



AUSTRALIAN RAIL TRACK CORPORATION LTD

SAFE Notice 2010

Number: 2-1349

Moree to Gurley Section

Bulluss Drive: Upgrade of Level Crossing Protection and Alterations to Signalling Infrastructure

(NAN 1472)

Commencing at 0600 hours Wednesday 30th June 2010 and continuing until 1700 hours on 30th June, or until completion; the existing active level crossing protection located at 664.333 kilometres, Bulluss Drive Moree will be upgraded to include half boom barriers. This work will be completed in conjunction with alterations to the signalling infrastructure at Moree South (Moree Saleyards, Dunavants Siding, Moree Silo, Moree Vegetable Oil Siding) and Moree that also will be tested and commissioned into use.

The active level crossing protection at Bulluss Drive Moree will be upgraded to include Type 'F' level crossing equipment inclusive of flashing lights, audible warning devices and half boom barriers.

The infrastructure changes include:

- Installation of half boom barriers, Bulluss Drive
- Installation of Main Line Indicators, Bulluss Drive
- Installation of Operator key releases
- Installation of Operator key release Duplex Locks with captive Fortress keys
- Installation of Location Name Signs

General arrangements:

Trackside Approach Warning signs for the Level Crossing are located as follows:

- Down Direction 663.454 km
- Up Direction 665.170 km

New Main or altered infrastructure is as follows

- New half boom barriers will be fitted to Bulluss Drive level crossing.
- "A" MLI - facing to down trains, positioned on the left side of the track when approached in the down direction, on the Sydney side of Bulluss Drive level crossing.
- "B" MLI is facing to up trains, positioned on the left side of the track when approached in the up direction, on the country side of Bulluss Drive level crossing.
- Driver's Set/Cancel Buttons will be located adjacent to , "A" MLI and "B" MLI.
- Shunter's Push Button will be located adjacent to Frame E, "A" MLI, "B" MLI and Frame K.

- A new Ground Frame "K" located on the up side of the main line and adjacent to the main line points at 664.813km will be brought into use. This provides access to and from the main line from the Loop Line sidings.
- Ground Frames at Moree Silo (Frames B and A) and Moree Vegetable Oil Siding (Frame C) will be renamed Frames C, D and E respectively.
- Duplex Locks, operated by an Operators key and releasing a fortress key to operate their respective Ground Frames will be fitted to Ground Frames C, D, E and K.
- Operator's locks will be fitted to Frame D (Moree Saleyards), Frames A & B Dunavants Siding, Moree Silo Frames A & B.
- New Location Name signs will be provided for Moree South (Down 655.461km and Up 662.950km) and Moree (Down 661.454km and Up 669171km)

Safeworking arrangements:

All work must be carried out in accordance with the appropriate ARTC Network Rules and Procedures.

An Infrastructure Booking Authority (ANRF 003) must be compiled as per the instructions in ARTC Network Rules and Procedures ANWT 312 and ANPR 704 for the booking in and commissioning of the new active level crossing warning equipment.

Testing of Level Crossing Warning Equipment:

The Level Crossing facility will be remotely monitored from Mitchell's Security Services at Bathurst, phone 02 6331 6814, and daily tests carried out by the Cerberus Level Crossing Monitoring System.

Failure of the Cerberus Monitoring Equipment:

In the event of a failure of the Cerberus monitoring equipment a 'Test' switch box is located on the outside of the Level Crossing Equipment Hut located on the Down side of the line and is opened by the test key obtained from the Narrabri Provisioning Centre.

Emergency Operation of the Level Crossing Warning Equipment:

Emergency switches are provided to isolate the warning equipment in the event of failure. The 'Emergency Switch Box' is located on the Level Crossing Equipment Hut and is opened by the emergency keys obtained from the Narrabri Provisioning Centre. The warning equipment must be operated in accordance with the ARTC Network Rules & Procedures ANGE 218 'Type F Level Crossing Management' and ANPR 715 'Protecting Type F Level Crossings'.

Manual Operation of the Level Crossing Warning Equipment:

A manual operation switch is provided in a box secured by an SL Lock, located on the outside of the Level Crossing Equipment Hut. The manual operation switch is provided for use by qualified workers in accordance with ARTC Network Rules & Procedures ANGE 218 'Type F Level Crossing Management', ANPR 715 'Protecting Type F Level Crossings' and ANPR 717 'Using Emergency Roadside Warning Equipment'.

This Safe Notice will serve as an amendment to the following units contained in Local Appendix North V4 Narrabri Junction - Moree-Walgett-Merrywinebone-Weemelah-North Star:

LAU 449 – Moree Saleyards

- In clause [b] “Ground frames”
 - Under Frame D delete the second paragraph relating to unlocking of ground frames and replace with the following:
 - “Frame D is unlocked by an Operator’s key.”

LAU 450 – Dunavants Cotton Siding

- In clause [c] “Ground frames”
 - Under Frames A and B delete the second paragraph relating to unlocking of ground frames and replace with the following:
 - “Frames A and B are unlocked by Operator’s key.”

LAU 451 – Moree Silo

- In clause [c] “Ground frames”
 - Under Frames A, B and C delete the second paragraph relating to unlocking of ground frames and replace with the following:
 - Frames A and B are unlocked by Operator’s key.
 - Under Duplex Lock delete the second and third paragraph relating to unlocking of top lock and cancelling the level crossing operation and replace with the following:
 - “The top lock of the duplex lock is unlocked by an Operator’s key.”
 - “When the operator’s key is turned in the Duplex Lock, A-MLI will be placed at stop and release the fortress key for use in the ground frame. If the level crossing protection is already operating this will cancel the operation of the level crossing warning equipment after two (2) minutes.”
- In the “WARNING”
 - Replace references to the “electric staff” with “operator’s key”

LAU 452 – Vegetable Siding

- In clause [b] “Ground frames”
 - Under Frames D and E delete the third paragraph relating to unlocking of ground frames and replace with the following:
 - Frames D and E are unlocked by Operator’s key.
- In clause [c] “Bulluss Drive level crossing”
 - Delete all paragraphs and insert:

"Type F flashing lights, bells and half boom barriers are provided at Bulluss Drive level crossing at 664.333kms.

Main Line Indicators

Main Line Indicators (MLIs) have also been provided either side of Bulluss Drive level crossing. "A" MLI is facing to down trains and is located on the Sydney side of the level crossing. "B" MLI is facing to up trains and is located on the country side of the level crossing. Both MLIs are normally in the clear position and display a yellow indication when clear and a red indication when at stop.

The warning equipment is automatically controlled by track circuits for up and down trains on the main line. Provided the respective MLI is clear an approaching train will activate the operation of the level crossing.

The MLIs can be placed at stop by either of two methods;

1. Through the use of the Set/Cancel Button located near the relevant MLI. With a train standing on the approach track to the MLI if the Cancel button is pressed for one second the MLI will be placed at stop. Placing the MLI at stop will cancel the operation of the level crossing after 120 seconds.
2. Through the operation of either of the duplex locks at Frames C, D, E or K. Operating any of these duplex locks will cause both MLIs to go to the stop position. If a train occupies either of the approach tracks within 120 seconds of the MLIs being placed at stop the level crossing warning equipment will operate but will cease operation after the 120 seconds has elapsed.

An MLI can be cleared provided all Duplex locks are restored normal and the route in the departing direction is clear. To clear an MLI the "Set" button located near the relevant MLI must be pressed for one second. This will commence the operation of the level crossing warning equipment and once the half boom barriers are fully descended the MLI will clear to the proceed indication, the MLI for the opposite direction will remain at stop until the train has cleared the departure track.

Shunters Pushbuttons

Shunters Pushbuttons have been provided at Frame E, the Sydney side of Bulluss Drive, the country side of Bulluss Drive and Frame K. These have been provided to facilitate shunting moves across Bulluss Drive level crossing when it is not possible or desirable to use the MLIs.

To activate the level crossing press and hold the "Start" button on the Shunters Pushbutton for one second. This will initiate the operation of the level crossing warning equipment. Once the gates have been lowered to the horizontal position and the road traffic comes to a stand the train can traverse the road crossing. The level crossing warning equipment will automatically cease to operate once the train has cleared the level crossing.

To cancel an operation once it has been established that the train is not going to shunt through the level crossing press the "Cancel" button in the Shunter's pushbutton box for one second the level crossing warning equipment will cease to operate once the half boom barriers are fully raised.

- In the "WARNING"
- Replace references to the "electric staff" with "operator's key"

Alterations to Local Appendix North : Volume 5

LAU 452 [c] page 3

"Insert new row"

Name of Crossing	Kilometres From Sydney	Code	Test Recorded By	Keys Located At
Bulluss Drive, Moree	664.333		Cerberus Monitoring System	Narrabri Provisioning Centre

LAU 453 – Moree

- In clause [d] "Ground frames" Insert

Frame K

"Frame K is located on the up side of the main line adjacent to the points and provides access to Loop Siding No.1.

Frame K is unlocked by an operator's key"

Contacts

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Newcastle, 28th June 2010

**Operations Manager North/South
Australian Rail Track Corporation**

Return to Controlling Manager:

Date.....Signed.....

.....
(Cut along this line and forward the detached receipt to your Controlling Manager)

To Controlling Manager.....

Received Safe Notice No.....2010 Date.....Signed.....

Name: (print).....Location.....

(Controlling Manager to retain this acknowledgment of receipt of this safe notice for record purposes for 90 days)