

SM012 State Highway Control Manual

Part 10 - Consolidated KiwiRail Sections

Index

Bridge Construction and Maintenance Standards	Page 2
NZTA/KiwiRail Operational Protocols	Pages 3 and 4
Bridge Restrictions for Legal Loads and Overweight Policy	Page 5
Safety Maintenance for Rail Level Crossings	Page 6
State Highway Rail Level Crossings	Pages 7 to 13
Other Rail Interface Requirements	Page 14

Bridge Construction and Maintenance Standards

Introduction

Bridges impose inflexible and durable constraints on State highways. Each bridge is unique. A consequence of this uniqueness is that there are no NZTA standard specifications developed for bridge construction and maintenance.

Railway bridges

NZTA has a formal agreement with KiwiRail covering the use and maintenance requirements of railway bridges used as carriageway on State Highways. Details of those requirements should be obtained from KiwiRail.

NZTA/KiwiRail Operational Protocols

NZTA/KiwiRail

This section details the protocol agreed between the NZTA and KiwiRail and the schedule of fees to be applied to projects, which affect KiwiRail.

Protocol for Management of Projects which Affect KiwiRail Ltd

General

The purpose of this protocol is to establish a mechanism for dealing with New Zealand Transport Agency (NZTA) projects which affect KiwiRail

This protocol applies to all NZTA projects which have effects on the KiwiRail corridor or operations.

Process

NZTA Infrastructure Delivery Managers and KiwiRail Regional Track & Structures Managers will keep each other generally informed regarding upcoming projects of mutual interest at their regular meetings.

When a project investigation affecting KiwiRail is to begin, the advice will be from the NZTA Project Manager to the KiwiRail Regional Track & Structures Manager.

For minor or routine work the KiwiRail Regional Track & Structures Manager will undertake the work locally. In this case local arrangements may take precedence over the detail of this protocol. Major projects will be referred to the KiwiRail Manager, Development in Wellington for further handling.

KiwiRail will respond to the NZTA Project Manager to outline KiwiRail involvement in the investigation phase of the project and advise an estimate of the cost and a timeframe for the work to be completed. The estimate will be based on actual costs in accordance with the attached schedule of rates, which will be updated from time to time and may include fees for an external consultant to act on KiwiRail's behalf.

KiwiRail may resource its involvement in a variety of ways including via an external consultant. Holmes Consulting Group is KiwiRail's preferred (but not exclusive) supplier for this work, which may relate to structures, clearances, general liaison on KiwiRail's behalf, etc. KiwiRail will brief any input by their external consultant. The scope, standards and appropriate communication protocols with the external consultant and timeframes for response will be agreed between KiwiRail and the NZTA Project Manager.

The NZTA is subject to a requirement to operate in an efficient manner and in effect to purchase professional services from a competitive market where possible. As part of this responsibility, the NZTA Project Manager is to be satisfied that the nominated supplier is needed and that the price is reasonable.

Once the NZTA has accepted the cost estimate and timeframe for delivery, the Project Manager will ask KiwiRail to proceed. If it appears during the course of the work that the estimate or timeframe will be exceeded, KiwiRail will advise the NZTA as soon as possible, and KiwiRail/NZTA will meet to agree the revised estimate or timeframe.

KiwiRail and the NZTA will meet as required to determine a mutually agreeable solution.

In the event that a mutually agreeable solution cannot be found, then the outstanding issues will be elevated to General Manager Transport Services (NZTA) and Group General Manager Infrastructure (KiwiRail).

Costs

All reasonable costs of the project will be met by the NZTA unless specifically negotiated otherwise. Costs include:

- KiwiRail investigation costs after the NZTA have accepted the estimate (as above);
- disbursements, fees and direct costs associated with Permits to Enter, provision of Protection staff, Deeds of Grant;
- design and/or design approval costs;
- construction costs including disruption and train delays;
- ongoing maintenance costs where appropriate and as determined by the Deed of Grant.

Approvals

KiwiRail approvals will generally be granted in two stages:

- approval in principle once major issues have been identified and resolved;
- approval in detail of construction drawings for structures, other project features which may affect the rail corridor or operations and, including Deeds of Grant and Permits to Enter.

Review

This protocol shall be reviewed once a year by General Manager Transport Services (NZTA) and Group General Manager Infrastructure (KiwiRail).

KiwiRail Schedule of Fees as at 30 August 2004

Category	Activity	Rate
Personnel	track protection/supervision	\$50 per hour
	technical	\$75 - \$125 per hour
Vehicles	cars, vans, utilities	\$1 per kilometre
	trucks	\$2.50 per kilometre
Train Operations	imposing a speed restriction	\$50 per train

Bridge Restrictions for Legal Loads and Overweight Policy

Purpose

Restrictions must be applied where the legal maximum weight and/or speed limits allowed by the Heavy Motor Vehicle (HMV) Regulations 1974 would exceed the structural capacity of the bridge leading to premature structural deterioration or failure.

Responsibility

System Managers are responsible for the rating and posting of restrictions for all State highway bridges (including railway overbridges) except combined road-rail bridges for which the responsibility is retained by KiwiRail.

KiwiRail controlled bridges

The list of KiwiRail combined road-rail bridges is given in the table below:

State Highway	Route Position	Name
2	243/10.82	Pekatahi
6	282/13.80	Inangahua
6	463/0.00	Arahura

Safety Maintenance for Rail Level Crossings

Purpose	The PIKB provides for road controlling authorities to pay half the cost of maintenance for safety devices and mechanisms for level crossings, included as work category 131. For NZTA, this is paid for nationally and separate funding is not required for regions.
Responsibility	KiwiRail will provide an itemised quarterly account for the safety maintenance works that have been undertaken. Note that the works include inspections of the assets and KiwiRail has specific requirements for general and detailed inspections of the assets. The list will need to be scrutinised in detail as previously there have been some non-conforming items that have ended up in the invoice. One of the biggest issues is the network changes that occur and making sure that KiwiRail are aware of the effects that it has on the NZTA list of crossings when a highway gets revoked.
Authority for Deeds of Grant	Section 75 of the Railways Act 2005 allows KiwiRail to require that any authority wanting to do work on rail land apply for and accept a Deed of grant that covers the affected area. There are separate types of Deed for level crossings and non-level crossings. The rail level crossing Deeds of Grant are stored in one place and by category currently in InfoHub.
Categories for Deeds of Grant	Level crossings can be split into three categories: road over rail, rail over road and shared responsibility. These define who pays when maintenance work is required on the level crossing. Note that this is repairs to the running surface but does not include maintenance of the rails. What applies can be found at any particular crossing by locating it in the level crossing Deeds folder. For road over rail, which indicates that rail was there first, the road controlling authority pays full cost for the maintenance. For rail over road, where the road was there first, the rail authority pays. For shared responsibility the cost is shared. It works out that there is nearly a third in each category, so there is a definitely need to check where any particular crossing sits in the system.
List of State highway rail level crossings	The list of rail level crossings on State highways, with commentary indicating past and future changes and other crossings which have been included in invoices in error, are listed in the table below. Check and add to the comments as further changes occur.

Area	State Highway	KiwiRail location	Comparative location	Comments
Whangarei	1	Te Rauponga (Kamo Bypass), NAL 217+477	Kamo Bypass, Te Rauponga Road, Kamo, Whangarei	
	1	Waiotu, NAL 243+197	Waiotu near Hukerenui, north of Whangarei	
	1	Towai, NAL 251+890	Adjacent to Paiaka Rd near Towai, north of Whangarei	
Auckland	16	Kaipara Coast Highway Pedestrian down, NAL 74+618	Kaipara Coast Highway, Kaukapakapa, Auckland	
	16	Kaipara Coast, NAL 74+625	Kaipara Coast Highway, Kaukapakapa, Auckland	
Hamilton	1	Huntly Bypass, RTWRO 0+070	Great South Road, Huntly Bypass, link to Huntly Power Station	To be revoked after Huntly bypass opens Feb20
	1	Kahikatea Drive, NIMT 540+114	Kahikatea Drive Hamilton	
	1B	Telephone Road, ECMT 11+080	Telephone Road Hamilton, adjacent to Holland Road	To be revoked after Hamilton bypass opens Dec21
	24	BROADWAY KNLTH 7+936 (now showing as 7+280)	Broadway Matamata, adjacent to SH27 junction roundabout	
	26	HTAPU 2+720	Morrinsville Road, Newstead, Hamilton	Remains after SH26 changes with Hamilton Bypass
	26	Piako Road LCA Motumaoho ECMT 24+565	Adjacent to Piako Road junction, Motumaoho, near Morrinsville	
	27	Tatuanui, WITOA 7+240	Adjacent to SH26 junction roundabout, Tatuanui	

	27	Burwood Road, KNLTH 9+200	Between Burwood Road and Firth Street, Matamata	
	27	KNLTH 1+699/Waharoa KNLTH 2+130	Waharoa rail crossing	
	29	KNLTH 15+740	Hinuera rail crossing	
	30	Benneydale Road, NIMT 449+740	Adjacent to Barker Road intersection, west of Benneydale	
	30	Awakino Road, NIMT 475+450	Awakino Road, Te Kuiti, link to SH3	
Waitomo	3	Ward Street, NIMT 476+200	Ward Street, Te Kuiti, is a local authority road	Incorrect reference, do not pay
Tauranga	2	Hewletts Road, MTMNG 2+773	At Maunganui Road roundabout, Mt Maunganui	
	2	Paengaroa, ECMT 127+433	Adjacent to eastern end of TEL, west of Paengaroa	
	29A	SH29 Te Maunga, ECMT 104+410 (now showing as 104+442)	At SH2 Te Maunga roundabout, Maunganui Road, Mt Maunganui	To be revoked when overbridge complete Dec20
	30	Awakeri Road, ECMT 475+450 (now showing as 177+431)	Adjacent to SH2 junction, Awakeri, Whakatane	
	34	Kawerau Road, MUPRA 0+310	Adjacent to Onepu Spring Rd on Kawerau Road leg of SH34, Kawerau	
Hawkes Bay	2	Ellison Street, PNGL 176+410	Adjacent to Marine Parade intersection, Napier	
	2	Georges Drive, PNGL 179+330	South of the intersection with Thackeray Street/Hyderabad Road, Napier	
	2	Pandora Road, NPRPT 1+060	At Hyderabad Road roundabout, Napier	Retained when Pandora Road revoked Jun19

	2	Meanee Quay, PNGL 183+430	Meeanee Quay at SH2/50B junction, Napier	Revoked Jun19 and passed to NCC
	2	Ruataniwha Street, PNGL 108+228 (now showing as 108+236)	Adjacent to Racecourse Road, Waipukurau	
	51	SH50 Taradale Road, PNGL 179+860	South of the roundabout on Hyderabad Road, Napier	Became SH51 in Napier changes Jun19
	50	Bridge Street, NPRPT 2+217	Roundabout at Customs Quay/Coronation Street, Napier	
	50	Breakwater Road, NPRPT 3+373	Western port entrance adjacent to Battery Road, Napier	
	50	BREAKWATER ROAD NPRPT 3+950	Industrial siding, east end of port, Napier	
Napier	38	Carroll Street, PNGL 294+759	Adjacent to Ormond Street, Wairoa, Hawkes Bay	
	50	Prebensen Drive	South of the roundabout on Hyderabad Road, Napier	Declared Jun19 and now NZTA responsibility, DoG not held
Taranaki	3A	Rata Street, MNPL 186+406	Between Matai Street and Rimu Street, Inglewood, New Plymouth	
	43	Regan Street MNPL 162+254	Adjacent to Broadway, Stratford township, Stratford	
Manawatu-Whanganui	2	McLean Street, PNGL 26+900	Adjacent to Station Street, Woodville	
	2	Tahoraiti, PNGL 49+344	At Wi Duncan Road intersection by the golf course, south of Dannevirke	
	54	Kimbolton Road, NIMT 87+939 (now showing as 153+129)	Adjacent to Aorangi Street roundabout, Feilding	

Palmerston North	1	Mangaweka, NIMT 231+229	Straight south of Mangaweka township	
	2	Masterton Road, WRAPA 170+379	Southern end of rail loop adjacent to Broomfield Road, Woodville	
	49	NIMT 299+874	"S" bend between wood processing plant and Whangaehu River, Tangiwai	
	56	Opiki Road, NIMT 111+770	Opiki Road adjacent to SH57 junction Makerua, north of Shannon	
	57	Kimberley Road, NIMT 87+939	Kimberley Road adjacent to SH1 junction Kimberley, south of Levin	
Wellington	1	Mackays Crossing, NIMT 41+792	Mackays Crossing interchange, adjacent to Queen Elizabeth II Park entrance	Retained as NZTA responsibility to connect ramps
	2	Fitzherbert Street, WRAPA 56+524	Adjacent to the SH2/SH53 junction, Featherstone	
	53	Revans Street, WRAPA 56+460	Adjacent to the SH2/SH53 junction, Featherstone	
Blenheim	1	Wairau Road Picton, MNL 347+074	At Broadway intersection, Wairau Road, Picton	
	1	Main Street Roundabout South, MNL 318+760	Main Street Roundabout, Blenheim	
	1	Main Street Roundabout North, MNL 318+789	Main Street Roundabout, Blenheim	
Christchurch	1	Omihi Road, MNL 73+394	Adjacent to Burrows Road, northeast of Omihi, Waipara	
	1	Omihi Road, MNL 77+740 (now showing	Northeast of Omihi School, Waipara	

		as 77+924)		
	1	Carmen Road, MSL 19+750	Adjacent to Smarts Road, Hornby, Christchurch	
	1	Selwyn, MSL 19+750 (now showing as 47+020)	Adjacent to Railway Terrace, Main Road South, Selwyn	
	1	SH73A Main South Road, HRNBY 1+770	Adjacent to Main South Road/Carmen Road intersection, Hornby	Retained when SH73A revoked
	1	Winchester, MSL 144+497	Adjacent to Reilly Road and Waihi School, Winchester, Timaru	
	1	Chertsey, MSL 74+740	Adjacent to Chertsey Line Road, Chertsey, Ashburton	
	1	West Street, MSL 95+578	Adjacent to East Street intersection, Ashburton	
	7	Waipara Flat Road, MNL 61+974	Adjacent to SH1 junction, turnoff to Lewis Pass	
	71	Lineside Road, MNL 26+541	South of Southbrook, Rangiora	
	73	West Coast Road, MDLND 18+840	At Ansons Road, west of Kirwee	
	74A	Garland Road, MSL 7+410	Adjacent to Radley Street intersection, Hillsborough, Christchurch	
	76	Halswell Junction Road, HRNBY 1+770	Halswell Junction Road, Hornby, Christchurch	To be revoked when CSM2 complete Apr20
	79	MSL 130+870	Adjacent to SH1 junction, Rangitata	
West Coast	6	Kumara up (north), HKTKA 17+242	North lane of roundabout, Kumara Junction	
	6	Arahura Roundabout, south-bound lane,	Southbound lane of roundabout, south of Arahura	

		HKTKA 31+367	River Bridge	
	6	Arahura Roundabout Pedestrian, HKTKA 31+429	Footway/cycleway adjacent to roundabout, south of Arahura River Bridge	
	6	Seven Mile Road, RPHOE 7+500 (now showing as 6+394)	Adjacent to Duncan Street, Cobden, Runanga	
	7	Raupo, SNL 25+730	South of Totara Flat	
	7	Dudleys, SNL 30+080	East of Tatara Line, north of Totara Flat	
	7	Stony Creek, SNL 45+560	Just south of Stony Creek, north of Mawheraiti	
	7	Hinau, SNL 48+260	South of Maimai and north of Antonios Road, southwest of Reefton	
	67	Palmerston Street, WPTIL, 0+720	Palmerston Street, Westport, east of Buller River Bridge	
	67	Fairdown Road, SNL 143+810	Fairdown, Denniston, Northeast of Westport	
	67	Birchfield Road, SNL 158+250	"s" bend north of Birchfield, Karamea road	
	67	Torea Street, Granity, SNL 160+990	"s" bend south of Granity, Karamea road	
	69	Landing Bridge, SNL 84+790	Adjacent to rail bridge, Inangahua Landing	
	69	Oweka, SNL 89+790	Only other SH69 crossing is just south of the SH6 junction at Inangahua	
	69	Buller Road, SNL 143+410 (now showing as 61+070)	Buller Road, Reefton	
	73	Aickens, MDLND 138+150	Adjacent to Aickens, Otira	

	73	McDonalds, MDLND 140+680	Further northwest from Aickens, Otira	
Dunedin	1	Severn Street, MSL 255+023	Between Itchen Street and Cross Street, Oamaru	
	1	Alma-Maheno Road, MSL 267+810	Between Maheno and Reidston	
	1	Main Road, MSL 495+774	Adjacent to SH93 junction, Clinton	
	1	MSL 564+360	Siding into Fonterra milk factory, Edendale, Southland	To be revoked when bypass opens Jun20
	1	BLUFF 9+610	Adjacent to McLauchlan Road, Greenhills, north of Bluff	
	87	Gordon Road, MSL 393+400	Between Gladstone Road and Burns Street, Mosgiel	
	88	Beach Street PTCHS 0+079 (now showing as 1+718)	Twin entry into the port, Port Chalmers, Dunedin	
Invercargill	1	Clyde Street, MSL 600+893	Adjacent to Tyne Street, Invercargill	
	1	PIONEER HIGHWAY MSL 563+250	North siding into Fonterra milk factory, Edendale, Southland	To be revoked when bypass opens Jun20
	93	Bridge Street, MSL 549+677	At SH1 junction, Mataura	

Other Rail Interface Requirements

Non-level crossing Deeds of Grant

Non-level crossing Deeds are permits for works done and perhaps occupying rail land. We pay an annual operating cost for each permit once they are in place, so it is important, if a permit is no longer needed, to ensure that it is cancelled in a timely fashion. However, if the encroachment is ongoing, such as a bridge, pipe, drain, cable etc., then Waka Kotahi will receive an annual invoice for the Deed of Grant to be retained. These costs are managed through the annual national maintenance programme and will be arranged for by the Wellington office. The schedule of non-level crossing Deeds of Grant is included in the “Interaction with Rail” folder in InfoHub.

Responsibilities for Deeds of Grant

The initial responsibility for the costs of a Deed of Grant remain with the project/work managers and paid for out of the works costs until such time as the works are complete and the site is in a final state. Then the responsibility for management of Deeds of Grant and their costs may be handed over to the national Operations team, provided the Deed document is supplied for records and all ongoing responsibilities are clarified and recorded.

The transfer of Deeds of Grant is similar to any other works consent being passed to Operations for ongoing management. It is very important that the recipient is made aware of any additional conditions contained in the Deed so that those conditions can continue to be met and not to cause future conflicts. If the Deed is expected to be relinquished in the future, it is important that the requirements to achieve that are understood so that it is not retained longer than necessary.

If the Deed of Grant does not need to be retained at the end of the works, then the works/project manager is responsible for ensuring that it is properly relinquished and that is agreed with KiwiRail. A copy of the cancelled Deed and the appropriate correspondence with KiwiRail should be provided to the national Operations team in case there are any questions later.

Upgrades of rail level crossing safety devices

There is an annual programme that KiwiRail produces for level crossing safety upgrades across the whole country and all road controlling authorities. The NZTA should receive the programme but there are usually very few State highway crossings on the list because State highways generally have higher standard crossings. That does not mean that there are never any on the list, because it can include renewals, so the NZTA needs to make provision for them in the State Highway Plan. From the requirements in the PIKB, half the cost of the upgrades is to be paid for by the road controlling authority so upcoming works need to be identified through liaison with KiwiRail so that they can be budgeted for. The NZTA costs come out of the Low Cost, Low Risk bucket, but there is still a need to make allowance for particular upgrades that are scheduled to happen within the three-year programme.
