## Transport Objectives

| | |
|---|---|
| **TRN– O1** | To recognise and provide for the critical role land transport infrastructure plays in supporting communities including emergency services, and economic activity on the West Coast/Te Tai o Poutini. |
| **TRN – O2** | To manage the effects provide for the safe and efficient operation of land transport infrastructure on the character, landscape and amenity of the towns, settlements and rural areas and minimise adverse effects on the environment. |
| **TRN – O3** | To enable accessibility, safety and connectivity of land transport infrastructure and consider to provide for the amenity of all transport users, including pedestrians and cyclists. |
| **TRN– O4** | To encourage resilience within the transport network to natural hazards and climate change reflecting its vital role in community wellbeing and economic activity. |
| **TRN – O5** | To ensure that the provision of safe and efficient parking, loading and access is consistent with the character, scale and intensity of the zone, the roading hierarchy and the activity being undertaken. |
| **TRN – O6** | Land transport corridors and land transport infrastructure are protected from incompatible land use activities and subdivision development. |

Also the Strategic Objectives and Policies

## Transport Policies

| | |
|---|---|
| **TRN – P1** | The road and rail transport networks shall;<br>a. Be maintained or enhanced to provide safe and efficient transportation;<br>b. Consider the needs of all transport users and modes of transport; and<br>**c.** Minimise effects on adjoining properties including the impacts of vibration, noise and glare; and<br>**d.** Recognise the different functions and design requirements for each road classification under the most current National Transport Network classification system. |
| **TRN – P2** | Vehicle crossings and associated access will;<br>a. Be designed and located to provide for safe, effective and efficient movement to and from sites;<br>b. Minimise Mitigate potential conflicts between vehicles, pedestrians and cyclists on the adjacent road network; and<br>c. Manage separation of vehicle access to and from sites adjacent to intersections, rail level crossings, and where State Highways meet. |
| **TRN – P3** | Maximise user safety at road and rail level crossings by considering the location of buildings and other visual obstructions within sightlines. |
| **TRN – P4** | Ensure any new r~~R~~oad and pedestrian rail level crossings carefully consider ensure the safety of road users, pedestrians, and the effective and efficient operation of the regions rail network. |
| **TRN – P5** | Control vehicle access to sites adjacent to all road/rail level crossings to improve safety for road users on the approach to level crossings. |
| **TRN – P6** | Enable provision of electric vehicle and bicycle charging stations. |
| **TRN – P7** | Support increased cycling and walking by:<br>a. Requiring larger developments to provide bicycle parking and<br>b. Providing for off-road pedestrian and bicycle facilitates to complement facilities located within the road network; and<br>c. Providing for connectivity |
| **TRN – P8** | Manage the number, location and type of parking and loading spaces, including bicycle parking and electric car charging spaces to support the following: |

a. The safe, efficient and effective operation of the transport network;
b. The functional and operational requirements of activities;
c. The recognition of different activities having different trip characteristics;
d. The use of sustainable transport options including cycling and walking;
e. Provision of safe access and egress for vehicles, pedestrians and cyclists;
f. Avoid or mitigate potential conflicts between vehicles, pedestrians and cyclists;
g. Mitigation of stormwater contamination from vehicles through treatment of stormwater from large areas of car parking;
h. Provision for flexible approaches to parking, including more efficient use of parking spaces, and reduce incremental and individual parking provision.

**TRN – P9** Require parking and loading areas to be designed so that reverse manoeuvring of vehicles onto or off the road does not occur in situations which will compromise:
a. The safe, effective and efficient operation of roads including State Highways; or
b. Pedestrian access and amenity; or
c. Safe and functional access.

**TRN – P10** Recognise and provide for the function of land transport infrastructure to ensure the safe and efficient movement of people and goods.

**TRN – P11** Only allow high traffic generating activities where these activities support the safe, efficient and effective use of transport infrastructure, as demonstrated through an integrated transport assessment (ITA). All ITAs should be completed by a suitably qualified and experienced transport professional.

## Transport Rules

Note: There may be a number of Plan provisions that apply to an activity, building, structure and site. In some cases, consent may be required under rules in this Chapter as well as rules in other Chapters in the Plan. In those cases unless otherwise specifically stated in a rule, consent is required under each of those identified rules. Details of the steps Plan users should take to determine the status of an activity is provided in General Approach.

**Advice Notes:**

1. Works undertaken in a road reserve / transport corridor or an area subject to a transport designation, that are undertaken by a Utility Provider who is not the roading authority are Permitted where these are compliant with the **Utilities Access Act 2010** and Code of Practice.

2. Works undertaken in a road reserve / transport corridor or areas subject to a District Council designation also require road opening approval from the relevant District Council.

3. Minimum vehicle parking spaces, except for accessibility parking and bicycling parking, are not set. A minimum number of vehicle parking spaces do not have to be provided, however, if vehicle parking is provided it must comply with the vehicle parking standards.

4. Any work required for a new or upgraded vehicle crossing intersecting with a State Highway, requires a Corridor Access Request prior to any works occurring with the State Highway road reserve and approval from **Waka Kotahi NZ Transport Agency.**

5. Any crossing that intersects with the Rail Network requires approval from **Kiwirail**.

6. The Auckland Design Manual Guideline Document GD 2017/01 Stormwater Management Devices in the Auckland Region provides information on best practice stormwater design options for stormwater treatment.

| **Permitted Activities** | |
|---|---|
| **TRN - R1** | **Establishment of accessways, vehicle crossings, parking spaces, loading spaces, queuing and standing spaces** |

**Activity Status Permitted**
Where:
1. Vehicle crossings and access way standards - TRN Tables 1 - ~~3~~4, Standards TRN S1 - S3, and TRN Figure 1-5 are complied with;
2. Parking, loading, queuing and standing standards - TRN Tables ~~4~~5 - ~~5~~6, Standards TRN S4 - S6 and TRN S12 and TRN Figures ~~2~~6 and ~~3~~7 are complied with;
3. Manoeuvring standards TRN S7 - S11 are complied with;
4. Where an impermeable carparking area greater than 1000m2 in area is provided, stormwater treatment is provided; and
5. Formation standards TRN S12 and TRN S13 are complied with.

**Advice Note:** The Auckland Design Manual Guideline Document GD 2017/01 Stormwater Management Devices in the Auckland Region provides information on best practice stormwater design options for stormwater treatment.
**Activity status where compliance not achieved**: Restricted Discretionary

| **TRN - R2** | **~~Land transport operation, removal, repairs and maintenance within a road reserve / transport corridor or an area subject to designation~~ Maintenance or upgrading of existing transport infrastructure within the existing transport corridor** |
|---|---|

**Activity Status Permitted**
Where:
1. All performance standards in Rule TRN - R1 are complied with; and
2. The works are undertaken:
a. By, or on behalf of, a road controlling authority; or
b. In accordance with a subdivision consent; or
~~c. By a requiring authority in accordance with a designation listing in this Plan.~~

**Activity status where compliance not achieved**: Restricted Discretionary

| **TRN – R3** | **Formation of an unformed legal road** |
|---|---|

**Activity Status Permitted**
Where:
1. All performance standards in Rule TRN - R1 are complied with; and
2. The works are undertaken:
a. By, or on behalf of, a road controlling authority; or
b. In accordance with a subdivision consent; or
~~c. By a requiring authority in accordance with a designation listing in this Plan.~~

**Activity status where compliance not achieved**: Restricted Discretionary

| ~~**TRN – R4**~~ | ~~**Formation of a new transport corridor**~~ |
|---|---|

~~**Activity Status Permitted**~~
~~Where:~~
~~1. This is undertaken by a requiring authority in accordance with a designation listed in this Plan.~~

~~**Activity status where compliance not achieved**: Restricted Discretionary~~

| **TRN – R5** | **Establishment of shared pathways including cycleways and bridleways on public land** |
|---|---|

**Activity Status Permitted**
Where:
1. The activity is below 1000m above sea level.

| **TRN – R6** | **Establishment of e-bike and e-vehicle charging stations ~~in the transport corridor~~** |
|---|---|

**Commented [SP1]:** Strikethrough on 4 is not showing.

**Activity Status Permitted**
Where:
1. All performance standards in Rule TRN - R1 are complied with; and
2. These are not more than 2m in height and 10m2 in area.

**Advice Note:** If within the legal road reserve, contact the appropriate ~~land transport~~ road controlling authority to obtain a license to occupy.
**Activity status where compliance not achieved**: Restricted Discretionary

| **TRN – RX** | **Trip Generation Activities** |
|---|---|

**Activity Status Permitted**
**Activity status where compliance not achieved**: Restricted Discretionary

**Restricted Discretionary Activities**

| **TRN – R7** | **Establishment of accessways, vehicle crossings, parking spaces, loading spaces, queuing and standing spaces not meeting Permitted Activity standards** |
|---|---|

**Activity Status Restricted Discretionary**

Discretion is restricted to:

a. The impact on other road users including pedestrians;

b. Effects on the safety and efficiency of the transport system;

c. The ability to safely and effectively park, load, queue; and

d. Any requirements for future natural flood hazard mitigation; and

e. Stormwater treatment and control;

f. The location, size and design of accessways, vehicle crossings, parking and loading areas; and

g. The types of vehicle crossings serving the site, their intensity, the time of day the site is frequented and likely trip generation.

**Activity status where compliance not achieved**: N/A

| **TRN – R8** | **Land transport operation, removal, repairs and maintenance within a road reserve / transport corridor ~~or an area subject to a designation~~ not meeting Permitted Activity standards** |
|---|---|

**Activity Status Restricted Discretionary**

Discretion is restricted to:

a. Impacts during construction;

b. Any requirements for flood l hazard mitigation;

c. Outcome of consultation with the relevant road controlling authority;

d. Stormwater treatment and control.

**Activity status where compliance not achieved**: N/A

| TRN – R9 | Formation of unformed legal road not meeting Permitted Activity standards |
|---|---|

**Activity Status Restricted Discretionary**

Discretion is restricted to:

a. Effects on the safety and efficiency of the transport ~~system~~network;

b. The ability for accessibility park users to safely and effectively park, enter and exit a vehicle;

c. The impact on other road users including pedestrians;

d. Any requirements for flood hazard mitigation; and

e. Stormwater treatment and control.

**Activity status where compliance not achieved**: N/A

| TRN – R10 | Establishing shared paths including cycleways and bridleways on public land not meeting Permitted Activity standards |
|---|---|

**Activity Status Restricted Discretionary**

Discretion is restricted to:

a. Visual impacts on landscapes ~~over 1000m above sea level~~;

b. Effects on public access; and

c. Effects on the transport network.

**Activity status where compliance not achieved**: N/A

| TRN – R11 | Establishing e-bike and e-vehicle charging ~~stations in the transport corridor~~ not meeting Permitted Activity standards |
|---|---|

**Activity Status Restricted Discretionary**

Discretion is restricted to:

a. Effects on safety and efficiency of the transport network; and

b. Outcome of consultation with the relevant ~~transport agency~~ road controlling authority.

**Activity status where compliance not achieved: N/A**

| TRN – R12 | High Trip generating transport activities |
|---|---|

**Activity Status Restricted Discretionary**

Where:

1. This is the establishment of a new activity or the expansion of an existing activity that exceeds the thresholds listed in Table TRN ~~6~~7 ~~that complies with Standard TRN-S14~~.

Discretion is restricted to:

a. The matters outlined in TRN S14 – High Trip Generating Activities Transport Assessment requirements:

b. Effects on the transport network including whether the use or development compromise the safety and efficiency of the transport network; ~~and~~

c. ~~Effects and recommendations to minimise effects from the transport assessment~~. Any recommendations in a transport assessment provided by a suitably qualified and experienced transport professional;
d. The extent to which vehicle access, parking and manoeuvring areas associated with the activity are provided; and
e. The nature of the activity and compatibility with the function and purpose of the underlying zone.

**Activity status where compliance not achieved**: N/A

| **Discretionary Activities** | |
|---|---|
| **TRN – R13** | **Formation of a new Transport Corridor ~~not meeting Permitted Activity standards~~** |

**Activity Status Discretionary**

**~~Notification: Applications will always be publicly notified.~~**

**Activity status where compliance not achieved**: N/A

| | |
|---|---|
| **TRN – R14** | **High Trip generating activities not meeting Permitted or Restricted Discretionary Activity standards** |

**Activity Status Discretionary**

**Activity status where compliance not achieved**: N/A

| | |
|---|---|
| **TRN – RXX** | **Any Activity which is not a Permitted, Controlled, Restricted Discretionary or Discretionary Activity** |

**Activity Status Non-complying**

**Activity status where compliance not achieved: N/A**

## Appendix One: Transport Performance Standards Te Āpitihanga Tuatahi: Ngā Ture Tūnuku

**TRN** Table 1 – Vehicle Access Design Standard – State Highway: Minimum sight distance from vehicle access point ~~relative to intersections and minimum spacing~~

| Posted Legal Speed Limit | Minimum Sight Distance | ~~Minimum distance of vehicle access~~ | ~~Minimum~~ ~~spacing between vehicle access points on~~ |
|---|---|---|---|

**Commented [SP2]:** I have recommended that these two columns be deleted, as they are now better captured in TRN Table 3.

| | | point relative to intersections | same or opposite frontages |
|---|---|---|---|
| Kkm/hr | Distance x in metrers | Distance y in meters | Distance z in meters |
| 50 | 115 | 30 | 9m for residential, 15m all other |
| 60 | 140 | 30 | 20 |
| 70 | 170 | 100 | 40 |
| 80 | 205 | 100 | 100 |
| 100 | 280 | 200 | 200 |

**TRN** Table 2 – Vehicle Access Design Standard for vehicle access onto a local road, arterial or collector road, up to 60 vehicle movements a day: Minimum distance of vehicle access point relative to intersections and minimum spacing

| Posted Legal speed limit | Minimum sight distance Local Road | Minimum sight distance Collector Road | Minimum sight distance Arterial Road | Minimum spacing between vehicle access points on same or opposite frontages |
|---|---|---|---|---|
| Kkm/hr | Distance x in metrers | Distance x in metrers | Distance x in metrers | Distance z in metrers |
| 50 or below | 40 | 90 | 90 | NA |
| 60 | 55 | 115 | 115 | NA |
| 70 | 85 | 140 | 140 | 10 |
| 80 | 105 | 175 | 175 | 10 |
| 100 | 160 | 250 | 250 | 10m |
| Total maximum combined width of vehicle access points | | | | 4m or 50% of the road boundary, on any site |

**TRN** Table 3 – Vehicle Access Design Standard for minimum distances between any vehicle access point and other vehicle access point or transport corridor intersection

| Type of traffic using accessway (more than one slow, heavy or long vehicle movements per week?) | Separation (m) for Posted Speed Limit (km/h) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 30 - 50 km/h | | | 60 - 70 km/h | | | 80 - 100 km/h | | |
| | K | M | N | K | M | N | K | M | N |
| Yes | 30 | 30 | 5 | 60 | 40 | 40 | 200 | 60 | 200 |
| No | 20 | 20 | 5 | 60 | 30 | 20 | 150 | 60 | 200 |

| | Posted speed limit of 60km/hr or less | | | Posted speed limit of greater than 60km/hr | | |
|---|---|---|---|---|---|---|
| | Arterial Road | Collector Road | Local Road | Arterial Road | Collector Road | Local Road |

**Commented [SP3]:** Alternatively, the table below could be replaced with the Land Use option in the Memorandum prepared by Robert Swears if that is the preferred option.

**Commented [NM4]:** Don't we also want this to be 30m to prevent a B Train waiting at one access blocking another?

**Commented [NM5]:** An Austroads passenger vehicle is 5.2m in length (Design Vehicles and Turning Path Templates Guide (austroads.com.au) ). To avoid blocking another access consider a min. separation distance of 6m or more.

| | | | | | | |
|---|---|---|---|---|---|---|
| ~~All RESZ – Residential Zones~~ | ~~15m~~ | ~~9m~~ | ~~9m~~ | ~~15m~~ | ~~9m~~ | ~~9m~~ |
| ~~MPZ - Māori Purpose, RURZ – Rural and FUZ – Future Urban Zones~~ | ~~30m~~ | ~~30m~~ | ~~30m~~ | ~~50m~~ | ~~50m~~ | ~~50m~~ |
| ~~OSRZ - Open Space and Recreation Zones~~ | ~~50m~~ | ~~30m~~ | ~~30m~~ | ~~50m~~ | ~~30m~~ | ~~9m~~ |
| ~~AIRPZ - Airport and PORTZ - Port Zone~~ | ~~50m~~ | ~~30m~~ | ~~30m~~ | ~~50m~~ | ~~30m~~ | ~~9m~~ |
| ~~CMUZ - Commercial and Mixed Use, HOSZ - Hospital, STADZ - Stadium and all INZ - Industrial Zones~~ | ~~50m~~ | ~~30m~~ | ~~30m~~ | ~~50m~~ | ~~30m~~ | ~~9m~~ |

**TRN Table 4: Accessway standards and guidelines for a new vehicle crossing on a sealed road where the posted speed limit is 70 km/h or above.**

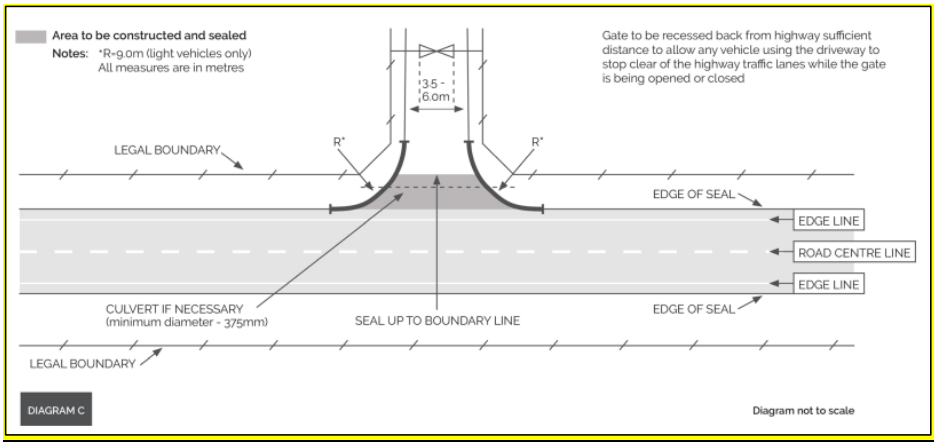
| Daily traffic volume using the vehicle crossing (ECMs*) | Is the vehicle crossing on a state highway? | Accessway type |
|---|---|---|
| 1 – 30; and no more than 2 heavy vehicle movements per week | n/a | TRN Figure 1 Diagram C, Perspective C |

| | | |
|---|---|---|
| 1 – 30; and more than 2 heavy vehicle movements per week,<br><br>or,<br><br>31-100 | No | TRN Figure 2, Diagram D, Perspective D |
| 1 – 30; and more than 2 heavy vehicle movements per week,<br><br>or,<br><br>31-100 | Yes | TRN Figure 3, Diagram E, Perspective E |

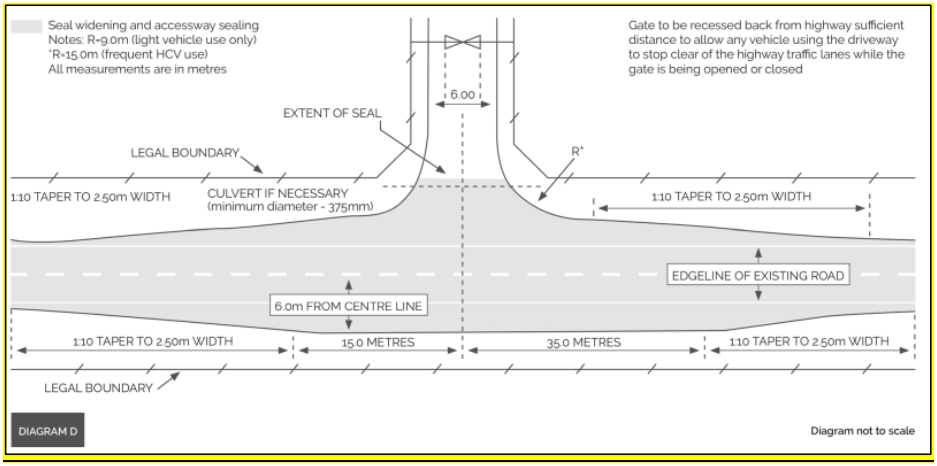
**ECMs (equivalent car movements per day) are defined as follows:*

- *1 car to and from the property = 2 ECMs;*
- *1 truck (heavy) to and from a property = 6 ECMs*
- *1 truck and trailer (heavy) to and from a property = 10 ECMs*

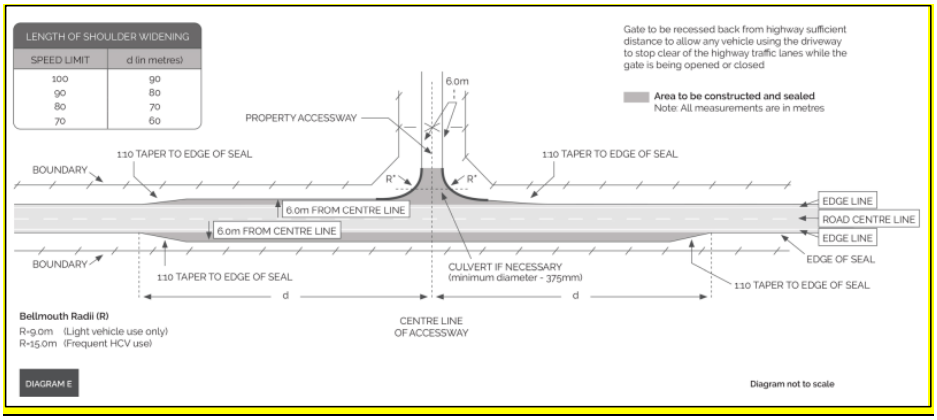
**TRN** Figure 1 – Diagram C, Perspective C




**TRN** Figure 2 – Diagram D – Perspective D




**TRN** Figure 3 – Diagram E – Perspective E




**TRN** S1 – All new vehicle access points shall be located a minimum of 30 m from a railway level

crossing. The 30 m is measured from the closest rail track to the edge of the seal on the proposed vehicle

access point. All new vehicle access points that intersect a railway require the approval of Kiwirail.

**TRN** S2 Access areas must accommodate the 85th percentile car tracking curves in TRN Figure 4.

The required driveway must not include any space used for on-site queue, tracking curve,

manoeuvring, loading space, standing space, bicycle parking space, or vehicle access point.

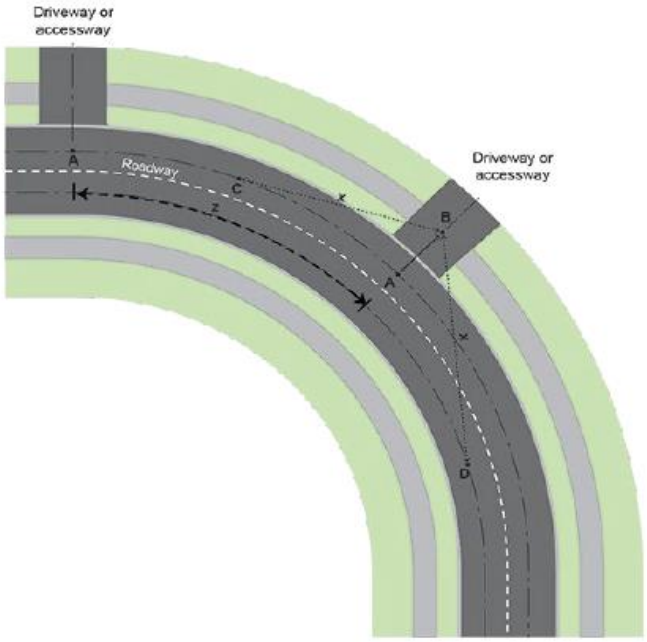
**TRN** S3 – Requirements for driveways:

For all zones the minimum driveway width is 3 m, and maximum gradient is 1:5.

For all zones, where the driveway is longer than 50 m, passing bays must be provided at no more

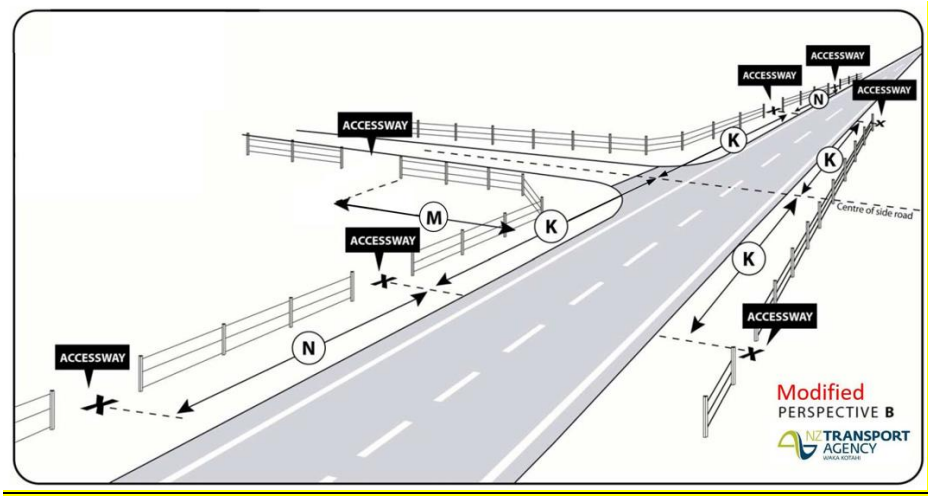
than 50 m intervals. Turning areas must be provided when the driveway length is 50 m or longer.

**TRN** Figure ~~1~~4 – Sight line calculations for TRN Table 1 and TRN Table 2




Sight lines shall be from driver's eye height to drivers eye height (1.15 m) above ground level.
Point A: Intersection of lane centreline and driveway centreline.
Point B: Position of centreline of driveway where sight distance is measured (note - this is measured From the edge lane line and where there is no edge lane line, from the edge of seal).
Point C and D: Position on centreline of lane where sight distance is measured.

**TRN** Figure 5 – Minimum Distance Calculation from vehicle access point and transport corridor intersection for TRN Table 3




**TRN** S4 – Where accessibility parking spaces are provided they must be located on a level surface; clearly marked, designed and constructed in accordance with NZS 4121: 2001 Design for Access and Mobility – Buildings and Associated Facilities

| **TRN** Table ~~4~~5 – Minimum number of on-site accessibility parking spaces Total number of vehicle spaces provided | Number of accessibility parking spaces (inclusive of total) |
|---|---|
| Less than 20 | 1 |
| Between 21 and 50 | 2 |
| In excess of 50 | 2 plus 1 additional accessibility space per 50 vehicles spaces thereafter |

**Commented [SP6]:** Strikeout not showing

**TRN** Table ~~5~~6 – Minimum number of on-site bicycle parking spaces

| Total number of vehicle spaces provided | Number of bicycle parking spaces |
|---|---|
| Less than 10 | 1 |
| Between 10 and 20 | 2 |
| In excess of 20 | 2 plus 1 additional accessibility space per 10 vehicles spaces thereafter |

**TRN** S6 – Residential developments in Moana and Iveagh Bay must provide the equivalent of three carparking

spaces on-site for trailer / boat storage.

**TRN** S7 – Dimensions for on-site vehicle parking spaces including manoeuvring dimensions.

a. Parking space and area for vehicles must not include any space for on-site queue, tracking curve, manoeuvring, loading space, standing space, bicycle parking space, or vehicle access point.

b. Must meet the requirements specified for on-site dimensions for car parking areas and circulating routes for vehicles of dimensions less than service vehicles shown in TRN Figure 2, and

- For vehicles of dimensions equal or greater than a service vehicle.:
    - The two-way aisle width for parallel parking bays must be at least 3 m wider than for oneway aisle.
    - The two-way aisle width for parking bays at 90 degrees must be at least 5.5 m.
- Where a parking space is located at the end of a blind aisle, an additional 1m clearance must be provided.
- Where any parking space has a side directly next to a wall, support column or other obstacles, an additional 300 mm width must be provided

**TRN** S8 – Where loading spaces and or standing spaces are provided they must be designed to accommodate a 90th percentile two-axle truck in accordance with TRN Figure 3, and where articulated trucks and trailer, or buses are to be used, the loading space(s) must be designed to accommodate these vehicles. Every vehicle space must be of a useable shape and comply with the following dimensions:

- Minimum width of 3.5 m if adjacent to a kerb or 4.5 m when adjacent to a wall; minimum depth 8m, minimum height of 4.5 m above ground / floor level.
- The loading space must not include any space for on-site queue, tracking curve, manoeuvring, standing space, bicycle parking space, or vehicle access point.
- The standing space must not include any space for on-site queue, tracking curve, manoeuvring, loading space, bicycle parking space, or vehicle access point.

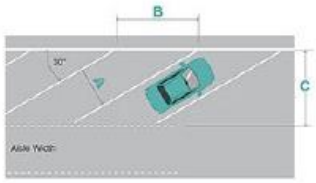
**TRN** S9 - On-site queuing spaces must be provided when six or more parking, loading, and / or standing spaces combined are provided on-site. On-site queuing lengths, measured from the commencement of the driveway to the site boundary, must comply with the following: 6 m into the site if the largest vehicle to visit the site is a car, or 8 m into the site if the largest vehicle to visit the site is a service vehicle; or when the largest vehicle to visit the site is greater than a service vehicle, then this vehicle must be able to be accommodated within the site.

**TRN** S10 – Minimum onsite manoeuvring space provision - On-site manoeuvring space must be provided where a single vehicle access point services four or more parking spaces; or access to a site is obtained from a state highway, arterial road or collector road.

**TRN** S11 – Minimum onsite manoeuvring space design -The manoeuvring space must not include any space for on-site parking, queuing, loading, or standing space, or vehicle access point and must meet the requirements for the relevant tracking curve in TRN Figure 2.

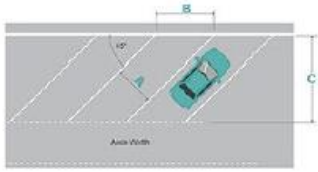
This standard does not apply where the site has direct vehicle access to a service lane, right of way or driveway which be utilised instead of the required manoeuvring space.

**TRN** – Figure ~~2~~6 – On-site car parking space dimensions



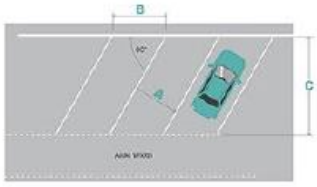

Parking Bays at 30°

| User Class | A | B | C1 | C2 | C3 | Aisle Width |
|---|---|---|---|---|---|---|
| 1 | 2.1 | 4.2 | 4.4 | 4.1 | 4.5 | 3.1 |
| 2 | 2.5 | 4.6 | 4.4 | 4.1 | 4.7 | 3.6 |
| 3 | 2.6 | 5.0 | 4.4 | 4.1 | 4.9 | 2.6 |
| 4 | 3.6 | 6.4 | 4.4 | 4.1 | 5.6 | 2.6 |



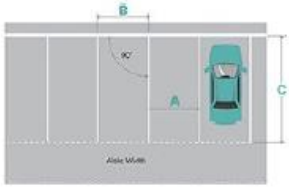

Parking Bays at 45°

| User Class | A | B | C1 | C2 | C3 | Aisle Width |
|---|---|---|---|---|---|---|
| 1 | 2.4 | 3.4 | 5.2 | 4.8 | 5.5 | 3.9 |
| 2 | 2.6 | 3.5 | 5.2 | 4.8 | 5.6 | 3.7 |
| 3 | 2.6 | 3.7 | 5.2 | 4.8 | 5.7 | 3.6 |
| 4 | 3.6 | 5.1 | 5.2 | 4.8 | 6.1 | 2.3 |



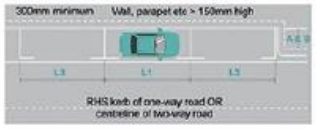

Parking Bays at 60°

| User Class | A | B | C1 | C2 | C3 | Aisle Width |
|---|---|---|---|---|---|---|
| 1 | 2.4 | 2.8 | 5.7 | 5.1 | 5.9 | 4.9 |
| 2 | 2.5 | 2.9 | 5.7 | 5.1 | 6.0 | 4.6 |
| 3 | 2.6 | 3.0 | 5.7 | 5.1 | 6.0 | 4.3 |
| 4 | 3.6 | 4.2 | 5.7 | 5.1 | 6.9 | 4.0 |




Parking Bays at 90°

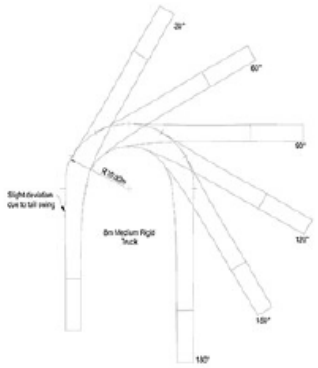
| User Class | A | B | C1 | C2 | C3 | Aisle Width |
|---|---|---|---|---|---|---|
| 1 | 2.4 | 2.4 | 5.4 | 4.8 | 5.4 | 6.2 |
| 2 | 2.5 | 2.5 | 5.4 | 4.8 | 5.4 | 6.0 |
| 3 | 2.6 | 2.6 | 5.4 | 5.1 | 5.4 | 5.4 |
| 4 | 3.6 | 3.6 | 5.4 | 4.8 | 5.4 | 6.0 |




Parallel Parking Bays

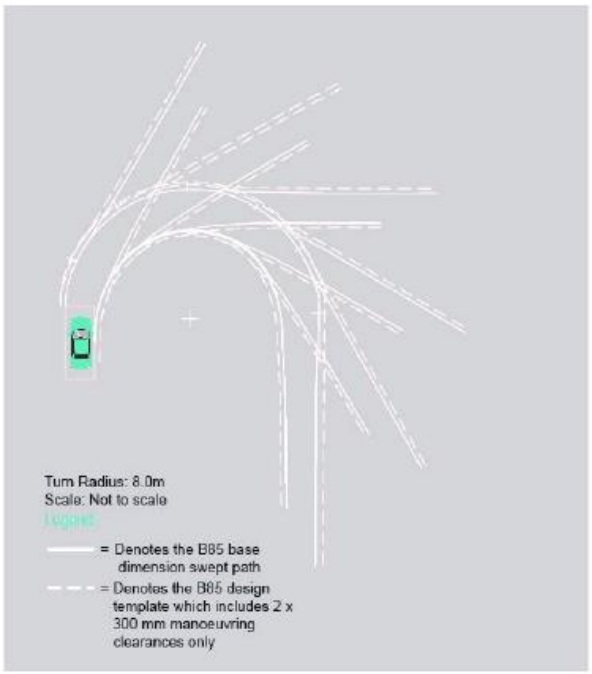
| User Class | A | B | L1 | L2 | L3 | Aisle Width |
|---|---|---|---|---|---|---|
| 1, 2, 3 | 2.1 | 2.5 | | | | |
| 4 | 3.6 | 3.6 | | | | |
| All | | | 6.3 | 6.6 | 5.4 | 3.6 |
| All | | | 6.1 | 6.4 | 5.4 | 3.3 |
| All | | | 5.9 | 6.2 | 5.4 | 3.6 |

**TRN** - Figure ~~3~~7 - Tracking path for a 90th percentile two axle truck



**TRN** - Figure 48 - Minimum tracking path for the 85th percentile car

Commented [SP7]: Strikethrough not showing on the 4.




Note:

With the exception of 90 degree car parks, aisle width dimensions are for manoeuvring into and out of car parks with one-way aisles.

User Class is identified as:

- for all day parking, such as tenant, employee and commuter parking;

- for medium-term parking, such as town centre parking, sports and entertainment centres, motels, airport visitors;
- for short-term parking, such as short-term town centre parking, shopping parking, hospitals, and the drop-off of children;
- accessible parking for people with disabilities.

Dimension C is selected as follows:

- C1: where parking is to a wall or high kerb not allowing any overhang;
- C2: where parking is to a low kerb which allows 600 mm overhang;
- C3: where parking is controlled by wheelstops installed at right angles to the direction of parking, or where the ends of parking spaces form a sawtooth pattern.

Dimension L is selected as follows:

- L1: space length for consecutive parallel parking spaces;
- L2: space length for obstructed end spaces;
- L3: space length for unobstructed end spaces.

**TRN** S12 – Requirements for on-site vehicle parking, loading and standing spaces – construction and formation

| | |
|---|---|
| All RURZ - Rural Zones and FUZ - Future Urban Zone | For sites with four or more vehicle parking / loading / standing spaces, the surface must be formed, sealed, marked and drained to an all-weather standard, with a maximum gradient of 1:20. |
| All RESZ - Residential Zones and MPZ - Māori Purpose Zone | For sites with four or more vehicle parking / loading / standing spaces, the surface must be metalled, marked and drained to an all-weather standard, with a maximum gradient of 1:20. |
| All CMUZ - Commercial and Mixed Use, INZ - Industrial, OSRZ - Open Space and Recreation, AIRPZ - Airport, HOSZ - Hospital, STADZ - Stadium and PORTZ - Port Zones | For sites with less than four on-site vehicle parking / loading / standing spaces the surface must be formed, with a maximum gradient of 1:20; and the area over which vehicles obtain access to the parking area is sealed from the vehicle access point to 5m into the site; or if adjacent to a residential zone, the area must be formed, sealed, marked and drained. |
| All zones | If the spaces are sealed, stormwater from the sealed surface must not be discharged causing erosion to other sites or accesses. |

Note. Marking does not require all lines to be shown. However, it should be clear to the user of the parking area where the edge of each space is.

**TRN** S13 – Requirement for rights of way – construction and formation

| | |
|---|---|
| All RESZ - Residential Zones, MPZ - Māori Purpose Zone, All RURZ - Rural Zones and FUZ - Future Urban Zone | The minimum road width is 3.5 m one to nine dwellings, 5.5 m for ten or more dwellings. |

| | |
|---|---|
| All CMUZ - Commercial and Mixed Use Zones | The minimum road width is 3 m for 2 allotments, 4.5 m for 3 or more allotments. |
| All INZ - Industrial, OSRZ - Open Space and Recreation Zones, HOSZ - Hospital, AIRPZ - Airport, STADZ - Stadium and PORTZ - Port zone | The minimum road width is 7 m for 2 allotments, 10 m for 3 or more allotments. |
| All zones | Stormwater from the right of way must not be discharged causing erosion to other sites or accesses. When a right of way services 3 or more allotments, one passing bay for every 50 m of length shall be provided. Maximum gradient for right of way 1:5 |

**TRN** Table ~~6~~7 – High Trip Generating Activities

| Equivalent Car Movements per day | Access is to a road classified as: | | | |
|---|---|---|---|---|
| | Access | Primary / Secondary Collector | Arterial | Regional / National |
| 0-100 | n/a | n/a | n/a | n/a |
| 101-200 | n/a | Basic | Basic | Full |
| 201-400 | Basic | Basic | Full | Full |
| >400 | Full | Full | Full | Full |

| ~~**TRN** Table 6 – High Trip Generating Activities Activity~~ | ~~Qualifier~~ |
|---|---|
| ~~Childcare including preschool, kindergarten and play centre~~ | ~~25 children~~ |
| ~~Education – Schools~~ | ~~30 students~~ |
| ~~Education – Tertiary~~ | ~~150 FTE students~~ |
| ~~Industrial~~ | ~~5,000m2 Gross Floor Area~~ |
| ~~Mining and Quarrying~~ | ~~>30 heavy vehicle movements per day~~ |
| ~~Warehousing and distribution~~ | ~~6,500m2 Gross Floor Area~~ |
| ~~Healthcare~~ | ~~300m2 Gross Floor Area~~ |
| ~~Office~~ | ~~2,000m2 Gross Floor Area~~ |
| ~~Residential~~ | ~~20 residential sites / units~~ |
| ~~Retail – Shops and supermarkets~~ | ~~250m2 Gross Floor Area~~ |
| ~~Retail – Large Format and Bulk Goods~~ | ~~500m2 Gross Floor Area~~ |
| ~~Service Stations~~ | ~~2 filling pumps~~ |
| ~~Mixed use or other activities not otherwise listed in this Table~~ | ~~60 vehicle movements per day~~ |

**TRN** S14 – High Trip Generating Activities Transport Assessment requirements

1. Basic Traffic Impact Assessment:
    a. Whether the provision of access and on-site manoeuvring areas associated with the activity, including vehicle loading and servicing deliveries. affects the safety,

efficiency, accessibility (including for people whose mobility is restricted) of the site, and the land transport network (including considering the network classification of the frontage road).

b. Whether the design and layout of the proposed activity promotes opportunities for travel other than private cars, including by providing safe and convenient access for travel using more active modes.

c. Having particular regard to the level of additional traffic generated by the activity and whether measures are proposed to adequately mitigate the actual or potential effects from the anticipated trip generation (for all transport modes) from the proposed activity, including consideration of cumulative effects with other activities in the vicinity, proposed infrastructure and construction work associated with the activity.

d. Whether the traffic impact assessment has been prepared by a suitably qualified and experienced transport specialist.

e. Need for a traffic impact assessment - Any characteristics of a proposed activity or site that are out of scope of an existing ITA but where expected traffic generation and access to existing multi modal connections mean requiring a traffic impact assessment, in a manner set out in this rule, is unnecessary.

2. Full Integrated traffic assessment:

a. Whether the provision of access and on-site manoeuvring areas associated with the activity, including vehicle loading and servicing deliveries, affects the safety, efficiency, accessibility (including for people whose mobility is restricted) of the site, and the land transport network (including considering the network classification of the frontage road).

b. Whether the design and layout of the proposed activity promotes opportunities for travel other than private cars, including by providing safe and convenient access for travel using more active modes.

c. Having particular regard to the level of additional traffic generated by the activity while taking into account any particular effects from heavy vehicles and whether measures are proposed to adequately mitigate the actual or potential effects from the anticipated trip generation (for all transport modes) from the proposed activity, including consideration of cumulative effects with other activities in the vicinity, proposed infrastructure and construction work associated with the activity.

d. Whether the ITA has been prepared by a suitably qualified and experienced transport specialist.

e. Need for an ITA - Any characteristics of a proposed activity or site that are out of scope of an existing ITA but where expected traffic generation and access to existing multi modal connections mean requiring an ITA, in a manner set out in this rule, is unnecessary.

~~1. Whether the provision of access and on-site manoeuvring areas associated with the activity, including vehicle loading and servicing deliveries, affects the safety, efficiency, accessibility (including for people whose mobility is restricted) of the site, and the land transport network.~~
~~2. Whether the design and layout of the proposed activity maximises opportunities for travel other than private cars, including by providing safe and convenient access for travel using more active modes.~~
~~3. Having particular regard to the level of additional traffic generated by the activity and whether measures are proposed to adequately mitigate the actual or potential effects from the anticipated trip generation (for all transport modes) from the proposed activity, including consideration of cumulative effects with other activities in the vicinity, proposed infrastructure and construction work associated with the activity.~~
~~4. Whether there are any effects from the anticipated trip generation and how they are to be mitigated where activities will generate more than 250 hvm/d heavy vehicle movements per day.~~
~~5. Whether the transport assessment has been prepared by a suitably qualified and experienced transport specialist and has been approved by the relevant District Council.~~