

# Safety Alert

ARTC No. 106  
Issued 12/06/2018

## Working on Bridges and Viaducts

This alert has been issued following a high potential incident where a group of ARTC workers and a contractor were conducting measurements on a viaduct with no fall protection under lookout working. The workers had a near miss as they hurriedly tried to clear the viaduct on the approach of a train.

In general, the use of lookout working on bridges or viaducts is **not** to be used unless permitted by an ARTC Worksite Supervisor or ARTC Site Representative (as a minimum Work Group Leader, Team Leader, Area Manager or Project Engineer or Project Manager) from the respective area based on an assessment of risk at that location.

All workers using lookout working as a method of protection are reminded to ensure that an easily reached safe place is available when conducting works noting that in this incident the emergency refuges were highlighted as the safe place. Emergency refuges are not considered safe places for the purpose of lookout working as they are still within the danger zone.

All workers are encouraged to use the sighting distance cards below to calculate warning times when using lookout working (Note the table below is the same across all 3 rule books). Moreover, where there are multiple permanent speeds where Lookout Working is being used, the highest permanent speed must be used to determine minimum sighting distances. Temporary Speed Restrictions must not be used to determine rail traffic speeds.

### MINIMUM WARNING TIME (MWT)

Minimum Warning Time (MWT) is the minimum time required for a Lookout to warn workers on track about approaching rail traffic. The minimum warning time required must be written on the Worksite Protection Plan (WPP) and be calculated as follows:

1. Time it might take a Lookout to see approaching rail traffic and warn workers (Reaction Time) = **A** seconds
2. Time it takes the workers to hear the warning and start to move = **B** seconds
3. Time required to move workers, tools, equipment and materials clear of the track to a Safe Place = **C** seconds
4. The minimum time to be in a Safe Place before rail traffic arrives = **10** seconds

The Minimum Warning Time required = (A + B + C + 10) seconds

NOTE

If using a single Lookout in a single line bidirectional area, the reaction time (A) will need to have additional time included to look in both directions.

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SPEED Km/h	DISTANCE TRAVELLED / TIME TAKEN					
	20 Seconds	25 Seconds	30 Seconds	35 Seconds	40 Seconds	45 Seconds
160	890m	1110m	1335m	1555m	1780m	2000m
150	840m	1045m	1250m	1460m	1670m	1875m
140	780m	970m	1170m	1360m	1555m	1750m
130	730m	905m	1085m	1265m	1445m	1625m
120	670m	835m	1000m	1170m	1335m	1500m
110	620m	765m	920m	1070m	1225m	1375m
100	560m	695m	835m	975m	1110m	1250m
90	500m	625m	750m	875m	1000m	1125m
80	450m	555m	670m	780m	890m	1000m
70	390m	485m	585m	680m	780m	875m
60	340m	420m	500m	585m	670m	750m
50	280m	350m	420m	485m	555m	625m
40	230m	280m	335m	390m	445m	500m
30	170m	210m	250m	295m	335m	375m
25	140m	175m	210m	245m	280m	315m
20	120m	140m	170m	195m	225m	250m
15	90m	110m	130m	150m	170m	190m

### For your action

1. All leaders are to take a key role to ensure that key controls are implemented and that all team members are aware of this safety alert and the importance of managing these controls.
2. Ensure a method of sign-off is obtained (e.g. via tool-box/safety meetings/morning briefings etc) to verify that the Safety Alert has been distributed and discussed.

### Further information

- All Safety Alerts issued can be [found here](#).
- If you have any safety concerns with this Safety Alert please speak directly to your leader.
- For further information please contact Cath Bowlzer, Principal Advisor Safety and Environment Interstate.