

10. THIS DRAWING PROVIDES THE GENERAL CONFIGURATION OF A HATCH. FOR SPECIFIC INFORMATION CONTACT SALES.
9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 78LBS/ 35Kg.
8. DOGGING PRESSURE FULLY ADJUSTABLE.
7. HANDLE POSITION TOPSIDE INDICATES WHETHER DOGGING MECHANISM IS IN OPEN OR CLOSED POSITION.
6. 316L STAINLESS STEEL MECHANISM SHOWN.
5. FLUSH, WATERTIGHT CONSTRUCTION.
4. INTEGRAL TOPSIDE "T" HANDLE IS STANDARD, OTHER TOPSIDE ACTUATION AVAILABLE.
3. DUCTILE IRON COVER / MILD STEEL RING.
2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
1. 18.1" /460mm DIAMETER CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING AND BENDING VARIATION AND ARE REFERENCE ONLY.

NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: _____
 Date: _____

IMPORTANT! THIS DRAWING SUPERSEDES ALL OTHER DOCUMENTS. By signing this approval you accept and agree that the dimensions and details shown are correct and properly fit your application, regardless of any differences between this drawing and any contract specifications. Should you see any errors in the drawing, or have any questions, please contact your Freeman Marine sales engineer for clarification.

REV.	DESCRIPTION:	DATE:	DRAWN
-	INITIAL RELEASE	08JUN11	RR

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES, TOLERANCES FOR ROUGH AND CLEAR OPENING $\pm .125$ INCH. ALL OTHERS ARE:

.X	.XX	.XXX	ANGLES
$\pm .1$	$\pm .03$	$\pm .010$	$\pm 2^\circ$

DO NOT SCALE DRAWING

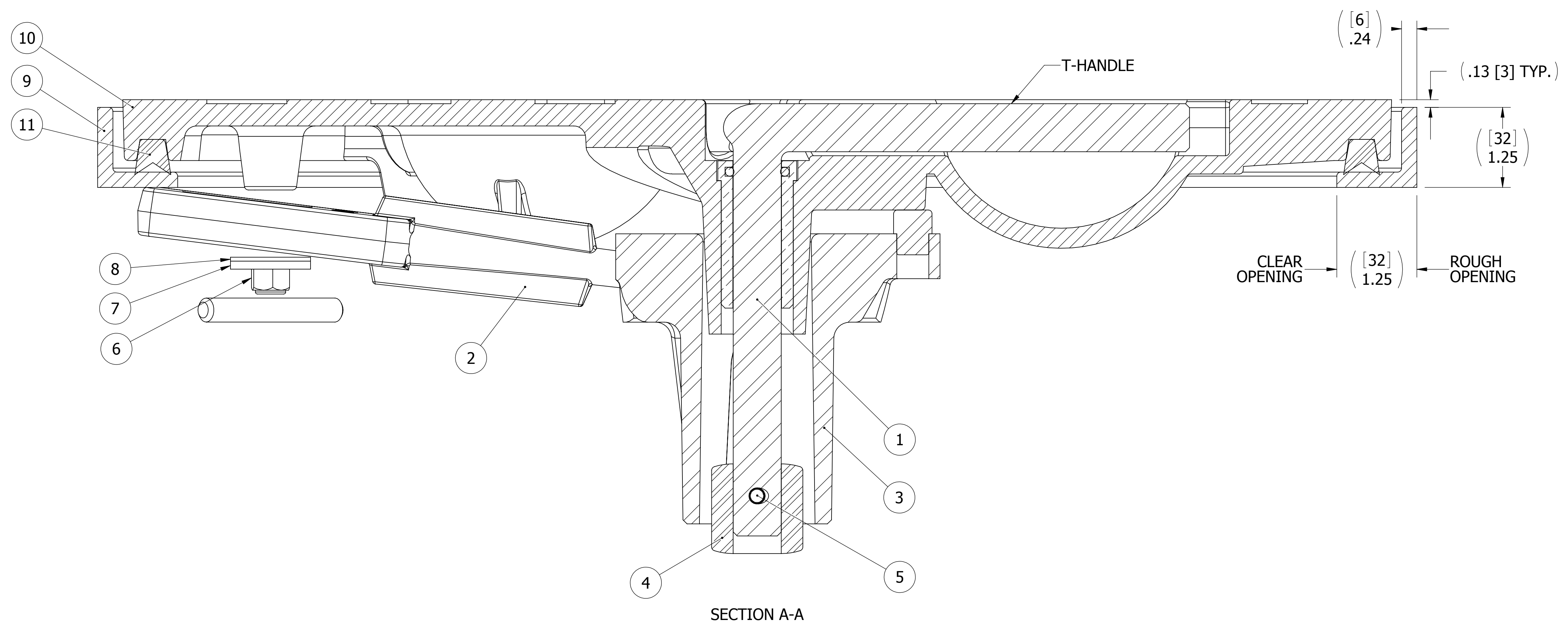
		28336 HUNTER CREEK ROAD GOLD BEACH, OR 97444 U.S.A. PHONE: 541-247-7078 FAX: 541-247-2114 www.freemanmarine.com			
		CLIENT: FREEMAN MARINE EQUIPMENT, INC.	TITLE: HATCH: 18, DI COVER, MS RING		
DRAWN: R. REESE	DATE: 08JUN11	SIZE: D	CAGE CODE: 64747	DRAWING NUMBER: 2481-0107	REV.:
CHECKED: P. CANCELLIERI	DATE: 08JUN11	SCALE: 1:2	CALC. WT.	ACT. WT.	SHEET 1 OF 3
ENGR:	DATE:				
DESIGN ACTIVITY:	DATE:				
CONTRACT NO.:					

D

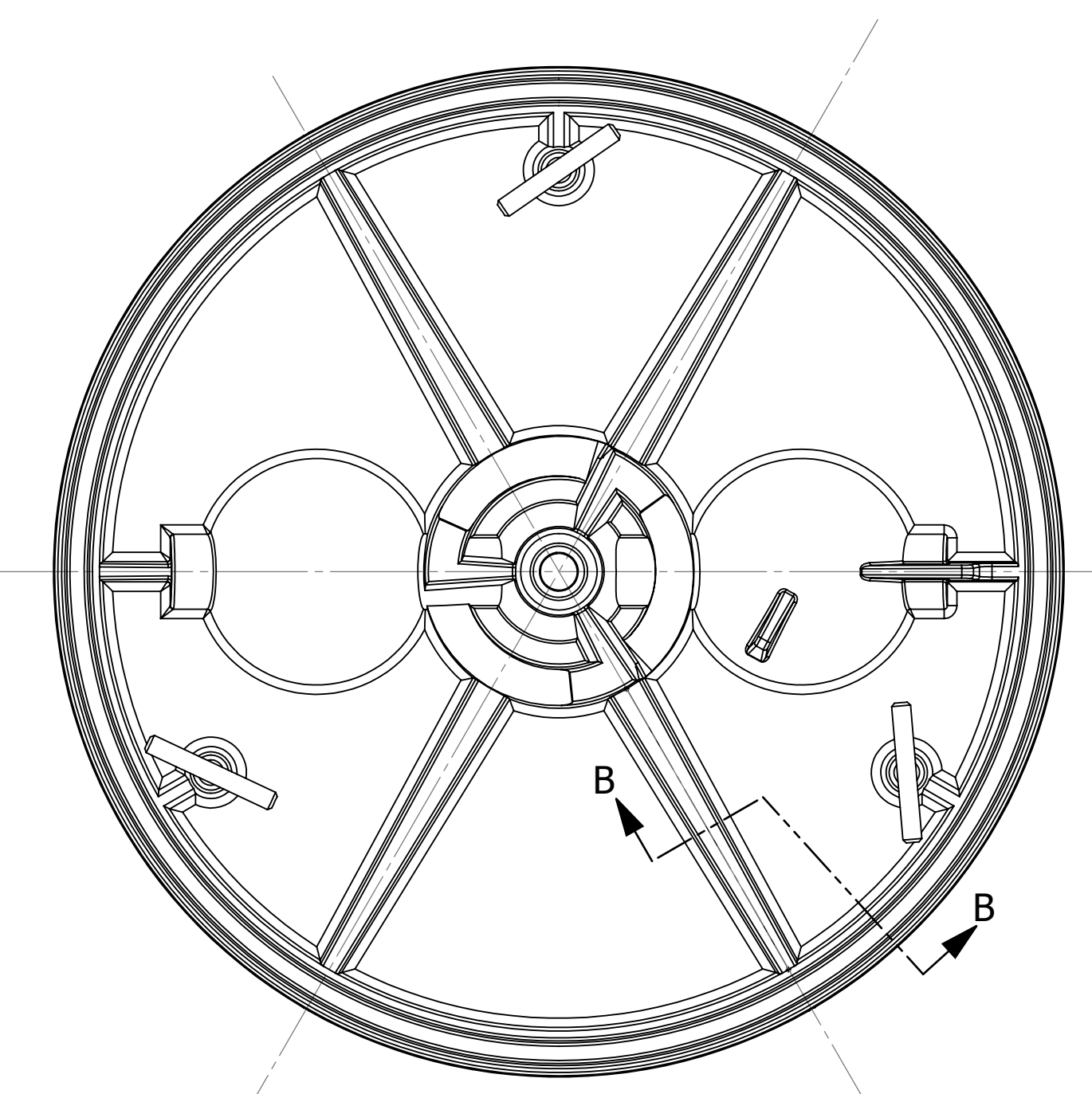
C

B

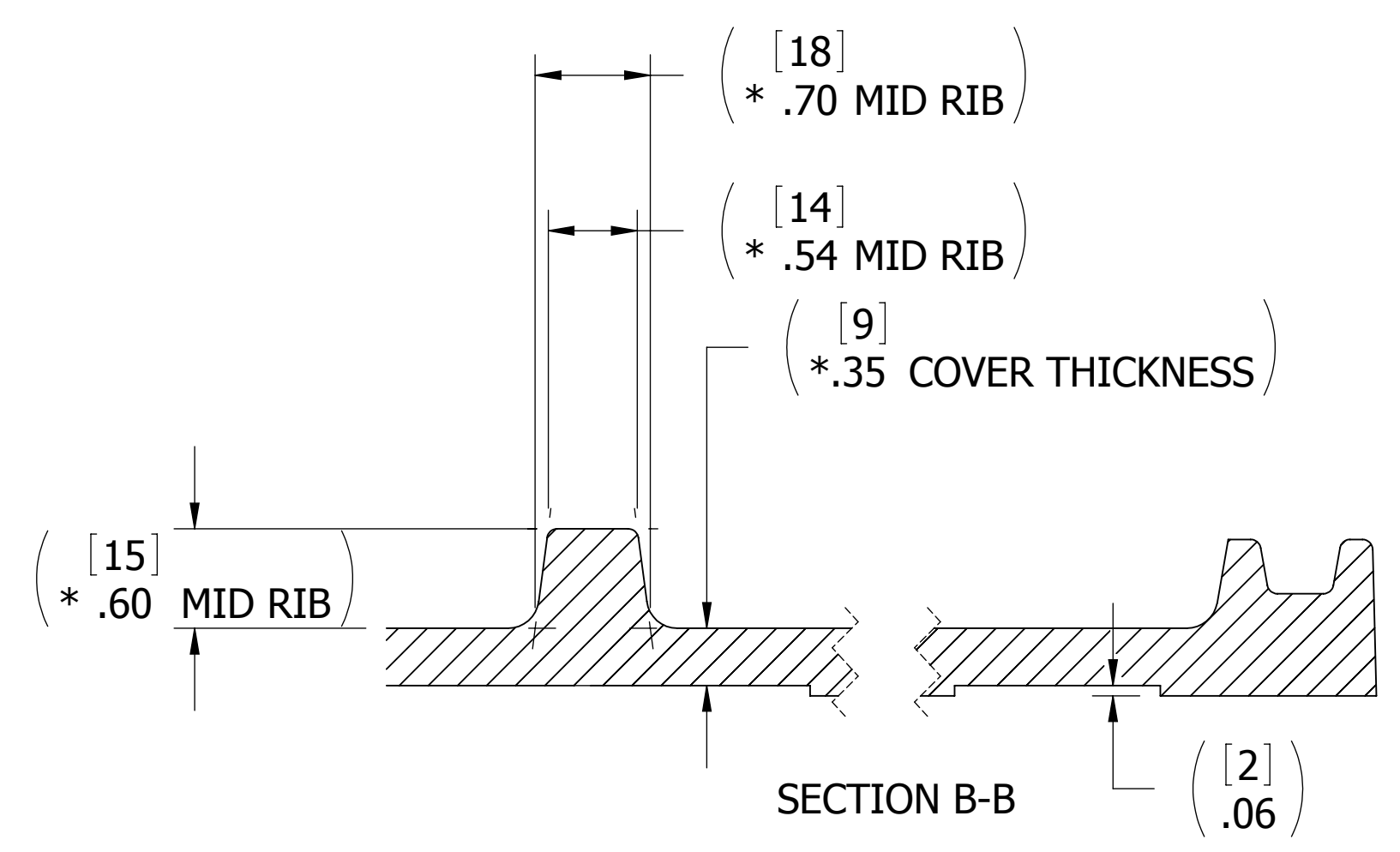
A



SECTION A-A



INTERIOR VIEW
CAST COVER



SECTION B-B

ITEM NO.	QTY	PART NUMBER	DESCRIPTION	MATERIAL
11	1	9839-2001	GASKET: 18 DI (4.97 FT. OF 0631-9839)	NEOPRENE
10	1	2481-3001	COVER: 18 DI, FINISHED CASTING	REF. S/A B.O.M.
9	1	2481-1103	RING: 18 MILD STEEL, DUCTILE IRON CVR	MILD STEEL
8	3	0413-2005	WASHER, .406 X 1.250 X .062 NYLON	NYLON
7	3	0411-2033	WASHER, .406 X 1.25 X .125, 316 S/S	STAINLESS STEEL, 316
6	3	0411-2032	LOCKNUT, NYLON INSERT, 3/8-16, 316 S/S	STAINLESS STEEL, 316
5	1	0411-2004	PIN, KNURLED, 1/4 X 2-1/4, 316 S/S	STAINLESS STEEL, 316L
4	1	0212-2017	ACTUATOR, 316LD S/S	STAINLESS STEEL, 316L
3	1	0212-2014	HUB, 3 HOLE, 316L S/S	REF. S/A B.O.M.
2	3	0212-2004	DOG, LOCKING ARM 18, 316L S/S	316 STAINLESS STEEL
1	1	0021-2005	HANDLE, S/S, ROUND BAR	STAINLESS STEEL, 316

NOTE: * NOMINAL DIMENSION VALUE DUE TO CASTING VARIATIONS.

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.X	.XX	.XXX	ANGLES
±.1	±.03	±.010	±2°

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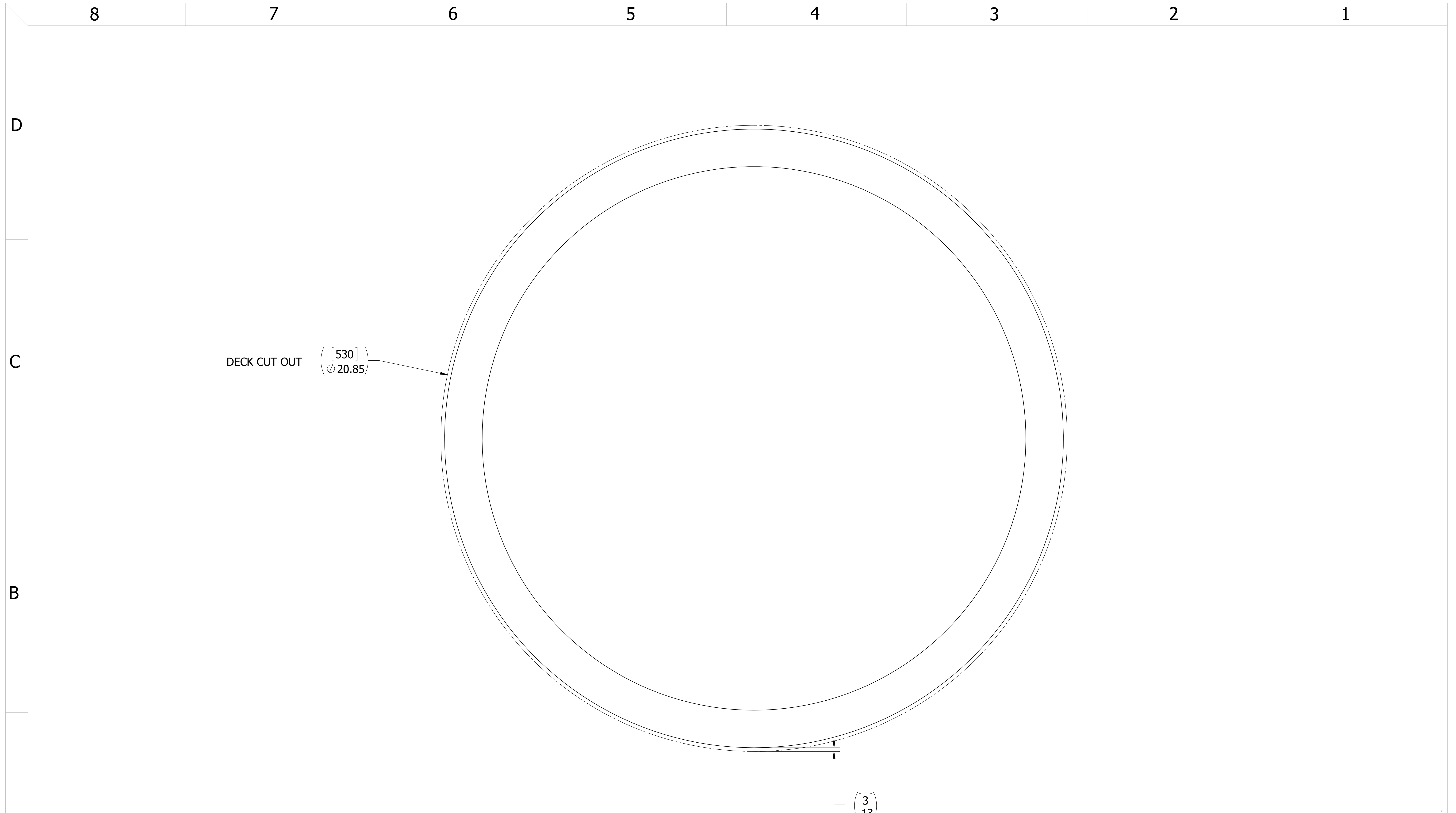
FREEMAN
MARINE EQUIPMENT, INC.

28336 HUNTER CREEK ROAD
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PHONE: 541-247-7078 FAX: 541-247-2114
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TITLE:	HATCH: 18, DI COVER, MS RING		
SIZE	CAGE CODE	DRAWING NUMBER	REV.
D	64747	2481-0107	-
SCALE:	1:1	CALC. WT.	ACT. WT.
			SHEET 2 OF 3

INITIAL RELEASE	08JUN11	RR
REV. DESCRIPTION:	DATE:	DRAWN



DECK CUT OUT ([530])
 (Ø 20.85)

([3])
 (.13)

- 3. FINISH: 125 RMS MAX.
 - 2. BREAK SHARP EDGES AND DEBURR.
 - 1. MATERIAL: REF. S/A B.O.M.
- NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

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DESIGN ACTIVITY:		DATE:		DRAWING NUMBER: 2481-0107	REV: -
CONTRACT NO.:		SCALE: 2:3	CALC. WT.	ACT. WT.	SHEET 3 OF 3