# **RESIDENTIAL VEHICLE CROSSINGS**

Dear Sir/Madam,

Please ensure you familiarise yourself with all attached information **prior** to making application to Council. Council's requirements for the construction of residential vehicle crossings of the gutter and footway (area between kerb and property boundary) are set out below.

To ensure crossings are properly constructed additional work may be required such as:

- re-alignment or extension of gutter crossing
- reconstruct damaged gutter crossing
- · connect roof water pipeline to kerb
- reconstruct footpath to 125mm thick

A Council officer will advise of any additional work required at the time of formwork inspection. If you have any questions about any additional work or any construction enquiries that may be required, please ring 02 6538 5250 between 8:30am and 4:30pm.

## **TYPES OF CONSTRUCTION PERMITTED**

Footway crossings may be constructed in plain concrete, paving bricks, hot mix (Rural type crossing only), coloured concrete and stencilled concrete. Plain concrete and rural type crossings will be restored by Council if at some future date they are disturbed by the activities of Public Utility Authorities or Council, however, in the case of crossings with decorative paving bricks, coloured concrete, stencilled concrete etc, Council takes no responsibility for matching colour or texture. Such restoration work is difficult, expensive and will have to be arranged by the resident. Council does not have the resources to match colour or patterns in concrete aprons. The waiver section of the Residential Vehicle Crossing Application must be signed by the owner and returned to Council at least two working days prior to the commencement of construction.

The finished surface must be sufficiently rough so as to ensure safety for pedestrians and other users. In the case of concrete the finished surface must NOT be finished in a smooth steel float finish. The surface of the footway crossing must NOT be coated with any epoxy type "paint" or other sealant. These types of surfaces may result in a smooth finish, which can be slippery in wet weather.

All residential construction must be in accordance with the attached Council Standard Residential Footway and Layback Crossing plan and the Construction Specification for Residential Vehicle Crossings in Concrete or Specification for Residential Vehicle Crossings in Brick Paving which are attached. Details are also available for construction of rural type crossings in Hot Mix, Emulsion Seal and Gravel in Council's Standard Rural Vehicle Crossings plan attached.

## COUNCIL FEE

See Annexure 'A' for Council fees for a vehicular crossing.

## PREMATURE & ADDITIONAL INSPECTIONS OF VEHICULAR CROSSING CONSTRUCTION

See Annexure 'A' for Council fees for a vehicular crossing.

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### HOW TO ARRANGE CONSTRUCTION

Council does not construct vehicle crossings, and therefore a suitable person with public liability insurance and a current \$1000 bond with Council must be engaged. Gutter crossings (laybacks), extensions to gutter crossings or the reinstatement of gutter crossings to kerb and gutter MUST be constructed by a person with \$10 million Public liability insurance.

Names of licensed concreters can be found in the classified section of local papers or under "Concrete Contractors" and "Paving – Concrete" in the "yellow pages". Concreters are required to provide a \$1000 bond and the application fee attached to this document must be paid prior to the commencement of works as per Council's current Fees and Charges available on Council's website.

### **INSPECTIONS (FIRST AND FINAL)**

Council must inspect the work when the formwork is erected (in the case of concrete work) or the base prepared (in the case of brick paving or hot mix work). A final inspection will **automatically** be carried out 14 days after the formwork inspection date unless otherwise requested. Please ensure that the formwork has been removed and the area is backfilled before the final inspection. Ring 02 6538 5250, giving 48 hours minimum notice for the inspection bearing in mind that applications must be received at least two working days prior to inspections being requested.

#### WORKMANSHIP

Council may require reconstruction of the work if workmanship or finish is not satisfactory or if the work is not in accordance with Council plans and specifications.

#### FUTURE CRACKING, SETTLEMENT, ETC.

Council cannot guarantee that cracking, settlement, etc., of the construction will not occur in the future and Council will not be liable for any claims to repair or reconstruct crossings even though Council had originally inspected and passed the work.

#### NOTE 1

Council accepts NO responsibility for the identification or position of property boundaries (either at the street or along side boundaries).

#### NOTE 2

The concreter is to comply with Occupational Health and Safety and WorkCover requirements and all other requirements associated with this construction.

#### NOTE 3

It is the responsibility of the concreter carrying out the construction to ensure the site is kept safe and pedestrians have safe access around the construction site. A traffic control plan must be kept on site by the concreter and produced upon request by a Council officer. The traffic control plan must comply with AS1742.3.

Yours faithfully,

Danny Green GENERAL MANAGER

Per:

# **CONSTRUCTION SPECIFICATION**

## **RESIDENTIAL VEHICLE CROSSINGS IN CONCRETE**

- 1. All gutter crossings (laybacks) shall be placed on a compacted layer of approved fine crushed rock, 175mm thick or extending down to the base of the existing pavement, whichever is the greater depth.
- 2. Laybacks shall be formed integrally with the gutter section.
- 3. Where a new gutter crossing (layback), or an extension to a gutter crossing is to be constructed where there is existing kerb and gutter, the gutter as well as the kerb is to be saw cut at each end and the gutter completely removed as well as the kerb. Minimum of 1m between mastic joints.
- 4. Before pouring the new gutter crossing, it may be necessary to tack an edge board to the surface of the road adjacent to the lip of the gutter so that the correct edging tool can be used. If there has been damage to the edge of the road pavement then the concrete is to be allowed to spill underneath the edge board and then, a suitable time after edging the lip of the gutter, this edge board is to be removed and the top 25mm of the concrete protruding into the road pavement is to be trowelled out. The edge of the road pavement is to be cut square and then restored with **hot mix**.
- 5. Concrete crossings are to consist of 125mm thick concrete on 25mm sub-base of approved granular material e.g. metal dust or sand. Any existing 75mm concrete path paving is to be removed and reconstructed in accordance with this specification. All unsuitable material under the proposed apron must be removed and replaced with approved compacted material to a suitable depth.
- 6. Where existing concrete path paving can be shown to a minimum of 125mm thick and structurally sound then it may be retained and drill and dowelled to proposed footway crossing along with full depth mastic joint on each side. Refer Note 10 of Standard Residential Footway and Layback Crossing plan attached. Any concrete path restored on either side of a vehicular crossing should have a minimum length of 500mm.
- 7. Concrete shall be reinforced with F82 (SL82) on chairs with 35mm cover. F82 (SL82) mesh **must** be on site at the time of formwork inspection.
- 8. Concrete shall have a minimum 28-day strength (F'c) of 20MPa and must be kept constantly moist for 5 days after pouring to allow the concrete to cure.
- 9. Concrete shall have a light brushed finish on vehicle crossings and a steel floated finish on laybacks and on kerb and gutter.
- 10. All vehicle crossings must be constructed with a cross fall of 4% from top of kerb to the boundary. Any variation to the standard cross fall must have prior approval of Council. Refer Standard Residential Footway and Layback Crossing plan attached.
- 11. Joint at street alignment to be either Mastic formed using bitumen impregnated fibreboard, Key joints or 25mm deep saw cut. When internal driveway is to be built at same time, reinforcement is to be continuous across joint at street alignment. Where internal driveway exists the proposed crossing is to be dowelled to driveway along with full depth mastic joint. Refer Standard Residential Footway and Layback Crossing plan attached.

- 12. Before the formwork inspection for a concrete vehicle crossing can be made, the formwork must be adequately fixed in a place to the correct levels, there must be a 25mm layer of fine granular material in the bottom of the excavation and all joints must either be in place or on site where the Crossing Inspector can see them.
- 13. On completion of construction site to be backfilled with top soil and footway area to be left level and clear of any excess spoil, waste materials, etc and safe for pedestrians. The Contractor is responsible for the backfilling and cleaning up of the site after completion of the works.
- 14. All works must adhere to the attached Standard Residential Footway and Layback Crossing plan.
- 15. Maximum footway crossing width to be 6 metres unless approved in development consent conditions.
- 16. Roof water pipe to be relocated outside of vehicle crossing and outlet connected to kerb, a minimum of 0.3m from top of wing and to Council specifications.
- 17. The concreter carrying out work must be licensed and must have in force \$10,000,000 public liability insurance cover and at all times maintain the safety of the site to WorkCover requirements.
- 18. The concreter must have on site a traffic control plan that complies with requirements of Australian Standard 1742.3 and/or the "RTA Traffic Control at Work Sites" manual and must be produced to Council's Inspector upon request.

# **ANNEXURE 'A'**

# COUNCIL FEE

An application fee in accordance with Councils current fees and charges must be paid a minimum of four working days prior to the commencement of any works to cover supervision and administrative costs. Urgent applications can be processed sooner however a surcharge fee may apply in addition to the standard application fee. When paying the fee, the name, address, telephone number and licence number of the concreter engaged must be given in writing. Please fill out the attached application and return it to Council with your payment. Ensure that the concreter chosen has the \$10,000,000 Public Liability Insurance cover and has lodged a bond with Council and a copy of the Policy.

#### BOND

Concreters/contractors are required to pay a \$1000 crossing bond. The crossing inspection fee will need to be paid before an application will be processed. In case of incomplete or unsatisfactory works, Council will undertake necessary works to comply with Council's specification at the cost of the concreter. No further applications will be accepted until the crossing bond is topped up.

#### PREMATURE & ADDITIONAL INSPECTIONS OF VEHICULAR CROSSING CONSTRUCTION

Officers are at times requested to carry out inspections of sites in response to claims by applicants that works are complete or ready for inspection when in fact they are not. Where officers are required to re-inspect as a result of such a premature request for an inspection, a fee will be charged. No re-inspection will be carried out until this fee is paid.

It should be noted that the application fee covers the first formwork and final inspection only. All extra inspections required will attract an additional fee.

Cancellations must be made prior to 9:00am by phoning 6538-5250. Failure to cancel will incur an additional fee.

All fees are in accordance with Council's Adopted Fees and Charges. For further information, please see Council's Web Page or contact Council's Office during business hours.

# **ANNEXURE 'B'**

# SPECIFICATIONS FOR THE SELECTION OF CLAY & CONCRETE PAVERS FOR USE IN PUBLIC AREAS.

# GENERAL

This specification covers the criteria to be applied when selecting either clay or concrete pavers for use within Council controlled areas. Evidence of compliance with this specification will need to be submitted to Council's Manager Works and Services before approval can be given.

# **SPECIFICATIONS**

## DIMENSIONS

All pavers to have a minimum width to length ratio of 0.45 when actual dimensions are measured in accordance with A.S.N.Z.S 4455:1997 and shall not exceed the following tolerances:

 $\pm$  40mm on the length of 20 pavers  $\pm$  40mm on the width of 20 pavers

 $\pm$  40mm on the depth of 20 pavers

 $\pm$  40mm on the depth of 20 pavers

#### SHAPE

#### Footpaths

Pavers to be laid in areas trafficked by pedestrians or motorised scooters may be any regular shape such as square rectangular or hexagonal. Other shapes will only be considered after submission of an application in writing (with a representative sample) to the Manager Works and Services who will determine whether to grant or refuse permission for their use.

#### Roadways

Pavers to be laid in areas trafficked by any class of vehicular traffic shall be any regular shape designed to interlock with adjoining pavers and resist movement in both a transverse and longitudinal direction, and subject to the prior approval, obtained in writing, of the Manager Works and Services.

## EDGE TREATMENT

The edges to the wearing course shall be rounded or chamfered to a radius not exceeding 5mm.

#### WEARING SURFACE

Pavers shall have re-rolled finish rather than a wire-cut finish. All wearing surfaces shall be smooth nonslip, with no sharp projections.

# CHARACTERISTIC REQUIREMENTS

All pavers shall meet the characteristics set out in the following table when tested in accordance with the Australian Standard specified in the table below.

Characteristics	Australian Standard	Minimum	Maximum
Abrasion resistance	AS/NZS4456.9:1997	-	3.5cm <sup>3</sup>
Compressive strength (concrete)	AS/NZS4456.4:1997	45mpa	-
Characteristic Breaking load (clay pavers)	AS/NZS4456.5:1997	5kN	-
Cold water absorption	AS/NZS4456.5:1997	-	8%
Efflorescence	AS/NZS4456.6:1997	<u></u>	Nil
Lime Pitting	AS/NZS4456.13:1997	-	Nil
Co-efficient of friction	AS/NZS4586:1999 AS/NZS3661:1993	50 BPN	175
Transverse Breaking Load	AS/NZS4456.5:1997	5.0kN	÷

# COMPLIANCE:

All suppliers wishing to have their pavers pre-approved for use within Gloucester Shire Council will need to apply in writing to the Manager Works and Services for such approval. All such applications must be accompanied by a Certificate of Compliance from a NATA registered laboratory stating that all of the above requirements have been tested and have been found to comply with this specification. In addition details of the suppliers manufacturing quality Assurance Accreditation must be supplied.

# NON-COMPLIANCE:

The Manager Works and Services reserves the right to withdraw pre-approval for any manufacture or product for any reason of non-compliance with this specification at any time

# VARIANCE:

The Manager Works and Services may grant, at his sole discretion limited approval for the use of non complying pavers and subject to any conditions he may wish to impose against such approval.

# **Notice Regarding Telstra Pits and Other Service Pits**

Please be advised that Telstra have notified Council that Telstra manholes and/or pits will not be accepted in new vehicle footway crossings.

You are therefore advised to take into account Telstra manholes and pit locations prior to any construction of a dwelling to ensure that the proposed vehicle crossing will not be affected by Telstra pits.

Telstra advises that any vehicle crossing proposal that may incorporate a Telstra manhole and/or pit would be unacceptable in their view due to posing a threat to the occupational health and safety of Telstra staff and furthermore due to the adverse impact on Telstra's ability to adequately service the network and their customers.

The following procedure should be followed to obtain Telstra approval to construct a vehicular crossing in case that the Telstra manholes and pits are located in the vehicular footway crossings:-

DialBeforeYouDig at the following web address:- www.1100.com.au DialBeforeYouDig Phone No. is 1100 Fax No: is 1300 652 077

Contact Telstra - Phone: 02 9204 0989. Their office address is:- Level 3, No 9, Wentworth Street, Parramatta 2150.

Telstra's fax number is 02 9204 9011 and the postal address is:- Locked Bag 5390, Parramatta.

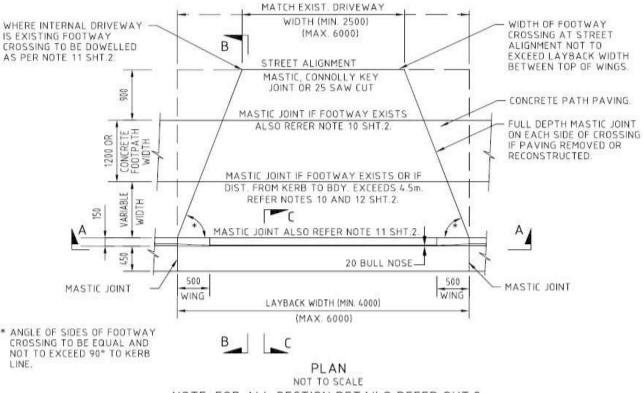
Thereafter Telstra will provide a written consent to construct vehicular crossing.

Council will not accept vehicle crossing applications that incorporate or impact on Telstra manholes and or/pits without written permission i.e. clearance by Telstra.

In addition proposed vehicle crossings must be located a minimum of 1 metre from stormwater drainage pits (residential crossings), Country Energy/Telstra poles, electrical boxes, or 2 metres from stormwater drainage pits (industrial crossings) and no closer than 6 metres to the kerb tangent point near street corners.

If you have any enquiries regarding the above please contact Council's Technical Services Section.

### Standard Residential Footway and Layback Crossing



NOTE: FOR ALL SECTION DETAILS REFER SHT.2.

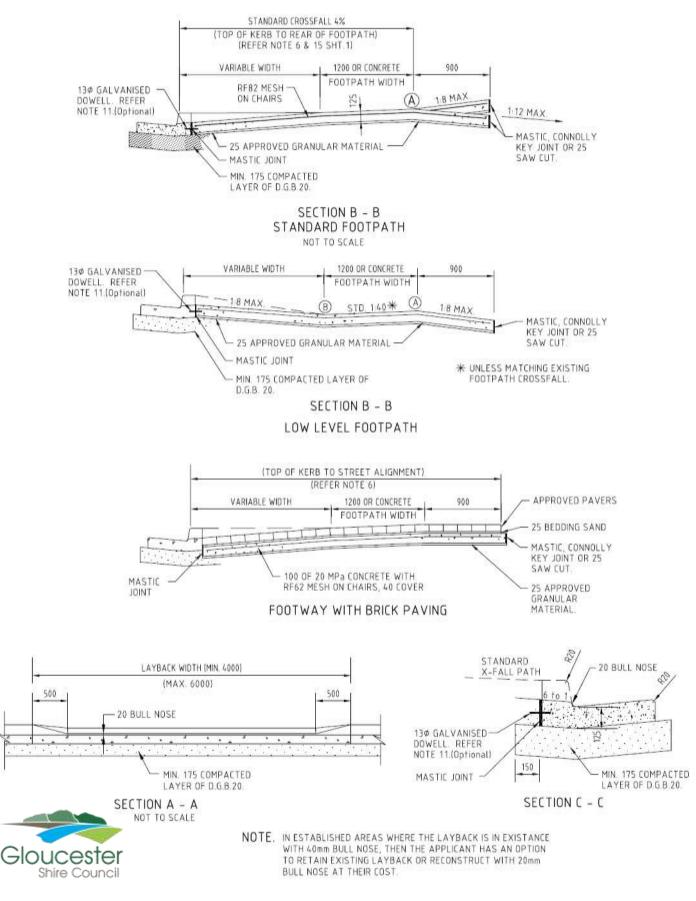
#### NOTES:

- RESIDENTIAL VEHICULAR FOOTWAY CROSSING SHALL BE 125mm THICK CONCRETE ON 25mm SUB-BASE OF APPROVED FINE GRANULAR MATERIAL. REFER ALSO PLAN A(BS)110.
- ALL KERB AND GUTTER AND LAYBACK CROSSINGS SHALL BE PLACED ON A 175mm MINIMUM COMPACTED LAYER OF D.G.B. 20 OR TO THE BASE OF EXISTING PAVEMENT, WHICH EVER IS GREATER.
- ALL CHANGES IN GRADE SHALL BE "ROLLED" ESPECIALLY POINT A, BUT POINT B MUST RETAIN 40mm OF WATER. (LOW LEVEL FOOTWAY).
- 4. CONCRETE SHALL HAVE A 28 DAY STRENGTH (F'c) OF 20 MPa.
- 5. CONCRETE SHALL HAVE A LIGHT BRUSHED FINISH.
- 6. ANY VARIATION TO STANDARD CROSSFALL OF 4% SHALL HAVE THE PRIOR APPROVAL OF COUNCIL'S ENGINEER.
- CONCRETE SHALL BE REINFORCED WITH RF82 MESH ON CHAIRS WITH 35mm COVER. IN CASE OF BRICK PAVING USE RF62 MESH WITH 40mm COVER.
- 8 THE STANDARD SHAPE OF THE CROSSING SHALL BE MAINTAINED. HOWEVER, IN SPECIFIC CIRCUMSTANCES AND WITH THE APPROVAL OF COUNCIL'S ENGINEER THE DIMENSIONS MAY BE ALTERED.
- FOOTWAY CROSSING AND LAYBACK MUST BE A MINIMUM OF 1m OFF POWER POLES AND ELECTRICAL BOXES AND 1m FROM STORMWATER PITS. TELSTRA PITS WILL NOT BE ALLOWED IN FOOTWAY CROSSING.
- 10. WHERE EXISTING PATH PAVING CAN BE SHOWN TO BE > 125mm THICK IT MAY BE RETAINED BUT MUST BE DRILL AND DOWELLED TO CROSSING ON BOTH SIDES WITH GALVANISED 13¢ DOWELLS PLACED 350mm IN FROM EDGES OF CROSSING AND AT 900mm SPACING WITH FULL DEPTH MASTIC JOINT. COAT ONE HALF OF DOWELL WITH SUITABLE MATERIAL TO ENSURE SLIP JOINT.
- 11. DOWELLING OF LAYBACK TO FOOTWAY CROSSING WITH GALVANISED 13Ø DOWELLS PLACED 350mm IN FROM EDGES OF CROSSING AND AT 900mm SPACING IS OPTIONAL BUT RECOMMENDED WITH FULL DEPTH MASTIC JOINT. COAT ONE HALF OF DOWELL WITH SUITABLE MATERIAL TO ENSURE SLIP JOINT. REFER ALSO NOTE 13.
- 12. WHERE DISTANCE FROM BACK OF LAYBACK TO STREET ALIGNMENT EXCEEDS 4.5m A MASTIC JOINT REQUIRED WITH DOWELLS AS PER NOTE 11. LOCATION OF JOINT TO BE DETERMINED BY COUNCIL'S ENGINEER.
- 13. ALL DOWELLS TO BE 300mm LONG WITH 150mm PENETRATION INTO EACH SLAB.
- 14 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

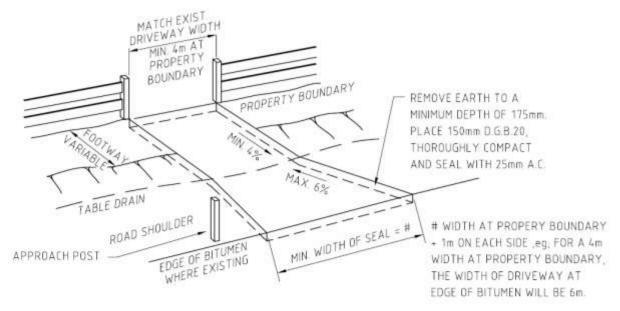


15 THE SECTION OF THE CROSSING ADJACENT TO THE CONCRETE FOOTPATH IS TO HAVE 2.5% FALL, UNLESS MATCHING THE CROSSFALL OF EXISTING FOOTPATH.

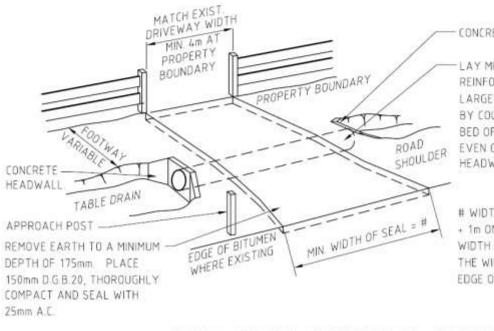
# Standard Residential Footway and Layback Crossing Cross-Section



# **Standard Rural Vehicular Crossings**



RURAL VEHICULAR CROSSING - TYPE 1



CONCRETE HEADWALL.

LAY MIN. 375mm INTERNAL DIA. REINFORCED CONCRETE PIPE (OR LARGER DIA. PIPES AS REQUIRED BY COUNCIL) 4.88m LONG, TO MATCH BED OF EXISTING TABLE DRAIN AT EVEN GRADE CONSTRUCT CONCRETE HEADWALL AT BOTH ENDS OF PIPE.

# WIDTH AT PROPERY BOUNDARY + 1m ON EACH SIDE .eg; FOR A 4m WIDTH AT PROPERTY BOUNDARY, THE WIDTH OF DRIVEWAY AT EDGE OF BITUMEN WILL BE 6m

> Gloucester Shire Council

RURAL VEHICULAR CROSSING - TYPE 2

# NOTES FOR BOTH TYPE 1 AND TYPE 2:

- 1. RURAL VEHICULAR CROSSINGS WILL START FROM THE PROPERTY GATE / GRID AND EXTEND UP TO THE EDGE OF BITUMEN WHERE EXISTING.
- 2. A GUIDE POST MUST BE INSTALLED FOR SAFETY REASONS ON THE APPROACH SIDE.
- 3. STORMWATER MUST DRAIN FROM THE CROSSING TO THE TABLE DRAIN AND NOT ONTO THE ADJACENT ROAD.
- 4. VEHICULAR CROSSINGS ARE REQUIRED TO BE SEALED IF THE ADJACENT ROAD IS SEALED OR OTHERWISE REQUIRED BY COUNCILS TECHNICAL SERVICES DEPARTMENT.
- 5. WHERE A GATE IS TO BE LOCATED AT THE ENTRANCE TO THE PROPERTY IT SHALL BE SET BACK A MINIMUM OF 19 METRES FROM THE EDGE OF THE EXISTING BITUMEN (OR TRAVEL LANE IF LOCATED ON A GRAVEL ROAD).