

SECTION 02274 – RIPRAP

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS:

This specification covers the requirements for furnishing and installing riprap.

PART 2 – PRODUCTS

2.01 MATERIALS:

- A. Stones: Shall be clean, free of seams and blemishes or other imperfections, and when tested in accordance with ASTM shall show wear not to exceed 50%. All stones shall be obtained from the same source. All stones shall be moss rock or blue stone (quarried or shattered face exposed). The stones may be variable in sizes, shall not be thicker than the depth of the course being placed.
- B. Stones required for riprap shall be quarried, field stones or salvaged from an approved source. The source(s) of stones shall be approved by the Engineer prior to the start of construction. Approval of a source of stones shall not be construed as an approval of all material from that source, nor that the source will produce the quantity and size required by this specification.
- C. Stones shall be Ameron HC&D 'B' 8" x 15" stones, 160# to 1.5# or equal.

PART 3 - EXECUTION

3.01 GENERAL:

- A. The Contractor shall use equipment and workmen capable of performing the work specified in this section.
- B. The construction methods which the Contractor intends to use shall be thoroughly discussed with the Engineer and the approval of the methods obtained prior to commencing the operations.

3.02 INSTALLATION:

- A. Stones shall be placed to match the limits, elevations, lines and slopes as indicated on the drawings and as specified hereinafter. Stones shall be in pieces generally rectangular in cross section, the least dimension of any piece being not less than one-third its greatest dimension. In general, the stone shall be keyed and fitted tight and placed so that vertical joints are broken with the long axis of the stone set approximately normal to the structure slope and pointing inward toward the center of the structure section. The contractor shall maintain the placed stone until accepted and any material displaced by any cause shall be replaced at his expense.
- B. Preparation of Ground Surface: Prior to replacement or resetting of stones as shown on the drawings and specified in this section the subgrade shall be compacted to 90%.
- C. Placement: Stones for repair shall be selected with care as to size and shape and placed in such a manner as to produce the required section as indicated on the drawing. Each stone shall be fitted and keyed with adjacent stones, leaving voids through which underlying stones cannot pass. Resetting of adjacent in-place stone to provide for proper placing of shifted or separated stone shall be considered incidental to this work. All stone shall rest securely upon the underlying stone. The voids between the stone shall not be filled with chink stones. Voids shall not be more than 2 inches in diameter. The placement of stone shall proceed as soon as practicable after placement of the underlying stone to prevent displacement of the underlying stone.
- D. Removal of Rejected Stones: If a newly placed stone or reset stone is found defective in quality, size, shape, weight or placement, the Contractor shall promptly remove the defective stone and replace it with a new stone or reset the required stone to the satisfaction of the Engineer, at no increase in contract price.

END OF SECTION