ENGINEERING

Subject

Residential Property Access Standard

Objectives

This standard applies to all residential properties with up to two dwelling units, from the travel lane of the road to the property boundary at the road frontage.

Policy

Property Access Constraints

- (a) Property accesses shall be a minimum of 3 metres and a maximum of 6 metres wide across the footpath with the exception of the flares at the kerb to prevent rutting.
- (b) Property accesses must be wholly located within the frontage of the allotment. To avoid service access points, property accesses should, where practical, be located with a minimum side boundary clearance of 1 metre.
- (c) Generally, property accesses will be located on the more minor road where the property has frontage to two or more roads, except where the generated traffic would impact adversely in respect of amenity or safety.
- (d) Property accesses must not be located within 12 metres from the tangent point of an intersection or roundabout (for clarification, refer to AS/NZL2890.1.).
- (e) Constraints such as power poles, guard rails, stormwater drainage pits etc should also be examined before siting the house and driveway.
- (f) Access restriction strips (encroachment), easements or "limited access" roads may prevent the placement of the driveway in the intended location.
- (g) Property accesses should have sufficient sight distance for entering and leaving the property access. In some special circumstances such as busy roads, works may need to be undertaken within the property to allow a vehicle to turn within the property and leave the property in a forward direction.

Driveway Design

Property accesses for single dwelling unit or duplex developments must be constructed in accordance with Miriam Vale Shire Council standard drawing MVSC-R-02 (attached). Car tracks across the footpath tend to rut between the tracks over time and present an unacceptable pedestrian risk and therefore are not allowed on the footpath.

- (a) The minimum width "W" (refer plan MVSC-R-02) for a straight property access for a car is 3 metres. Property accesses for two residential units should be 6.0 metres wide at the boundary (i.e. "W").
- (b) Given the minimum width stated above, property accesses must be wide enough to accommodate the swept path of the vehicle so as to prevent rutting over the sides of the property access. (Check this by driving the largest vehicle expected over the area where the property access is intended). Allow at least 0.3 metres to 0.6 metres either side of the wheel path for misjudgement. The flares at the kerb and channel may be required to be widened.
- (c) Isolation joints must be provided where a pavement adjoins a building or other rigid structure such as a drainage pit. Isolation joints should allow freedom of movement between the slab and the structure and resist the entrance of foreign matter.

Some guidance for the construction of property accesses for surface types, other than concrete, can be found in Australian Standard AS 3727.

Surface Treatments

As the property access must also accommodate the needs of pedestrians walking along the verge of the road, it will be required to meet the relevant AUSTROADS' Guidelines in terms of skid resistance. Accordingly, broom finished concrete or similar provides a good textured finish and is preferred. Loose surfaces will not be permitted in urban areas, as loose material can be washed into gutters or stormwater drains and tracked onto the road causing a hazard and polluting water ways. Slick coatings or finishes with low skid resistance in wet weather should be avoided. This may include rounded pebbles in exposed aggregate property accesses, silicone sealant paint (used to lift the colours of oxides), glossy ceramic tiles or any other surface that is slippery when wet.

Protection of Services and Markers

Council and other utility providers are likely to have pipes and wires under the footpath where the property access will be placed. Accordingly, the property access constructor should locate the existing services in the road reserve well before the digging starts.

It is recommended that they:

- contact Council who will be able to provide most of the information required on what services are located in the footpath (refer Guide); and
- make use of the "Dial before you dig" service by phoning "1100".

Services located under footpaths are *usually* covered by at least 300 mm of soil. This is designed to spread the surface loads (or impacts) on the underground services. Accordingly, any excavation works should be undertaken <u>very carefully</u> to ensure that these services are not damaged.

Utility providers may have constructed access points such as surface or subsurface pits valves or connections, which if covered by concrete or other material during construction of a property access, may prevent future access for maintenance work. Accordingly, the property access should be located to avoid construction over these points if at all practical. If the property access is to be constructed over a service access, then provision must be made for suitable isolation joints adjacent to the service access point. The service access should be capable of taking the expected wheel loadings. If necessary, the applicant should contact the service provider to alter the level of the point to match the property access.

If the kerb is to be cut during the property access construction, the constructor should be on the look out for service markers on the kerb. These markers may designate a conduit (brass disk) or location of a fire hydrant (painted). If these markers are to be removed, then contact Council to relocate the markers before they are removed.

Service providers may need to cut through your property access in the future to either maintain existing services or place new services in the footpath. In instances where Council needs to cut through property accesses, reasonable attempts will be made to match surface finishes, however, a perfect match cannot be guaranteed.

Property access Levels and Slopes

The following gives a general guide to the levels for the construction of a property access.

- (a) Generally the level of the property access should match the level of the footpath for the first three metres from the kerb and channel.
- (b) The slopes and levels along the property access should be designed to allow a standard vehicle with a full passenger load to enter the property without scraping the middle or ends of the vehicle.
- (c) Council advises that the kerb and channel must be cut down to avoid damaging the vehicles crossing it. The kerb shall be cut along the invert line to accommodate this. The outline of the property access should be cut by a professional concrete cutter with a diamond saw, alongwith some transverse cuts to assist in the break out of small pieces of the kerb. Council will reject an uncut kerb broken out solely with a sledge hammer, and may replace the damaged kerb and channel at the expense of the property owner.
- (d) Roads also double as stormwater drains. Accordingly, to avoid potential flooding of the property, <u>Council requires that the level of the top of the kerb before its removal be achieved within</u> <u>the first metre of the property access</u>.

- (e) The desirable maximum property access grade is 16% (approximately one vertical in six horizontal). Property accesses with grades steeper than 16% must be constructed with a sealed pavement suitable for the traction of the appropriate two wheel drive to traverse the property accesses in wet weather (preferably concrete). The maximum grade for residential/rural property accesses is 20% (one vertical in four horizontal). A grade of 25% may be approved by Council in exceptional circumstances.
- (f) Transitions should be provided between changes in vertical grades to ensure that the loaded vehicles clear the property access. Templates contained in the Main Roads' "Urban Road Design Manual" Volume 1 (Figure 3-1170) are attached to the standard (the scale of the templates should be checked before using them). Other publications such as "AS 2890 Parking Facilities Off Street" also may be used to check the clearances of vehicles using the property access.

Council will not approve items being placed in the kerb and channel to help the vehicle enter or leave the property access, as these devices present slicing puncture or impact hazards to road users (pedestrians, cyclists or motorcyclists), as well as restrict the flow of storm water in the kerb and channel. The following examples are prohibited and should be removed: steel plate ramps, steel grates, pieces of timber etc.

Public Safety

The main concern of Council is the safety of persons using the road reserve whether they be pedestrians, cyclists, motorcyclists or motorists etc. Being on the footpath, the predominant group of concern is pedestrians who are vulnerable to tripping on uneven surfaces. A tripping hazard for sealed surfaces consists of a sudden change in level of 10 mm to 25 mm, while for a natural surface, a hazard is a sudden change of level of 25 mm to 50 mm. Tripping hazards must be minimised on the footpath at any time. The sides of the property access must be backfilled or joined to other surfaces to minimise tripping hazards. The maximum step allowable onto or across the property access for new installations is as follows:

- (i) from a paved or gravel surface: 10 mm; or
- (ii) from a grassed surface: 25 mm.

Approval Process

(a) Applications which strictly comply with this Standard

Applications must be submitted to Council on the appropriate form. The applicant is required to certify that the works will be undertaken strictly in accordance with this Standard.

Applications which **<u>comply</u>** with Council standards will attract an application fee as per Council's Fees Schedule and the applicant can immediately proceed with the project as a deemed approval. Council will, however, formally acknowledge and approve the application within five to ten business days of receipt of the application. The applicant is required to advise Council when the project is complete to allow a final inspection to be made. Council has the authority to issue a written notice requiring the applicant to rectify any faults in the property access, or Council may carry out the rectification work at the expense of the land owner if they fail to comply with the notice within a reasonable timeframe. If the fault is an imminent danger to public safety, works will be carried out immediately.

<u>Standard Conditions for Residential Property Access Property access that "Strictly Comply"</u> with the Standard

Applications must be submitted to Council on the appropriate form alongwith the prescribed fee as per Council's Fees Schedule, and must meet the following conditions:

- (a) The owner is responsible for the maintenance of all improvements/alterations undertaken.
- (b) The property access must be constructed in accordance with the Residential Property Access Standard and the Miriam Vale Shire Council standard drawing number MVSC-R-02.
- (c) The applicant is responsible for the Workplace Health and Safety aspects during the construction of the property access and must protect the public by complying with the following:
 - (i) the property access must be completed and safe within ten days of commencing excavation, including back fill to the sides of the property access;
 - (ii) tripping hazards to the public in the vicinity of the work must be minimised;
 - (iii) all steel rods or other potential hazards protruding above the ground must be suitably capped when the property access construction is unattended;
 - (iv) provision must be made for pedestrian safety, including safety mesh around the site whilst tripping hazards exist and alternative pedestrian passage on busy roads. (Where the home owner is constructing the property access, safety mesh may be borrowed from Council upon payment of a bond); and
 - (v) external house lights should be left on overnight where practical to flag the hazard on busy footpaths.
- (d) Property accesses and surrounding ground shall be maintained such that there is no tripping hazard. The property access must be built and maintained to the following tolerances: Kerbs, ropes, edging etc must not be placed on the side of the property access or footpath as they present a tripping hazard.

Type of adjacent ground	Maximum height difference between property access and adjacent ground	Maximum Grade adjacent to property access
Hard surfaces (concrete, pavers, gravels)	10 mm for new installation or up to 30 mm depending on risk associated with step for older work	1V in 8H (12.5%)
Soft natural surfaces (grass, loose soil)	25 mm for new installation or up to 50 mm depending on risk associated with step for older work	1V in 8H (12.5%)

- (e) Where the property access is being constructed by a commercial entity, the holder of the permit must ensure that the constructor is covered by liability insurance in an amount of not less than \$10 million and which indemnifies Council in respect of any liability arising from the construction of the vehicular access works.
- (f) Surface treatments shall be non-skid. Surface treatments other than broomed plain concrete may be difficult to replace by Council or any other service provider in the future.

Applications which do not comply with this standard

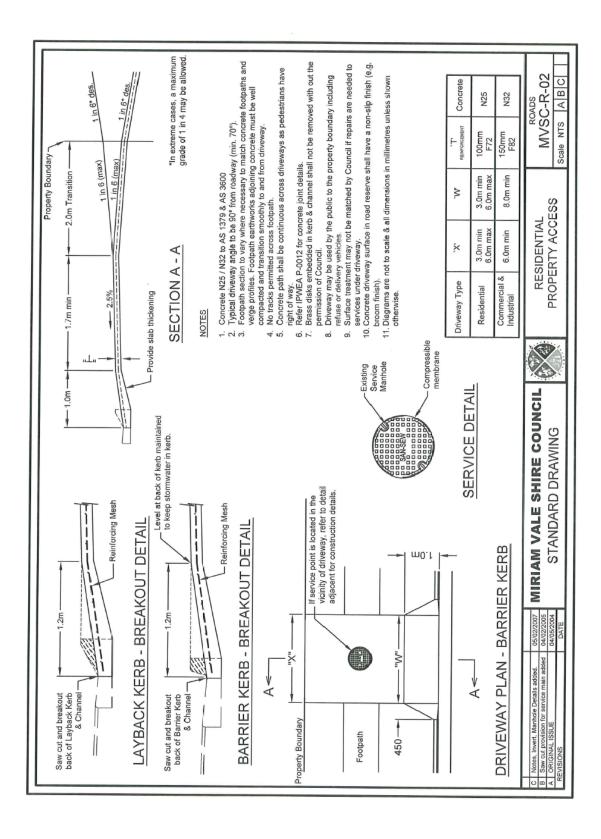
Applications must be submitted to Council on the appropriate form alongwith:

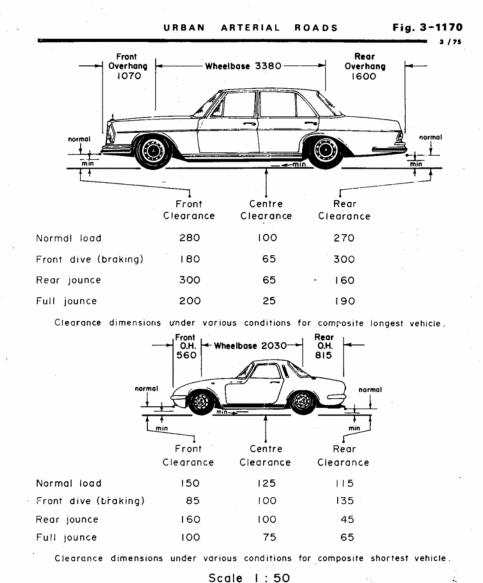
- the prescribed fee as per Council's Fees Schedule and provide the following
 - a) a dimensioned drawing of the property access showing the location of the property access with respect to the boundary;
 - b) the proposed surface type; and
 - c) if the standard drawing MVSC-R-02 is not being used, then an alternative plan, including a long section showing distances and heights with respect to the top of the kerb, shall be provided.

A Council officer may contact the applicant to confirm the details and possibly provide amended sketches of the property access to ensure compliance with this policy. A permit for construction of the property access should take five to ten business days.

The applicant is required to advise Council when the project is complete to allow a final inspection to be made. Council has the authority to issue a compliance notice to rectify any faults in the property access and carry out the rectification work at the expense of the land owner if they fail to comply with the notice within a reasonable time.

(For interpretation of Fig 3-1170 following, Jounce = a bouncing movement).





Delegation: Policy Number: Resolution Date/Page No: Implementation Responsibility: Review Responsibility: Date Reviewed: Date Amended: Date of next Review:

* Use normal load as a basis for design of entrances, but the effects of greater

- spring deflections should be checked.
- * The dimensions shown relate to those of a composite design vehicle and do not necessarily apply to the particular models shown.
 Source: Ref. 14

Template for vehicle clearance at property entrances

20 March 2