



# VEHICLE CROSSING GENERAL SPECIFICATIONS FOR LOCAL ROADS

## 1. CONSENT TO UNDERTAKE WORKS IN THE ROAD RESERVE APPLICATION FORM

- 1.1. The Road Management Act requires that consent from the responsible road authority (Whitehorse City Council) is required before a vehicle crossing can be constructed on all local roads within the City of Whitehorse.
- 1.2. Consent will not be given unless an application form has been lodged and approved by Council. This process is in place to ensure that the proposed location of the crossing does not conflict with council and other authority's assets and to ensure that it is constructed to an appropriate standard. Council has a maximum of 20 working days to consider the application once all relevant documents have been received.
- 1.3. Under Council Local Law 2014 the property owner is responsible for ensuring that the Vehicle Crossing is properly constructed and is not a hazard to the general public. The conditions of the application form are to be disclosed to property owners to ensure that they are aware of their responsibilities.
- 1.4. An application fee and a deposit is payable in each case.
- 1.5. If the proposed crossing or any associated work is attached to an arterial road, VicRoads written consent will be required along with any other permits required by VicRoads.

## 2. MINIMUM CONSTRUCTION STANDARDS

- 2.1. Residential vehicle crossings shall be constructed of unreinforced concrete, 150mm in depth, to the shape, grade and section as shown on the attached standard drawing and to the satisfaction of the Manager Engineering and Environmental Services or representative.
- 2.2. Commercial vehicle crossings shall be reinforced with F82 mesh.
- 2.3. Every crossing shall be at least equal to the width of the gateway or driveway it serves and must be a minimum of 3.00m in width (measured between kerbs where applicable) unless otherwise stipulated on any planning permit. The maximum width of a residential crossing shall be 6.00m and for a commercial crossing 8.00m, unless permission from the Manager Engineering and Environmental Services is obtained to exceed this width.
- 2.4. No crossing shall be constructed within 10.00m of any street or road intersection, measured from the kerb line intersection point.
- 2.5. Where two adjacent driveways are less than 1.20m apart, a double vehicle crossing shall be constructed.
- 2.6. Type 1 crossings shall be selected unless widening an existing Type 2 crossing or constructing a double crossing with the existing section being a Type 2 crossing, see Whitehorse City Council Standard Drawings for crossings types.

## 3. INSPECTIONS

- 3.1. A minimum of three working days' notice shall be given as to when the works will be ready for inspection. Crossings will only be inspected between the hours of 9:30am and 1:30pm, Monday to Friday.
- 3.2. Crossings will not be inspected on Saturdays, Sundays or public holidays unless warranted by special circumstances. If special circumstances exist, a special inspection fee is to be pre-paid at least one week prior to the commencement of work. Approval to carry out works under special circumstances is subject to the availability of a Council Officer to supervise the works.
- 3.3. No concrete is to be poured until the base, formwork and reinforcement (if any) has been inspected and approved.

## 4. ALTERATIONS TO EXISTING SERVICES

- 4.1. Vehicle crossings shall be located to avoid interference with existing services including pits, poles, valves, etc. If such interference is unavoidable, the applicant shall be responsible for the cost of all necessary alterations and/or additions. The minimum clearance to poles shall be 1.00m.
- 4.2. Existing junction pits shall be lowered and appropriate size and type of "Gatic" minimum Class 'C' (unless otherwise instructed) cover and frame fitted, the top of the cover being set flush with the finished surface of the new crossing.
- 4.3. Permission may be granted to modify or delete an existing side entry pit provided that an additional pit(s) is constructed at the applicant's expense, as directed by the Manager Engineering and Environmental Services or representative. A written application is to be submitted to the Manager Engineering and Environmental Services for approval. A crossing permit will be invalidated if approval has not been obtained prior to a permit being issued.

- 4.4. No crossing shall be constructed within 3.0m of an existing street tree. Council reserves the right to refuse the removal of a tree, or direct that any street tree be removed and replaced by Council staff, at the applicant's expense, as deemed necessary. If the location of the proposed crossing conflicts with an existing street tree or the required clearances cannot be met, a written application for its removal, or exemption from the specified clearance, is to be submitted to the ParksWide Department for approval. The Manager ParksWide shall determine the fee payable. Approval to construct a vehicle crossing will be invalidated if approval has not been obtained prior to a permit being issued.
- 4.5. If the construction of a crossing necessitates the alteration of any public service or utility, such alterations are to be arranged with the respective authority at the applicant's expense prior to the commencement of construction of the crossing. House drains, agricultural drains, conduits, etc., damaged during construction of the crossing shall be repaired or reconstructed to the satisfaction of the Manager Engineering and Environmental Services or representative at the applicant's expense.

## **5. EXISTING CONCRETE**

- 5.1. Existing concrete kerb and channel shall be removed to the nearest whole bay and repoured as an integral part of the crossing. The kerb and channel may be saw cut if the residual bay is a minimum 1.20m long
- 5.2. Where there is existing 75mm thick concrete footpath in the line of the works, this is to be replaced with 150mm thick concrete across the crossing and one either side of the proposed crossing.
- 5.3. Where an unused crossing exists at a different location to the proposed crossing, the existing crossing, including the concrete channel, shall be removed completely and concrete kerb and channel reinstated. It may be acceptable for the footpath to remain provided that it is in a good condition and is saw cut along the front of path. Nature strips adjoining the reinstatement are to be made good to correct levels with topsoil and seeded. This work shall be carried out concurrently with the crossing construction.

## **6. PREPARATION**

- 6.1. The ground is to be excavated and neatly trimmed to give a clear depth of 200mm below the finished level of the concrete. All excavated material shall be removed from the road reserve at the time of construction.
- 6.2. In cases where over-excavation has occurred or where unstable ground conditions are encountered, class 2 crushed rock must be used to bring the over-excavation up to the level of the boxing. Unstable ground must be removed and replaced with class 2 crushed rock and must be compacted in 150mm layers using a vibrating plate.
- 6.3. The permit holder shall spread a layer of class 2 crushed rock to give a finished base depth of 50mm after compaction with a vibrating plate. Crushed rock is to be wetted prior to compaction.

## **7. MATERIAL STORAGE**

- 7.1. Construction materials shall not be placed or dumped on the road pavement, kerb and channel or footpath. Hand mixing of concrete or mortar on the road pavement or footpath is prohibited.

## **8. REINFORCEMENT**

- 8.1. Commercial crossings shall be reinforced with F82 mesh. The reinforcement shall be set up on bar chairs to provide 30mm cover from the top surface of the concrete. Industrial crossings shall be reinforced with F92 mesh (2 layers).

## **9. CONCRETE**

- 9.1. Pre-mixed concrete shall consist of a mixture of 20mm maximum size aggregate, washed sand and Portland cement. Sufficient water shall be added at the batch plant to provide a slump of not less than 40mm and not more than 75mm at the time of pouring. No water is to be added to the concrete after it leaves the batch plant. The compressive strength of the concrete shall not be less than 25Mpa at 28 days. Every batch of concrete transported in a truck agitator shall be delivered and placed before rapid stiffening of the concrete develops, but in no case shall the time exceed 1.5 hours after the introduction of water to the mixture.
- 9.2. Colour for selected bluestone picher kerb and channel lined streets to be determined by Engineering and Environmental Services.

## 10. JOINTS

- 10.1 Expansion joints shall be located at the nearest joint in the footpath on either side of the crossing and at the property boundary where the crossing abuts a concrete driveway. Expansion jointing material shall extend the full width and depth of the paving.
- 10.2 Contraction joints shall be formed in the crossing in accordance with the standard drawing or as directed. The jointing pattern will be such as to form the crossing into bays of not more than 3 square metres. Joints shall be formed by creating a plane of weakness through the concrete after it has taken its initial set and should be defined in the finished concrete surface by means of an approved grooving tool.

## 11. FINISH

- 11.1 The surface of the concrete shall be brought to a smooth, even mortar finish, which must be applied to the concrete within half an hour after placing or be brought to the surface by the use of a perforated roller or wood float. The mortar finish shall consist of one part cement, one part sand and one part screened bluestone dust. The use of driers is not permitted. The final surface is to be obtained by lightly drawing a hair broom over the whole of the finished surface to provide an even, non-skid finish. Concrete kerb and channel shall be finished with a steel trowel to a smooth surface. On no account will consideration be given to using concrete abrasives, additives or any similar products with a view to the mortar finish being applied after the half hour has elapsed.

## 12. CURING

- 12.1 No vehicle shall use a newly poured crossing for at least thirty-six (36) hours from the time of pouring to allow the concrete to attain a satisfactory strength. An approved curing compound shall be applied between the months of December and March inclusive or when the forecast top temperature exceeds 25 degrees Celsius.

## 13. BARRICADES AND LIGHTING

- 13.1 The applicant shall supply and erect any barriers, signs, lights, etc. to ensure the safety of all traffic, both vehicular and pedestrian and to protect the works from damage, in accordance with the *Road Management Act 2004* Worksite Safety – Traffic Management Code of Practice.

## 14. CLEANING UP

- 14.1 Upon completion of the work the Applicant shall remove all surplus material from the site and resurface the nature strip with a minimum of 100mm topsoil and seed or as directed by Asset Protection officers. The Applicant shall reinstate any damaged road pavement along the road/ crossing interface to the satisfaction of the Manager Engineering and Environmental Services or representative.

## 15. CROSSING CONSTRUCTED WITHOUT A PERMIT

- 15.1 If a crossing is constructed without a permit or consent, without Council supervision or has not been properly constructed to Council standards the Council may require the property owner or applicant to reconstruct the crossing or completely remove the crossing and reinstate the footpath, kerb and channel, etc. in accordance with Clause 12 (2), (3), (4) and (5), Schedule 7 of the *Road Management Act 2004*. Deposits shall be forfeited.

## 16. CROSSINGS FOR ARTERIAL ROADS

- 16.1 Vehicle crossings on the roads listed below are to be constructed with a wide splay on the approach side to provide ease of entry, in accordance with the appropriate standard drawing and will require a VicRoads permit and any other permits required by VicRoads prior to applying to Council for an 'Application Form – Inspections for Various Permits':

Name	From	To	Comments
Belmore Road	Municipal Boundary	Elgar Road	
Blackburn Road	Railway Road	Highbury Road	
Boronia Road	Canterbury Road	Dandenong Creek	
Burwood Highway	Warrigal Road	Dandenong Creek	Excluding service roads
Canterbury Road	Alexandra Crescent	Heatherdale Road	Excluding service roads
Chapel Street	Whitehorse Road	Railway Road	
Elgar Road	Eastern Freeway	Burwood Highway	
Highbury Road	Warrigal Road	Springvale Road	

Middleborough Road	Eastern Freeway	Highbury Road	
Mitcham Road	162 Mitcham Road	Canterbury Road	
Railway Road	Chapel Street	Blackburn Road	
Riversdale Road	Warrigal Road	Station Street	
Springvale Road	Eastern Freeway	Highbury Road	Excluding service roads
Station Street	Eastern Freeway	Highbury Road	
Surrey Road	Eastern Freeway	Whitehorse Road	
Warrigal Road	Canterbury Road	Highbury Road	
Whitehorse Road	York Street	Heatherdale Road	Excluding service roads