

12. Transport

12.1 Introduction

The transportation systems of the Kaikoura District provide for the movement of people and goods throughout the district. Road, rail, and air transport systems contribute to the social and economic functioning of the district by providing a means of access between home, work, educational, recreational, cultural and business activities, as well as providing a route for visitors to, and through the District.

Kaikoura District has a well established transport infrastructure consisting of:

- State Highway 1, passing through the District from north to south and providing vital links to Marlborough and Canterbury. The state highway is New Zealand's main north-south transport link and is therefore of national significance;
- The Inland Road, starting just to the south of Kaikoura and passing through Waiiau and onto Culverden, provides an alternative route south;
- A network of secondary roads feeding into the highway system and providing access to adjoining properties, in both rural and urban areas;
- A network of unsealed local roads in rural areas providing property access;
- The Main Trunk Railway passing through the District - the main north-south rail link;
- The Kaikoura wharf, and the boat launching facilities at South Bay and at other small bays along the coastline;
- The Kaikoura Airfield - a base for tourist charter and club flights;
- Helipads - e.g. south of Kaikoura on Council land, near the Railway Station, and another opposite Kaikoura Hospital.

The Government is currently investigating and assessing existing responsibilities in respect of the provision and maintenance of roads throughout New Zealand. As a result of these investigations responsibilities for roading may change.

12.2 Issue 1 - Efficiency and Safety

The use of motorised transport has the potential to adversely affect the efficient and safe use of the District's roads.

12.2.1 Objective 1

To provide for the safe and efficient use of the District's existing and future transportation infrastructure.

12.2.2 Policies

1. To promote the efficient use of all roads within the District by adopting and applying design and access standards within different zones of the District, based on the intended function of each road, and the expected vehicle generation.
2. To protect the efficiency of through traffic on State Highway 1 due to its role as a carrier of through traffic.

3. To improve the safety of local traffic and pedestrians on Beach Road due to its role as a local road and business area.
4. To promote the efficient use of roads by ensuring the size, location and type of access to properties is appropriate.
5. To reduce congestion and loss of efficiency of roads by ensuring off-road parking and loading is provided for activities.
6. To promote and encourage cycling as a safe and efficient use of the Districts roads. \
7. To provide for the continued operation of the Kaikoura Airfield and lawfully established helipads.
8. To recognise the Airfield as an important transport node in the District and to avoid, remedy, and mitigate effects of reverse sensitivity on airfield operations.
9. To require all business activities to provide adequate and convenient car-parking for customers and staff.
10. To support the new development of safe pedestrian links, and to upgrade existing pedestrian links, in order to promote and provide for the safe, direct and pleasant movement of pedestrians and to reduce short vehicle trips and congestion.
11. To improve connections between rail and other transport modes, particularly pedestrian access, to the commercial areas of the township.
12. To encourage any new urban development in Settlement Zones to locate within or on the periphery of existing settlements to reduce the length of, and need for, vehicle trips.

12.2.3 Implementation Methods

1. The inclusion of Rules to:
 - Define design and access standards based on the intended function of roads;
 - Control the location of vehicle crossings on the State Highway;
 - Set performance standards for property access, parking and loading;
 - Specify performance standards for road construction, subject to the intended function of the road.
2. Consolidation of existing settlements through the clear definition of the extent of Kaikoura township and other settlements through zoning provisions.
3. Classification of the District's Roads according to road capacity and capabilities.
4. Through the Council's annual planning process:
 - Maintain the West End car-parking area for the benefit of all businesses in the West End.
 - Continue to maintain and progressively improve the roading network throughout the District, to improve traffic safety, and to provide for safe cycling, efficiency and accessibility.
 - To advocate that Transit New Zealand investigate and pursue options to improve the safety of Beach Road for local traffic and pedestrians, such as the proposed by-pass in order to protect the safety of pedestrians at the State Highway 1, West End and Ludstone Road intersection.

- Consider the establishment of a pedestrian bridge over State Highway 1 to provide for school students crossing Beach Road.

Explanation and Reasons

Access within and through the District is required for the social and economic well-being of the people of the District and for visitors to the area. It is important that provision and maintenance of transport routes is such that the safety of motorists and pedestrians is provided for. It is also important to encourage and provide for cycling as a healthy and environmentally friendly alternative form of transport. Cycling is seen as a particularly important form of transport in Kaikoura, being a small town with easy cycle access, and with an increasing number of tourists using bikes.

To enable people to carry out their existing and future activities, it is necessary to provide for a basic level of accessibility within and through the District. The adoption of design and access standards for different roads in the District will enable the use of roads to be related to their intended function, and for standards to be set accordingly.

Efficiency in relation to transport relates to a wide range of factors including infrastructure costs, traffic movement, environmental costs and safety. Some of the adverse effects on traffic safety and the environment resulting from access location and design, and high traffic numbers, can be mitigated through applying standards to roads and specifying acceptable access design and activities.

The efficient and safe flow of traffic on State Highway 1 is particularly important, as it is the main north-south transport route between Canterbury and Marlborough. The extent to which access is permitted onto the State Highway is the responsibility of both Transit New Zealand and the Kaikoura District Council. The safety of local traffic and pedestrians on Beach Road is also important to the Council. In particular, the Council recognises the need to ensure that the safety of school pupils crossing Beach Road is improved. Consequently, the Council wishes to encourage Transit New Zealand to investigate and pursue options to improve the safety of Beach Road such as the proposed by-pass.

To ensure that road safety and efficiency is maintained and enhanced it is appropriate for the Council to specify suitable standards for roading construction, access, parking and loading. Pedestrian links within urban areas also enhance pedestrian safety.

12.3 Issue 2 - Environmental Effects of Transportation

The use of motorised transport has the potential to adversely affect the environment.

12.3.1 Objective 1

To avoid remedy or mitigate actual and potential adverse effects of transportation.

12.3.2 Policies

- 1.** To encourage new residential development to locate within or on the periphery of existing settlements to reduce the length of and need for vehicle trips.
- 2.** To enable people to establish work places in their homes to reduce the need for vehicle trips, provided other effects on the environment are minor.

3. To support the development of pedestrian and cycling links within the settlements and urban areas, having regard to the needs of disabled persons by making these facilities safe and pleasant.
4. To promote the use of transport modes which have low adverse environmental effects.
5. To ensure new roads are designed to visually complement the surrounding area.
6. To encourage the incorporation of tree and landscape plantings within new roads and roading improvements, wherever possible, having due regard to traffic and pedestrian safety.
7. To ensure any adverse effects arising from road or railway maintenance, protection, upgrading, construction or realignment on the following are avoided, remedied or mitigated: significant habitats of indigenous fauna, indigenous plants; the natural character of the coastal environment and waterbodies; outstanding landscapes and natural features; mahinga kai and taonga; and habitats of salmon and trout and; people and communities.
8. To ensure parking and loading associated with activities, does not adversely affect the amenity enjoyed by neighbours.

12.3.3 Implementation Methods

1. As for 12.2.1 Objective 1; and
2. Through the Council's annual planning process:
 - Continue to improve the design and visual appearance of roads within the District, in particular within the settlements.
 - Encourage Transit New Zealand Ltd, Tranz Rail Ltd, Department of Conservation; the Council, and the Canterbury Regional Council to develop siting and design guidelines for works associated with any maintenance, protection, upgrading, construction or realignment of road or rail infrastructure in order to protect conservation and landscape values and to provide for the health and safety of people and communities.
 - Maintain the West End car-parking area for the benefit of all businesses in the West End.
 - Collect fair and reasonable financial contributions from benefiting landowners for the provision of public car-parking in Kaikoura township.

Explanation and Reasons

Motorised transport can result in the following adverse effects on the environment:

- emission of noxious gases from the burning of fossil fuels;
- noise and fumes affecting the local communities health and environmental standards;
- reduction in the safety experienced by pedestrians and people using non-motorised transport.

To reduce the need for the use of motorised transport, further residential development will be encouraged to develop within or on the periphery of existing settlements. Provision will be made to enable people to work from home, provided that any adverse effects on the amenity of the surrounding neighbourhood are mitigated, remedied or avoided.

The amenity of an area may be affected by quantity and type of traffic on nearby roads, in particular the road from which access to a property is obtained. By adopting design and access standards based on the intended function of roads, the Council can protect the amenity of areas within the

District. Adverse effects of transportation can be avoided by routing traffic away from sensitive areas, for example residential and commercial environments.

The road environment is an important, highly visible and extensive area of public open space within the District. Development of roads and their immediate surrounds (alignment, layout and associated plantings) is significant in maintaining and improving the amenity of both residential and business areas.

People need to make provision for parking and loading associated with any proposed activities, to ensure that the amenity of the surrounding environment is not adversely affected.

Significant habitats of indigenous fauna, indigenous plants; the natural character of the coastal environment and waterbodies; outstanding landscapes and natural features; mahinga kai and taonga; and habitats of salmon and trout; may potentially be adversely affected by road or railway maintenance, protection, upgrading, construction or realignment. Consequently, it is important that any adverse effects are mitigated or avoided. Remnant indigenous vegetation and habitat is often found on road verges, where these areas have not been grazed.

12.4 Issue 3 - Maintenance and Provision of Access

The maintenance of existing access routes and the provision of new access routes at the time of subdivision are necessary for the functioning of communities within the District.

12.4.1 Objective 1

To maintain and provide for access and ease of pedestrian and vehicle movement throughout the District.

12.4.2 Policies

1. To encourage the development of pedestrian areas, walking routes, and cycleways, having regard to the needs of disabled persons.
2. To ensure access is available through the provision of new roads and related facilities.

12.4.3 Implementation Methods

1. The inclusion of Rules to:
 - Require vehicular access to be provided to all sites.
 - Specify performance standards for road construction, subject to the intended function of the road.
 - Require the provision of footpaths.
2. Through the Council's annual planning process:
 - Encourage the development of pedestrian areas, walking routes, and cycleways.

Explanation and Reasons

Access within and through the District is required for the social and economic well-being of the people of the District and for visitors to the area. It is very important that provision and maintenance of transport routes and of adjacent land use activities is such that the safety of motorists and pedestrians is provided for.

Pedestrian links can improve the amenity within a town, as they provide an opportunity for people to travel by foot and therefore reduce the number of vehicle trips they make. This is a matter that should be considered at the time of land subdivision.

12.5 Anticipated Environmental Results

1. Safe, efficient and accessible transport systems.
2. Minimal adverse effects on the environment from transportation.
3. Efficiency in the use of fossil fuels and in traffic flow on the District's roads.
4. Construction of any new roads, access and parking areas to appropriate use and safety standards.
5. Increased use of non-motorised transport.
6. Improvement to pedestrian safety and access throughout urban areas.
7. Protection of the efficiency of State Highway 1.
8. Protection of the safety of Beach Road for local traffic and pedestrians.

Transport Rules

Should you require a resource consent refer to Section 3: User's Guide, and Section 25: Assessment Matters for Guidance.

12.6 Non-Notified Resource Consents

Resource consents in relation to the following Performance Standards shall not be notified, except where the activity is adjacent to a State Highway. Where the activity is adjacent to the State Highway, the resource consent shall be notified only if affected party approvals cannot be obtained:

- 12.8.1.d design of parking spaces
- 12.8.1.e reverse manoeuvring
- 12.8.1.f loading areas
- 12.8.1.g surface of parking and loading areas
- 12.8.2 vehicle crossings
- 12.8.3 intersection performance standards
- 12.8.7 road/rail level crossings

12.7 Activities

Any land use or subdivision activity which does not comply with one or more of the following Performance Standards, or where otherwise specified below, shall be a Restricted Discretionary Activity, with the exercise of the Council's discretion being restricted to the matter(s) specified in that standard.

Nothing in these provisions shall limit the power of the Council to require or impose conditions or standards in respect of applications for resource consent.

12.8 Performance Standards

12.8.1 Parking and Loading

a. Minimum Parking Space Requirements

- i. There shall be a minimum number of parking spaces to be provided at all times within the net area of the site of any activity. The number of parking spaces is specified below in Table 12.8.1. The required parking spaces shall be available for residents, staff and visitors at all times during the hours of operation of the activity.
- ii. Where there are two or more different activities on the site, the total requirement for the site shall be the sum of the parking requirements for each activity.
- iii. Where a land use corresponds with two or more similar activities in Table 12.8.1, the activity with the higher parking rate shall apply. Where there are two or more different activities on a site, the total requirement for the site shall be the sum of the parking requirements for each activity. However, where there is a specific parking space requirement for a particular activity in Table 12.8.1, that requirement shall be provided on the site of the activity, rather than the sum of the requirements for any group of individual activities that may collectively make up the particular activity. For example, the

requirement for service stations shall be provided rather than the sum of the requirements for commercial activities and service stations.

b. Car Parking For Disabled Persons

- i. Where 15 or more car parking spaces are required, car parking spaces for disabled persons shall be provided at the rate of 1 space per 15 required spaces or part thereof; except that in the Kaikoura Peninsula Tourism Zone car parking spaces for disabled persons shall be provided at the following ratio:
 - a. None for up to 14 required spaces, and;
 - b. 1 space per 15 required spaces, or part thereof, between 15 and 45 spaces required, and;
 - c. 1 space per 50 required spaces, or part thereof, for additional spaces required beyond 45.
- ii. Each disabled persons car parking space shall be clearly marked and exclusively reserved for disabled persons.

c. Assessment of Parking Areas

- i. Where the parking requirements listed in Table 12.8.1 results in a fractional space, any fraction under one half shall be disregarded, except for staff car parking where any fraction under one half shall be counted as one space. Any fraction of one half or more shall be counted as one car parking space.
- ii. The area of any parking space or spaces provided and of vehicular access, drives and aisles provided within a building shall be excluded from the assessment of gross floor area of that building for the purpose of ascertaining the total number of spaces required or permitted.

d. Design of Parking Spaces

- i. All required parking spaces and associated manoeuvring areas, other than for residential units and temporary activities, are to be designed in accordance with Appendix L size, accessibility and queuing..
- ii. Off street bus parking spaces shall be a minimum of 3.5m in width and 14m in depth. All associated manoeuvring areas shall be designed in accordance with the New Zealand On-Road Tracking Curves for a Tour Coach or determined by using recognised vehicle tracking software.

Table 12.8.1 - Minimum Parking Space Requirements

ACTIVITY	PARKING SPACES REQUIRED
Commercial activities except those involving retail sales in the Rural Zones and the display /retail component of the Visitor Attraction Complex in the Kaikoura Peninsula Tourism Zone.	1 space per 45m ² Gross Floor Area
Commercial activities involving retail sales in the Rural Zones	1 space per 10m ² Gross Floor Area or; 1 space per 10m ² outdoor display area, whichever is the greater
Drive-through facilities, excluding service stations	5 queuing spaces per ordering booth or facility
Educational and Day-Care facilities, including ancillary sports fields.	1 space per 2 staff plus 1 space per 10 students over 15 years of age

ACTIVITY	PARKING SPACES REQUIRED
Elderly Persons Housing Unit	1 space per unit
Golf Course Clubhouse	1 space per 25m ² Gross Floor Area of the clubhouse, or 50 parking spaces, whichever is the greater.
Health Care Facilities	2 spaces per professional plus 1 space per 2 staff
Hospitals and Rest Homes	1 space per 5 beds plus 1 space per 2 staff
Industrial activities	1 space per 50m ² Gross Floor Area plus 1 space per 100m ² outdoor storage space
Offices	1 space per 35m ² Gross Floor Area
Places of Assembly	1 space for every 4 people the place is designed to accommodate or; for churches, the greater of one space per 4.5m ² Floor Area of the auditorium of the Church or 4.5m ² of the total floor area of all meeting rooms. Auditorium means the primary place of assembly (including any nave / congregational seating area) and any adjoining gallery or room which is separated by non-permanent partitions, but does not include any chancel, sanctuary or stage.
Residential units	2 spaces per residential unit
Restaurants, taverns, and hotels including associated visitor accommodation activities	1 space per 10m ² public Floor Area, plus; 1 space per 2 staff, plus; for hotels: 1 bus parking space/50 hotel rooms for hotels with more than 50 rooms, plus; 1 car parking space per 3 beds except that in the Kaikoura Peninsula Tourism Zone 1 car parking space per 3 bedrooms shall be provided.
Service Stations	Pump area plus; 1 space for visitors per 100m ² Gross Floor Area plus; 1 space for staff per 100m ² Gross Floor Area
Sports fields, excluding sports fields ancillary to educational facilities and golf courses.	1.5 spaces per 1000m ² of field area plus; 1 space per 45m ² Gross Floor Area of ancillary buildings including clubrooms. Field area means all areas within the boundary of the sports field including the active playing surface and any spectator areas but excluding ancillary buildings and club rooms.
Visitor accommodation excluding accommodation associated with hotels	1 space per 4 visitors or guests plus; 1 space per 2 full-time equivalent staff
Visitor Attraction Complex (display/retail component)	1 car parking space per 4 visitors, plus; 1 bus parking space per 50 visitors, plus; 1 space per 2 full-time equivalent staff

e. Reverse Manoeuvring

- i.** On-site manoeuvring for a design car (refer Appendix I) shall be provided to ensure that no vehicle is required to reverse either onto or off a site where:

- a. Any activity is required to provide, or contains, 6 or more parking or loading spaces; or
 - b. The activity is not a residential activity; or
 - c. Any activity has vehicle access and/or a vehicle crossing onto or off a Strategic Arterial Road (refer Appendix M).
- ii. On-site manoeuvring for a design truck (refer Appendix I) shall be provided to ensure that no truck is required to reverse onto or off a site where any development requires loading areas or trade vehicle storage having vehicle access and/or a vehicle crossing onto a road in the Business B Zone or onto a Strategic Arterial Road (refer Appendix M).
 - iii. All truck refuelling sites shall be designed to accommodate a maximum length B-Train in a manner which will avoid the need to reverse off the site.
 - iv. Vehicles shall not be required to undertake more than one reverse manoeuvre when manoeuvring out of any required parking or loading space to depart the site.

f. Loading Areas

All industrial and commercial activities (including retail activities) in the Kaikoura Peninsula Tourism Zone, the Business B Zone, and in the Business A Zone on the northern side of West End, shall provide one loading space and associated manoeuvring area on the same site as the activity, in accordance with the following:

- i. Every loading space shall have a minimum height of 3.8m and a minimum width of 3.5m or such greater width as is required for adequate manoeuvring. The depth shall be as follows:
 - For transport depots or other similar activities, not less than 9m.
 - For retail premises, offices, warehouses, bulk stores, industrial and service activities and other similar uses, not less than 8m

except that for offices and other non-goods handling activities, where the gross floor area is less than 1500m² the space can be reduced to 6m in deep, 3m wide and 2.6m high.
- ii. No loading or unloading of goods or passengers shall be undertaken on a Strategic Arterial Road.

g. Surface of Parking and Loading Areas

- i. The surface of all parking, loading and trade vehicle areas and associated manoeuvring areas shall be formed; finished in an all weather surface; adequately drained and clearly marked.
- ii. Rule (g)(i) does not apply where a site contains one residential unit or up to two elderly persons units.

12.8.2 Vehicle Crossings

a. Vehicle Crossings to be provided

In all zones:

- i. Every site with frontage and/or vehicle access to a formed road shall be provided with a complying vehicle crossing except that no vehicle crossing shall provide vehicle access onto or off a Strategic Arterial where frontage and/or legal access is available from another road.

- ii. Vehicle access to a formed road shall only be provided by way of a complying vehicle crossing.

b. Design, Formation and Sealing of Vehicle Crossings

- i. A formed and drivable surface shall be provided between the carriageway of the road and the road boundary of the site or lot.
- ii. Except in the Kaikoura Peninsula Tourism Zone all vehicle crossings onto sealed roads or service lanes shall be designed in accordance with Appendix J and shall be sealed to ensure that material such as mud, stone chips or gravel is not carried onto any footpath, sealed road or service lane. The area shall be sealed with Grade 4 Chip surface to Transit New Zealand specifications, and shall be sealed as follows:
 - a. For the full width of the vehicle crossing or service lane; and
 - b. Between the edge of the carriageway and the road boundary of the site, or for the first 10m as measured from the centre-line of the road, whichever is the greater
- iii. Within the Kaikoura Peninsula Tourism Zone, vehicle crossings onto sealed roads or service lanes shall be formed and finished to an all weather surface to ensure that material such as mud, stone chips or gravel is not carried onto any footpath, sealed road or service lane, and shall be formed between the edge of the carriageway and the road boundary of the site, or for the first 10m as measured from the edge of the carriageway, whichever is the greater.
- iv. The following crossing widths Table 12.8.2(1) shall apply in all zones:

Table 12.8.2(1) - Crossing Widths

Land Use	Width of Crossing (m)	
	Minimum	Maximum
Residential	3m	6m
Service Stations		
— One way (with no tanker movements):	3.5m	6m
— One way (with tanker movements):	4.5m	6m
— Two way:	6m	9m
Other	4m	9m

c. Location of Vehicle Crossings onto the State Highway 1

Table 12.8.2(2): Vehicle crossing location standard

Posted (Legal) Speed Limit (km/h)	Required Sight Distance (m) See diagram A (next page)	Location of vehicle crossing Relative to Intersection See Diagram B (next page)		Minimum Spacing between adjacent vehicle crossings
50	85	30	20	-
60	115	50	30	-
70	140	100	45	-
80	170	120	60	100
100	250	200	60	200(see Note 1)

Note 1: There shall be no more than 5 individual accesses along any 1km section of State Highway (on both sides) measured 500m either side of a proposed access.

DIAGRAM A (Not to Scale)

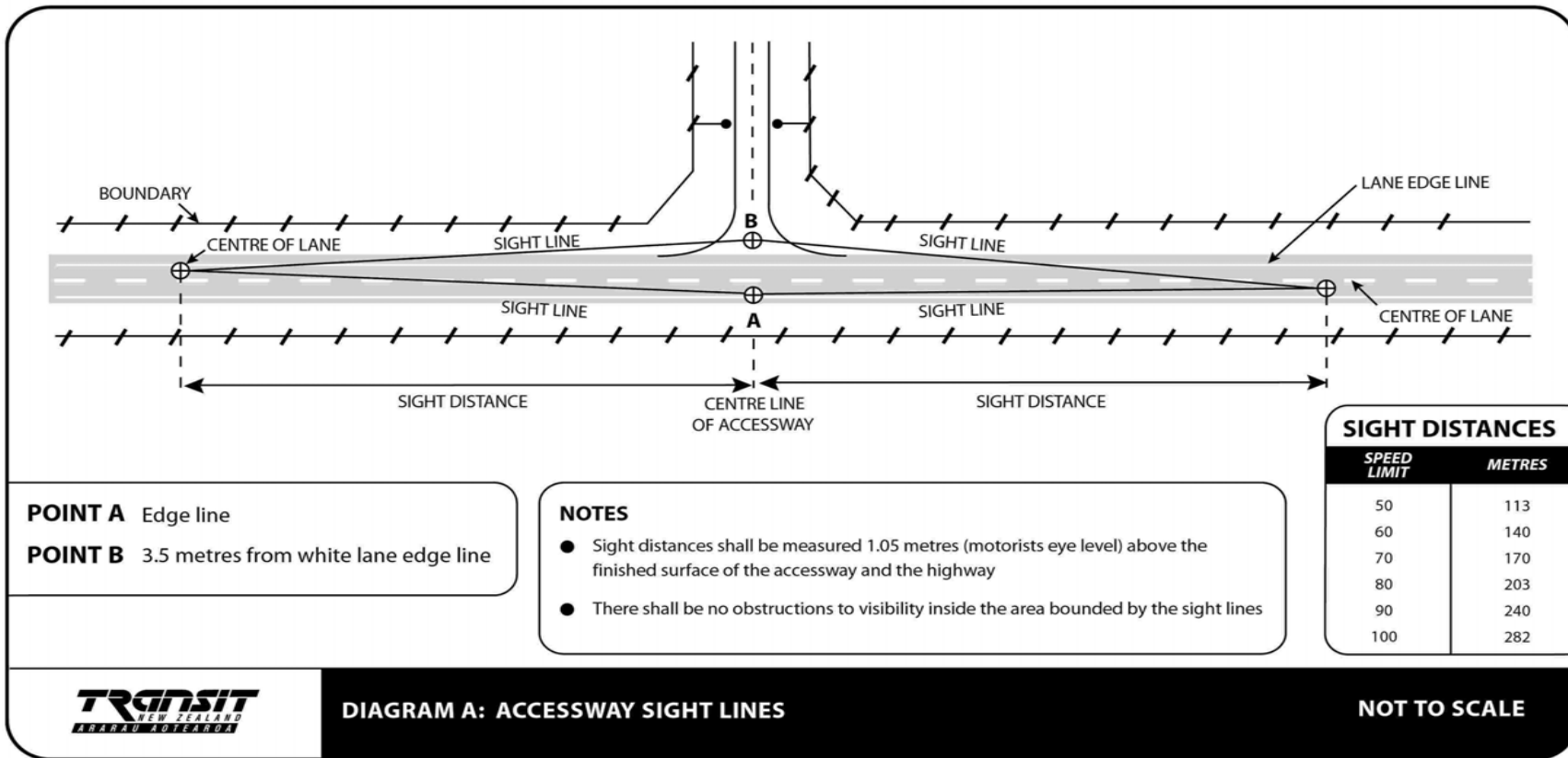
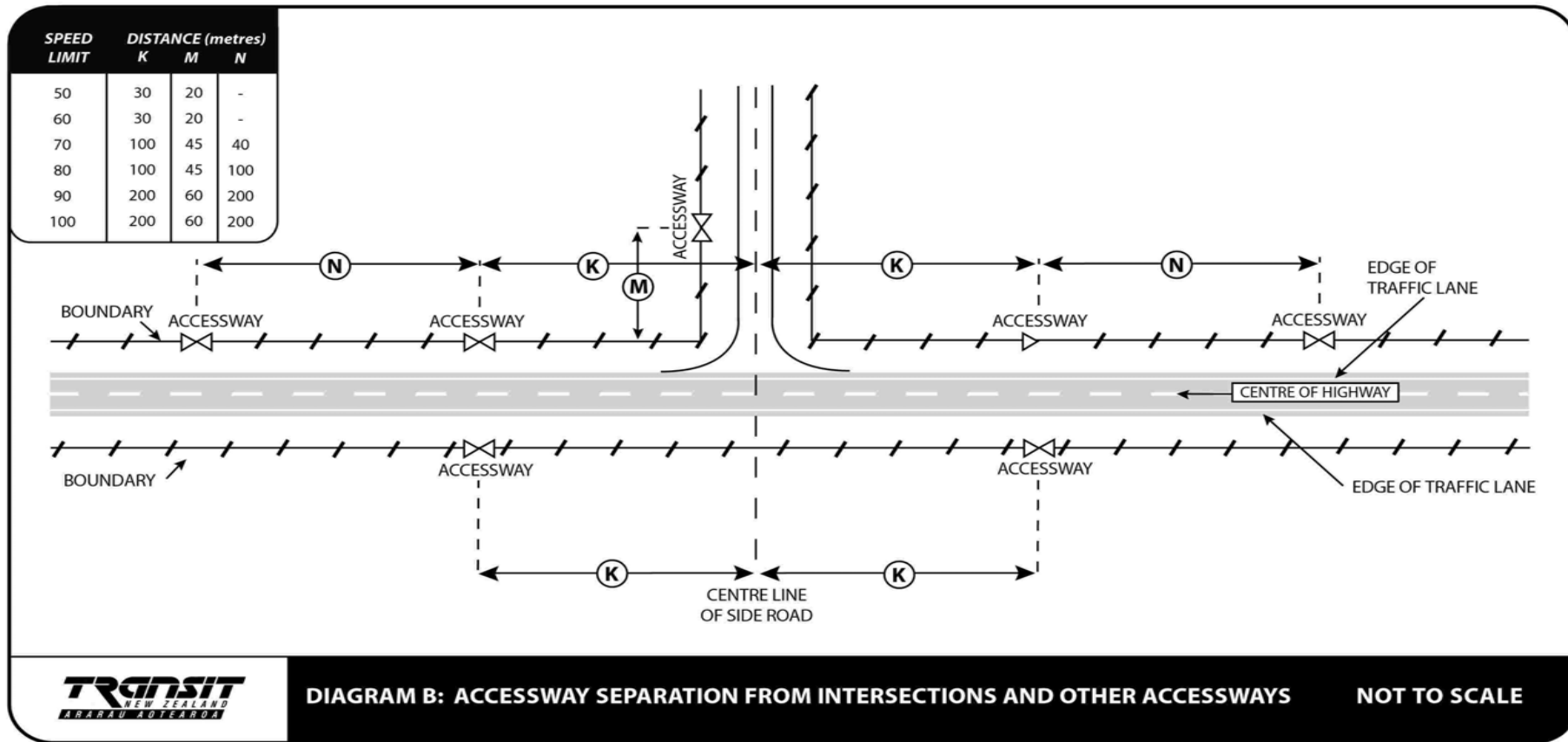


DIAGRAM B (Not to Scale)



12.8.3 Access – Kaikoura Peninsula Tourism Zone

- a. Prior to the operation of the hotel, clubhouse or visitor attraction complex, the primary vehicle access shall be formed to the standard set out in Table 12.8.3
- b. Prior to the operation of the golf course clubhouse, the secondary vehicle access shall be formed to the standard set out in Table 12.8.3
- c. Prior to construction within the Lifestyle Living Area shown on the Outline Development Plan for the Kaikoura Peninsula Tourism Zone in Appendix O, a vehicle access shall be formed to the standard set out in Table 12.8.3 and Performance Standard 13.12(8).

Table 12.8.3 Access Standard

Activity	Minimum Carriageway Width (m)	Parking	Turning Area	Surface Options	Drainage	Pavement Structure	Footpaths
Primary Vehicle Access	8.0	No	Yes	All weather surface	Yes	Specific Design	Yes
Secondary Vehicle Access	5.0	No	Yes	All weather surface	Yes	Specific Design	Yes
Service Lane	4.0	No	Yes, if there is a blind end	All weather surface	Yes	Specific Design	Optional

12.8.4 High Traffic Generating Activities

Any high traffic generating activity (i.e. an activity which generates more than 100 vehicle movements per day) is a Restricted Discretionary activity with Council’s discretion restricted to the following matters:

- i. effects on traffic, pedestrian and cyclist safety
- ii. effects of vehicle movements on amenity values of any residential units
- iii. effects of vehicle movements on any surrounding land uses
- iv. efficiency of roads and state highways

except that in the Kaikoura Peninsula Tourism Zone, this rule shall only apply to activities which, if established, would result in a combined total of more than 3800 movements per day within this zone, measured as a combined total for all access roads to the zone along Scarborough Street.

12.8.5 Intersections (refer also to Section 13, Subdivision)

a. Spacing Between Intersections

All intersections shall be designed and located such that the minimum spacing between successive intersections is not less than the minimum distance specified in Table 12.8.5(1).

Table 12.8.5(1) - Minimum Spacing Between Intersections

Legal Speed Limit for Road (km/hr)	Minimum Distance (m)
50	125
60	160
70	220
80	550

Legal Speed Limit for Road (km/hr)	Minimum Distance (m)
100	800

The distance shall be measured from the centre of one intersection to the centre of the succeeding intersection, parallel to the centreline of the road.

In Rural Zones where the legal speed limit for the road is 100km/hr, the above standard shall apply regardless of the side of the road on which the intersections are located.

On roads in other zones, the above standard shall apply to intersections on the same side of the road only.

b. Minimum Sight Distances From Intersections

Unobstructed sight distances, in accordance with the minimum sight distances specified in Table 12.8.5(2), shall be available from all intersections.

Table 12.8.5(2) - Minimum Sight Distances from Intersections

Legal Speed Limit for Road (km/hr)	Minimum Sight Distance (m)
50	85
60	115
70	140
80	170
90	210
100	250

All sight distance measurements shall be undertaken in accordance with the relevant diagram in Appendix K.

12.8.6 Service Stations

- a.** Service station pumps shall be located a minimum of 4.5m from the road boundary and 9m from the midpoint of any vehicle crossing at the road boundary. Pumps shall be located so that all vehicles are clear of the footpath and access when stopped for refuelling.
- b.** A minimum path width of 4.5m shall be provided for vehicles through any service station forecourt.
- c.** The minimum path and loading bay widths for tankers shall be 4.5m with a minimum inside turning radii of 7.5m.
- d.** Access for bulk fuel tankers to bulk tank filling positions shall be designed to ensure that tankers drive in and out in a forward direction, without the need for manoeuvring either on the site or adjacent roadways. Where this cannot be achieved access shall be designed so that bulk fuel tankers drive out in a forward direction.
- e.** Bulk fuel tankers shall not obstruct the footpath or obstruct the view of vehicles entering or leaving the site when discharging fuel.
- f.** Service station canopies shall be setback a minimum of 2m from the road boundary.

12.8.7 Road/Rail Level Crossings

All road/rail level crossings shall comply with the standards specified in Appendix K.

12.9 Kaikoura Airfield Protection (refer to diagram on following page)

No buildings, structures, masts, poles, fences, overhead telecommunications lines, overhead power lines, trees or other object may penetrate any surface described below and delineated on Planning Map 19.

i. Take-off Climb / Approach Surfaces

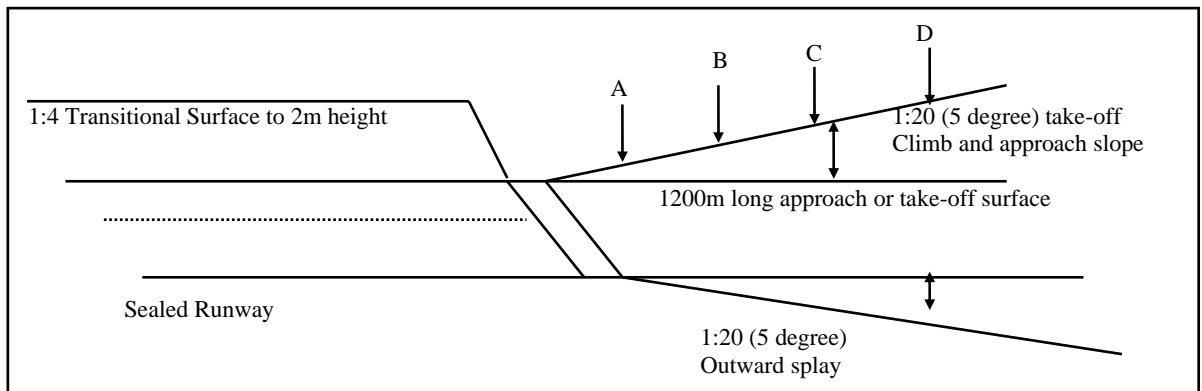
The take-off climb / approach surface:

- commences 5 metres out from the end of the sealed runway;
- extends for a distance of 1200 metres from the point of commencement;
- extends for the full width of the runways;
- rises at a gradient of 5 degrees (1 in 20);
- has sides which are splayed outwards from the surface at the rate of 5 degrees (1 in 20)

ii. Transitional Side Surface

The transitional side surface extends sideways and upwards from the eastern and western boundaries of the runways and from the take-off climb / approach surface, at a gradient of 25 degrees (1 in 4) until it reaches a height of 2 metres above the runway strip.

Kaikoura Airfield Protection Surface (not to scale)



- Key:**
- Point "A" - surface is 10m above runway and 200m from end of runway
 - Point "B" - surface is 25m above runway and 500m from end of runway
 - Point "C" - surface is 50m above runway and 1000m from end of runway
 - point "D" - surface is 60m above runway and 1200m from end of runway