

ALABAMA DEPARTMENT OF TRANSPORTATION

General Application Special Provision

DATE: October 9, 2026

GASP No. 26-GA0012

EFFECTIVE DATE: TBD

SUBJECT: Bridge Barrier Rail

Alabama Standard Specifications, 2026 Edition, SECTION 510 shall be revised as follows:

SECTION 510 BRIDGES

510.03 Construction Requirements.

(c) Superstructure

Subitem 510.03(c)6j shall be revised as follows:

6. Reinforced Concrete Bridge Decks.

j. Barrier Rails Placed By Slip Forming.

Bridge barrier rails constructed by the use of a slip form extrusion machine shall be well compacted dense concrete meeting all the requirements of Section 501, except for the requirement for fixed forms. The forming portion of the extrusion machine shall be readily adjustable vertically during the forward motion of the machine so that the top of the barrier can be maintained at the required grade.

Open joints and control joints shall be located as required on the plans and Bridge Special Project Drawing series BBR. The joints shall be provided as soon as the concrete has hardened to the degree that tearing and raveling is not excessive, and before uncontrolled shrinkage cracking begins. This time may be as short as four hours or even less in extremely warm weather, but not over 12 hours unless authorized by the Engineer. If extreme conditions exist which make it impractical to prevent uncontrolled cracking, the procedure shall be revised immediately.

(1) Open Joints.

Longitudinal bars shall be cut at joint locations to provide for 2 inch {50 mm} end cover. The Contractor shall be responsible for marking these locations in advance of placement of concrete so that sawed joints will be properly located.

~~The joints shall be sawed as soon as the concrete has hardened to the degree that tearing and raveling is not excessive, and before uncontrolled shrinkage cracking begins. This time may be as short as four hours or even less in extremely warm weather, but not over 12 hours unless authorized by the Engineer. If extreme conditions exist which make it impractical to prevent uncontrolled cracking by early sawing, the procedure shall be revised immediately to adjust the sequence of sawing.~~

A minimum saw cut width of 5/16 of an inch {8 mm} shall be maintained. On the inside of the barrier, the saw cut shall extend from the top to the bottom of the rail to the point of intersection with the bridge deck. On the outside of the barrier, the saw cut shall extend from the top to within 11 inches {280 mm} of the bottom of the rail. Joints at the end of bridge decks shall match the opening in the deck.

(2) Control Joints.

Longitudinal bars shall be continuous through the location of control joints. Joints are made by tooling or sawing on both vertical faces and top of barrier rail. Joints are maximum ¾" deep. Joint recesses shall be filled with a cold applied silicone from the qualified materials list III-4.