CORPORATION OF THE CITY OF BURLINGTON

SPECIFICATIONS

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UNIT MASONRY PAVING (SPEC. NO. SS6)

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CORPORATION OF THE CITY OF BURLINGTON

SPECIFICATIONS

FOR

UNIT MASONRY PAVING (SPEC. NO. SS6)

WORK INCLUDED

The work included under these specifications shall consist of supplying of all labour, materials and equipment to construct the masonry paving. All work shall conform to the lines, grades and dimensions indicated on the drawings or as directed by the Contract Administrator.

GENERAL

1. **Description**

   a) This section specifies the supply and installation of unit brick pavers.

   b) All masonry paving work shall be carried out by an approved contractor or subcontractor.

   c) Submit a representative sample of brick showing colour range and average sizes two weeks before any work starts.

   d) Before commencement of work, install a $2m^2$ panel brick paving in accordance with specifications and drawings.

   e) Install sample panel in approved location and amend panel as directed until approved by the Engineer.

   f) All brick work shall conform to approved samples and sample panel.

   g) Before commencing work, visit site and become familiar with the specifications governing the work of others, particularly backfill, concrete, mechanical and electrical work.

   h) Commencement of work will denote acceptance of surfaces and conditions and any subsequent failure of installed work of this Section due to surface defects will be rectified at no cost to the City.

   i) Co-ordinate work with that of other trades and fully co-operate with others so as not to delay work progress. Give timely notice to other trades when they are responsible for installation of electrical and mechanical items.

2. **Submittals**

   Be prepared to submit samples of any or all specified materials if requested by the Contract Administrator.

3. **Product Delivery, Storage and Handling**

   a) Additives for mortar shall be delivered in standard containers clearly marked with contents, weight and manufacturer's name and shall be stored off the ground in a dry weatherproof place.

   b) Mortar sand shall be delivered in a dry condition and protected at all times from the weather.
   c) All masonry units shall be stored off the ground on boards or pallets to prevent moisture absorption from the ground., Units shall be covered with weatherproof tarpaulins or similar to keep units dry and protected from rain, snow and mud.

d) Masonry units shall be handled carefully to prevent soiling, breaking or cracking.

e) Damaged units will be rejected and shall be removed from the site immediately.

4. **Reference Standards**

a) CSA Standard A82.56-195, Aggregate for Masonry Mortar.
b) CSA Standard A179-1975, Mortar and Grout for Unit Masonry.
c) CSA Standard A82.1-1977, Clay Brick.

5. **Protection**

a) Protect all masonry work from time of installation until acceptance of all project work. Do all necessary remedial work, as required to maintain work in acceptable approved condition.

b) Prevent traffic and work on newly-laid masonry by barricading areas for at lease 48 hours following installation.

PRODUCTS

6. **Materials**

a) Granular Base Course: In accordance with specified requirements of Section 02 200 and as follows: Base Course: Granular "A".

b) Concrete: To meet the requirements of the City of Burlington Standard No. SS7-1. Concrete Sidewalks, Bus Pads, Curb and Gutter.

c) Reinforcement: To meet requirements of Section 03 300, CSA A5.

d) Sand: Aggregates for masonry mortar shall conform to CSA-A82 and ASTM-C144-44.

e) Waterproofing admixtures for mixing with mortar shall be of approved manufacture, delivered in standard containers clearly marked with manufacturer's name ad brand.

f) Mortar colouring admixtures for setting bed and joint filler shall match colour of stone and be approved by the Contract Administrator.

g) Brick Pavers

i) Shall be as manufactured by a company indicated in the Special Provisions.
ii) Colour - as indicated in the Special Provisions for contract.
iii) Shape - as indicated in the Special Provisions for contract.
iv) Size - as indicated in the Special Provisions for contract.

h) Mortar:

i) Mortar for mortar cushion shall consist of one (1) part slow setting Portland masonry cement and three (3) parts sand by volume.

ii) Mortar for mortar slurry shall consist of equal parts of cement and sand to which shall be added an approved waterproofing and colouring admixture, applied in strict accordance with manufacturer's directions.

i) Expansion and Contraction Joint Fillers:

i) Bituminous fibre board.

ii) Joint Backing Material - resilient, extruded, close-celled polyethylene cord, 25% wider than joint width, manufactured by Dow Chemical Co. of Canada Ltd., or approved equivalent.

iii) Polysulphide sealant (two part) conforming to CGSB-19-GP-3b. Colour to match colour of mortar joints.

EXECUTION

7. Preparation

i) Ensure concrete work has been completed in accordance with Specifications and Drawings and confirm approval of cast-in-lace concrete sidewalk before commencing masonry work.

ii) Ensure that street tree planting has been completed in accordance with the drawings and confirm approval of tree planting before commencing placement of base course and pavers.

8. Placing Masonry on Slab

a) Sweep clean, remove laitance and other foreign matter that will impair and reduce bond. Concrete shall be wetted before placing mortar.

b) Spread mortar cushion evenly over concrete lab to the minimum specified depth (18mm) as indicated on drawings.

c) Cut masonry as required, using a saw cutter as recommended by the manufacturer to provide a clean, finished edge, flush and true with adjacent structures or materials.

d) Paving shall be installed true to line and level, to the specified pattern shown on drawings and conforming to the approved sample panel.

e) All joints shall be uniform in width as shown on drawings and true to line.

f) Joints to be + or - 10 mm.

g) Allow to dry for a minimum of 24 hours.

h) Fill joints with mortar slurry consisting of sand and cement proportioned one to one by volume, with addition of approved colouring and waterproofing agents. Water shall be added to the mixture in sufficient quantity to enable the mixture to flow freely in the joints.

i) Remove all mortar splatters and droppings from stone surfaces.

j) Apply required joint sealant to expansion and contraction joints in strict accordance with manufacturer's specifications.

k) Finished paving shall have a smooth surface, true to line and level and free of depressions and ridges of more than 5 mm.

9. Placing Masonry Around Tree Pit

a) Upon approval of the street tree planting, the granular base course shall be spread, graded and hand tramped to the profile indicated on drawings.

b) Masonry sand setting bed shall be spread evenly over the granular base course, to the depth specified on the drawings.

c) Brick pavers shall be laid out true to line and level, to the specified pattern shown on the drawings.

d) All joints shall be uniform in width 10 + or -mm and true to line.

e) Fine masonry sand shall be swept into the joint, watered in using fine spray and refilled with sand until paving units are firmly embedded.

10. **Replacement of Defective Work**

Replace entire masonry units that are defective.

11. **Cleanup**

a) Before cleaning operations begin, allow mortar to set and cure thoroughly.

b) Completion of all masonry mortar work and prior to street tree installation, clean all surfaces to remove contamination resulting from the work.

c) Use cleaning agent as recommended by brick manufacturer and in strict accordance with the manufacturer's recommendations.

d) Minor clean up shall be carried out after installation pavers at base of trees and prior to final inspection.

12. **PAYMENT**

Payment shall be based on the unit described in the Form of Tender for the Contract.