

A. DO NOT SCALE DRAWINGS.  
B. ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE (U.N.O.).

A. THE REQUIREMENTS OF THE NATIONAL BUILDING CODE OF CANADA AND ALL SUPPLEMENTS SHALL APPLY.

- D. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH CSA STANDARDS.
- D.1. CAN/CSA A23.1 METHOD OF TESTS FOR CONCRETE
- D.2. CAN/CSA A23.2 DESIGN OF CONCRETE
- D.3. CAN/CSA A23.3 DESIGN OF CONCRETE STRUCTURES
- E. ALL DESIGN AND CONSTRUCTION CODES AND STANDARDS ARE TO BE THE LATEST EDITION/REVISION.

A. STEEL  
A.1. HSS CLASS C, WWF, W, AND S SHAPES SHALL BE IN ACCORDANCE WITH CAN/CSA-G40.21, GRADE 350W (50 ksi) OR APPROVED ALTERNATIVE.  
A.2. PLATE, BAR, CHANNEL & ANGLE SHAPES SHALL BE IN ACCORDANCE WITH

- A.3. PIPE SHALL BE IN ACCORDANCE WITH ASTM A53, GRADE B (MINIMUM  $F_y=35$  ksi).  
 A.4. WELDS AND WELDING PROCEDURES FOR STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH CSA W59: WELDED STEEL CONSTRUCTION. MINIMUM FILLET WELD SIZE TO BE  $\frac{3}{8}$ " (PLATES B/S, OTHER SHAPES ALL AROUND).

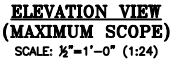
- B.1. STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 35 MPa WITH 5% AIR ENTRAINMENT AND A MAXIMUM W/C OF 0.40.
- B.2. CEMENT SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN3-A5, TYPE 10, NORMAL PORTLAND CEMENT.
- B.3. CONCRETE REINFORCEMENT SHALL BE PLAIN BILLET STEEL BARS IN ACCORDANCE WITH CSA STANDARD CAN16, GRADE 400.
- B.4. STEEL BOLTS SHALL BE NEW MATERIAL IN ACCORDANCE WITH CSA STANDARD CAN3-A226-10W.
- B.5. ADMIXTURES SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN3-A266-1, A266-2 AND A266-4.

A. ALL MILD STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED.

B. ANY SURFACE FINISH DEFECTS SHALL BE TREATED WITH A MINIMUM OF (2) COATS OF GALVICON OR SIMILAR ALTERNATIVE.

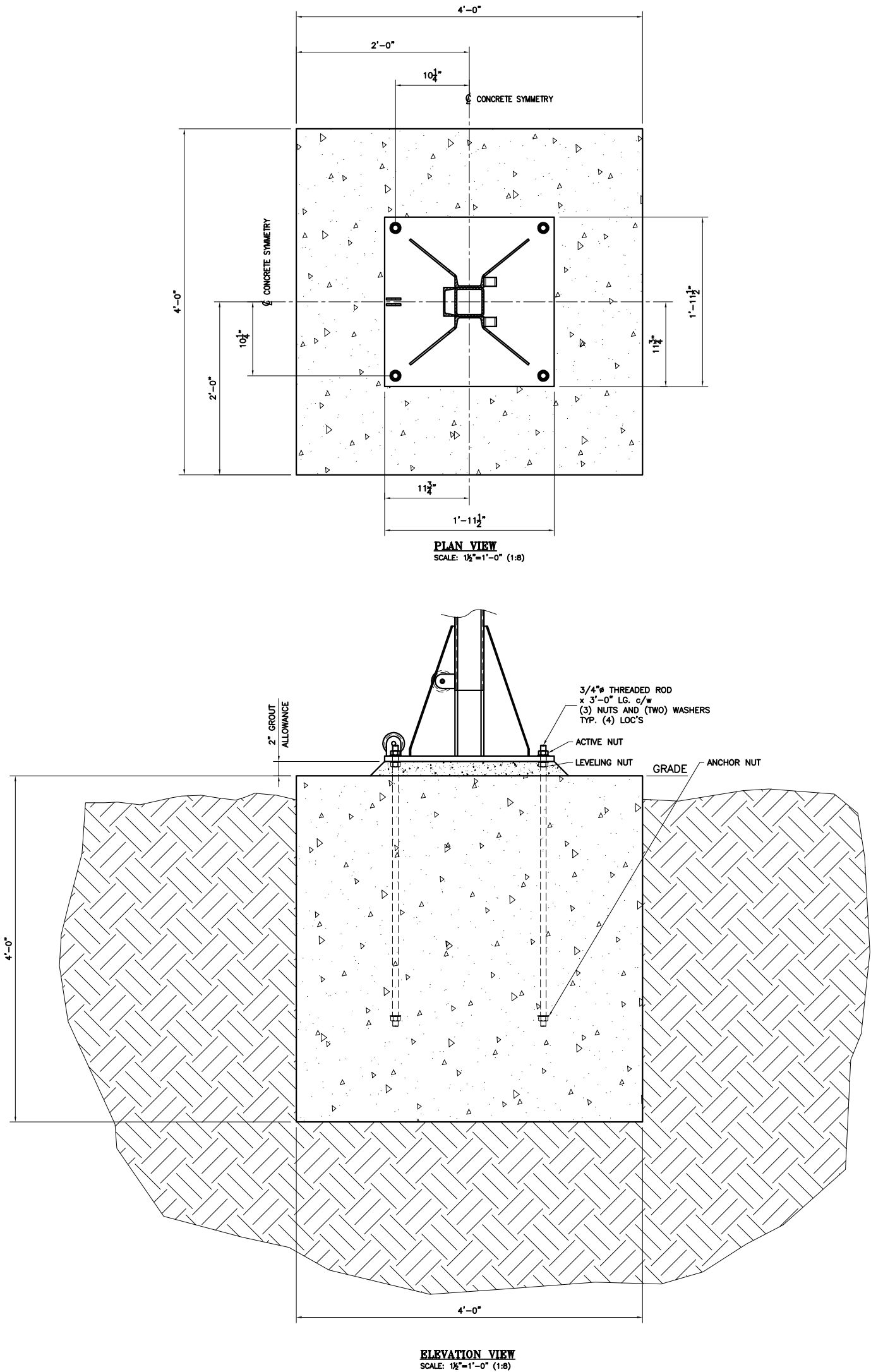
A. FOR WELDED CONSTRUCTION, USE APPROPRIATE WELDING ELECTRODE AND PROCEDURE FOR SPECIFIED PARENT MATERIAL.

- B. ALL WELDS TO BE FULL PENETRATION CONTINUOUS FILLET WELDS TO CSA W89. SHORDED AND STAGGERED WELDS (ON ITEMS SUCH AS STIFFENERS) ARE ACCEPTABLE ONLY IF THE WELDS ARE FULL PENETRATION WELDS AND WELD JOINTS TO A MINIMUM 1/4" FILLER. ALL GROOVED JOINTS ARE TO BE FILLED ENTIRELY WITH WELD METAL. CORNER TO CORNER WELDS ARE NOT PERMITTED.
- C. CLEAR COVER TO ALL CONCRETE REINFORCEMENT SHALL BE 3" UNIFORM.
- D. LAP SPACE ALL REINFORCEMENTS A MINIMUM LENGTH OF 36 BAR DIAMETERS.
- E. ALL ANCHOR BOLTS SHALL BE SET WITH FULL SHEET PLYWOOD TEMPLATE.
- F. STAINLESS STEEL SURFACES SHALL NOT BE PAINTED OR GALVANIZED.
- G. ALL ITEMS TO BE FABRICATED TO WITHIN  $\pm 1/16"$  UNIFORM.
- H. HARDWARE TO BE EITHER ASTM A325, CHROMIUM PLATED/GALVANIZED OR 316L STAINLESS STEEL.
- I. INSTALLER TO PROVIDE ALL FASTENING HARDWARE FOR COMPLETE ASSEMBLY OF INDIVIDUAL ITEMS IN ADDITION TO JOINING FABRICATED ITEMS.
- J. INSTALLER TO PROVIDE FASTENERS/HANGERS/SUPPORTS FOR EQUIPMENT TO BASES OR SUPPORT STEEL.
- K. INSTALLER TO PROVIDE FOUNDATION FOR THE TOWER BASE APPROVED BY A LICENSED ENGINEER.

[illegible]

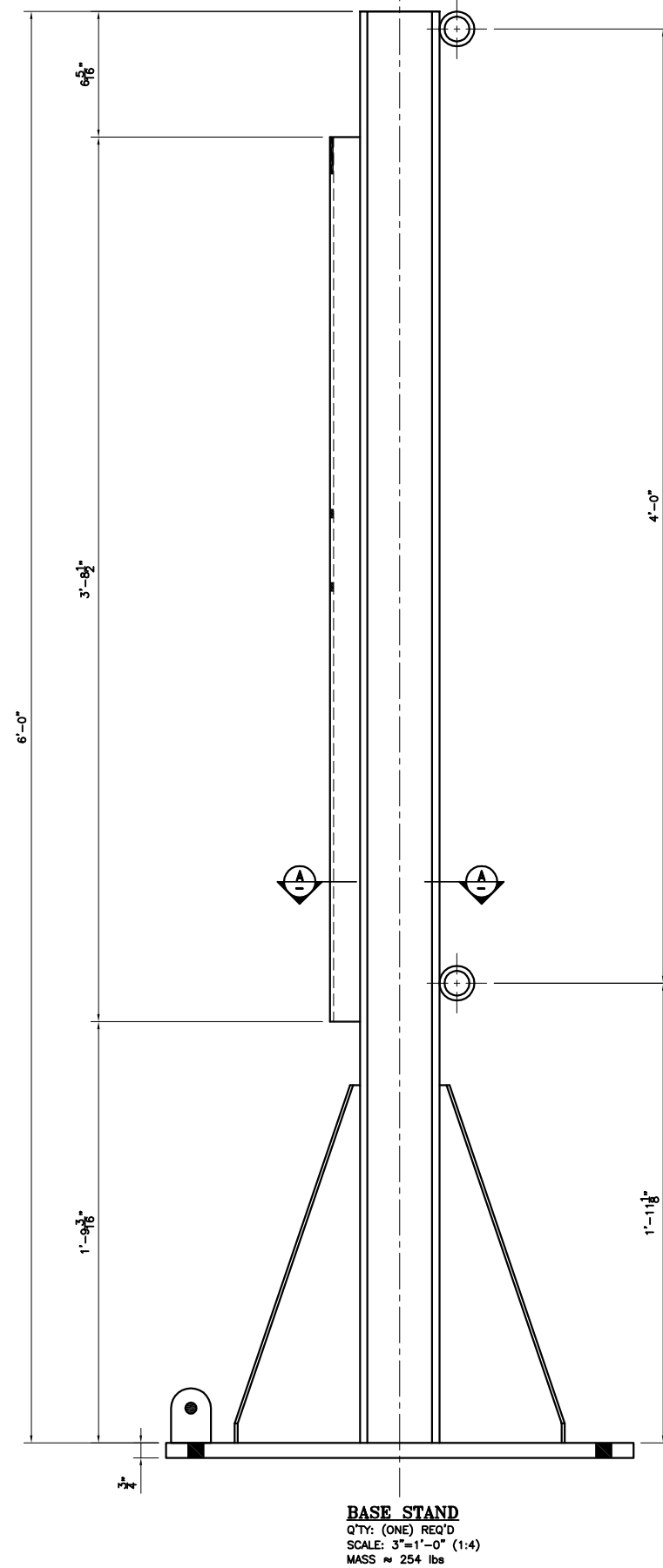
**NOTES:**

1. DO NOT SCALE DRAWINGS.
2. ALL DIMENSIONS ARE IN FEET AND INCHES  
UNLESS NOTED OTHERWISE (U.N.O.).
3. SEE DWG 192-GA-01 FOR GENERAL NOTES.
4. REINFORCEMENT NOT SHOWN, SEE GENERAL NOTES.

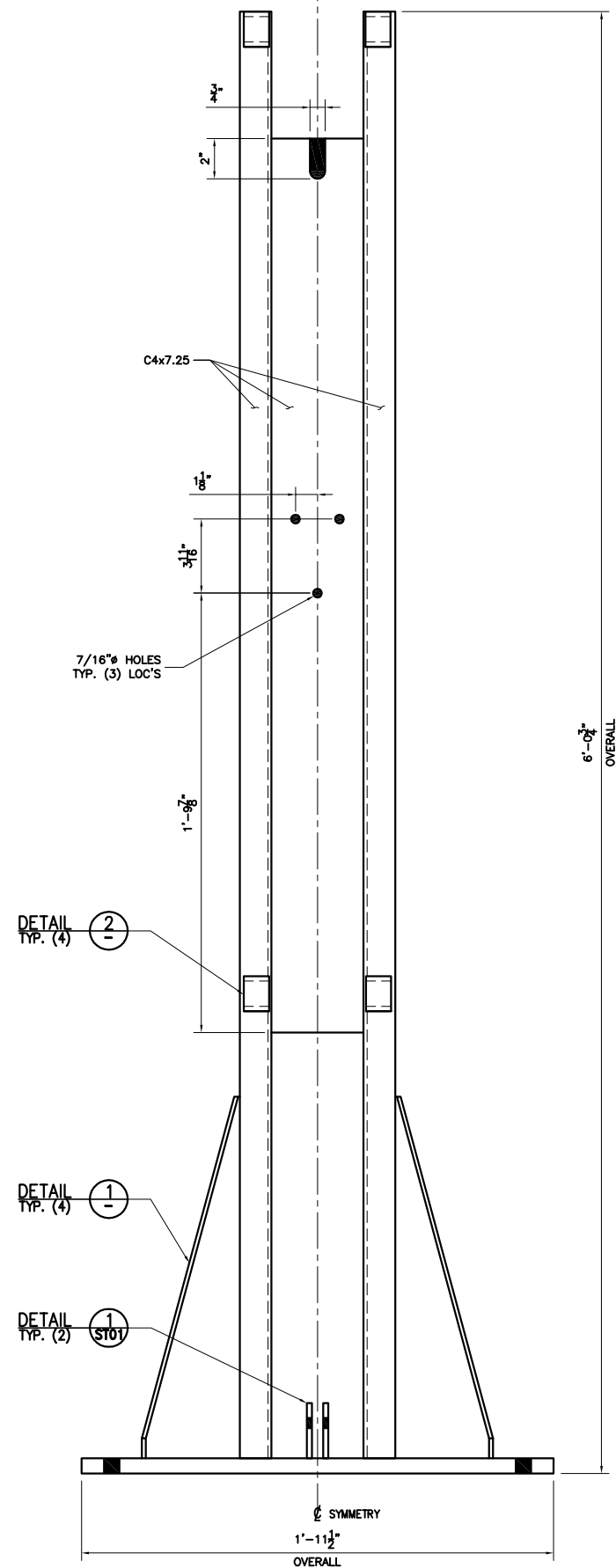


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| TILTTOWER.COM                                      |                         |      |      |      |      |         |      |     |           | PROJECT NO. | —         |
| CONCRETE<br>TILT—CRANK TOWER<br>FOUNDATION DETAILS |                         |      |      |      |      |         |      |     |           | REVISION    | 1         |
| COPYRIGHT © 2011 TILTTOWER.COM                     |                         |      |      |      |      |         |      |     |           | DRAWING NO. | 192—CO—01 |
| NO.  | REVISION                | DWN. | DES. | CHK. | APP. | DATE    | DWN. | NO. | REFERENCE |             |           |
| △  |                         |      |      |      |      |         |      |     |           |             |           |
| △  |                         |      |      |      |      |         |      |     |           |             |           |
| △  | REVISED OVERALL DESIGN  |      | BS   | BS   | BS   | 06JUL11 |      |     |           |             |           |
| △  | ISSUED FOR CONSTRUCTION |      | BS   | BS   | BS   | 03JUL10 |      |     |           |             |           |
| △  | ISSUED FOR REVIEW       |      | BS   | BS   | BS   | 13JUN10 |      |     |           |             |           |





**BASE STAND**  
Q'TY: (ONE) REQ'D  
SCALE: 3"=1'-0" (1:4)  
MASS  $\approx$  254 lbs

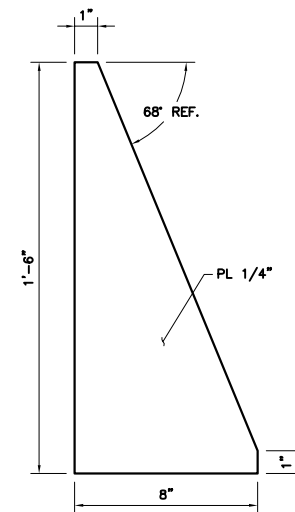


DETAIL TYP. (4) 2  
-

DETAIL TYP. (4) 1

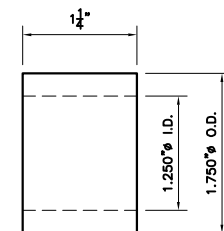
DETAIL 1  
TYP. (2) ST01

SECTION 1:4 (A)



DETAIL 1  
1:4

**BASE GUSSET**  
Q'TY: (4) REQ'D  
SCALE: 3"=1'-0" (1:4)  
MASS ≈ 20 lb



DETAIL 2  
1:1

**BASE PIN MOUNT**  
Q'TY: (4) REQ'D  
SCALE: 12"=1'-0" (1:1)  
MASS ≈ 2 lb

- NOTES:**
1. DO NOT SCALE DRAWINGS.
  2. ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE (U.N.O.).
  3. ALL WELDS TO BE 1/4" FILLET U.N.O.
  4. SEE DWG 192-GA-01 FOR GENERAL NOTES.

|     |                         |      |      |      |         |      |          |                       |                     |  |  |             |
|-----|-------------------------|------|------|------|---------|------|----------|-----------------------|---------------------|--|--|-------------|
| △   |                         |      |      |      |         |      |          |                       | SECTION: STRUCTURAL | TITLE  | <div>TILTTOWER.COM</div> <div>COPYRIGHT © 2011 TILTTOWER.COM</div> | PROJECT NO. |
| △   |                         |      |      |      |         |      |          | SCALE: AS NOTED       | DATE                | STRUCTURAL<br>TOWER COMPONENTS<br>BASE DETAILS |  | REVISION    |
| △   | REVISED OVERALL DESIGN  | BS   | BS   | BS   | 06JUL11 |      |          | DESIGNED BY: B. STONE | JUN 10              |  |  | 1           |
| △   | ISSUED FOR CONSTRUCTION | BS   | BS   | BS   | 03JUL10 |      |          | DRAWN BY: B. STONE    | JUN 10              |  |  | DRAWING NO. |
| △   | ISSUED FOR REVIEW       | BS   | BS   | BS   | 13JUN10 |      |          | CHECKED BY:           |                     |  |  | 192-ST-02   |
| NO. | REVISION                | DRN. | DES. | CHK. | APP.    | DATE | DWG. NO. | REFERENCE             | APPROVED BY:        |  |  |             |