

## Chain Hoist Stand Owner's Manual

### Warning

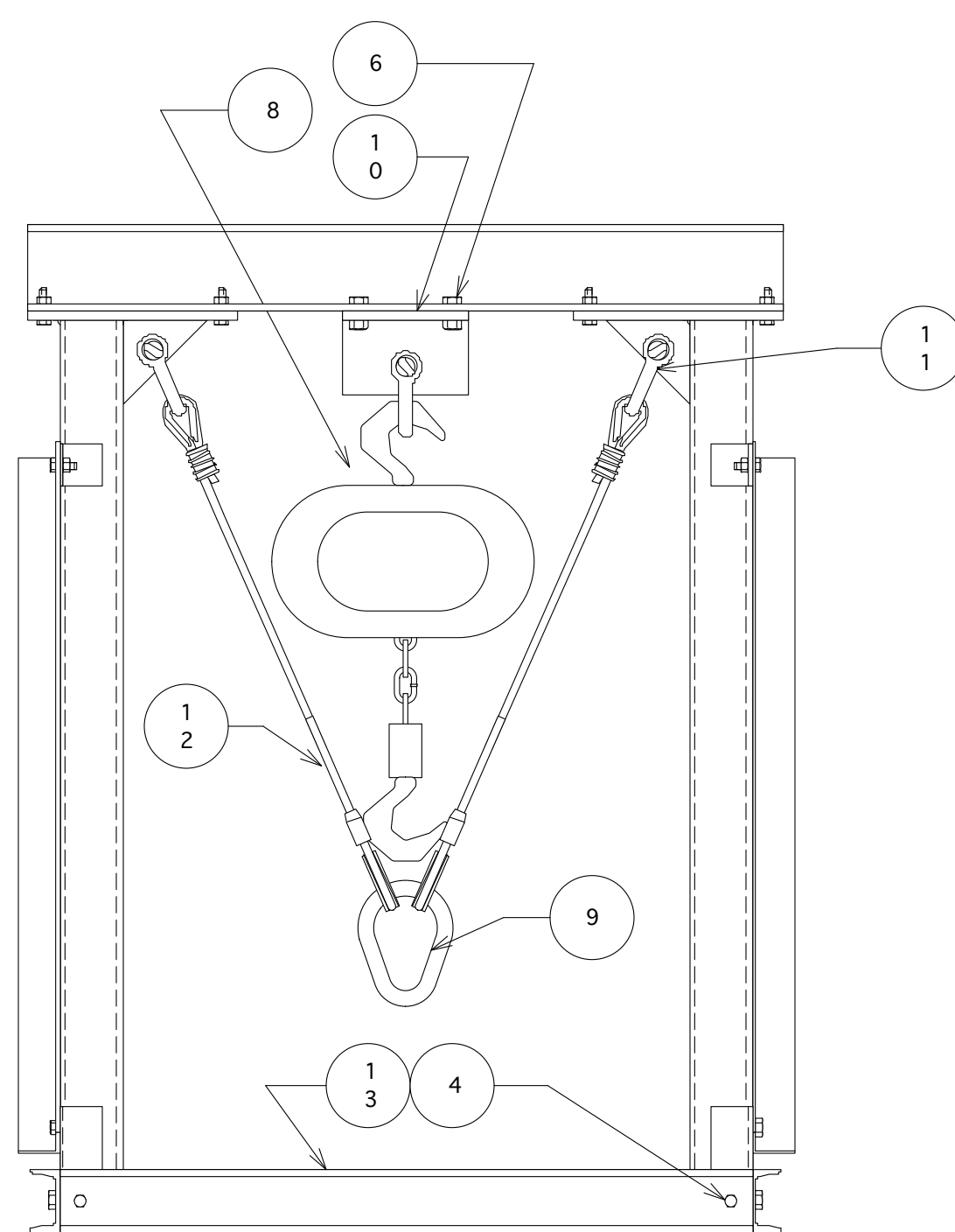
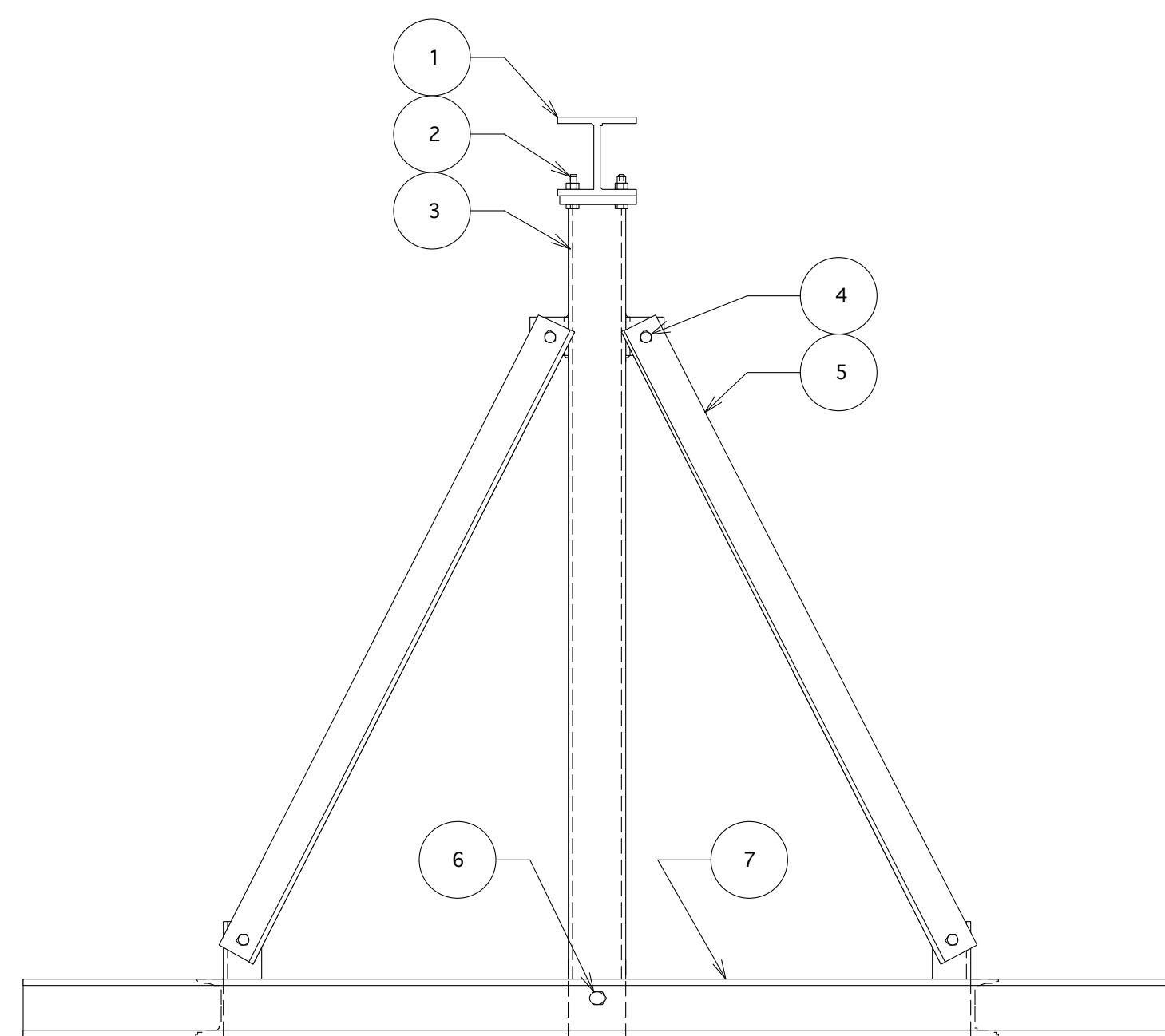
- Chain Hoist Stand must be placed on a flat and level surface.
  - The area under the Chain Hoist Stand (floor, grid, catwalk, etc) must have a load rating equal to or greater than the Chain Hoist Stand rating.
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### Installation Instructions

1. Assemble chain hoist stand per the attached drawing with the supplied bolts.
    - a. Tighten all 3/8" Ø hex nuts to 23 ft. lbs.
    - b. Tighten all 1/2" Ø hex nuts to 57 ft lbs.
  2. Place the Chain Hoist Stand in the desired location and secure to the floor, grid, catwalk, etc.
  3. Install the wire rope bridle assembly per the drawing.
    - a. All 5/8" Ø screw pin anchor shackles should be oriented 'pin up'.
    - b. Safety each shackle pin to the shackle bell with the supplied zip ties.
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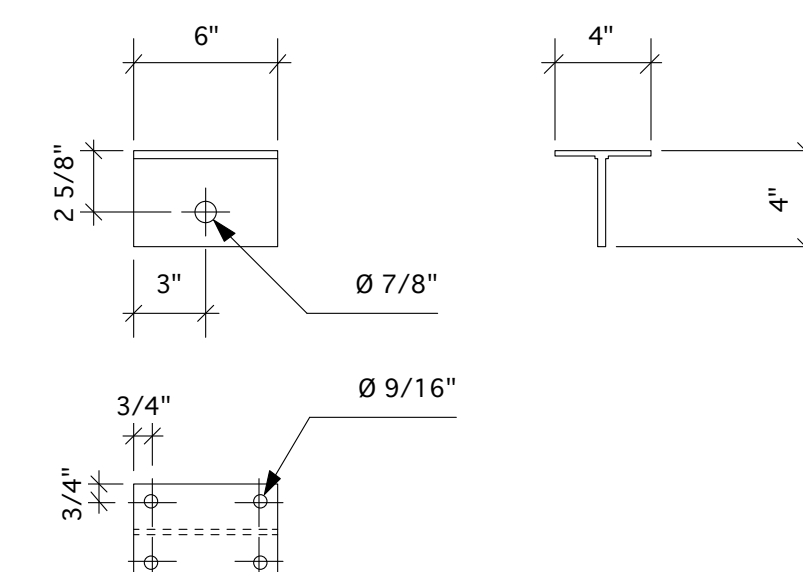
### Warranty

Sapsis Rigging, Inc. shall repair or replace any/all equipment manufactured or supplied by Sapsis Rigging, Inc., at no charge to the owner, for a period of three (3) years from the sale date. This repair/replacement policy shall be in force if the failure has been caused by manufacturer defects. This warranty shall be null and void if the equipment failure has been caused by negligence, abuse, misuse, normal wear or acts of terrorism.

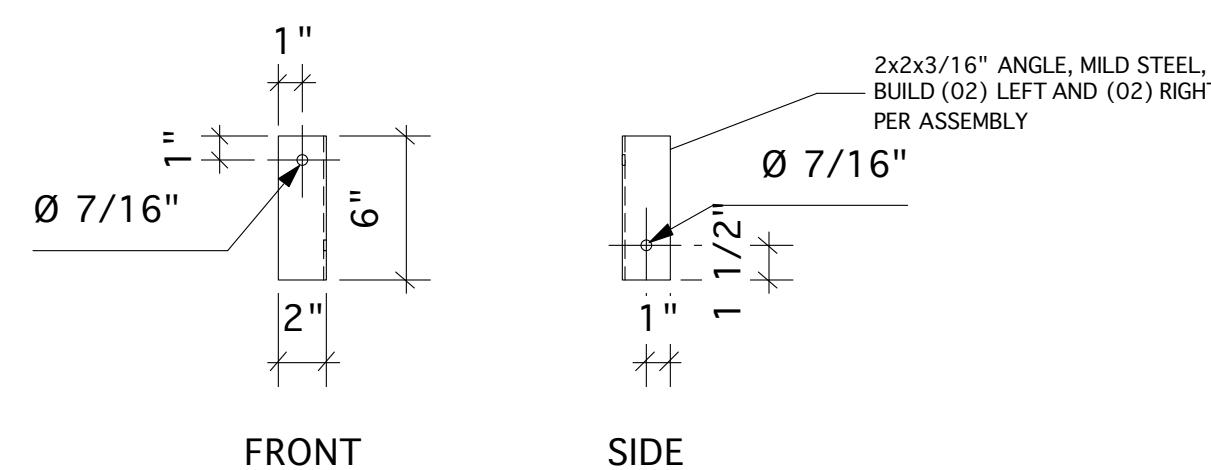


ITEM NUMBER	DETAIL SHEET	DESCRIPTION OR PART NUMBER	QUANTITY PER	TOTAL THIS SHEET
1	1/1	CROSSBAR, W4x13 WIDE FLANGE BEAM, MILD STEEL	1	1
2	1/1	3/8x1 1/2" GRADE 5 BOLT, LOCKNUT	8	8
3	1/1	UPRIGHT ASSEMBLY, MILD STEEL	2	2
4	1/1	3/8x1" GRADE 5 BOLT, LOCKNUT	12	12
5	1/1	ANGLE BRACE, 2x2x3/16" ANGLE, MILD STEEL	4	4
6	1/1	1/2x1-1/4" GRADE 5 BOLT, LOCKNUT	2	2
7	1/1	BASE ASSEMBLY, MILD STEEL	2	2
8	1/1	CM LOADSTAR CHAINMOTOR, 1 TON, NON-INVERTED	1	1
9	1/1	5/8" PEAR RING, DOMESTIC	1	1
10	1/1	HOIST POINT, MILD STEEL	1	1
11	1/1	5/8" SHACKLE, DOMESTIC	3	3
12	1/1	3/8" 7x19 AIRCRAFT CABLE, COPPER NICO SWAGE, THIMBLE	2	2
13	1/1	LEG CROSS BRACE, C3x4.1 CHANNEL, MILD STEEL	2	2

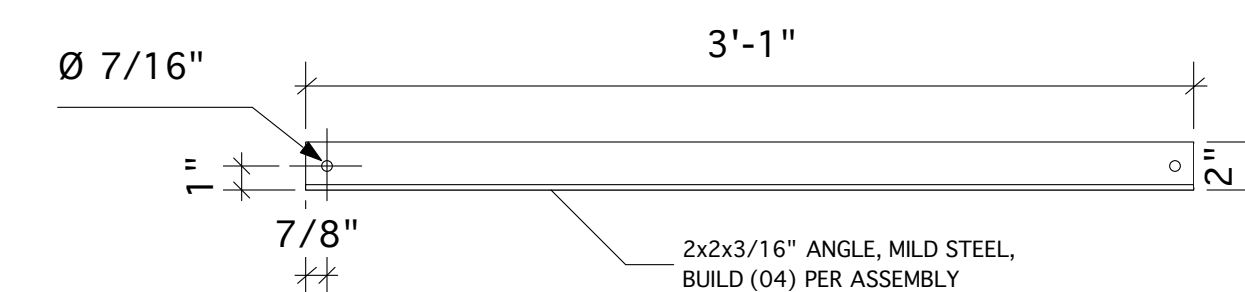
1 ELEVATION  
Scale: 1 1/2" = 1'-0"



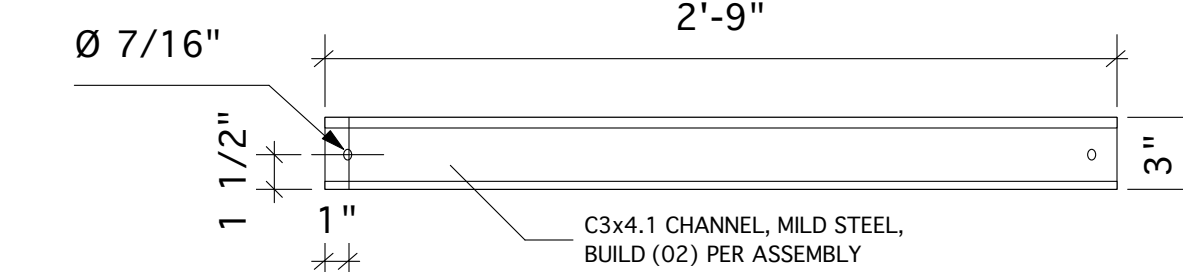
3 HOIST POINT  
1 1/2" = 1'-0"



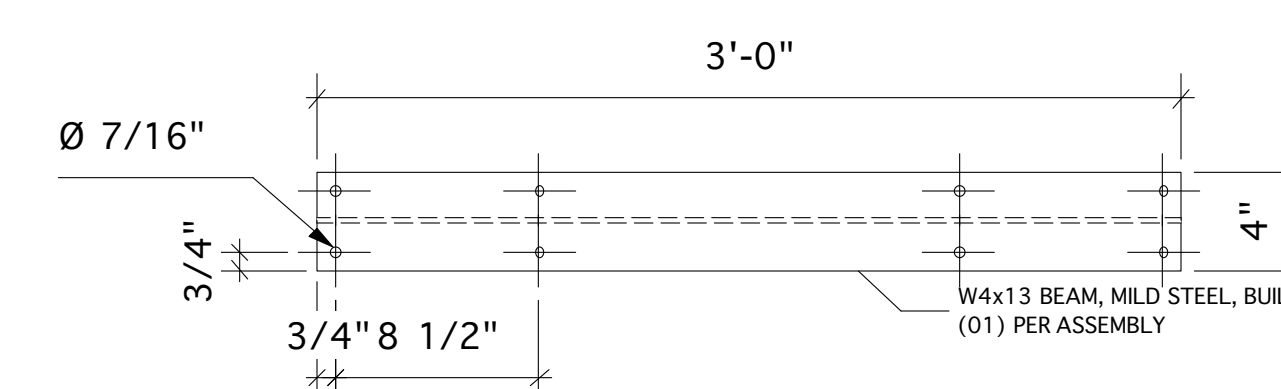
FRONT SIDE



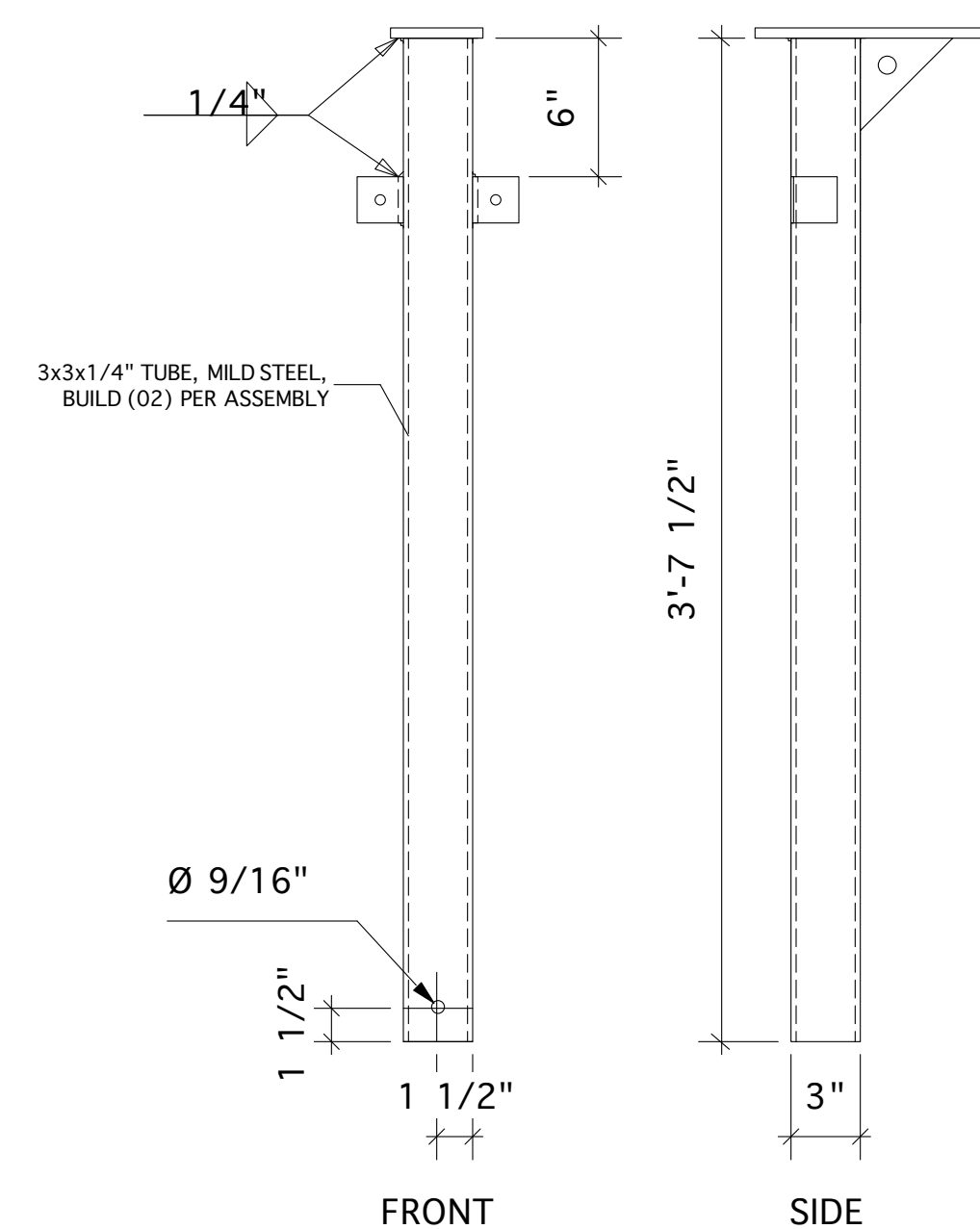
5 ANGLE BRACE  
1 1/2" = 1'-0"



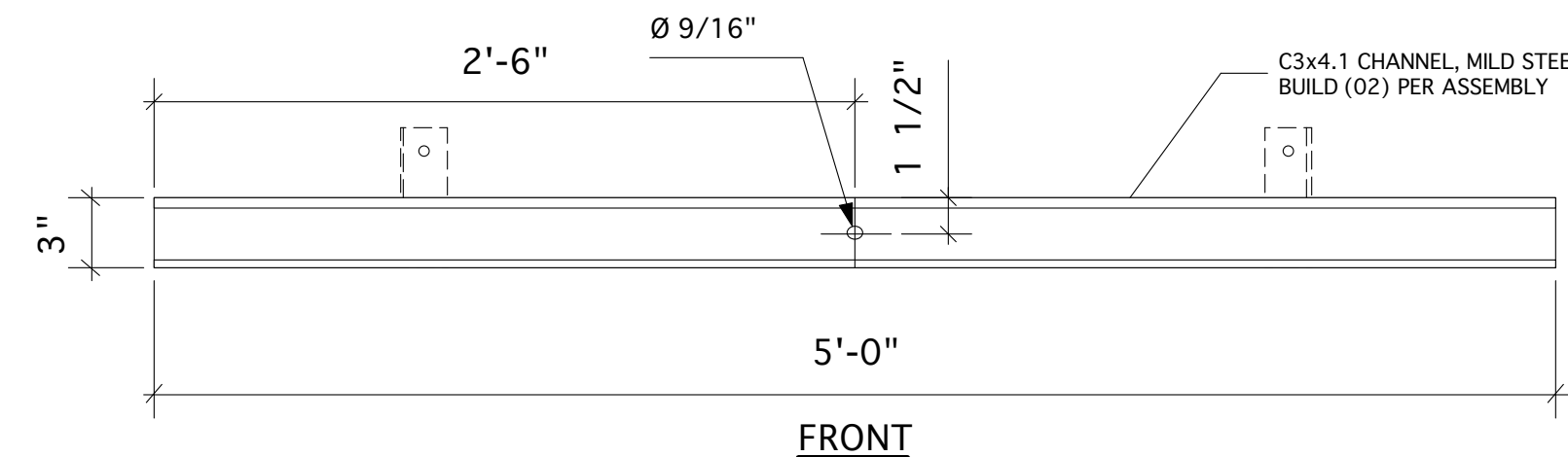
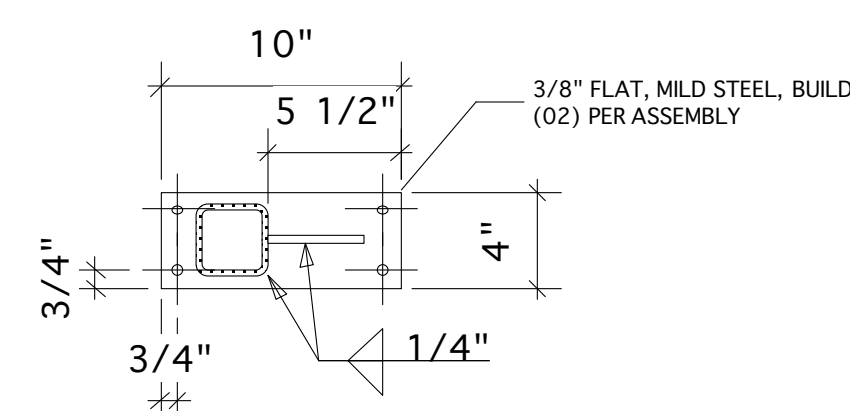
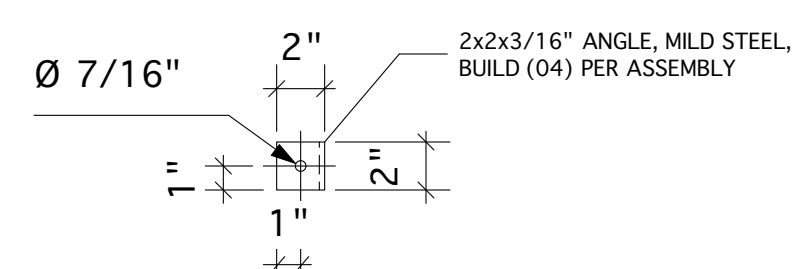
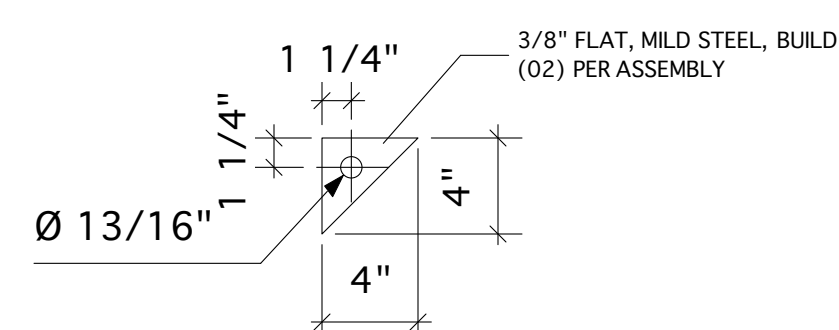
6 LEG CROSS BRACE  
1 1/2" = 1'-0"



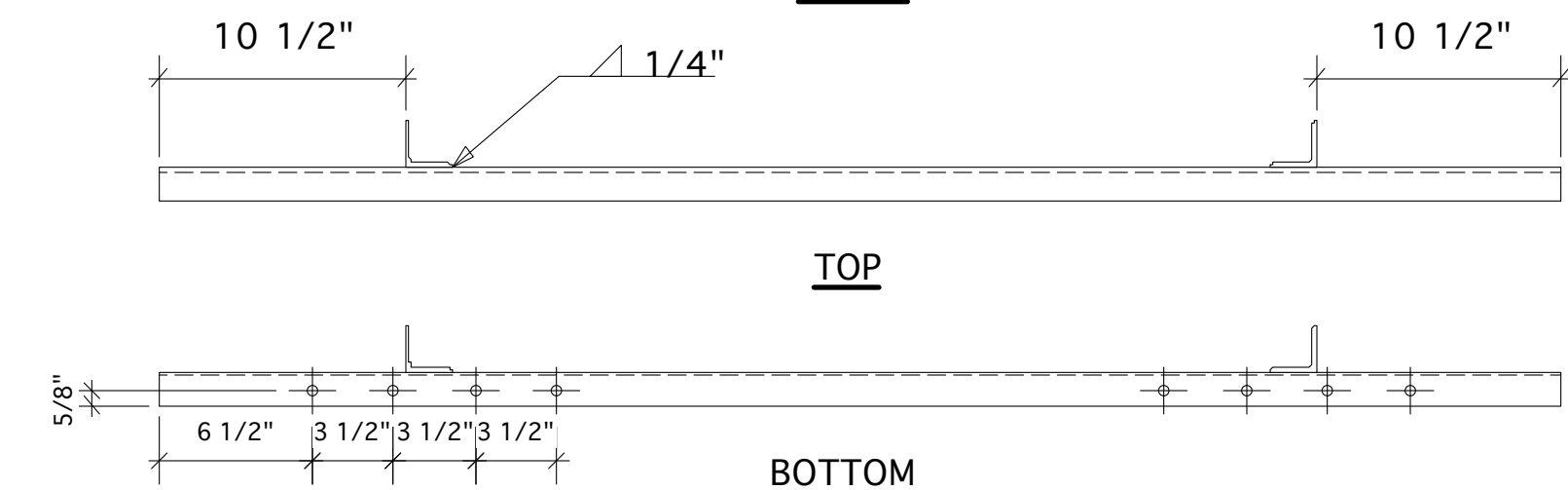
7 CROSSBAR  
1 1/2" = 1'-0"



2 UPRIGHT  
1 1/2" = 1'-0"



FRONT



TOP BOTTOM

4 BASE  
1 1/2" = 1'-0"

Client

Project Manager

Job #

Drawing Title

CHAIN HOIST CARRIAGE

Revision

△ DEAD HANG ADDITION 9/15/03  
△ HOIST POINT CHANGE 12/21/06

# Description Date

Drawing #

1-B

Scale AS NOTED

Date Drawn by 8/24/01 M.YOCUM

12/30/2014

Sapsis Rigging Inc.  
223 N. Landsdowne Avenue  
N. Landsdowne, PA 19050  
Attn: Bill Sapsis

RE: Chain Hoist Stand

CRE Proj. No.: 14.319.04

Dear Bill,

Per your request, we have reviewed the Chain Hoist Stand. Attached are the plans and analysis for the structure. Attached are the plans and analysis for the structure. Our review has been performed in accordance with the structural provisions of the 2012 International Building Code and 2014 AISC Manual. The maximum load applied to the system is no larger than 1 ton.

**Table of Contents for Analysis Package**

General Notes & Plans ..... 1-2  
Supporting Calculations.....3-34

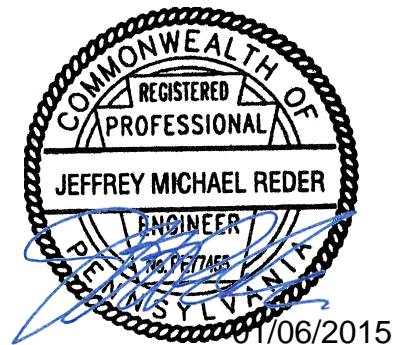
We trust this information is suitable for your needs at this time. If you have any questions, please do not hesitate to contact our office.

Regards,

**Clark-Reder Engineering, Inc.**

  
01/06/2015

Scott Horn, E.I.T.

  
01/06/2015

Jeffrey M. Reder, P.E.



## **GENERAL STRUCTURAL NOTES**

### **CODES AND REFERENCE**

1. 2012 INTERNATIONAL BUILDING CODE
2. ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
3. AISC STEEL MANUAL, 14<sup>TH</sup> EDITION

### **DESIGN LOADS**

1. DEAD LOAD: SELFWEIGHT OF STRUCTURE
2. RIGGING LOADS: MAXIMUM LOAD SUPPORTED BY CHAIN MOTOR OR PEAR RING = 2200#

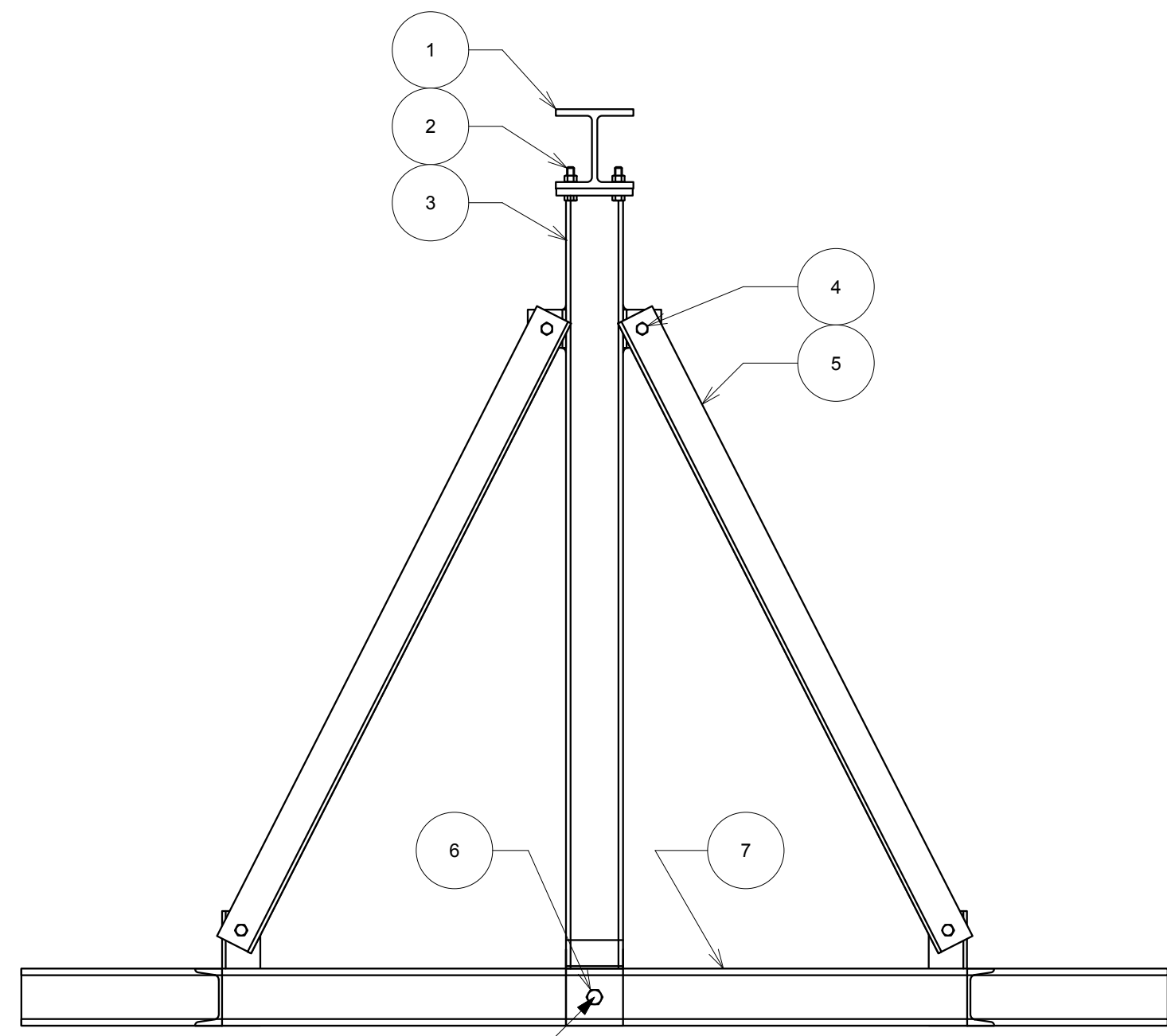
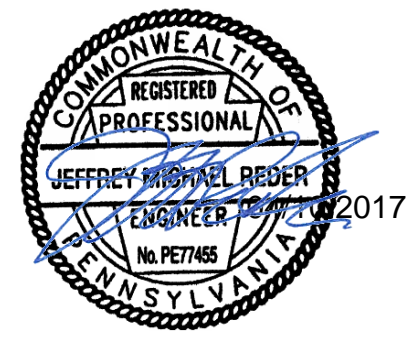
### **STRUCTURAL STEEL**

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS NOTED OTHERWISE ON THE DRAWINGS:
  - A. ROLLED WIDE FLANGE SHAPES: ASTM A992, FY = 50 KSI
  - B. MISC PLATE, BAR, ANGLES AND CHANNELS: ASTM A36, FY = 36 KSI
  - C. PIPE SHAPES: ASTM A53, TYPE E OR S, GRADE B, FY = 35 KSI
  - D. HSS TUBES: ASTM A500 GR B, FY = 46 KSI
  - E. HSS ROUND: ASTM A500 GR B, FY = 42KSI
  - F. BOLTS OR SCAFFOLD CONNECTION PINS: SAE J429 GRADE 5 BOLTS (FY=92 KSI)
  - G. TRUSS TO TRUSS CONNECTION PINS: A449
2. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY LATEST EDITION.

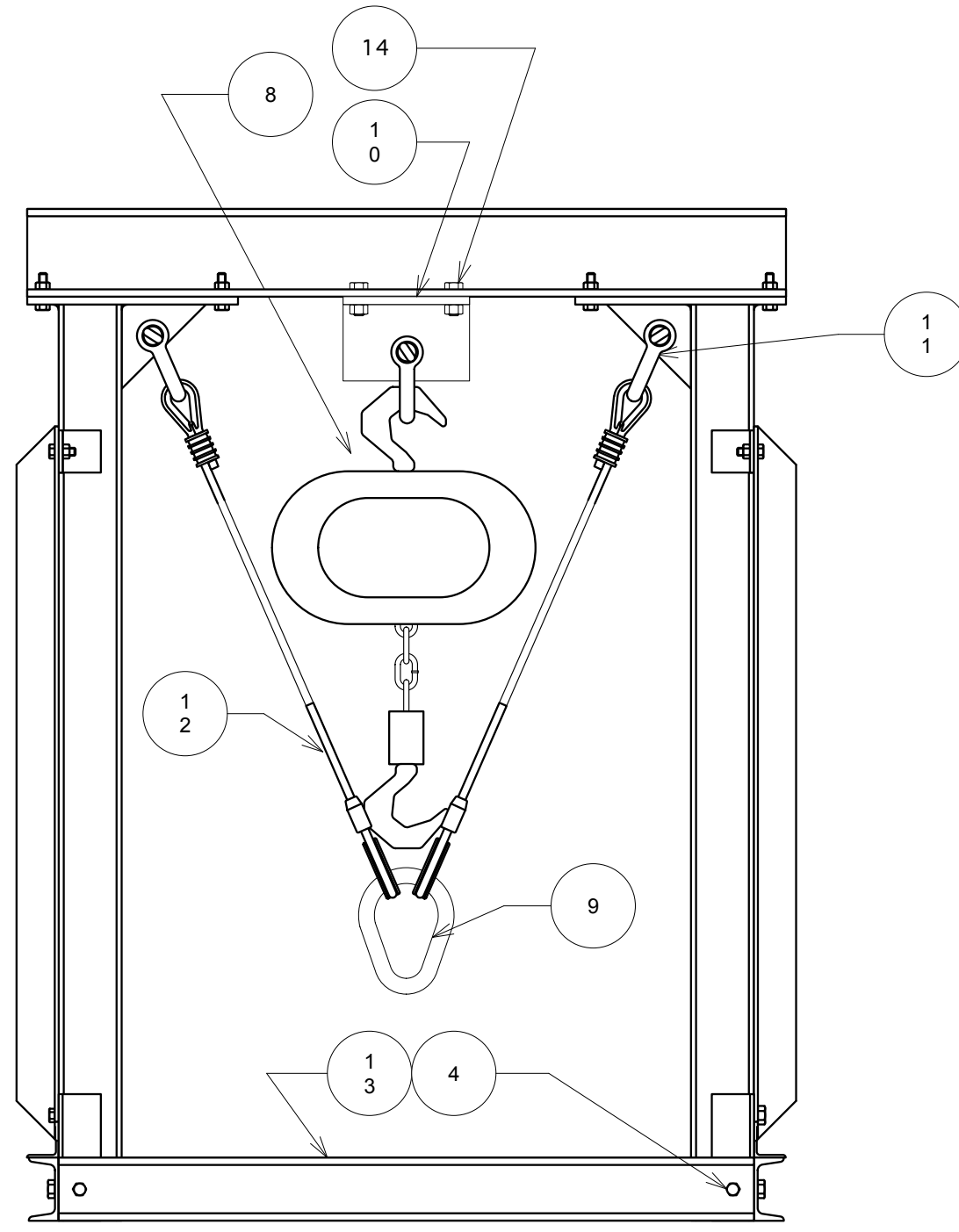
### **INSPECTIONS**

1. DAMAGED OR CORRODED EQUIPMENT SHALL NOT BE USED. FIELD MODIFICATIONS SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO INSTALLATION.

MAXIMUM LOAD SUPPORTED BY CHAIN MOTOR OR PEAR RING = 2,200 lbf



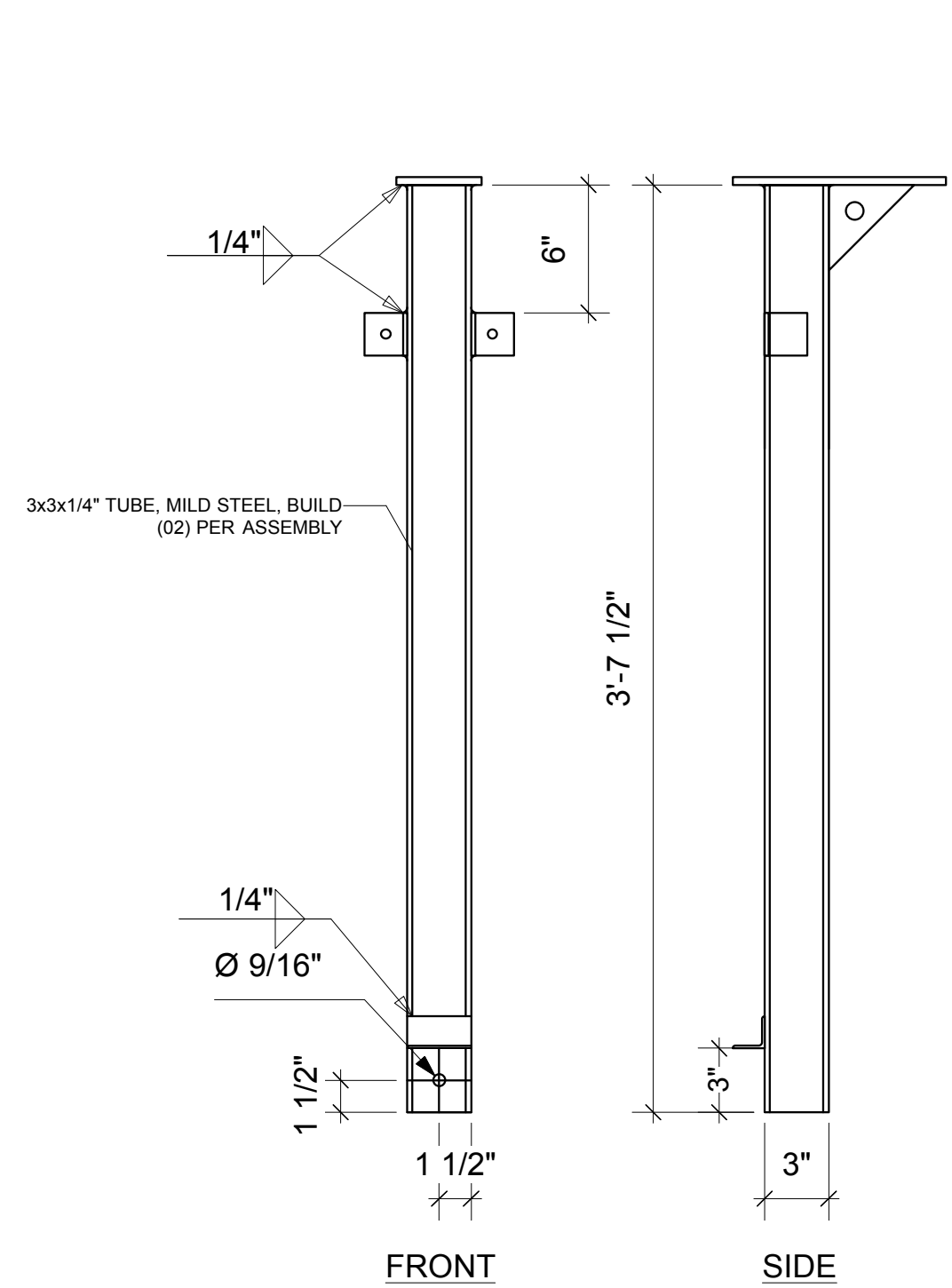
(#1) Upright and channel base through bolt  
(2) per assembly



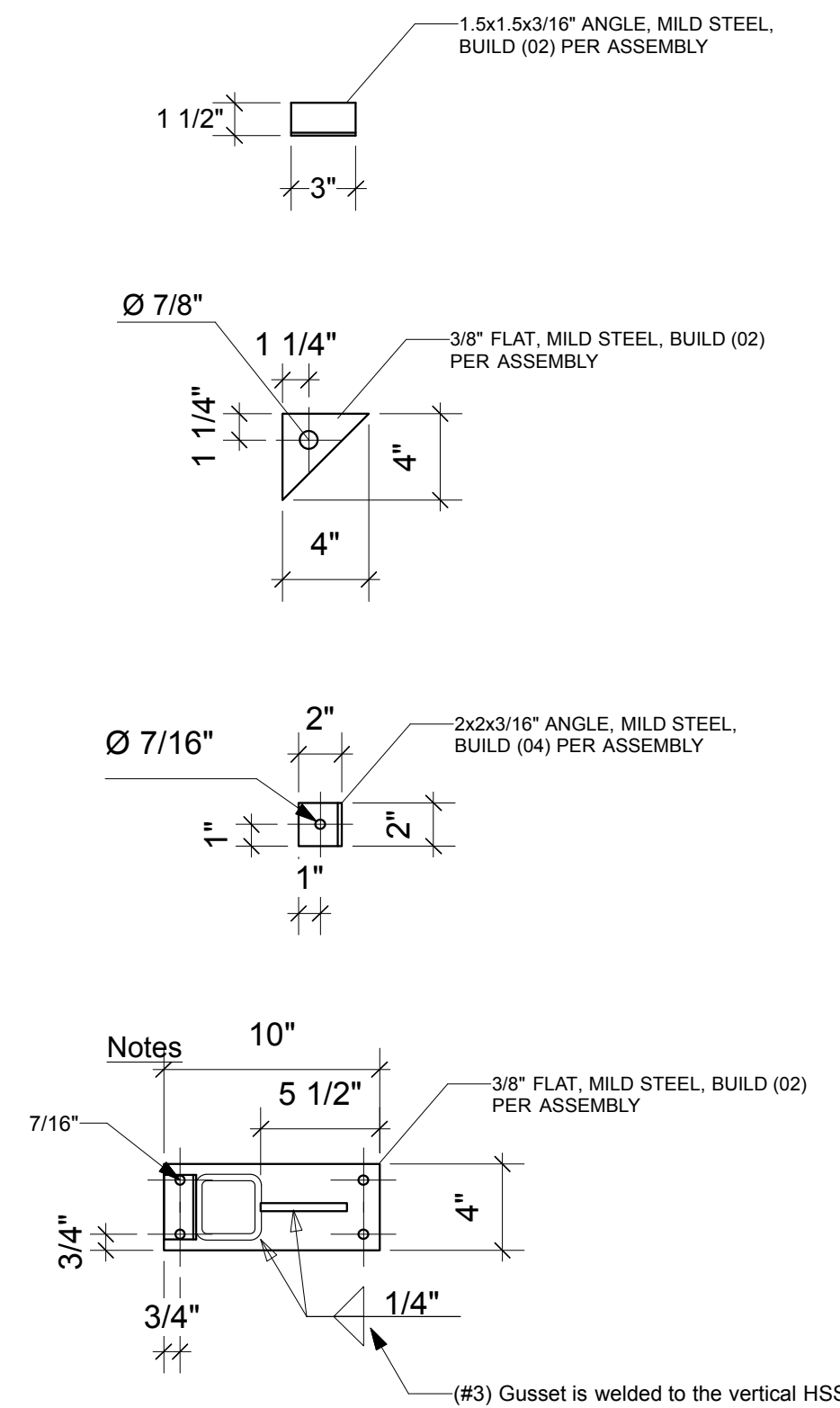
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3	2/1	UPRIGHT ASSEMBLY, MILD STEEL	2	2
4	1/1	3/8x1" GRADE 5 BOLT, LOCKNUT	12	12
5	5/1	ANGLE BRACE, 2x2x3/16" ANGLE, MILD STEEL	4	4
6	1/1	1/2x4" GRADE 5 BOLT, (2) WASHERS, LOCKNUT	6	6
7	4/1	BASE ASSEMBLY, MILD STEEL	2	2
8	1/1	CM LOADSTAR CHAINMOTOR, 1 TON, NON-INVERTED	1	1
9	1/1	5/8" PEAR RING, DOMESTIC	1	1
10	3/1	HOIST POINT, MILD STEEL	1	1
11	1/1	5/8" SHACKLE, DOMESTIC	3	3
12	1/1	3/8" 7x19 AIRCRAFT CABLE, COPPER NICO SWAGE, THIMBLE	2	2
13	6/1	LEG CROSS BRACE, C3x4.1 CHANNEL, MILD STEEL	2	2
14	1/1	1/2x2" GRADE 5 BOLT, (2) WASHERS, LOCKNUT	4	4

Notes have been labeled (#1)-(#4)

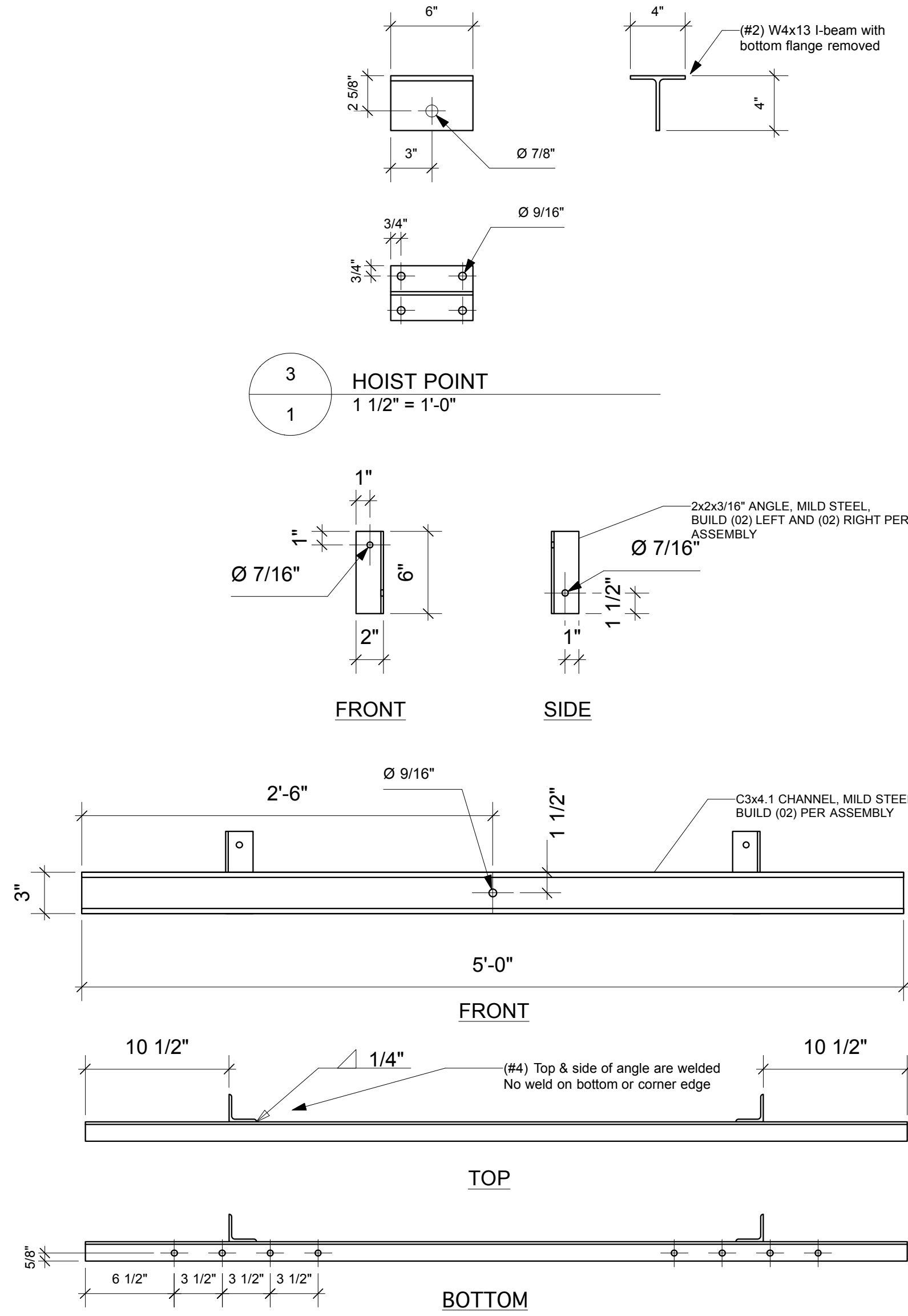
1 SECTION & ELEVATION  
Scale: 1 1/2" = 1'-0"



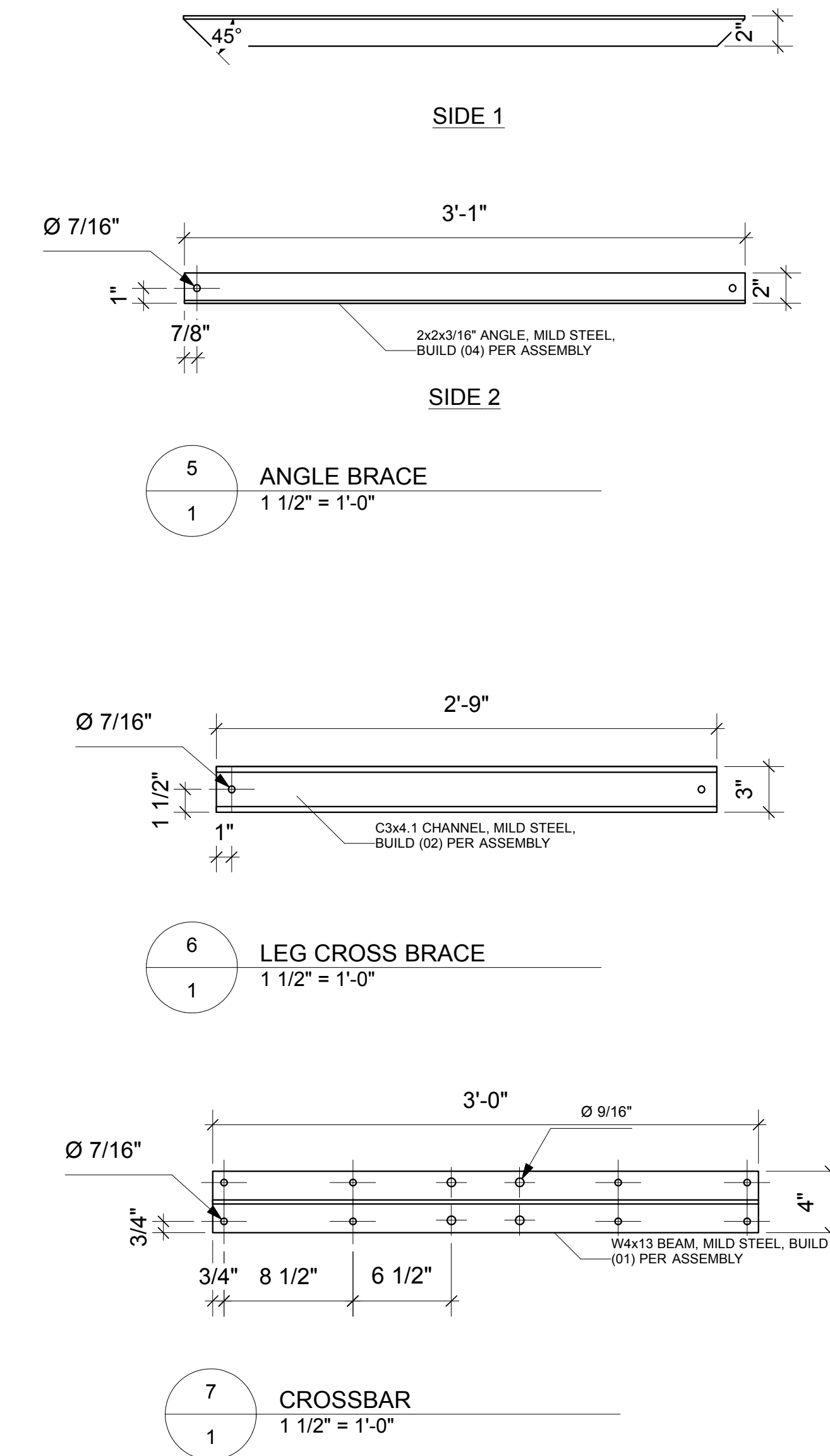
2 UPRIGHT  
1 1/2" = 1'-0"



3 HOIST POINT  
1 1/2" = 1'-0"



4 BASE  
1 1/2" = 1'-0"



7 CROSSBAR  
1 1/2" = 1'-0"



233 N. Lansdowne Avenue  
Lansdowne, PA 19050  
800-727-7471  
215-228-1786 fax  
www.Sapsis-Rigging.com

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Client

Project Manager

Job #

Drawing Title

CHAIN HOIST CARRIAGE

Revision

#	Description	Date
A	DEAD HANG ADDITION	9/15/03
B	HOIST POINT CHANGE	12/21/06

Drawing #

1-B

Scale AS NOTED

Date Drawn by 10/25/11 D.Porter