SECTION 02516

BRICK PAVERS

1. GENERAL

- 1.01 REFERENCES: The BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF THE CONTRACT and applicable parts of DIVISION 1 GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.
- 1.02 WORK INCLUDED: Provide all equipment and materials and do all work necessary to furnish and install the brick paver accent strips in the concrete pavement, as indicated on the drawings and as specified.
- 1.03 RELATED WORK: Examine Contract Documents for requirements that affect work of this Section. Other Specification Sections that directly relate to work of this Section include, but are not limited to:
 - A. DIVISION 31, Section EARTHWORK; establishment of subgrade elevations.
 - B. DIVISION 7, Section -JOINT SEALERS; expansion joint sealant and backer rod.
- 1.04 REFERENCES: Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.
 - A. American National Standards Institute/American Society for Testing and Materials (ANSI/ASTM):

C 902 Pedestrian and Light Traffic Paving Brick

- B. American Society for Testing and Materials (ASTM):
 - C 67 Sampling and Testing Brick and Structural Clay Tile
 - C 91 Masonry Cement
 - C 136 Sieve Analysis of Fine and Coarse Aggregates
 - C 144 Aggregate for Masonry Mortar
 - C 150 Portland Cement
 - C 207 Hydrated Lime for Masonry Purposes
 - C 216 Facing Brick (Solid Masonry Units Made from Clay or Shale)
- 1.05 SUBMITTALS
 - A. Samples: Furnish ten individual brick pavers as samples, showing extreme variations in color and texture.
 - B. Manufacturer's Product Data: Manufacturer's product data shall be submitted for the following items:
 - 1. Brick paver
 - 2. Latex Polymer mortar additive.
 - 3. Mortar coloring additive
 - C. Test Report: Submit reports from tests conforming to ASTM C 67 methods indicating:
 - 1. Compressive strength, psi.

- 2. Absorption, 24 hr. submersion in cold water.
- 4. Maximum saturation coefficient.
- 5. Initial rate of absorption (suction).
- 6. Abrasion index.
- 7. Freeze-thaw.
- 8. Efflorescence.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Brick pavers shall be carefully packed by the supplier for shipment.
 - 1. Waxed bricks shall have waxed surface protected with a paper separator or shall have waxed surfaces facing each other during delivery and storage.
- B. Brick shall be stored off the ground and protected against staining and other damage.
 - 1. Waxed bricks shall be stored protected from the sun.
- C. Pavers damaged in any manner will be rejected and replaced with new materials at no additional cost to the Owner.
- 1.07 PROTECTION OF FINISHED SURFACES: Finished surfaces adjacent to the brick paving work shall be adequately protected from soiling, staining and other damage during construction.
- 2. PRODUCTS

2.01 BRICK PAVERS

- A. Brick pavers shall meet or exceed the requirements of ASTM C 216, Grade SW, Type FBS, and ANSI/ASTM C 902, Class SX, Abrasion Type I, PA Chippage.
- B. Brick pavers shall be equal to the following:

1. "Morin Old Porter Brick Paver", manufactured by Morin Brick Company or as required by City of Portland Sidewalk Standards.

- C. Brick shall conform to the following requirements:
 - 1. Average absorption, 24 hr. cold water absorption test = 4% or less.
 - 2. Average compressive strength of not less than 10,500 psi for any five bricks tested.
 - 3. Capable of withstanding at least the equivalent of 100 cycles of freeze-thaw conditions.
 - 4. Permissible paver tolerances shall conform to ANSI/ASTM C902.
 - 5. Paver shall not vary from nominal dimensions by more than 1/8".
- D. Color and texture shall match the sample at the office of the Architect and shall be as approved by the Architect from samples submitted by the Contractor prior to delivery.
- E. Brick shall be uniform in color, size, appearance and dimensions, and shall have smooth regular edges where they are closely butted.
- F. Brick shall have a temporary wax coating with a 130°F melting point to protect surface from latex modified mortar.
- G. Laminated brick will not be accepted.
- 3. EXECUTION

3.01 INSTALLATION PROCEEDURES

- A. Install brick paving in accordance with City of Portland Sidewalk Paving Standards
- B. Brick pavers with chips, cracks, stains or other defects which might be visible in the finished work shall not be used.

3.03JOINT TREATMENT

A. Brick joints shall be uniform in thickness. All joints except expansion joints shall be 3/8" thick. Expansion joints shall be 1/2" thick.

3.04 CLEANING AND PROTECTION OF BRICK SURFACES

- A. After completion of brick paving, surfaces shall be carefully cleaned, removing all dirt, excess mortar, filler and stains.
- B. Expansion joints shall be cleaned and left ready for sealing of joints under Section 07900, JOINT SEALERS.
- C. Completed brick surfaces shall be thoroughly cleaned of wax coating using a steam jenny or other method approved by the Architect.
 - 1. Steam jenny shall have a capacity of 150 ga.. per hour at 120 psi and 325°F coil temperature.

END OF SECTION