

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. Shall not be used over freeway
Extinguishable Message Sign (EMS)	ES14-C	Extinguishable Message Sign (EMS)	No walkway. Shall not be used over freeway
Box Beam Closed Truss	NO LONGER A DESIGN OPTION		
Tubular	S16, S17A, 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

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 table is also shown in the standard plans. See sheets S31 or S32. Foundation design is based on 2001 AASHTO article 13.6 Broms' approximate procedure assuming cohesion - less materials. The angle of internal friction used is 30° and unit weight of soil used is 120 lb/ft³.

For CMS foundation, see reference sheet 31.

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.

OVERHEAD SIGN PANEL TYPES			
Overhead Sign Panel Name	Std Plan Sheet No.	State Furnished	Comments
Overhead Formed Panel	S20, S21, S91, S92	No	Standard plans allow mounting on sign truss. Can be used with bridge mount also
Laminated Type A Panel	S19, S46	No	Standard plans allow mounting on all overhead structures
Extinguishable Message Sign (EMS)	ES-14A, ES-14C	No	Standard plans allow only one special lightweight mount
Changeable Message Sign (CMS)	S101 to S142	Yes	Can be mounted on a two post tubular if special design is obtained from Special Designs Branch
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

STANDARD PANEL SIZES

Laminated sign panels are available in multiples of 12" in length and 10" in depth. The largest single panel is 5' x 24'. Overhead formed panels are available in multiples of 2' in length and 10" depth. Overhead formed panels should be used whenever an existing RSPF is available.

SUMMARY OF ROADSIDE SIGN SUPPORT STRUCTURES			
Sign Type	Standard Plan Sheet No.	Post Size	Comments
Wood Post	RS2	4 x 4 4 x 6 6 x 6 6 x 8	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	6" WF to 10" WF	Most expensive - use only for special cases of large signs
Timber Poles	No Standard Plan, for attachment details use 1/2" dia 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

SUMMARY OF ROADSIDE SIGN PANELS		
Sign Panel Name	Size	Comments
Framed Single Sheet	Maximum Length 8' Maximum Depth 36" Maximum Area 20.5 ft ²	Least expensive roadside sign panel. Do not mount on bridge barrier rail
Single Sheet Aluminum	Length 12" to 11' Depth 12" to 8' Maximum Area 88 ft ²	
Laminated Type B	Maximum Length 24' Maximum Depth 10' Maximum Area 288 ft ²	This sign is 2 5/8" (Nominally 2 1/2") 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

SPECIFICATIONS

Specifications for new construction are in the Standard Specifications and Standard Special Provisions.

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 RS1 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

FWBT - Facing West bound Traffic

FEBT - Facing East bound Traffic

FNBT - Facing North bound Traffic

FSBT - Facing South bound Traffic

UC - Upper case

LC - Lower case

WF - Wide flange beam

THIS SHEET NOT A PART OF CONTRACT PLANS	
OVERHEAD SIGNS	
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