

Safe Work Instruction

Lookout Working Worksite Protection for St Marys routine network maintenance activities



DOCUMENT NO.	D2023/10587		
WORK DESCRIPTION	Routine network maintenance activities		
WPP Number	WT07B 10178	SAP Code	
SCOPE:	<p>This SWI is applicable for the worksite protection arrangements using lookout working 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"> Routine preventative and corrective work such as inspections and maintenance as appropriate for the type of protection being applied as part of this plan. 		
AUTHORISATIONS:	<p>Protection Officer: Protection Officer Level 1 or higher Lookout: Handsignaller Level 1 or higher, Protection Officer Level 1 or higher.</p>		
SAFETY CONTROLS – Lookout Working arrangements:	<p>The nominated worksite location for Lookout Working includes the Up Main West line, Down Main West line, Up Suburban line, Down Suburban line, No 1 Storage siding, Plasser Australia siding between Werrington Station Platforms 1 and 2 to Mt Druitt Station Platforms 1,2,3 and 4.</p> <p>The nominated worksite location for Lookout Working is a moving worksite, where workers are working along the track within the limits of the nominated worksite location up to the where the Lookout is established.</p> <p>As work moves along the track, the Protection Officer must assess the new location and:</p> <ul style="list-style-type: none"> Establish Lookouts as required to watch for approaching rail traffic from all entry points Designate and instruct which safe places the workers are to use as the work is completed along the work route within the worksite limits. 		
PRESTART REQUIREMENTS:	<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"> Protection Officer requires a phone to contact the Signaller. Lookouts require a high-visibility arm sleeve and a whistle / horn. 		
FURTHER INFORMATION:	<p><i>NWT 300 Planning work in the Rail Corridor</i></p> <p><i>NWT 310 Lookout Working</i></p> <p><i>NPR 711 Using Lookouts</i></p> <p><i>NPR 751 Calculating Minimum Warning Time</i></p> <p><i>NGE 200 Walking in the Danger Zone</i></p> <p><i>NLA 200 Lidcombe - Penrith</i></p> <p><i>Lookout Working Prohibited Locations Register</i></p>		

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**Protection Officer assessment checklist**

Protection Officer's name:		Yes (Tick if Yes)
This document is still current at the time of its application? (up to 12 months from the document issue date)		
SWI details and protection arrangements have been reviewed and validated for the assessed worksite location, including: <ul style="list-style-type: none"> On-site safety assessment has been completed for relevancy of works being undertaken The required protection details, environment and tasks are unchanged from the details of this SWI 		
<ul style="list-style-type: none"> The Protection Officer and Qualified Workers deploying qualifications are current and have practiced in the last 6 months. If not practiced, then a Rail Safety Coach must be contacted for guidance. 		
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.

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Worksite Protection Pre-work Briefing

Briefing date:

Protection Officer Details

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
<ul style="list-style-type: none"> Struck by rail traffic 	<p>Lookouts must be trained and competent to perform lookout duties.</p> <p>Lookouts must be rotated if performing lookout for extended periods of time</p> <p>Workers to remain within worksite limits as set out in this procedure.</p> <p>Lookouts must be placed as per protection plan</p> <p>Workers are to stop work and move to a safe place immediately on being warned by the lookouts</p>	Protection Officer and Lookout
<ul style="list-style-type: none"> Adjacent live lines 	Lookouts must provide warning to workers when rail traffic is approaching from the adjacent line in either direction.	Protection Officer and Lookout
<ul style="list-style-type: none"> Two-way running / multiple entry points into worksite 	One Lookout placed watching each direction before work starts. Lookouts are to warn workers of approaching rail traffic, including rail traffic entering or travelling within the worksite. Workers are to stop work and move to a safe place.	Protection Officer and Lookout
Obstruction to Minimum Sighting Distance	Lookouts must provide warning to the workers whenever their line of sight is obstructed by passing rail traffic. Workers must stop work and move to a safe place and reassess positioning and method	Protection Officer and Lookout
Adjoining/Surrounding Worksites	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 and Lookout
Limited / No safe places	Due to Metro works some Vortex fencing has been set on the Up and Down mains. No safe place on the Dn main city end of platform 4. Also limited safe places when working on Up and Down Suburban lines. All workers to follow POs instructions on safe places. No work to be conducted though Platforms 2 and 3 St Marys.	Protection Officer and All
Access to / Egress from worksite	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
Slips, trips, falls and hazards carrying equipment	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.	

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Worksite Protection Plan – Lookout Working

Signaller Details

Protection Officer Details

Planned duration

Workplace Supervisor details:

Type of work:

Worksite Location (tick the tracks that apply)

On the	<input type="checkbox"/> Up and Down Main West lines	<input type="checkbox"/> Up and Down Suburban lines
	<input type="checkbox"/> No 1 Storage siding	<input type="checkbox"/> Plasser Australia siding
between	<input type="checkbox"/> Werrington Station Platforms 1 and 2	<input type="checkbox"/> Mt Druiitt Station Platforms 1,2,3 and 4

Worksite Assessment

Has the Lookout Working Prohibited Locations Register been consulted? Yes

Warning method

Whistle/Horn
 Voice

Minimum Warning Time Calculations

Maximum track speed

Number of Lookouts used
 Position of Lookouts to
Note - Lookouts are relocated to positions within these km's as workers move along the worksite.

 Number of additional Lookouts* used
 Position of Lookouts to

2 sec	+	3 sec	+	10 sec	= Minimum Warning Time (MWT) $(S+M+10 \text{ sec} = \text{MWT})$	15 sec	115 km/h	480 metres	<small>* Add an additional 5 seconds of See Time if an additional Lookout is used</small>
2 sec	+	8 sec	+	10 sec		20 sec	115 km/h	639 metres	
2 sec	+	10 sec	+	10 sec		22 sec	115 km/h	703 metres	
2 sec	+	3 sec	+	10 sec		15 sec	105 km/h	438 metres	
2 sec	+	3 sec	+	10 sec		15 sec	95 km/h	396 metres	
2 sec	+	3 sec	+	10 sec		15 sec	25 km/h	105 metres	
2 sec	+	3 sec	+	10 sec		15 sec	13 km/h	55 metres	
2 sec	+	3 sec	+	10 sec		15 sec	13 km/h	55 metres	

See Time (S) Move Time (M) Safe Time Track speed Minimum Sighting Distance as calculated

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?

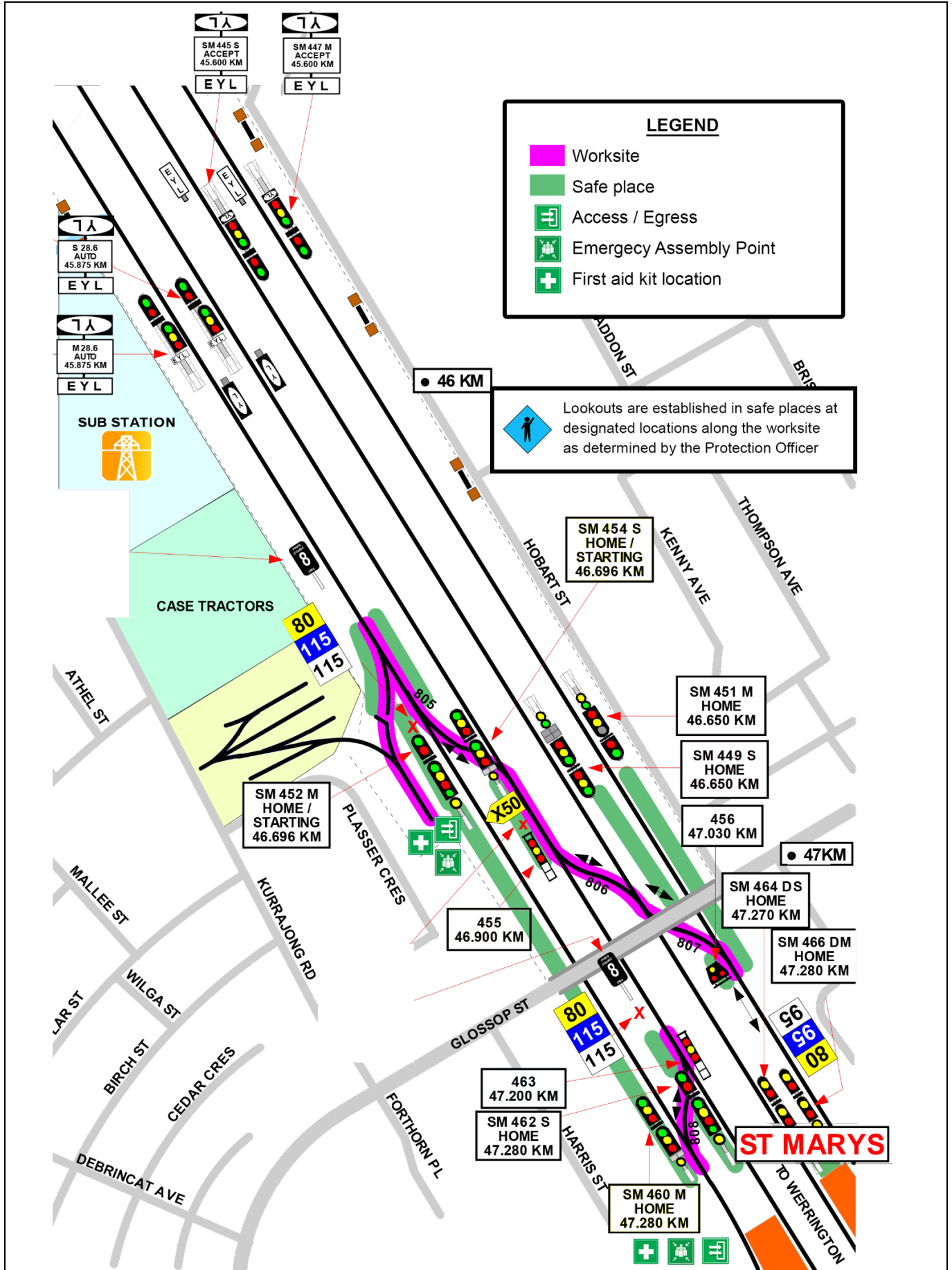
Lookouts:

 Workers:

Ensure the workers have been briefed about these work details Yes

The following diagrams, notes and detailed instructions are to be read and followed as part of this worksite protection plan for Lookout Working.

Diagram

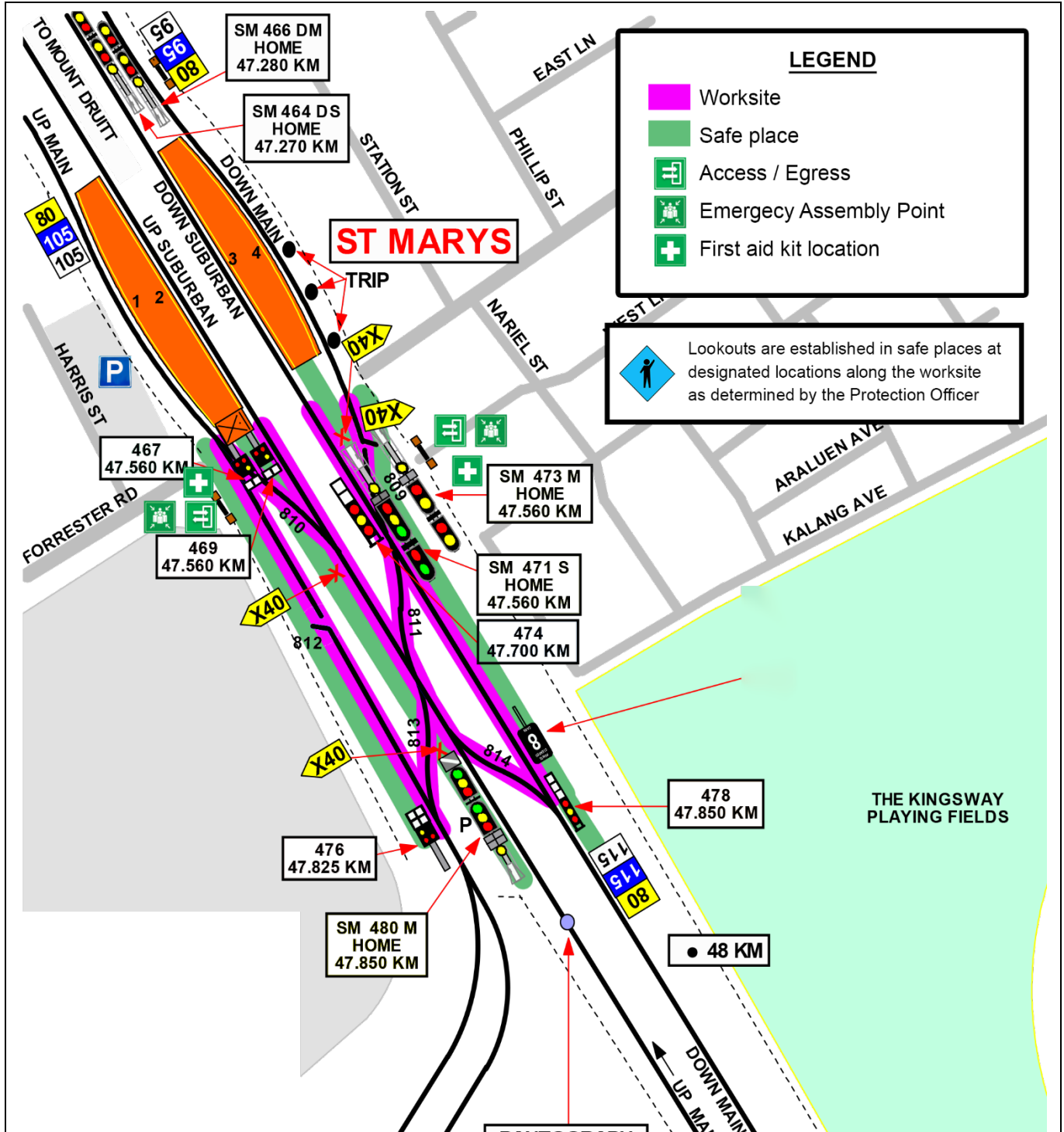




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Diagram



<p>INSTRUCTIONS:</p> <p>Location 1</p>	<ol style="list-style-type: none"> 1. Protection Officer briefs workers about the worksite protection arrangements. 2. Protection Officer contacts St Marys Panel and tells them about the use of Lookout Working between Werrington Station Platforms 1 and 2 to Mt Druitt Station Platforms 1,2,3 and 4. on all tracks 3. Workers enter rail corridor via gate W00 47.649 D, located on the Down side off Camira Street. 4. Protection Officer places Lookouts watching for rail traffic approach in both directions at the designated locations. 5. Workers start work. 6. Workers move to a safe place. 7. Repeat steps 4 – 6 until workers complete work between SM 480 M Signal and 467 Signal. 8. Once work is complete, all workers move into a safe place. 9. Protection Officer recalls Lookouts. 10. Protection Officer/Lookouts and workers exit the rail corridor via gate W00 47.649 and move to the next location.
<p>ADDITIONAL DETAILS</p>	<p><u>Two-way running / multiple entry points</u></p> <p>St Marys is a two-way running area. Rail traffic movements can occur in any direction.</p> <p>A Lookout is placed watching in both directions and must provide warning for any rail traffic approach. Workers must move into a safe place when Lookouts provide a warning regardless of which line the rail traffic is approaching on.</p> <p><u>Obstruction to Lookout’s Minimum Sighting Distance</u></p> <p>As Lookouts are place in the opposite cess in some locations. Lookouts must provide warning to workers when Minimum Sighting Distance is impeded by rail traffic on adjacent lines. All workers must remain in a safe place until Lookout can re-establish Minimum Sighting Distance.</p> <p><u>Passengers on St Marys Platforms</u></p> <p>Lookouts must provide warning to workers when Minimum Sighting Distance is impeded by passengers on St Marys platforms. All workers must remain in a safe place until Lookout can re-establish Minimum Sighting Distance.</p> <p><u>Rail traffic entering or exiting No 1 and No 2 Storage sidings.</u></p> <p>Lookouts to be positioned and warn workers to move to a safe place while Rail traffic enters or exits the sidings.</p> <p><u>Pantograph Condition Monitoring System (PCMS)</u></p> <p>The PCMS installed on structure SL47+908 MUST be isolated as per Safe Work Instruction DSYD2016/34982 prior to any work under possessions and OHW infrastructure work between SL47+880 and SL47+931 on the Western line. Contact Electrical Operating Centre (ICON Electrical) on 02 9379 4911 for advice.</p>
<p>LOOKOUTS</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Image 1: View of Up direction Lookout at 47.850 KM Down Cess.</p> </div> <div style="text-align: center;">  <p>Image 2: View of Down direction Lookout at 47.850 KM in a safe place behind signal SM 480 M.</p> </div> </div>

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Image 3: View of Down direction Lookout at 47.570 KM Up cess.



Image 4: View of Up direction Lookout at 47.622 KM Down cess.

**ACCESS /
EGRESS AND
EMERGENCY
ASSEMBLY
POINT**



Image 3: Access/egress gate W00 47.649 D







Image 5: Pantograph Condition Monitoring System (PCMS)



Image 4: Emergency Assembly Point inside gate W00 47.649 D

INSTRUCTIONS: Location 2	<ol style="list-style-type: none"> 1. Protection Officer briefs workers about the worksite protection arrangements. 2. Workers enter rail corridor via gate W00 46.959 U, located on the Up side off Glossop St. 3. Protection Officer places Lookouts watching for rail traffic approach in both directions at the designated locations. 4. Workers start work 5. Workers move to a safe place. 6. Repeat steps 3 – 4 until workers complete work between M28.6 Signal and SM 454 S. 7. Once work is complete, all workers move into a safe place. 8. Protection Officer recalls Lookouts. 9. Protection Officer/Lookouts and workers move via a safe place to the next Location.
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ADDITIONAL DETAILS	<p><u>Two-way running / multiple entry points</u> St Marys is a two-way running area. Rail traffic movements can occur in any direction. A Lookout is placed watching in both directions and must provide warning for any rail traffic approach. Workers must move into a safe place when Lookouts provide a warning regardless of which line the rail traffic is approaching on.</p> <p><u>Obstruction to Lookout’s Minimum Sighting Distance</u> Lookout must provide warning to workers when Minimum Sighting Distance is impeded by rail traffic on adjacent lines. All workers must remain in a safe place until Lookout can re-establish Minimum Sighting Distance.</p> <p><u>Rail traffic entering or exiting Plasser siding</u> Lookouts to be positioned and warn workers to move to a safe place while Rail traffic enters or exits the sidings.</p>
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LOOKOUTS	 <p>Image 1: View of Down direction Lookout at 46.562 KM 6 foot.</p>	 <p>Image 2: View of Up direction Lookout at 46.581 KM 6 foot</p>
	 <p>Image 3: View of Up direction Lookout at 46.696 KM 6 foot behind signal SM 454 S</p>	 <p>Image 4: View of Up direction Lookout at 46.696 KM 6 foot behind signal SM 454 S</p>

ACCESS /
EGRESS AND
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POINT



Image 3: Access/egress gate W00 46.959 U.



Image 4: Emergency Assembly Point

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INSTRUCTIONS:
Location 3

1. Protection Officer briefs workers about the worksite protection arrangements.
2. Workers enter rail corridor via gate **W00 46.959 U**, located on the Up side off **Glossop St**.
3. Protection Officer places Lookouts watching for rail traffic approach in both directions at the designated locations.
4. Workers start work.
5. Workers move to a safe place.
6. Repeat steps 4 – 6 until workers complete work between **SM 454 S Signal** and **456 Signal**.
7. Once work is complete, all workers move into a safe place.
8. Protection Officer recalls Lookouts.
9. Protection Officer/Lookouts and workers move via a safe place to the next Location

ADDITIONAL DETAILS

Two-way running / multiple entry points

St Marys is a two-way running area. Rail traffic movements can occur in any direction.

A Lookout is placed watching in both directions and must provide warning for any rail traffic approach. Workers must move into a safe place when Lookouts provide a warning regardless of which line the rail traffic is approaching on.

Obstruction to Lookout’s Minimum Sighting Distance

Lookout must provide warning to workers when Minimum Sighting Distance is impeded by rail traffic on adjacent lines. All workers must remain in a safe place until Lookout can re-establish Minimum Sighting Distance.

Rail Traffic on approach in the Up direction over the Down main from platform 4 St Marys.

Lookouts to be positioned and warn workers to move to a safe place.

Shut movements from 455 Signal and 456 Signal.

Lookouts to be positioned and warn workers to move to a safe place.

Limited Safe places

Limited safe places exist behind structures when working on the Up and Down Suburban lines. PO to instruct workers of these safe places and limit workers to only what’s needed when working on these lines. Extra move time has been assessed for these locations.

LOOKOUTS



Image 1: View of Down direction Lookout at **46.913 KM** 6 foot.



Image 2: View of the Up direction Lookout at **46.918 KM** 6 foot..



Image 3: View of Down direction Lookout at 46.948 KM 6 foot.



Image 4: View of Up direction Lookout at 47.015 KM Down cess.

ACCESS /
EGRESS AND
EMERGENCY
ASSEMBLY
POINT



Image 3: Access/egress gate W00 47.354 U.



Image 4: Emergency Assembly at Gate W00 47.354 U.

INSTRUCTIONS:
Location 4

1. Protection Officer briefs workers about the worksite protection arrangements.
2. Workers enter rail corridor via gate **W00 47.354 U**, located on the Up side off **Harris St** St Marys Up station car park.
3. Protection Officer places Lookouts watching for rail traffic approach in both directions at the designated locations.
4. Workers start work.
5. Workers move to a safe place.
6. Repeat steps 4 – 6 until workers complete work between **SM 460 M Signal** and **463 Signal**.
7. Once work is complete, all workers move into a safe place.
8. Protection Officer recalls Lookouts.
9. Protection Officer contacts **St Marys Panel** to end the use of Lookout Working between **Werrington Station Platforms 1 and 2** to **Mt Druiett Station Platforms 1,2,3 and 4** on all tracks
10. Protection Officer/Lookouts and workers exit the rail corridor.

ADDIOTNAL DETAILS

Two-way running / multiple entry points

St Marys is a two-way running area. Rail traffic movements can occur in any direction.

A Lookout is placed watching in both directions and must provide warning for any rail traffic approach. Workers must move into a safe place when Lookouts provide a warning regardless of which line the rail traffic is approaching on.

Obstruction to Lookout’s Minimum Sighting Distance

Lookout must provide warning to workers when Minimum Sighting Distance is impeded by rail traffic on adjacent lines or passengers on St Marys platforms. All workers must remain in a safe place until Lookout can re-establish Minimum Sighting Distance.

Shut movements from 463 Signal and 455 Signal.

Lookouts to be positioned and warn workers to move to a safe place.

Rail traffic entering or exiting No 1 and No 2 Storage sidings.

Lookouts to be positioned and warn workers to move to a safe place while Rail traffic enters or exits the sidings.

LOOKOUTS AND ACCESS / EGRESS



Image 1: View of Up direction Lookout City End of Platform 3 St Marys.



Image 2: View of th Down direction Lookout at 47.189 KM Up cess.

ACCESS / EGRESS AND EMERGENCY ASSEMBLY POINT



Image 3: Access/egress gate W00 47.354 U.



Image 4: Emergency Assembly at Gate W00 47.354 U.

