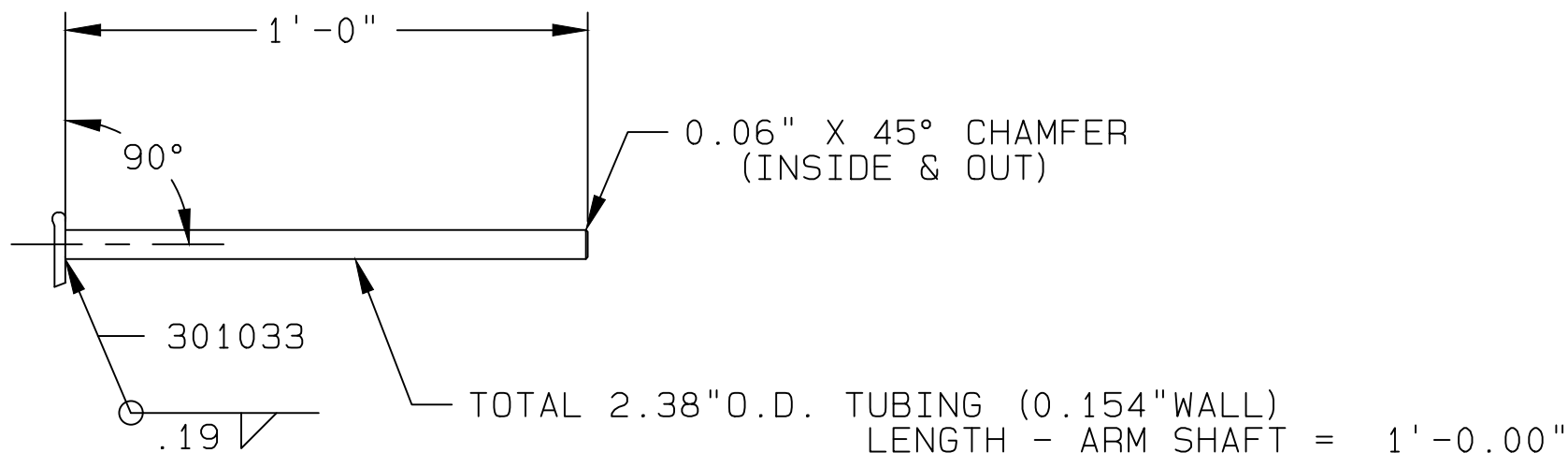
SHIP

301033

1

0

RADIAL INDEX FOR ARM ATTACHMENT LOCATION



			PROD. CODE (2) <u>04</u> S. CODE (1) <u>28</u> ELS (7) <u>02</u> STD. IND. (1) <u>15</u> UOM (2) <u>PC</u> SHIP FLAG (1) <u>29</u> CLASS CODE (1) <u>2</u> CLASS NO (3) <u>064</u>												
			ALAM0070010000G STD												
B	02/09/06	REMOVE W-45 SPEC	PAR	DWG. SIZE (1) <u>A</u> PURC. L. T. (5) <u>87</u> CONTROL (1) <u>102</u> MATL. COST (5.4) <u>07</u> PL. CODE (1) <u>41</u> WEIGHT (7) <u>6</u>											
A	03/30/00	ADDED W-45 SPEC	JKC												
REF. (107)	DATE	REVISION DESCRIPTION		MATERIAL THICKNESS		DATE	DRAWN	CHECKED		SCALE		AB17205			
SPECIFICATIONS		MATERIAL: S109	TOL.: M-30	NOTED		02/27/85	JTF			NONE					
		FINISH: F-1	WELD: W-999				DUPLICATE DRAWING DISTRIBUTION			04	38	PART NUMBER			
										37	40				

BILL OF MATERIAL

PART NUMBER

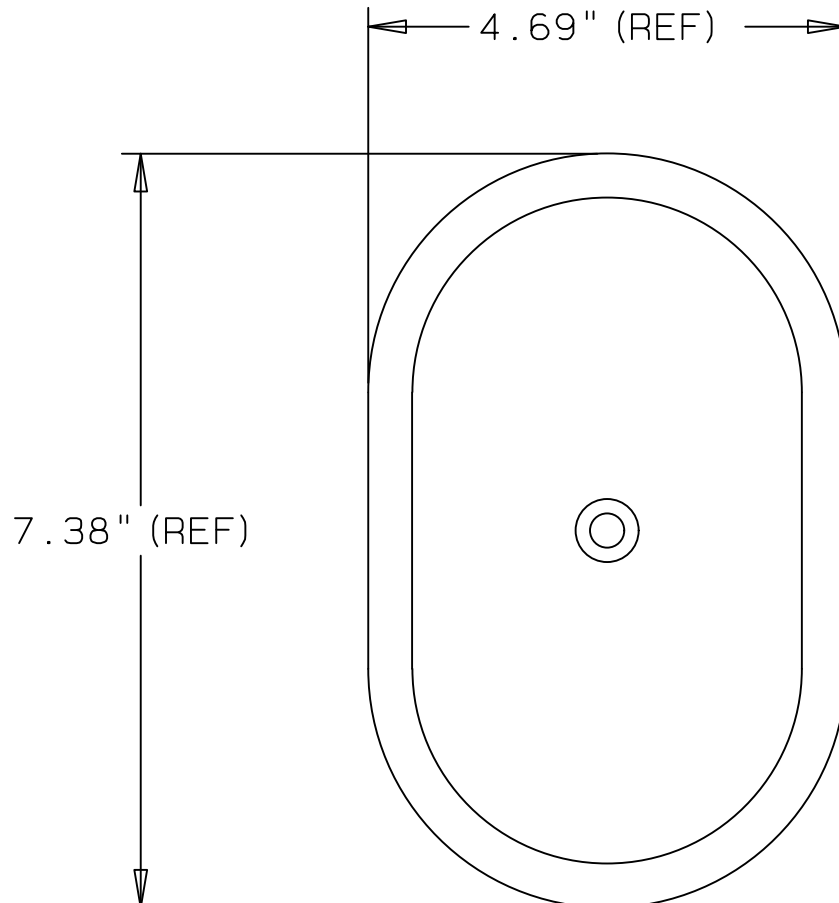
QTY

SHIP


BB11082

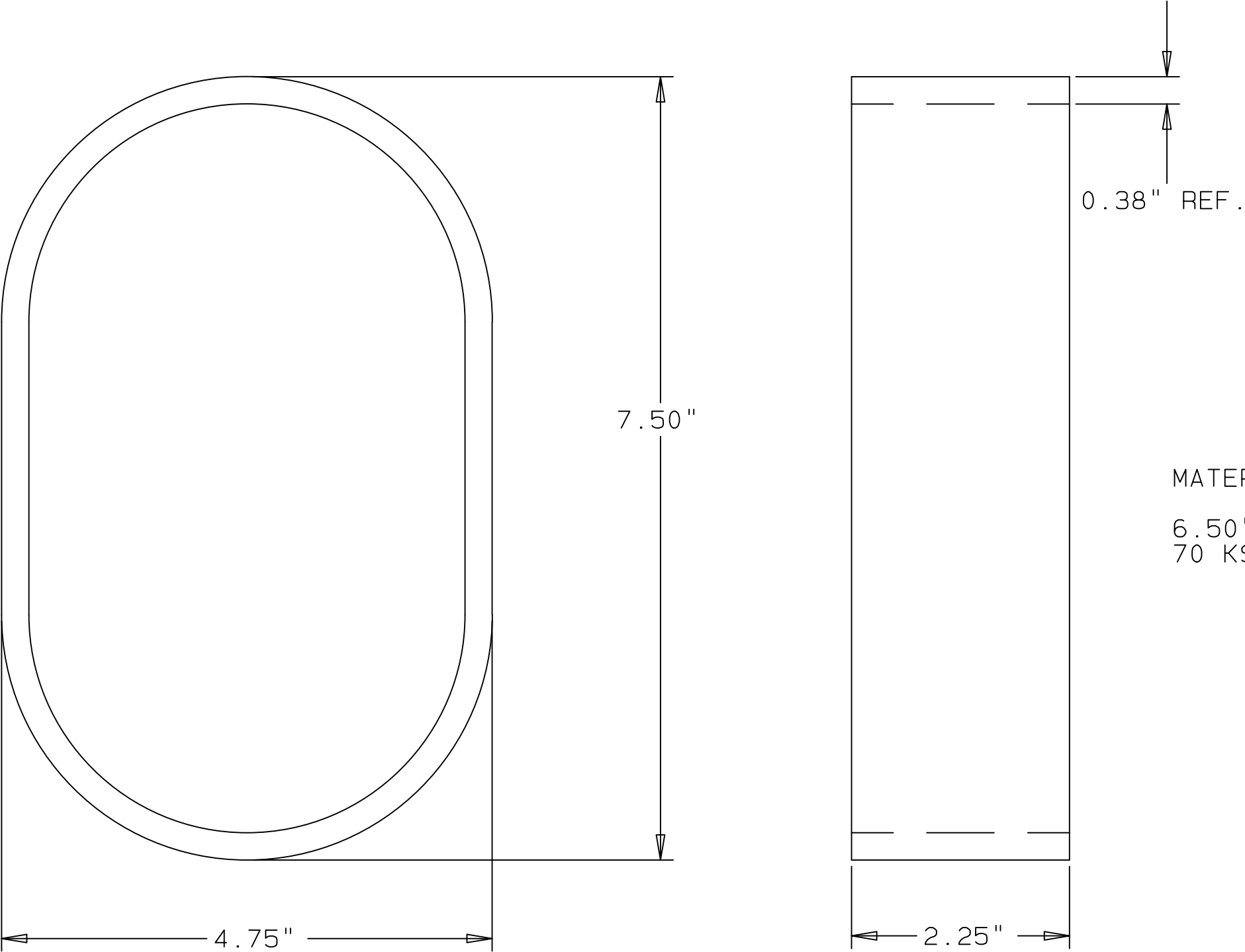
1

0



BB11082-HANDHOLE COVER-BLK

				PROD. CODE (2) <u>04</u> S. CODE (1) <u>EL</u> (7) <u>02</u> STD. IND. (1) <u>15</u> UOM (2) <u>PC</u> SHIP FLAG (1) <u>29</u> CLASS CODE (1) <u>B</u> CLASS NO (3) <u>870</u>		valmont 				
				HHC040X065GVCA SPCL COUNTERSUNK HOLE						
				DWG. SIZE (1) <u>A</u> PURC. L. T. (5) <u>87</u> CONTROL (1) <u>102</u> MATL. COST (5.4) <u>07</u> PL. CODE (1) <u>41</u> WEIGHT (7) <u>0001.08</u>						
REF. (107)	DATE	REVISION DESCRIPTION		MATERIAL THICKNESS	DATE	DRAWN	CHECKED	SCALE	AB32136	
SPECIFICATIONS		MATERIAL: N.A.	TOL.: M-30	N.A.	09/18/87	JM	GM	NONE	PART NUMBER	
		FINISH: F318	WELD: N.A.							



MATERIAL NOTE:
6.50" O.D. X 0.375" WALL D.O.M.
70 KSI MINIMUM YIELD STRENGTH.

			MATERIAL THICKNESS: 0.375	<input checked="" type="checkbox"/> 04 <input checked="" type="checkbox"/> 37 <input checked="" type="checkbox"/> 38 <input checked="" type="checkbox"/> 40				DATE 12-23-87	DRAWN NL	CHECKED GL	SCALE NONE		
			SPECIFICATIONS	PROD. CODE (2) <u>04</u> S. CODE (1) <u> </u> ELS (7) <u> </u> STD. IND. (1) <u> </u> UOM (2) <u>PC</u> SHIP FLAG (1) <u> </u> CLASS CODE (1) <u>B</u> CLASS NO (3) <u>870</u>									
			MATERIAL <u>NOTED</u>	<div>HHR040X065 .38 WALL-70KSI-2.25IN DEEP</div> <div>DESCRIPTION (40) FIELD 37</div>								<div>valmont</div>	
		FINISH <u>NA</u>											
		WELD <u>NA</u>											
		TOLERANCE <u>M30</u>											
A NL	01-22-98	REDRAWN TO EVAULT		DWG. SIZE (1) <u>B</u> PURC. L. T. (5) <u> </u> CONTROL (1) <u> </u> MATL. COST (5.4) <u> </u> PL. CODE (1) <u> </u> WEIGHT (7) <u>4.60</u>								PART NO. <div>BB13081</div>	
REV.	DATE	REVISION DESCRIPTION											