

SECTION 02517- UNIT PAVERS

PART 1 - GENERAL

1.01 GENERAL PROVISIONS:

- A. The Conditions of the Contract and all Sections of Division 1 are hereby made a part of this Section.

1.02 DESCRIPTION OF WORK:

- A. Provide paving units where shown and as detailed on the drawings.
 - 1. Clay Brick Pavers along sidewalks within public Right of Ways
 - 2. Precast Concrete pavers at terrace area as shown on the plans
 - 3. Precast Truncated Dome Pavers at all accessible ramp areas as indicated on the plans.
- B. 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:
 - 1. SECTION 02315 – COMMON EXCAVATION EMBANKMENT AND COMPACTION
 - 2. SECTION 02741- BITUMINOUS CONCRETE PAVEMENT
- C. Alternates, Allowance, Unit Prices: Refer to Section 01000 to determine extent, if any, work of this Section will be affected by any Alternates, Allowances, or Unit Prices.

1.03 QUALITY ASSURANCE, SUBMITTALS:

- A. Comply with requirements of DIVISION 1- GENERAL REQUIREMENTS.
- B. Paver installation to be performed by a professional firm with a proven history of successful projects of similar scope.
- C. Submittals: Provide submittals as follows:
 - 1. Product Data:
 - a. Paving Brick
 - b. Concrete Pavers
 - c. Truncated Dome pavers at accessible ramps
 - d. Edge restraint.
 - 2. Samples:
 - a. Unit or units representative of full color image, size, shape and texture of pavers.
 - b. Edge restraint.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Protect pavers before and during construction from physical damage and contamination from soil and other materials that may cause staining.

1.05 JOB CONDITIONS

- B. Cold Weather Protection:
 - 1. Frozen Materials: Do not use frozen materials or materials mixed or coated with ice or frost.
 - 2. Frozen Work: Do not install when subgrade, base, or setting bed is frozen. Remove and replace work damaged by frost or freezing.

PART 2 - PRODUCTS

2.01 BRICK PAVERS

- A. Brick Masonry Paving Units: Provide full depth brick paving bricks as manufactured by Lachance Brick Co. or approved equal.
- B. General specifications are per ASTM C-216.
 - 1. Size: Nominal 4" x 8" x 2 3/8" thick.
 - 2. Color: "Old Port Blend", or approved equal.

2.02 CONCRETE UNIT PAVERS

- A. Concrete Masonry Paving Units: Provide full depth concrete paving blocks "Traditional Pressed Brick" as manufactured by Hanover Architectural Products, or approved equal.
- B. General specifications are per ASTM C-216.
 - 1. Size: Nominal 11.75" x 11.75" x 2 3/8" thick.
 - 2. Finish: Tudor
 - 3. Color: TBD by Architect. 2 colors are required. Colors will be selected from standard manufactured color chart.

2.03 CONCRETE TRUNCATED DOME PAVERS

- A. Concrete Masonry Paving Units: Provide full depth concrete paving bricks "Detectable Warning Paver" as manufactured by Hanover Architectural Products, or approved equal.
- B. General specifications are per ASTM C-216.
 - 1. Size: Nominal 11.75" x 11.75" x 2 " thick.
 - 2. Finish: Tudor
 - 4. Color: TBD by Architect. 2 colors are required. Colors will be selected from standard manufactured color chart.

2.04 SETTING BED AND JOINT SAND

- A. Setting bed shall consist of two parts Concrete sand conforming to ASTM C33 and one part mortar cement, equally mixed prior to placement.

- B. Joint Sand to be sharp sand, washed and free of foreign material.

PART 3 - EXECUTION

3.01 GENERAL

- A. Place setting bed and edge restraints.
- B. Set Pavers in configurations/patterns as shown on drawings.
- C. Compact and sand sweep joints to provide tight, interlocking surface.
- D. Units with excessive chips, cracks, voids, discoloration, or other defects which may affect finished work, will not be used and will be rejected.

3.02 INSTALLATION OF UNIT PAVERS

A. Base:

1. Contractor shall inspect and verify that aggregate base and bituminous binder course for all work covered in this Section has been placed and compacted in the amounts specified in the Drawings and Specifications (See SECTION 02200 - EARTHWORK and SECTION 02513 - BITUMINOUS PAVING).
2. Commencement of work by the Contractor signifies acceptance of base conditions. Any deviations or abnormalities in base preparation are to be reported to the Architect immediately.

B. Setting Bed

1. Place and screed setting bed to grades and lines as required. Thickness after paver installation to be no less than 3/4" and no greater than 1 1/2".
2. Do not use water saturated or frozen sand.
3. Do not use sand to compensate for improperly installed or compacted base or for making up any unevenness or irregularity in the base course surface as this will show through to the finished surface of the pavers over time.
4. Do not walk on or otherwise disturb screeded setting bed surface prior to paver installation.

C. Pavers & Concrete Unit Pavers

1. Set pavers hand tight using specified colors, shapes and textures in patterns and configurations shown.

2. Trim and cut pavers as required using a motor driven masonry saw with a blade designed specifically for the cutting of paving units. Only the minimum number of cuts will be used. Small pieces used to create what could have been a larger, uncut whole will not be accepted.
3. A typical "hand-tight" spacing is to be maintained between pavers.
4. Joints greater than 3/8" are not allowed, and pavers shall be cut as required to meet this requirement. Gaps between pavers and adjoining objects shall be filled with sand.
5. After pavers are set, vibrate into place with a plate vibrator capable of 3,000 to 5,000 pounds centrifugal compaction force and operating at a frequency of 80 to 90 hertz. Two passes in opposing directions (at right angles) minimum to be made with vibrator.
6. Sweep joints with dry sand, and vibrate (lightly water when sand/cement used). Repeat process to fill joints. Damp sand may be spread over paver surface and allowed to dry before filling joints.
7. Do not compact closer than 3' to an unrestrained paver edge.
8. All work must be compacted up to 3' from stopping point by the end of each work day. Cover and protect setting bed and uncompacted pavers until resumption of work.

D. Tolerances

9. Unless specified otherwise, finished surface elevations are not to deviate more than 1/4" under a 10' long straight edge in any direction.
10. Surface elevation of pavers are to be 1/8" to 1/4" above adjoining curbs, inlets, walks, etc. (and may be 1/8" to 1/4" above final grades in general) to allow for characteristic minor settling.

3.03 REPAIR, PROTECTION, CLEANUP

1. Replace units that are chipped, broken, stained, or in any other way do not conform to or may adversely affect the adjoining work.
2. Work area to be left in a neat and orderly manner upon completion of work, free from debris and swept clean.
3. Finished work is not to be used for storage of materials, unapproved vehicle movement or other operations which may damage, stain or otherwise mar the paver surface.

3.04 INSPECTION AND ACCEPTANCE

- D. When paver installation is complete, Architect will, upon request, inspect work to determine acceptability.

- E. Work that does not comply with requirements will be removed and replaced as specified and as shown on drawings, at no additional cost to Owner.
- F. Architect will, upon completion and request, inspect replaced areas to determine acceptability.

END OF SECTION 02517