SECTION 04201

MODULAR BLOCK RETAINING WALL

04201.01 GENERAL

A. Description

Modular block retaining wall shall include, but not necessarily be limited to, performing design, preparation of final plans, furnishing and construction of a modular block wall system above and below grade to the size, finish, and at the locations indicated in accordance with the Contract Documents or as directed by the Engineer.

B. Related Work Included Elsewhere

- 1. General excavation; Section 02220.
- 2. Excavation support; Section 02400.
- 3. Dewatering; Section 02512.
- 4. Porous Backfill; Section 02246.
- 5. Portland Cement Concrete; Section 03310.
- 6. Cast-In-Place Concrete Structures; Section 03300.

C. Submittals

1. Approved Retaining Wall Systems for This Project:

| Recon Retaining Wall | Reinforced Earth Wall | Isogrid Retaining Wall System |
|--|-------------------------------|-------------------------------|
| Recon Wall Systems, Inc. | Reinforced Earth Wall Company | The Neel Company |
| 7600 W. 27 th Street, # 229 | 2010 Corporate Ridge | 8328 D Traford Lane |
| St. Louis Park, MN 55426 | McLean, VA 22102 | Springfield VA 22152 |

| Keystone Wall | Mesa Wall |
|-----------------------------------|---------------------------------|
| Keystone Retaining Wall | Tensar Earth Technologies, Inc. |
| Systems, LLC | 8201 Corporate Drive, Suite 620 |
| 4444 West 78 th Street | Landover, MD 20785 |
| Minneapolis, MN 55435 | |

- 2. The Contractor shall submit four samples of each type of block furnished for approval prior to construction.
- 3. Certificates of compliance shall be submitted as specified in the "General Provisions" for all block furnished stating that the material meets the requirements specified in Section 04201.02.
- D. Quality Assurance

- 1. The Engineer will inspect all materials before and/or after installation to ensure compliance with the Contract Documents.
- 2. The Contractor shall construct sample masonry panels of exposed block masonry. Panels shall be not less than 4' x 4' x 8" thick and incorporate reinforcing, face units, and backup units as indicated. Panels shall show the proposed color range, texture, bond, mortar joint, and workmanship of masonry materials. Do not proceed with masonry wall work until the Engineer has approved the sample panel for the work involved. The approved panels shall become the standard of comparison for all masonry work built of the materials that the approved panels include. Do not alter, move, or destroy the panels until all masonry work is complete.
- 3. Block units shall be free from dust or other injurious matter, and shall be thoroughly seasoned, whole, sound, and free from cracks or other defects that interfere with the proper placing or impair the strength or permanence of the construction.
- 4. Tolerances: Faces of walls, and inside and outside corners, shall be plumb, and courses shall be within the tolerances indicated by the wall system manufacturer.

04201.02 MATERIALS

A. Materials Furnished by the County

The County will not furnish any materials for the modular block retaining wall.

B. Contractor's Options

The Contractor shall submit working drawings, design calculations, and specifications prepared by the modular block wall manufacturer to the County for review and approval.

C. Detailed Material Requirements

Per Manufacturer's specification and meeting the specifications detailed on the Plans.

04201.03 EXECUTION

Per Manufacturer's specification and meeting the specifications detailed on the Plans.

04201.04 METHOD OF MEASUREMENT

Measurement for the modular block retaining wall system will be made on basis of the block face surface area measured in square feet. Area measurement is made from the top of the stone leveling pad to the top of the cap unit for the length specified on the Plans. All stone, modular block units, drain pipe, geotextile, reinforcing steel, and all materials and incidentals specified on the plans or required by the Manufacturer shall be included in the square foot measurement.

04201.05 BASIS OF PAYMENT

Payment for the modular block retaining wall system will be made at the price bid per square foot. The price bid shall include excavation; backfill; disposal of excess materials; preparing foundation soil; furnishing and installing leveling pad; geotextile; stone; and all other materials; labor, equipment, tools, and incidentals necessary to complete the required work.