

723-R-756 REINFORCED CONCRETE THREE-SIDED STRUCTURES

(Adopted 11-18-22)

The Standard Specifications are revised as follows:

SECTION 723, AFTER LINE 101, INSERT AS FOLLOWS:

The three-sided structure, headwalls, wingwalls, and footings shall be designed and constructed in accordance with the dimensions shown on the contract plans. Construction joints shall not be used within the cross-section of precast three-sided structures unless shown on the contract plans.

SECTION 723, BEGIN LINE 159, DELETE AND INSERT AS FOLLOWS:

(c) Working Drawings

Working drawings shall be submitted in accordance with 105.02 for fabrication of a precast or cast-in-place reinforced concrete three-sided structure, precast or cast-in-place reinforced concrete three-sided structure extension, precast or cast-in-place headwalls, precast or cast-in-place wingwalls, and precast or cast-in-place spandrel walls. The working drawings shall include *notes indicating design assumptions, applicable design codes, and material requirements*, all details, dimensions, and quantities necessary to construct the structure, headwalls, wingwalls, or spandrel walls and shall include, but not be limited to, the following information.

1. Structure span and rise.
2. Structure section details showing all concrete dimensions, ~~and reinforcement requirements~~ *joint details, locations and details of lifting devices or inserts, locations and details of pre or post-installed anchorages, concrete clear cover, size and spacing of reinforcing bars or WWR, and reinforcing bar bending diagrams*. An analysis of the precast segment modeled as a simple span and designed in accordance with AASHTO LRFD Bridge Design Specifications Section 5.7.3. This analysis shall demonstrate that the precast segment is designed to withstand the forces of erection. Details for providing horizontal restraint of the structure legs during installation until after the completion of backfill placement shall be included unless the analysis indicates such details are not needed.

SECTION 723, BEGIN LINE 278, INSERT AS FOLLOWS:

723.10 Pedestals

Where a reinforced concrete pedestal is required between the base of the structure leg and the top of the footing *to provide the required rise and low structure elevation as shown on the contract plans*, the Contractor shall have the option of providing a structure with extended legs or constructing the pedestals.

SECTION 723, BEGIN LINE 395, INSERT AS FOLLOWS:

723.14 Precast Reinforced-Concrete Three-Sided Structure Section Joints
