



DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
REGISTERED ENGINEER - CIVIL					
PLANS APPROVAL DATE _____					

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

SUMMARY OF OVERHEAD SIGN STRUCTURES			
Overhead Sign Type	Std Plan Sheet No.	Sign Panel Type	Comments
Truss	S1 to S18	Laminated Type A or overhead formed panel	Most popular - easy to fabricate and erect
Lightweight	S41 to S49	Laminated Type A	No walkway - Lightweight should not be used over freeway
Box Beam Closed Truss	S60 to S73	Laminated Type A or overhead formed panel	No new construction (Details shown on Standard Plans are for maintenance only).
Tubular	S30 to S37	Laminated Type A	
Bridge Mounted	See MTD 21-12 (A detail sheet is required)	Laminated Type A or overhead formed panel	Least expensive. Review by Bridge Maintenance Department may be required

**OVERHEAD SIGN FOUNDATIONS**

Select the post type or size from the appropriate type selection sheets in this booklet. Select the foundation from the standard plans using the post type, tubular post selection is shown only in the standard plans. See sheets S31 or S32. Foundation design is based on 2001 AASHTO article 13.6 Broms' approximate procedure assuming a cohesionless materials. The angle of internal friction used is 30 degrees and unit weight of soil used is 1922 Kg/m<sup>3</sup>.

Spread footings are generally used over utility lines where a CIDH pile is not practical. When existing soil is bay mud, foundation will require a special design plan and a special geology investigation.

SUMMARY OF ROADSIDE SIGN SUPPORT STRUCTURES			
Sign Type	Std Plan Sheet No.	Post Size	Comments
Wood Post	RS2	89 x 89 89 x 140 140 x 140 140 x 184	Use as first choice for economy
Laminated Wood Box Beam	RS3	Type M Type L	Use if wood post is too small
Steel Post	No Standard Plan, request special plan from Division of Structures	150 mm WF to 250 mm WF	Most expensive - use only for special cases of large signs
Timber Poles	No Standard Plan. For attachment details use 13 mm Ø bolts, bolted thru pole and panel. For bolt locations, see Detail A - Std Plan RS3	Class 1 to Class 6	Pole is not expensive, but it must be located behind a barrier. No breakaway details have been approved

**SPECIFICATIONS**

Specifications for new construction are in the Standard Specifications.

Changes to existing features require an investigation. Work to be completed must be identified, estimated and defined for payment. There are more than 80 coded contract items for signing. Refer questions to the district specification engineer.

**DEFINITIONS**

- Overhead Sign - Any sign within and over the traveled way.
- Roadside Sign - Sometimes called "Ground Mounted Sign" is a low level sign outside the traveled way and not on bridges. See Standard Plan RSI for clearances.
- Sign Panel - The message board. Usually it is colored green, white or orange.
- Laminated Panel - 3 - part construction. Two exterior face sheets covering a structural core.
- RSPF - Removable Sign Panel Frame
- EMS - Extinguishable Message Sign
- CMS - Changeable Message Sign

OVERHEAD SIGN PANEL TYPES			
Overhead Sign Panel Name	Std Plan Sheet No.	State Furnished	Comments
Overhead Formed Panel	S20 to S21	No	Standard plans allow mounting on sign truss. And can be used with bridge mounted signs also.
Laminated Type A Panel	S19 S46	No	Standard plans allow mounting on all overhead structures
Extinguishable Message Sign	ES-14A ES-14C	No	Standard plans allow only one special lightweight mount
Changeable Message Sign	SI01 to SI42	Yes	Single Post versions of CMS 500 and CMS 510 are in Standard Plans. Other mounts require special details from Special Designs.
Porcelain Enamel on Steel Single Sheet Panel	-----	No	This is an old panel that mounts on an RSPF. There are many in service. For panel alterations, remove and replace with overhead formed panel

**SIGN PANELS**

Laminated sign panels are available in multiples of 305 mm in length and 254 mm in depth. The largest single panel is 1.52 m by 7.31m. Overhead formed panels are available in multiples of 610 mm in length and 254 mm depth. Overhead formed panels should be used whenever an existing RSPF is available.

SUMMARY OF ROADSIDE SIGN PANELS		
Sign Panel Name	Size	Comments
Formed Single Sheet	Maximum Length 2.4 m Maximum Depth 915 mm Maximum Area 1.9 m <sup>2</sup>	Least expensive roadside sign panel. Do not mount on bridge barrier rail
Single Sheet Aluminum	Length 305 mm to 3.35 m Depth 305 mm to 2.4 m Maximum area 8.2 m <sup>2</sup>	
Laminated Type B	Maximum Length 7.3 m Maximum Depth 3.0 m Maximum Area 26.8 m <sup>2</sup>	This sign is 66.7 mm thick and should be used when panel exceeds maximums for single sheet aluminum
Laminated Type H	See Laminated Type B	Most expensive. Use Type H only for locations that have experienced damage to sign panel

**Note:**

Changeable message signs are State furnished. All other sign panels are Contractor furnished.

<b>THIS SHEET NOT A PART OF CONTRACT PLANS</b>	
<b>OVERHEAD SIGNS</b>	
<b>SIGN SUMMARY</b>	<b>1</b>