



**CITY OF VINCENT**

**SPECIFICATIONS FOR THE  
REINSTATEMENT OF  
INSITU CONCRETE, SLAB  
AND BRICK PAVED PATHS**

**Reviewed 20 July 2009**

## **REINSTATEMENT OF INSITU CONCRETE AND SLAB FOOTPATHS**

### **1. GENERAL**

- 1.1 All materials used shall be in accordance with the Council's standard specification and any materials used which are inferior to those specified or as directed by the Director Technical Services shall be rejected.
- 1.2 Protection of works and the public shall be provided and all necessary signs, barricades, road warning lamps etc. shall be installed.
- 1.3 Any damage which may occur to any Council facilities or private property during the course of the works of which may subsequently become evident from the operations thereof shall be the sole responsibility of the Contractor, who shall be held responsible for the repair, replacement, legal claims, liability or any other thing which may arise from the carrying out of any such works.
- 1.4 Adequate provisions shall be made for the safe and convenient passage of pedestrians and vehicles.
- 1.5 Suitable traffic barriers and/or warning signs to regulate and protect pedestrians and traffic shall be erected and maintained as may be necessary or as directed. Such barriers and warning signs, if required at night, shall be provided with warning lights and shall be illuminated from sunset to sunrise.
- 1.6 Where requested by the City, compaction tests are to be undertaken by the Contractor at their own expense.

### **2. EXISTING SERVICES**

The Contractor shall be responsible for the location of all existing services.

During the excavation, the Contractor shall take every precaution necessary for the protection of any existing service conduit.

All damage caused to services shall be the responsibility of the Contractor who shall arrange for the responsible Service Authority to make good any damage caused.

### **3. DAMAGE**

The Contractor shall be responsible for any damage caused to buildings, roads, paths, fences, persons or services by whatever cause due to the works and shall make these good and bear any compensation. Where services are damaged, the relevant Authority is to be notified immediately, and all charges, fees etc. paid by the contractor, at his cost.

### **4. WATER SUPPLY**

The Contractor shall provide at his own cost, all water necessary for the execution of the work. At no time shall the Contractor make unauthorised connection to or tamper with Water Corporation water mains or fittings without the approval of the Water Corporation.

### **5. PROVISION FOR TRAFFIC**

The Contractor shall provide traffic warning signs where work is in progress as per Australian Standards.

### **6. ROADS TO REMAIN OPEN TO TRAFFIC**

Roads shall remain open to traffic at all times.

Half road closures may be permitted during normal working hours following obtaining approval from the City, subject to the correct traffic control procedures being adopted.

Outside the normal hours and shall be left in a safe and trafficable condition for such purposes.

## 7. **CLEANING UP**

The Contractor shall ensure that works are finished to uniform grade, free of depressions and that all surfaces make smooth junctions with existing work. The Contractor shall remove from site all rubbish, and salvaged materials. The whole area shall be left in a neat and tidy condition to the satisfaction of the City.

## 8. **DEFECTS LIABILITY PERIOD**

The City of Vincent shall have the full, free and unrestricted use of the said work without any interference whatsoever on the part of the Contractor during the currency of the maintenance period and such use shall not relieve the Contractor of any liabilities of obligations.

## 9. **DUST CONTROL**

The Contractor shall comply with the provisions of "Dust Control Guidelines" published by the Environmental Protection Authority – September 1990.

## 10. **NOISE CONTROL**

Hours of work to comply with Environment Protection (Noise) regulations 1997.

## 11. **ADJACENT RESIDENCES**

The Contractor shall ensure particular attention is given to plant, equipment and manpower operations so as to avoid causing a nuisance to adjacent residences due to the works.

## 12. **REINSTATEMENT OF INSITU CONCRETE PATH**

12.1 **Concrete** – all concrete used in works shall develop a minimum compressive strength of 20 megapascals at 28 days and shall be composed of a mixture of screenings, sand and cement to give the strength specified with a maximum slump of 80mm. Please note: - minimum allowable aggregate size is 14mm.

**Note:** Concrete prepared and mixed on site will **NOT** be accepted.

12.2 **Excavation** – the excavation for the pavement bed shall be taken out to the levels, lines and grade agreed set by the Director Technical Services or representative and all excavation shall be executed cleanly and efficiently to provide for a consolidated sound base free from depressions or any deleterious materials to give a minimum 100mm depth of concrete pavement.

12.3 **Placing concrete** – the base shall be thoroughly and evenly moistened prior to placing concrete. Concrete shall be evenly placed to a depth specified and shovelled into position continuously and spaded especially at all edges to give maximum density. No break in operations shall be permitted from time of placing to finishing except as authorised by the Director Technical Services or representative.

12.4 **Finishing** – the finish shall be obtained by spreading to the correct levels and broom finished to provide a non-slip dense surface free of any depressions, marks, honeycomb sections or accumulation of fine dust accretions liable to cause excessive surface wear. The final surface finish shall be to the entire satisfaction of the Director Technical Services or representative who shall reserve the right to require the removal of or the correction of any surface deficiencies of finish.

12.5 **Jointing** – Expression Joints shall be constructed at every third (3<sup>rd</sup>) contraction joint, i.e., six (6) metres apart and shall be full depth joints 14mm wide and shall be filled with bitumen impregnated caneite or similar approved material.

12.7 **Tolerances**

Thickness	100mm +/- 5mm
Width	+/- 20mm
Surface	+/- 5mm on a 3m scale
Alignment	+/- 50mm

12.8 **Size of reinstatement** – In the case of a concrete reinstatement, if the area damaged is less than 2.5m<sup>2</sup> the Contractor is to remove and replace the entire concrete panel between expansion/contraction joints

12.9 **Completion** – it is the responsibility of the Contractor to back-fill the footpath as required and acquire the sand at own cost. On completion, the site is to be left in a clean and tidy condition to the satisfaction of the Director Technical Services.

### 13. REPLACEMENT OF PRECAST CONCRETE SLABS

#### 13.1 Placing precast concrete slabs

The base shall be thoroughly and evenly moistened prior to placing. All slabs shall be re-laid at the existing level and grade.

#### 13.2 Tolerances

Thickness	50mm +/- 5mm
Width	600mm
Height	600mm
Surface	+/- 5mm between slabs
Alignment	+/- 80mm

13.3 All re-laid- precast concrete slabs shall be locked into position with a uniformly fine graded white silica sand, compacted and the surface cleaned of all excess material.

### 14. BRICKPAVING

#### 14.1 Laying Pavers

Pavers shall be placed on a minimum 200mm thick compacted limestone base with 20-30mm of bedding sand. They shall be laid to the nominated laying pattern, care being taken to maintain the specified bond throughout the job. Paving units shall be placed to achieve gaps nominally 2mm wide between adjacent units such that all joints are correctly aligned.

The first row of pavers shall abut an edge restraint with a gap of 2mm and shall be laid at a suitable angle to the edge restraint to achieve the required visual orientation.

In each row all full units shall be laid first. Closure units shall be cut and fitted subsequently. Such closure units shall consist of not less than 25% of a full unit. Units must be cut with a diamond blade power saw. Cutting of pavers to less than 25% of their standard size should be avoided by using insertions one half or three quarter size.

Except where it is necessary to correct any minor variations occurring in the laying bond the paving units shall not be hammered into position. Where adjustment of position is necessary, care shall be taken to avoid premature compaction of the sand bedding.

Any foot or barrow traffic shall require boards overlaying paving to prevent disturbance of units prior to mechanical compaction. No other construction traffic shall be allowed on the pavement at this stage of construction.

#### 14.2 Compaction

After laying the pavers they shall be compacted to achieve consolidation of the sand bedding and brought to design levels and profiles by not less than three passes of a suitable plate compactor. Only silica sand to be used, NOT yellow sand.

#### 14.3 Damaged Units

Any units which are structurally damaged during compaction or do not comply with the acceptance criteria described, shall be immediately removed and replaced.

#### 14.4 Filling Joints

As soon as practical after compaction, and in any case prior to the termination of work on that day, sand for joint-filling shall be spread over the paving. The sand shall be free of all soluble salts or contaminants likely to cause efflorescence or staining.

The filling sand shall be broomed to fill the joints. At least one pass of the plate compactor is required to achieve compaction of the joint filling sand.

#### 14.5 **Acceptance Criteria for Paving**

Paving will not be approved until the following criteria is satisfied.

- (a) the finished pavement shall conform to the construction tolerances and be free draining at all times. The maximum finished surface tolerance deviation using a 3m straight edge shall be 10mm and the level of adjacent pavers shall not differ by greater than 2mm.
- (b) the pavers shall be true to shape with no transverse cracking or surface crazing.
- (c) pavers shall be blended as required to ensure the colour of the pavement is uniform.
- (d) the surface texture to be uniform throughout.

#### 14.6 **Clean Up**

At the completion of all paving works, the Contractor shall clean away all debris resulting from his works.

Kerbs shall be left clean and true to line, manhole lids shall be exposed and flush with the finished paving levels, stormwater pits shall be free from all debris and their surface flush with the pavement as detailed.

#### 14.7 **Screed Sand**

Screed sand shall be well graded, free from deleterious materials and organic matter and must not contain soluble salts that may cause efflorescence.

#### 14.8 **Setting Sand**

Setting sand shall be well graded, pass a 2.36mm sieve and be free from deleterious materials likely to cause staining.

14.9 **Limestone**

(Refer to Clause 11.4)

14.10 **Bricks**

Bricks shall be new, solid, manufactured in dependence on type of reinstatement, and have sharp or true bevelled arises. They shall have nominal dimensions of 230x115x65mm and have an equivalent transverse strength of 2.5mpa as determined by AS1226.3.

Note: Rumbled/handmade bricks will not be approved.  
Interlocking concrete pavers will be permitted.