

## Worksite Protection for Berowra track inspections

<b>DOCUMENT NO.</b>	D2020/22561
<b>WORK DESCRIPTION</b>	Track inspections on 51, 52 and 53 points at Berowra
<b>REVIEW DATE</b>	03/03/2022
<b>WPP Number</b>	CN1BC 10002
<b>SCOPE:</b>	<p>This SWI is only applicable for the worksite protection arrangements of the routine track inspections performed by the City North Civil team for Berowra. Work activities include:</p> <ul style="list-style-type: none"> <li>• Civil track inspections and measurements</li> <li>• Points inspections and measurements</li> </ul>
<b>AUTHORISATIONS:</b>	<p><b>Protection Officer:</b> Protection Officer Level 1 or higher</p> <p><b>Lookout:</b> Handsignaller Level 1 or higher, Protection Officer Level 1 or higher.</p>
<b>SAFETY CONTROLS – Lookout Working arrangements:</b>	<p>Lookout Working on the <b>Up Main</b> line is a fixed worksite location at <b>52 points</b>. A Lookout is placed on <b>Berowra Platform 1</b> at <b>44.636km</b> for Up direction rail traffic on the <b>Up Main</b>.</p> <p>Workers must move into a safe place if the ASB is suspended.</p>
<b>Absolute Signal Blocking (ASB) arrangements:</b>	<p>Absolute Signal Blocking on the <b>Down Main</b> and <b>Refuge Loop</b> is at a fixed worksite location from <b>B3 Signal to 28.5 Signal</b>.</p> <p><i>For reference only;</i></p> <p>The worksite is protected by:</p> <ul style="list-style-type: none"> <li>• <b>B1 Signal and B3 Signal</b> at STOP with blocking facilities applied on the <b>Down Main</b></li> <li>• <b>B5 Signal</b> at STOP with blocking facilities applied and <b>52 points</b> to prevent access to the worksite on the <b>Up Main</b></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>• Lookouts require a high-visibility arm sleeve and two horns.</li> </ul>
<b>FURTHER INFORMATION:</b>	<p><b>References</b></p> <p><i>NWT 300 Planning work in the Rail Corridor</i></p> <p><i>NWT 310 Lookout Working</i></p> <p><i>NWT 314 Absolute Signal Blocking</i></p> <p><i>NPR 703 Using Absolute Signal Blocking</i></p> <p><i>NPR 711 Using Lookouts</i></p> <p><i>NPR 751 Calculating Minimum Warning Time</i></p> <p><i>NPR 712 Protecting work from rail traffic on adjacent lines</i></p> <p><i>Lookout Working Prohibited Locations Register</i></p>

## Worksite Protection for Berowra track inspections

### Protection Officer assessment checklist

Protection Officer's name:		Yes (Tick if Yes)
On-site safety assessment has been completed		
The required protection details, environment and tasks are unchanged from the details of this SWI		
SWI details and protection arrangements have been reviewed and validated for the assessed worksite location.		
Corridor Safety Number	Protection Officer Signature	Date

# Worksite Protection for Berowra track inspections

## Worksite Protection Pre-work Briefing

Briefing date:  /  / 

### Protection Officer Details

<input type="text"/> name	<input type="text"/> signature	<input type="text"/> contact No.
---------------------------	--------------------------------	----------------------------------

Work location: Scope of work: Worksite protection:  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>Struck by rail traffic</b>	ASB & Lookout Working implemented. Workers to remain within worksite limits.	Protection Officer
<b>Adjacent live lines</b>	Designated work and walk areas as per Protection Officer's instructions. All work is to stop and workers moved to a safe place when warned by lookout and/ or Protection Officer.	Protection Officer
<b>Multiple entry points into worksite</b>	ASB implemented	Protection Officer
<b>Obstruction to Minimum Sighting Distance</b>	Lookouts are to provide warning to the workers whenever the Minimum Sighting Distance is obstructed by passing rail traffic or passengers on the platform. Workers are to stop work and move to a safe place.  Lookouts must confirm with Protection Officers when the Minimum Sighting Distance is regained.	Protection Officer & Lookout
<b>Adjoining/Surrounding Worksites</b>	Lookouts must have two independent audible warning devices that can be heard by workers over any noise generated by adjoining/surrounding worksites.  Lookouts are to provide warning if their line of sight is obstructed by adjoining/surrounding worksites.	Protection Officer & Lookout
<b>Electrical infrastructure</b>	Electrical infrastructure is to be treated as live and workers must maintain a safe approach distance as instructed by the Protection Officer or Workplace Supervisor.	Protection Officer & Workplace Supervisor
<b>Access to / Egress from worksite</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 phone usage is not allowed in the Danger Zone.  Mobile phones may be used only in a safe place after informing the Protection Officer.	All

# Worksite Protection for Berowra track inspections

## Workplace Supervisor Details

name	contact No.
Emergency assembly point: <input style="width: 150px;" type="text"/>	SWMS/SWI Ref #: <input style="width: 150px;" type="text"/>
First aid kit location: <input style="width: 200px;" type="text"/>	First Aider: <input style="width: 200px;" type="text"/>

## Workplace Supervisor Acknowledgement

The Workplace Supervisor acknowledges that all identified WHS and rail safety hazards have the appropriate controls in place to manage and/or eliminate the hazards.

Yes

## Participant Acknowledgement

**NOTE: Recipients of the briefing are to question the Briefer if they don't understand any part of this briefing.**

All workers listed below acknowledge that they:	
<ul style="list-style-type: none"> <li>1. have been inducted to the site</li> <li>2. are free from the effects of alcohol/drugs/fatigue</li> <li>3. hold the applicable and current Rail Safety Worker Authorisation, trade licence and/or induction record e.g. Construction Industry Induction</li> <li>4. wear the appropriate Personal Protective Equipment (PPE)</li> </ul>	<ul style="list-style-type: none"> <li>5. have been briefed on the contents of the Worksite Protection Plan</li> <li>6. have been shown the Worksite Protection Plan diagram</li> <li>7. understand the kinds and limits of worksite protection in place</li> <li>8. have been briefed about any new hazards and controls identified during the final site inspection (<i>final site inspection must be conducted immediately before commencing work</i>)</li> </ul>

Mark each check box below with a tick  if the item applies or a cross  if the item does not apply.

<ul style="list-style-type: none"> <li><input type="checkbox"/> have been informed of the requirements of the electrical permit (if required)</li> <li><input type="checkbox"/> have been briefed on the SWMS/SWIs/ documented safe work practice for the job</li> <li><input type="checkbox"/> have been instructed in the controls recorded in this document and SWMS/SWIs</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> have been made aware of any hazardous materials/substances on site</li> <li><input type="checkbox"/> have been briefed on Safety Data Sheets (SDS)</li> <li><input type="checkbox"/> have been briefed on the WHS Management plan</li> <li><input type="checkbox"/> have been briefed on the hazards of adjoining worksites/processes.</li> </ul>
---	---

Name	Signature	Time of briefing: hh:mm	Amendment briefing: hh:mm and initial

# Worksite Protection for Berowra track inspections

## Worksite Protection Plan – Lookout Working

### Signaller Details

### Protection Officer Details

Planned duration

Workplace Supervisor details:

Type of work:

### Worksite Location

On the

between  and

### Worksite Assessment

Has the Lookout Working Prohibited Locations Register been consulted? Yes

### Warning method

### Minimum Warning Time Calculations

Maximum track speed

Number of Lookouts used  Position of Lookouts  to

Number of additional Lookouts\* used  Position of Lookouts  to

2 sec	+	3 sec	+	10 sec	= Minimum Warning Time (MWT)	15 sec	90 km/h	375 metres
sec	+	sec	+	10 sec		sec	km/h	metres
sec	+	sec	+	10 sec		sec	km/h	metres

*See Time (S)*    *Move Time (M)*    *Safe Time*    *(S+M+10 sec = MWT)*    *Track speed*    *Minimum Sighting Distance as calculated*

\* Add an additional 5 seconds of See Time if an additional Lookout is used

**Note** – Additional MWT calculations can be recorded in the Protection Officer's Diary.

### Where are the safe places identified for the Lookouts and the workers?

Lookouts:

Workers:

Ensure the workers have been briefed about these work details Yes

This worksite protection plan is to be used in conjunction with the worksite protection plan for ASB on the following page. The work is performed on 52 points and Lookout Working is only established once the ASB protection arrangements are implemented.

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 Lookout Working and ASB.

# Worksite Protection Plan – Absolute Signal Blocking

## 1. ASB Request – 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"/>

Type of work:

### 2. Worksite Location

On the	<input type="text" value="Down Main"/>	
from	<input type="text" value="B3 Signal"/>	to <input type="text" value="28.5 Signal"/>
On the	<input type="text" value="Down Passing Loop"/>	
from	<input type="text" value="B3 Signal"/>	to <input type="text" value="28.5 Signal"/>

### 3. Protection to be used

<input type="text" value="Signal(s) at STOP with blocking facilities applied"/>	<input type="text" value="Points secured"/>
---	---

Protection is required from other Signallers(s) at

### 4. Assurances

All points of entry into the affected portion of track are protected and blocking facilities applied

The last rail traffic to pass the protection was  The last known location of rail traffic is

Confirm that there is no rail traffic between the protection and the worksite

### 5. Authorisation

Authorised by Signaller

<input type="text" value="name"/>	<input type="text" value="Broadmeadow Location / panel"/>	<input type="text" value="hr"/>	<input type="text" value="/ /"/>
-----------------------------------	---	---------------------------------	----------------------------------

Protection Number <input type="text"/>	Notes <input type="text"/>
--	----------------------------

### 6. Temporarily Suspending ASB

Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>
Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>
Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>
ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr

### 7. Re-establish ASB assurances

The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>
All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>
The last rail traffic to pass the protection was <input type="text" value="rail traffic ID"/>	The last rail traffic to pass the protection was <input type="text" value="rail traffic ID"/>	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"/>	The last known location of rail traffic is <input type="text" value="location"/>	The last known location of rail traffic is <input type="text" value="location"/>
There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>
ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr
Protection Number <input type="text"/>	Protection Number <input type="text"/>	Protection Number <input type="text"/>

### 8. Ending

Provide name and worksite location  Workers and equipment clear of the Danger Zone  Provide protection number  Ended at

--

<b>6. Temporarily Suspending ASB</b>		
Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>
Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>
Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>
ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr

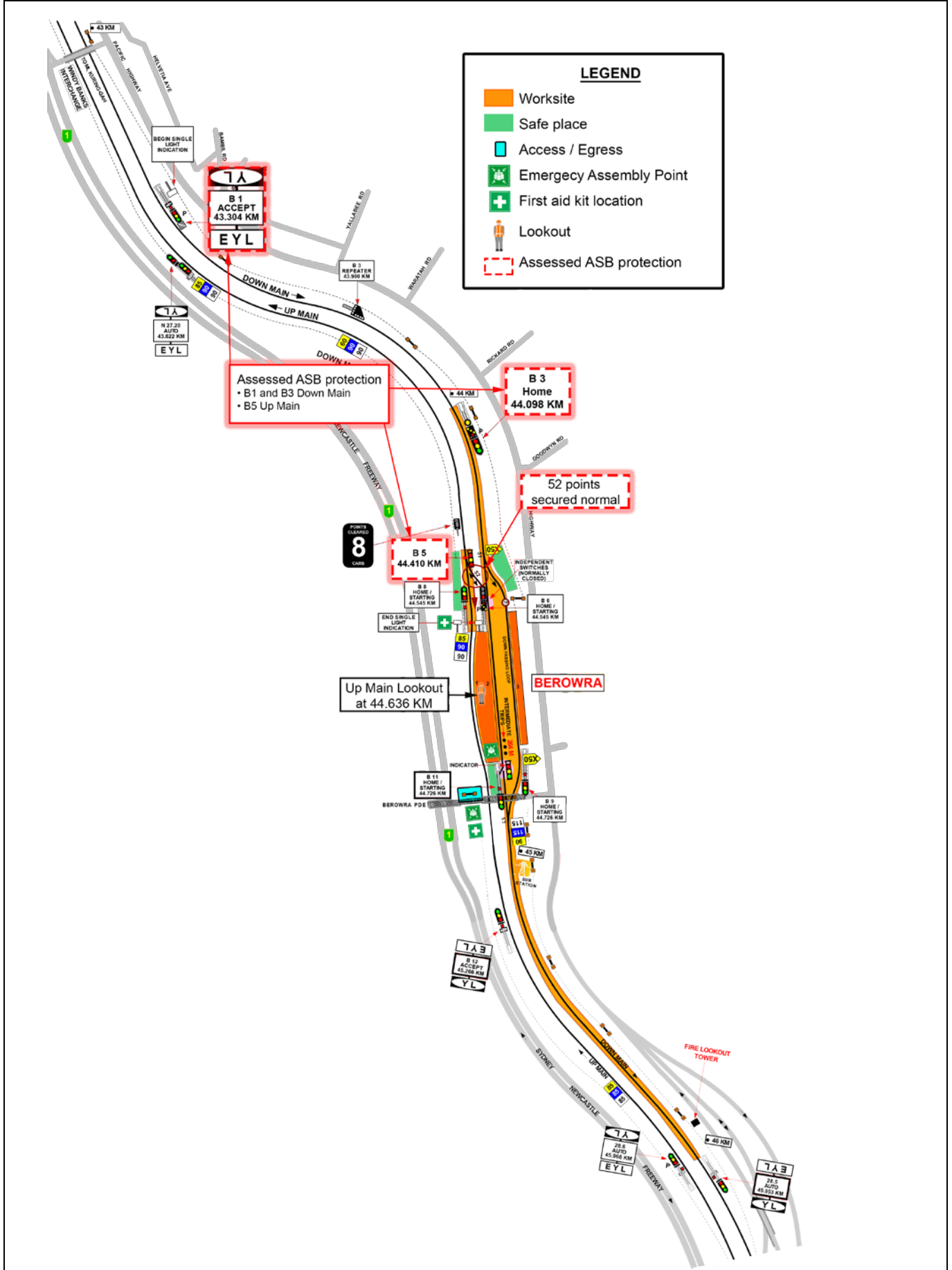
<b>7. Re-establish ASB assurances</b>		
The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>
All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>
The last rail traffic to pass the protection was <input type="text"/> rail traffic ID	The last rail traffic to pass the protection was <input type="text"/> rail traffic ID	The last rail traffic to pass the protection was <input type="text"/> rail traffic ID
The last known location of rail traffic is <input type="text"/> location	The last known location of rail traffic is <input type="text"/> location	The last known location of rail traffic is <input type="text"/> location
There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>
ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr
Protection Number <input type="text"/>	Protection Number <input type="text"/>	Protection Number <input type="text"/>

Provide name and worksite location <input type="checkbox"/>	Workers and equipment clear of the Danger Zone <input type="checkbox"/>	Provide protection number <input type="checkbox"/>	Ended at <input type="text"/> hr
---	---	--	----------------------------------

<b>6. Temporarily Suspending ASB</b>		
Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>	Provide the name and worksite location <input type="checkbox"/>
Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>	Workers and equipment are clear of the Danger Zone <input type="checkbox"/>
Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>	Provide protection number <input type="checkbox"/>
ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr	ASB suspended at <input type="text"/> hr

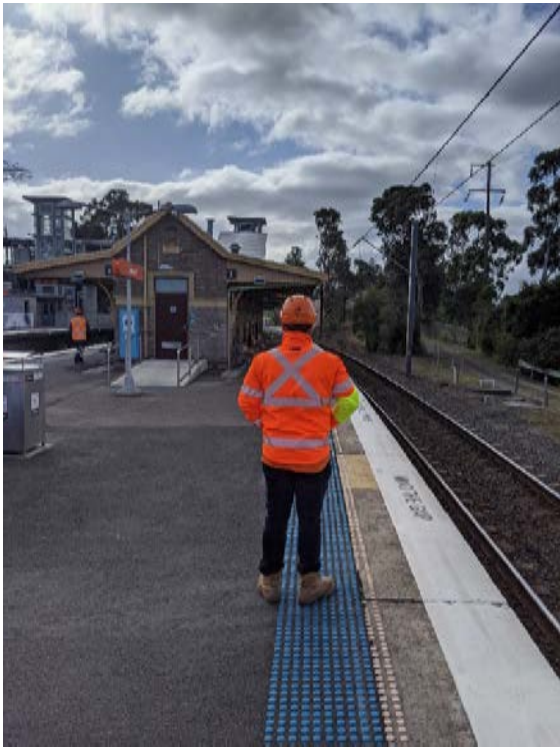

<b>7. Re-establish ASB assurances</b>		
The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>	The worksite location is identical <input type="checkbox"/>
All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>	All points of entry into the affected portion of track are protected and blocking facilities applied <input type="checkbox"/>
The last rail traffic to pass the protection was <input type="text"/> rail traffic ID	The last rail traffic to pass the protection was <input type="text"/> rail traffic ID	The last rail traffic to pass the protection was <input type="text"/> rail traffic ID
The last known location of rail traffic is <input type="text"/> location	The last known location of rail traffic is <input type="text"/> location	The last known location of rail traffic is <input type="text"/> location
There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>	There is no approaching rail traffic between the protection and the worksite <input type="checkbox"/>
ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr	ASB re-established at <input type="text"/> hr
Protection Number <input type="text"/>	Protection Number <input type="text"/>	Protection Number <input type="text"/>

Diagram – Berowra





# Worksite Protection for Berowra track inspections

<b>INSTRUCTIONS:</b>	<ol style="list-style-type: none"> <li>1. Workers enter corridor via gate <b>N00 44.735 U</b> on Berowra Parade.</li> <li>2. Protection Officer briefs workers about the worksite protection arrangements.</li> <li>3. Workers remain in Up Cess safe place until Protection Officer informs all protection is in place.</li> <li>4. Establish Lookout on <b>Berowra Platform 1</b> at <b>44.636 KM</b> watching for <b>Up Main</b> rail traffic approach.</li> <li>5. Protection Officer contacts Hornsby North Panel and tells the Signaller about the use of Lookout Working at Berowra on the <b>Up Main</b> line and requests ASB on the <b>Down Main</b> and <b>Down Passing Loop</b>.</li> <li>6. Once ASB has been authorised, workers start work on <b>51 points</b> on the <b>Down Main</b> line.</li> <li>7. When work on <b>51 points</b> is complete, workers move and start work on <b>52 points</b> on the <b>Up and Down Main</b> line.</li> <li>8. When work on <b>52 points</b> is complete, the lookout for the <b>Up Main</b> line is recalled and work is to continue on the <b>Down Main</b> and <b>Down Relief</b> line until <b>53 points</b>.</li> <li>9. Workers move to safe place once work is complete on <b>53 points</b>.</li> <li>10. Protection Officer contacts Hornsby North Panel to end ASB and Lookout Working.</li> </ol>
<b>SAFEWORKING HAZARDS</b>	<p>Rail traffic that enters <b>Berowra Platform 2</b> on the <b>Down Main</b> line may travel onto the Up Main line through <b>52 points</b>. The ASB may be suspended for an extended period of time because of this.</p> <p>Environmental noise from Sydney Newcastle Freeway may impede certain audible warning devices. The Lookout must use two horns as individual warning devices.</p> <p>Passengers on <b>Berowra Platform 1</b> may impede the Lookout’s Minimum Sighting Distance. Lookouts must provide warning to the worksite if Minimum Sighting Distance cannot be achieved. Lookouts must confirm with the Protection Officer when Minimum Sighting Distance is regained.</p>
<b>LOOKOUT</b>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>Image 1:</b> Position of Lookout on the <b>Up Main</b> at <b>44.636KM</b></p> </div> <div style="text-align: center;">  <p><b>Image 2:</b> View from the Lookout</p> </div> </div>

# Worksite Protection for Berowra track inspections

WORKSITE



Image 4: B5 at stop and 52 points secured normal



Image 5: View of 53 points

