

<b>DOCUMENT NO.</b>	D2022/3843
<b>WORK DESCRIPTION</b>	Routine network maintenance activities
<b>WPP Number</b>	WT1D1 10178
<b>SCOPE:</b>	<p>This SWI is applicable for the worksite protection arrangements using Signal Key Switch Blocking concerning routine network maintenance, defect management and repair of assets within the limits specified below and in the attached plan.</p> <p>Work activities include:</p> <ul style="list-style-type: none"> <li>Routine preventative and corrective work such as inspections and maintenance as appropriate for the type of protection being applied as part of this plan.</li> </ul>
<b>AUTHORISATIONS:</b>	<p><b>Protection Officer:</b> Protection Officer Level 1 or higher</p> <p><b>Handsignallers:</b> Engineering Handsignaller Level 2.</p>
<b>SAFETY CONTROLS – Signal Key Switch Blocking (SKS) arrangements:</b>	<p>Signal Key Switch Blocking on the <b>Down Main West line</b> and <b>Up Main West line</b> is a fixed worksite location.</p> <p>The worksite is protected by:</p> <ul style="list-style-type: none"> <li><b>38.9 signal</b> at STOP with the Signal Key Switch removed for the <b>Down Main West line</b>.</li> <li><b>42.6 signal</b> at STOP with the Signal Key Switch removed for the <b>Up Main West line</b>.</li> <li><b>2 points</b> and <b>3 points</b> must remain clipped and locked unless protection is provided on both the <b>Up and Down Main West lines</b>.</li> <li>Danger tag and dedicated padlock applied to the door on to Glenbrook control panel.</li> </ul>
<b>PRESTART REQUIREMENTS:</b>	<p>Protection Officer assessment checklist must be completed before instructions in this SWI are followed.</p> <p>Tools and equipment required:</p> <ul style="list-style-type: none"> <li>Protection Officer requires a phone to contact the Signaller.</li> <li>Radios</li> <li>Danger tag and dedicated padlock</li> </ul>
<b>FURTHER INFORMATION:</b>	<p><i>NWT 300 Planning work in the Rail Corridor</i></p> <p><i>NWT 320 Signal Key Switch Blocking</i></p> <p><i>NPR 753 Using Signal Key Switch Blocking</i></p> <p><i>NPR 754 Using a Signal Key Switch</i></p> <p><i>NLA 212 Penrith - Wallerawang</i></p> <p><i>NGE 200 Walking in the Danger Zone</i></p>

**Safe Work Instruction****SKS Worksite Protection for Glenbrook routine network maintenance activities****Protection Officer assessment checklist**

<b>Protection Officer's name:</b>		<b>Yes</b> (Tick if Yes)
This document has not expired 12 months beyond the issue date.		
On-site safety assessment has been completed and additional hazards and controls recorded on the pre-work briefing (Page 3).		
SWI details and protection arrangements have been reviewed and validated for the assessed worksite location.		
<b>Corridor Safety Number</b>	<b>Protection Officer Signature</b>	<b>Date</b>

**Warning**

*If an above item does not apply, the Protection Officer must not use this Safe Work Instruction or implement Signal Key Switch Blocking. Use of an alternative Work on Track Rule must be assessed and a new worksite protection plan must be completed in accordance with NRF 014 Worksite Protection Pre-work briefing and NRF 015 Worksite Protection Plan.*

# Safe Work Instruction

## SKS Worksite Protection for Glenbrook routine network maintenance activities



### Worksite Protection Pre-work Briefing

Briefing date:  /  /

#### Protection Officer details

name  signature  contact No.

Work location:

Scope of work:

Worksite protection:  **Signal Key Switch Blocking** Refer to Worksite Protection Plan for details

Hazards (e.g. Site specific hazards identified, including physical environment, human errors, plant and equipment)	Controls (to be implemented to eliminate or reduce the risk to the lowest practicable level)	Person responsible for Control
<b>Approaching rail traffic</b>	SKS Blocking implemented. Workers must remain within worksite limits.	Protection Officer
<b>Adjacent live lines</b>	Designated work and walk areas as per Protection Officer's instructions. All work must stop and workers moved to a safe place when warned by the Protection Officer.	Protection Officer
<b>Multiple entry points into worksite</b>	Protection Officer must visually confirm that <b>2 and 3 points</b> are clipped and locked to prevent entry into the worksite if protection is only on one line. Protection Officer must apply danger tag and dedicated padlock to Glenbrook control panel door lock.	Protection Officer
<b>Access to / Egress from worksite</b>	Access and egress points must be agreed prior to entering the danger zone, consideration should be given to ease of access and safest possible entry and exit points.	All
<b>Slips, trips, falls and hazards carrying equipment</b>	Protection Officer will assess and instruct when it is safe for workers to use <i>NGE 200 Walking in the Danger Zone</i> to move to the worksite or safe place.	All
<b>Mobile phone distraction</b>	Mobile phones use is not permitted in the danger zone unless being used by maintenance staff for critical maintenance communications or recording of defects.	All
<b>Signaller cut in at Glenbrook control panel during SKS Blocking</b>	Danger tag and dedicated padlock applied to entrance of Glenbrook control panel. Danger tag must have the name and contact details of the Protection Officer.	Protection Officer



**Safe Work Instruction**

SKS Worksite Protection for Glenbrook routine network maintenance activities

**Worksite Protection Plan – SKS Blocking****Protection Officer Details**

<input type="text" value="name"/>	<input type="text" value="signature"/>	<input type="text" value="contact No."/>
<input type="text" value="RSW or RIW No."/>	<input type="text" value="designation"/>	Planned duration <input type="text"/>

Workplace Supervisor details: Type of work: **Worksite Location** (tick the applicable lines)

On the	<input type="text" value="Down Main West line"/>	between	<input type="text" value="41.3 Signal"/>	and	<input type="text" value="42.5 Signal"/>	<input type="checkbox"/>
On the	<input type="text" value="Up Main West line"/>	between	<input type="text" value="42.0 Signal"/>	and	<input type="text" value="41.6 Signal"/>	<input type="checkbox"/>

Danger tag and dedicated padlock applied to entrance of Glenbrook control panel ☐ **Handsignaller details** (tick the applicable locations)

1	<input type="text" value="name"/>	<input type="text" value="38.9 SKS Signal Down Main West line"/>	<input type="text" value="Sig/km"/>	<input type="checkbox"/>
2	<input type="text" value="name"/>	<input type="text" value="42.6 SKS Signal Up Main West line"/>	<input type="text" value="Sig/km"/>	<input type="checkbox"/>

**Assurances from Penrith panel** (confirm the details provided by the Signaller) ☐

The last rail traffic to pass the protection was	<input type="text" value="rail traffic ID"/>	The last known location of rail traffic is	<input type="text" value="location"/>
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Confirm that there is no approaching rail traffic between protection and worksite ☐ Authorised time **Train Running Information - Down Main**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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**Signaller Details**

<input type="text" value="name"/>	<input type="text" value="Penrith Panel"/>	<input type="text" value="4780 3824"/>
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**Assurances from Katoomba** (confirm the details provided by the Signaller) ☐

The last rail traffic to pass the protection was	<input type="text" value="rail traffic ID"/>	The last known location of rail traffic is	<input type="text" value="location"/>
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Confirm that there is no approaching rail traffic between protection and worksite ☐ Authorised time **Train Running Information - Up Main**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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**Signaller Details**

<input type="text" value="name"/>	<input type="text" value="Katoomba Panel"/>	<input type="text" value="9851 7401"/>
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Protection Officer's log, diagrams, notes and detailed instructions are over the next pages. These are to be read and followed as part of this worksite protection plan for Signal Key Switch Blocking.

**Safe Work Instruction****SKS Worksite Protection for Glenbrook routine network maintenance activities**

Before allowing workers to enter the Danger Zone, confirm:

- all entry points into the affected portion of track have been reduced or protected
- the Handsignaller has removed the key from the signal key switch and the signal is at STOP

Line (circle)		Rail traffic ID	Arrival time	Departure time	SKS key removed time	Cleared worksite time
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
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Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					
Up Main West	Down Main West					

**Ending SKS Blocking**

Worksite location – Down Main West line between 41.3 Signal to 42.5 Signal

☐ ☐ N/A

Worksite location – Up Main West line between 42.0 Signal to 41.6 Signal

☐ ☐ N/A

Workers and equipment clear of the Danger Zone

☐  hr

Handsignaller(s) have restored the SKS key(s)

☐  hr

Danger tag and dedicated padlock removed to entrance of Glenbrook control panel

☐  hr

SKS Blocking Ended

☐  hr

### INSTRUCTIONS:

1. Workers enter corridor via Down cess gate **W00 67.301 D** or Up Main Cess gate **W00 67.291 U** at Glenbrook.
2. Protection Officer applies a Danger tag and dedicated padlock to Glenbrook Control Panel door lock with the following information:
  - Protection Officers name and contact number,
  - SKS Blocking is in place.
3. Protection Officer briefs workers about the worksite protection arrangements.
4. Handsignaller placed at the required SKS Signals:
  - **38.9 Signal, Down Main West line,**
  - **42.6 Signal, Up Main West line.**
5. Workers remain in a safe place until Protection Officer informs all protection is in place.
6. Protection Officer contacts the required Signallers at:
  - Penrith Panel to request SKS Blocking on **38.9 Signal** on the **Down Main West line,**
  - Katoomba Panel to request SKS Blocking on **42.6 Signal** on the **Up Main West line.**
7. Once permission is granted, Protection Officer instructs placed Handsignallers to arrange the removal of the SKS key from their respective SKS signals.
8. Protection Officer confirms with placed Handsignallers that the SKS key has been removed and the signal is displaying STOP.
9. Protection Officer contacts the Signaller at Penrith Panel / Katoomba Panel to confirm that rail traffic has been excluded from the affected portion of track.
10. Protection Officer confirms with Penrith Panel / Katoomba Panel:
  - train running information for rail traffic planned to pass through the worksite,
  - the Identification number of last rail traffic to enter the affected portion of track and its last known location,
  - that there is no rail traffic approaching the worksite.
11. Protection Officer confirms **2 points** and **3 points** are clipped and locked if implementing SKS Blocking on just the **Up Main West line** or the **Down Main West line**.
12. Protection Officer informs workers protection is in place and to start work.
13. Once work is complete, workers move to a safe place.
14. Protection Officer instructs placed Handsignallers at SKS signals to restore the key.
15. Once placed Handsignallers have confirmed the SKS key has been restored and the signal is displaying PROCEED, Protection Officer contacts the Signaller at Penrith Panel / Katoomba Panel to end SKS Blocking.
16. All workers exit the rail corridor via gate **W00 67.301 D** or **W00 67.291 U** at Glenbrook.

### ADDITIONAL DETAILS

#### Signaller cut in at Glenbrook control panel

Glenbrook control panel may be cut in to operate the points at Glenbrook.

To prevent a Signaller from entering and operating the control panel, a Danger tag and dedicated padlock is applied to the Glenbrook control panel door lock. The Danger tag must have the Protection Officer's name and contact details.

#### Multiple entry points

**2 and 3 points** provide entry points into the worksite if the point clips are removed.

Unless protection is provided on both the **Up Main West line** and the **Down Main West line** at the same time during the work, **2 and 3 points** must remain clipped and locked.



## Safe Work Instruction

### SKS Worksite Protection for Glenbrook routine network maintenance activities

#### KEY LOCATIONS



**Image 1:** Danger tag and dedicated padlock on Glenbrook control panel door.



**Image 2:** Emergency Assembly Point Dn Side



**Image 3:** Emergency Assembly Point Up Side



**Image 4:** Access gate **W00 67.301 D** to the **Down Main West line** worksite.



**Image 5:** Access gate **W00 67.291 U** to the **Down Main West line** worksite.

#### SKS SIGNAL LOCATIONS



**Image 4:** 38.9 Signal on the **Down Main West line**



**Image 5:** Access gate **W00 63.029 D** to 38.9 Signal



**Image 6:** 42.6 Signal on the **Up Main West line**



**Image 7:** Access gate **W00 69.042 U** to 42.6 Signal



DANGER TAG



Image 7: Example of front side of the Danger tag

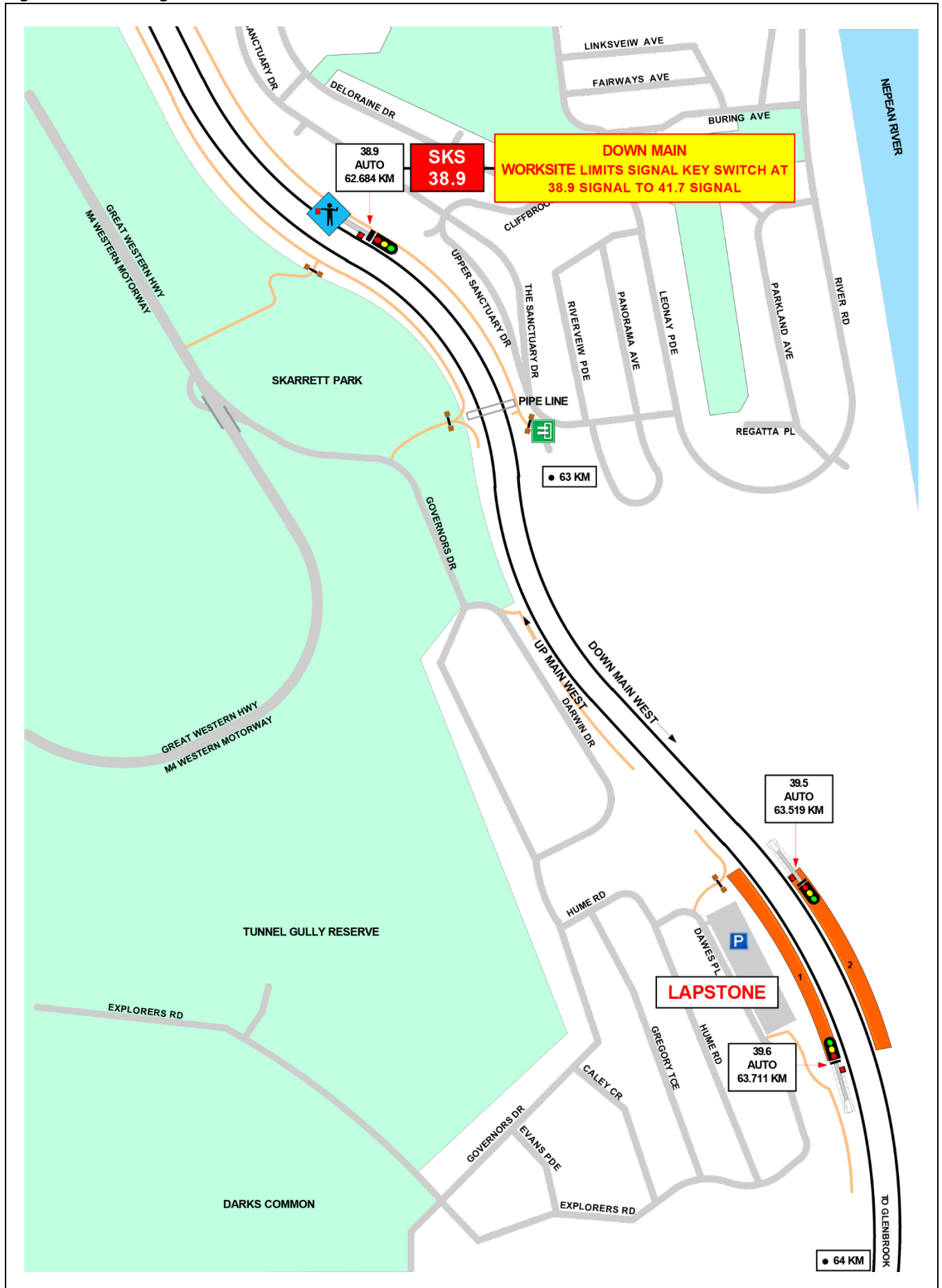


Image 8: Example of reverse side of the Danger tag

## Safe Work Instruction

### SKS Worksite Protection for Glenbrook routine network maintenance activities

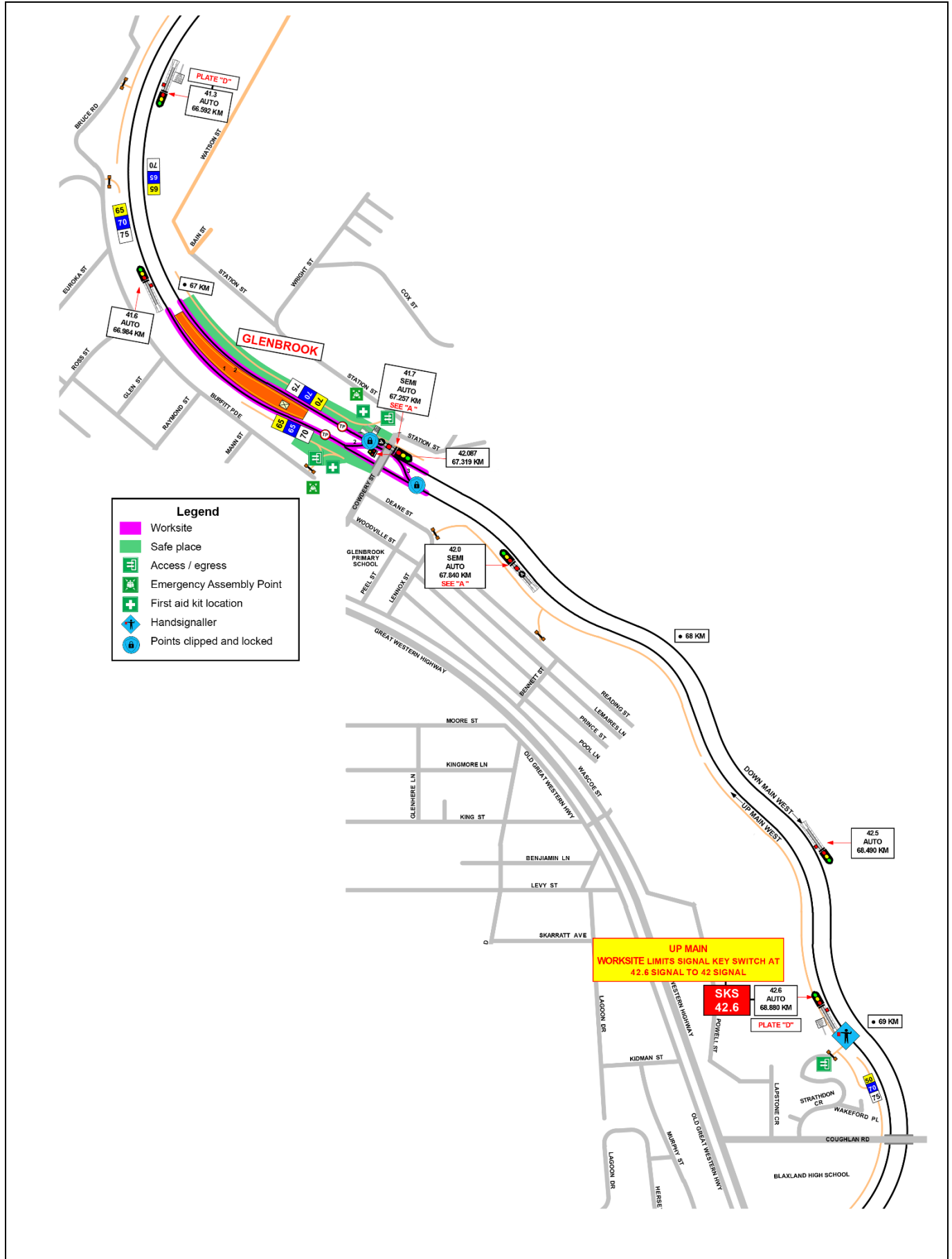
Diagram – SKS 38.9 Signal Down Main West line



## SKS Worksite Protection for Glenbrook routine network maintenance activities



**Diagram – Worksite and SKS 42.6 Signal Up Main West line**





### Protection Officer's diary

[illegible]