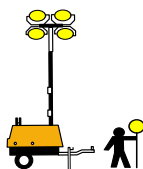


Use of Stop/Slow bats requires a 2-up Client approval to be obtained prior to commencement of works, and completion of the required Stop/Slow Bat Approval Request Form. This must also be recorded in the Field Notes section and this TGS signed off as modified/approved.

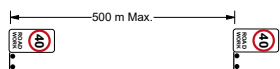


ALTERNATE SIGNAGE ARRANGEMENT

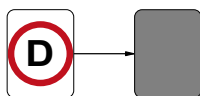


Light Towers to be used where required to illuminate TC's if lighting is insufficient.

Speed Reduction Signage to be repeated at a distance of 500m max



Existing Speed Signs to be covered with opaque material.



Purpose and usage	Speed zone of device location km/h	Maximum spacing m
On approach to a traffic controller position (centreline or edge line)	All cases	4
Merge tapers	55 to 75	9
	greater than 76	12
Lateral shift tapers	55 to 75	12
	greater than 76	18
Protecting freshly painted lines	56 to 75	24
	greater than 75	60*
All other purposes	less than or equal to 55	4
	56 to 75	12
	greater than 76	18

	Recommended taper length (m)		
Existing permanent speed limit (km/h)	Traffic control taper	Lateral shift taper	Merge taper
45 or less	15	15	15
46 to 55	15	15	30
56 to 65	30	30	60
66 to 75	N/A	70	115
76 to 85	N/A	80	130
86 to 95	N/A	90	145
96 to 105	N/A	100	160
Greater than 105	N/A	110	180

Tolerance	Positioning of signs, length of tapers or markings	Spacing of delineating devices
Minimum	10% less than the distances or lengths given	Nil
Maximum	25% more than the distances or lengths given	10% more than the spacing shown

Edge of traffic lane to:	Edge clearances
Line of traffic cones or bollards	<ul style="list-style-type: none"> • 0.5 m for traffic speeds less than 65 km/h • 1.0 m for traffic speeds greater than 65 km/h

[illegible]

ITCP Holder-

- ITCP qualified person must ensure that the TGS is implemented as approved. Minor adjustments can be completed in accordance with Section 7.10.3 Tolerances on positioning of signs and devices. Modifications will be recorded on the TGS checklist and a signed copy will be available on-site.

PWZTMP Holder-

- Modifications to a Site Specific TGS must be approved by the PWZTMP or relevant qualification holder, and must be supported by a TMP or risk assessment to ensure all TGSs considers and mitigate identified site-specific conditions and risks.
- If risk is identified during the implementation of the TGS and requires modification outside of the tolerance listed below, the works must be stopped until an updated TGS is drafted and approved by a PWZTMP qualified person prior to works recommencing. (refer to TCAWS 7.10.4).
- Any anomalies or inconsistencies found in the TGSs being used must be recorded and reported back to the TGS designer who is PWZTMP qualified.

- A TGS must be installed, maintained and removed in a planned and safe manner. The implementation of a TGS must only be undertaken by an ITCP qualified person. (Refer To TCAGS 7.10.1)
- Signs and traffic control devices must be installed in a sequence via GPS, survey, landmarks, side streets or chainage in accordance with CAVAS V6 Risk Section 6.4 and AGTMT Section 6.2
- An implementation TGS should be provided if the risk of implementation is deemed high. The sequence of implementation should be determined as part of the drafting process in TGS or SWMS, rather than being determined on-site. (Refer To TCAGS 7.10.2)

- This Traffic Guidance Scheme is developed by competent and experienced persons in accordance with the requirements outlined in the TNSW TCASIS Issue 6.0, AS1742.3 and the Road Management Act 2004.
- Prior to implementation of the TGS, D&D Traffic Management will carry out an inspection and risk assessment.
 - The TGS will be reviewed and approved on an on-going basis at all times.
 - A PWZTMP and/or ITCP qualified person must ensure the TGS is implemented, and the work area maintained as per attached TGS. Otherwise, any adjustment and modification will be captured in the shift paperwork.
 - Pedestrian management is to be overseen by onsite crew and supported by a risk assessment. If additional signage (TCASIS 6.5.2 - Table 6.5) is required it is subject to modifying TGS criteria, see below.
 - Signs to be installed on high legs if sight obstruction is present (for example behind guardrails/barriers, etc.)
 - Site Specific TGS is drafted for nominated works that is noted on the TGS. The TGS must be formally reviewed and signed off by a PWZTMP qualified person (a minimum of every 12 months from the drafted date) as per TCASIS 7.11.2. For details, refer to the title box below.
 - Borger Traffic Management does not accept liability for the implementation of this TGS, when not directly involved in carrying out the subject works.

- Highlight entry point with double cones and leaving a small break as per above diagram.
- Prior to Entering Worksite, work vehicles shall:
 - Turn on beacons
 - Radio Traffic Management on approach to Site using nominated UHF channel
- Traffic Controllers are to ensure that no local traffic follows work vehicles in the work area
- Above diagram is depicting a Lane 1 Closure. Set-up is to be mirrored in case of median lane closures.

Dimension 'D'
AS 1742.3: A distance expressed in metres,
determined in accordance with Clause 4.1.5,
and used for the positioning of
advanced warning signage.

Speed Limit (km/H)	Dimension D (m)
< 55 km/H	15 m
60 km/H	45 m
> 65 km/H	Approach Speed



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Email: sydney@borgertraffic.com
Phone: 02 9083 2081

Date: _____

Full Name:

PWZTMP or TCT Number:

Expiry Date or Issue Date:


Signature: _____

Date: _____

TGS Field Notes:

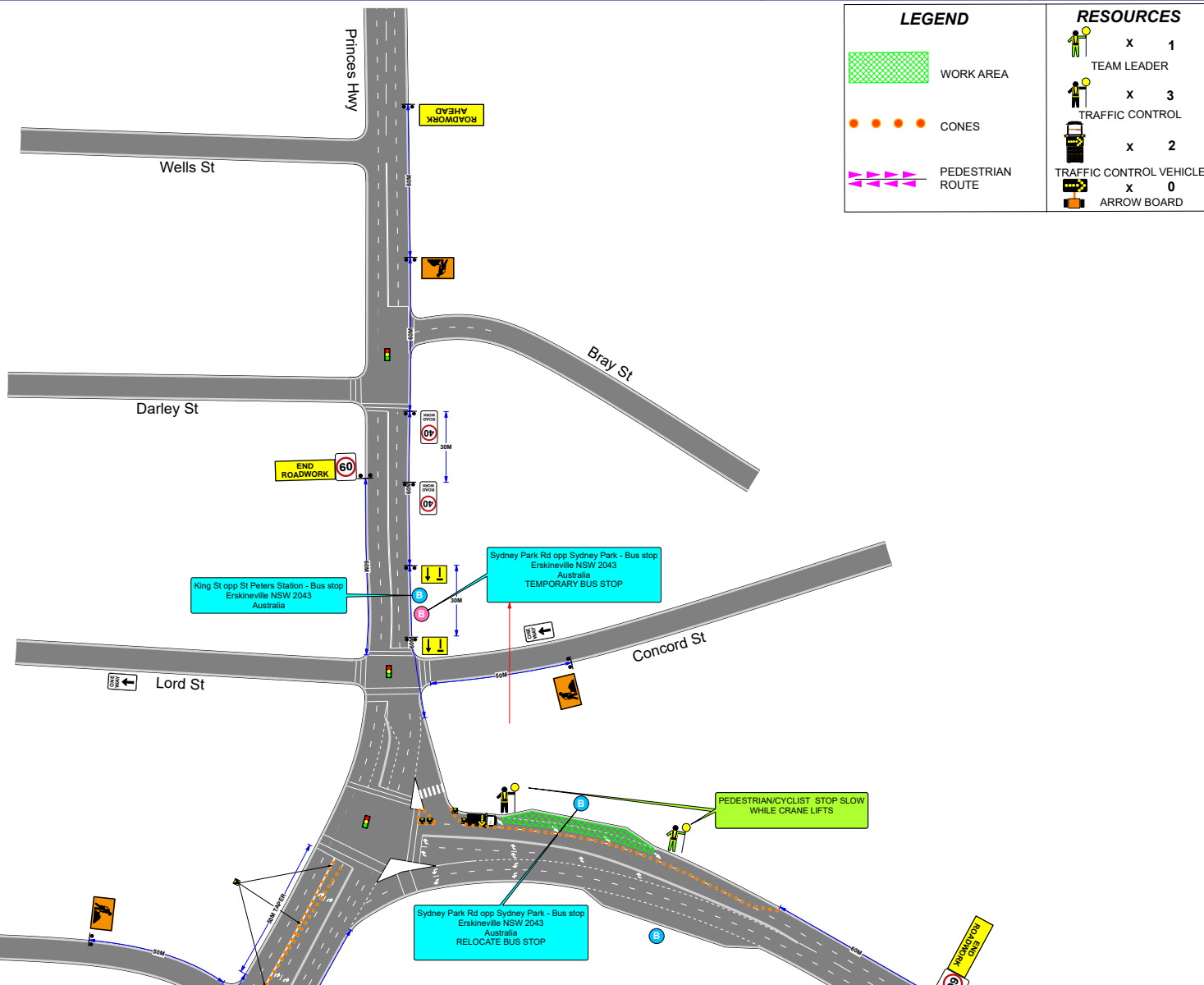
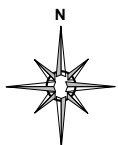
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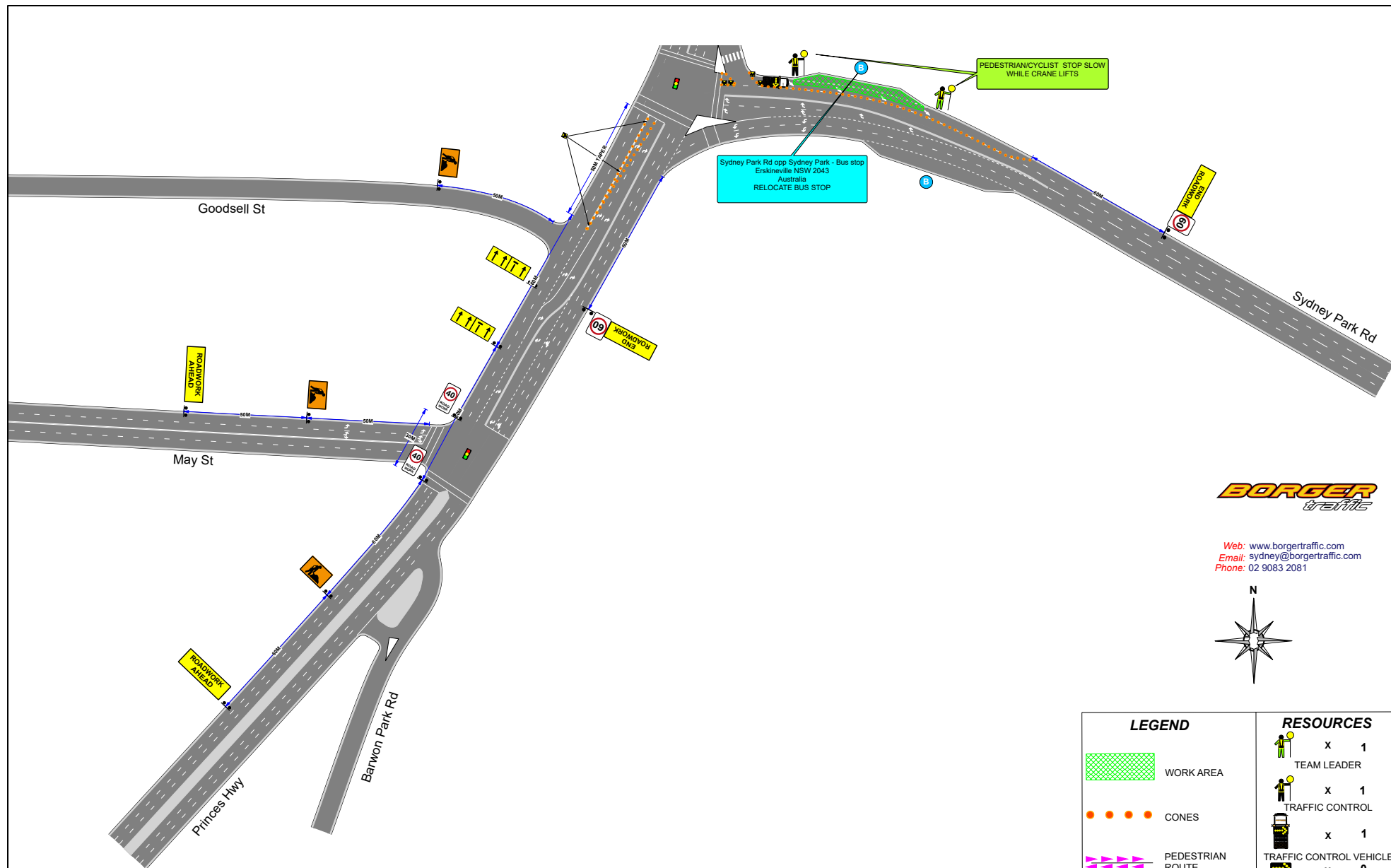
REV	REVISION DESCRIPTION	TGS PLAN #	TGS058	CLIENT:		DESIGNED BY	S. KOLIMI	APPROVED BY	MEHMET.YESIL	IMPLEMENTED BY	
00	SUPPLIED TO CLIENT	ROAD NAME	SYDNEY PARK RD	BORGER CRANES		SIGNATURE		SIGNATURE		SIGNATURE	
01		SUBURB	ST PETERS	ROL REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	DATE	10.04.2024	DATE	10.04.2024	DATE	
02		WORK LOCATION	LANE CLOSURE	ROAD SPEED(S)	50, 60 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT1003170	CERTIFICATE #	

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LEGEND		RESOURCES	
	WORK AREA	X 1	TEAM LEADER
	CONES	X 1	TRAFFIC CONTROL
	PEDESTRIAN ROUTE	X 1	TRAFFIC CONTROL VEHICLE
		X 0	ARROW BOARD

REV	REVISION DESCRIPTION	TGS PLAN #	TGS058	CLIENT: BORGER CRANES	DESIGNED BY	S. KOLIMI	APPROVED BY	MEHMET.YESIL	IMPLEMENTED BY	
00	SUPPLIED TO CLIENT	ROAD NAME	SYDNEY PARK RD		SIGNATURE		SIGNATURE		SIGNATURE	
01		SUBURB	ST PETERS	ROL REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	DATE	10.04.2024	DATE	10.04.2024	DATE
02		WORK LOCATION	LANE CLOSURE	ROAD SPEED(S)	50, 60 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT1003170	CERTIFICATE #

TRAFFIC CONTROL GUIDANCE SCHEME-PRE WORKS RISK ASSESMENT CHECK LIST

Traffic Designers Name: Sandeep Kolimi



Day & date of risk assessment: Wednesday 10.04.2024

TGS Number: TGS058

Client: Borger Cranes



Work Site Location: Sydney Park Rd-St Peters

Date of proposed works:

Current Road Speed:50, 60 Km/hr

Speed Reduction Required?: ☒ Yes / No Speed Reduction to: 40Km/hr

Will works require an ROL to be lodged with RMS?: ☒ Yes / No ROL Application Number:

Will works require council permit?: Yes / ☒ No Name of the Council: Inner West

WORK SITE RISK ASSESSMENT

What is the current road configuration?

- ☐ One Lane-Single Direction
☐ 2 Lane-Divided
☒ Multi Lane -Divided
☐ 2 Lane-2 Way
☐ 3 Lane - 2Way
☐ Multi Lane -Undivided

What is current road alignment?

- ☒ Straight
☐ Crest
☒ Pedestrian Crossing
☐ Intersection
☐ Traffic Islands
☐ Curved

What is proposed traffic control set up?

- ☐ Stop/Slow
☐ Road Closure
☒ Pedestrian Management
☐ Contra Flow
☐ Shoulder Closure
☒ Lane Closures

Which lane will the works affect

- ☒ Slow lane
☐ Fast Lane
☐ Fast and Middle lane
☒ Shoulder
☐ Middle Lane
☐ Slow and Middle Lanes

Are the conflicting signs that need to be covered up: Yes

Any other site - specific items to be noted? Stop slow with speed reduction

SITE SPECIFIC RISK CHECK LIST:How are we to control the following hazard? Refer to SWMS for further Hazards

HAZARD	RISK	APPLICABLE	CONTROL MEASURES
Pedestrians	Struck by vehicles	<input checked="" type="checkbox"/> Yes / No	Pedestrian management around work zone
High speed road	Struck by vehicles	<input checked="" type="checkbox"/> Yes / No	Speed reduction to 40km/hr
Long Queues	Rear end collisions	<input checked="" type="checkbox"/> Yes / No	Lane Closure
Night works	Struck by vehicles	<input checked="" type="checkbox"/> Yes / No	Traffic Control vehicle with arrow board
		Yes / No	
		Yes / No	
		Yes / No	

Traffic Designers sign:

Date: 10.04.2024

RISK ASSESSMENT**What is an ACTIVITY?**

An activity is the physical task being undertaken. EG: Installation of an advanced warning sign, operating a PTCD, etc.

What is a HIGH RISK ACTIVITY?

A high-risk activity requires a worker to hold a licence, competency and/or work permit/approval to perform the activity. This is due to the hazardous nature of the work.

What is a HAZARD?

A hazard is anything that could cause harm. EG: Traffic Controllers being struck by live traffic, Traffic Controllers falling into an excavation on the worksite, etc.

What is a RISK?

A risk is the assessment and determination of likelihood and consequence of the hazard occurring. E.g. crush injury to operator or nearby pedestrian from articulated dump truck tray rolling over. Using the **Risk Matrix**, allocate the **Risk Score** based on the consequence – e.g. permanent disability / fatality, and likelihood – e.g. likely to occur. The **Risk Score** is where the two points intersect – for this example it is a 3. The risk must be assessed before control measures are applied, and again after control measures are applied to verify if the risk has been eliminated or reduced.

Hierarchy of Controls

Southern Cross Traffic employs a Hierarchy of Controls which is split into 3 levels of control. Each level describes the ways in which a risk can be controlled. The higher the level of control, the greater level of protection and reliability is provided in effectively controlling the risk.

The most effective form of control is elimination, however where this is not possible, a combination of substitution, isolation or engineering controls must be applied to minimise the risk. Level 3 controls include administrative and PPE categories, the least preferred form of control to manage a risk.

Risk Matrix

The risk matrix provided below is used to distribute risks into four categories – Critical, High, Medium and Low.

A task with an identified risk of Critical must not proceed. The Team Leader must escalate the high-risk activity with the Site Supervisor and Operations, and work must stop immediately, to identify strategies to reduce risk or where Director approval is required where risk cannot be lowered to acceptable level.

How to look for hazards:

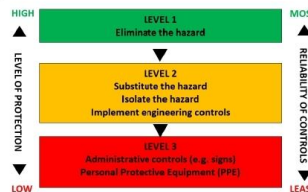
A simple way to begin looking for hazards can be by dividing the Site into logical workplace groupings, such as:

- Task hazards (EG: loading and unloading vehicles, signs/devices needed for Site Treatment);
- Workplace hazards (EG: Pedestrian and Vehicular Traffic);
- Environmental hazards (EG: Road layout and configuration, topography/lay of the land, weather conditions – strong wind, rain, extreme heat);

There are many other activities that can be undertaken to help with identifying hazards. These include:

- Walking through and inspecting each task or location;
- Consulting with workers. Ask about any problems they have encountered or how the job should be carried out safely;
- Consider the following:
 - How people use equipment and materials;
 - How suitable the equipment used for the task is; and
 - How people could be injured directly and indirectly by the various workplace hazards.

		CONSEQUENCE			
		CRITICAL	HIGH	MEDIUM	LOW
LIKELIHOOD	Almost certainly will occur	EXTREME (E)	EXTREME (E)	EXTREME (E)	HIGH (H)
	Likely to occur	EXTREME (E)	EXTREME (E)	HIGH (H)	MEDIUM (M)
	Possibility to occur	EXTREME (E)	HIGH (H)	MEDIUM (M)	LOW (L)
	Unlikely to occur	HIGH (H)	MEDIUM (M)	LOW (L)	LOW (L)
	Could occur rarely	MEDIUM (M)	LOW (L)	LOW (L)	LOW (L)
RISK SCORE		CATEGORY			
1 – 6		EXTREME (E)			
7 – 10		HIGH (H)			
11 – 14		MEDIUM (M)			
15 – 20		LOW (L)			



Likelihood	Definition	Frequency Scale
Almost certainly will occur	Would expect the event to occur every time the activity is undertaken (daily), >90% of the time the activity is undertaken.	Every day
Likely to occur	Would expect the event to occur at least once a week if the activity was done regularly, 60 – 90% of the time the activity was undertaken.	Every week
Possibility to occur	Would expect the event to occur once per month if the activity was done regularly, 30 – 60% of the time the activity was undertaken.	Every month
Unlikely to occur	Would expect the event to occur once during the project <30% of the time the activity was undertaken.	Duration of project
Could occur rarely	Would expect the event to occur only in exceptional circumstances <5% of the time the activity was undertaken whether performed regularly or infrequently.	Duration of project

Task	Hazard/s	Risk Rating	Mitigation Measures/Responses	Residual Risk Rating	TC/PCBU Responsible
Dynamic Works (including set-up and pack-up activities)	- Being struck by live traffic - TC in live traffic lane - Vehicular accidents	7 (High)	- Follow safe working methods as outlined in approved SWMS. - Positive communication between all crew members. - Cover vehicles to be used at all times, positioned at a safe distance from the lead vehicle. - Shadow/Tail vehicles to be positioned with good sight distance to oncoming traffic, as per TCAWS 6.1. - TMA's to be used as Cover Vehicles in all motorway scenarios, and/or for multi-lane roads exceeding 80km/H.	14 (Medium)	All TC's
Implementation of approved Signs and Devices	- Being struck by live traffic - TC in live traffic lane - Slips, trips and falls - Manual Handling injuries	7 (High)	- Follow safe working methods as outlined in approved SWMS. - TC to have a cover vehicle in place at all times. - TC to never stand in the live lane of traffic, only in the closed lane, with a cover vehicle in place. - Clear escape route to be available to TC at all times, this is non-negotiable. - Positive communication between all crew members.	14 (Medium)	All TC's
Stopping Traffic	- Being struck by live traffic - TC in live traffic lane - Slips, trips and falls	7 (High)	- Follow safe working methods as outlined in approved SWMS. - Traffic stoppages only to occur using PTCD's (Portable Traffic Lights, Portabooms, etc.). - TC to never stand in the live lane of traffic, only in the closed lane or off-road. - Clear escape route to be available to TC at all times, this is non-negotiable. - Positive communication between all crew members. - Hold point must achieve minimum sight distances to oncoming traffic as per TCAWS 6.1.	12 (Medium)	All TC
Dealing with irate members of the public	- Being struck by live traffic - Receiving verbal or physical abuse	10 (High)	- Do not engage or retaliate with irate members of the public. - Report incident to Team Leader immediately. - Remain polite and de-escalate situation until Team Leader or other relevant Crew Member is able to assist. - Clear escape route to be available to TC at all times, this is non-negotiable.	15 (Low)	All TC's
Pedestrian Management	- Being struck by live traffic - Slips, trips and falls	7 (High)	- Set up clear exclusion zones around Work Area and restricted areas. - Signage and delineation to be set-up as per approved TGS, in accordance with TCAWS 6.1 - TC to monitor pedestrian movements and assist where required.	14 (Medium)	All TC's

Notations

End of Queues and Avoiding Collisions

Refer to TfNSW TCWS Manual V6 Section 4.6 End-of-queue management regarding placement of "PREPARE TO STOP" signs, assessment of expected queue lengths and procedures for reducing end-of-queue collisions.

Defining "D"

Refer to TfNSW TCWS Manual V6 section 4.3.6 Sight distances, Table 7-2. Dimension D calculation based on speed zone AND section 7.10.3 Tolerances on positioning of signs and devices.

TfNSW TCWS Manual V6.1: Section 4.3.4 Minimum clearances of workers to traffic (Page 47)

Work must be planned and designed to provide maximum clearances to workers on foot and plant. When performing static work, the minimum allowable clearance of 1.5m must be maintained at all times between workers on foot, plant, and traffic. Where workers are closer than 1.5m to moving traffic a 30km/h speed zone should be installed.

Other considerations to be undertaken in the specific Risk Assessment of working within 1.5m of passing traffic are to deploy VMS Radar Data Boards, Portable Speed Humps, Rumble Strips, Escort/Patrol Vehicle.

(TfNSW TCWS technical manual V6 section 7.6.6 Workers on foot. Also refer to Section 4.3.5 Protection of work area (Pge 47) and Table 4 Mandatory and recommended controls for protection of a work area (Pge 48)).

Other considerations to be undertaken in the specific Risk Assessment of working within 1.5m of passing traffic are to deploy VMS Radar Data Boards, Portable Speed Humps, Rumble Strips, Escort/Patrol Vehicle.

Traffic Controllers

Refer to TfNSW TCAWS V6 Section 5.4.3 Requirements for traffic controllers. Table 5-11 provides the general requirements that must be applied when a traffic controller is used, including the use of a PTC and also refer to TfNSW TCAWS V6 Section 6.6 Portable traffic control devices Subsection 6.6.1 General

Sight distances

Refer to TfNSW TCWS Technical Manual V6.1:

>Section 5.4.5 Traffic control locations "When a traffic controller is utilized for operation of a PTC and a STOP/SLOW bat, a sight distance of 1.5D must be allowed for." (Page 89).

>Section 5.4.3 Requirements for traffic controllers (Page 86) Table 5-11 General requirements for the use of a traffic controller. Specifically the "Visibility" and "Positioning" aspects therein.

Refer to AUSROADS Temporary Traffic Management Guidelines Part 3 Static Worksites:

>Section 2.5.4 Sight distance (Page15)

Table 2.3: Recommended sight distances to a traffic control device

Figure 2.3: Appropriate sight distance

Termination Area

Traffic Control Risk Assessment undertaken prior to works commencing and as works progress to monitor the effectiveness and suitability of the END ROAD WORK sign placement and re-instatement of posted speed limits.

Refer to the TfNSW TCAWS technical manual V6 Section 7.6.2.5 Termination Area and also refer to the AGTTM03-19 Part 3 Static Worksites: Section 4.9 Termination Area and "Table 4.5: Placement of termination signs" therein.

Field notes: