

ITEM 603.9801--25 - CULVERT END SAFETY GRATE

1. DESCRIPTION:

- 1.01 This work shall consist of furnishing and installing culvert-end safety grates of the sizes shown and at the locations indicated in the contract documents.

2. MATERIALS:

- 2.01 The materials used for the fabrication of culvert-end safety grates shall conform to Section 709-01 Bar Reinforcement, Grade 420 of the Standard Specifications. All individual bars shall be full length with no splices or butt welds. "J" bar hooks shall be fabricated from reinforcing bar.
- 2.02 All reinforcing bar, including "J" bar hooks shall be galvanized in accordance with Section 719-01 Galvanized Coatings and Repair Methods, Type I.
- 2.03 Welding shall conform to the requirements of welding as specified in the New York Steel Construction Manual with the exception that radiographic inspection will not be required.

3. CONSTRUCTION DETAILS:

- 3.01 Safety grates shall be fabricated of steel reinforcing bars as indicated in the contract plans. The bars shall be spaced 12 inches on center and welded at each intersection with either 4 tack welds or a double flare bevel groove weld at the Contractor's option. All welding shall be performed prior to galvanizing.
- 3.02 The grate shall lay flat on the embankment slope and overlap the opening on each side and at the top as indicated in the contract plans. The Contractor shall perform any necessary final slope shaping and grading to ensure proper grate support and smooth uniform slopes in the area surrounding the grate.
- 3.03 "J" bar hooks shall be installed on each side of the grate and driven full depth into the soil as detailed in the contract documents.

4. METHOD OF MEASUREMENT:

- 4.01 Culvert-end safety grates will be measured as the number of square feet of grate furnished and installed. The area of a culvert-end safety grate shall be computed as the product of its overall length and width. The area shall be rounded to the nearest tenth of a square foot.

5. BASIS OF PAYMENT:

- 5.01 The unit price bid shall include all labor, materials and equipment necessary to complete the work.