



Local Network Instructions:

L3.3 Masterton - Woodville, PNGL and Branches

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1. General Instructions

Heat Sheets

The Daily Heat Sheets for the PNGL and between Woodville to Masterton can be found [here](#).

1.1 Bulletins

Terminals must be supplied with all bulletins for the areas shown:

Terminal	All Bulletins affecting
Palmerston North	<ul style="list-style-type: none"> • Taumarunui–Wellington • Whareroa–Marton • Wanganui Freight Branch • Castlecliff Branch • Napier–Palmerston North • Woodville–Wellington
Napier	<ul style="list-style-type: none"> • Palmerston North–Gisborne Line
Wellington	<ul style="list-style-type: none"> • Palmerston North–Wellington • Palmerston North–Woodville • Woodville–Wellington • Johnsonville Line

1.2 Automatic Signalling

Trains are signalled by Train Controllers under Automatic Signalling Rules between:

- Palmerston North and Woodville
- Hastings and Napier

1.3 Track Warrant Control

The Track Warrant Control system operates on the PNGL between:

- Woodville and Hastings
- Napier and Gisborne

1.3.1 Wairarapa Line

Wairarapa Line	
Warrant Stations	<ul style="list-style-type: none"> • Pahiatua
Intermediate Boards	<ul style="list-style-type: none"> • Mangamahoe • Newman • Hukanui
TW Lever Locked sidings	<ul style="list-style-type: none"> • Mauriceville Siding • Tui Dairy Siding • Mangatainoka Siding

Track Warrant Communication:

Wairarapa Line: Woodville – Masterton

The Hawkes Bay Train Control desk is responsible for the above areas.

- At Woodville radio communication with the Train Controller will be available on Channel 14.
- Between Woodville and Masterton channel 14 radio coverage is unsatisfactory and should not be relied upon.

In this area cellular phones are to be used as follows:

- Coverage is satisfactory except between 104km (between Masterton and Mauriceville) and 121km (between Mangamahoe and Newman) where it is non-existent. It is also poor in the Pahiatua area.
- Hawkes Bay Train Control desk telephone 04 498 3355 or 43355.

Channel 12 (south end of area) radio communication is not to be used, as they are required for another Train Control area unless an emergency occurs.

- If the Train Controller does not receive a call from a train at the expected time of arrival at Masterton or Woodville and the Operator cannot be contacted, the Train Controller must arrange for a Track Maintenance Representative with a Hi-Rail vehicle to locate the train and advise the Train Controller.



CAUTION

If the Track Maintenance Representative travels by rail into the section where the train may be stopped, the train should be approached from the rear whenever possible.

1.3.2 Woodville - Hastings

Woodville – Hastings	
Warrant stations	<ul style="list-style-type: none"> • Oringi • Dannevirke • Makotuku • Waipukurau • Otane
Interlocked station	<ul style="list-style-type: none"> • Takapau
Intermediate boards	<ul style="list-style-type: none"> • Kopua • Opapa • Poukawa
TW Lever Locked sidings	<ul style="list-style-type: none"> • Hatuma Lime Co Siding

Ormondville Siding:

No.9 main line points at this siding are PS locked. The points can only be unlocked and operated in accordance with the procedures in the second paragraph of **Instruction 10. Signalling and Interlocking Out of use**

1.3.3 Napier - Gisborne

Napier - Gisborne	
Warrant stations	<ul style="list-style-type: none"> • Eskdale • Waikoau • Wairoa • Kopuawhara • Beach Loop • Muriwai

Napier - Gisborne	
Intermediate boards	<ul style="list-style-type: none"> • Bay View • Waipunga • Tutira • Putorino • Kotemaori • Ohinepaka • Whakaki • Nuhaka • Paritu • Tikiwhata • Maraetaha • Manutuke
TW Lever Locked sidings	<ul style="list-style-type: none"> • Raupunga • AFFCO Siding • Waipaoa Siding

1.3.4 Security and Operation of TW keys at Napier

When Owens Siding at Napier is shunted, the TW key to operate the points must be obtained from the Team Leader's Office, Napier.

When shunting is finished, the TW key must be returned to the Team Leader's Office.

1.4 Shunting Trains and Light Locomotives

1.4.1 Arrangements

The area, hours, and work of shunting trains will be arranged and advised by the Team Leader.

Work required by the Access Provider is authorised by the Team Leader, in conjunction with the Train Controller.

Shunting trains and light locomotives may run as arranged by each Team Leader within their respective area and directed by the Train Controller.

1.4.2 Propelling

Wagons may be propelled between:

- Napier marshalling yard and Owens Siding during daylight
- Wairoa and AFFCO Siding

1.4.3 Crewing

When shunting trains and light locomotives are running under ATC conditions, the Train Controller must be advised.

The Train Controller must endorse the train control diagram alongside the plot line for the intended movement.

1.5 Maximum Speeds

1.5.1 Maximum Speeds of MPUs and Rolling Stock

Motive Power Type	Speed km/h
DC, DFT, DXB, DXC, DXR	100
DL	80

**NOTE**

Additional speed restrictions apply for vehicles over 16.3 tonne axle load, i.e., wagons over 65.2 tonnes, DL, DXB, DXC

1.5.2 Wairarapa Line

Portion of Line			Kilometres per hour		
Masterton–Pahiatua			P	Exp F	F
			50	50	50
EXCEPT					
Meterages between		Masterton–Mauriceville			
104.33	104.35	Bridge 82**	40	40	40
104.63	104.65	Bridge 83**	40	40	40
109.18	109.22	Bridge 92**	25	25	25
Bridge 92 “No braking – no power – just roll over”					
Meterages between		Mauriceville–Eketahuna			
117.956	117.978	Bridge 98**	25	25	25
Meterages between		Eketahuna–Newman			
117.95	117.98	Bridge 98**	25	25	25
120.50	121.30	(Includes Tunnel 3)	10	10	10
129.01	129.08	Bridge 104**	10	10	10
137.04	137.05	Bridge 107ca**	40	40	40
144.27	144.29	Bridge 111**	25	25	25
Pahiatua–Woodville			50	50	50
Except Meterages between					
158.50	158.80	Mangatainoka Bluff	30	30	30
155.00	169.00	DL Locomotives and vehicles over 16.3 tonne axle load**	..	40	40

** Speed boards have not been erected. **Network Signals, Indicators and Boards Manual, 6.8 Permanent Reduction of Line Speed** is modified accordingly.

Operators, when travelling over the above-listed bridges, must report anything unusual in accordance with **GR06 Conditions Affecting the Network, 5. Damaged or Obstructed Lines**

1.5.3 Palmerston North - Gisborne Line

Portion of Line	Kilometres per hour		
Palmerston North–Napier (Sale Street)	Exp P	Exp F	F
	70	70	55
EXCEPT			
Ashhurst–Woodville			
Between 14.85km and 16.33km	40	40	40
Between 16.33km and 19.55km (includes Tunnel Nos. 1 and 2)	25	25	25
Tunnel No.1 when negotiating north end curve (Woodville end) for all main line locomotives	10	10	10
Tunnel No.1 when negotiating north end curve (Woodville end) for S class cars and AG power vans	Dead Slow		
Through Tunnel 1 for RM31	25

Portion of Line	Kilometres per hour		
Through Tunnel No.1 for J1211, JA1271, JA1275 and JB126 steam locomotives. IB, IBB and IC wagons loaded with 2.9m containers	15	15	15
Through Tunnel No.1 and 2 for DD wagons, and Ballast Cleaner (ETM567, ESR75, YKR12, YKR25 and YK wagons)	10	10	10
Between 19.55km and 22.55km	40	40	40
Between 22.55km and 23.55km	25	25	25
Woodville			
Past platform for YK wagons	..	55	..
Past platform for wagons conveying TSF, 2.6m and 2.9m containers	..	25	25
Up trains through No.7 crossover (27.58km)	50	50	50
Down trains through No.7 crossover to 4LAB signal (26.16km)	50	50	50
Dannevirke–Ormondville			
Over Bridge No.145 at 56.5km for DL Locos	25	25	25
Over Bridge No.145 at 56.5km for DXB/DXC and DXR Locos and wagons over 66 tonnes gross	30	30	30
Over Bridge No.145 for IA wagons conveying wine tanks	..	50	50
Over Bridge No.146, between 58.90km and 59.10km for DL, DXB/DXC and DXR locomotives and wagons over 66 tonnes gross	30	30	30
Between 66.73 – 66.85km (Bridge No.151)	60	60	..
Ormondville–Takapau			
Over Bridge No.155 at 70.92km for DL locomotives	40	40	40
Over Bridge No.155 at 70.92km for IA wagons conveying wine tanks	..	50	50
Between 73.98km and 74.45km (Br No.156)	15	15	15
Between 76.76 – 76.89km (Br No.158)	60	60	..
Over Bridge No.158 at 76.8km for DL, DXB/DXC and DXR Locos and wagons over 66 tonnes gross	30	30	30
Otane–Opapa			
Between 131.10km and 134.40km	50	50	50
Hastings			
Between 2R and 2L signals Hastings	50	50	50
Along North and South Loops	25	25	25
Hastings - Awatoto			
Over Bridge No.212 between 163.44 and 163.50km for DL Locomotives	40	40	40
Awatoto			
Down trains departing from loop, between 171.40km 4LB signal, over Waitangi Road level crossing to 171.25km 4RABC signal	10	10	10
Napier (Sale St) – 8R Up Starting Signal	50	50	50
EXCEPT			
Between Sale St (177.67km) and Owen St (178.59km)	30	30	30
From 180.09km (down direction) on PNGL to Prebensen Drive (180.03km) due to rusty rail #	10	10	10
From 180.46km (up direction) on PNGL to Severn Street (180.70km) due to rusty rail #	25	25	25

Normal line speed may resume when rail vehicle is foul of the crossing

Portion of Line	Kilometres per hour		
	Exp P	Exp F	F
Napier (8R Up Starting Signal) - Gisborne	40	40	40
EXCEPT			
Between 182.23 and 182.58km over Bridge No.218	25	25	25
Through Tunnels 9 and 10 for all 2.9m type containers	..	25	25
Past platform Wairoa for FG, FGS, FIH and PKL wagons	..	25	25

1.5.4 Napier Port Branch

Portion of Line	Kilometres per hour	
	Exp F	F
Napier (5A & 5B junction points) - Napier Port	25	25
EXCEPT		
Over all turnouts entering / departing Napier Marshalling Yard	15	15
Over Waghorne Street Crossing at 3.26km	..	10
All Wharves	..	10

1.6 Whistle Board Locations

Track Meterage		Locations at or between	Warning for
For "Down" trains km	For "Up" train km		
PNGL			
# 22.15	..	Woodville and Ashhurst	Trucks crossing track
+160.15	+159.91	At Hastings	+ Rail Personnel in vicinity of Shunters hut
168.70	168.30	Whakatu and Awatoto	Private level crossing
Masterton – Woodville			
92.17	..	Masterton and Mauriceville	Trespass on Bridge No .78
..	114.72	Mauriceville and Eketahuna	Private level crossing

2. Level Crossings

2.1 Automatic Alarms

Except where the name of the crossing is prefixed by a symbol, the standard equipment consisting of flashing lights and bells is installed at level crossings listed in this instruction.

Symbol	Meaning
A	Bell signals operate during restricted hours
B	Barrier arms also provided
C	Fitted with strobe lights
D	Fitted with Level Crossing Predictor
E	Bell signals and signs worded "TRAIN COMING" operates when a train is approaching
G	Pedestrian automatic gates also provided
H	Bell signals only
M	Manual Control instructions on following pages.
O	Equipped with control panel to switch alarms off
P	When a power failure occurs and Points Indicators have been illuminated or a signal cleared for a movement, these level crossing alarms will continue to operate for up to four minutes before cancelling. Under these conditions the Operator should approach the crossing with caution even if the alarms are operating.
R	Fitted with Remote Control for Hi-Rail vehicles
S	Fitted with special level crossing manual control panel
W	Fitted with white warning lights only, flashing lights and bells not provided. NOTE: Crossing only for site inducted construction vehicles, no public access.
X	Enlarged white side lights.



NOTE

As a trial, the flashing lights have been fitted with red flashing side lights which when illuminated indicate to Operators of approaching trains that the alarms are working.

Unless otherwise stated, level crossing alarms will start and cancel automatically for the passage of trains.

In signalled areas the alarms will operate in conjunction with the signals leading over them. If it is necessary to pass a signal at "Stop", all or some of the alarms in the section ahead may not operate correctly. In a number of cases alarms will operate in conjunction with signals controlled by a local panel. Pressing the "Clear" button will initiate the alarms and after a short delay the signal will clear. Pressing the "Stop" button will restore the signals to Stop and after a time delay the alarms will stop.

At TWC motor point loops the alarms will operate in conjunction with the signals / indicators leading over them. "Alarms Start Here" boards may be provided to indicate where the alarms start. If it is necessary to pass these boards, but not the signal/indicator, the indication should be cancelled. If a train is required to pass a signal/indicator at "Stop" the alarms may not operate correctly.

Crossings fitted with Level Crossing Predictors do not have a fixed starting point; rather the warning time for the automatic alarms is computed from the speed of the approaching train. Therefore, through movements approaching the crossing should not accelerate but maintain constant speed after passing a point approximately 500 metres from the crossing. If a movement stops on the approach to the crossing, provided it is not within 15 metres of the crossing, the alarms will cancel. When the movement

restarts, the alarms will also restart automatically but the warning time may be reduced. The Operator must observe that the alarms are operating before proceeding over the crossing.

To avoid excessive operation of alarms when shunting, or for non-automatic operation, manual controls consisting of “Start” and “Cancel” buttons are provided as shown below. Alarms started manually will cancel automatically when the train clears the crossing unless otherwise stated. Once the alarms have been manually cancelled all subsequent operations must be manually operated until the train leaves the area. Under manual control the Operator must check the alarms are operating before proceeding onto the crossing. Where barrier arms are provided the Operator must wait until the barriers are fully down before proceeding onto the crossing.

When manually cancelled or cancelled automatically after the train has passed over the crossing, if the train remains in the track circuit controlled area for a prolonged period the alarms may reactivate and should be manually re-cancelled.



IMPORTANT

Manual controls must not be used to cancel alarms operating due to fault conditions.

2.2 Masterton - Woodville

km	Feature	Crossing	Locations at or between
98.40	R	Opaki–Kaiparoro Road	Masterton and Mauriceville
101.68		Opaki–Kaiparoro Road	Masterton and Mauriceville
106.76		Opaki–Kaiparoro Road	Masterton and Mauriceville
111.21	A	Opaki–Kaiparoro Road	Mauriceville and Eketahuna
127.05		Alfredton Road	Eketahuna and Hukanui
127.35		Haswell Street	Eketahuna and Hukanui
137.06		Hamua–Hukunui Road	Eketahuna and Hukanui
154.43	R	Hall Street	Pahiatua
168.19		Range Road	Mangatainoka and Woodville
170.38		Masterton Road (SH2)	Woodville on Balloon Loop

2.3 Palmerston North – Gisborne Line

km	Feature	Crossing	Locations at or between
1.86	B R S	Tremaine Avenue	Palmerston North and Ashhurst
4.16	B S	Roberts Line	Palmerston North and Ashhurst
5.16	B R S	James Line	Palmerston North and Ashhurst
6.22	B S	Stoney Creek Road	Palmerston North and Ashhurst
12.33		Hillcrest Road	Ashhurst
15.77	W	Manawatu Gorge	Ashhurst and Woodville
26.93	A B P	McLean Street (SH2)	Woodville
28.20		Nelson Road	Woodville
49.33	B R S	SH2	Oringi and Dannevirke
51.31		Laws Road	Oringi and Dannevirke
52.20	B R S	Rawhiti Street	Oringi and Dannevirke
53.09	B S	Stairs Street	Dannevirke
53.72	M R	Allardice Street	Dannevirke

km	Feature	Crossing	Locations at or between
54.65	R	Cole Street	Dannevirke and Makotuku
55.46	R	Hospital Street	Dannevirke and Makotuku
55.81		Ruahine Street	Dannevirke and Makotuku
70.02		Makotuku South Crossing	Makotuku and Takapau
70.65		Matamau–Ormondville Road	Makotuku and Takapau
73.46		Norsewood–Ormondville Road	Makotuku and Takapau
90.11	B S	Oruawharo Road	Takapau
91.47	B S	Fraser Road	Takapau
108.23	B M R S	Ruataniwha Street (SH2)	Waipukurau
115.54	C	Victoria Street	Waipukurau and Otane
116.16		Tamumu Road	Waipukurau and Otane
117.76	D	Racecourse Road	Waipukurau and Otane
121.87	P	Higginson Street	Otane
134.60		Te Aute Trust Road	Otane and Hastings
141.96		Poukawa Crossing	Otane and Hastings
145.19		Te Mahunga Road	Otane and Hastings
151.29		Stock Road	Otane and Hastings
152.01	#	Te Aute Road	Otane and Hastings
155.29	B R S	Longlands Road	Otane and Hastings
155.87		Davis Road	Otane and Hastings
157.03	B S	Tollemache Road	Otane and Hastings
157.64	B S	Murdoch Road	Otane and Hastings
158.67	B R S	Southampton Street (SH2)	Hastings
158.80	B S	Lyndon Road	Hastings
158.92	B R S	Eastbourne Street	Hastings
159.06	B H	Heretaunga Street Ped	Hastings
159.16	B R S	Queen Street	Hastings
159.41	B R S	St Aubyn Street	Hastings
160.45	B R S	Frederick Street	Hastings
162.07	B R S	Elwood Road	Hastings
163.79	B R S	Whakatu Arterial Road	Whakatu
164.08	B S	Whakatu Road	Whakatu
..	M	Anderson Road (on Siding)	Whakatu
165.07		Works Road	Whakatu
171.24	B S	Waitangi Road	Awatoto
173.47	B S	Awatoto Road	Awatoto and Napier
176.41	B R S	Ellison Street (SH2)	Awatoto and Napier
177.30	A	Hastings Street	Napier
177.69	A B S	Sale Street	Napier
177.99	A B S	Raffles Street	Napier
178.30	B R S	Tennyson Street	Napier
178.59	A	Owen Street	Napier
178.83	A	Jull Street	Napier
179.33	A B S	Georges Drive (SH2)	Napier
179.85	A B S	Taradale Road (SH50)	Napier
180.03	B R S	Prebensen Drive	Napier
180.70		Severn Street	Napier
1.03	B R S	Pandora Road (SH2)	Napier Marshalling Yard
1.97		Lever Street	Napier Marshalling Yard
2.27	B M S	Bridge Street (SH50)	Napier Marshalling Yard

km	Feature	Crossing	Locations at or between
3.26	A M	Waghorne Street	Napier Marshalling Yard
3.38	B R S	Breakwater Road (SH50)	Napier Port
3.57	B M	Napier Port Access Road	Napier Port
183.43	R	SH2 (Meanee Quay)	Napier and Bay View
183.99	R	Domain Road	Napier and Bay View
294.74		Carroll Street (SH38)	Wairoa
296.75		Te Uhi Road (SH2)	Old AFFCO Siding and Whakaki
335.70		Ormond Drive	Opoutama and Kopuawhara

Disconnected Crossings

The following level crossings have been disconnected and are inoperative on the PNGL as part of the mothballing process.

Crossing	Meterage
Te Uhi Road	296.75 km
Ormond Road	335.70 km

2.4 Alarms with Manual Control

2.4.1 Allardice Street, Dannevirke

“Alarms Start Here” boards indicate where alarms start for the loop.

Trains should not enter beyond these unnecessarily. If it is necessary to stand a train in this area, or on the main line but clear of the crossing, the alarms should be manually cancelled.

Manual controls are available either side of the crossing:

- in the north end of the sidings for the loop
- on the Station Platform for the main.

The main or loop buttons should be used as appropriate.

There may be a short delay in the alarms cancelling when the “Cancel” button is first pressed.

Alarms must not be operated on the loop when a main line train is closely approaching and until it is well clear of the crossing.

When Up trains make a prolonged stop at Dannevirke platform the alarms must be cancelled.

2.4.2 SH2 Ruataniwha Street, Waipukurau

Manual control is available for Down trains on the Station Platform.

There may be a short time delay in the alarms cancelling when the “Cancel” button is first pressed. The alarms may continue to operate after attempting to cancel if an Up train is closely approaching.

For Up trains to the loop or sidings the alarms will cancel when No.1 main line points are reversed. Alarms can then be controlled by the appropriate manual control panel adjacent to No.1 main line points.

Alarms do not start automatically for movements in the loop or siding.

Manual control is available on either side of the crossing when the train is standing close to the road on the loop or siding. The appropriate button for the intended route must be used.

When a Down train makes a prolonged stop at Waipukurau platform the alarms must be cancelled.

2.4.3 Anderson Road, Whakatu (Siding)

Alarms do not start automatically.

Manual control is available on either side of the road.

2.4.4 Bridge Street (SH50), Napier Marshalling Yard

Alarms do not start automatically for Down trains.

Manual control is available at the road crossing.

2.4.5 Waghorne Street, Napier Marshalling Yard

Alarms do not start automatically for Up trains.

Manual control is available at the west side of the road crossing and adjacent to No.2 floodlight tower.

2.4.6 Napier Port Access Road, Napier Port

The Napier Port Access Road level crossing is equipped with half-barrier arms interlocked with the adjacent traffic signals.

The alarms operate automatically for movements to the Port.

For movements from the Port, the crossing is protected by a red light on the indicator.

Trains must occupy the track circuit adjacent to the pushbutton.

When the pushbutton is pressed, the red light will flash to acknowledge receipt, and a time delay of 20 seconds will operate while the traffic lights cycle to red for movements across the crossing.

After the time delay, the alarms will operate.

When the barriers have been detected down, the flashing red light will extinguish, and the "T" light will illuminate.

Napier Port Pedestrian crossing will operate automatically for movements in both directions and will cancel independently from the road crossing.

3. Standing Room for Wagons

3.1 Masterton - Woodville

Location	Standing Room metres	Description of Siding
Mauriceville	135	Siding
	150	Lime Co Siding (98m clear of road crossing)
Pahiatua	578	Loop
	270	No.1 Road
Mangatainoka	360	Siding
Woodville	615	Main Line
	585	Loop
	683	Wairarapa Main (clear of road crossing)

3.2 Palmerston North - Gisborne

Location	Standing Room metres	Description of Siding
Ashhurst	570	Loop
Woodville	615	Main Line
	585	Loop
	585	No.1 Road
	683	Wairarapa Main (clear of road crossing)
Oringi	450	Loop
Dannevirke	983	Loop (548 south of level crossing and 420 north)
Makotuku	1050	Loop
Takapau	1155	Loop
	233	No.1 Exchange Siding
Hatuma Lime Siding	240	Siding
Waipukurau	600	Loop (480 clear of road crossing)
Otane	570	Loop
Hastings	1050	South Loop (465 clear of Frederick St)
	885	North Loop
Whakatu	885	Loop
Awatoto	855	Loop
	525	No.1 Road
Industrial Siding	818	Siding
Owens Siding	270	Siding
Eskdale	563	Loop
Waikoau	368	Loop
Raupunga Siding	675	Siding
Wairoa	585	Loop

4. Clearances

4.1 Sidings and Structures

The following sidings and structures are not to standard height and/or side clearance. Take care when working in these localities. Yard clearances are advised with the Workplace Safety Plan.



CAUTION

Rolling stock must not be shunted past or through any structure without first ensuring that clearances are adequate. Rolling stock must not be shunted past or through any structure without first ensuring that clearances are adequate.

An asterisk (*) alongside the name of the lines or siding means that the distance shown in the column "Side Clearance from Centre Line of Track" is the distance between the centre lines of the two tracks and is substandard.

4.2 Masterton - Woodville

Location	Siding or line	Structure	Height above rail level mm	Side clearance from centre line of track mm	Remarks and rolling stock prohibited from passing structure
Pahiatua	Main and Loop*		..	3560	
	Loop and No.1 Road		..	3330	
Mangatainoka	Main and Loop*		..	3430	Speed of trains when loop is occupied must not exceed 25 km/h

4.3 Palmerston North - Gisborne

Location	Siding or Line	Structure	Height above rail level mm	Side clearance from centre line of track mm	Remarks and rolling stock prohibited from passing structure
Hastings	North Loop and Watties*		..	3300	
Whakatu	Main and Whakatu Industrial Park*		..	3500	
Waipukurau	Main and Loop*		..	3410	
Dannevirke	Main and Loop*		..	3440	
Woodville	Main and Loop*		..	3640	

5. Radio Channels

5.1 Palmerston North – Gisborne Line

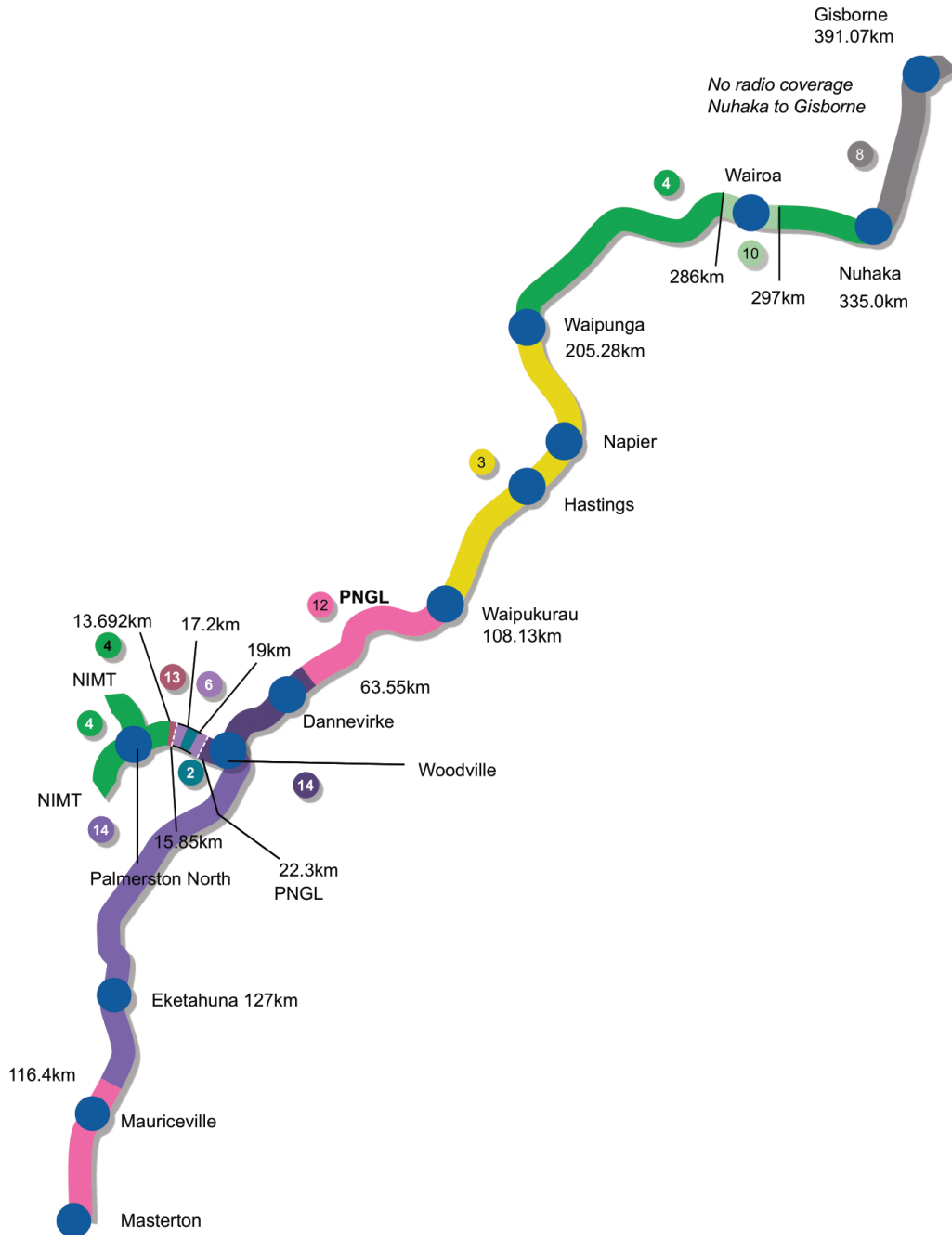
From Km / location	To Km / location	Channel
0.00 - Palmerston North	13.69 - Ashhurst	4
13.69 - Ashhurst	15.85 - Southend Portal Tunnel 1	13
15.85 - Southend Portal Tunnel 1	17.2 - North end Portal of Tunnel 1	6
17.2 - North end Portal of Tunnel 1	19.00 - between Ashhurst and Woodville	2
19.00 - between Ashhurst and Woodville	22.30 - Manawatu Gorge	6
22.30 - Manawatu Gorge	63.55 - between Dannevirke and Makotuku	14
63.55 - between Dannevirke and Makotuku	108.13 - Waipukurau	12
108.13 - Waipukurau	205.28 - Waipunga	3
205.28 - Waipunga	286.00 - Ohinepaka	4
286.00 - Ohinepaka	297.00 - between AFFCO Siding and Whakaki	10
297.00 - between AFFCO Siding and Whakaki	335.00 - between Nuhaka and Kopuawhara	4
335.00 - between Nuhaka and Kopuawhara	391.07 - Gisborne	8

5.2 Wairarapa Line

From Km / location	To Km / location	Channel
48.96 - Featherston portal Rimutaka tunnel (T2)	116.48 - Mauriceville	12
116.48 - Mauriceville	169.00 - Woodville	14

5.3 Snake Diagram

Wairarapa & PNGL Train Control Radio Network



17 November 2023



6. Palmerston North – Napier

6.1 Load Schedule



IMPORTANT

To be read in conjunction with the master locomotive load schedule.

Special load schedule/conditions for services hauled by 2 x DL or DL/DFB Locomotives between Palmerston North and Napier are as follows.

Between Woodville to Takapau and Otane to Hastings, the load schedule can be:

- Up to 2000 trailing tonnes for DL/DL combination
- Up to 1650 trailing tonnes for DL/DFB combination
- Or 750m in length

Between Hastings to Otane and Takapau to Dannevirke, the load schedule can be:

- Up to 1800 trailing tonnes for DL/DL combination
- Up to 1400 trailing tonnes for DL/DFB combination.
- Or 750m in length



IMPORTANT

The DL locomotive must always lead the DFB locomotive, and a DFT locomotive cannot be substituted in place of the DFB locomotive.

The loading rules for trains between 1700 and 2000 tonnes are:

- The maximum consist is 41 wagons trailing load
- The leading 600 tonnes of the trailing load must be heavy drawgear wagons loaded to a minimum of 50 tonnes gross
- The middle 600 tonnes of the trailing load must be on wagons loaded to a minimum of 30 tonnes gross and must be on wagons fitted with either heavy drawgear or Alliance drawgear.
- The load up to 800 tonnes at the rear of the train can be a mix of empty and loaded wagons

Only DL and DFB locomotives with fully operational dynamic brakes must be dispatched on these services. If a traction motor or dynamic brake fails en route, the train may continue to its destination without a tonnage reduction, but the following rules apply:

Descending the Matamau Bank and/or Opapa Bank, the preferred method of train handling will be maintaining braking, with the following restrictions:

- The maximum speed descending must not exceed 40 km/h
- Releasing speed 20 km/h

On these grades, when only one dynamic brake is available, maintaining braking should be applied with the following restrictions:

- The maximum speed descending must not exceed 30 km/h
- Releasing speed 10 km/h

When descending the Matamau and/or Opapa Bank with no dynamic braking, the following rules apply:

- Maximum speed over the top 20 km/h
- The maximum speed descending must not exceed 30 km/h
- Apply the Independent brake to 300 kPa as the speed drops below 20 km/h to fully bunch the train
- Once stopped, apply the independent brake to full service
- Release the automatic brake
- Reduce the independent brake to 150 kPa once the movement starts
- Release the independent brake once the BP is fully recharged

6.2 Derusting Loops

To stop the build-up of rust, one train per week must be routed via the loop (when available for use) at:

- Dannevirke
- Makotuku
- Takapau
- Otane
- Hasting (North and South)

At Whakatu one train or shunt per three days is to be routed via the loop (when available for use) to stop build-up of rust.

At Awatoto one train or shunt service per day (Monday to Friday) is to be routed via the loop (when available for use) to stop the build-up of rust.

6.3 Testing Tunnel Radio System

The following arrangements will apply to test tunnel nos. 1 and 2 (linked together) radio system in the Manawatu Gorge.

Shortly after entering the first tunnel the Operator must "Base Call" the Train Controller and note that an acknowledge "lock on" is received (indicated by the flashing lamp becoming steady). The Operator should then obtain a verbal acknowledgement from the Train Controller that the base call was received on the tunnel system indication in Train Control.

Tuesday and Friday	tested by No.620 or, if it does not run, a train as arranged by the Train Controller.
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NOTE

When replying, the Train Controller may select the nearest hilltop repeater if it is thought the train has left the tunnel.

The "Lock on" of a base call is sufficient to confirm that the tunnel radio system is operational.

The Train Controller must note the results of the test on the train control diagram.

6.4 Slip Warning System Manawatu Gorge

A slip detection array (fence) is located at 21.30km PNGL at an existing slip site. A calming net is situated above the detection array.

The array is activated by falling debris, which then:

- sends an indication to the train control signalling screen.
- transmits a voice message on radio channel 1
- activates an orange flashing beacon located at 21.30km.

The following procedures are to be followed:

If a train arrives at 21.00km or 21.60km to travel through the slip warning area in the Manawatu Gorge area and any of the following has occurred:

- the beacon has been activated, and/or
- a channel 1 transmission is received that the slip warning has been activated,
The Operator can proceed through the slip area (between 21.00 and 21.60km PNGL), travelling at a speed being able to stop within half the clear distance ahead, not exceeding 10 km/h.
The Operator must report to the Train Controller if the track is clear and/or if any obstructions are present.

Upon receiving activation of slip warning system, the Train Controller must:

- advise Operators of the slip activation, with speed restriction for first train or if any obstructions are present.
- advise Operations Support to arrange for an Infrastructure Maintenance Representative to undertake an inspection, and repair and reactivate the fence as necessary during daylight hours (P2).
- issue a 10 km/h speed restriction (with no boards) until slip detection array reset.

6.5 Train Safety Procedures between Woodville and Hastings

TARPs and procedures that should apply are now covered in this section.

6.5.1 Purpose

This instruction outlines the safety procedures that apply due to on-going repair of Cyclone Gabrielle damage in terrain that is susceptible to extreme weather conditions due to potential slips and scouring issues. This instruction provides temporary safety procedures for train running while further resilience work is implemented.

6.5.2 Rainfall TARP Track Inspections

When required by "Rainfall TARP", a rail inspection will be conducted to assess if there has been any reactivation of the slip and scour/flooding sites captured on the essential features list.

Due to the damages observed following Cyclone Gabrielle, the thresholds for rainfall forecast triggering both amber or red levels on eastern North Island (PNGL and Wairarapa) from Metsolutions updates have been temporarily lowered to the following:

- Amber: 50 mm of rainfall in 24 hrs or 75 mm within 48 hrs.
 - Thunderstorms / downpour risks
- Red: Widespread heavy rain with event totals >100 mm within 48 hours

6.5.3 Personnel and Other Resources

If the inspection following a weather event deems the section as damaged / not clear, then:

1. Following initial assessment from the Field Protection Manager and/or the Asset Engineer, a geo-specialist (engineering geologist or geotechnical engineer) will be called to any event that involves a slip / slope hazard preventing the resumption of services.
2. A Track Maintenance Representative will initially lead the investigation and actions relating to any train or rail line incident that doesn't relate to slips, scour or flooding issues.

6.6 Woodville

6.6.1 Signalling

On the Wairarapa Line, a Station Warning board is located outside A12L Up Outer Home from Wairarapa signal. **Network Signals, Indicators and Boards Manual, 3.4.1 Fixed Signals** is modified accordingly.

After passing the Station Warning board the Operator must be prepared to stop the train at the Up Outer Home signal.

A12L signal will only display a proceed indication when the main unit of No.12LABC Up Home from Wairarapa signal is displaying a proceed indication.

6.6.2 Shunt Limit Board

When it is necessary for rail movements to be carried out on the Wairarapa main, this may be authorised up to the Shunt Limit board located 236 metres inside A12L Outer Home from Wairarapa signal provided the Train Controller first ensures there will be no conflicting movements.

6.7 Oringi

Instructions for trains / shunting movements in the Oringi yard including the Freezing Works are detailed in the Oringi Work Site Safety Plan, which is the responsibility of KiwiRail Manager, Palmerston North.

A high column switch stand has been installed at the north end loop to backshunt to siding points; the normal setting of these points is Richmond Siding to siding. The yellow target displays the letter S (for sidings) in black reflectorised tape; the red disc displays the letter B (for backshunt) in black reflectorised tape.

When locomotives are running long hood leading between Oringi and Richmond Meat Works (loading shelter facing points):

- The Pilot may ride in the cab of the locomotive long hood leading between Oringi and the first set of facing points (Meat Works siding) under the following conditions:
- the speed of movement must not exceed 15 km/h
- the movement must stop clear of and before passing over the road crossing adjacent to the facing points, and
- once stationary, the Pilot must move from the locomotive to a safe riding position on the locomotive long hood running board.

The movement may recommence once the Pilot is correctly positioned on the locomotive running board piloting position.

Rail Operating Code, 5.1 Shunting Procedures have been modified accordingly.

6.8 Dannevirke - Waipukurau

6.8.1 Rusty Rail Conditions Dannevirke

Rusty rail conditions will apply to all services traversing Dannevirke loop in accordance with **SO05 Faulty Track Circuit Operations, 4.3 Rusty Rail**.

- No.3 and 7 points have been electrically disabled. For access to the loop, these points will need to be hand operated.
- the speed of all trains over Stairs Street level crossing at the 53.09 km and Allardice Road level crossing at the 53.72 km via the loop must not exceed 10 km/h. Once on the crossing trains may resume normal line speed.
- Speed boards have not been erected. **TO10 Network Line Speeds, 5. Temporary Speed Restrictions** is modified accordingly.

6.8.2 Rawhiti Street (between Dannevirke and Oringi)

If a rail movement passes 3TIA or 3TIB at Dannevirke at Stop, the movement must observe a 10 km/h sighting speed restriction on approach to Rawhiti Street at the 52.20 km between Dannevirke and Oringi as the level crossing alarms may not operate.

6.8.3 Rusty Rail Conditions Makotuku

Rusty rail conditions will apply to all services traversing Makotuku loop in accordance with **SO05 Faulty Track Circuit Operations, 4.3 Rusty Rail**.

- No.3 and 7 points have been electrically disabled. For access to the loop, these points will need to be hand operated.
- Speed boards have not been erected. **TO10 Network Line Speeds, 5. Temporary Speed Restrictions** is modified accordingly.

6.8.4 Rusty Rail Conditions Waipukurau

Rusty rail conditions will apply to all services traversing Waipukurau loop in accordance with **SO05 Faulty Track Circuit Operations, 4.3 Rusty Rail**.

- the speed of all trains over Ruataniwha Street (SH2) level crossing at the 108.23 km via the loop must not exceed 10 km/h. Once on the crossing trains may resume normal line speed.
- Speed boards have not been erected. **TO10 Network Line Speeds, 5. Temporary Speed Restrictions** is modified accordingly.

6.9 Harvest Monitoring System (between Ormondville and Kopua)

A Harvest monitoring system consisting of string-pot deflection gauges has been installed on Bridge 156 at the 73.986km PNGL between Ormondville and Kopua IB.

Upon receiving activation of the sensor, the Train Controller must:

Red Alert Level:

- advise Operators of the alarm activation and stop train movements
- advise Operations Support to arrange Infrastructure personnel to complete a physical inspection
- Infrastructure personnel will report to the Train Controller if train movements can be reinstated with speed restrictions
- if a temporary speed restriction is required, the Train Controller will enter details into the Access Provider's Speed Restriction system and identify any trains to be advised
- upon receiving clearance from Infrastructure personnel, and if the alarm system remains operative in the field, the Train Controller must arrange a reset of the alarm by requesting Operations Support to contact the Harvest Engineer who will reset the alarm remotely.

If the alarm mechanism has been damaged or fails and needs re-configuration:

- the Train Controller will impose the above speed restrictions
- the Field Asset Engineer will arrange for a technician to attend and report to the Train Controller when the alarm system is fully functional.

6.10 Waipukurau - Otane

6.10.1 Ovation Siding

Due to restricted clearance between the main line and Ovation Siding, no trains may be stabled between the 60 km/h board (immediately south of Waipukurau) and the 108km peg while shunting Ovation Siding.

6.10.2 Otane

Rusty Rail Conditions Otane Loop

Rusty rail conditions will apply to all services traversing Otane loop in accordance with **SO05 Faulty Track Circuit Operations, 4.3 Rusty Rail**.

- No.3 and 7 points have been electrically disabled. For access to the loop, these points will need to be hand operated.
- the speed of all trains over Higginson Street level crossing at the 121.87 km via the loop must not exceed 10 km/h. Once on the crossing trains may resume normal line speed.
- Speed boards have not been erected. **TO10 Network Line Speeds, 5. Temporary Speed Restrictions** is modified accordingly.

6.11 Hastings

6.11.1 Rusty Rail Conditions

As a result of rusty rail conditions and track circuits not operating correctly on the North backshunt, signal nos. 32RAC, 32RD and 32L will not display a proceed aspect for movements entering and / or exiting the North backshunt.

After authorising a movement past these signals, the Train Controller must not alter the position of No.27 points until confirmation has been received that the movement is clear of the points.

6.11.2 Arrow Indicator

An Arrow indicator (3AI) and related colour light indicator (3PI):

- controlled by a switch adjacent to switch lock WL1A, and
- available only when:
 - the switch lock release has been given, and
 - 3 points are at normal

has been provided.

Operating 3PI control to “Go” will:

- illuminate A1
- clear 3PI to yellow
- lock No.3 points in normal

until 30 seconds after the control has been restored to Stop.

6.11.3 Switch Lock WL1A

When switch lock WL1A release has been given, signal nos. 12RC, 12RD, 12RE, 12LC and 12LD may be controlled from pushbuttons by shunting personnel. Operation of a signal pushbutton will initiate the lowering of the barriers if they are not already down. When the barriers are fully down the appropriate signal will clear. The clearing of a signal will be indicated by the normally illuminated red signal indication in the signal control box extinguishing.

Signals will automatically cancel as soon as the movement has cleared the crossing, however, in the event of a signal being cleared and the movement not taking place operation of the Cancel pushbutton will restore the signal to Stop.

6.11.4 Signals 32L and 32RD

When No.27 points are at normal and No.29 points are reversed, signal nos. 32L and 32RD may be controlled from the pushbuttons by shunting personnel. Operation of a signal pushbutton will initiate the lowering of the barriers if they are not already down. When the barriers are fully down, the appropriate signal will clear. The clearing of a signal will be indicated by the normally illuminated red signal indication in the signal control box extinguishing.

Signals will automatically cancel as soon as the movement has cleared the crossing, however, in the event of a signal being cleared and the movement not taking place operation of the Cancel pushbutton will restore the signal to Stop.

6.11.5 Rail Vehicles Unattended on Loop

Rail vehicles may be left unattended on the loop at Hastings/Tomoana for operational purposes after Train Controllers permission has been obtained.

All vehicles must be properly secured to prevent movement in accordance with **Rail Operating Code Section 5.1, 2.6 Procedures for Securing Rail Vehicles.**

TO08 Shunting, 7.3 Standing at Stations is modified accordingly.

6.11.6 Low-Speed 2L Signal

The low-speed aspect on 2L signal must only be used for shunting purposes and only gives movement authority to the shunting limit board.

This aspect will activate St Aubyn Street level crossing only and all other level crossings south of the shunting limit board will not activate.

Locomotive Engineers must notify the Train Controller if they have received a low-speed aspect on this signal before departing Hastings.

6.12 Awatoto

Rail vehicles may be left unattended on the loop at Awatoto for operational purposes after Train Controllers permission has been obtained.

All vehicles must be properly secured to prevent movement in accordance with **Rail Operating Code Section 5.1, 2.6 Procedures for Securing Rail Vehicles.**

TO08 Shunting, 7.3 Standing at Stations is modified accordingly.

6.13 Napier

Napier is divided into the marshalling yard and the port area, including a passenger stop/platform located on the main line.

6.13.1 Marshalling Yard

The marshalling yard includes all lines and sidings between the ATS board 54 metres south of 12L signal and the loop road towards Napier Wool Dumpers, including those sidings in the old yard.

6.13.2 Authorising Services to Napier Marshalling Yard from the Main Line Connections

The Officer in Charge authorises any service (except when yard personnel are not on duty) past 10RAC or 10RD signals to the marshalling yard.

When Rail Personnel are not on duty for incoming trains, the Locomotive Engineer must contact the Train Controller when approaching the ATS board 54 metres south of 12L signal. No train or light locomotive may pass the ATS board until authorised by the Train Controller.

6.13.3 Piloting

No service may pass any ATS board in the marshalling yard area unless the Officer in Charge has instructed the Locomotive Engineer. If there are no Rail Personnel on duty, the Train Controller will give permission.

6.13.4 All Trains Stop Boards

There is an ATS board in each direction between the marshalling yard and the port:

- Up direction from the marshalling yard to the port is 54m on the Freight Centre yard side of 12L signal.
- Down direction from the port to marshalling yard on Bridge Street level crossing port side.

6.13.5 Attendance of Rail Personnel

Rail Personnel are at Napier Terminal from:

- Monday to Friday: 03:30hrs to 22:30hrs
- Saturday: Unattended
- Sunday: Unattended

6.13.6 Movements of Trains / Track Occupancies within Napier Terminal

At the beginning of each workday, Napier Operations staff must contact the Train Controller once on site and take control of the Napier Terminal as OIC (Officer in Charge).

The time at which control of the Napier Terminal is taken by the OIC must be recorded on the train control diagram.

At the end of each workday Napier Operations staff must:

- hand back control of the Napier Terminal, and
- confirm the position of “Napier Port Branch Main line” points, and
- confirm whether the main line is clear, or occupied

to the Train Controller.

This time at which control of the Napier Terminal is taken by the Train Controller and information confirmed must be recorded on the train control diagram.

When Napier Terminal is Attended:

- The OIC will authorise all movements past relevant ATS boards to enter and exit the Napier Terminal and all movements within terminal limits.
- The OIC will authorise any track occupancies within non-interlocked areas.

When Napier Terminal is Unattended :

- The Train Controller will authorise all movements past relevant ATS boards to enter and exit the Napier Terminal.
 - First preference for berthing trains is to be on the main line if clear, or hold sufficient space to accommodate a subsequent movement.
 - Once berthed on the main line the Locomotive Engineer will confirm with the Train Controller whether the “West End” Main to Loop points (1 points) are clear for any additional movements towards, or from the loop and/or siding roads.

- When any movements are required to depart Napier, the points must be reset back to normal after departure. If this is not possible, the Train Controller must record which road the movement has departed from and advise the next movement and/or Napier Operations staff when next on duty.
- The Train Controller will authorise Infrastructure personnel to work within non-interlocked area as OIC.
 - Track occupancies authorised by the Train Controller within the Napier Terminal must be recorded on the train control diagram.
 - The Train Controller must not authorise any other movements to enter or exit the Napier Terminal during this time unless an agreement has been reached with Infrastructure personnel around safe berthing and/or departing of movements.
 - Track Maintenance Representatives must provide their own protection based on location of work and position of rail vehicles (stop discs, derailleurs, clamping points, detonators, etc.).

6.13.7 Shunting Movements from Industrial Siding

The Shunter in Charge must get permission from the Train Controller before any shunting movement is signalled past 6LC shunt from the Industrial Sidings signal. The Train Controller must make sure the route is clear for the intended movement before giving permission.

6.13.8 Shunt Limit Board on South Main

To allow locomotives to move around the triangle when No.3 points are at normal, a low-speed light on number 4LABC Down Directing signal will authorise the movement up to the Shunt Limit board on the south main without the excessive operation of the level crossing alarms.

6.13.9 Working Services between the Marshalling Yard and Port

All movements between the marshalling yard/port area are under the control of the Officer in Charge. On Sundays, the person delegated by the Officer in Charge will authorise the working of services in this area.

6.13.10 Port Area

The Napier Port area includes all lines and sidings east of Breakwater Road level crossing.

All movements in the port area must be piloted by the Remote Control Operator / Shunter in Charge. Before shunts leave the port, permission must be obtained from the Officer in Charge at the marshalling yard.

The level crossing alarms at Breakwater Road (SH50) Cold Storage Siding, Napier Port (3.96km) are not operational.

6.13.11 Signalling

Approaching Napier from Bay View a Station Warning board is located outside A8L Down Outer Home signal. **Network Signals, Indicators and Boards, 3.4.1 Classes of Fixed Signals / Intermediate Signals** is modified accordingly. After passing the Station Warning board the Operator must be prepared to stop the train at the Down Outer Home signal.

A8L signal will only display a proceed indication when No.8LAB Down Home signal is displaying a proceed indication.

When shunting Owens Siding, movements must not pass the Shunting Limit board erected 274 metres on the north side of the siding.

When a shunting move locks in Owens Siding and the points are set for through running on the main line, the Train Controller must be advised.

The points must not be operated again for the shunt to return to the main line, until the Train Controller has ensured the main line is clear for the intended movement and authorised operation of the points.

On completion of shunting and the movement is clear of the siding on the main line the Shunter in charge must ensure the main line points are locked in normal and the TW key is in their possession for returning to the Team Leader.

6.13.12 Rusty Rail Conditions

As a result of rusty rail conditions over the points tracks which has affected the signalling interlocking, the following points have been electrically disconnected to prevent movement by the Train Controller.

- 5A points
- 5B points
- 3 points

The points may be hand wound if required for operational purposes.

The points will remain electrically disconnected until the rust has been removed and the Signal Maintenance Representative cancels this instruction.

7. Napier – Gisborne

The line is currently closed between A8L Down Outer Home signal at Napier and 9 points Affco Siding to all scheduled train services.

Track Closure Arrangements:

Work Site	Signal / Meterage From	Signal / Meterage To
Protected Work Area	A8L (Down Outer Home Signal Napier)	191.300 km (between Bay View and Eskdale)
Construction Zone	191.300 km (between Bay View and Eskdale)	217.00 km (between Waipunga and Waikoau)
Protected Work Area	217.00 km (between Waipunga and Waikoau)	9 pts Affco Siding

Protected Work Areas:

- All scheduled train services are cancelled
- Track access must be arranged by Will Te Amo – 027 493-2673
- Level Crossings: During the hours of work, any level crossings alarms within the work area may be placed on manual in accordance with **GR04 Working on a Level Crossing, 6.2 Manual Control**
- Refer to Safe Working Arrangements below

Construction Zones:

- Closed to **all** rail movements.
- A danger stop signal and derailer will be placed at the limits of the construction zones
- Use of **TS02 Protected Work Area, 5. Worksite Register and Locking On/Off** within the Construction Zones is suspended. Personnel onsite will be managed by the ACC.
- Refer to Safe Working Arrangements below

Ahuriri Control Centre (ACC):

- Location – 7 Tu Atu Street, Ahuriri, Napier
- Primary contact – Will Te Amo – 027 493-2673
- Manned – as required by work activities.

Track Protection - Track Warrant Control:

- A Track Warrant (Bravo Delta) will be issued to Will Te Amo from A8L (Down Outer Home) Signal Napier to 9Pts Affco Siding.
- TWAC's blocking must be applied between:
 - 191.300 km and 217.00 km
- Clause 12 of the Track Warrant must indicate the limits of the Construction Zone:
 - 191.300 km and 217.00 km

Level Crossings:

Referring to S&I Diagram:

- No.3238 for Napier, and
- No.2603 for Eskdale - Raupunga Sdg.

To be read in conjunction with Speed Restriction Advice.

Until a certificate is received from the signal's member in charge, due to unreliable operation of track circuits, a 10 km/h speed restriction applies to **all level crossings fitted with automatic warning**

devices between A8L (Down Outer Home) Napier and Bay View Intermediate Board in accordance with **GR04 Level Crossings**

The speed of all movements over all level crossings fitted with level crossing alarms must not exceed 10 km/h. Once on the level crossing the rail movement may resume normal line speed.

Speed boards have not been erected. **T010 Network Line Speeds, 5. Temporary Speed Restrictions** is modified accordingly.

Safe Working Arrangements:

From A8L (Down Outer Home) Signal Napier to 9 Pts Affco Siding:

- Will Te Amo will authorise and be responsible for arranging and managing access of all rail activity within the above limits
- The movement of all Rail Vehicles (including Hi-Rail vehicles) on the rail network are permitted within the Protected Work Areas only
- **No rail movements are permitted to operate within the Construction Zones.**

7.1 Napier – 296.50km (between 9pts AFFCO Siding and Whakaki IB)

A double-sided board is erected at the 296.30km (between AFFCO Siding and Whakaki IB) with the words “End of PNGL” for the Up direction, and “KiwiRail TWC begins” for the Down direction.

All track occupancies, including Hi-Rail vehicles between the 296.30km and 296.50km will be authorised under **TS09 Foul Time**.

A portable derailer has been installed at the 296.50km to prevent Rail Bike Adventures from exceeding their lease limit.

7.1.1 Satellite Phone

All trains operating north of Waipunga must be in possession of a satellite phone.

Napier Loco based satellite phone No.0061 406 321 710

7.1.2 Compulsory Radio Call Locations

To aid the monitoring of train progress, Locomotive Engineers of all trains must base call the Train Controller at the following locations:

- Waikoau
- Raupunga Siding

The Train Controller must acknowledge each radio call, however the train does not need to stop, nor wait for an acknowledgement from the Train Controller. The Train Controller must record the time of the call against the call location on the train control diagram.

7.1.3 Rusty Rail Napier – Wairoa

Following reduced rail operations, rusty rail conditions will apply on the following level crossings:

- Severn Street – 180.70km
- SH2 (Meanee Quay) – 183.43km
- Domain Road – 183.99km
- SH36 (Carroll Street) – 294.74km

The speed of all trains over level crossings fitted with level crossing alarms must not exceed 10 km/h. Once on the level crossing a train can resume normal line speed.

**NOTE**

Speed Boards have not been erected

RP15 Implementing Temporary Speed Restrictions is modified accordingly.

7.1.4 Rusty Rail Wairoa

Following the resumption of services after an extensive cessation, rusty rail conditions will apply as follows:

- Due to unreliable track circuits, No.3 and / or 7 points must be hand wound and isolated in reverse for all movements to / from the loop.

**NOTE**

Points Indicators must be passed in accordance with the relevant regulations. When not in use, points must be left isolated in normal.

7.1.5 Wagons on Loop – Wairoa

Wagons may be left unattended on the loop at Wairoa provided that:

- the vehicles are secured sufficiently to prevent movement in accordance with **Rail Operating Code 5.1 Shunting Procedures, 2.6 Procedures for Securing Rail Vehicles**, and
- chocks are fitted if any vehicles are standing on a grade.

The train crew must advise the Train Controller of the number of hand brakes applied and chocks fitted (if required) before leaving the wagons unattended.

The Train Controller must record this information on the train control diagram.

T008 Shunting, 7.3 Standing at Stations is modified accordingly.

7.1.6 Entering Wairoa Station Limits

To improve situational awareness between Operators, all rail vehicles must contact the Log Loader Operator on 027 295 0293 before entering station limits Wairoa, on the following days / times:

- Monday – Friday
- Between 06:00 and 16:00 hrs.

7.2 296.50km (between 9pts AFFCO Siding and Whakaki IB) – 385.30km (North End of Matawhero Siding)

The line between 296.50km (between 9pts AFFCO Siding and Whakaki IB) and 385.30km (north end of Matawhero Siding) is leased to Rail Bike Adventures (RBA) as described below:

7.2.1 Extent of lease

The lease to RBA extends from the 296.50km (between 9pts AFFCO Siding and Whakaki IB) and the 385.30km (north end of Matawhero Siding).

All maintenance requirements between the 296.50km and 373.50km are the responsibility of RBA.

7.2.2 Demarcation between RBA and KiwiRail Territory

A double-sided board is erected at the 296.50km with the words “RBA Territory Begins” for the Up direction, and “RBA Territory Ends” for the Down direction.

7.2.3 Common Territory between RBA and GCVR

Between the 373.50km (9 points Muriwai) and the 385.30km (north end of Matawhero Siding) is common territory used by both RBA and Gisborne City Vintage Railway (GCVR) and will operate under the terms and conditions set out in the joint operability agreement.

7.3 373.50km (9 points Muriwai) – Gisborne

A licence to occupy has been issued to GCVR for the line between 373.50km (9 points Muriwai) and Gisborne (end of line), as described below.

7.3.1 Extent of Licence to Occupy

The lease to GCVR extends from 373.50km (between Maraetaha IB and Muriwai 1pts) to end of line at Gisborne. All maintenance requirements and all rail vehicle movements, when operating is the responsibility of GCVR.

7.3.2 Common Territory between RBA and GCVR

Between the 373.50km (between Maraetaha IB and Muriwai 1pts) and the 385.30km (north end of Matawhero Siding) is common territory used by both RBA and GCVR and will operate under the terms and conditions set out in the joint operability agreement.

7.3.3 Access and Emergency Contacts for GCVR Territory

Access and emergency matters (including Airport Emergency calls) when GCVR are operating, should be directed to 027 717 1710.

Alternate number: Geoff Joyce 021 108 3642

7.3.4 Signalling and Interlocking – Gisborne

All interlocking within station limits Gisborne is secured with Signals 41 padlocks and the CTC disconnected.

8. Wairarapa Line

The line is currently closed between Masterton (Track Warrant Begins Board) and Newman IB (129.82 km) due to:

- condition of Bridge No.92 (109.182 km and 109.221 km) between Masterton and Mauriceville Sdg
- Prematurely Decayed Sleepers (117.50 km - 117.80 km and 119.15 km - 119.95 km) between Mangamahoe and Newman IB
- condition of Bridge No.104 (129.01 km and 129.07 km) between Mangamahoe and Newman IB

Only Infrastructure and approved contractor vehicles are authorised in this area for asset inspection and maintenance activities.

The Infrastructure Asset Engineer must confirm that the line has been inspected and is ready for any train service on that portion of line. Any such authority must be issued by bulletin.

Train Control has applied TWACS blocking to the area which may be removed to allow asset Inspections and/or maintenance activities. Any other removal of the blocking shall require Network Control Manager approval.

8.1 Pahiatua Joint Operating Plan

8.1.1 Rail Operators

- Pahiatua Railcar Society (PRS)
- KiwiRail Infrastructure (KRI)
- KiwiRail Operations (KiwiRail)

8.1.2 Purpose

The purpose of this plan is to:

- define agreed terms for interoperability at PRS private sidings and NRS no.1 road
- provide contact details to enable communication between Operators.

8.1.3 Scope

The document applies to and is binding on KiwiRail, KRI and PRS personnel working within the confines of the PRS private sidings and No.1 Road at Pahiatua. No.1 Road and all roads off it are protected from the Controlled Network. Other Network Rail Operators will liaise with PRS directly regarding access to the PRS private sidings.

8.1.4 Responsibilities

KRI and KiwiRail responsibilities:

- Jointly responsible for ensuring that the National Rail System (NRS) shunting instructions to enable shunting of the PRS private sidings and No.1 Road at Pahiatua are included in the **Rail Operating Code 5.1 Shunting Procedures, 2.6 Procedures for Securing Rail Vehicles**.
- Individually responsible for advising PRS of any infrastructure defects that may become apparent.
- Ensuring that they do not operate in PRS operating area unless it is to access the No.1 Road and for the sole purpose of shunting rail vehicles only.

PRS responsibilities:

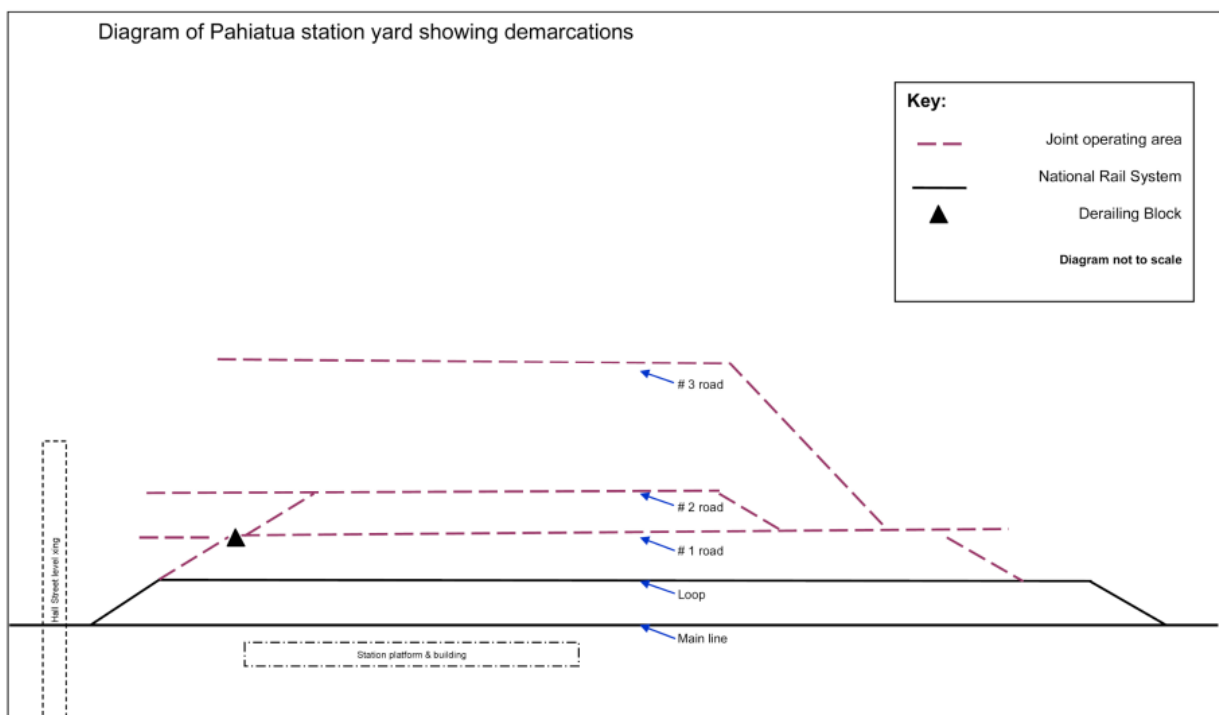
- The safe operation of the relevant tracks insofar as this does not conflict with the responsibilities of KRI and KiwiRail.

- Ensuring all shunting by PRS staff is performed only by staff trained and certified under the PRS Safety System approved by NZTA.
- Notifying the KiwiRail Rail Manager, Palmerston North, if any KiwiRail rail vehicle becomes unserviceable.
- Notifying the Network Control Manager if any KRI rail vehicle or track infrastructure becomes unserviceable.
- Ensuring rail vehicles are placed on No.1 Road for uplifting by KiwiRail.

8.1.5 NRS Demarcation Points

The demarcation points between the PRS sidings and the NRS are determined by the turnouts off No.1 Road in three locations:

- South end of No.1 Road north facing turnout to No.2 Road (load bank / goods shed)
- North end of No.1 Road south facing to No.2 Road (turnout to goods shed)
- North end of No.1 Road south facing turnout to loading shelter (back road)



Pahiataua Station yard demarcations

8.1.6 Running Rights and Restrictions

Summary

- PRS may operate on No.1 Road (including the south backshunt) and on all other roads.
- KRI may operate on No.1 Road and any other roads as agreed from time to time, at KRI's request.
- KiwiRail may operate on No.1 Road.

Siding No.1

PRS rail vehicles may operate along No.1 Road as required to:

- Undertake various shunting operations.
 - Other than as may be necessary during such shunting operations, PRS Rail Vehicles must NOT be stabled on No.1 Road.
- Enable trains to depart from No.1 Road on to the Controlled Network or terminate back at No.1 Road after leaving the Controlled Network.

All movements to or from the Controlled Network will be authorised by bulletin.

KRI and KiwiRail rail vehicles may operate on No.1 Road (referring to the attached Site Plan), provided that the roads into the PRS depot are kept clear of stabled rail vehicles.

- All stabled rail vehicles must be kept clear of turnout fouling points.

Derailer

A derailer is located at the south end of No.1 Road and is double locked with an AS padlock and a PRS padlock. This needs to be unlocked for movements:

- along No.1 Road
- to and from the turnout to No.2 Road (the load bank / goods shed)

The No.1 Road weighted points / south end backshunt is double locked with an AS padlock and a PRS padlock.

Other Yard Roads

- KRI may have access to portions of yard roads by prior arrangement.
- KRI will protect its unattended vehicles by clamping the blade to the stock rail or by spiking the blade of the turnout leading to the road that the vehicle is stabled on, in accordance with **TS08 Working Within Non-Interlocked Areas, 6. Protection Requirements.**

8.1.7 Operating Procedures

Speed must not exceed 15 km/h.

No.1 Road Operation

All unattended rail vehicles must be secured in accordance with **Rail Operating Code 5.1 Shunting Procedures, 2.6 Procedures for Securing Rail Vehicles.**

Procedures for KRI and KiwiRail

Prior to the entry of a movement onto No.1 Road from the NRS, the KRI or KiwiRail PIC must visually determine whether PRS Rail Vehicles are occupying the No.1 Road or are about to be moved onto it.

- If PRS Rail Vehicles **are not** occupying the road (and are not about to), the movement may enter the No.1 Road.
- If PRS Rail Vehicles **are** occupying the road (or are about to), the movement must not enter the road until suitable liaison has occurred between the parties to establish what movements will take place and under whose control.

PRS rail vehicles will not occupy the road unless PRS staff are on duty.

Procedures for PRS

Prior to the entry of a PRS movement onto No.1 Road the PRS PIC must visually determine whether KRI or KiwiRail Rail Vehicles are occupying the No.1 Road or are about to be moved onto it.

- If KRI / KiwiRail rail vehicles are not occupying No.1 Road (and are not about to), the PRS movement may enter the road.
- If KRI / KiwiRail rail vehicles are occupying the No.1 Road (or are about to) and KRI or KiwiRail personnel are present (indicating that operations are in progress), the PRS movement must not enter the road until suitable liaison has occurred between the parties to establish what movements will take place and under whose control.

- If KRI / KiwiRail rail vehicles are occupying No.1 Road, but KRI or KiwiRail personnel are not present, the PRS movement may enter the No.1 Road, but the PRS PIC must ensure that the KRI / KiwiRail rail vehicles are clear, or temporarily moved clear, of the intended PRS movements.
- It is the responsibility of the KRI or KiwiRail crew to ensure that all turnouts are set correctly.

8.1.8 Track Certification

KRI is responsible for certifying that the track to which KRI and KiwiRail have rights of access is of appropriate standard. This track consists of:

- No.1 Road
- any other tracks within PRS territory that KRI has been granted access to (refer 8.1.6).

PRS is responsible for certifying that all track is of appropriate standard for its operation.

8.1.9 Operating Incidents

In the event of any incident involving the staff or operation of any equipment belonging to any Rail Operator, that Rail Operator must notify the other Rail Operators immediately by telephone.

8.1.10 Contact Telephone Numbers

Contact details are held in Train Control.

8.1.11 New Zealand Transport Agency (NZTA) Rail Licence

Each Operator holds an NZTA Rail Licence. If a Rail Operator intends to relinquish its licence, or the licence is revoked or withdrawn, it must inform the other Rail Operators at the earliest opportunity.

8.2 Tui Dairy Siding

Due to the risk of diesel fume and oil leakage contamination, diesel locomotives of any class are prohibited from entering the ELA (loadout bay).

A runner wagon must always be used.

9. Signalling and Interlocking

9.1 Masterton – Woodville

Pahiatua

Current S&I Diagram No.2862

Amendments:

- Mauriceville – Add TWC hand points signs for 1 & 9 points
- Pahiatua – Add TWC hand points signs for 1 & 9 points
- Tui Siding – Add TWC hand points signs for 11 points
- Mangatainoka Siding – Add TWC hand points signs for 1 & 9 points

9.2 Palmerston North – Gisborne Line

Ashhurst

Current S&I Diagram No.3149

Amendments:

- Change meterage 5076 to 10296
- Add new level crossing – Manawatu Gorge at 15.77 km

Woodville

Current S&I Diagram No.3066

Amendments:

- Sheet 2 – Move TWC Territory limit from 10R to 10L.

Dannevirke

Current S&I Diagram No.3382

Makotuku

Current S&I Diagram No.3143

Takapau–Waipukurau

Current S&I Diagram No.3094

Otane

Current S&I Diagram No.2745

Amendments:

- Insert Racecourse Road level crossing at 117.76 km (between Tamumu Road level crossing and Otane Station Warning Board)
- Change meterage of Opapa Intermediate Board to 135.90 km

Hastings

Current S&I Diagram No.3067

Amendments:

- Sheet 2 – change meterage 936 to 705
- Change ‘Ellwood Road’ at 162.07km at Hastings to ‘Elwood Road’

Whakatu–Awatoto

Current S&I Diagram No.3230

Napier

Current S&I Diagram No.3238

Eskdale–Raupunga Siding

Current S&I Diagram No.2603

Amendments:

- Eskdale – Add TWC hand points signs for 1 & 9 points
- Waikoau – Add TWC hand points signs for 1 & 9 points
- Delete Waihua Intermediate Board

Wairoa

Current S&I Diagram No.3002

Amendments:

- Change meterage of Danger Stop board to 296.30 km
- Show back-to-back “End of PNGL” and “KiwiRail TWC begins” board at 296.30 km

Kopuawhara–Muriwai

Current S&I Diagram No.3003

Gisborne

Current S&I Diagram No.2861

10. Signalling and Interlocking Out of Use

Points at the following stations or sidings are bolted in normal and secured with a PS padlock pending removal.

If it is necessary to shunt any of these sidings the KiwiRail Infrastructure Manager for the area, or their deputy, must be in attendance. Unless otherwise stated, Train Controller permission must be obtained and if in a Track Warrant area, a Track Warrant must be issued before the points are unlocked. The Officer from whom permission to unlock the points was obtained must be advised when the points are again padlocked.

Mauriceville

Nos. 1 and 9 frame lever points have been secured in normal and are not available for use.

Mangatainoka

No.1 and 9 frame lever points have been secured in normal and are not available for use.

Oringi

AS points at the north end of the Loop, towards Richmond Siding (milk loading area) have been secured in reverse.

Hastings

Due to rusty rail conditions, WL21A and WL21B switch locks are secured in normal and are not available for use. If WL21A and WL21B switch locks are needed for any purpose, a Signals Maintenance Representative must be in attendance.

E points (leading to West Siding) have been secured in normal.

Whakatu

WL1A switch lock pedestal has been secured closed with a signals security padlock and the switch has been secured in normal with a PS bolt and padlock. If the switch lock is needed for any purpose, a Signals Maintenance Representative must be in attendance.

Awatoto

WL1A and WL1B switch locks have been secured in normal, switch lock doors secured with a Signals padlock and lock release control from Train Control disconnected. If WL1A or WL1B switch locks are required for use, a Signals Maintenance Representative must be in attendance.

No.3 & 7 points have been secured in normal due to rusty rail conditions.

Napier

No.9 points Owens Sidings have been secured in normal and are not available for use.

WL2 switch lock has been secured in normal. Track Engineering approval is required before the siding can be used.

No.7 points have been secured in normal. A Signals Maintenance Representative must be in attendance if required for use.

WL4 Switch lock has been secured in normal with PS Bolt and is unavailable for use.

Eskdale

No.1 and 9 main to loop points have been bolted in normal and are unavailable for use.

The 'old' loop to sidings frame lever points at the south and north ends of Eskdale are secured in normal with a Signals '41' padlock, pending removal.

Waikoau

The loop to siding points have been secured in normal and are unavailable for use.

Raupunga

No.1 and 9 main to siding points have been secured in normal with PS padlocks and are unavailable for use, pending removal.

**NOTE**

Parts of No.1 points and the siding have been removed.

Wairoa

The north end and south end loop to siding points have been secured in normal and are unavailable for use.

Kopuawhara

The 'old' loop to sidings frame lever points at the south and north ends of Kopuawhara are secured in normal with Signals '41' padlocks, pending removal.