

DIVISION 3

REMOVALS

3.01 Description:

This work shall consist of removing, in whole or in part, all bridges, retaining walls, culverts, concrete, asphalt, curb and gutter, sidewalk, fence, poles, guard rail, manholes, catch basins, inlets, sewers, watermains, and other structures which are not suitable to be left in the roadway or are otherwise objectionable, salvaging and disposing of the resulting materials and backfilling the resulting trenches, holes and pits.

All walls, piers, foundations and similar masonry structures shall be removed entirely, or to an elevation at least two feet below subgrade within the area of the roadbed, or to provide two feet clearance from proposed new structure, and elsewhere to an elevation at least one foot below the finished surface.

3.02 Construction Methods:

3.02.01 Drop-Hammer Use – The use of a drop-ball, drop-hammer, pile-driver, or any such equipment may be permitted for the purpose of breaking up any structure in the streets or alleys when done under controlled conditions as approved by the Engineer. The Contractor shall be responsible for repairing any damage which may occur to adjacent property due to his operation.

3.02.02 Sawing Concrete – When a limited portion of a concrete pavement or similar structure is to be removed, the boundary of such portion shall first be sawed to a depth of not less than 1-1/2 inches with an approved masonry saw. When the sawing has been completed, the concrete which is to be removed shall be broken out using air hammers in such a manner as will leave the sides of the opening as nearly vertical and smooth as is feasible. Pavement crushers or breakers of any type are prohibited unless specifically authorized by the Engineer.

Concrete drives, which are being removed and replaced behind the property line for grade considerations, shall be removed along an existing joint provided the joint is not more than eleven (11) feet behind the property line and also provided that the necessary grade change can be accomplished within this distance. Concrete drive removal that does not fall within the limitations stated above, shall be accomplished by sawing the concrete as directed by the Engineer prior to removal.

Sawing of concrete shall be included as part of the removal item.

3.02.03 Removing Concrete Curb or Curb and Gutter – Removal of concrete curb or concrete curb and gutter shall consist of removing the entire section (stone) to the nearest joint or

saw cutting the stone at the desired location. At no time shall the remaining stone be less than four feet in length.

- 3.02.04 Blasting – Where blasting is necessary, the Contractor shall obtain the required permits and licenses at his own expense. The work shall be done in compliance with City Ordinance, and with due regard to the safety of workmen, other people, and public and private property. The method of covering blasts, amount of charges used, and the general procedure for doing this work shall be subject to the approval of the Engineer.
- 3.02.05 Removing Bituminous Asphalt – Asphalt pavement and drives shall be saw cut with an approved cutting device along removal limits. Bituminous asphalt may be removed with power equipment; however, it shall be removed separately and shall not become mixed with backfill material. Sawing of bituminous asphalt shall be included as part of the removal item. No additional payment will be considered.
- 3.02.06 Fences, Light Posts, Etc. – Any fences, light posts or other permanent fixtures located in the City right-of-way or in private property requiring removal due to interference with construction shall be removed and replaced in as good as original condition by the Contractor to a location adjacent to the right-of-way as directed by the Engineer.
- 3.02.07 Salvage – All materials having salvage value shall be the property of the City and shall be carefully removed to avoid damage and shall be delivered by the Contractor to the City of Wyoming's Public Service Building storage yard at 2660 Burlingame Avenue, SW, unless otherwise directed by the Engineer. The actual location for depositing the salvaged materials shall be designated by the Engineer at time of delivery.
- 3.02.08 Disposal of Waste – All concrete, stone, brick and other materials shall be hauled away by the Contractor to an approved dump.
- 3.02.9 Valve Chambers – When a valve chamber on a watermain is to be removed, a standard cast iron valve box will be furnished by the Contractor and installed according to the requirements of Division 16 of the Standard Construction Specifications.
- 3.02.10 Removing Tops of Existing Structures – When the top portion of existing manholes, catch basins, valve chambers, or similar structures are to be removed for the purpose of rebuilding such top portions to fit the required crown or grade of the surrounding area, such work shall be performed as herein specified. The work of removing tops of existing structures will not be measured separately but shall be considered as incidental to the work of rebuilding as specified in Division 16.
- 3.02.11 Backfilling – Unless otherwise specified, all trenches, holes, and pits resulting from the breaking down or removal of any structures shall be filled with Class II sand. The compaction of backfill shall be done in twelve (12) inch layers with vibrators or other mechanical means as approved by the Engineer to obtain a minimum density of 95% maximum unit weight as determined by Michigan Department of Transportation Specifications.

3.02.12 Cleaning Up – When the removed structures were in or near the right-of-way of a public street or alley, or in a right-of-way acquired across private property, the Contractor shall remove all resulting debris from the street surface, walks, gutters, fences, lawns, private property, right-of-way, and adjacent structures. When the removed structures were in or near or over a public water-way, the Contractor shall remove all resulting debris from the bed of the stream and the adjacent structures and land. All areas and structures to be cleaned as herein specified shall be left in as good condition as originally found, and all machinery, tools, surplus materials (except salvage), temporary buildings and other temporary structures shall be removed from the site before final payment will be made.

3.02.13 Bulkheads or Plugs – Where a drainage structure will be abandoned or removed with the sewer, the Contractor shall bulkhead or plug the sewer heads. This work shall be included in the cost of removing sewer or structures.

3.03 Method of Measurement:

Removal of bridges, retaining walls, concrete pavement, concrete curb and gutter, concrete sidewalk and drives, guard rail, manholes, catch basins, inlets, sewers, and watermain, unless otherwise provided, shall be measured in units as set forth in the proposal.

Removal of culverts, bituminous pavement less than six inches (6”), fences, and poles shall be included with other contract items, unless otherwise provided.

Any concrete removal and replacement due to carelessness by the Contractor, as determined by the Engineer, shall be at the Contractor’s expense.

3.04 Basis of Payment:

The contract unit price for each item as provided in the method of measurement in units set forth in the contract, shall be payment in full for furnishing all labor, materials, and equipment for breaking and removing, salvaging as directed, disposing of all waste or surplus material, and backfilling