

**Historical Design Guidance
Standard Specifications**

05-20-11

For 2006 SSPs that were incorporated in the 2010 *Standard Specifications*, owners wish to retain the design guidance shown in the following table:

Section no.	Heading	Design guidance
12-3.06	Construction Area Signs	Include standard plans S93, S94, and S95 as appropriate. Include a lump sum contract item for Construction Area Signs, except when the only Construction Area Signs required for the project are for traffic control system for lane closure. Use if temporary object markers are used in conjunction with construction area signs and include standard plans A73A and A73B.
12-3.11	Plastic Traffic Drums	Use item code 120199 Traffic Plastic Drum.
12-3.15	Temporary Crash Cushion Module	If bid items of work shown on the project plans require temporary crash cushions, include bid item code 121162 temporary crash cushion module.
56-2.02	Single Sheet Aluminum Panels	Include Standard Plans RS2 and RS3 for roadside sign installation details and Standard Plans S93 to S95 for sign panel fabrication details.
56-2.03	Fiberglass Reinforced Plastic Panels	Include Standard Plans RS2 and RS3 for roadside sign installation details.
56-2.04	Laminated Panels	Include Standard Plans RS2 and RS 3 for Type B and Type H roadside laminated panel sign installation details and 2006 Standard Plans S19, S33, S42, and S46 for Type A overhead laminated panel sign installation details. Include Standard Plans S81 to S88 for laminated panel sign hardware and fabrication details
56-2.05	Formed Panels	Include Standard Plans S89 to S92 for formed panel sign fabrication details. Include also Standard Plans RS2 and RS3 for roadside formed panel sign installation details and Standard Plans S20 and S21 for overhead formed panel sign installation details
56-3	Overhead Sign Structures	Include bid item or items for furnish sign panel
56-3.03	Construction	If the existing sign support is a braced post installation in an unprotected area, a new roadside sign is required for the new sign panel. Do NOT specify mounting of sign panels on these posts. Show on the plans where existing sign panels are to be salvaged or disposed of.
56-4	Roadside Signs	Include bid item or items for furnish sign panel
56-5	Install Sign Panel on Existing Frame	Include bid item or items for furnish sign panel
56-6	Install Removable Sign Panel Frame	Include bid item or items for furnish sign panel. Include bid item 560206 "Furnish Removable Sign Panel Frame with Sign Panels Attached"

61-1.01D(2)(a)	Field Leakage Testing for Culvert and Drainage Pipes	61-1.01D(2)(a) applies if in place assurance of watertight joints are required due to high groundwater conditions, pipes operating under hydrostatic head, or where water quality concerns restrict infiltration/exfiltration. Refer to Highway Design Manual Index 854.1 (2), "Joint Leakage" for guidance. At locations where siphon or pressure pipe is being specified, section 61-1.01.01D(1)(a) applies instead of watertightness requirements under section 61-1.01D(2)(a). If pipe system is to be fully encased in concrete backfill, section 61-1.01D(2)(a) does not apply. Designate those pipe systems that will require field testing for watertightness on the drainage quantity plan sheets. Use bid item code: 610001 Field Leakage Testing.
62-2	Alternative Slotted Pipe	Include Standard Plans D98A, D98B, NSP D98D & NSP D98E Use bid item codes: 620710 12"Alternative Slotted Pipe. 620715 18"Alternative Slotted Pipe.
62-4	Concrete Backfill for Pipe Trenches	Where concrete backfill is shown for alternative pipe, use bid item code 620800 "Concrete Backfill (Pipe Trench)."
64-1	Plastic Pipe	Include Standard Plan A62F and NSP D97I. Corrugated PVC Pipe with smooth interior diameters range from 12 inches to 36 inches. If leakage is a concern, refer to section 61-1.01D(2)(a) for field leakage testing on joints. Show corrugated PVC pipe diameters on the plans. When concrete backfill is required for plastic pipe culverts, use bid item code 620800 "Concrete Backfill (Pipe Trench)."
64-2	Slotted Plastic Pipe	Include Standard Plans NSP D98D & NSP D98E. Add appropriate bid item codes to match pipe sizes used: 642110 12" Slotted Plastic Pipe. 642115 18" Slotted Plastic Pipe. Include heel resistant grate for pedestrian traffic areas. Show heel resistant grate on the plans. Concrete backfill for slotted plastic pipe is included in the bid price for slotted plastic pipe.
65	Concrete Pipe	For a corrosive environment use "ALT Pipe Software." Include Standard Plans A62D and A62DA. Use 620800 "Concrete Backfill (Pipe Trench)" if concrete backfill is required.
66	Corrugated Metal Pipe	Specify pipe joint classifications on Drainage Quantity plan sheets. 620800 "Concrete Backfill (Pipe Trench)."
66-1.02F	Corrugated Aluminum Pipe	Corrosion test data is required to support the use of aluminum or aluminized corrugated metal pipes.

66-3	Spiral Rib Pipe	Corrosion test data is required to support the use of corrugated aluminum pipe (CAP) and aluminum-coated corrugated steel pipe (CSP) as allowable alternatives. Size, thickness and joint classification MUST be shown on the plans. Size, thickness and joint classification MUST be shown on the plans. If leakage is a concern, include bid item 610001 for field leakage testing on joints. If spiral rib pipe is the only corrugated metal pipe culvert specified on the project, create a one-time item number under RTL Guide Section 7.6.1, "Non-Standard Items."
66-4	Composite Steel Spiral Rib Pipe with Smooth Interior	Use for Composite Steel Spiral Rib Pipe with smooth interior for diameters from 30 inches to 84 inches. Refer to HDM Table 854.3H for maximum height of cover, pipe diameter, and wall thickness. Use with Standard Plan A62F and NSP D97J. If leakage is a concern, include bid item 610001 for field leakage testing on joints. If composite steel spiral rib pipe with smooth interior is the only metal pipe culvert specified on the project, create a one-time item number under RTL Guide Section 7.6.1, "Non-Standard Items."
69-1.02F	Cable Anchorage System	Include standard plan D87C. For additional guidance, refer to Highway Design Manual section 834.4(5). One inch steel rod must be used instead of cable if the cable is in contact with soil.
69-1.03	Construction	Areas of hot mix asphalt overside drains must be included in the quantity for Hot Mix Asphalt (Miscellaneous Area) and the quantity for the hot mix asphalt material must be included in the hot mix asphalt bid item.
69-1.04	Payment	Payment for the cable anchorage systems is described in the work and therefore included in the payment for the size and type of pipe down drain involved under section 9-1.03 Payment Scope of the general provisions
83-410*	Cable Railing	Use with Standard Plan B11-47. When additional cement and air-entrainment are required, list concrete in post footings, post pockets, and gutters in SSP 51-320.
83-551*	Transition Railing (Type WB)	Use with Standard Plan A77J4.
83-552*	Transition Railing (Type STB)	Use with Standard Plan A78J.
83-553*	Transition Railing (Type DTB)	Use with Standard Plan A78K.
*Reference is based on 2006 SSP no.		