

Excavation and backfill will not be measured for payment; instead these costs will be included in the unit price or prices bid for various pay items.

Reinforcing steel will be included as part of the cost of the structure, complete, and will not be measured as a pay item.

## SECTION 612

### ADJUSTMENT OF EXISTING STRUCTURES

#### 612.01. DESCRIPTION.

This work shall consist of adjusting, altering, relocating, or resetting to the required grade and aligning existing structures, equipment, or appurtenances; this applies to only those structures which are not to be removed or abandoned and which are not the property of a private company, firm, or corporation which would be required to move its own property. All work shall be in accordance with these Specifications and in reasonably close conformity with the lines, grades, elevations, and dimensions shown on the Plans or approved by the Engineer.

When specified on the Plans or shown in the Proposal, this work shall include refurbishing and resetting existing electrical equipment taken from storage.

#### 612.02. MATERIALS.

Materials for use in this work—including the existing item to be adjusted or reset and any new material necessary—shall be specified on the Plans, or if not specified, shall be of the same grade of material as specified elsewhere in these Specifications or for a similar type work, or of a material equivalent to that in the structure being adjusted.

#### 612.04. CONSTRUCTION METHODS.

- (a) **General.** The materials and workmanship necessary in raising, lowering, or otherwise adjusting or resetting existing structures shall conform to the requirements of the Plans and Specifications for the class of work involved, or as approved by the Engineer. Rebuild existing structures in accordance with the Plans and Specifications. If the structure is in the pavement, complete the final adjustment to grade after the final surface course has been placed.

Guard against damage or breakage to any portion of the structure or appurtenance to be altered, removed, or reset. Any damage or breakage due to failure to properly protect such structure or appurtenances shall be repaired or replaced at the Contractor's expense.

At the Contractor's expense, transport items to be reset from the storage site, and reset them as shown on the Plans. Repair or replace any items damaged as a result of failure to properly transport, adjust, or reset the structure or appurtenance. If the Plans specify an existing item to be modified, cleaned, repaired, or otherwise made ready for reuse, do this work in accordance with the Plan requirements, prior to resetting them at the planned location.

- (b) **Manholes.** Where the tops of the manholes are to be lowered to a new grade, remove the walls and rebuild them to an elevation far enough below the new grade so that the maximum batter of the walls does not exceed 4 inches per foot (330 mm per meter).

Where manholes are to be built up a distance of 1 foot (300 mm) or less to a new grade, the walls may be carried up vertically. Where the walls are to be built up a distance exceeding 1 foot (300 mm), first remove the existing walls to the bottom of the batter section, or to such elevation that the inside diameter of the manhole is not less than 3 feet (one meter). After that, rebuild the manhole in conformity with the size and shape requirements for new manholes.

- (c) **Catch Basins, Inlets, Manholes.** Where inlets, catch basins, manholes or similar structures are to be revised to grade or rebuilt, do the work in conformity with the requirements for new construction of this class of work as provided in 611 of these Specifications.
- (d) **Valve Boxes, Meter Boxes, Lampholes.** Take care in removing valve boxes, meter boxes, etc., and resetting them to grade, to avoid breaking; any damage must be replaced at the Contractor's expense.
- (e) **Fire Hydrants, Valves, Water Meters, Waterlines, Manholes, Etc.** Where adjustment or relocation of waterlines and appurtenances is to be done by the owner, the Contractor shall be responsible for coordinating the arrangements with the owner for lowering or relocating of all waterlines and the resetting of water valves, meters, manholes, and fire hydrants. When the alteration is part of the work to be performed by the Contractor as a part of the contract, perform such work in conformity with the requirements of the owner as well as in accordance with the requirements of these Specifications for new work of this type.
- (f) **Traffic Signal or Highway Lighting Systems.** When the adjustment or relocation of traffic signals or highway lighting systems requires new concrete footing or other concrete appurtenances, construct these concrete structures in accordance with the details shown on the Plans and arrange for them to be paid for in other items of work, unless otherwise specified.

If items are to be reused—such as signal heads, luminaries, etc.—inspect them for damage and repair if necessary; then clean them thoroughly, and relamp them with a new lamp of the original size and type before reinstalling the items.

Dispose of materials that are not reusable—such as wiring, connectors, fuses, conduit, etc.—in a manner approved by the Engineer. Furnish all additional new materials necessary to complete the installation as specified and to make the system operational; they shall be paid for in other items of work.

After adjusting and/or resetting the items specified in this work and after the electrical connections have been completed, energize and test the traffic signal or highway lighting system in a manner approved by the Engineer. Correct any item that fails to function as specified to the satisfaction of the Engineer.

- (g) **Pipe Sewers.** If pipe sewers and appurtenances are to be removed and relaid, perform this work in conformity with the requirements for new sewers.
- (h) **Waterlines.** If waterlines and appurtenances are to be removed and relaid or lowered, perform this work in conformity with the requirements for new waterlines.

**612.05. METHOD OF MEASUREMENT.**

Structure to be adjusted and/or reset, or relaid, will be measured by each unit of the type and size specified or on the lump sum basis, if stipulated, complete with all necessary accessories, and will be operationally tested.

**612.06. BASIS OF PAYMENT.**

The accepted quantities of items, measured as provided above, will be paid for at the contract unit price as follows:

(A)	MANHOLES ADJUST TO GRADE .....	EACH
(B)	MANHOLES REBUILT .....	EACH
(C)	CATCH BASINS ADJUST TO GRADE .....	EACH
(D)	CATCH BASINS REBUILT .....	EACH
(E)	INLETS ADJUST TO GRADE .....	EACH
(F)	INLETS REBUILT .....	EACH
(G)	VALVE BOXES ADJUST TO GRADE .....	EACH
(H)	METER BOXES ADJUST TO GRADE .....	EACH
(I)	LAMPHOLES ADJUST TO GRADE .....	EACH
(J)	FIRE HYDRANT RESET .....	EACH
(K)	VALVES RESET .....	EACH
(L)	WATER METERS RESET .....	EACH
(M)	WATERLINE LOWERED .....	LINEAR FOOT (METERS)
(N)	WATERLINE REMOVED AND RELAID .....	LINEAR FOOT (METERS)
(O)	REMOVE & RELOCATE TRAFFIC SIGNAL	
	(Specific Item) .....	LUMP SUM
(P)	RESET LIGHT POLES .....	EACH
	(Specific Item)	
(Q)	ELECTRIC CABLE RELAID .....	LINEAR FOOT (METERS)
(R)	ELECTRIC CABLE CONDUIT RELAID .....	LINEAR FOOT (METERS)
(S)	PIPE SEWER REMOVED AND RELAID .....	LINEAR FOOT (METERS)
(T)	REMOVE AND RESET MANHOLE	
	FRAME AND COVER .....	EACH

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

Valve boxes, meter boxes, etc., in connection with valves or meters to be reset, will be considered as part of the valve or meter and will not be paid for as a separate item.

Valves in waterlines or fire hydrant leads will not be considered as a separate pay item, but the cost of resetting same shall be included in the contract unit price for the waterline or lead.

When the valve is under pavement, adjustment of the valve box will be a separate pay item.

Extensions to fire hydrant leads, when separately classified for payment, will be paid for as set out for the new waterlines under Section 616; otherwise cost of pipe for extending the lead shall be included in the contract unit price for fire hydrants reset.