

Notice type	National Notice
Title	NCCW – Ararat – Updated Operating Procedures

AFFECTED AREA

Network Control	Control Centre NCCW (Mile End) Boards Vic North / West, Vic South / West
Network Area	All areas within the defined Network Control Centre(s) and Board(s)

EFFECTIVE PERIOD

Date and time	From/at Mon, 31 Aug 2026 18:00 AEST	To Sat, 27 Feb 2027 19:00 AEDT
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REFERENCE DOCUMENTS

Other notices	Empty
Train Alteration Advice	Empty
Route Access Standards	Empty
NIBs	OGW-30-05, OGW-30-06

OPERATING CONDITIONS (GENERAL DETAILS)

Effective 1800hrs Monday 31 August 2026, the new operating procedures for Ararat will be updated and are included with this National Notice.

Respective NIBs will be updated detailing the operating procedures.

SAFEWORKING ARRANGEMENTS

Nil

ADDITIONAL DETAILS

Amendments are now listed under an amendment register in document V1.5.

These changes covered:

- Page 21 (5.4.6) first 2 paragraphs have been repeated. One deleted.
- Page 20 (5.4.3) states Points 11 are in the ~~normal~~ position (change to REVERSE)

Recipients must ensure this Notice is circulated to and understood by all personnel affected by, or needing to know, its content. This Notice must be issued to all affected Competent Workers. Competent Workers who receive this Notice must follow the requirements.

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**Ararat Junction
Signalling Project
Final
ARTC Operating Procedures**

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AMENDMENT RECORD

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.1	31/08/2026	5.4.3, 5.4.6	Changed 'Normal' to 'Reverse', deleted repeated paragraph

1 GENERAL

1.1 Ararat Overview

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 ARTC South West Network Controller manages the points and signals in accordance with the rules and procedures detailed in TA20, the ARTC Code of Practice for Main Line Operations, as follows:

- The ARTC Main Line;
- The Maryborough Link Line between the ARTC Main Line and Home Signal 265/14 located on the Maryborough Line;
- The Ararat Yard Link Line, and
- The Ararat Yard.

The V/Line Broad Gauge Western Train Controller manages the points and signals in accordance with the Revision 7 Book of Rules and Operating Procedures as follows:

- The V/Line Broad Gauge Main Line into the Ararat Broad Gauge Platform, and
- Between the Broad-Gauge Platform and the Ararat Car Siding.

The V/Line Standard Gauge North West Train Controller manages and signals in accordance with the Revision 7 Book of Rules and Operating Procedures as follows:

- The V/Line Standard Gauge Main Line from Maryborough to Home Signal 265/14.

The V/Line Broad Gauge Main Line crosses the ARTC Standard Gauge Main Line and then 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 V/Line Broad Gauge Main Line from Ballarat and connects to the ARTC Main Line.

There is also a connection allowing access from Maryborough into the Ararat Yard.

1.2 Systems of Safeworking

1.2.1 ARTC

The Rules and Operating procedures for Centralised Traffic Control as detailed in TA20, the ARTC Code of Practice for Victorian Main Line Operations is in force for all points and signals at Ararat.

The Ararat Yard is defined as an Intermediate Siding within the CTC single line section between Maroona and Pyrenees Loop.

1.2.2 V/Line Broad Gauge

The rules and operating procedures for Train Staff and Ticket as detailed in the Revision 7 Book of Rules and Operating Procedures is in force between Wendouree and Ararat.

The Broad-Gauge Signalling is operated under Absolute Block Signalling is as detailed in the Revision 7 Book of Rules and Operating Procedures.

1.2.3 V/Line Standard Gauge

The rules and operating procedures for Train Order Working as detailed in the Revision 7 Book of Rules and Operating Procedures is in force between Maryborough and Ararat.

Commence Train Order and End Train Order Working boards are located at Home Signal 265/36.

The Standard Gauge Signalling is operated under Absolute Block Signalling as detailed in the Revision 7 Book of Rules and Operating Procedures.

2 ARTC OPERATED SIGNALS, POINTS AND RELEASES

2.1 Signals

Signals operated by the ARTC South West Network Controller are provided with a black name plate with the following white lettering:

ARTC

2.2 Automatic Signal V2611

- **Automatic Signal V2611:** Located on approach to Home Signal 265/6 for Adelaide-bound movements.



If Automatic Signal V2611 is displaying a 'Reduce to Medium Speed' indication, it is indicating that Home Signal 265/6 is set for a route to the Maryborough Line

2.3 Controlled Signals

The following signals at Ararat are operated by the ARTC South West Network Controller:

- **Home Signal 265/6:** Located on arrival into Ararat for Adelaide-bound movements.



To allow the ARTC South West Network Controller to set signal 265/6 for a route to the Maryborough Line, the V/Line Standard Gauge North West Train Controller must initiate a signal release.



If Home Signal 265/6 is displaying a 'Medium Speed' indication, it is indicating that the route is set for a route to the Maryborough Line

- **Home Signal 265/2:** Located at the exit of the Ararat Yard for rail movements to the Maryborough Line.



To allow the ARTC South West Network Controller to set signal 265/2 for a route to the Maryborough Line, the V/Line Standard Gauge North West Train Controller must initiate a signal release.

- **Home Signal 265/14:** Located on the Maryborough Line for rail movements from the Maryborough Line toward the ARTC Main Line to Maroona, or into the Ararat Yard.

2.4 Points

The following points at Ararat are operated or released by the ARTC South West Network Controller:

- **Catch Point No. 9:** Located on the Ararat Link Line protecting rollout from the Ararat Yard toward the Maryborough Line.
- **Points No. 7U and 7D:** Double-ended crossover providing connection from the ARTC Main Line to the Ararat Yard at the Melbourne-end of Ararat.

The points are provided with a T21 hand-operated point machine and an electric lock.

The ARTC South West Network Controller initiates a release to allow the points to be operated.

- **Points No. 11U and 11D:** Points located at either end of the Maryborough Link Line providing access from the ARTC Main Line to or from the Maryborough Line.

The points are provided with dual-control point machines and are operated by the ARTC South West Network Controller when setting a route to or from the Maryborough Line.

- **Points No. 27U and 27D:** Double-ended crossover providing connection from the ARTC Main Line to the Ararat Yard at the Adelaide-end of Ararat.

The points are provided with dual-control points machines which and are operated from a localised Key Switch provided at the points.

The ARTC South West Network Controller initiates a release to allow the points to be operated.

2.5 Signal / Grade Releases

- **Broad Gauge Grade Release:** To allow the V/Line Broad Gauge Western Train Controller to operate Points No. 17 for a Broad-Gauge Movement, the ARTC South West Network Controller provides a grade release.
- **Standard Gauge Signal Release:** To allow the V/Line Standard Gauge North West Train Controller to operate Home Signal 265/24 for a Standard Gauge Movement, the ARTC South West Network Controller provides a signal release.

3 V/LINE BROAD GAUGE OPERATED SIGNALS AND POINTS

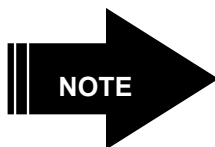
3.1 Repeating Signal A2075

- **Down Repeating Signal A2075:** Located on approach to Home Signal 265/8 for Ararat-bound movements.

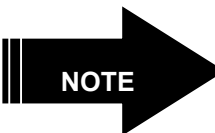
3.2 Controlled Signals

The following signals at Ararat are operated by the V/Line Broad Gauge Western Train Controller:

- **Down Home Signal 265/8:** Located on arrival into Ararat for Ararat-bound movements.



To allow the V/Line Western Train Controller to set Signal 265/8 for a route into Ararat, the ARTC South West Network Controller must initiate the Broad Gauge grade release.

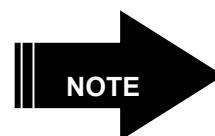


Signal 265/8 is provided with TPWS

- **Down Dwarf Signal 265/16:** Located at the exit of the Ararat Car Sidings for rail movements to the Ararat Broad Gauge platform.
- **Up Home Signal 265/18:** Located at the Ararat Platform for rail movements proceeding to Ballarat or into the Ararat Car Sidings.



To allow the V/Line Western Train Controller to set Signal 265/18 for a route toward Ballarat, the ARTC South West Network Controller must initiate the Broad Gauge grade release.



If the ARTC North West Network Controller has Pyrenees Loop Signal 214/26 set onto the Main Line at Pyrenees with Points No. 7 in Normal, or Signal 214/26 set onto 2 Road with Points No. 7 in Reverse, then the V/Line Broad Gauge Western Train Controller will be unable to set either Signal 265/8 or 265/18.

3.3 Points

The following points at Ararat are operated by the V/Line Western Train Controller:

- **Points No. 17:** Points providing connection from the Ararat Platform to the V/Line Broad Gauge Main Line.

The points are provided with a Dual Control Point Machine and are operated by the V/Line Broad Gauge Western Train Controller.

The ARTC South West Network Controller initiates a Broad-Gauge grade release to allow the points to be operated.

Should Points No. 17 be in the Reverse position, neither the ARTC South West or North West Network Controllers are able to set signals between Maroona and Pyrenees Loop.

- **Derail No. 19:** Derail and Wheel Crowder located at the exit of the Ararat Car Sidings.

The Derail and Wheel Crowder are provided with a dual-control point machine and are operated by the V/Line Controller when setting a route to or from the Ararat Car Sidings to or from the Broad Gauge Platform.

4 V/LINE STANDARD GAUGE OPERATED SIGNALS AND POINTS

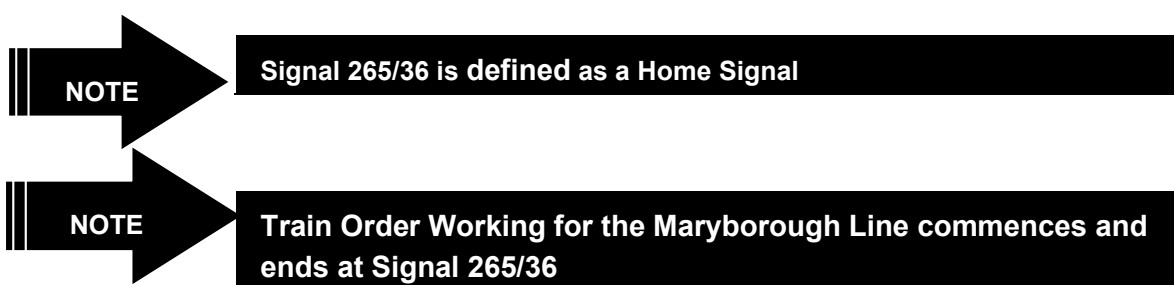
4.1 Repeating Signal NE2688

- **Up Repeating Signal NE2688:** Located on the Maryborough Line, on approach to Home Signal 265/36 for Ararat-bound movements.

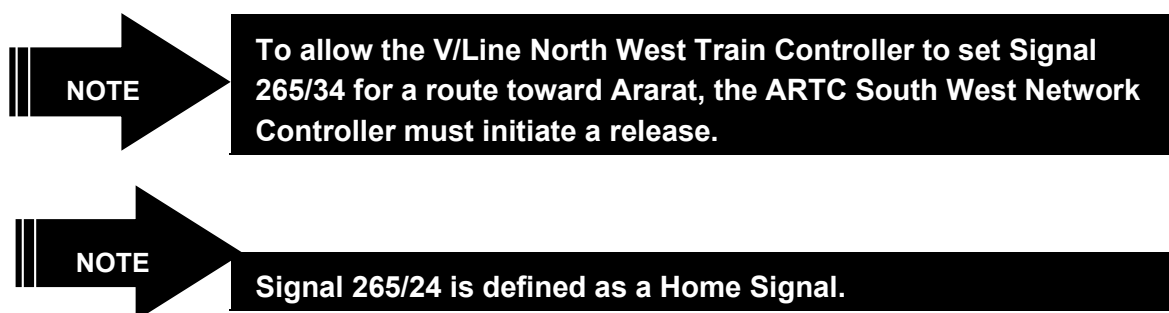
4.2 Controlled Signals

The following signals at Ararat are operated by the V/Line Standard Gauge North West Train Controller:

- **Up Home Signal 265/36:** Located on arrival into Ararat for Ararat-bound movements.



- **Down Home Signal 265/34:** Located for rail movements departing Ararat toward Maryborough.
- **Up Home Signal 265/24:** Located on arrival into Ararat for Ararat-bound movements.



4.3 ARTC Main Line Standard Gauge between Maroona and Pyrenees Loop

4.3.1 Maroona

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

CTC Home Departure Signals 244/30 and 244/32 are provided with a release function, the release provided by the ARTC North West Network Controller.

Provided a rail movement can be accepted, or the rail movement is proceeding to the Maryborough Line or into the Ararat Yard, the ARTC North West Network Controller may provide the release to allow the ARTC South West Network Controller to operate the signals to proceed.

4.3.2 Pyrenees Loop

The points and signals at Pyrenees Loop are operated by the ARTC North West Network Controller.

CTC Home Departure Signals 214/10 and 214/12 are provided with a release function, the release provided by the ARTC South West Network Controller.

Provided a rail movement can be accepted, or the rail movement is proceeding into the Ararat Yard, the ARTC South West Network Controller may provide the release to allow the ARTC North West Network Controller to operate the signals to proceed.

4.3.3 Home Departure Signal fails to Display a Proceed Aspect

In the event that a Home Departure Signal at Maroona, or at Pyrenees Loop, fails to display a Proceed Aspect when operated, the ARTC South West Network Controller is responsible for issuing CTC Caution Orders to the failed Home Departure Signal at Stop at Maroona leading into the Maroona – Ararat section, and at Pyrenees Loop leading into the Pyrenees Loop – Maroona single line section.

Prior to issuing a CTC Caution Order for a rail movement to depart Pyrenees Loop, in addition to complying with Clause B, Rule 7, Section 17 of TA20, the ARTC South West Network Controller must confirm with the ARTC North West Network Controller that Points No. 7 are correctly set, and a blocking facility has been applied for the rail movement.

The ARTC South West Network Controller must also receive confirmation from the V/Line Broad Gauge Western Train Controller that there are no rail movements over the grade crossing during this time.



The Home Departure Signals at Maroona will not assume a Proceed Aspect if there is a release initiated on Ararat Points No. 7 and 27 or Points No. 7 and 27 are not being detected in the Normal position.



The Home Departure Signals at Pyrenees Loop will not assume a Proceed Aspect if the Ararat Broad Gauge grade release has been initiated, if there a release initiated on Ararat Points No. 7 and 27, or Points No. 7 and 27 are not being detected in the Normal position, or Points No. 11 are not set and detected in the Normal position.

5 ARTC STANDARD GAUGE OPERATIONS

5.1 Automatic Signal V2611 Aspects

When Signal V2611 is displaying:

- A **Normal Speed Warning** indication, this indicates that Signal 265/6 is set at the Stop position;
- A **Clear Normal Speed** indication, this indicates that Signal 265/6 is set at Normal Speed for a route toward Pyrenees Loop, and
- A **Reduce to Medium Speed** indication, this indicates that Signal 265/6 is set at Medium Speed for a route toward the Maryborough Line.



Rail Traffic Crews must ensure that Automatic Signal V2611 is displaying the correct aspect for their respective rail movement route, and if not, immediately advise the ARTC South West Network Controller

5.2 Home Signal 265/6

5.2.1 Aspects

Signal 265/6 is defined as a Home Signal for a rail movement proceeding toward Pyrenees Loop and the Maryborough Line.

When Signal 265/6 is displaying:

- A **Normal Speed Warning** or a **Clear Normal Speed** indication, this indicates that Signal 265/6 is set for a route toward Pyrenees Loop, and
- A **Medium Speed Warning** or **Clear Medium Speed** indication, this indicates that Signal 265/6 is set for a route toward the Maryborough Line.



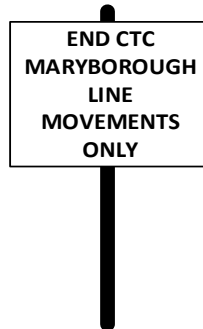
Rail Traffic Crews must ensure that Signal 265/6 is displaying the correct aspect for their respective rail movement route, and if not, immediately advise the ARTC South West Network Controller



Signal 265/6 does not display a Low Speed indication

5.2.2 Advisory Sign

The following advisory sign is provided at Signal 265/6 to define the end of CTC for rail movements proceeding to the Maryborough Line:



5.2.3 Route Along Main Line

Signal 265/6 may be operated for a route along the Main Line toward Pyrenees Loop provided:

- Points No. 11 are in Normal Position;
- The Broad-Gauge grade release has not been initiated;
- A release has not been initiated on Points No. 7, and they are detected in the Normal Position, and
- The release has not been initiated on Points No. 27.

5.2.4 Route to Maryborough Line

Signal 265/6 may be operated for a route to the Maryborough Line provided the V/Line Standard Gauge North West Train Controller has provided a release.

Signal 265/6 may only be able to be operated for a route to the Maryborough Line provided:

- Points No. 11U and 11D are in the Reverse position;
- The Broad Gauge grade release has not been initiated;
- A release has not been initiated on Points No. 7, and they are detected in the Normal Position, and
- The release has not been initiated on Points No. 27.

5.2.5 Signal 265/6 Fails to Display a Proceed Aspect when Operated for Main Line

The authority for a rail movement to pass Signal 265/6 at the Stop position for a route toward Pyrenees Loop is a CTC Caution Order.

Prior to issuing a CTC Caution Order for a rail movement to proceed, in addition to complying with Clause B, Rule 7, Section 17 of TA20, the ARTC South West Network Controller must confirm:

- Points No. 11 are detected in the Normal Position;
- The Broad-Gauge grade release has not been initiated;

- The control system does not indicate any occupancy that is not expected to be indicated, and that the occupancy is a failure of indication;
- The release on Points No. 7 has not been initiated and they are detected in the Normal position, and
- The release on Points No. 27 has not been initiated, and they are detected in the Normal position.

Provided the above has been confirmed, the ARTC South West Network Controller may then issue a CTC Caution Order to pass Signal 265/6 at Stop.

5.2.6 No Detection on Points

If Points No. 11 are not detected in the Normal position, the ARTC South West Network Controller must operate them to Reverse and then to Normal again to establish if Normal detection can be achieved.

If detection cannot be achieved, the ARTC South West Network Controller may ask the Rail Traffic Crew to operate the points to the hand-operating position and set them for the required route prior to issuing the CTC Caution Order.

5.2.7 Signal 265/6 Fails to Display a Proceed Aspect when Operated for Maryborough Line

The authority for a rail movement to pass Signal 265/6 at the Stop position for a route toward the Maryborough Line is a Signalman's Caution Order issued by the ARTC South West Network Controller.

Prior to issuing a Signalman's Caution Order for a rail movement to proceed, in addition to complying with Clause E, Rule 3, Section 4 of TA20, the ARTC South West Network Controller must confirm with the V/Line Standard Gauge North West Train Controller that the route is clear to Home Signal 265/34 and then a Signalman's Caution Order may be issued.

In addition, the ARTC South West Network Controller must ensure that:

- The V/Line Standard Gauge North West Train Controller has provided, or has attempted to provide the release to allow operation of Signal 265/6;
- Points No. 11 are detected in the Reverse Position;
- The control system does not indicate any occupancy that is not expected to be indicated, and that the occupancy is a failure of indication;
- The Broad Gauge grade release has not been initiated;
- The release on Points No. 7 has not been initiated and they are detected in the Normal position, and
- The release on Points No. 27 has not been initiated, and they are detected in the Normal position.

Provided all has been confirmed, the ARTC South West Network Controller may then issue the Signalman's Caution Order.

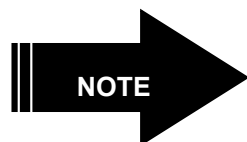
5.2.8 No detection on Points

If Points No. 11 are not detected in the Reverse position, the ARTC South West Network Controller must operate them to Normal and then to Reverse again to establish if detection can be achieved.

If detection cannot be achieved the ARTC South West Network Controller may ask the Rail Traffic Crew to operate the points to the hand-operating position and set them for the required route prior to issuing the Signaller's Caution Order.



Rail Traffic Crews must ensure that both Points No. 11U and 11D are operated to the hand-operating position and set for the required route.



The services of a SMT must be obtained to resolve the fault on Points No. 11U and 11D, and to restore the points to the motor-operating Position.

If Catch Points No. 9 are not detected in the Normal position, the ARTC South West Network Controller must operate them to Normal and then to Reverse again to establish if detection can be achieved.

If Points No. 7 and or Points No. 27 are not detected in the Normal position, the services of a Signal Maintenance Technician must be obtained to restore the detection on the points.

5.3 Home Signal 265/2

5.3.1 Aspects

Signal 265/2 is defined as a Home Signal for a rail movement proceeding toward the Maryborough Line.

Home Signal 265/2, when at proceed, displays **Medium Speed Warning** or **Clear Medium Speed** indications.



Signal 265/2 does not display a Low Speed indication.

5.3.2 Advisory Sign

The following advisory sign is provided at Signal 265/2 to define the end of CTC:



5.3.3 Route to Maryborough Line

Signal 265/2 may be operated for a route to the Maryborough Line provided the V/Line Standard Gauge North West Train Controller has provided a release.

Signal 265/2 may only be able to be operated for a route to the Maryborough Line provided:

- Catch Point No. 9 is in the Reverse position, and
- Points No. 11U and 11D are in the Normal position.

5.3.4 Signal 265/2 Fails to Display a Proceed Aspect when Operated

The authority for a rail movement to pass Signal 265/2 at the Stop position is a Signalman's Caution Order issued by the ARTC South West Network Controller.

Prior to issuing a Signalman's Caution Order for a rail movement to proceed, the ARTC South West Network Controller must confirm with the V/Line Standard Gauge North West Train Controller that the route is clear to Home Signal 265/34 and a Signalman's Caution Order may then be issued.

In addition, the ARTC South West Network Controller must ensure that:

- The V/Line Standard Gauge North West Train Controller has provided, or has attempted to provide the release to allow operation of Signal 265/2;
- Catch Point No. 9 is detected in the Reverse position;
- Points No. 11 are detected in the Normal position, and
- The control system does not indicate any occupancy that is not expected to be indicated, and that the occupancy is a failure of indication.

Provided the above has been confirmed, the ARTC South West Network Controller may then issue the Signalman's Caution Order.

5.3.5 No detection on Points

If Catch Point No. 9 or Points No. 11 are not detected in the correct position, the ARTC South West Network Controller must operate them to establish if detection can be achieved.

If detection cannot be achieved, the ARTC South West Network Controller may ask the Rail Traffic Crew to operate the points to the hand-operating position and set them for the required route prior to issuing the Signalman's Caution Order.

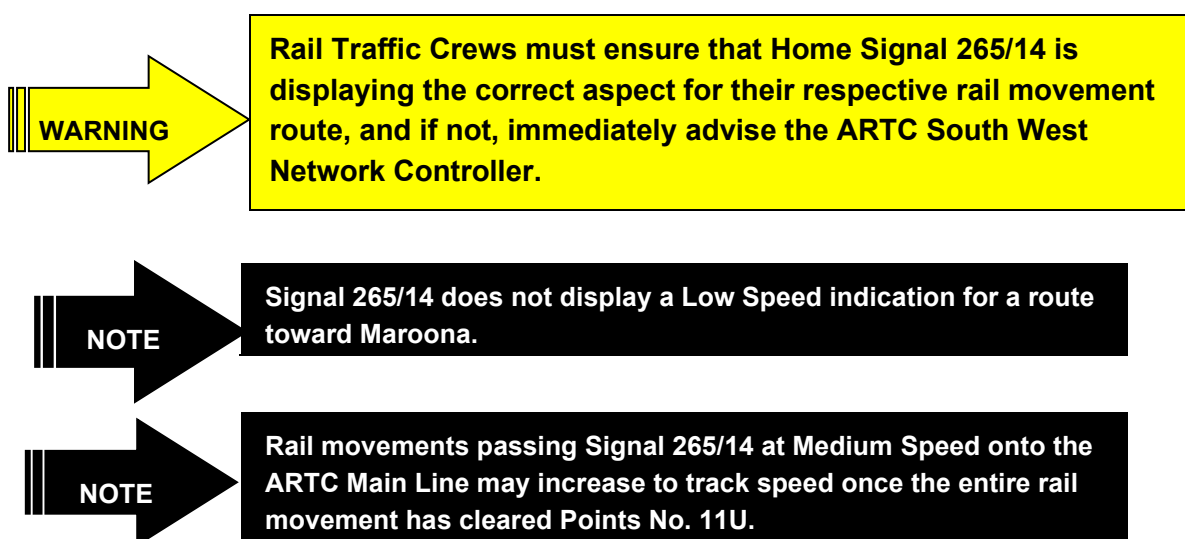
5.4 Home Signal 265/14

5.4.1 Aspects

Signal 265/14 is defined as a Home Signal for a rail movement proceeding toward Maroona and the Ararat Yard.

When Home Signal 265/14 is displaying:

- A **Clear Medium Speed** indication, this indicates that Signal 265/14 is set for a route toward Maroona.
- A **Low-Speed** indication, this indicates that Signal 265/14 is set for a route toward the Ararat Yard.



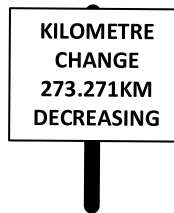
5.4.2 Advisory Signs

The following advisory signs are provided at Signal 265/14 to define the start of CTC which is mounted on the signal mast, and the change of KM chainage for Maroona-bound rail movements which is located adjacent to the signal:

START
CTC

KILOMETRE
CHANGE
264.991KM
DECREASING
TO GEELONG
263.639KM
INCREASING
TO PYRENEES
LOOP

The following advisory sign is provided at Signal 265/14 to indicate the KM chainage for Maryborough-bound rail movements:



5.4.3 Route to ARTC Main Line

Signal 265/14 may be operated for a route to the ARTC Main Line toward Maroona provided:

- No release has been provided to allow the ARTC North West Network Controller to operate the Home Departure Signals at Pyrenees Loop;
- No release has been provided to allow the ARTC South West Network Controller to operate the Home Departure Signals at Maroona;
- No release has been provided to allow the ARTC South West Network Controller to operate Ararat Signal 265/2;
- Points No. 11 are in the Reverse Position;
- The Broad-Gauge grade release has not been initiated;
- The release has not been initiated on Points No. 7, and they are detected in the Normal position, and
- The release has not been initiated on Points No. 27.

5.4.4 Route to Ararat Yard

Signal 265/14 may be operated for a route to the Ararat Yard provided the points are correctly set for the movement.

Prior to signalling a route into the Ararat Yard, the ARTC South West Network Controller must ensure that there are no other activities within the Ararat Yard that may impact the safe passage of the rail movement, and if there are activities, advise the Rail Traffic Crew prior to setting Signal 265/14 to proceed.

5.4.5 Signal 265/14 Fails to Display a Proceed Aspect when Operated for Main Line

The authority for a rail movement to pass Signal 265/14 at the Stop position for a route toward Maroona is a CTC Caution Order.

Prior to issuing a CTC Caution order for a rail movement to proceed, in addition to complying with Clause B, Rule 7, Section 17 of TA20, the ARTC South West Network Controller must confirm:

- Points No. 11 are detected in the Reverse position;
- The ARTC North West Network Controller has not initiated a release allowing the operation of the Home Departure Signals at Maroona;

- The ARTC South West Network Controller has not initiated a release allowing the operation of the Home Departure Signals at Pyrenees Loop;
- The V/Line North West Train Controller has not provided the release to allow the ARTC South West Network Controller to operate Ararat Signal 265/2;
- The Broad-Gauge grade release has not been initiated;
- The control system does not indicate any occupancy that is not expected to be indicated, and that the occupancy is a failure of indication;
- Catch Point No. 9 is in the Normal position;
- The release on Points No. 7 has not been initiated and they are detected in the Normal Position, and
- The release on Points No. 27 has not been initiated, and they are detected in the Normal Position.

Provided the above has been confirmed, the ARTC South West Network Controller may then issue the required CTC Caution Order.

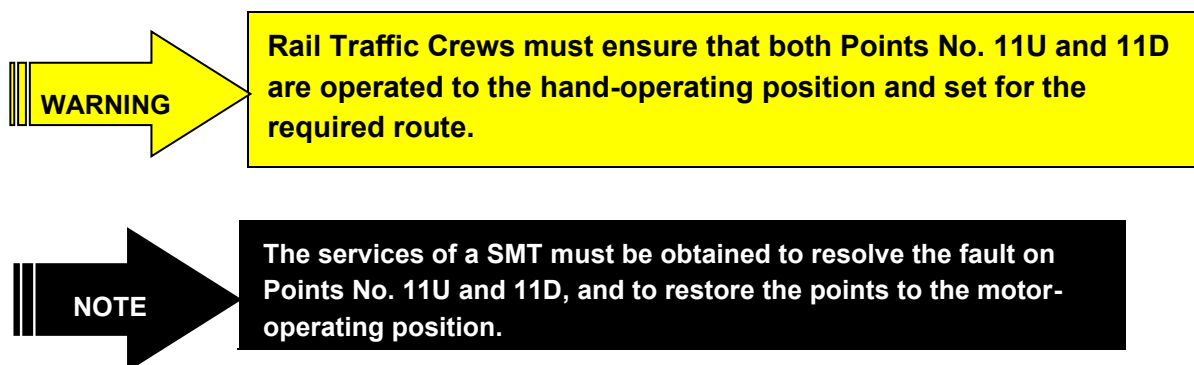
5.4.6 No detection on Points for Route toward Maroona

If Points No. 11 are not detected in the required position, the ARTC South West Network Controller must operate them to establish if Normal detection can be achieved.

If Points No. 11 are not detected in the Reverse position, the ARTC South West Network Controller must operate them to Normal and then to Reverse again to establish if detection can be achieved.

If detection cannot be achieved, the ARTC South West Network Controller may ask the Rail Traffic Crew to operate the points to the hand-operating position and set them for the required route prior to issuing the CTC Caution Order.

If Catch Points No. 9 are not detected in the Normal position, the ARTC South West Network Controller must operate them to Normal and then to Reverse again to establish if detection can be achieved.



5.4.7 Signal 265/14 Fails to Display a Proceed Aspect when Operated to the Ararat Yard

Prior to issuing a Modified CTC Arrival Message for a rail movement to proceed toward the Ararat Yard, the ARTC South West Network Controller must confirm:

- Points No. 11 are detected in the Normal position;
- The release on Points No. 7 has not been initiated and they are detected in the Normal Position, and
- Catch Point No. 9 is detected in the Reverse position.

The ARTC South West Network Controller may then issue the required Modified CTC Arrival Message, designating that the rail movement is located at “Ararat Junction” in the available space, and ensuring the text “Crossing Loop” and “Passing Lane – East / West” have been crossed out.

5.4.8 No detection on Points for Route toward the Ararat Yard

If Points No. 11 and or Catch Point No. 9 are not detected in the required position, the ARTC South West Network Controller must operate them to establish if detection can be achieved.

If detection cannot be achieved, the ARTC South West Network Controller may ask the Rail Traffic Crew to operate the points to the hand-operating position and set them for the required route prior to issuing the Modified CTC Arrival Message.



The services of a SMT must be obtained to resolve the fault on Points No. 11U and 11D, and to restore the points to the motor-operating position.

5.5 Ararat Yard

5.5.1 Overview

The Ararat Yard is classed as an Intermediate Siding in the CTC Single Line Section between Maroona and Pyrenees Loop, and must be worked as detailed in Clause A, Rule 4, Section 17 of TA20, and as modified in these procedures.

The Ararat Yard consists of the following tracks:

- **No. 2 Track:** No. 2 Track is used for rail movements operating through the Ararat Yard onto or from the ARTC Main Line to or from the Maryborough Line, or to access No. 3 or No. 4 Track.

Points No. 7 at the Melbourne-end of the Ararat Yard, and Points No. 27 at the Adelaide-end of the Ararat Yard form connection to the ARTC Main line.

Access to the Maryborough Line is via the Ararat Lead.

- **No. 3 Track:** No. 3 Track is a privately leased track with connections to No. 2 Track via a rodded set of points at the Melbourne-end and a WSA lever at the Adelaide-end.
- **No. 4 Track:** No. 4 Track is a dead-end siding coming off No. 3 Track at the Adelaide-end and is used as an ARTC Engineers Siding.



Rail Movements must not stable on No. 2 Track unless permission has been provided by the ARTC Train Transit Manager who must ensure the stabling will not impact other rail movements requiring access to or from the Maryborough Line.



Rail movements must not stable on No.3 Track unless permission has been provided by the operator leasing No. 3 Track.



Rail movements must not stable on No. 4 Track unless permission has been provided by the ARTC Ararat Infrastructure Maintainer Work Group Leader.

5.6 Points No. 7

5.6.1 Overview

Points No. 7 are provided with electric locking and a T21 hand-operated point machine which is rodded to the points in the ARTC Main Line and the points in the Ararat Yard.

A Red Abloy Protect (RAP) Key Switch is provided at the adjacent Points No. 7 on the ARTC Main Line to allow the Competent Worker to accept a release for the operation of the points.

The points may only be released by the ARTC South West Network Controller, provided that:

- There are no route calls on Maroona Signals 244/30 and 244/32, or Pyrenees Loop Signals 214/10 and 214/12;
- The Ararat Broad Gauge grade release has not been provided;
- Points No. 11 are in the Normal position, and
- No Standard Gauge rail movement is in the section between Maroona and Pyrenees Loop, except for a rail movement standing within 18 metres of the facing points.

5.6.2 Red Abloy Protect Key Switch

A RAP Key Switch has two settings:

RELEASE:	Provided the release has been granted by the ARTC South West Network Controller, placing the Key Switch to the 'RELEASE' setting will unlock the HLM on the points. Accepting the release inhibits the ability of the ARTC South West Network Controller to cancel the release.
CANCEL:	Provided the points have been set 'NORMAL' operating the Key Switch to 'CANCEL' will lock the points and allows the ARTC South West Network Controller to cancel the release.

5.6.3 Indications on RAP Key Switch

LED indications are provided on the RAP Key Switch as follows:

POINTS LOCKED:	When the POINTS LOCKED indicating light is displayed with no other indicating lights, this indicates that a release has not been provided by the ARTC South West Network Controller.
RELEASE AVAILABLE:	When the RELEASE AVAILABLE indicating light is displayed at the same time as the POINTS LOCKED indicating light, this indicates that a release has been provided by the ARTC South West Network Controller but not accepted by operation of the Key Switch.
POINTS FREE:	When the RELEASE AVAILABLE indicating light is displayed at the same time as the POINTS FREE indicating light, this indicates that a release has been provided by the ARTC South West Network Controller and accepted though the operation of the Key Switch to RELEASE.

5.6.4 Providing Release

To obtain the release, the Competent Worker must contact the ARTC South West Network Controller and request the release on Points No. 7.

When the Competent Worker requests a release, the ARTC South West Network Controller must confirm that the track circuit on the points is not occupied, and:

- If a rail movement requires to enter the Ararat Yard, a rail movement is standing on the track within 18 metres of the facing points, or
- If the rail movement is to exit the Ararat Yard, there are no conditions that will prevent the release from being initiated.

The ARTC South West Network Controller must initiate the release command on the ARTC South West Train Control System (TCS) Phoenix Workstation and provided the ARTC South West Train Control System (TCS) Phoenix Workstation indicates that the release has been provided, and the **RELEASE AVAILABLE** LED will be displayed on the RAP Key Switch.

When the release is initiated, the following will be locked '**NORMAL**' and will be unable to be operated:

- Maroona Signals 244/30 and 244/32;
- Pyrenees Loop Signals 214/10 and 214/12;
- Points No. 11 in the Normal position;
- The Broad-Gauge grade release, and
- Points No. 27 release.

5.6.5 Accepting the Release

The Competent Worker must operate the RAP Key Switch for the **RELEASE** position to accept the release and when accepted, the HLM will be unlocked, and the points may be operated by operating the lever on the T21 point machine.

The ARTC South West Network Controller cannot cancel the release unless it is first cancelled by the Competent Worker.

5.6.6 Rail Movement Shunting from the Main Line at Points No. 7

5.6.6.1 Obtaining Release

When a rail movement requires to shunt into the Ararat Yard:

- If travelling toward Melbourne, the movement must come to a stand clear of the track circuit, the lead portion to be shunted must be detached and the rail movement must move forward to the facing side of Points No. 7 and come to a stand within 18 metres of the facing points, or
- If the rail movement is proceeding toward Adelaide, the rail movement must come to a stand within 18 metres of the facing points.

The Competent Worker must:

- Contact the ARTC South West Network Controller and request a release on Points No. 7.

The ARTC South West Network Controller must:

- Confirm that the '**OFFER**' command is available;
- Select the '**OFFER**' command;
- Confirm that the '**OFFER**' command indicates that the release has been successful, and
- Advise the Competent Worker.

The release will initiate and the '**RELEASE AVAILABLE**' LED will be displayed on the RAP Key Switch.

5.6.6.2 Operating Points to Shunt

To operate the points to Reverse, the Competent Worker must:

- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the '**RELEASE**' Position, and
- Observe that '**POINTS FREE**' LED indicator has become lit.

The Competent Worker may then withdraw the key from the Key Switch, unlock the point lever on the T21 point machine and operate the points for the required rail movements.

5.6.6.3 Completion of Shunting or Operating Points to Normal

At completion of the shunting, the Competent Worker must:

- Restore the T21 point machine lever to the Normal position, observe the points are Normal and lock the lever;
- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the '**CANCEL**' Position;
- Observe that '**POINTS LOCKED**' LED indicator is lit;
- Advise the ARTC South West Network Controller that the shunting has been completed, and the release has been cancelled.

5.6.6.4 Cancelling Release

Once it is confirmed that the shunting has been completed, the ARTC South West Network Controller must:

- Observe that the points are Normal on the Train Control System (TCS) Phoenix Workstation;
- Observe that the release has been cancelled, and
- Cancel the release command.

5.6.7 Rail Movement Proceeding into Ararat Yard

5.6.7.1 Obtaining Release

When a rail movement requires to proceed into the Ararat Yard:

- The rail movement must come to a stand within 18 metres of the facing points.

The Competent Worker must:

- Contact the ARTC South West Network Controller and request the points be released.

The ARTC South West Network Controller must:

- Confirm that the '**OFFER**' command is available;
- Select the '**OFFER**' command;
- Confirm that the '**OFFER**' command indicates that the release has been successful, and
- Advise the Competent Worker.

Provided the correct conditions exist, the release will initiate and the '**RELEASE AVAILABLE**' LED will be displayed on the RAP Key Switch.

5.6.7.2 Operating Points to Reverse

To operate the points to Reverse, the Competent Worker must:

- Insert the RAP key into the Key Switch;
- Operate the RAP key to the '**RELEASE**' position, and
- Observe that '**POINTS FREE**' LED indicator has become lit.

The Competent Worker may then withdraw the key from the Key Switch, unlock the point lever on the T21 point machine and operate the points for the required rail movements.

5.6.7.3 Operating Points to Normal

Upon the rail movement clearing the points, the Competent Worker must:

- Restore the T21 point machine lever to the Normal position, observe the points are Normal and lock the lever;
- Insert the RAP key into the Key Switch;
- Operate the RAP key to the '**CANCEL**' Position;
- Observe that '**POINTS LOCKED LED**' LED indicator is lit;
- Advise the ARTC South West Network Controller that the arriving rail movement has been completed, and the release has been cancelled.

5.6.7.4 Cancelling Release

Once it is confirmed that the arriving rail movement has been completed, the ARTC South West Network Controller must:

- Observe that the points are Normal on the Train Control System (TCS) Phoenix Workstation;
- Observe that the release has been cancelled, and
- Cancel the release command.

5.6.8 Rail Movement Proceeding from the Ararat Yard

5.6.8.1 Obtaining Release

When a rail movement requires to depart the Ararat Yard, the Competent Worker must:

- Contact the ARTC South West Network Controller and request the points be released.

The ARTC South West Network Controller must:

- Confirm that the '**OFFER**' command is available;
- Select the '**OFFER**' command;
- Confirm that the '**OFFER**' command indicates that the release has been successful, and
- Advise the Competent Worker.

Provided the correct conditions exist, the release will initiate and the '**RELEASE AVAILABLE**' LED will be displayed on the RAP Key Switch.

5.6.8.2 Operating Points to Reverse

To operate the points to Reverse, the Competent Worker must:

- Insert the RAP key into the Key Switch;
- Operate the RAP key to the '**RELEASE**' Position, and
- Observe that '**POINTS FREE**' LED indicator has become lit.

The Competent Worker may then withdraw the key from the Key Switch, unlock the point lever on the T21 point machine and operate the points for the required rail movements.

5.6.8.3 Operating Points to Normal

Upon the rail movement clearing the points, the Competent Worker must:

- Restore the T21 point machine lever to the Normal position, observe the points are Normal and lock the lever;
- Insert the RAP key into the Key Switch;
- Operate the RAP key to the '**CANCEL**' Position;
- Observe that '**POINTS LOCKED**' LED indicator is lit;
- Advise the ARTC South West Network Controller that the shunting has been completed, and the release has been cancelled.

5.6.8.4 Cancelling Release

Once it is confirmed that the shunting has been completed, the ARTC South West Network Controller must:

- Observe that the points are Normal on the Train Control System (TCS) Phoenix Workstation;
- Observe that the release has been cancelled, and
- Cancel the release command.

5.6.8.5 Points 7 Release Blocking Facility

The ARTC South West Train Control System (TCS) Phoenix Workstation is provided with a Points Release blocking facility; the operation inhibits the ability to operate the points release.

5.7 Points 27

5.7.1 Overview

Points No. 27 consist of a motorised Main Line set of points (No. 27D) on the ARTC Main Line and motorised half set of Points (No. 27U) in the Ararat Yard, the point motors being dual-control point machines.

The hand throw lever and the selector lever on the point machines are locked with Maintenance Lock signal maintenance locks.

The points are operated by a RAP Key Switch which is released by the ARTC South West Network Controller.

The ARTC South West Network Controller may only initiate a release on Points No. 27 provided:

- There are no calls on Maroona Signals 244/30 and 244/32, or Pyrenees Loop Signals 214/10 and 214/12;
- The Broad Gauge grade release is not provided;
- Points No. 11 are Normal, and
- There is no Standard Gauge rail movement in the section between Maroona and Pyrenees Loop, except for a rail movement standing within 18 metres of the facing points of Points No. 27D waiting to shunt, and

The restoration of the points to the 'Normal' position must be undertaken either by the Competent Worker operating the RAP Key Switch, or the ARTC South West Network Controller by operating the command on the ARTC South West Train Control System (TCS) Phoenix Workstation to cancel the release.

A route selection between Pyrenees Loop and Maroona or vice versa is not achievable whilst a release is provided on Points No. 27.

5.7.2 Location of RAP Key Switch

The Key Switch for the operation of Points No. 27 is located adjacent to Points No. 27D.

5.7.3 Special Padlocks on Point Machines

The selector lever and hand throw lever on both point machines for Points No. 27 will be provided with Maintenance Lock padlocks.

5.7.4 Control System Controls and Indications

5.7.4.1 Indications

The ARTC South West Train Control System (TCS) Phoenix Workstation displays the following indications for Points No. 27:

- **Points Normal and free:**
 - The release command has been initiated and is successful.
- **Points Normal and locked:**
 - The release has not been provided.
- **Points Reverse:**
 - Points are set reverse.
- **Points Blocked:**
 - A blocking facility has been applied on the points to prevent operation to Normal or Reverse after the release has been provided.

- **Points Occupied:**
 - Points are occupied.
- **Release Available:**
 - The facing track within 18 metres of Points No. 27D is occupied, and or no route has been set between Ararat and Maroona;
 - No rail movements between Pyrenees Loop and Maroona in either direction;
 - Points No. 11 are Normal;
 - No release on Points No. 7, and
 - The Broad Gauge grade release has not been provided.
- **Release Not Available:**
 - The facing track within 18 metres of Points No. 27D is not occupied, and or no route has been set between Ararat and Maroona;
 - There is a rail movement between Pyrenees Loop and Maroona in either direction;
 - Points No. 11 are Reverse;
 - A release command has been placed on Points No. 7, and or
 - The Broad Gauge grade release has been provided.
- **Release Provided:**
 - The release command has been initiated.
- **Release Blocked:**
 - The release command has been blocked by a blocking facility to prevent operation.

5.7.4.2 Train Control System (TCS) Phoenix Workstation Controls

The ARTC South West Train Control System (TCS) Phoenix Workstation is provided with the following controls:

- **Points No. 27 Release Offer:**
 - Initiates the release command.
- **Points No. 27 Release Cancel:**
 - Cancels the release command and operates Points No. 27 to Normal after a 2-minute timer has expired.
- **Points No. 27 Release Block:**
 - Initiates a blocking facility on Points No. 27 release to prevent operation of the release.
- **Points No. 27 Release Unblock:**
 - Cancels the blocking facility on Points No. 27 release.
- **Points No. 27 Block:**
 - Initiates a blocking facility on Points No. 27 to prevent them from being operated from the Key Switch or the ARTC South West Train Control System (TCS) Phoenix Workstation (should the release be cancelled). The blocking facility can be applied whilst the points are in Normal or Reverse.

- **Points 27 Unblock:**
 - Cancels the blocking facility on Points No. 27.

5.7.5 RAP Key Switch

5.7.5.1 Overview

A RAP Key Switch is provided at Points No. 27D, the Key Switch is spring-loaded to centre position with a left and right turn.

Operating the key to the right will operate Points No. 27 to the Reverse position and operating the key to the left will operate the points to the Normal position.

The key can only be inserted and withdrawn from the Key Switch in the Centre position.

5.7.5.2 Indications

LED indications will be provided as follows:

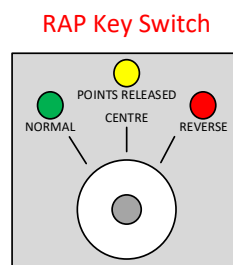
- **POINTS RELEASED:** Indicates that the points have been released by the ARTC South West Network Controller;
- **NORMAL:** Indicates that the points have been set Normal, and
- **REVERSE:** Indicates that the points have been set Reverse.

When the Key Switch is operated to Reverse, the '**REVERSE**' LED will flash to indicate that the route has been initiated and will go steady when the points have been set Reverse.

When the Key Switch is operated to Normal, the '**NORMAL**' LED will flash to indicate that the route has been initiated and will go steady when the points have been set Normal.

The Key Switch must be held in the respective position for three seconds for the command to initiate.

5.7.5.3 Diagram of RAP Key Switch



5.7.5.4 Providing Release

To provide the release, the ARTC South West Network Controller must confirm that the track circuit on the points is not occupied, and if a rail movement requires to enter the Ararat Yard, the

approach track is occupied, or if the rail movement is to exit the Ararat Yard, all the correct conditions are in place to allow operation of the release.

The ARTC South West Network Controller will initiate the Release Offer Command on the ARTC South West Train Control System (TCS) Phoenix Workstation and provided the ARTC South West Train Control System (TCS) Phoenix Workstation indicates that the release has been provided, and the 'Points Released' LED is displayed on the RAP Key Switch.

When the release is initiated, the following will be locked Normal:

- Maroona Signals 244/30 and 244/32;
- Pyrenees Loop Signals 214/10 and 214/12;
- Points No. 11 in the Normal position;
- The Broad Gauge grade release, and
- Points No. 7 release.

5.7.5.5 Cancelling Release

The ARTC South West Network Controller may cancel the release on Points No. 27 at any time, and when cancelled, Points No. 27 will operate to Normal, and the release command will cancel.

To cancel the release the following conditions must apply:

- The point track circuit must not be occupied, and
- If the points are Reverse, a 2 minute timer has occurred after which the points will operate to the Normal position.

When the ARTC South West Network Controller selects the **RELEASE CANCEL** command, a pop-up window will be displayed with the following wording and a **YES/NO** selection:

**ARE YOU SURE YOU
WANT TO CANCEL OFFER?**

Selecting **YES** will initiate the **RELEASE CANCEL** command and selecting **NO** will cancel the **RELEASE CANCEL** command request.

5.7.6 Rail Movement Shunting from the Main Line

5.7.6.1 Obtaining Release

When a rail movement requires to shunt into the Ararat Yard:

- If travelling toward Adelaide, the rail movement must come to a stand clear of the track circuit, the lead portion to be shunted must be detached and the rail movement must move forward to the facing-side of Points No. 27 and come to a stand within 18 metres of the facing points, or

- If the rail movement is proceeding toward Melbourne, the rail movement must come to a stand within 18 metres of the facing points.

The Competent Worker must:

- Contact the ARTC South West Network Controller and request the points be released.

The ARTC South West Network Controller must:

- Confirm that the '**OFFER**' command is available;
- Select the '**OFFER**' command;
- Confirm that the '**OFFER**' command indicates that the release has been successful, and
- Advise the Competent Worker.

The release will initiate and the '**POINTS RELEASE**' LED will be displayed on the RAP Key Switch.

5.7.6.2 Operating Points to Shunt

To operate the points to Reverse, the Competent Worker must:

- Observe that the indicating lights display that the points are in the '**NORMAL**' position and the '**POINTS RELEASED**' LED indicator is displayed;
- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the '**REVERSE**' Position and hold the key in that position for three seconds, then return to centre;
- Observe that '**REVERSE**' LED indicator commences flashing;
- Observe that the points have operated to '**REVERSE**', and
- Observe that the '**NORMAL**' LED indicator has extinguished and the '**REVERSE**' LED indicator has become steady.

The ARTC South West Train Control System (TCS) Phoenix Workstation will also indicate that the points are in the Reverse position.

Prior to allowing the rail movement to proceed over the points, the Competent Worker must confirm that the correct indication is displayed in the RAP Key Switch to indicate that the points are set Reverse.

The points may be operated to Normal and Reverse using the Key Switch, as required for the shunting activity.

5.7.6.3 Completion of Shunting or Operating Points to Normal

At completion of the shunting, the Competent Worker must:

- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the '**NORMAL**' Position and hold the key in that position for three seconds, then return to centre;
- Observe that '**NORMAL**' LED indicator commences flashing;
- Observe that the points have operated to Normal;

- Observe that the '**REVERSE**' LED indicator has extinguished and the '**NORMAL**' LED indicator has become steady, and
- Advise the ARTC South West Network Controller that the shunting has been completed.

Provided the command has been initiated, the '**NORMAL**' indication will commence to flash and as the points drive the '**REVERSE**' indication will become extinguished. Upon the points being set Normal, the '**NORMAL**' indication will become steady.

5.7.6.4 Cancelling Release

Once it is confirmed that the shunting has been completed, the ARTC South West Network Controller must:

- Observe that the points are Normal, and
- Cancel the release command.

When the ARTC South West Network Controller selects the '**RELEASE CANCEL**' command, a pop-up window will be displayed with the following wording and a **YES/NO** selection:

**ARE YOU SURE YOU
WANT TO CANCEL OFFER?**

Selecting **YES** will initiate the **RELEASE CANCEL** command and selecting **NO** will cancel the **RELEASE CANCEL** command request.

5.7.7 Rail Movement Proceeding into Ararat Yard

5.7.7.1 Obtaining Release

When a rail movement requires to proceed into the Ararat Yard:

- The rail movement must come to a stand within 18 metres of facing Points No. 27D;

The Competent Worker must:

- Contact the ARTC South West Network Controller and request the points be released.

The ARTC South West Network Controller must:

- Confirm that the '**OFFER**' command is available;
- Select the '**OFFER**' command;
- Confirm that the '**OFFER**' command indicates that the release has been successful, and
- Advise the Competent Worker.

Provided the correct conditions exist, the release will initiate and the '**POINTS RELEASED**' LED will be displayed on the RAP Key Switch.

5.7.7.2 Operating Points to Reverse

To operate the points to Reverse, the Competent Worker must:

- Observe that the indicating lights display that the points are in the '**NORMAL**' position and the '**POINTS RELEASED**' LED indicator is displayed;
- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the '**REVERSE**' position and hold the key in that position for three seconds, then return to centre;
- Observe that '**REVERSE**' LED indicator commences flashing;
- Observe that the points have operated to '**REVERSE**', and
- Observe that the '**NORMAL**' LED indicator has extinguished and the '**REVERSE**' LED indicator has become steady.

The ARTC South West Train Control System (TCS) Phoenix Workstation will also indicate that the points are in the Reverse position.

Prior to allowing the rail movement to proceed over the points, the Competent Worker must confirm that the correct indication is displayed on the RAP Key Switch to indicate that the points are set Reverse.

5.7.7.3 No Requirement to Operate Points to Normal

The Competent Worker will not require to operate the points back to the Normal position.

5.7.7.4 Operating Points to Normal and Cancelling Release

The ARTC South West Network Controller must:

- Observe that the rail movement has cleared the points and there is no occupancy on the point track circuit;
- Confirm with Rail Traffic Crew that the train is clear of the points, and
- Cancel the release on the ARTC South West Train Control System (TCS) Phoenix Workstation.

When the ARTC South West Network Controller selects the '**RELEASE CANCEL**' command, a pop-up window will be displayed with the following wording and a **YES/NO** selection:

**ARE YOU SURE YOU
WANT TO CANCEL OFFER?**

Selecting **YES** will initiate the '**RELEASE CANCEL**' command and selecting **NO** will cancel the **RELEASE CANCEL** command request.

Initiating the '**CANCEL RELEASE**' command will initiate a 2-minute timer on Points No. 27, which will appear on the Train Control System (TCS) Phoenix Workstation, which will be displayed as follows:

ARTC South West Train Control System (TCS) Phoenix Workstation:	The 'POINTS RELEASE' command will flash
RAP Key Switch:	The 'POINTS RELEASED' and the 'POINTS NORMAL' LED indicators will flash

During the period that the **'CANCEL RELEASE'** command is in place; the points will not be able to be operated from the Key Switch.

Upon expiry of the 2-minute timer, and provided the points track circuit is not occupied, the points will operate to the Normal position and the **'RELEASE'** on the points will cancel.

5.7.8 Rail Movement Proceeding from the Ararat Yard

5.7.8.1 Obtaining Release

When a rail movement requires to proceed from the Ararat Yard the Competent Worker must:

- Contact the ARTC South West Network Controller and request the points be released.

The ARTC South West Network Controller must:

- Confirm that the **'OFFER'** command is available;
- Select the **'OFFER'** command;
- Confirm that the **'OFFER'** command indicates that the release has been successful, and
- Advise the Competent Worker.

Provided the correct conditions exist, the release will initiate and the **'POINTS RELEASED'** LED will be displayed on the RAP Key Switch.

5.7.8.2 Operating Points to Reverse

To operate the points to Reverse, the Competent Worker must:

- Observe that the indicating lights display that the points are in the Normal position and the **'POINTS RELEASED'** LED indicator is displayed;
- Insert the RAP key into the RAP Key Switch;
- Operate the RAP key to the **'REVERSE'** Position and hold the key in that position for three seconds, then return to centre;
- Observe that **'REVERSE'** LED indicator commences flashing;
- Observe that the points have operated to Reverse, and
- Observe that the **'NORMAL'** LED indicator has extinguished and the **'REVERSE'** LED indicator has become steady.

The ARTC South West Train Control System (TCS) Phoenix Workstation will also indicate that the points are in the Reverse position.

Prior to allowing the rail movement to proceed over the points, the Competent Worker must confirm that the correct indication is displayed in the Key Switch to indicate that the points are set Reverse.

5.7.8.3 No Requirement to Operate Points to Normal

The Competent Worker will not require to operate the points back to the Normal position.

5.7.8.4 Operating Points to Normal and Cancelling Release

The ARTC South West Network Controller must:

- Observe that the rail movement has cleared the points and there is no occupancy on the point track circuit;
- Confirm with Rail Traffic Crew that the rail movement is clear of the points, and
- Cancel the release on the ARTC South West Train Control System (TCS) Phoenix Workstation.

When the ARTC South West Network Controller selects the **'RELEASE CANCEL'** command, a pop-up window will be displayed with the following wording and a **YES/NO** selection:

ARE YOU SURE YOU WANT TO CANCEL OFFER?

Selecting **YES** will initiate the **'RELEASE CANCEL'** command and selecting **NO** will cancel the **'RELEASE CANCEL'** command request.

Initiating the **'CANCEL RELEASE'** command will initiate a 2-minute timer on Points No. 27, which will appear on the Train Control System (TCS) Phoenix Workstation, which will be displayed as follows:

**ARTC South West Train Control System
(TCS) Phoenix Workstation:**

The **'POINTS RELEASE'** command will flash

RAP Key Switch:

The **'POINTS RELEASED'** and the **'POINTS NORMAL'** LED indicators will flash

Upon expiry of the 2-minute timer, and provided the points track circuit is not occupied, the points will operate to the Normal position and the release on the points will cancel.

5.7.8.5 Points No. 27 Release Blocking Facility

The ARTC South West Train Control System (TCS) Phoenix Workstation is provided with a Points Release blocking facility. The operation of this blocking facility will inhibit the ability to provide a Release on Points No. 27.

5.7.8.6 Points No. 27 Blocking Facility

The ARTC South West Train Control System (TCS) Phoenix Workstation is provided with a blocking facility that will prevent the operation of Points No. 27 from the RAP Key Switch after the release has been provided, either in the Normal position or the Reverse position.

The purpose of the blocking facility is to prevent the points from operating in specific circumstances (such as operation of Track Machines or maintenance activities) should the release be cancelled in error.

When the blocking facility is initiated on the Train Control System (TCS) Phoenix Workstation, the points will not be operable from the Key Switch or the Train Control System (TCS) Phoenix Workstation, irrespective of the position they are set.

5.7.8.7 Points No. 27 Failure to Operate

If Points No. 27 requires to be operated manually owing to failure or other reason, a Signal Maintenance Technician must attend to unlock the Maintenance Lock padlocks on the selector lever and the hand throw lever.

5.8 Grano Street Level Crossing

5.8.1 Overview

Grano Street Level Crossing has three track sections that are inputs to the operation of the Grano Street active level crossing protection. These are:

- 1T (AXC) Up Approach;
- 2T (AXC) Crossing Track, and
- 3T (AXC) Down Approach

5.8.2 Axle Counter General Reset Process

The reset process requires the performance of checks to ensure that the axle counter track section is currently not occupied by any rail vehicles. In the case of the axle counter sections at Grano Street Level Crossing, there is a track circuit underlying the axle counter sections.

The ARTC South West Network Controller is able to check the status of these two track circuits and confirm that the section covering the three axle counter sections is not occupied. If the section is occupied, the ARTC South West Network Controller must wait until the rail movement has cleared the section and the sections are not occupied. The ARTC South West Network Controller may then apply the **RESET** function by selecting **AXC RESET** icon on the Train Control System (TCS) Phoenix Workstation screen and then the track section to be reset.

To perform the reset, the ARTC South West Network Controller must:

- Select the **RESET** function, and
- Select the track section that the **RESET** function is being applied to.

5.8.3 Axle Counter Supervisor Reset Process

The Supervisory Reset automatically resets a miscount under the configured logic conditions, with logs accessible either onsite or remotely by the Signal Maintenance Technician.

The Supervisory Reset section only covers two axle counter sections (track circuits 1T and 2T). If there is a miscount at a wheel detector (section) and the axles were correctly counted in at the preceding wheel detector and out at the following wheel detector (this is the Supervisory section) then the system will reset the defective axle counter section and log the reset within the axle counter system. This reduces the number of miscounts in normal operation. This will also limit the impact of a miscount (causing the section to be occupied) causing operation of the level crossing protection at Grano Street for an extended period until it is reset.

6 ARARAT JUNCTION SIGNALLING AUTHORITIES

6.1 Overview

The following table details identification of signals and the authority to pass each signal at 'Stop.'

6.2 Table:

Number	Classification	Signal Controlled by	Authority
265/8	Home Signal	V/Line Broad Gauge Western Train Controller	Signallers Caution Order issued by V/Line BG Western Train Controller <i>Requires liaison with ARTC South West Network Controller for routes across the grade crossing</i>
265/18	Home Signal	V/Line Broad Gauge Western Train Controller	Signallers Caution Order issued by V/Line BG Western Train Controller <i>Requires liaison with ARTC South West Network Controller for routes across the grade crossing</i>
265/16	Dwarf Signal	V/Line Broad Gauge Western Train Controller	Verbal Permission issued by V/Line BG Western Train Controller
265/6	Home Signal for route to Pyrenees; Home Signal for route to Maryborough Line	ARTC Standard Gauge South West Network Controller	CTC Caution Order issued by ARTC South West Network Controller for route to Pyrenees Loop and Signalman's Caution Order issued by ARTC South West Network Controller for route to Maryborough Line <i>Requires liaison with V/Line BG Western Train Controller and V/Line SG North West Train Controller for routes across grade crossing and to Maryborough Line respectively</i>
265/2	Home Signal	ARTC Standard Gauge South West Network Controller	Signalman's Caution Order issued by ARTC South West Network Controller for route to Maryborough Line <i>Requires liaison with V/Line SG North West Train Controller for routes to Maryborough Line</i>
265/14	Home Signal for route to Maroona; Home Signal for route to Ararat Yard	ARTC Standard Gauge South West Network Controller	CTC Caution Order issued by ARTC South West Network Controller for route to Maroona and Modified CTC Arrival Message issued by ARTC South West Network Controller for route into Ararat Yard
265/24	Home Signal	V/Line Standard Gauge North West Train Controller	Signaller's Caution Order issued by V/Line SG North West Train Controller <i>Requires liaison with ARTC South West Network Controller for routes to Ararat</i>
214/10	CTC Departure Signal	ARTC Standard Gauge North West Network Controller	CTC Caution Order issued by ARTC South West Network Controller <i>Requires liaison with ARTC North West Network Controller to depart and with V/Line BG Western Train Controller for routes across grade crossing</i>
214/12	CTC Departure Signal	ARTC Standard Gauge North West Network Controller	CTC Caution Order issued by ARTC South West Network Controller <i>Requires liaison with ARTC North West Network Controller to depart and with V/Line BG Western Train Controller for routes across grade crossing</i>

7 V/LINE BROAD AND STANDARD GAUGE OPERATIONS

7.1 Location Description

Ararat is the Standard Gauge junction for the Maryborough Line and the terminus for the Broad Gauge Line from Ballarat.

The Broad Gauge Line from Ballarat crosses the ARTC Standard Gauge Line and terminates in No.2 Platform at Ararat Station.

Ararat Stabling Yard is accessed from No. 2 Platform and can accommodate Broad Gauge stabling of 2 x 3 Car Vlocities. Due to the in-clear length of Ararat No. 2 platform, Vlocities arriving and departing the Stabling Yard can only do so as a single 3 Car Unit.

The ARTC Standard Gauge line runs via No.1 Platform at Ararat.

The Ararat - Maryborough Standard Gauge Corridor, and the Ballarat - Ararat Broad Gauge Line is managed by the V/Line North West and Western Train Controllers respectively at Centrol.

The Standard Gauge Line between Pyrenees Loop and Maroonna and the Ararat Yard is managed by the ARTC South West Network Controller in Mile End.

The Ballarat Broad Gauge Line crosses the ARTC Standard Gauge Line and the Ararat – Maryborough Corridor on the Melbourne-side of Ararat.

The ARTC South West Network Controller provides a grade release to the Western Train Controller to allow operation of the Broad Gauge signals across the ARTC Standard Gauge Line and the Ararat – Maryborough Corridor.

7.2 Operation of Points and Signalling (Broad Gauge)

The V/Line Western Train Controller shall not request a release from the ARTC South West Network Controller for a rail movement to depart Ararat until it has been confirmed that the Driver is in possession of the applicable authority for the Staff Section Wendouree - Ararat and departure is imminent.

The Broad-Gauge Points No.17 leading from No.2 Platform track towards the Stabling Siding are equipped with a dual-control point machine and are controlled by the Western 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 South West Network Controller has provided the grade release.

7.3 Self-Normalisation of Broad-Gauge Points

Points No.17 are provided with a self-normalising function.

When the points are set to the Reverse position for a movement to the Main Line and the signal is set for the movement, the points shall automatically restore to the Normal position for the Stabling Siding once the rail movement 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 facility must be applied on the points. This will disable the self-normalising function.

Note: The release for the Broad-Gauge grade crossing will not be able to be returned to the ARTC South West Network Controller when Points No. 17 are in the Reverse position.

7.4 Failure Of Broad Gauge Grade Release:

a. Broad Gauge Home Signals No. 265/8, 265/18 or Points No. 17

In the event of a failure of the Broad-Gauge grade release, Points No. 17 or a failure of Home Signals 265/8 or 265/18, the V/Line Western Train Controller must contact the ARTC South West Network Controller and request the required blocking facilities be applied to prevent operation of Standard Gauge Home Signals 265/6, 214/10 and 214/12.

After confirming that the blocking facilities have been applied and the points are set and detected in the required position, the Western Train Controller must place a blocking facility on the points. The Western Train Controller must then prepare and dictate a Caution Order to the Driver as authority to pass the signal at the 'Stop' position.

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

b. Points No. 17: Failure of Positive Detection

If positive detection of Points No. 17 and 19 cannot be determined on the Train Controllers VDU, 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 Western Train Controller.

In the case of Home Signal 265/8, the Western Train Controller may issue a Caution Order for the Driver to proceed, with instructions being given to stop at a point beside Dwarf Signal 265/16.

The Driver must then place the selector lever on Points No. 17 to the hand-operating position, and ensure the points are set in the required position before proceeding into the platform.

Following the rail movement through the points, the Western Train Controller at Control will arrange for a Competent Worker to restore the points back into Motor and into the Normal position, to allow for ARTC to signal trains on the Standard Gauge through Ararat.

7.5 Track Maintenance Operations On Grade Crossing

a. Standard Gauge

In the event that it becomes necessary to perform track maintenance operations on the ARTC Standard Gauge line between Signals 265/6 and 214/6, 265/14 and or Points No. 11U & 11D, and such maintenance requires the issue of a Track Warrant, Absolute Occupation, Absolute Signal Blocking (ASB) or Road Rail Vehicle Permission (RRVP), the authority shall be issued by the ARTC South West Network Controller who shall first ensure that the appropriate blocking facilities have been applied to protect the works.

Prior to issuing the appropriate method of safeworking, the ARTC South West Network Controller must confer with the V/Line Broad Gauge Western Train Controller for the Ballarat Line and V/Line Standard Gauge North West Train Controller to ensure that the issue of the authority will not affect the passage of any rail movements.

b. Track Maintenance Operations on Broad Gauge Line at Ararat

In the event that it becomes necessary to perform track maintenance operations on the Broad-Gauge line between Signals 265/8 and 265/18, and such maintenance requires the issue of a Track Warrant, the Track Warrant shall be issued by the V/Line Western Train Controller.

The V/Line Western Train Controller must first obtain the grade release from the ARTC South West Network Controller and ensure that the appropriate blocking facilities have been applied to protect the works.

Prior to issuing the Track Warrant, the V/Line Western Train Controller must confer with the ARTC South West Network Controller to ensure that the issue of the Track Warrant will not affect the passage of a Standard Gauge movement.

7.6 Ararat – Maryborough Corridor:

a. Interface

The operational and signalling interface between ARTC and V/Line on the Maryborough Line is at Home Signal 265/14, located at the 264.991 km.

ARTC is responsible for the management of the safeworking, signalling and infrastructure on the Standard Gauge track between Signal 265/14 and the Ararat Yard, and the ARTC Main Line (excluding the Mixed Gauge Diamond leading to the Maryborough Line).

b. Train from the ARTC Main Line or the Ararat Yard toward Maryborough

When a rail movement requires to proceed from the ARTC Main Line, or from the Ararat Yard, the V/Line North West Train Controller must provide a release to the ARTC South West Network Controller to allow the operation of Signal 265/6 or 265/2, to signal the rail movement toward the Maryborough Line.

c. Train from Maryborough toward the ARTC Main Line or the Ararat Yard

When a rail movement requires to proceed from the Maryborough Line to the ARTC Main Line, or the Ararat Yard, the ARTC South West Network Controller must provide a release to the V/Line North West Train Controller to allow the operation of Signal 265/24, to signal the rail movement from the Maryborough Line.

d. Signal 265/24 Fails to Display a Proceed Aspect when Operated

The authority for a train to pass Signal 265/24 at the Stop position is a Signallers Caution Order issued by the V/Line North West Train Controller.

Prior to issuing a Signallers Caution Order, the V/Line North West Train Controller must confirm with the ARTC South West Network Controller that the route is clear to Home Signal 265/14, request a blocking facility on to prevent the operation of any opposing rail movement and confirm that a Signallers Caution Order may be issued.

After confirming that the blocking facilities have been applied, the North West Train Controller must then prepare and dictate a Signallers Caution Order to the Driver as authority to pass the signal at the 'Stop' position.

It will not be necessary for the Driver to record the details of the Signallers Caution Order as dictated by the North West Train Controller. The North West Train Controller and Driver must then exchange names.