

ALABAMA DEPARTMENT OF TRANSPORTATION

General Application Special Provision

DATE: October 13, 2022

GASP No. 22-GA0018

EFFECTIVE DATE: April 1, 2023

SUBJECT: Roadway Pipe.

Alabama Standard Specifications, 2022 Edition, shall be amended as follows:

SECTION 530 ROADWAY PIPE CULVERTS

530.03 Construction Requirements.

(a) General.

1. Pipe Inspection.

Item 530.03(a)1 shall be replaced by the following:

1. Pipe Inspection.

Pipe shall be laid only in the presence of the Engineer or his authorized representative and shall not be covered until approved. Pipe installed contrary to this requirement will be rejected and shall be replaced by the Contractor without additional compensation.

Precast concrete pipe will be evaluated at delivery and any time prior to installation according to the criteria in AASHTO R 73.

(d) Placing Pipe.

3. Joining Pipe.

a. Rigid Pipe (Concrete, C.I.)

Subitem 530.03(d)3a shall be replaced by the following:

a. Rigid Pipe (Concrete, C.I.)

Rigid pipe may be of bell and spigot, tongue and groove, or other approved design unless a specific type is specified (joint configuration for round rigid pipe shall accommodate the use of a rubber gasket seal). The method of joining pipe sections shall be such that the ends are fully entered, and the inner surfaces are reasonably flush and even.

Joints for non-round rigid pipe shapes shall be sealed with bituminous plastic cement, preformed flexible sealant, rubber gaskets (when joint configuration can accommodate the use of a rubber gasket), or other type sealers that may be approved. Joints shall be thoroughly cleaned before being sealed and shall be sealed for the full circumference of the joint unless otherwise directed.

When joining round R.C. pipe, only rubber gaskets shall be used unless otherwise approved by the Engineer.

When bituminous plastic cement is used, the interior surface of the hub, beginning at the lip of the normal interior surface of the pipe, shall be coated with a layer of sealing material that will cover at least 0.33 times the distance, measured along the surface of the hub, parallel to the normal length of the pipe. The thickness of the mastic placed shall be such that it will provide a uniform seal between the edges of the pipe sections being joined (approximately 1/2 of an inch {10 mm} on the inside shoulder of the hub and approximately 1/8 of an inch {3 mm} of material on the remaining area to be covered).

When Pre-formed flexible sealant is used it shall be placed according to the manufacturer's requirements.

No joint shall be considered satisfactory when the space between the edges of the pipes being joined exceeds 1/2 of an inch {10 mm} for more than 0.33 times the circumference of the pipe. The inside of the joint shall be wiped and finished smooth.

Rubber or other types of gaskets shall be installed as recommended by the manufacturer, rubber gaskets installation shall include gasket equalization and application of lubricant.

SECTION 831 PRECAST CONCRETE PRODUCTS

831.01 Description.

All precast concrete products, except precast non-prestressed concrete bridge members, shall be furnished from an approved producer that is participating in, and meeting the requirements given in ALDOT-364. ALDOT 364 is the "Procedure for Inspection of Concrete Pipe, Precast Manholes, Precast Box Culverts, and Miscellaneous Precast Concrete Products".

Producers of precast concrete products shall be shown in List I-8, PRODUCERS OF PRE-CAST CONCRETE PRODUCTS, of the Department's "Materials, Sources, and Devices with Special Acceptance Requirements" Manual. Information concerning this list is given in Subarticle 106.01(f) and ALDOT-355.

Precast products will be evaluated at delivery according to the criteria in AASHTO R 73.

SECTION 846 PIPE CULVERT JOINT SEALERS

846.01 Rigid Pipes.

(d) Rubber Gaskets.

Subarticle 846.01(d) shall be replaced by the following:

(d) Rubber Gaskets.

Rubber gaskets shall be used on all round pipe joints. This material shall meet the latest requirements of ASTM C443 "Standard Specification for Joints for Concrete Pipe and Manholes Using Rubber Gaskets". The material shall be installed per the manufacturer's recommendations including gasket equalization and application of lubricant.

SECTION 850 ROADWAY PIPE

850.01 Concrete Pipe.

(f) Handling and Storage.

Subarticle 850.01(f) shall be replaced by the following:

(f) Handling and Storage.

Pipe shall be handled, transported, delivered, and stored in a manner that will not injure or damage the pipe. Pipe shall not be shipped before it has been inspected and approved. Pipe that is damaged during shipment or handling will be rejected even though satisfactory before shipment. Pipe dropped from platforms or vehicles or in the pipe trench will be rejected.

Pipe will be evaluated at delivery and any time prior to installation according to the criteria in AASHTO R 73.