

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

(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 00759 of the Standard Specifications modified as follows:

00759.02 Definitions – Delete this subsection.

00759.03 Required Submittals - Replace the title of this subsection with "**Submittals**"

Replace the paragraph that begins "Material ordered or Work ..." with the following paragraph:

Material ordered or Work performed before the Engineer reviews and returns the documents is at the Contractor's risk.

00759.03(d) Corrective Action Plan - Replace the paragraph that begins "At least 21 Calendar Days ..." with the following paragraph:

At least 21 Calendar Days before concrete Structures Work is scheduled to begin, submit a corrective action plan. Address procedures to correct deficient Structures through minor corrective action or replacement according to 00759.55(a) in the corrective action plan, and include:

Replace the bullet that begins "List of minor ..." with the following bullet:

- List of minor corrective actions that are used to correct deficiencies, according to 00759.50 and 00759.55.

00759.11 Aggregate Base - Replace this subsection, except for the subsection number and title, with the following:

Furnish Aggregate Base Materials for Base, foundation courses, Leveling courses, or bedding meeting the requirements of 00640.10 or dense graded Base Aggregate in 00641.10 as appropriate and included in the Special Provisions.

00759.12 Curb Ramp Treatment - Delete this subsection.

00759.21 Concrete Extruding Machine - Replace this subsection, except for the subsection number and title, with the following:

Provide concrete extruding machines that operate under sufficient restraint to forward motion to produce a well consolidated mass of concrete.

00759.22(a) Qualified Smart Levels — Replace this subsection, except for the subsection number and title, with the following:

Measure Slopes ~~will be measured~~ with the use of a 24-inch SmartTool level model 92379 or model 92500, and a 6-inch SmartTool level model 92346 or 92510.

00759.23 Concrete Resurfacing Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide power-operated scarifying Equipment capable of uniformly removing and preparing the existing surface to depths required. For concrete grinding operations, provide 12 segment grinders, fine-toothed scarifying Equipment, or other approved grinding Equipment.

00759.42 Foundations - Replace this subsection with the following subsection:

00759.42 Aggregate Base - Before placing concrete, prepare underlying Aggregate Base surfaces according to Section 00641.

00759.43 Foundation Preparation - Replace the paragraph that begins "Bring areas ..." with the following paragraph:

Bring areas where Structures are to be constructed to established line, and make firm, dry and free of all Unsuitable Material before placing concrete. Provide clean and moist existing concrete surfaces at the time of placing new concrete.

00759.45 Reinforcement, Dowels, and Tie Bars - Replace the paragraph that begins "Provide dowels ..." with the following paragraph:

Furnish dowels with "slip sleeves" and place as load transfer devices where shown. Place dowels without "slip sleeves" as fastenings or ties between new and existing underlying concrete when shown.

00759.48 Expansion Joints - Replace the bullet that begins "Not less than ..." with the following bullet:

- Not less than 1/2 inch wide, except where abutting or underlying concrete joints are larger, then match those joints' width.

Replace the bullet that begins "Which completely ..." with the following bullet:

- That completely separate the concrete segments.

00759.48(a) Curbs, Islands, and Traffic Separators - Replace the paragraph that begins "Provide expansion ..." with the following paragraph:

Construct expansion joints:

00759.48(b) Driveways, Walks, Monolithic Curbs and Sidewalks, and Surfacing - Replace this subsection, except for the subsection number and title, with the following:

Do not construct expansion joints within the curb ramp, and between separate concrete pours on the same Project.

Construct expansion joints:

- Between driveways and concrete Pavement.
- Transversely in walks opposite expansion joints in adjoining curbs and elsewhere so the distance between joints does not exceed 45 feet.
- Transversely in walks at a distance of 16 feet to 8 feet from ends of walks that abut curbs.
- Around poles, posts, boxes, and other fixtures that protrude through or against the Structures.

00759.48(c) Stairs - Replace this subsection, except for the subsection number and title, with the following:

Construct expansion joints for stairs at the top and bottom landings as shown.

00759.49(c) Requirements - Replace this subsection, except for the subsection number and title, with the following:

Construct contraction joints that:

- Are not less than 1/8 inch or more than 1/4 inch wide.
- Have a depth of one-third the thickness of the concrete.
- Have clean, unfilled grooves (if preformed expansion joint filler is not used).

00759.50(a) General - Replace the paragraph that begins “The top and face...” with the following paragraph:

Construct the top and face of Structures true and straight, free from humps, sags, or other irregularities. Do not vary the surface by more than 1/4 inch from the edge of 12-foot-long straightedge laid on the top or face of the Structure, except in curves. Provide and operate the straightedge as directed. Unless otherwise shown or directed, tool edges to 1/4-inch radius.

Replace the paragraph that begins “Install truncated domes...” with the following paragraph:

Construct tactile surface indicators according to Section 00765 to the slopes, lines, grades, and dimensions as shown or established.

00759.50(c) Driveways, Walks, and Surfacing - Replace the paragraph that begins “The 24-inch smart ...” with the following paragraph:

The 24-inch smart level is used to measure driveway and sidewalk cross slopes on the pedestrian access route.

00759.50(d) Curb Ramps - Replace the paragraph that begins “The 6-inch smart ...” with the following paragraph:

Use the 6-inch smart level to measure the curb running Slope. Use the 6-inch smart level to measure Slopes on portions of the curb ramp, gutter pan, or adjacent surfaces that cannot accommodate a 24-inch smart level. All other curb ramp locations will use a 24-inch smart level to measure Slopes.

(Use the following subsection .50(f) when historic dates and names are required.)

Add the following subsection:

00759.50(f) Historic Dates and Names - Preserve or re-stamp historic dates and street names in existing sidewalk corners into the new concrete. Do not install historic date and street name stamps in the Pedestrian Accessible Route.

Stamp the dates or street names exactly as they existed in the sidewalk corner. This includes misspelled words and names that are no longer used for the street name. Restamp the original date with a slash and the current year into the new corner curb. Do not preserve or re-stamp Contractors’ names. Provide a set of stamping tools to complete the Work.

(Use the following sentence when stamping tools are available from PBOT.)

A set of stamping tools is available for loan through the Portland Bureau of Transportation construction office on a first come, first served basis.

(Use the following subsection .50(g) when horse rings are required.)

Add the following subsection:

00759.50(g) Horse Rings - Notify the Engineer when existing horse rings are discovered. Do not begin concrete pour until the Engineer provides notification of the action plan for reinstallation of the horse ring(s). If historic horse rings are encountered during curb removal, salvage and reinstall horse ring assembly as close to the existing location as directed by the Engineer. Do not install metal horse rings on ramp runs, on curb ramp flares, on curb returns adjacent to curb ramps, or in the Pedestrian Accessible Route.

00759.51 Curing - Add the following paragraph to the end of this subsection:

Concrete Structures may be opened to Public Traffic before 7 Calendar Days if the concrete has reached a minimum compressive strength of 2,000 psi as verified by the rebound number determined according to ASTM C805. Test at locations as directed.

(Use the following subsection .52 when historical marker installation is required.)

Add the following subsection:

00759.52 Historical Marker Installation - Install salvaged historical markers in concrete surfacing as shown or as directed, flush with the adjacent concrete surface. Ensure the historical marker is free of all laitance, dirt, dust, grease, efflorescence, curing agents, paint, or other foreign material after installation. Do not install historical markers in the Pedestrian Accessible Route.

00759.53 Welding - Replace this subsection, except for the subsection number and title, with the following:

Conform welding, welder qualifications, prequalification of weld details and inspection of welds to AWS D1.1. Submit all welding procedure specifications to the Engineer for approval.

00759.54(b) Accuracy of Punched Holes - Replace this subsection, except for the subsection number and title, with the following:

Locate all holes punched full size so accurately that when multiple anchor plates are stacked with the edges even, a cylindrical pin 1/8 inch smaller in diameter than the nominal size of the punched hole may be entered perpendicular to the face of the plate without drifting in each of the connecting holes in the same plane. Non-conforming pieces are rejected.

00759.55(a)(2)a. Keyway - Replace this subsection, except for the subsection number and title, with the following:

Sawcut a keyway at the boundaries of repair areas that are not already defined by panel control joints. Sawcut the keyway 1/8 inch wide and 1/4 inch deeper than the edge of the repair area. Bevel inside edge of keyway at a 45-degree angle.

00759.55(a)(2)d. Resurface - Replace this subsection, except for the subsection number and title, with the following:

Furnish concrete resurfacer from the QPL according to 02015.60; refer to QPL remarks to select an appropriate material based on allowable installation depths. Furnish resurfacer in a color that closely matches the color of surrounding concrete surfaces. Mask boundaries of the repair area. Use hand tools to work resurfacer into keyways and match existing grade at boundaries. Apply a light broom-finish to achieve non-slip surface.

00759.55(b) Acceptance of Structures - Replace this subsection, except for the subsection number and title, with the following:

Once the corrective work or replacement has been completed, acceptance is based on the Engineer's inspection and approval of the Structure.

00759.80 Measurement - Replace the bullet that begins "**Each Basis...**" with the following bullet:

- **Each Basis** - Measurement will be by actual count.

00759.90 Payment - Delete Pay Items (k), (l) and (m) from the Pay Item list.

Replace the paragraph that begins "In item (a) the type ..." with the following paragraph:

In item (a) the type of curb is inserted in the blank, if appropriate. Item (a) includes the curb runs constructed adjacent to the curb ramps.

Replace the paragraph that begins "In item (g)..." with the following paragraph:

In item (g), the specified thickness, or type, of concrete Surfacing is inserted in the blank, if appropriate.

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.

(Use the following pay item (p) when Historical Marker Installation is required.)

Add the following Pay Item to the Pay Item list:

(p) Historical Marker Installation.....Each

Delete the paragraph that begins "Item (k) includes..."

Delete the paragraph that begins "Item (l) includes..."

Delete the paragraph that begins "Item (m) includes..."

(Use the following two paragraphs when snow curb returns are included on the Project.)

Add the following sentence to the end of the paragraph that begins "In item (a)....":

Item (a) includes snow curb returns constructed at the curb ramps.

(Use the following two paragraphs when pay item (p) is included in the Pay Item list.)

Add the following paragraph after the paragraph that begins "Item (m) includes...":

Item (p) includes the installation or reinstallation of historical markers within concrete walk as shown.

Add the following paragraph before the paragraph that begins "No separate or additional payment...":

Tactile surface indicators will be paid for according to Section 00765.

In the paragraph that begins "No separate or additional payment...", add the following bullet to the end of the bullet list:

- The additional Work required to construct a curb ramp or replace an existing curb ramp, including any corrective action.

(Use the following two bullets when pay item (p) is included in the Pay Item list.)

- Stamping dates and street names into new concrete
- For salvaging and reinstalling horse rings

(Use the following two paragraphs when earthwork is included as separate Pay Items but the earthwork Pay Items and estimated quantities do not include all or a portion of the Work in this Section. The use of this language requires notation (contact the Senior Standards Engineer) in the Plans to describe the earthwork pay limits relative to SP00330 and requires the State Specification Engineer and RE approval. Consider issuing a LOC.)

Replace the paragraph that begins "When earthwork is included as separate Pay ..." with the following paragraph:

When earthwork is included as separate Pay Items under Section 00330, payment will be made according to 00330.90 through 00330.94 as appropriate and only for locations where earthwork quantities are shown. No separate or additional payment will be made for earthwork under Section 00330 where earthwork quantities are not shown.