

**CONCRETE GUTTER, CURB ELEMENTS, AND TRAFFIC SEPARATOR -RAISED
CROSSWALK CHANNEL GUTTER
(REV 1-31-23)**

ARTICLE 520-2 is expanded by the following new subarticle:

520-2.5 Plates and Grates: For RC Channel Gutter (raised crosswalk channel gutter), when required by the plans, provide cast iron or structural steel grates with thickness no less than 1-1/4 inches and no greater than 1-3/4 inches and openings less than or equal to 1/4 inch. The ratio of surface area to opening area for the grates must not be less than 3 to 1. Plates without openings are acceptable when specified in the Plans. Walking surface of grate or plate must be even, flat, and unyielding. Do not use diamond plate or surface applied slip resistant tapes, films, nonmetallic coatings, or other similar materials. Hot-dip galvanize steel grates or plates after shop fabrication and in accordance with Section 962. Galvanized steel plates, steel grates, and cast iron grates shall have a minimum coefficient of friction on the top surface of 0.8 in dry condition, and 0.65 in a wet condition, as determined by ASTM F1677 or ASTM F1679.

ARTICLE 520-11 is deleted and the following substituted:

520-11 Method of Measurement.

For curb or curb and gutter, the quantity to be paid will be the plan quantity, in feet, measured along the face of the completed and accepted curb or curb and gutter. Curb for sidewalk curb ramps or driveways will be paid at the Contract unit price for the adjacent curb type.

For valley gutter or shoulder gutter, the quantity to be paid will be the plan quantity, in feet, measured along the gutter line of the completed and accepted valley gutter or shoulder gutter.

For concrete traffic separator of constant width, meeting the requirements of Standard Plans, Index 520-020, the quantity to be paid will be the plan quantity, in feet, measured along the center of its width, completed and accepted, including the length of the nose.

For concrete traffic separator of nonstandard or varying width, the quantity to be paid will be the plan quantity, in square yards, completed and accepted.

For curb of any type next to concrete pavement, the curb-pavement joint quantity to be paid will be the plan quantity, in feet, measured along the face of the completed and accepted curb.

For RC Channel Gutter, the quantity to be paid will be the plan quantity, in feet, measured along the face of the completed and accepted curb. When a grate is shown in the plans, payment for the grate will be incidental to the RC Channel Gutter.

ARTICLE 520-12 is deleted and the following substituted:

520-12 Basis of Payment.

520-12.1 Concrete Gutter, Curb Elements, and Traffic Separator: Price and payment will be full compensation for all work specified in this Section, including reinforcement steel, dowels, asphalt pavement and base under traffic separator, joint materials and asphalt curb pad.

520-12.2 Excavation: Excavation for new installations will be paid for as roadway excavation in accordance with 120-13.2.

520-12.3 Payment Items: Payment will be made under:

Item No. 520- 1-	Concrete Curb and Gutter - per foot.
Item No. 520- 2-	Concrete Curb - per foot.
Item No. 520- 3-	Concrete Valley Gutter - per foot.
Item No. 520- 4-	Curb-Concrete Pavement Joint - per foot.
Item No. 520- 5-	Concrete Traffic Separator - per foot.
Item No. 520- 6-	Concrete Shoulder Gutter - per foot.
Item No. 520- 70-	Concrete Traffic Separator - per square yard.
Item No. 920-520-	RC Channel Gutter – per foot.

THERMOPLASTIC PAVEMENT MARKINGS

(REV 1-31-23)

ARTICLE 711-9 is deleted and the following substituted:

711-9 Method of Measurement.

711-9.1 Thermoplastic Pavement Markings: The certified quantities, authorized and acceptably applied, under this Section will be paid as follows:

1. The length, in gross miles, of solid, 10'-30'skip, 3'-9'dotted, 6'-10'dotted, 2'-2'dotted, and 2'-4'dotted lines.
2. The length, in linear feet, of transverse lines, diagonal lines, chevrons, and parking spaces.
3. The number of pavement messages, symbols, arrows and raised crosswalk markings. Each arrow is paid as a complete marking, regardless of the number of "points" or directions. Each vertical deflection marking includes all arrows within the set, and each advance warning marking includes all lines within the set, as shown in the Developmental Standard Plan Index D520-030.
4. The area, in square feet, for removal of existing thermoplastic pavement markings acceptably removed. Payment for removal of thermoplastic pavement markings will only be made for locations where the existing pavement surface is to remain.

The gross mile measurement will be taken as the distance from the beginning of the thermoplastic line to the end of the thermoplastic line and will include the unmarked gaps for skip and dotted lines. The gross mile measurement will not include designated unmarked lengths at intersections, turn lanes, etc. Final measurement will be determined by plan dimensions or stations, subject to 9-1.3.1.

711-9.2 Removal of Existing Thermoplastic Markings: The quantity for removal of existing thermoplastic pavement markings to be paid will be the area, in square feet, acceptably removed. Payment for removal of thermoplastic pavement markings will only be made for locations where the existing pavement surface is to remain.

ARTICLE 711-10 is deleted and the following substituted:

711-10 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Final payment will be withheld until all deficiencies are corrected.

Payment will be made under:

Item No. 711- Thermoplastic Pavement Markings:

Solid - per gross mile.

Solid - per linear foot.

Skip - per gross mile.

Dotted - per gross mile.

Message or Symbol - each.

Arrows - each.

Vertical Deflection Marking - each.

Vertical Deflection Advance Warning Marking - each.

Yield Line - per linear foot.

Railroad Dynamic Envelope - per linear foot.

Remove - per square foot.