NOTE TO CONSULTANTS: Edit with Track Changes turned on, any text in this section that appears in bold and italics then turn off the bold and italics for the final approved version. (Remove this Note).

PART 1 – GENERAL

1.01 DESCRIPTION:

A. General: Site Landscape Boulders shall be pre-approved before delivery by the Consultant.

1.02 RELATED SECTIONS:

Section 31 00 00 - Earthwork

1.03 PERFORMANCE REQUIREMENTS:

A. General: Deliver to the site and place landscape boulders in conformance with the Contract Documents and under the direction of the Consultant and the Engineer.

1.04 SUBMITTALS:

A. General: Submit the following in accordance with Division 01 Specifications;

1. Product data and source for each type of stone.
2. Samples of stone (consisting of stones not less than 12 inches square) for verification purposes of form, color, grade, finish, type, and variety of stone required. Include 2 or more stones in each set of samples showing the full range of variations in appearance characteristics to be expected in the completed work. Deliver samples to the site for review by the Engineer and the Engineer.

1.05 QUALITY ASSURANCE:

A. Single-Source Responsibility for Stone: Obtain stone from a single quarry with resources to provide materials of consistent quality in appearance and physical properties, including the capacity to place the material without delaying the progress of the work.

B. Information on the Contract Documents establishes the requirements for both aesthetic effects and performance of the stone. Aesthetic effects relative to the formal characteristics are indicated by dimensions, arrangement, alignment, and profiles of components and assemblies as they relate to sight lines and relationships to one another and to adjoining construction; performance is indicated by criteria subject to verification either by preconstruction or field test, if applicable, or by in-service experience.

C. Do not modify intended aesthetic effects, except with the Engineer's approval, and

only to the extent exclusively needed to comply with the performance requirements. Where modifications are proposed, submit comprehensive explanatory data for review.

D. Installer Qualifications: Installer shall be an experienced equipment operator and landscape boulder placement technician, with at least 3 years experience placing landscape boulders.

1.06 DELIVERY, STORAGE AND HANDLING:

A. Deliver materials to the project site in undamaged condition.

B. Store and handle the stone and related materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, corrosion, breakage, chipping, or other causes

C. Do not use pinch or use wrecking bars.

D. Lift with wide-belt-type slings where possible; do not use wire rope or ropes containing tar or other substances that might cause staining.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Stones shall per-selected at the supplier's yard and shall be free from cracks, flaking and deterioration.

2.02 STONE:

A. ***Granite Boulders: "High Cascade" Weathered Granite***
Finish: Smooth.
Size: 2-5 "man" rock.
Boulders must be smooth and free of cracking, flaking and machine marks.

B. Or, approved equal.

PART 3 – EXECUTION

3.01 EXAMINATION:

A. Examine the areas to receive the boulder placement, and the conditions under which the boulders will be installed, with the Installer present, for compliance with the requirements for installation and other conditions affecting the performance of the placement. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION:

A. Protect the stonework during setting as follows:

B. Prevent staining of the stone from caulking or paving materials. Immediately remove such materials from the stone without damage to the latter.

C. Protect boulders from damage from construction machines and materials.

D. Clean stone surfaces that have become dirty and stained prior to setting. Remove soil, stains, and foreign materials. Clean stones by thoroughly scrubbing stones with fiber brushes followed by a thorough drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh filler or abrasives.

3.03 SETTING STONE, GENERAL:

A. Set the stones to comply with the requirements indicated on the Drawings and the final shop drawings.

B. Broken, chipped, stained, or otherwise damaged stones.

C. Broken, chipped, stained, or otherwise damaged stone shall be replaced until the methods and results are acceptable to the Engineer.

3.04 PROTECTION:

A. Provide final protection and maintain conditions to ensure that no damage occurs to the stonework until Substantial Completion is approved.

3.06 CLEANUP:

A. Remove all metal, wood, and concrete debris, protective wrappings and coverings, and shipping materials from the project site. Remove all residues, repair all stains, scuffs, abrasions, and marks from the finished product prior to requesting inspection. Fully restore all areas of the site that were impacted by the installation activities per SPR Standard Specifications for landscape planting.

END OF SECTION