

Prepared By: Mark Liebel
 941-351-1553
 Duncan Seawall Dock & Boat Lift, LLC
 1714 Independence Blvd.
 Sarasota, FL 34234



Scale:
 1" = 10'
 Date:
 7/18/23

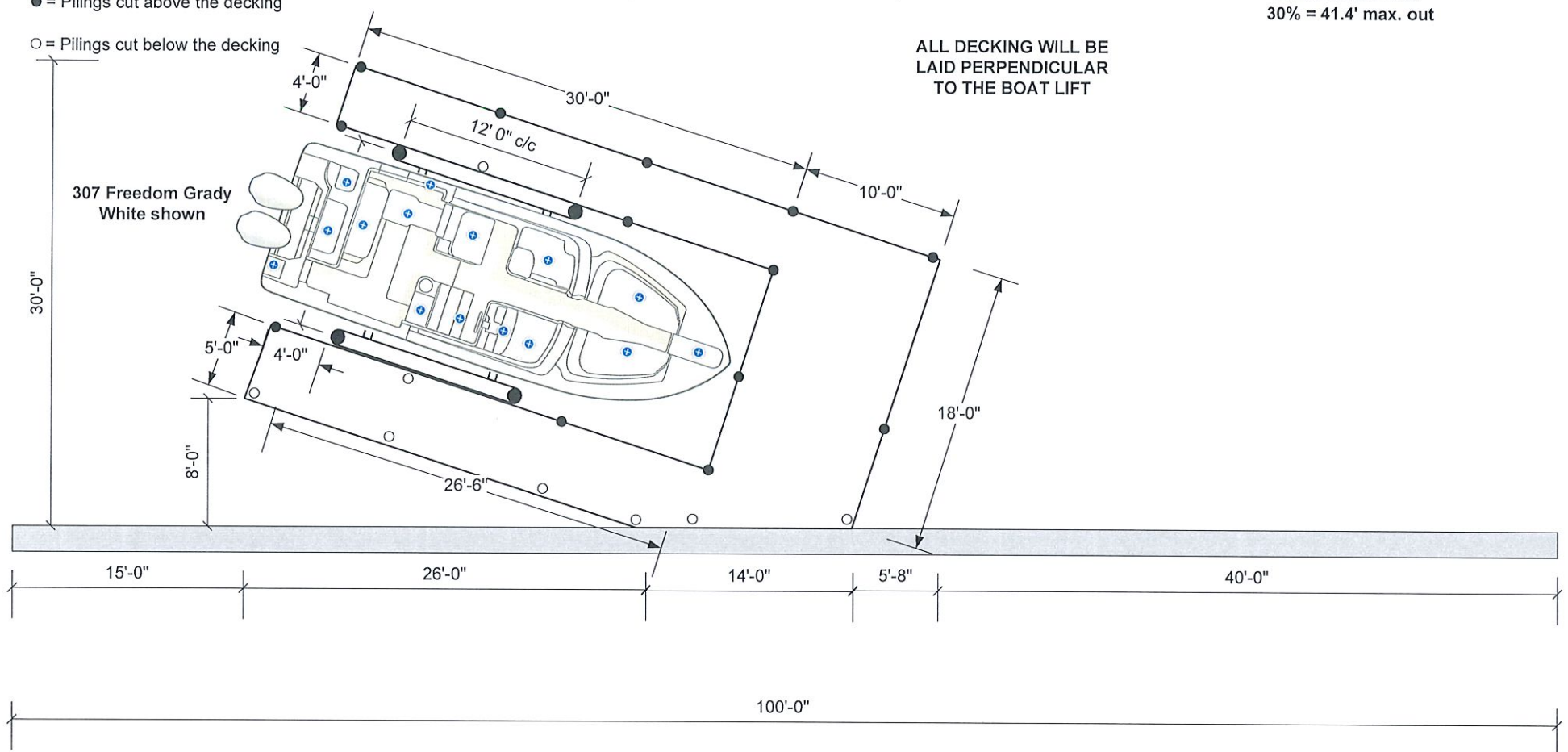
Prepared For: Mr. Cornell Faucher
 640 Emerald Harbor Drive
 Longboat Key, FL 34228

Shock Hazard Signs will be visible from all approaches
 to the dock/lift, NEC2017 section 555.23 & 555.24"

Canal Width= 138'
 30% = 41.4' max. out

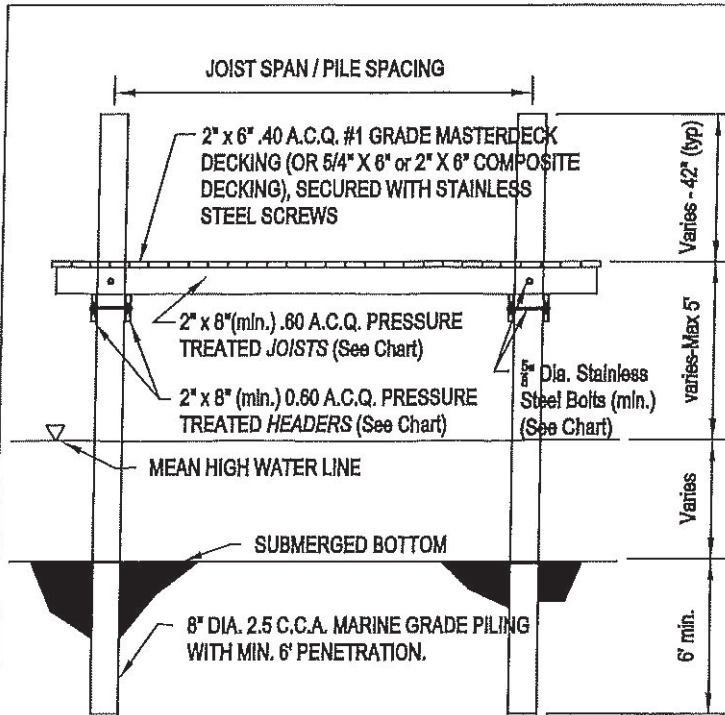
- = Pilings cut above the decking
- = Pilings cut below the decking

ALL DECKING WILL BE
 LAID PERPENDICULAR
 TO THE BOAT LIFT



Scope of Work:

- Install new 466 sq. ft. dock.
- Dock to be level with the cap.
- Install 14,000-lb capacity lift.
- Lift piles to be cut so not portion of the lift with the exception of the guide posts will not exceed 5' above the decking of the dock.

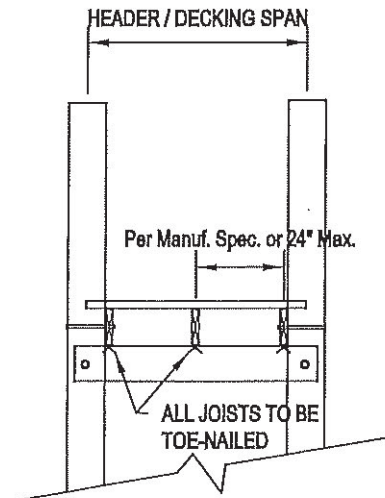


GENERAL NOTES:

1. IN LIEU OF SPECIFIC CODE REQUIREMENTS, RESIDENTIAL DOCK HAS BEEN DESIGNED FOR THE FOLLOWING MINIMAL CONDITIONS:
 LIVE LOAD: 40 PSF
 DEAD LOAD: 10 PSF
 HURRICANE UPLIFT: 30 PSF
 DEFLECTION LIMITS: L/360 (LIVE LOAD)
2. ALL DIMENSIONAL LUMBER SHALL BE MINIMUM NO. 2 SOUTHERN YELLOW PINE.
3. DESIGN MEETS MINIMUM REQUIREMENTS OF 2017 AND 2020 FLORIDA BUILDING CODES. WIND SPEED 170 MPH EXP. D.

LONGITUDINAL DOCK CROSS SECTION

HEADER SPAN (Feet)	JOIST SPAN (Feet)	HEADER SIZE (Nominal Inches)	JOIST SIZE (Nominal Inches)	BOLT SIZE (Qty, Inches)
<6	10	2X8	2x8	1-5/8
8	10	2x8	2x8	2-5/8
10	10	2x10	2x8	2-5/8
12	10	2x12	2x10	2-5/8
<6	12	2X8	2x8	1-5/8
7	12	2x8	2x8	2-5/8
9	12	2x10	2x8	2-5/8
11	12	2x12	2x10	2-3/4



TRANSVERSE DOCK CROSS SECTION

TYPICAL CROSS SECTIONS FOR RESIDENTIAL DOCKS			
DUNCAN SEAWALL			
1714 INDEPENDENCE BLVD, SRQ 34234			

Piling (S)

8"

25 C.C.A. Piling

10 1/2'
Max

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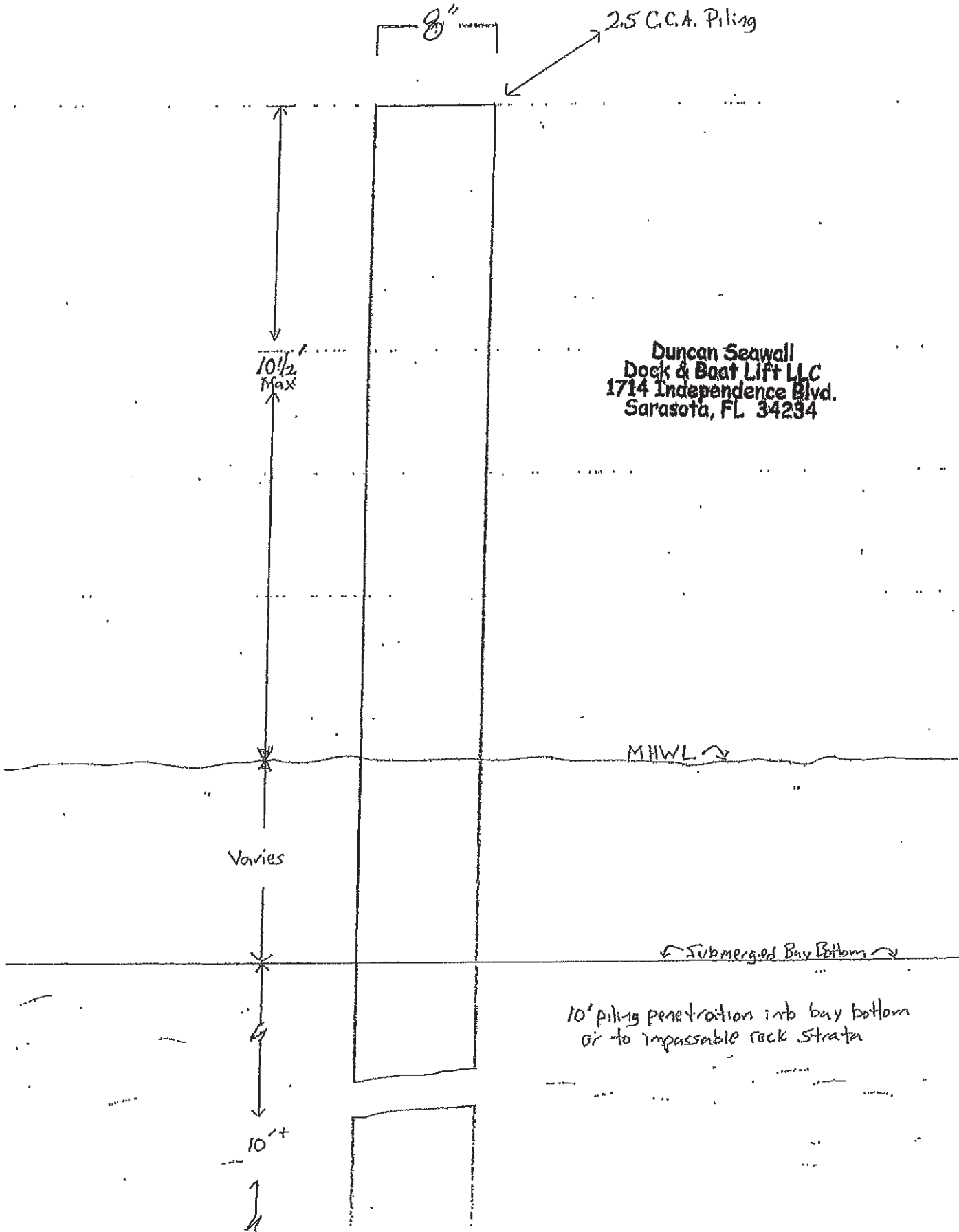
MHWL

Varies

Submerged Bay Bottom

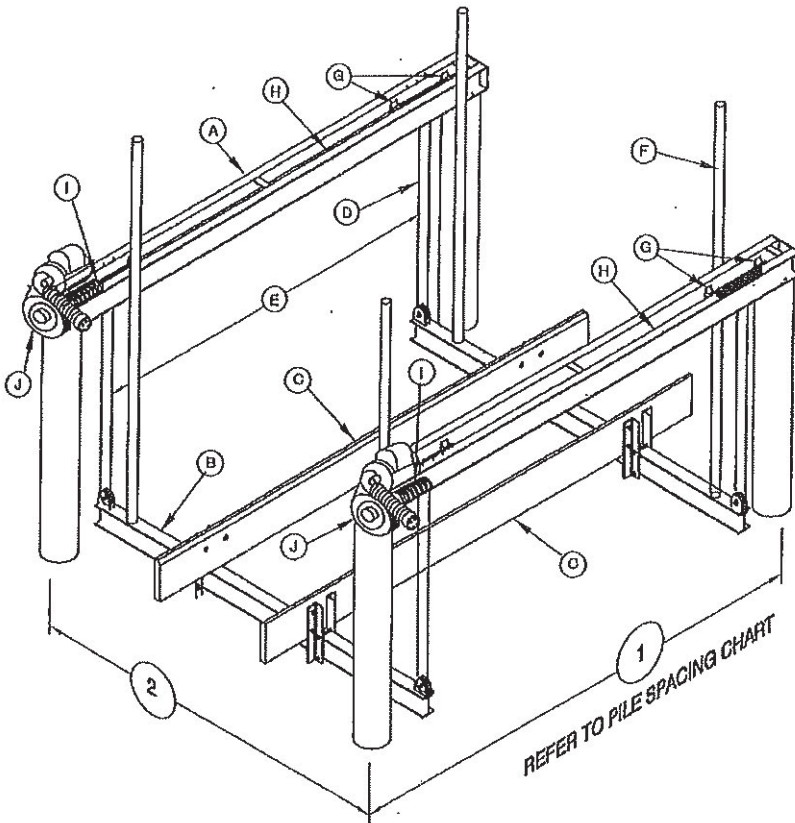
10' piling penetration into bay bottom
or to impassable rock strata

10'+



GOLDEN

4 POST, 2 MOTOR SEA DRIVE BOAT LIFTS



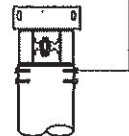
PILE SPACING CHART:
The boat center of gravity needs to be set in the center of the top beam

Lift Capacity	1 st Dimension	2 nd Dimension	Recommended Pile Diameters
Lb.	Ft.	Ft.	In.
5,000	11	10	8
7,500		12	
10,000	12	12.5	
14,000			10
16,000		14	
20,000	14		
24,000		16	
28,000	16		12

STAINLESS STEEL PILING MOUNT BRACKET - RECOMMENDED ATTACHMENT BASED ON BRACKET CONFIGURATION. VERIFY ADEQUACY BASED ON ACTUAL SITE CONDITIONS:
4-3/8" STAINLESS STEEL LAG SCREWS USED TO CONNECT THE BRACKETS TO THE PILING AND 2-3/8" STAINLESS STEEL CARRIAGE BOLTS USED TO CONNECT THE BRACKETS TO THE LIFT CHANNELS

NOTE: THIS STRUCTURE HAS BEEN DESIGNED FOR LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 160 MPH, EXPOSURE 'D', RISK CATEGORY I, CALCULATED PER FLORIDA BUILDING CODE 7th EDITION, 2020, ASCE/SEI 7-16 AND ADM-2016. BOATS SHALL NOT BE STORED ON LIFTS DURING HIGH WIND EVENTS.

IN GENERAL, PILING PENETRATION TO BE A MINIMUM OF 10' INTO THE SAND BOTTOM OR 5' INTO THE ROCK STRATA. SUB-SURFACE CONDITIONS CAN VARY GREATLY, THE CONTRACTOR SHALL VERIFY ALL PILE CAPACITIES, ALL PILINGS TO BE 2.5 C.C.A. PRESSURE TREATED WOOD. ALL STRUCTURAL MEMBERS TO BE 6061-T6 ALUMINUM.



SUMMARY OF DESIGN FEATURES

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)		
LIFT CAPACITY	TOP BEAM CHANNEL	CRADLE BEAM	BUNK	CABLE SIZE	CABLE	GUIDE	BRGS	DRIVE	WINDER	MOTOR	INCHES	RECOM
Lbs	2 EACH	2 EACH	BOARDS	INCHES	SPREAD	POST		SHAFT	DIA	HP	OF LIFT	PILING
	INCHES	INCHES	(PT)		IN	HGTH				VOLTAGE	PER MIN	SIZES
6,000#	4 H x .16 2 W x .23 140" OAL	6 H x .19 4 W x .29 120" LGTH	2x4x4 ROUGH SAW CARPENTED	4 - 5/16" x15" ST ST 1 PART	107.75	80"	10 - 2" H.D. EXTRUDED 6061-T6 ALUM.	SCH 40 GALV PIPE	3-1/2" DIA SCH 80 ALUM PIPE W/ CABLE GROOVES	2 - 3/4 HP 120V/20A 240V/10A	39.70"	8" DIA
7,500#	6 H x .16 2.25 W x .26 x 153" OAL	6 H x .19 4 W x .29 144" LGTH		4 - 5/16" x30" ST ST 2 PART	120.75					2 - 1 HP 120V/28A 240V/14A		
10,000#	6 H x .17 2.6 W x .29 x 153" OAL	8 H x .23 6 W x .35 160" LGTH			116.75					2 - 3/4 HP 120V/20A 240V/10A		
14,000#	7 H x .17 2.75 W x .29 x 163" OAL	8 H x .25 6 W x .41 150" LGTH										
16,000#	8 H x .19 3 W x .35 x 163" OAL	10 H x .25 6 W x .41 168" LGTH	2x4x4 ROUGH SAW CARPENTED	4 - 5/16" x16" ST ST 3 PART	127.75	120"	1-15/16" DIA. SCH 80 GALV PIPE	3-1/2" DIA SCH 80 ALUM PIPE W/ CABLE GROOVES	2 - 1 HP 120V/28A 240V/14A	19.85"	10" DIA	
20,000#	8 H x .25 3.75 W x .41 x 177" OAL	10 H x .25 6 W x .41 192" LGTH			161.75							
24,000#	8 H x .26 3.75 W x .41 x 201" OAL	10 H x .29 6 W x .50 192" LGTH										
28,000#	10 H x .528 2.88 W x .437 x 201" OAL	12 H x .31 7 W x .62 192" LGTH			4 - 5/16" x60" ST ST 4 PART				145			

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