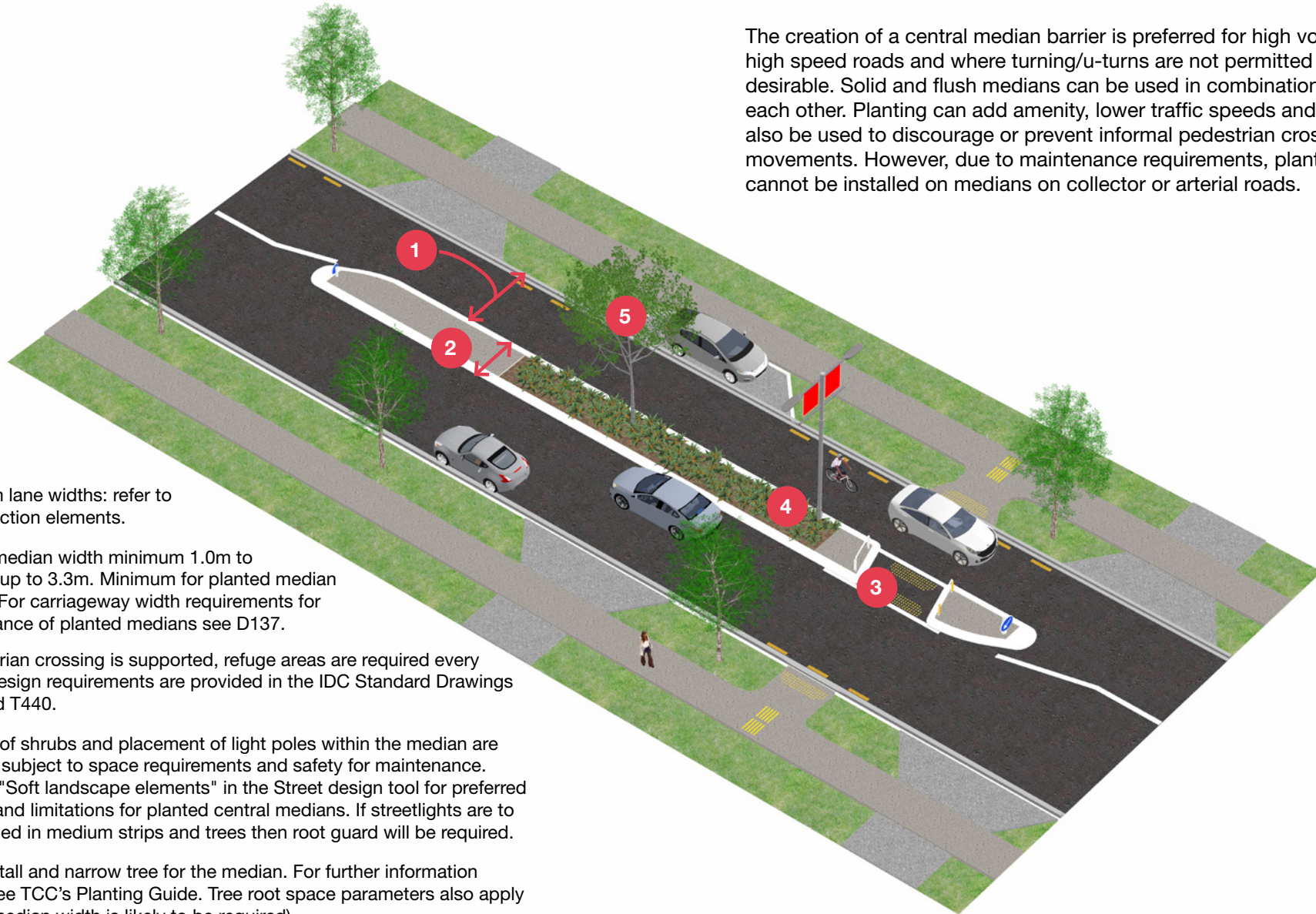


The creation of a central median barrier is preferred for high volume/ high speed roads and where turning/u-turns are not permitted or desirable. Solid and flush medians can be used in combination with each other. Planting can add amenity, lower traffic speeds and can also be used to discourage or prevent informal pedestrian crossing movements. However, due to maintenance requirements, planting cannot be installed on medians on collector or arterial roads.



- 1 Minimum lane widths: refer to lane selection elements.
- 2 Central median width minimum 1.0m to typically up to 3.3m. Minimum for planted median is 2.5m. For carriageway width requirements for maintenance of planted medians see D137.
- 3 If pedestrian crossing is supported, refuge areas are required every 120m. Design requirements are provided in the IDC Standard Drawings T423 and T440.
- 4 Planting of shrubs and placement of light poles within the median are possible subject to space requirements and safety for maintenance. Refer to "Soft landscape elements" in the Street design tool for preferred options and limitations for planted central medians. If streetlights are to be installed in medium strips and trees then root guard will be required.
- 5 Select a tall and narrow tree for the median. For further information please see TCC's Planting Guide. Tree root space parameters also apply (>2.0m median width is likely to be required).

Driving elements

Solid or planted central median

Infrastructure Development Code
Street Design Diagrams

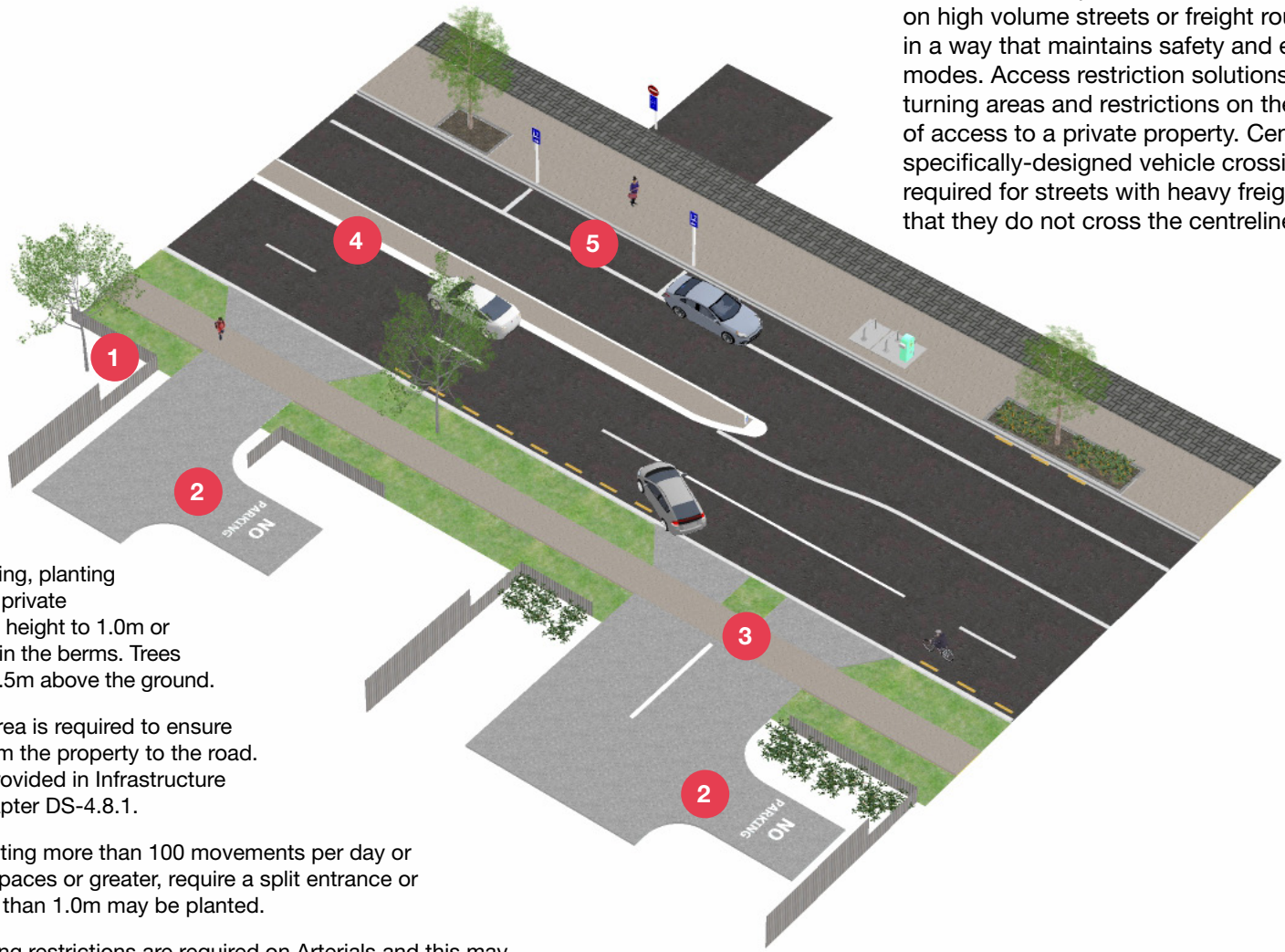
D108

June 2021

Version 1

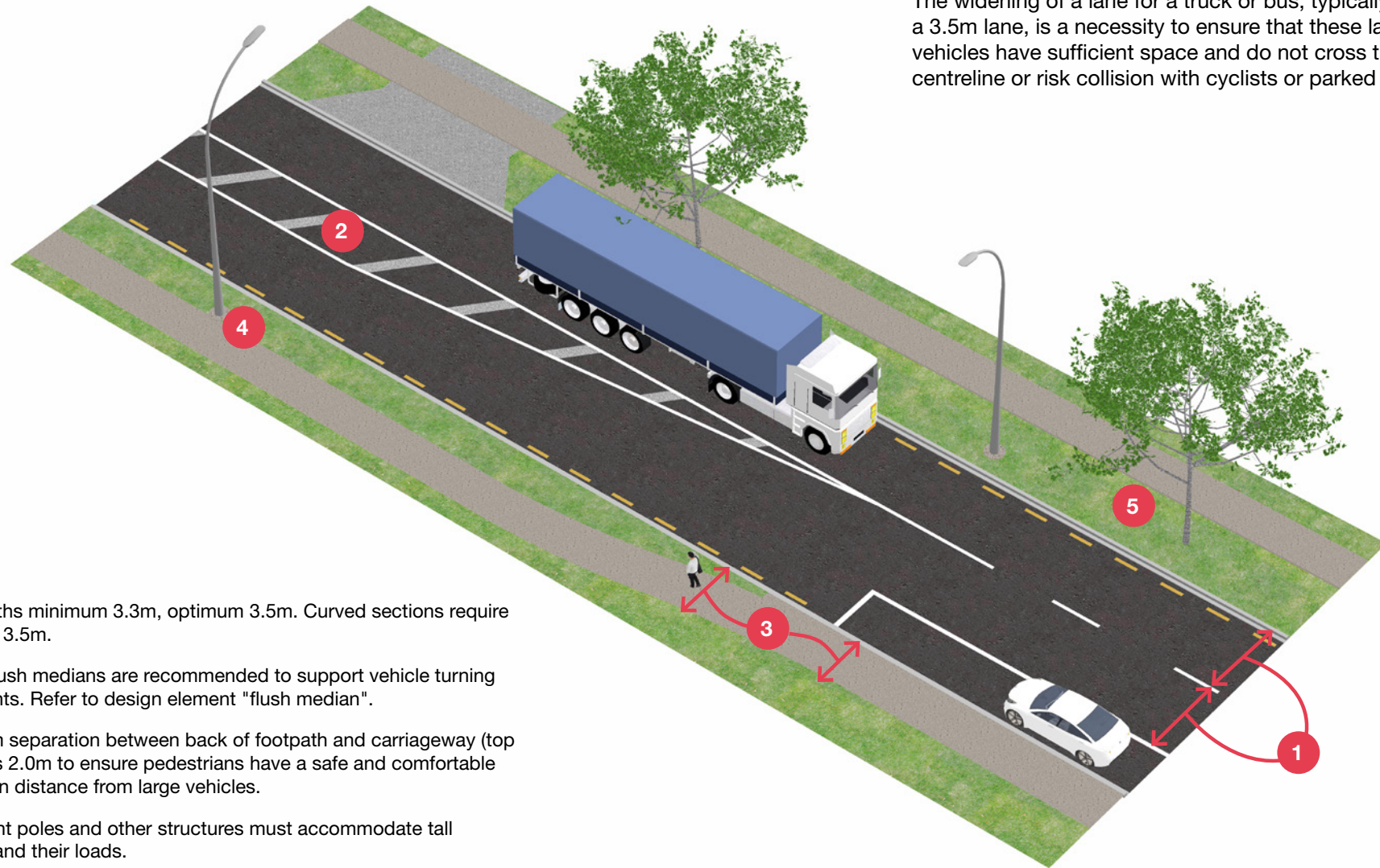


This element requires vehicle crossings to be restricted on high volume streets or freight routes and managed in a way that maintains safety and efficiency for all modes. Access restriction solutions can include on-site turning areas and restrictions on the hours and direction of access to a private property. Central medians and specifically-designed vehicle crossings are likely required for streets with heavy freight vehicles, to ensure that they do not cross the centreline when turning.



- 1** Within 5.0m of the crossing, planting and other objects within private property are restricted in height to 1.0m or less and 600mm or less in the berms. Trees require a clear trunk of 2.5m above the ground.
- 2** Reverse manoeuvring area is required to ensure forward-movements from the property to the road. Further information is provided in Infrastructure Development Code Chapter DS-4.8.1.
- 3** Vehicle crossings expecting more than 100 movements per day or accessing 30 car park spaces or greater, require a split entrance or slip lane. A gap of more than 1.0m may be planted.
- 4** Left-in and left-out turning restrictions are required on Arterials and this may be enforced through a solid central median.
- 5** Entrances to existing service lanes should be time-restricted to hours outside of busy periods. Car parks and loading zones should also be time-restricted on busy routes.

The widening of a lane for a truck or bus; typically to a 3.5m lane, is a necessity to ensure that these larger vehicles have sufficient space and do not cross the centreline or risk collision with cyclists or parked vehicles.



- 1 Lane widths minimum 3.3m, optimum 3.5m. Curved sections require minimum 3.5m.
- 2 Central flush medians are recommended to support vehicle turning movements. Refer to design element "flush median".
- 3 Minimum separation between back of footpath and carriageway (top of kerb) is 2.0m to ensure pedestrians have a safe and comfortable separation distance from large vehicles.
- 4 Street light poles and other structures must accommodate tall vehicles and their loads.
- 5 Street trees species selected to avoid overhanging limbs, and provide a tall height. For further information please see TCC's Planting Guide.

Driving elements

Wider lane for truck or bus (overwidth lane)

Infrastructure Development Code
Street Design Diagrams

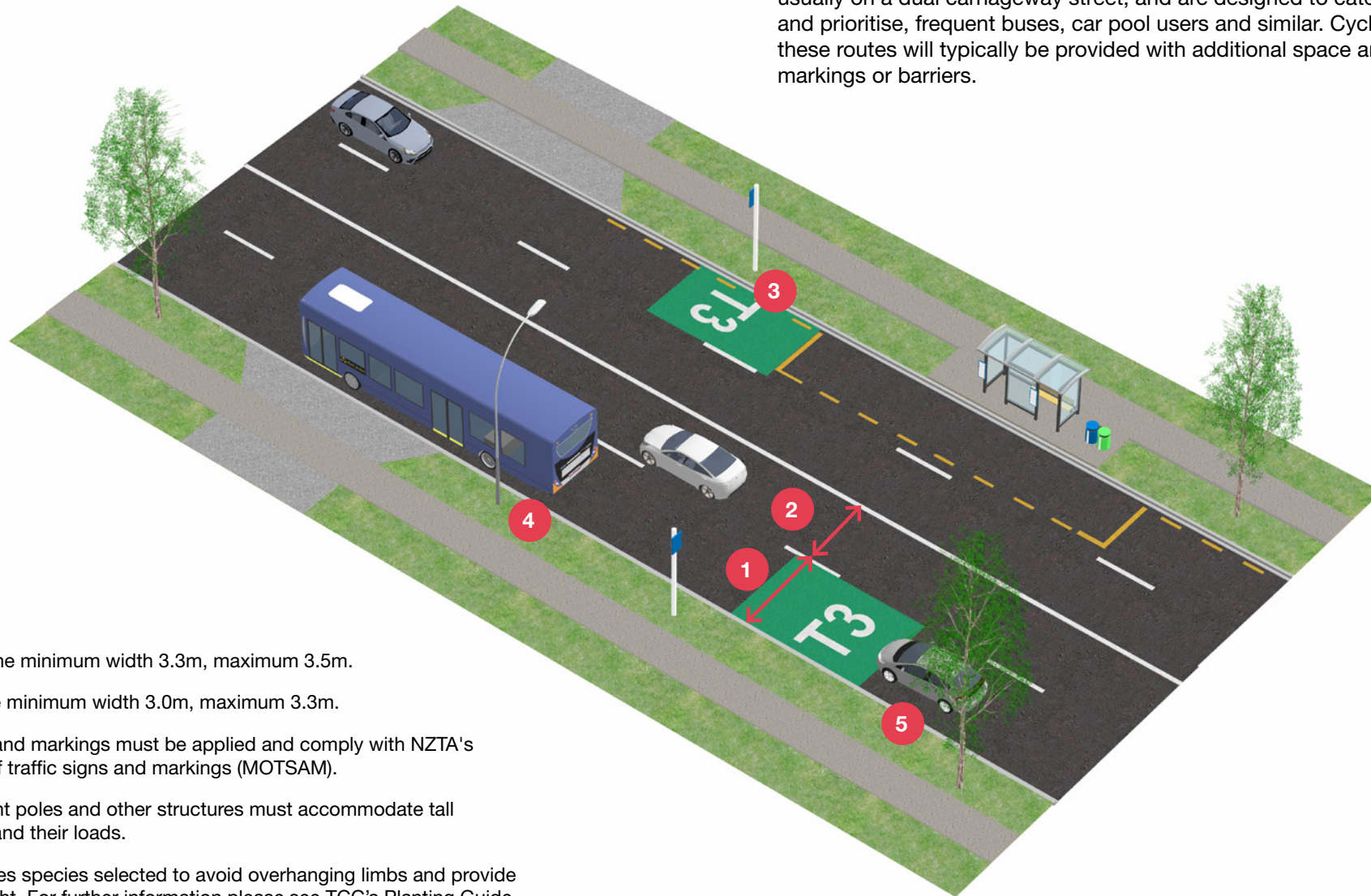
D110

June 2021

Version 1



High-occupancy vehicle lanes are either permanent or temporary lanes, usually on a dual carriageway street, and are designed to cater for, and prioritise, frequent buses, car pool users and similar. Cyclists on these routes will typically be provided with additional space and lane markings or barriers.



- 1 Transit lane minimum width 3.3m, maximum 3.5m.
- 2 Inner lane minimum width 3.0m, maximum 3.3m.
- 3 Signage and markings must be applied and comply with NZTA's Manual of traffic signs and markings (MOTSAM).
- 4 Street light poles and other structures must accommodate tall vehicles and their loads.
- 5 Street trees species selected to avoid overhanging limbs and provide a tall height. For further information please see TCC's Planting Guide.

Driving elements

Bus/high occupancy vehicle (HOV) lane

Infrastructure Development Code
Street Design Diagrams

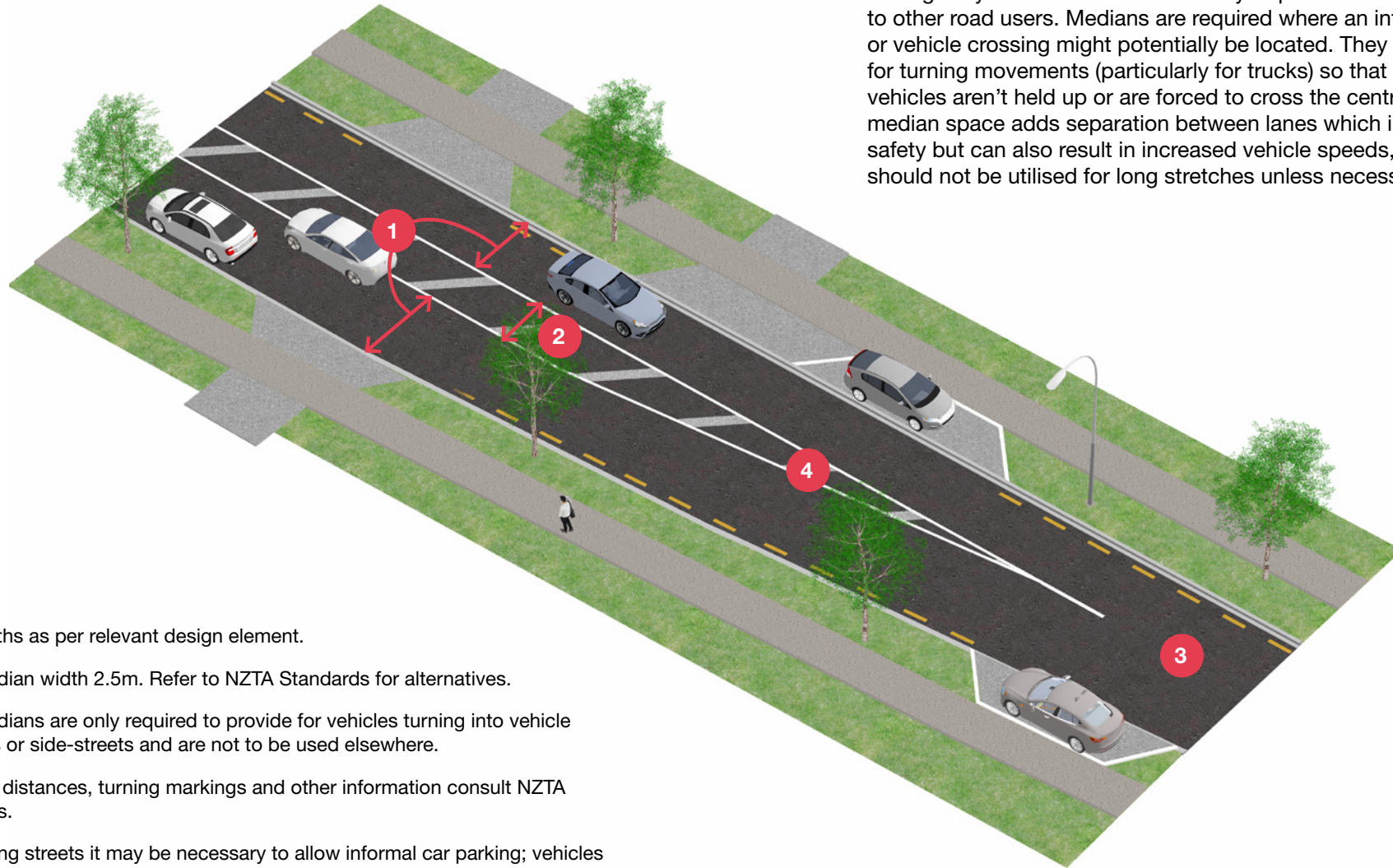
D111

June 2021

Version 1



Flush medians ensure that vehicles turning right from the carriageway do not cause undue delay or present a safety risk to other road users. Medians are required where an intersection or vehicle crossing might potentially be located. They add space for turning movements (particularly for trucks) so that other vehicles aren't held up or are forced to cross the centreline. The median space adds separation between lanes which improves safety but can also result in increased vehicle speeds, therefore should not be utilised for long stretches unless necessary.



- 1 Lane widths as per relevant design element.
- 2 Flush median width 2.5m. Refer to NZTA Standards for alternatives.
- 3 Flush medians are only required to provide for vehicles turning into vehicle crossings or side-streets and are not to be used elsewhere.
- 4 For taper distances, turning markings and other information consult NZTA Standards.
- 4 For existing streets it may be necessary to allow informal car parking; vehicles passing parked vehicles may drive onto the flush median. This outcome is not recommended since it can increase the likelihood of head-on collisions.