

**610.5.01 Adjustments**

General Provisions 101 through 150.

**Section 611—Relaying, Reconstructing, or Adjusting to Grade of  
Miscellaneous Roadway Structures**

**611.1 General Description**

This work includes relaying, reconstructing, resetting, adjusting to grade, capping minor structures, resetting guard rail, or adjusting other miscellaneous roadway structures as specified in the Proposal or on the Plans.

**611.1.01 Definitions**

General Provisions 101 through 150.

**611.1.02 Related References**

**A. Standard Specifications**

Section 610—Removal of Miscellaneous Roadway Items

Section 641—Guard Rail

Section 668—Miscellaneous Drainage Structures

Section 854—Castings and Forgings

**B. Referenced Documents**

General Provisions 101 through 150.

**611.1.03 Submittals**

General Provisions 101 through 150.

**611.2 Materials**

Most materials for the work in this Specification are salvaged from the removal of existing structures. The Engineer will determine the suitability of the salvaged material for use.

Use other materials to complete the structure, such as mortar, sand-cement grout, sand for sand cushion, bituminous filler, brick, and other materials that meet the requirements of the applicable Specifications for such materials for use in new structures of the same character and type.

**611.2.01 Delivery, Storage, and Handling**

General Provisions 101 through 150.

**611.3 Construction Requirements**

**611.3.01 Personnel**

General Provisions 101 through 150.

**611.3.02 Equipment**

General Provisions 101 through 150.

**611.3.03 Preparation**

General Provisions 101 through 150.

**611.3.04 Fabrication**

General Provisions 101 through 150.

### 611.3.05 Construction

#### A. Miscellaneous Roadway Items

Follow these procedures to construct miscellaneous roadway items:

1. Remove existing structures to be rebuilt according to Section 610.
2. Clean the material salvaged for use in the rebuilt structure and stockpile it in convenient places. Protect it from damage until it is used.
3. Dispose of the portions of structures not suitable for reuse as provided in Section 610. Replace them with suitable new material.
4. Relay or rebuild the structures according to the Specifications for new structures of the same type.
5. Adjust to the required grade miscellaneous structures specified in the Proposal or on the Plans by raising or lowering the upper portion of the fixture, including sleeve extensions, adjustable manhole rings, gaskets, mastic, mortar, masonry, and other material.
6. Furnish materials such as mortar, sand-cement grout, sand cushion, bituminous filler, brick, castings, and other materials to excavate, trench, prepare earth foundation, backfill, and other work necessary to complete the Item.

#### B. Capping an Existing Structure

When capping an existing structure requires removing adjacent existing pavement, sidewalk, curb, gutter, or other improvement not otherwise affected by the work, follow these guidelines:

1. Remove the improvements to expose only the portion of the structure to be modified.
2. Replace the removed improvements to the Engineer's satisfaction without additional compensation.
3. Remove enough existing masonry to lower the top elevation to a point not less than the thickness of the cap plus 3 ft (1 m) below subgrade elevation, unless otherwise indicated.
4. Cap the remaining portion of the structure with a fitted reinforced concrete cover constructed to the general details shown on the Plans.

Grates, rings, plates, covers, hoods, or other castings or fittings removed while capping and not re-used become the property of the Department unless otherwise indicated on the Plans.

#### C. Resetting Guard Rail

When resetting the guard rail is specified in the Proposal:

1. Reset guard rail removed according to Section 610 where the Plan indicates and to the required post spacing.
2. Furnish materials, including additional hardware, offset blocks, and posts.
3. Replace posts that do not conform to the Plans.
4. Follow the applicable provisions of Section 641.

#### D. Raising Manholes

When raising manholes:

1. Adjustments may be made by using adjustable extension rings that do not require removing the existing manhole frame.
2. Ensure that the extension device locks to the existing frame and permits height and diameter adjustment. The adjustable extension ring to be used shall have the Engineer's prior approval.
3. Choose an extension ring compatible with the existing casting and cover. Ensure that the adjustment range conforms to the finished pavement surface.
  - a. Use an adjustable extension ring made of materials that meet the requirements of Subsection 854.2.01 or are manufactured from ASTM A 36/A 36M steel and approved by the Office of Materials and Research.
  - b. Ensure that the extension ring and cover are machine ground to reduce contact irregularity. Ensure that the grates are rattleproof.
  - c. Obtain the Engineer's approval for the type of adjustable extension ring used.

#### E. Replacing Fences

Replace fences removed under Section 610 in kind, using the removed materials as far as possible. Unless the Plans provide for new fence at the particular location, include new materials required in the Bid Price for resetting fence.

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**611.3.06 Quality Acceptance**

General Provisions 101 through 150.

**611.3.07 Contractor Warranty and Maintenance**

General Provisions 101 through 150.

**611.4 Measurement**

Relaying, reconstructing, or adjusting to grade, capping minor structures, resetting guard rail, or adjusting other miscellaneous roadway structures is measured to determine the unit or units of each type completed and accepted.

Manhole tops to be raised or lowered 2 ft (600 mm) or less are considered “Adjust to Grade.”

Manhole tops to be raised between 2 ft (600 mm) and 6 ft (1.8 m), or tops to be lowered more than 2 ft (600 mm), are considered “Reconstruct Manhole” and are paid as shown in Subsection 611.5, “Payment.”

Remove manholes to be raised more than 6 ft (1.8 m) as clearing and grubbing, and construct a new manhole in its place according to Section 668.

**611.4.01 Limits**

General Provisions 101 through 150.

**611.5 Payment**

Relaying, reconstructing, resetting, adjusting to grade, capping minor structures, resetting guard rail, or adjusting other miscellaneous roadway structures will be paid for at the Contract Unit price. Payment is full compensation for relaying, resetting, reconstructing, or adjusting to grade the structures as specified in this Specification.

Excavation and backfill necessary for capping is considered incidental to the Item and is not paid for separately.

Tapping a new pipeline into an existing structure is not considered reconstruction of the existing structure.

Payment will be made under:

Item No. 611	Relay	Per unit shown in Proposal
Item No. 611	Reconstruct	Per unit shown in Proposal
Item No. 611	Reset	Per unit shown in Proposal
Item No. 611	Adjust to grade	Per unit shown in Proposal
Item No. 611	Cap minor structures	Per unit shown in Proposal

**611.5.01 Adjustments**

General Provisions 101 through 150.

**Section 612—Construct, Maintain, and Remove Median Crossover**

**612.1 General Description**

This item includes constructing, maintaining, and removing median crossovers according to the Plans.

**612.1.01 Definitions**

General Provisions 101 through 150.

**612.1.02 Related References**

**A. Standard Specifications**

Section 700—Grassing

**B. Related Documents**

General Provisions 101 through 150.