

Date Adopted: Draft 2025

Version: 1.0

Technical Document: Driveway Crossings

The objective of this section is to ensure that development provides safe, practical, and durable vehicular access between the property boundary and the public roadway. The driveway within the property shall also adequately accommodate vehicle loads and manoeuvring with acceptable gradients. To achieve these goals and ensure safety for all road users, driveways and crossings are to be designed in accordance with this document and relevant standards, specifically Australian Standard 2890 and Austroads Standards Part 3 (particularly relevant to rural environments).

Works within the road reserve cannot commence until approval is obtained from the council. For a list of relevant application forms, including the "Application for Vehicle Access Crossing (Driveway)" and "Application for a Road Opening Permit," please refer to the Council's website under the section "Work Applications on Council Land and Roads."

1. Specifications

1.1 Crossing Width

For residential developments, driveway crossovers for single-garage dwellings shall be 3 metres wide. The crossing may be reduced to 2.7 metres in width where site constraints exist for existing dwellings. Where a crossover services a double-garage dwelling, a maximum crossover width of 4.5 metres may be adopted. For multi-dwelling housing, the driveway crossover shall be a minimum of 5.5 metres wide (a maximum of 6 metres) and shall extend 6 metres minimum inside the property boundary to accommodate vehicle passing. Where drive strips are installed inside the boundary, their width should accommodate vehicle turning wheel paths (refer to SD015). Crossings should be perpendicular (i.e., straight) to the kerb and maintain the same width from the kerb line to the property boundary.

For business, commercial, and industrial developments, the crossing width shall accommodate the expected design vehicle turning paths as determined by the AS2890 series.

For rural accesses, the width shall be sufficient to cater to expected usage and shall be a minimum of 3.6 metres (a maximum of 7.1 metres), with additional width for splays at the junction with the edge of the road (see SD013).

For high-use access or high-traffic-generating developments, such as markets, events, and centres, the crossing shall be designed to accommodate the expected design vehicle turning paths, with minimum intersection treatment in accordance with Council's Standard Drawing (see SD031) and Austroads as applicable.

1.2 Construction Requirements

The Standard Drawings that must be followed are set by council typically through the 'Application for Vehicle Access Crossing (Driveway)' process, and sometimes through the Development Application

(DA) process. The standards listed below can be used as a guide to prepare plans for DA and CDC approval however council may assess that a different drawing shall be used.

For urban residential developments, the crossing shall be provided in accordance with Council's Standard Drawings SD007, SD008, SD009, SD010, SD011, and SD012. Grated trench drains shall be installed at the low points of the driveways either in front of a garage or at the property boundary (inside the lot) and connected to the onsite or street drainage system.

For heritage areas, the vehicular crossing shall comply with Standard Drawings SD014 and SD015. The concrete colour should be selected in accordance with Council's requirements for heritage areas. Any site-specific requirements in Council's Development Control Plan will also be considered during the driveway approval process.

For business and industrial developments, the crossing shall be provided in accordance with Council's Standard Drawings SD007, SD008, SD010, and SD012, using "Commercial/Industrial Driveway Crossing" concrete construction, or as designed by a qualified engineer to accommodate expected (heavy) vehicle loads.

For rural developments, the crossing shall be provided in accordance with Council's Standard Drawing SD013. Driveway crossing roadside table drains should be installed as a dish crossing with a regrade to avoid scraping. Where the depth of the drain makes a dish impractical, 5 metres long, 375mm diameter (minimum) concrete Class 4 pipe (or equivalent Fibre Reinforced Concrete pipe if appropriate) with headwalls shall be provided. The table drain shall be diverted so that the pipe is located at least 2 metres from the edge of the road bitumen. The pipe size must provide sufficient capacity for the 10% Annual Exceedance Probability (AEP) storm event for the contributing catchment area, with larger overflows being contained by the road pavement/reserve. The crossing shall consist of compacted gravel (minimum 200mm thickness), with a 2-coat or asphaltic bitumen seal from the edge of the existing road seal to the property boundary, or as shown on Council's Standard Drawing SD013.

2. Profiles

Driveway crossing profiles shall be designed and drawn to show levels for both the design surface and the existing surface in compliance with the specifications for high/low level driveway crossing construction as indicated on Council's Standard Drawing SD008.

The designer/builder should aim to match the existing surface levels as closely as possible while complying with the standard profile. Minor cuts and fills of up to 120mm may be acceptable in the footway provided a 14:1 slope is achievable as it transitions to the adjoining sides/existing surface levels.

Where there is no footpath, the profile should have a maximum grade of +4% (parallel to the longitudinal fall of the footway) over the road footway.

Where the footpath exists in the footway verge, the profiles shall be +4% from the back of layback to the front of footpath, +2.5% maximum grade over the concrete footpath and may vary from the back of the footpath to suit property or garage levels, as per SD008.

Where requested by Council, a 1.5 metres wide section within the crossing with a maximum grade of +2.5% for a future footpath construction shall be provided or another width may be specified for wider paths at +2.5%.

Where an existing concrete path crosses the driveway crossing, the path shall be retained to maintain the appearance of continuity.

Development on the low side of a road must consider the potential for stormwater runoff from the roadway or gutter to enter the site via the driveway layback. The design profile should be designed and constructed to effectively manage and contain stormwater flows within the roadway.

The design shall have a maximum internal driveway grade of 25% at any point and shall include suitable grade change transitions to facilitate driveway and garage entry in accordance with AS2890.

3. Clearances to Utilities and Street Furniture

Crossings shall provide a minimum clearance of 600mm from the edge of the crossing to service poles, edge of lintel kerb transitions, and pillars (a minimum of 300mm may be considered where constraints exist), and a minimum of 2 metres clearance from the edge of the crossing to any street tree, as per SD009.

The minimum clearance to any obstructions higher than 150mm shall be 300mm or as required by the relevant authority and standards, whichever is greater.

Note: Variations may be considered in older areas where constraints exist. This does not apply to new areas.

4. Table Drain Crossings

Where crossings run through a shallow roadside table drain, a concrete dish crossing may be the preferred option for crossing within the table drain in accordance with Council's Standard Drawing SD004. To achieve this, regarding the surface by cutting into the verge and extending into the property may be necessary to prevent vehicle scraping.

5. Public Laneways (Existing)

Where permitted by consent, access to property development via an existing public laneway (or unformed or informal 'paper road') is subject to an assessment of the existing road pavement (if any). This may require construction or rehabilitation of the laneway to meet Council's standards, either as a bitumen-sealed gravel, flexible or reinforced concrete pavements, unless otherwise justified. All works shall be carried out in accordance with Council's Manual of Engineering Standards with the pavement generally being a minimum of 4 metres wide. Additional pavement width may be required depending on factors such as the type and volume of traffic, passing opportunities, length of works, sight distances, and other relevant considerations.

6. Removal of Paths

Where path removal is necessary due to damage, required strengthening, level adjustment, or for drainage pipes, the path shall be removed to the nearest existing joint and reinstated to match the appearance of the existing path (plain concrete). The reinstated path shall be dowelled to the existing concrete and constructed in accordance with Council's Manual of Engineering Standards.

7. Verge Damage

Any damage to existing verges or paths caused by building construction activity should be prevented. Access to the building site should be restricted to limit potential damage to a single point. Any necessary reinstatement of the verge (with full turf cover) or path (with new reinforced concrete) must be completed prior to the occupation of the development and in accordance with Council's requirements.

8.Redundant Laybacks

Redundant laybacks shall be removed and reinstated with integral kerb and gutter, and the footways and road surfaces shall be restored to match the existing surfaces.

9. Service Conduits

Service connections must be provided along the full length of the corridor to all rear lots.

10. Sight Distances

Fencing and landscaping on both sides of driveways, at least 2 metres wide and within a distance of 2.5 metres from the property boundary, shall be limited to a height of 1 metre to maintain sight distances in accordance with AS2890.1 and as shown in Figure 1 below.

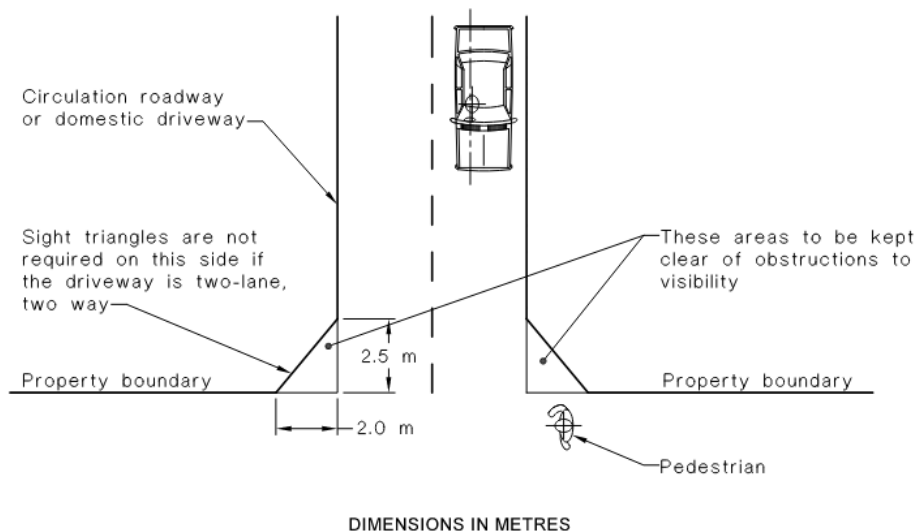


Figure 1: Minimum Sight Lines for Pedestrian Safety (AS2890.1)

11. Lintel & Grate Adjustments

Driveway crossings shall not be located on stormwater pits, utilities, and other street furniture. Council will not approve the removal or relocation of pits/lintels in relatively new subdivisions due to the potential for excessive damage to new infrastructure.

If a crossing is located over a pit in older roads, it is a standard requirement to provide a new pit adjacent to the crossing, and to replace the existing pit with a heavy-duty “V” grate to ensure adequate inlet capacity. Council may consider the removal of the additional pit/lintel only if an engineer can demonstrate that the stormwater inlet capacity, including gutter flow widths, will not be compromised, and subject to Council's discretion.

The surplus lintel and grate shall be delivered to Council's depot in good condition.

12. Locations of Crossing

Crossing locations shall comply with the following guidelines set by Council:

- Crossings shall be aligned with the garage, not angled to the road. This alignment enhances

safety and sightlines, improving visibility when entering or exiting. Angled crossings can create blind spots, limit the driver's field of sight (especially when reversing), and increase the risk of accidents with pedestrians, cyclists, and other vehicles. Straight crossings provide safer, more predictable navigation, making it easier for drivers to reverse or pull forward without dealing with sharp turns or restricted visibility. Generally, crossings shall be between 70 and 110 degrees (ideally 90 degrees) to the kerb line or road pavement to ensure safe and efficient vehicle access.

- Crossings shall be spaced less than 1.5 metres apart or greater than 6 metres apart to maximise retention of on-street parking, especially for the secondary driveway crossing.
- Crossings shall be positioned 0.9 metres minimum from any side boundary, providing a landscape area as per Council's DCP.
- Crossings are not to be located at pedestrian pram ramps or bus stop concrete pads.
- In residential areas, crossings may be located within bus zones, which is acceptable for small residential developments. However, for larger developments or bus stops with rapid turnover, crossings should be positioned so that laybacks do not align with the front or back door, and they should be placed outside the bus drawn out length.
- Crossings are not permitted at bicycle lane on/off ramps (consideration may be given to relocating the bicycle ramps to the next lot frontage, at Council's discretion).
- Crossings must not align with existing aboveground utilities, including street lighting.
- Crossings cannot be placed over public stormwater pits or lintels.
- Crossings are prohibited within the main radius kerb return at intersections and roundabouts.
- Crossings are not allowed opposite isolated central median islands/refuges.
- Crossings must be located at least 10 metres from the hold line of the intersections/roundabouts where a continuous central median exists.

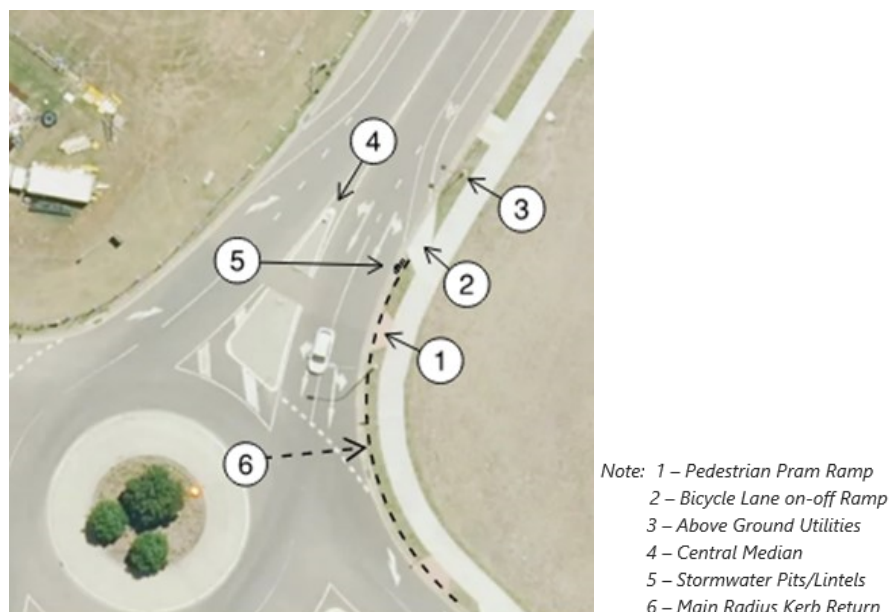
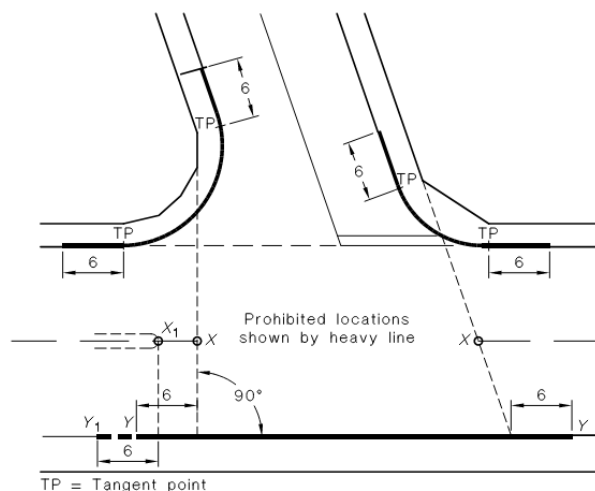


Figure 2: Locations to Avoid for Crossing Placement

- Crossings are not permitted in the sections of the kerb marked with heavy lines in Figure 3 (AS2890.1). Access to domestic crossings is excluded from this prohibition with respect to the kerb section marked Y-Y, as per AS2890.1.



NOTES:

- 1 Accesses to domestic driveways are excluded from the prohibition in respect of the kerb section marked Y-Y (see Clause 3.2.3(a)).
- 2 The points marked X_1 and X are respectively at the median end on a divided road and at the intersection of the main road centre-line and the extensions of the side road property lines shown as dotted lines, on an undivided road. On a divided road, dimension Y-Y extends to Point Y_1 .

DIMENSIONS IN METRES

Figure 3: Prohibited Locations of Access Crossings

- Figure 3 above is based on a standard kerb return with an 8 metres radius. Where the kerb return exceeds an 8 metres radius, the prohibited crossing location is the first 15 metres from the intersection, measured from the prolongation of the side kerblines.

13. Driveway Handles

Driveway handles, sometimes referred to as battle-axe handles, can be categorised into two types: internal driveway corridors within developments such as strata or enterprise properties and battle-axe handles used for lot access or easements. The Council's Development Control Plan is the governing document when easements and handle widths are involved.

Access handles and carriageways must comply with the Council's DCP Design Guidelines.

The DCP extract below is provided for convenience. The most current version of the DCP shall take precedence.

ZONING ¹	SINGLE HANDLE ²	DUAL HANDLES ³	PAVEMENT WIDTH ⁴
Residential (R1)	4.0	(2x) 3.0 or (2x) 3.5 ^{5,6}	3.0 ⁷
Residential (R5-V & X)	4.0	(2x) 3.0	3.0
Residential (R5-Y)	4.5	(2x) 3.0	3.0
Residential (R5-Z)	6.0	(2x) 3.0	3.0
Business (B) & Industrial (IN1)	6.0 or 8.0 ⁸	(2x) 4.0	3.3 min or 6.0 ⁹
Rural (RU)	6.0	(2x) 4.0	3.5

Notes:

- (1) For minimum lot size: V=2,000, X=5,000, Y=10,000, Z=20,000 and above
- (2) For a single allotment. Long or bent handles may require greater widths for passing
- (3) Each handle width for two adjoining lot handles, with a single driveway covered by a full-width reciprocal ROC.
- (4) For single lane. Note: concrete wheel strips can be provided for residential
- (5) Three metres (x2) permits vehicle passing within o/a 6m width for each residential zone. It is assumed regular conflict is unlikely and "give-way" will apply in residential zones.
- (6) Where lots are >600m² (excluding handle), OR having potential for further subdivision or additional dwellings, adopt 3.5m each.
- (7) Where lots have potential for high density development with regular traffic movements, adopt 5.5m, preferably as two carriageways with a 400mm grassed separation.
- (8) Increase to 8m where regular two-way conflict is likely.
- (9) Generally for one-way or minor two-way movements with "give-way". For two-way movements with regular traffic conflict 6.0m min should be provided.

Figure 4: Handle Width Requirements

Note: It is recommended that the applicant refer to the DCP for the latest requirements, as the specifications in the DCP will take precedence in this instance.

13.1 Pavement Handle Width

For internal driveway corridor widths, the designer shall consider the Council's Development Control Plan (DCP), the relevant planning legislation or scheme, and Australian Standard AS2890.

13.2 Pavement Handle Construction Specifications

Driveways for residential land use shall be constructed using reinforced concrete, segmental pavers, bitumen, or asphalt, with an appropriate depth of compacted road-base material. "Shared" driveways shall be covered by a reciprocal right of access (or carriageway) and/or designated as common or community property. Driveways for business and industrial land use shall consist of reinforced concrete across the verge, with either reinforced concrete or asphaltic concrete (AC) used internally. All driveways must meet the minimum construction thickness requirements outlined in Council's Standard Drawings SD007 to SD015. The designer or engineer is responsible for ensuring that the pavement thickness is appropriate for its intended use and for specifying a thicker pavement where necessary.

13.3 Pavement Handle Grades

The recommended maximum driveway grade for standard residential scenarios is 4 horizontal to 1 vertical (25%), as shown in Standard Drawing SD008. Where possible, driveways within the property should be graded to evenly shed water runoff toward adjacent landscaped or grassed areas, ensuring that runoff is not directed as concentrated flow onto adjoining properties. Stone or sand-filled trenches adjacent to driveways are encouraged to promote infiltration, provided a subsoil outlet is available at the low point of the trench. Otherwise, stormwater collected from the driveway should be conveyed via pipes and/or concrete kerbing to the on-site or street drainage system.