

SPECIFICATIONS FOR THE CONSTRUCTION OF STANDARD RESIDENTIAL CONCRETE VEHICLE CROSSINGS

1. SCHEDULE OF REQUIREMENTS

- a) Minimum Depth of Concrete: 100mm.
- b) Minimum Width at Property Line: 2.8m.
- c) Maximum Width at Property Line: 6.0m.
- d) Wing Dimension: 2m along kerb line and 3m at 90 degrees to kerb line, measured from the edge of the main body of the vehicle crossing. Refer to Standard Drawing TS 07-1 (attached).
- e) Verge Gradient: A positive 2% slope from the top of kerb to the property boundary (i.e. a rise of 20mm for every 1.0m).
- f) Vehicle crossings to be constructed to meet the kerb line at an angle of 90°. Any variation must be approved by the Director Infrastructure.
- g) Crossings to adjoining properties must be constructed a minimum 1.0m from the common boundary. **Note** – wings to these crossings may overlap.
- h) Vehicle crossing shall not be constructed closer than 7.5m to the intersection of property lines at street corners.
- i) Canite strips 12mm wide by 100mm deep of bituminous impregnated canite material as detailed in Clause 4.
- j) Concrete high early strength to 20 Mpa at 28 days.
- k) Surface Finish: broomed non-slip.

2. CONSTRUCTION

- a) Concrete:
 - (i) Premix concrete shall comply with the requirements of Australian Standard 1379-1973. All concrete used in the works shall develop a minimum compressive strength of 20 Mpa 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 90mm.
 - (ii) All concrete shall have an approved high early strength additive to give rapid hardening.
 - (iii) Documentation on concrete used for vehicle crossing construction shall be made available to the Director Infrastructure when requested.
- b) Excavation:
 - (i) The excavation for the crossing bed shall be taken out to the levels, lines and grades as per the standard design shown on Drawing No 424.
 - (ii) Excavation shall be cleanly and efficiently executed, watered and vibrator rolled to give a compaction of 95% of maximum density as determined by modified compaction test under 12A or SAA Standard A89 - 1966 to provide for a sound base free from depressions or any deleterious materials to give a minimum depth of 100mm of concrete pavement for residential crossings.
 - (ii) All surplus material resulting from site preparation and construction of the vehicle crossing shall become the property of the contractor and shall be removed at the contractor's expense.
 - (iii) Where an existing footpath is laid in the location where a vehicle crossing is to be constructed the contractor shall:
 - If the footpath is precast concrete slabs – the slabs shall be removed and disposed of at the contractor's expense.
 - If the footpath is insitu concrete and has a thickness of 100mm or more - construct a vehicle crossing either side of the footpath.
- c) Placing Concrete:
 - (i) The base shall be thoroughly and evenly moistened, but not saturated, prior to placing concrete.

(ii) 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 Infrastructure.

d) Finishing:

(i) The finish shall be obtained by screening to correct levels and broom finishing to provide a non-slip, dense surface free of any depressions, marks, jointing marks, honeycomb sections or accumulation of fine dusty accretions liable to cause excessive surface wear. The final surface finish shall be to the entire satisfaction of the Director Infrastructure who shall reserve the right to require the removal of or the correction of any surface deficiencies or finish.

(ii) Where required and or where directed, any portion of the surface may be required to be treated with a multi-grooved grooving tool with grooving to be at 200mm centres worked parallel to the kerb line to minimise the slipping effect.

A STEEL TROWEL FINISH IS NOT PERMITTED ON A VEHICLE CROSSING.

- e) Surface Patterns: The final surface shall be broom finished and non-slip. It should provide a safe route for pedestrians. All expansion joints must comply with the concrete vehicle crossing specifications.
- f) Jointing: Joints shall be formed in positions shown on Standard Drawing TS 07-2.
- g) Levels: The crossing levels will be as specified by the Director Infrastructure but in no case shall the vehicle crossing junction at the property line be stepped unless specifically authorised by the Director Infrastructure.

2. GENERAL

- a) This specification is made pursuant to the provision of Regulation 12 of the Local Government (Uniform Local Provisions) Regulations 1996.
- b) The construction of vehicle crossing shall be executed under the direction of the Director Infrastructure or his authorised deputy.
- c) All levels for, the grading, surface finish, joining or any other construction requirement shall be as directed by the Director Infrastructure.
- d) All materials used in the construction of vehicle crossings shall be in accordance with the standard specification of Council and any material used which are inferior to those specified or as directed by the Director Infrastructure shall be liable to rejection and replacement without 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 Director Infrastructure.
- e) Protection of works and the public shall be provided by the contractor who shall supply and keep supplied as directed all necessary signs, barricades, road warning lamps, temporary bridges or any other thing necessary or as may be directed by the Director Infrastructure and failure so to provide or keep provided shall render the contractor liable under Regulation 17 of the Local Government (Uniform Local Provisions) Regulations 1996.
- f) Any damage which may occur to any Council facilities or private property during the course of the works or 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 claim liability or any other thing which may arise from the carrying out of any such works.

4. CANITE MATERIAL

Approved canite-type material shall be such that when it is subject to compression in hot weather, no bitumen is extruded.

The following materials are approved and the use of any other material requires the approval of the Director Infrastructure.

NON PORITE - Bitumen impregnated canite by the cold solvent process.
FOSROC EXPANDITE
MELJOINT

5. CONTRIBUTION

If it is a first vehicle crossing constructed to the premises, Council may contribute towards the cost. Application for a subsidy payment must be made on the prescribed form within six (6) months of the date it was constructed and is to be accompanied by proof of payment (invoice or delivery docket). The Director Infrastructure may then inspect the vehicle crossing and if it is constructed in accordance with Council's specification, the subsidy payment will be forwarded by pose.

6. ALTERNATIVE PRODUCTS

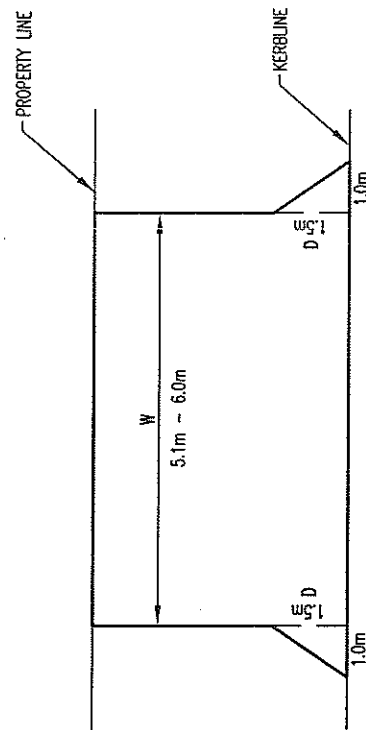
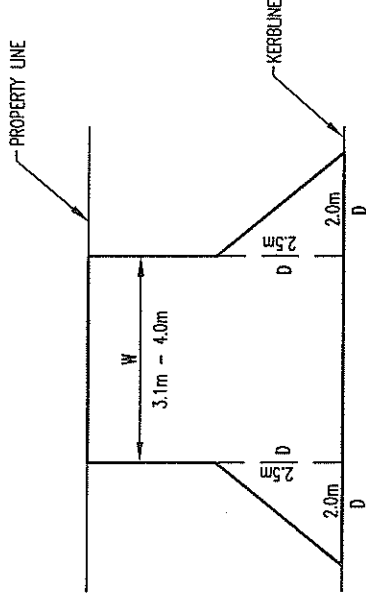
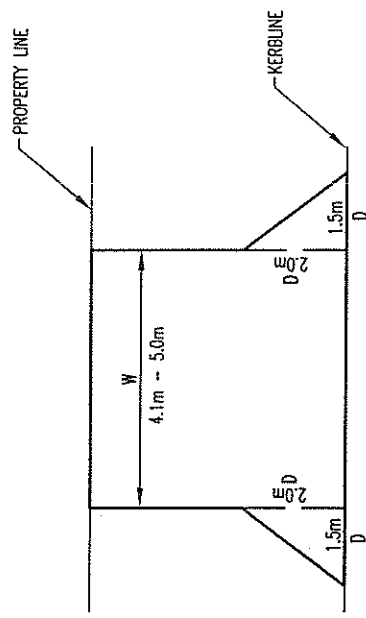
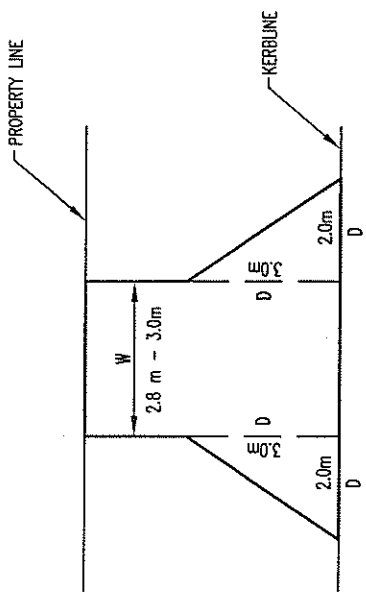
FAUX BRICK is a stencil patterned concrete system approved by Council for vehicle crossings provided it is laid in accordance with the specifications outlined from (1) to (4) above. FAUX BRICK vehicle crossings will be eligible for a subsidy payment from Council (refer to 5 above).



Dennis Blair
DIRECTOR INFRASTRUCTURE


No	REVISION	BY	DATE	AUTH
0.	ISSUED	J.M.T.	9/2001	
1.	CURVED WINGS REMOVED, NOTES AMENDED	T.T.	3/2006	B.C.

CROSSOVER WIDTH (W)	WING DIMENSIONS (D)
3.0m	3.0m x 2.0m
3.1m - 4.0m	2.5m x 2.0m
4.1m - 5.0m	2.0m x 1.5m
5.1m - 6.0m	1.5m x 1.0m



* INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING.

DATE: N/A	DESIGNED: C.O.W.	APPROVED: * T. QUINN 08/2001
SCALE: 1:100	DRAWN: C.O.W.	APPROVED: * R. KORENHOF 08/2001
DESIGN ARCHIVE	DESIGN CHECKED:	APPROVED: * D. BLAIR 08/2001
DRAWING ARCHIVE	DESIGNER: * J. TRIMMER 08/2001	APPROVED: * J. TRIMMER 08/2001
* FINAL STANDARD DRAWINGS	STANDARDS/DRAWING CONTROL:	APPROVED: * J. TRIMMER 08/2001
	DESIGNER: * J. TRIMMER 08/2001	APPROVED: * J. TRIMMER 08/2001
	DESIGN CHECKED:	APPROVED: * J. TRIMMER 08/2001
	DRAWN: C.O.W.	APPROVED: * J. TRIMMER 08/2001
	DESIGNED: C.O.W.	APPROVED: * J. TRIMMER 08/2001
	SUPERVISOR: N/A	APPROVED: * J. TRIMMER 08/2001
	GRD: N/A	APPROVED: * J. TRIMMER 08/2001



CITY OF WANNEROO
TECHNICAL SERVICES

INFRASTRUCTURE SERVICES

CROSSOVERS AND VERGE
RESIDENTIAL
WIDTH ALTERNATIVES

STANDARD

LOCALITY

FILE No.

DRAWING No.

SHEET

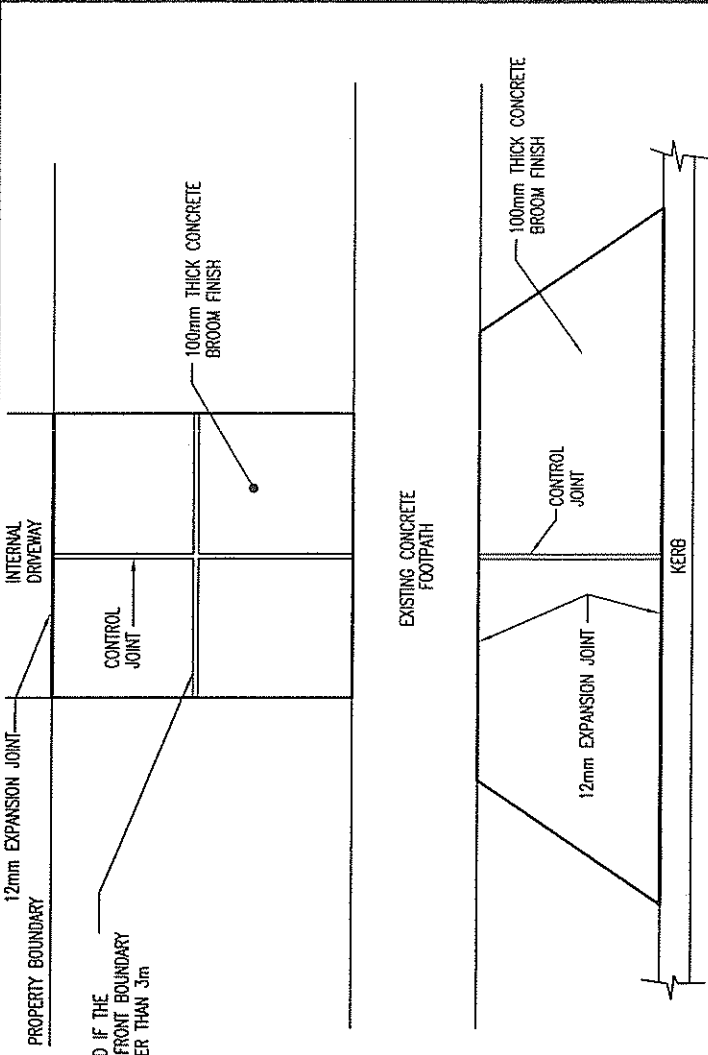
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PAGE SIZE

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A3

No	ISSUED	BY	DATE	AUTH
0.		J.W.T.	8/2001	
1.	DIMENSIONS AND NOTES AMENDED - CURVED WINGS REFERENCE REMOVED	T.T.	3/2006	B.C.
2.	NOTE 6 ADDED	P.A.	6/2007	B.C.



STANDARD CROSSOVER

CROSSOVER WITH EXISTING 100mm CONCRETE FOOTPATH

- NOTES:**
- CROSSING OBSTRUCTIONS: SHOULD ANY TREE, POLE, PIT, MANHOLE, GULLY SIGN OR ANY OTHER OBSTRUCTION BE LOCATED ON THE PROPOSED ALIGNMENT OF THE VEHICLE CROSSING, THE APPLICANT SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH REMOVAL OR ALTERATIONS OF SAME (IF APPROVED BY THE CITY).
 - PROPERTY LINE LEVELS: THE GRADIENT OF THE VERGE SHALL BE A POSITIVE 2% TO THE PROPERTY LINE, A NEGATIVE SLOPE IS NOT PERMITTED.
 - WANNEROO ROAD: VEHICLE CROSSINGS ABUTTING WANNEROO ROAD WITHIN THE CITY SHALL BE SUBJECT TO THE JOINT APPROVAL OF COUNCIL AND MAIN ROADS WA. ACCESS TO WANNEROO ROAD IS DISCOURAGED BY BOTH AUTHORITIES.
 - 12mm EXPANSION JOINT: SHALL BE CAMITE MATERIAL AT LEAST 100mm DEEP. TYPE OF CAMITE AS PER WRITTEN SPECIFICATION.
 - CROSSOVER TO BE CONSTRUCTED AT 90 DEGREE TO THE KERB OR AS DIRECTED BY THE CITY.
 - IF A CONCRETE FOOTPATH EXISTS ACROSS THE FRONTAGE OF A PROPERTY, THE FOOTPATH MUST REMAIN AND THE CROSSOVER CONSTRUCTED AS TO MATCH THE EXISTING FOOTPATH LEVELS EITHER SIDE.

		CITY OF WANNEROO TECHNICAL SERVICES			
CROSSOVERS AND VERGE RESIDENTIAL CONCRETE CROSSOVERS		DRAWING No TS 07 - 2 - 2		SHEET 2	
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DESIGN APPROVE N/A		DESIGN CHECKED C.O.W.		STANDARDS/DOCUMENT CONTROL J. TRAMMER	
ORIGINAL STANDARD DRAWINGS		ORIGINAL ISSUE OF DRAWING 08/2001		WANNEROO INFRASTRUCTURE	
LOCALITY STANDARD		APPROVED * T. QUINN		APPROVED * R. KORENHOFF	
APPROVED * D. BLAIR		APPROVED * J. TRAMMER		APPROVED * J. TRAMMER	