



APPLICATION FOR CROSSOVER SUBSIDY BRICK PAVED

Applicant to Complete

I, _____ wish to advise that I have made arrangements with _____
(Print Name) (Contractor)

to construct a Brick paved crossover to Council's standard specification from the boundary of my property to the road at: _____
(House and Lot Number) (Street name) (Town and Postcode)

I understand that **NO WORK IS TO COMMENCE** until consultation with the Shire of Waroona's Director Technical Services and that all work must conform to the standard specifications set down by the Technical Services Department of The Shire of Waroona.

I am further aware that if drainage pipes are deemed necessary when constructing the crossover, that the supply and cost of such pipes is my responsibility and that regular care by myself to keep the crossover drainage pipes clear is required in order to prevent flooding problems.

(Signature of Property Owner) (Date)

PH: _____ Home _____
 _____ Work _____
 _____ Mobile _____
 _____ Email _____
(Postal Address)

Contractor to Complete

I _____ Certify that this crossover has been constructed in accordance with Council's standards and specifications. Also, the total cost for the construction of the crossover exceeds \$500.00 and the maximum subsidy of \$250.00 is hereby requested.

(Contractors Signature)

OFFICE USE ONLY

Crossover inspected: ____/____/____

Comments: _____

Approved for subsidy: Yes
 No

Manager Works & services

APPLICATION FOR RESIDENTIAL CROSSOVER SUBSIDY SPECIFICATIONS FOR THE CONSTRUCTION OF STANDARD VEHICLE CROSSINGS OVER FOOTPATH RESERVATIONS

1. GENERAL

- a. This specification is made pursuant to the provisions of Section 357 and Section 358 of the Local Government Act 1950 – 1982 as may be amended.
- b. The construction of vehicle crossings shall be executed under the supervision of and to the direction of the Manager of Works and Services or his authorised representative (hereinafter referred to as “the MWS”)
- c. All material used in the construction of vehicle crossings shall be in accordance with the standard specification of Council and any materials which are inferior to those specified or as directed by the Director Technical Services shall be liable to rejection and replacement without any payment or compensation being made to the Contractor for the supply, delivery, laying, placing, finishing, removal or disposal of anything so rejected as directed by the MWS.

NOTE: The Contractor shall be known as the person responsible for the construction of the driveway.

- d. Protection of works and the public shall be provided and maintained by the contractor who shall supply and keep supplied as directed all the necessary signs, barricades, road warning lamps, temporary bridges or any other thing necessary or as may be directed by the Director Technical Services to provide for the safety of the public generally and to protect the works from damage for the minimum period of three days following completion of the works and failure to provide or keep provided shall render the Contractor liable under Section 377 of the Local Government Act 1960 – 1982, as amended. All such protective equipment shall comply with the relevant S.A.A. Code.
- e. Any damage which may occur to any Council facilities or private property or the vehicle crossing itself during the course of the works or which may subsequently become evident from the operation thereof shall be the sole responsibility of the Contractor, legal claims, liability, or any other things which may arise from the carrying out of any such works.

2. LOCATION

Crossings shall be positioned as directed by the MWS. Crossings shall be located in such a position as to not cause interference to public utility facilities and shall not be positioned within a corner truncation or closer than 6.5 metres from the property line intersection point at a corner site unless specifically approved by the MWS. Crossings shall be constructed to 90° (right angles) to the kerblines.

3. LEVELS

- a. The crossover levels will be as set out in attached specification/drawings all variation from specification/drawings shall be approved by the MWS or his representative.

Contents

1. Scope of Works	2
2. General.....	2
3. Traffic Control	3
4. Materials	3
4.1 Segmental Paving Units	3
4.2 Sub-Base.....	3
5. Preparation and placement.....	4
5.1 Sub-grade	4
5.2 Sub-Base.....	4
5.3 Sand Bedding.....	4
6. Laying Segmental Paving Blocks	5
6.1 Segmental Paving Block Compaction.....	5
6.2 Tolerances.....	6
7. Foot Paths	6
8. Backfilling and Reinstatement of verge.....	6
9. Keyed Layback.....	6
9.1 Finish	6
10. Clean-up.....	6

1. Scope of Works

The Contractor shall carry out the complete works being;

- Supply of Pavers, Concrete,
- Supply of labour, plant, formwork and materials,
- Traffic control,
- Trenching where required,
- Cut, filling and boxing out of sub-grade shall conform to shape and dimensions of the drawings
- Supply of sub-grade fill material to achieve the design
- Stockpile surplus materials on site as instructed by Principal

2. General

The final shape and dimensions of the driveway shall be in accordance with the attached standard drawing included in this contract; Drawing number WR009-X01.

3. Traffic Control

For each site of works, the Contractor shall submit a traffic management plan for the works. The cost of preparing and implementing this traffic management will remain with the Contractor.

All Traffic Management Plans must be in accordance with the most current version of AS unless overridden by Main Roads WA's Code of Practice. All Traffic Management plans must also meet the following:

- Be prepared and signed by an accredited person
- Must include a Risk Assessment
- Be lodged with Council a minimum of three (3) working days before commencing works, and be endorsed by a Council representative

4. Materials

All concrete used shall be supplied in a ready mixed state and shall comply with requirements of AS 1379: Specification and Supply of Concrete. All concrete used in the works shall develop a minimum compressive strength of 25 MPa at 28 days with a maximum slump of 75 millimetres and maximum aggregate size of 14mm.

4.1 Segmental Paving Units

Tolerance the paver shall have ± 2 millimetres tolerance on all nominated manufactured dimensions.

Concrete Paving Units shall comply with the Concrete Masonry Association of Australia Specification for Segmental Paving Units (MA20).

Clay units shall be high temperature fired with exposed faces of an extruded, wire-cut or pressed finish. The bricks shall have a minimum strength of 30 MPa and absorbing when saturated not more than 10% of their own weight of water.

Sand for mortar shall be crushed stone or natural sand free from all deleterious substances and have a uniform grade.

Sand for bedding or backfill shall be clean sand free from roots, clay or any deleterious matter.

4.2 Sub-Base

4.2.1 Limestone

Crushed limestone shall be obtained and crushed to comply with IPWEA Local Government Guidelines for Subdivisional Development Edition 2.1 – 2011 Crushed Limestone.

General:

The limestone shall be free from sand, loam, capstone, roots and other foreign material and shall not contain either oversize spalls or an excessive proportion of fine grained material.

4.2.2 Gravel

Gravel shall be obtained and crushed to comply with IPWEA Local Government Guidelines for Subdivisional Development Edition 2.1 – 2011 Gravel.

General:

A gravel base course shall consist of a combination of soil binder, sand and laterite gravel and shall be free of vegetable matter and lumps or balls of clay and shall not contain excessive quantities of pyrites or other foreign substances.

5. Preparation and placement

The driveway site shall be cleared of all top soil, vegetation, roots, humus and organic material. Only trees nominated by the Principal shall be pruned or removed.

5.1 Sub-grade

Sub-grade the entire width of the driveway shall be cut or filled as necessary. After excavation or filling, compaction, trimming the finish surface of the driveway sub-grade shall conform to the shape and dimensions shown in the drawing.

The sub-grade for the depth of 250mm (or the depth of fill if greater) shall be compacted to not less than 95% of the dry density obtained from modified maximum dry density compaction tests conducted in accordance with AS 1289-1993: methods of testing soils for engineering purposes.

The tolerance for sub-grade width shall be ± 100 millimetres.

5.2 Sub-Base

Sub-Base shall be constructed of crushed limestone or gravel. The sub-base shall be placed so that the compacted sub-grade is not disturbed or broken up and the even thickness specified is achieved. Sub-base shall be watered to optimum moisture content and compacted by rolling to a density not less than 95% of maximum dry density when tested in accordance with AS1289: 'Methods of testing Soils for Engineering Purposes'.

The depth of sub-base after compaction shall be as specified on the approved drawings with a tolerance of +5 mm and – 10mm.

All irregularities in the longitudinal grade and cross section and any imperfections or failures detected in the surface of the sub-base shall be corrected in an approved manner until the road sub-base is brought to a uniformly compacted, smooth and even surface.

5.3 Sand Bedding

Sand bedding shall be spread loosely to a uniform depth and screeded to the nominated design profile with sufficient surcharge to allow for compaction to a uniform thickness of 30 mm, with a tolerance of ± 5 mm.

6. Laying Segmental Paving Blocks

Paver shall be laid on uncompacted bedding sand and shall be placed so the units are not in direct contact with each other. Pavers shall be laid with a 2 mm (minimum) to 3 mm (maximum) gap between the pavers. This 2mm to 3mm gap is an essential feature of the interlocking pavement.

All rectangular interlocking pavers shall be laid in a 45 degrees herringbone configuration.

Full pavers shall be laid first and gaps at the pavement edge shall be neatly filled by saw cutting pavers to fit. Only full bricks/blocks shall be laid against all edges restraints.

6.1 Segmental Paving Block Compaction

Immediately after laying the pavers shall be compacted and brought to design level by not less than 3 passes of a vibrating plate compactor. Compaction shall continue until a smooth surface is produced.

The top of the paving shall finish 5 mm to 8 mm above abutting drainage inlet structures.

Immediately after compaction is completed gaps between pavers shall be filled with dry joint filling sand.

Pavements subject to stormwater runoff, gutter flow or any other movement of water shall be protected from scouring. Scour protection shall be provided by means of dry cement grouting of the paving joints for a width of 300 mm from the edges of interlocking pavements. The joint filling grout shall consist of a 4:1 mix of 1.18 mm sieve dry sand and dry cement.

Where damage to adjoining properties may result, the use of vibrating rollers will only be permitted with care and in negotiation with the council representative to ensure all measures are taken to protect adjacent properties.

It may be necessary to formulate a vibration plan in conjunction with the council. A Vibration Plan would need to address vibration, noise nuisance and potential damage and be approved by the Department for Environmental and Conservation, consulting Engineer and Council Representative.

The driveway will achieve a smooth transition from the layback through the high point back the existing driveway or boundary to eliminate vehicle scraping or bottoming out.

The finished alignment shall conform to requirements of the approved drawings and must not impede the flow of water or be detrimental to adjoining properties.

Variations of levels must be approved by the council representative.

6.2 Tolerances

The finished product shall be true to the drawing dimensions and finish specified. Tolerances for driveway shall be in accordance with the following requirements:

- the top surface of the layback shall be parallel to the ruling grade of the pavement and free from depressions exceeding five millimetres when measured with a three metre straight edge;
- level ± 5 millimetres;
- line ± 10 millimetres to face of layback or gutter line;
- Cross-section dimensions ± 5 millimetres;
- Width ± 10 millimetres

7. Foot Paths

Where a foot path intersects a driveway the path section of the driveway will be constructed to foot path design and continues through the driveway.

8. Backfilling and Reinstatement of verge

Backfilling to the driveway shall be placed after pavement construction is complete. Backfill material shall be free draining sand or a similar material to the local topsoil, free from debris and compacted to a thickness not less than that of the surrounding natural surface.

9. Keyed Layback

Where keyed layback is specified on approved drawings, excavation of the base shall be by an approved method. The primed road surface beyond the line of the face of layback shall not be disturbed.

9.1 Finish

The completed pavement surface shall satisfy the following criteria prior to acceptance

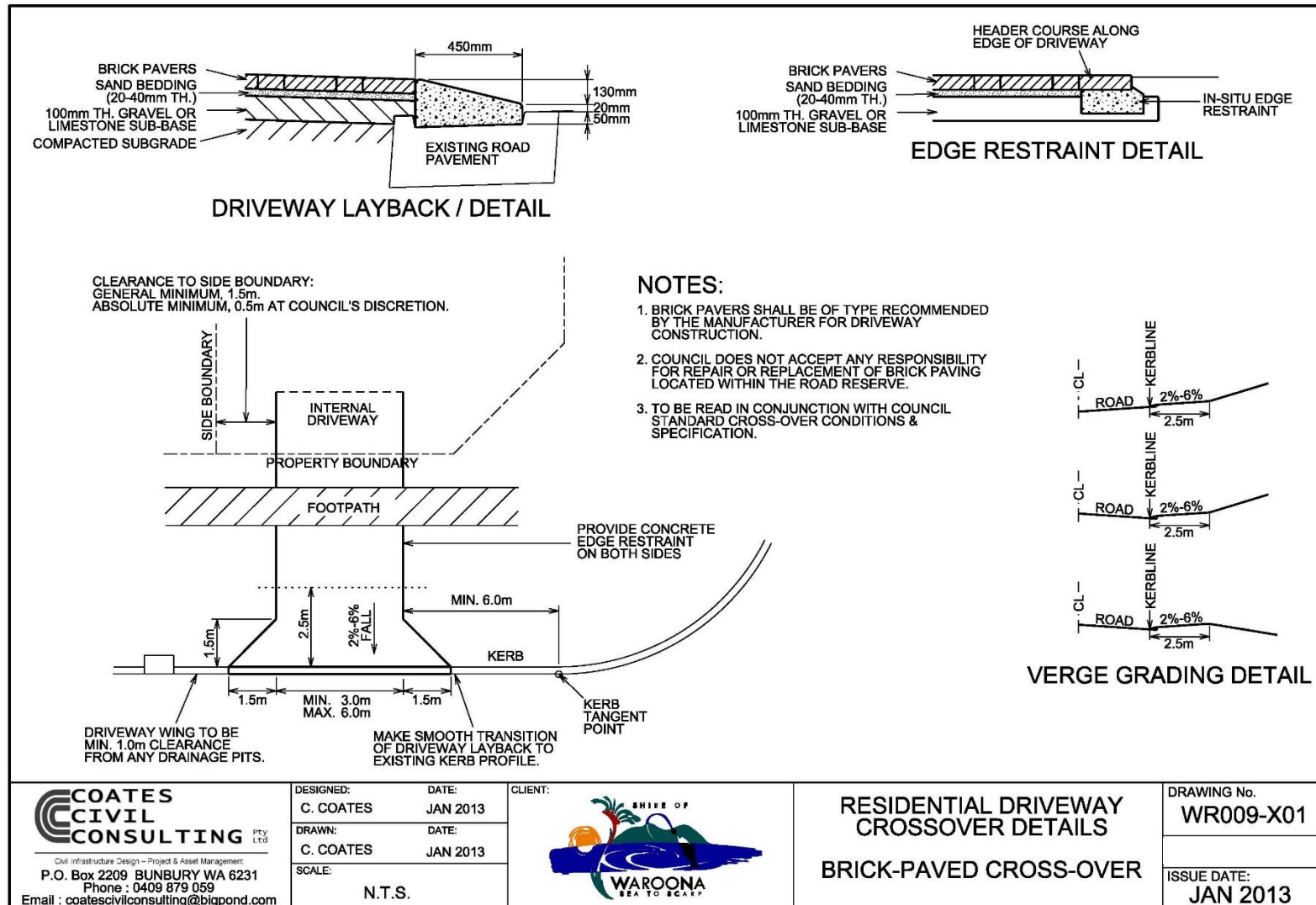
- The complete pavement surface shall be constructed in accordance with design profiles and shall drain freely;
- The pavers shall not be cracked, damaged or distorted;
- The surface texture shall be uniform and be free from abrasion or wear and the colour of the pavement shall be uniform and any colour variations in batches of pavers shall be eliminated by batch mixing to produce a uniform colour grade.

10. Clean-up

Works site shall be kept clear of debris and spoil at all times.

Specification based on IPWEA (WA) Subdivisional Guidelines Edition No.2.1 July 2011

RESIDENTIAL DRIVEWAY CROSSOVER DETAILS (WR009-X01) BRICKPAVED



COATES CIVIL CONSULTING Pty Ltd
Civil Infrastructure Design - Project & Asset Management
P.O. Box 2209 BUNBURY WA 6231
Phone : 0409 879 059
Email : coatescivilconsulting@bigpond.com

DESIGNED: C. COATES
DRAWN: C. COATES
SCALE: N.T.S.

DATE: JAN 2013
DATE: JAN 2013

CLIENT: SHIRE OF WAROONA
SEA TO SCARP

RESIDENTIAL DRIVEWAY CROSSOVER DETAILS
BRICK-PAVED CROSS-OVER

DRAWING No. WR009-X01
ISSUE DATE: JAN 2013