

MAGNUM
30K / 25K
HD
MODEL
INSTALLATION
INSTRUCTIONS

Boat Lifts Unlimited
Odenton, Maryland
410-674-3100

Prior to installation:

- a). To insure that the lift will operate properly, adequate electricity should be available. Electricity will also be needed to install the lift.
- b). Insure that the pilings are at least 48" high above the deck of the pier.
- c). The lift pilings should be driven in the ground to refusal. Otherwise the weight of the boat will sink the piles.
- d). If existing piles are to be used, insure they are not cracked or show any signs of decay.
- e). obtain any locally required permits.

DO NOT USE ANY POWER TOOLS WHILE STANDING IN THE WATER. IF ELECTRICITY MUST BE USED NEAR THE WATER, INSURE THAT THE CIRCUIT IS PROTECTED BY A GROUND FAULT INTERRUPTER.

1).The standard Magnum 8 pile lifts are shipped to be mounted on pile groups spaced 4' apart. The supplied bunks are 15 feet for the 30,000 lb. lift, 20' bunks are available. The piles should be cut to 4 feet above the deck and all be the same height off of the water.(fig.001,003)

2).The cradle travels up and down between the pilings. If the pilings are part of the dock cut out the deck boards as shown in figure 003.

3). Mount the 4 pile mounts as shown in figures 002,005 using three 5/8 inch lag bolts and washers. Take care to mount all 4 pile mount at the same height off of the water and the gears in the same direction. There is enough cable supplied to lower the cradle 15 feet from sheave S1 (fig. 009).

4).Mount the corresponding back covers onto the gear plates. There are two long cord motors and two short cord motors. The long cords should go to the bow and the short cords to the stern. Mount the motors, pulleys and belts onto the gear plates (figure 006) . Place the gear plates onto the cable drums. Install the 1/2 inch washers, 1/2 x 1 1/2 bolts and lock washers(46). At the stern dockside mount, install the Auto Stop switches.

5).On the dockside bring the long cord switch to the stern pile mount. There should be enough wire to run under the pier and back to the stern portion of the lift so all of switches are in the same location. Attach the front covers to the back covers (fig.007). Mount the remote control box to one of the stern pilings. When the lift is completed wire up the remote control. The instructions and transmitter are in the small junction box on the remote.

On the outside, attach a 2 x 10 x 10 to the two pilings and staple the wire to the 2 x 10 x 10' (figure 002 item 34). Assemble the 1" PVC conduit as in figure 002 to span underwater from the dock to the outside. Feed the two 50' sections of 14/5 wire through the conduit. Remove the outside switches and splice the wire in the outside junction box. Reattach the switches to the wire on the pier side of the lift. All four switches should be at the stern pier side.

If one or both of the motors are running in the wrong direction you must change the wiring inside of the motor. This is easily done. Remove the access plate from the end of the motor and follow the directions on the motors data plate.

6). Measure the distance between the pier side sheave S1 and the outside sheave S1. Add 6" to this measurement and that will determine the length of the lift beam.

If cutting of the lift beam is out of the question the beam adapters (9) may be repositioned. The outside to outside dimension of the beam adapters should be equal to the s1 plus 6" dimension. Position the lifting beams across the slip and suspend them this can be using chains or a scaffolding. Route the cables as shown in figure 11. Attach the cable clamps as in fig 008.

8). Heavy Duty bunks are designed to lift the boat directly under the flat lifting strakes. They are ideally suited for deep Vee bottom sport boats and cruisers. Install the guide poles and position the bunks onto the lifting beams in the manner outlined in figure 013. If the bunks are not prefabricated, assemble them as shown in figure 012 using a 7/16 inch diameter, 12 inch long drill bit. Install the U-bolts from the bottom of the lift beam up with the 7" x 7" U-bolt plate between the bunk I beam and the bunk timber. Please note that the boat must be closer to the GEAR side of the lift than to the outside of the lift to install the catwalk. The bow and stern pads are optional. Fit the boat as in figure. Drill the holes for the catwalk supports and attach them to the lift beams. Mark and drill the angles and bolt the frame together as shown in figure 010. Attach the 2 x 10 walk board to the top of the frame.

IMPORTANT

A GOOD HEAVY GREASE MUST BE APPLIED TO THE GEAR UNITS PRIOR TO LIFTING A BOAT. THE GREASE THAT COMES ON THE GEARS FOR SHIPMENT, IS NOT ENOUGH TO INSURE PROPER LUBRICATION. IT IS BEST TO APPLY THE GREASE WHILE THE UNITS ARE RUNNING. UPON LIFTING THE BOAT, IF ANY GRINDING OR FINE POWDER IS OBSERVED COMING FROM THE WORM GEAR, REAPPLY THE GREASE. AFTER THE GEARS HAVE SEATED, ONLY ANNUAL LUBRICATION IS REQUIRED.

9). When fitting the boat (fig 014, 015), only about 2' -3' of hull extends beyond the stern lifting beam, the remainder is off the bow. The flat strakes on the hull should rest squarely on the bunks (fig 015). Carpet and install the bow and stern pads if the hull is coming in contact with the lifting beams.

**"HD" MODEL LIFTS: 30,000 LB
PARTS LIST**

NO.	ITEM DESCRIPTION	QTY
1	W 10 x 19 x 17' ON 25,000 LB OR W 10 x 26 x 17' ON 30,000 LB LIFT BEAMS	2
1a	8" x 10# x 15' BUNK BEAMS	2
2	GUIDE POLE STANTIONS	4
3	2" PVC PIPE 8' LENGTHS (GUIDE POLE)	4
4	PVC GUIDE POLE CAPS	4
5	GUIDE POLE PLATES (CLAMPS)	8
6	3/4" BORE ALUMINUM SHEAVES	8
7	2 7/16" PILLOW BLOCK BEARING	4
8	GROOVED CABLE WINDER	4
9	BEAM ADAPTERS	4
10	2 7/17" DIA DRUM SHAFT	4
11	TOP FRAME WITH SHEAVES, BEARINGS, AND DRUM INSTALLED	4
12	MOTOR ANCHORS (NOT USED)	0
13	GEAR PLATES (2 LEFT AND 2 RIGHT)	4
14	10" PULLIES	4
15	BELTS (4L360 ON 25,000 LB OR 4L350 ON 30,000 LB)	4
16	SPACER SLEEVES (NOT USED)	0
17	SPOOL SHIELDS	4
18	5/16" CABLES 45' LONG ON 25,000 LB OR 3/8" CABLES 45' LONG ON 30,000 LB	4
19	3/4 HP MOTOR ON 25,000 LB OR 1 HP MOTOR ON 30,000 LB	4
20	CONTROL WIRE TO BOW	2
21	HINGED COVERS (2 LEFT AND 2 RIGHT)	4
22	U-BOLT PLATES	4
23	ROLLS CARPET 6" WIDE x 16' LONG (TIMBER CARPET)	2
24	CARPET PIECES 6" x 24" (BOW AND STERN PADS)	2
25	CATWALK SUPPORTS	2
26	CATWALK ANGLE 2 1/2" x 2 1/2" x 15'	1
27	CATWALK ANGLES 1 1/2" x 1 1/2" x 4'	2
HARDWARE BAGS (PART NUMBERS NOT SHOWN ON DRAWINGS)		
28	COVER HARDWARE PACK	2
29	GUIDE POLE PACK/ADAPTER BAG	2
30	"HD" BUNK PACK	1
31	TOP FRAME ATTACHING PACKAGE-WITH CABLE CLAMPS	2
32	RAISED CATWALK PACK	1
32a	STAINLESS STEEL BAG	1

"HD" MODEL LIFTS: 30,000 LB**OPTIONAL WOOD**

NO.	ITEM DESCRIPTION	QTY
33	4" x 6" x 16' CCA TIMBERS FOR BUNKS	2
34	2" x 10" x 16' CCA BOARD FOR WALKWAY AND OUTSIDE PILING TIE	2
35	2" x 4" x 22" FOR PADS	2
36	3" x 6" x 24" FOR SPACER BLOCKS	4

GALVANIZED

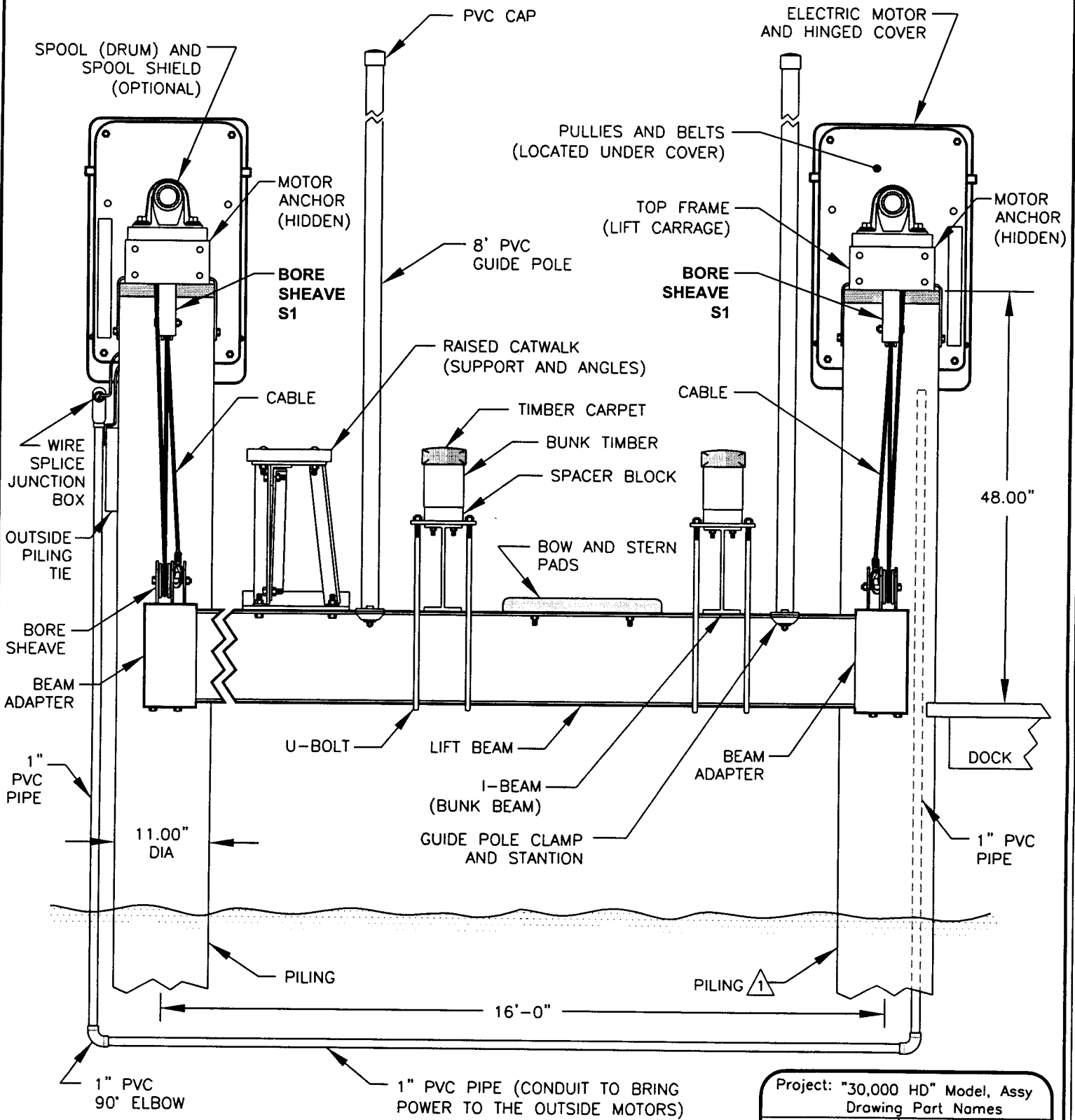
37	3/8" PLAIN NUT	22
38	1/2" PLAIN NUT	36
39	5/8" PLAIN NUT	32
40	3/4" PLAIN NUT (NOT USED)	0
41	1/2" WASHER	16
42	5/8" WASHER	32
43	3/4" WASHER (NOT USED)	0
44	3/8" x 1" HEX BOLT	10
45	1/2" x 1 1/2" HEX BOLT	36
46	1/2" x 2" HEX BOLT	8
47	5/8" x 1 3/4" HEX BOLT	16
48	3/8" x 3 1/2" CARRIAGE	4
49	3/8" x 7" CARRIAGE	8
50	3/8" x 9" CARRIAGE	4
51	5/8" x 4 1/2" LAG BOLT	16
52	5/8" x 13" x 19' U-BOLT	8

STAINLESS

53	5/16" PLAIN NUT	9
54	3/4" NUT	8
55	3/4" WASHER	16
56	3/4" LOCK WASHER	8
57	3/4" x 3 1/2" HEX BOLT WITH GREASE FITTING	4
58	3/4" x 5" HEX BOLT WITH GREASE FITTING	4
59	1/2" x 4 1/2" HEX BOLT (NOT USED)	0
60	5/16" x 2 1/2" CARRIAGE	9
61	5/16" x 1" HEX BOLT	8
62	5/16" FLAT WASHER	8
63	5/16" LOCKNUT	8

GENERAL NOTES:

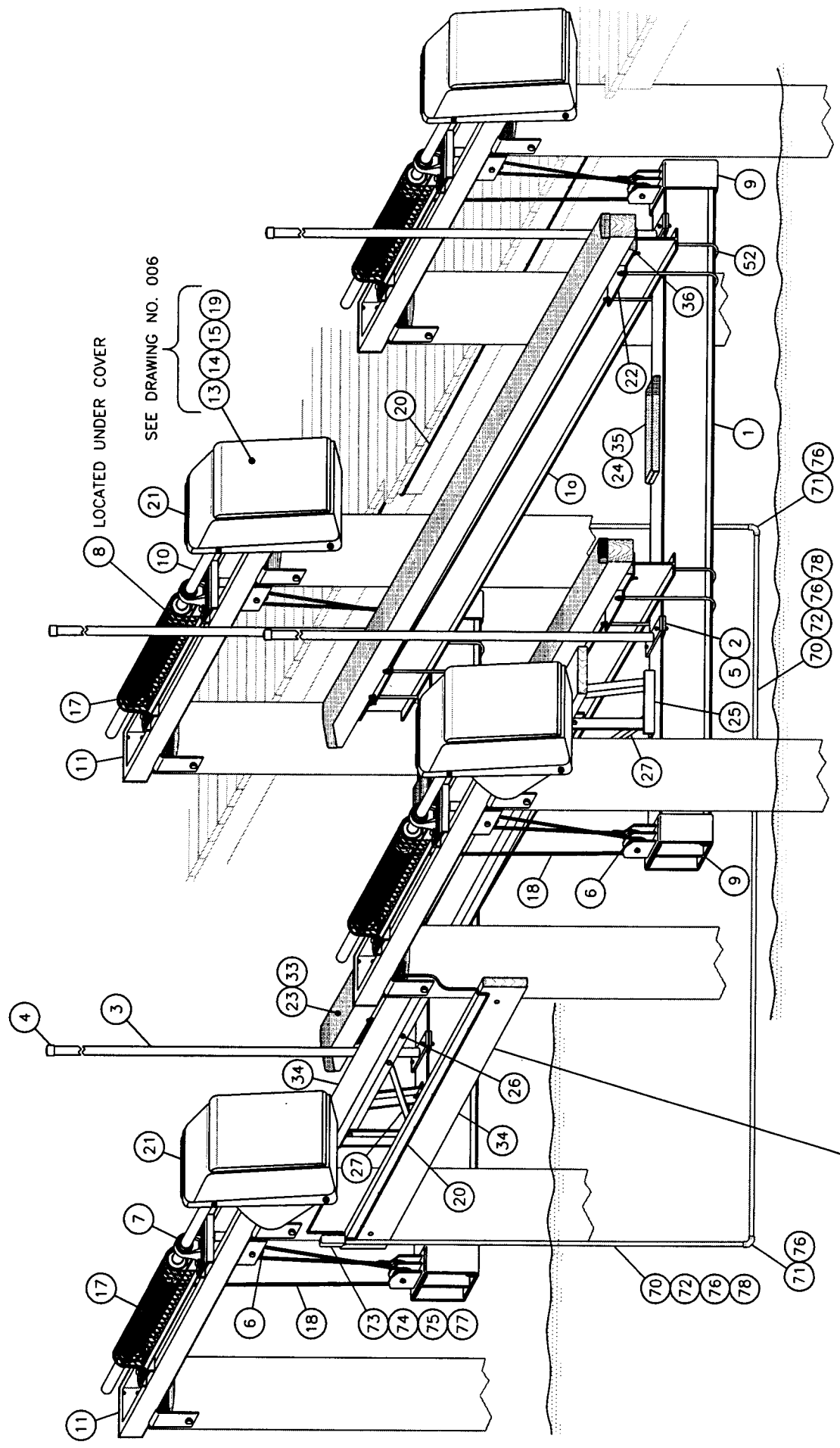
⚠ IMPORTANT—PILINGS SHOULD BE SECURELY ANCHORED TO A SEAWALL OR INTEGRATED INTO A DOCK.



Project: "30,000 HD" Model, Assy		
Drawing Part Names		
No.: 001	Revision Date:	
Scale: None	Date: 04-13-01	Sheet: 1 of 1

GENERAL NOTES:

1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.

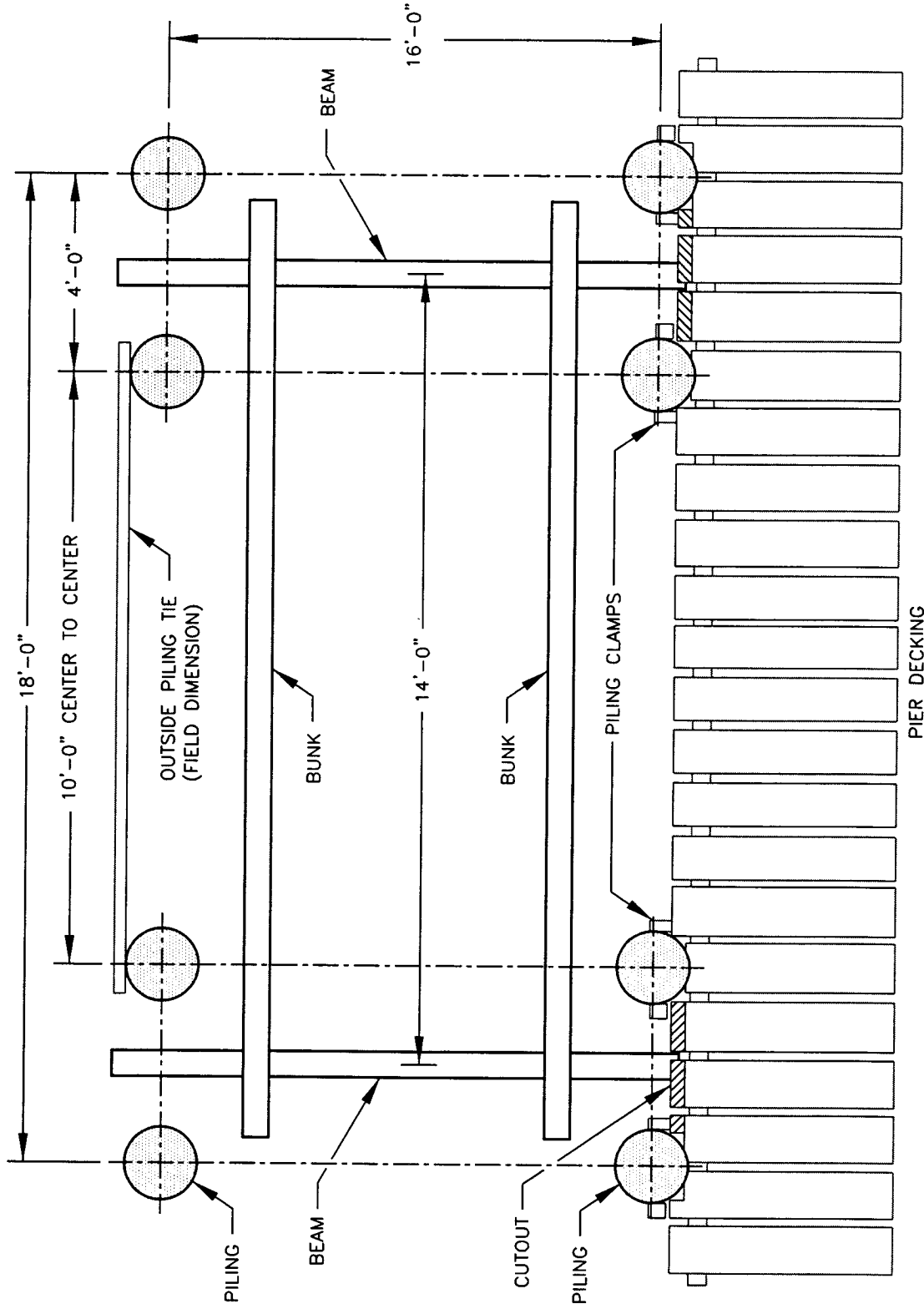


THIS BOARD IS TO TIE THE OUTSIDE PILES TOGETHER AND RUN THE BOW CONTROL WIRE TO THE STERN. WITH BOTH OUTSIDE CONTROL WIRES AT THE STERN, ASSEMBLE THE PVC CONDUIT TO CROSS THE SLIP UNDERWATER TO THE DOCKSIDE AND MOUNT THE SWITCHES IN THE COVER.

Project: "30,000 HD" Model	
Installation Part Numbers	
No.: 002	Revision Date:
Scale: None	Date: 05-03-01
Sheet: 1	of 1

GENERAL NOTES:

- IF THE PILING ARE RECESSED INTO THE DECK OF THE PIER, AN OPENING MUST BE MADE TO ALLOW A FREE, UNOBSTRUCTED PATH FOR THE LIFT. THE OPENING SHOULD RUN PARALLEL TO THE PIER STRINGERS BETWEEN THE PILES IN EACH PILE GROUP.



Project: Piling And Beam Dimensions	
No.: 003	Revision Date:
Scale: None	Date: 04-16-01
	Sheet: 1 of 1

TOP VIEW

GENERAL NOTES:

1. FOR A DETAIL DRAWING OF VIEW CALLED OUT, GO TO SPECIFIED DRAWING.

MOTOR AND MOTOR HOUSING
SEE DRAWING NO. 006 AND 007
FOR PART NUMBERS AND DETAIL

LIFT CARRAGE
SEE DRAWING NO. 005, 008 AND 011
FOR PART NUMBERS AND DETAIL

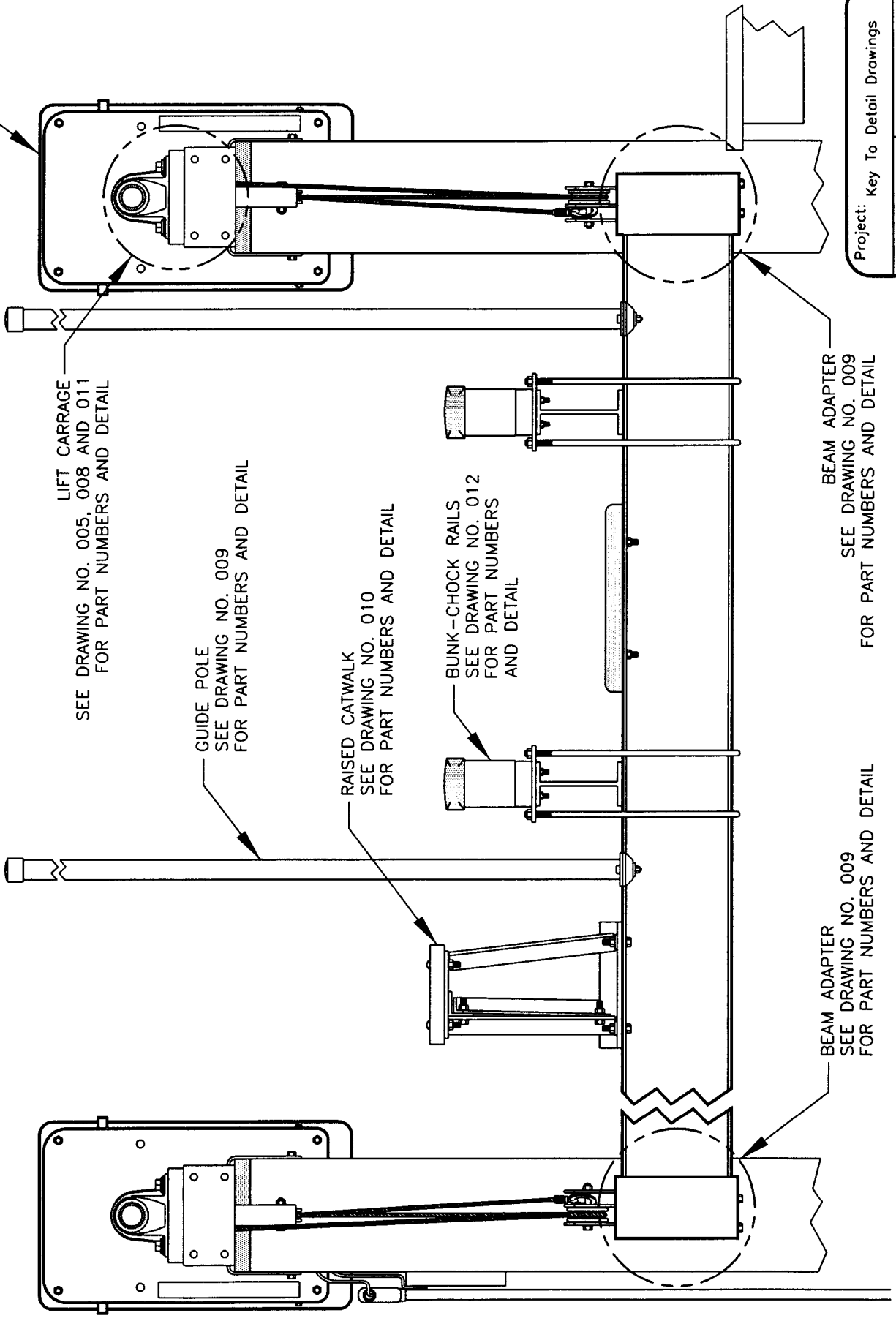
GUIDE POLE
SEE DRAWING NO. 009
FOR PART NUMBERS AND DETAIL

RAISED CATWALK
SEE DRAWING NO. 010
FOR PART NUMBERS AND DETAIL

BUNK-CHOCK RAILS
SEE DRAWING NO. 012
FOR PART NUMBERS
AND DETAIL

BEAM ADAPTER
SEE DRAWING NO. 009
FOR PART NUMBERS AND DETAIL

BEAM ADAPTER
SEE DRAWING NO. 009
FOR PART NUMBERS AND DETAIL

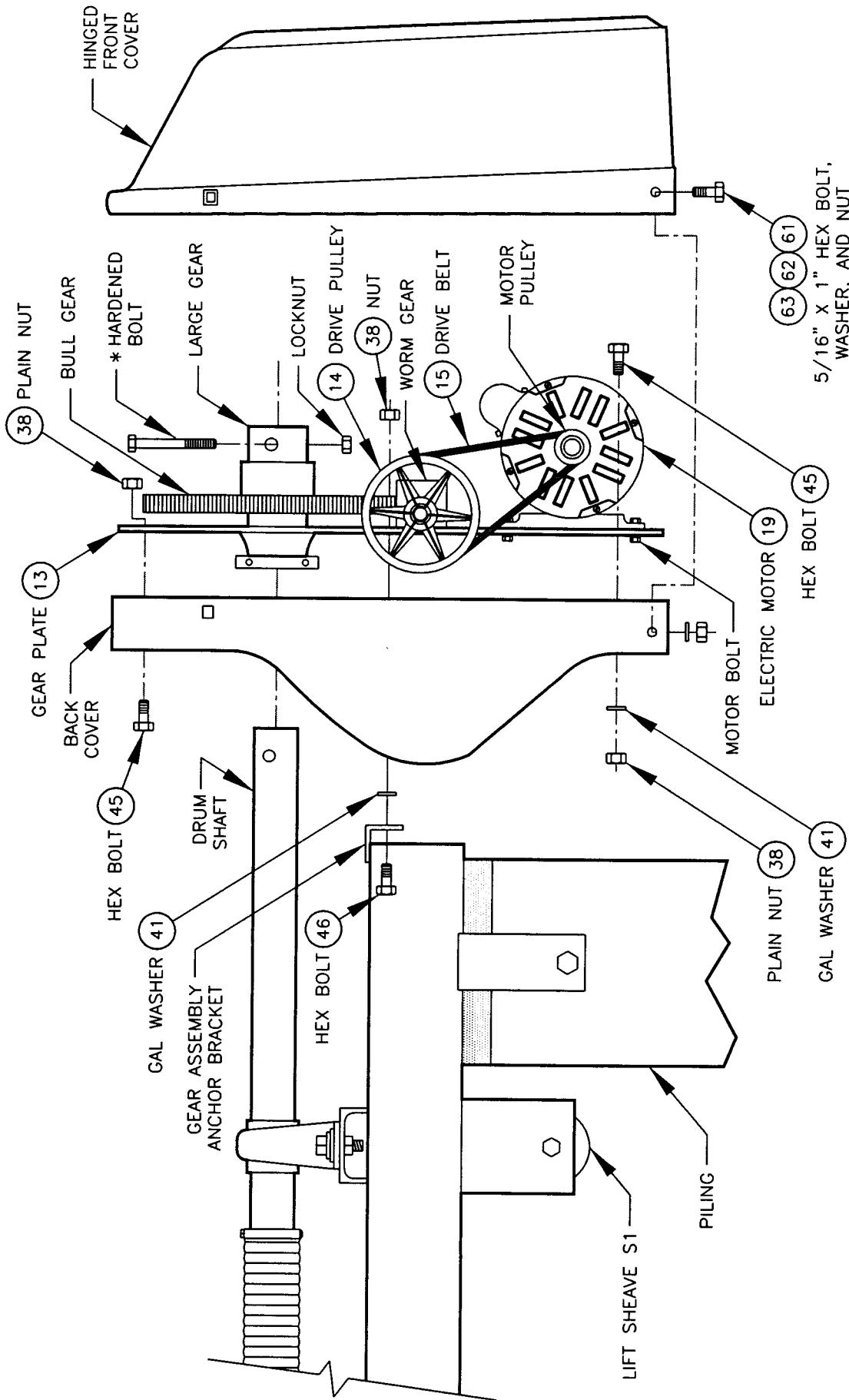


Project: Key To Detail Drawings

No.:	004	Revision Date:	
Scale:	None	Date:	05-04-01
Sheet:	1	of 1	

GENERAL NOTES:

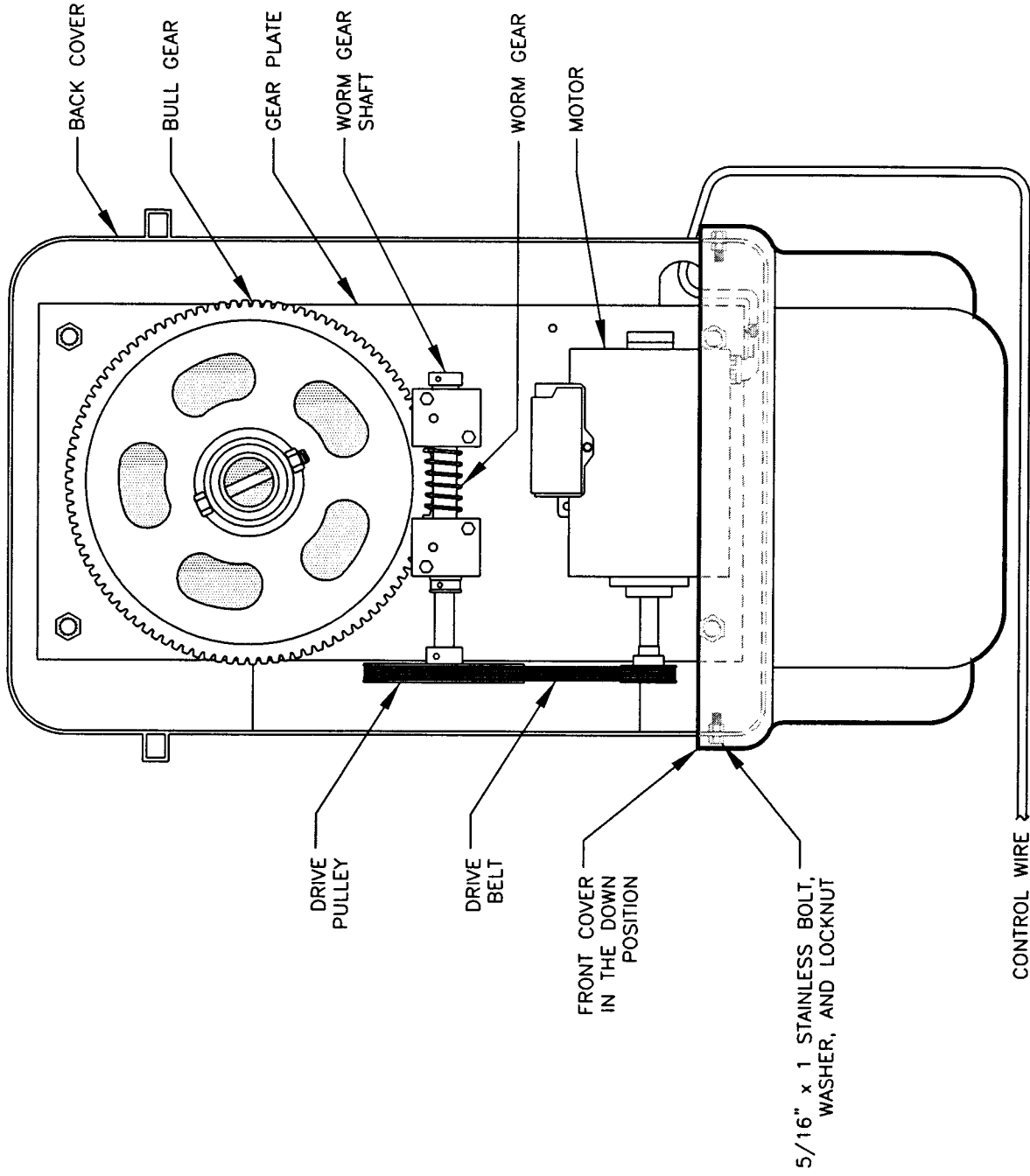
1. *CAUTION: INSTALL ONLY THE HARDENED BOLT SUPPLIED WITH THE GEAR ASSEMBLY. DO NOT USE ANY OTHER BOLT IN THIS LOCATION.
2. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.



Project: Drum and Motor Mount	
No.: 006	Revision Date:
Scale: None	Date: 04-16-01
Sheet: 1	of 1

GENERAL NOTES:

- 1. SEE DRAWING NO. 006 (DRUM AND MOTER MOUNT) FOR A SIDE VIEW OF MOTOR AND MOTOR HOUSING.

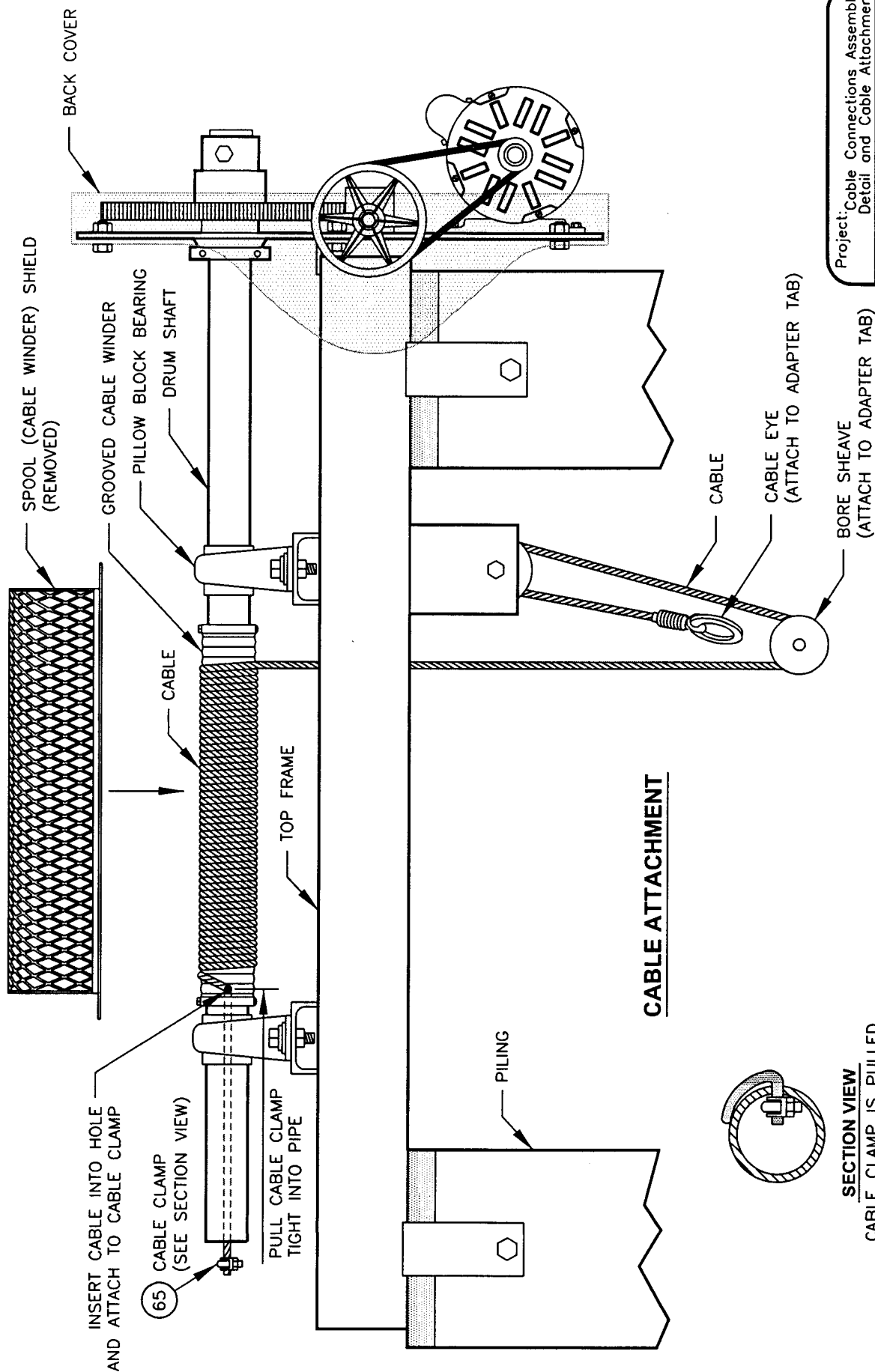


MOTOR HOUSING - FRONT VIEW
(COVER DOWN)

Project: Motor and Motor Housing	
No.: 007	Revision Date:
Scale: None	Date: 05-03-01
	Sheet: 1 of 1

GENERAL NOTES:

1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.

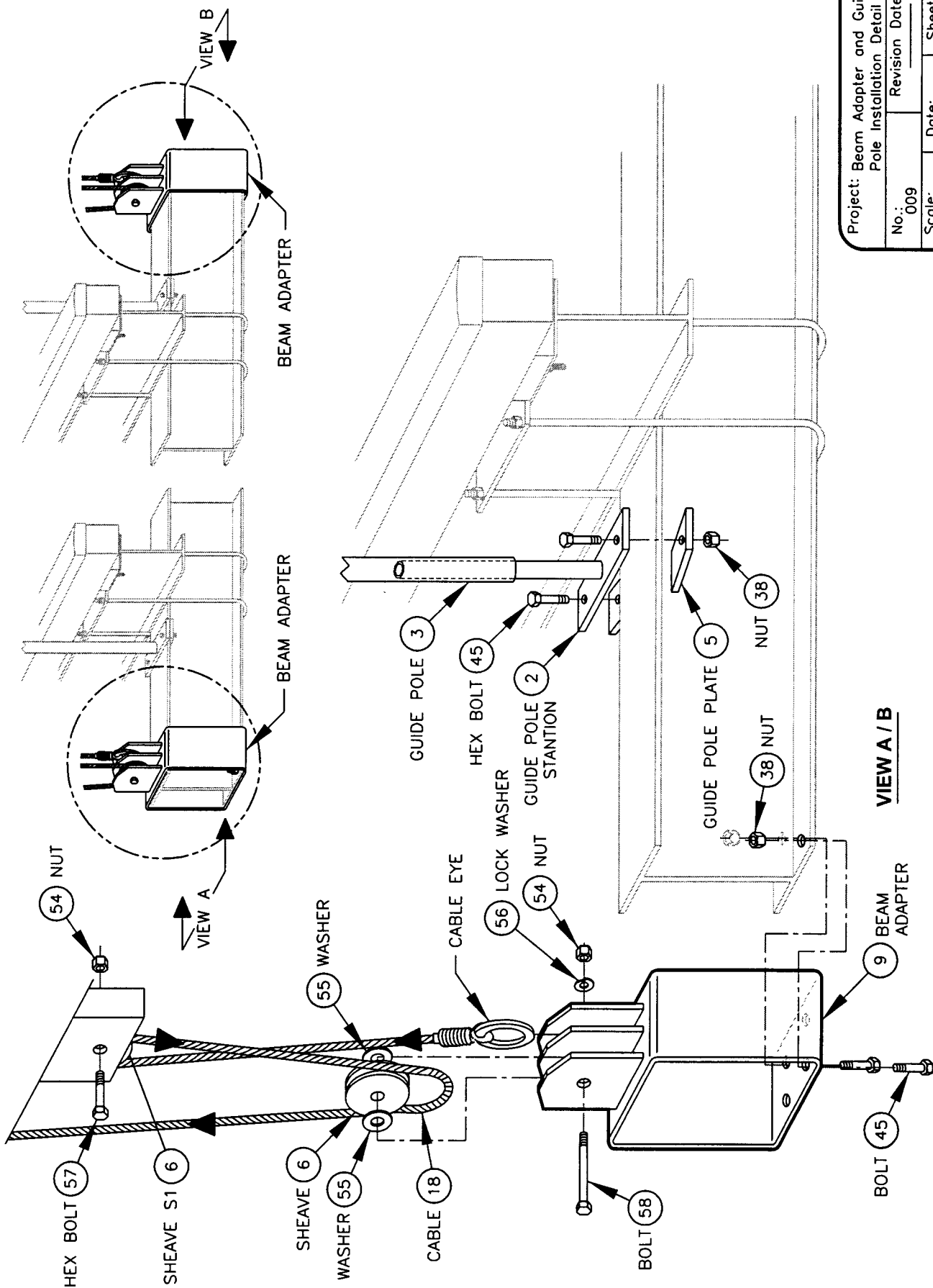


Project: Cable Connections Assembly Detail and Cable Attachment			
No.:	008	Revision Date:	
Scale:	None	Date:	04-17-01
		Sheet:	1 of 1

SECTION VIEW
CABLE CLAMP IS PULLED TIGHT INTO DRIVE PIPE

GENERAL NOTES:

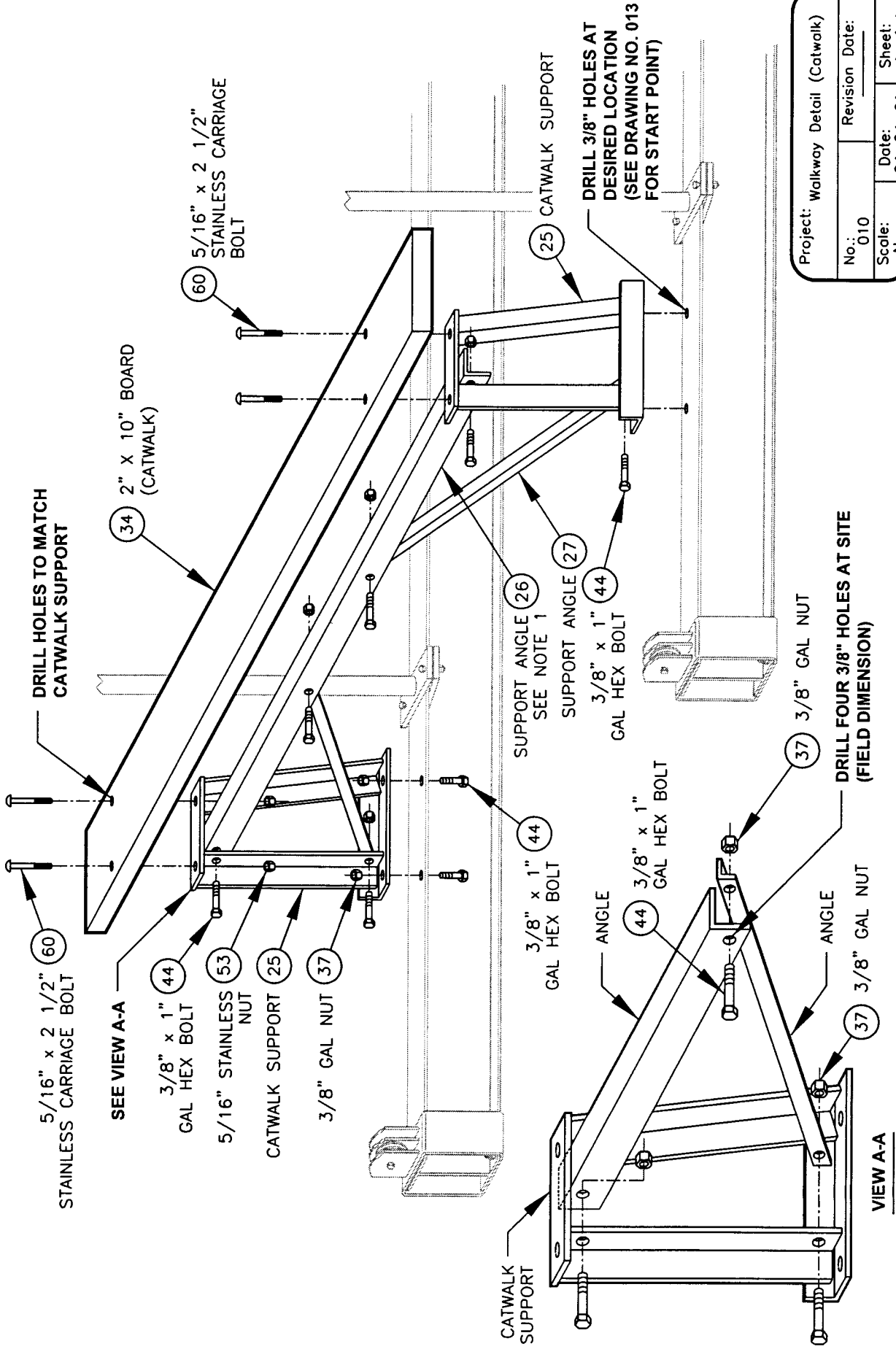
1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.



Project: Beam Adapter and Guide Pole Installation Detail	
No.: 009	Revision Date:
Scale: None	Date: 04-23-01
	Sheet: 1 of 1

GENERAL NOTES:

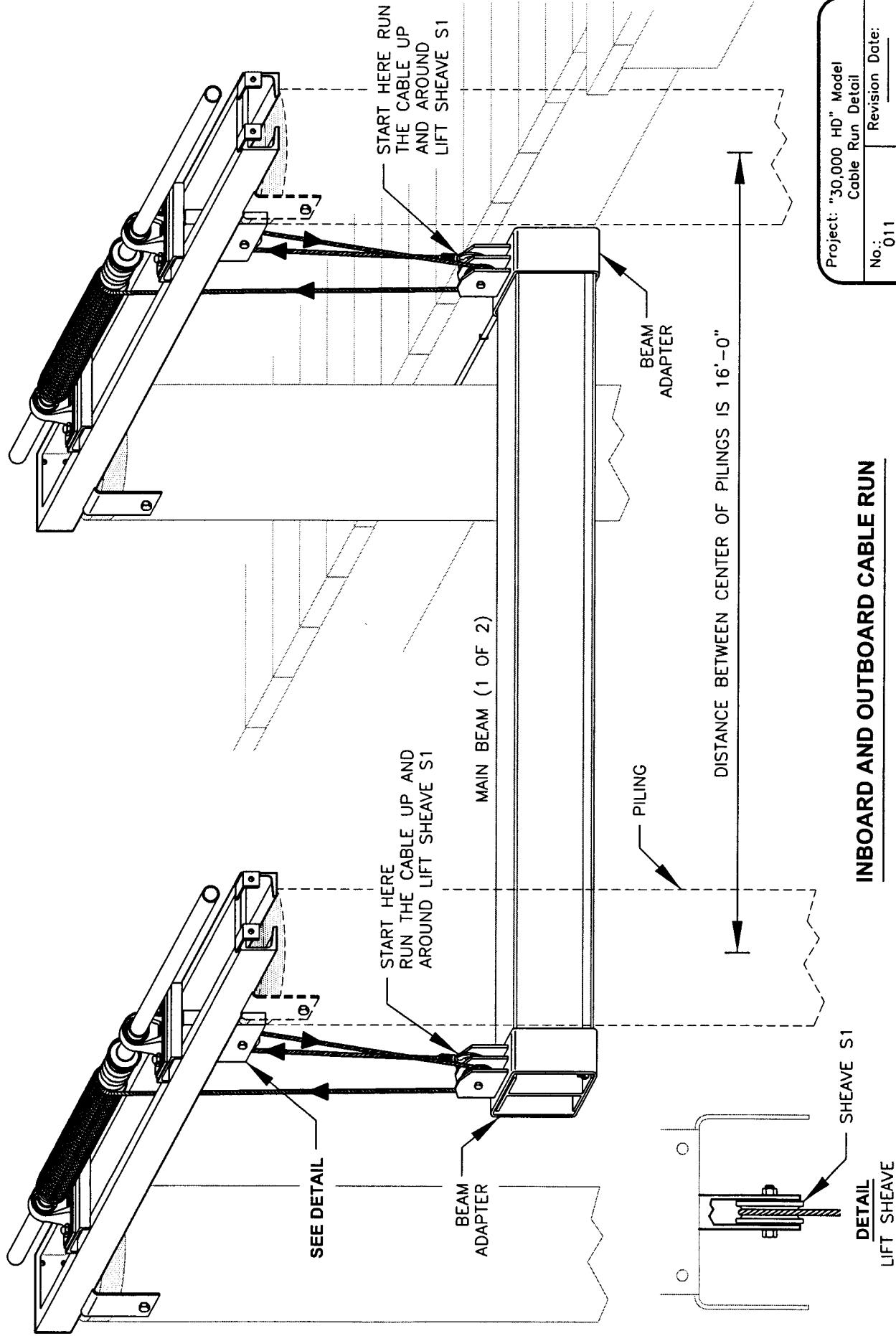
1. A 2 1/2" X 2 1/2" SUPPORT ANGLE, CUT TO LENGTH IS SUPPLIED WITH THE THE "HD MODEL" TO SERVE AS A SUPPORT FOR THE CATWALK. THE BRACES (PART NUMBER 27) SHOULD BE DRILLED AND BOLTED TO BOTH THE BOW AND STERN CATWALK SUPPORT ANGLE.
2. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.



Project: Walkway Detail (Catwalk)	
No.: 010	Revision Date:
Scale: None	Date: 04-24-01
Sheet: 1	of 1

GENERAL NOTES:

1. ENOUGH CABLE IS SUPPLIED WITH THE LIFT TO LOWER THE LIFT 15' BELOW SHEAVE BOLT S1. IF A GREATER AMOUNT OF DROP IS REQUIRED, CALL YOUR LIFT SUPPLIER TO ACQUIRE LONGER CABLES.

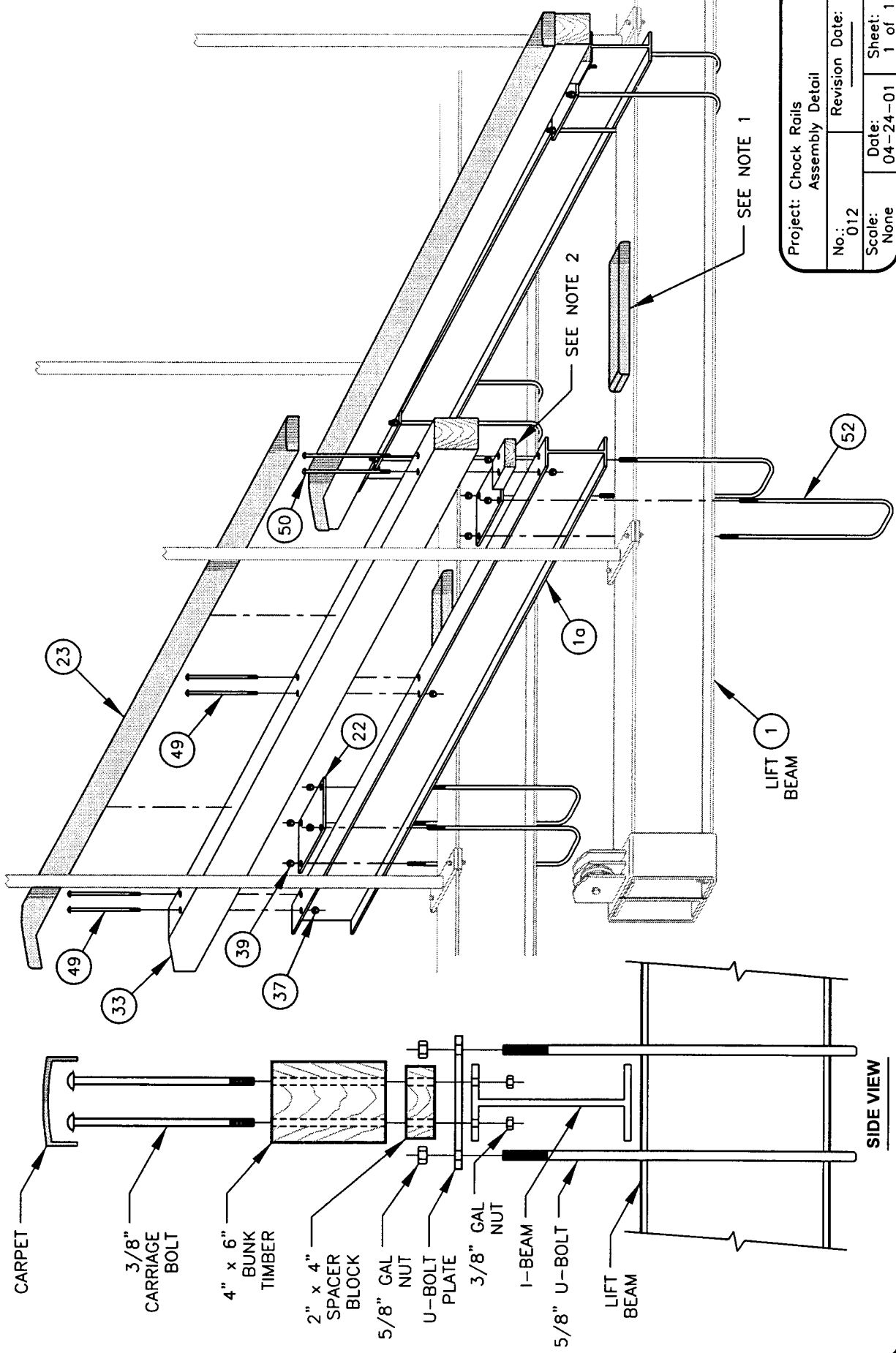


Project: "30,000 HD" Model Cable Run Detail	
No.: 011	Revision Date:
Scale: None	Date: 04-24-01
Sheet: 1 of 1	

INBOARD AND OUTBOARD CABLE RUN

GENERAL NOTES:

1. TWO BOW AND STERN PADS MADE FROM 6" x 24" CARPET PIECES (FIND NO. 24), ATTACHED TO 2" x 4" x 22" (OR LARGER) WOOD PIECES (FIND NO. 35), HELD DOWN WITH TWO 3/8" x 3 1/2" GALVANIZED CARRIAGE BOLTS (FIND NO. 48), AND TWO 3/8" PLAIN NUTS (FIND NO. 37) PER PAD (OPTIONAL).
2. A SHORT 2" x 4" WOOD PIECE (FIND NO. 36) SHOULD BE USED TO SPACE UP THE FRONT OF THE BUNK IN ORDER TO CATCH THE STRAKE WHEN IT BEGINS TO FLARE UP AT THE BOW.
3. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST.

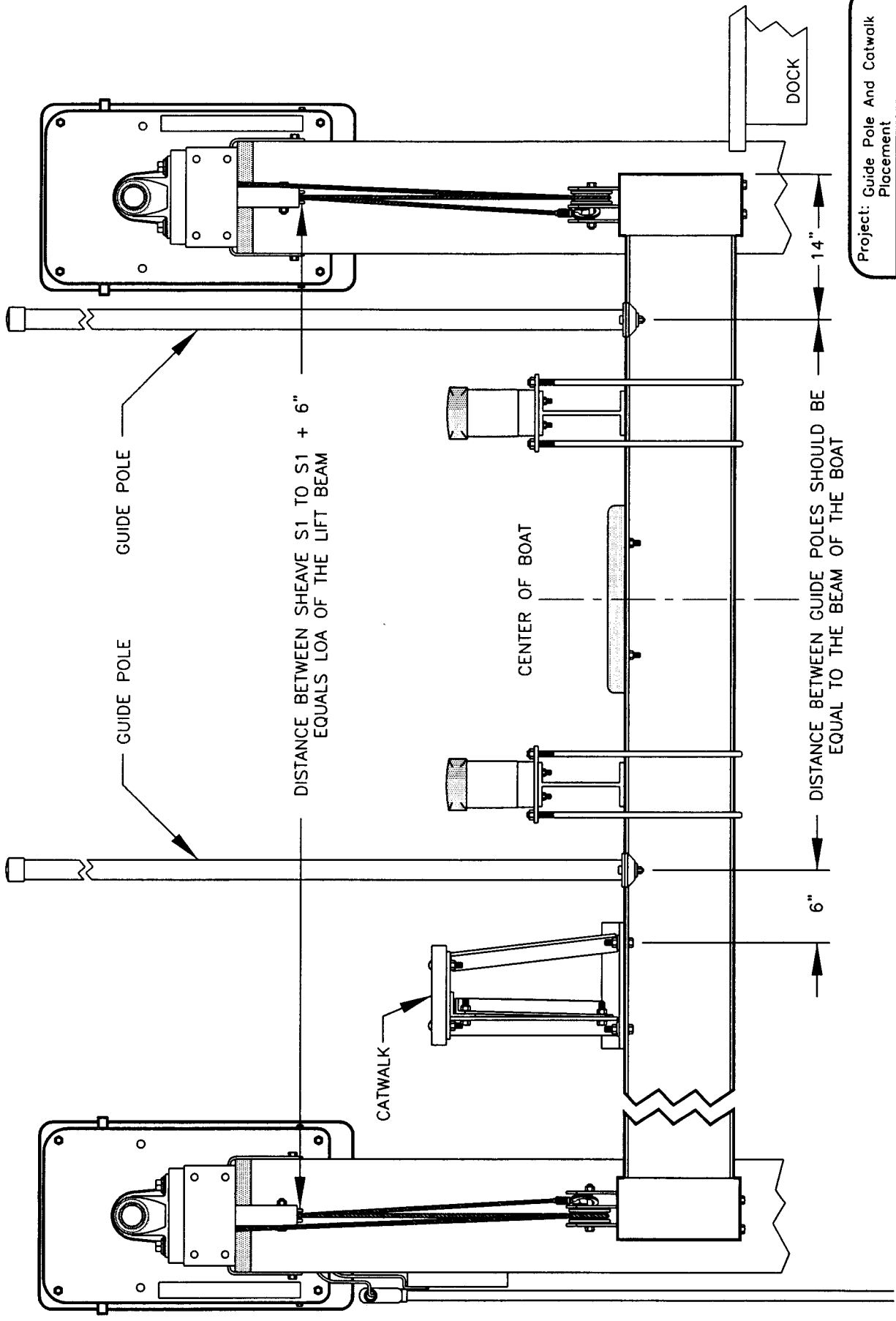


Project: Chock Rails Assembly Detail	
No.: 012	Revision Date:
Scale: None	Date: 04-24-01
Sheet: 1 of 1	

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GENERAL NOTES:

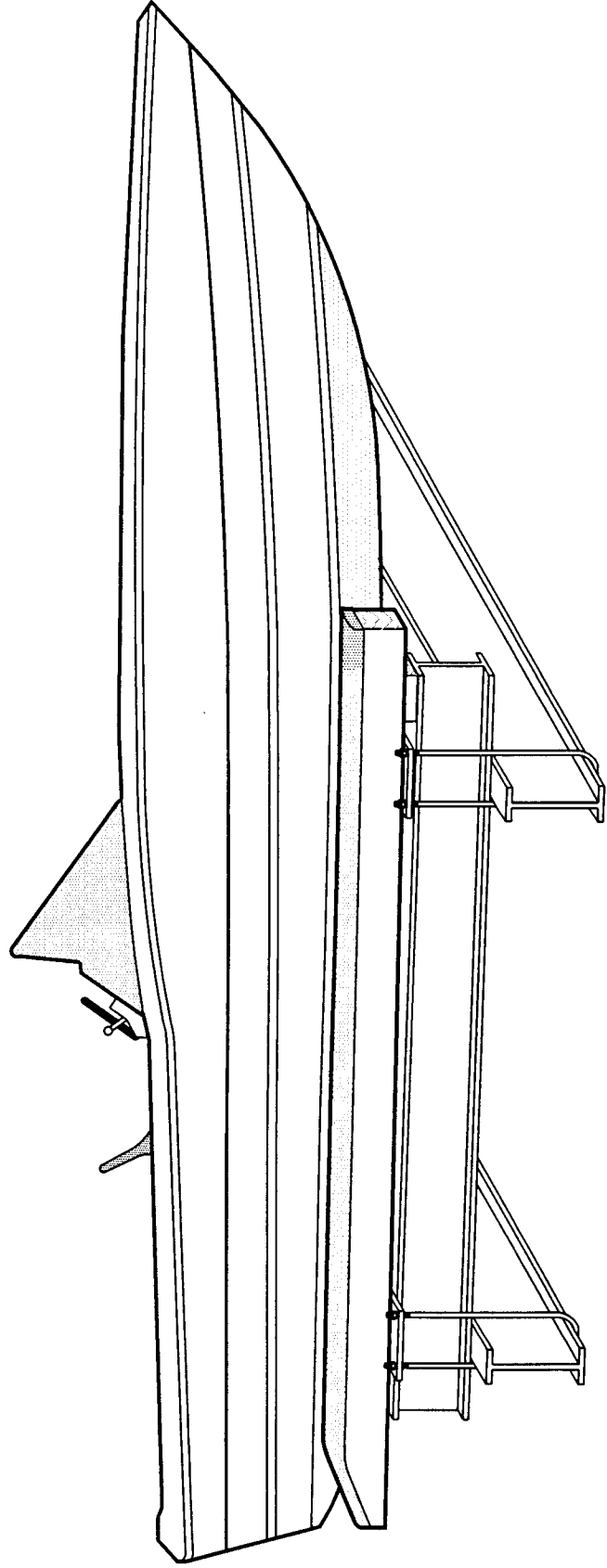
1. DISTANCE BETWEEN CENTER OF GUIDE POLES IS DETERMINED BY WIDTH OF BOAT.



Project: Guide Pole And Catwalk Placement		Revision Date: _____	
No.: 013		Date: 04-17-01	Sheet: 1 of 1
Scale: None			

GENERAL NOTES:

1. FOR OPTIMUM PERFORMANCE, EQUAL WEIGHT DISTRIBUTION IS REQUIRED OVER BOTH CRADLE ARMS.
2. TO OBTAIN EQUAL WEIGHT DISTRIBUTION:
 - A. USE BALANCE POINT OF BOAT.
 - B. DO NOT USE CENTER OF BOAT LENGTH.
3. POSITION THE BOAT IN THE LIFT AS CLOSE TO THE DOCK AS POSSIBLE.

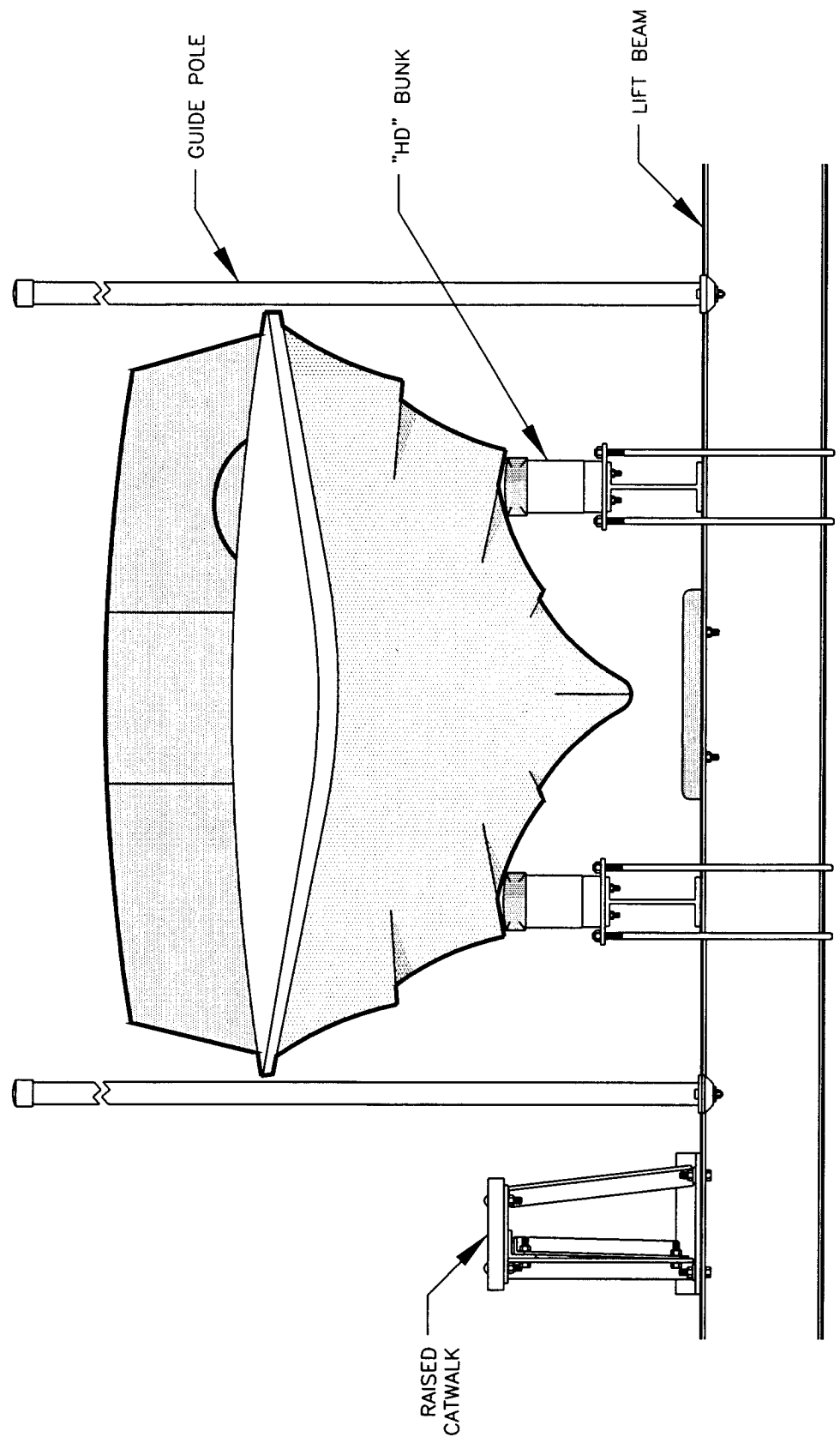


SIDE VIEW OF BOAT

Project: Instructions For Weight Distribution			
No.:	014	Revision Date:	
Scale:	None	Date:	04-17-01
		Sheet:	1 of 1

GENERAL NOTES:

- 1. DISTANCE BETWEEN CENTER OF GUIDE POLES IS DETERMINED BY WIDTH OF BOAT.



FRONT VIEW OF BOAT

Project: Proper "30,000 HD" Model Bunk Fit	
No.: 015	Revision Date:
Scale: None	Date: 04-17-01
	Sheet: 1 of 1