

ALABAMA DEPARTMENT OF TRANSPORTATION

General Application Special Provision

DATE: May 26, 2026

GASP No. 26-GA0010

EFFECTIVE DATE: **TBD**

SUBJECT: Concrete Barrier Retaining Wall

Alabama Standard Specifications, 2026 Edition, are hereby amended to add a New SECTION 574 as follows:

SECTION 574

CONCRETE BARRIER RETAINING WALL

574.01 Description.

This Section shall cover the work of constructing a concrete barrier retaining wall at the location shown on the plans, proposal, or directed. Barriers shall be basically classified as to "Type" which will designate the size, shape, height, etc. all in accordance with details shown in the plans. Barriers may be cast in place, extruded by slip form equipment, or precast and installed in a permanent manner.

574.02 Materials.

All materials furnished for use shall conform to the appropriate requirements of Division 800, Materials, and the following:

(a) Selected Backfill Material.

Selected backfill material for Concrete Barrier Retaining Walls shall be well graded, angular, commercially produced sand or crushed stone (material containing slag will not be allowed) free from organic matter and/or other deleterious material.

The following types of materials will be allowed:

1. Concrete sand meeting the requirements of Section 802, Fine Aggregates (F.M. waived).
2. Section 801, Coarse Aggregate crushed material that is smaller than #467 with 10% or less passing the #200 {75 μ m} sieve.
3. Crusher run material with 100% passing a 2-inch {50 mm} sieve and with 10% or less passing the #200 {75 μ m} sieve.

(b) Cast-in-Place Reinforced Concrete Barrier Retaining Wall.

Concrete for cast-in-place reinforced concrete barrier retaining walls shall be Class A concrete in accordance with the material requirements given in Section 501.

Reinforcing steel shall be furnished and placed in accordance with the material requirements given in Section 502.

The bituminous expansion joint filler and waterstop shall meet the requirements given in Section 832.

Dowels at expansion joints shall be plain Grade 60 bars meeting the requirements given in AASHTO M 31. Pipe sleeves at expansion joints shall be Grade 36 sleeves meeting the requirements given in AASHTO M 270.

Cast-in-place walls shall have a deposit (belt), not less than 1 foot {300 mm} wide and 1 foot {300 mm} deep, of approved local or commercial free draining material placed full length along the back face of the vertical walls at the line of weepholes. This material shall conform to the requirements given in Subarticle 214.02(b).

574.03 Construction Requirements.**(a) General.**

The concrete mix, construction, placing of the concrete, curing, and finishing shall be in accordance with the appropriate provisions of Section 501, unless otherwise provided in this Section or noted in the plan details.

(b) Excavation and Backfill.

Excavation and backfill for permanent barriers shall be in accordance with the provisions of Section 214.

(c) Slip Form Method.

Barriers 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 predetermined grade.

(d) Concrete Surface Tolerances and Finishing.

The finished concrete shall be within reasonably close conformity to the lines, grades, and dimensions shown on the plans or directed; the barrier shall present a smooth uniform appearance free from objectional cavities or projections. A 10 foot {3 m} straightedge, laid on the top faces of the barrier, shall not vary more than 0.02 foot {6 mm} from the edge of the straightedge except at grade changes and curves and be free of humps, sags or other irregularities.

Concrete surfaces shall be finished in accordance with the requirements given in Section 501 for Class 1 with exposed surfaces receiving a Class 2 coated surface finish.

(e) Joints.

Joints shall be in accordance with the provisions of Section 501, except as follows:

1. Surface edges on exposed vertical contraction joints shall be rounded with a 1/4 inch {6mm} edger or sawed.
2. Vertical expansion joints may be open or sealed in accordance with plan requirements.

(f) Cast-in-Place Reinforced Concrete Retaining Wall.

ALDOT designed Cast-In-Place Walls shall be constructed in accordance with the details shown on Sheets 1 through 4, in ALDOT Standard Drawing - Retaining Walls 0' to 34' Heights.

Concrete for cast-in-place reinforced concrete retaining walls shall be furnished and placed in accordance with the requirements given in Section 501. Reinforcing steel shall be furnished and placed in accordance with the construction requirements given in Section 502. All other materials shall be installed in accordance with the details shown on the standard wall details or the approved wall details.

574.04 Method of Measurement.

Concrete Barrier Retaining Walls will be measured for payment to the nearest 0.1 foot {0.1 m} along the top surface of the barrier.

Excavation and backfill shall be measured in accordance with the provisions of Section 214.

574.05 Basis of Payment.**(a) Unit Price Coverage.**

The Concrete Barrier Retaining Walls, measured as noted above, shall be paid for at the appropriate unit price bid provided in the proposal. Said unit price bid shall be full compensation for the furnishing of all materials and the construction of the barrier complete in place, including all equipment, tools, labor, and incidentals necessary to complete the work.

(b) Payment will be made under Item No.:

574-A Concrete Barrier Retaining Wall, * Slope Barrier Face- per linear foot {meter}

- Vertical or Single