



AUSTRALIAN RAIL TRACK CORPORATION LTD

# SAFE Notice 2010

Number: 2-1348 Amended

## **DARNICK: *WORKS RESCHEDULED***

### **Provision of Active Level Crossing Protection at Pooncarrie Road 880.728 km**

Commencing at 0730 hours **Friday 2<sup>nd</sup> July 2010** and continuing until commissioned, the existing passive level crossing protection at Pooncarrie Road Darnick will be upgraded with the installation and commissioning of active level crossing protection consisting of LED flashing lights, boom gates and warning bells.

#### **General Arrangements:**

The level crossing warning equipment will be automatically controlled by conventional track circuit equipment.

The new infrastructure will consist of the following:

- Boom gate mechanisms, Type F flashing light assemblies and warning bells
- Level crossing hut (on Ivanhoe side of crossing on up side of line)
- Main Line Indicators at the level crossing with MLI Push Button boxes
- Duplex Locks at Frame A and Frame D
- Shunters Push Button boxes at Frame B and Frame C
- Approach warning signs
- Manual Operation Switch, Test Switch box and Emergency Switch box (located on the side of the level crossing hut)

Level crossing approach warning signs will be located at:

- Down direction 879.507 km.
- Up direction 881.949 km.

A layout diagram is included in this safe notice.

#### **Main Line Indicators and Pushbuttons:**

A Main Line Indicator, 'X' MLI will be installed at 880.805km on the main line facing to up trains. 'Clear' and 'Cancel' push buttons for 'X' MLI are located in the box mounted on 'X' MLI and locked by an SL lock. 'X' MLI will normally display a pulsating white proceed aspect but will be placed at stop when Duplex Lock D or Triplex Lock BC is operated. 'X' MLI when displaying a

pulsating white proceed aspect also indicates that 'A', 'B' and 'C' points are set for main line running.

A Main Line Indicator, 'Y' MLI will be installed at 880.665km on the main line facing to down trains. 'Clear' and 'Cancel' push buttons for 'Y' MLI are located in the box mounted on 'Y' MLI and locked by an SL lock. 'Y' MLI will normally display a pulsating white proceed aspect but will be placed at stop when Duplex Lock A or Triplex Lock BC is operated. 'Y' MLI when displaying a pulsating white proceed aspect also indicates that 'B', 'C' and 'D' points are set for main line running.

Existing 'A' MLI will have a new yellow proceed aspect installed which will be displayed when 'Y' MLI is displaying a red stop aspect. 'A' MLI when displaying a pulsating white proceed aspect indicates that 'A' points are set for main line running and 'Y' MLI is displaying a pulsating white proceed aspect.

Existing 'D' MLI will have a new yellow proceed aspect installed which will be displayed when 'X' MLI is displaying a red stop aspect. 'D' MLI when displaying a pulsating white proceed aspect indicates that 'D' points are set for main line running and 'X' MLI is displaying a pulsating white proceed aspect.

These indications are in accordance with ARTC Network Rules & Procedures ANSG 604.

### **Duplex Locks:**

A duplex lock will be installed adjacent to Signal Equipment Location 'A'. The existing Operators Lock installed on Lever AA will be replaced with a Fortress Lock. The top lock of the duplex lock will accept an Operators Key and will release the Fortress Key in the bottom lock. The Fortress Key will unlock Lever AA at the derail.

A duplex lock will be installed to Signal Equipment Location 'D'. The existing Operators Lock installed on lever 1 of Frame D will be replaced with a Fortress Lock. The top lock of the duplex lock will accept an Operators Key and will release the Fortress Key in the bottom lock. The Fortress Key will unlock lever 1 of the ground frame.

The operating procedure for existing Triplex Lock BC will remain unchanged however this lock will be electrically interlocked with the level crossing equipment.

### **Operational Requirements:**

For trains travelling in the up direction, 'X' MLI will show pulsating white aspect and the level crossing warning equipment will activate once the train occupies the up approach section adjacent to the up driver's level crossing warning board. The level crossing will cease to operate when the train clears the level crossing.

For trains travelling in the down direction, 'Y' MLI will show pulsating white aspect and the level crossing warning equipment will activate once the train occupies the down approach section adjacent to the down driver's level crossing warning board. The level crossing will cease to operate when the train clears the level crossing.

For shunting trains operating on the up direction approach track circuit to Pooncarrie Road level crossing, 'X' MLI is to be cancelled during shunting. This MLI can be cancelled by operating Duplex lock D or Triplex Lock BC or by using the cancel button provided at the MLI.

For shunting trains operating on the down direction approach track circuit to Pooncarrie Road level crossing, 'Y' MLI is to be cancelled during shunting. This MLI can be cancelled by operating Duplex lock A or Triplex Lock BC or by using the cancel button provided at the MLI.

For trains in the loop wanting to pass over the level crossing to depart the loop onto the main line, the driver must stop at the stop sign on the western side of the level crossing, set Frame B points for the loop then operate the 'Start' button in the Shunters Push Button box located adjacent to Frame B. The level crossing will then operate and when the booms have fully descended the train can cross the level crossing onto the main line. The level crossing will cease to operate when the train clears the track circuit equipment over the level crossing and Frame B points.

For trains in the siding wanting to pass over the level crossing to depart the siding onto the main line, the driver must stop at the stop sign on the eastern side of the level crossing, set Frame C points for the siding then operate the 'Start' button in the Shunters Push Button box located adjacent to Frame C. The level crossing will then operate and when the booms have fully descended the train can cross the level crossing onto the main line. The level crossing will cease to operate when the train clears the track circuit equipment over the level crossing and Frame C points.

If 'X' MLI or 'Y' MLI are displaying a stop indication to an approaching train, the level crossing will not operate and the driver must bring the train to a stop at the MLI. The driver can then operate the button labeled 'clear' in the MLI push button box. The level crossing will then operate and when the booms have fully descended the MLI will clear.

### **Equipment To Be Removed:**

The following equipment will be removed:

- The existing Signal Equipment Hut at the level crossing will be removed. All equipment inside this hut will be relocated to the new level crossing hut.
- The existing Traffic Hut will be removed. The Emergency Equipment Box will be mounted on a post. The Telstra phone will be installed inside the Emergency Equipment Box.

### **Testing of Level Crossing Warning equipment:**

The Level Crossing will be remotely monitored from Mitchell's Security Services at Bathurst, Phone 02 6331 6814, and tested 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 daily testing must be implemented in accordance with ARTC Network Rules & Procedures ANGE 218.

A 'Test' switch box is located on the outside of the Level Crossing Equipment Hut and is opened by the test key obtained from the Transfield Services Provisioning Centre at Ivanhoe.

### **Emergency operation of the Level Crossing warning equipment:**

Emergency switches are provided to isolate the warning equipment in the event of a failure. The 'Emergency Switch Box' is located on the Level Crossing Equipment Hut and is opened by the keys obtained from the Transfield Services Provisioning Centre at Ivanhoe. The warning equipment must be operated in accordance with the ARTC Network Rules and Procedures.

### **Manual operation of 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.

### **Safeworking arrangements:**

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

An Infrastructure Booking Authority (NRF 003) must be compiled as per the instructions in ARTC Network Rules & Procedures ANWT 312 and ANPR 704 to commission and book the new level crossing warning equipment into use.

In the event that installation and testing work is completed ahead of the anticipated completion time, the early commissioning and use of the equipment being installed is authorised. Should the installation and testing work extend beyond the anticipated completion time, the arrangements and instructions contained in this Safe Notice will apply until the work is completed, or until otherwise advised.

### **Amendments to LAU's**

This Safe Notice will serve as an amendment to the following units contained in Local Appendix - West Volume 3:

### **Local Appendix West: Volume 3 – LAU 303 [f] Page 22,**

**Delete:** All reference to "Darnick 880.730".

### **Insert:**

| <b>Name of crossing</b> | <b>Km from Sydney</b> | <b>Code</b> | <b>Test recorded by</b>  | <b>Emergency keys located at</b>                |
|-------------------------|-----------------------|-------------|--|---|
| Pooncarrie Road         | 880.728               | ABFLR       | Cerberus monitoring system at Mitchell Security Services, Bathurst | Transfield Services Provisioning Centre Ivanhoe |

Dave Hanney

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02 6332 5444 or 0427 990221

**Newcastle, 30<sup>th</sup> 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)

