

Revision of Sections 105 and ♦ 518 Contractor Submittals And Bridge Expansion Device

Section 105 of the Standard Specifications is hereby revised for this project as follows: ♦

In subsection 105.02, delete Table 105-1 and replace with the following:

Table 105-1
Summary of Contractor Submittals

Section No.	Description	Type	Contractor P.E. Seal Required?
504	MSE Walls (Contractor Alternative)	Shop Drawing	Yes
504	MSE Walls (Default Design)	Shop Drawing	No
508	Timber Structures	Shop Drawing	No
509	Steel Structures	Shop Drawing	No
512	Bearing Devices Type II	Shop Drawing	No
512	Bearing Devices Type III	Shop Drawing	Yes
514	Pedestrian and Bikeway Railing	Working Drawing	No
518	Expansion Devices: 0-4"	Shop Drawing	No*
518	Expansion Devices: 0-6", 9", 12"...	Shop Drawing	Yes
601 & 618	Precast Panel Deck Forms	Working Drawing	No
601	Permanent Steel Bridge Deck Forms	Working Drawing	Yes
601	Falsework	Working Drawing	Yes
602	Reinforcing Steel	Working Drawing	No
606	Bridge Railing	Working Drawing	No
607	Sound Barriers (Alternative)	Shop Drawing	Yes
607	Sound Barriers (Default Design)	Working Drawing	No
613	Light Standards (Low Mast)	Working Drawing	Yes
613	Light Standards (High Mast)	Working Drawing	Yes
614	Overhead Sign Structures	Shop Drawing	Yes*
614	Variable Message Signs (Cabinet and tilting bracket)	Working Drawing	Yes
614	Traffic Signal Pole (Mast Arm)	Shop Drawing	No
614	Traffic Signal Pedestal Pole	Working Drawing	Yes
614	Traffic Signal Equipment	Working Drawing	No
618	Prestressed Concrete (Pre-tensioned)	Shop Drawing	Yes*
618	Prestressed Concrete (Post-tensioned)	Shop Drawing	Yes*
618	Steel Diaphragms between Prestressed Girders	Working Drawing	No
628	Prefabricated Pedestrian Bridges	Shop Drawing	Yes

*A PE seal is required where the Contractor has provided the design for the item or performed engineering to modify the details shown on the plans. The PE seal is not required where complete details are provided on the plans.

Revision of Sections 105 and ♦ 518 Contractor Submittals And Bridge Expansion Device

Revise Section 518 of the Standard Specifications for this project as follows:

In subsection 518.04, delete the second paragraph and replace with the following:

The device shall consist of a continuous premolded elastomeric expansion joint seal (also called neoprene gland) and steel extrusions as shown on the plans, required by the manufacturer, or specified herein for attaching the elastomeric expansion joint seal to the anchored steel extrusions. The expansion device shall have a rated range of movement of 4 inches including rotations.

In subsection 518.04, delete the fourth paragraph and replace with the following:

Structural steel extrusions for strip seal expansion devices shall conform to the specifications of ASTM A709 Grade 36 or Grade 50W, steel extrusions for modular expansion devices and cover plates shall conform to the specifications of ASTM A709 Grade 50 or Grade 50W, whereas other structural steel shall conform to the specifications of ASTM A709 Grade 36, Grade 50 or Grade 50W. Fabrication and welding of structural steel shall conform to the requirements of Section 509. The material designations for all steel components shall be shown in the Contractor's shop drawings.

Where only a portion of an expansion device is to be replaced, the Contractor shall field verify the manufacturer of the existing anchored steel extrusion to be matched. The Contractor shall field verify the existing length of anchored steel extrusion that needs to be replaced. The Contractor shall provide verification of the manufacturer and length to be replaced to Engineer for review. ■

In subsection 518.09, delete the first and second paragraph and replace with the following:

The Contractor shall furnish shop drawings in conformity with subsection 105.02 for all elastomeric expansion devices bid under this section. Shop drawings shall specifically identify each piece, location of welding, bends in the extrusions, galvanizing, and installation hardware. The manufacturer's instructions for proper installation of the expansion joint device shall be included in the shop drawings. Shop drawings which lack manufacturer's installation instructions will be returned for resubmittal. ♦

Where applicable according to the plans, details of the expansion device through cover plates, and connections shall be shown on the shop drawings.

Subsection 518.09 shall include the following:

The installation of the new bridge expansion device shall conform to the staged construction required by the Lane Closure Policy unless otherwise directed or approved by the Engineer.

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Subsection 518.13 shall include the following:

The cost for the technical representative of the manufacturer shall be included in the work.

Instructions to Designers (delete instructions and symbols from final draft):

Use this project special provision when placing Bridge Expansion Device (0-4 Inch).

♦ Use revision to 105 when placing Bridge Expansion Device (0-4 Inch) joints that are complex, e.g., T-joints, high skew with horizontal bends into barrier, multiple vertical bends for sidewalks, etc. to increase quality control.

■ Use when only a portion of the steel rails are replaced. A partial joint replacement is not preferred and short sections or joints in the wheel path should be avoided. However, the BPM Program has encountered at least one newer structure where this was the appropriate course of action, and the joint was replaced across one 12 ft lane.

Permanent Changes to Project Dated Special Provisions

Revision of Section 518 and 105 Bridge Expansion Device

Date	Author	Description of Change
1/14/19	BPM Cons.	Initial Website Issue
04.11.2023	M. Kayen	Revisions to make spec online accessibility-compliant. 5.22.23 Additional accessibility work.