

## Section 203. REMOVING DRAINAGE STRUCTURES, CULVERTS AND SEWERS

**203.01 Description.** This work consists of removing, or abandoning, in whole or in part, drainage structures, culverts, and sewers as required. Salvaging, storing, and disposing of removed materials, backfilling and compacting the excavated sites is also included.

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

Sound Earth . . . . .	205
Granular Material Class III . . . . .	902

### 203.03 Construction.

A. **Drainage Structures.** When removing or abandoning a drainage structure, any live sewers connected to it shall be rebuilt and properly reconnected through the removal area. Service shall be maintained during these construction operations.

If the plans call for abandoning a drainage structure, the cover shall be removed and the masonry broken down according to subsection 204.03.

#### B. Culvert Pipe.

1. **Removing.** All pipe culverts specified to be removed, including all end treatments, shall be completely removed.
2. **Removing Ends.** Where existing culvert pipe is to be extended or the existing end treatment is to be replaced, only such portions of the existing culvert pipe shall be removed as to provide a proper connection to the new work. Care shall be taken to not damage any portion of the remaining culvert pipe.
3. **Abandoning.** Pipe culverts to be abandoned shall be bulkheaded according to subsection 402.03.E or other approved method. If the Engineer determines that the culvert is not in suitable condition for abandonment, alternate treatment will be specified.

Culvert pipe designated to be abandoned, with a top elevation within 5 feet of the top of the pavement, shall be reviewed for removal.

4. **Disposing of Materials.** Meet subsection 205.03.P.
5. **Backfilling.** Meet subsection 204.03.C.

#### C. Sewer Pipe.

1. **Removing.** Sewers (storm, sanitary, or combined) or parts thereof which are specified to be removed, or that interfere with the new construction, shall be removed.

Where existing sewers are to be extended or otherwise incorporated into the new work, only such part of the existing sewer shall be removed as 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 parts of the sewer to be retained.

- 2. **Abandoning.** Sewers to be abandoned shall be bulkheaded according to subsection 403.03.E or other approved method. If the Engineer determines that the sewer is not in suitable condition for abandonment, an alternate treatment will be specified.

All sewers designated to be abandoned, with a top elevation within 5 feet of the top of pavement, shall be reviewed for removal.

- 3. **Disposing of Materials.** Meet subsection 205.03.P.
- 4. **Backfilling.** Meet subsection 204.03.C.

**203.04 Measurement and Payment.**

<b>Contract Item (Pay Item)</b>	<b>Pay Unit</b>
Dr Structure, Rem .....	Each
Dr Structure, Abandon .....	Each
Culv, Rem, ____ inch .....	Each
Culv End, Rem, ____ inch .....	Each
Sewer, Rem, ____ inch .....	Foot

- A. Payment for **Dr Structure, Rem** and **Dr Structure, Abandon** includes equipment, labor and materials to maintain and reconnect live sewers where required, and for removal of all attached parts and connections.
- B. Payment for **Culv, Rem** and **Culv End, Rem** will include the removal of any existing end treatments regardless of type. Elliptical or pipe arch culverts will be measured across the greatest dimension.
- C. Removal of pipes (culverts, sewers, underdrains, etc.) less than 12 inches in diameter will not be paid for separately, but will be included in the contract item for the construction of the new structure, culvert or sewer, if any portion of the existing pipe is within the excavation limits of the new item.
- D. Abandoning pipe culverts and abandoning sewers will not be paid for separately. Bulkheads over 12 inches required in abandoning pipe culverts and abandoning sewers, except when included in removing or abandoning a drainage structure, will be paid as **Sewer Bulkhead** according to subsection 402.04.D.