21. VEHICLE ACCESS, PARKING, LOADING & ROADING

This section sets out the standards, conditions and requirements for vehicle access, parking, loading and roading.

21.1 CONDITIONS FOR VEHICLE ACCESS, PARKING, LOADING & ROADING

All activities shall comply with the following requirements (in addition to the rules and permitted activity conditions for each zone):

21.1.1 Vehicular and Pedestrian Accessways Design Standards

(a) Roading Hierarchy

(i) All proposed new roads shall connect with and be compatible with Council's roading hierarchy set out in Rule 21.1.8.

(ii) All public road carriageways shall provide for two lanes of moving traffic.

(b) Alignment of Roads

(i) The alignment of all roads shall be such that they can be negotiated during all weather conditions and comply with minimum sight distance standards for road safety. Horizontal and vertical alignments shall be designed in accordance with NZS 4404:2010.

(ii) Pedestrian access shall be provided between no-exit roads or where necessary to improve connectivity and be designed for user safety.

(c) Turning Circles for Cul-de-Sac

(i) All cul-de-sacs shall be provided with an area where light vehicles may turn without reversing manoeuvres onto “through” roads. Each cul-de-sac shall be of such design and dimension to enable larger vehicles to reverse from the cul-de-sac.

(d) Vehicle Access

(i) All vehicle access points shall be sited in accordance with Table 21-1, Table 21-2 and Rule 21.1.6.

(ii) No vehicle access shall have a gradient in excess of 1 in 8.

(e) Design Dimensions and Formation

(i) All accessways shall be formed as prescribed in Table 21-3.

(ii) Provision shall be made for the collection and disposal of all surface water run-off and containment of water-borne contaminates and the maintenance thereof.

(iii) Any vehicle access which crosses a water way shall incorporate culvert crossings appropriate to the volume of water in the water way and the traffic load on the access.

Note: Horizons Regional Council may have additional requirements relating to the quality and quantity of surface water discharged to any waterway, and to the type of activities permitted in waterways (e.g. culvert crossings).

21.1.2 Road Intersections (Other than State Highways)

(a) Minimum distances between intersections shall be as prescribed in Table 21-2.

(b) New road intersections shall have minimum sight distances for traffic on adjoining roads in accordance with NZS 4404:2010.

Note: Sight distances are measured at a height of 1.15 metres above ground level.

(c) The kerb line radius at intersections shall not be less than 6 metres. Intersections with arterial routes shall be specifically designed to provide for bus and heavy vehicle use.

(d) Any road intersection shall have a minimum permitted angle of 70 degrees.

Note: The preferred angle of road intersection is 90 degrees. Carriageway alignment may be offset from the road alignment to improve intersection angle. Roads intersecting at T-intersections should be offset by at least 40 metres, where practicable.

(e) Corner splays for road purposes shall be vested as road, and shall have minimum horizontal dimension(s) of 6 metres. Rights of way and private roads shall give due consideration to visibility splays especially if accessing onto footpaths and cycleways.

Table 21-1 Sight Distances for Accessways

Posted Road Speed (km/hr)	Minimum Sight Stopping Distance for Accessways (metres)
50	60
70	96
80	115
100	170

21.1.3 Vehicle Crossings to the State Highways

(a) Vehicle crossings on the State Highways shall be permitted provided:

(i) There is no alternative road where physical access can be achieved;

(ii) There is no more than one vehicle crossing (up to 6 metres in width) to each property;

(iii) The location of the vehicle crossing and its use shall comply with NZTA requirements and the Transit Planning Policy Manual, Appendix 5B Accessway standards and guidelines.

Note: Under Section 51(2) TNZA 1989, the written permission of NZTA must be obtained prior to commencement of any work on any State Highway.

21.1.4 Vehicle Crossings to all Arterial, Collector and Local Roads

(a) For sites in the Residential, Commercial, Industrial, Greenbelt Residential and Open Space Zones, which have frontage of 30 metres or less to an arterial, collector or local road, no more than one vehicle crossing place shall be permitted.

(b) For sites in the Residential, Commercial, Industrial, Greenbelt Residential and Open Space Zones which have frontage of more than 30 metres to an arterial, collector or local road, no more than two vehicle crossings shall be permitted, provided there is a minimum distance of 7.5 metres between those crossings unless Table 21-2 applies.

(c) For sites not provided for in Rules 21.1.4(a) or 21.1.4(b) vehicle crossing spacing shall be permitted and comply with Table 21-2.

Table 21-2 Intersections and Vehicle Crossing Spacing

85th Percentile speed* (Kms/hr)	**Separation Distances (m)**					
	Intersection Spacing		**Vehicle Crossing Spacing from Intersections**		**Vehicle Crossing Spacing**	
	Arterial & Collector	**Local**	**Arterial & Collector**	**Local**	**Arterial & Collector**	**Local**
100	800	500	200	40	200	105
80	800	400	100	40	100	70
70	400	220	40	30	55	40
60	200	80	50	20	-	-
50	150	60	20	12	-	-

*As measured. If road count measurements are not available, adopt posted speed.

Note: The above separation distances are based on the District's Roading Hierarchy and speed environment of the roads in the District.

21.1.5 Vehicle Crossing Separation from Railway Level Crossings

(a) New vehicle crossings shall be located a minimum of 30 metres from a railway level crossing.

21.1.6 Construction of Vehicle Crossings

(a) Where an activity or subdivision involves the creation of a vehicle crossing the formation and its use shall comply with Council's Subdivision and Development Principles and Requirements (Version: July 2014) Appendix One - Vehicle Crossings.

21.1.7 Formation Standards

(a) Standards for Pedestrian Facilities

(i) As part of any new road in Residential, Commercial, Industrial, Greenbelt Residential and Open Space Zones, pedestrian footpaths shall be provided. Pedestrian footpaths shall be surfaced over their full width with a permanent surfacing layer and designed to minimise any surface water flow across the footpath.

(ii) The longitudinal profile of footpaths shall be designed to avoid depressions from vehicular crossings where space permits.

(iii) Pram, mobility scooter and wheelchair crossings shall be provided in pedestrian footpaths at road intersections.

(iv) Footpath and ramp gradients shall not exceed 1 in 8 except where steps or other safety measures are provided.

(b) Standards for Roads & Accessways

(i) The consent holder or developer shall form and construct all roads to comply with NZS 4404 Land Development and Subdivision Infrastructure and Council's Subdivision and Development Principles and Requirements (Version: July 2014) shall prevail where those provisions alter NZS 4404:2010 unless otherwise stated.

(ii) The consent holder or developer shall form and construct all shared access ways, private ways, and private roads to comply with Table 21-3.

(iii) In addition to the requirements of Table 21-3, all shared accessways in the Greenbelt Residential zone shall be sealed from the road carriageway to a distance of at least 10 metres inside the property boundary.

(iv) In addition to the requirements of Table 21-3, passing bays are to be provided every 50 metres for all shared accessways in the Rural and Greenbelt Residential Zones that are over 150m long and have a formed width less than 5 metres

(v) All roads vested with Council shall be formed and sealed to an all-weather hard surface standard and shall incorporate provision for surface water drainage.

Table 21-3 Accessway Dimensions

Plan Zone	Number of Allotments/Site Served	Required Minimum Legal Width	Required Minimum Formation	Maximum Permitted Length
Rural	Up to 2	6m	2.5m formed and metalled to an all-weather standard	3km
	more than 2	8-10m	5m formed and metalled to an all-weather standard	3km
Residential	1	3m	2.5m formed and sealed to an all-weather standard	50m
	Up to 3	3.5m	3m formed and sealed to an all-weather standard	50m
	4 or more	5m	4m formed and sealed to an all-weather standard	50m
Greenbelt Residential (including Waitarere Rise Overlay and Foxton Beach North Overlay)	1	3m	2.5m formed and sealed to an all-weather standard	50m
	2 to 3	6m	4m formed and metalled to an all-weather standard	150m
	4 or more	8m	5m formed and metalled to an all-weather standard	150m
Commercial	3 or less	4.5m	4.5m formed and sealed to an all-weather standard	50m
	4 or more	7m	6m formed and sealed to an all-weather standard	100m
Industrial	1 or more	6m	5m formed and sealed to an all-weather standard where 2 or more allotments are served by the access	100m

(vi) In addition to the requirements of Table 21-3, all shared accessways in the Greenbelt Residential (Foxton Beach North Overlay) Zone shall be sealed from the road carriageway to a distance of at least 10 metres inside the property boundary.

(vii) In addition to the requirements of Table 21-3 passing bays are to be provided every 50 metres for all shared accessways in the Greenbelt Residential (Foxton Beach North Overlay) Zone that are over 150 metres long and have a formed width less than 5 metres.

(c) Standards for Rail Level Crossings

(i) Where any accessway crosses a rail level crossing, it shall be formed at the same level as the level crossing for 20 metres both sides of the level crossing and shall be approved by New Zealand Railways Corporation.

(d) Cycleways

(i) Cycle traffic shall be provided for within road carriageways. Road design shall ensure adequate and safe lane width and riding surfaces to incorporate both cycles and vehicles.

(ii) Where cycle traffic is not provided for within the road carriageways separate shared pedestrian/cycle paths, not forming part of a road carriageway, shall be provided with a minimum width of 1.8 metres.

21.1.8 Roading Hierarchy

The following definitions have been used in identifying the roading hierarchy.

Arterial – Road which forms part of the network of important district arterial routes that predominantly carry through traffic and the major traffic movements within and between settlements.

Collector – Locally preferred routes forming a link between the arterial roads and residential, commercial, industrial, open space and rural areas. Although having a major through traffic function, they also serve adjacent properties.

Local – Roads with the main function of providing access to properties and connectivity within a local area.

Arterial	**Collector**
Foxton Beach Road	Arapaepae Road (Not SH57)
Foxton-Shannon Road	Bartholomew Road
Hokio Beach Road (Levin) (from State Highway 1 to Moutere Road)	Bath Street
Ladys Mile	Cambridge Street
Mangahao Road to Blackwood Drive	Gladstone Road from Tararua Road (North)
Queen Street (Levin)	Hickford Road
Robinson Street	Himatangi Block Road
Roslyn Road (Levin)	Kawiu Road
Union Street	Koputaroa Road
Waitarere Beach Road (Rural)	Liverpool Street
	MacArthur Street
	Main Street, Foxton
	Mako Mako Road

Arterial	Collector
	Manakau South Road
	McKenzie Street
	Motuiti Road
	Muhunoa East Road to Arapaepae Road
	Queen Street (East) (Rural)
	Queenwood Road
	Salisbury Street
	Seabury Avenue
	South Manakau Road
	Tane Road
	Tararua Road
	Tavistock Road
	Tiro Tiro Road
	Victoria Street, Foxton
	Waikawa Beach Road
	Waitohu Valley Road
	Weraroa Road
	Wylie Road

Local Roads

All other roads.

21.1.9 Vehicle Parking Standards

(a) Parking for the Disabled

(i) All commercial, community, and/or industrial activities are required to provide the greater of one (1) onsite mobility carpark or the number of mobility carparks required by other legislation (notably the Disabled Persons Community Welfare Act 1975 and the Building Code), except if the activity is located in the Levin, Foxton and Shannon Town Centre or Pedestrian Overlays Areas.

(b) Vehicle Access and Manoeuvring Space to be provided

Any vehicle parking spaces shall be provided with practical vehicular access from a public road. Sufficient manoeuvring space shall be provided to enable vehicles to enter and leave the parking area in a forward direction in the following situations:

(i) Where the site gains access from a State Highway; or

(ii) The vehicle parking area contains more than three (3) parking spaces; or

(iii) Any of the parking spaces are located further than 30 metres from the road; or

(iv) Where the site is a rear site with access by way of an access leg or driveway.

(c) Vehicle Parking Spaces and Access Aisles to Remain Clear

(i) The space that is dedicated on any site for vehicle parking and access shall remain unobstructed by other activities and shall not be diminished by the storage of goods or erection of any structure.

(d) Design of Vehicle Parking Spaces

(i) Any parking spaces shall be of usable shape and have a minimum dimension to accommodate a 90 percentile car tracking curve with manoeuvring space in accordance with AS/NZS 2890.1:2004 Parking facilities-Off street car parking and AS/NZS 2890.6:2009 for off street parking for people with disabilities.

(e) Standard of Formation for Vehicle Parking Spaces

(i) In the Residential, Commercial, Industrial, Greenbelt Residential and Open Space Zones, all vehicle parking spaces and access aisles shall be formed, metalled, and surfaced to an all-weather hard surface standard and shall be provided with surface water drainage and containment of water borne contaminants which shall be regularly maintained by the owner in accordance with the requirements of Rule 24.2.4.

(ii) In the Rural Zone, all vehicle parking spaces and access aisles shall be formed and metalled to an all-weather standard and shall be provided with surface water drainage and containment of water borne contaminants which shall be regularly maintained by the owner in accordance with the requirements of Rule 24.2.4.

(iii) All parking areas that are available to the public shall be provided with night lighting.

(iv) Any parking area which comprises five (5) or more parking spaces and which adjoins a residential zone except where the parking area is associated with Council recreational areas or within road reserve shall be screened along the

boundary adjoining that Residential Zone by planting or a solid screen fence not less than 1.5 metres in height.

(v) All parking areas, short term stopping areas and access thereto shall have, adjacent to their boundary with any road and footpath, a permanent barrier or raised kerb to prevent vehicles entering or leaving the site at any point other than the approved vehicle access crossing point. "Trip" hazards are not to be created.

21.1.10 Vehicle Loading Conditions

(a) Obligation to Provide Loading Facilities

(i) Every activity shall make provision for the off-street loading and unloading of goods onto or from delivery vehicles associated with that activity.

(ii) Where any activity is changed (and or upgraded) or any building erected or altered, provision for loading or unloading facilities within the site shall be sufficient to serve the operations or activities undertaken on the site.

(b) Vehicle Access to be Provided

Each required loading space shall be provided with practical vehicular access from a public road. Loading spaces and access aisles are to remain clear. The space that is dedicated on any site for loading and unloading of vehicles shall remain unobstructed by other activities and shall not be diminished by the storage of goods or erection of any structure. Sufficient manoeuvring space shall be provided to enable vehicles to enter and leave the site in a forward direction in the following situations:

(i) Where the site gains access from a State Highway; or

(ii) The vehicle parking area contains more than three (3) parking spaces; or

(iii) Any of the parking spaces is located further than 30 metres from the road; or

(iv) Where the site is a rear site with access by way of an access leg or driveway onto an Arterial or Collector road.

(c) Loading Spaces and Access Aisles to Remain Clear

(i) The space that is dedicated on any site for loading and unloading of vehicles shall remain unobstructed by other activities and shall not be diminished by the storage of goods or erection of any structure.

(d) Design of Loading Spaces

(i) Each required loading space shall be of usable shape and have a minimum length of 8.5 metres, minimum width of 3.5 metres, and minimum clear height of 4.5 metres. Sufficient manoeuvring space shall be provided to accommodate an 8 metre rigid two-axle truck using a 12.5 metre radius tracking curve as per NZTA's RTS 18, New Zealand on-road tracking curves for heavy motor vehicles. Additional information regarding design can be obtained from AS 2890.2:2002 Parking Facilities-Off street commercial vehicle facilities. On industrial and commercial sites where articulated

vehicles are likely to be used, the layout shall be designed to accommodate such vehicles.

Note: If insufficient design causes conflict in traffic movements then restrictions may be placed on the type of heavy motor vehicle allowed to load or unload on the site.

(e) Conditions of Construction of Loading Spaces

(i) All required loading spaces and access aisles required by this District Plan shall be formed and surfaced to an all-weather hard surface standard and shall be provided with surface water drainage and containment of water-borne contaminants that shall be regularly maintained by the Lot owner in accordance with the requirements of Rule 24.2.4, with the exception of rural loading spaces not imposing on road reserve which can be metalled to an all-weather hard surface standard.

(f) Farm Loading Ramps

(i) Farm loading ramps shall be designed so that vehicles using the ramp do not have to reverse onto or off an Arterial or Collector Route, or park on any part of the carriageway of any road while loading or unloading.

(ii) The minimum sight distance from any farm loading ramp which is designed so that vehicles using it have to park on any part of a non-arterial or non-collector route shall be 115 metres. If this sight distance is not available, the landowner shall provide advance warning to approaching traffic that the loading or unloading is taking place.

21.1.11 Railway Level Crossing Requirements

(a) Activities and Subdivision near Existing Level Crossings

(i) Maintaining the sight triangle requirements set out in this rule is important to maintain clear visibility around level crossings to reduce the risk of collisions.

(ii) The requirements set out in (b) below apply only to level crossings without alarms or barriers arms, while the requirements set out in (c) below apply to all level crossings.

(iii) All the requirements set out in this rule apply during both the construction and operation stages of any land use activities or subdivision.

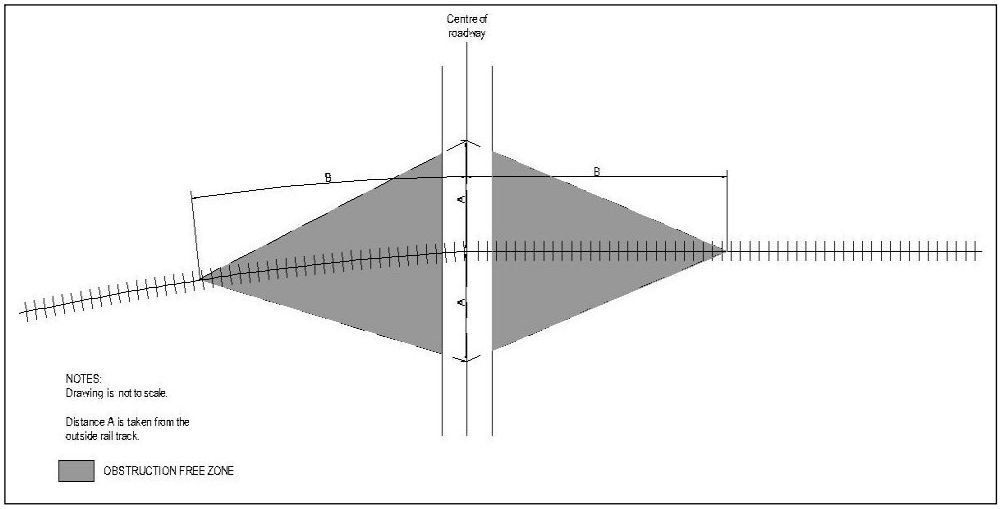
(b) Approach Sight Triangles at Level Crossings without Alarms and/or Barrier Arms

(i) A road vehicle driver when approaching a level crossing with signs and without alarms or barrier arms needs to be able to either:

- see a train and stop before the crossing; or
- to continue at the approach speed and cross the level crossing safely.

(ii) No new visual obstructions are permitted within the approach sight triangles (shaded areas) shown diagrammatically in Diagram 1, irrespective of whether any visual obstructions already exist. The required sight triangles to achieve this are 30 metres from the outside rail (approach distance along road) and 320 metres along the railway track.

Diagram 1: Approach Sight Triangles For Level Crossings



(c) Restart Sight Triangles for all Level Crossings

A road vehicle driver when stopped at the level crossing needs to be able to see far enough along the railway to be able to start off, cross and clear the level crossing safely before the arrival of any previously unseen train.

(i) No new visual obstructions are permitted within the restart sight triangles (shaded areas), shown diagrammatically in Diagram 2, irrespective of whether any visual obstructions already exist. The restart sight triangle is measured 5 m back from the outside rail and distance C is specified in the table below depending on the type of control.

Diagram 2: Restart Sight Triangles for Level Crossings

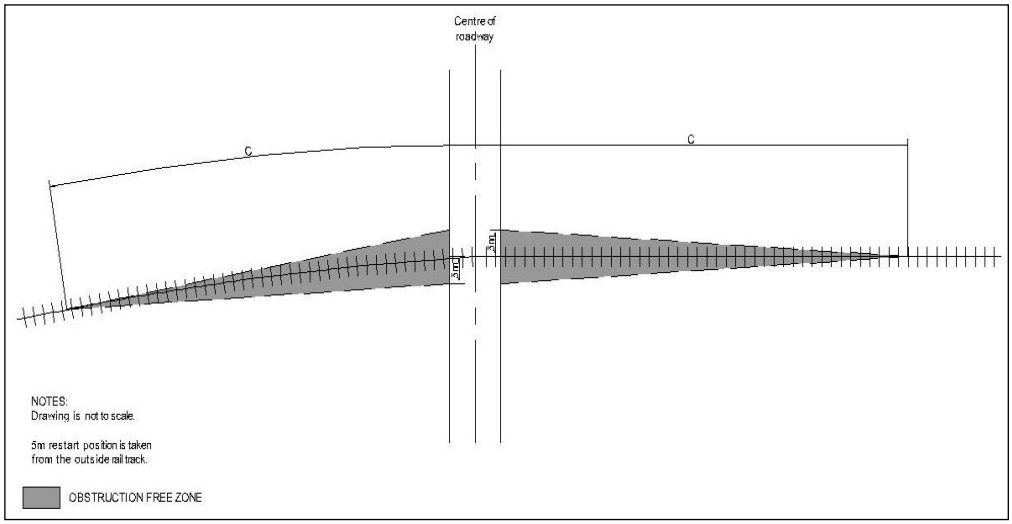


Table 21-5 Required Restart Sight Distances for Level Crossings

Required approach visibility along tracks C (m)		
Signs only	**Alarms only**	**Alarms and boom gates**
677 m	677 m	60 m

Notes:

1. The dimensions in Diagrams 1 and 2 apply to a single set of rail tracks only. For each additional set of tracks, add 25 metres to the along-track distance in Diagram 1, and 50 metres to the along-track distance in Diagram 2.

2. All figures are based on the sighting distance formula used in NZTA Traffic Control Devices Manual 2008, Part 9 Level Crossings. The formulae in this document are performance based. However, for the purpose of this rule, the parameters are fixed to enable easy application. The parameters used are:

   - A train speed of 110 kph and a single set of rail tracks
   - A vehicle approach speed of 20 kph
   - A fall of 8 % on the approach to the level crossing and a rise of 8 % at the level crossing
   - 25 metre design truck
   - 90° angle between road and rail.

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