

SECTION 00820 - CONCRETE BARRIER

(Follow all instructions and make all edits with "Track Changes" turned on. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the project. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)

Comply with Section 00820 of the Standard Specifications modified as follows:-

00820.11(a) Concrete - Replace this subsection, except for the subsection number and title, with the following:

Furnish concrete meeting the requirements of Section 00440, except modify Aggregates as follows:

(1) Fine Aggregate - Furnish Fine Aggregate meeting the test requirements of 02690.30(c) and 02690.30(d) with test results less than 1 year old.

(2) Coarse Aggregate - Furnish Coarse Aggregate meeting the test requirements of 02690.20(b) and 02690.20(c) with test results less than 1 year old.

00820.11(b) Hardware - Replace this subsection, except for the subsection number and title, with the following:

Furnish pins, bolts, and dowels according to ASTM A449 and hot-dip galvanized according to AASHTO M 232 (ASTM A153).

00820.12(b) Barrier Used on Previous Projects - Replace this subsection, except for the subsection number and title, with the following:

Precast concrete barriers used on previous projects may be reused in permanent installations, provided they meet all the requirements of this Section. Prior to delivery to the Project Site provide documentation required by 00165.10(b) and barriers:

- Are restored to like-new condition, without visible cracks, chips, spalls or corroded loops.
- Present a surface of uniform texture and appearance.
- Are free of markings, except as required by 00820.11(e).

Apply two coats of a water-based coating Material meeting the requirements of 02210.30 after installation in final position.

00820.41 Line and Grade - Replace this subsection, except for the subsection number and title, with the following:

Place precast barrier sections on the Pavement surface. Ensure new Pavement surfaces placed as a part of this Project meet the appropriate smoothness requirement prior to placing the barrier. If corrective work is required for existing surfaces to receive concrete barrier, it is paid according to 00195.20.

Place the barrier sections so that the joints offset no more than 1/4 inch transversely and no more than 1/2 inch vertically.

Construct the top and face of finished barriers true and straight. Construct the top surface of the barriers to uniform width and free from humps, sags, or other irregularities. When a 12-foot straightedge is laid on the top or face of the barrier, do not vary the surface does more than 1/4 inch from the edge of the straightedge, except at grade breaks or curves. To compensate for variations in the Roadway grade and cross Slope, adjust the height of the barrier at no additional cost to the Agency.

00820.43(a)(2) Latex Paint Cure - Replace the paragraph that begins "Barriers cured in this ..." with the following paragraph:

Barriers cured in this manner are considered to have met the surface finishing requirements of 00820.45 except that additional coats may be necessary to provide uniform coverage and appearance to correct construction damage.

00820.43(b)(2) Steam Cure - Replace the paragraph that begins "Steam curing can be ..." with the following paragraph:

Steam curing can be substituted for water curing if done under a suitable enclosure constructed to contain live steam and to minimize moisture and heat loss. Steam cure at 100 percent relative humidity to prevent loss of moisture and to provide excess moisture for proper hydration of cement. Do not apply the steam directly to the concrete.

00820.45 Surface Finishing - Replace the paragraph that begins "After stripping forms ..." with the following paragraph:

After stripping forms and while the concrete is still green, remove all fins and form marks, and repair all rock pockets and holes having a surface opening over 3/8 inch in diameter with portland cement grout meeting the requirements of 02080.40. Prevent grout from drying prematurely. Additional finishing after precast concrete barrier is set in its permanent position may be required to present a surface of uniform texture and appearance.

00820.49(a) Test Section - Replace this subsection, except for the subsection number and title, with the following:

Cast a test section at least 25 foot long that:

- Is placed off the final barrier location site
- Has the same section and reinforcement as detailed

- Includes one typical contraction or expansion joint.
- Is removed and disposed of at no additional cost to the Agency

00820.49(b) Prior Performance - Replace the paragraph that begins "Identify at least two ..." with the following paragraph:

Identify at least two recent projects where the Contractor installed slipformed single-slope concrete barrier. For each project, provide the name and phone number of a person the Engineer may contact to determine the success of the installation. The Engineer will determine whether to allow slipforming on the current project.

00820.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Replace the paragraph and bullets that begins "Payment will be payment ..." with the following paragraph and bullets:

No separate or additional payment will be made for:

- Excavating and backfilling buried ends of concrete barrier
- Securing concrete barrier to the Roadway by means of grout or keyways
- Moving, stockpiling, handling, and pinning removed and reinstalled concrete barrier.