

**Section 204. REMOVING MISCELLANEOUS STRUCTURES AND MATERIALS**

**204.01 Description.** This work consists of removing miscellaneous structures and materials which are not suitable to remain in the right-of-way. Salvaging or disposing of removed materials and backfilling the resulting excavated site is also included in this work.

**204.02 Materials.** Materials shall meet the following requirements.

Granular Material Class III ..... 902

**204.03 Construction.**

A. **Breaking Down and Removing.** All structures or portions thereof, including all attached parts and connections, shown on the plans to be removed, shall be removed entirely or to the limits shown on the plans. The retained portion of an existing structure shall not be damaged by construction operations.

Structures requiring removal, but not shown to be removed, shall be removed entirely or broken down as specified in subsection 204.03.A.1.

1. **Partial Removal.** Portions of existing miscellaneous structures not interfering with the new construction shall be broken down to an elevation at least 3 feet below the pavement surface within the limits of the roadbed, and elsewhere to an elevation at least one foot below the finished grade.
2. **Pavement, Curb, Gutter, Curb and Gutter, Sidewalk, and Similar Structures.** Removal shall be to an existing joint or to a sawed joint. Concrete shall be sawed full depth unless otherwise allowed. The use of a crane and ball type pavement breaker will not be permitted. Removal shall be made to provide for proper grades and connections.

Adjacent soils or base materials removed when removing concrete, shall be replaced with a similar acceptable material at the Contractor's expense.

3. **Masonry and Concrete Structures.** All walls, foundations, and similar structures, which are not bridges, culverts, or retaining walls, shall be removed entirely or broken down according to subsection 204.03.A.1. This work will include partial or complete removal of utilities or any structure constructed of masonry or concrete having a least dimension of 12 inches for non-reinforced concrete or 8 inches for reinforced concrete structures.
4. **Basement Cleanout.** Basement cleanout will include removal of existing backfill material, breaking the floors, plugging drains, and then backfilling.
5. **Structures and Retaining Walls.** If any part of a steel structure is to be salvaged, the members to be re-erected shall be match-marked with paint before being dismantled. All pins, nuts, loose plates and parts shall be similarly match-marked to indicate their proper locations. All pins, pin holes, and machined surfaces shall be treated to prevent

corrosion. All loose parts shall be wired to adjacent members or packed in properly match-marked containers.

Where any portion of an existing concrete structure is being incorporated as part of the new construction, the concrete cuts that will be exposed in the final work shall be made with a concrete saw. Corners shall not be overcut, but shall be drilled and chipped to provide square corners. Cutting reinforcing steel shall be avoided wherever possible. Steel reinforcement projecting from the existing work shall not be cut off. Projecting steel shall be protected from damage and embedded in the new concrete.

The retained portion of an existing structure or any new work under construction shall not be damaged by the removal operations. Explosives shall not be used except with the written permission of the Engineer. Granting permission for the use of explosives in no way relieves the Contractor of any liability and/or responsibility for damages.

6. **Breaking Down and Removing Culvert Structures.** All culvert structures or parts thereof which are specified to be removed, or that interfere with the new construction, shall be removed. Culvert structures shall be removed entirely or as specified in subsection 204.03A.1.

Where existing culvert structures are to be extended or otherwise incorporated into the new work, only enough of the existing structure shall be removed as required to provide a proper connection to the new work. The connecting edges shall be cut, chipped and trimmed to the required lines and grades without weakening or damaging the part of the structure to be retained.

7. **Railway Trackwork.** In removing railway trackwork, all rails, paving, ties, track encasement, concrete foundations, and other related items shall be removed. Crushed stone or gravel ballast shall be left in place.
8. **Guardrail.** All posts, beam elements, anchorages (including concrete blocks and/or steel sleeves), hardware, and other items shall be removed.
9. **Utility Pole.** All attached parts and connections shall be removed.
10. **Fence.** All fence fabric, wire and posts shall be removed and resulting holes backfilled as required.
- B. **Disposal of Materials.** Removed materials shall become the property of the Contractor unless otherwise shown on the plans or in the proposal. Materials reserved for use by the Department, local agency, or others shall be removed without damage and stored outside the construction limits in an approved location and manner. Materials not incorporated into the new work, that become the property of the Contractor, shall be disposed of according to subsection 205.03.P before acceptance of the project. Salvaged materials meeting specification requirements may be used in the new work, if approved by the Engineer.

Broken concrete which is matted together by steel reinforcement shall be disposed of outside the right-of-way.

C. **Backfilling.** All excavated sites or holes resulting from removals, within the subgrade surface limit shall be backfilled with granular material Class III, unless otherwise directed. The granular material shall be placed and compacted according to the Controlled Density Method of subsection 205.03.H. Outside or below the subgrade surface, the backfill material and compaction method shall be as approved by the Engineer.

**204.04 Measurement and Payment.**

<b>Contract Item (Pay Item)</b>	<b>Pay Unit</b>
Pavt, Rem .....	Square Yard
Curb, Rem .....	Foot
Gutter, Rem .....	Foot
Curb and Gutter, Rem .....	Foot
Sidewalk, Rem .....	Square Yard
Basement Cleanout .....	Cubic Yard
Track, Unencased Railway, Rem .....	Foot
Track Encasement, Rem .....	Cubic Yard
Utility Pole, Rem .....	Each
Structures, Rem .....	Lump Sum
Structures, Rem Portions .....	Lump Sum
Culv, Other than Pipe, Rem .....	Each
Masonry and Conc Structure, Rem .....	Cubic Yard
Guardrail, Rem .....	Foot
Fence, Rem .....	Foot

A. **General.**

Unless stated otherwise, the structure or material quantity to be removed will be measured in the original position.

The unit price for the contract items listed herein shall be payment for the work as described including breaking down and removing, sawing where required, disposing of materials, and furnishing, placing, and compacting backfill.

Where piling or timber cribs not shown on the plans are encountered during removal of structures, their removal will be paid for as extra work.

B. **Pavt, Rem** will be measured and paid for according to the following criteria:

1. **HMA Pavements and HMA Driveways.**

- a. The removal of hot mix asphalt (HMA) surface, 5 inches or less in thickness, overlying a material (concrete, masonry, aggregate, earth, etc.) which is to be removed, is considered a part of the underlying material and is included in the quantities of the underlying material measured for removal.
- b. The removal of HMA surface, over 5 inches thick, overlying a material (concrete, masonry, aggregate, earth, etc.) which is to be removed, will be measured and paid

for as **Pavt, Rem**. Removal of the underlying material will be measured and paid for separately.

- c. The removal of HMA surface, 12 inches or less in thickness, overlying a material which is to remain in place, will be measured and paid for as **HMA Surface, Rem** according to section 502.
  - d. The removal of HMA surface, greater than 12 inches thick, overlying a material to remain in place, will be measured and paid for as **Pavt, Rem**.
  - e. Curb, curb and gutter, or gutter requiring removal in conjunction with removing HMA pavements or HMA driveways will be measured and paid for separately.
2. **Concrete and Masonry Pavements and Concrete Driveways.**
- a. Concrete and masonry pavements and concrete driveways required to be removed will be paid for as **Pavt, Rem**. When one or more concrete or masonry pavements are encountered underlying the pavement being removed, the contract item will be allowed for each pavement removed. A concrete overlay will be considered a separate pavement.
  - b. Removal of curb, curb and gutter, or gutter in conjunction with removing concrete pavement or concrete driveways will be measured and paid as **Pavt, Rem**.
- C. **Curb, Rem; Gutter, Rem; or Curb and Gutter, Rem** set up as separate items not in conjunction with pavement removal, will be measured along the base of the curb face or along the flowline of the gutter.
- D. The volume of **Basement Cleanout** will be based on the elevation of the existing backfill, the elevation of the floor and the inside dimensions of the foundation. **Basement Cleanout** will only be measured and paid for outside the pay limits for **Excavation, Earth**.
- E. **Track Removal.**
- 1. **Track, Unencased Railway, Rem** will be measured by length of single line track and will include the removal of rails, ties, and other related track items. Any pavement between the rails and on either side of the track will be measured and paid for as **Pavt, Rem**.
  - 2. **Track Encasement, Rem** will include removal of the rails and other related track items.
- F. Payment for **Culv, Other than Pipe, Rem** includes breaking down, removing, sawing and disposing of materials. Furnishing, placing and compacting backfill, if required, is also included in this item.
- G. Payment for **Masonry and Conc Structures, Rem** will be limited to masonry or concrete structures, or parts thereof, that are 12 inches or more in the least dimension, and to

reinforced concrete structures that are 8 inches or more in least dimension. Removal of all other masonry and concrete structures will be classified and paid as **Excavation, Earth**.

- H. **Guardrail, Rem** will be measured along the face of the existing guardrail installation and payment will be based on the measured length, regardless of the number of beam elements in the existing guardrail cross-section.

Removing cable guardrail will not be paid for separately, but will be considered as having been included in the contract unit prices bid for other contract items.

- I. When not a separate contract pay item, removal of sidewalk and drainage structures within the excavation limits of cut sections will be paid as **Excavation, Earth**.
- J. Payment for the work of bulkheading abandoned pipes, conduits, or service connections, 12 inches in diameter or smaller, encountered in excavation shall be considered included in payment for other contract items. Payment for bulkheading abandoned pipes, conduits, or service connections, over 12 inches in diameter shall be according to subsection 402.03.E and will be measured and paid for as **Sewer Bulkhead**.