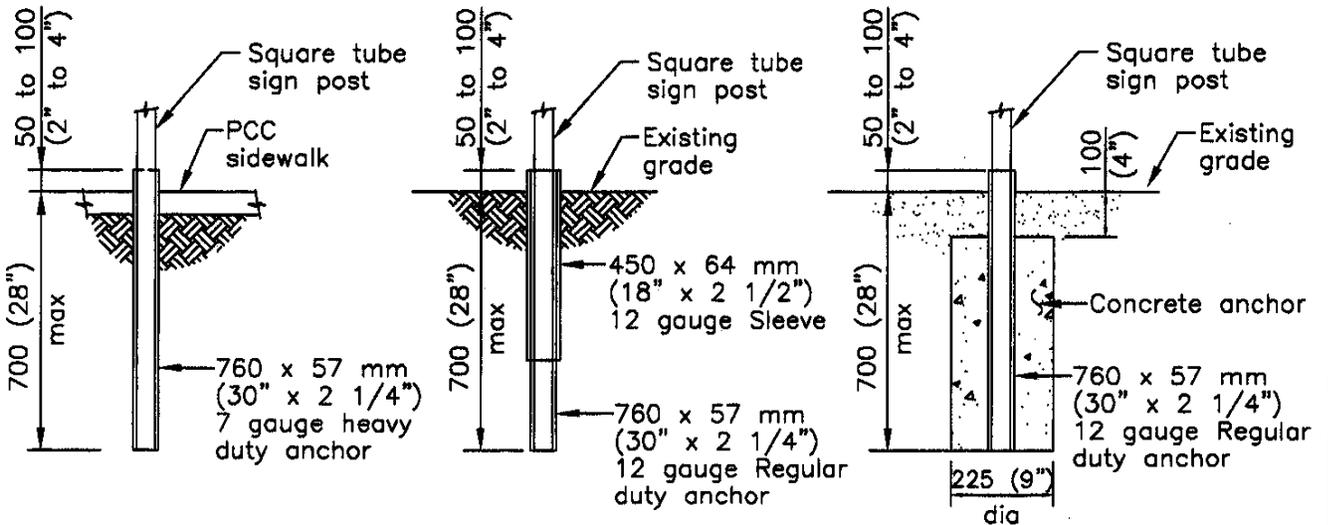


TYPICAL SIGN INSTALLATION



WITH SIDEWALK

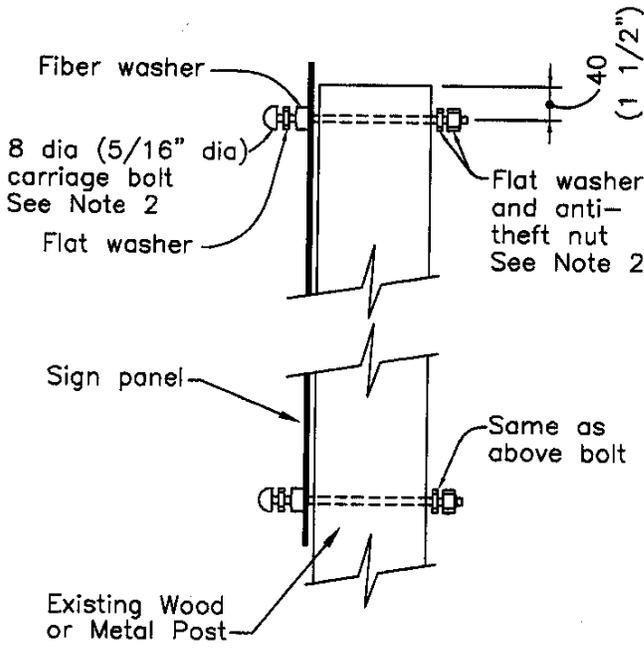
WITHOUT SIDEWALK

AT SAND BEACHES

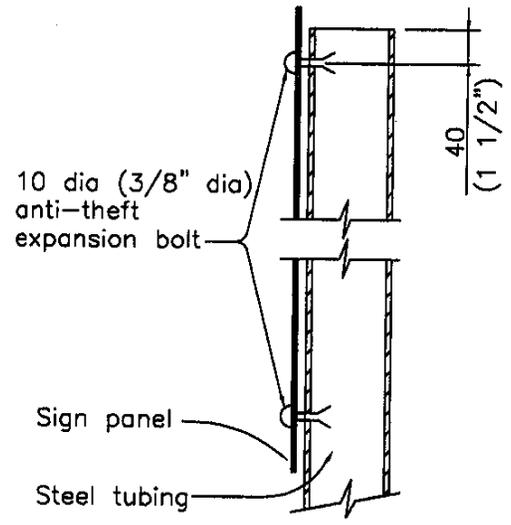
FOUNDATION DETAILS FOR SQUARE STEEL TUBING POST

Dimensions are in millimeters, except as noted

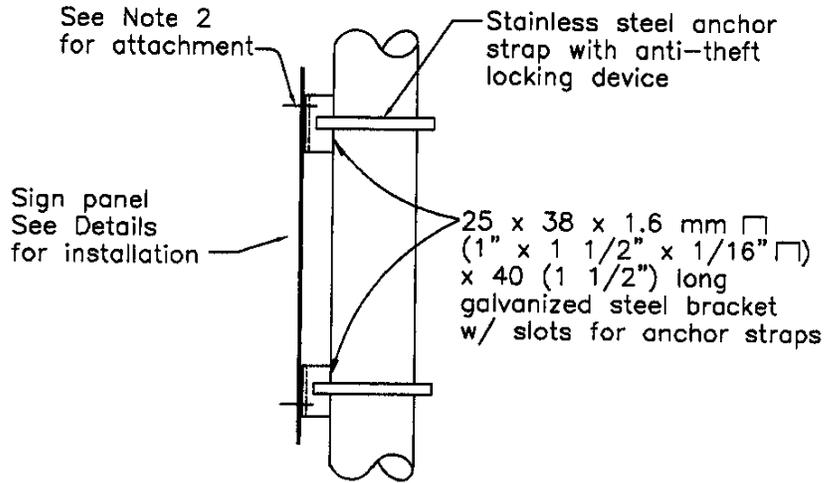
REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	04/05/96	TRAFFIC SIGN INSTALLATION	METRIC 317
2	11/28/01		
3	12/23/02		
4	02/28/03	APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.E. No. 40599	DATE: 4/16/03 EX. DATE 03/31/07
			SHEET 1 OF 3



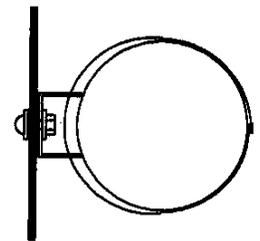
DETAIL A
SINGLE POST SIGN PANEL INSTALLATION
AT EXISTING POST



DETAIL B
SINGLE POST SIGN PANEL INSTALLATION
AT NEW TUBE STEEL POST



SIGN INSTALLATION ON STREET LIGHT
OR TRAFFIC SIGNAL STANDARD



Dimensions are in millimeters, except as noted

REVISIONS NO. DATE		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO. METRIC 317
1 04/05/96 2 11/24/97 3 12/23/02 4 02/28/03	TRAFFIC SIGN INSTALLATION		
APPROVED BY: <i>[Signature]</i> CITY ENGINEER R.E. No. 40599		DATE: <i>4/16/03</i> EX. DATE: 03/31/07	SHEET 2 OF 3

NOTES:

1. All signs shall be balanced installations unless otherwise shown on the project plans or as necessary to provide horizontal clearance from face of curb.
2. a. Sign panels shall be attached to wood post and steel brackets with galvanized 8 mm dia. (5/16" dia.) carriage bolts and anti-theft nuts per Detail A.
 b. Sign panels shall be attached to steel tubing with 10 mm dia. (3/8" dia.) approved anti-theft expansion bolts with cadmium plated washers on face of the sign per Detail B.
3. All new sign post shall be 51 x 51 mm (2"x2") square tubular posts and shall conform to the following specifications:

Material: Steel posts furnished shall conform to the standard specifications for hot rolled carbon sheet steel, structural quality, ASTM designation A570, Grade 50.

Finish: The square tubing shall be given triple coated protection by an in-line application of hot-dipped zinc (galvanized) per AASHTO M-120, followed by a chromate conversion coating and clear organic exterior coating. The inside surface shall be given corrosion protection by a double in-line application of a full zinc-based organic coating tested in accordance with ASTM B117 standards.

Shape: The cross section of the post shall be square tubing formed of 14 gauge (.083 U.S.S. gauge) steel, carefully formed into size and corner induction welded in such a manner that neither weld nor flash shall interfere with telescoping properties.

Die-Punched Knockouts: Knockout diameter shall be 11.1, ±0.4 mm (7/16", ±1/64") diameter on 25 mm (1") centers, on four opposite sides down the entire length of the post. Knockouts shall be on center line of each side in true alignment and opposite each other. Only knockouts necessary for sign mounting shall be removed.

4. All traffic signs shall be mounted at an angle of 90 degrees to the curblines, except for parking signs with arrows that are used to indicate the limits of the restricted zone, which shall be installed at an angle not less than 30 degrees and not greater than 45 degrees to the curblines.
5. No sign post shall be erected within the curb return radii.

Dimensions are in millimeters, except as noted

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		DATE: 4/16/03	EX. DATE: 03/31/07
		3 OF 3	