

BUILDING FOR BUSHFIRE

Property Access

Property access refers to the carriageway which provides access from a road onto land to the nearest point of the building area. Habitable buildings in bushfire-prone areas must be provided with suitable vehicular access to both the buildings on the site and the firefighting water connection point.



The property access must be designed and located to allow a laden fire appliance to access the buildings and firefighting water supply, thereby assisting firefighters to defend buildings and evacuate occupants.

To meet the Deemed-to-Satisfy requirements for property access the carriageway must be designed and constructed to comply with the following:

1. If property access length is less than 30 metres; or access is not required for a fire appliance to access a water connection point

- There are no specified design and construction requirements for property access.

2. If property access length is 30 metres or greater; or access for a fire appliance to a water connection point is required

- All-weather construction; (note: driveway carriageways do not necessarily need to be sealed. For example, a gravel driveway with appropriate drainage may be acceptable);
- Load capacity of at least 20 tonnes, including for bridges and culverts;
- Minimum carriageway width of 4 metres;
- Minimum vertical clearance of 4 metres;
- Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- Cross falls of less than 3 degrees (1:20 or 5%);
- Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
- Curves with a minimum inner radius of 10 metres;
- Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and
- Terminate with a turning area for fire appliances provided by one of the following:
 - a. a turning circle with a minimum outer radius of 10 metres; or
 - b. a property access encircling the building; or
 - c. a hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.

3. If property access length is 200 metres or greater

- The Requirements for section 2 above; and
Passing bays of 2 metres additional carriageway width and 20 metres length provided every 200 metres.

4. If property access length is greater than 30 metres, and access is provided to 3 or more properties

- Complies with Requirements for section 2 above; and
- Passing bays of 2 metres additional carriageway width and 20 metres length must be provided every 100 metres.

CURVES

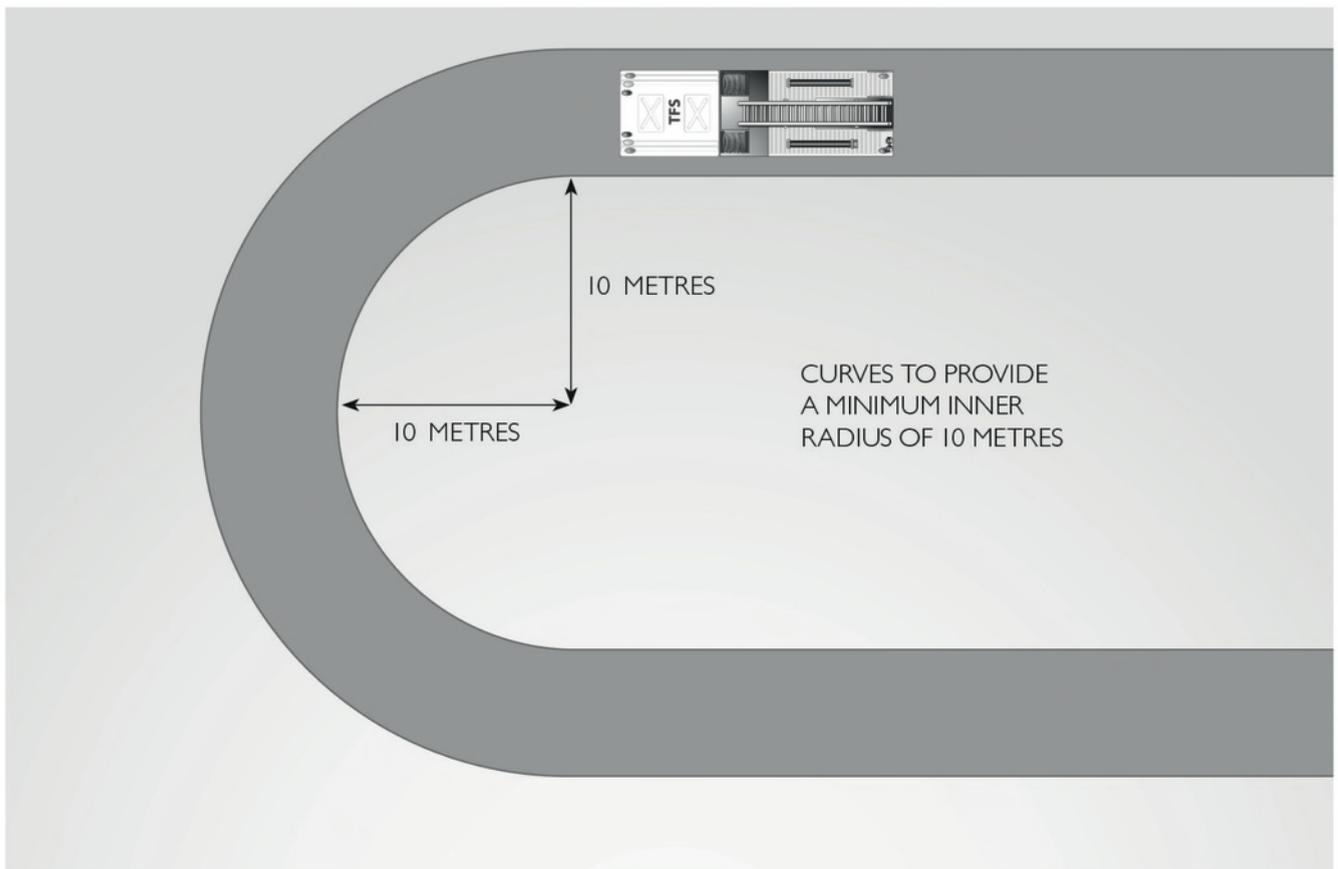


Figure I Curve radius

GRADIENT



Figure 2 Gradient angles

DIPS



Figure 3 Dip approach and exit angles

CROSS FALLS



Figure 4 Cross fall angles

WIDTH AND CLEARANCE REQUIREMENTS

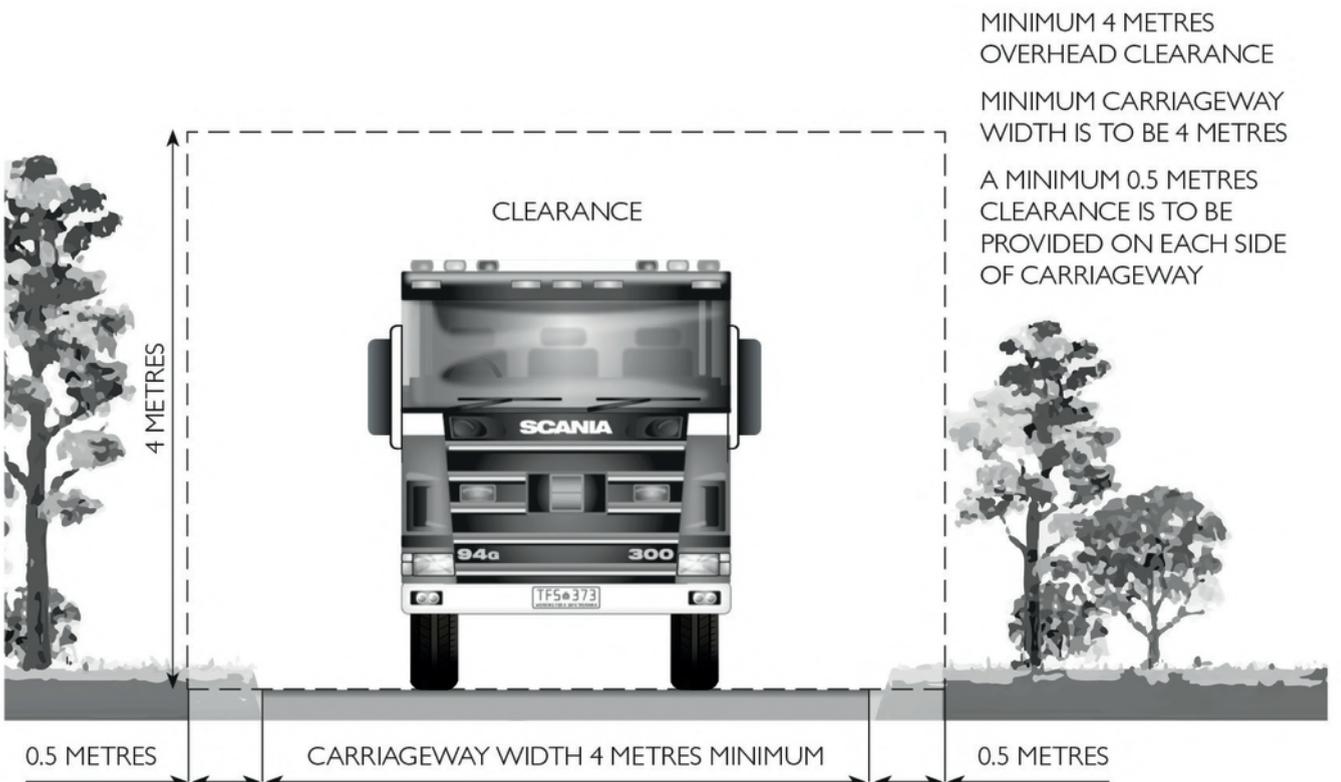


Figure 5 Carriageway width and clearance

TURNING AREAS AND PASSING BAYS

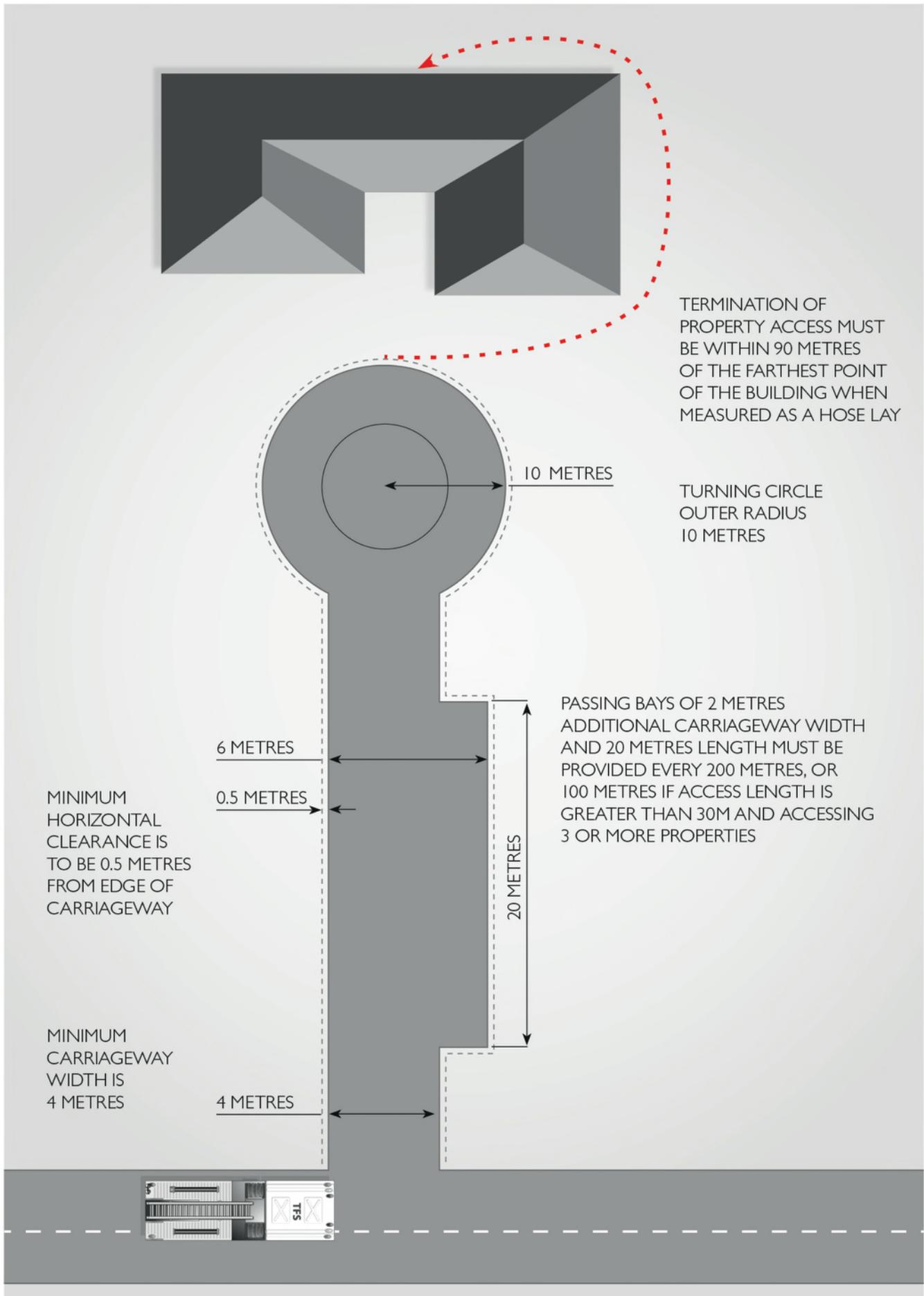


Figure 6 Property access turning areas and passing bays



TURNING AREAS AND PASSING BAYS CONTINUED

Figures 7 and 8:

Private access termination

'Hammerhead T or Y' driveway turn-arounds provide sufficient maneuvering space for fire appliances to access a property, defend and safely and quickly exit.

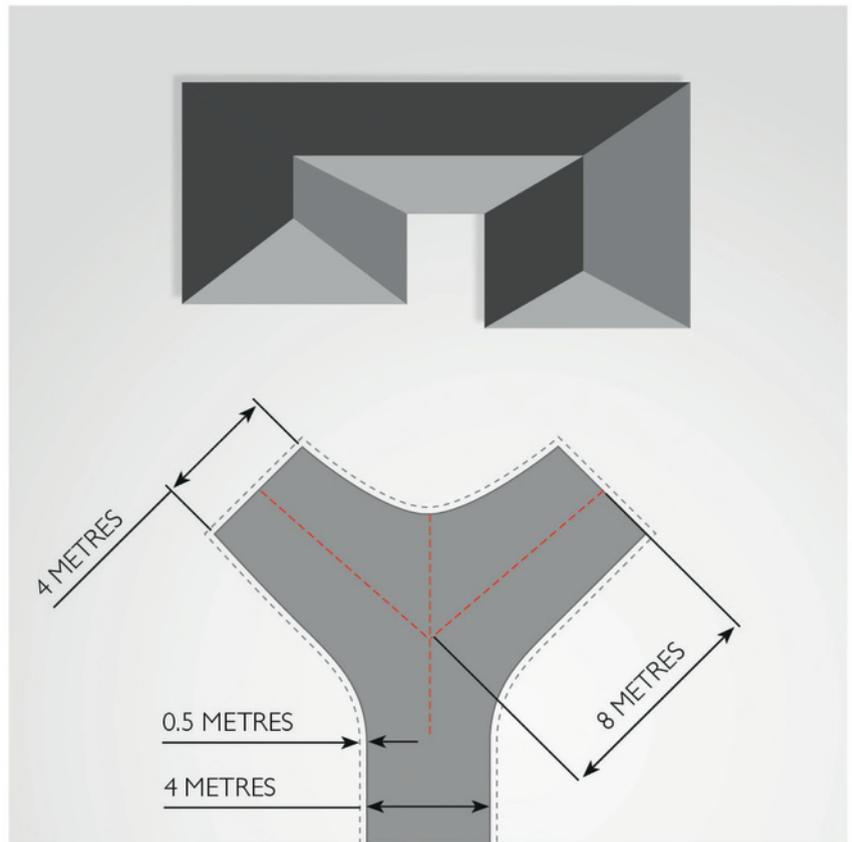


Figure 7: Private access turning head – Y

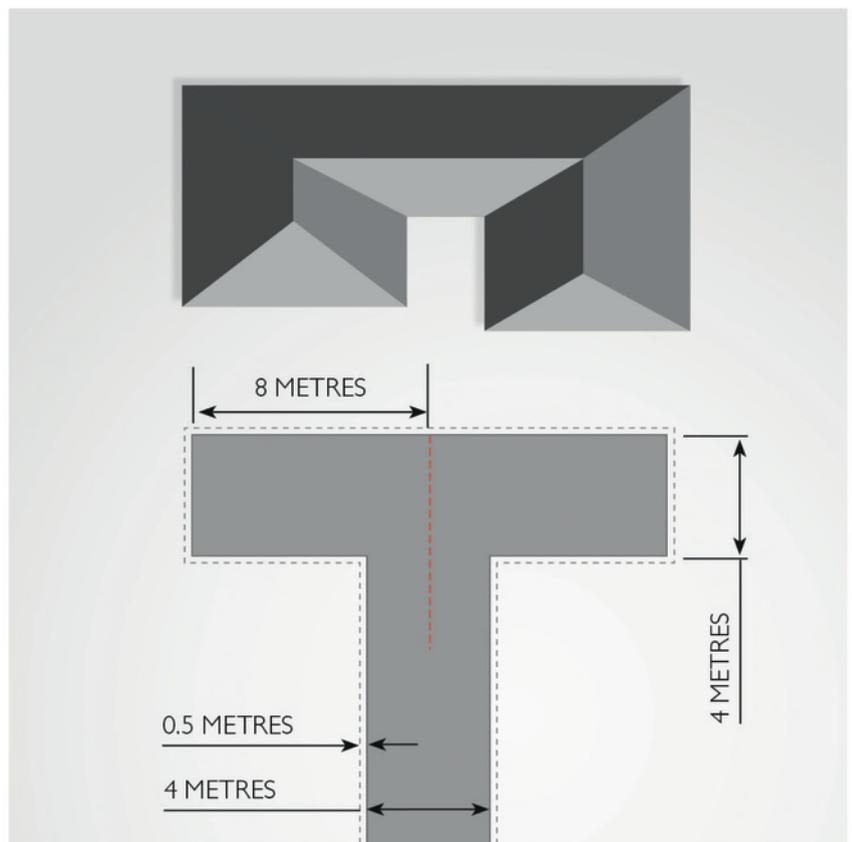


Figure 8: Private access turning head – T

GLOSSARY OF TERMS

Carriageway – the section of road formation which is used by traffic, and includes all the area of the traffic lane pavement together with the formed shoulders.

Deemed-to-Satisfy – provisions which are deemed-to-satisfy the performance requirements.

Habitable building – a building of Class 1 – 9 of the Building Code of Australia.

Hose lay – the distance between two points established by a fire hose laid out on the ground, inclusive of obstructions.

Property access – the carriageway which provides vehicular access from the carriageway of a road onto land, measured along the centre line of the carriageway, from the edge of the road carriageway to the nearest point of the building area.

TFS – Tasmania Fire Service

Firefighting water point – the point where a fire appliance is able to connect to a water supply for firefighting purposes. This includes a coupling in the case of a fire hydrant, offtake or outlet, or the minimum water level in the case of a static water body (including a dam, lake or pool).



Tasmania Fire Service



Tasmanian
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