### **UNIT PAVERS**

## PART 1 GENERAL

# 1.1 Related Work

.1 All Division 1 Specification Sections
.2 Section 02233 Granular Base
.3 Section 02311 Site Grading

# 1.3 <u>Samples</u>

- .1 Submit full size sample of each type of unit paver for the approval of the Consultant prior to shipping material to the site.
- .2 All work shall match approved production run samples.
- .3 Identify all samples with project name and number, date, description and all other pertinent information.

# 1.4 **Shop Drawings**

- .1 Prepare and submit shop drawings in accordance with Section <a href="https://doi.org/10.1030/journal.org/">01330 Submittals</a> and as specified below.
- .2 Clearly indicate layout, pattern and relationship of paving joints to fixtures and adjacent project installations.

# 1.5 <u>Protection</u>

- .1 Prevent damage to surrounding area and structures and adjacent property. Make good any damage.
- .2 Maintain access to buildings at all times and coordinate paving schedule to minimize interference with the normal use of the premises.

### PART 2 PRODUCTS

# 2.1 Materials

- .1 Unit pavers: uniform in materials, colour and size and from one manufacturer.
- .2 19 mm 'Crusher Run' limestone gravel: clean, hard, durable crushed limestone, free from shale clay, organic matter and other deleterious substances and graded as follows:

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Sieve designation	% Passing
25 mm	100
16 mm	75-95
#4	35-55
#16	15-35
#50	7-20
#200	3-10

- .3 Sand: to CSA A82.56, hard durable, angular particles, free from clay lumps, cementation, organic material, frozen material and the deleterious materials.
- .4 Edging: as indicated on contract drawings.
- .5 Polymeric Jointing Sand:
  - .1 Product Type: Dry mix, contains polymeric binding agent, activated by water.
  - .2 Joint Sand Colours: (As selected by the Consultant.)
  - .3 Properties:
    - .1 Water resistant after 90 minutes
    - .2 Applied dry hardens after being misted
    - .3 Inhibits weed growth
    - .4 Deters ants and other insect infestation.
    - .5 Resists erosion water, frost, heaving, wind, power washing, etc.
    - .6 Stabilizes pavers strengthens interlocking
  - .4 Sieve analyses: Most meet ASTM-C144 compliance.
  - .5 Compressive strength is to be 800 psi (unless otherwise stated)
- .6 Final set time is 170 minutes.
- .7 Required bedding type should be drainage bed (sand -set), as recommended by the Interlocking Concrete Pavement Institute (ICPI).
- .8 Minimum joint width is 1/8" (3 mm).
- .9 Maximum joint width is 1" (25 mm).
- .10. Joint depth: Fill paver joints completely. Minimum depth of 1.5" (38 mm)

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#### PART 3 EXECUTION

# 3.1 <u>Subgrade</u>

.1 Excavate and prepare the subgrade to the levels and depths indicated on the contract documents. In fill situations compact cohesion less fill soils to at least 98% of corrected maximum dry density and cohesive soils to at least 95% of corrected maximum dry density in lifts not exceeding 200 millimetres. For vehicular surfaces compact the subgrade to 100% of corrected maximum dry density.

## 3.2 Granular Base

- .1 Spread and compact crusher run limestone in uniform layers not exceeding 100 mm compacted thickness to the overall depth specified in the contract drawings.
- .2 Compact to a density of not less than 98% SPD.
- .3 Shape and roll alternately to obtain a smooth, even and uniformly compacted granular base and ensure conformity of grades with finished surface. Use approved mechanical tampers in areas inaccessible to rolling equipment.
- .4 Apply water as necessary during compaction to obtain specified density. If granular base is excessively moist, aerate by scarifying with suitable equipment until moisture content is corrected
- .5 Ensure top of granular base does not exceed plus or minus 10mm of finished grade less combined thickness of sand laying course plus surface course.

# 3.3 Edging

.1 Install edging true to grade, in the location and layout as shown on the contract drawings.

## 3.4 Sand Laying Course

.1 Place the sand to the depth indicated on the contract drawings.

# 3.5 <u>Surface Course</u>

- .1 Ensure the sand laying course is dry prior to placement of unit pavers.
- .2 Install unit pavers true to grade, in location, layout and plan as indicated.

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- .3 Where required cut units accurately without damaging edges.
  - .1 Install pavers with 3 mm joints.
  - .2 Tamp down and level pavers with a mechanical plate vibrator on 19mm thick plywood until unit pavers are true to grade and free of movement. For vehicular traffic surfaces tamp and level pavers with a rubber tired roller.

# 3.6 Polymeric Jointing Sand

- .1 Installation:
  - .1 Surface must be completely dry: Spread polymeric sand uniformly over surface. Using a push broom, sweep to fill joints completely to full depth.
- .2 Compaction:
  - .1 Pass mechanical plate vibrator on sand cushion over surface course to achieve compaction of sand in joints.
- .3 Wetting:
  - .1 Sweep the surface with a fine bristle brush and remove all residues with a leaf blower. Ensure that the wetting of one section is finished before another section is started. Wetting of the entire project should be done without any interruptions.
- .4 Drying:
  - .1 Surface should not be exposed to rain within 90 minutes to wetting.
  - .2 Surface of finished pavement: free from depressions exceeding 3mm as measured with a 3 m straight edge.
  - .3 A minimum of twenty-four (24) hours drying time is required prior to allowing foot traffic and forty-eight (48) hours for vehicular traffic on the paver surface.
  - .4 Sweep surface course clean prior to first use. The Consultant to review surface prior to use.

# 3.7 Cleaning

.1 Broom clean excess sand from finished paving stones, followed by a final water spray.

#### **END OF SECTION - 02785**