

Schedule of Requirements

- a) Minimum Depth of Concrete: 100mm.
- b) Minimum Width at Property Line: 3.0m.
- c) Maximum Width at Property Line: 6.0m.
- d) Wing Dimension: Refer to City's Standard Drawing TS 07-1.
- 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). Refer to TS 07-2
- f) Vehicle crossings to be constructed to meet the kerb line at an angle of 90°. Any variation must be approved by the Director Assets.
- 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 item 4 below.
- j) Concrete high early strength to 32 Mpa at 28 days.
- k) Surface Finish: broomed non-slip.

Construction

- a) Concrete:
 - (i) Premix concrete shall comply with the requirements of Australian Standard 1379-2007. All concrete used in the works shall develop a minimum compressive strength of 32 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 Assets 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 Drawing TS07-11.
 - (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 - 1973 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.
 - (iii) All surplus material resulting from site preparation and construction of the vehicle crossing shall become the property of the owner/contractor and shall be removed at the owner/contractor's expense.
 - (iv) 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 Assets.

- 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 Assets 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 Assets but in no case shall the vehicle crossing junction at the property line be stepped unless specifically authorised by the Director Assets.

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 Assets or its authorised deputy.
- c) All levels for, the grading, surface finish, joining or any other construction requirement shall be as directed by the Director Assets.
- 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 Assets 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 Assets.
- 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 City 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 owner/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.

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 Assets.

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

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 Assets may then inspect the vehicle crossing and if it is constructed in accordance with Council's specification, the subsidy payment will be forwarded by post.

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).

Street and Verge Bond Permits

If you apply for a building permit, you will also be required submit an application for the City's Street and Verge Bond Permit. This application includes a non-refundable administration fee. If the construction value is over \$5000, an additional bond fee applies. For more information on these applications (including fees and a link to apply online), please refer to the [Street and Verge Bond page](#) on the City's website.

Fees

To determine your application fees, please refer to please refer to our [Building Fee Schedule](#) or [Building Application Fee Calculator](#) on the City's website.

For further information, please contact the City's Building Services on 9405 5000.

Harminder Singh
DIRECTOR ASSETS

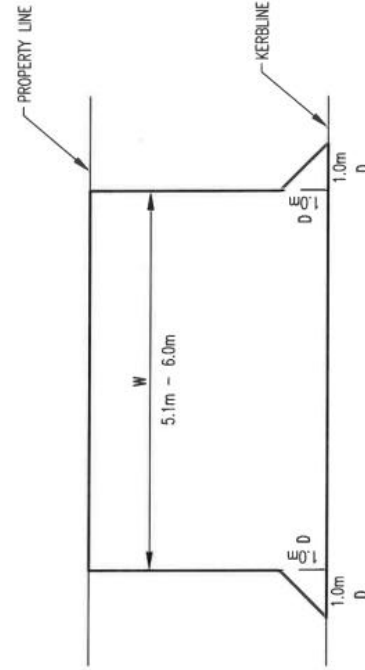
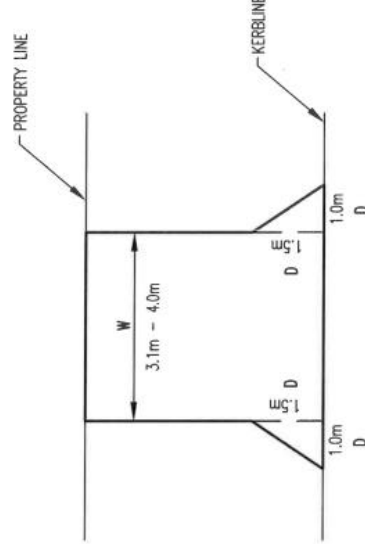
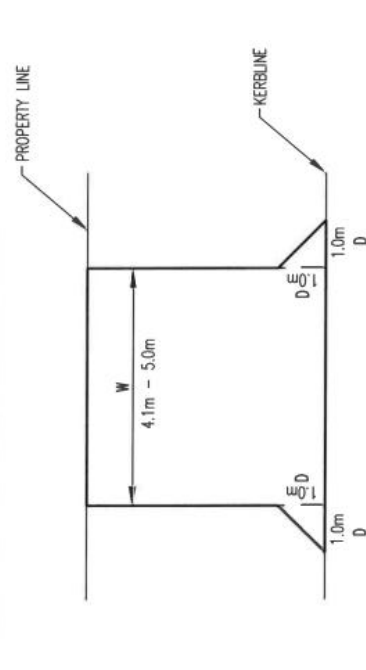
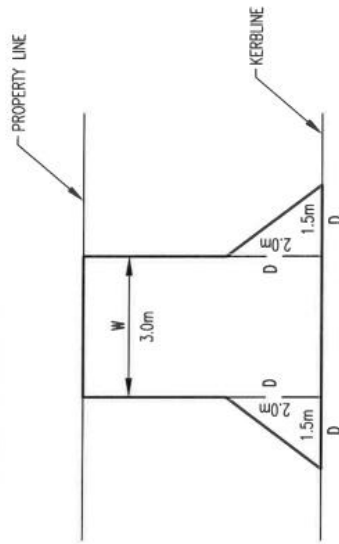
Disclaimers:

1. In line with the City's recordkeeping requirements, please ensure that the information included on any application form is accurate and complete. Please also retain a copy of the completed form before submitting with the City as the form and any supporting documents will not be returned. The City accepts no responsibility for any loss, damage, liability or inconvenience suffered by any person as a result of using an application form or lodging an application form with the City.
2. This information sheet is produced by The City of Wanneroo in good faith and the City accepts no responsibility for any ramifications or repercussions for providing this information. This information sheet is correct as of July 2020 and prone to alteration without notification.

No	ISSUED	REVISION	BY	DATE	AUTH
0.			J.M.T.	8/2001	B.C.
1.	CURVED WINGS REMOVED, NOTES AMENDED		T.T.	3/2006	B.C.
2.	LENGTHS OF WINGS REDUCED, NOTE AMENDED		P.J.	9/2017	B.C.
3.	UPDATED TITLE BLOCK BRAND		K.R.	7/2022	P.W.

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.

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

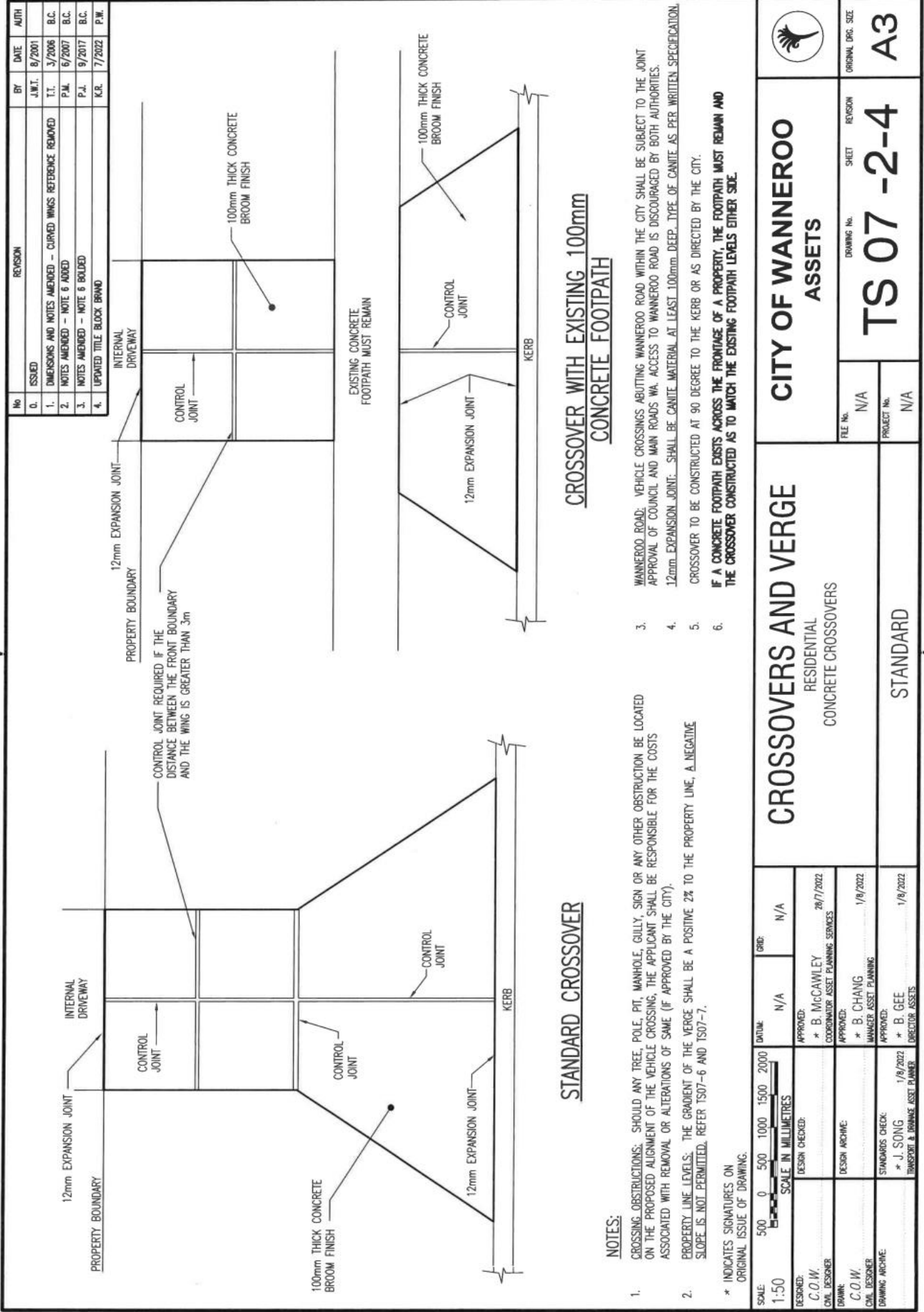


* INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING.

SCALE: 1:100	DATUM: N/A	GRID: N/A
DESIGNED: C.O.W	DESIGN CHECKED: * B. McCAWLEY	APPROVED: 28/7/2022
DRAWN: C.O.W	DESIGN ARCHIVE: * B. CHANG	APPROVED: 1/8/2022
CIVIL DESIGNER: * J. SONG	STANDARDS CHECK: * B. GEE	APPROVED: 1/8/2022
DRAWING ARCHIVE:	TRANSPORE & DRAINAGE ASSET PLANNER:	DIRECTOR ASSETS:

CROSSOVERS AND VERGE		CITY OF WANNEROO	
RESIDENTIAL WIDTH ALTERNATIVES		ASSETS	
FILE No:	N/A	DRAWING No. SHEET	REVISION
PROJECT No.:	N/A	TS 07 -1-3	
STANDARD		ORIGINAL DRG. SIZE	
		A3	





STANDARD CROSSOVER

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. REFER TS07-6 AND TS07-7.

* INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING.

SCALE: 1:50	DATE: N/A	GRID: N/A
DESIGNED: C.O.W.	APPROVED: * B. MCCAWLEY	DATE: 28/7/2022
DRAWN: C.O.W.	DESIGN ARCHIVE: * B. CHANG	DATE: 1/8/2022
DRAWING ARCHIVE: * J. SONG	STANDARDS CHECK: * B. GEE	DATE: 1/8/2022
	EMSPORT & DEANAS ASSET PLANNER	

CROSSOVERS AND VERGE

RESIDENTIAL
CONCRETE CROSSOVERS

STANDARD

CROSSOVER WITH EXISTING 100mm CONCRETE FOOTPATH

- 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 CANITE MATERIAL AT LEAST 100mm DEEP. TYPE OF CANITE 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
ASSETS

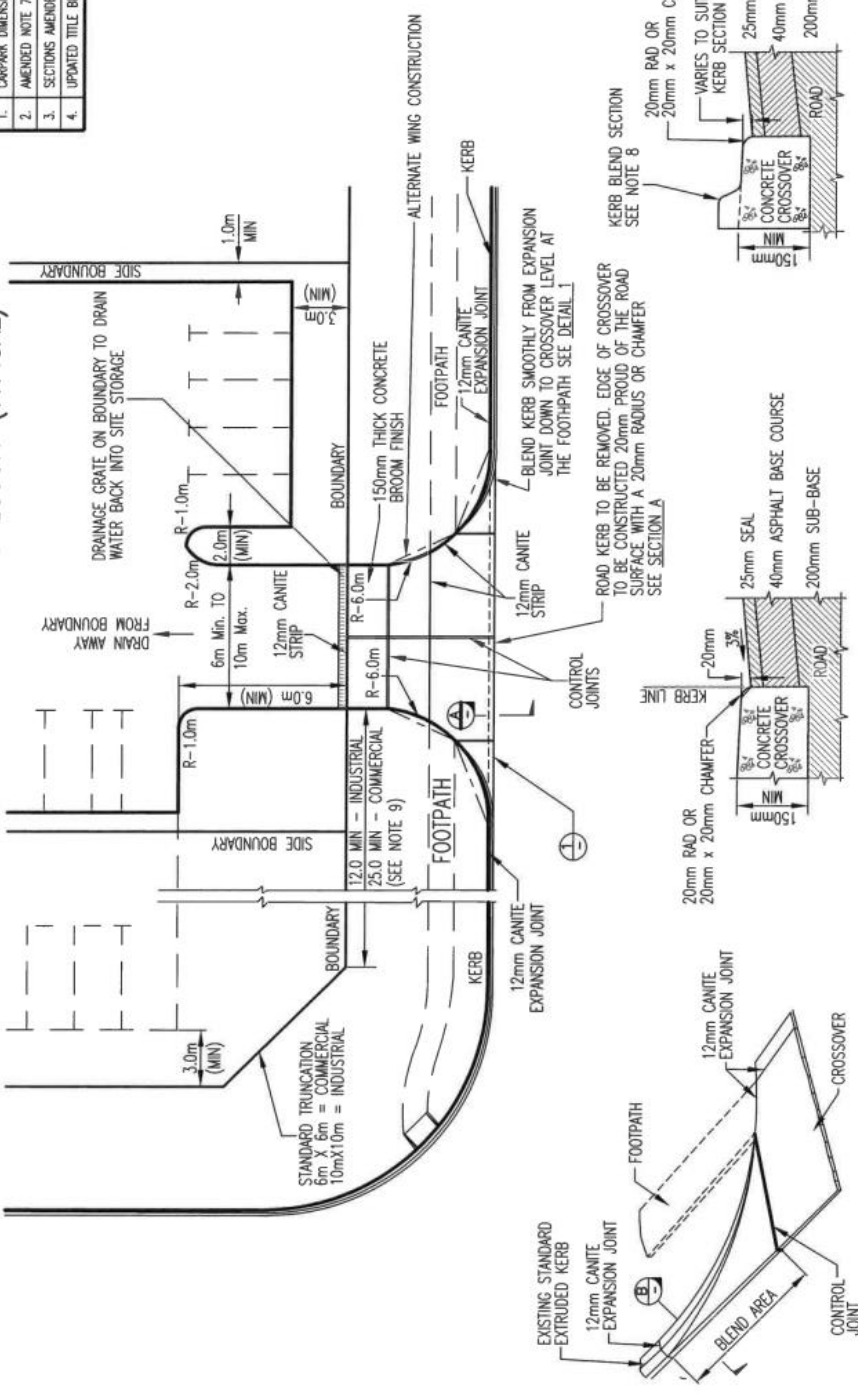
FILE No:	N/A	DRAWING No.:	TS 07 -2-4	SHEET:	REGION:	ORIGINAL Dwg. SIZE:	A3
PROJECT No.:	N/A						

No	ISSUED	REVISION	BY	DATE	AUTH
0.			J.W.T.	8/2001	
1.	CARPARK DIMENSIONS REMOVED		T.T.	3/2006	B.C.
2.	AMENDED NOTE 7		D.N.	7/2015	P.W.
3.	SECTIONS AMENDED AND NOTE 12 ADDED		D.N.	6/2019	B.C.
4.	UPDATED TITLE BLOCK BRAND		K.R.	7/2022	P.W.

NOTES:

- SHOULD ANY TREE, POLE, PIT, UNWHEEL, GULLY, OR OBSTACLE BE LOCATED ON THE PROPOSED ALIGNMENT OF THE CROSSING, THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL THE COSTS ASSOCIATED WITH ITS REMOVAL OR ALTERATION.
- THE GRADIENT OF THE CROSSOVER SHALL BE A POSITIVE 2% TO THE PROPERTY LINE.
A NEGATIVE SLOPE IS NOT ALLOWED.
- CROSSOVERS ABUTTING WANNEROO ROAD WITHIN THE CITY SHALL BE SUBJECT TO APPROVAL OF COUNCIL AND MAIN ROADS WA.
- 12mm CANITE STRIP SHALL BE CANITE MATERIAL AT LEAST 150mm DEEP. APPROVED CANITE TYPES ARE - NON PORITE & D'ORVILLE.
- CROSSOVER TO BE CONSTRUCTED AT 90° TO THE KERB OR AS DIRECTED BY THE CITY.
- MAXIMUM SPACING BETWEEN CONTROL JOINTS SHALL BE 3.0m.
- MINIMUM COMPRESSIVE STRENGTH OF CONCRETE TO BE 32 MPa AT 28 DAYS.
- CROSSOVER WING SECTION TO HAVE FULL 150mm MIN DEPTH KERB BLEND SECTION TO BE EXTRA OVER MIN DEPTH.
- INTERSECTION SIGHT DISTANCE. CROSSOVERS SHOULD BE LOCATED TO ALLOW FOR ADEQUATE HORIZONTAL AND VERTICAL SIGHT DISTANCES AND SEE SECTION 2890.1-1983. OFF - STREET PARKING.
- CROSSOVER IS TO BE AN ABSOLUTE MINIMUM OF 1.0m FROM THE SIDE BOUNDARY.
- CROSSOVER IS NOT TO BE LOCATED OPPOSITE A ROAD JUNCTION, OR OTHER MAJOR CROSSOVER.
- WING DIMENSION CAN REDUCED IF IT IS DEMONSTRATED WITH ADEQUATE TOLERANCE OF TOLERATED VEHICLE AND ENOUGH SIGHT LINE IS AVAILABLE.

CARPARK LAYOUT IN ACCORDANCE WITH AS 2890.1 (TYPICAL)



SCALE: 1:100		DATE:	GRD:	DESIGN CHECKED:	DESIGN ARCHIVE:	STANDARDS CHECKED:	DESIGNED:	APPROVED:	DATE:	SCALE IN METRES	FILE NO.	SHEET	REVISION	ORIGINAL DRG. SIZE
2.5	0	2.5	5	7.5	10	N/A	N/A	N/A			N/A			A3
DESIGNED:	C.O.W.	DESIGN CHECKED:	* B. McCAWLEY	28/7/2022	COORDINATOR ASSET PLANNING SERVICES	DESIGN ARCHIVE:	* B. CHANG	1/8/2022	MANAGER ASSET PLANNING	STANDARDS CHECKED:	* J. SONG	1/8/2022	DIRECTOR ASSETS	
DRAWN:	C.O.W.	APPROVED:	* B. GEE	1/8/2022	DIRECTOR ASSETS									
CITY OF WANNEROO ASSETS														
CROSSOVERS AND VERGE INDUSTRIAL/COMMERCIAL CONCRETE CROSSOVER														
TS 07 -11-4														
STANDARD														