Item C609 - Curbing

C609.1 Description

C609.2 Material and Construction

C609.3 Excavation C609.4 Restoration

C609.5 Method of Measurement

C609.6 Basis of Payment

C609.1 Description. The work done shall conform to ODOT Item 609, Curbing, of the Construction and Materials Manual, latest edition, in conformance with the lines, grades and cross-sections shown on the plans or established by the City Engineer, and shall include the following supplemental specifications and/or exceptions.

This item shall include necessary saw cutting, excavation, 4-inches of Item 304 Aggregate Base, furnishing and installing joint materials, curing compound, restoration of grassed areas, existing street, and driveway pavement, and the disposal of surplus excavation and discarded materials in accordance with ODOT Item 203 - Excavation.

C609.2 Material and Construction. Concrete shall meet the requirements of ODOT Item 499 of the Ohio Department of Transportation "Construction and Material Specifications Manual", latest edition. Mix design shall be QC Misc or QC 1. The ratio and size of coarse aggregate shall be as ordered to secure a workable mix. Pea Gravel Mix shall not be allowed. Where existing curb or curb and gutter is to be replaced, the new curbing shall have the same dimensions and cross-section as the existing curb. Where curb or curb and gutter is replaced across an asphalt driveway approach, a 2-foot-wide strip of the asphalt drive shall be removed. This 2-foot-wide strip will allow compaction of new driveway materials, and shall comply with and be paid under Item C448 Asphalt Driveways. See Item C448 Asphalt Concrete for restoration requirements. Concrete driveways shall not be disturbed unless directed by the City Engineer.

Joints shall be tooled every 5 feet. Full depth, ½" vinyl expansion material shall be placed on one end of pieces of curb replaced 15' or under. Over 15' of curb replaced, the expansion material is required on both ends of the replacement. For 50' or more of replaced curb, expansion material shall be placed every 50 feet. Expansion material shall also be placed at intersection radius points, at both sides of a drive approach, and on each side of a structure. All vinyl expansion material shall be full depth and meet the requirements of ODOT Item 705.03. Curing compound shall be sprayed on all new exposed concrete surfaces. Curing compound shall conform to ASTM C309.

See Sumpline Connection detail for instruction regarding Sumplines.

If an existing downspout or private trench drain outlet pipe extends through the curb section being replaced, the existing pipe shall be cut back 10 feet from the back of curb or 3 feet behind the back of existing sidewalk (if sidewalk is present) and a popup outlet installed, as directed by the City Engineer. Sump pump "showerhead" connections and all

popup outlets will be paid under Item C811.

Access to residential driveways shall be maintained overnight and on weekends, except when replacing drive aprons. Temporary gravel restoration for driveway access or steel plating, as needed, shall be provided and included in the bid item cost for Item C614 Maintaining Traffic. Access to business driveways shall not be disturbed without prior approval from the business and the City Engineer. New concrete curb shall be protected from traffic for 7 days after it is placed. Driveway access shall be restored immediately upon completing the 7 day cure time.

C609.3 Excavation. Unsuitable sub-grade material shall be removed as directed by the City Engineer and replaced with ODOT Item 304 Aggregate Base. Removal and replacement up to 4 inches of unsuitable material shall be included in the unit price of curb. Should unsuitable sub-grade material be found below 4 inches, payment for such removal and replacement shall be paid for under Item C203 - Undercutting.

Where existing curb or curb and gutter is to be removed and replaced, removal shall be under of Item C202.

C609.4 Restoration. Prior to asphalt restoration, all vertical edges shall be cleaned and coated with asphalt material per ODOT 401.14. Any gutter to be overlaid shall also be coated per ODOT 401.14.

Full-depth form boards are required.

For continuous or isolated curb repair, restoration of the disturbed asphalt pavement at the face of the gutter plate or barrier curb shall be done by LSM 100 to 2-inches below the surface and Item C441 (448) placed to the surface. LSM restoration is to be a minimum of 4" wide and a maximum of 12" wide. Prior to final restoration of the existing street or driveway approach, the pavement shall be saw cut, full depth. Ragged edges and undermined pavement will not be permitted. An expansion joint shall be installed between the concrete curb and all concrete driveway approaches. Permanent restoration of drive approaches as well as temporary pavement restoration at all reconstructed curb shall be completed within two weeks of the curb reconstruction, including concrete curing time. If necessary, asphalt and/or gravel may be needed across the disturbed area in front of drive approaches to allow access until all grinding and paving takes place.

In the case of new barrier curb construction, restoration of disturbed asphalt pavement at the face of the curb shall be done by uniformly saw cutting any ragged pavement edge and placing ODOT Item 301 asphalt an elevation of 2 - inches below the finished pavement elevation (4-inch minimum thickness on residential streets, 10-inch minimum thickness on arterial streets) and 2-inches of Item C441 (448) to the surface. The area shall be of sufficient width to allow proper mechanical compaction. Additionally, backfill behind the new barrier curb shall be done with clean fill and finished with 6-inches topsoil, seeding and mulching according to Item C659.

Restoration of the grassed areas shall be done with topsoil, seeding and mulching in accordance with Item C659.

C609.5 Method of Measurement. The curb measured for payment will be the actual number of linear feet of curb or curb and gutter, of the kind and type specified, complete and in place, measured along the front face of the curb section.

Curb within the limits of catch basins, inlets and manhole aprons will not be deducted from the length of curb measured for payment. No deductions will be made for depressed curb at driveways.

C609.6 Basis of Payment. The price bid for this item shall include all labor, equipment and material incidental to the construction of the curb and shall include expansion material, curing compound, sub-grade preparation, constructing openings in the curb for drain tile as directed, constructing joints, depressing curbs for driveways, 4-inches of ODOT Item 304 Aggregate Base, backfill, restoration of the grass areas, restoration of the existing street as described above, and sealing joints. Restoration of asphalt driveways will be paid under Item C441 (448) Asphalt Driveways.

Payment will be based on the unit price bid:

Item	Unit	Description
C609	Linear Foot	Curb, Type, Installed, Isolated
C609	Linear Foot	Curb, Type, Installed, Continuous