Appendix C: Level Of Services

C.1 Operational Levels of Service

Responsiveness

Item	Level of Service	Road	Operational Performance Measures
Responding to faults and defects in the network	Faults in the roading network are repaired promptly.	All roads	• More than 90% of faults are repaired within the specified time.

Sealed Road Pavements

Item	Level of Service	Road	Operational Performance Measures
Potholes The sealed road network be predominately free of potholes	The sealed road network shall be predominately free of potholes	Strategic/ Arterial	There are no potholes
		Collector	 There are no potholes exceeding 30mm in depth There is no more than 1 pothole per centreline km less than 120mm in diameter There are no potholes greater than 120mm in diameter
		Local	 There are no potholes exceeding 70mm in depth There is no more than 1 pothole per centre line km sized less than 200mm diameter There are no potholes greater than 200mm in diameter
Surface Defects	The sealed road network shall be predominately free of surface defects such as cracking that may led to further pavement failure, or flushed surfaces that may adversely affect skid resistance or cause a nuisance with 'sticky' bitumen.	Strategic/ Arterial	• There is no more than 1 surface defect per lane km
		Collector	• There are no more than 3 surface defects per lane km within the traffic or cycle lanes, and no more than 8 per centre line km
		Local	• There are no more than 5 surface defects per lane km within the traffic lanes, and no more than 12 per centre line km
Structural Defects	The sealed road network shall be predominately free of structural defects such as heaves and shoves that may led to further pavement failure, vibration complaints and road safety issues.	Strategic/ Arterial	 There is no more than 1 pavement failure per lane km There are no reported vibration complaints that have not been investigated and appropriate treatment programmed.
		Collector	 There are no more than 2 pavement failures per lane km There are no reported vibration complaints that have not been investigated and appropriate treatment programmed

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		Local	 There are no more than 4 pavement failures per lane km There are no reported vibration complaints that have not been investigated and appropriate treatment programmed
Minor Surface deformation	The sealed road network shall be predominately free of minor surface deformation defects, including service boxes, which cause water to pond on the road surface that may led to vehicles aquaplaning, or cause an uncomfortable ride and vibration complaints. (Minor surface deformation is defined as an area that holds water to a depth of 15 mm or greater, when surrounding area is drying or a hump or hollow that deviates more than 15 mm from a two metre straight edge within a vehicle lane or cycle lane, or locations causing a justified vibration complaint.)	Strategic/ Arterial	 There is no more than 1 surface deformation per lane kilometre. There are no reported vibration complaints that have not been investigated and appropriate treatment programmed. Surface Covers within vehicle wheel tracks and cycle-ways are within ± 10mm of the adjacent finished surface level All other surface covers are within ± 15mm of the adjacent finished surface level.
		Collector	 There are no more than 3 surface deformations per lane kilometre within the traffic or cycle lane, and no more than 8 per centreline kilometre. There are no reported vibration complaints that have not been investigated and appropriate treatment programmed. Surface Covers within vehicle wheel tracks and cycle-ways are within ± 10mm of the adjacent finished surface level All other surface covers are within ± 15mm of the adjacent finished surface level.
		Local	 There are no more than 5 surface deformations per lane kilometre within the traffic or cycle lane, and no more than 12 per centreline kilometre. There are no reported vibration complaints that have not been investigated and appropriate treatment programmed. Surface Covers within vehicle wheel tracks and cycle-ways are within ± 10mm of the adjacent finished surface level All other surface covers are within ± 15mm of the adjacent finished surface level
Seal Edge Break	The sealed road network shall be predominately free of edge break that may lead to vehicles losing control if they drive along the seal edge, or leads to water ponding along the seal edge causing further pavement failure.	Strategic/ Arterial	There is no edge break
		Collector/ Local	• There is no edge break encroaching into the traffic lane or greater than 50 mm in depth.
Unsealed Shoulders	Unsealed shoulders shall be predominately level with the edge of seal so as to prevent water ponding along the seal edge and to provide support for the seal edge and prevent edge break and shall not	Strategic/ Arterial	 There is no more than 75 m of 30 mm deep rutting in a one kilometre length and none greater than 50 mm depth The maximum length of high shoulder that prevents water readily draining from the sealed surface is less than 75 m in any continuous kilometre section Aggregate size for shoulder granular material is less than 20 mm Depth of loose aggregate for shoulder granular material is

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	contain depressions, noies or		less than 30 mm.
	rutting that may lead to		
	vehicles losing control if they		
	drive along the seal edge.		
		Collector	 There is no more than 150 m of 30 mm deep rutting in a one kilometre length and none greater than 50 mm depth The maximum length of high shoulder that prevents water readily draining from and ponding on the sealed surface is less than 150 m in any continuous kilometre section Aggregate size for shoulder granular material is less than 20 mm Depth of loose aggregate for shoulder granular material is less than 30 mm
		Local	 There is no more than 250 m of 30 mm deep rutting in a one kilometre length and none greater than 50 mm depth The maximum length of high shoulder that prevents water readily draining from and ponding on the sealed surface is less than 150 m in any continuous kilometre section Aggregate size for shoulder granular material is less than 20 mm Depth of loose aggregate for shoulder granular material is less than 30 mm
Detritus	The road surface shall be predominately clear of loose material, spillages and the like, especially at intersections, that could cause vehicles to lose traction.	Strategic/ Arterial	 There is no road surface with greater than 200 grams per m2 of detritus per continuous kilometre section. There is no build up of detritus into windrows at intersections.
		Collector/ Local	 There is no road surface with greater than 400 grams per m2 of detritus per continuous kilometre section. There is no build up of detritus into windrows at intersections.

Unsealed Pavements

Item	Level of Service	Road	Operational Performance Measures
Surface defects	The unsealed road network shall be predominately free of defects so as to provide a safe and comfortable ride at speeds of 70 – 80km/h, where that speed is safe, in a normal light 2 wheel drive vehicle.	All roads	 Grading is carried out at the specified frequency. The grading frequency is modified to suit changing conditions to ensure the levels of service are met. There is no rutting greater than 70 mm deep There are no corrugations that exceed 45 mm from crest to trough on 80% of any section of unsealed road. There are no corrugations that exceed 70mm in depth. There are no potholes that exceed 45 mm in depth on 80% of any section of unsealed road. There are no potholes that exceed 70mm in depth.
Surface and shape	The surface and shape of unsealed roads shall be such that a uniform running surface is provided and water readily drains from the road surface.	All roads	 Target cross falls of between 4% and 6% on straights are maintained and cross fall on bends remain constant across the width of the road, with cross fall on transition sections applied evenly on 80% of any section of unsealed road. Super elevation of curves is maintained for the full width of the carriageway up to a maximum cross fall of 10%. There are no areas on the running surface, feather edges, tapers and unsurfaced water channels where water ponds on 80% of any section of unsealed road. There is no ponding greater than 50 mm in depth in any location over 80% of any section of unsealed road. The depth of loose maintenance gravel on the running surface does not exceed 30 mm loose depth on 80% of any section of unsealed road. The existing widths of the running surface, feather edges, tapers and unsurfaced water channels are maintained.

	 There is a smooth transition from sealed to unsealed or unsealed to sealed and that the sealed road is kept free of wearing course. The transition is at least 20 m long. There is no clay or exposed subgrade patches exceeding 3 m² visible. There shall be no more than 2 clay or exposed subgrade patches per 200 centreline meters sized between 0.5 m² and 3 m² to a depth of 100 mm.
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Stormwater Channels and Structures (including kerb and channel)

Item	Level of Service	Road	Operational Performance Measures
Stormwater Channels and structures	All stormwater channels and structures shall be kept clean and clear of debris, silt or obstructions that will inhibit the flow of water and allow free drainage from the road formation to the water channels and along the water channels to an outfall at all times.	All roads	 After rainfall, no ponding in lined stormwater channels is greater than 50 mm deep Stormwater channels and structures have 90% of the waterway area clear of debris throughout the length of the channel or structure. All under road culverts are marked at both ends by a marker peg.
Urban Kerb and Channel, sumps and pipes	All urban kerb and channel, sumps and pipes shall function properly at all times and there shall be no broken stormwater kerb entries. All urban streets with kerb and channel shall be cleaned using a mechanical sweeper, from the kerb face to 2m wide parallel to the edge of the seal. All traffic and pedestrian islands shall be kept clean and tidy	All roads	 Adjacent to a path the kerb has no more than 1 broken stormwater kerb entry per 100m of kerb length; or where the kerb is adjacent to the berm, there is no more than 3 broken stormwater kerb entries per 100m of kerb length. This includes the broken concrete surround where the kerb entry adaptor may not be damaged. 5 year average in RAMM rated defects, broken and uphill grade, for kerb and flat channel < 2.5%. Urban kerb and channel is swept at the specified frequency. There is no visible material within the area specified following mechanical sweeping. The concrete channel and the areas under bridged vehicle entrances, around sumps, the sides of adjacent roads are free of litter, debris and detritus following cleaning. Sumps are cleaned at a frequency to ensure they function properly at all times and to ensure detritus at the bottom of the sump does not exceed 50mm in depth or be closer than 50mm to the outlet pipe invert, whichever is the lesser. During rain or when rain is expected all sumps are clear of any litter or debris which could cause surface flooding from blockage. During autumn all fallen leaves from the channels of affected streets are removed every Monday, Wednesday and Friday. Streets known to be affected by leaves are listed in the Appendices. The Contractor must verify which street will require this additional cleaning.

Street Cleaning and Litter Control including Bus Shelters

Item	Level of Service	Road	Operational Performance Measures
Central Business Areas and main entrance roads	The roads, footpaths, bollards, hand rails, lighting poles and other street furniture in the Central Business Areas (CBA) of Rangiora and Kaiapoi and on the 'main' entrance roads to Rangiora and Kaiapoi shall be kept clean and tidy and free of	All roads	 Sweeping, cleaning and litter control is carried out at the specified frequency. The concrete channel and the areas under bridged vehicle entrances, around sumps, the sides of adjacent roads, and the footpaths within the Central Business Areas are free of litter, debris and detritus following cleaning. There is no visible material within the area specified following cleaning. The footpaths in the CBA's are scrubbed using specialist scrubbing equipment at the specified frequency and shall

	litter at all times.		 attain the cleanliness equal to the surface of a new paver or asphalt surface. The footpaths in the CBA's are kept clear of litter, stains, vomit, cigarette butts, graffiti, chewing gum and moss Surfaces in the CBA's are clean and clear of all stains, vomit, cigarette butts, graffiti, chewing gum, litter, debris and detritus by 8am each cleaning day.
Bus Shelters	Bus shelters shall be kept clean and tidy at all times	All roads	 Bus shelters shall have no graffiti, debris, detritus, litter or damage visible. Shelters are swept as required and washed on a weekly basis.

Traffic Services including signs, bollards, sight rails, fences and all maker posts

Item	Level of Service	Road	Operational Performance Measures
All traffic signs, bollards, sight rails, fences and marker posts	All traffic signs, bollards, sight rails, fences and all marker posts shall be effective and visible to ensure the road is safe at all times.	All roads	 At least 95% of traffic signs, bollards, sight rails, fences and all marker posts shall be clean, vertical and facing the correct direction at any one time. There are no more than two consecutive edge marker posts missing or ineffective at any location at any time.
			Regulatory, Warning, Advisory Speed Signs and Chevron Markers
			 There is not more than 1 missing or damaged or dirty or discoloured sign within any continuous 5km section. There is not more than 1 sign not visible at night from a distance of 160m, with head lights on dipped beam, and/or has a reflectivity of 50% of its original reflectivity within any continuous 5km section. There is not more than 1 incorrectly aligned sign within any 5km section. Where two regulatory signs are positioned on opposite sides of a road and facing the same direction to indicate the same regulatory traffic requirement at least one of these sizes much be present at all times.
			Information Signs
			 There are not more than 5 missing or damaged or dirty or discoloured sign within any continuous 5km section. There are not more than 5 signs not visible at night from a distance of 160m, with head lights on dipped beam, and/or has a reflectivity of 50% of its original reflectivity within any continuous 5km section. There is not more than 10 incorrectly aligned signs within
			any 5km section. Unauthorised Signs
			 Record during routine inspections and remove as agreed with the Service Manager.
			Seasonal Signs
			• All seasonal signs are maintained for the period and in the positions indicated.
			Frangible Posts
			 All frangible posts are to be checked, including bolt torque on slip based posts on a six monthly basis. All damaged frangible posts are to be reported within 24 hours.

Footpaths and Off Road Cycleways

Item	Level of Service	Road	Operational Performance Measures
Footpaths and pedestrian crossing facilities	Footpaths and pedestrian crossing facilities shall be safe, comfortable and convenient for all users	All roads	 There are no trip hazards. A trip hazard is defined as a discontinuous surface more than 10mm deep. There are no potholes or areas where the seal has broken away. There is no area that holds water to a depth of 10 mm or greater, when surrounding area is drying or a hump or hollow that deviates more than 10 mm from a two metre straight edge
Off Road Cycle ways	Off road cycle ways shall be safe, comfortable and convenient for cyclists as well as pedestrians	All roads	 There are no trip hazards. A trip hazard is defined as a discontinuous surface more than 10mm deep. There are no potholes or areas where the seal has broken away. There is no area that holds water to a depth of 15 mm or greater, when surrounding area is drying or a hump or hollow that deviates more than 15 mm from a two metre straight edge.

Vegetation Control including Roadside Mowing

Item	Level of Service	Road	Operational Performance Measures
Vegetation control	Roadside areas, including kerbs and channels and traffic islands shall be kept free of vegetation to ensure adequate visibility, general safety, a tidy appearance, adequate drainage, the free flow of water in channels and the elimination of a fire hazard Sight Visibility	All roads	 Protected Indigenous Vegetation There is no damage to protected indigenous vegetation. Sight Visibility Sufficient indivisibility is provided and is defined as: a sightline clear of vegetation between 600mm and 2.4m higher than the carriageway surface for a minimum of 60m where speed limits are 50km/h and for 120m where speed limits are higher. For reference see Transit New Zealand Manual of Traffic Signs and Markers Part 1: Traffic Signs.
	Vegetation is controlled to ensure sufficient indivisibility between vehicles, cyclists and pedestrians to allow drivers to stop safely, if need be.		 Vegetation Free Envelope No more than 10 linear metres per continuous kilometre are inside the envelope by more than 500 mm.
			Signs, markers, barriers, sight rails, water channels, ditches, drains
			• No vegetation in spray areas is over 100 mm in height.
			Road carriageway, kerbs, traffic islands
			• Are weed free. This is achieved when weed growth, dead or alive, is not distinguishable when viewed from 10 metres.
			Gravel shoulders and gritted footpaths
			• There is no more than 1% of weed cover in any 10m2 but no more than 5 weeds between 50mm and 100mm in any 100m length and no weeds over 100mm.

		Urban	
		 Sealed surfaces is weed free. This is achieved when v growth, dead or alive, is not distinguishable from set surfaces when viewed from 10 metres. Cobbled/paved surfaces are weed free. This is achi when weed growth, dead or alive, is not distinguish from cobbled or paved surfaces when viewed from metres. Cobbled surfaces within the carriageway have no n than 200 cm2 of weed cover in any 10m2 (not inclumoss and lichen) but no weeds are to exceed 100mm h There are no weeds encroaching over the kerb stappearing in construction cracks between kerbs, paven edge strip, barrier walls, the pavement itself, or any oconcrete structure. 	weed ealed able n 10 more iding igh. face, nent, other
		 Within a 100m strip of roadside there shall be: No more than 5 weeds with live growth greater than 50 in height. No live weed cover with more than 100mm spread. No live or dead weed growth greater than 100mm in he or spread 	0mm eight
Roadside mowing	The regular mowing of roadsides in defined areas to ensure adequate visibility, tidy appearance and general safety.	 The grass height in the area specified to be mow maintained such that no more than 10% of any 1 m outside the grass height tolerance as stated below. Orban - Grass height 50-100 mm. Ostrategic/Arterial - Grass height 50-100 mm. Collector / Local - Grass height 100-300 mm 	n is n2 is n.

Road Markings including RRPMs

Item	Level of Service	Road	Operational Performance Measures
Road Marking	Road marking and RRPM's shall clearly delineate the road to ensure traffic can safely navigate along the roads.	All roads	 All markings meet the P/20 Standard for Road Markings The Retro reflectivity is the key property which will define the performance. The minimum standard of 100mcd.m-2.lux-1 measured with a Microlux 12 Reflectometer (or equivalent value using other reflectometers) shall be adopted for white and yellow reflectorised markings. Tests for daytime visibility and skid resistance as specified in TNZ P/20 will also form the compliance criteria. A flat sampling level of 5% of the networks marking is required, this supersedes clause 6.5.3 of NZTA P/20 There are no more than two consecutive RRPM's missing or ineffective at any location at any time.

Bridges and Structures

Item	Level of Service	Road	Operational Performance Measures
Bridges and structures	Bridges and structures shall maintain their function, structural integrity and appearance Cattle stops shall allow safe passage of vehicles.	All roads	 All components are free of moss, vegetation, detritus, etc and all visible graffiti Bridge deck, joints, bearing pads, holding down bolts, tops of abutments and piers, truss members and cable trays, guardrails and handrails are clear of dirt, stones and vegetation Bridge end markers, handrails, guardrails and associated fixing plates and bolts are clean of dust/dirt build up and clear of vegetation All drainage system features comply with the performance markers.

	• There is no damage associated with ineffective or
	inoperable drainage systems
	• All drainage paths on the bridge and 20m beyond each end,
	are maintained so water does not sit on the bridge deck or
	enter on to the bridge
	• All bridge deck joints are maintained in a serviceable
	condition
	• All bearings and linkage bolts are maintained in a
	serviceable condition including lubrication if required
	• All Timber deck members including running boards and
	deck planks are sound, free of algae and moss growth,
	firmly fixed and free of projections
	• Timber kerbs, running decks and deck slabs are replaced to
	a length not exceeding 10 linear metres of the total bridge
	deck.
	• All vegetation growing around the bridge structure is kept
	cut back for 2 metres from any bridge member
	• Build up of debris, including scrub and trees in the
	waterway immediately under the bridge and around piers
	and abutment piles is cleared
	• Small repairs to gabion structures that can be repaired by
	lacing is carried out
	• All guard rails and wire rope barriers are maintained in a
	serviceable condition.

Ice and Snow Cleaning

Item	Level of Service	Road	Operational Performance Measures
Ice and Snow Clearing	Snow and ice on roads shall be managed to minimise traffic hazards and minimise road closures.	All roads	 Undertake patrols of the network and identify when ice is present and take the necessary action to make the roads safe when ice is present. Resources are readily available for ice gritting and snow clearing response Ice warning signs are open when ice is present Ice warning signs are closed when ice is not present Roads are gritted when ice is present Excess material is removed as soon as the road is deemed to be safe without the material. Snow is cleared from roads as soon as practical Roads are cleared of snow in the following priority order unless otherwise directed To and for emergency services and for critical utility services access Strategic and arterial roads Collector roads Urban local roads Service requests are responded to promptly The Police, AA, other authorities, the public via the media and directly parties are informed of road conditions as required.

<u>Fords</u>

Item	Level of Service	Road	Operational Performance Measures
Fords	Fords are trafficable when it is safe for them to be open. Fords are closed when they are unsafe for a standard 2 wheel drive vehicle to negotiate. Fords are reopened as soon as possible once it is safe to do	All roads	 Fords are closed when it is unsafe for a 2 wheel drive vehicle to negotiate them. Fords, except Burnt Hill Road and Two Chain Road fords, are reopened within 72 hours of the water level dropping to a safe trafficable level. Burnt Hill Road and Two Chain Road fords are reopened within 24 hours of the water level dropping to a safe trafficable level. All ford closures are adequately signed and barricaded.

SO.		•	The Customer Service Centre is advised when a ford is closed and when it is opened again.
Burnt Hill Road a Road fords are hi fords.	and two Chain gh priority		

Street lighting

Item	Level of Service	Road	Operational Performance Measures
Street lighting	Lighting is provided to enhance safety for all road users, and to aid navigation and security	All roads	 All Lanterns operating 100% of lighting installations and upgrade should comply with NZ Standards

Emergency Work

Item	Level of Service	Road	Operational Performance Measures
Emergency Work	The contractor has adequate processes, resources, and communications in preparation to respond and the contractor responds to all emergency situations events affecting the road 24 hours per day every day.	All roads	 Processes, resources and communication systems are prepared and ready to respond to any emergency 24hrs per day every day. Emergency calls and works are attended to immediately and the road is made safe. Mobilisation occurs as soon as possible and within 0.5hr of notification and is on site as soon as possible and within 1.5hr of notification. Road users are protected by making the roads and adjacent area safe to all road users.
			 Emergency patrols are undertaken when it is likely that an emergency situation may arise, or when advised of an emergency by the Customer Service Centre or After Hours Service Repair work is undertaken to re-establish safe passage for all normal road users to at least single lane status Large dead animals and other material is removed from the road reserve areas that is offensive, dangerous or a nuisance under the Health Act. Sump gratings and other inlet structures are cleared during time of flooding. The carriageway is cleared of petrol, diesel oil or other chemicals and the skid resistance of the road surface is reinstated. Roads are closed by providing all signage when required due to flooding, snow, wind, major crashes and major spillages. Barricading, signposting is provided or the site is made safe by any other manner when there is a hazard which may be a danger to the public.

C.2 Service Standard

Category	Service Standard	ervice Standard							
	Urban			Rural Sealed	Rural Sealed				
	Business and Residential zones			Sealed roads in all other zones	Unsealed roads in all other zones				
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
Carriageway	 Sealed road approx 14m wide. Two-way at all times. Preferred heavy vehicle route. Cycle facilities provided. Parking both sides. Parking restrictions near all intersections. May have solid central median. 	 Sealed road approx 10m - 14m wide. Two-way at all times Heavy vehicles can be expected. Cycle facilities considered when traffic volumes are greater then 1500vpd. Parking both sides Parking restrictions near intersections sometimes. 	 Sealed road 7 - 10m wide. Two-way traffic not always possible when vehicles parked opposite each other. Heavy vehicles not encouraged. Cycle facilities not normally provided. Parking not usually marked. Speed environment is less than 50km/h. All unsealed urban roads sealed over time in the order determined by the WDC Urban Seal Extension Policy. 	 Sealed road approx 8.5 to 10m wide. Two-way at all times. Preferred heavy vehicle route. 0.75m - 1.5m sealed shoulders. Marked turning bays at intersections with moderate turning movements, additional seal width at all intersections. Cycle facilities provided. 	 Sealed road approx 7.0m to 7.5m wide. Two-way at all times. Heavy vehicles can be expected. Up to 250mm sealed shoulders. Marked turning bays at intersections with high turning movements, additional seal width at all intersections. Cycle facilities provided where determined by Walking and Cycling Strategy. 	 Sealed road approx 6.0 to 6.5m wide. Two-way most of the time, except for temporary disruptions. Heavy vehicles can be expected. Unsealed shoulders Some additional width at intersections. Cycle facilities provided where determined by Walking and Cycling Strategy. 	 Unsealed approx 4m - 7m wide. Usually narrow but generally two-way. Some heavy vehicles. May be necessary to slow, stop or pull-off carriageway when meeting or following other vehicles. Passing opportunities limited by dust and/or width. Long and/or high heavy vehicles may not be able to negotiate all routes. Unsealed roads will be considered for sealing if they qualify for NZTA Subsidy, or if there are sufficient subdivision contributions to justify sealing as per the Council's Rural Seal Extension Policy. 		

Category	Service Standard								
	Urban Business and Residential zones			Rural Sealed	Rural Sealed				
				Sealed roads in all other zones	Unsealed roads in all other zones				
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
Bridges and Bridge Culverts	 Two lanes – two way. No load restriction. Full overload capacity. Footpaths on both sides. Cycle facilities provided. Parking normally provided. 	 Two lanes – two way. No load restriction. Full overload capacity not necessarily available on older bridges. Footpaths on both sides. Cycle facilities considered when traffic volumes are greater then 1500vpd 	 Two lanes – two way. No load restriction. No overload capacity. Footpaths on one side. 	 Two lanes – two way. No load restriction. Full overload capacity. Footpaths considered when safety issues exist. Cycle facilities provided. 	 Two lanes – two way. Some load restrictions possible if by-pass route available. Full over-load capacity not necessarily available on older bridges. Cycle facilities provided where determined by Walking and Cycling Strategy. 	 Single lane – two way Some load restrictions possible if by-pass route available. Full over-load capacity not necessarily available on older bridges. When there is less than 250 veh/day: No over-load capacity. Fords can be expected in place of bridges. 	 Single lane – two way. Some load restrictions possible if by-pass route available. No over-load capacity Fords can be expected in place of bridges 		

Category	Service Standard								
	Urban			Rural Sealed		Rural Unsealed			
	Business and Residential zones			Sealed roads in all other zones	Unsealed roads in all other zones				
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
Ride Quality	Smooth, comfortable, only occasional bumps felt.	Comfortable with possibility of bumps being felt.	Bumps may be frequent and noticeable but not severe.	Smooth and comfortable, only occasional bumps felt.	Comfortable with possibility of bumps being felt.	Bumps may be frequent and noticeable, but not severe; bumps felt at legal road speeds.	 Comfortable ride can be expected up to 70km/hr, where that speed is safe. Ride may be coarse. Corrugations and potholes will not be present continuously but may be present from time to time especially near intersections. Corrugations and potholes will generally be shallower than the diameter of a golf ball. Metal roads will be graded to maintain their shape and ride. Most roads will be graded once each month or once each two months, depending on their specific characteristics. Some roads will be graded more or less frequently than this because of traffic volumes, the stability of their surfaces or for other similar reasons. 		

Category	Service Standard						
	Urban Business and Residential zones			Rural Sealed			Rural Unsealed
				Sealed roads in all other zones			Unsealed roads in all other zones
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All
Noise and Vibration	 Basic measures taken to reduce road-surface noise e.g. Depressions and humps removed. Utility covers and trenches will not cause vibration or noise problems on adjacent properties. Smaller chip will be laid to reduce road noise. There will be no speed control measures, such as speed humps or speed platforms, which increase noise and vibration. Asphaltic concrete (hotmix) will be laid on all strategic and arterial roads in the urban areas of Kaiapoia and Rangiora as per Council Policy to reduce road surface noise. All roads will generally me 	 Basic measures taken to reduce road-surface noise e.g. Depressions and humps removed. Utility covers and trenches will not cause vibration or noise problems on adjacent properties. Smaller chip will be laid to reduce road noise. There will be no speed control measures, such as speed humps or speed platforms that increase noise and vibration. 	 Basic measures taken to reduce road-surface noise e.g. Depressions and humps removed and addressed only for ride quality, safety and structural maintenance reasons. Utility covers and trenches will not cause vibration or noise problems on adjacent properties. Smaller chip will be laid to reduce road noise. There may be speed control measures, such as speed humps or speed platforms that increase noise and vibration. 	 No special noise control meas Depressions and humps remo structural maintenance reasor No speed control measures su Larger chip may be used. 	sures wed and addressed only for is. ich as speed humps or spee	ride quality, safety and d platforms.	 Metal Road Surface. No special noise control measures. Depressions and humps removed and addressed only for ride quality, safety and structural maintenance reasons. No speed control measures such as speed humps or speed platforms.
Safety	All roads will generally meWhere terrain allows, road	et accepted safety standard shoulders will provide for	is and will provide a safe envisate passage of pedestrian ar	nd equestrian traffic, providing rea	asonable width and traffica	ble cross-slopes.	

Category	Service Standard								
	Urban			Rural Sealed			Rural Unsealed		
	Business and Residential zones		Sealed roads in all other zones			Unsealed roads in all other zones			
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
Footpath	 Footpath on both sides of t made for the mobility impa downs and tactile indicator places. Footpath will be smooth ar Wider footpaths in some an higher volumes of pedestri schools. All footpaths will be skid r 	he road with provision aired with suitable cut- is at formed crossing and 1.5m wide. reas where there are ans, e.g. shops and esistant.	 Footpath on one side of the road only with provision made for the mobility impaired with suitable cut-downs at formed crossing points. Footpaths will be smooth and 1.5m wide, except in Residential 3 and 4 zones. In those zones, footpaths will be surfaced with chip-seal and be 1.2m wide. All footpaths will be skid resistant. All existing footpaths will be maintained. 	 Footpaths will be provided v Footpaths will be unsealed or Where paths are shared pede 	• No footpaths.				
Drainage	Generally provided by kert Oxford except where suital drains in other towns, See 1	o and channel in Rangiora, ble swales and drains alrea	Kaiapoi, Woodend and dy exist, and by swales and	Where terrain allows stormw property boundaries.	vater drainage by way of fla	t, mowable swales, or deeper ve	rtical-sided drains against		

Category	Service Standard							
	Urban			Rural Sealed			Rural Unsealed	
	Business and Residential zone	es		Sealed roads in all other zones			Unsealed roads in all other zones	
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All	
Kerb and Channel	 Kerb and channel on both s Footpaths separated from tipedestrian-friendly hard-fa 	sides of the road. he roadway by ced kerb and channel.	 Kerb and channel on both sides of the road in Rangiora, Kaiapoi, Woodend and Oxford, except where suitable drainage swales or drains already exist. New kerb and channel generally not provided in other towns (residential 3 and 4 zones) unless there are specific roading problems that require it. Existing kerb and channel will be maintained. Kerb and channel shall be pedestrian-friendly hard-faced. 	Kerbing only at some intersec	ctions to channelise traffic.		No kerb and channel.	
Streetlights	 Street lighting provided and to NZ Standards. Footpaths can be safely use In dry conditions pedestriat safe distance at 50km/h. In busy pedestrian areas, an roads, high quality street light level all features on the road and pedestrians. Good balance between the motorists. There will be some light-sponto adjacent properties. 	d designed and installed ed without other lighting. ns will be seen from a nd on heavily trafficked ghting that provides vels clearly illuminating all road users including needs of pedestrians and bill from street lighting	 Basic level of lighting provided that enables pedestrians to see large obstacles, other people, and most footpath defects. In dry conditions, pedestrians wearing light-coloured clothing will usually be seen from a safe distance at 50km/h. Designed and installed to NZ Standards. There will be some light-spill from street lighting onto adjacent properties. 	 Area lighting to NZ standards at significant intersections. No other street lighting will be provided except in areas where there are significant numbers of night time crashes. There will be some spill from street lighting onto adjacent properties. 	No street lighting will be provided except in areas where there are significant numbers of night time crashes	No lighting provided		

Category	Service Standard								
	Urban			Rural Sealed			Rural Unsealed		
	Business and Residential zones			Sealed roads in all other zones	Unsealed roads in all other zones				
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
Signs	 Street name-blades at each junction. Adequate warning of all safety decisions required by all road users. Adequate warning of all information on significant destinations. Drivers informed of sudden changes in the road environment. Legally required signs. 	 Street name-blades at each junction. Adequate warning of all safety decisions required by all road users. Information on significant destinations. Drivers informed of sudden changes in the road environment. Legally required signs. 	 Street name-blades at each junction. Adequate warning of all safety decisions required by all road users. Legally required signs. On roads carrying more than 100 veh/day drivers informed of sudden changes in the road environment. 	 Road name-blades at each junction. Adequate warning of all safety decisions required by all road users. Adequate warning of all information on significant destinations. Legally required signs. 	 Road name-blades at each junction. Adequate warning of all safety decisions required by all road users. Information on significant destinations. Legally required signs. 	 Road name-blades at each junction. Drivers informed of sudden changes in the road environment. Legally required signs. 	 Road name-blades at each junction. On roads carrying more than 100 veh/day drivers informed of sudden changes in the road environment. Legally required signs. 		

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	Urban			Rural Sealed			Rural Unsealed	
	Business and Residential zones			Sealed roads in all other zones			Unsealed roads in all other zones	
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All	
Appearance	• Painted surfaces on bridges, structures, signs and street furniture shall be neat, tidy and present a cared-for appearance free of graffiti.	 Painted surfaces on bridges, structures, signs and street furniture shall be neat, tidy and present a cared-for appearance free of graffiti. Grassed berms maintained by residents, except where they are between the kerb and channel and the roadway. 		 Painted surfaces on bridges, structures, signs and street furniture shall be neat, tidy and present a cared-for appearance free of graffiti. Rural roadsides regularly mown for approximately 1.8m from seal edge where ever it is practical to do so. Roadsides mown full width where required to maintain 			 Painted surfaces on bridges, structures, signs and street furniture shall be neat, tidy and present a cared-for appearance free of graffiti. Roadsides only mown by 	

Category	Service Standard						
	Urban			Rural Sealed			Rural Unsealed
	Business and Residential zones			Sealed roads in all other zones			Unsealed roads in all other zones
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All
	 Grassed berms maintained by residents, except where they are between the kerb and channel and the roadway. Kerb and channel kept clean and tidy by sweeping at the frequencies shown on WDC Plan 937. Gross Litter collected daily. Weeds in footpath and kerb & channel controlled by spraying. Additional street cleaning will be carried out in autumn to remove leaves accumulating in known problem area Offensive matter removed on notification or daily. Plus, in the Central Business Areas of Kaiapoi and Rangiora Area is clean and tidy at the start of each business day, Christmas day and New-Years Day. 	 Kerb and channel swep Litter in kerb and ch normal sweeping cycle Weeds in footpath and by spraying. Additional street clea autumn to remove lea problem area Offensive matter remo Plus, in the Central E and Rangiora Area is clean and tidy at day, Christmas day and N 	pt on a six-weekly cycle annel only collected during e. d kerb & channel controlled ning will be carried out in wes accumulating in known wed on notification. Business Areas of Kaiapoi the start of each business New-Years Day.	 adequate sight distance. Debris on the road surface re Any kerb and channel swept No litter collected. Offensive matter excluding and hedgehogs removed on n Works in road verges shall l of works and finished tidily verges will be left to regener they have been maintained t which case they will be re season. Weeds in footpath and ker marker-pegs, signposts, brid furniture controlled by sprayi All broom, gorse and other the adjacent landowner. 	moved regularly. on a six-weekly cycle. dead possums, cats, birds totification. be left safe on completion y within 6 months. Road ate naturally except where o a residential standard in s-sown in the appropriate b & channel and around lge ends and other road- ing. plant pests controlled by	 Works in road verges shall be left safe on completion of works and finished tidily within 6 months. Road verges will be left to regenerate naturally except where they have been maintained to a residential standard in which case they will be re- sown in the appropriate season. Weeds in footpath and kerb & channel and around marker-pegs, signposts, bridge ends and other road-furniture controlled by spraying All broom, gorse and other plant pests controlled by the adjacent landowner Debris on the road surface removed when encountered. Any kerb and channel swept on a six-weekly cycle. No litter collected Offensive matter excluding dead possums, cats, birds and hedgehogs removed on notification. 	 landowners as they see fit. Debris on the road surface removed when encountered. No litter collected. Offensive matter excluding dead possums, cats, birds and hedgehogs removed on notification. Works in road verges shall be left safe on completion of works and finished tidily within 6 months. Road verges will be left to regenerate naturally except where they have been maintained to a residential standard in which case they will be re-sown in the appropriate season. Weeds around marker-pegs, signposts, bridge ends and other road-furniture carriageway surface, controlled by spraying All broom, gorse and other plant pests controlled by the adjacent landowner

Category	Service Standard								
	Urban	Urban					Rural Unsealed		
	Business and Residential zones			Sealed roads in all other zones		Unsealed roads in all other zones			
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Urban Collector	Local	Strategic and Arterial	Collector	Local	All		
						 Plus, when there are: 250 veh/day or more: Rural roadsides regularly mown for approximately 1.8m from seal edge wherever it is practical to do so. Less than 250 veh/day Some roadsides may be mown to maintain adequate sight-distance. All other roadsides mown by landowners as they see fit 			

Category	y Service Standard								
	Urban	Rural Sealed			Rural Unsealed				
	Business and Residential zones		Sealed roads in all other zones			Unsealed roads in all other zones			
	Strategic, Arterial and all others carrying 5000 veh/day, or more.	Local	Strategic and Arterial	Collector	Local	All			
Markings and Delineation	 Sudden and difficult to discern situation highlighted. Culverts and bridge-ends highlighted. Intersections highlighted. Centre-line marked. No-passing lines. Edge-lines marked. Additional markings at busy intersections. 	 s • Sudden and difficult to discern situations highlighted. • Culverts and bridge-ends highlighted. • Intersections highlighted. • Intersections highlighted. Plus, when there are 250 veh/day or more: • Centre-line marked. • Some edge lines marked where no kerb and channel and traffic wearing the edge of the seal. 	 Sudden and difficult to discern situations highlighted. Culverts and bridge-ends highlighted. Intersections highlighted. Intersections highlighted. Centre-line marked and "cats' eyes" installed. No-passing lines. Edge-lines marked. Additional markings at busy intersections. Full marker-pegs. Plus, above 200m in elevation, generally north and west of Oxford, cats' eyes will only be installed on the strategic road (Depot Road / Route 72) 	 Sudden and difficult to discern situations highlighted. Culverts and bridge- ends highlighted. Intersections highlighted. Centre-line marked No-passing lines. Edge-lines marked. Additional markings at busy intersections. Chevrons or marker pegs at bends that require highlighting, marker pegs not normally provided elsewhere. Plus, when there are 1,000 veh/day or more: "Cats' eyes" installed at twice normal spacing. Except north and west of Oxford Full marker pegs. 	 Sudden and difficult to discern situations highlighted. Culverts and bridge-ends highlighted. Intersections highlighted. Unsafe passing places highlighted. Chevrons or marker pegs at bends that require highlighting, marker pegs not normally provided elsewhere. Plus, when there are 250 veh/day or more: Centre-line marked. Some edge lines marked where traffic wearing the edge of the seal. 	 Sudden and difficult to discern situations highlighted. Culverts and bridge-ends highlighted. Intersections highlighted. 			

Category	Service Standard								
	Urban			Rural Sealed			Rural Unsealed		
	Business and Residential zones			Sealed roads in all other zones			Unsealed roads in all other zones		
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Responsiveness	 Hazards made safe promptly, according to severity. Notifications and complaints prioritised and inspected promptly. Defects resolved promptly after prioritization by altering forward programmes and deferring other works if necessary. 	 Hazards made safe promptly, according to severity. Notifications and complaints prioritised and inspected within 2 weeks. Most defects resolved as part of routine periodic maintenance. Full repair may take over one year. 	 Hazards made safe quickly, according to severity. Notifications and complaints prioritised and inspected within 4 weeks. Most defects resolved as part of routine periodic maintenance. Full repair may take over one year. 	 Hazards made safe promptly, according to severity. Notifications and complaints prioritised and inspected promptly. Defects resolved promptly after prioritisation by altering forward programmes and deferring other works if necessary. 	 Hazards made safe promptly, according to severity. Notifications and complaints prioritised and inspected within 2 weeks. Most defects resolved as part of routine periodic maintenance. Full repair may take over one year. 	 Hazards made safe quickly, Notifications and compla within 4 weeks. Most defects resolved maintenance. Full repair may take over or 	according to severity. ints prioritised and inspected as part of routine periodic ne year.		