

Division / Business Unit: Function:
Document Type:

Engineering & Systems
Operations
Guideline

Network Information Book Vic South West Pyrenees (exc) to Newport (exc)

OGW-30-05

Applicability

Interstate Network

Publication Requirement

Internal / External

Primary Source

Route Access Standard - Defined Interstate Rail Network Section Pages D2

Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
2.4	7 Dec 2023	Configuration Management Administrator	Corridor Assets & Operational Representatives	Configuration Manager	Head of Operations Standards

Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	24 Jun 2016		Initial issue
2.0	15 Jun 2020	Various	Adjacent Train Control, Parallel Running Lines, Section Operating Equipment & Emergency Automatic Mode information updated. Interface Points details added to new section 1.6. Ararat location updated. Maroona and Pyrenees locations updated. Altona North refuge siding details added. Wayside Equipment details updated. Diagrams updated.

© Australian Rail Track Corporation Limited (ARTC)

Disclaime

This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

Authorised users of this document should visit ARTC's intranet or extranet (www.artc.com.au) to access the latest version of this document.

CONFIDENTIAL Page 1 of 91



Table of Contents

2.1	20 Sep 2021	1.1, 1.4, 1.11, 1.18, 1.21, 2.2.5.2, 2.3	Board Extent, Adjacent Train Control Boards / Centres, Level Crossings table, Wayside Equipment section and Drawing Legend updated. Ararat standard gauge movements updated including special operational instructions note. Maroona, North Geelong, Elders Loop – Manor Loop & Manor Loop to Laverton Loop diagrams updated. Usage note added to all diagrams.
2.2	3 Feb 2022	1.1, 1.11	Board Extent & Level Crossings table updated.
2.3	6 Jul 2022	1.1, 1.11, 2.14, 3.1	Board Extent, Level Crossings table & Manor Loop to Laverton Loop diagram. Portland location moved from Vic North West NIB.
2.4	7 Dec 2023	1.1, 1.11, 2.15	Board Extent & Level Crossings table updated. Laverton location text updated. Vite Vite and Laverton diagrams updated.



Table of Contents

Tab	e of Co	ontents	3					
1	Gene	eral Information	5					
	1.1	Board Extent	5					
	1.2	3 7						
	1.3	Applicable Rules	5					
	1.4	Adjacent Train Control Boards / Centres	5					
	1.5	Parallel Running Lines	5					
	1.6	Interface points ARTC / MTM / V/Line between Laverton Loop and Manor Loop	6					
	1.7	Special Conditions – Disabled Train Moorabool Viaduct	6					
	1.8	Section Operating Equipment	7					
		1.8.1 Motorised Point Machines	7					
		1.8.2 Switch Locks	7					
		1.8.3 General Operating Procedure - Sidings	9					
		1.8.4 Locations Fitted with Emergency Automatic Mode Operation	9					
		1.8.5 Emergency Automatic Mode	S					
	1.9	Train Braking Requirements	11					
	1.10	Index to TA 20	12					
	1.11	Level Crossings	13					
	1.12	Emergency Local Releases	24					
	1.13	Maximum Permitted Speeds and Permanent Speed Restrictions	24					
	1.14	Maximum Train Length	24					
	1.15	Structure Clearances	24					
	1.16	Significant Kilometre Markings	24					
	1.17	Communications	25					
	1.18	Wayside Monitoring Systems	25					
	1.19	Ruling Gradients	25					
	1.20	Curve and Gradient Data	25					
	1.21	Drawing Legend	26					
2	Loca	ations and Sections Information	27					
	2.1	Pyrenees Loop (PYL)	27					
	2.2	Ararat (ART)	27					
		2.2.1 Overview	27					





Table of Contents

	2.2.2	Stabling in No 2 Track	28
	2.2.3	Train Operator Requirements	28
	2.2.4	Broad Gauge Movements	28
	2.2.5	Standard Gauge Movements (includes special operational instructions)	30
2.3	Marooi	na Loop (MNA)	41
	2.3.1	Maroona Operating Protocols	41
2.4	Tatyoo	n Loop (TYP)	46
2.5	Westm	ere Loop (WSM)	49
2.6	Vite Vi	te Loop (VVE)	52
2.7	Tooli L	oop (TOZ)	55
2.8	Berryb	ank Loop (BBK)	58
2.9	Winge	el Loop (WGI)	61
2.10	Barwoi	n Park Loop (BWP)	63
	2.10.1	Inverleigh (IVH) Intermediate Siding Procedures	63
2.11	Gherin	ghap Loop (GHP)	69
	2.11.1	Gheringhap Engineers Siding Procedure	69
2.12	North (Geelong – Anakie - Moorabool	71
	2.12.1	Overview 71	
	2.12.2	Train Control Management	71
	2.12.3	Movement from Gheringhap into V/Line operated tracks at North Geelong C	71
	2.12.4	Movement from V/Line operated tracks at North Geelong to Gheringhap	71
2.13	Elders	Loop (ERZ)	77
2.14	Manor	Loop (MRS)	80
2.15	Laverto	on Loop (SCT)	83
	2.15.1	SCT Terminal Operational Procedure	83
	2.15.2	ARTC Refuge Siding Altona North	86
Maro	ona – P	ortland Line	89
3 1	Portlan	nd (PDJ)	89

3



1 General Information

1.1 Board Extent

Pyrenees Loop (exclusive) 214-6 signal 267.229km to Newport (exclusive) NPT724 signal 10.910km and Portland Yard inclusive 1 Signal 400.629km to end of ARTC lease at 405.277km.

The South West Board comprises mainly of standard gauge track and forms part of the ARTC main Line corridor between Victoria and South Australia.

Dual gauge track is between Gheringhap and North Geelong

Interface with the North Geelong Yard for Broad Gauge movements and the Portland Line at Maroona.

This area is controlled by Network Controller Vic South West, Network Control Centre West (NCCW).

Contact Numbers:

Phone: (08) 8152 8001 Emergency (08) 8152 8061 Train Transit Manager: (08) 8152 8020 TTM Emergency: (08) 8152 8080

1.2 Safe Working System

Centralised Traffic Control (CTC) and with Automatic Block Signalling (ABS) from Laverton Signal 20/26 – Newport NPT724.

1.3 Applicable Rules

TA20 ARTC Code of Practice for Victorian Mainline Operations.

1.4 Adjacent Train Control Boards / Centres

ARTC Vic North West (08) 8152 8010 Emergency (08) 8152 8070 ARTC Melbourne Metro (08) 8152 8002 Emergency (08) 8152 8062 V/Line Geelong Corridor (03) 9619 1062 V/Line Mildura Board (03) 9619 4702 V/Line Signaller Ararat 0499 300 664 Metrol Western (03) 9610 7272

1.5 Parallel Running Lines

The Metro Trains Melbourne (MTM) Network operates parallel to the ARTC Main Line from Newport to approximately 34.445km in the Laverton Loop to Manor Loop section.

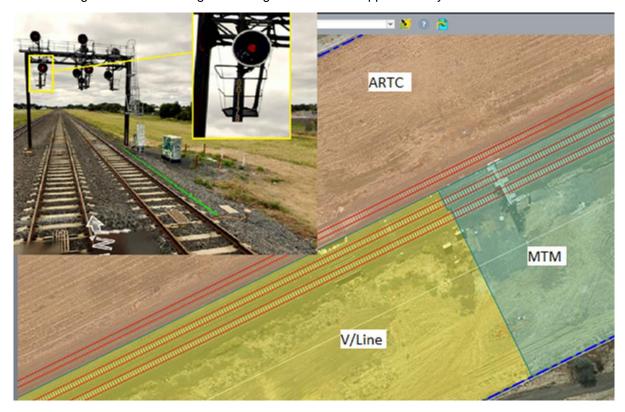
The Metro Trains Melbourne Network is electrified from approximately 32.190km at Werribee to Newport.



The V/Line Network operates parallel to the ARTC South West Board from approximately 34.445km in the Laverton Loop to Manor Loop section to North Geelong.

1.6 Interface points ARTC / MTM / V/Line between Laverton Loop and Manor Loop.

MTM / V/Line boundary coincides with the Train Protection and Warning System (TPWS) transmitter grids on the Geelong side of Signal GG1178 at approximately 34.445km.



Detailed below are the relevant Metrol contact numbers for ARTC:

- Senior Train Controller (03) 9610 7204 or (03) 9610 7205.
- Western Panel Controller, Craigieburn-Sunbury-Werribee lines. (03) 9610 7272

Detailed below are the relevant V/Line contact numbers for ARTC:

- Senior Train Controller (03) 9619 1077.
- Geelong Corridor Train Controller, Werribee Geelong. (03) 9619 1062

1.7 Special Conditions – Disabled Train Moorabool Viaduct

In the event of a train becoming disabled on the Moorabool Viaduct with the locomotive immobilised, the train crew must advise the Network Controller and remain on the locomotive until emergency services are in place.



1.8 Section Operating Equipment

1.8.1 Motorised Point Machines



M23 Mk II Selector Level Hand throw lever

Dual control (motorised hand operation)

If the points are in reverse when placed in hand operation, the hand throw lever needs to be placed fully across to engage the clutch mechanism to turn the points.

1.8.2 Switch Locks

There are sidings on the South West board at the following locations:

- Ararat Yard
- Inverleigh (intermediate switch locked siding)
- Berrybank Loop
- Westmere Loop
- Tatyoon Loop
- Maroona Yard

At each siding Point Indicators as per TA20 Victorian Main Line rules and operating procedures are used to indicate the position of the points. The points are hand operated by train crews and protected by V5PSW key switches and interlocked with the signalling system.

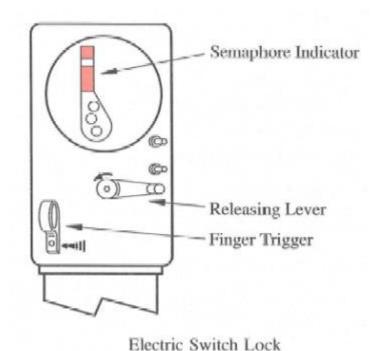
A release is given out by the ARTC Network Controller from the Phoenix Signalling System to the field to allow for access at each location.

The releasing mechanism in the field may be either an Electric Switch Lock or V5PSW key switch.





V5PSW key switch



Electric Switch Lock used in Victoria



1.8.3 General Operating Procedure - Sidings

V5PSW key switches are located adjacent to the Goods Siding points at either end of the yard and are electrically connected to the Train Controllers operating system in Adelaide and provide electric locking of the points.

The key switches have 3 positions as follows:

- 1. Cancel: Cancels the release command after the points have been set for the Loop line.
- 2. Centre: Allows the key to be inserted or removed from the Key Switch.
- 3. Accept: Accepts the release command initiated by the Train Controller.

Three indicator lights are provided at each Key Switch; the lights are labelled and indicate the status of the release or points as follows:

- 1. Points Locked: Indicates that the Points are set and secured and cannot be operated.
- 2. Release Available: Indicates that the Train Controller has provided a Release Command for acceptance by the Driver required to operate the points.
- 3. Points Free: Indicates that the points are available for operation.

1.8.4 Locations Fitted with Emergency Automatic Mode Operation

The following locations on the South West Board are fitted with the Emergency Automatic Mode Operation:

- Elders Loop
- Barwon Park Loop
- Wingeel Loop
- Berrybank Loop
- Tooli Loop
- Vite Vite Loop
- Westmere Loop
- Tatyoon Loop

1.8.5 Emergency Automatic Mode

At crossing locations between Tatyoon Loop and Elders Loop emergency automatic mode is available during CTC failure conditions.

The following is copied from Section 17 of the Victorian Code of Practice (TA20).

If the remote control system fails, all signals will be automatically restored to 'Stop' with the normal approach locking applying and the crossing loop will operate automatically allowing trains to enter either No. 1 or No. 2 track in the following sequence:

First Train Approaching Loop

The first train in the approach section will be automatically signalled into the No. 2 track if unoccupied. The usual speed proving and approach operation applying on the home arrival



signal. A second train in the approach section from the opposing direction will be automatically signalled into the No. 1 track.

These movements are permitted to occur simultaneously when the systems is in the automatic mode.

Second Train Approaching Loop

A second train travelling in the same direction as the first will not be automatically signalled passed the home arrival signal whilst the first train is in the No.2 track. Automatic mode will not permit one train to overtake another; an arrival message will have to be obtained if this is necessary.

5P Emergency Key Switch

The home departure signals will not operate automatically. Manual control is provided with the 5P key switch for these signals and is located in the telephone cabins.

Key switches must not be operated without verbal consent from the Train Controller. The following notice appears above the key switches:

'Train crews must obtain permission from the Train Controller prior to the operation of these 5P key switches'.

The 5P emergency key switch is normally in the central position. When it is turned to the right, a call is placed on the points to run to the track application to the key switch. This call is only effective if there is no opposing movement in the single line section.

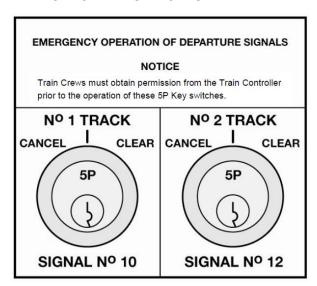
If the single line section is clear, the points will run; when detected in their correct position and locked, the home departure signal will display a 'Proceed' aspect.

The 'Proceed' aspect on the home departure signal will be cancelled by:

- 1. The passage of the train, or
- 2. Turning the 5P emergency key switch left to the 'CANCEL' position.

The 5P key can only be withdrawn when the key switch is in the centre position.

EMERGENCY KEY SWITCHES





1.9 Train Braking Requirements

Train braking and holding test are covered in the RAS.

BRAKE HOLDING TESTS FOR THE REARMOST VEHICLES (RETENTION TESTS)

The following apply:

- 1. The operator **shall** put into place systems for conducting brake holding tests.
- 2. The number of vehicles (or for articulated or permanently coupled vehicles the number of triple valve control units) required to conform to the requirements of this sub-section shall be:
- a. Three (3) for freight trains operated in New South Wales;
- b. Two (2) for freight trains not entering New South Wales; and
- c. One (1) for all passenger trains where a guard is provided or three (3) for passenger trains without guards.
- 3. The vehicle operator shall ensure that air and hand brakes operate correctly.
- 4. The air brakes on the vehicles **shall** remain effectively applied for a period of time, based on train length, considered sufficient for a member of the train (locomotive) crew to reach the vehicles and secure handbrakes in the event of a breakaway en route.
- 5. This time **shall** be ten (10) minutes plus three (3) minutes for each 100 metres or part thereof of train length. For example, a train 1240 metres long will require a holding (retention) time of $13 \times 3 + 10 = 49$ minutes.
- 6. If any of the required number of vehicles (as specified in item (2) above) fail the above test (as specified in item (5) above), generally known as a holding or retention test, the faulty vehicle(s) **shall** be repaired or the train remarshalled to ensure compliance with the requirements of items (3) and (4) above.
- 7. Brake holding tests successfully completed will remain valid for the departure within a period of 24 hours from completion of the test. After that period, the vehicles **shall** be re-tested.

FREIGHT TRAINS

On freight trains, the maximum number of inoperative or isolated brakes permitted on a train **shall** be either of the following:

- 1. One conventional two-bogie vehicle for every ten (10) vehicles in the train where the vehicle is isolated as a unit.
- 2. One bogie for every ten (10) bogies in the train where individual bogies can be isolated or the isolation of triple valve control units affects more than two (2) bogies. This applies, only on the proviso that the total un-braked mass of the train **shall not** exceed 10% of the total train mass (excluding the mass of the hauling locomotives).

Item (1) above applies where the only vehicles isolated are conventional two-bogie vehicles. In all other cases, the requirements of item (2) **shall** be followed.

For the purposes of this clause, a four-wheel (two-axle) vehicle **shall** be counted as one bogie, and locomotives under power **shall not** be counted as train vehicles.



1.10 Index to TA 20

Section	Safeworking Rules
Section 00	Master Contents
Section 1	General Rules
Section 2	Fixed Signals
Section 3	Detention at Fixed Signal
Section 4	Defective Fixed Signals
Section 5	Working of points and Signals
Section 7	Audible track warning signals
Section 8	Control and working of stations
Section 9	Working of Level Crossings
Section 10	Working of Trains
Section 11	Train Signals
Section 12	Shunting
Section 13	Train stopped by accident or obstruction
Section 14	Single Line Working
Section 15	Infrastructure Works
Section 17	Centralised Traffic Control
Section 18	
Section 19	Train Order Working Section Authority Working
Section 21	Train Staff and Ticket
Section 25	Issue of Train Authorities
Section 23	Operating Procedures
Section 27	Working of points and Signals
Section 28	Control and working of stations
Section 29	Working of Trains
Section 30	Infrastructure Works
Section 33	Overhead and Electrical equipment
	Addendum
n/a	Phoenix Electronic Train Order System
	·



1.11 Level Crossings

ALCAM ID is the number allocated from the Australian Level Crossing Assessment Model used by rail and road managers across Australia. It's a national database for assessing risk which is overseen by a National Committee and supported by the Rail Industry Safety Standards Board (RISSB).

ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
1797	Park Rd Ararat	MAROONA - PYRENEES LOOP	267.056	Road	Public	Half Boom Flashing Lights
4764	Illegal Pedestrian Crossing	MAROONA - PYRENEES LOOP	266.104	Pedestrian	Public	
4768	Private Pedestrian (Rail)	MAROONA - PYRENEES LOOP	265.470	Pedestrian	Private	
4769	Private Road (Rail)	MAROONA - PYRENEES LOOP	265.451	Road	Private	
4770	Private Road (Rail)	MAROONA - PYRENEES LOOP	265.380	Road	Private	
4767	Private Pedestrian (Rail)	MAROONA - PYRENEES LOOP	265.358	Pedestrian	Private	
4765	Private Road (Rail)	MAROONA - PYRENEES LOOP	265.203	Road	Private	
4766	Private Pedestrian (Rail)	MAROONA - PYRENEES LOOP	265.173	Pedestrian	Private	
4771	Private Pedestrian (Rail)	MAROONA - PYRENEES LOOP	264.991	Pedestrian	Private	
4772	Private Pedestrian (Rail)	MAROONA - PYRENEES LOOP	264.986	Pedestrian	Private	
2063	Alfred St Ararat	MAROONA - PYRENEES LOOP	263.956	Road	Public	Half Boom Flashing Lights
4258	Occupation Crossing	MAROONA - PYRENEES LOOP	263.893	Road	Private	
2064	Western Hwy (Barkly St)	MAROONA - PYRENEES LOOP	263.773	Road	Public	Half Boom Flashing Lights
2065	Britannia Mine Rd Ararat	MAROONA - PYRENEES LOOP	261.868	Road	Public	Give Way Signs
2066	Jackson's Creek Rd	MAROONA - PYRENEES LOOP	260.686	Road	Public	Primary Flashing Lights
2067	Reserve Rd Ararat	MAROONA - PYRENEES LOOP	259.066	Road	Public	
4260	Occupation Crossing	MAROONA - PYRENEES LOOP	258.380	Road	Private	
2068	Occupation Crossing	MAROONA - PYRENEES LOOP	257.584	Road	Private	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
2069	Station Rd Langi Logan	MAROONA - PYRENEES LOOP	256.335	Road	Public	Half Boom Flashing Lights
2071	Tatyoon Rd Jacksons Creek	MAROONA - PYRENEES LOOP	255.756	Road	Public	Primary Flashing Lights
2072	Logan Rd Jacksons Creek	MAROONA - PYRENEES LOOP	255.410	Road	Public	Give Way Signs
4391	Occupation Crossing	MAROONA - PYRENEES LOOP	255.030	Road	Public	
2073	Langi Logan Rd Jacksons Creek	MAROONA - PYRENEES LOOP	253.734	Road	Public	Give Way Signs
4262	Occupation Crossing (Sec 36)	MAROONA - PYRENEES LOOP	253.150	Road	Private	
2074	Mine Dump Rd Maroona	MAROONA - PYRENEES LOOP	252.054	Road	Public	
2075	Richardson Rd Maroona	MAROONA - PYRENEES LOOP	250.227	Road	Public	Half Boom Flashing Lights
2076	Coopers Rd Maroona	MAROONA - PYRENEES LOOP	249.040	Road	Public	Stop Signs
2077	Labrador Rd Maroona	MAROONA - PYRENEES LOOP	248.290	Road	Public	Give Way Signs
2078	Andrews Lane Maroona	MAROONA - PYRENEES LOOP	246.302	Road	Public	Half Boom Flashing Lights
4259	Private Road Maroona	MAROONA - PYRENEES LOOP	244.096	Road	Private	
4419	Private Pedestrian	NORTH GEELONG - MAROONA	244.316	Pedestrian	Private	
1567	Helendoite Rd Maroona	NORTH GEELONG - MAROONA	244.086	Road	Public	Primary Flashing Lights
4261	Private Pedestrian	MAROONA - PYRENEES LOOP	244.059	Pedestrian	Private	
4420	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	242.888	Road	Private	
4421	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	239.793	Road	Private	
4422	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	238.769	Road	Public	
1566	Grange and Rockies Hill Rd (Cnr)	NORTH GEELONG - MAROONA	236.691	Road	Public	Give Way Signs
1565	Tatyoon Rd Tatyoon	NORTH GEELONG - MAROONA	233.932	Road	Public	Primary Flashing Lights
1564	Burnetts Rd	NORTH GEELONG	233.226	Road	Public	Stop Signs





ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
	Tatyoon	- MAROONA				
4423	Private Pedestrian	NORTH GEELONG - MAROONA	233.203	Pedestrian	Private	
4424	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	232.778	Road	Public	
4425	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	232.356	Road	Public	
4426	Private Pedestrian	NORTH GEELONG - MAROONA	231.542	Pedestrian	Private	
1562	Porters Bridge Rd Tatyoon	NORTH GEELONG - MAROONA	231.421	Road	Public	Stop Signs
1561	Bibbys Rd Tatyoon	NORTH GEELONG - MAROONA	229.490	Road	Public	Stop Signs
4427	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	228.656	Road	Private	
1560	Kulkurt Rd Mininera	NORTH GEELONG - MAROONA	227.673	Road	Public	Give Way Signs
1559	Delacombe Way Mininera	NORTH GEELONG - MAROONA	226.037	Road	Public	Give Way Signs
1558	North Yaccamunda Rd	NORTH GEELONG - MAROONA	224.340	Road	Public	Give Way Signs
1556	Mininera East Rd Mininera	NORTH GEELONG - MAROONA	222.750	Road	Public	Half Boom Flashing Lights
4428	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	221.129	Road	Public	
1555	Summons Rd Mininera	NORTH GEELONG - MAROONA	221.129	Road	Public	
1554	Rossbridge - Streatham Rd Mininera	NORTH GEELONG - MAROONA	219.270	Road	Public	Half Boom Flashing Lights
4429	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	216.853	Road	Private	
1553	Casanova Rd Westmere	NORTH GEELONG - MAROONA	215.951	Road	Public	Give Way Signs
4430	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	215.53	Road	Public	
1552	Glenelg Hwy Westmere	NORTH GEELONG - MAROONA	213.365	Road	Public	Half Boom Flashing Lights
4431	Private Pedestrian	NORTH GEELONG - MAROONA	213.242	Pedestrian	Private	
4432	Private Pedestrian	NORTH GEELONG - MAROONA	212.743	Pedestrian	Private	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
4433	Private Road	NORTH GEELONG - MAROONA	211.862	Road	Private	
4434	Occupation Crossing	NORTH GEELONG - MAROONA	209.003	Road	Private	
4435	Occupation Crossing	NORTH GEELONG - MAROONA	208.714	Road	Public	
4436	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	208.611	Road	Private	
4437	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	206.863	Road	Private	
4438	Occupation Crossing	NORTH GEELONG - MAROONA	205.357	Road	Public	
1550	Woorndoo - Streatham Rd	NORTH GEELONG - MAROONA	204.221	Road	Public	Primary Flashing Lights
4439	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	203.042	Road	Private	
4440	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	202.295	Road	Public	
1548	Trawalla South Estate Rd	NORTH GEELONG - MAROONA	199.525	Road	Public	Give Way Signs
4441	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	198.176	Road	Private	
4442	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	196.453	Road	Private	
1546	Darlington – Carranballac Rd	NORTH GEELONG - MAROONA	195.448	Road	Public	Primary Flashing Lights
4443	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	191.828	Road	Private	
1545	Vite Vite Rd (Brooks Rd) Vite Vite	NORTH GEELONG - MAROONA	189.809	Road	Public	Half Boom Flashing Lights
4444	Private Road	NORTH GEELONG - MAROONA	189.020	Road	Private	
4445	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	188.236	Road	Private	
4446	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	187.226	Road	Private	
4447	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	186.461	Road	Private	
1544	Vite Vite Rd Vite Vite	NORTH GEELONG - MAROONA	185.037	Road	Public	Primary Flashing Lights (duplicated)
1543	Mercers Rd	NORTH GEELONG	184.152	Road	Public	Give Way Signs



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
	Vite Vite	- MAROONA				
4448	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	182.507	Road	Private	
1542	Occupation Crossing	NORTH GEELONG - MAROONA	181.425	Road	Private	Give Way Signs
4449	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	180.068	Road	Private	
1541	Taylor St Derrinallum	NORTH GEELONG - MAROONA	179.160	Road	Public	Give Way Signs
1540	Vite Vite Rd Derrinallum	NORTH GEELONG - MAROONA	176.508	Road	Public	Primary Flashing Lights
1538	Leemons Rd Derrinallum	NORTH GEELONG - MAROONA	175.948	Road	Public	Stop Signs
1537	Hamilton Hwy Derrinallum	NORTH GEELONG - MAROONA	175.342	Road	Public	Half Boom Flashing Lights
4450	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	173.405	Road	Public	
1536	Harveys North Ln Derrinallum	NORTH GEELONG - MAROONA	173.268	Road	Public	Give Way Signs
4451	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	171.397	Road	Public	
4452	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	169.045	Road	Private	
1535	Lismore - Skipton Rd	NORTH GEELONG - MAROONA	168.183	Road	Public	Half Boom Flashing Lights
1534	Camperdown - Lismore Rd	NORTH GEELONG - MAROONA	167.934	Road	Public	Primary Flashing Lights
1532	Gnarpurt Rd Lismore	NORTH GEELONG - MAROONA	165.750	Road	Public	Primary Flashing Lights
4453	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	165.412	Road	Private	
4454	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	164.406	Road	Private	
1531	Grimmes Rd Lismore	NORTH GEELONG - MAROONA	163.294	Road	Private	Position Markers Only
1530	Murdocks Rd Gnarkeet	NORTH GEELONG - MAROONA	161.589	Road	Public	Stop Signs
1529	Gnarkeet Rd Gnarkeet	NORTH GEELONG - MAROONA	159.825	Road	Public	Give Way Signs
4456	Occupation Crossing	NORTH GEELONG - MAROONA	159.651	Road	Public	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
4457	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	157.735	Road	Private	
4458	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	157.41	Road	Private	
1528	Mc Leans Rd Gnarkeet	NORTH GEELONG - MAROONA	156.699	Road	Public	Give Way Signs
1527	Collins Lane Berrybank	NORTH GEELONG - MAROONA	155.059	Road	Public	Give Way Signs
4460	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	153.813	Road	Private	
4461	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	153.442	Road	Private	
1526	Foxhow Berrybank Rd	NORTH GEELONG - MAROONA	152.366	Road	Public	Half Boom Flashing Lights
4462	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	151.409	Road	Private	
4463	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	150.73	Road	Private	
1524	Doyles Rd Narringhill South	NORTH GEELONG - MAROONA	148.875	Road	Public	Give Way Signs
1523	Hamilton Hwy Duverney	NORTH GEELONG - MAROONA	146.560	Road	Public	Half Boom Flashing Lights
4464	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	145.595	Road	Public	
4465	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	145.116	Road	Public	
1522	Duverney Rd Duverney	NORTH GEELONG - MAROONA	144.493	Road	Public	Primary Flashing Lights
4466	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	143.647	Road	Private	
1521	Kings Rd Duverney	NORTH GEELONG - MAROONA	142.845	Road	Public	Give Way Signs
4467	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	141.869	Road	Private	
1520	Werneth Rd (Urches Rd)	NORTH GEELONG - MAROONA	141.136	Road	Public	Give Way Signs
4468	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	140.427	Road	Private	
1519	Nelsons Rd Cressy	NORTH GEELONG - MAROONA	139.890	Road	Public	Give Way Signs
4469	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	139.415	Road	Private	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
1518	Smarts Rd (Fitzroy St)	NORTH GEELONG - MAROONA	138.869	Road	Public	Give Way Signs (duplicated)
1517	Yarima Rd Cressy	NORTH GEELONG - MAROONA	138.507	Road	Public	Stop Signs
1516	Hamilton Hwy Cressy	NORTH GEELONG - MAROONA	138.063	Road	Public	Half Boom Flashing Lights
4470	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	136.191	Road	Private	
1514	Reddies Rd Cressy	NORTH GEELONG - MAROONA	136.000	Road	Public	Give Way Signs
4471	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	135.125	Road	Private	
4472	Occupation Crossing	NORTH GEELONG - MAROONA	132.472	Road	Private	
1513	Calverts Crossing Poorneet	NORTH GEELONG - MAROONA	129.185	Road	Private	
1512	Barpinba - Poorneet Rd	NORTH GEELONG - MAROONA	127.149	Road	Public	Primary Flashing Lights
4473	Occupation Crossing	NORTH GEELONG - MAROONA	127.109	Road	Public	
4474	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	125.828	Road	Private	
4475	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	125.455	Road	Private	
1511	Barunah Plains Rd Wingeel	NORTH GEELONG - MAROONA	122.652	Road	Public	Give Way Signs
4476	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	120.808	Road	Private	
4477	Private Road	NORTH GEELONG - MAROONA	120.088	Road	Private	
1509	Mt Hesse Rd (Wingeel Rd)	NORTH GEELONG - MAROONA	117.890	Road	Public	Primary Flashing Lights
4478	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	116.757	Road	Private	
4479	Occupation Crossing	NORTH GEELONG - MAROONA	115.772	Road	Private	
1508	Baileys Rd Wingeel	NORTH GEELONG - MAROONA	114.640	Road	Public	Give Way Signs
4480	Occupation Crossing	NORTH GEELONG - MAROONA	112.925	Road	Private	
4481	Occupation Crossing	NORTH GEELONG - MAROONA	110.561	Road	Private	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
1507	Ellingerrin Rd Inverleigh	NORTH GEELONG - MAROONA	107.702	Road	Public	Give Way Signs
1506	Flemings Rd Inverleigh	NORTH GEELONG - MAROONA	106.451	Road	Public	Half Boom Flashing Lights
4482	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	104.704	Road	Private	
1505	Barwon Park Rd Inverleigh	NORTH GEELONG - MAROONA	104.100	Road	Public	Primary Flashing Lights
1504	Mahers Rd Inverleigh	NORTH GEELONG - MAROONA	102.925	Road	Public	Half Boom Flashing Lights
1503	Terrier Rd Inverleigh	NORTH GEELONG - MAROONA	102.375	Road	Public	Stop Signs
1502	Fuller Rd Inverleigh	NORTH GEELONG - MAROONA	101.968	Road	Public	Give Way Signs
4483	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	101.582	Road	Public	
1500	Railway St Inverleigh	NORTH GEELONG - MAROONA	100.343	Road	Public	Primary Flashing Lights
1499	Inverleigh - Winchelsea Rd	NORTH GEELONG - MAROONA	99.667	Road	Public	Primary Flashing Lights
3255	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	97.95	Road	Private	Give Way Signs
4484	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	97.195	Road	Private	
1498	Hamilton Hwy Inverleigh	NORTH GEELONG - MAROONA	95.922	Road	Public	Half Boom Flashing Lights
4485	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	95.664	Road	Private	
1497	Harvey Rd Murgheboluc	NORTH GEELONG - MAROONA	92.151	Road	Public	Half Boom Flashing Lights
1496	Brislanes Rd Murgheboluc	NORTH GEELONG - MAROONA	91.706	Road	Public	Primary Flashing Lights
4486	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	91.106	Road	Private	
4487	Occupation Crossing (Lic)	NORTH GEELONG - MAROONA	89.218	Road	Private	
1495	Burnside Rd Bannockburn	NORTH GEELONG - MAROONA	88.370	Road	Public	Primary Flashing Lights
4488	Occupation Crossing	NORTH GEELONG - MAROONA	86.645	Road	Public	
4489	Occupation Crossing (Sec 36)	NORTH GEELONG - MAROONA	85.282	Road	Private	



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
4490	Private Road	NORTH GEELONG - MAROONA	83.746	Road	Private	
1493	Buchter Rd Batesford	NORTH GEELONG - MAROONA	81.658	Road	Public	Give Way Signs
1492	Geelong - Ballan Rd (Steiglitz Rd)	NORTH GEELONG - MAROONA	77.377	Road	Public	Half Boom Flashing Lights
1491	Evans Rd Moorabool	NORTH GEELONG - MAROONA	76.599	Road	Public	Primary Flashing Lights
4491	Occupation Crossing	NORTH GEELONG - MAROONA	74.552	Road	Public	
1490	Anakie Rd Bell Park	NORTH GEELONG - MAROONA	73.608	Road	Public	Half Boom Flashing Lights
4492	Illegal Pedestrian Crossing	NORTH GEELONG - MAROONA	73.308	Pedestrian	Public	
4493	Illegal Pedestrian Crossing	NORTH GEELONG - MAROONA	73.275	Pedestrian	Public	
4494	Illegal Pedestrian Crossing	NORTH GEELONG - MAROONA	73.116	Pedestrian	Public	
1489	Furner Av - Morgan St	NORTH GEELONG - MAROONA	72.7	Pedestrian	Public	Maze
1488	Thompson Rd North Geelong	NORTH GEELONG - MAROONA	72.14	Road	Public	Half Boom Flashing Lights
1487	Separation St North Geelong	NORTH GEELONG - MAROONA	71.178	Road	Public	Half Boom Flashing Lights
6015	Unknown	NORTH GEELONG - MAROONA	70.11	Road	Public	
4631	Private Pedestrian (Rail)	WERRIBEE - GEELONG	68.619	Pedestrian	Private	
4632	Private Road (Rail)	WERRIBEE - GEELONG	67.367	Road	Private	
1358	North Shore Rd (Station St)	WERRIBEE - GEELONG	67.220	Road	Public	Half Boom Flashing Lights
3312	North Shore Rd (Station St)	WERRIBEE - GEELONG	67.235	Pedestrian	Public	Adjacent boom gates and audio
1357	DeoP NORTH SHORE	WERRIBEE - GEELONG	67.087	Pedestrian	Public	Automatic Gates
4633	Occupation Crossing (Lic)	WERRIBEE - GEELONG	66.389	Road	Private	
1355	St Georges Rd Corio	WERRIBEE - GEELONG	65.528	Road	Public	Half Boom Flashing Lights
1352	School Rd Corio	WERRIBEE - GEELONG	63.513	Road	Public	Half Boom Flashing Lights



ALCAM ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
4641	Occupation Crossing	WERRIBEE - GEELONG	61.025	Road	Private	
1351	Canterbury Rd Lara	WERRIBEE - GEELONG	59.275	Road	Public	Half Boom Flashing Lights
1350	Lara Lakes Rd (McClelland Ave)	WERRIBEE - GEELONG	57.697	Road	Public	Half Boom Flashing Lights
4634	Private Pedestrian (Rail)	WERRIBEE - GEELONG	57.605	Pedestrian	Private	
4635	Private Pedestrian (Rail)	WERRIBEE - GEELONG	57.396	Pedestrian	Private	
4636	Private Pedestrian (Rail)	WERRIBEE - GEELONG	57.286	Pedestrian	Private	
1347	Windermere Rd (McIntyre Rd)	WERRIBEE - GEELONG	55.910	Road	Public	Half Boom Flashing Lights
1346	Plains Rd Lara	WERRIBEE - GEELONG	53.842	Road	Public	Half Boom Flashing Lights
1345	Peak School Rd Rothwell	WERRIBEE - GEELONG	51.735	Road	Public	Half Boom Flashing Lights
1344	Cherry Swamp Rd Little River	WERRIBEE - GEELONG	49.590	Road	Public	Half Boom Flashing Lights
4637	Illegal Pedestrian Crossing	WERRIBEE - GEELONG	47.599	Pedestrian	Private	
1341	Edgars Rd Little River	WERRIBEE - GEELONG	47.410	Road	Public	Half Boom Flashing Lights
4638	Occupation Crossing	WERRIBEE - GEELONG	45.491	Road	Private	
1340	Wests Rd Manor	WERRIBEE - GEELONG	39.469	Road	Public	Half Boom Flashing Lights
4639	Occupation Crossing	WERRIBEE - GEELONG	37.691	Road	Private	
1339	Browns Rd (Galvin Rd)	WERRIBEE - GEELONG	35.325	Road	Public	Half Boom Flashing Lights
327	Balmoral Street Laverton	NEWPORT - WERRIBEE	21.672	Pedestrian	Public	Automatic Gates
324	Maidstone St Altona	NEWPORT - WERRIBEE	17.729	Road	Public	Half Boom Flashing Lights
321	Maddox Rd Newport	NEWPORT - WERRIBEE	12.312	Road	Public	Half Boom Flashing Lights
320	Champion Rd Newport	NEWPORT - WERRIBEE	11.748	Road	Public	Half Boom Flashing Lights
6100	Private Pedestrian (Rail)	NEWPORT - WERRIBEE	10.82	Pedestrian	Private	





ALCAM ID	Road Name	Line Segment	КМ	Traffic Type	Access	Control Type
319	Newport Workshops staff access	NEWPORT - WERRIBEE	10.82	Pedestrian	Private	Maze
4407	Occupation Crossing (Lic)	MAROONA - PORTLAND	401.29	Road	Public	
2153	Garden St Portland	MAROONA - PORTLAND	402.240	Road	Public	Primary Flashing Lights
2154	Kennedy St Portland	MAROONA - PORTLAND	402.840	Road	Public	Primary Flashing Lights
4409	Private Road	MAROONA - PORTLAND	403.129	Road	Private	
4410	Private Pedestrian (Rail)	MAROONA - PORTLAND	403.187	Pedestrian	Private	
4408	Private Road	MAROONA - PORTLAND	403.284	Road	Private	
4411	Private Road	MAROONA - PORTLAND	403.722	Road	Private	
4412	Private Road	MAROONA - PORTLAND	403.815	Road	Private	
4413	Private Road	MAROONA - PORTLAND	403.912	Road	Private	
4414	Private Road	MAROONA - PORTLAND	403.979	Road	Private	
4415	Julia Street Portland	MAROONA - PORTLAND	404.223	Road	Public	Primary Flashing Lights
4416	Pedestrian Crossing	MAROONA - PORTLAND	404.498	Pedestrian	Public	Maze



1.12 Emergency Local Releases

Nil

1.13 Maximum Permitted Speeds and Permanent Speed Restrictions

Refer the Route Access Standard - Defined Interstate Rail Network Section Pages D2 for all speed information.

1.14 Maximum Train Length

Maximum train length is 1800 metres.

1.15 Structure Clearances

Refer Route Access Standards for Rolling Stock Outlines.

1.16 Significant Kilometre Markings

The following locations on the network have kilometre posts that change on the ground and do not follow the measured distance between kilometre posts:

- Newport 10.700 km increasing to North Geelong 69 km (69km becomes 71km).
- North Geelong 71 km increasing to Maroona 244.524 km (244.524 km becomes 244.000 km).
- Maroona last long timber on 5 Points towards Portland 244.460 km becomes 232.149 km towards Portland
- Maroona 244.506 km becomes 244.000 km increasing to Ararat 265.344 km decreasing.
- Ararat 265.344 km becomes 265.000 km increasing to Pyrenees 269.000 km.



1.17 Communications

The National Train Communications System (NTCS) is the Primary communications system for the ARTC controlled rail network and is mandatory for all operators to operate their locomotives using a NTCS ICE (In-Cabin Equipment) Unit as the primary communications device.

A standard ICE unit is installed with the following components

- Telstra NextG™ transceiver
- Iridium satellite transceiver
- UHF Radio
- GPS

The ICE unit primary communications is via the Telstra NextG[™] and backup communications is provided via the Iridium Satellite network. The ICE unit will automatically call the Mile End network control centre when the routine and emergency buttons are pressed.

The UHF radio is used for the Local train Radio - Train to Train and train to track Side communications.

UHF Local Train Radio (LTR) frequency details

Frequency: 418.425 MHz (UHF),

Bandwidth: 12.5 KHz,

EIRP: 41W (remote/low density areas), 8.3W (medium & high density areas)

Tx CTCSS: 162.2 Hz Rx CTCSS: 162.2 Hz

Selcall: disabled

Alternate Communication for this section is by mobile or satellite phones.

1.18 Wayside Monitoring Systems

The wayside monitoring systems in place in this section is at Lara. There is a Wheel Condition Monitor (WCM) and a Rail Bearing Acoustic Monitor (RailBAM) at 53.914km.

1.19 Ruling Gradients

Pyrenees to Newport	1 in 110
Newport to Pyrenees	1 in 94

1.20 Curve and Gradient Data

For all Curve and Gradient data, refer to the ARTC Internet.

https://extranet.artc.com.au/eng_network-config_cd.html



1.21 Drawing Legend

1.21 Drawing Legend			
	Standard gauge track		Dual gauge track
	Broad gauge track	15	Crossover
7 -	Advisory Sign or Location Sign		Tunnel
	Pedestrian Crossing	<u>*</u>	Passive Protection Level Crossing
	Active Protection Level Crossing – Flashing Lights		Active Protection Level Crossing – Lights and Boom
	Bridge or Overpass		Underpass
\frac{\sqrt{\sq}\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	River/Creek or Significant river bridge or Viaduct	Station Passenger Platform	Station or Platform
Y 1	Derail	~ 구·	Dual Control Motorised Points
	Point Indicator		Mechanical Frame
		Absolute Signals (Absolute signal containing a 'P' on the name plate signals)	
	Permissive Signals	(a) (B) 74.592 km	Signal number reference
	Dwarf Signals		Banner Indicator
P 4	Overheight Detectors	>> <<	Wayside Equipment



2 Locations and Sections Information

2.1 Pyrenees Loop (PYL)

The ARTC South West Network Controller shall issue the Authority to pass the CTC Home Departure Signals 214/30 and 214/32 at Stop.

Signal Failures at Pyrenees Loop (towards Maroona)

214 / 10 to Maroona - CTC Home Departure Caution Order

214 / 12 to Maroona - CTC Home Departure Caution Order

2.2 Ararat (ART)

Standing Room:

- No 2 road 345m
- No.3 road 305m
- No.4 road 101m

Goods Siding:

Yes, release given by Network Controller

Local Control Panel:

Nil

Crank handles:

No, dual control point machines on the broad gauge line

2.2.1 Overview

The Ararat Yard is operated by the Ararat Yard Signaller under the direction of the ARTC Network Controller as part of the Murray Basin Project, the signaller is the responsibility of V/Line.

Ararat is the standard gauge junction for the ARTC Main Line to the Maryborough line and the terminus for the broad-gauge line from Ballarat.

The standard gauge Maryborough line and the broad gauge Ballarat line are the responsibility of V/Line and operated under the rules and procedures in accordance with the 1994 Book of Rules and Operating Procedures. Ararat is a V/Line Train Order Terminal Station.

The line between Pyrenees Loop and Maroona is the responsibility of ARTC.

The broad-gauge line from Ballarat crosses the ARTC standard gauge line and terminates in No.2 platform at Ararat. The ARTC standard gauge line runs via No.1 platform at Ararat.

The standard-gauge main line from Maryborough crosses the broad-gauge main line from Ballarat and connects to the ARTC main line. This line also connects to No. 2 road in Ararat Yard.

The signalling on the standard gauge is operated by the ARTC network controller whilst the signalling on the broad gauge at Ararat is operated by the V/Line train controller.



The ARTC network controller provides a grade release to the V/Line train controller to allow the V/Line train controller to set the points for a broad-gauge movement and to signal the broad-gauge movement over the grade crossing into or from the Ararat station.

Immediately the movement clears the track circuits associated with the release, the points at the Ararat station will reset to normal and the grade release will cancel automatically.

Points (No.11u) on the ARTC main line leading to the Maryborough line, and points (No.11d) on the V/Line standard gauge forming the connection from the ARTC Main Line to the Maryborough Line, are hand operated by the Ararat Yard Signaller under the direction of the ARTC Network Controller. This connection is known as the 'Maryborough Link Line'.

27 points located at the Down end of Ararat yard to the ARTC standard gauge line are rodded to a Derail and Crowder. 7 points located on the up-end are rodded to form a cross-over from the main line to the yard.

A Sign is placed at facing points 27 on the ARTC Main Line train proceeding toward Melbourne: 'POINTS 27 BERTH TRACK'

2.2.2 Stabling in No 2 Track

No. 2 track at Ararat is a running line and except for trains waiting to depart, wagons and / or Rail Movements must not stable on No. 2 track at Ararat unless detailed in a train notice or authorised by the Train Transit Manager.

2.2.3 Train Operator Requirements

Train operators operating rail traffic to or from the Maryborough line are not permitted to undertake crew changes between signal 265/6 and the 'Commence Train Order Working' board at Stop Board One and must arrange for an alternative location to undertake this task.

2.2.4 Broad Gauge Movements

(a) TRAIN STAFF & TICKET WORKING

Broad gauge traffic between Ballarat and Ararat is operated under the rules applicable to Staff and Ticket working as contained in the 1994 Book of Rules and Operating Procedures, and any additional instructions applicable to V/Line operations.

(b) OPERATION OF POINTS AND SIGNALLING

The V/Line CENTROL train controller must not request a release for a movement to depart Ararat until it has been confirmed that the Driver is in possession of the applicable authority for the Section Ballarat - Ararat and departure is imminent.

Broad-Gauge points No. 19 leading from No.2 Platform track towards the stabling siding are equipped with a Dual Control Point Machine and are controlled by the V/Line train controller. The points are normally set for the Stabling Siding and require to be operated to the Reverse position for movements to or from the Ballarat line.

The points can only be operated to reverse provided the ARTC network controller has provided the grade release.

The points are provided with a 'Self Normalising' function. When the points are set to the Reverse position for a movement to the Broad-Gauge Main line and the signal is set for the movement, the points will automatically restore to the normal position for the Stabling Siding once the train has cleared the points.



Should it become necessary to hold the points in the 'Reverse' position (set for the Ballarat line) after a movement has departed or owing to track work which will interfere with the track circuits, a Blocking Command must be applied on the points.

This will disable the automatic normalisation function.

NOTE: The release for the Grade Crossing will not be able to be returned to the ARTC network controller whilst a Blocking Command has been applied to secure No.17 points in the reverse position.

(c) FAILURE OF GRADE RELEASE: BROAD GAUGE HOME SIGNALS NOS. 265/8, 265/18 OR NO.17 POINTS

In the event of a failure of the Grade Release, the broad-gauge points or a failure of Home signals providing broad gauge access across the grade crossing, the V/Line train controller must contact the ARTC network controller and request a Blocking Command be applied to the Standard Gauge Home Signals protecting the grade crossing and the release on points 7 and 27 blocked in the 'Normal' position. Points 11u and 11d must be confirmed locked in normal by the V/Line Signaller at Ararat.

After confirming that the Blocking Commands have been applied and points 17 are set and detected in the 'Reverse' position, the V/Line train controller must place a Blocking Command on points No. 17. The V/Line train controller must then prepare and dictate a Caution Order to the Driver.

It will not be necessary for the Driver to record the details of the Caution Order as dictated by the train controller. The train controller and Driver must then exchange names.

If positive detection on Points No. 17 cannot be determined on the train controllers control system, the Selector Lever on the points must be placed in the 'Hand' operating position by the Driver, and the points correctly set for the required movement. The authority to pass the applicable signal at the 'Stop' position may then be issued by the V/Line train controller.

In the case of Home Signal No.265/8, the V/Line train controller may issue a Caution Order for the Driver to proceed, with instructions being given to stop at a point beside Dwarf Signal No.265/16.

The Driver must then place the Selector Lever on No.17 and No 19 Points to the 'Hand' operating position, and ensure the points are set in the required position before proceeding into the platform.

(d) BROAD GAUGE TRACK MAINTENANCE OPERATIONS

When required to perform track maintenance operations on the Broad-Gauge line between Signals No's 265/8 and 265/18, and such maintenance requires the issue of a Track Warrant, the Track Warrant must be issued by the V/Line train controller. The V/Line train controller must first obtain the Grade release and ensure that the appropriate Blocking Commands have been applied to protect the works.

Prior to issuing the Track Warrant, the V/Line train controller must confer with the ARTC network controller to ensure that the issue of the Track Warrant will not affect the passage of a Standard Gauge movement.



2.2.5 Standard Gauge Movements (includes special operational instructions)

2.2.5.1 PYRENEES LOOP - MAROONA

The points and signals at Maroona are operated by the ARTC South West Network Controller in Adelaide.

Maroona operates as a Train Order Terminal Station for movements to and from the Portland Line and a CTC unattended crossing location.

Safe working system is CTC - Centralised Traffic Control between Pyrenees Loop and Maroona

A release is provided for control of the Departure signals between Maroona and Pyrenees and the ARTC South West Network Controller shall give the release to the ARTC North West Network Controller to allow for the departure signals at Pyrenees Loop to be cleared for a rail movement to proceed from Pyrenees Loop.

The ARTC North West Network Controller shall give the release to the ARTC South West Network Controller for rail movements to proceed from Maroona towards Pyrenees Loop.

Should the Home Departure signals at Pyrenees Loop fail, the authority to pass these signals will be a CTC Home Departure Caution Order issued by the ARTC South West Network Controller.

Signal 244/12 also has an illuminated route indicator with shows M Melbourne or P Portland

Up Automatic Signal V2484 between Pyrenees Loop and Maroona is powered by batteries, which are charged by solar panels. During the period that no movements are within the approach circuit of this signal, the top light will be extinguished however the marker light will continue to be lit.

Immediately a movement enters the approach circuit for this signal it will then be lit and will display the applicable aspect for the track ahead. The approach circuit is immediately an up movement passes down Automatic Signal V2635 at Ararat (1500 metres from the signal).

In the event that a fault is detected in the lighting of this signal, the applicable departure signals leading into the single line section in which the signals are located will be held at 'Stop'.

In addition, an 'Auto Power Off' or 'Lamp Fail' alarm will be displayed on the Phoenix CTC system alerting the ARTC Network Train Controller of the failure.

The Train Controller shall issue the appropriate authority to the Driver to pass the affected Departure Signal at stop and also advise the Driver of the circumstance regarding the failure alarm.

The Train Controller shall also report the failure to the applicable Signal Maintenance Technician so that the fault may be rectified.



2.2.5.2 MARYBOROUGH LINK LINE

The Ararat Yard is operated by the Ararat Yard Signaller under the direction of the ARTC Network Controller as part of the Murray Basin Project, the signaller is the responsibility of V/Line.

The signaller is located at the Ararat Yard to manage all rail movements between the ARTC Main Line, Ararat Yard and the Maryborough Line. This signaller is referred to as the Ararat Yard Signaller.

The Ararat Yard Signaller will have no interaction with the issue of Train Orders or Train Authorities between Ararat, Ararat Yard and Maryborough.

Operators requiring access to Ararat yard must obtain authority from the Ararat Yard Signaller prior to requesting passage from the ARTC network controller.

SIGNAGE

The following signage is provided for Maryborough Line standard gauge operation at Ararat:

On the Maryborough Line at 274.000Km for trains proceeding to Maryborough:

'STOP BOARD 2 OBTAIN AUTHORITY FROM ARARAT YARD SIGNALLER PRIOR TO PROCEEDING'.

On the Maryborough Line at 271.500Km for trains proceeding to Maryborough:

'COMMENCE TRAIN ORDER WORKING'.

On the Maryborough Line at 271.500Km for trains proceeding to Ararat:

'STOP BOARD 1 OBTAIN AUTHORITY FROM ARARAT YARD SIGNALLER PRIOR TO PROCEEDING', and

'END TRAIN ORDER WORKING'.

On the Maryborough Line at 269.330Km for trains proceeding to Ararat:

'LOCATION BOARD: 2670m ARARAT STOP'

At facing points 27 on the ARTC Main Line train proceeding toward Melbourne: -

'POINTS 27 BERTH TRACK'

At the fouling point of points 7d in the Ararat Yard for trains proceeding in both directions on the Maryborough line: -

'FP'

ARARAT YARD SIGNALLER SIGNING ON AND OFF DUTY

The Ararat Yard Signaller will be on duty for all movements to and from the Ararat Yard however may cease duty should rail operations permit.

When ceasing duty, the Ararat Yard Signaller must advise the ARTC Network Controller and the V/Line Train Controller and provide contact details and the commencement time of the next Ararat Yard Signaller.

When commencing duty, the Ararat Yard Signaller must advise the ARTC Network Controller and the V/Line Train Controller that they are in attendance.



(A) ARARAT - MARYBOROUGH LINE OVERVIEW

Ararat is the Junction Station for the V/Line Maryborough line, the junction being connected to the ARTC Adelaide to Melbourne main line 50 metres on the Adelaide side of Alfred St level crossing.

The points are operated by the Ararat Yard Signaller under the direction of the ARTC Network controller

Train Order Working in accordance with the 1994 Book of Rules and Operating Procedures is in force between Ararat and Maryborough.

(B) RAIL MOVEMENTS FROM MAROONA TO THE MARYBOROUGH LINE

NOTE: The following special arrangement / local specific instructions have been introduced after previously being published in a Train Notice and reflects a variation to network rules and procedures. These special arrangement / local specific instructions apply only at the specified location.

Prior to a rail movement departing Maroona (from the Portland Line) or Tatyoon Loop (on the main line) the rail movement must come to a stand either on the main line or the crossing loop to obtain a train order from the V/Line Train Controller to proceed beyond Ararat;

If the rail movement cannot be accepted by the V/Line Train Controller it must be held at Tatyoon Loop or Maroona.

Rail movements proceeding to the Maryborough line must be issued a train order prior to departing Tatyoon Loop or Maroona, the train order must commence with the following text:

'PROCEED FROM ARARAT TO ..'.

The driver of the rail movement must advise the ARTC Network Controller that the rail movement has been issued a train order.

Provided the rail movement has been issued a train order to proceed beyond Ararat the ARTC Network Controller must:

- Place signal 265/6 to the 'Stop' position and apply a blocking command;
- Operate the signalling to advance the rail movement from Maroona to Ararat, and
- Advise the Ararat Yard Signaller of the proposed arrival time of the rail movement at Ararat and provide permission for the Ararat Yard Signaller to operate points 11d

The Ararat Yard Signaller must proceed to points 11d and:

- Unlock the padlocks, remove the point clip and set the points to 'Reverse', and
- Lock the hand throw lever in the reverse position.

The Ararat Yard signaller must then proceed to points 11u and:

- Observe that the rail movement has come to a stand at signal 265/6;
- Contact the ARTC Network Controller and advise that the rail movement is at a stand at the signal, and
- Obtain permission from the ARTC Network Controller to operate points 11u to the 'Reverse' position.



The ARTC Network Controller must:

- Confirm that the Grade Release has not been provided to the V/Line Train Controller;
- Confirm that a release has not been provided on points 7 and 27;
- Apply a Blocking Command on the Grade Release, Points 7 and 27, and the signalling between Maroona and Pyrenees Loop, and
- Provided the correct conditions exist, grant permission for the Ararat Yard Signaller to operate points 11u for the rail movement to proceed to Maryborough.

The Ararat Yard Signaller must:

- When granted, unlock the padlocks, remove the point clip and operate the selector lever to the 'Hand Operating position;
- Set the points to 'Reverse';
- Lock the hand throw lever in the reverse position, and
- Advise the ARTC Network Controller that the route has been set for the rail movement.

The ARTC Network Controller must:

- Confirm with the Ararat Yard Signaller that the route is correctly set, and
- Issue a Condition Affecting Network (CAN) for Western Hwy and Alfred St level crossings;
- Issue a Train Authority to the driver of the rail movement to pass signal 265/6 at the 'Stop' position with the following wording:

'PASS SIGNAL 265/6 AT STOP,

PROCEED TO STOP BOARD 4

MARYBOROUGH LINK LINE'

The Driver must record the CAN and Train Authority and repeat back the information to the ARTC Network Controller. Once it is confirmed that the repeat back is ok, the driver can then control the rail movement in accordance with the CAN and the Train Authority.

The driver of the movement must not exceed 10km/h towards the Western Highway Level Crossing and must observe the booms in the horizontal position prior to passing over the level crossing.

Upon the movement approaching, and provided the correct conditions exist, the Ararat Yard Signaller may authorise the rail movement to pass Stop Board 4.

Immediately the last vehicle clears points 11u, the Ararat Yard Signaller must:

- Restore the points to the 'normal' position;
- Operate the selector lever to the 'motor' position;
- Apply the point clip, and lock the point clip and point levers with special padlocks;
- Confirm that the rear of the rail movement has cleared Stop Board 4 and advise the Driver of the rail movement, and
- Advise the ARTC Network Controller that 11u points are set normal and secured.



The Driver, when advised by the signaller that the rail movement has cleared Stop Board 4, may contact the ARTC Network Controller and cancel the Train Authority.

The Ararat Yard Signaller must then proceed to points 11d, and upon the rear of the rail movement clearing the points, the Ararat Yard Signaller must:

- Advise the Driver that the rail movement is clear of the ARTC main line;
- Restore the points to the 'normal' position;
- Operate the selector lever to the 'motor' position;
- Apply the point clip, and lock the point clip and point levers with special padlocks, and
- Advise the ARTC Network Controller that 11d points are set normal and secured.

(C) RAIL MOVEMENTS FROM THE MARYBOROUGH LINE TO MAROONA

NOTE: The following special arrangement / local specific instructions have been introduced after previously being published in a Train Notice and reflects a variation to network rules and procedures. These special arrangement / local specific instructions apply only at the specified location.

Prior to an up train departing Maryborough, the V/Line Train Controller must confer with the ARTC Network Controller and ensure that the rail movement can be signalled toward Ararat and that there are no opposing movements planned to proceed from the ARTC main line onto the Maryborough line at Ararat;

If the train cannot be accepted owing to an opposing train, the train must be held at Maryborough;

If the train can be accepted onto the ARTC main line at Ararat, the V/Line Train Controller may issue a Train Order to advance the train toward Ararat from Maryborough;

- Upon the train passing the Ararat Location board, the driver must contact the Ararat Yard Signaller and seek permission to pass 'Stop Board One', and
- The Ararat Yard Signaller must confer with the ARTC Network Controller and establish that the train can be accepted.

The ARTC Network Controller must:

- Confirm that there are no rail movements or occupancies between Pyrenees Loop and Maroona, and no routes are set or stored for a movement;
- Confirm that the grade release, or points 7 and 27 have not been provided;
- Apply a Blocking Command on the Grade Release, Points 7 and 27, and the signalling between Maroona and Pyrenees Loop;
- Provided the correct conditions exist, grant permission for the Ararat Yard Signaller to set points 11d and 11u to reverse and advise the Ararat Yard Signaller that the rail movement can be advanced to Stop Board 3.
- Stop Board 3 is equipped with Yellow Flashing Lights to improve visibility

Once the ARTC Network Controller has committed to the rail movement from Maryborough towards Maroona it must be completed.



The Ararat Yard Signaller must proceed to points 11d and:

- Unlock the padlocks, remove the point clip and set the points to 'Reverse', and
- Lock the hand throw lever in the reverse position.
- Authorise the driver of the rail movement to pass 'Stop Board 1' and proceed to 'Stop Board 3':
- Proceed to points 11u, and

Unlock the padlocks, remove the point clip and set the points to 'Reverse', and

- Lock the hand throw lever in the reverse position
- Upon the movement coming to a stand at 'Stop Board 3', advise the ARTC Network
 Controller that the rail movement is at a stand at 'Stop Board 3', and the route has been
 correctly set for the rail movement.

The ARTC Network Controller must:

- Confirm with the Ararat Yard Signaller that the route is correctly set, and
- Issue a Condition Affecting Network (CAN) for Alfred St and Western Hwy level crossings;
- Issue the driver of the rail movement a CAN and a Train Authority for the movement with the following wording:

'PROCEED FROM STOP BOARD 3

TO MAROONA SIGNAL 244/26'

The Driver must record the CAN and Train Authority and repeat back the information to the ARTC Network Controller. Once it is confirmed that the repeat back is ok, the driver must advise the Ararat Yard Signaller that the Train Authority has been issued.

The Ararat Yard Signaller must:

- Provide the driver permission to pass Stop Board 3;
- Upon the movement commencing to move, operate the test switch on the Alfred St Level Crossing;
- Once the movement has cleared the Alfred St Level Crossing complete, cancel the test switch and lock the cabinet;
- Then advise the driver that the last vehicle has cleared points 11u;
- Restore the points 11u to the normal position, operate the selector lever to the 'motor' position;
- Apply the point clip, and lock the point clip and point levers with special padlocks, and
- Advise the ARTC Network Controller that points 11u are set normal and secured.
- then proceed to points 11d, and must:
- Restore 11d points to the 'normal' position;
- Operate the selector lever to the 'motor' position;
- Apply the point clip, and lock the clip and point levers with special padlocks, and



Advise the ARTC Network Controller that 11d points are set normal and secured.

Upon the rail movement arriving clear at Maroona, the Driver must cancel the Train Authority with the ARTC Network Controller.

(D) RAIL MOVEMENTS VIA ARARAT YARD

Rail movements may operate via Ararat Yard to and from the Maryborough line provided the Ararat Yard Signaller is on duty.

The Ararat Yard Signaller is responsible for the operation of points 27.

(E) TRAIN PROCEEDING FROM MELBOURNE TO THE MARYBOROUGH LINE VIA PYRENEES LOOP

When a train requires to proceed from Melbourne to the Maryborough Line, prior to allowing the train to depart Tatyoon, the ARTC Network Controller must confer with the V/Line Train Controller and confirm that the train can be accepted.

Provided the train can be accepted, or held at Pyrenees Loop, the ARTC Network Controller may signal the train to Pyrenees Loop and advise the Ararat Yard signaller of the proposed movement.

In preparation for the proposed rail movement, the Ararat Yard Signaller must:

- Check and ensure that the points within the Ararat Yard are correctly set along No. 2 track;
- Lock bars have been applied and locked;
- All derails are removed from No. 2 track, and
- Advise the ARTC Network Controller.

The Ararat Yard Signaller must then proceed to Pyrenees Loop and wait for the rail movement to arrive.

Upon arrival at Pyrenees Loop, the Driver will detach the locomotive/s from the rail movement, and as signalled, run around the consist.

Once the locomotive/s has run around, the Ararat Yard Signaller must drive one of the Drivers to the rear end of the rail movement to allow the Driver to undertake any required preparation activities in accordance with the rail operator and or ARTC processes.

Once completed, the Ararat Yard Signaller must return the Driver back to the locomotive/s and then proceed to Ararat Points 27 and wait for the rail movement to arrive and advise the ARTC Network Controller when in position.

The Driver, on approach to Ararat, must drive the train so that it comes to a stand on the Berth Track for Points 27.

Upon the train coming to a stand on the Berth Track of Points 27, the Ararat Yard Signaller must;

- Contact the ARTC Network Controller and request a release on Points 27;
- Upon receiving the release, accept the release by operation of the 5Psw key switch,
 and
- Operate the points for the train to enter the Ararat Yard.



The provision of the release by the ARTC Network Controller acts as authority for the train to enter the Ararat Yard.

The Ararat Yard Signaller may then advise the Driver by radio that the train is authorised to proceed into the Ararat Yard up to STOP BOARD 2 and come to a stand.

Upon the train clearing Points 27, the Ararat Yard Signaller must:

- · Restore Points 27 for the main line;
- Cancel the release by operation of the 5PSW key switch, and
- Advise the ARTC Network Controller.

The train will then operate in accordance with V/Line procedures.

(F) TRAIN PROCEEDING FROM THE MARYBOROUGH LINE TO MELBOURNE LINE VIA PYRENEES LOOP

When a train is approaching Ararat the Ararat Yard Signaller must:

- Check and ensure that the points within the Ararat Yard are correctly set along No. 2 track;
- Lock bars have been applied and locked;
- All derails are removed from No. 2 track, and
- Advise the ARTC Network Controller of the trains approach and request permission to allow the rail movement to enter the Ararat Yard.

Provided the ARTC Network Controller has granted permission for the rail movement to enter the Ararat Yard, the Ararat Yard Signaller may authorise the train to pass the Stop Board in accordance with the V/Line procedures.

When the Rail Movement is ready to depart the Ararat Yard, the Ararat Yard Signaller must contact the ARTC Network Controller and request release on Points 27.

Provided the Rail Movement can be accepted, the ARTC Network Controller may provide a release on Points 27.

The Ararat Yard Signaller must:

- Contact the ARTC Network Controller and request a release on Points 27;
- Upon receiving the release, accept the release by operation of the 5Psw key switch, and
- Operate the points for the train to depart the Ararat Yard.

The provision of the release by the ARTC Network Controller acts as authority for the train to enter the ARTC Main Line.

Upon the train clearing points 27, the Signaller must:

- Restore Points 27 for the main line;
- Cancel the release by operation of the 5PSW key switch, and
- Advise the ARTC Network Controller.

The Ararat Yard Signaller must then proceed to Pyrenees Loop and wait for the train to arrive.



Upon arrival at Pyrenees Loop, the Driver will detach the locomotive/s from the train, and as signalled, run around the train consist.

Once the locomotive/s has run around, the Ararat Yard Signaller must drive one of the Drivers to the rear end of the train to allow the Driver to undertake any required train preparation activities in accordance with the rail operator and or ARTC processes.

Once completed, the Ararat Yard Signaller must return the Driver back to the locomotive/s and then return to Ararat and advise the ARTC Network Controller when back in position.

(G) ISSUE OF TRAIN ORDER

A train order may be issued to the driver of a rail movement standing at Pyrenees Loop, the wording of the train order must commence with the words 'PROCEED FROM ARARAT TO -.'

If the rail movement is standing in Ararat yard, the train order may be issued to the driver in the usual manner.

In all instances, the V/Line Train Controller must advise the Ararat Yard Signaller when a train order has been issued.

There is no requirement for the ARTC network controller to be advised.

(H) TRACK FORCE OPERATIONS

The Ararat Yard Signaller will be responsible for all track force operations between 'Stop Board One' and the Ararat Yard and between points 11d and 'Stop Board Three'.

Should there be a requirement for track force operations to operate between points 11d and 'Stop Board Three', the track force protection coordinator must:

- Obtain a Track Warrant from the ARTC Network Controller for the section between signal 265/6 at Ararat and 214/6 at Pyrenees Loop;
- Advise the Ararat Yard Signaller the details of the track warrant, and then
- Obtain a track warrant from the Ararat Yard Signaller.

When cancelling the track warrants, the TFPC must first cancel the track warrant issued by the Ararat Yard Signaller prior to cancelling the track warrant issued by the ARTC Network Controller.

(I) STANDARD GAUGE TRACK MAINTENANCE OPERATIONS

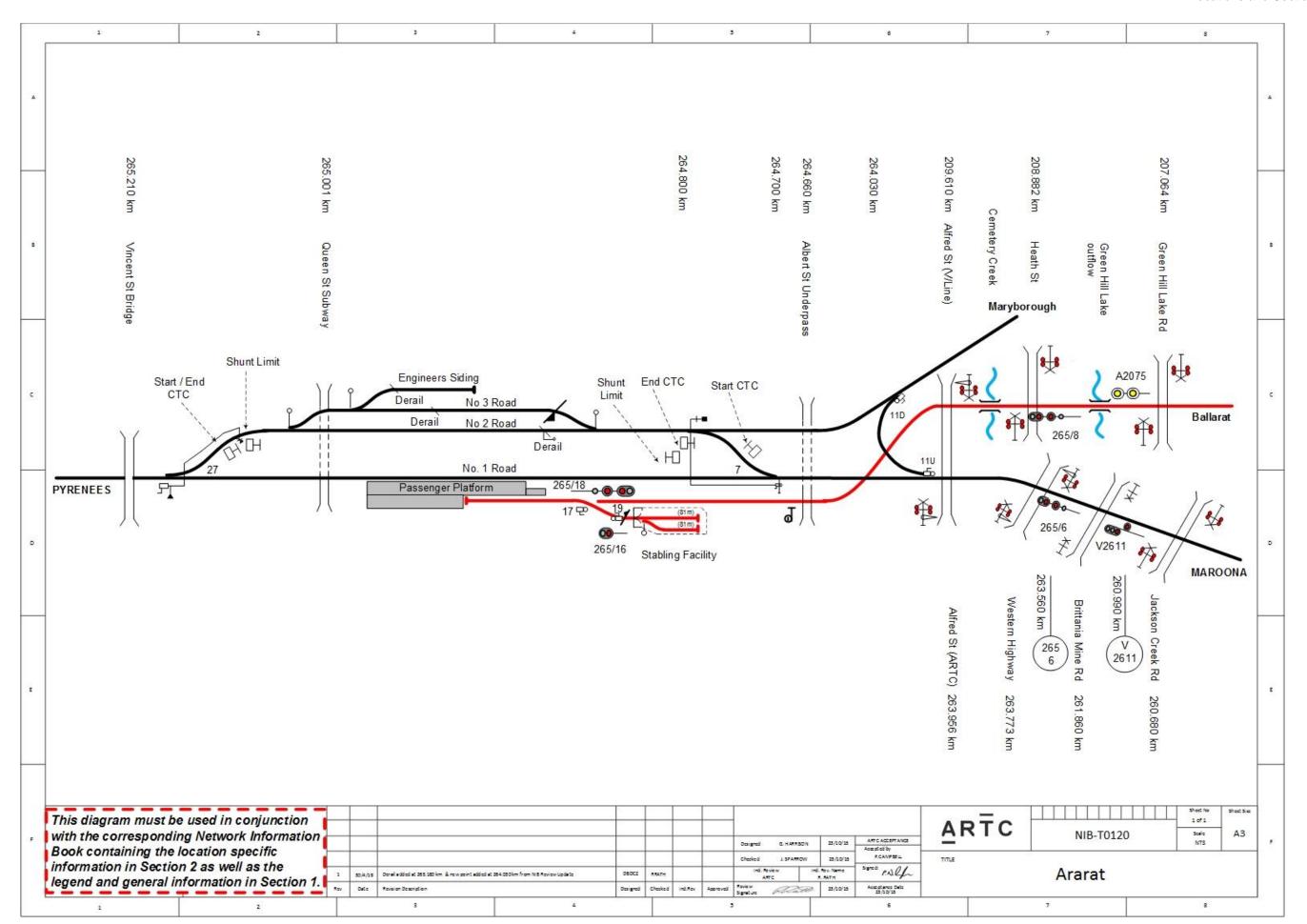
Prior to issuing the track warrant the ARTC network controller must confer with the V/Line train controller to ensure that the issue of the Track Warrant will not affect the passage of a Broad-Gauge movement and ensure that the appropriate Blocking Commands have been applied to protect the works.

When undertaking work on the ARTC Standard Gauge Main Line which includes working through the limits of Ararat, independent padlocks must be applied to the point clips on 11u and 11d points.

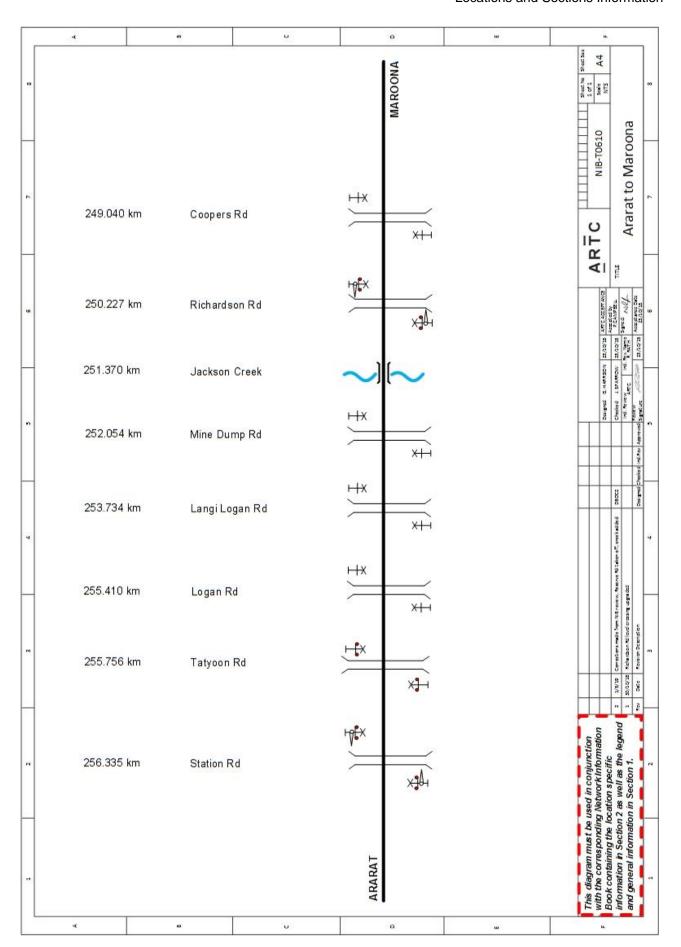
If the work involves the use of Track Warrants, worksite protection must be applied as per Rule 21, Section 15, Clause (a) (securing of points) for the Maryborough Link line.

The Ararat Signaller must be advised of the works.











2.3 Maroona Loop (MNA)

Standing Room:

- No 2 road 823m
- No.3 road 670m
- No.4 road 360m

Goods Siding:

· Yes, release given by Network Controller

Local Control Panel:

Nil

Crank handles:

No, dual control point machines

Other Information:

2.3.1 Maroona Operating Protocols

The points and signals at Maroona are operated by the ARTC South West Network Controller in NCCW.

Maroona operates as a Train Order Terminal Station for movements to and from the Portland Line and a CTC unattended crossing location.

Safe working system is CTC - Centralised Traffic Control between Pyrenees Loop and Maroona.

A release is provided for control of the Departure signals between Maroona and Pyrenees and the ARTC South West Network Controller shall give the release to the ARTC North West Network Controller to allow for the departure signals at Pyrenees Loop to be cleared for a rail movement to proceed from Pyrenees Loop.

The ARTC North West Network Controller shall give the release to the ARTC South West Network Controller for rail movements to proceed from Maroona towards Pyrenees Loop.

Should the Home Departure signals at Pyrenees Loop fail, the authority to pass these signals will be a CTC Home Departure Caution Order issued by the ARTC South West Network Controller.

The driver of a Portland line rail movement shall not proceed beyond signal 244/10 or 244/12 unless in possession of the appropriate Train Order (Portland Line).

Signal 244/12 also has an illuminated route indicator which shows M Melbourne or P Portland.

Up Automatic Signal V2484 between Pyrenees Loop and Maroona is powered by batteries, which is charged by solar panels. During the period that no movements are within the approach circuit of this signal, the top light will be extinguished however the marker light will continue to be lit.

Immediately a movement enters the approach circuit for this signal it will then be lit and will display the applicable aspect for the track ahead. The approach circuit is immediately an up movement passes down Automatic Signal V2635 at Ararat (1500 metres from the signal).

In the event that a fault is detected in the lighting of this signal, the applicable departure signals leading into the single line section in which the signals are located will be held at 'Stop'. In



addition, an 'Auto Power Off' or 'Lamp Fail' alarm will be displayed on the Phoenix CTC system alerting the ARTC Network Train Controller of the failure.

The Train Controller shall issue the appropriate authority to the Driver to pass the affected Departure Signal at stop and also advise the Driver of the circumstance regarding the failure alarm.

The Train Controller shall also report the failure to the applicable Signal Maintenance Technician so that the fault may be rectified.

Point Stand Indications

The points from the loop line to the Goods Siding at both ends of the yard are equipped with a T21 point machine. Point Stand Indicators are placed on the point machines to indicate to the Driver of approaching trains the position of the points as follows:

- 1. Yellow Circle: Indicates to movements proceeding in both directions that the points are set for the loop line.
- 2. White Square: Indicates to movements proceeding in both directions that the points are set for the Goods Siding.

Should the Driver of a movement observe the Point Stand Indicator displaying a white square the Train Controller shall be immediately advised. The Movement shall be brought to a stand at the points and the Driver shall ensure that the points are set and secure for the movement prior to passing over them.

Goods Siding Point Locking

V5PSW key switches are located adjacent to the Goods Siding points at either end of the yard and are electrically connected to the Train Controllers operating system in NCCW and provide electric locking of the points.

The key switches have 3 positions as follows:

- 1. Cancel: Cancels the release command after the points have been set for the Loop line.
- 2. Centre: Allows the key to be inserted or removed from the Key Switch.
- 3. Accept: Accepts the release command initiated by the Train Controller.

Three indicator lights are provided at each Key Switch; the lights are labelled and indicate the status of the release or points as follows:

- 1. Points Locked: Indicates that the Points are set and secured and cannot be operated.
- 2. Release Available: Indicates that the Train Controller has provided a Release Command for acceptance by the Driver required to operate the points.
- 3. Points Free: Indicates that the points are available for operation.

Location of Derail Devices

A rodded Hayes Wheel Crowder and Derail is located as follows:

- 1. Melbourne end: The Fouling point on No 3 and 4 tracks (rodded to the T21 point machine operating the points to the siding). The Clearance point is marked by a painted white sleeper on both 3 and 4 roads.
- Adelaide end: The Fouling point on No 3 track (rodded to the T21 point machine operating the points to the siding). The Clearance point is marked by a painted white sleeper on 3 and 4 roads.



Train Operations at Maroona Goods Siding

Prior to a movement arriving at Maroona Yard the Train Crew shall confirm with the ARTC Network Controller that the movement is required to work within the Maroona yard.

On entering the Loop Track, the Driver of the movement shall bring the train to a stand at the points and:

- 1. Contact the ARTC Network Controller and request a release on the Points,
- 2. Observe that the 'Release Available' light is displayed
- 3. Insert the key and turn it to the 'Release' position.
- 4. Observe that the 'Points Free' light is displayed.
- 5. Return the key switch to the 'Centre' position, withdraw it and unlock the 'Hand Throw' Lever on the Point Machine.
- 6. Operate the T21 point machine to the required position for the movement.

Immediately the movement is clear of the main line the points are to be restored to the 'Normal' position and the 'Hand Throw' lever locked again.

The Driver shall insert the 5VPSW key in the key switch and operate it to the 'Cancel' position and advise the Train Controller.

Issue of Train Orders to the Portland Line

Drivers of Portland Line Movements shall bring the train to a stand at Maroona to receive a Train Order from the ARTC North West Network Controller.

Should a Portland Line Rail movement be standing at Pyrenees Loop waiting to depart, the ARTC Network Controller may issue a Train Order to the Driver of the Portland Line bound rail service provided that;

- 1. There are no movements operating between Maroona and Glen Thompson Loop
- 2. There has been no Train Order issued towards Maroona
- 3. There are no Maintenance activities in operation which would prevent a Train Order being issued.

The ARTC Network Controller may issue a Train Order for the Rail movement to proceed beyond Maroona towards Portland. The Train Order TEXT must commence with the following text:

Proceed from Maroona to...

The ARTC North West Network Controller will then advise the ARTC South West Network Controller when a Train Order has been issued for a movement to depart towards the Portland Line.

The ARTC South West Network Controller must not clear a signal for a rail movement to depart towards the Portland Line without first being advised that a Train Order has been issued for the movement.

Signal Failures at Maroona Loop

During signal failures, the authority to pass a signal at stop is as follows:

244 / 10 to the Portland Line - Signalman Caution Order form 2377

244 / 12 to the Portland Line - Signalman Caution Order form 2377



- 244 / 10 towards Tatyoon Loop CTC Home Departure Caution Order
- 244 / 12 towards Tatyoon Loop CTC Home Departure Caution Order
- 244 / 8 CTC Arrival Message Form
- 244 / 6 CTC Arrival Message Form
- 244 / 26 CTC Arrival Message Form
- 244 / 30 to Pyrenees Loop CTC Home Departure Caution Order
- 244 / 32 to Pyrenees Loop CTC Home Departure Caution Order

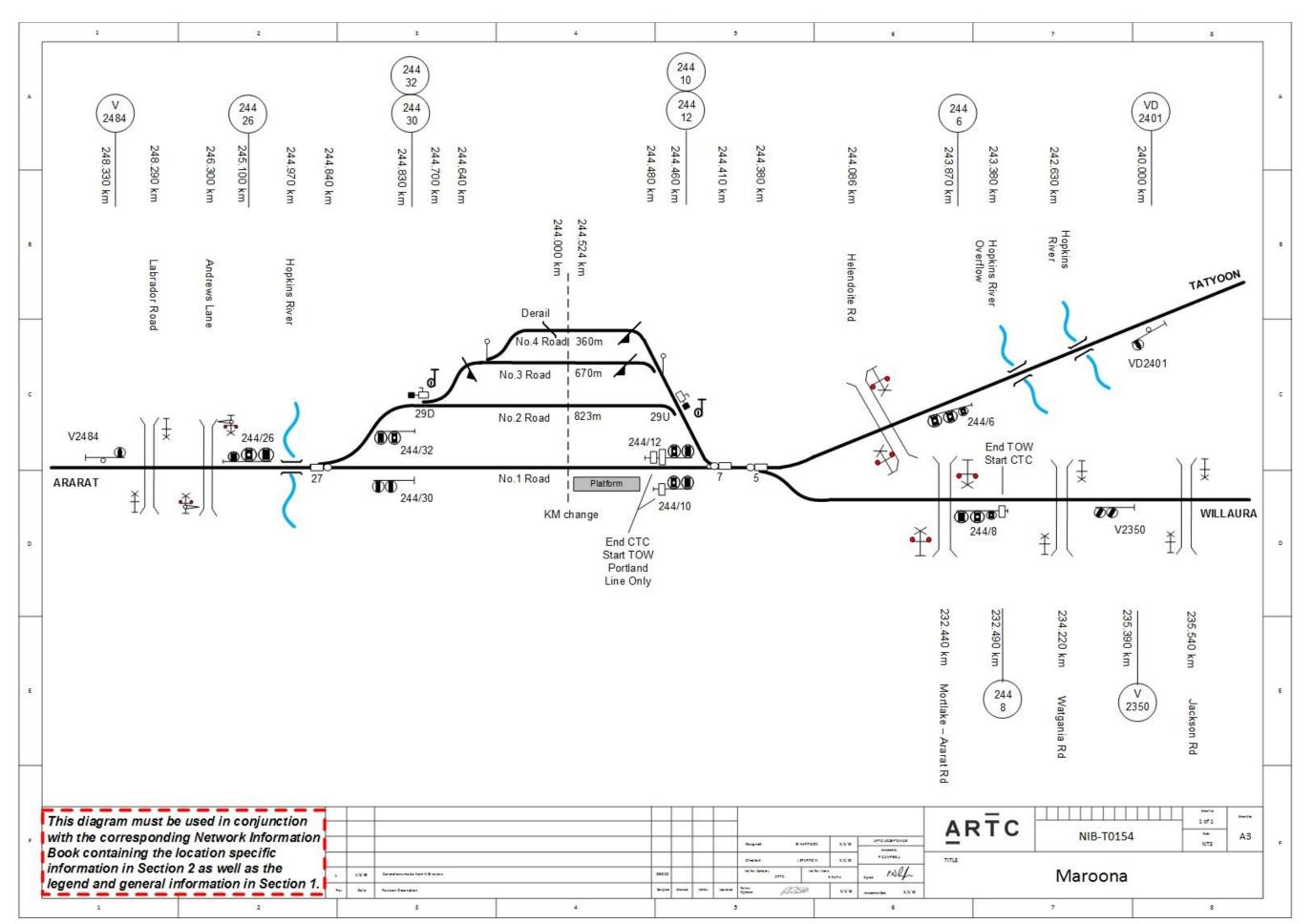
Signal Failures at Ararat

265 / 6 - Verbal permission is given by the ARTC Network Controller as per TA.20 Section 17 rule 7 clause c

Signal Failures at Pyrenees

- 214 / 10 to Maroona Loop CTC Home Departure Caution Order
- 214 / 12 to Maroona Loop CTC Home Departure Caution Order







2.4 Tatyoon Loop (TYP)

Standing Room:

• 1659m

Goods Siding:

• Yes, 400 metres single ended, access facing Ararat

Local Control Panel:

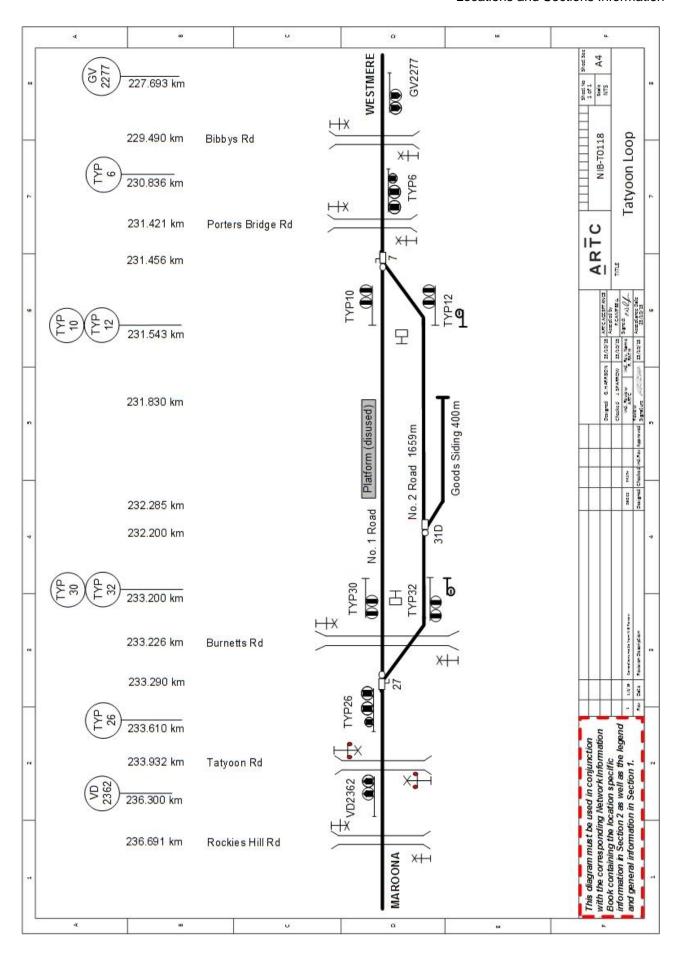
Nil

Crank handles:

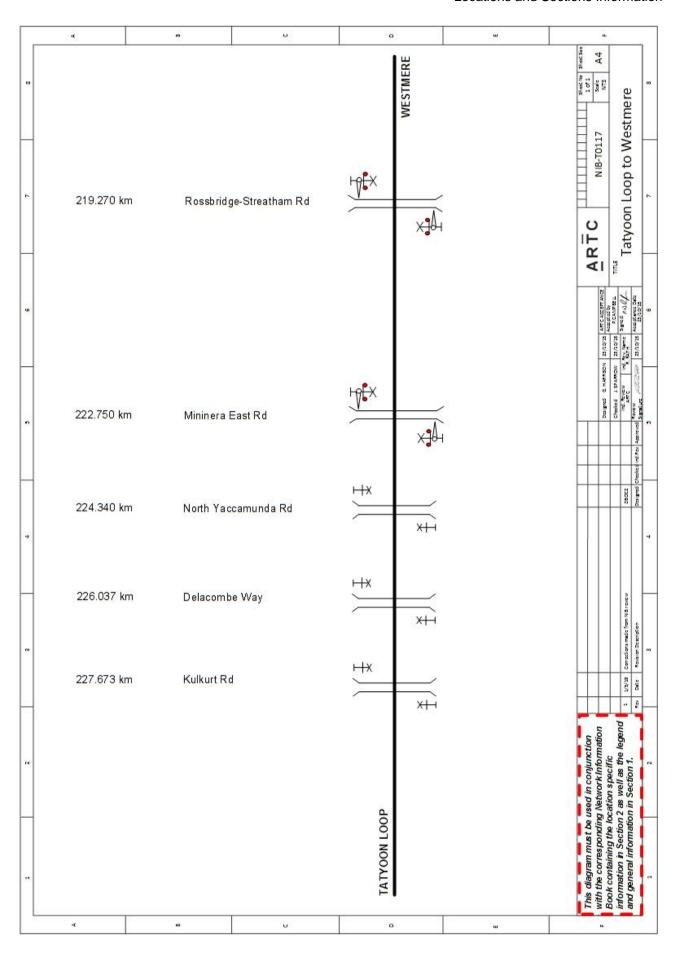
No, dual control point machines

Other Information:









OGW-30-05

2.5 Westmere Loop (WSM)

Standing Room:

• 1850m

Goods Siding:

• Yes, 338 metres with 146 metre dead end track on Ararat end

Local Control Panel:

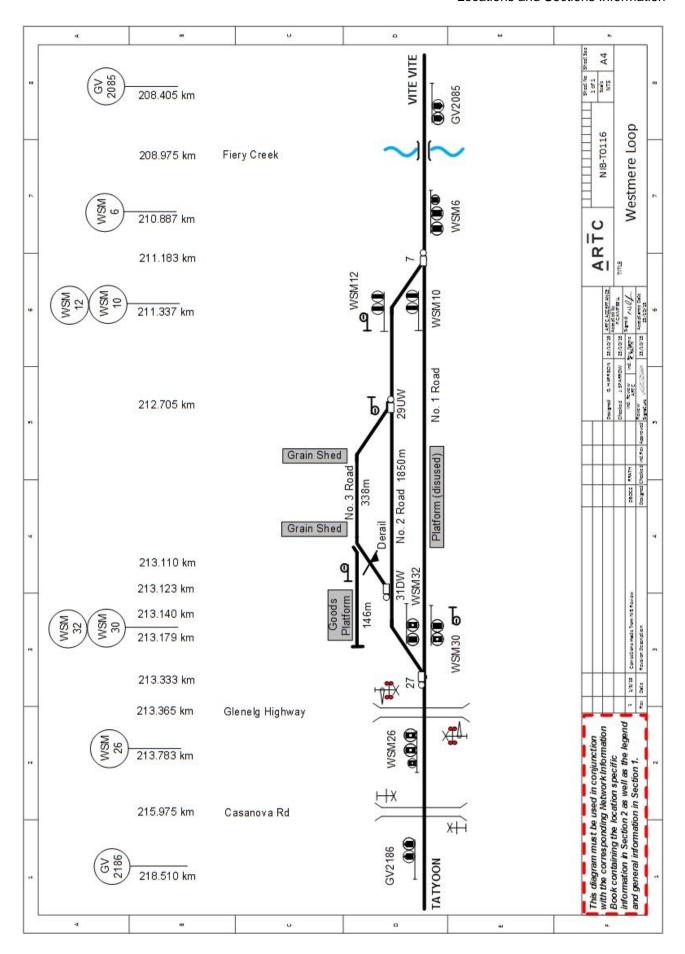
• Nil

Crank handles:

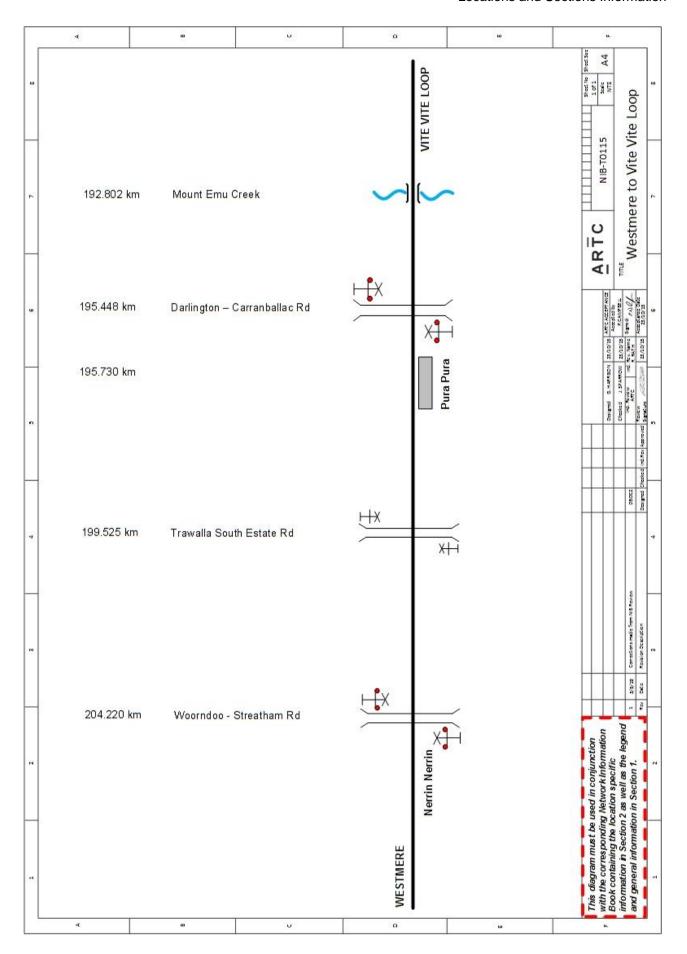
No, dual control point machines

Other Information:











2.6 Vite Vite Loop (VVE)

Standing Room:

• 1650m

Goods Siding:

Nil

Local Control Panel:

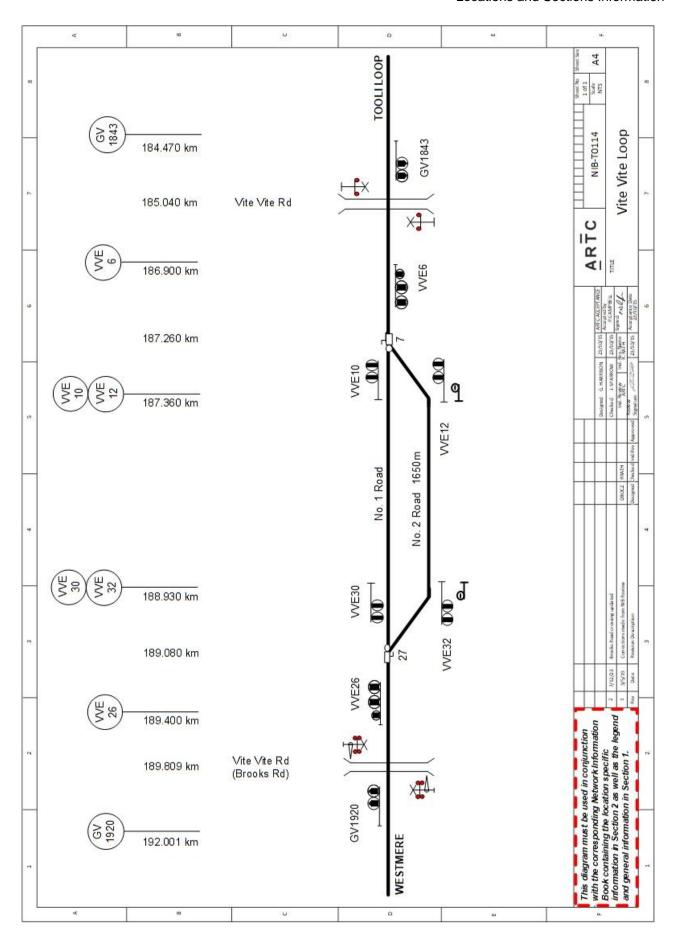
• Nil

Crank handles:

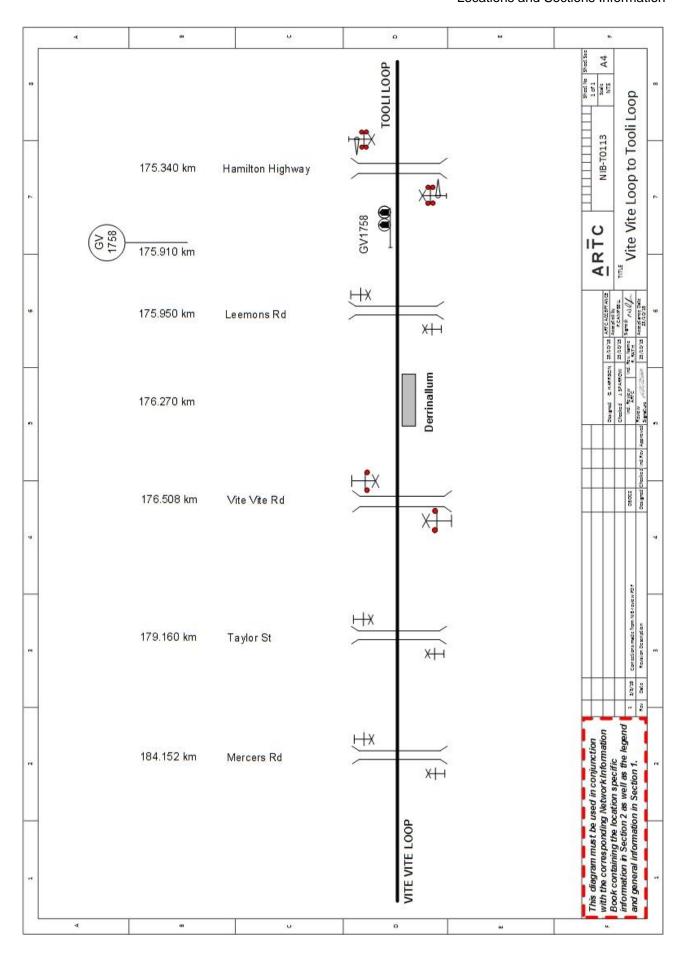
No, dual control point machines

Other Information:











2.7 Tooli Loop (TOZ)

Standing Room:

• 1850m

Goods Siding:

• Nil

Local Control Panel:

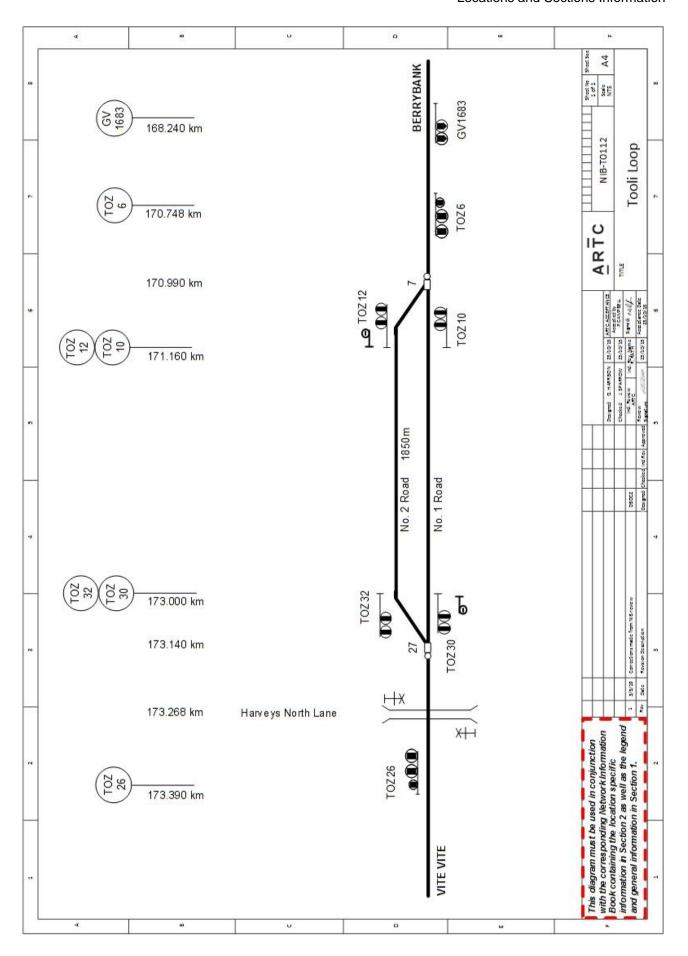
• Nil

Crank handles:

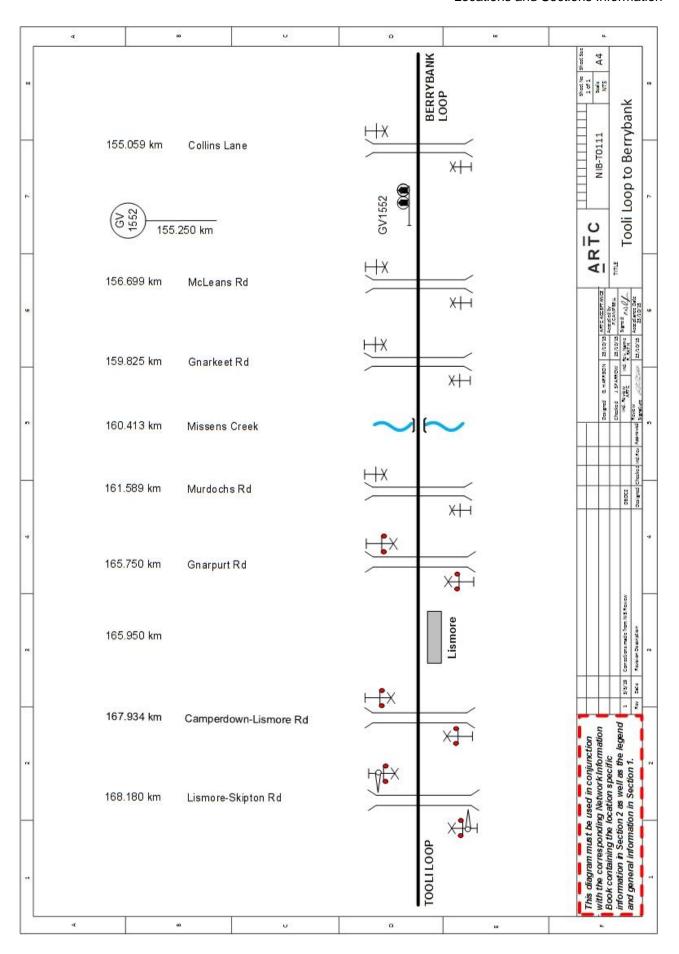
• No, dual control point machines

Other Information:













2.8 Berrybank Loop (BBK)

Standing Room:

• 1842m

Goods Siding:

Yes, 222m in length with access from the Adelaide end only

Local Control Panel:

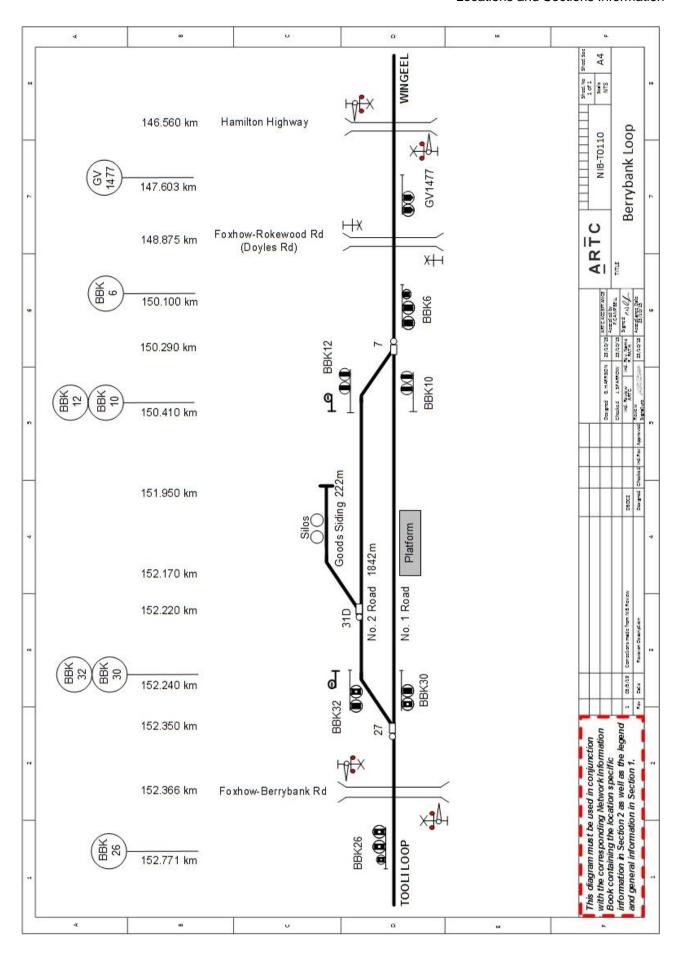
• Nil

Crank handles:

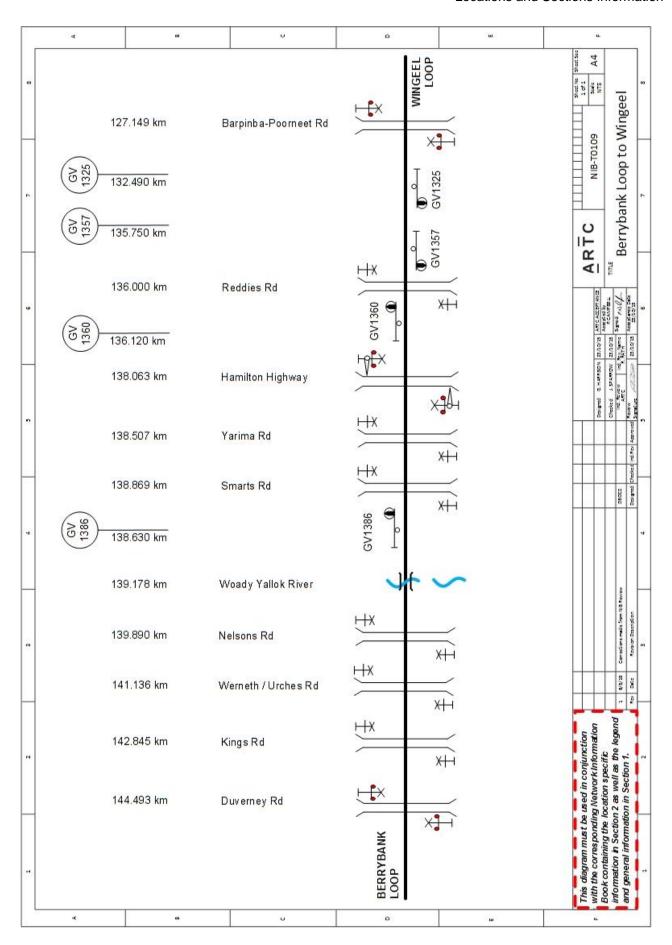
No, dual control point machines

Other Information:











2.9 Wingeel Loop (WGI)

Standing Room:

• 1675m

Goods Siding:

Nil

Local Control Panel:

• Yes, not available to train crew

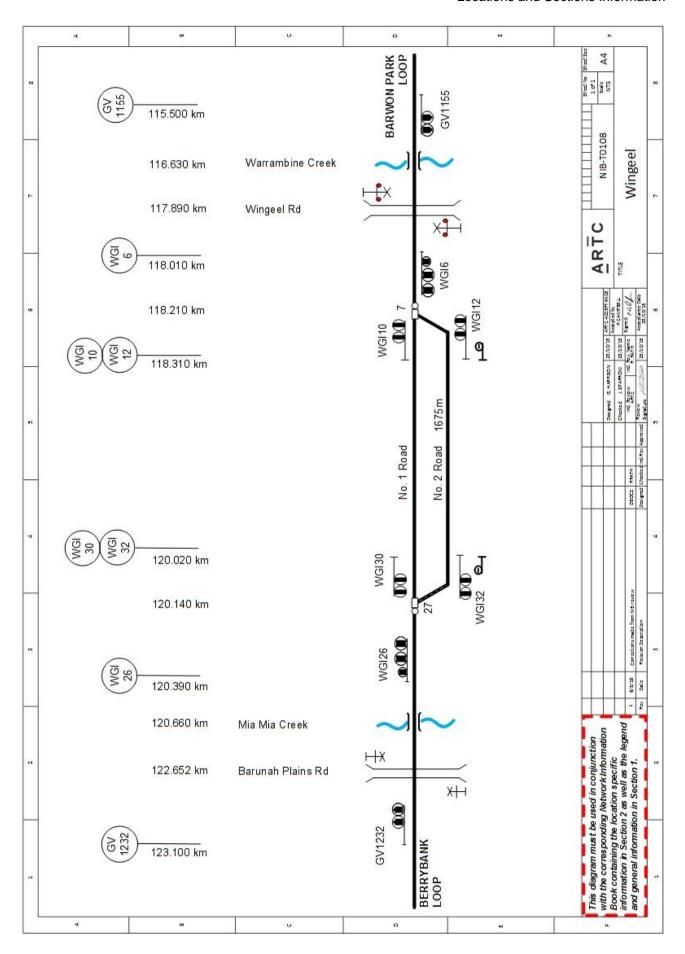
Crank handles:

No, dual control point machines

Other Information:

• Nil







2.10 Barwon Park Loop (BWP)

Standing Room:

1850m

Goods Siding:

Nil

Local Control Panel:

• Nil

Crank handles:

Nil, Dual Control Point Machines

Other Information:

Nil

2.10.1 Inverleigh (IVH) Intermediate Siding Procedures

Standing Room:

Nil

Goods Siding:

904 metres

The points from the main line at both ends of the yard are rodded to a point lever connected to an Electric Release lock. Point Stand Indicators are rodded to the points to indicate to the Driver of approaching trains the position of the points as follows:

Green Arrow: Indicates to movements proceeding in both directions that the points are set for

the main line.

2 Red Dumbells: Indicates to movements proceeding in both directions that the points are set for

the siding.

Should the Driver of a Main Line movement observe the Point Stand Indicator displaying 2 Dumbells, the Network Controller shall be immediately advised. The Movement shall be brought to a stand at the points and the Driver shall ensure that the points are set and secure for the movement prior to passing over them.

Signals and Main Line Point Locking

The following fixed signals control the movement of trains between Gheringhap and Barwon Park Loop.

Down Home and Starting signals 83/32 and 83/30 display 'Stop' and 'Proceed' indications.

Up Home Departure Signals BWP/10 and BWP/12 at Barwon Park Loop display 'Stop' and 'Proceed' indications.

The position of the points at Inverleigh will determine the aspect displayed on these signals with additional indication of points supplied by GV1001. Should a release be provided by the Network Controller to operate the points at Inverleigh, the Signals shall display a "Stop" indication.



Provided the points at Inverleigh are set and secured for the Main Line the Signals shall display a "Proceed" indication.

The CTC Network Controller shall ensure that no "Point Release" commands have been initiated at Inverleigh Siding.V5PSW key switches are located adjacent to the main line points at either end of the Inverleigh yard and are electrically connected to the Network Controllers operating system in Adelaide and provide electric locking on the Main Line points.

The key switches have 3 positions as follows:

- 1. Cancel: Cancels the release command after the points have been set for the Main Line.
- 2. Centre: Allows the key to be inserted or removed from the Key Switch.
- 3. Accept: Accepts the release command initiated by the CTC Network Controller.

Three indicator lights are provided at each Key Switch; the lights are labelled and indicate the status of the release or points as follows:

Points Locked: Indicates that the Points are set and secured for the Main Line and cannot be operated.

Release Available: Indicates that the CTC Network Controller has provided a Release Command for acceptance by the Driver requiring access to operate the points.

Points Free: A flashing light indicates to the Driver accepting the release that a 5 minute time release has been activated. A steady light indicates that the points are available

for operation.

An 18 metre Track Approach is provided at the Melbourne and Adelaide end facing points, a movement requiring entry to the Inverleigh Yard shall be stationary on the Track Approach to accept a release of the point locking from the Network Controller

Location of Derail Devices - Rodded Hayes Wheel Crowder and Derails are located on both turnouts from the siding to the main line at Inverleigh and work in conjunction with the respective Switch lock Points. Train Crews are to ensure that all bogies are within the derailers on the siding track to avoid the risk of any rollingstock fouling the main line.

Train terminating at Inverleigh Siding

The Driver of the movement shall bring the train to a stand at the facing points at Inverleigh ensuring the movement is stationary on the 18 metre approach track and:

- 1. Contact the CTC Network Controller and request a release on the Main Line Points,
- 2. Observe that the 'Release Available' light is displayed
- 3. Insert the key and turn it to the 'Accept' position.
- 4. Observe that the 'Points Free' light is displayed.
- 5. Return the key switch to the 'Centre' position, withdraw it and unlock the Point Lever.
- 6. Operate the points to the required position for the movement.

Immediately the movement is clear of the main line and derail, the points are to be restored to the 'Normal' position and the Point lever locked again. The Driver shall insert the 5VPSW key in the key switch and operate it to the 'Cancel' position and advise the CTC Network Controller.



Train originating at Inverleigh Siding

- 1. Contact the Network Controller and request a release on the applicable Main Line Points,
- 2. Observe that the 'Release Available' light is displayed.
- 3. Insert the key and turn it to the 'Accept' position.
- 4. Observe that the 'Points Free' light is flashing.
- 5. Return the key switch to the 'Centre' position, withdraw it and unlock the Point Lever.
- 6. Operate the points to the required position for the movement.

Immediately the movement is clear on the main line the points are to be restored to the 'normal' position and the Point lever locked again. The Driver shall insert the 5VPSW key in the key switch and operate it to the 'Cancel' position and advise the Network Controller. The CTC Network Controller shall then cancel the release.

Movements shunting at Inverleigh enroute

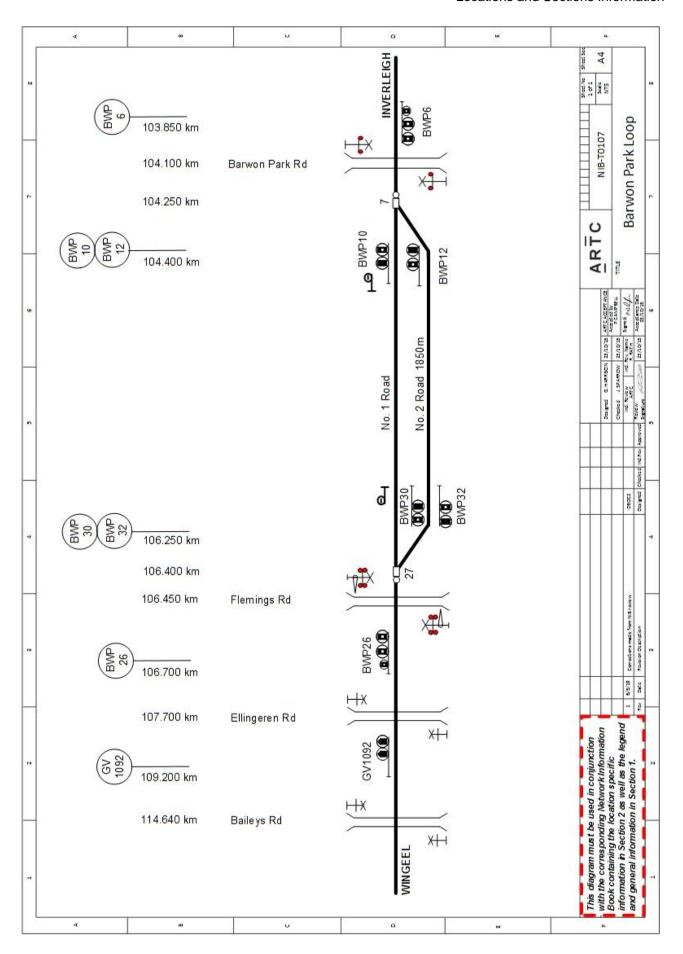
Should a movement be required to shunt at Inverleigh the train crew shall advise the CTC Network Controller accordingly. The Main Line Points are to be operated as per clause (e) and (f) of this procedure with the exception that the rear portion of the train shall remain on the main line during the shunting until the movement has been confirmed as arriving complete at either Gheringhap or Barwon Park Loop.

Winchelsea Road Level Crossing -The Winchelsea Road Flashing Light equipment is provided with a Level Crossing Predictor facility. A sign is erected at the Melbourne end points of the siding for Melbourne bound movements as follows:

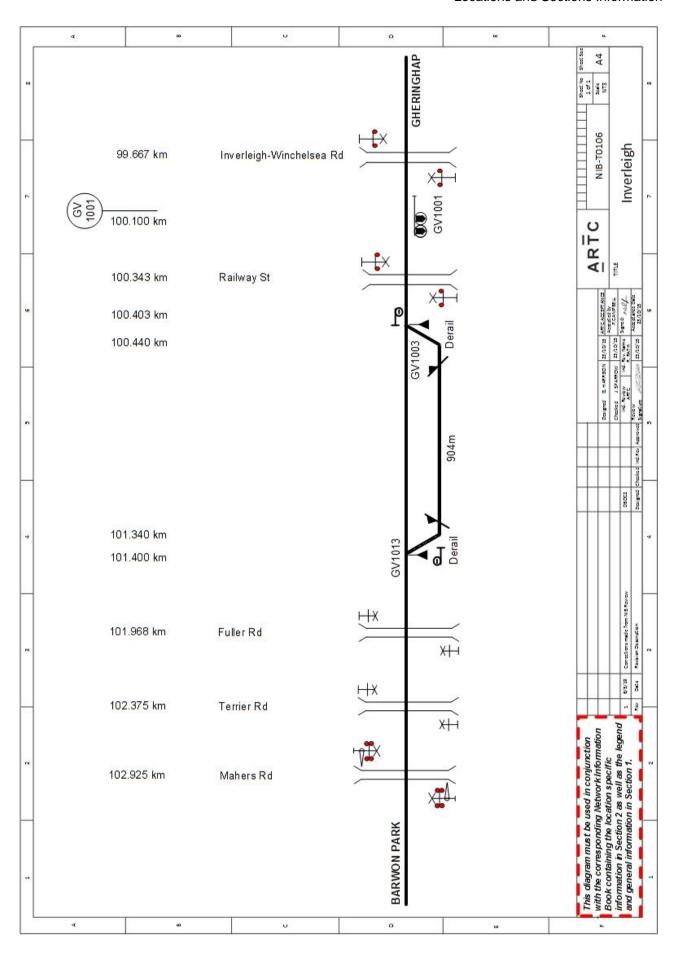
Stopping Movements shall not exceed 25kph up to Winchelsea Rd Level Crossing. Movements originating or shunting at Inverleigh when departing shall not exceed 25 KPH until it is confirmed that the Level Crossing Equipment has been activated and is operating.

Failure of Electric Release Locks -In the case of a failure of the Release Function to operate for the passage of a movement to or from the main line from or to the Inverleigh yard a Signal Maintenance Technician shall be contacted and requested to attend to enable the release to be provided.

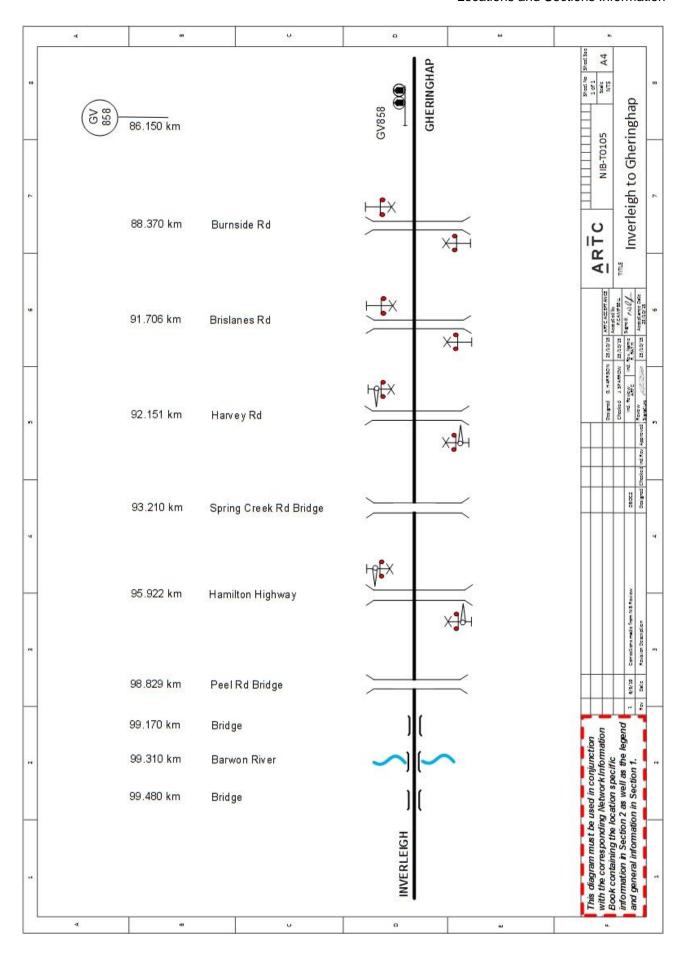














2.11 Gheringhap Loop (GHP)

Standing Room:

• 1606m

Goods Siding:

Yes, 299 metres

Local Control Panel:

• Nil

Crank handles:

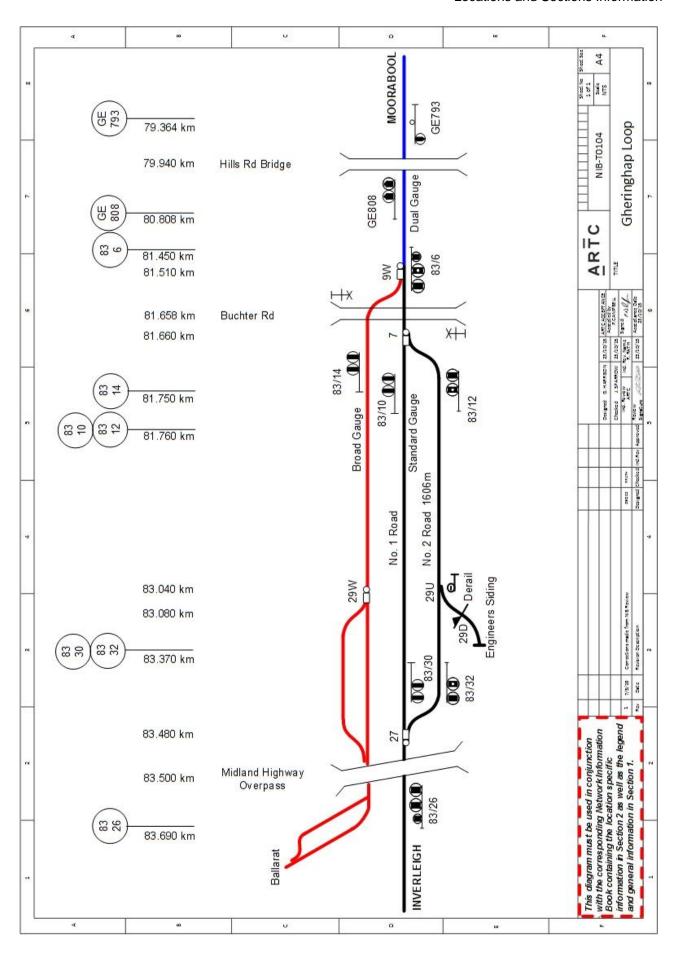
Nil, Dual Control Point Machines

Other Information:

2.11.1 Gheringhap Engineers Siding Procedure

The Goods siding is accessible by a switch lock on Number 2 road at the Melbourne end. The Network Controller provides a release from the Phoenix Panel to the field.







2.12 North Geelong - Anakie - Moorabool

Standing Room:

- Moorabool 1850m
- Anakie 1180m

Local Control Panel:

Nil

Crank handles:

Nil

2.12.1 Overview

The points and signals applicable to the ARTC main running lines and leading onto the ARTC main line from the V/Line operated lines are controlled by the ARTC South West Network Controller under the rules applicable to Centralised Traffic Control.

There are two tracks between North Geelong and Moorabool, one is referred to as the South Line whilst the other is referred to the North line.

The South line is dual gauge between Thompsons Rd and Anakie Rd, and then standard gauge between Anakie Rd and Moorabool.

The North line is standard gauge between Thompsons Rd and Anakie Rd, and then Dual Gauge between Anakie Rd and Ballan Rd.

2.12.2 Train Control Management

The V/Line Train Controller operates all points, signals and releases applicable to the V/Line Dual Gauge Main Line, and the Arrival and Departure tracks whilst the ARTC Network Controller operates all points and signals controlling entry onto, from and along the ARTC main lines.

A release function is provided for the Dual Gauge Main Line, the Arrival track or the departure track and the provision of the release allows the ARTC Network Controller to signal a standard gauge, or a broad gauge movement into the track that the release applies.

2.12.3 Movement from Gheringhap into V/Line operated tracks at North Geelong C

When a broad or standard gauge movement requires to proceed from Gheringhap into the V/Line operated tracks at North Geelong C, the ARTC Network Controller must liaise with the V/Line Train Controller to establish the track the movement is to enter, and request that a release be provided on that track.

The V/Line Train Controller will then provide the applicable release upon which the ARTC Network Controller may then set the route for the movement to proceed.

2.12.4 Movement from V/Line operated tracks at North Geelong to Gheringhap

When a broad or standard gauge movement requires to proceed from North Geelong to Gheringhap, the driver of the movement will contact the ARTC Network Controller, provide the relevant train details and advise that the movement is ready to proceed.



If the movement is broad gauge, the driver must ensure to first obtain a train order to proceed beyond Gheringhap prior to requesting a signal to proceed from the ARTC Network Controller. Provided correct conditions exist the ARTC Network Controller may then set the route for the movement to proceed.

SIGNAL FAILURE

When a signal fails to assume a proceed aspect when operated, the ARTC Network Controller will issue the appropriate authority to pass the signal at stop.

When issuing the authority to proceed, the Network Controller must include details of the track the movement will proceed to.

If the signal failure includes an area controlled by the V/Line Train Controller, the ARTC Network Controller must liaise with the V/Line Train Controller to ensure the correct conditions exist for the movement to proceed.

If the failure includes no detection of points, the driver of the movement must be instructed to place relevant point machines into the hand operating position and set the route for the movement. When operating crossovers, the driver must ensure that the points at both ends of the crossover have been correctly set.

The authority to pass signals at Stop is as detailed:

Signal No.72/6 - Along ARTC Main Line - ARTC Network Controller provides verbal authority to driver

Signal No.72/30 - To the North Standard Gauge or the South Dual Gauge lines - ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take.

Signal No.72/32 - To the South Dual Gauge line - ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take.

Signal No.72/34 - To the South Dual Gauge line or the shunt neck - Verbal Authority of the ARTC Network Controller, the network controller is to advise the train driver of the route the movement is taking.

Signal No.72/36 - To the South Dual Gauge line or the shunt neck - Verbal Authority of the ARTC Network Controller, the network controller is to advise the train driver of the route the movement is taking.

Signal No.72/38 - To the Arrival or Departure Tracks - Verbal Authority of the ARTC Network Controller, the network controller is to advise the train driver of the route the movement is taking.

Signal No.72/42 - To the ARTC Main Line toward Elders Loop - CTC Caution Order issued by the ARTC Network Controller

Signal No.72/40 - To the ARTC Main Line toward Elders Loop - CTC Caution Order issued by the ARTC Network Controller

Signal No.72/40 - To the V/Line Dual Gauge Main Line, or the Arrival or Departure Tracks - After consultation with the V/Line Train Controller, the ARTC Network Controller issues a Signallers Caution Order to the driver; there is no requirement for the driver to record the caution order.

Signal No.72/44 - To the South Standard Gauge line, or the North Dual Gauge line, ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take



Signal No.72/46 - To the South Standard Gauge line, or the North Dual Gauge line, ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take

Signal No.72/48 - To the South Dual Gauge line, or the North Standard Gauge line, ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take

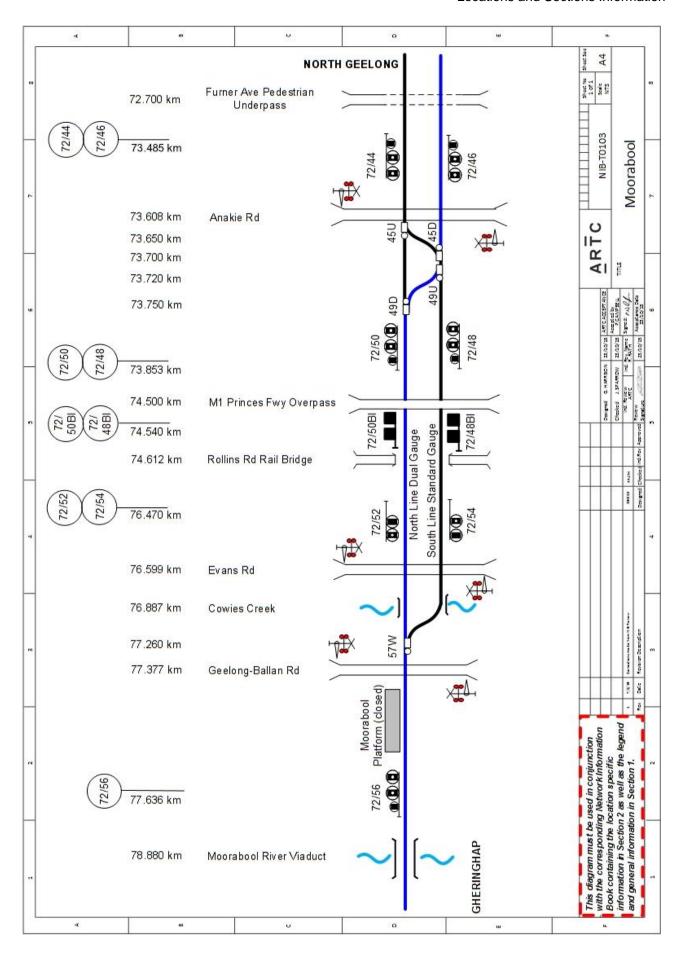
Signal No.72/50 - To the South Dual Gauge line, or the North Standard Gauge line, ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take

Signal No.72/52 - To the dual gauge main line - CTC Caution Order issued by the ARTC Network Controller

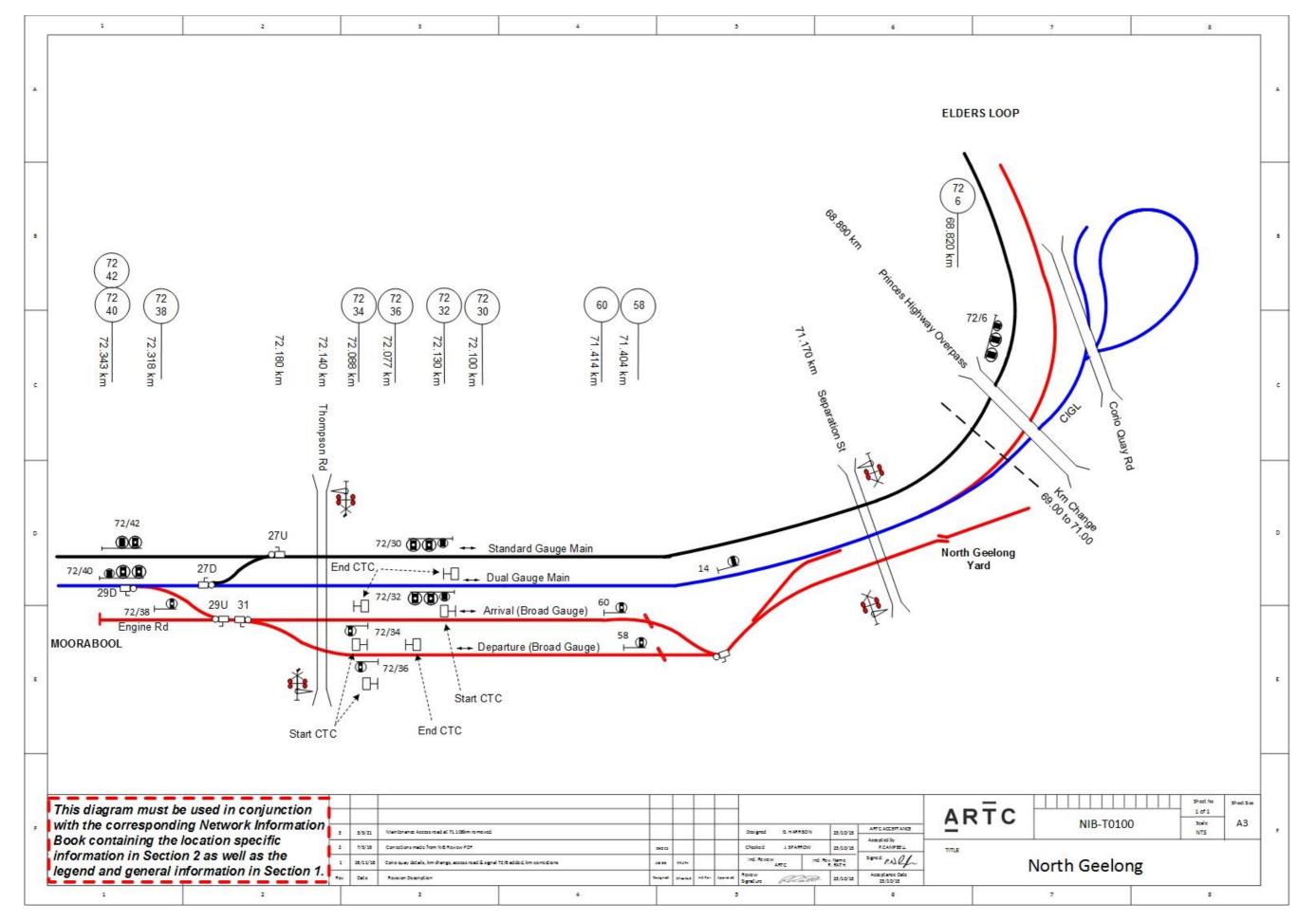
Signal No.72/54 - To the dual gauge main line, CTC Caution Order issued by the ARTC Network Controller

Signal No.72/56, To the South Dual Gauge line, or the North Standard Gauge line, ARTC Network Controller issues arrival message to the driver, the message is to include the track the movement is to take.

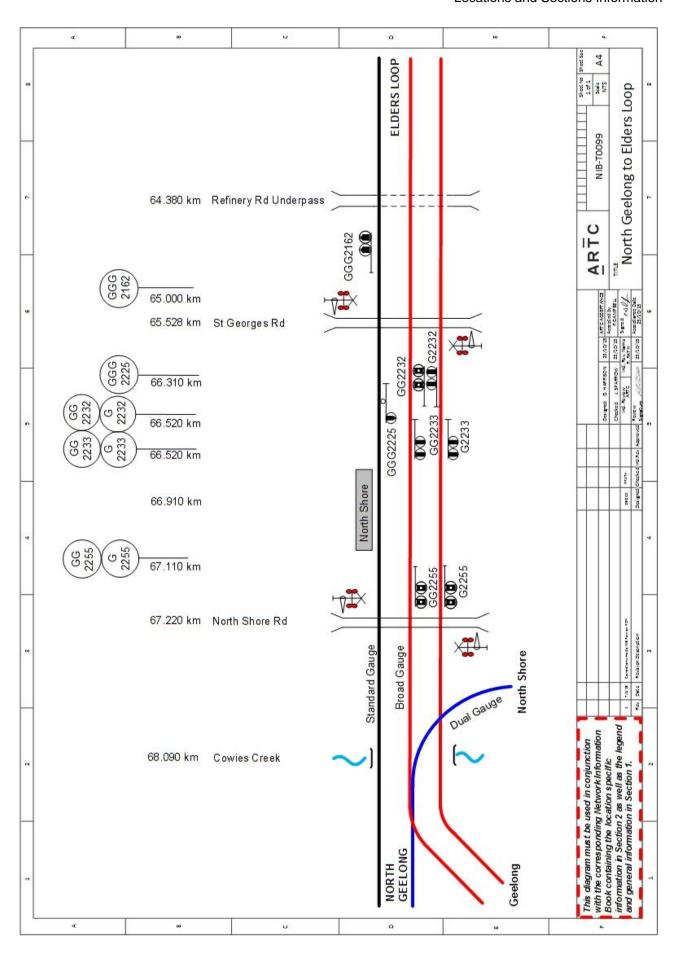












OGW-30-05



Locations and Sections Information

2.13 Elders Loop (ERZ)

Standing Room:

• 1850m

Goods Siding:

• Nil

Local Control Panel:

• Nil

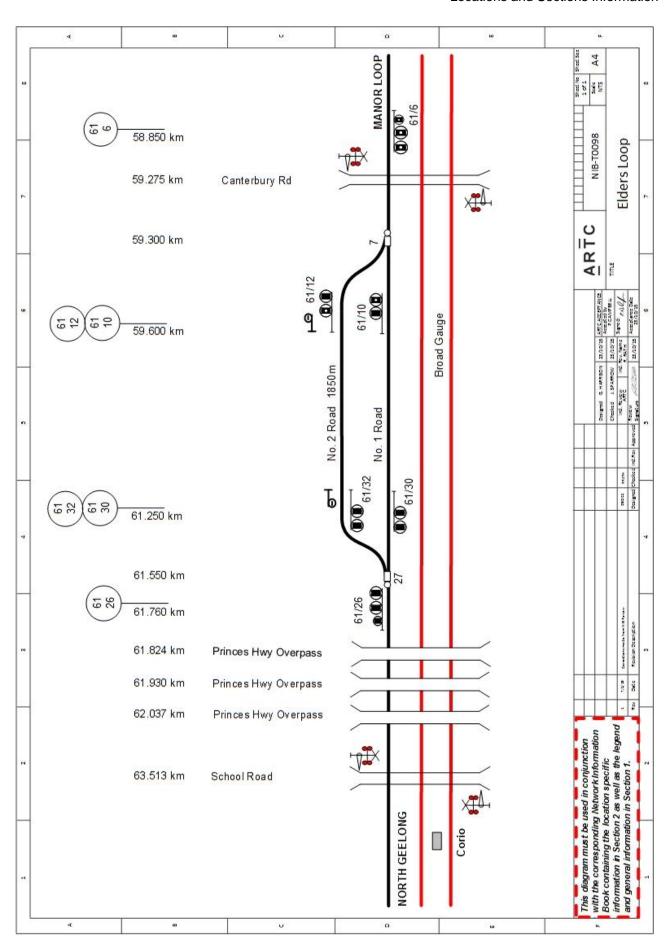
Crank handles:

Nil

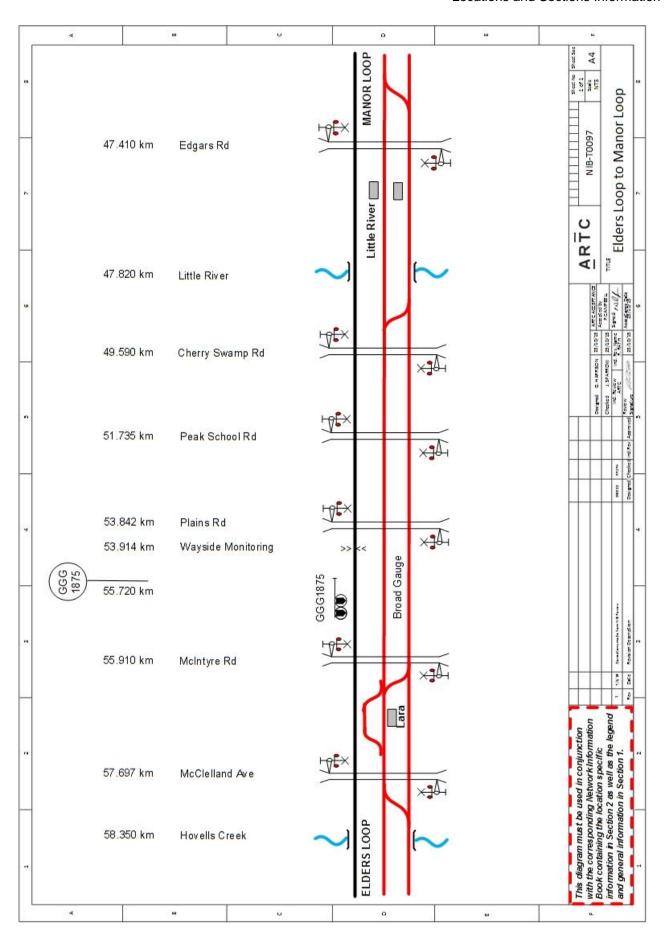
Other Information:

Elders Loop is equipped with Emergency Automatic Mode during failure conditions.











2.14 Manor Loop (MRS)

Standing Room:

• 1650m

Goods Siding:

• Nil

Local Control Panel:

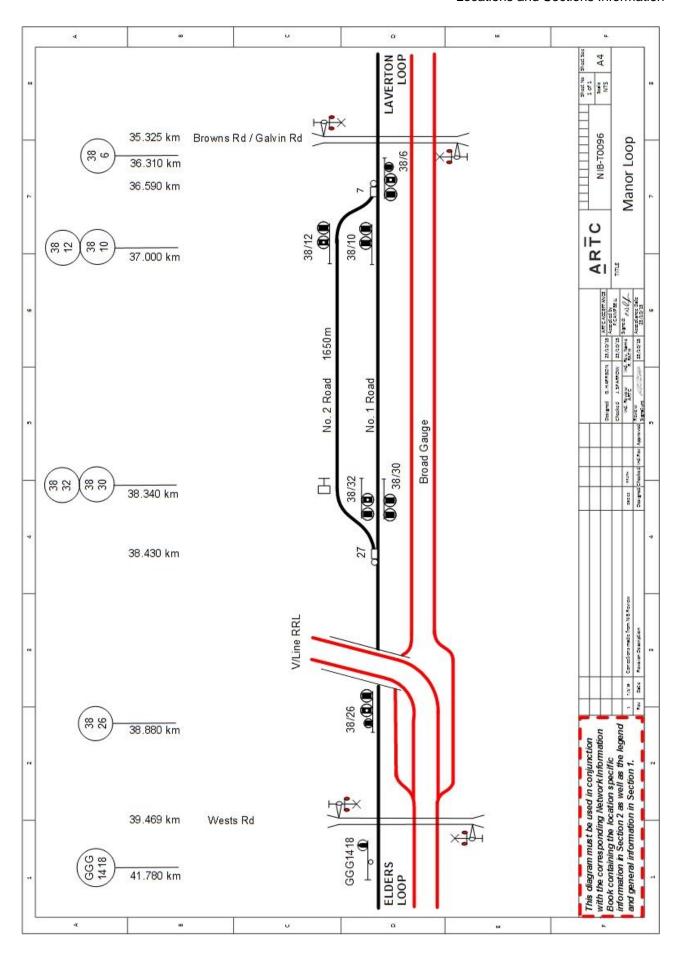
• Nil

Crank handles:

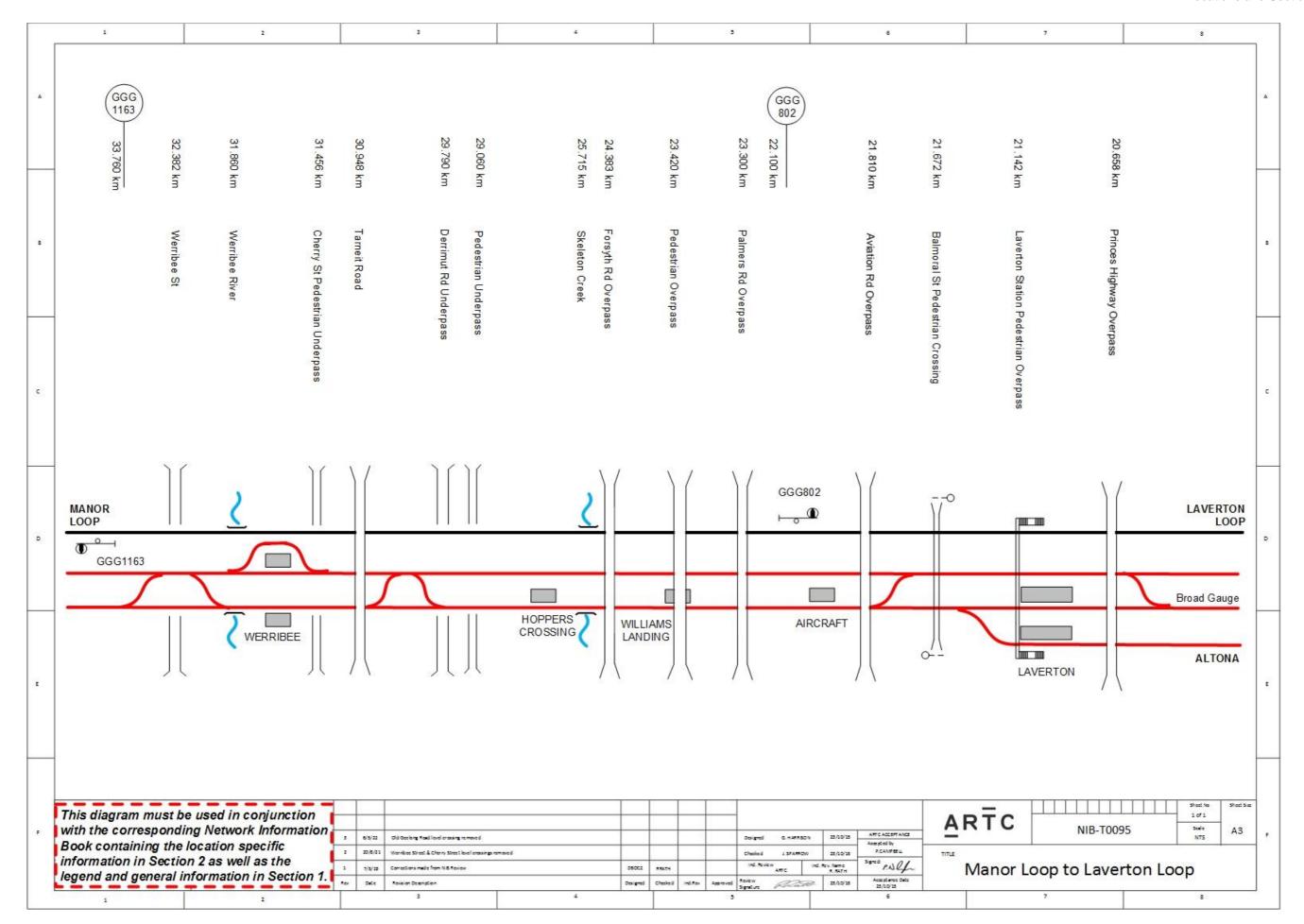
• Nil, Dual control point machines

Other Information:











2.15 Laverton Loop (SCT)

Standing Room:

1846m

Goods Siding:

CRT private siding

Local Control Panel:

No

Crank handles:

No, dual control point machines

Other Information:

2.15.1 SCT Terminal Operational Procedure

Overview

Automatic Block Signalling in accordance with various rules contained in TA20 is in operation between Newport and the Adelaide end of Laverton Loop.

The points and signals at Laverton Loop are controlled by the ARTC Network Controller at NCCW Mile End SA.

Centralised Traffic Control in accordance with TA20 commences at Laverton Loop Signals 20/30, 20/32 and 20/34.

The ARTC Network Controller signals movements to and from the SCT operated sidings at Laverton Loop.

Rail operators requiring access into the SCT sidings must first seek authority from SCT prior to seeking passage from the ARTC Network Controller.

Points 15 and 17, and derail 23 providing access to the SCT sidings are provided with self-normalisation and will self-normalise after each movement clears the points. If the points are placed to reverse and no signal is called for a movement to either enter or depart, the points will self-normalise after 45 seconds.

The ARTC Network Controller may prevent the points from self-normalising by the application of a blocking command.

SCT Sidings

SCT siding is accessed from both the Melbourne end and the Adelaide end of Laverton Loop.

At the Melbourne end, there is a signalled connection to the SCT Departure Track. At the Adelaide end there is a signalled connection to the SCT sidings.

A control system is located at SCT, operated by the SCT Train Coordinator, and allows operation of a release on the points and derails providing access into the SCT siding at the Adelaide end of Laverton Loop only.

The ARTC Network Controller cannot signal a train into or from SCT at the Adelaide end of Laverton Loop without obtaining the release from the SCT Train Coordinator.



The ARTC Network Controller can signal a rail movement into or from the SCT Departure track at the Melbourne End of Laverton Loop at all times.

The ARTC Network Controller must not signal a rail movement to depart Somerton, Tottenham, or Manor Loop without first ascertaining with the SCT Train Coordinator that the movement can enter the siding, and into which track it is to be signalled.

Operation of Signal 20/6

Signal 20/6 will not operate to proceed for a rail movement to enter the Arrival Track and all arriving rail movements to the SCT sidings at the Melbourne end of Laverton must be signalled to the Departure track.

The driver must control the rail movement ensuring that the Maidstone St level crossing is fully operating prior to allowing the rail movement to pass through the level crossing.

Maidstone Street Level Crossing

Rail movements entering the SCT Departure track must comply with the rules associated with a Low Speed Aspect (on Signal 20/6), when proceeding over the Maidstone Street Level Crossing.

Immediately a route is called from signal 20/16 for a rail movement to depart the SCT Departure Track, the Maidstone Street Level Crossing will commence operating and when the crossing is set for the rail movement, signal 20/16 will display a proceed aspect.

A route must not be set for a rail movement to depart the SCT Departure Track from Signal 20/16 until the Driver of the rail movement has confirmed with the ARTC Network Controller that the rail movement is at, or closely approaching signal 20/16 and is ready to depart.

SCT East Bound Movement Requiring Access to the SCT Siding

Prior to signalling an eastbound movement from Elders, the ARTC Network Controller must contact the SCT Train Coordinator and establish the train can be accepted.

Provided the rail movement can be accepted, the SCT Train Coordinator may provide the release for the track the rail movement is to arrive, after which the ARTC Network Controller may set the route.

SCT West Bound Movement Requiring Access to the SCT Siding

Prior to signalling a westbound movement from Tottenham, or from Tullamarine Passing Lane, the ARTC Network Controller must contact the SCT Train Coordinator and establish the departure track is available for the arrival of the rail movement.

The following conditions apply for a westbound movement entering the SCT siding at the Melbourne end.

- SCT will not schedule train services to arrive into the Melbourne end of the SCT sidings between 0600hrs and 0900hrs and between 1600hrs and 1900hrs.
- Between Monday and Friday, excluding weekends, if an out of course train requires to arrive between 0600hrs and 0900hrs and between 1600hrs and 1900hrs, the maximum length of the arriving train is 1200 metres.
- Between Monday and Friday, excluding weekends, if a train is in excess of 1200
 metres, it may either be held back along the North East corridor until it can arrive
 outside of the peak period or enter into the Laverton Loop and then taken into the
 Manor Loop section and pushed back into the SCT siding from the Adelaide end.



When advised of an arriving rail movement, the SCT Train Coordinator must ensure that the departure track is available and the route is correctly set for the rail movements arrival and that qualified workers within the yard have been advised.

Provided the rail movement can be accepted, the SCT Train Coordinator may advise the ARTC Network Controller that the rail movement can be signalled into the departure track at the Melbourne end of Laverton Loop.

The ARTC Network Controller must signal the rail movement into the Departure track.

SCT Movements Departing the SCT Siding at the Melbourne End

A departing rail movement at the Melbourne end of Laverton Loop must be waiting at 20/16 pending departure.

When a movement requires departing SCT, the SCT Train Coordinator must advise the ARTC Network Controller details of the movement, the track from which the movement is to depart and confirm that the rail movement is waiting departure.

The ARTC Network Controller may then signal the rail movement to depart from SCT Siding.

Immediately signal 20/16 is operated, the Maidstone St level crossing will initiate and once the boom gates are lowered, the respective signal will display a proceed aspect.

SCT Movements Departing the SCT Siding at the Adelaide End

When a movement requires departing SCT at the Adelaide end, the SCT Train Coordinator must advise the ARTC Network Controller details of the movement and provide the release on points 29.

The ARTC Network Controller may then signal the rail movement to depart from SCT Siding.

Signal Failure

In the event of signals 20/6, 20/10, 20/12, 20/16 and 20/26 failing to assume a proceed aspect when operated, the ARTC Network Controller will issue a Signallers Caution Order as authority to pass the signal at stop.

Signals 20/30, 20/32 and 20/34 are classed as CTC departure signals controlling access into the CTC single line section to Manor Loop. The authority to pass these signals at stop is a CTC caution order issued by the ARTC Network Controller.

Provided detection on the affected points can be confirmed by observation of the Signal Control (Phoenix) System, the ARTC Network Controller may issue the applicable the authority to pass the signal at stop after ensuring point blockings have been applied.

In the event the point detection cannot be confirmed by observation of the Signal Control (Phoenix) System, arrangements must be made for the point machines in the route to be placed in the hand operating position and the points operated manually for the movement.

Passing Signals 20/10, 20/12, 20/30 and 20/32 to Operate Points

If signals 20/10, 20/12, 20/30 or 20/32 fail to display a proceed aspect, and the train crew are required to operate the points by hand, the ARTC Network Controller may issue the appropriate authority for the train to pass the signal at stop prior to the points being operated to the hand operating position.



Upon receiving the authority to pass the signal, the driver must control the rail movement to a point clear off the points ahead, stop and operate the points to the hand operating position and set them for the required route.

The movement may then proceed in accordance with the authority issued by the Network Controller.

The ARTC Network Controller must make arrangements for the points to be restored to the Motor Position.

2.15.2 ARTC Refuge Siding Altona North

ARTC Maintenance teams utilise the short refuge siding located at CRT Siding at Altona North. The siding is approximately 32 metres long.

When the tamper and ballast regulator are required to stable on this siding a portable derailer will be utilised to provide rollout protection.

Priority will be given to train services accessing the location when the tamper and regulator need to gain access to the main line.

The Project Delivery Manager Melbourne is to ensure that permission has been gained from the siding owner to access the refuge.

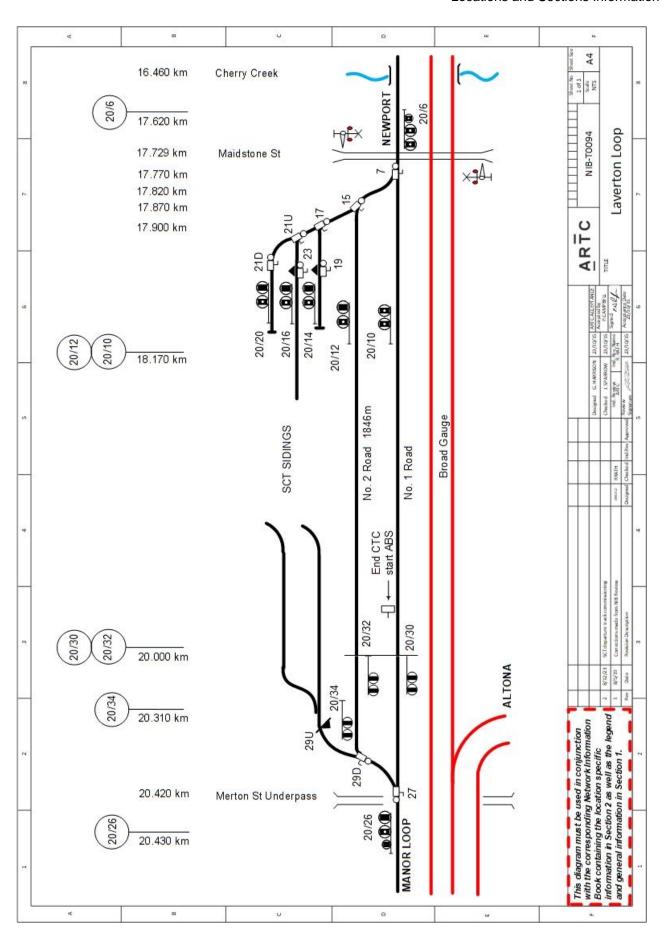
The Track Force Protection Coordinator is to contact the ARTC Network Controller prior to passing the STOP Board and traversing 11D points when departing the siding.

The Track Force Protection Coordinator is to contact the ARTC Network Controller and obtain verbal permission to pass 15/12 at stop prior to traversing 11D points when arriving into the siding or departing for the main line.

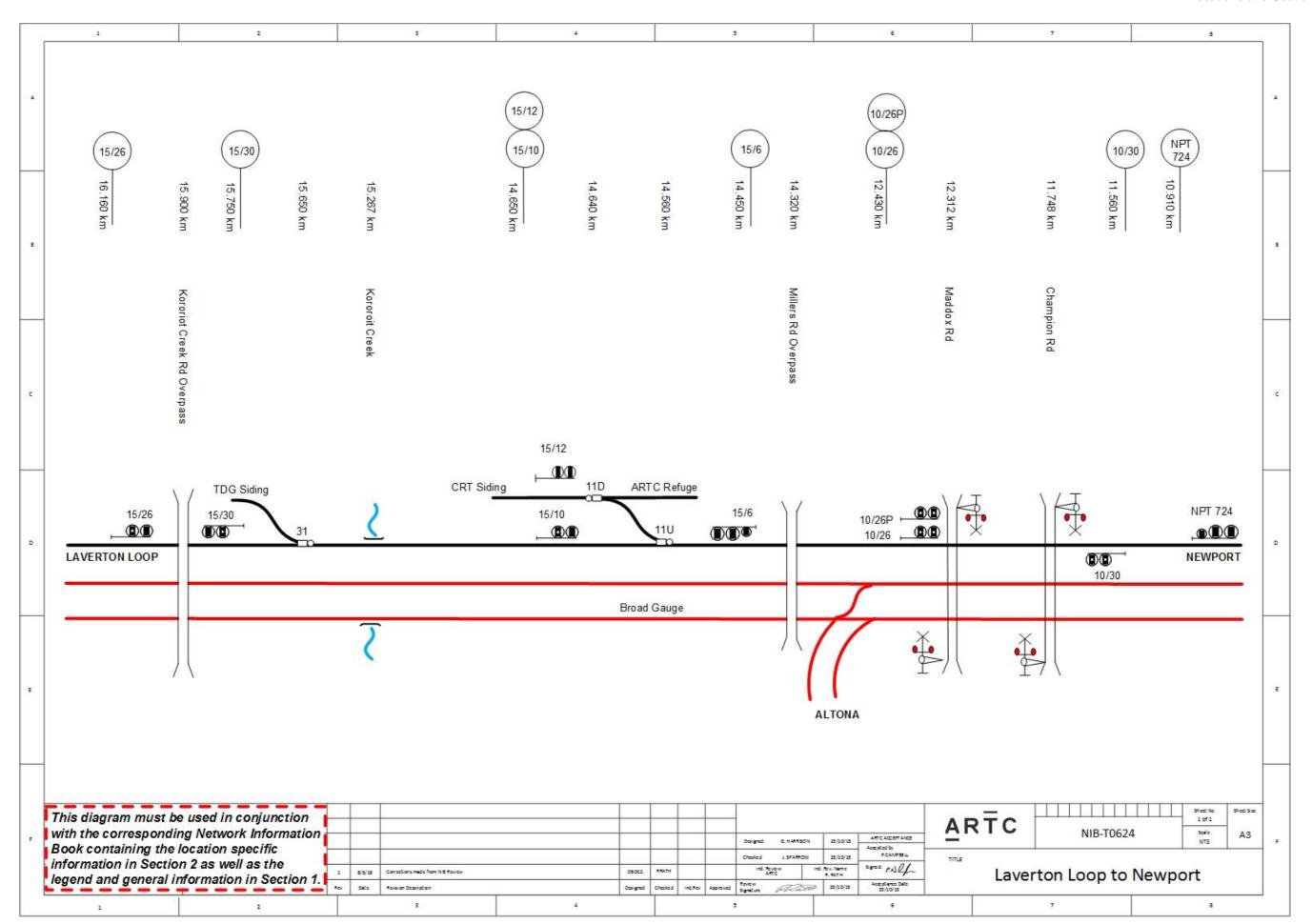
The Track Force Protection Coordinator is to ensure that the points (11D and / or 11U) are correctly set for the movement when arriving into the siding or departing for the main line.

The tamper and ballast regulator are not permitted past the STOP Board at the entrance to CRT Siding.











Maroona - Portland Line

3 Maroona - Portland Line

For general information and details relating to other locations on the Maroona to Portland line refer to Vic North West Network Information Book OGW-30-06.

3.1 Portland (PDJ)

The new end of the ARTC boundary at Portland is located at the 405.277 kilometre. Beyond this, is located the Port of Portland Private Sidings.

All trains and work trains are to proceed through Portland Yard under signal indications as per posted track speed. If signalling fails, a Signalman's Caution Order will be issued verbally to train crews.

Due to infrequent rail traffic movements in Portland Yard, between Portland Signal 1 and the end of the ARTC lease at the 405.277km, a Condition Affecting the Network (CAN) form will be issued for all level crossings within these boundaries.

All drivers of rail traffic movements on approach to each active level crossing must:

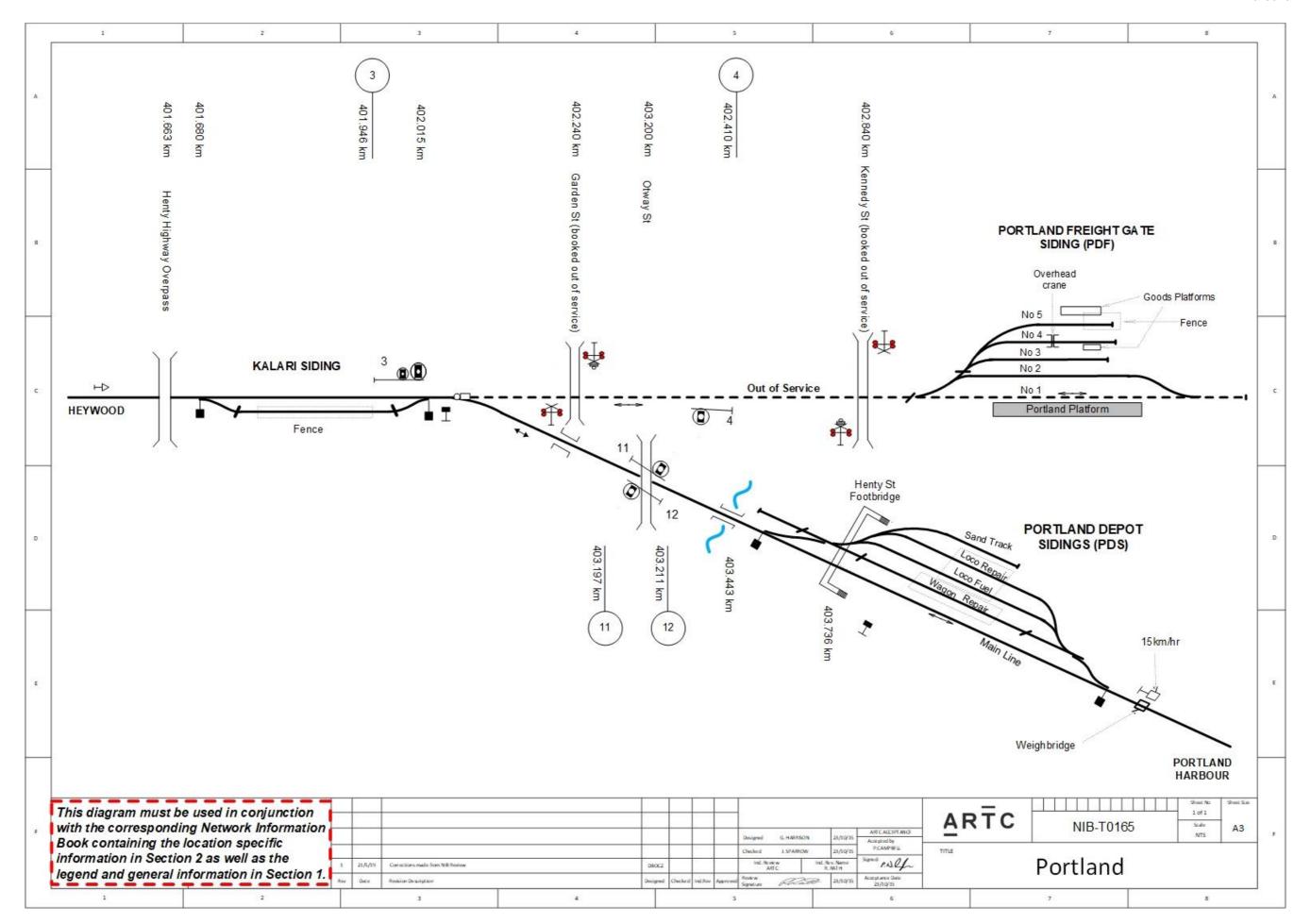
- Treat the active level crossing as faulty or potentially faulty (as no flagmen are provided),
- If the warning equipment is operating correctly, proceed per CAN form,
- If the warning equipment is not operating correctly, the Driver must direct the Second Crew Member to operate the manual test switch for the level crossing,
- Once an assurance has been obtained from the Second Crew Member that the level crossing warning equipment has operated correctly for a period of not less than 30 seconds and any road vehicle / pedestrians approaching the level crossing have stopped and it is safe to do so, the train may proceed over the level crossing,
- As soon as possible, report the status of the level crossing to the Network Controller.

The above procedure also applies to Track Machines as listed in TA20 - ARTC Code of Practice for the Victorian Main Line Network.

All affected level crossings within the boundaries of Portland Yard are as follows:

- 400.840 km Cashmore Road
- 404.223 km Julia Street (Anderson Road)

Maroona - Portland Line





Maroona – Portland Line

