

ANWT 308

Absolute Signal Blocking

Applicability

NSW

SMS

Publication Requirement

External Only

Document Status

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2.1	23 February 2020

Purpose

To prescribe the rules for working in the *Danger Zone* using *Absolute Signal Blocking* (ASB) to exclude *rail traffic* from a portion of *track*.

General

Safety Assessment



If the safety assessment shows that a work on track authority is necessary, work *must not* be done using Absolute Signal Blocking.

Work on track authorities are prescribed in:

- ***ANWT 302 Local Possession Authority***
- ***ANWT 304 Track Occupancy Authority***
- ***ANWT 306 Track Work Authority.***

If a safety assessment shows that it is safe, some kinds of work *may* be done in the *Danger Zone* without a *work on track authority*. The *Absolute Signal Blocking* method of protection may be used.

Working under Absolute Signal Blocking

When working under *Absolute Signal Blocking*, one worker may work alone. In this case, that worker is also the *Protection Officer*.

Using Absolute Signal Blocking

Absolute Signal Blocking may be used only:

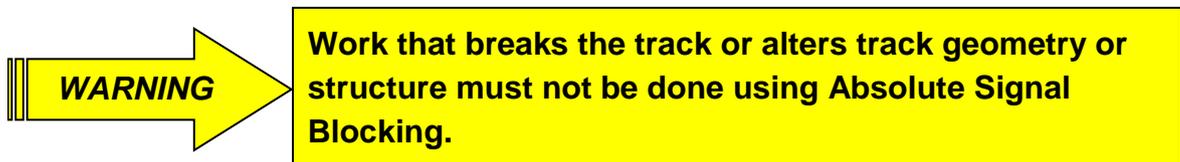
- to allow vehicles and machines to directly cross the track, or
- for work not requiring tools, or
- for work using tools which can be easily and immediately removed from the track by one person without mechanical assistance and are:
 - *light, non-powered hand tools, or*
 - *light, powered hand tools, or*
 - *light, battery powered tools or devices.*

Restrictions

The Absolute Signal Blocking method of protection must be applied to *absolute signals* only.

Absolute Signal Blocking must not be used:

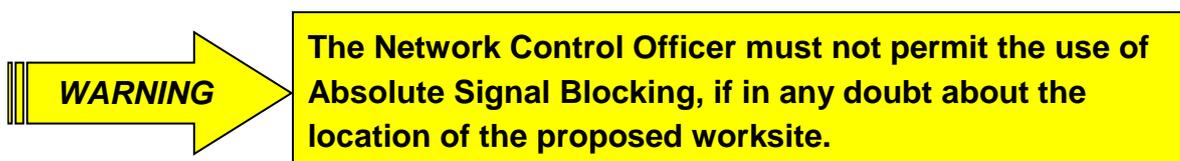
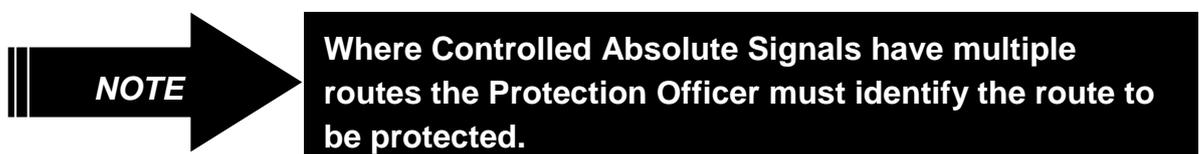
- for work that:
 - breaks the track, or
 - alters track geometry or structure, or
- where a work on track authority is in place.



Requesting Absolute Signal Blocking

When using Absolute Signal Blocking method for work on track the Protection Officer must:

- speak to the *Network Control Officer*, and
- tell the Network Control Officer the *location* of the worksite, and
- request permission for Absolute Signal Blocking, and
- identify the signals to be set and kept at STOP with blocking facilities applied.



Permission for Absolute Signal Blocking

Area of Control

Network Control Officers may only authorise Absolute Signal Blocking for signals in their area of control, unless an authorising Network Control Officer has been nominated where more than one Network Control Officer is required to exclude rail traffic.

If the Absolute Signal Blocking requires more than one Network Control Officer to exclude rail traffic from a portion of track, the affected Network Control Officers must:

- confer to ensure all points of entry are protected, and
- nominate an authorising Network Control Officer.

Authority to set signals at STOP

Where *Signallers* are used, before setting controlled absolute signals at STOP, the Signaller must speak to the *Network Controller* about the request to exclude rail traffic.

Protection Methods

Protecting Work

The Protection Officer must arrange for:

- Controlled Absolute Signals to be set at STOP with blocking facilities applied, or
- Controlled Absolute Signals to be set at STOP with blocking facilities applied, and:
 - removal of the *manual points control mechanism*, or
 - points secured to prevent access.

Where work is to be undertaken within 500 metres of a protecting Controlled Absolute Signal the Protection Officer must arrange for:

- one Controlled Absolute Signals to be set at STOP with blocking facilities applied and a Lookout to be provided at the worksite, or
- two consecutive Controlled Absolute Signals to be set at STOP with blocking facilities applied, or
- Controlled Absolute Signals to be set at STOP with blocking facilities applied and points secured to prevent access.

If rail traffic can approach from more than one direction, the Protection Officer must protect all points of entry into the Absolute Signal Blocking limits.



Removing the manual points control mechanism only does not constitute Absolute Signal Blocking.

Network Control Officer



Before clearing a protecting Controlled Absolute Signal for a different route, the Protection Officer and Network Control Officer must ensure that the worksite is not established at a location where rail traffic using the different route can enter the worksite.

Before allowing the work to start, the Network Control Officer must make sure that:

- the Protecting Controlled Absolute Signals have been set at STOP with blocking facilities applied, and
- there is no approaching rail traffic between the protecting Controlled Absolute Signals and the proposed worksite, and
- any rail traffic that has passed complete beyond the proposed worksite will not be authorised to return.

Protection Officer

A Protection Officer is required for the period of the work.

When Absolute Signal Blocking is authorised, the Protection Officer may remove the manual points control mechanism to exclude rail traffic. The Protection Officer must safeguard the manual points control mechanism.

Confirming protection is applied

Before work starts, the Protection Officer must confirm with the Network Control Officer that:

- the protecting Controlled Absolute Signals have been set at STOP with blocking facilities applied, and
- on unidirectional tracks the track is clear between the protecting Controlled Absolute Signals and the proposed worksite, and
- on bidirectional tracks, the track is clear between the protecting Controlled Absolute Signals and the proposed worksite in the directional of travel of the rail traffic, and
- any rail traffic that has passed complete beyond the worksite, will not return.

Primary Duty

A Protection Officer's primary duty is to keep the worksite and workers safe.

A Protection Officer is responsible for managing the rail safety component of worksite protection and must:

- tell workers about the *locations* of safe places, and the kinds and limits of safety measures in place:
 - before work begins, and
 - If protection arrangements change
- be the only person to speak to Network Control Officers about safety arrangements, and
- make sure that the agreed safety measures are in place before work starts.

Other duties

A Protection Officer must be satisfied that other work will not interfere with *protection* duties.

Ending Absolute Signal Blocking

Protection Officer

The Protection Officer must tell the Network Control Officers when:

- work is completed, and
- workers and their equipment are clear of the Danger Zone, and
- if used:
 - manual points control mechanism have been returned to normal, and
 - points that were secured are available for use.

Network Control Officer

After being told by the Protection Officer that the track is clear, Network Control Officers may remove blocking facilities applied for Absolute Signal Blocking.

Keeping Records

Network Control Officers and the Protection Officer must keep a permanent record about the Absolute Signal Blocking details.

Related ARTC Network Procedures

ANPR 703	Working using Absolute Signal Blocking
ANPR 707	Clipping Points
ANPR 711	Lookouts
ANPR 712	Protecting work from rail traffic on adjacent tracks

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