

## **Section 610—Removal of Miscellaneous Roadway Items**

### **610.1 General Description**

This work includes removing, salvaging, or disposing of items listed in the Proposal as Pay Items to be removed, and backfilling the excavations made during removal.

Remove structures not separately listed as Pay Items in the Contract as specified in Sections 201, 202, or 205.

#### **610.1.01 Definitions**

General Provisions 101 through 150.

#### **610.1.02 Related References**

##### **A. Standard Specifications**

Section 201—Clearing and Grubbing Right-of-Way

Section 202—Random Clearing and Grubbing

Section 205—Roadway Excavation

Section 208—Embankments

Section 540—Removal of Existing Bridge

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

##### **B. Referenced Documents**

General Provisions 101 through 150.

#### **610.1.03 Submittals**

General Provisions 101 through 150.

### **610.2 Materials**

#### **610.2.01 Delivery, Storage, and Handling**

##### **A. Materials Retained by the Department**

Unless removed under Sections 201, 202, or 205, or unless otherwise provided for in the Plans or Proposal, carefully remove materials with a salvage value.

1. Neatly stack or stockpile the materials along the right-of-way near the removal point and above high water.
2. Store highway signs standing on edge and protected from the elements.
3. Replace materials damaged, defaced, or destroyed by removing them carelessly at no cost to the Department.
4. Notify the Engineer when the materials have been stockpiled and are ready to be transported.
5. Keep materials secure and replace (at the Contractor's expense) materials lost, stolen, or missing within a maximum of 10 days after the Engineer has been notified that the materials are ready to be transported.

##### **B. Materials Reused in the Work**

Maintain structures, portions of structures, and other materials to be salvaged and reused in reconstruction work.

Assume responsibility for the material until Project Final Acceptance.

Repair or replace materials lost or stolen before reuse at the Contractor's expense.

Spread suitable surplus excavation material on the slopes of the roadway embankments. Otherwise, dispose of the waste materials off the right-of-way at the Contractor's expense.

##### **C. Bridge Components**

Dispose of bridge components according to Section 540. Replace or repair at the Contractor's expense structures, portions of structures, or materials to be salvaged, retained, or used in the reconstructed work but that were carelessly damaged or destroyed by the Contractor.

## 610.3 Construction Requirements

### 610.3.01 Personnel

General Provisions 101 through 150.

### 610.3.02 Equipment

General Provisions 101 through 150.

### 610.3.03 Preparation

If removing a structure may endanger a new construction, finish that part of the work before beginning the new construction.

### 610.3.04 Fabrication

General Provisions 101 through 150.

### 610.3.05 Construction

#### A. Protection of Remaining Structures

Do not use explosives, equipment, or devices that may endanger structures, facilities, or other property to remain in place. If parts of structures are to remain in place, protect them from damage during construction. Protect and preserve the salvage value of materials to be salvaged.

#### B. Extent of Removal

Separate and remove existing structures, with their attached parts and connections, as shown on the Plans or designated to be removed.

1. When a part of an existing structure is to remain in place, ensure that the part to be removed extends to a construction joint or is cut off to the lines shown on the Plans, leaving reasonably smooth faces.  
Remove walls and other masonry construction to the bottoms of the foundations unless otherwise specified.
2. Remove walls and their foundations within the roadbed area to an elevation at least 3 ft (900 mm) below the top of the finished subgrade, unless otherwise specified.
3. See Subsection 201.3.05.C.1.c, "Abandoned Obstructions," for guidelines for rigid surfaces.

#### C. Railway Tracks

Removing railway tracks includes removing rails, ties, switches, towers, concrete structures, sign posts, and other related railway structures. Leave ballast in place, unless otherwise specified.

#### D. Inlets, Catch Basins, Manholes, and Culverts

1. Remove gratings, traps, and other metal castings of inlets, catch basins, and manholes without damaging them. Reuse them on new structures or salvage them, whichever the Engineer directs.
2. Remove old culverts down to the ground level or to the adjacent water level, unless otherwise shown on Plans.
3. Remove the bottom slabs of inlets, catch basins, manholes, and culverts. If the Engineer permits them to remain in place, break them up so that water will readily pass through them.

#### E. Removing Pipe

Uncover the pipe to remove it without damage. Exercise care in removing the pipe. Replace pipe sections damaged by negligence at the Contractor's expense.

After removing the pipe, clean it and neatly stack it at points directed by the Engineer along the line of the work. Unless otherwise specified, the pipe is the property of the Department.

#### F. Septic Tanks

When encountering septic tanks, completely remove the contents of each tank.

1. Remove and dispose of the tank's contents as required by the State Department of Health and local health authorities.
2. Before backfilling the remaining portion of the septic tank, drill holes in the bottom of the tank or break it up as the Engineer directs, to permit drainage.

**G. Backfilling**

Backfill trenches and other excavations dug for removing miscellaneous structures.

1. Use approved materials in the backfill.
2. Compact the backfill in layers no more than 6 in (150 mm) thick and with the proper moisture content. Use pneumatic tampers or other approved equipment.
3. Under the roadway, ensure that the degree of compaction conforms to Section 208.  
Elsewhere, compact the backfill equal to the soil surrounding it.

**H. Structures to Remain**

Preserve unharmed the miscellaneous structures, including fences, buildings, pipe lines, pole lines, water and sewer lines, and other improvements that owners or the Department will retain or that others will remove.

**I. Culverts to be Extended**

Where concrete culverts are to be extended, remove a minimum amount of concrete in parapets, wing walls, and wing wall footings to clear the new construction. Make the joint or connection as shown on the Plans or as directed by the Engineer.

**J. Fences**

When removing fences, do not allow livestock to escape. If fences are to be reset according to Section 611, protect the spelter coating of fence fabric, steel fence posts, and braces.

The Engineer will require that reusable posts removed be clean and free of concrete. If desired, furnish new posts instead of cleaning the old ones at no additional cost to the Department.

**K. Raised Edge Curb**

Remove raised edge curb to a reasonably true line at the elevation of normal finished pavement.

If the average of the plus and minus deviations approximate the original normal edge of pavement, a tolerance of approximately 1 in (25 mm) above or below this elevation will be accepted.

Do not shatter pavement that will be retained.

**L. Highway Signs**

Remove the entire sign from the supports, and remove the supports from the concrete foundation.

**M. Lighting Standards and Appurtenances**

Disassemble the lighting standard, and separate each component part including the transformer base. Cut the underground duct before removing these items.

**610.3.06 Quality Acceptance**

General Provisions 101 through 150.

**610.3.07 Contractor Warranty and Maintenance**

General Provisions 101 through 150.

**610.4 Measurement**

Removing miscellaneous roadway items is measured to determine the Unit or Units of each type specified in the Proposal and on the Plans. Only when listed as a Pay Item in the Contract will a removed item be measured for separate payment.

**610.4.01 Limits**

General Provisions 101 through 150.

**610.5 Payment**

Removing miscellaneous roadway items will be paid for at the Contract Unit Price. Payment is full compensation for removing and disposing of the structures according to these Specifications.

Payment will be made under:

Item No. 610	Remove_____	Per unit shown in Proposal
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**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.