Network Safeworking Rules and Procedures

Planning Work in the Rail Corridor

Rule Number: 3000

Brookfield Rail

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Glossary for this Rule

Absolute Signal Blocking (ASB)	A method used by Competent Workers to carry out work on track using controlled absolute signals set and kept at STOP, without a formally issued work on track authority.
Access	A designated safe way into, along, across or out of the Rail Corridor.
Access Provider	An organisation that provides and manages a Rail Network and safe method of entry to that network for Access Users.
Adjacent	Near to, close to, parallel to.
Adjoining	In contact with, connected to.
Advertise	To give written or electronic notice, usually in advance, of planned activities.
Associated Rail Traffic	Rail traffic that performs track maintenance or construction tasks for the work.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Brookfield Rail	Brookfield Rail Pty. Ltd.
Competent Worker	A worker certified as competent to carry out a relevant task.
Controlled Absolute Signal	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Danger Zone	Everywhere within three (3) metres horizontally from the nearest rail and any distance above or below this three (3) metres, unless a safe place (see Safe Place) exists or has been created.
Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Emergency	Incident requiring urgent action. The incident might involve death or serious injury, health or safety effects, significant damage to property or infrastructure.
Exclusive Occupancy	Sole occupancy of track within defined limits.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Level Crossings	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
Light Tool or Device	A tool that can be carried and easily removed by one person and is not powered by cord or hose (e.g. compressed air, gas, electricity).

Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Lookout	A Competent Worker responsible for • keeping watch for approaching rail traffic; and • warning other workers to stand clear of the line before the rail traffic arrives.
Lookout Working	A safety measure used by Competent Workers to carry out work on track without a formally issued work on track authority.
Network Controllers	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Obstruct	To make a line unsafe for the passage of rail traffic.
Plant	Equipment, machinery or apparatus used for the purpose of maintaining/constructing rail infrastructure (e.g. generators, excavators, backhoes. cranes).
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Corridor	The land on which a railway is built; comprising all property between property fences, or from the nearest rail in each direction for the distance defined under the Brookfield Rail lease.
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.

Siding	A portion of track where vehicles can be placed clear of the running lines. Also see intermediate siding.
Sighting Distance	The distance that someone can clearly see along the track.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track-Circuit	An electric circuit where current is carried through the rails and used to detect the presence of trains. Track-circuits are used in the operation and control of points, signalling and level crossing equipment.
Track Occupancy Authority (TOA)	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
Track Work Authority (TWA)	An authority for non-exclusive occupancy of track by track workers and equipment within a defined portion of track for a specified period..
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Train Order	An authority issued by the Network Controller for the movement of rail traffic.
Train Order System Blocking (TOSB)	A facility used by a Network Controller to protect rail traffic, track workers and prevent the unintended issue of an Occupancy Authority on the Train Order system.
Unauthorised	Not given approval, or exceeding the limit of authority.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1. Purpose

This Rule provides instructions designed to ensure that appropriate planning is carried out for work within the *Rail Corridor* and assessing the work for safety.

2. General

Work planned for the *Rail Corridor* must be assessed for safety and its potential to intrude into the *Danger Zone*.

Work in the *Danger Zone* must not:

- be carried out unless there is a *Safe Place* that can be easily reached; and
- begin until the required safety measure is in place.

Work in the *Danger Zone* must be carried out using one of the *Protection* methods listed in this Rule.

The level of safety must not be reduced:

- to allow *Rail Traffic* movements; or
- because of a lack of trained workers.

Workers in the *Rail Corridor* must wear long pants, long sleeved shirts and approved Personal Protection Equipment (PPE). The minimum PPE required is High Visibility clothing and Safety footwear.

Effective Communication with *Network Controllers*, *Possession Protection Officers* and *Protection Officers* must be maintained.

The *Protection Officer* must contact the *Network Controller* before workers enter the *Rail Corridor*.

3. Protection Officer

A worksite within or work that has potential to intrude into the *Danger Zone* must have a *Protection Officer* for the duration of the work.

The *Protection Officer* is responsible for managing the rail safety component of worksite *Protection*.

A *Protection Officer's* primary duty and responsibility is to keep the worksite and workers safe. The *Protection Officer* must be satisfied that other work will not interfere with this duty.

The *Protection Officer* must:

- wherever possible, compile a Worksite Safeworking Planner form and accompanying Worksite Protection Plan prior to arrival at the worksite;
- make a *Safety Assessment* upon arrival at site to confirm details in the Worksite Safeworking Planner;
- brief workers about the rail safety component of worksite *Protection*;
- make sure that the rail safety component of the work is done safely;
- communicate with the *Network Controller* about the work and *Protection* arrangements; and
- keep records about the *Work on Track* method and *Protection* arrangements in the *Protection Officer's* Workbook.

4. Assessing Safety

When making a *Safety Assessment*, *Protection Officers* must consider, amongst other factors, if:

- work will affect *Track* under the control of different *Network Controllers, Access Providers* or private *Siding* operators;
- appropriate numbers of *Competent Workers* are available to protect the work;
- easily reached *Safe Places* are available for workers;
- the Sighting Distance and the speed of approaching rail traffic will allow sufficient warning time to be given by Lookouts;
- it is possible to close the affected line during the work;
- there will be *Rail Traffic* on *Adjacent* lines;
- rail traffic will travel on an adjacent line in both directions over a *uni-directional* line
- there will be *Rail Traffic* between and/or within worksites;
- signals are available to protect worksites;
- other *Work on Track* will affect the worksites;
- there is safe passage to and from worksites;
- there is public *Access* to the *Rail Corridor*;
- there is a risk to workers from road traffic;
- the work will intrude on *Level Crossings*;
- the line is electrified or has power lines overhead;
- the line is *Track-Circuited*;
- the formation of the line and the *Location* will affect the work;
- *Effective Communication* is available;
- equipment used in the work will intrude into the *Danger Zone*;
- other groups need to be told about or involved in the work; and
- the potential for noise within and external to the worksite may impact on the worksite *Protection*.

The *Protection Officer* must regularly review safety measures and if conditions such as visibility or work *Location* changes make amendments to the worksite safety as required.

4.1 Use of Plant Near or Work Above the Danger Zone

Unless special precautions for *Protection* of the *Running Line* have been approved by *Brookfield Rail*, a *Work on Track Authority* must be used where:

- *Plant* is to be used and any portion of that *Plant* may encroach into the *Danger Zone*; or
- work is to be carried out above the *Danger Zone*.

NOTE: Special precautions may include, but not be limited to, chain link fencing, scaffolding, roofing above the *Running Line* and restrictive safety chains on *Plant*.

5. Multiple Access Providers

If the planned work will affect *Track* under the control of more than one *Access Provider*, the *Protection Officer* must get the relevant *Network Controllers*' authority.

NOTE: *Protection Officers* must be aware of the *Protection* arrangements required for *Adjoining Networks*.

Where necessary *Competent Workers* must be qualified in the *Adjoining Network* rules and procedures.

6. Level Crossings

If *Work on Track* will intrude into the *Level Crossing* or affect the *Level Crossing* operation, the *Protection Officer* must arrange to ensure the safety of:

- workers; and
- road, pedestrian and *Rail Traffic*.

7. Methods for Working Safely on Track

Appropriate methods must be selected for arranging and managing work within the *Rail Corridor*.

The *Protection Officer* must tell affected workers about the *Protection* arrangements.

7.1 Running Lines in the Network Outside Depots and Sidings

Work in the *Danger Zone* must be *Protected* by using one or more of the following:

- 3001 Local Possession Authority.
- 3005 Track Occupancy Authority.
- 3009 Track Work Authority.
- 3011 Absolute Signal Blocking.
- 3013 Lookout Working.
- 3023 Train Order System Blocking

The preferred methods of working on *Track* are:

- *Local Possession Authorities*; and
- *Track Occupancy Authorities.*

NOTE: Each *Work on Track* method has mandatory minimum safety measures. However, additional safety measures may be identified through risk assessment

7.2 In Depots and Sidings

7.2.1 Depots

If *Rail Traffic* needs to be excluded from a work area within a Depot, the *Protection Officer* must get permission from the person in charge of the Depot.

The *Protection Officer* must make arrangements with the person in charge of the Depot to prevent *Unauthorised Rail Traffic* entry into the work area.

The person in charge of the Depot must ensure *Unauthorised Rail Traffic* entry into the work area is prevented.

7.2.2 Sidings

Where there is not a person in charge of the *Sidings*, the *Protection Officer* must make arrangements with:

- the *Network Controller*; or
- the person responsible for giving entry into the *Siding*.

8. Local Possession Authority (LPA)

An *LPA* is applied in accordance with Rule 3001 Local Possession Authority.

LPA's are used to close a defined portion of *Track* for a specified period.

An *LPA* is *Issued* exclusively to the *Possession Protection Officer*.

At all times, there must be a nominated *Possession Protection Officer* for the *LPA*.

Work within the portion of *Track* included in the *LPA* limits must only be done with the *Possession Protection Officer's* approval.

A number of separate work groups, *Associated Rail Traffic* and equipment may occupy the portion of *Track* defined by the *LPA*.

A *Possession Protection Officer* is responsible for coordinating the rail safety component of worksite *Protection*.

The *Track* may be broken or *Obstructed*.

Unless authorised for an *Emergency* the intention to take an *LPA* must be *Advertised*.

9. Track Occupancy Authority (TOA)

A *TOA* is applied in accordance with Rule 3005 Track Occupancy Authority.

TOA's are used to close a defined portion of *Track* for a specified period.

A *TOA* is *Issued* to the *Protection Officer* and gives *Exclusive Occupancy*.

A single work group, including that group's equipment, and *Associated Rail Traffic* may occupy the portion of *Track* defined by the *TOA*.

The *Track* may be broken or *Obstructed*.

10. Track Work Authority (TWA)

A *TWA* is applied in accordance with Rule 3009 Track Work Authority.

TWA's are used to occupy a defined portion of *Track* between *Rail Traffic* movements.

A *TWA* is *Issued* to the *Protection Officer* who must manage the passage of *Rail Traffic* through the worksite.

A *TWA* does not give *Exclusive Occupancy* of the defined portion of *Track*.

A *TWA* does not does not permit the use of *Associated Rail Traffic*.

The *Track* may be broken or *Obstructed* but must be restored and cleared for *Rail Traffic* transit as necessary.

11. Absolute Signal Blocking (ASB)

An *ASB* is applied in accordance with Rule 3011 Absolute Signal Blocking.

ASB is a method of working in the *Danger Zone* by maintaining *Controlled Absolute Signals* at STOP to exclude *Rail Traffic* from a portion of *Track*.

The *ASB* method must not be used for work that breaks the *Track* or alters *Track* geometry or structure.

ASB's are *Issued* to *Protection Officer's* and give *Exclusive Occupancy* for the agreed period of time.

The *ASB* method:

- must not be used where a *Work on Track Authority* is in place; and
- must be applied to *Controlled Absolute Signals* only.

ASB may be used:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using *tools* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- work involving light tools powered by a cord or hose (i.e compressed air, gas or electricity);
- for minor signalling maintenance activities;
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *ASB* is used one worker may work alone. In this case, that worker must be a *Protection Officer*.

12. Train Order System Blocking (TOSB)

TOSB is applied in accordance with Rule 3023 Train Order System Blocking.

The *TOSB* method of *Protection* must be applied to the *Train Order* System only.

The *TOSB* method must not be used for work that breaks the *Track* or alters *Track* geometry or structure.

TOSB may be used only:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using *Light Tools or Devices* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- work involving light tools powered by a cord or hose (i.e compressed air, gas or electricity);
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *TOSB* is used, one worker may work alone. In this case, that worker is also the *Protection Officer*.

13. Lookout Working

Lookout Working is applied in accordance with Rule 3013 Lookout Working.

Lookout Working is used to give warning of approaching *Rail Traffic* to workers in or near the *Danger Zone*.

The *Lookout Working* method must not be used for work on overhead wiring, or work that breaks the *Track* or alters *Track* geometry or structure.

Lookout Working may be used for:

- minor short-term work; and
- work requiring the use of *Light Tools or Devices* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- inspections in the *Danger Zone*; or
- work conducted in the *Rail Corridor*, but outside of the *Danger Zone* that may intrude into the *Danger Zone*.

Work in the *Danger Zone* using the *Lookout Working* method must be done in daylight hours only, where visibility allows.

Workers must be able to remove themselves, tools and materials to a *Safe Place* immediately the warning of approaching *Rail Traffic* is received.

14. Walking in the Danger Zone

Workers walking in the *Danger Zone* must apply Rule 2001 Walking in the Danger Zone

Walking in the *Danger Zone* is:

- walking from place to place in the *Danger Zone*; and
- doing no work other than placing or removing *Protection* for a worksite or *Rail Traffic*; or visual inspection of *Track*.

Where workers must walk in the *Danger Zone*:

- an easily-reached *Safe Place* must be available; and
- visibility conditions must allow enough *Sighting Distance* for workers to reach a *Safe Place* before the arrival of *Rail Traffic*.

15. References

2001 Walking in the Danger Zone

3001 Local Possession Authority

3005 Track Occupancy Authority

3009 Track Work Authority.

3011 Absolute Signal Blocking

3013 Lookout Working.

3023 Train Order System Blocking

16. Effective Date

1 Oct 2016

Network Safeworking Rules and Procedures

Local Possession Authority

Rule Number: 3001

Brookfield Rail

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Local Possession Authority

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Glossary for this Rule

Adjacent	Near to, close to, parallel to.
Adjoining	In contact with, connected to.
Advertised	To give written or electronic notice, usually in advance, of planned activities.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Associated Rail Traffic	Rail traffic that performs track maintenance or construction tasks for the work.
At Grade Rail Crossing	A point where two or more railway lines cross over at the same elevation, commonly known as a "Diamond Crossing".
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Blocking Facilities	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Centralised Traffic Control (CTC)	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
Certified	Infrastructure or rolling stock that is fit for purpose.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Converging	Lines meeting and joining to become one line.
Cross	To cross or pass other rail traffic.
Crossover	A portion of line that is used to divert rail traffic from one continuing line to another.
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Delegate	A Competent Worker authorised and designated to act in place of another.
Departure Signal	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.

Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Emergency	Incident requiring urgent action. The incident might involve death or serious injury, health or safety effects, significant damage to property or infrastructure.
Exclusive Occupancy	Sole occupancy of track within defined limits.
Fixed Signals	A signal that is located permanently near the line.
Fixed Worksite	A worksite with boundaries that are fixed and defined by the Authority provided for the duration of the work.
Fulfil	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.
Half Pilot Keys	A metal key located at the end of a single line CTC section and interlocked with the Departure signals' circuits. Two half pilot keys can be joined to provide a full pilot key for Pilot Key Working through the section.
In-Effect	Activate, become current, in force.
In-Field Protection	One or more devices approved by Brookfield Rail that provide warning to protect rail traffic crew and workers. The device or devices may be used in conjunction with signalling or blocking facilities.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Local Possession Authorities (LPA).	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Network Controllers	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Pilot	To direct or guide rail traffic crews and tell them about local conditions and operating restrictions on running lines and at worksites.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.

Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Protecting Signal	A fixed signal that is held and maintained at Stop to prevent rail traffic entry into a worksite. A signal that protects a train from conflicting movements and/or obstructions.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Railway Track Signal's (RTS)	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.
Restrain	To prevent movement of rail traffic with signals, signalling equipment, blocking facilities, or the issue of a written warning.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Siding	A portion of track where vehicles can be placed clear of the running lines. Also see intermediate siding.
Single Line Automatic Signalling	The portions of line where the Single Line Automatic Signalling system of Safeworking is used.

Special Train Notice (STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Stabled	To leave rail traffic unattended and secured, usually in a siding.
Terminal Line	A dead-end line.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Closed Warning Device	A Brookfield Rail approved Stop sign designed to lock into the gauge as part of in-field protection.
Travel	Planned or purposeful movement from one location to another.
Unauthorised	Not given approval, or exceeding the limit of authority.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1. Purpose

This Rule details the protocols for *Issuing,* using *Local Possession Authorities (LPAs)* and how an individual worksite is *Protected* when multiple worksites are within the LPA. These *Authorities* are used to close a defined portion of *Track* for a specified period .

2. General

Only *Network Controllers* may authorise an *LPA* for *Track* under their control.

An *LPA* gives *Exclusive Occupancy* for the defined portion of *Track*.

At all times, there must be a nominated *Possession Protection Officer* for the *LPA*.

The *Possession Protection Officer* applying this Rule must have a minimum *Protection Officer* Level 2 (PO2) and management of multiple worksites within an *LPA Competency* in accordance with Rule 1004 Track Access Accreditation.

An *LPA* is *Issued* exclusively to the *Possession Protection Officer*.

A *Possession Protection Officer* is responsible for coordinating the rail safety component of worksite *Protection*.

Work within the portion of *Track* included in the *LPA* limits must only be done with the agreement of the *Possession Protection Officer*.

A number of separate work groups and their *Associated Rail Traffic* and equipment may occupy the portion of *Track* defined by an *LPA*.

Unless authorised for an *Emergency* the intention to take an *LPA* must be *Advertised*.

3. Authorisation

Before authorising the *LPA*, the *Network Controller* must make sure that:

- another *Work on Track Authority* is not in use within the proposed limits;
- approaching *Rail Traffic* can be *Restrained* at the ends of the *Section* that include the proposed limits;
- *Stabled Rail Traffic* not associated with the *LPA*, but is within the limits of the *LPA*, must not be authorised to move;
- *Rail Traffic* associated with the *LPA*, within the limits has been identified and is being managed as agreed by the *Possession Protection Officer* and the *Network Controller*;
- the *Possession Protection Officer* knows about any existing *Obstructions*;
- *Blocking Facilities* have been applied, in accordance with Rule 6003 Blocking Facilities, to prevent *Unauthorised Rail Traffic* entry into the proposed limits; and
- in *Single Line Automatic Signalling Territory,* the *Half Pilot Keys* have been removed from both ends of the affected *Section*.

The *Network Controller* must confirm with the *Possession Protection Officer* the:

- name, Track Access Permit number and contact details of the *Possession Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location*, using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - a *Points* number;
  - a signal number;
  - an observance of *Points* or signal *Aspect* change;
  - permanent structures, such as a bridge, roadway or overpass, used only in conjunction with one of the above identifiers; or
  - another identifier.

Where an existing *Work on Track* method is in place, the *Network Controller* may *Issue* the *LPA* only if the existing *Work on Track* method is *Fulfilled* or ended.

4. Possession Protection Officer and Protection Officer

4.1 Possession Protection Officer

The *Possession Protection Officer* must:

- be responsible for the *Protection* of workers from *Rail Traffic*;
- make sure that the limits of the *LPA* are *Protected* against the entry and exit of *Unauthorised Rail Traffic*;
- in *Single Line Automatic Signalling Territory* , arrange for the *Half Pilot Keys* to be removed from both ends of the affected *Section*;
- make sure that each worksite under the *LPA* has a *Protection Officer* while work is being performed;
- establish *Effective Communication* with *Protection Officers*;
- make sure *Protection Officers* keep the *Tracks* between worksites and protecting *Locations Clear* of *Obstructions*;
- coordinate the *Protection* of all worksites within the limits of the *LPA*; and
- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place.

4.2 Change of Possession Protection Officer

An outgoing *Possession Protection Officer* must tell an incoming *Possession Protection Officer* about the worksite *Protection* arrangements.

The incoming *Possession Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover of the *LPA*.

4.3 Protection Officer

There must be a *Protection Officer* present at the worksite for the period of the work.

A *Protection Officer* must:

- *Effectively Communicate* with *Possession Protection Officer*;
- Comply with the *Possession Protection Officers* instruction.
- 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*;
- be satisfied that other work will not interfere with *Protection* duties.
- make sure the *Tracks* between worksites and protecting *Locations* are kept *Clear* of *Obstructions*;
- make sure that worksites are *Protected* against the *Unauthorised* entry and exit of *Rail Traffic*; and
- tell workers about the *locations* of *Safe Places* before work begins; and
- tell workers if the *Protection* arrangements change.

4.4 Change of Protection Officer

The outgoing *Protection Officer* must tell the incoming *Protection officer* about the current worksite *Protection* arrangements.

Before taking charge of the worksite, the incoming *Protection Officer* must:

- confirm the current worksite *Protection* arrangements;
- make a *Permanent Record* of the time of the worksite handover; and
- confirm that the *Possession Protection Officer* has noted the changed contact arrangements.

The *Possession Protection Officer* must record the incoming *Protection Officer's* name and contact details in the *LPA* Worksite Permit (Master)

.

5. Obtaining an LPA

The *Network Controller* and the *Possession Protection Officer* must confirm and record on the *Work on Track Authority* form:

- the number of the *Special Train Notice (STN)*, *Advertising* the *LPA*;
- the *LPA* limits;
- a unique identifying number;
- that *Blocking Facilities* have been applied to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- *the Points* to be clipped, in accordance with Procedure 9000 Clipping Points, if required;
- the duration of the *LPA*;
- the *Possession Protection Officer's* name and contact details;
- the name of the *Issuing Network Controller*;
- the time of *Issue*; and
- the date of *Issue*.

The *Possession Protection Officer* must repeat the details back to the *Network Controller*.

Where a *Departure Signal* is the *Protecting Signal*, the *Possession Protection Officer* must arrange for the removal and *Securing* of the *Half Pilot Key* for that signal.

When the *LPA* is *Issued* the *Possession Protection Officer* must ensure the required *Protection* is in place before work commences.

The *Network Controller* must make sure that other affected *Network Controllers* are aware of the *Protection*.

6. Protection

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

The *Network Controller* must apply *Blocking Facilities*, where available, to prevent *Unauthorised Rail Traffic* from entering the *LPA*. Where required, the *Possession Protection Officer* must place *In-Field Protection* at all points of entry to the *LPA*.

In-Field Protection can be one of the following:

- *Railway Track Signal's (RTS)* and *Handsignaller*;
- *RTS* and STOP sign;
- *Track Closed Warning Device*; or
- *Points* clipped to prevent *Rail Traffic* entry.

NOTE: *RTS* must be use in accordance with Procedure 9004 Using Railway Track Signals.

In-Field Protection is not required between the worksites and the end of a *Terminal Line* if the *Network Controller* tells the *Possession Protection Officer* that there are no planned *Rail Traffic* movements from that direction.

Where there is *Stabled Rail Traffic* not associated with the *LPA*, within the limits of the *LPA*, the *Possession Protection Officer* must place *In-Field Protection* to prevent entry in to the *LPA*.

The distance between the *Protecting Signal*, or signs designating, the limits of the *LPA* and a *Fixed Worksite* must not be less than 500 metres unless:

- *Points* can be *Secured* to prevent access to the portion of *Track* within the *LPA* limits; or
- a *Work on Track Authority Adjoining* the entry-end limit of that *LPA* has also been authorised for the period of the work.

6.1 Protection for Rail Traffic Crossing the LPA

The *Possession Protection Officer* must:

- Make sure that *In-Field Protection* is placed on the:
  - closed line 500 metres *Clear* of the *Crossover* or turnout; and
  - *Converging* line that allows entry to the *LPA* area, at the signal protecting entry into the closed line.

If *Rail Traffic Crossing* is authorised the *Network Controller* must get the *Possession Protection Officer's* permission for the move.

Where the *Possession Protection Officer* authorises *Rail Traffic* movements across the *LPA* the *Possession Protection Officer* must:

- arrange the removal of *Protection* at the entry point of the *Route*; and
- when *Rail Traffic* has cleared the entry point make sure *Protection* is replaced.

6.2 Adjacent Line

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

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

6.3 Protecting Multiple Worksites

The *Possession Protection Officer* must:

- make sure the *Protection Officers* protect their worksites correctly; and
- tell the *Protection Officers* if changes are required to worksite *Protection* and make sure the changes are carried out.

In-Field Protection can be one of the following:

- *RTS* and *Handsignaller*;
- *RTS* and STOP sign;
- *RTS* and rail clamped STOP sign; or
- *Track Closed Warning Device.*

Protection Officers must make sure that *In-Field Protection* is placed on all *Rail Traffic* approaches to the worksite: Figure 3001-2 Example of protection arrangements for individual worksites more than a 1000 metres apart.

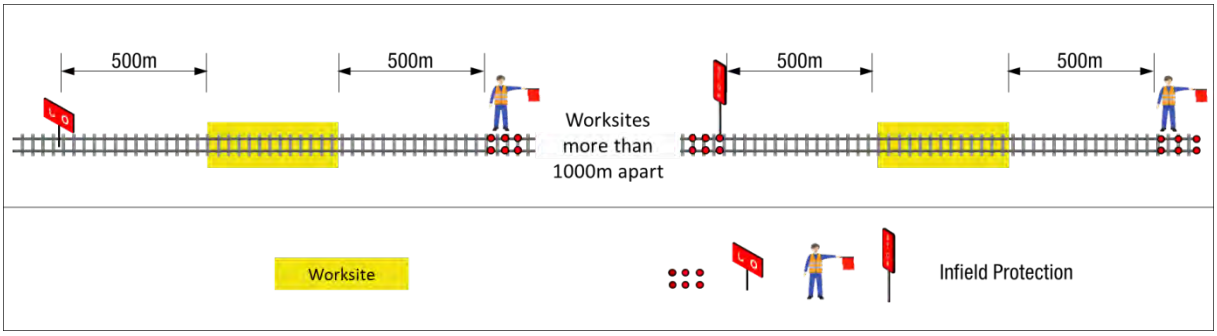


Figure 3001-3 Example of protection arrangements for multiple worksites more than 500 metres but less than 1000 metres apart.

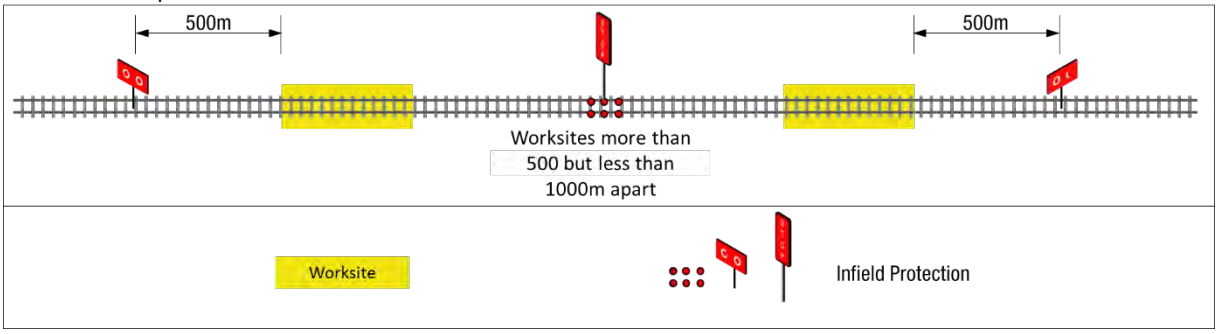
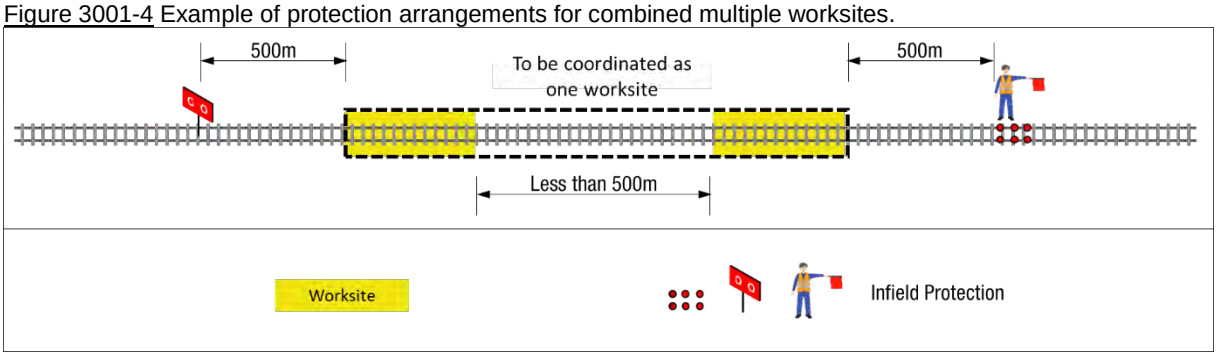


Figure 3001-4 Example of protection arrangements for combined multiple worksites.



6.3.1 Compiling and Issuing LPA Worksite Permits

If an *LPA* involves one worksite only, an *LPA* Worksite Permit is not required.

Before work starts on the second and subsequent worksites, those *Protection Officers* must have an *LPA* Worksite Permit for the work they will supervise.

The *Possession Protection Officer* must:

- fill out an *LPA* Worksite Permit;
- record the details of the worksite including;
  - the worksite limits;
  - the intended start and finish times for the work;
  - if *Rail Traffic* movements are associated with the worksite;
  - the type and *Location* of *Protection*; and
  - the *Protection Officer's* name and contact details;
- make sure the *Protection Officer* has signed the *LPA* Worksite Permit; and
- record the *LPA* Worksite Permit details in the *LPA* Worksite Permit (Master).

6.3.2 Maintaining the LPA Worksite Permit (Master)

If the *LPA* involves more than one worksite, the *Possession Protection Officer* uses the *LPA* Worksite Permit (Master) to:

- maintain a record of *LPA* Worksite Permits *Issued*; and
- record worksite handovers between *Protection Officers*.

Possession Protection Officer must:

- fill out an *LPA* Worksite Permit (Master) that includes details about the;
  - reference details of the *LPA Advertisement*;
  - intended start and finish times of the *LPA*;
  - *LPA* limits;
  - number of worksites included in the *LPA*; and
- for each worksite, record;
  - the worksite limits;
  - the *Protection Officer's* name and contact details;
  - if *Rail Traffic* movements are associated with the worksite;
  - the intended start and finish times for the work;
  - the time and date when the *LPA* Worksite Permit is *Issued*; and
- if the *Protection Officer* changes, record the;
  - time of handover; and
  - incoming *Protection Officer's* name and contact details.

6.3.3 Extending the LPA Worksite Permit Time

If the work will not be completed within the specified time the *Protection Officer* must get approval from the *Possession Protection Officer* for an extension of time.

If the *Possession Protection Officer* agrees to an extension, the *Possession Protection Officer* must record the:

- new worksite end time; and
- time the extension was agreed.

6.3.4 Fulfilling a LPA Worksite Permit

When the work has been completed the *Protection Officer* must make sure:

- that *Rail Traffic* and equipment is *Clear* of the line;
- that the workgroup has cleared the worksite;
- that *In Field Protection* and *Points* clips have been removed;
- the portion of *Track* included in the worksite permit has been *Certified* as available for use;
- the *Possession Protection Officer* is advised about operating restrictions that have been placed or removed; and
- the *LPA* Worksite Permit is *Fulfilled*.

The *Possession Protection Officer* must:

- use the *LPA* Worksite Permit (Master) to record that the *LPA* Worksite Permit has been *Fulfilled*; and
- ensure all Worksite Permits are *Fulfilled* before *Fulfilling* the *LPA*.

7. Rail Traffic

Only *Rail Traffic* associated with the *LPA* may enter the limits of the *LPA*.

Other *Rail Traffic* may cross the *LPA* to enter or exit a *Running Line*, *Siding* or *At Grade Rail Crossing*, but only with the *Possession Protection Officer's* agreement.

Before entering the *LPA*, *Rail Traffic Crews* must verify with the *Possession Protection Officer* or *Delegate* that the *LPA* is *In-Effect*.

7.1 Rail Traffic Entering or Travelling Within the LPA Limits

The *Possession Protection Officer* or *Delegate* must manage all *Rail Traffic* movement within the *LPA*.

Where a *Pilot* is used, the *Possession Protection Officer* or a *Delegate* must act as the *Pilot*.

The *Possession Protection Officer* must make sure that *Rail Traffic* associated with the *LPA* does not exceed the limits of the *LPA*.

Rail Traffic that is associated with the *LPA*, entering and *Travelling* within the *LPA* limits must:

- be *Piloted*; or
- receive written or verbal instructions from the *Possession Protection Officer*.

7.2 Fixed Signals

Fixed Signals within the limits of the *LPA* must, where possible, be placed to PROCEED for *Rail Traffic* movements.

Where *Fixed Signals* cannot be placed to PROCEED for *Rail Traffic* movement, they must be passed in accordance with Rule 6013 Passing Fixed Signals at Stop.

NOTE: Inside an LPA, the *Possession Protection Officer* must *Authorise* all *Rail Traffic* movements past *Fixed Signals* and would request the *Network Controller* to place *Fixed Signals* at PROCEED, the *Network Controller* can only place *Fixed Signals* at PROCEED on the request of *the Possession Protection Officer.*

7.3 Rail Traffic Departing the LPA

Rail Traffic may depart from the limits of an *LPA* only on the authority of the *Network Controller*.

8. Communications with Network Control

The *Possession Protection Officer* must be the only point of contact between the *Network Controller* and work groups for matters of worksite *Protection*.

The *Possession Protection Officer* must tell affected *Network Controllers* about:

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

The *Possession Protection Officer* must if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Possession Protection Officer* has not requested and extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

9. Fulfilling the LPA

Before *Fulfilling* the *LPA* the *Possession Protection Officer* must make sure and tell the *Network Controller* that:

- *Associated Rail Traffic* and all equipment has cleared the *Track*;
- all work groups have cleared the worksites;
- *In-Field Protection* has been removed;
- signals that were affected have been restored for normal use; and
- the portion of *Track* included in the *LPA* is *Certified* as available for use.

The *Possession Protection Officer* and the *Network Controller* must *Fulfil* the *LPA*.

The *Network Controller* must confirm with the *Possession Protection Officer* that:

- *Blocking Facilities* can be removed; and
- in *Single Line Automatic Signalling Territory*, the *Half Pilot Keys* have been replaced.

NOTE: The *Network Controller* must test the *Departure Signals* after *Half Pilot Keys* have been replaced before the *Possession Protection Officer* leaves the site. Testing of signals must be carried out in accordance with Rule 6005 Fixed Signals.

The *Network Controller* must advise other affected *Network Controllers* that the *LPA* has been *Fulfilled*.

The *Possession Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

9.1 Work to Continue Under Another Work on Track Authority

Where arrangements have been made to continue work under another *Work on Track Authority* the *Protection Officer* must ensure that the *Protection* applied for the *LPA* is not removed until the new *Work on Track Authority* is *Issued* and the required *Protection* for that new *Authority* is in place.

The *Network Controller* must ensure that the *Track* within the limits of the proposed *Work on Track Authority*:

- is *Clear* of *Rail Traffic*; or
- is only occupied by *Associated Rail Traffic* permitted under that *Authority*.

10. Keeping Records

Network Controllers and the *Possession Protection Officer* must keep *Permanent Records* about the details of the *LPA*, including *Protection* arrangements and changes to the worksite *Protection*.

11. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

6005 Fixed Signals

6013 Passing Fixed Signals at Stop

9000 Clipping Points

9004 Using Railway Track Signals.

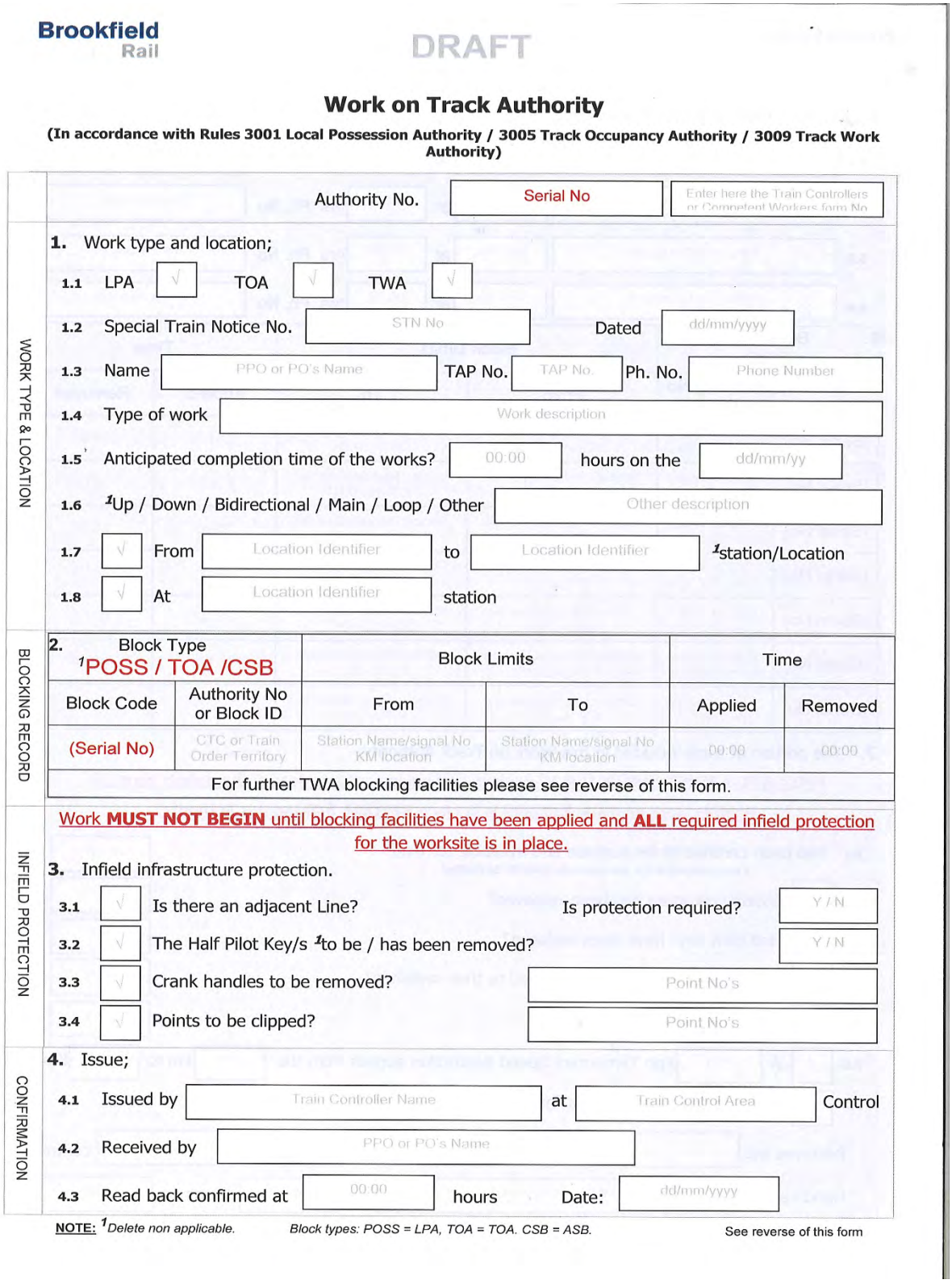
9010 Protecting Work from Rail Traffic on Adjacent Lines.

12. Effective Date

4 May 2016

13. Attachments

Work on Track Authority form (front).



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Work on Track Authority

(In accordance with Rules 3001 Local Possession Authority / 3005 Track Occupancy Authority / 3009 Track Work Authority)

Authority No. Serial No | Enter here the Train Controllers or Competent Workers form No

WORK TYPE & LOCATION

1. Work type and location;

1.1 LPA [√] TOA [√] TWA [√]

1.2 Special Train Notice No. STN No Dated dd/mm/yyyy

1.3 Name PPO or PO's Name TAP No. TAP No. Ph. No. Phone Number

1.4 Type of work Work description

1.5 Anticipated completion time of the works? 00:00 hours on the dd/mm/yy

1.6 [1]Up / Down / Bidirectional / Main / Loop / Other Other description

1.7 [√] From Location Identifier to Location Identifier [1]station/Location

1.8 [√] At Location Identifier station

BLOCKING RECORD

2. Block Type [1]POSS / TOA /CSB

Block Code	Authority No or Block ID	Block Limits: From	Block Limits: To	Time: Applied	Time: Removed
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00

For further TWA blocking facilities please see reverse of this form.

INFIELD PROTECTION

Work **MUST NOT BEGIN** until blocking facilities have been applied and **ALL** required infield protection for the worksite is in place.

3. Infield infrastructure protection.

3.1 [√] Is there an adjacent Line? Is protection required? Y / N

3.2 [√] The Half Pilot Key/s [1]to be / has been removed? Y / N

3.3 [√] Crank handles to be removed? Point No's

3.4 [√] Points to be clipped? Point No's

CONFIRMATION

4. Issue;

4.1 Issued by Train Controller Name at Train Control Area Control

4.2 Received by PPO or PO's Name

4.3 Read back confirmed at 00:00 hours Date: dd/mm/yyyy

NOTE: [1]*Delete non applicable.* *Block types: POSS = LPA, TOA = TOA. CSB = ASB.* See reverse of this form

Work on Track Authority form (rear)

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PERSONNEL CHANGES

5. Worksite Protection Officer changes;

5.1	PPO, or PO's name	TAP No.	at	00:00	hrs	Ph. No	Phone Number
5.2	PPO, or PO's name	TAP No.	at	00:00	hrs	Ph. No	Phone Number
5.3	PPO, or PO's name	TAP No.	at	00:00	hrs	Ph. No	Phone Number
5.4	PPO, or PO's name	TAP No.	at	00:00	hrs	Ph. No	Phone Number

ADDITIONAL TWA BLOCKING RECORDS

6. Block Type CSB		Block Limits		Time	
Block Code	Authority No or Block ID	From	To	Applied	Removed
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00
(Serial No)	CTC or Train Order Territory	Station Name/signal No KM location	Station Name/signal No KM location	00:00	00:00

HAND BACK

7. The portion of track included in this Work on Track Authority;

PPO's & PO's **MUST CHECK** that all workers and equipment are clear of the danger zone OR another work on track Authority is in place **BEFORE** fulfilling this Authority.

7.1 Has been certified fit for purpose and available for use? Y / N

If answered NO to 7.1, this Authority CANNOT be fulfilled.

7.2 √ Infield protection has been removed? Y / N

7.3 √ Half pilot keys have been replaced? Y / N

7.4 √ Crank handles have been returned to their switches? Y / N

7.5 √ Point clips have been removed? Y / N

7.6 √ A [Kph] Kph Temporary Speed Restriction applies from the [Km] km to [Km] Km

7.7 √ Temporary Speed Restriction signs [1]have been / will be erected?

Received by: [Train Controller Name] at [Train Control Area] control

Hand back by [PPO or PO's Name] at [00:00] hours on [dd/mm/yyyy]

NOTE: [1]*Delete non applicable.* *Block types: POSS = LPA, TOA = TOA. CSB = ASB.*

Network Safeworking Rules and Procedures

Track Occupancy Authority

Rule Number: 3005

Brookfield Rail

Version 1.02, 1 April 2017

Track Occupancy Authority

Rule Number: 3005

Document Control Identification

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Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
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Authorisation

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Brookfield Rail
1 April 2017

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Table of Contents

Glossary for this Rule

Adjacent	Near to, close to, parallel to.
Advertise	To give written or electronic notice, usually in advance, of planned activities.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Associated Rail Traffic	Rail traffic that performs track maintenance or construction tasks for the work.
At Grade Rail Crossing	A point where two or more railway lines cross over at the same elevation, commonly known as a "Diamond Crossing".
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Blocking Facilities	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Centralised Traffic Control (CTC)	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
Centralised Traffic Control (CTC) Territory	The portions of line where the Centralised Traffic Control system of Safeworking is used.
Certified	To classify infrastructure or rolling stock as fit for purpose.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Controlled Absolute Signal	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Delegate	A Competent Worker authorised and designated to act in place of another.
Departure Signal	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.

Exclusive Occupancy	Sole occupancy of track within defined limits.
Fixed Signals	A signal that is located permanently near the line.
Fulfil	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.
Half Pilot Keys	A metal key located at the end of a single line CTC section and interlocked with the Departure signals' circuits. Two half pilot keys can be joined to provide a full pilot key for Pilot Key Working through the section.
Handsignaller	A Competent Worker who gives handsignals to rail traffic crew
In-Effect	Activate, become current, in force.
In-Field Protection	One or more devices approved by Brookfield Rail that provide warning to protect rail traffic crew and workers. The device or devices may be used in conjunction with signalling or blocking facilities.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Network Controllers	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Pilot	To direct or guide rail traffic crews and tell them about local conditions and operating restrictions on running lines and at worksites.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Protecting Signals	A Controlled Absolute Signal that is held and maintained at Stop to prevent rail traffic entry into a worksite.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).

Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Railway Track Signal's (RTS)	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.
Restrained	To prevent movement of rail traffic with signals, signalling equipment, blocking facilities, or the issue of a written warning.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Siding	A portion of track where vehicles can be placed clear of the running lines. Also see intermediate siding.
Single Line Automatic Signalling	The portions of line where the Single Line Automatic Signalling system of Safeworking is used.
Special Train Notice(STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Stabled	To leave rail traffic unattended and secured, usually in a siding.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.

Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Closed Warning Device	A Brookfield Rail approved Stop sign designed to lock into the gauge as part of in-field protection.
Track Occupancy Authorities (TOA)	An Authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
Track Vehicle	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Train Order	An authority issued by the Network Controller for the movement of rail traffic.
Travel	Planned or purposeful movement from one location to another.
Unauthorised	Not given approval, or exceeding the limit of authority.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1 Purpose

This Rule details the protocols for *Issuing* and using *Track Occupancy Authorities (TOA).* These *Authorities* are used to close a defined portion of *Track* for a specified period.

2 General

Only *Network Controllers* may authorise a *TOA* for *Track* under their control.

A *TOA* is *Issued* to the *Protection Officer* and gives *Exclusive Occupancy* unless issued in accordance with Section 3.1 of this rule.

The *Protection Officer* applying this Rule must have a minimum of *Protection Officer* Level 2 (PO2) *Competency* in accordance with Rule 1004 Track Access Accreditation.

A single work group, including that group's equipment, and *Associated Rail Traffic*, may occupy the portion of *Track* defined by the *TOA*.

The *Track* may be broken or *Obstructed*.

3 Authorisation

Before authorising the *TOA*, the *Network Controller* must make sure that:

- another *Work on Track Authority* is not in use within the proposed limits;
- approaching *Rail Traffic* can be *Restrained* at the ends of the *Section* that includes the proposed limits;
- *Stabled Rail Traffic* not associated with the *TOA*, but is within the limits of the *TOA*, must not be authorised to move;
- *Rail Traffic* associated with the *TOA* within the limits has been identified and is being managed as agreed by the *Protection Officer* and the *Network Controller*;
- the *Protection Officer* knows about any existing obstructions; and
- *Blocking Facilities* have been applied in accordance with Rule 6003 Blocking Facilities to prevent *Unauthorised Rail Traffic* entry into the proposed limits.

The *Network Controller* must confirm with the *Protection Officer* the:

- Name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - a *Points* number;
  - a signal number;
  - an observance of *Points* or signal *Aspect* change;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.

3.1 Authorising a TOA where rail traffic is holding a Unidirectional Authority.

A TOA may be authorised when *Rail Traffic* holding a *Uni-Directional Authority* has *Cleared* the limits of the proposed worksite by confirming:

- with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track Vehicle* movement;
- with the *Rail Traffic Crew*, the *Location* of their *Rail Traffic*; or
- that the *Section* is *Clear*.

4 Protection Officer

4.1 Protection Officer

There must be a *Protection Officer* present at the worksite until the TOA is *Fulfilled* unless otherwise approved by the *Manger Network Operations*.

A *Protection Officer* 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*;
- make sure the *Tracks* between the worksite and protecting *Locations* remain *Clear* of obstructions;
- make sure that the worksite is *Protected* against the *Unauthorised* entry or exit of *Rail Traffic*; and
- tell workers about the *Locations* of *Safe Places*.

4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements;
- confirm with the *Network Controller* the *TOA Authority* number; and
- make a *Permanent Record* of the handover of the *TOA*.

5 Obtaining a TOA

The *Network Controller* and the *Protection Officer* must confirm and record on the *TOA form*:

- the number of the *Special Train Notice (STN) Advertising* the *TOA*;
- the *TOA* limits;
- the unique identifying number;
- that *Blocking Facilities* have been applied to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- in *Single Line Automatic Signalling Territory*, that the *Half Pilot Keys* have been removed from both ends of the affected *Section*;
- the *Points* to be clipped, in accordance with Procedure 9000 Clipping Points, if required;
- the anticipated duration of the *TOA*;
- the *Protection Officer's name* and contact details;
- the name of the *Issuing Network Controller*;
- the time of *Issue*; and
- the date of *Issue*.

The *Protection Officer* must repeat the details of the *TOA* back to the *Network Controller*.

When the *TOA* is *Issued* the *Protection Officer* must ensure the required *Protection* is in place before work commences.

The *Network Controller* must make sure that other affected *Network Controllers* are aware of the *Protection*.

6 Protection

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

The *Network Controller* must apply *Blocking Facilities*, where available, to prevent *Unauthorised Rail Traffic* from entering the *TOA*. Where required, the *Protection Officer* must place *In-Field Protection* at all points of entry to the *TOA*.

6.1 In-Field Protection

In-Field Protection can be one of the following:

- *Railway Track Signal's (RTS)* and *Handsignaller*;
- *RTS* and a STOP sign;
- *Track Closed Warning Device*; or
- *Points* clipped to prevent *Rail Traffic* entry.

NOTE: *RTS* must be used in accordance with Procedure 9004 Using Railway Track Signals.

6.2 Terminal Lines

In-Field Protection is not required between the worksites and the end of a Terminal Line if the *Network Controller* tells the *Protection Officer* that there are no planned *Rail Traffic* movements from that direction.

Where there is *Stabled Rail Traffic* not associated with the *TOA*, within the limits of the *TOA*, the *Protection Officer* must place *In-Field Protection* to prevent entry in to the *TOA*.

6.3 Centralised Traffic Control (CTC) Territory

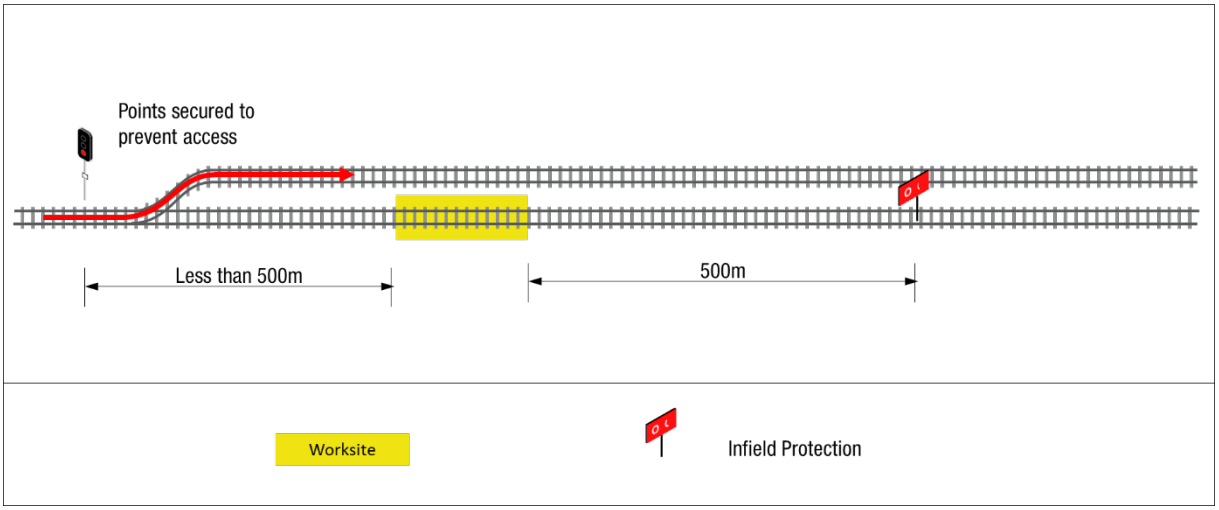
Protecting Signals must be placed to STOP with *Blocking Facilities* applied and *In-Field Protection* placed:

- at that *Protecting Signal*; or
- at least 500 metres from the worksite in such a position that any *Rail Traffic* entering the *TOA* limits must pass over that *In-Field Protection*.

Where a *Departure Signal* is the *Protecting Signal* the *Protection Officer* must also take possession of the *Half Pilot Key*.

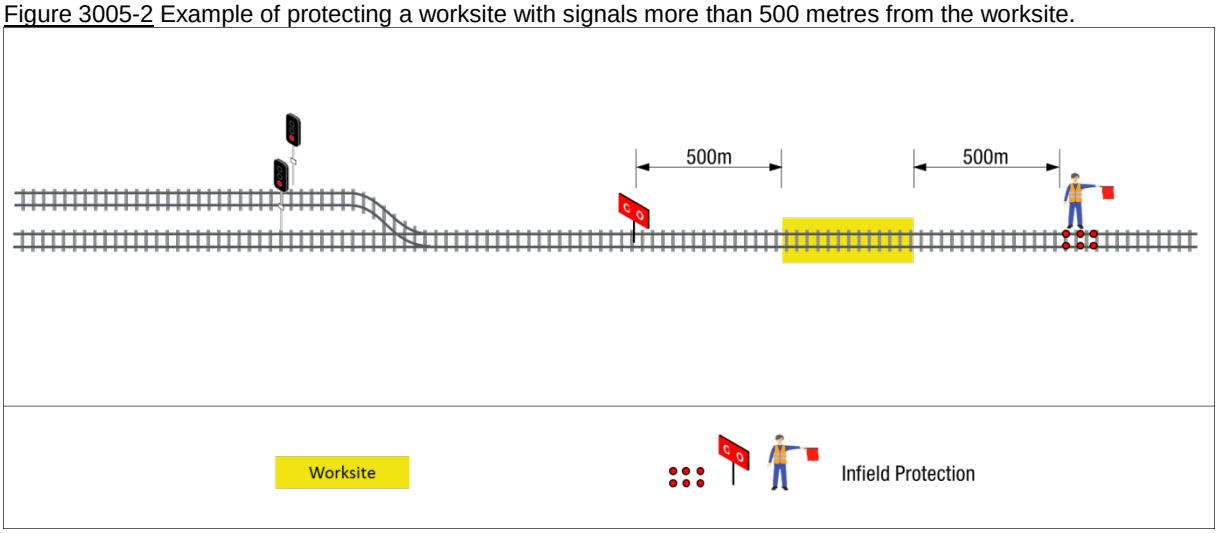
If a *Controlled Absolute Signal* less than 500 metres from the worksite is used to prevent access to the portion of *Track* within the *TOA* limits, and a set of *Points* is available for a different *Route*, then set and *Secure* the *Points* for the different *Route*.

Figure 3005-1 Example of a protecting signal less than 500 metres from the worksite and points secured for a different route.



If *Points* cannot be *Secured* for a different *Route*, a *Controlled Absolute Signal* at least 500 metres from the worksite must be used.

Figure 3005-2 Example of protecting a worksite with signals more than 500 metres from the worksite.



6.4 Train Order Territory

Where available, *Blocking Facilities* must be applied to the *Train Order* System and *In-Field Protection* placed at the entry to the *TOA* limits.

Figure 3005-3 Example of protection arrangements for an individual worksite on a single line

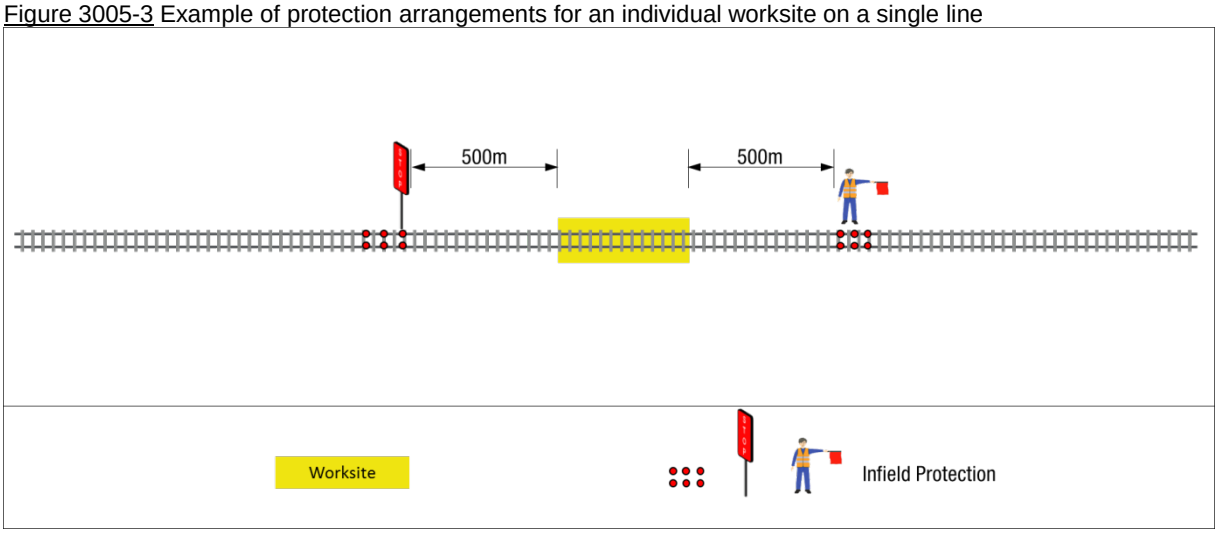
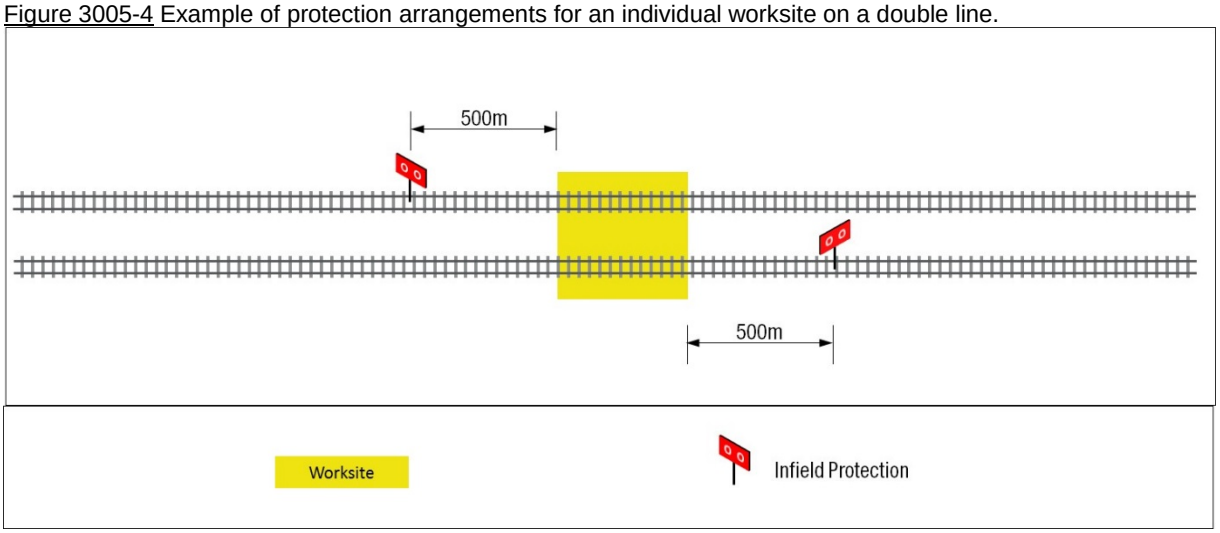


Figure 3005-4 Example of protection arrangements for an individual worksite on a double line.



6.5 Adjacent Line

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

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

7 Rail Traffic

Only *Rail Traffic* associated with the *TOA* may enter the limits of the *TOA unless the TOA has been suspended in accordance with section 8 of this rule*.

Other *Rail Traffic* may cross the *TOA* to enter or exit a *Running Line*, *Siding* or *At Grade Rail Crossing*, but only with the *Protection Officer's* agreement.

Before entering the *TOA*, *Rail Traffic Crews* must verify with the *Protection Officer* that the *TOA* is *In-Effect*.

7.1 Rail Traffic Entering or Travelling Within the TOA Limits

The *Protection Officer* must manage all *Rail Traffic* movement within the *TOA*.

Where a *Pilot* is used, the *Protection Officer* or a *Delegate* must act as the *Pilot*.

The *Protection Officer* must make sure that *Rail Traffic* associated with the *TOA* does not exceed the limits of the *TOA*.

If Temporary Speed Restriction signs have not been erected, *Rail Traffic*, entering and *Travelling* within the *TOA* limits must:

- be *Piloted*; or
- Receive written or verbal instructions from the *Protection Officer*.

7.2 Fixed Signals

Fixed Signals within the limits of the *TOA* must, where possible, be placed to PROCEED for *Rail Traffic* movements.

Where *Fixed Signals* cannot be placed to PROCEED for *Rail Traffic* movement, they must be passed in accordance with Rule 6013 Passing Fixed Signals at Stop.

NOTE: Inside a TOA, the *Protection Officer* must *approve* all *Rail Traffic* movements passed *Fixed Signals* and would request the *Network Controller* to place *Fixed Signals* at PROCEED, the *Network Controller* can only place *Fixed Signals* at PROCEED on the request of the *Protection Officer*..

7.3 Rail Traffic Departing the TOA

Rail Traffic may depart the limits of the *TOA* only on the authority of the *Network Controller*.

8 Communications with Network Control

The *Protection Officer* must be the only point of contact between *Network* Control and work groups for matters of worksite *Protection*.

The *Protection Officer* must tell affected *Network Controllers* about:

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

The Protection Officer must, if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the Protection Officer has not requested an extension of time the *Network* Controller must act in accordance with Rule 4017 Overdue Occupancies.

9 Suspending a TOA

A *TOA* is suspended when the *Protection Officer* tells the *Network Controller* that:

- work sites is clear of workers, tools and equipment, including any *Associated Rail Traffic*;
- *In-Field Protection* has been removed;
- *Half Pilot Keys* have been replaced, if necessary;
- the portion of track included in the *TOA* has been confirmed as fit for the *Rail Traffic* passage; and
- *Blocking Facilities* can be removed.

The Protection Officer must tell the Network Controller and the Rail Traffic Crew about operating restrictions that have been placed or removed in accordance with section 7.1 of this rule.

10 Reinstating a TOA

The *TOA* can be reinstated after the rear of the *Rail Traffic* has cleared the section or the worksite and the *Rail Traffic* is not returning.

The *Protection Officer* must:

- confirm with the *Network Controller* the *TOA* number*;*
- ask the *Network Control* to re-instate the *TOA* and apply new *Blocking Facilities;* and
- ensure all *Protection* has been replaced before allowing workers to re-enter the *Danger Zone.*

11 Fulfilling the TOA

Before *Fulfilling* the *Authority* the *Protection Officer* must make sure and tell the *Network Controller* that:

- *Associated Rail Traffic* and all equipment has *Cleared* the *Track*;
- all work groups have *Cleared* the worksites;
- *In-Field Protection* has been removed;
- if necessary, signals have been restored to normal use; and
- the portion of *Track* included in the *Authority* is *Certified* as available for use.

The *Protection Officer* and the *Network Controller* must *Fulfil* the *Authority*.

The *Network Controller* must confirm with the *Protection Officer* that:

- *Blocking Facilities* can be removed; and
- in *Single Line Automatic Signalling Territory*, the *Half Pilot Keys* have been replaced.

NOTE: The *Network Controller* must test the *Departure Signals* after *Half Pilot Keys* have been replaced before the *Protection Officer* leaves the site.

Testing of signals must be carried out in accordance with Rule 6005 Fixed Signals.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

12 Keeping Records

Network Controllers and the *Protection Officer* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the worksite *Protection* arrangements.

13 References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

6005 Fixed Signals

6013 Passing Fixed Signals at Stop

9000 Clipping Points

9004 Using Railway Track Signals

9010 Protecting Work from Rail Traffic on Adjacent Lines

14 Effective Date

1 April 2017

Network Safeworking Rules and Procedures

Track Work Authority

Rule Number: 3009

Brookfield Rail

Version 1.01, 01 October 2016

Track Work Authority

Rule Number: 3009

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01 October 2016

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Table of Contents

Glossary for this Rule

Adjacent	Near to, close to, parallel to.
Adjoining	In contact with, connected to.
Advertise	To give written or electronic notice, usually in advance, of planned activities.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Associated Rail Traffic	Rail traffic that performs track maintenance or construction tasks for the work.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Blocking Facilities	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Certified	To classify infrastructure or rolling stock as fit for purpose.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Controlled Absolute Signals	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Danger Zone	Everywhere within 3 metres horizontally from the nearest rail and any distance above or below this 3 metres, unless a safe place (see Safe Place) exists or has been created.
Delegate	A Competent Worker authorised and designated to act in place of another.
Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Exclusive Occupancy	Sole occupancy of track within defined limits.
Fulfil	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.

Handsignallers	A Competent Worker who gives handsignals to rail traffic crew
In-Field Protection	One or more devices approved by Brookfield Rail that provide warning to protect rail traffic crew and workers. The device or devices may be used in conjunction with signalling or blocking facilities.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Network Controllers	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Normal Speed	A speed that does not exceed the speed limit currently in effect for the section of line and type of rail traffic.
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Occupancy	Presence of rail traffic or track workers on track.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Protecting Signal	A Controlled Absolute Signal that is held and maintained at Stop to prevent rail traffic entry into a worksite.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Railway Track Signals (RTS)	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.

Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Special Train Notice (STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Stopping Place	A designated location, next to the line, that may allow personnel to enter and leave trains.
Terminal Line	A dead-end line.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Closed Warning Device (TCWD)	A Brookfield Rail approved Stop sign designed to lock into the gauge as part of in-field protection.
Track Work Authorities (TWA).	An authority for non-exclusive occupancy of track by track workers and equipment within specified limits.
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Unauthorised	Not given approval, or exceeding the limit of authority.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1. Purpose

This Rule details the protocols for *Issuing* and using *Track Work Authorities (TWA)*. These *Authorities* are used to *Occupy* a defined portion of *Track* between *Rail Traffic* movements.

2. General

Only *Network Controllers* may authorise a *TWA* for *Track* under their control.

A *TWA* is *Issued* to the *Protection Officer* who must manage the passage of *Rail Traffic* through the worksite.

The *Protection Officer* applying this Rule must have a minimum *Protection Officer* Level 2 (PO2) *Competency* in accordance with Rule 1004 Track Access Accreditation.

A *Track Work Authority* can be used when:

- no *Rail Traffic* has an authority to traverse that section towards the worksite, or
- *Rail Traffic* has passed through the location where the TWA is required.

If a *TWA* is in place, no rail traffic will be issued an authority, or signalled into a section towards the worksite until the TWA has been fulfilled in accordance with the rules. Network control must provide blocking facilities as per Rule 6003 Blocking Facilities.

A TWA does not permit the use of Associated Rail Traffic.

The *Track* may be broken or *Obstructed* but must be restored and *Cleared* for *Rail Traffic* transit as necessary.

The work must be carried out between *Rail Traffic* movements and planned to allow any *Rail Traffic* to continue as scheduled.

3. Authorisation

Before authorising the *TWA*, the *Network Controller* must make sure that:

- another *Work on Track Authority* is not in use within the proposed limits;
- any *Rail Traffic* holding a *Uni-Directional Authority* has *Cleared* the limits of the proposed worksite by confirming:
  - with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track* vehicle movement;
  - with the *Rail Traffic Crew*, the *Location* of their *Rail Traffic*; or
  - that the *Section* is *Clear*.
- the *Protection Officer* knows about any existing obstructions; and

- if required, *Blocking Facilities* have been applied in accordance with Rule 6003 Blocking Facilities to prevent *Unauthorised Rail Traffic* entry into the proposed limits
- The *Network Controller* must confirm with the *Protection Officer* the:
- name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - a *Points* number;
  - a signal number;
  - an observance of *Points* or signal *Aspect* change;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.

Where an existing *Work on Track* method is in place, the *Network Controller* may *Issue* the *TWA* only if the:

- *Protection Officers* have consulted and agree that the existing work can be included in the proposed *Authority*; or
- the existing *Work on Track* method will be *Fulfilled* or ended.

4. Protection Officer

4.1 Protection Officer

There must be a *Protection Officer* present at the worksite for the period of the work.

A *Protection Officer* 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*;
- make sure the *Tracks* between the worksite and protecting *Locations* are kept *Clear* of obstructions;
- make sure that the worksite is *Protected* against the *Unauthorised* entry of *Rail Traffic*; and
- tell workers about the *Locations* of *Safe Places*.

4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Train Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover of the *TWA*.

5. Obtaining a TWA

The *Network Controller* and the *Protection Officer* must confirm and record on the *TWA*:

- the number of the *Special Train Notice (STN) Advertising* the *TWA*;
- the *TWA* limits;
- a unique identifying number;
- if required, that *Blocking Facilities* have been applied to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- the *Points* to be clipped, in accordance with Procedure 9000 Clipping Points, if required;
- the duration of the *TWA*;
- the *Protection Officer's* name and contact details;
- the name of the *Issuing Network Controller*;
- the time of *Issue*; and
- the date of *Issue*.

The *Protection Officer* must repeat the details of the *TWA* back to the *Network Controller*.

When the *TWA* is *Issued*, the *Protection Officer* must ensure the required *Protection* is in place before work commences.

6. Protection

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

Effective Communication must be maintained between the *Protection Officer* and:

- the *Network Controller*;
- *Handsignallers*; and
- approaching *Rail Traffic Crews*.

The Protection Officer must make sure that all points of entry into the worksite is *Protected* against *Unauthorised Rail Traffic*.

The *Protection Officer* may, in agreement with the *Network Controller*, prevent entry to a worksite by *Securing* the *Points* that give access to the worksite.

The *Protection Officer* must make sure that the worksite is *Protected* against *Unauthorised Rail Traffic* entry before the use of the *Points* is restored.

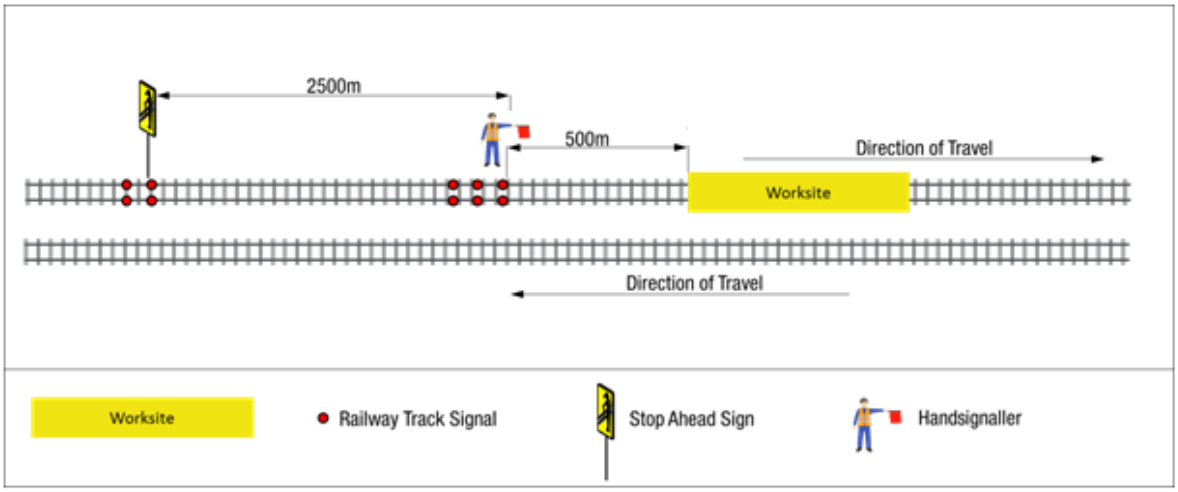
Where the *Protection* arrangements of *Adjoining TWA* worksites overlap, the worksites must be managed as a single worksite under a single *TWA* by the chosen *Protection Officer*.

6.1 Protecting with Handsignaller and STOP AHEAD Sign

A *Handsignaller* and three *Railway Track Signals* must be placed not less than 500 metres from the worksite in the direction of approaching *Rail Traffic*.

A STOP AHEAD sign and two *Railway Track Signals* must be placed 2500 metres from the *Handsignaller* and three *Railway Track Signals* in the direction of approaching *Rail Traffic*.

Figure 3009-1 Protection using a Handsignaller and a STOP AHEAD sign.



6.2 Protecting with STOP or Track Closed Warning Device and STOP AHEAD Signs

A STOP sign and three *Railway Track Signals* or *Track Closed Warning Device* must be placed not less than 500m from the worksite in each direction.

A STOP AHEAD sign and two *Railway Track Signals* must be placed 2500 metres from the STOP sign and three *Railway Track Signals* in the direction of approaching *Rail Traffic*.

Figure 3009-2 Protection using STOP and STOP AHEAD signs.

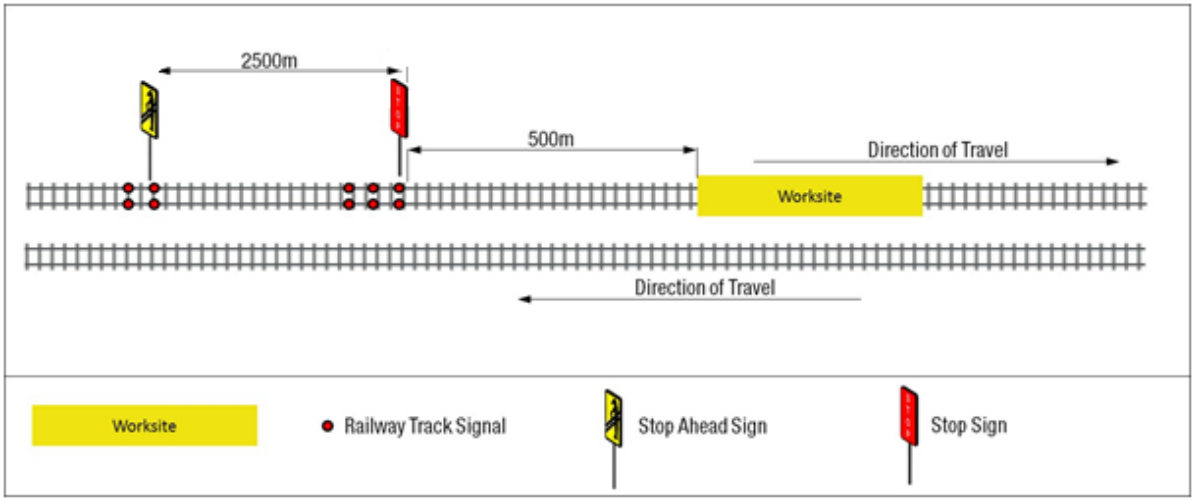
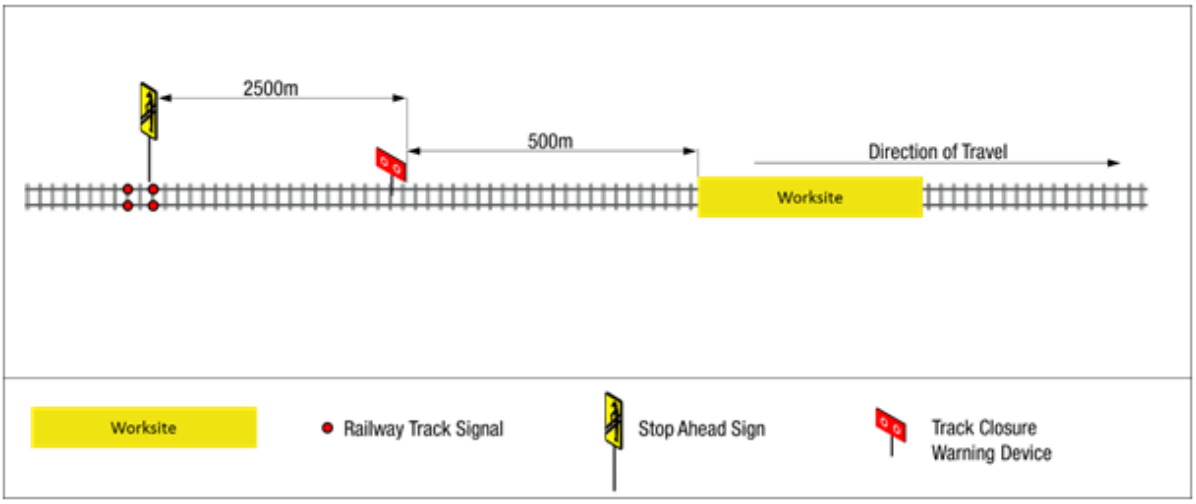


Figure 3009-3 Protection using a TRACK CLOSED WARNING DEVICE and a STOP AHEAD sign.



6.3 Protecting by Setting Signals at STOP

Where *Controlled Absolute Signals* are between 500 metres and 2500 metres of a worksite in the direction of approaching *Rail Traffic* these signals must be used to *Protect* the worksite and a STOP AHEAD sign is not necessary.

NOTE: An Absolute Signal (Intermediate signal or Approach signal) cannot be used as a Protecting signal..

Protecting Signals must be:

- set and kept at STOP with *Blocking Facilities* applied; and
- *Cleared* only if it is safe to allow *Rail Traffic* to pass through the worksite.

One of the following *In-Field Protection* methods must be placed at the *Protecting Signal*:

- a *Handsignaller* and three *Railway Track Signals*;
- a STOP sign and three *Railway Track Signals*; or
- a *Track Closed Warning Device*.

Figure 3009-4 Protection by setting signals at STOP with a Track Closed Warning Device.

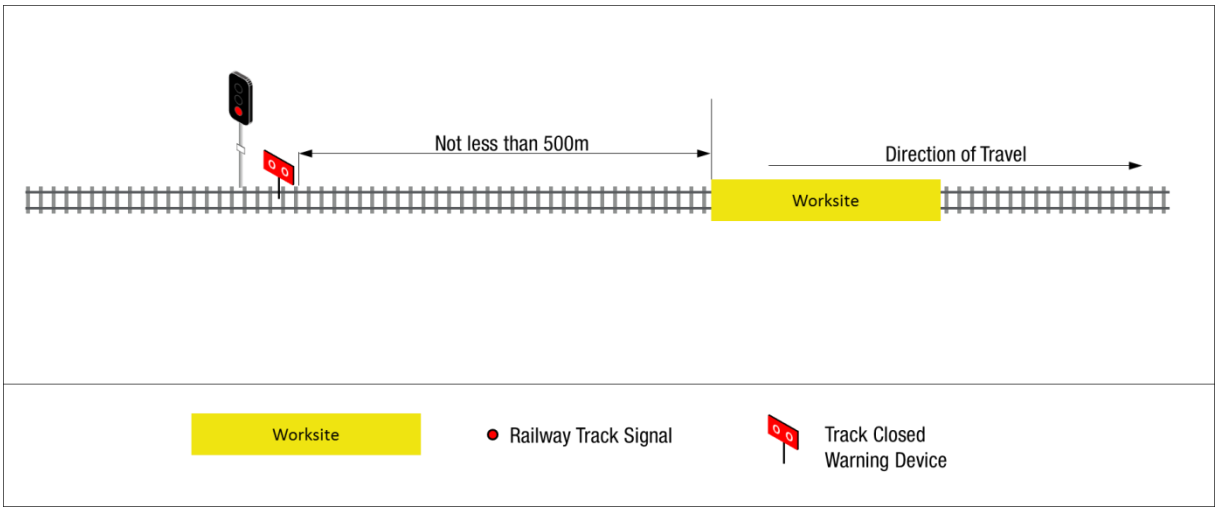


Figure 3009-5 Protection by setting signals at STOP with a STOP sign and three Railway Track Signals

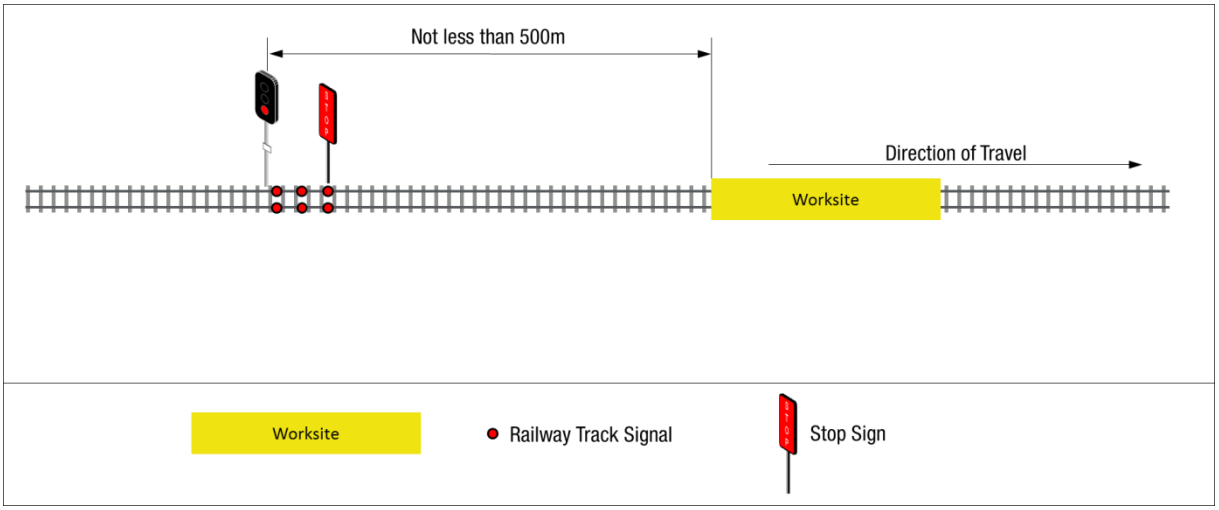
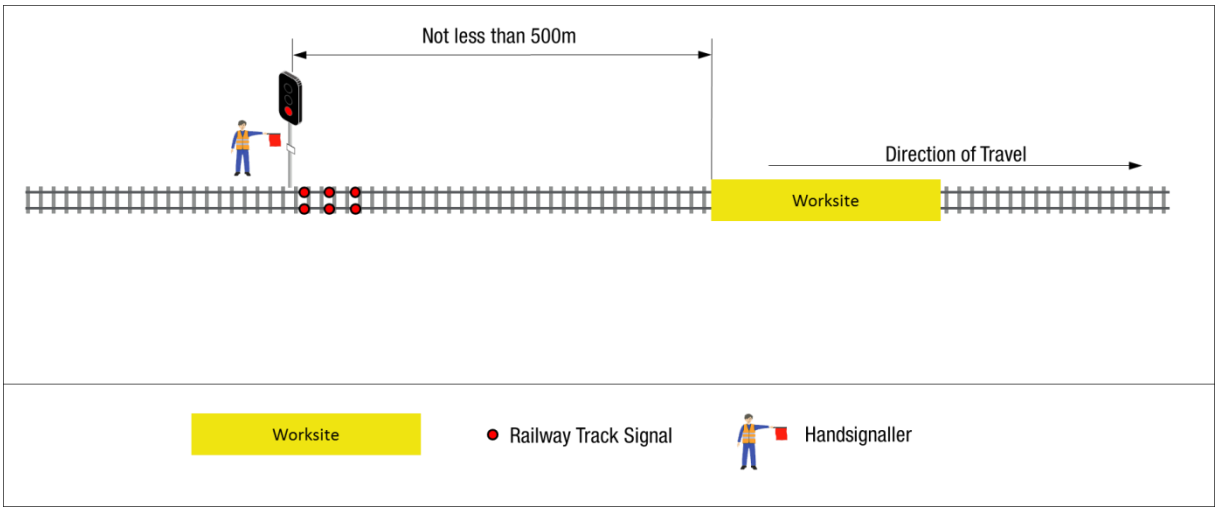


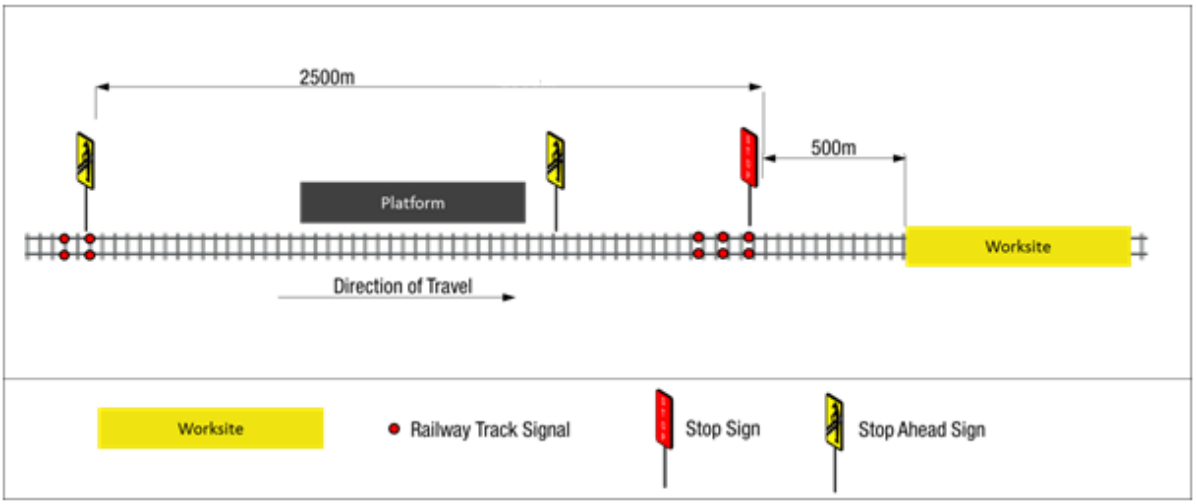
Figure 3009-6 Protection by setting signals at STOP with a Handsignaller and three Railway Track Signals.



6.4 Additional Warning

If a *Stopping Place* is located between the STOP AHEAD sign and the *Handsignaller*, STOP sign, or *Track Closed Warning Device*, an additional STOP AHEAD sign must be placed at the departure end of the *Stopping Place* to remind *Rail Traffic Crews* that a *Handsignaller*, STOP sign, or *Track Closed Warning Device* is ahead.

Figure 3009-7 An additional STOP AHEAD sign placed at the Departure end of the stopping place.



6.5 Affected Signals

Before starting work the *Protection Officer* must tell the *Network Controller* about signals that will or may be affected by the work.

WARNING: An affected signal may not be a *Protecting Signal*.

If an affected signal is within 500 metres of a worksite it cannot be used as a *Protecting Signal*.

Where a *Controlled Absolute Signal* is within 500 metres of a worksite, it must be placed at STOP with *Blocking Facilities* applied.

6.6 Terminal Lines

If the *Network Controller* tells the *Protection* Officer that there are no planned Rail Traffic movements between the worksite and the end of a *Terminal Line*, *Protection* from that direction is not necessary.

6.7 Adjacent Line

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

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

6.8 Joint Occupancy with a Track Occupancy Authority (TOA)

The *Network Controller* may authorise a *TWA* for a portion of *Track* where a TOA is current, provided the Protection limits will not overlap.

The *Network Controller* may *Issue* a *TWA* only if the *Protection Officers* have consulted and agree that a *TWA* may be *Issued*.

7. Rail Traffic

The *Protection Officer* or *Delegate* must manage all *Rail Traffic* movement within the *TWA*.

Before authorising *Rail Traffic* to pass STOP signs, or authorising *Handsignallers* to allow *Rail Traffic* to approach worksites, *Protection Officers* must make sure that:

- workers are in *Safe Places*; and
- the *Track* is unobstructed and safe for the passage of *Rail Traffic*.

NOTE: The *Handsignaller* must comply with Rule 2003 Handsignals and Verbal Commands when authorising *Rail Traffic* movements.

Only *Protection Officers* may tell *Handsignallers* whether to allow *Rail Traffic* to proceed, and at what speed.

The *Protection Officer* must direct *Handsignallers* at *Controlled Absolute Signals* to:

- ask the *Network Controller* to *Clear* the signal; or
- get the *Network Controller* to *Issue* an *Authority* to the *Rail Traffic Crew* to pass the signal at STOP.

7.1 Rail Traffic Clearing Worksites

The *Protection Officer* must advise *Rail Traffic Crews* when their *Rail Traffic* is *Clear* of the worksite and that *Normal Speed* may be resumed.

NOTE: After the passage of *Rail Traffic* through the worksite, and before allowing workers to re-enter the *Danger Zone*, *Protection Officers* must make sure that the *Protection* has been replaced.

8. Communications with Network Control

The *Protection Officer* must be the only point of contact between Network Control and work groups for matters of worksite *Protection*.

The *Protection Officer* must tell affected *Network Controllers* about:

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

The *Protection Officer* must if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

9. Fulfilling the TWA

Before *Fulfilling* the *Authority* the *Protection Officer* must make sure and tell the *Network Controller* that:

- all work groups and equipment have *Cleared* the worksites;
- *Points* securing devices have been removed;
- *In-Field Protection* has been removed;
- if necessary, *Blocking Facilities* can be removed and signals restored to normal use; and
- the portion of *Track* included in the *Authority* is *Certified* as available for use.

The *Protection Officer* and the *Network Controller* must *Fulfil* the *Authority*.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

9.1 Work to Continue Under Another Work on Track Authority

Where arrangements have been made to continue work under another *Work on Track Authority*, the *Protection Officer* must ensure that the *Protection* for the *Authority* is not removed until the new *Work on Track Authority* is *Issued*, and the required *Protection* is in place.

The *Network Controller* must ensure that the *Track* within the limits of the proposed *Work on Track Authority*:

- is *Clear* of *Rail Traffic*; or
- is only *Occupied* by *Associated Rail Traffic* permitted under that *Authority*.

10. Keeping Records

Network Controller and the *Protection Officer* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the worksite *Protection* arrangements.

11. References

1004 Track Access Accreditation

2003 Handsignals and Verbal Commands

4017 Overdue Occupancies

6003 Blocking Facilities

9000 Clipping Points

9010 Protecting Work from Rail Traffic on Adjacent Lines

12. Effective Date

01 October 2016

Network Safeworking Rules and Procedures

Absolute Signal Blocking

Rule Number: 3011

Brookfield Rail

Version 1.01, 01 October 2016

Absolute Signal Blocking

Rule Number: 3011

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Table of Contents

Glossary for this Rule

Absolute Signal Blocking (ASB)	A method used by Competent Workers to carry out work on track using controlled absolute signals set and kept at STOP, without a formally issued work on track authority.
Access	A designated safe way into, along, across or out of the Rail Corridor.
Adjacent	Near to, close to, parallel to.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Blocking Facilities	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Centralised Traffic Control (CTC) Territory	The portions of line where the Centralised Traffic Control system of Safeworking is used.
Centralised Traffic Control (CTC)	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Complete	Rail traffic where the consist has not parted.
Controlled Absolute Signals	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Level Crossing	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).

Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Lookout	A Competent Worker responsible for • keeping watch for approaching rail traffic; and • warning other workers to stand clear of the line before the rail traffic arrives.
Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Protecting Signal	A fixed signal that is held and maintained at Stop to prevent rail traffic entry into a worksite. A signal that protects a train from conflicting movements and/or obstructions.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Traffic	Trains and track vehicle or vehicles travelling on the Network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.

Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track-Circuit Shorting Device	A cable that can be clamped to a line's rails to activate track-circuits.
Track Vehicle	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
Unauthorised	Not given approval, or exceeding the limit of authority.
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1. Purpose

The function of this Rule is to outline the protocols for authorising and using *Absolute Signal Blocking (ASB)* in *Centralised Traffic Control (CTC) Territory*.

2. General

This is a method of working in the *Danger Zone* by maintaining *Controlled Absolute Signals* at STOP to exclude *Rail Traffic* from a portion of *Track.*

The *ASB* method must not be used for work that breaks the *Track* or alters *Track* geometry or structure.

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

The *Protection Officer* applying this Rule must have a minimum *Protection Officer* Level 1 (PO1) *Competency* in accordance with Rule 1004 Track Access Accreditation.

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

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.

ASB may be used only:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using tools which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- work involving light tools powered by a cord or hose (i.e compressed air, gas or electricity);
- for minor signalling maintenance activities;
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *ASB* is used, one worker may work alone. In this case, that worker is also the *Protection Officer*.

The *ASB* method of *Protection* must be applied to *Controlled Absolute Signals* only.

3. Authorisation

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

- a *Track Occupancy Authority* is not in use within the proposed limits;
- any *Rail Traffic* holding a *Uni-Directional Authority* has *Cleared* the limits of the proposed worksite by confirming:
  - with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track Vehicle* movement;
  - with the *Rail Traffic Crew*, the *Location* of their *Rail Traffic*; or
  - that the *Section* is *Clear*.
- stabled *Rail Traffic* that is within the limits of the *ASB*, must not be authorised to move;
- the *Protection Officer* knows about any existing obstructions;
- the *Protecting* signals have been identified; and
- *Blocking Facilities* have been applied in accordance with Rule 6003 Blocking Facilities to prevent *Unauthorised Rail Traffic* entry into the proposed limits.

WARNING: The *Network Controller* must not permit *ASB* if there is any doubt about the *Location* of the proposed worksite.

The *Network Controller* must confirm with the *Protection Officer* the:

- Name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - a *Points* number;
  - a signal number;
  - by the use of a Track Circuit Shorting device
  - an observance of *Points* or signal *Aspect* change;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.

3.1 Joint Occupancy

An ASB cannot be authorised for a portion of track where a Track Occupancy Authority (TOA) is current.

The *Network Controller* may authorise an ASB for a portion of Track where another *ASB or TWA* is current.

The *Network Controller* may Issue the ASB only if the *Protection Officers* have consulted and agree that an ASB may be issued.

NOTE: Where a Local Possession Authority is in place, only the *Possession Protection Officer* for that LPA can approve the work.

4. Protection Officer

A *Protection Officer* is required for the period of the work, except if the *ASB* is used to allow livestock or vehicles to directly cross the *Track*; in these circumstances the *Network Controller* may apply *ASB*.

If authorised by the *Network Controller*, the *Protection officer* must remove and safeguard the *Points* control mechanism or place the *Points* in manual mode.

A *Protection Officer* must:

- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- before work begins, tell workers about the:
  - types and limits of *Protection* in place;
  - *Locations* of *Safe Places*;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- make sure the *Tracks* between worksites and *Protecting Locations* remain *Clear* of obstructions;
- make sure that worksites are *Protected* against the *Unauthorised* entry of *Rail Traffic*; and
- confirm with the *Network Controller* that *Blocking Facilities* have been applied to prevent the *Unauthorised* entry of *Rail Traffic*.

NOTE: A *Protection Officer* must be satisfied that other work will not interfere with *Protection* duties

4.1 Request for ASB from a Person other than a Protection Officer

The *Network Controller* may apply *ASB* to allow livestock or vehicles to directly cross the *Track*.

The *Network Controller* must:

- confirm the *Location* and the work to be done;
- make sure the line is *Clear* between the *Protecting Signals* and the proposed worksite and any *Rail Traffic* that has passed the worksite will not return;
- set the *Protecting Signals* at STOP and apply *Blocking Facilities*;
- advise the person of the arrangements and authorise the work; and
- when told that the area is *Clear*, remove *Blocking Facilities*.

4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover.

5. Obtaining Approval for ASB

The *Network Controller* and the *Protection Officer* must confirm and record on the Blocking Request for *Work on Track* form:

- the *Location* of the work;
- a unique identifying number;
- that *Blocking Facilities* have been applied, or where approved by the *Network Controller*, the *Points* control mechanism has been removed, placing the *Points* into manual mode to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- the blocking *Authority* number from the Train Control System;
- the *Points* to be clipped, in accordance with Procedure 9000 Clipping Points, or placed in manual mode, if required;
- the duration of the work;
- the *Protection Officer's* name and contact details;
- the approving *Network Controller's* name;
- the time of approval; and
- the date of approval.

NOTE: After receiving the Blocking Request form from the *Network Controller* the *Protection Officer* must repeat the details back as per Procedure 9016 Written Authorities and Forms.

When the *ASB* is approved the *Protection Officer* must ensure the required *Protection* is in place before work commences.

6. Protection

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

The *Protection Officer* must arrange for:

- *Controlled Absolute Signals* to be set at STOP with *Blocking Facilities* applied; or
- *Points* control mechanism to be removed or *Points* to be placed in manual mode to set *Controlled Absolute Signals* at STOP.

6.1 Protecting Signal

Where the proposed worksite is within 500 metres of the *Protecting Signal* then:

- two consecutive *Controlled Absolute Signals* must be set at STOP with *Blocking Facilities* applied; or
- one *Controlled Absolute Signal* 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* provided.

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

6.2 Network Controller

The *Network Controller* must confirm with the *Protection Officer* that:

- the protecting *Controlled Absolute Signals* have been set at STOP with *Blocking Facilities* applied;
- the line is *Clear* between the *Protecting Signals* and the proposed worksite; and
- any *Rail Traffic* that has passed *Complete* beyond the worksite will not return.

Network Controllers must not authorise movements into portions of line 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 *Protection Officer* must arrange for *Adjacent* lines to be *Protected* in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

7. Communications with Network Control

The *Protection Officer* must be the only point of contact between Network Control and work groups for matters of worksite *Protection*.

The *Protection Officer* must tell affected *Network Controllers* about:

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

If the work is to exceed the agreed time, the *Protection Officer* must if necessary, seek an extension of time..

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time, the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

8. Ending ASB

Before ending the *ASB* the *Protection Officer* must make sure and tell the *Network Controller* that*:*

- all workers and equipment have *Cleared* the *Danger Zone*;
- *Points* operation has been restored; and
- *Blocking Facilities* can be removed and signals restored to normal use.

The *Network Controller* must make sure that the *Points* and signals are working correctly after the *Points* have been restored to normal operation.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

9. Keeping Records

The Network Controller and the *Protection Officer* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the worksite *Protection* arrangements.

10. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

9000 Clipping Points

9010 Protecting Work from Rail Traffic on Adjacent Lines

9016 Written Authorities and Forms

11. Effective Date

01 October 2016

Network Safeworking Rules and Procedures

Lookout Working

Rule Number: 3013

Brookfield Rail

Version 1.01, 1 October 2016

Lookout Working

Rule Number: 3013

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3013 – Lookout Working		1.00 1.01	31 March 2016 1 October 2016

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Glossary for this Rule

Absolute Signal Blocking (ASB)	A method used by Competent Workers to carry out work on track using controlled absolute signals set and kept at STOP, without a formally issued work on track authority.
Adjacent	Near to, close to, parallel to.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Audible Warning Device	A device, such as a whistle, siren, horn or hooter, used to give warning.
Civil Infrastructure	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Electrical Infrastructure	may include: Equipment and systems for supplying and distributing electricity Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.
Handsignal	A signal given by hand or lights movements, hand signals may be with or without flags.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Light Tool or Device	A tool that can be carried and easily removed by one person and is not powered by cord or hose (e.g. compressed air, gas, electricity).
Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.

Lookout	A Competent Worker responsible for • keeping watch for approaching rail traffic; and • warning other workers to stand clear of the line before the rail traffic arrives.
Lookout Working	A safety measure used by Competent Workers to carry out work on track without a formally issued work on track authority.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Corridor	The land on which a railway is built; comprising all property between property fences, or from the nearest rail in each direction for the distance defined under the Brookfield Rail lease.
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.

Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Sighting Distance	The distance that someone can clearly see along the track.
Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Speed	The allowed maximum speed for a portion of track.
Work on Track	The work performed in the Danger Zone.
Wrong Running Direction	The direction opposite to the normal direction of travel on unidirectional lines.

1. Purpose

The object of this Rule is to detail how *Lookout Working* is to be used to give warning of approaching *Rail Traffic* to workers in or near the *Danger Zone*.

2. General

If the *Absolute Signal Blocking (ASB)* method is practical, this is the preferred method and must be applied in accordance with Rule 3011 Absolute Signal Blocking.

Only *Network Controllers* may authorise *Lookout Working* for *Track* under their control.

Lookouts are the only safety measure used in this method of *Work On Track*.

The *Lookout Working* method must not be used for moving worksites, work that breaks the *Track* or alters *Track* geometry or structure.

Work in the *Danger Zone* using the *Lookout Working* method must be done in daylight hours only, where visibility allows.

The *Protection Officer* applying this Rule must have a minimum *Protection Officer* Level 1 (PO1) *Competency* in accordance with Rule 1004 Track Access Accreditation.

The *Protection Officer* must also obtain information concerning *Rail Traffic* movements for the work *Location*, from the *Network Controller*.

NOTE: Information on the running of *Rail Traffic* is a planning tool only and workers should expect *Rail Traffic* to approach from any direction at any time.

Lookout Working may be used, during daylight hours, for:

- work requiring the use of *Light Tools or Devices* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- inspections in the *Danger Zone*; or
- work conducted in the *Rail Corridor*, but outside of the *Danger Zone*, that may intrude into the *Danger Zone*.

NOTE: A Lookout provided for work outside the Danger Zone that may intrude into the Danger Zone is in place to warn workers before they intrude into the Danger Zone even if there is not rail traffic approaching.

2.1 Tools

Workers using the *Lookout Working* method must ensure any *Light Tools or Devices* used do not interfere with the ability of the worker to respond to a *Lookout's* warning.

3. Authorisation

Before authorising Lookout Working, the Network Controller must make sure that:

- another Work on Track method is not in use at that Location; and
- the Protection Officer knows about any existing obstructions.

The *Network Controller* must confirm with the *Protection Officer* the:

- name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - a *Points* number;
  - a signal number;
  - an observance of *Points* or signal *Aspect* change;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.

Where an existing *Work on Track* method is in place, the *Network Controller* may authorise *Lookout Working* only if the *Protection Officers* have consulted and agree that *Lookout Working* can be done within the existing method.

NOTE: If the existing *Work on Track* method is a *Local Possession Authority (LPA)* the *Possession Protection Officer* must approve the work.

4. Protection Officer

There must be a *Protection Officer* present at the worksite for the period of the work.

A *Protection Officer* must:

- conduct a pre-work *Safety Assessment*;
- 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*;
- tell workers about the *Locations* of *Safe Places*;
- determine the number of *Lookouts* needed to *Protect* the work;
- make sure *Lookouts* do not perform their function continuously at the same *Location* for more than 60 minutes;
- rotate the *Lookouts*, and provide a break equivalent to the period the lookout duty was last performed, before resuming as a *Lookout; and*
- ensure that workers do not perform as a *Lookout* more than 4 hours combined in a 24 hour period.

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

5. Obtaining Approval for Lookout Working

The *Network Controller* and the *Protection Officer* must confirm:

- the *Location* of the work;
- the type of work to be done;
- the duration of the work;
- the *Protection Officer's* name and contact details; and
- the name of the authorising *Network Controller*.

When *Lookout Working* is authorised, the *Protection Officer* must put the required safety measures in place and commence work.

6. Protection

WARNING: Work must not start in the *Danger Zone* until the required safety measures are in place.

6.1 Safe Places

An easily-reached *Safe Place* must be available if the *Lookout Working* method is used.

Workers must immediately be able to remove themselves, tools and materials to a *Safe Place* when told to do so by a *Lookout*.

WARNING: A *Protection Officer* must take into account the extra time for the minimum *Sighting Distance* required when providing touch warnings.

6.2 Noisy Machinery

Where the work involves noisy machinery and the workers are wearing hearing protection, the *Protection Officer* must ensure other workers are positioned to provide a physical warning, by touch, to those workers.

NOTE: The worker providing touch warning must do no work other than providing warning.

The *Lookout* must be visible to the worker at all times.

6.3 Placing Lookouts

The *Protection Officer* must make sure:

- that the *Locations* of *Lookouts* and the visibility conditions give *Lookouts* enough *Sighting Distance* of approaching *Rail Traffic*;
- that *Lookouts* have *Effective Communication* with workers and an *Audible Warning Device*;
- that the *Lookout* has a backup *Audible Warning Device*; and
- that when *Rail Traffic* approaches, *Lookouts* can warn workers in time to allow them to:
  - react to the warning of the approach of *Rail Traffic*; and
  - move themselves and their equipment to a *Safe Place* before the *Rail Traffic* arrives.

Only one *Lookout* in each direction is permitted, distant Lookouts are not permitted.

Where the *Protection Officer* determines that it is safe to use a single *Lookout* to provide warning for both directions the minimum reaction time must be increased from 5 seconds to 15 seconds when calculating the *Sighting Distance*.

6.4 Lookouts

WARNING: *Lookouts* must not use radios or telephones to warn workers.

Lookouts must be alert for *Rail Traffic* which is unexpected or comes from the *Wrong Running Direction*.

Lookouts must wear a high visibility Yellow vest to ensure they are readily identifiable.

Lookouts must:

- agree with the *Protection Officer* about how workers will be warned about the approach of *Rail Traffic*;
- stand or walk in a *Safe Place* where they can see approaching *Rail Traffic*;
- keep a continuous watch for the approach of *Rail Traffic* from any direction;
- remain within sight and hearing or in physical touch of the workers. If you cannot do this safely tell the *Protection Officer*;
- tell the *Protection Officer* if the *Lookout* needs to move from the designated position and only move if all workers and their equipment are in a *Safe Place* or a new *Lookout* is in position; and
- tell the *Protection Officer* if conditions, such as visibility, change.

If visibility conditions deteriorate to where the *Lookout* can no longer maintain *Sighting Distance*, the *Lookout* must warn the workers to get them clear of the *Danger Zone* and then tell the *Protection Officer* of the changed conditions.

WARNING: *Lookouts* must do no work other than look for and give warning to workers about the approach of *Rail Traffic*.

Lookouts must not:

- manage the passage of *Rail Traffic*, or
- do any other work.

6.5 Giving Warning

When *Rail Traffic* approaches the worksite the *Lookout* must immediately warn the workers.

NOTE: Warning must be given as soon as *Rail Traffic* is seen to be approaching even if the *Rail Traffic* has not reached the minimum *Sighting Distance*.

The workers must:

- acknowledge the *Lookout's* warning by raising an arm above their head;
- remove their tools, equipment and materials from the *Track*; and
- move to a position of safety.

Only if all workers and their equipment are in a *Safe Place* can the *Lookout* face the approaching *Rail Traffic* and give an ALL *CLEAR Handsignal*, in accordance with Rule 2003 Handsignals and Verbal Commands, to the *Rail Traffic Crew*.

The *Lookout* must maintain the ALL *CLEAR Handsignal* until the *Rail Traffic* Crew acknowledges the *Handsignal*.

The *Lookout* must make sure that the line is *Clear* before telling the *Protection Officer* that it is safe for work to resume.

6.6 Adjacent Line

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

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

7. Calculating the Minimum Warning Time

WARNING: If the calculated minimum warning times cannot be met or there is any doubt that sufficient *Sighting Distance* is available, then another *Protection* method must be used.

WARNING: When using a single *Lookout* to provide warning for both directions then a minimum of 15 seconds is used for the reaction time.

The minimum warning time required shall be calculated as follows:

- reaction time (minimum 5 seconds);
- time required to move the workers, tools, equipment and materials *Clear* of the *Track* (determined in the test conducted by the *Protection Officer*); plus
- being in a position of safety for a minimum of 10 seconds before *Rail Traffic* arrives.

7.1. Example of How Warning Time is Calculated

Figure 3013-1 Calculation Table

Reaction time	5 Seconds
Time required to move the workers, tools, equipment and materials clear of the track	20 Seconds
Minimum time to be in a position of safety before rail traffic arrives.	10 Seconds
Minimum warning time required.	Total 35 Seconds

The minimum *Sighting Distance* needed to see an approaching movement, so that sufficient warning can be given, is dependent on the minimum warning time required and the maximum *Track Speed*, determined from Figure 3013-2 in section 7.2 and as demonstrated in the following example:

Example: The minimum warning time required in this example is 35 seconds and the maximum *Track Speed* in the area is 120 km/h; therefore the required minimum *Sighting Distance* of approaching *Rail Traffic* from the table in Figure 3013-2 is 1170 metres. The *Lookout* must be positioned to be able to see the approaching *Rail Traffic* at least 1170 metres in order to give the minimum warning time required.

The *Protection Officer* must:

- know the maximum speed for *Rail Traffic* on the portion of line that the work is to take place; and
- conduct a test to determine how long it will take for the workers to remove their equipment and move to the *Safe Place*.

7.2. Minimum Sighting Distance

Figure 3013-2 Sighting Distance table.

	Minimum Warning Time					
Maximum Track Speed	**20 sec**	**25 sec**	**30 sec**	**35 sec**	**40 sec**	**45 sec**
160km/h	890m	1115m	1335m	1560m	1780m	2000m
150km/h	835m	1045m	1250m	1460m	1665m	1875m
140km/h	780m	975m	1170m	1365m	1560m	1750m
130km/h	725m	905m	1085m	1265m	1445m	1625m
120km/h	670m	835m	1000m	1170m	1335m	1500m
110km/h	615m	765m	920m	1070m	1225m	1375m
100km/h	560m	695m	835m	975m	1115m	1250m
90km/h	500m	625m	750m	875m	1000m	1125m
80km/h	445m	560m	670m	780m	890m	1000m
70km/h	390m	490m	585m	680m	780m	875m
60km/h	335m	420m	500m	585m	670m	750m
50km/h	280m	350m	420m	490m	555m	625m
40km/h	225m	280m	335m	390m	445m	500m
30km/h	170m	210m	250m	295m	335m	375m
25km/h	140m	175m	210m	245m	280m	315m
20km/h	115m	140m	170m	195m	225m	250m
15km/h	85m	105m	125m	150m	170m	190m

NOTE: Distances in Figure 3013-2 have been rounded up to the nearest 5m.

8. Communications with Network Control

The *Protection Officer* must be the only point of contact between the *Network Controller* and the work group for matters of worksite *Protection*.

The *Protection Officer* must, if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

8.1 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover of *Lookout Working*.

9. Ending Lookout Working

The *Protection Officer* must make sure, and tell the *Network Controller* that:

- all workers, tools, equipment and materials are *Clear* of the worksite; and
- *Lookout Working* has ended.

10. Keeping Records

The *Network Controller* and the *Protection Officer* must keep *Permanent Records* about the details and changes to the worksite *Protection* arrangements.

11. References

1004 Track Access Accreditation

2003 Handsignals and Verbal Commands

3011 Absolute Signal Blocking

4017 Overdue Occupancies

9010 Protecting Work from Rail Traffic on Adjacent Lines

12. Effective Date

1 Oct 2016

Network Safeworking Rules and Procedures

Infrastructure Booking Advice

Rule Number: 3015

Brookfield Rail

Version 1.0, 31 March 2016

Infrastructure Booking Advice

Rule Number: 3015

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Glossary for this Rule

Advertise	To give written or electronic notice, usually in advance, of planned activities.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Certified	Infrastructure or rolling stock that is fit for purpose.
Civil Infrastructure	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.
Commission	To formally place into active service or use.
Electrical Infrastructure	may include: Equipment and systems for supplying and distributing electricity Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Infrastructure Representative	An authorised Brookfield Rail employee or an organisation contracted to Brookfield Rail, responsible for constructing or maintaining Network infrastructure.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Local Possession Authority (LPA)	An authority that closes a defined portion of track for a specified period.
Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).

Rail Traffic	Trains and track vehicle or vehicles travelling on the Network.
Secure	To safeguard against accidental or unauthorised access or movement.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Special Train Notice (STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Track Occupancy Authority (TOA)	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
Track Work Authority (TWA)	An authority for non-exclusive occupancy of track by track workers and equipment within a defined portion of track for a specified period..
Unauthorised	Not given approval, or exceeding the limit of authority.

1. Purpose

This Rule describes the protocols for recording and notifying of approved changes to the *Network* regarding *Infrastructure* when it has been booked out of or back into use and when new *Infrastructure* is *Commissioned*.

2. General

The *Infrastructure* Booking Advice (IBA) form is used to notify of the temporary or permanent installation or removal of *Infrastructure*.

3. Advertising Infrastructure Work

Infrastructure Representatives must make sure that work on *Infrastructure* that affects the configuration of the *Network* is documented and *Advertised* by the *Issue* of a *Special Train Notice (STN)*.

New *Infrastructure* must be *Advertised* before it is *Certified* and *Commissioned.*

4. Compiling Infrastructure Booking Advice Form

The *Infrastructure Representative* must use an IBA form to detail work that requires *Infrastructure* equipment to be:

- temporarily booked out of use;
- permanently removed;
- booked back into use; or
- newly *Commissioned*.

Infrastructure Representatives must compile the IBA form before equipment is removed or *Commissioned*.

The *Infrastructure Representatives* must:

- send a copy of the IBA form to the appropriate *Network Controller*; or
- jointly fill out the IBA form with the *Network Controller*.

The *Infrastructure Representative* must give a copy of the IBA form for:

- work associated with a *Local Possession Authority (LPA)*, to the *Possession Protection Officer*; or
- work associated with a *Track Occupancy Authority (TOA)* or *Track Work Authority (TWA)*, to the *Protection Officer*.

The *Network Controller* and the *Infrastructure Representatives* must keep completed IBA forms.

5. Securing Infrastructure

Infrastructure that is not yet *Commissioned*, or has been decommissioned but not yet removed, must be *Secured* against *Unauthorised* use.

6. Certifying Infrastructure

Infrastructure that has been installed or removed must be *Certified* in an IBA form:

- filled out by the relevant *Infrastructure Representatives*; and
- acknowledged by the *Network Controller*.

7. Booking Infrastructure Back into Use

If *Infrastructure* has been *Certified* as working correctly, the relevant *Section* of the IBA form must be signed.

The *Infrastructure Representative* must endorse the copy of IBA form held by the *Possession Protection Officer* or the *Protection Officer*.

If parts of the *Infrastructure* remain un-certifiable at the end of work, they must be booked out of use again using a new IBA form.

The new IBA form must:

- be compiled before the original advice is signed; and
- include a reference to the IBA form it replaces.

The completed IBA form must include a reference to the new IBA form for those parts of the *Infrastructure* that were not *Certified*

8. Using Uncommissioned Infrastructure

Infrastructure that is not yet *Commissioned* (uncommissioned) may be given limited certification for specific purposes including *Rail Traffic* movements.

Before uncommissioned *Infrastructure* is used:

- an *Infrastructure Representative* must certify that it is fit for the specific purpose; and
- it must be *Advertised*.

Uncommissioned *Infrastructure* must be:

- unsecured before use; and
- *Secured* after use.

9. References

Nil

10. Effective Date

4 May 2016

11. Attachments

Infrastructure Booking Advice (IBA) form.

Brookfield Rail

Infrastructure Booking Advice (IBA)

(In accordance with Rule 3015 Infrastructure Booking Advice.)

Advice No. | Serial No. | Time | te

☐ Previous IBA No. | Form No. | Dated | d

Location

between | location | and | location | station

Special Train Notice No. | STN No. | Dated

Equipment details

ID Number	Description	Certification	FARF No.

Booking-Out Confirmation

We certify that in accordance with Special Train Notice No. | STN No. | dated | the equipment listed above is now:

☐ Temporarily out of use ☐ Permanently removed

Division	Time	Date	Name	Signature
Signals				
Civil				
Electrical				
Network Control				

Booking-In Confirmation

We certify that the equipment detailed above is operating correctly and is now:

☐ Back in service and fit for purpose ☐ commissioned for use in accordance with

Special Train Notice No | STN No. | dated

Division	Time	Date	Name	Signature
Signals				
Civil				
Electrical				
Network Control				

☐ New IBA No. | Form No. | Dated | Signed

Network Safeworking Rules and Procedures

Track Vehicles

Rule Number: 3019

Brookfield Rail

Version 1.01, 1 October 2016

Track Vehicles

Rule Number: 3019

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Glossary for this Rule

Active Control Level Crossing	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
Adjacent	Near to, close to, parallel to.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Aspect	The displayed pattern or position of lights used to give a signal indication.
Blocking Facility	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Centralised Traffic Control (CTC) Territory	The portions of line where the Centralised Traffic Control system of Safeworking is used.
Centralised Traffic Control (CTC)	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Competent Worker	A worker certified as competent to carry out a relevant task.
Controlled Absolute Signal	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Convoy	A group of track vehicles not coupled but travelling closely together under a single Occupancy Authority.
Controlled Speed	Controlled speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear line that is visible ahead.
Delegate	A Competent Worker authorised and designated to act in place of another.
Derail Device	A device intended to guide the wheels of rail traffic off the rails to protect a running line.
Disabled	Unable to travel due to a defect.
Dual Gauge Track	Track that allows rail traffic of different gauges to transit using a common rail.

Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
End-of-Train Marker	A device, including tail lights, fitted to the trailing end of the last vehicle of a rail traffic consist to indicate the end of the consist.
Fit for Purpose	Able to be used for the function required.
Fixed Signal	A signal that is located permanently near the line.
Fulfil	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.
Handsignal	A signal given by hand or lights movements, hand signals may be with or without flags.
Handsignaller	A Competent Worker who gives handsignals to rail traffic crew
Hazard Light	Amber or orange flashing light fitted to a vehicle to provide warning.
Headlights	Lights fitted at the front of rail traffic to provide visibility for the rail traffic crew and to improve the visibility of rail traffic.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Intermediate Siding	A siding located within a section, generally used for purposes other than crossing or passing of rail traffic.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Level Crossing	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
Light Tool or Device	A tool that can be carried and easily removed by one person and is not powered by cord or hose (e.g. compressed air, gas, electricity).
Limit of Authority	The limit may be defined by a sign, a signal capable of displaying a STOP indication, or a specific kilometrage point on a line. It defines the location to which rail traffic may travel under a Proceed Authority or the limits of a work on track authority.
Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.

Location	A place in the Network with a designated name, identification number, or signalling reference.
Manual Block Working	A method of working, which ensures sole occupancy by administratively maintaining the block for rail traffic movements where the control system cannot.
Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controllers	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Pilot	To direct or guide rail traffic crews and tell them about local conditions and operating restrictions on running lines and at worksites.
Platform	A designated raised or level area, next to the line, that allows passengers to enter and leave trains.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Protecting Signal	A fixed signal that is held and maintained at Stop to prevent rail traffic entry into a worksite. A signal that protects a train from conflicting movements and/or obstructions.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Corridor	The land on which a railway is built; comprising all property between property fences, or from the nearest rail in each direction for the distance defined under the Brookfield Rail lease.
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Restricted Speed	Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead. Restricted speed must not exceed 25 km/h.

Road Rail Vehicle	A road vehicle fitted with additional rail gear that enables the vehicle to be driven on rail.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Safe Braking Distance	A distance indicated to rail traffic that would allow rail traffic to stop with the application of normal service braking.
Secure	To safeguard against accidental or unauthorised access or movement.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Set Back	To move in the reverse direction to that provided in the current Proceed Authority.
Shunt	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
Siding	A portion of track where vehicles can be placed clear of the running lines. Also see intermediate siding.
Special Train Notice (STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Stable	To leave rail traffic unattended and secured, usually in a siding.
Station Limits	A defined operational limit of controlled locations or a running line.
Tail Lights	Red lights used as to designate the end of rail traffic. (see also end-of-train markers).
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track-Circuit	An electric circuit where current is carried through the rails and used to detect the presence of trains. Track-circuits are used in the operation and control of points, signalling and level crossing equipment.
Track-Circuit Shorting Device	A cable that can be clamped to a line's rails to activate track-circuits.
Track Occupancy Authority (TOA)	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
Track Speed	The allowed maximum speed for a portion of track.
Track Vehicle	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
Track Vehicle Operator	A Competent Worker controlling the movement of a track vehicle.

Train Order	An authority issued by the Network Controller for the movement of rail traffic.
Train Order Territory	The portions of line where the Train Order system of Safeworking is used.
Travel	Planned or purposeful movement from one location to another.
Unauthorised	Not given approval, or exceeding the limit of authority.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
Whistle	A device such as a bell, whistle, siren, horn or hooter, fitted to rail traffic to give audible warning.

1. Purpose

The function of this Rule is to outline the protocols for managing *Track Vehicles* safety when *Travelling* and carrying out work in the *Network*.

2. General

Track Vehicles include:

- *Road Rail Vehicles*, including *Track* inspection vehicles;
- *Track* maintenance machines.

Prior notice must be given by *Special Train Notice (STN)* when *Track* maintenance machines are to run or work on a *Running Line*.

Competent Workers in charge of *Track Vehicles* must act in accordance with Rule 2027 Responsibilities of Rail Traffic Crews.

Track Vehicle Whistles must be used in accordance with Rule 4007 Rail Traffic Whistles.

3. Track Vehicle Approval

Track Vehicle types must be approved as *Fit for Purpose* by the General Manager *Infrastructure* or *Delegate*.

WARNING: If a *Track Vehicle* that does not reliably operate *Track-Circuits* is to *Travel* over *Points* that automatically return to a normal setting, and the *Points* are in a position where they can automatically return to normal, the *Points* must be *Secured* for the passage of the *Track Vehicle*.

The Manager Engineering will provide a list of *Track Vehicles* that reliably operate the *Track Circuit* and *Level Crossing Protection*.

If compatible *Track Vehicles* are fitted with approved coupling devices, they must be coupled together during *Travel*.

4. Preparing Track Vehicles for Travel

The *Track Vehicle Operator* must make sure that the vehicle is fitted with working:

- Communications systems;
- brakes;
- *Headlights*;
- *Tail Lights*, or an approved *End-of-Train Marker* on the rear of the last vehicle; and
- *Hazard Lights*, or flashing warning lights.

The *Track Vehicle Operator* must make sure that the vigilance control device is working.

The *Track Vehicle Operator* must make sure the vehicle carries:

- one red and one yellow flag;
- at least 36 *RTS*;
- an approved *Track-Circuit Shorting Device*; and
- Safeworking forms as necessary.

5. Occupying a Running Line

Track Vehicles may occupy a *Running Line* only with the authority of the:

- *Network Controller* responsible for the *Location*;
- *Possession Protection Officer* in charge of a *Local Possession Authority (LPA)*; or
- *Protection Officer* in charge of a *Track Occupancy Authority (TOA)*.

Where a *Track Vehicle* is to enter or *Travel* in *Dual Gauge Track* areas, the *Competent Worker* in charge of the *Track Vehicle* must confirm with the *Network Controller* the gauge of the *Track Vehicle*.

The *Network Controller* must advise the *Competent Worker* when *Blocking Facilities* have been applied. *Blocking Facilities* must be applied and removed in accordance with Rule 6003 Blocking Facilities.

Track Vehicles must enter or be placed on *Running Lines* only:

- within *Station Limits*;
- within *Intermediate Sidings*;
- within the limits of an *Occupancy Authority*;
- at approved on and off *Track Locations* where the approach of *Rail Traffic* can be managed by *Controlled Absolute Signals*; or
- within a *Train Order Section* where there is no approaching *Rail Traffic*.

The *Location* where the *Track Vehicle* is to enter or be placed on the *Running Line* must be verified using two or more of the following:

- a kilometre sign and *Section*;
- a *Points* number;
- a signal number;
- observance of *Points* or signal *Aspect* change; or
- another identifier.

Before *Travel* begins and throughout the journey, the *Competent Worker* in charge of a movement must make sure that there is *Effective Communication* between all *Track Vehicles* involved and the *Network Controller*.

6. Track Vehicle Travel

Track Vehicles singly, coupled, or in *Convoy* must be worked under *Manual Block Working* conditions, in accordance with Rule 5023 Manual Block Working.

The *Network Controller* must tell affected *Network Controllers* of the *Track Vehicle Travel*.

Travelling Track Vehicles must have a *Competent Worker* in charge of the movement in the lead vehicle.

In double line areas *Track Vehicles* must *Travel* on the correct *Running Line*.

Fixed Signals must only be passed at STOP in accordance with Rule 6013 Passing Fixed Signals at Stop.

Approved *Track Vehicles Travelling* on signal indications must be directly supervised by a worker who is *Competent* as a *Protection Officer* Level 3 (PO3).

Where the *Competent Worker* in charge of the *Track Vehicle* is unfamiliar with the *Route*, a *Competent Worker* who is familiar with the *Route* must accompany the *Track Vehicle* in accordance with Procedure 9006 Piloting Rail Traffic.

The *Network Controller* must be told about:

- the number and types of *Track Vehicle*s in a movement; and
- the identification numbers and order of all vehicles in the *Convoy*.

As necessary during *Travel*, the *Competent Worker* in charge of the movement must:

- obey instructions from the *Network Controller*;
- report to the *Network Controller* entry and clearance of *Sections* as they occur;
- tell other *Track Vehicle Operators* in the *Convoy* about conditions relating to the movement;
- tell the *Network Controller* when the *Limits Of Authority* have been *Cleared* by the rearmost vehicle;
- make sure that *Points* are set correctly and *Secured* for the movement;
- be alert for workers in the *Rail Corridor*; and
- get the *Protection Officer's* authority before entering into a *Work on Track Authority Location* or traversing a worksite within a *Work on Track Authority*.

6.1 Authority for Road Rail Vehicles to Travel

Road Rail Vehicles must be authorised to *Travel* on a *Road Rail Vehicle Authority (RRVA)* issued by the *Network Controller* responsible for that area.

Where a *Road Rail Vehicle* is authorised to follow a *Rail Traffic* movement that it is not *Travelling* in *Convoy* with, the *Competent Worker* must not permit the *Road Rail Vehicle* to follow within 200 metres of that *Rail Traffic*. The *Network Controller* must advise the *Rail Traffic Crew* that a *Road Rail Vehicle* is following their *Rail Traffic*.

6.1.1 Obtaining a Road Rail Vehicle Authority (RRVA)

The *Competent Worker* in charge of a *Road Rail Vehicle* must obtain an *RRVA* from the *Network Controller* responsible for the area over which the vehicle is to *Travel*.

Before authorising an *RRVA*, the *Network Controller* must make sure that:

- in *Train Order Territory*, no *Train Order* has been *Issued* for an opposing movement;
- any *Rail Traffic* holding a *Uni-Directional Authority* has *cleared* the starting point of the proposed *RRVA* and will not be returning;
- the *Competent Worker* knows about existing obstructions;
- the *Competent Worker* understands and agrees to the limits of the *RRVA*;

The *Network Controller* and the *Competent Worker* in charge of a *Road Rail Vehicle* must confirm and record on the *RRVA*:

- the proposed *RRVA* limits;
- a unique identifying number;
- the gauge of the *Road Rail Vehicle*;
- that *Blocking Facilities* have been applied, in accordance with Rule 6003 Blocking Facilities, to prevent entry of *Rail Traffic* into the portion of *Track* occupied by the *Road Rail Vehicle*;
- the name of the *Competent Worker* in charge of a *Road Rail Vehicle* and contact details;
- the name of the *Issuing Network Controller*;
- the time of *Issue*; and
- the date of *Issue*.

Before moving into the *Section* the *Competent Worker* must:

- confirm *Blocking Facilities* have been applied by repeating back to the *Network Controller* the details of the blocking;
- record the blocking on the *RRVA*;
- ensure that all *Points* are correctly set; and
- obtain the *Network Controller's* verbal authority to proceed.

6.1.2 Road Rail Vehicle stopping for work

The *Protection* provided by the *RRVA* permits work that:

- does not require tools; or
- uses *Light Tools or Devices* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;

The work must not break the *Track* or alter *Track* geometry or structure.

If the *Road Rail Vehicle* is required to stop for work and there are *Adjacent* lines and the work may encroach into the *Danger Zone* of the *Adjacent* line then the *Competent Worker* must act in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

6.1.3 Road Rail Vehicle setting back

If a *Road Rail Vehicle* is required to *Set Back*, the *Competent Worker* in charge must:

- ensure it is safe to *Set Back*;
- *Travel* at *Restricted Speed*; and
- not exceed the limits of the *RRVA*.

6.1.4 Fulfilling a Road Rail Vehicle Authority (RRVA)

The *RRVA* must be *Fulfilled* by the *Competent Worker* when the *Road Rail Vehicle* has:

- arrived at the end of the *RRVA*; or
- has been removed from and is *Clear* of the *Running Line*.

The *Network Controller* and the *Competent Worker* must endorse their copy of the *RRVA* as *Fulfilled*.

6.2 Authority for Track Maintenance Machines to Travel

Track maintenance machines *Travel* only:

- in *Centralised Traffic Control (CTC) Territory*, on the authority of *Fixed Signals*; or
- in *Train Order Territory*, on a *Train Order*.

Fixed Signal Aspects displayed to the first vehicle apply to all *Track Vehicles* in the *Convoy*.

Track Vehicles must not *Set Back* without the authority of the *Network Controller*.

After the *Track Vehicles* have passed the *Protecting Signal*, the *Network Controller* must ensure the *Protecting Signal* is at STOP and *Blocking Facilities* applied, in accordance with Rule 5023 Manual Block Working.

7. Travelling in Convoy

No more than three *Track Vehicles* are permitted to *Travel* in *Convoy*.

The *Competent Worker* in charge must ensure that *Track Vehicle Operators*:

- maintain a minimum distance of 200 metres and a maximum distance of 400 metres between *Track Vehicles*; and
- comply with the instructions for closing up.

The *Convoy* must close up:

- if the leading vehicle stops;
- before entering a *Section*; and
- before *Travelling* over an *Active Control Level Crossing*.

Operators of *Track Vehicles* in *Convoy* must maintain *Effective Communication*.

If communication is lost *Track Vehicle Operators* must *Travel* at *Restricted Speed.*

7.1 Competent Worker in the Leading Track Vehicle

The *Competent Worker* in the leading *Track Vehicle* must warn the following *Track Vehicle Operators* if the lead *Track Vehicle*:

- slows down or stops;
- approaches an *Active Control Level Crossing*; or
- approaches the *Protection* limits of a worksite.

7.2 Track Vehicle Operators

Track Vehicle Operators must adjust the speed of *Track Vehicles* according to messages received from the *Competent Worker* or other *Track Vehicle Operators* within the *Convoy*.

Tell other *Track Vehicle Operators* in the *Convoy*:

- when pre planned, easily-identified *Locations* or reference points during the journey have been reached; and
- if there is a need to slow down or stop the *Track Vehicle*.

If the *Track Vehicle Operator* is not sure of the whereabouts of the *Track Vehicle* ahead when the last reported *Location* is reached, the *Track Vehicle Operator* must *Travel* at *Restricted Speed*.

If the *Track Vehicle Operator* needs to stop the vehicle, immediately after the vehicle has stopped, the *Track Vehicle Operator* must warn following *Track Vehicle Operators* by the use of one or more of the following:

- sending two-way radio messages;
- flashing the *Track Vehicle's* lights;
- sounding the *Track Vehicle's Whistle* repeatedly;
- giving a STOP *Handsignal* at a *Safe Braking Distance* behind the *Track Vehicle*.

The *Track Vehicle Operator* must continue to give the warning until acknowledged by the following *Track Vehicle Operator*.

8. Travelling Over Level Crossings

When approaching an *Active Control Level Crossing:*

If *Track Vehicles* cannot reliably operate the *Track Circuit* and *Level Crossing Protection* as approved by Manager Engineering and shown on the *Track Vehicles* Certificate of Compliance, the *Track Vehicle* Operators must stop short of the Level Crossing.

Before travelling over an *Active Control Level Crossing* with a vehicle that cannot reliably operate the *Track Circuit* and *Level Crossing Protection*, the *Track Vehicle Operator* must make sure that

- The *Level Crossing* is clear of all road and pedestrian traffic;
- If possible, manually operate the *Active Controlled Level Crossing Protection*;
- If it is not possible to operate the manual switch (or one is not provided), wait for all road and pedestrian traffic to stop and the *Level Crossing* is clear, then proceed over the *Level Crossing* at *Restricted Speed.*

If *Track Vehicles* can reliably operate the *Track Circuit* and *Level Crossing Protection* as approved by Manager Engineering and shown on the *Track Vehicles Certificate of Compliance*, the *Track Vehicle Operator* must ensure:

- It is safe to proceed and the *Level Crossing* is clear, or
- All road and pedestrian traffic has stopped before proceeding over the *Level Crossing*

When approaching a passive *Level Crossing:*

The *Track Vehicle Operator* must ensure

- It is safe to proceed and the *Level Crossing* is clear, or
- All road and pedestrian traffic has stopped before proceeding over the *Level Crossing.*

9. Disabled Track Vehicles

Where a *Track Vehicle* becomes *Disabled* or causes an obstruction for any reason, it must be *Protected* in accordance with Rule 4001 Protecting Disabled Rail Traffic.

10. Overdue Track Vehicle

If a *Track Vehicle* movement is overdue the *Competent Worker* and the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

11. Travelling Through LPA or TOA Limits

Only *Track Vehicles* associated with the *LPA* or *TOA* are permitted to enter the limits of the *Work on Track Authority*.

Track Vehicles entering or *Travelling* within the limits of the *Work on Track Authority* must:

- be *Piloted*; or
- receive written or verbal instructions from the *Possession Protection Officer* or *Protection Officer*.

Track Vehicles must only depart from the limits of the *Work on Track Authority* with the *Network Controller's* authority.

12. Track Vehicle Speed Limits

WARNING: *Track Vehicle Operators* must *Travel* at speeds that are safe for the prevailing conditions.

A *Track Vehicle's* speed must not exceed:

- the speed specified for the *Track Vehicle*; or
- if it is lower than the speed specified for the *Track Vehicle*, the authorised *Track Speed*.

Track Vehicles other than *Road Rail Vehicle's* must not exceed 20 km/h over a *Level Crossing*.

12.1 Road Rail Vehicles

A *Road Rail Vehicle* must not exceed 10 km/h over *Points*.

If a *Road Rail Vehicle* must *Travel* behind *Rail Traffic* in a *Section*, it must *Travel* at *Controlled Speed*.

13. Headlights

Headlights must be switched on during *Travel*.

Headlights must be dimmed during approach to:

- *Rail Traffic*;
- a *Platform*;
- a *Location* where *Shunting* is in progress; and
- a road vehicle on a nearby road.

14. Tail Lights

Track Vehicles must have red *Tail Lights* lit or an approved *End-of-Train Marker* during *Travel*.

15. Hazard Lights

Track Vehicles on a *Running Line* must have approved and operating *Hazard Lights*.

16. Stabling Track Vehicles

Track Vehicles may be *Stabled* on *Running Lines* only with the *Brookfield Rail* Manager Network Operations authority.

Track Vehicles Stabled on lines other than *Running Lines* must be:

- *Clear* of *Running Lines*;
- *Secured* against unintended movement; or
- if *Stabled* in a *Siding*, be inside *Derail Devices*.

Track Vehicles must be *Secured* against *Unauthorised* operation and unintended movement at all times.

17. Track Vehicle Stopping for Work

Track Vehicles stopping for work must be protected using a *Work on Track Authority*.

18. Keeping Records

The *Network Controller* and the *Competent Worker* in charge of *Track Vehicles* must keep a *Permanent Record* of the details of the *Track Vehicle Travel*.

19. References

2027 Responsibilities of Rail Traffic Crew

4001 Protecting Disabled Rail Traffic

4007 Rail Traffic Whistles

4017 Overdue Occupancies

5023 Manual Block Working

6003 Blocking Facilities

6013 Passing Fixed Signals at Stop

9006 Piloting Rail Traffic

9010 Protecting Work from Rail Traffic on Adjacent Lines

20. Effective Date

1 October 2016

Network Safeworking Rules and Procedures

Train Order System Blocking

Rule Number: 3023

Brookfield Rail

Version 1.01, 01 October 2016

Train Order System Blocking

Rule Number: 3023

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Table of Contents

Glossary for this Rule

Access	A designated safe way into, along, across or out of the Rail Corridor.
Adjacent	Near to, close to, parallel to.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Blocking Facility	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Clear	A proceed indication displayed by a signal. In reference to a track circuit, block, section or signal route, the absence of rail traffic. In reference to track workers being clear of track.
Competent	Having the ability, skill and certification to carry out a relevant task.
Complete	Rail traffic where the consist has not parted.
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
Level Crossing	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Lookout	A Competent Worker responsible for • keeping watch for approaching rail traffic; and • warning other workers to stand clear of the line before the rail traffic arrives.

Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
Rail Traffic	Trains and track vehicle or vehicles travelling on the Network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Safe Place	A Safe Place is: • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.

Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Stable	To leave rail traffic unattended and secured, usually in a siding.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Vehicle	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Train Order	An authority issued by the Network Controller for the movement of rail traffic or issue of LPA track work authorities.
Train Order System Blocking	A facility used by a Rail Traffic Controller to protect rail traffic, track workers and prevent the unintended issue of an Occupancy Authority on the Train Order system.
Train Order Territory	The portions of line where the Train Order system of Safeworking is used.
Unauthorised	Not given approval, or exceeding the limit of authority.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

1. Purpose

The object of this Rule is to detail the procedures for *Train Order System Blocking (TOSB)* used as a method of working in the *Danger Zone* in *Train Order Territory*

2. General

The *TOSB* method of *Protection* must be applied to the computerised *Train Order* system only.

Blocking Facilities, in accordance with Rule 6003 Blocking Facilities, on the *Train Order* System (TOS) prevent *Train Orders* being *Issued*.

TOSB is used to exclude *Rail Traffic* from a portion of *Track.*

The *TOSB* method must not be used for work that breaks the *Track* or alters *Track* geometry or structure.

Only *Network Controllers* may approve *TOSB* for *Track* under their control.

The *Protection Officer* applying this Rule must have a minimum *Protection Officer* Level 1 (PO1) *Competency* in accordance with Rule 1004 Track Access Accreditation.

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

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

TOSB may be used only:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using tools which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- work involving light tools powered by a cord or hose (i.e compressed air, gas or electricity);
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *TOSB* is used, one worker may work alone. In this case, that worker is also the *Protection Officer*.

3. Authorisation

Before authorising *TOSB* working, the *Network Controller* must make sure that:

- a *Track Occupancy Authority* is not in use within the proposed limits;
- any *Rail Traffic* holding a *Uni-Directional Authority* has *Cleared* the limits of the proposed worksite by confirming:
  - with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track Vehicle* movement with the *Protection Officer*;
  - with the *Rail Traffic Crew*, the *Location* of their *Rail Traffic*; or
  - that the *Section* is *Clear*.
- *Stabled Rail Traffic* that is within the limits of the *TOSB*, must not be authorised to move;
- the *Protection Officer* knows about any existing *Obstructions*; and
- *Blocking Facilities* have been applied to prevent *Unauthorised Rail Traffic* entry into the proposed limits.

WARNING: The *Network Controller* must not permit *TOSB* if there is any doubt about the *Location* of the proposed worksite.

The *Network Controller* must confirm with the *Protection Officer* the:

- Name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.

3.1 Joint Occupancy

A TOSB cannot be authorised for a portion of track where a Track Occupancy Authority (TOA) is current.

The *Network Controller* may authorise a TOSB for a portion of Track where another *TOSB* or *TWA* is current.

The *Network Controller* may Issue the TOSB only if the *Protection Officers* have consulted and agree that a TOSB may be issued.

NOTE: Where a Local Possession Authority is in place, only the *Possession Protection Officer* for that LPA can approve the work.

4. Protection Officer

A *Protection Officer* is required for the period of the work, except if the *TOSB* is used to allow livestock or vehicles to directly cross the *Track*; in these circumstances the *Network Controller* may apply *TOSB*.

A *Protection Officer* must:

- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- before work begins, tell workers about the:
  - types and limits of *Protection* in place;
  - *Locations* of *Safe Places*;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- make sure the *Tracks* between worksites and *Protecting Locations* remain *Clear* of *Obstructions*; and
- confirm with the *Network Controller* that *Blocking Facilities* have been applied to prevent the *Unauthorised* entry of *Rail Traffic*.

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

4.1 Request for TOSB from a Person Other than the Protection Officer

The *Network Controller* may apply *TOSB* to allow livestock or vehicles to directly cross the *Track*.

The *Network Controller* must:

- confirm the *Location* and the work to be done;
- make sure the line is *Clear* between the entry point and the proposed worksite and any *Rail Traffic* that has passed the worksite will not return;
- apply *Blocking Facilities* to the *Train Order* system;
- advise the person of the arrangements and authorise the work; and
- when told that the area is *Clear*, remove the *Blocking Facilities*.

4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover.

5. Obtaining Approval for TOSB

The *Network Controller* and the *Protection Officer* must confirm and record on the Blocking Request for *Work on Track* form:

- the *Location* of the work;
- a unique identifying number;
- that *Blocking Facilities* have been applied to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- the *Blocking* ID number from the *Train Order* System;
- the *Points* to be clipped, in accordance with Procedure 9000 Clipping Points, if required;
- the duration of the work;
- the *Protection Officer's* name and contact details;
- the approving *Network Controller's* name;
- the time of approval; and
- the date of approval.

When the *TOSB* is approved the *Protection Officer* must ensure the required *Protection* is in place before work commences.

6. Protection

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

The worksite must be a minimum of 500 metres from the *Protecting* limits, unless:

- *Points* are *Secured* to prevent *Rail Traffic Access*; or
- an easily reached *Safe Place* is available and a *Lookout* provided.

If *Rail Traffic* can approach from more than one direction, the *Protection Officer* must *Protect* all *Points* of entry into the *TOSB* limits.

6.1 Network Controller

The *Network Controller* must confirm with the *Protection Officer* that:

- *Blocking Facilities* have been applied;
- the line is *Clear* between the *Protecting* limits and the proposed worksite; and
- any *Rail Traffic* that has passed *Complete* beyond the worksite will not return.

Network Controllers must not authorise movements into portions of line where *TOSB* is in use.

6.2 Temporary Removal of Blocking Facilities

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

6.3 Adjacent Line

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

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

7. Communications with Network Control

The *Protection Officer* must be the only point of contact between the *Network Controller* and work groups for matters of worksite *Protection*.

The *Protection Officer* must tell affected *Network Controllers* about:

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

If the work is to exceed the agreed time, the *Protection Officer* must seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested and extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

8. Ending TOSB

Before ending the *TOSB* the *Protection Officer* must make sure and tell the *Network Controller* that:

- all workers and equipment have *Cleared* the *Danger Zone*;
- *Points* securing devices have been removed;
- *Blocking Facilities* can be removed.

When told by the *Protection Officer* that the *Track* is *Clear* the *Network Controller* can remove the *Blocking Facilities*.

The *Network Controller* must confirm with the *Protection Officer* that the *Points* are working correctly after the *Points* have been restored to normal operation.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

9. Keeping Records

Network Controllers and the *Protection Officer* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the worksite *Protection* arrangements.

10. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

9000 Clipping Points

9010 Protecting Work from Rail Traffic on Adjacent Lines

11. Effective Date

01 October 2016

Network Safeworking Rules and Procedures

Temporary Speed Restrictions

Rule Number: 3025

Brookfield Rail

Version 1.0, 31 March 2016

Temporary Speed Restrictions

Rule Number: 3025

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3025 – Temporary Speed Restrictions	4 May 2016		

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Table of Contents

Glossary for this Rule

Bi-Directional	Normal movement of rail traffic in either direction according to the infrastructure and system of Safeworking in use.
Civil Infrastructure	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.
Condition Affecting the Network (CAN)	A situation or condition that affects or has potential to affect the safety of the Network.
Driver Information System	A system that can provide Rail Traffic Crews with: • Train Consist • Temporary Speed Restrictions • Permanent Speed Restrictions • Standard Timetable • Train Notices • Instructions • Track Warnings • Vehicle Restrictions
Electrical Infrastructure	may include: Equipment and systems for supplying and distributing electricity Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Infrastructure Representative	An authorised Brookfield Rail employee or an organisation contracted to Brookfield Rail, responsible for maintaining network infrastructure.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.

Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Normal Speed	A speed that does not exceed the speed limit currently in effect for the location and type of rail traffic.
Permanent Record	A record made in writing or in an electronic system, and kept for reference and audit.
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Temporary Speed Restriction (TSR)	An imposed reduction of the normal speed for a portion of track.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Speed	The allowed maximum speed for a portion of track.
Track Workers	Competent rail safety workers whose primary duties are associated with work on or around infrastructure in the Rail Corridor.
Travel	Planned or purposeful movement from one location to another.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Special Train Notice (STN)	A notice issued by Brookfield Rail which contains safeworking information for competent workers.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.

1. Purpose

The purpose of this Rule is to set out the protocols for applying a *Temporary Speed Restriction (TSR)*. The object of a *TSR* is to reduce the speed of *Rail Traffic* to ensure safe passage over a *Section* of *Track* when the *Track* is not safe for *Normal Speeds*.

2. General

TSR's are applied by an *Infrastructure Representative*.

A *TSR* overrides any existing higher speed.

A *TSR* may be applied due to:

- *Infrastructure* conditions;
- risks to workers; or
- weather conditions.

2.1 Advice of a TSR

Where possible *Rail Traffic Crews* are advised about a *TSR* by *TSR* signs, and by:

- the *Issue* of a *Special Train Notice (STN)*;
- the *Driver Information System*; or
- the *Issue* of a *Condition Affecting the Network (CAN)* warning, in accordance with Rule 2009 Reporting and Responding to a Condition Affecting the *Network (CAN)*.

If it is not possible to place *TSR* signs immediately, *Rail Traffic Crews* must be given written or verbal advice of the *TSR*, before they enter the affected portion of *Track*. *TSR* signs must be placed as soon as is practical after the speed restriction is imposed.

Rail Traffic Crews must keep the advice for the duration of the journey.

3. Types of Signs

Temporary Speed Restriction Ahead signs:

- indicate that a *Temporary Speed Restriction* is ahead; and
- display the maximum speed permissible for each *Rail Traffic* type over the affected portion of *Track*.

Temporary Speed Restriction Start signs indicate:

- to *Rail Traffic Crews*, that they are entering the limits of a *TSR*; and
- the maximum speed permissible for each *Rail Traffic* type over the affected portion of *Track*.

Temporary Speed Restriction End signs indicate to *Rail Traffic Crews* that they are leaving the limits of a *TSR*.

NOTE: In *Bi-Directional* areas where the *TSR* applies in both directions, the back of the *TSR* Start sign will indicate to *Rail Traffic Crews* that they are leaving the limits of a *TSR*.

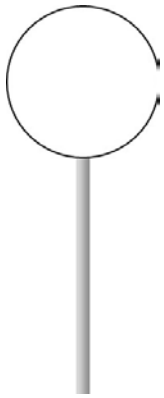
3.1 Temporary Speed Restriction Ahead Sign

Sign	Description	Required Action
	*Temporary Speed Restriction* Ahead signs are diamond shaped with a yellow background and a horizontal black stripe. This sign is placed 2500 metres before a *Temporary Speed Restriction* Start sign. Placed below the *Temporary Speed Restriction* Ahead sign is a Maximum Speed sign displaying the maximum speed permitted for the restricted area.	*Rail Traffic* should Proceed, being prepared to *Travel* at the speed indicated on the Maximum Speed sign placed below the Speed Restriction Ahead sign. Note: If no maximum speed sign is displayed below the *Temporary Speed Restriction* Ahead sign, *Rail Traffic Crews* must be prepared to reduce speed as detailed in the Drivers Information documentation, or where this is not available, to 15km/h over the *TSR*.

3.2 Temporary Speed Restriction Start Sign

Sign	Description	Required Action
	*Temporary Speed Restriction* Start signs are circular shaped with a yellow background with a horizontal black stripe. This sign is placed 50 metres before the area covered by a *Temporary Speed Restriction*. Placed below the *Temporary Speed Restriction* Start sign is a Maximum Speed sign displaying the maximum speed permitted for the restricted area.	*Rail Traffic* must Proceed at the speed shown on the Maximum Speed sign placed below the *Temporary Speed Restriction* sign. Note: If no maximum speed is displayed below the *Temporary Speed Restriction* Start sign, *Rail Traffic Crews* must be prepared to reduce speed as detailed in the Drivers Information documentation, or where this is not available, to 15km/h over the *TSR*.

3.3 Temporary Speed Restriction End Sign

Sign	Description	Required Action
	*Temporary Speed Restriction* End signs are white and circular. This sign is placed 50 metres beyond the *Temporary Speed Restriction* area. Note: In *Bi-Directional* areas where the *TSR* applies in both directions, the back of the *TSR* Start sign will indicate to *Rail Traffic Crews* that they are leaving the limits of a *TSR*.	*Rail Traffic* can return to the authorised *Track Speed*, once the *Rail Traffic Consist* has passed beyond the *Temporary Speed Restriction* End sign.

3.4 Placement

TSR signs must be placed:

- wherever possible, to the left of the line to which the *TSR* applies; and
- where they can be clearly seen by *Rail Traffic Crews*.

3.5 Adjoining TSRs

TSRs may adjoin provided the *TSR* signs can be placed so that there is not two *Temporary Speed Restriction* Ahead signs before a *Temporary Speed Restriction* sign.

Where the distance between *TSRs* will not permit the clear separation of signs then the lower speed must apply from the first *TSR* to the end of the lowest *TSR*, then:

- a *Temporary Speed Restriction* end sign must be placed; or
- a *Temporary Speed Restriction* sign placed, displaying a higher Maximum Speed sign.

Where a higher speed *TSR* applies at the end of a lower *TSR* then a *Temporary Speed Restriction* Ahead signs is not required and a *Temporary Speed Restriction* sign with the higher Maximum Speed sign must be place at the start of that *TSR*.

4. General Arrangement of TSR Signs

Figure 3025-1 General arrangement of TSR signs for single Bi-Directional track.

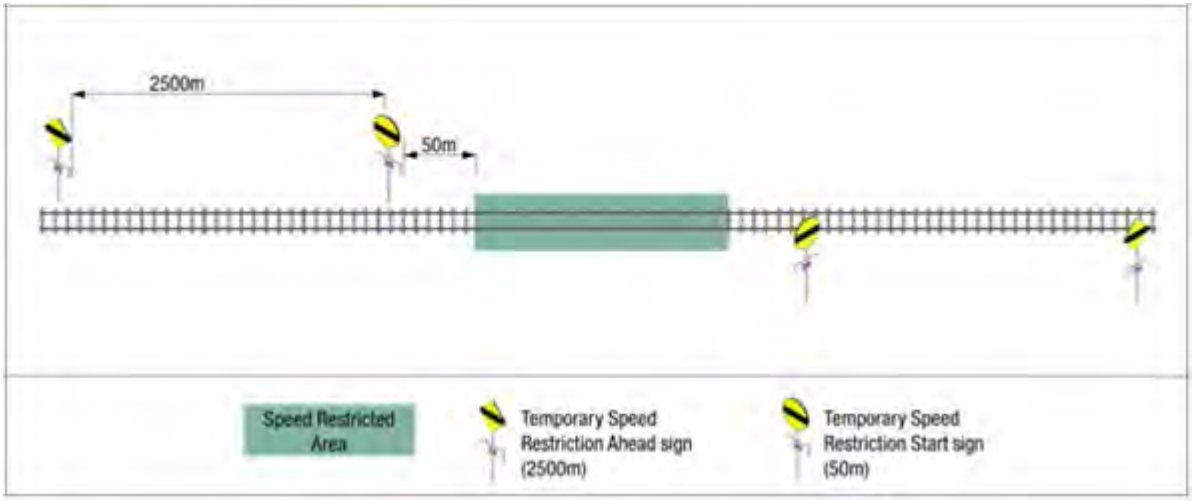


Figure 3025-2 General arrangements of TSR signs on double *Uni-Directional* track.

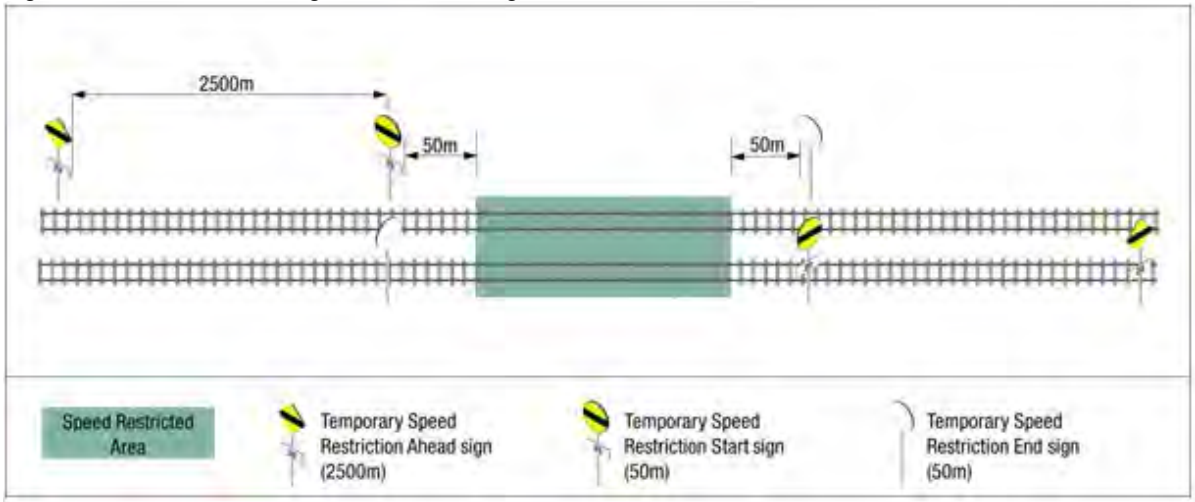
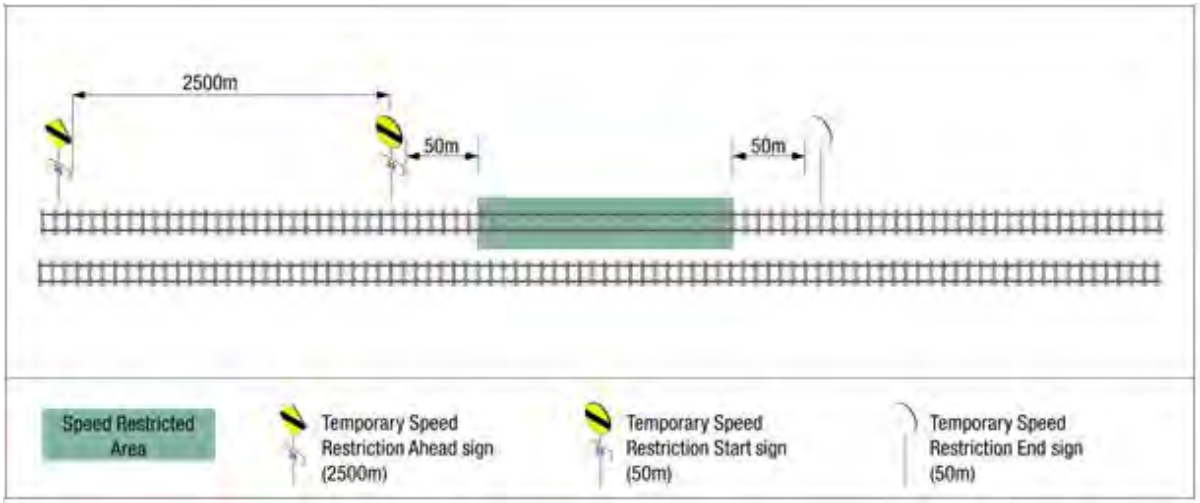


Figure 3025-3 General arrangements of TSR signs on double *Uni-Directional* track where only one line is affected.

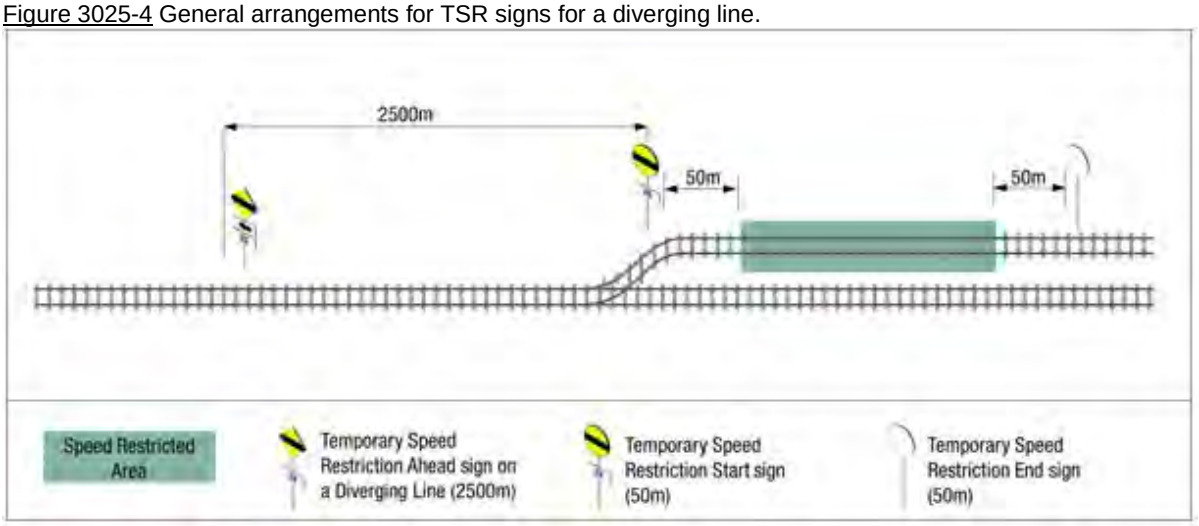


4.1 Diverging Routes

TSR signs must be placed on all lines that might give access to the affected line.

If the *TSR* applies on a diverging *Route*, the *Temporary Speed Restriction* Ahead sign and *Temporary Speed Restriction* Start sign will display an arrow in the direction of the divergence, or additional text to indicate the *Track* to which the speed restriction applies.

Figure 3025-4 General arrangements for TSR signs for a diverging line.



5. Keeping Records

Infrastructure Representatives, *Rail Traffic Crews* and *Network Controllers* must keep a *Permanent Record* of the details of *TSRs*.

6. References

2009 Reporting and responding to a Condition Affecting the Network (CAN)

7. Effective Date

4 May 2016