MATERIALS:

A. Brick Pavers

1. Manufactured from extruded fireclay or shale and fire to produce a dense paver thoroughly annealed and evenly burned so that, when broken, they show a uniformly dense structure free from lime, air pockets, and marked laminations.

2. Provide brick pavers in walk areas in accordance with ASTM C 902, Class SX, Type I.

3. Paver thickness shall be 2-1/4" (minimum).

4. Provide a bevel-edge brick paver of quality and color to match the tone and hue of the bricks listed below, as approved by the Engineer. Provide three representative bricks for color approval.

Brick Paver Specifications:
a. English Edge RF (Red Flash) Brick Paver #552475
b. Dimensions 2-1/4" x 4" x 8" as manufactured by Pine Hall Brick for Walks
c. Dimensions 2-3/4" x 4" x 8" as manufactured by Pine Hall Brick for Curb Ramps

Brick must meet dimensions and quality. Contractor is to discard any defective bricks.

Color Blending Instructions:
Pavers are to be laid from multiple pallets to accomplish a uniform blending of colors.

5. Temporary wax coating of pavers is permissible, but not required. If temporary wax coating is provided, the Contractor shall remove the wax coating as per manufacturer's recommendations prior to placing the pavers in service.

6. The manufacturer shall blend the pavers at the plant prior to palletizing.

7. Clay pavers shall have a minimum compressive strength of 7,500 psi with no individual stone testing less than 7,200 psi.

a. Clay pavers shall have an absorption rate of less than 6% when tested in accordance with ASTM C140 with no individual stone testing more than 7%.

B. Asphalt Setting Bed Specifications:

1. Asphalt setting bed for clay pavers shall be made from the following materials:

a. Asphalt cement to be used on the Asphalt setting bed shall conform to ASTM Designation D-3381.

b. The fine aggregate to be used in the asphalt setting bed shall be clean, hard sand with durable particles and free from adherent coatings, lumps of clay, alkali salts, and organic matter. It shall be uniformly graded from "coarse" to "fine" and all passing the No. 4 sieve and meet the gradation requirements when tested in accordance with the standard method of test for sieve or screen analysis of fine and coarse aggregates ASTM Designation C-136-81.

c. The dried fine aggregate shall be combined with hot asphalt cement, and the mix shall be heated to approximately 300°F at an asphalt plant. The approximate proportion of materials shall be 7% asphalt cement and 93% fine aggregate. Each ton shall be apportioned by weight in the approximate ratio of 145 lbs. asphalt to 1,855 lbs. sand. The contractor shall determine the exact proportions to produce the best possible mixture for construction of the asphalt setting bed to meet construction requirements.

2. Neoprene-Modified Asphalt Adhesive Under Clay Pavers: Mastic (asphalt adhesive): shall be Karnak #237-2% AF Neo-asphalt or an approved equivalent.

3. Joint filler for clay pavers:

SandLOCK Binder being a proprietary, non-toxic, organic binder that is colorless and odorless concentrated powder that binds aggregates together to produce a firm paver joint. Sand shall conform to ASTM C-33. Refer to plans for locations of joint filler.

C. Construction Underlayment

Furnish concrete with fiber mesh following ODOT Specification Item 608 Walks with the additive to the concrete of fiber mesh to manufacturers recommendation. Expansion joint shall be placed between the concrete underlayment and curb, concrete walk, and stone wall.

Concrete underlayment shall be cured with one coat of Super Diamond Clear. Concrete underlayment shall be finished to the proper uniform grade with a smooth troweled finish.

CONSTRUCTION

A. Quality Assurance

1. Source Quality Control

a. Provide independent testing reports as per ASTM C 1272 and this specification for:

1) Compressive strength
2) Freeze-thaw cycles
3) Sulfates soundness test ASTM C 88
4) Absorption rate, coefficient of saturation
5) Tolerances on dimensions
6) Skid resistance, ASTM E 274

2. All brick paving shall be performed by the Contractor's employees, or a single subcontractor with his employees. Skilled craftsmen shall be employed for all brick paving work. Thirty days prior to brick paving work, the Contractor shall submit to the City for their approval the names of his employees or the name of his subcontractor and his employees who will perform the brick paving work, a list of projects that were completed by same, and the years of experience performing similar work.

B. Product Delivery, Storage, and Handling

1. Deliver packaged masonry materials in their original, unopened containers clearly labeled with the manufacturer's name and brand designation, the type, and class as applicable.

2. Handle and store brick masonry materials in a manner that prevents damage or inclusion of any foreign and/or deleterious material. Store under waterproof covers and on planking clear of the ground. Label each pallet of brick with the manufacturer's name, pallet identification number, quantity of brick, and shipping date.

3. Transport and stockpile aggregates separately according to their sources and gradations. Handle at all times in a manner that prevents segregation or contamination with earth or foreign materials.

4. Store emulsions in temperatures above 40°F.