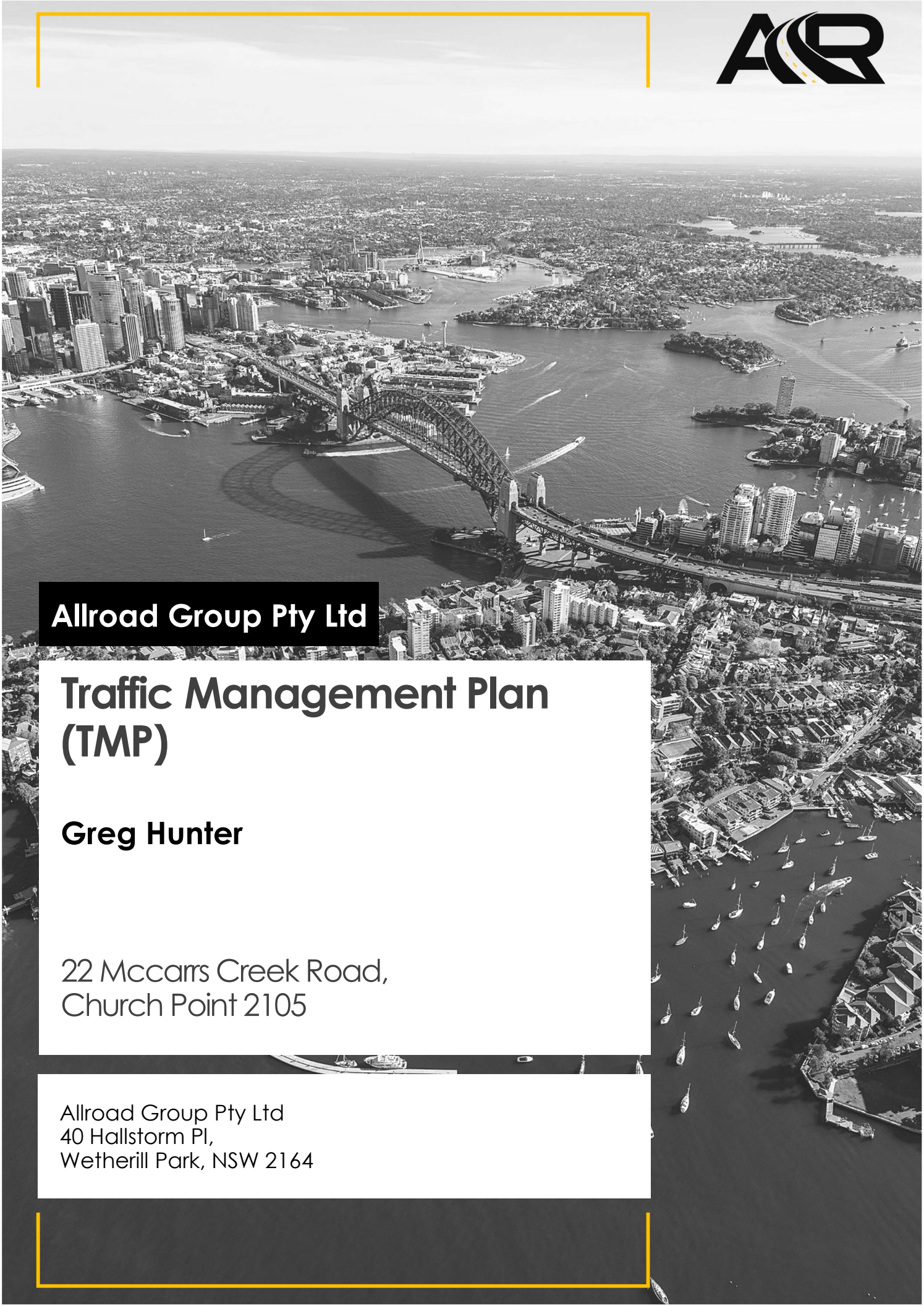


Allroad Group Pty Ltd

Traffic Management Plan (TMP)

Greg Hunter

22 Mccarrs Creek Road,
Church Point 2105

Allroad Group Pty Ltd
40 Hallstorm Pl,
Wetherill Park, NSW 2164

Document & Version Control

Project Name:	Construction and Demolition
Address:	22 Mccarrs Creek Road, Church Point 2105
Client:	Greg Hunter
File Reference:	ARG 23-031 TMP

Version	Date	Author	Approved by	
Draft	10/07/2023	Harpreet Singh	Greg Hunter	
V1.0	03/08/2023	Harpreet Singh	Greg Hunter	

Allroad Groups consultants are qualified personal, with the relevant "Prepare a Work Zone Traffic Management Plan" accreditation.

This TMP has been prepared for the Client and for the specific purpose of seeking approval for their works, as stated in the document.
Allroad Group does not accept any responsibility for any amendments of the content of this report by a third party.
This document has been prepared based on the Client's descriptions, their requirements and other information provided by the Client and other third parties.

Table of Content

Figures

Tables

1. Introduction

This Traffic Management Plan (TMP) has been commissioned by Greg Hunter for the alterations and Extension works to dwelling house at 22 Mccarrs Creek Road, Church Point.

The purpose of this report is to detail the Traffic Management during the construction works, which would minimise traffic impacts on the surrounding road network, ensure safety and efficiency for workers, pedestrians, cyclists and other road users, and provide information regarding the construction vehicle access routes and any changed road conditions (if applicable).

The TMP and Traffic Guidance Scheme (TGS) have been prepared in accordance with:

- Australian Standards 1742.3 2009
- RMSs "Traffic Control at Work Sites Technical Manual" V6.1
- Austroads "Temporary Traffic Management Manual" 2019

The Applicant is not allowed to commence constructions until the TMP has been approved by the Northern Beaches Council as per the development application (**DA2021/2113**).

2. Key Stakeholders

The table below shows the Key Stakeholders of the project.

Company Name	Contact Name (First & Last)	Position	Role of the company within the project	Contact Details (Email & Phone)
Constructive Construction	Greg Hunter		Spokesman	0418460646 constructive6@bigpond.com
Peter Downes	Peter Downes		Designer and DA applicant	0488662445 peter@peterdownes.com.au

Table 1 - Key Stakeholders

3. Construction Site Location & Context

3.1 Site Location

The construction site is located at 22 Mccarrs Creek Road, in the suburb of Church Point and under the jurisdiction of the Northern Beaches Council. The site is bounded by the following roads:

North: Pittwater Road

South: Walker Place

Figure 1- Construction Site Location (Six Maps)

Figure 2- Street View (Google Street View)

3.2 Road Hierarchy

The road hierarchy within the area of the construction site is presented in *Figure 2* and described below:

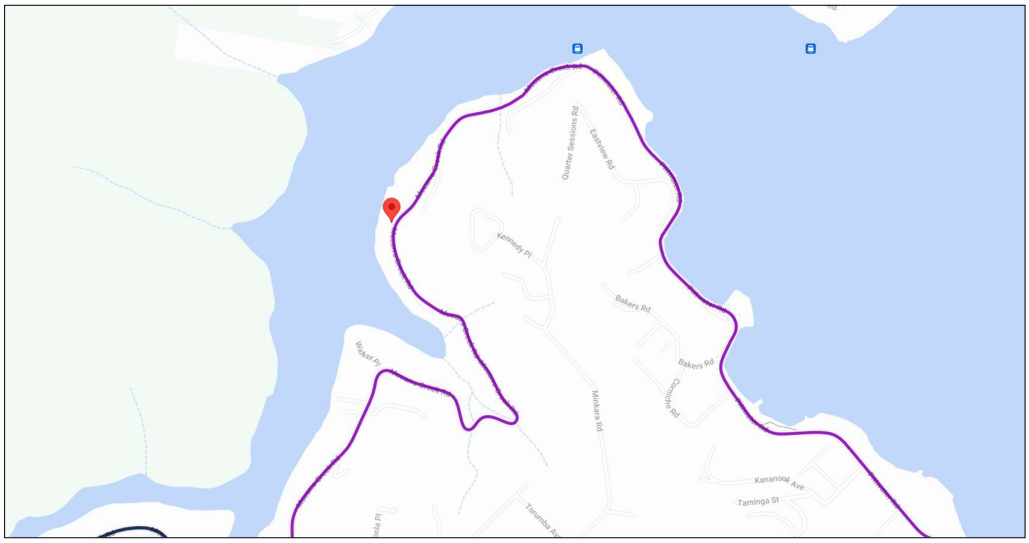


Figure 3 - Road Hierarchy (*https://roads-waterways.transport.nsw.gov.au/classification/map/index.html*)

3.2.1 Reginal Roads

Mccarrs Creek Road is a 2-lane, 2-way in Church Point. Furthermore, it requires the approval from TMC as well as Council. It runs in a North – South direction in the vicinity of the site. The road provides a link to Pittwater Road in the South and only way access for residents for accessing different location as it is not connected to any other link road.

Speed Limit: 50km/h

Distance to Site: 0m

4. Council Permits/Transport Approval

4.1 Council Permits

The applicant will ensure that prior to the commencement of works all relevant council permits such as a "Stand Plant" and "Works Zone" permits have been obtained from the Northern Beaches Council.

4.1.1 Works Zone

During the early stages of the construction works a "Works Zone" permit will be applied for when necessary. The location of the proposed works zone will at the front of the property.

4.1.2 ROL Application

Mccarrs Creek Road is a reginal road with the shared responsibility of the council and transport. It requires the approval of transport of any work being carried out on the road. Project must be approved by council prior to application being submitted for transport approval. ROL application takes 10 working days process to access.

5. Construction & Traffic Management

Greg Hunter and their Builder will be carrying out the construction works at 22 Mccarrs Creek Road, Church Point.

5.1 Construction Stages: Dates & Work Hours

The project consists of 1 Stage. The start and end dates as well as the working hours are shown in the table below:

Dates and Times	
Duration of Entire Project excluding unexpected events such as weather etc.:	15 Months
Stage 1	Demolition (2 Weeks)
Beginning Stage 1:	TBC
Finish Date Stage 1:	TBC
Hours of Work during Stage 1:	Mon – Fri: 7am – 5pm
	Sat: 8 am-1 pm (No work on Sunday or Public Holiday)
Stage 2	Excavation (2 Weeks)
Beginning Stage 2:	TBC
Finish Date Stage 2:	TBC
Hours of Work during Stage 2:	Mon – Fri: 7am – 5pm
	Sat: 8 am-1 pm (No work on Sunday or Public Holiday)
Stage 3	Construction (56 Weeks)
Beginning Stage 3:	TBC
Finish Date Stage 3:	TBC
Hours of Work during Stage 3:	Mon – Fri: 7am – 5pm
	Sat: 8 am-1 pm (No work on Sunday or Public Holiday)

Table 2- Construction Stages Overview

Works will only take place within council approved times. Out Of Hours application must be lodged and approved prior to the implementation of the works.

5.2 Description of Works, Duration & Traffic Management

The tables below provide an overview of the construction stages, their duration, the description of works as well as the traffic management.

Stage 1

Stage 1 (Duration: 6-7 Months)	
Construction Works	• Construction and Demolition Works
Traffic Management	• Heavy Vehicle Movement **ARG 23-1126 TGS** • Stop/Slow **(if necessary) ARG 23-1127 TGS** • Vehicle Movement Plan **ARG 23-1128 TGS**

Table 3 – Stage 1 Overview

The Traffic Guidance Schemes for this project are shown in **Appendix A**.

5.3 Impact on nearby Construction Sites

There are no construction works in the proximity of the construction site.

5.4 The proposed method of loading and unloading excavation and construction machinery

Current parking is limited to the verge construction of road base to the side of the bitumen road. It is proposed to use the verge for the full frontage of No. 22 and half frontage of No. 20 for tradesman to unloading/loading of excavation and construction machinery/building materials.

Note: No tower crane to required during construction period.

5.5 Resident Access to Properties

All residents will be able to always access their properties.

5.5 Traffic Controller Requirements

All Traffic Controllers (TCs) who attend the construction site must hold the following accreditation to perform their Traffic Control duties:

- Traffic Controller Ticket
- Implement Traffic Control Plans Ticket

All Traffic Controllers must also wear the appropriate PPE for the time of day & weather.
Before commencing work all Traffic Controllers are required to attend inductions for the project if mandatory and attend toolbox talks prior to each shift.

All Traffic Controllers need to have suitable TGS and SWMS for the project on site, any modifications to the TGS must be signed off by a Traffic Control Team Leader who holds at least a "Prepare Work Zone (PWZ)" ticket.

The traffic control devices such as signage and delineation must be in place before the Traffic Controllers commence work.

5.6 Long Term Temporary Signage

Any signage that is in place for more than 2 weeks and is continuously required, should, where appropriate, be erected in a permanent manner on signposts sunk into the ground in accordance with AS 1742.3 CL 4.7.5. Where 2 signs are to be displayed together at one location, they may be displayed on the same mounting, either side by side or one above the other if suitable. If one of the 2 displayed signs is a Roadwork Speed Zone sign, it must be placed closest to the traffic.
Roadwork Speed Zone Signs shall be erected at a min. of 600mm between the ground and the underside of the sign. Sign sizes will be determined in accordance to AS 1742.3 Cl 3.2.3.

Long Term Temporary Signage must be installed by an experienced person holding a Transport for NSW accreditation of no less than an "Implement Traffic Control Plan" ticket.

Long Term Temporary Signage must accommodate daytime, nighttime & adverse weather conditions. All signs must meet the Australian Standards and Transport for NSW Specifications as per AS 1742.3 2009, Section 3.4.2 as well as the Austroads "Guide to Temporary Traffic Management".

6. Pedestrian & Cyclist Management

To ensure that pedestrians and cyclists can move safely, the work area will be clearly defined using appropriate fencing as per TCAWS V6.1 – Section 4.4.2.

6.1 Pedestrians

The current road alignment does not have footpaths on either side of the road.

6.2 Cyclists

Cyclists will not be obstructed by the construction works and will be able to use both sides of the road.

7. Construction Site Management

7.1 Site Contact Person

The site contact person for the project is Bruce Law.

Name: Greg Hunter

Phone: 0418460646

Email: constructive6@bigpond.com

7.2 Site Compound

The site compound of the construction site will be located within the existing building out the front of the house down the driveway.

7.3 Site Fence

A temporary sediment control fence around the property as well as a site safety fence at the front of the property will be erected to contain the work area.
An additional screen mesh will be installed to protect neighboring properties.

7.4 Contractor Parking Arrangements

Contractors to park on the designated parking. Driveway of No. 20 can be used as temporary parking for the tradesman.

Note: No Construction vehicle will be parked on Council Road blocking residents parking alongside road. In the case of space required for parking, prior council approval must be obtained.

7.5 Material Handling

The following provisions for material handling will be in place (as per Figure 5):

- Building material storage area on site (surrounded by site fence and sediment control fence)
- Building waste & recycling area on site (surrounded by site fence and sediment control fence)
- Excavation material to be loaded into trucks and excavation waste removal we be performed on the same day.
- Frontage of H.No:20 will be utilized as temporary crane hardstand for the material Loading/unloading.

7.6 Environmental Procedures

A range of measurements, including those outlined in the Environmental and Sedimental Control Plan (ESCP) shall be implemented to ensure the following:

- No dirt or debris from construction vehicles is tracked onto the public road network.
- reduce impacts to sensitive receivers, including, where practicable, operating noisy equipment away from sensitive receivers and implementing respite periods
- watering of dusty activities will be undertaken, or activities temporarily halted and then resumed once weather conditions have improved.
- spill kits will be provided at appropriate locations and near the site compound, parking area, dangerous goods areas, and the main project work area.
- All vibratory compactors must not be used closer than 30m from residential buildings unless vibration monitoring confirms compliance with the vibration criteria.
- Large heavy-duty driveways are present onsite from previous site use, as Austral masonry manufacturing yard.

A visual inspection of all vehicles will take place before entering the road reserve. Depending on the loose material, a manual clean using a heavy-duty brush to remove loose material from vehicle and then a sweep before vehicle is allowed to enter the road reserve.
In extreme cases hose vehicles remove material from vehicles before entering the road reserve making sure good practice of sediment control is in placed around road drains.
Also note limitations on vehicles entering or leaving site during inclement weather.

8. Construction Site Access Management

The site access for each stage including Heavy Vehicle Routes will be outlined in the sections below. Construction Vehicles will use the indicated site accesses and ingress/egress the site in a forward motion, no reverse movements are allowed. Any turning movements will be carried out within the construction site boundaries.
No construction vehicles should obstruct any pedestrian crossings or footpaths. Traffic Controller might need to do intermittent stoppages to allow construction vehicles to enter or exit the site as location do not have any link road to allow left in and left out method.

Definition of Light & Heavy Vehicles for the purpose of this TMP:

- Light Vehicles – Car, Ute, Four-Wheel Drive, small bus, and concrete trucks up to 9.6m in length
- Heavy Vehicles – range from a 12.5m Heavy Rigid Vehicle (HRV) up to 26.0m B-Doubles

All drivers must comply with the Driver Code of Conduct, outlined in Section 8.2.

All heavy construction vehicles will consult the NHVR Route Planner to determine their movements to and from site. The NHVR Route Planner can be viewed at https://www.service.nhvr.gov.au/#page=informationHub/routePlannerTool .

Transport for NSWs Oversize Over Mass Unit will be notified of the roadworks if an oversized load needs to pass the worksite.

8.1 Site Access

The site can be accessed via Pittwater Road.

Heavy Construction Vehicles will use the following routes to get to and from site:

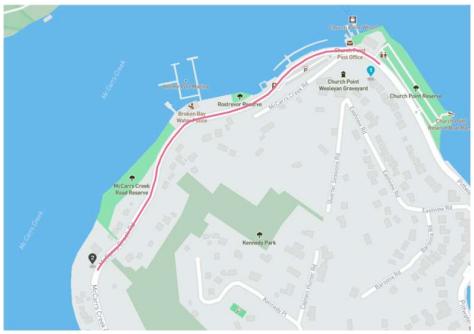
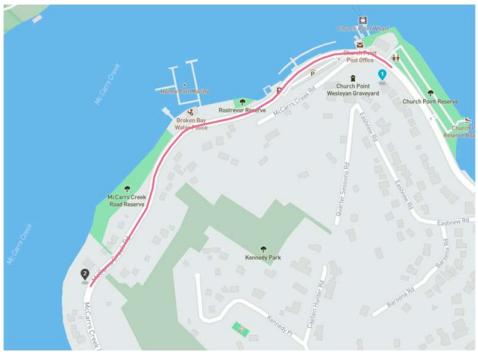
	Route	Description
Ingress		Construction Ingress via: • Pittwater Road (SB)
Egress		Construction Egress via: • Pittwater Road (NB)

Table 4 - Vehicle Ingress and Egress

8.1.1 Construction Vehicle Movements per Day

The following Construction Vehicles will be on site:

- Light Vehicles
- 5T Excavator
- 6 Wheel Tipper Truck

	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Heavy Vehicles	≤4	≤4	≤4	≤4	≤4	≤4	/
Light Vehicles	≤4	≤2	≤2	≤2	≤2	≤2	/

Table 5- Construction Vehicle Movements all Stages

8.2 Driver Code of Conduct

All Drivers on Site must:

- be responsible and accountable for their own actions while operating a company vehicle.
- must have a current Driver License for the class of vehicle they are operating.
- comply with all traffic and road legislation.
- undertake daily pre-start checks of oil, tyre pressures, radiator, and battery levels of. company vehicles that they regularly use.
- drive within the legal speed limit incl. driving to the environmental conditions.
- not drive outside the approved Heavy Vehicle Routes.
- be cognizant of the noise and emission requirements imposed within the Environmental Impact Statement (EIS).
- not queue on public roads unless approval has been sought.
- never drive under the influence of alcohol and other drugs, incl prescriptions and over the counter medication that cause drowsiness, influences brain functions, neural activities and various vital functions of the body-
    - report to their supervisor if they have been prescribed medication prior to the start of the work.
- avoid distraction when driving-
    - adjust car stereos/ mirrors etc. before setting off or pull over to safely do so.
    - not play with their mobile phone while operating the vehicle.
- report ALL near-misses, crashes, and scrapes to their manager.
- report vehicle defects to a manager prior to the next use of the vehicle.
- keep loads always covered.

8.3 Work site inspections, recording and reporting

The inspection, review and audit of temporary traffic management (TTM) arrangements are critical to ensure that the work site is operating safely. As such, the structure, schedule and frequency of these activities must be considered and identified during the TTM planning phase. These aspects will vary depending on the size, complexity and duration of works as per TCWS technical manual V6 (2020) section 8.

Weekly inspections must only be carried out by a PWZTMP qualified person. Weekly inspections must be carried out when a site is first open and at least once every week thereafter.

9. Public Transport Services

9.1 Railway Services

The *Integrated Public Transport Service Planning Guidelines, Sydney Metropolitan Area* (Transport for NSW – December 2013) states that rail services influence the travel choices of areas that are within 800m (10min walk) of a railway station.
There is no close train station in Church Points.

9.2 Bus Services

The *Integrated Public Transport Service Planning Guidelines, Sydney Metropolitan Area* (Transport for NSW – December 2013) states that bus services influence the travel choices of areas that are within 400m (5min walk) of a bus stop.
The closest bus stop to the site is "Maccarrs Creek Road" and is approx. 170m Southeast of the site. The bus stop location is far from location and the current Traffic guidance Scheme do not affects the buses at all. No buses will be affected by the project.

Note: A relevant email will be sent to the bus company regarding the upcoming project prior to the commencement date of work informing them about construction work.

10. Impacts on the Community

10.1 Communication Strategy

A communication Strategy will be established by Greg Hunter to inform residents and businesses in the area of the proposed construction works. Resident access will always be maintained. The table below outlines the communication strategy to ensure that adequate communication with key stakeholders has been met.

Risk	Strategy	Communication Channel
Wider Traffic Disruption	Wider Community and Stakeholders informed through letter box drops	Letter Box Drops by Greg Hunter
Construction Related Traffic	Ensure that Heavy Construction Vehicles use routes as identified in the TMP and Ensure that residents in the area are notified in advance to any traffic changes that may affect them	

Table 6- Communication Strategy

10.4 Emergency Services

Emergency vehicles will not be impacted by the construction works and will be able to use all carriageways within the vicinity of the construction site without any restrictions. Emergency vehicles can ingress and egress the site using the indicated site access at 16 Fairwater Drive, Breakfast Point.

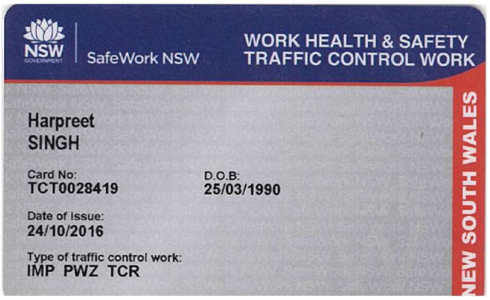
Harpreet Singh

Planner

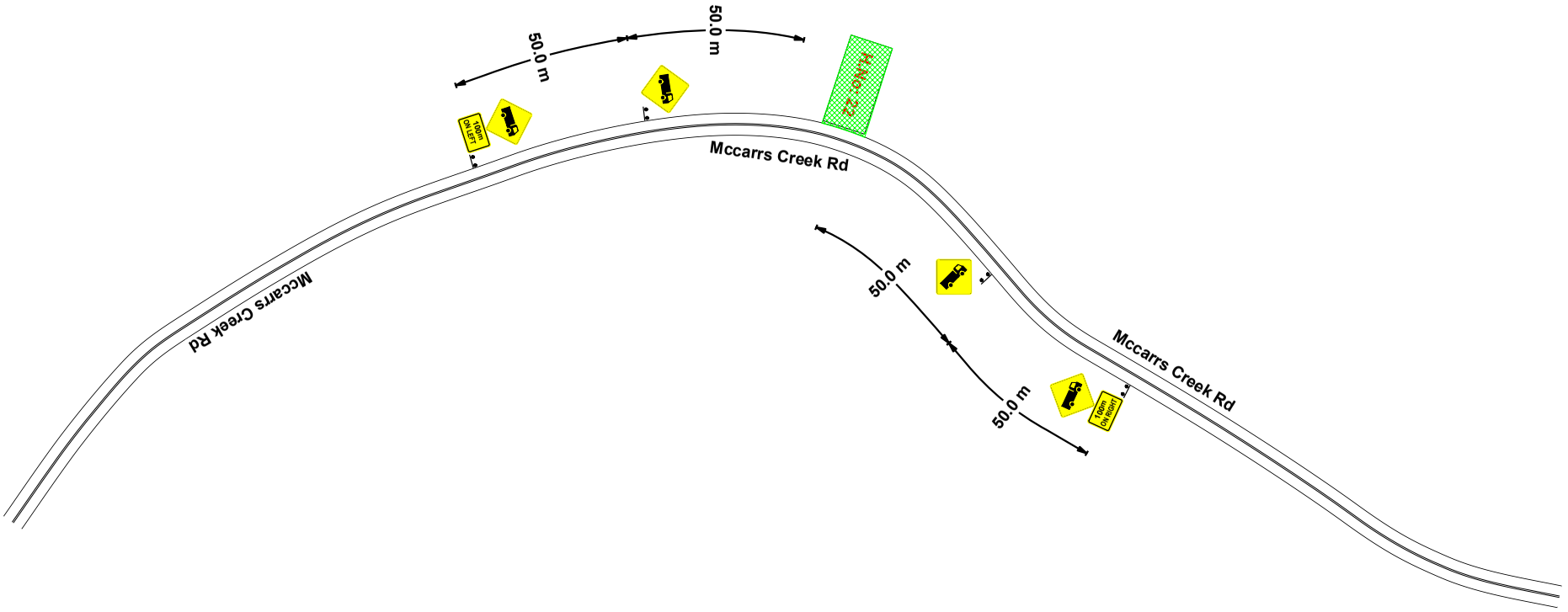
M.B.A (Finance)

Master of applied Information Technology (IT)

PWZTMP No: TCT0063633



Appendix A – Traffic Guidance Scheme



Designed by:	Harpreet Singh	Designed by:	Ronak Gandhi	**Legend:**
Qualification No:	TCT0028419	Qualification No:	TCT0063633	Work Area
Role:	Senior Project Planner	Role:	Planning & Design Manager	
Signature:	Harpreet Singh	Signature:	R.H.Gandhi	
Implementer Name:	.....	Implementer Qualification No:	TCT.....	

Compliance Notes:

1. All TGSs are in accordance with TfNSW - TCAWS V6.1 & Austroads Guide to Temporary Traffic Management 2019
2. Recommended taper lengths TfNSW - TCAWS V6.1, Table 7-3
3. Sign spacing Austroads TTM, Part 3: Table 2.2
4. Recommended sight distances to devices Austroads TTM, Part 3: Table 2.3
5. Traffic controller min. sight distance TfNSW - TCAWS V6.1, Table 5-13
6. End-of queue management TfNSW - TCAWS V6.1, Sec 4.6
7. Spacing of cones and bollards TfNSW - TCAWS V6.1, Table 6-2

REVISION	REV	Description
	00	sent to client
	01	

Review Date:	17/07/2023	Type of TTM: Static Works	Duration: Single Shift
North Code:		TTM Set-up: Truck Symbolic Signs Installation	
Sign Type:	Swing Stand	Shift TTM Inspections: after installation -> every 2h	
		Speed Limit: 50 km/h	
		Map Reference: Bing Satellite	Scale: 1:500
		Issue Date: 10/07/2023	Page No.: 01 of 03

Client: weathertex

Project Description: Repair and Maintenance

Work Location: 22 Mccarrs Creek Road, Church Point

Drawing No:	TMP Reference No.:
ARG 23-1126 TGS	N/A

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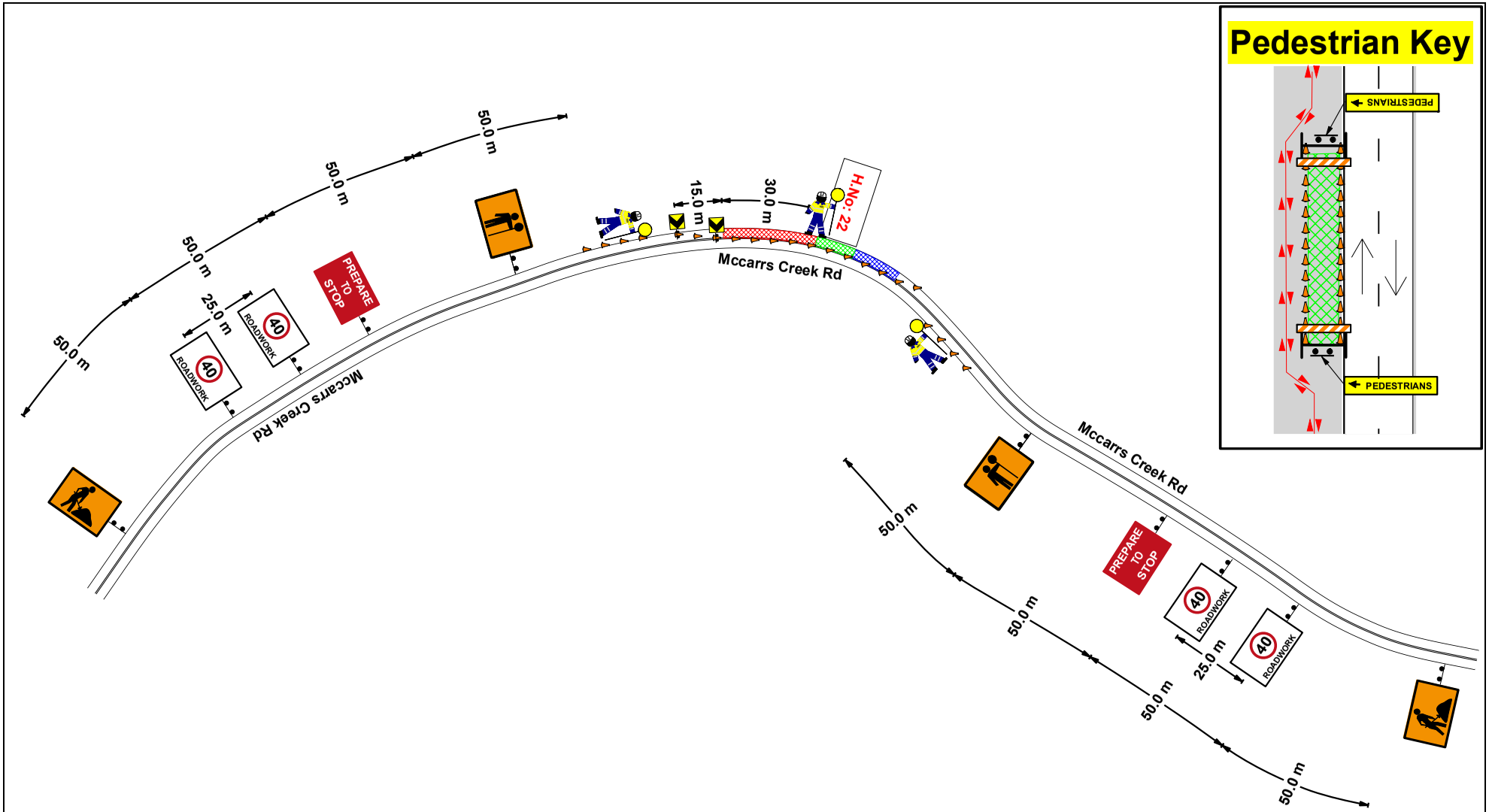

Note: This TGS only require "when occupying one lane out" to do Stop/Slow to maintain traffic flow all time.

Allroad Group Pty Ltd

Designed by:	Harpreet Singh	Designed by:	Ronak Gandhi
Qualification No:	TCT0028419	Qualification No:	TCT0063633
Role:	Senior Project Planner	Role:	Planning & Design Manager
Signature:	Harpreet Singh	Signature:	R.H.Gandhi
Implementer Name:	.....	Implementer Qualification No:	TCT.....

Legend:

- Buffer Zone
- Cone
- Transition
- Work Area

Compliance Notes:

1. All TGSs are in accordance with TfNSW - TCAWS V6.1 & Austroads Guide to Temporary Traffic Management 2019
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7. Spacing of cones and bollards TfNSW - TCAWS V6.1, Table 6-2

REVISION	REV	Description
	00	sent to client
	01	

Review Date:	17/07/2023		
North Code:		Map Reference: Bing Satellite	Scale: 1:500
Sign Type:	Swing Stand	Issue Date: 10/07/2023	Page No.: 01 of 03

Type of TTM:	Static Works
Duration:	Single Shift
TTM Set-up:	STOP/SLOW
Shift TTM Inspections:	after installation -> every 2h
Speed Limit:	50 km/h

Client: weathertex

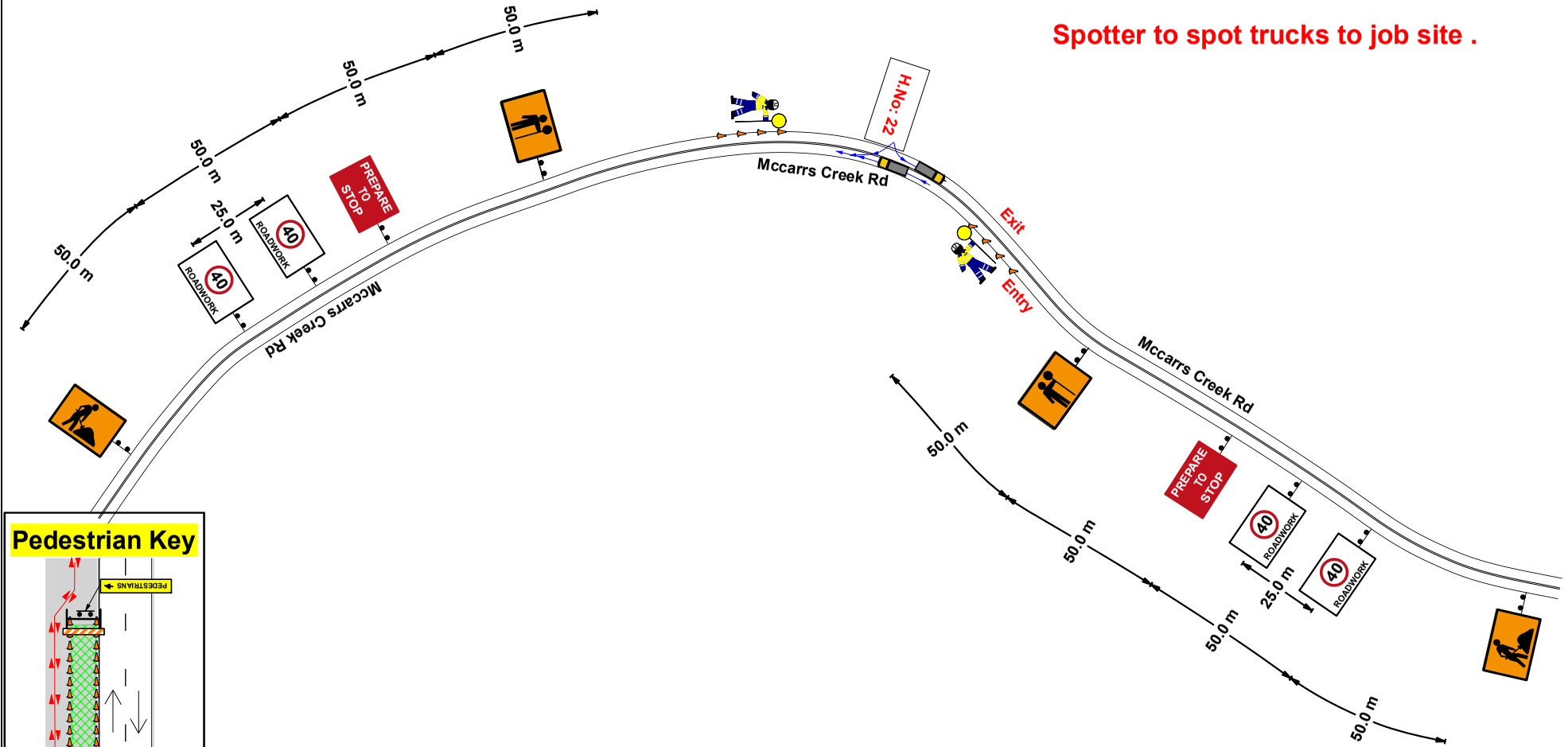
Project Description: Repair and Maintenance

Work Location: 22 Mccarrs Creek Road, Church Point

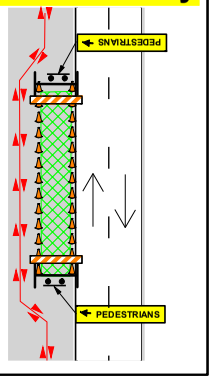
Drawing No:	TMP Reference No.:
ARG 23-1127 TGS	N/A

Note: Truck driver to communicate with Traffic Controller prior to entering/exiting the site on UHF__.

Spotter to spot trucks to job site .



Pedestrian Key



Designed by:	Harpreet Singh	Designed by:	Ronak Gandhi
Qualification No:	TCT0028419	Qualification No:	TCT0063633
Role:	Senior Project Planner	Role:	Planning & Design Manager
Signature:	Harpreet Singh	Signature:	R.H.Gandhi
Implementer Name:	.....	Implementer Qualification No:	TCT.....

Allroad Group Pty Ltd

Legend:

- Cone
- Work Area

Compliance Notes:

1. All TGSs are in accordance with TfNSW - TCAWS V6.1 & Austroads Guide to Temporary Traffic Management 2019
2. Recommended taper lengths TfNSW - TCAWS V6.1, Table 7-3
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REVISION	REV	Description
	00	sent to client
	01	

Review Date:	17/07/2023		
North Code:		Map Reference: Bing Satellite	Scale: 1:500
Sign Type:	Swing Stand	Issue Date: 10/07/2023	Page No.: 01 of 03

Type of TTM:	Static Works
Duration:	Single Shift
TTM Set-up:	Vehicle Movement Plan
Shift TTM Inspections:	after installation -> every 2h
Speed Limit:	50 km/h

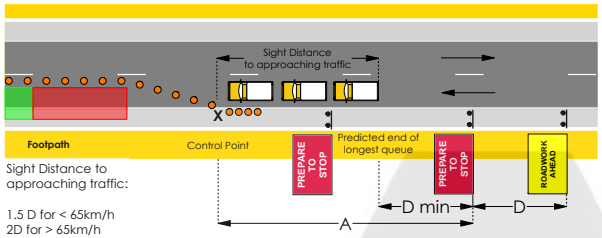
Client: weathertex

Project Description: Repair and Maintenance

Work Location: 22 Mccarrs Creek Road, Church Point

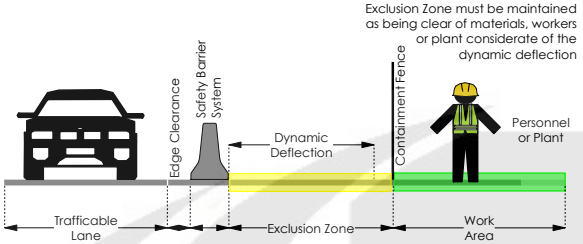
Drawing No:	TMP Reference No.:
ARG 23-1128 TGS	N/A

TCAWS V6.1, Sec. 4.6.3: End-of-Queue Management

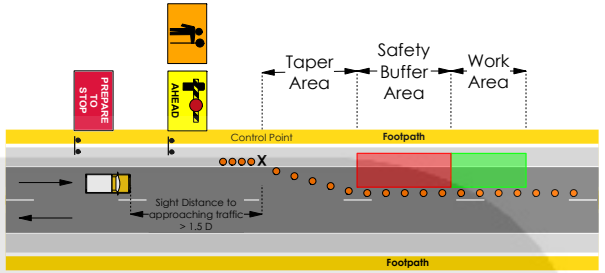


Repeater PTS signs required when distance A exceeds 4D

TCAWS V6.1, Sec. 6.7.2: Dynamic deflection and exclusion zone



TCAWS V6.1, Table 7-2: Dimension D based on Speed Zones



TCAWS V6.1, Table 7-10: Permitted Tolerences for positioning of signs and devices

Tolerence	Positioning of signs, length of taper or marking	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

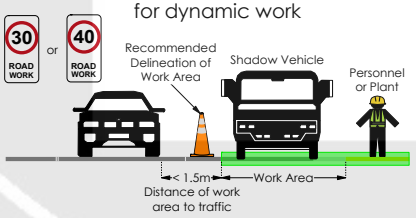
TCAWS V6.1, Table 6-3: Sign spacing requirements

Tolerence	Approaching speed	
	less than 65km/h	65km/h or greater
Minimum	D	2D
Maximum	D	D

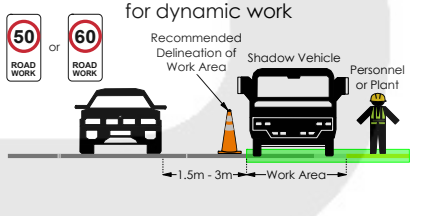
TCAWS V6.1, Sec. 4.3.5: Protection of work area

Mandatory & recommended controls for static, short-term work

Mandatory & recommended controls for dynamic work



Mandatory & recommended controls for dynamic work



TCAWS V6.1, Table 7-3: Recommended taper lengths

	Recommended Taper Length [m]		
Speed [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

Note to Table 7-3: Speed is defined as the speed [km/h] of traffic at a position in the TGS where a device is located (e.g. start of a taper). This should be one of the following, in order of preference:

- The measured speed
- The predicted speed of traffic
- The preceding roadwork speed zone in accordance with Section 7.3 Dimension D; or
- The existing posted speed limit

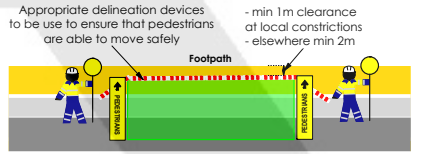
TCAWS V6.1, Table 6-2: Spacing of cones and bollards

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

TCAWS V6.1, Sec. 5.3.5: Working at night or in low visibility

Work Site has appropriate Road lighting	Additional signs and devices	Delineation in accordance with AS 1742.3	All personnel on site wear approved Hi-Vis clothing
- PTCDs or TCs with Stop/Slow bats must be clearly visible to road users - ITCP, works supervisors or team leaders must ensure that do not adversely affect road users and adjacent properties	- on high speed roads, high volume roads and busy roads in build-up areas, flashing arrow signs must be used at night - back-up units are made available on critical works	- Standard signs must be used for night works - All signs must have either Class 400 or Class 400T yellow sheeting	- approved Class N Hi-Vis clothing for night-time works that conform with AS 4602.1 must be worn - Any additional PPE must be worn as required - PPE must be clean and bright

TCAWS V6.1, Table 4.4.2: Pedestrians



- Adequate signposts to indicate the direction of footway
- Personnel may need to be positioned to guide and assist pedestrians

TCAWS V6.1, Table 6-1: Edge Clearance

Edge of traffic lane to:	Edge Clearances from delineating device to traffic side edge
Line of traffic Cones or bollards	- 0.5m for traffic speeds less than 65km/h - 1.0m for traffic speeds greater than 65km/h
Barrier Boards, temp. guide posts or temp. hazard markers	- 1.0m
Road Safety Barrier System	- 0.3m for traffic speeds less than 45km/h - 0.5m for traffic speeds 45 - 65km/h - 1.0m for traffic speeds 65 - 85km/h - 2.0m for traffic speeds greater than 85km/h

TCAWS V6.1, Table 5-13: Min Sight Distance

Existing Permanent Speed [km/h]	Length of Work Area [L]	Minimum Clear Sight Distance to oncoming traffic
less than 105	less than 60m	300m
less than 105	greater than or equal to 60m	L + 250m
greater than 105	less than 60m	400m
greater than 105	greater than or equal to 60m	L + 350m

Allroad Group Pty Ltd

Designed by:	Harpreet Singh	Designed by:	Ronak Gandhi
Qualification No:	TCT0028419	Qualification No:	TCT0063633
Role:	Senior Project Planner	Role:	Planning & Design Manager
Signature:		Signature:	
Implementer Name:	.....	Implementer Qualification No:	TCT.....

Legend:

- Cone
- Work Area

Compliance Notes:

1. All TGSs are in accordance with TfNSW - TCAWS V6.1 & Austroads Guide to Temporary Traffic Management 2019
2. Recommended taper lengths TfNSW - TCAWS V6.1, Table 7-3
3. Sign spacing Austroads TTM, Part 3: Table 2.2
4. Recommended sight distances to devices Austroads TTM, Part 3: Table 2.3
5. Traffic controller min. sight distance TfNSW - TCAWS V6.1, Table 5-13
6. End-of queue management TfNSW - TCAWS V6.1, Sec 4.6
7. Spacing of cones and bollards TfNSW - TCAWS V6.1, Table 6-2

REVISION		
REV	Description	
00	sent to client	
01		

Review Date: 10/07/2023

North Code:

Sign Type: Swing Stand

Type of TTM:	Static Works
Duration:	Single Shift
TTM Set-up:	
Shift TTM Inspections:	after installation -> every 2h
Speed Limit:	50 km/h
Map Reference:	Bing Satellite
Scale:	1:500
Issue Date:	10/07/2023
Page No.:	

Client: weathertex

Project Description: Repair and Maintenance

Work Location: 22 Mccarrs Creek Road, Church Point

Drawing No:

TMP Reference No.: N/A

General Notes

1. The designer of the TGS must hold a current PWZTMP qualification issued by Safe Work NSW
2. The TGS must be prepared in accordance with TfNSW - TCAWS V6.1 (issued on 28 Feb 2022). Any departures in situations were the min. requirements contained in the TCAWS are not achievable, or are not achieving the required level of risk management must be documented as per Sec. 2.8.
3. The TGS MUST be read in conjunction with the associated risk assessment.
4. It is the clients responsibility to have all necessary permits on site before commencing works.
5. The TGS SHALL ONLY be implemented by either an "Implements Traffic Control Plan" ITCP or "Prepare Work Zone Traffic Management Plan" PWZTMP qualified person.
6. Before the commencement of works, a toolbox talk needs to be held.
7. A "TTM Inspection checklist" must be filled out prior to the implementation of the TGS and a "Post site inspection confirmation" must be filled out after the completion of works as per TfNSW - TCAWS V6.1 - Appendix E3 & E4.
8. Traffic Controllers need to identify and make note of escape routes prior to the commencement of works.
9. Hand held UHF radios are to be utilized where required to communicate between traffic control & site vehicles.
10. The Principal contractor has to notify local Emergency Services prior to the commencement of works.
11. Traffic Controllers have to ensure that the ROL (if required) has been activated prior to each shift and deactivated once shift has ended via the TMC web app.
12. Advance signs SHALL be mounted at a minimum height of 200mm displayed as prominently as possible by selecting the longitudinal location of the sign for best sight distance for approaching traffic. Signs continuously required for works which will be in progress for periods longer than 2 weeks should be erected in a permanent manner, e.g. on posts sunk into the ground, and duplicated on the right side of the road.
13. Traffic volumes should be monitored throughout the implementation of the TGS(s). In the event queue lengths become unmanageable, works should cease if possible and traffic cleared before recommencing.

Pedestrian and Cyclist Management

All pedestrian & cyclist control measures, for the duration of the construction works will be monitored as required for effectiveness & improvements. Appropriate warning signage and directional signage will be in place and monitored throughout the works as per the provided TGS's attached to this document. Where current documented control measures are ineffective, A PWZTMP qualified person(s) should be contacted to suggest changes.

Recording & Monitoring

Regular inspections of traffic control devices SHALL be carried out 2 times a day and recorded in "Shift/Daily TTM inspection checklist". These records SHALL be available for inspection during the project. These records will be held on site by The Contractor. Details of all changes in traffic movements shall be recorded and maintained throughout the construction period and submitted within 7 days from the date of practical completion. In the event of a traffic related incident with in the site, The Contractor SHALL immediately notify the principal's representative, the police, and any necessary emergency services.

Adjustment & Modification of TGS

ITCP Holder:

ITCP qualified person must ensure that the TGS is implemented as approved. Minor adjustments can be completed in accordance with TfNSW - TCAWS V6.1 - Sec. 7.10.3. 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 a PWZTMP holder or another relevant qualification holder. Modifications must be supported by a TMP or risk assessment to ensure that all site-specific conditions and risks have been considered and mitigation measurements identified and implemented in the TGSs
- If risk is identified during the implementation of the TGS and requires modification outside of the tolerance, works must be stopped until an updated TGS is drafted and approved by a PWZTMP qualified person prior to works recommencing. (TfNSW - TCAWS V6.1 - Sec. 7.10.4)
- Any anomalies or inconsistencies found in the TGSs being used must be recorded and reported back to the PWZTMP qualified TGS designer.

Risk Assessment to develop a Site Specific TGS

#	Task	Hazard	Risk Rating	Control Measures	Residule Risk Rating	Staff responsible for control measures
1	Implementation of approved traffic control devices	Struck by vehicle Manual Handling Slips, Trips & Falls Cuts & Abrasions	4B	- Follow safe work methods outlined in SWMS - Set up off drop deck, use cover vehicle & or TMA at all times - Clear communication with spotter/driver with potential oncoming motorists - Must use fall restraint when on drop deck	3C	All Site Staff
2	Working on foot implementation of delineation devices as per TGS	Struck by vehicle Manual Handling Slips, Trips & Falls Cuts & Abrasions	4B	- Follow safe work methods outlined in SWMS - Set up off drop deck, use cover vehicle & or TMA at all times -Clear communication with spotter/driver with potential oncoming motorists	3C	All Site Staff
3	Stopping traffic at Control Point or cross over points	Struck by vehicle Slips, Trips & Falls	4C	- Only stop traffic with approved PCTD - Select safe stopping distance - Ensure correct amount of TC's are onsite to safely & effectively manage traffic flow as per TGS - TC'S MUST HAVE ESCAPE ROUTE	3D	All Site Staff
4	Handling irritated and upset motorists and other road users	Struck by vehicle Verbal, Physical, Mental Abuse	3C	- Do not engage with irate MOP/ Motorist - Report incident to TL immediately - Deescalate the situation by continuing with your duties, until TL or representative is available to handle the situation - TC'S MUST HAVE ESCAPE ROUTE	3D	All Site Staff
5	Pedestrians within work zones & exclusion zones	Struck by vehicle Verbal, Physical, Mental Abuse Slips, Trips & Falls	4B	- Set up clear exclusion zones for MOP & WOF, around works zones - Where practical us physical barrier or delineation to guide MOP / WOF safely around exclusion zone - Ensure the correct amount of TC's are onsite to effectively manage the work site	3C	All Site Staff
6	Performing Dynamic Works (Mobile Works) Including set up & Pack down	Vehicle collision Vehicle Interaction with WOF / MOP	4C	- Abide by safe distances outlined in TCAWS V 6.1 between vehicles - Use Cover/tail/shadow vehicle & Or TMA where possible - Avoid WOF if possible - Follow Safe Work Methods outlined in SWMS	4D	All Site Staff

LIKELIHOOD	CONSEQUENCES				
	1. Insignificant	2. Minor	3. Major	4. Severe	5. Catastrophic
A. Almost Certain	Medium (1A)	High (2A)	Extreme (3A)	Extreme (4A)	Extreme (5A)
B. Likely	Medium (1B)	High (2B)	High (3B)	Extreme (4B)	Extreme (5B)
C. Possible	Low (1C)	Medium (2C)	High (3C)	High (4C)	Extreme (5C)
D. Unlikely	Low (1D)	Low (2D)	Medium (3D)	High (4D)	Extreme (5D)
E. Rare	Low (1E)	Low (2E)	Low (3E)	Medium (4E)	High (5E)

4 Extreme	URGENT - Stop work immediately, the risk requires immediate attention
3 High	Continue with supervision and control measures in SWMS or site risk assessment
2 Medium	Use control measures to ensure risk is low as reasonably possible
1 Low	Use control measures to keep risk low

Site Specific Notes

1. Traffic Controllers have to ensure that signs that are not need for aftercare TGSs are covered as per TfNSW - TCAWS V6.1 - Sec. 7.10.1
2. The speed of traffic SHALL be reduced to 40 km/h when workers on foot are closer than 1.5m to traffic as per TfNSW - TCAWS V6.1 - Sec. 4.3.5, Table 4-3.
3. A PTCD sign relevant to the device used, such as Boom Barrier symbolic (T1-272n) or Signals symbolic sign (T1-30), or a Traffic Controller symbolic sign (T1-34) must be used to give advance warning of the presence of traffic control. A PREPARE TO STOP (T1-18) sign must also be used when traffic is required to stop at the traffic control location.
   The above signs must only be used when the traffic control is in operation and must be removed or covered up when traffic control is discontinued or during breaks, such as lunch as per TfNSW - TCAWS V6.1 - Sec. 5.4.3, Table 5-11.
4. Access to local businesses and driveways will be maintained during works. Unless otherwise shown on the TGS(s) and site specific notes. It is the Principal Contractors responsibility to seek permission prior to blocking public and private access.
5. Access to bus stops to be maintained whenever possible. Any impact to bus services such as bus stops within the TTM or the closure of bus lanes require the approval of the relevant bus companies.
6. Standard (700mm) cones must be positioned at a maximum spacing of 4m when traffic speed is < 55km/h and on all approaches to a traffic control position (centreline or edge line) as per TfNSW - TCAWS V6.1 - Sec. 6.2.5, Table 6-2.
7. Signs should be duplicated for all lane status signs regardless of the vpd as per TfNSW - TCAWS V6.1 - Sec. 6.5.6 and all speed zone signs as per TfNSW - TCAWS V6.1 - Sec. 4.5.5
8. As per TfNSW - TCAWS V6.1 - Sec. 4.6.3 where the maximum queue length can be predicted in advance, the primary PREPARE TO STOP sign must be located such that the distance from this sign to the end of the queue is not less than D, see Figure 4-4. The B size PREPARE TO STOP sign should be used in this application.
   The distance may need to be adjusted if the queue length proves to be underestimated. If the primary PREPARE TO STOP sign needs to be placed more than 4D, approximately 15 seconds of travel time from the control point, repeater PREPARE TO STOP signs at intervals of not more than 4D should be provided between that point and the control point to provide for conditions after the queue has dispersed. In any relocation of the primary PREPARE TO STOP sign, the distance D to the roadwork ahead sign must be maintained.
9. A minimum lane width of 3m have to be maintained for traffic speeds < 65km/h
10. In accordance with Section 8.2 Record keeping of TTM documentation, roadwork speed zones must be inspected and associated documentation examined on a regular basis. The ITCP qualified person must ensure that speed restriction signs are properly erected, conflicting signs are covered and advance signs are in place, when inspecting the traffic control on the site.

Implementation Instructions

Before work commences, signs and devices at the approaches to and within the work area SHALL be implemented in accordance with the approved Traffic Guidance Schemes and the Traffic Control Companies Safe Work Method Statements, in the following sequence:

1) Traffic Controllers implementing signage are to ensure all signage is available for implementation prior to shift.
2) Signs & devices in side streets leading into the works are to be implemented first. Where required, detours are to be in place before commencing any closures.
3) All signage on arterial and main road alignments to be implemented with the flow of traffic.
4) Signs are to be implemented in all non affected lane(s) first and all conflicting signs are to be covered.
5) Signs in the affected lane to be implemented; Taper, Speed Reduction, Safety buffer (if applicable), and Delineation to be implemented with the traffic flow. Conflicting signs to be covered in process.
6) Ensure signs & devices are correct before works commence.
7) Once works have finished, Traffic Control are to pick up delineation and taper's in reverse. Then pick up advance warning signs with the flow of traffic.
8) 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. (TfNSW - TCAWS V6.1 - Sec. 7.10.1)
9) Signs and traffic control devices must be installed in a sequence via GPS, survey, landmarks, side streets or chainage in accordance with TCAWS V6.1 - Sec. 6.4 and AGTTM Sec. 6.2
10) 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. (TfNSW - TCAWS V6.1 - Sec. 7.10.2)

Allroad Group Pty Ltd

Designed by:	Harpreet Singh	Designed by:	Ronak Gandhi
Qualification No:	TCT0028419	Qualification No:	TCT0063633
Role:	Senior Project Planner	Role:	Planning & Design Manager
Signature:		Signature:	
Implementer Name:	.....	Implementer Qualification No:	TCT.....

Legend:

- Cone
- Work Area

Compliance Notes:

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REVISION	Description
00	sent to client
01	

Review Date: 10/07/2023

North Code:

Sign Type: Swing Stand

Type of TTM: Static Works

Duration: Single Shift

TTM Set-up:

Shift TTM Inspections: after installation -> every 2h

Speed Limit: 50 km/h

Map Reference: Bing Satellite

Scale: 1:500

Issue Date: 10/07/2023

Page No.:

Client: weathertex

Project Description: Repair and Maintenance

Work Location: 22 Mccarrs Creek Road, Church Point

Drawing No:

TMP Reference No.: N/A