

# ASB Worksite Protection for Bombo Tunnel

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| <b>DOCUMENT NO.</b>   | D2024/12742  |
| <b>WORK DESCRIPTION</b>   | Routine Network Maintenance Activities   |
| <b>WPP Number</b>   | SC59C 10118  |
| <b>SCOPE:</b>   | <p>This SWI is applicable for the worksite protection arrangements using ASB for routine network maintenance activities performed by South Coast Maintenance Teams</p> <p>Work activities may include:</p> <ul style="list-style-type: none"> <li>• Track Circuit Testing</li> <li>• KK Testing</li> <li>• Track Patrol</li> <li>• OHW Inspections</li> <li>• Structures Examinations</li> <li>• Light Examinations</li> <li>• Tunnel Inspections</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 - Absolute Signal Blocking (ASB) arrangements:</b> | <p>ASB established to exclude rail traffic on the South Coast Branch Line at Bombo</p> <p><b>For reference only.</b></p> <p>The assessed ASB protection is:</p> <ul style="list-style-type: none"> <li>• <b>44.5 Signal</b> at <u>STOP</u> with blocking facilities applied on the City side of the worksite.</li> <li>• <b>44.25 &amp; 44.27 Signals</b> at <u>STOP</u> with blocking facilities applied on the City side of the worksite.</li> <li>• <b>45.26 &amp; 45.28 Signals</b> at <u>STOP</u> with blocking facilities applied on the Country side of the worksite.</li> <li>• <b>51 Points</b> Kiama ESML Key removed and secured</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 a whistle / horn</li> </ul>   |
| <b>FURTHER INFORMATION:</b>   | <p><i>NWT 300 Planning work in the Rail Corridor</i></p> <p><i>NWT 308 Absolute Signal Blocking</i></p> <p><i>NPR 703 Using Absolute Signal Blocking</i></p> <p><i>NGE 200 Walking in the Danger Zone</i></p> <p><i>NLA 418 Wollongong to Bomaderry (Nowra)</i></p>  |

## ASB Worksite Protection for Bombo Tunnel

### Protection Officer assessment checklist

| Protection Officer's name:   |                              | Yes<br>(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.                 |                              |                      |
| Corridor Safety Number   | Protection Officer Signature | Date                 |
|  |                              |                      |

#### Warning



*If an above item does not apply, the Protection Officer must not use this Safe Work Instruction. A new worksite protection plan must be completed in accordance with NRF 014 Worksite Protection Pre-work briefing and NRF 015 Worksite Protection Plan.*

# ASB Worksite Protection for Bombo Tunnel

## Worksite Protection Pre-work Briefing

Briefing date: / /

### Protection Officer details

|      |           |             |
|------|-----------|-------------|
| name | signature | contact No. |
|------|-----------|-------------|

Work location: **Bombo Tunnel**

Scope of work: **Routine Network Maintenance Activities**

Worksite protection: **ASB** 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>   | ASB implemented.<br>Workers to remain within worksite limits.   | Protection Officer             |
| <b>Adjacent live lines</b>  | Designated work and walk areas as instructed by the Protection Officer. Workers must remain within the ASB nominated worksite location limits whilst work is being performed. | Protection Officer             |
| <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 and from the worksite or safe place.      | All                            |
| <b>Mobile phone distraction</b>   | Mobile phone usage is not allowed in the Danger Zone.<br>Mobile phones may be used only in a safe place after informing the Protection Officer.                               | All                            |
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# ASB Worksite Protection for Bombo Tunnel

## Workplace Supervisor details

name  contact No.  
 Emergency assembly point:  SWMS/SWI Ref #:   
 First aid kit location:  First aider:

## 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:

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. have been inducted to the site</li> <li>2. are free from alcohol and drugs</li> <li>3. are free from the effects of fatigue</li> <li>4. hold the applicable and current Rail Safety Worker Authorisation, trade licence and/or induction record e.g. Construction Industry Induction</li> <li>5. must wear the appropriate Personal Protective Equipment (PPE)</li> </ol> | <ol style="list-style-type: none"> <li>6. have been briefed on the contents of the Worksite Protection Plan</li> <li>7. have been shown the Worksite Protection Plan diagram</li> <li>8. understand the kinds and limits of worksite protection in place</li> <li>9. 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> </ol> |
|---|--|

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

- |  |   |
|--|---|
| <input type="checkbox"/> have been informed of the requirements of the electrical permit (if required)<br><input type="checkbox"/> have been briefed on the SWMS/SWIs/documented safe work practice for the job<br><input type="checkbox"/> have been instructed in the controls recorded in this document and SWMS/SWIs | <input type="checkbox"/> have been made aware of any hazardous materials/substances on site<br><input type="checkbox"/> have been briefed on Safety Data Sheets (SDS)<br><input type="checkbox"/> have been briefed on the WHS Management plan<br><input type="checkbox"/> have been briefed on the hazards of adjoining worksites/processes. |
|--|---|

| Name | Signature | Time of briefing:<br>hh:mm | Amendment briefing:<br>hh:mm and initial |
|------|-----------|----------------------------|--|
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# ASB Worksite Protection for Bombo Tunnel

## 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: **Routine Network Maintenance Activities**

### 2. Worksite location

|        |  |      |                                  |    |                                  |
|--------|--|------|----------------------------------|----|----------------------------------|
| on the | <b>South Coast Branch Line,<br/>Main Line and Loop Line at<br/>Kiama and Bombo</b> | from | <b>44.25 &amp; 44.27 Signals</b> | to | <b>45.26 &amp; 45.28 Signals</b> |
|--------|--|------|----------------------------------|----|----------------------------------|

### 3. Protection to be used

|   |  |
|---|--|
| <input type="text" value="Signal(s) at STOP with blocking facilities applied"/> | <input type="text" value="Removal of ESML/EOL key"/> |
|---|--|

Protection is required from other Signallers 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  **South Coast panel**  / /

Protection Number  Notes

### 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

# ASB Worksite Protection for Bombo Tunnel

## 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                       |

## 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"/>     | 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                 |
| 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                       |
| Protection Number  | <input type="text"/>     |  | Protection Number                                | <input type="text"/>   |                          |

Notes

## 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                       |

## 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"/>     | 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                 |
| 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                       |
| Protection Number  | <input type="text"/>     |  | Protection Number                                | <input type="text"/>   |                          |

# ASB Worksite Protection for Bombo Tunnel

**INSTRUCTIONS:**

1. Workers enter the rail corridor via 100 117.683 U Access Gate
2. Protection Officer briefs workers about the worksite protection arrangements.
3. Protection Officer contacts the Signaller at South Coast Panel (02) 4223 5766 to request ASB.
4. After ASB has been authorized. start work within the limits of the nominated worksite location.
5. After work is complete, workers move to a safe place.
6. Protection Officer contacts the Signaller at South Coast Panel to end ASB.
7. All workers egress the rail corridor via 100 119.070 U

**ADDITIONAL DETAILS**

Suspending ASB

If the ASB is required to be suspended, the Protection Officer must make sure all workers and equipment are clear of the Danger Zone and are in a safe place before suspending the ASB.

Occupied Sidings

If the sidings at Bombo (Down Siding) or Kiama (Down Siding or Turntable Siding) are occupied, arrange to have relevant points secured to prevent access as per *NWT 308*.

**Access Gates:**



**Image 1:** Access gate 100 117.683 U at Bombo Station commuter carpark.



**Image 2:** Access gate 100 119.070 U on Railway Parade.

# ASB Worksite Protection for Bombo Tunnel

EOL/ESML  
Cabinet

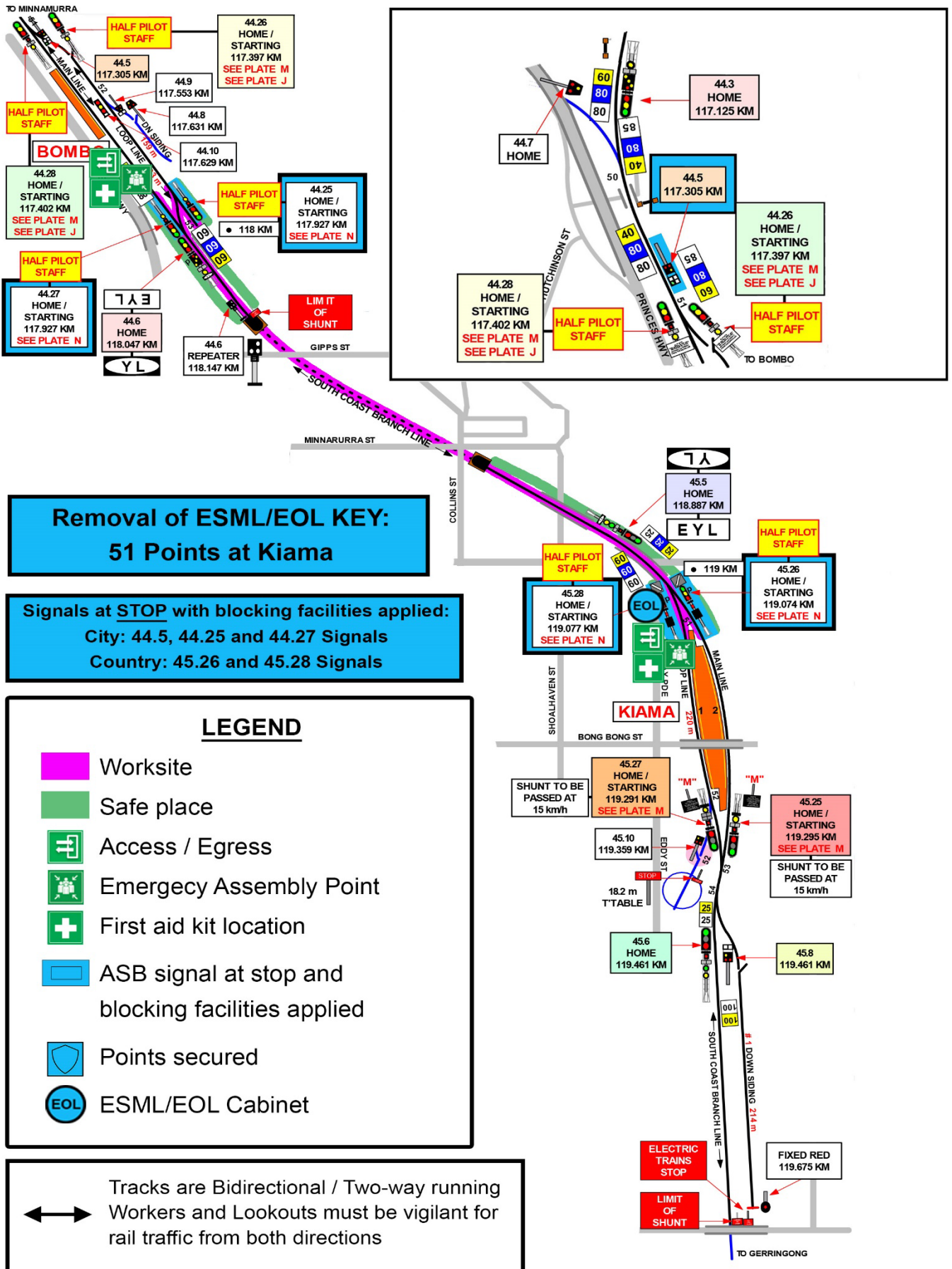


Image 3: 51 Points ESML cabinet at Kiama



# ASB Worksite Protection for Bombo Tunnel

Diagram



**Removal of ESML/EOL KEY:  
51 Points at Kiama**

**Signals at STOP with blocking facilities applied:**  
 City: 44.5, 44.25 and 44.27 Signals  
 Country: 45.26 and 45.28 Signals

**LEGEND**

- Worksite
- Safe place
- Access / Egress
- Emergency Assembly Point
- First aid kit location
- ASB signal at stop and blocking facilities applied
- Points secured
- ESML/EOL Cabinet

↔ Tracks are Bidirectional / Two-way running  
 Workers and Lookouts must be vigilant for rail traffic from both directions

