

## **C10: TRAFFIC MANAGEMENT**

## C10.1 INTRODUCTION

Access within and through the district is vital for the efficient functioning of the community. Most members of the community make daily use of or are dependant on the transportation network. It is therefore important that roads and footpaths are provided throughout the district in a manner that makes the most efficient use of resources and enables access to private properties, places of business and areas of public land.

The Plan requires the setting aside of road reserves and the formation of carriageways and footpaths where appropriate as part of any subdivision activity. The road reserve becomes vested in Council and then enables access to individual private properties, public property such as reserves, as well as linking up to the existing transportation network.

Many public open spaces within the district also provide through access for pedestrians and cyclists. Such walkways and tracks are provided in accordance with Councils' Reserve Management Plans and the rate of such development may vary from year to year.

Vehicle parking requirements and loading and servicing requirements of some activities can create adverse effects. This occurs when insufficient area for parking and loading has been allowed for on the site and forces these activities to occur on the public road.

This in turn leads to congestion caused by parked vehicles and the resultant 'bottlenecks' created which can reduce levels of safety and amenity.

Demand for parking and traffic movement is an effect created by most activities. This demand has the potential to adversely affect the environmental qualities of an area therefore careful attention must be paid to the management of traffic and in particular parking if adverse effects on the environment are to be avoided, remedied or mitigated. For these reasons activities must provide sufficient area on site for all the parking, manoeuvring and servicing requirements of the activity.

The road reserve is an integral part of any neighbourhood and can influence the character of the immediate vicinity. The road reserve includes not only foot paths and carriageways but also the land between opposing front property boundaries. It is often used for amenity planting and landscaping in addition to its traffic carrying function, and as an area to locate reticulated services such as water, wastewater, gas, electricity, telephone and street lighting. Control should be exercised over the placement of such buildings and structures, including utility services in order to avoid adverse effects.

Signs carrying road safety and public information are also located on road reserves. In order to manage the variety of potentially conflicting activities which occur on road reserves, all road reserves in the district have been zoned. The zone will enable the various activities to occur in an efficient and coordinated way so as to ensure public safety and the maintenance or enhancement of the amenity values of the area.

The operation of heavy vehicles can create a nuisance, particularly if such activities occur in the residential area or at night. While it is accepted that heavy vehicles will sometimes operate in residential areas, such as when used for delivery or home maintenance purposes, in general they will be discouraged from such areas. The Plan restricts the overnight parking of heavy vehicles on specified roads within the district in order to reduce the noise nuisance and adverse visual impacts of such activity.

## C10.2 OBJECTIVES AND POLICIES

#### C10.2.1 Objectives

- C10.2.1.1 To maintain and enhance access to the natural and physical resources of the district by ensuring the effects of traffic congestion and insufficient parking are mitigated.
- C10.2.1.2 To ensure that activities taking place on roads or on land adjacent to roads do not adversely affect motorist, cyclist and pedestrian safety and efficiency, or the amenity values of the immediate area where practicable.

#### C10.2.2 Policies

- C10.2.2.1 Vehicular and pedestrian access to public and private land within the district should be provided where safe to do so.
- C10.2.2.2 The vehicle parking and servicing requirements of various activities should where appropriate take place within the site boundaries of the activity.
- C10.2.2.3 The siting, bulk and design of buildings, structures and services within the road reserve and on properties adjacent to roads should not compromise safety or the amenity values of the neighbourhood.

- C10.2.2.4 The operation, including parking, of heavy vehicles should not compromise the safety or amenity values of residential areas.
- C10.2.2.5 Property accesses shall be spaced and constructed to standards that are appropriate to their intended use.
- C10.2.2.6 On-site manoeuvring areas shall be of sufficient size and design to encourage property ingress and egress to occur in a forward motion.
- C10.2.2.7 Manage the adverse effects of land use, development and subdivision on transport safety, and the capacity of the transportation network.

## C10.3 GENERAL OBLIGATIONS

The provision of adequate access, parking, and loading arrangements is an important part of maintaining the safety and efficiency of transport systems. The efficient and safe movement of vehicles on the street system is aided by having adequate vehicle parking provided. Different activities have the potential to attract and/or generate varying demands for parking. In general, the majority of such parking needs to be provided on or as close as possible to the site that the activity is located on.

Every person who erects a building, adds to a building, or changes the use of land or a building or site shall provide in relation to the activity:

- Adequate parking spaces,
- Adequate loading and unloading bays, and
- Adequate manoeuvring space, aisles and access for all vehicle movements.

Where a proposed building is listed in the disabled persons welfare legislation, the Council may require one carparking space required for the use to be constructed and set aside for the exclusive use of disabled persons in a readily accessible and convenient position.

## C10.4 RULES

## C10.4.1 Parking Requirements

The number of parking spaces required by the Council for each site, taking into account the proposed activity, its likely traffic generation, and other relevant factors, is set out by activity (regardless of the zone it is located in) as the activity generates and/or attracts parking to similar levels regardless of the zoning.

Unless otherwise indicated, the normal minimum requirements are as listed below:

- 1 All references are to the maximum capacity of the building/activity.
- 2 All staff numbers are peak numbers and include employers, and
- 3 Where an activity comprises 2 or more uses, e.g. a warehouse with a retail outlet, each part of the activity will be assessed separately.
- 4 Specific parking requirements for network utilities are contained in section C9.7.6.

Activity or Use of Land or Building	Spaces Required
RESIDENTIAL	
Dwelling Unit	2 per unit
Home Occupation	1 for every non-resident employee
Papakainga	2 per unit
Visitor Accommodation	1 per unit or 1 per 4 guests whichever is the greater
COMMERCIAL	
Shops	1 per 25m <sup>2</sup> GFA
Supermarket	1 per 25m <sup>2</sup> GFA
Cinemas and Theatres	1 for every 10 persons based on maximum seating capacity
Dairy or Convenience Store	1 per 16m <sup>2</sup> GFA
Takeaway Food Premises	1 per 16m <sup>2</sup> GFA
Service stations	1 per 20m <sup>2</sup> GFA excluding canopies over petrol pumps
Restaurant	1 per 4 seats plus 1 per staff

	member
Tavern	1 per 5m <sup>2</sup> of net public floor area
Outdoor Display Area	1 per 100m <sup>2</sup> GFA
Vehicle Showrooms	1 per 100m <sup>2</sup> GFA
Offices	1 per 35m <sup>2</sup> GFA
Premises for medical practitioners including dentists and veterinary surgeons	1 per 25m <sup>2</sup> GFA
INDUSTRIAL	
Industrial premises and warehouses (pulp and paper)	1 for every 1 of the maximum number of employees on site at any one time. This is to be assessed as the number of employees on daytime duties plus the number of shift workers going off shift at the 8am (approx) shift change.
Industrial premises (other)	1 for every 1 of the maximum number of employees on-site at any one time, plus 1 per 1500m <sup>2</sup> GFA
EDUCATIONAL ACTIVITIES	
Childcare facility	1 per 20m <sup>2</sup> GFA
Primary and Intermediate School	1 per FTA staff member
Secondary School	1 per staff member plus 1 for every 50 students
COMMUNITY/RECREATION ACTIVITIES	
Marae, Community Centres or places of Worship	1 for every 15m <sup>2</sup> GFA, or 1 for every 10 persons the facility is designed to accommodate, whichever is the greater.

Note: 'GFA' means Gross Floor Area. 'FTE' means Full Time Equivalent

## C10.4.2 Layout Requirements

Parking spaces provided under this Plan shall be of sufficient size and suitability laid out to comply with the 90 Percentile Car Tracking Curve Minimum Radius.

All parking requirements under this Plan shall be constructed and maintained as follows:

- C10.4.2.1 Every parking space shall be of usable shape.
- C10.4.2.2 Every parking space shall be accessible directly from the street or indirectly from an aisle to the street.
- C10.4.2.3 Every such parking space, vehicle access and aisle shall be properly graded, drained, formed and provided with permanent dust free surfacing before the commencement of the use to which it relates.
- C10.4.2.4 Every parking space, vehicle access and aisle shall be maintained in good order and condition at all times.
- C10.4.2.5 Every parking space to be provided under this section for use by the public, shall be available for use at all times and shall be marked to define the depth of the stall.
- C10.4.2.6 Manoeuvring areas are to be located within the site they relate to.

### C10.4.3 Loading Requirements

As with parking, loading spaces are required not only to service the activity, but also to ensure that the safety and efficiency of the roading resource is not compromised.

Different activities have different loading requirements. In addition, the nature of providing a loading service has changed over time. For instance, most commercial and business activities are served daily by courier services, using smaller vans. Accordingly, smaller loading spaces are required, but these are required to be available at all times. Vacant parking spaces can be used by courier vans. Activities such as supermarkets and hardware depots are serviced by large vehicles, as well as courier vans. Accordingly, larger specified loading spaces are required for this loading requirement.

Standing space is designed to be used for picking up or unloading passengers and/or goods for use of periods up to five minutes duration.

### Commercial and Industrial Zones

- Every standing space shall have access to a road or service lane and the building which it is intended to serve.
- All standing spaces shall have a minimum width of 4 metres and minimum depth of 8.5 metres
- Standing spaces in a shopping area shall be placed at the rear of the building it serves
- Standing spaces shall be located on the site and clear of the adjacent road, or service lane.
- Manoeuvring areas are to be located within the site to which they relate.

All permitted activities exclusive of dwellings shall be provided with at least one loading space in a location appropriate to the use. All discretionary activity loading requirements shall be assessed on their merits.

### C10.4.4 Access

Access points must be located to ensure safe entry or egress. The main factors affecting safety are the availability of satisfactory visibility of approaching traffic, and sufficient separation between existing intersections and major access points to avoid conflicts with vehicle turning movements.

All access requirements shall be constructed and maintained as follows:

- C10.4.4.1 The design of such access shall be in general accordance with the widths and turning curves as set out in this Section with reference to the types of vehicular traffic likely to require such access.
- C10.4.4.2 Every lot shall be provided with legal access.
- C10.4.4.3 Access Segregation Strips will be required as a condition of subdivision consent where circumstances require access to be prohibited in order to maintain road safety.

C10.4.4.4 Sight distances shall be in accordance with the Sight Distance Measurement Diagrams A and B and Tables 1 and 2 in this Section.





Table 1:Property Access Performance Criteria where traffic generation is less than 30<br/>vehicle movements per day.

Posted (Legal)	Minimum Sight	Location of property a intersection.	access	relative	to	Minimum Spacing between adjacent
Speed	Distances	See Diagram B.				property accesses (on

Limit (km/h)	(m) See Diagram A	Minimum Distance K (m)	Minimum Distance L (m)	Minimum Side Road Distance M (m)	same or opposite frontages). Distance N on Diagram B. (m)
50	85	15	30	15	7.5 or 15
60	115	30	40	20	20
70	140	60	100	30	40
80	170	90	120	30	100
100	250	150	200	30	200

Table 2:Property Access Performance Criteria where traffic generation is more than<br/>30 and less than 60 vehicle movements per day.

Posted (Legal) Speed Limit	Minimum Sight Distances (m)	Minimum Spacing between adjacent property accesses			
(km/h)	See Diagram A	Minimum Distance K (m)	Minimum Distance L (m)	Minimum Side Road Distance M (m)	(on same or opposite frontages). Distance N on Diagram B. (m)
50	85	20	30	20	7.5 or 15
60	115	50	50	30	20
70	140	100	100	45	40
80	170	120	120	60	100
100	250	200	200	60	200

#### C10.4.5 State Highways

The following criteria applies to property access to State Highways that are not limited access roads:

# C10.4.5.1 Restricted Discretionary Activity – State Highway Access

Creation of a new property access, or the increase in use of an existing access to a state highway by more than 12 additional vehicle movements per day is a restricted discretionary activity in regard to access considerations alone.

#### C10.4.5.2 Assessment Criteria for State Highway Access

When considering an application for a restricted discretionary resource consent regarding access to a State Highway, Council shall restrict its discretion to the

adverse effects of the proposal on the function, and safe and efficient operation of the state highway and adjoining transport network and any measures to avoid, remedy or mitigate these effects, including:

- Whether the crossing is sufficiently remote from an intersection having regard to traffic volumes on the roads, the 85<sup>th</sup> percentile speed of vehicles on the roads, and any other factors that will prevent congestion and confusion between vehicles turning at the crossing or at the intersection.
- Whether there is a need to separate entry and exit in order to reduce potential traffic confusion and congestion.
- Whether the physical form of the road will minimise the adverse effects of access, for example whether the road offers good visibility; the presence of a solid median to stop right hand turns; or a flush median to assist right hand turns.
- Whether particular mitigation measures such as a deceleration lane are required due to the speed and volume of vehicles on the road.
- The design of the crossing in relation to the ability of traffic exiting the site to safely enter the traffic stream.
- Whether there is adequate queuing and parking space on site so that vehicles do not queue over vehicle crossings.
- The design of the crossing in relation to pedestrian and cyclist safety.
- The effects of the location of the access on the amenity and safety of neighbouring properties.
- Any cumulative effects of the introduction of extra access points in relation to access for other activities in the vicinity.
- Any cumulative effects of extra access points on the function of the frontage road(s) in terms of its position in the roading hierarchy.

- Whether the speed environment on the road, as determined by the 85th percentile speed data, is such that the sight distance standards in the Plan can be safely reduced.

<u>Note:</u> A restricted discretionary resource consent application for access on a State Highway may be considered without notification or the need to obtain the written approval of affected parties excepting that of New Zealand Transport Agency.

## C10.5 RESTRICTED DISCRETIONARY ACTIVITIES TRAFFIC MANAGEMENT

- C10.5.1 When assessing an application to reduce or amend the parking, layout, loading or access rules Council will restrict the exercise of its discretion to the following matters:
  - The hours of operation relative to other activities on the site or on adjoining sites and the opportunities for sharing parking spaces.
  - The ability of the street to accommodate parking in a safe manner.
  - The total parking demand generated by the proposed development. Where it can be demonstrated that the development is such that the premises cannot be used for any other purpose, a lesser number of parking spaces may be accepted by Council as being adequate.
  - The availability of payment in lieu of parking where any reduction from the required parking cannot be granted.
  - The availability of appropriate off street parking in the locality, particularly where the developer has financially supported such provision.
  - The amount of public space, which is incorporated within the building and the intensity of use of such facilities.
  - Any inappropriate modification to the natural environment that would result from providing the parking spaces.

- **C10.5.2** In determining the required parking for a particular activity or development Council will restrict the exercise of its discretion to the following matters:
  - Whether off site parking is in close proximity.
  - Whether joint parking provision is acceptable particularly where hours of operation are different.

C10.

- 5 The desirability of avoiding vehicular access to the site on traffic safety or pedestrian amenity grounds.
- 3
- The convenience of those using the parking spaces especially the general public.
- R

That any arrangement for alternative parking provisions is
adequately secured so that parking can take place when
required.

red sight distances for accessways are determined with reference to the **85<sup>th</sup> percentile operational seed**<sup>1</sup>. This should be measured at the accessway location. However, where the 85<sup>th</sup> percentile operating speed has not been measured, *NZTA* will generally use the state highway's **posted speed plus 10km/h** as an approximation for the 85<sup>th</sup> percentile operational speed, because this generally reflects driving behaviour in New Zealand.

Posted speed Limit (km/h)	85 <sup>th</sup> percentile operating speed, measured at the site (or if above not known, posted speed plus 10km/h)	Minimum sight distance standard (m)
Not applicable	50	89
50	60	113
60	70	140
70	80	170
80	90	203
90	100	240
100	110	282

Table App5B/1 – Sight distance standards<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Required minimum sight distances on this basis are set out in table App5B/11 below and illustrated in Diagram A and Perspective A.

 $<sup>^{2}</sup>$  Other accessways will normally be expected to meet the accessway spacings set out in table 2 and illustrated in diagram B and perspective B.

Table App5B/3 – Guidelines for minimum accessway spacings

Posted Speed limit (km/h)	85 <sup>th</sup> percentile operating speed (or if not known, posted speed plus 10km/h)	Recommended minimum distanced between accessway and nearest intersection (m)	Recommended minimum distance between local road accessway and intersection (m)	Recommended minimum distance between accessways (m)	Desirable spacings between accessways and between intersections and accessways on national state highways carrying over 10,000vpd.
Not applicable	50	30	20	-	125
50	60	30	20	-	160
60	70	30	20	-	220
70	80	100	45	40	305
80	90	100	45	100	400
90	100	200	60	200	500
100	110	200	60	200	500