



## Gladstone Regional Council

### Urban Commercial/Industrial Driveway Standards

#### 1.0 SCOPE:

This standard applies to industrial and commercial properties (including properties of more than five dwellings "units") from travel lane of the road to property boundary at the road frontage within the region. It does not override development conditions imposed for a particular development.

#### 2.0 DRIVEWAY CONSTRAINTS

- Driveways must be wholly located on the frontage of the allotment serviced with a minimum side boundary clearance of two metres, where practical.
- Driveways must not be located within 20 metres of an intersection or roundabout unless otherwise approved by the Director Engineering Services or his delegate.
- Constraints such as power poles and guard rails must be examined before positioning the driveway.
- Access restriction strips (encroachment), easements, reserves, or "limited access" declarations must also be researched as these may prevent the placement of the driveway in the intended location.
- All driveways must have sufficient sight distance for the vehicles entering and exiting the property. In some special cases such as busy roads or main 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.
- The driveway must be completed and safe within 10 days of commencing excavation, including back fill to the sides of the driveway.

#### 3.0 DRIVEWAY DESIGN

- The configuration of the driveway is to satisfy the basic traffic design criteria for all intersections with regard to driver behaviour, safety of pedestrians and vehicle characteristics.
- The number of driveways accessing a particular site is to be kept to the minimum necessary to allow satisfactory traffic operation for the site.
  - Generally, only a single access point (entrance/exit) will be approved for any particular development. However, this may be relaxed where it can be demonstrated that safety and traffic operation on the road are not compromised, or where pedestrian safety can be improved by such a design.
- All developments are to provide internal traffic circulation to avoid use of the public road system for movements between car parking and/or servicing areas of a site.

- Developments with driveway/s via signalised intersections or roundabouts will be required to dedicate the traffic signal footprint including detection loops as public roadway to ensure lawful priority of traffic movements under current Queensland traffic law.
- Access to developments is preferred via minor roads rather than major roads, provided the traffic generated by the development will not compromise the amenity of that road.
  - In some cases, improvement works may be required in the minor road/s to alleviate possible detrimental impacts to that road.
- For new commercial or industrial accesses, the developer is required by the Council to apply for a permit for the access to be constructed on the road reserve as a part of their local laws. In such permit, the developer shall nominate the service vehicles expected to utilise the access. As such the access shall be approved for that type of vehicle only.

#### 4.0 DRIVEWAY TYPE

The type and width of driveway appropriate for a development depends on:

- volume of traffic generated at that driveway by the development
- type of road to which access is sought
- existing and predicted future traffic volumes of the road to which access is sought
- number of car parking spaces served by the driveway
- size and type of the largest vehicle likely to use the driveway on a regular basis (usually a service vehicle)
- number of service bays served by the driveway.

Driveways are to be constructed in accordance with the Capricorn Municipal Development Guidelines CMDG-R-042A Urban Commercial/Industrial Driveway.

For roads under the control of the Department of Main Roads, its separate design requirements will be determined by Department of Transport and Main Roads (DTMR).

A driveway type should be selected according to its function with regard to car parking or service vehicle requirements, or both.

- Determine driveway function and select driveway type from relevant table:
  - Cars only, Table 1
  - Service vehicles only, Table 2
- Where a driveway provides access for both cars and service vehicles, a driveway suitable for both functions shall be selected.
- For developments that generate large volumes of traffic, and where the use of a standard driveway would cause unacceptable delays or hazard to traffic, a fully channelised intersection may be required.
- To ensure adequate visibility between vehicles on a driveway and pedestrians on the footpath, sight splays are to be provided at the property boundary, where the driveway leaves between two obstructions

#### 4.1 DRIVEWAYS FOR PARKING AREAS

Each driveway of a parking area having multiple points of access is to be designed on the basis of the number of spaces effectively served by that driveway. The driveway type should then be selected from Table 1

**Table 1: Driveway selection for cars only**

Turnover rate of car parking area (1)	Type of frontage road	Type of driveway for the number of spaces in car parking area			
		1-25	26-250	251-500	Over 500(2)
Low/Med	Minor	A (3)	B2	C1	C3
Low/Med	Major	B1 (6m)	C1	C2	C3
High	Minor	B1 (7m)	C1	C2	C3
High	Major	B2 (7m)	C2	C3	C3

*(1) Low to medium parking turnover rates are likely to be generated by residential, industrial and commercial developments. High parking turnover rates are likely to be generated by entertainment, transport, retail and fast food developments.*

*(2) Car parking areas containing over 500 spaces or generating more than 1,000vpd are to be assessed for the need of an appropriately designed channelised access intersection.*

#### 4.2 DRIVEWAYS FOR SERVICE VEHICLES

Driveway types for service vehicles are determined according to the turning path requirements of the relevant design vehicle nominated in an application for a driveway permit. The appropriate driveway is selected from Table 2.

- Where traffic is required to be restricted to left in/out movements only, a type 2 driveway with centre island is to be used.
- For entry or exit only driveways, the relevant half of a Type C driveway is to be used.
- Where the volume of traffic generated by a development contains a substantial proportion of service vehicles and exceeds 500vpd, then a channelised access intersection may be required in place of a standard driveway.

**Table 2 Driveway selection for service or other large vehicles**

Type of driveway			
Frontage road	Minor road	Major road <100vpd	Major road
Nominated design vehicle (1)	Driveway type		Driveway type
Car and Trailer	A (6m)		C1
Service Vehicle 8.8m	B2 (7m)		C2
Single unit truck 12.5m	B2 (7m)		C2
Refuse Collection Vehicle	B2 (7m)		C2
Bus	B2 (9m)		C4
Prime Mover	B2 (9m)		C4
B - double	B2 (9m)		C4

(1) Where semi-trailers, B-doubles or coaches are to negotiate the driveway and internal roads, a plan showing the swept and wheel paths of the vehicle is required to be submitted to Council to demonstrate how the vehicle will practically access the property. Accesses for such vehicles require forward only manoeuvre for entry and exit of the property.

## 5. SIGNS AND PAVEMENT MARKINGS

- All traffic/parking control signs and pavement markings are to conform to the requirements of the current Manual of Uniform Traffic Control Devices (MUTCD).
- Direction, regulatory, warning and information signs and pavement markings are to be erected on site to control traffic movements and driver behaviour and to warn of any potential safety hazards. Signage also includes pavement markings.
- Signs are to be provided on site to clearly indicate the existence and location of access points to car parking areas; where parking areas are located at the rear of a development, where access to the car parking area is not from the main frontage road, where visitor parking is provided for multi-unit residential developments and is not visible from the frontage road or access driveway and where ingress/egress is via one-way driveways.
  - Where developments are expected to generate vehicular traffic movements during hours of darkness, self - illuminated and/or reflectorised signs and pavement marking complying with current state or national standards are to be provided.
  - All signs and pavement markings are to be maintained and replaced such that they retain their function and remain in accordance with state or national standards and rules.
- In commercial areas, tactiles are to be installed on the footpath at the driveway line to assist vision impaired pedestrians and must meet current Design for Access and Mobility standard AS 1428.1-2009.

## 6.0 DRIVEWAY LEVELS AND SLOPES

- The slopes and levels along the driveway shall be designed to allow the largest vehicle likely to use the driveway with full load to enter the property without scraping the middle or ends of the vehicle. Transitions must be provided between changes in vertical grades to ensure loaded vehicles clear the driveway.
- The driveway grade within the footpath will not exceed 2.5%. The desirable maximum driveway grade after the footpath is 10% (1Vertical in 10Horizontal).
- Driveways and surrounding ground must be maintained such that any tripping hazards are minimised. The driveway must be built and maintained to the following tolerances:

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

## 7.0 SURFACE TREATMENTS

- The driveway must meet the relevant AUSTRROADS' Guidelines in terms of skid resistance. Accordingly broom finished concrete or segmental pavers providing a good textured finish is accepted. Sealed or asphalt surface for commercial/industrial driveways in urban areas will not be accepted.
- Loose surfaces will not be permitted in urban areas due to the fact that the material can be washed onto footpath and into the gutter or stormwater drains and tracked onto the road causing a hazard and polluting water ways.
- Uneven surfaces such as stamped concrete must be avoided as they can create a tripping hazard.
- Slick coatings or finishes with low skid resistance in wet weather must be avoided. This may include; rounded peddles in exposed aggregate driveways, silicon sealant paint and glossy or ceramic tiles.

## 8.0 PROTECTION OF EXISTING FOOTPATHS

- Existing Footpaths within the road verge and within the proposed driveway footprint are to be cut with a Diamond Blade saw and removed enabling the proposed driveway to be constructed.

- If the existing footpath location and height conflicts with the driveway design standards, additional footpath may need to be removed and then reconstructed to enable an acceptable transition to the newly built driveway.
- This rebuilt footpath transition is to be constructed in accordance with Council's footpath standards and specifications.
- Expansion joins are to be provided at the intersecting points where the driveway adjoins the footpath.

## **9.0 PROTECTION OF SERVICES AND MARKERS**

- Council and other utility providers are likely to have services pipes and cables under the footpath where the driveway will be placed. Accordingly, the driveway constructor must undertake 'Dial B4 You Dig' and locate the existing services in the road reserve well in advance of driveway construction.
- Any alteration deemed necessary to services including but not limited to water, sewer, gas, electricity, telecommunication, stormwater system and other services to facilitate the driveway construction is to be coordinated by the applicant/contractor with the relevant authority for their requirements and approval. All associated costs will be borne by the applicant/property owner.
- 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 driveway, may prevent future access for maintenance work. Accordingly, the driveway must be located to avoid construction over these points.
- Whilst the kerb is cut during the construction of a driveway, the contractor must be aware of the possibility of service indicator (brass disk) markers on the kerb. These markers may designate a conduit or location of a fire hydrant (painted). If these markers are to be removed Council must be contacted to relocate the markers before they are removed.
- During the construction of a driveway, the constructor must be aware of the possibility of service indicators (posts/star pickets) including survey markers. These markers may designate a service location, conduit, pit or survey reference. If these markers are to be removed the relevant service provider/authority must be contacted to relocate the markers before they are removed. All associated costs will be borne by the applicant/property owner.