PUBLIC TRANSPORT AUTHORITY

SAFEWORKING RULES AND PROCEDURES

3011

ABSOLUTE SIGNAL BLOCKING

CONTENTS

1. PURPOSE

The purpose of this rule is to outline the protocols for *Authorising* and using *Absolute Signal Blocking* (*ASB*) in the Public Transport Authority (PTA) *Network*. This is a method of working in the *Danger Zone* by:

- maintaining *Controlled Absolute Signals* at Stop to exclude *Rail Traffic* from *the limits of a Worksite*; and/or
- where the *Signal* has more than one *Route* available apply *Blocking Facilities* to protect all entry points to the *Worksite*.

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2. GENERAL

Only *Train Controllers* may approve *ASB* for *Track* under their control.

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*. *ASB* is one of those methods of working.

WARNING

If the *Safety Assessment* shows that a *Work on Track Authority* is necessary, work must not be done using the *ASB* method.

ASB may be used only:

- for station staff to access the *Track*;
- for work using equipment which can be removed from the *Track* by *Workers* without mechanical assistance;
- at *Network Access Level Crossings*, to allow *Vehicles* to cross the *Track*; or
- to allow *Vehicles* to directly cross the *Track*.

If *ASB* is used, then a *Worker* may work alone. In this case, that *Worker* is also the *Protection Officer* (*PO*):

- the *ASB* method of *Protection* must be applied to *Controlled Absolute Signals*; and/or
- where the *Signal* has more than one *Route* available apply *Blocking Facilities* to protect all entry points to the *Worksite*.

The *ASB* method must not be used for work that breaks the *Track* or affects *Infrastructure* integrity.

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3. AUTHORISATION

Before authorising *ASB* working, the *Train Controller* must make sure that:

- another *Work on Track Authority* is not in use within the limits of the proposed *Worksite*;
- any *Rail Traffic* holding an *Authority* for *Unidirectional* movement has *Cleared* the limits of the proposed *Worksite* by confirming with the *PO* that the *Section* is *Clear*;
- *Rail Traffic* that is *Stabled* and within the limits of the *ASB,* must not be *Authorised* to move;
- the *PO* knows about any existing obstructions;
- the Kilometre locations of the limits of the *Worksite* have been identified;
- the protecting *Signals* have been identified;
- *Blocking Facilities* have been applied to prevent *Unauthorised* entry by *Rail Traffic* into the limits of the *Worksite*; and
- where the *Signal* has more than one *Route* available apply *Blocking Facilities* to protect all entry points to the *Worksite*.

WARNING

The *Train Controller* must not permit *ASB* if there is any doubt about the *Location* of the proposed *Worksite*.

The *Train Controller* must confirm with the *PO* the:

- name and contact details of the *PO*;
- the works program number;
- type of work; and
- *Location* using:
  - a kilometre sign and if required one of the following identifiers;
  - station name;
  - *Overhead Line Equipment* (*OLE*) structure number;
  - a *Points Identification Number*;
  - a *Signal Identification Number*;
  - an observance of *Points* or *Signal Aspect* change; or
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers.

4. PROTECTION OFFICER

There must be a PO present at the *Worksite* for the period of work, except if the *ASB* is used to allow road vehicles to directly cross the *Track* or where station staff are required to access the *Track*. In these circumstances the *Train Controller* may apply *ASB* and assume the role of the *PO.*

If *Authorised* by the *Train Controller,* the *PO* must remove and safeguard the *Crank Handle.*

A *PO* must:

- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- be responsible for the *Protection* of *Workers* from *Rail Traffic;*
- ensure the *Worksite* is for the shortest practical distance;
- identify all entry points and the kilometre location of the limits of the *Worksite*;
- make sure that the *Worksite* is protected against the entry of *Rail Traffic*;
- inform all workers of the limits of the *Worksite*; and
- tell *Workers* about the *Location* of *Safe Places.*

NOTE

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

4.1. REQUEST FOR ABSOLUTE SIGNAL BLOCKING FROM WORKER OTHER THAN THE PROTECTION OFFICER

The *Train Controller* may apply *ASB* to allow station staff to access the *Track* or *Vehicles* to directly cross the *Track*.

The *Train Controller* must:

- confirm the *Location* and the work to be done;
- make sure the *Route* is *Clear* between the *Protecting Signals* and the proposed *Worksite*, and that any *Rail Traffic* that has passed the *Worksite* will not return;
- set the *Protecting Signals* at Stop and apply *Blocking Facilities;* and/or
- where the *Signal* has more than one *Route* available apply *Blocking Facilities* to protect all entry points to the *Worksite*;
- advise the *Worker* of the arrangements and *Authorise* the work; and
- when told that the area is *Clear*, remove *Blocking Facilities.*

4.2. CHANGE OF TRAIN CONTROLLER

An outgoing Train Controller must tell an incoming Train Controller about the *Worksite Protection* arrangements.

The incoming Train Controller must make a *Permanent Record* of the handover.

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5. OBTAINING APPROVAL FOR ABSOLUTE SIGNAL BLOCKING

The Train Controller and the *PO* must confirm and record on the Absolute Signal Blocking Form:

- the kilometre *Location* of the *Worksite*;
- identify the *Controlled Absolute Signals* to be set and kept at STOP with *Blocking Facilities* applied; and/or
- where the *Signal* has more than one *Route* available, identify the *Route* to the *Worksite* and apply *Blocking Facilities* to protect all entry points;
- that *Blocking Facilities* have been applied or, where approved by the *Train Controller*, the *Crank Handle* has been removed. The purpose of this precaution is to prevent entry of *Rail Traffic* into the limits of the *Worksite*;
- the blocking *Authority* or identification number from the *Train Control* System;
- identification of the *Points Secured*;
- the *PO's* name and contact details;
- the approving *Train Controller's* name;
- the time of approval; and
- the date of approval.

When the *ASB* is approved the *PO* must put the required safety measures in place and commence work.

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6. PROTECTION

WARNING
Work must not start in the *Danger Zone* until the required *Protection* is in place.

The *PO* must arrange for:

- *Controlled Absolute Signals* to be set at Stop with *Blocking Facilities* applied; and/or
- where the *Signal* has more than one *Route* available apply *Blocking Facilities* to protect all entry points to the *Worksite*; or
- *the Crank Handle* to be removed to set *Controlled Absolute Signals* at Stop.

6.1. PROTECTING SIGNAL

Where the proposed *Worksite* is within 200m of a *Protecting Signal*:

- two consecutive *Controlled Absolute Signals* must be set at Stop with *Blocking Facilities* applied; or
- one *Controlled Absolute Signals* must be set at Stop with *Blocking Facilities* applied, with:
  - *Points Secured* to prevent access; or
  - an easily reached *Safe Place* available and a *Lookout* is provided.

A *Lookout* is positioned as a secondary safety measure and does not need to comply with sighting distances as per **Rule 3013 Lookout Working**.

WARNING
The *Lookout* must not do any work other than look for and give *Warning* about the approach of *Rail Traffic.*

If *Rail Traffic* can approach from more than one direction, the *PO* must protect all *Points* of entry into the *ASB* limits.

If the *Worksite* includes the limits of a *Terminal Line* then *Protection* is not required from that direction provided the *Train Controller* and *PO* agree there are no *Rail Traffic* movements from that direction.

Protection will still need to be applied to prevent any *Rail Traffic* movements towards the end of the *Terminal Line*.

6.2. TRAIN CONTROLLER

The *Train Controller* must confirm with the *PO* that:

- the protecting *Controlled Absolute Signals* have been set at Stop with *Blocking Facilities* applied; and/or

- all potential *Signal Routes* available have had *Blocking Facilities* applied to protect all entry points to the *Worksite*;
- the *Route* is *Clear* of *Rail Traffic* between the *Protecting Signals* and the Limits of the *Worksite*;
- any *Rail Traffic* between the *Protecting Signals* and the limits of the *ASB Worksite* is contained within a Work on Track Authority; or
- any *Rail Traffic* that has passed *Complete* beyond the *Worksite* will not return.

WARNING

When a *Work on Track Authority* with *Rail Traffic* is located between the *Protecting Signal* and the *ASB Worksite*, the *Train Controller* must not fulfil the *Work on Track Authority* until:

- *Rail Traffic* is confirmed as clear of *Track*; or
- the *ASB* has been removed.

Train Controllers must not *Authorise* movements into the limits of the *Worksites* where *ASB* is in use.

6.3. TEMPORARY REMOVAL OF BLOCKING FACILITIES

Blocking Facilities may be temporarily removed in accordance with **Rule 6003 Blocking Facilities**.

6.4. ADJACENT LINE

If the *Safety Assessment* indicates that *Workers* need to be protected from *Rail Traffic* on *Adjacent* lines, the *PO* must arrange for *Adjacent* lines to be protected in accordance with **Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines**.

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7. COMMUNICATIONS WITH TRAIN CONTROL

The *PO* must be the only point of contact between *Train Control* and *Work Groups* for matters of *Worksite Protection*.

The *PO* must tell affected *Train Controllers* about:

- the *Protection* arrangements;
- *Protection* arrangements on *Adjacent* lines; and
- work progress.

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8. ENDING ABSOLUTE SIGNAL BLOCKING

Before ending the *ASB* the *PO* must make sure and tell the *Train Controller* that:

- all *Workers* and equipment have cleared the *Danger Zone*;
- *Points* securing devices have been removed; and
- *Blocking Facilities* have been removed and *Infrastructure* restored to normal use.

The *Train Controller* must make sure that the *Points* and *Controlled Absolute Signals* are working correctly after the *Points* have been restored to normal operation.

The *PO* must tell the *Train Controller* about operating restrictions that have been placed or removed.

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9. KEEPING RECORDS

Train Controllers and the *PO* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the *Worksite Protection* arrangements.

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10. REFERENCE

Rule 2007 Network Communication

Rule 6003 Blocking Facilities

Procedure 9000 Clipping Points

Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines

Procedure 9016 Written Authorities and Forms

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11. EFFECTIVE DATE

1 November 2018

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