

## **ITEM 07560.13 M - REMOVE AND RESET RUBBLE STONE MASONRY**

### **DESCRIPTION:**

The work shall consist of removing existing rubble stone masonry from its original position, cleaning the stone, and resetting the stone, where indicated on the contract plans or where ordered by the Engineer.

### **MATERIALS:**

Portland cement shall be Type 6 (white) cement meeting the material requirements of Subsection 701-01 of the Standard Specifications, except that the maximum permissible alkali content shall be 0.60 percent. All portland cement used for this item shall be supplied by the same manufacturer.

Hydrated lime shall meet the requirements of ASTM C 207, Type SA. All hydrated lime used for this item shall be supplied by the same manufacturer.

Masonry sand shall be obtained from a natural local source, and graded per ASTM C 144. The sand shall be free of impurities such as salts, organic impurities, and other deleterious materials in accordance with ASTM C 144. The Contractor shall provide a sample of the masonry sand to the Engineer for approval prior to commencing work.

Water used for mixing and curing mortar shall meet the requirements of Subsection 712-01 of the Standard Specifications.

New stones shall match or replicate the existing masonry and native stone as closely as possible in kind, sizes, quality, color, texture, and finish. All stones shall be clean and free from structural defects. Samples of the new stone shall be submitted to the Engineer for approval.

### **CONSTRUCTION DETAILS:**

This work shall be performed by skilled masons with a minimum of five years experience restoring historic masonry structures. The Contractor shall provide the Engineer with specific documentation of each mason's experience.

The Contractor shall carefully remove the existing stone masonry as shown on the plans or as ordered by the Engineer. All stone shall be cleaned and old mortar removed, as approved by the Engineer, prior to reuse within the reset stone masonry. The existing masonry surface below the stone masonry designated to be removed shall be blown clean by oil-free compressed air to the satisfaction of the Engineer, and all voids filled with fresh mortar.

The masonry shall be reset in accordance with the requirements of Subsection 560-3.05 of the Standard Specifications, except as modified by this specification. The new masonry shall be true to line and to the dimensions shown on the plans or as ordered by the Engineer. The workmanship shall duplicate that of the original installation.

Mortar shall consist of 1 part portland cement, 2 parts lime, and 8 parts sand. After adding all ingredients (including water) to a mechanical mixer, mix for 3 to 5 minutes to entrain air and produce a workable and uniform consistency. Mortar that has stiffened due to evaporation may

**ITEM 07560.13 M - REMOVE AND RESET RUBBLE STONE MASONRY**

be retempered by adding water to restore a workable consistency. Discard all unused mortar 2 ½ hours after mixing. The use of pigments or other mortar additives will not be permitted.

At the completion of the project, masonry surfaces shall be cleaned using plain water and natural bristle or nylon brushes as directed by the Engineer. Use of chemical detergents will not be permitted for cleaning masonry.

**METHOD OF MEASUREMENT:**

This work will be measured by the number of cubic meters of the stone masonry, reset in its final location.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.