Traffix Group

Traffic Management Plan

Springvale Battery Energy Storage System Project

222 Clarke Road Springvale South

Prepared for
Symal

August 2025

G36309R-01A TMP Springvale BESS.docx

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TMP Overview

Traffix Group has been engaged by Symal to prepare a Traffic Management Plan for the Springvale Battery Energy Storage System Project at 222 Clarke Road Springvale South.

Table 1: TMP Overview

Location	222 Clarke Road Springvale South	
Project	Springvale Battery Energy Storage System Project	
Dates	August 2025 to March 2027 (approx.)	
Site Inspection	7 May and 24 June 2025	
Work Hours	Works are proposed to be undertaken between 7:00am and 7:00pm Monday to Saturday.	
TM Layouts	**Description**	**Duration (approx.)**
Crossover Works (Short-term)	Setting up site access fencing/gate and widening of Clarke Road crossover and internal site access road.	2 weeks
Construction Stage (Long-term)	Internal construction works.	18 months

Document Control

Our Reference: G36309R-01A TMP Springvale BESS.docx

Issue No.	Type	Date	Prepared By	Approved By
A	Initial Issue	22/08/2025	S. Birgani	A. Coyle (RPE6079)

AS/NZS ISO 45001-2018 Occupational Health & Safety Management Systems
AS/NZS ISO 14001 Environmental Management Systems
AS/NZS ISO 9001-2016 Quality Management Systems

Table of Contents

1. Introduction 8
1.1. Purpose of the Plan 9
1.2. Traffic Management Plan Objectives 9
1.3. Statement of Duty of Care 10
1.4. Roles and Responsibilities 10
1.4.1. Project Manager 10
1.4.2. Traffic Supervisor 10
1.4.3. Traffic Management Personnel 11
1.4.4. Workers and Subcontractors 11
1.5. Site Inspection 11
1.6. Site Induction and Training Plan 11
1.7. Reference Documents 11
2. Site Information 13
2.1. Project Details 13
2.2. Subject Site 13
2.3. Road Network & Land Use 15
2.4. Responsible Road Authorities 19
2.5. Heavy Vehicle Access Routes 20
2.6. Public Transport 23
2.7. Traffic Volumes 25
2.8. Traffic Management Category 25
3. Project Details 26
3.1. Construction Activities 26
3.2. Indicative Project Staging and Timing 27
3.3. Work Hours 27
3.4. Worker Parking 27
3.5. Site Opportunities & Constraints 27
3.6. Site Risk Rating 28
4. Proposed Traffic Staging 29
4.1. Around Through Past Options Assessment & Risk Assessment 29
4.2. Traffic Staging Summary 29
4.3. Short-term Works – Crossover Works 30
4.4. Long-term Works – Internal Construction 31

5. Traffic Management Details 32
5.1. Traffic Event Program 32
5.2. Traffic Guidance Schemes 32

6. Traffic Impact Assessments 33
6.1. Traffic Impacts Assessment 33
6.1.1. Crossover Works (Short-term) 33
6.1.2. Internal Construction (Long-term) 33

7. Road Safety Audit and Risk Assessments 34

8. Stakeholder Consultations and Approvals 34

9. Communications Strategy 34
9.1. VMS Strategy 34
9.2. Community Notification 34

10. Implementation, Monitoring and Maintenance 35
10.1. Checklists 35
10.2. Monitoring and Maintenance 35
10.3. Variations 35

11. Incident Response 36

12. Project & Emergency Contacts 37

List of Figures

Figure 1: TMP Preparation Flow Chart (AGTMM Part 2) 8
Figure 2: Locality Map (Source: Melways) 13
Figure 3: Aerial Photograph 14
Figure 4: Site Photographs 16
Figure 5: Low Hanging Overhead Power Lines 18
Figure 6: Heavy Vehicle Network Maps (Source: NHVR) 21
Figure 7: Heavy Vehicle Access Flowchart (Source: DTP) 22
Figure 8: PTV Public Transport Map – Greater Dandenong (Source: ptv.vic.gov.au) 23
Figure 9: Bus Route 824 Route Map 24
Figure 10: Traffic Management Category (Source: DTP) 25
Figure 11: Project Overview 26
Figure 12: Site Risk Rating Matrix 28
Figure 13: Maximum length of operation under shuttle flow 33
Figure 14: Local Emergency Services / Facilities 38

List of Tables

Table 1: TMP Overview 2
Table 2: Summary of Public Transport Services 24
Table 3: Project Long-Term Staging and Timing 27
Table 4: Project Short-Term Staging and Timing 27
Table 5: Site Risk Rating 28
Table 6: Around Through Past Options Assessment – Construction 29
Table 7: Around Through Past Options Assessment – Crossover Works 29
Table 8: Proposed Traffic Staging and Impacts 29
Table 9: – Short-term Works 30
Table 10: – Long-term Works 31
Table 11: Traffic Event Program 32
Table 12: Traffic Guidance Schemes – Short-term 32
Table 13: Traffic Guidance Schemes – Long-term 32
Table 14: Emergency Contact Personnel 37
Table 15: Emergency Authorities Contacts 37
Table 16: Local Emergency Services / Facilities 37

List of Appendices

Appendix A Short-term Traffic Guidance Schemes – Crossover Works

Appendix B Long-term Traffic Guidance Schemes – Construction

Appendix C Road Safety Audit and Risk Assessments

Appendix D Stakeholder Consultation (to be included following consultation)

Appendix E Implementation & Install/Remove Checklists

1. Introduction

Traffix Group has been engaged by Symal to prepare a Traffic Management Plan (TMP) for the Springvale Battery Energy Storage System Project at 222 Clarke Road Springvale South.

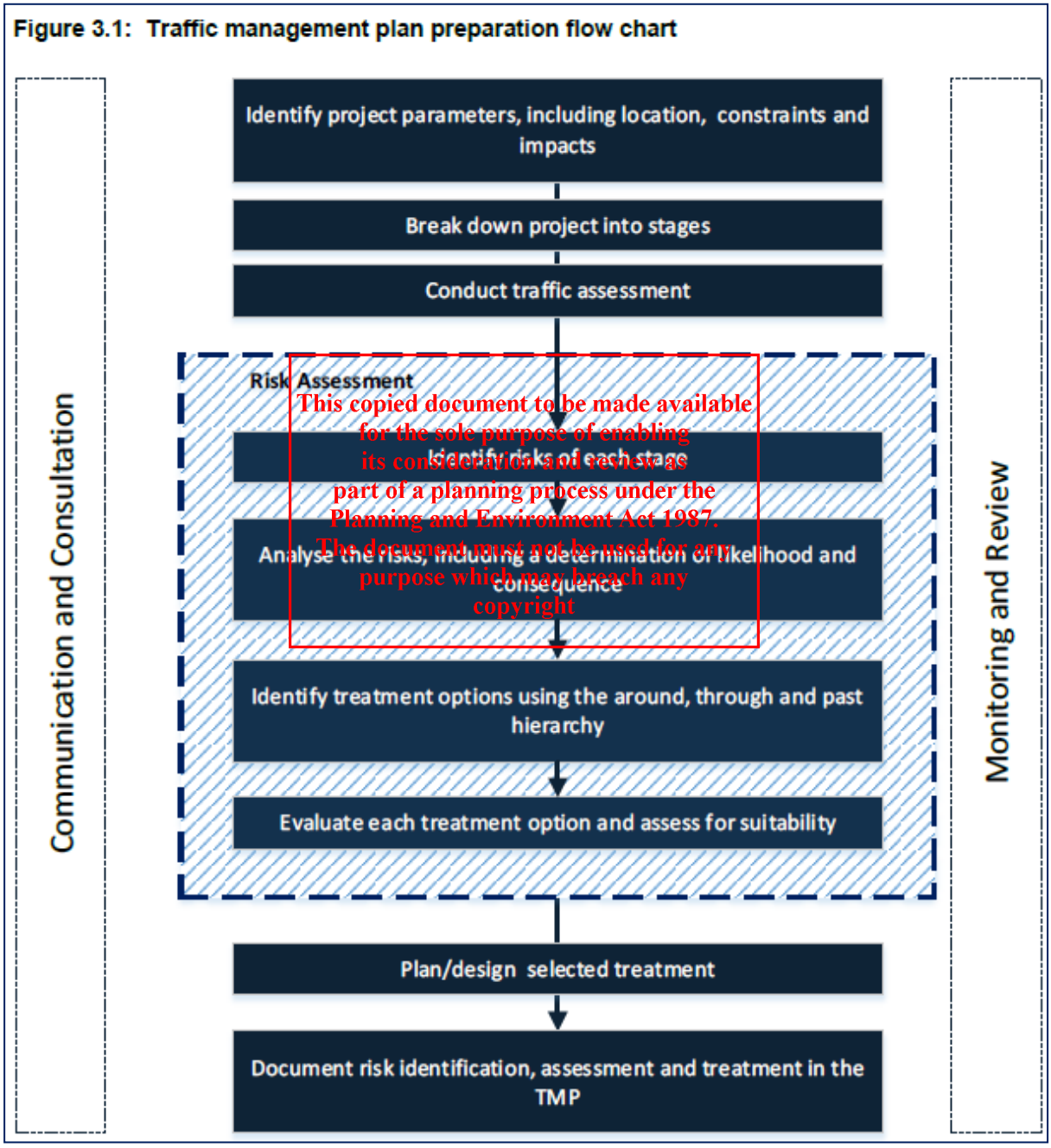


Figure 1: TMP Preparation Flow Chart (AGTMM Part 2)

1.1. Purpose of the Plan

The purpose of this document is to outline the risk assessment for the project (related to traffic management) and to present the Traffic Guidance Schemes to warn traffic and guide it around, through or past the worksite.

This TMP includes the following elements:

- Details on the location and timing of the works.
- Description of current conditions of key roads in the vicinity of the work areas.
- Brief description of proposed traffic management treatments.
- Traffic staging methodologies as well as justification for the proposed work methods.
- Traffic Guidance Scheme (TGS) plans to enable traffic management implementation.
- Procedures and responsibilities for implementing, monitoring, reviewing, maintaining and auditing the TMP.
- Schedule of the traffic impacts as a result of the works.
- Hazard assessment of the works and worksite safety management plan risk assessments.
- Drawings showing all proposed staging along with the measures to adequately control traffic.
- Detailed drawings identifying the nature and location of all temporary measures contemplated.
- Details of any required notification.
- List of key contacts that includes responsibility and telephone numbers.

1.2. Traffic Management Plan Objectives

The key objectives of the TMP include:

- Providing a safe environment for the travel public and the construction work force.
- Minimising the impact on all road users.
- Communicating the purpose of all proposed works affecting traffic.
- Communicating the arrangements for and impacts of works affecting traffic.

1.3. Statement of Duty of Care

Symal's Project Manager has the ultimate responsibility and authority to ensure the TMP is implemented for the prevention of property damage and injury to workers, contractors, sub-contractors, road users and all members of the public.

They will ensure all site personnel are fully aware of their responsibilities, and traffic controllers/drivers are appropriately trained and accredited. They will ensure that sufficient controllers are available to ensure appropriate breaks are taken.

Any changes to the TMP and TGS are to be recorded, and the Project Manager notified.

1.4. Roles and Responsibilities

1.4.1. Project Manager

The Project Manager shall:

- Ensure all traffic control measures for this TMP are placed and maintained in accordance with this plan and the relevant Acts, Codes, Standards and Guidelines;
- Ensure suitable communication and consultation with the affected stakeholders is maintained at all times;
- Ensure inspections of the Traffic Controls are undertaken in accordance with the TMP, and results recorded. Any variations shall be detailed together with reasons;
- Review feedback from field inspections, worksite personnel and members of the public, and take action to amend the traffic control measures as appropriate; and
- Arrange and/or undertake any necessary audits and incident investigations.

1.4.2. Traffic Supervisor

The Traffic Supervisor is responsible for overseeing the day-to-day activities, and is therefore responsible for the practical application of the TMP, and shall:

- Instruct workers on the relevant safety standards, including the correct wearing of high visibility safety vests, safety boots and other equipment as required;
- Ensure traffic control measures are implemented and maintained in accordance with the TMP;
- Undertake and submit the required inspection and evaluation reports to management;
- Render assistance to road users and stakeholders when incidents arising out of the works affect the network performance or the safety of road users and workers; and
- Take appropriate action to correct unsafe conditions, including any necessary modifications to the TMP.
- Develop and implement procedures and practices for the safe implementation and removal of the long term and short term TGS.

1.4.3. Traffic Management Personnel

Traffic Management Personnel shall:

- Have at least one person on site accredited in Basic Worksite Traffic Management (or the new TMI2 qualification) and shall have the responsibility of ensuring the traffic management devices are set out in accordance with the TMP.
- Have at least one person accredited in Advanced Worksite Traffic Management or Worksite Traffic Management (or the new TMD2 qualification) available for contact to provide guidance for variations, contingencies and emergencies, and to take overall responsibility for traffic management. If it is determined that works cannot be adequately covered by TGSs provided, work activity shall not commence.

1.4.4. Workers and Subcontractors

Workers and Subcontractors shall:

- Correctly wear high visibility vests, in addition to other protective equipment required (footwear, eye protection, helmet, sun protection etc.), at all-time whilst on the worksite;
- Comply with the requirements of the TMP and ensure no activity is undertaken that will endanger the safety of other workers or the general public; and
- Enter and leave the site by approved routes and in accordance with safe work practices.

1.5. Site Inspection

A site visit was undertaken during the preparation of this TMP.

1.6. Site Induction and Training Plan

Prior to the implementation of this TMP, a site induction will be organised for all staff, in particular traffic management staff, are aware of the contents of the TMP. A copy of the TMP will be maintained on site.

1.7. Reference Documents

This Worksite Traffic Management Plan (TMP) has been prepared in accordance with:

- Road Management (Works and Infrastructure) Regulations 2015.
- Road Management Act 2004.
- Road Safety Act 1986.
- Road Safety (Traffic Management) Regulations 2019 S.R. No. 93/2019 Clause 35 Traffic management plan.
- Occupational Health and Safety Act 2004.
- Road Safety Road Rules 2017.
- Occupational Health and Safety Regulations 2017

- Additional Network Standards & Guidelines Part 2.2 Authorisation of Traffic control devices.
- Road Management Act 2004 Code of Practice Worksite Safety - Traffic Management (2023).
- Austroads Guide to Temporary Traffic Management Parts 1 to 10.
- Department of Transport and Planning, Road Design Note 06-04 Accepted Safety Barrier Products.
- AS 1742.3 Manual of Uniform Traffic Control Devices Part 3: Traffic Control devices for Works on Roads (2019).
- AS 1742.2-2009, Manual of Uniform Traffic Control Devices Part 2, Traffic Control Devices for General Use (2009).
- Department of Transport and Planning's Traffic Engineering Manual – Volume 2, Supplements to Australian Standards.
- City of Greater Dandenong https://www.greaterdandenong.vic.gov.au/plan-and-build

2. Site Information

2.1. Project Details

The project involves the construction of the Springvale Battery Energy Storage System Project at 222 Clarke Road Springvale South.

2.2. Subject Site

The locality of the site is shown in Figure 2 and an aerial photograph of the site is provided at Figure 3

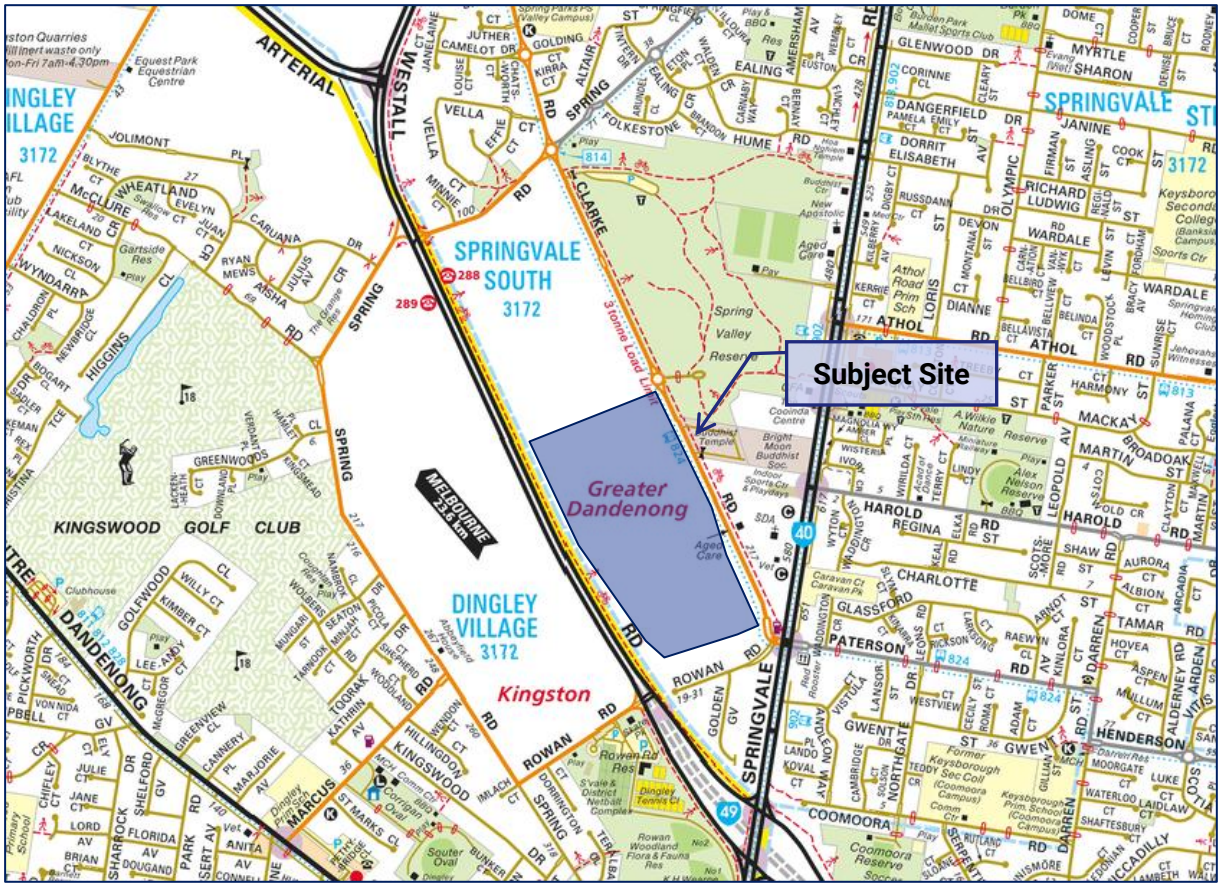


Figure 2: Locality Map (Source: Melways)

Figure 3: Aerial Photograph *Source: MetroMap*

2.3. Road Network & Land Use

Springvale Road is a divided primary arterial road oriented in a north-south direction between Reynolds Road to the North and Wells Road to the south. Springvale Road typically has 2-3 lanes in each direction with turning lanes added at intersections. In addition to Heatherton Road which provides direct access from the arterial road network to Clarke Road's northern end, Springvale Road is the only other Arterial Road which provides direct access to Clarke Road (southern end) from the arterial network.

There is a posted speed of 80km/h along Springvale Road.

Spring Road is a Major Road (City of Greater Dandenong) oriented in a southwest-northeast direction between Westall Road to the southwest and Heatherton Road to the northeast. Spring Road is generally made up of one lane in each direction with kerbside parking allowed on both sides. Spring Road is almost parallel to Clarke Road from the north and can provide direct access to Clarke Road from both southwest and northeast approaches. It is worth noting that there are existing truck bans along Spring Road's northeast approach (between Heatherton Road and Clarke Road).

There is a posted speed of 50km/h along Spring Road.

Clarke Road is a Major Road (City of Greater Dandenong) oriented in a northwest to southeast direction between Heatherton Road in the northwest and Springvale Road in the southeast. Clarke Road generally has one traffic lane in each direction with kerbside parking permitted along some sections. There is an existing truck ban along Clarke Road between Spring Road and Heatherton Road.

There is a posted speed of 50km/h along Clarke Road.

Significant land uses in the nearby area include:

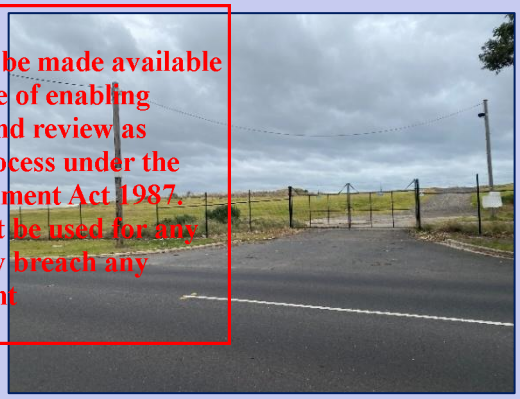
- **Wat Buddharangsi (Cambodian Temple)**, located directly north of the site,
- **Japara Aged Care**, located directly south of the site,
- **Spring Valley Reserve**, located approximately 400m north of the site, and
- **Cook Island Seventh-day Adventist Church**, located approximately 400m south-east of the site.

Photographs of the area are shown below.

Clarke Road – View Northwest to Site Access

Clarke Road – View Southeast across from Site Access

Clarke Road – View West to Site Access



Clarke Road – View West to Site Access

Clarke Road – View Northwest along Site Access

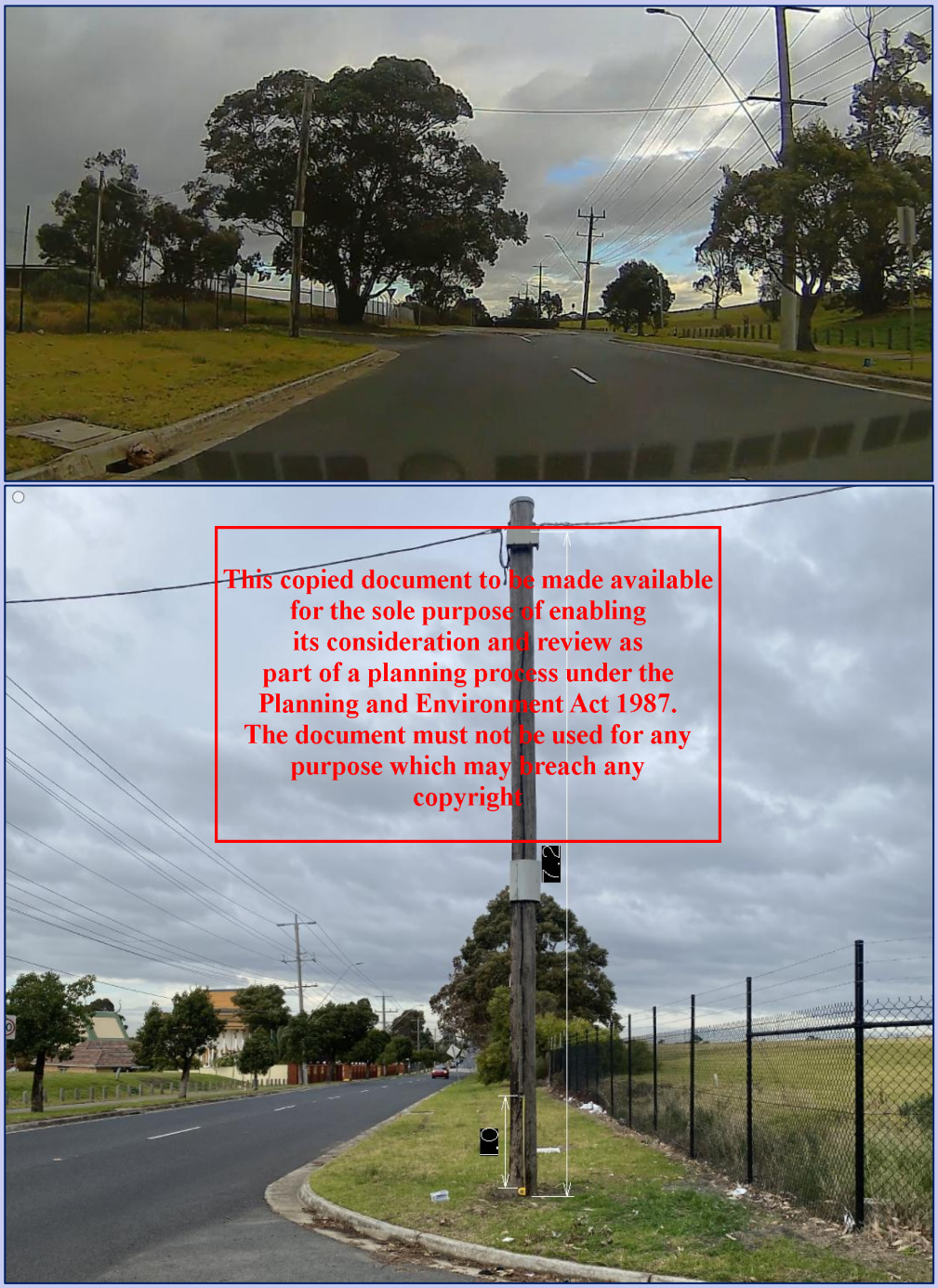
Clarke Road – View Northwest across from Site Access

Figure 4: Site Photographs

It is worth noting that there are some power lines that run across the width of Clarke Road at several locations. The measurement from the bottom of the pole to the top, where the lowest powerline starts, were approximated using a reference measurement of 1m at two locations. The two locations include 221-224 Clarke Road as well as directly outside the site access gate. Drive through screenshots as well as measurement images can be found below.

Location: 221-224 Clarke Road

As shown, the vertical measurement was approximated to be 5.7m. This does not account for the sag of the wires between the poles. Therefore, at the lowest point, the wires would approximately be at minus 0.5m – 1m from the measured 5.7m.



Location: Directly outside of site access gate

As shown, the vertical measurement was approximated to be 7.2m. This does not account for the sag of the wires between the poles. Therefore, at the lowest point, the wires would approximately be at minus 0.5m – 1.0m from the measured 7.2m.

Figure 5: Low Hanging Overhead Power Lines

It is worth noting that these are not the only locations along Clarke Road where there are overhead powerlines running across the road. There are more overhead power lines along the travel route of the trucks on several roads. Should there be significantly taller loads scheduled for delivery throughout the project, additional route surveys may need to be undertaken to check low hanging overhead powerlines in more detail along the proposed truck travel routes.

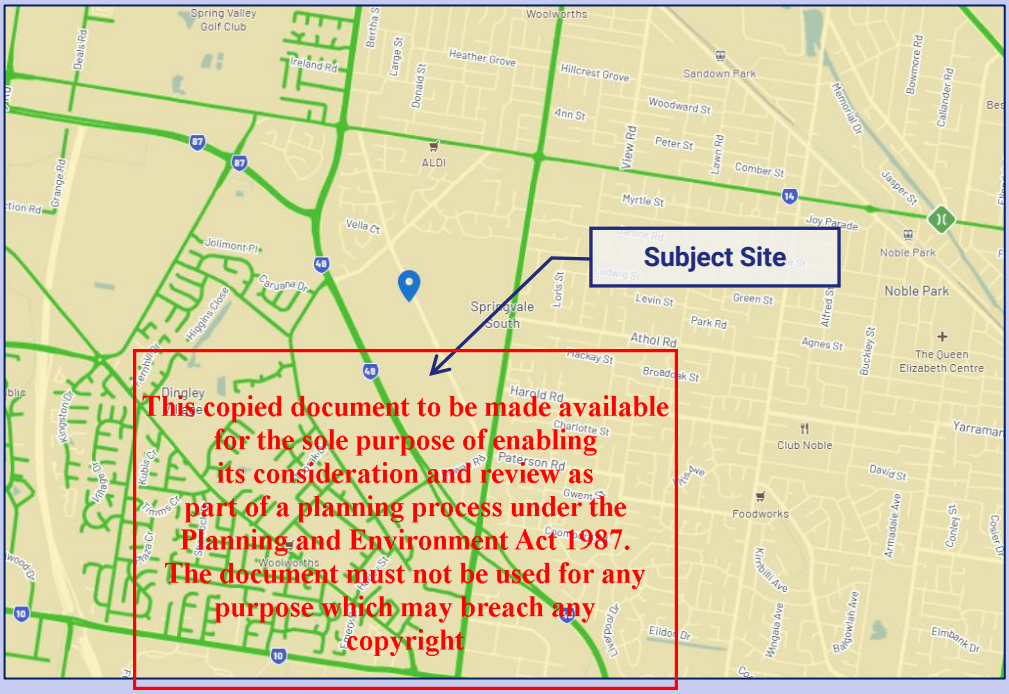
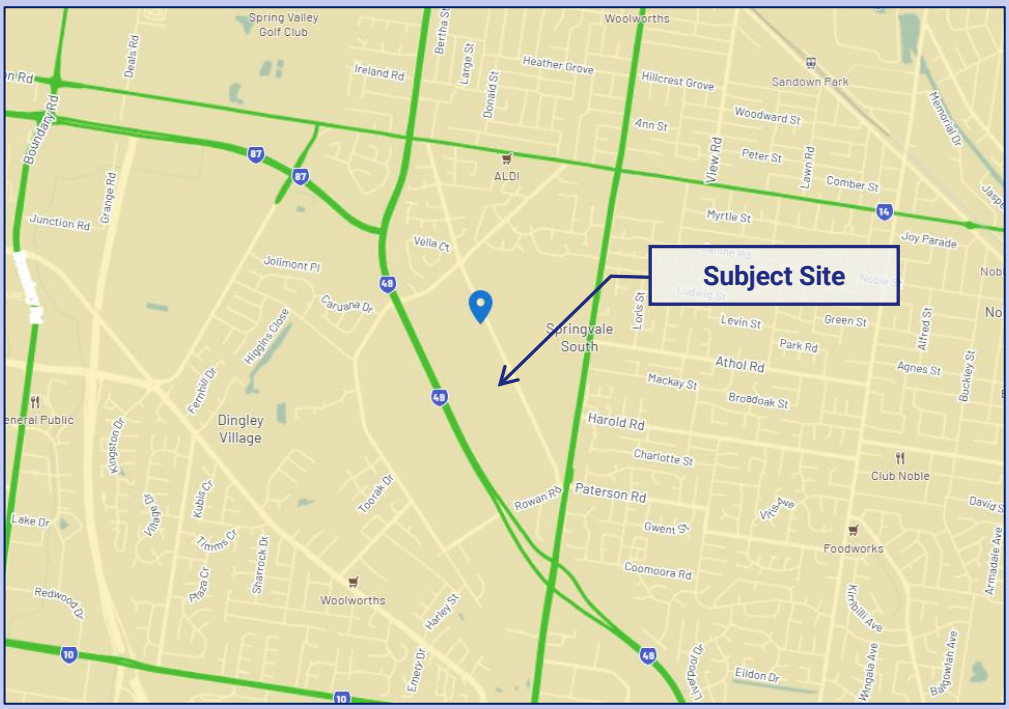
2.4. Responsible Road Authorities

Greater Dandenong City Council is responsible for Clarke Road and other surrounding local roads.

The Department of Transport and Planning (DTP) is the responsible road authority for Springvale Road and other arterial roads and freeways which the trucks will use to access the site.

2.5. Heavy Vehicle Access Routes

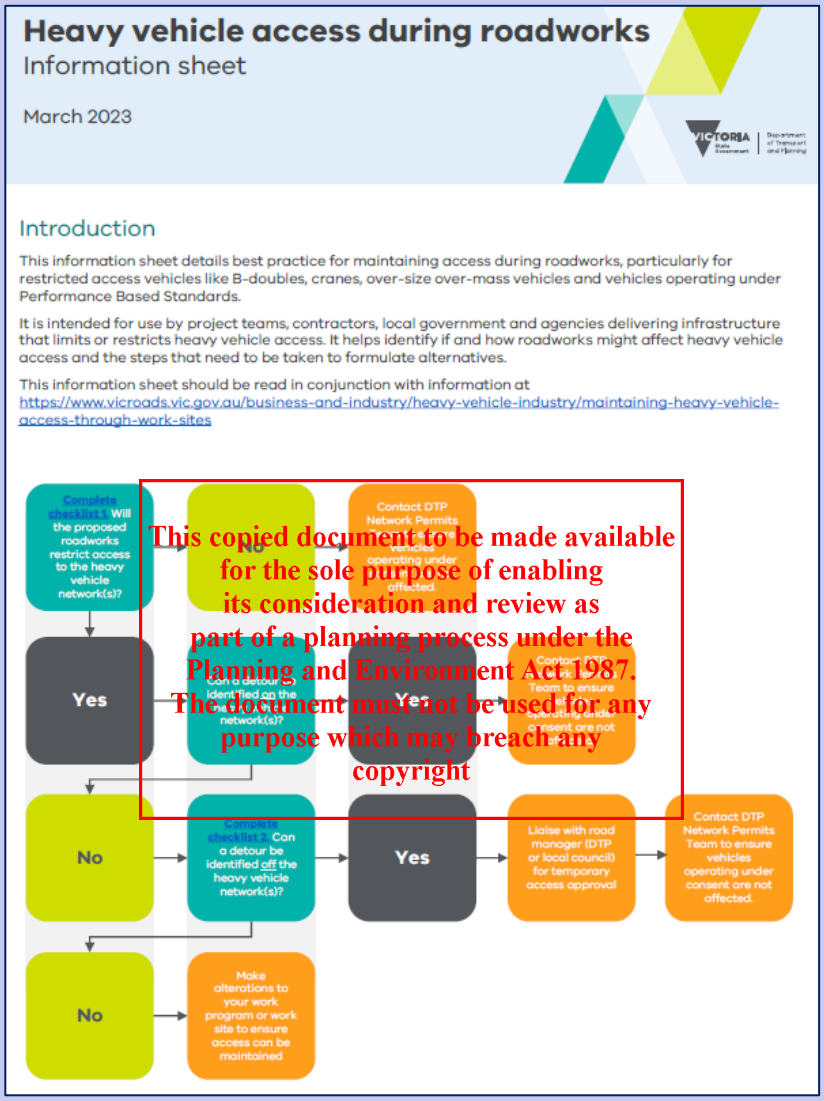
The NHVR website includes information on heavy vehicle access routes in Victoria. The relevant heavy vehicle access maps for the site are shown in Figure 6.

Type	Network Map
40t SPV Network	
OSOM Network	

B-Double Network	
Higher Mass Limits Network	

Figure 6: Heavy Vehicle Network Maps (Source: NHVR)

The DTP flowchart for Heavy Vehicle Access During Roadworks is shown below, with the maximum dimensions of different types of vehicles.



Maximum Dimension and Mass Limits	Height [m]	Width [m]	Length [m]	Low Speed Swept Path [m]	Mass [t]
B-Doubles	4.6	2.5	26.0	8.7	68.5
PBS/HPFVs	4.3	2.5	36.5	10.6	113.5
Oversize/Overmass Vehicles	5.0	5.0	30.0	Varies	100.0
Emergency & Emergency Preparedness	5.0	4.0	26.0	Varies	78.5
Class 1 Agricultural Vehicles	5.0	Up to 6.5*	35.0	Varies	45.0
Platform Trailers	6.0	6.0	44.0	Varies	206.0
* Refer to Class 1 Agricultural Vehicles map to determine width requirement.					

Figure 7: Heavy Vehicle Access Flowchart (Source: DTP)

2.6. Public Transport

The site has two nearby bus routes as shown in Figure 8 below. Bus route 824 travels along Clarke Road past the subject site and bus route 902 travels along Springvale Road. A screenshot of the PTV Public Transport Map in the vicinity of the site is shown below.

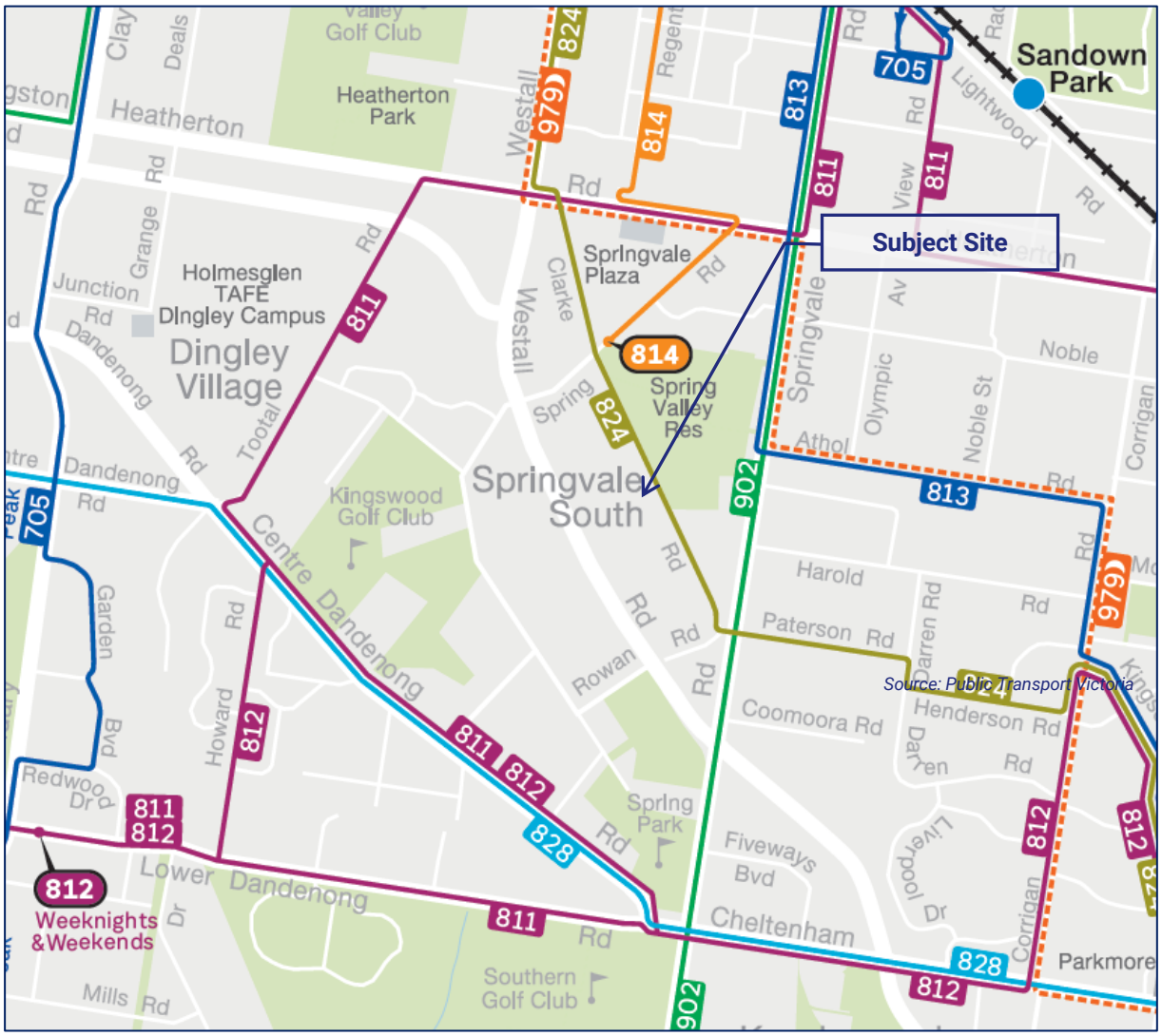


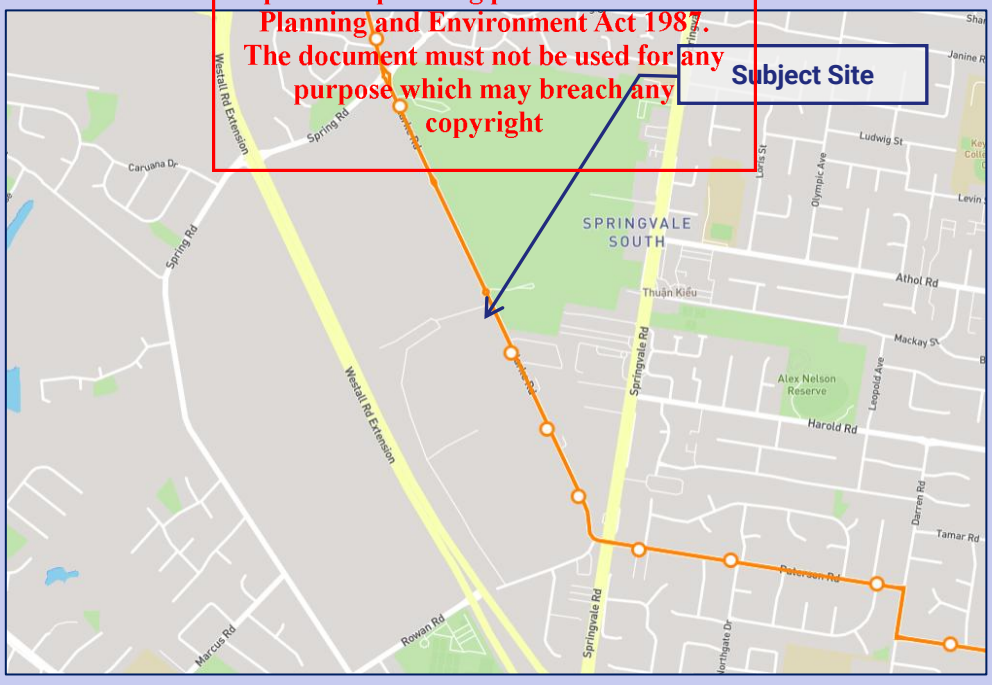
Figure 8: PTV Public Transport Map – Greater Dandenong (Source: ptv.vic.gov.au)

Bus route 824 travels along Clarke Road past the subject site and bus route 902 travels along Springvale Road.

Table 2: Summary of Public Transport Services

Service	Between	Via	Weekday	Saturday	Sunday
Clarke Road – approximately 100m walking distance southeast of the site					
Bus Route 824	Moorabbin & Keysborough	Clayton & Westall	6:00am-9:45pm 40-60 minutes	7:40am-9:40pm 60 minutes	9:35am-9:55pm 60 minutes
Springvale Road – approximately 500m walking distance east of the site					
Bus Route 902 (SmartBus)	Chelsea & Airport West	Glen Waverley	5:10am-12:10am 20-30 minutes	5:40am-12:15am 20-30 minutes	7:10am-9:20pm 30 minutes

The route 824 map and bus stop locations are shown below.



Phone: 03 9771 4300
Website: https://www.venturabus.com.au/

Figure 9: Bus Route 824 Route Map

2.7. Traffic Volumes

Clarke Road is currently mostly undeveloped land between Springvale Road to the southeast, and Spring Road to the northwest (former rubbish tip and Spring Valley Park). Therefore, the traffic volumes along Clarke Road are expected to be reasonably low. Typical weekday SCATS data was analysed (May 2025) at the Springvale Road/ Clarke Road intersection. The SCATS data indicates the volumes along Clarke Road were approximately:

- Southeastbound Volumes
  - AM Peak (8:00AM) ➔ 216 vph
  - PM Peak (3:00PM) ➔ 226 vph
- Northwestbound Volumes
  - AM Peak (8:00AM) ➔ 502 vph
  - PM Peak (3:00PM) ➔ 422 vph

2.8. Traffic Management Category

https://experience.arcgis.com/experience/2ba210aa8cdc4319aabe3595bf4e6610

Clarke Road, Westall Road and Springvale Road are Category 2 roads and Spring Road is a Category 1 Road. Traffic Management Category Map for the subject site is shown below.

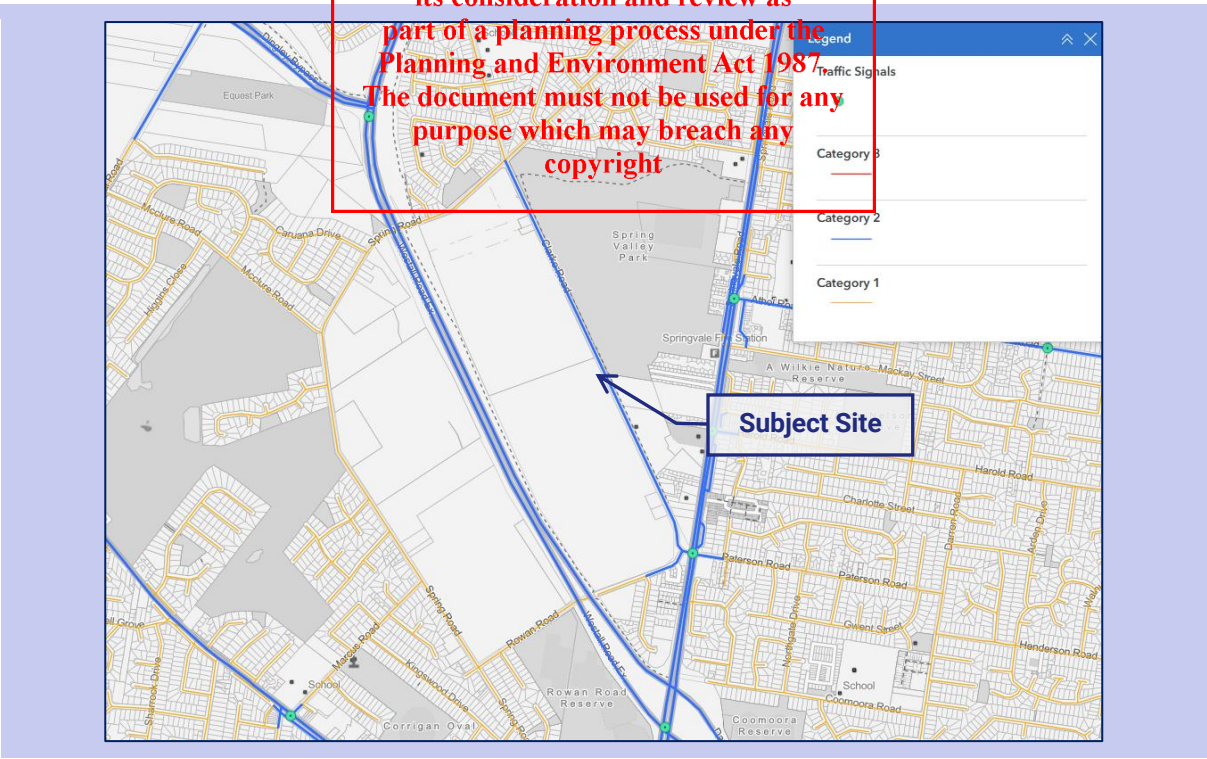


Figure 10: Traffic Management Category (Source: DTP)

3. Project Details

3.1. Construction Activities

This TMP is associated with the Springvale Battery Energy Storage System Project at 222 Clarke Road Springvale South.

The project involves the installation of a Battery Energy Storage System including the construction of internal roads.

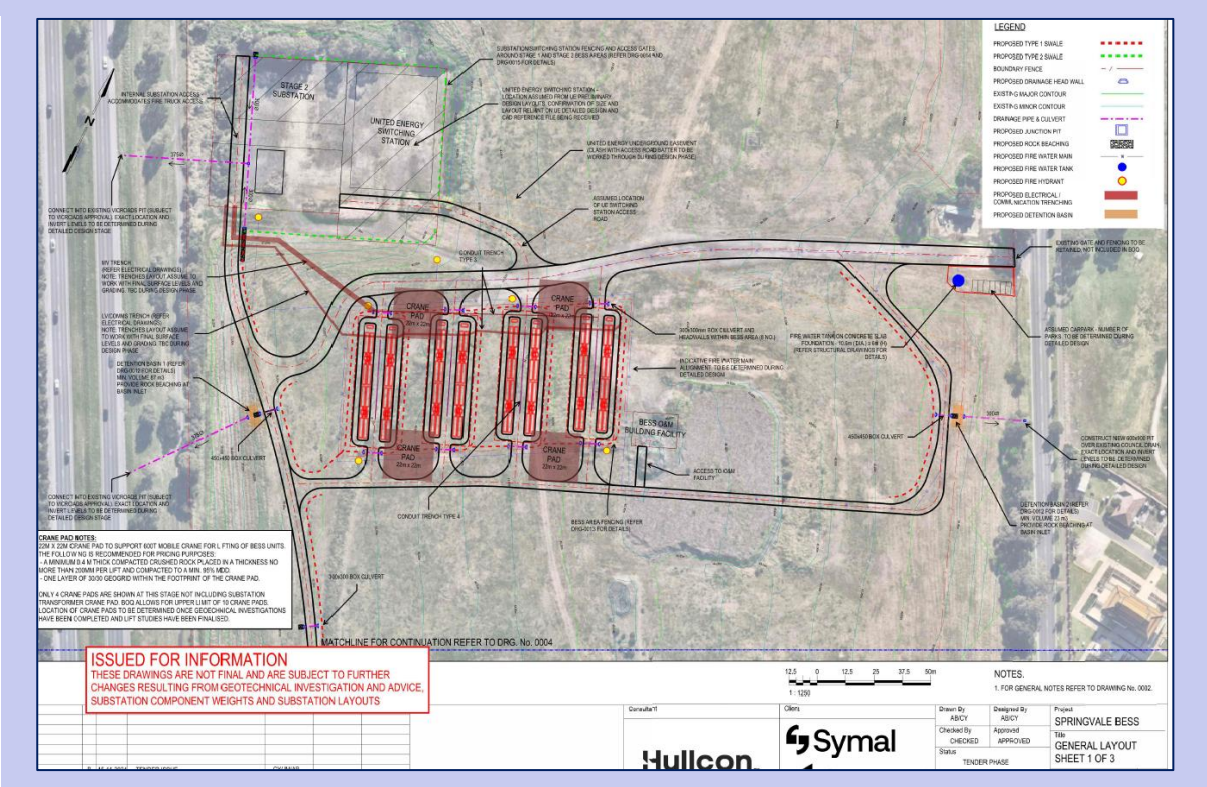


Figure 11: Project Overview

3.2. Indicative Project Staging and Timing

The program has been established to minimise the impact to the public and proposes a staged approach.

The indicative project timing and staging are outlined in Table 3. The staging, sequencing and program are to be confirmed once the scope has been finalised.

Table 3: Project Long-Term Staging and Timing

Layout	Description	Duration (approx.)
Construction Stage	Internal construction works.	18 months

Short term TGS's may be required to implement and remove the long term TGS's, and to undertake short term works.

Table 4: Project Short-Term Staging and Timing

Layout	Description	Duration (approx.)
Crossover Works	Setting up site access fencing, gate and widening of Clarke Road crossover and internal site access road.	2 weeks

3.3. Work Hours

For long-term stages, the layouts will be in place 24/7. Works are proposed to be undertaken between 7:00am and 7:00pm Monday to Saturday.

3.4. Worker Parking

Symal has advised the estimated number of workers for the works (i.e. maximum number of workers per day):

- Crossover Works – up to 15 workers per day.
- Construction Stage – up to 100 workers per day.

All workers will be able to park within the site in a dedicated worker parking area.

3.5. Site Opportunities & Constraints

Site opportunities:

- Direct access to Clarke Road available via surrounding arterial roads.
- Reasonably low traffic volumes along Clarke Road.

Site constraints:

- Clarke Road only has one lane each way with limited turning space for large trucks.

3.6. Site Risk Rating

The risk assessment is outlined in AGTTM Part 2. For each of the stages, the site risk rating was determined using the site risk rating matrix from AGTTM Part 10.

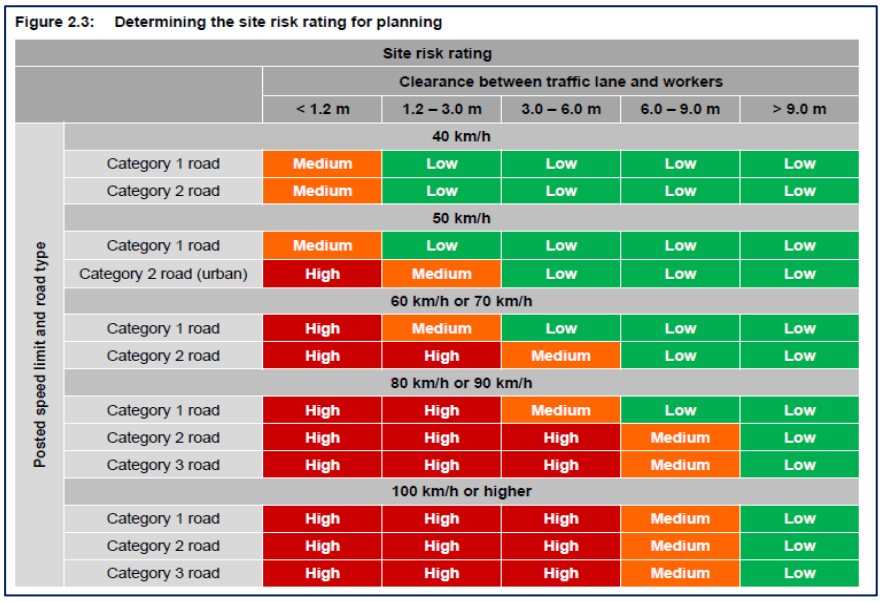


Figure 2.3: Determining the site risk rating for planning

Site risk rating						
		Clearance between traffic lane and workers				
		< 1.2 m	1.2 – 3.0 m	3.0 – 6.0 m	6.0 – 9.0 m	> 9.0 m
Posted speed limit and road type	40 km/h					
	Category 1 road	Medium	Low	Low	Low	Low
	Category 2 road	Medium	Low	Low	Low	Low
	50 km/h					
	Category 1 road	Medium	Low	Low	Low	Low
	Category 2 road (urban)	High	Medium	Low	Low	Low
	60 km/h or 70 km/h					
	Category 1 road	High	Medium	Low	Low	Low
	Category 2 road	High	High	Medium	Low	Low
	80 km/h or 90 km/h					
	Category 1 road	High	High	Medium	Low	Low
	Category 2 road	High	High	High	Medium	Low
	Category 3 road	High	High	High	Medium	Low
	100 km/h or higher					
	Category 1 road	High	High	High	Medium	Low
	Category 2 road	High	High	High	Medium	Low
	Category 3 road	High	High	High	Medium	Low

Figure 12: Site Risk Rating Matrix

The site risk rating for each stage is outlined below.

Table 5: Site Risk Rating

Stage	Crossover Works	Construction
Road Name	Clarke Road	
Road Type	Category 2	
Posted Speed Limit (km/h)	50	
Clearance Between Traffic Lane and Workers	<1.2m	>9.0m
Worksite Hazard Rating	HIGH	LOW

4. Proposed Traffic Staging

4.1. Around Through Past Options Assessment & Risk Assessment

The table below presents an assessment for the around / through / past options.

Table 6: Around Through Past Options Assessment – Construction

TYPE	TREATMENT	ROAD TRAFFIC		PEDESTRIANS		CYCLISTS	
		COMMENT	ADOPTION	COMMENT	ADOPTION	COMMENT	ADOPTION
AROUND	Detour	Not able to close the road	☒		N/A		N/A
THROUGH	Occupy Roadway	Not able to send traffic through the work area	☒		N/A		N/A
PAST	Working within 6m	Traffic can safely go past the site and warning signs will be used as required	☑		N/A		N/A

Table 7: Around Through Past Options Assessment – Crossover Works

TYPE	TREATMENT	ROAD TRAFFIC		PEDESTRIANS		CYCLISTS	
		COMMENT	ADOPTION	COMMENT	ADOPTION	COMMENT	ADOPTION
AROUND	Detour	Not able to close the road	☒		N/A		N/A
THROUGH	Occupy Roadway	Not able to send traffic through the work area	☒		N/A		N/A
PAST	Working within 6m	Lane closure, shuttleflow, traffic controllers, speed reduction and warning signage	☑		N/A		N/A

4.2. Traffic Staging Summary

Table 8 below outlines the proposed stages and their impacts to Clarke Road, and the surrounding network.

Table 8: Proposed Traffic Staging and Impacts

Stage		Impact
Short-term Stage: Crossover Works	Setting up site access fencing/gate and widening of Clarke Road crossover and internal site access road.	• Moderate – Shuttle flow arrangement on Clarke Road during works hours. Arrangements to be removed afterhours.
Long-term Stage: Construction	Internal construction works of the Battery Energy Storage System	• Minor – Trucks turning to and from site access on Clarke Road. The impact on the road as a result of these truck movements is expected to be minimal.

4.3. Short-term Works – Crossover Works

The table below presents a summary of this stage.

Table 9: – Short-term Works

TGS #	G36309-01-11 to 12
TGS Description	Shuttle flow arrangement will be implemented along a section Clarke Road during works hours to construct the crossover.
Lane Closures	Lane closure along Clarke Road to implement shuttle flows.
Speed Reductions	Speed reduction to 40km/h along Clarke Road on approach to the shuttle flow arrangement.
Linemarking Changes	Nil
Detour Routes	Nil
Heavy Vehicle Routes	For the short-term works, there will not be any significantly large vehicle movements to the work area. Movements will be via: Springvale Road ➔ Clarke Road.
Heavy Vehicle Swept Paths	Attached as Appendix A.
Public Transport	Existing bus stops remain operational.
Pedestrians / Cyclists	Pedestrian access maintained along the existing footpath on the eastern side of Clarke Road. No existing bicycle facilities.
Temporary Traffic Barriers and End Treatments	Nil
Site Access & Egress	Yes – site access and egress via Clarke Road.
Traffic Signal Operations	Nil.
Parking Impacts	No changes are proposed.
Property Access	Existing property access maintained.
Emergency Services Access	Emergency services access maintained.
Waste Collection Access	Waste collection access maintained.
Street Lighting	Existing street lighting in vicinity of the subject site maintained.
Coordination with Other Projects	Unaware of any nearby projects.
Services	Existing services within vicinity of works.

4.4. Long-term Works – Internal Construction

The table below presents a summary of this stage.

Table 10: – Long-term Works

TGS #	G36309-01-01
TGS Description	TGS will only include some site access way finding and truck warning signs in both direction along Clarke Road.
Lane Closures	Nil
Speed Reductions	Nil
Linemarking Changes	Nil
Detour Routes	Nil
Heavy Vehicle Routes	For the long-term works, the proposed truck route for major deliveries will be using the following route for: Springvale Road ➔ Heatherton Road ➔ Westall Road ➔ Spring Road ➔ Clarke Road ➔ Site Gate. Exit movement's route will be: Site Gate ➔ Clarke Road ➔ Spring Road ➔ Westall Road ➔ Springvale Road Swept paths at critical intersections have been included in Appendix B for the biggest vehicle.
Heavy Vehicle Swept Paths	Attached as Appendix B.
Public Transport	Existing bus stops remain operational.
Pedestrians / Cyclists	Pedestrian access maintained along the existing footpath on the eastern side of Clarke Road. No existing bicycle facilities.
Temporary Traffic Barriers and End Treatments	Nil
Site Access & Egress	Yes – site access and egress via Clarke Road.
Traffic Signal Operations	Nil.
Parking Impacts	No changes are proposed.
Property Access	Existing property access maintained.
Emergency Services Access	Emergency services access maintained.
Waste Collection Access	Waste collection access maintained.
Street Lighting	Existing street lighting in vicinity of the subject site maintained.
Coordination with Other Projects	Unaware of any nearby projects.
Services	Existing services within vicinity of works.

5. Traffic Management Details

5.1. Traffic Event Program

A Traffic Event Program (TEP) outlining all upcoming traffic disruptions on the project will continuously be updated and submitted to DTP on a regular basis by the project team. A list of traffic events associated with this TMP is included in the table below.

Table 11: Traffic Event Program

Type	Stage	Description	Duration (approx.)
Short-term	Crossover Works	• Intersection/ crossover works at site gate.	2 weeks
Long-term	Construction	• Internal construction works and delivery of materials.	18 months

5.2. Traffic Guidance Schemes

This section lists the Traffic Guidance Schemes (TGSs) as part of this TMP. Refer to Appendix A and Appendix B for short-term and long-term TGS details, respectively.

Table 12: Traffic Guidance Schemes – Short-term

Stage	TGS No.	Traffic Management Description
Crossover Works	G36309-01-11 to 12	• Shuttle flow arrangement on Clarke Road during works hours.

Table 13: Traffic Guidance Schemes – Long-term

Stage	TGS No.	Traffic Management Description
Construction	G36309-01-01	• Trucks turning to and from site access on Clarke Road.

6. Traffic Impact Assessments

6.1. Traffic Impacts Assessment

6.1.1. Crossover Works (Short-term)

The intersection works will be undertaken under a shuttle flow arrangement.

The Austroads Guide to Temporary Traffic Management (AGTTM) Part 3 provides guidance on the maximum length of operation under shuttle flow. It is noted that these volumes are conservative.

Table 5.4: Maximum length of operation under shuttle flow

Traffic volume in both directions (vph)	Length of single lane section (m)
Residential street	60
701 - 800	70
601 - 700	100
501 - 600	150
401 - 500	250
351 – 400	400
301 – 350	600
≤ 300	800

Figure 13: Maximum length of operation under shuttle flow

As per Section 2.7, the combined volume for Clarke Road is approximately 700 vph in a peak hour. However, it is noted that there is a significant directional split with approximately 65% in the northwestbound direction.

The length of the shuttle flow along Clarke Road is approximately 160m.

Therefore, if the volumes in both directions were equal, the maximum length of the shuttle flow would be 100m. However, given the significant directional split (with more time able to be allocated to the northwestbound movements), it is expected that impacts will be moderate (with any queuing being easily contained on the Clarke Road approaches with no impact on adjacent intersections.

6.1.2. Internal Construction (Long-term)

As all vehicles can turn left in and right out of the site access on Clarke Road, there will be minor impacts to Clarke Road traffic. During the small number of oversized truck movements, there will be some moderate impacts when escort vehicles stop other traffic for short periods of time or when required.

7. Road Safety Audit and Risk Assessments

Road Safety Audits (RSA) may be undertaken if required. If undertaken, the audits are included as Appendix C.

Risk Assessments have also been conducted for both TGS's and have been included in Appendix C.

8. Stakeholder Consultations and Approvals

Stakeholder consultation and approvals (DTP Memorandum of Authorisation and Council) are included in Appendix D.

9. Communications Strategy

9.1. VMS Strategy

Variable Message Signs will be installed prior to the works starting to inform drivers prior to the commencement of works.

9.2. Community Notification

Council website, project website and social media will be used to provide updates on the project. Symal will coordinate with council to ensure the community are regularly notified on any notable activities.

10. Implementation, Monitoring and Maintenance

TGS's will be installed only by DTP' pre-qualified contractors (TMI – Traffic Management Implementation). Any minor changes, if required in the field, will be documented on the TGS and kept on file.

The installation of the TGS's and their on-going operation will be monitored throughout the operation of the traffic event.

10.1. Checklists

The following checklists are in compliance with the Road Management Act 2004, Code of Practice, Worksite Safety – Traffic Management:

- Hazard Assessment used to assess the risks and controls (refer to Section 6.1).
- Traffic Implementation Checklist filled out following the implementation of the TGS.
- TMP Installation and Removal Checklist filled out following each implementation of this TMP.

This procedure should be used in conjunction with the SWMS developed specifically for the works associated with this TMP.

The relevant checklists are attached in Appendix E.

10.2. Monitoring and Maintenance

The maintenance crew, managed by the Traffic Supervisor, will conduct drive-through inspections for each implementation. If issues are identified, the crew must rectify them immediately or as soon as practicable. If this cannot be achieved, the issues are to be reported to the Traffic Supervisor who will coordinate for the issues to be corrected.

10.3. Variations

Any changes or variations to the TMP and associated TGS should be recorded.

Any significant changes or variations should be reported to the TMD.

11. Incident Response

In the event of a vehicle breakdown, traffic incident or other incident that creates congestion and causes unacceptable delays to traffic, the works will be aborted, and the traffic management will be removed completely or repositioned to direct traffic around the new obstruction.

If required, First Aid shall be administered, and medical assistance shall be called for. For life threatening injuries an ambulance shall be called on 000. The Police shall also be called on 000 for traffic crashes where life threatening injuries are apparent.

In case of an incident involving the public, or from which legal proceedings may arise, the following information shall be recorded.

- Location of incident.
- Time and Date.
- Weather conditions.
- Condition of travelled path (e.g. lane width and surface condition).
- Details of the incident.
- Details of any injured person.
- Details of vehicle(s) involved.
- Details of emergency services called to the incident.
- Details of type, size and location of signs and devices in use at the time of the incident.
- Details of any traffic management devices damaged as a result of the incident.
- Details of any witnesses to the incident.

Details of all incidents and incidents shall be reported to the site supervisor and project manager using the relevant incident report form.

12. Project & Emergency Contacts

Key contacts and organisation who may be contacted in the event of an emergency are listed below:

Table 14: Emergency Contact Personnel

Organisation	Contact	Contact Number
Project Manager	Luke Soltys	0435 427 322
Traffic Management Company	TBC	TBC

Table 15: Emergency Authorities Contacts

Organisation	Contact	Contact Number
DTP Traffic Management Centre (TMC)	24 hours	13 11 70
Greater Dandenong Council	24 hours	8571 1000
State Emergency Service	24 hours	13 25 00
Victoria Police	24 hours	000 or 112
Ambulance Victoria	24 hours	000 or 112
Fire Rescue Victoria	24 hours	000 or 112

Local emergency services / facilities are listed below.

Table 16: Local Emergency Services / Facilities

Organisation	Address	Contact Number
Victoria Police	314 Springvale Rd, Springvale VIC 3171	8558 8600
Ambulance Victoria	17 Sibthorpe St, Mordialloc VIC 3195	000

Fire Rescue Victoria ▲	518 Springvale Rd, Springvale South VIC 3172	000
Hospital ✚	135 David St, Dandenong VIC 3175	9554 8307
Medical Clinic ✚	110 Centre Dandenong Rd, Dingley Village VIC 3172	9558 2155

The location of the local emergency services / facilities are shown below.

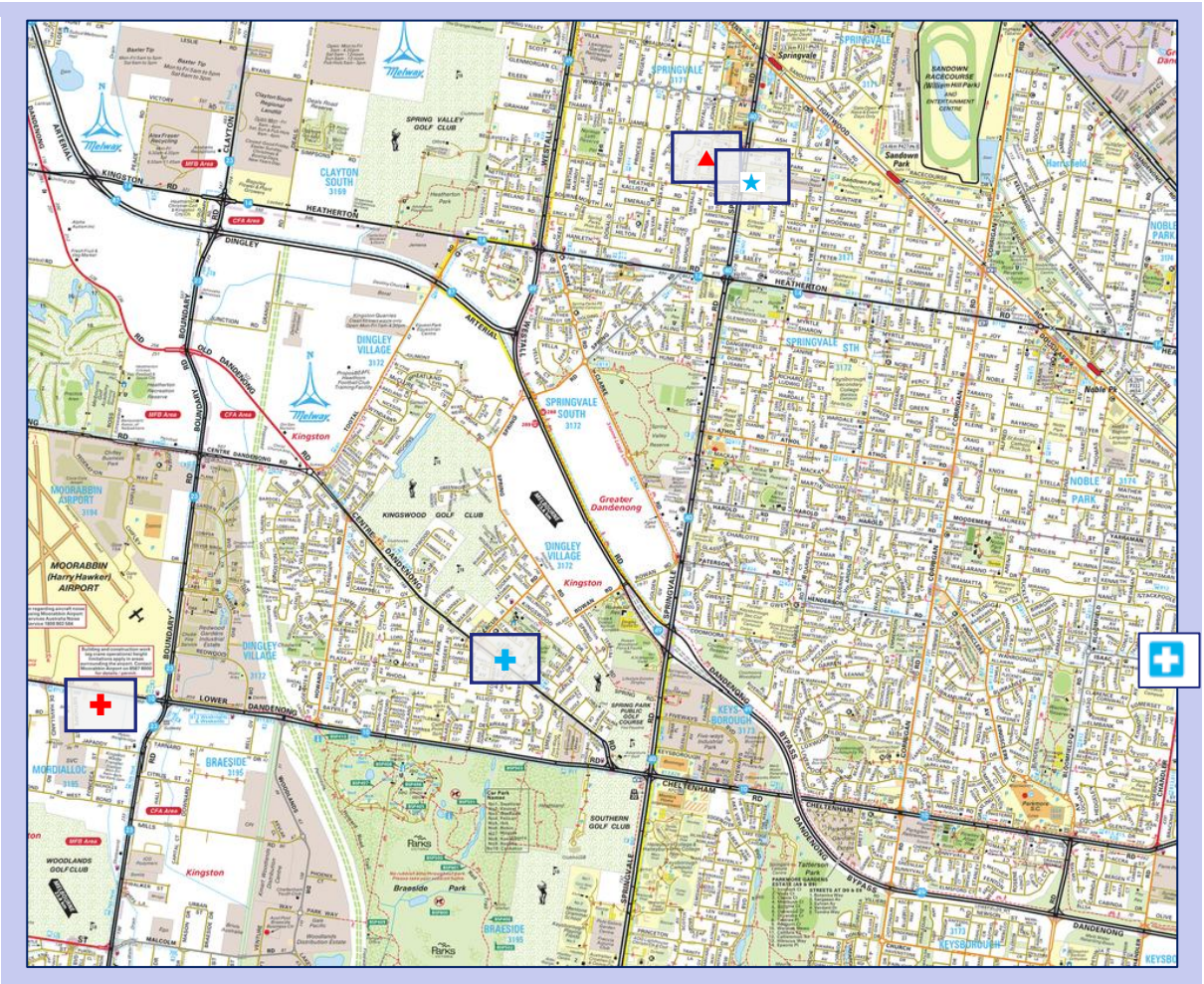
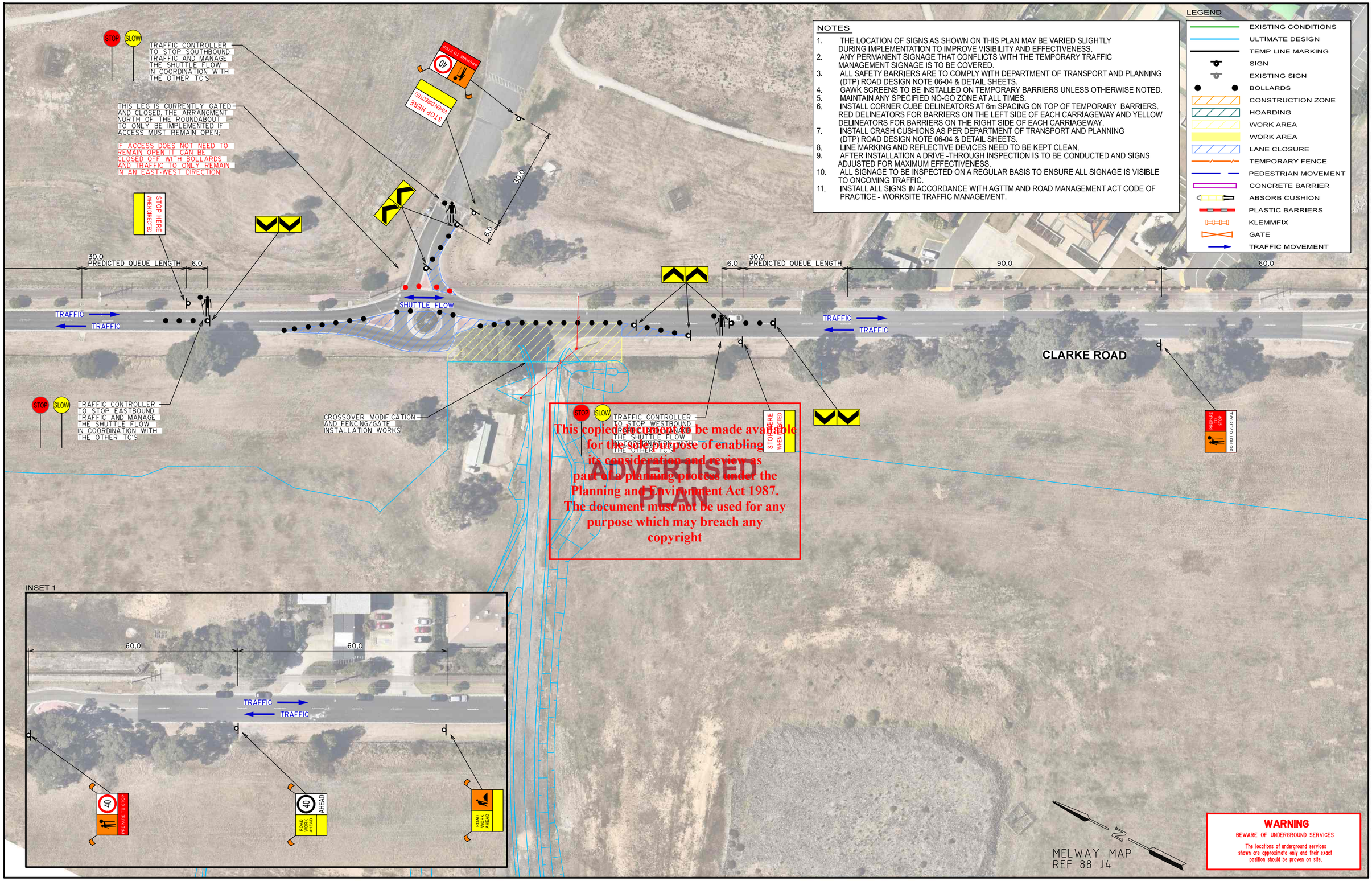


Figure 14: Local Emergency Services / Facilities

Appendix A

Short-term Traffic Guidance Schemes – Crossover Works



FOR CONTINUATION REFER TO SHEET 2

FOR CONTINUATION REFER TO INSET 1

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	S.B	A.C(RPE0006079)	25/05/2025
B	UPDATED ISSUE	S.B	A.C(RPE0006079)	22/08/2025

GENERAL NOTES
1. BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP MARCH 2025).
2. ROADS:
CLARKE ROAD: (SPEED ZONE 50km/h).
SPRINGVALE ROAD: (SPEED ZONE 80km/h).

DESIGNED: S. BIRGANI
CHECKED/APPROVED: A. COYLE (RPE 0006079)
FILE NAME: G36309-01.dgn

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SPRINGVALE BATTERY ENERGY STORAGE SYSTEM
CITY OF GREATER DANDENONG
SHORT-TERM STAGE - CROSSOVER WORKS
TRAFFIC GUIDANCE SCHEME

SCALE 1:1000 (A3) 0 5 10 15 20 | SHEET No. 1 OF 2 | DWG No. G36309-01-11

DATE: 22/08/2025
MODEL: G36309-01-11
FILE: P:\Synergy\Projects\GRP3\GRP36309\03-Drawings\G36309-01.dgn

LEGEND

- EXISTING CONDITIONS
- ULTIMATE DESIGN
- TEMP LINE MARKING
- SIGN
- EXISTING SIGN
- BOLLARDS
- CONSTRUCTION ZONE
- HOARDING
- WORK AREA
- WORK AREA
- LANE CLOSURE
- TEMPORARY FENCE
- PEDESTRIAN MOVEMENT
- CONCRETE BARRIER
- ABSORB CUSHION
- PLASTIC BARRIERS
- KLEMMFIX
- GATE
- TRAFFIC MOVEMENT

NOTES

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2. ANY PERMANENT SIGNAGE THAT CONFLICTS WITH THE TEMPORARY TRAFFIC MANAGEMENT SIGNAGE IS TO BE COVERED.
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6. INSTALL CORNER CUBE DELINEATORS AT 6m SPACING ON TOP OF TEMPORARY BARRIERS. RED DELINEATORS FOR BARRIERS ON THE LEFT SIDE OF EACH CARRIAGEWAY AND YELLOW DELINEATORS FOR BARRIERS ON THE RIGHT SIDE OF EACH CARRIAGEWAY.
7. INSTALL CRASH CUSHIONS AS PER DEPARTMENT OF TRANSPORT AND PLANNING (DTP) ROAD DESIGN NOTE 06-04 & DETAIL SHEETS.
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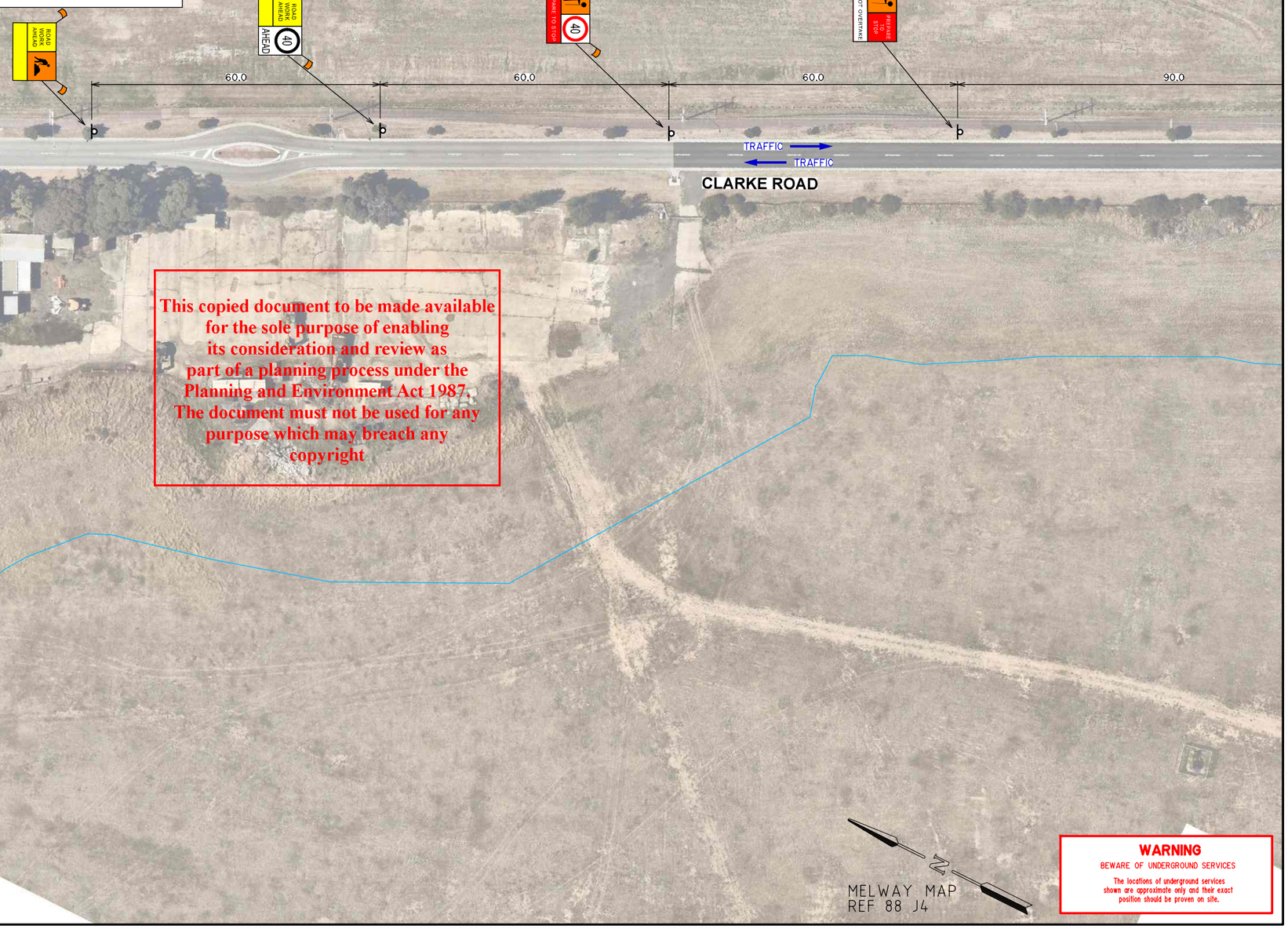

MELWAY MAP REF 88 J4

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

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DATE: 22/08/2025
MODEL: G36309-01-12
FILE: P:\Synergy\Projects\GRP3\GRP36309\03-Drawings\G36309-01.dgn

19m SEMI

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

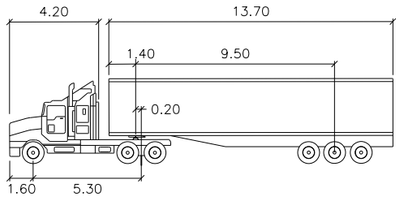
SCALE: 0 2.5 5.0
1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMP2 LAYOUT
CHK TURN NO:	1

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



19m semi (AustRoads)

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.8
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

19m SEMI

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

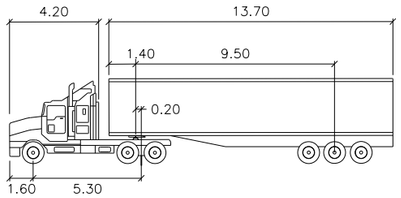
SCALE: 0 2.5 5.0
1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMP2 LAYOUT
CHK TURN NO:	2

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



19m semi (AustRoads)

meters

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.8
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

B99

LEGEND

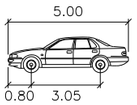
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 0 2.5 5.0

DRAWN BY:	S. BIRGANI
TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMP2 LAYOUT
CHK TURN NO:	3 8 4

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



99th percentile

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

B99

LEGEND

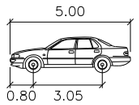
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 0 2.5 5.0

DRAWN BY:	S. BIRGANI
TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMP2 LAYOUT
CHK TURN NO:	5

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



99th percentile

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

Appendix B

Long-term Traffic Guidance Schemes – Construction

FOR CONTINUATION REFER TO INSET 1

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LEGEND

- EXISTING CONDITIONS
- ULTIMATE DESIGN
- TEMP LINE MARKING
- SIGN
- EXISTING SIGN
- BOLLARDS
- CONSTRUCTION ZONE
- HOARDING
- WORK AREA
- WORK AREA
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- PEDESTRIAN MOVEMENT
- CONCRETE BARRIER
- ABSORB CUSHION
- PLASTIC BARRIERS
- KLEMMFIX
- GATE
- TRAFFIC MOVEMENT

SITE ACCESS

CONSTRUCTION VEHICLES EXCEPTED

NO ENTRY

TRAFFIC

TRAFFIC

100.0

100.0

13.2

100.0

100.0

ULTIMATE ACCESS ROAD/ CROSSOVER TO BE MODIFIED AS REQUIRED TO ACCOMODATE SWEPT PATHS FOR THE LARGEST VEHICLE THAT IS USED DURING THE CONSTRUCTION PROCESS

(INDICATIVE CHANGES SHOWN IN BLACK)

SITE CONTAINMENT FENCING TO BE INSTALLED AS PER THE THE PROJECT BOUNDARY

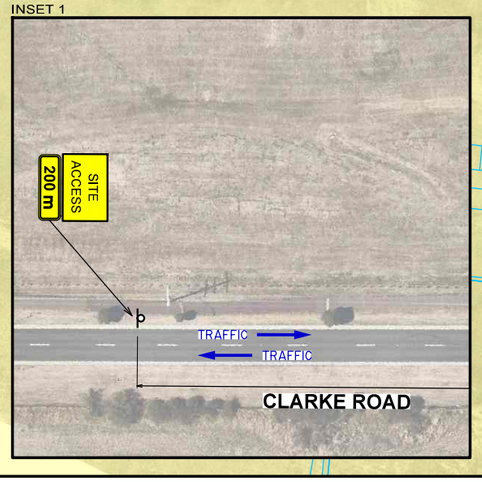
SITE ACCESS

SITE EGRESS

SITE ACCESS

SITE ACCESS 200 m

INSET 1



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   SPRINGVALE ROAD: (SPEED ZONE 80km/h).

DESIGNED: S. BIRGANI

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DATE: 22/08/2025
MODEL: G36309-01-01
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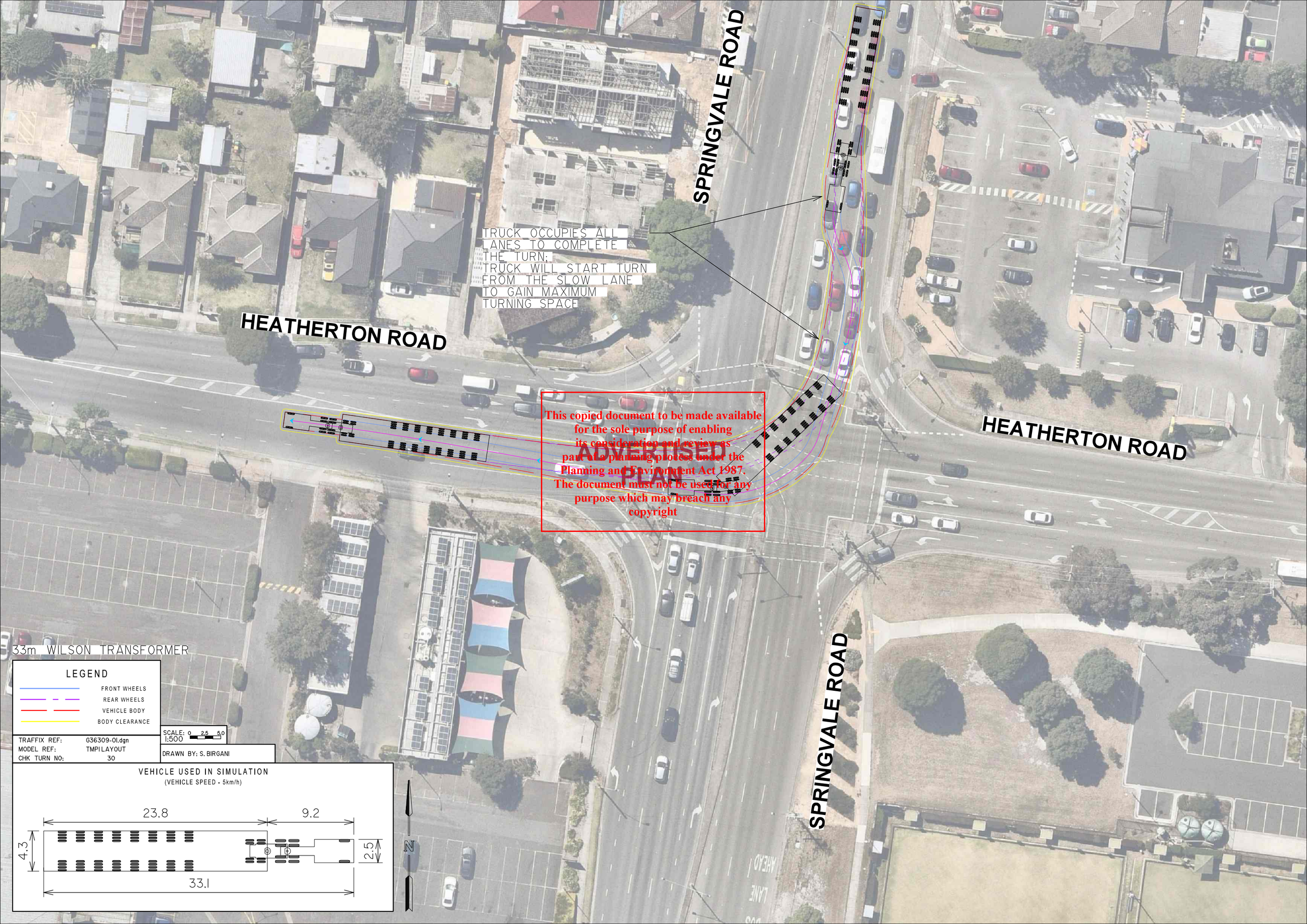


HEATHERTON ROAD

WESTALL ROAD

HEATHERTON ROAD

WESTALL ROAD

TRUCK MOUNTS THE EDGE OF THE KERB ON THIS SIDE BUT NARROWLY MISSES EXISTING SIGNS

33m WILSON TRANSFORMER

LEGEND

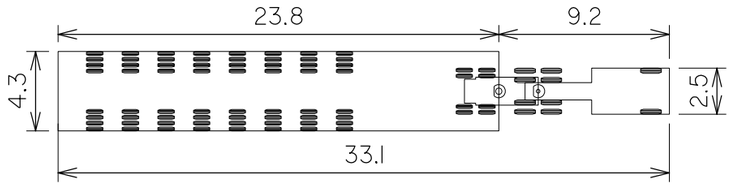
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 0 2.5 5.0

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPILAYOUT
CHK TURN NO:	31

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)



N

33m WILSON TRANSFORMER

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

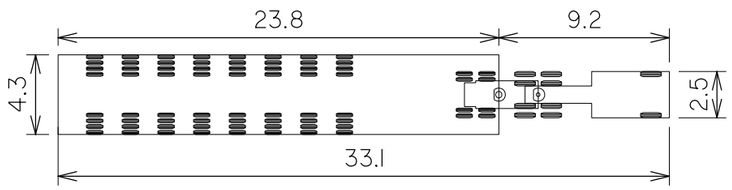
SCALE: 0 2.5 5.0
1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPLAYOUT
CHK TURN NO:	33

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



TRUCK MOUNTS ISLAND ON BOTH SIDES. EXISTING SIGNS TO BE REMOVED

TRUCK COMPLETES TURN BY GOING OVER THE WRONG SIDE OF THE ROUNDABOUT;

OTHER APPROACHES MUST BE MANAGED DURING THESE MOVEMENTS TO ENSURE THERE ARE NO CLASHES

SPRING ROAD

CLARKE ROAD

BEWARE THAT THERE COULD BE PARKED CARS ALONG SPRING ROAD ON BOTH SIDES AS THERE ARE NO EXISTING NO STOPPING SIGNS (GOOGLE STREET VIEW 2019)

ALONG THIS SECTION, CLARKE ROAD IS 6m WIDE IN TOTAL. THE WIDTH OF THE TRUCK IS 4.3m.

ONLY A WIDTH OF 1.7m OR LESS WILL BE AVAILABLE FOR THE TRAFFIC COMING FROM THE OTHER SIDE

6.0

CLARKE ROAD

6.0

ALONG THIS SECTION,
CLARKE ROAD IS 6m
WIDE IN TOTAL.
THE WIDTH OF THE
TRUCK IS 4.3m.

ONLY A WIDTH OF 1.7m
OR LESS WILL BE
AVAILABLE FOR THE
TRAFFIC COMING FROM
THE OTHER SIDE

TRUCK IS TOO LONG TO
BE ABLE TO GO AROUND
THE MID-BLOCK ISLAND;

TRUCK MUST DRIVE OVER
THE ISLAND. EXISTING
SIGNS TO BE REMOVED.

33m WILSON TRANSFORMER

LEGEND

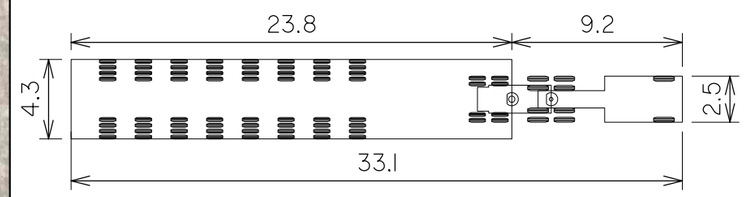
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 0 2.5 5.0
1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPLAYOUT
CHK TURN NO:	34

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)



N

ALONG THIS SECTION,
CLARKE ROAD IS 6m
WIDE IN TOTAL.
THE WIDTH OF THE
TRUCK IS 4.3m.

ONLY A WIDTH OF 1.7m
OR LESS WILL BE
AVAILABLE FOR THE
TRAFFIC COMING FROM
THE OTHER SIDE

6.0

TRUCK DRIVES OVER THE ISLANDS ON BOTH SIDES AND MOUNTS THE ROUNDABOUT;

EXISTING VEGETATION AND SIGNS TO BE REMOVED FROM THE ROUNDABOUT

6.0

CROSSOVER TO BE WIDENED TO ENABLE TRUCK ENTRY/EXIT MOVEMENTS;

EXISTING TREE TO BE TRIMMED AS REQUIRED

33m WILSON TRANSFORMER

LEGEND

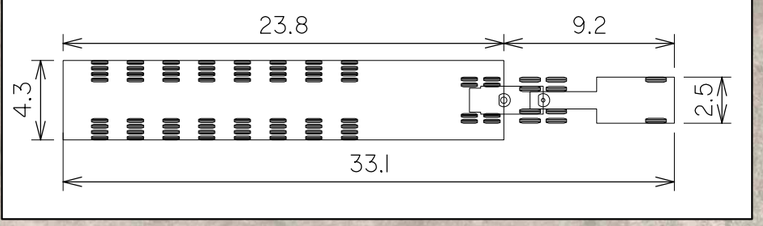
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 0 25 50

TRAFFIX REF: G36309-01.dgn
MODEL REF: TMPLAYOUT
CHK TURN NO: 36

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)



TRUCK DRIVES OVER THE ISLANDS ON BOTH SIDES AND MOUNTS THE ROUNDABOUT;

EXISTING VEGETATION AND SIGNS TO BE REMOVED FROM THE ROUNDABOUT

6.0

CROSSOVER TO BE WIDENED TO ENABLE TRUCK ENTRY/EXIT MOVEMENTS;

EXISTING TREE TO BE TRIMMED AS REQUIRED

33m WILSON TRANSFORMER

LEGEND

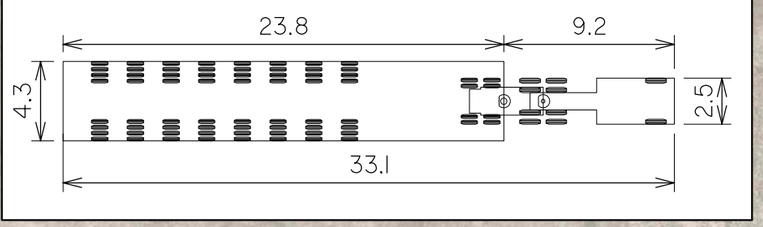
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 (0, 2.5, 5.0)

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPILAYOUT
CHK TURN NO:	35

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)



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33m WILSON TRANSFORMER

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

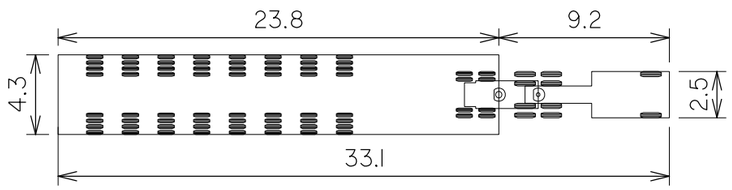
SCALE: 0 2.5 5.0 1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPLAYOUT
CHK TURN NO:	37

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



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TRUCK MOUNTS ISLAND ON BOTH SIDES. EXISTING SIGNS TO BE REMOVED

SPRING ROAD

CLARKE ROAD

TRUCK STARTS TURN FROM THE WRONG SIDE OF THE ROAD;

OTHER APPROACHES MUST BE MANAGED DURING THESE MOVEMENTS TO ENSURE THERE ARE NO CLASHES

ALONG THIS SECTION, CLARKE ROAD IS 6m WIDE IN TOTAL. THE WIDTH OF THE TRUCK IS 4.3m.

ONLY A WIDTH OF 1.7m OR LESS WILL BE AVAILABLE FOR THE TRAFFIC COMING FROM THE OTHER SIDE

6.0

WESTALL ROAD

SPRING ROAD

TRUCK WILL GET CLOSE TO EXISTING SIGNS AT THIS LOCATION AND DRIVE OVER THE EDGE OF NATURE STRIP

TRUCK MUST MOUNT ISLAND TO GAIN SUFFICIENT TURNING SPACE. EXISTING SIGNS AT THESE TWO LOCATIONS TO BE REMOVED FROM THE ISLAND

TRUCK MOUNTS KERB BUT NARROWLY MISSES EXISTING SIGN

33m WILSON TRANSFORMER

LEGEND

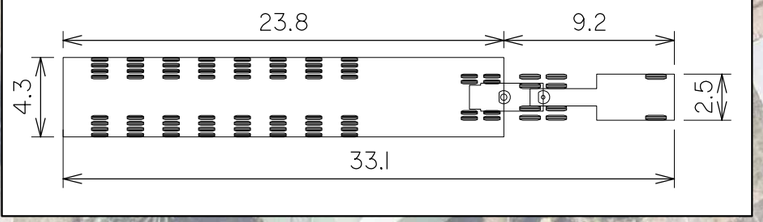
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 1:500 (0, 25, 50)

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMPILAYOUT
CHK TURN NO:	38
DRAWN BY: S. BIRGANI	

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



N

WESTALL ROAD

SPRINGVALE ROAD

TRUCK MOUNTS KERB AND DRIVES OVER DRAINAGE PIT AND 2 EXISTING SIGNS. SIGNS TO BE REMOVED

33m WILSON TRANSFORMER

LEGEND

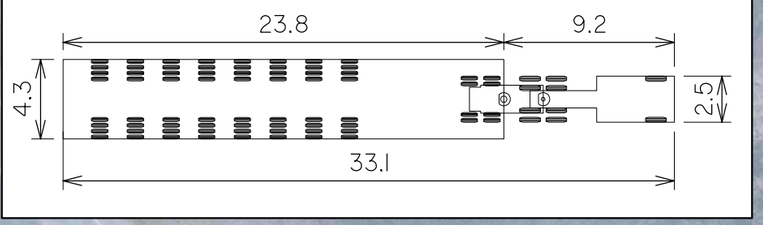
- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

SCALE: 0 2.5 5.0 1:500

TRAFFIX REF:	G36309-01.dgn
MODEL REF:	TMP1LAYOUT
CHK TURN NO:	39

DRAWN BY: S. BIRGANI

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)



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Appendix C

Road Safety Audit and Risk Assessments

OPTIONS ASSESSMENT, TRAFFIC IMPACTS AND RISK ASSESSMENT

PROJECT PARAMETERS

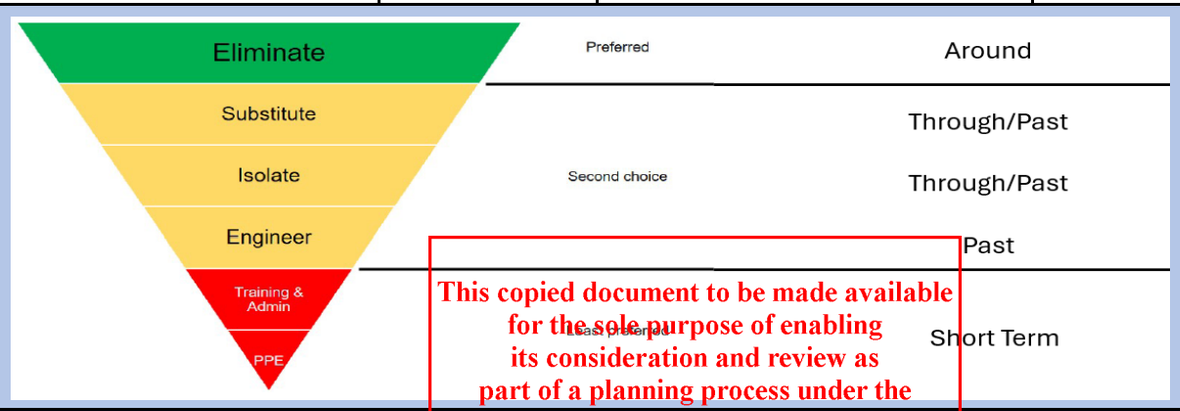
The following Risk Assessment has been prepared in accordance with Section 3.3 of AGTTM02-21 Guide to Temporary Traffic Management Part 2 Traffic Management Planning.

STAGE	**N/A**	**Short-term**	
WORKS DESCRIPTION	Crossover works		
TRAFFIC MANAGEMENT	Lane closure, shuttleflow, bollards, traffic controllers, speed reduction and warning signage		
RISK ASSESSMENT PREPARED BY	S. Birgani	**DATE**	22/08/2025
RISK ASSESSMENT REVIEWED BY	A. Coyle (RPE 6079)	**TGS**	G36309-01-11 to 12

OPTIONS ASSESSMENT

TYPE	TREATMENT	ROAD TRAFFIC		PEDESTRIANS		CYCLISTS	
		COMMENT	ADOPTION	COMMENT	ADOPTION	COMMENT	ADOPTION
AROUND	**Detour**	Not able to close the road	☒		N/A		N/A
THROUGH	**Occupy Roadway**	Not able to send traffic through the work area	☒		N/A		N/A
PAST	**Working within 6m**	Lane closure, shuttleflow, traffic controllers, speed reduction and warning signage	☑		N/A		N/A

HIERARCHY OF CONTROL



IMPACTS

		IMPACT	COMMENT
ROAD TRAFFIC	**• PRIVATE VEHICLES**	**HIGH**	Traffic must come to a full stop and be managed by TC's
	• FREIGHT	**HIGH**	Low truck volume in the vicinity of the works
	• PUBLIC TRANSPORT	**HIGH**	Buses remain operational but impact remains as per above
	• PROPERTY ACCESS	N/A	No impact to any property access in the area
PEDESTRIANS		N/A	No footpath on the western side where the site gate is.
CYCLISTS		N/A	No cyclist facility in the area
PARKING		N/A	No public parking in the area

STEP 1 - SITE RISK RATING

ROAD	Clarke Road
ROAD TYPE	Major Road (Local Council)
ROAD CATEGORY	**Category 2**
POSTED SPEED LIMIT	50
CLEARANCE BETWEEN TRAFFIC LANE AND WORKERS	<1.2m
OVERALL WORKSITE HAZARD RATING	**High**
REQUIRED LEVEL OF PLANNING	Site specific TGS

STEP 2 - IDENTIFY THE HAZARDS AND RISKS

For each stage

STEP 3 - ANALYSE THE RISKS

Including a determination of the likelihood and consequence

Table 2.5: Consequence / likelihood risk matrix

		Likelihood				
		Almost certain	Likely	Possible	Unlikely	Rare
Consequence	Catastrophic	Very high	Very high	High	High	Medium
	Major	Very high	Very high	High	Medium	Low
	Moderate	High	High	Medium	Low	Low
	Minor	High	Medium	Low	Low	Low
	Insignificant	Medium	Low	Low	Low	Negligible

STEP 4 - IDENTIFY TREATMENT OPTIONS

Using the around, through and past hierarchy of control

STEP 5 - EVALUATE EACH TREATMENT OPTION

Assess for suitability

		EXISTING			RESIDUAL	

HAZARDS / RISKS	RISK TO WORKERS / OTHER ROAD USERS	LIKELIHOOD	CONSEQUENCE	TREATMENT TYPE	TREATMENT OPTION/S	LIKELIHOOD	CONSEQUENCE
		RISK RATING				RISK RATING	
CLEARANCE TO TRAFFIC	Potential exposure between workers and other road user vehicles causing severe injury	Possible	Major	Past	Lane closure, shuttleflow, bollards, traffic controllers, speed reduction and warning signage	Unlikely	Major
		High				Medium	
HIGH SPEED TRAFFIC THROUGH WORKSITE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR DRIVER COMPLIANCE TO SPEED SIGNAGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR ADVANCE SIGHT DISTANCE(<200M)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR OBSERVANCE OF DIRECTIONS / INSTRUCTIONS TO MOTORISTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
NARROW PAVEMENT WITH NO ESCAPE PATH (<2.9m WIDTH)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
PRESENCE OF WORKERS AT WORKSITE	Traffic driving closely past the work area can pose a collision risk to workers.	Possible	Major	Past	Lane closure, shuttleflow, bollards, traffic controllers, speed reduction and warning signage	Unlikely	Major
		High				Medium	
EXCAVATIONS ADJACENT TO WORKSITE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
PRESENCE OF UNPROTECTED HAZARDS WITHIN THE CLEAR ZONE.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
ROUGH OR UNSEALED ROAD SURFACE	N/A	N/A	N/A			N/A	N/A
		N/A				N/A	
HIGH TRAFFIC VOLUME THROUGH WORKSITE >10,000 VPD	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
HIGH VOLUME OF HEAVY VEHICLES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
WORKS VEHICLES ENTERING OR LEAVING WORKSITE.	Direct exposure between site vehicles and other road user vehicles during truck entry exit movements to/from work area	Possible	Major	Through/ Past	Lane closure, shuttleflow, traffic controllers, speed reduction and warning signage	Unlikely	Major
		High				Medium	
STEP 6 - PREPARE TRAFFIC MANAGEMENT PLAN							
Prepare the TMP in accordance with Clause 15 of the RMA Code of Practice Worksite Safety – Traffic Management (2023).							
STEP 7 - CARRY OUT THE WORK							
Provide feedback following implementation for any improvement opportunities. The implemented Traffic Guidance Scheme shall be reviewed on site.							

OPTIONS ASSESSMENT, TRAFFIC IMPACTS AND RISK ASSESSMENT

PROJECT PARAMETERS

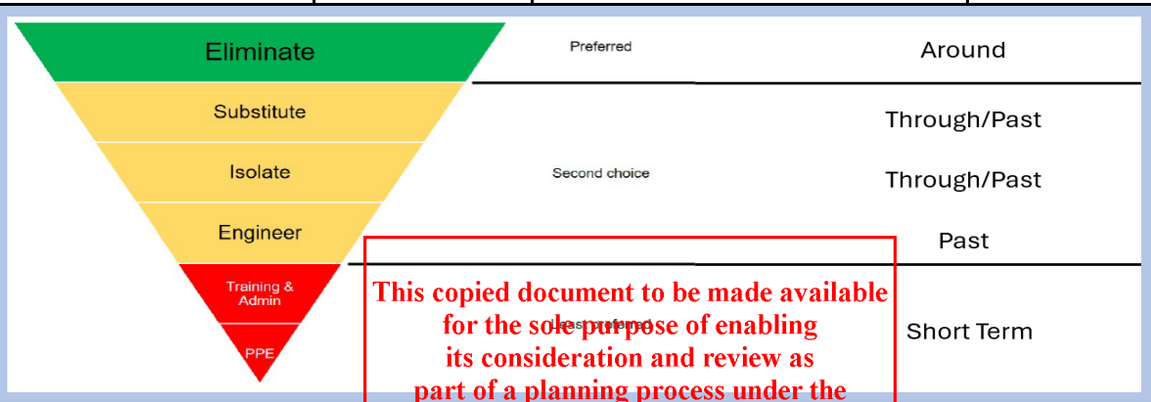
The following Risk Assessment has been prepared in accordance with Section 3.3 of AGTTM02-21 Guide to Temporary Traffic Management Part 2 Traffic Management Planning.

STAGE	**N/A**	**Long-term**	
WORKS DESCRIPTION	Construction of the battery storage facility		
TRAFFIC MANAGEMENT	Site fencing, warning signage, modifications to road alignment/ crossover		
RISK ASSESSMENT PREPARED BY	S. Birgani	**DATE**	22/08/2025
RISK ASSESSMENT REVIEWED BY	A. Coyle (RPE 6079)	**TGS**	G36309-01-01

OPTIONS ASSESSMENT

TYPE	TREATMENT	ROAD TRAFFIC		PEDESTRIANS		CYCLISTS	
		COMMENT	ADOPTION	COMMENT	ADOPTION	COMMENT	ADOPTION
AROUND	**Detour**	Not able to close the road	☒		N/A		N/A
THROUGH	**Occupy Roadway**	Not able to send traffic through the work area	☒		N/A		N/A
PAST	**Working within 6m**	Traffic can safely go past the site and warning signs will be used as required	☑		N/A		N/A

HIERARCHY OF CONTROL



IMPACTS

Road Traffic	IMPACT	COMMENT
• PRIVATE VEHICLES	LOW	There may be minor delays during truck entry/exit movements
• FREIGHT	LOW	Low truck volume in the vicinity of the works
• PUBLIC TRANSPORT	LOW	Buses operate along Clarke Road. Minor impact as per above
• PROPERTY ACCESS	N/A	No impact to any property access in the area
PEDESTRIANS	N/A	No footpath on the western side where the site gate is.
CYCLISTS	N/A	No cyclist facility in the area
PARKING	N/A	No public parking in the area

STEP 1 - SITE RISK RATING

ROAD	Clarke Road
ROAD TYPE	Major Road (Local Council)
ROAD CATEGORY	**Category 2**
POSTED SPEED LIMIT	50
CLEARANCE BETWEEN TRAFFIC LANE AND WORKERS	>9.0m
OVERALL WORKSITE HAZARD RATING	**Low**
REQUIRED LEVEL OF PLANNING	Site specific TGS

STEP 2 - IDENTIFY THE HAZARDS AND RISKS

For each stage

STEP 3 - ANALYSE THE RISKS

Including a determination of the likelihood and consequence

Table 2.5: Consequence / likelihood risk matrix

		Likelihood				
		Almost certain	Likely	Possible	Unlikely	Rare
Consequence	Catastrophic	Very high	Very high	High	High	Medium
	Major	Very high	Very high	High	Medium	Low
	Moderate	High	High	Medium	Low	Low
	Minor	High	Medium	Low	Low	Low
	Insignificant	Medium	Low	Low	Low	Negligible

STEP 4 - IDENTIFY TREATMENT OPTIONS

Using the around, through and past hierarchy of control

STEP 5 - EVALUATE EACH TREATMENT OPTION

Assess for suitability

		EXISTING			RESIDUAL

HAZARDS / RISKS	RISK TO WORKERS / OTHER ROAD USERS	LIKELIHOOD	CONSEQUENCE	TREATMENT TYPE	TREATMENT OPTION/S	LIKELIHOOD	CONSEQUENCE
		RISK RATING				RISK RATING	
CLEARANCE TO TRAFFIC	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
HIGH SPEED TRAFFIC THROUGH WORKSITE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR DRIVER COMPLIANCE TO SPEED SIGNAGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR ADVANCE SIGHT DISTANCE(<200M)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
POOR OBSERVANCE OF DIRECTIONS / INSTRUCTIONS TO MOTORISTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
NARROW PAVEMENT WITH NO ESCAPE PATH (<2.9m WIDTH)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
PRESENCE OF WORKERS AT WORKSITE	General public accessing the site can pose a risk to both the workers and the public	Unlikely	Major	Past	Site fencing, warning signage, modifications to road alignment/ crossover	Rare	Major
		Medium				**Low**	
EXCAVATIONS ADJACENT TO WORKSITE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
PRESENCE OF UNPROTECTED HAZARDS WITHIN THE CLEAR ZONE.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
ROUGH OR UNSEALED ROAD SURFACE	N/A	N/A	N/A			N/A	N/A
		N/A				N/A	
HIGH TRAFFIC VOLUME THROUGH WORKSITE >10,000 VPD	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
HIGH VOLUME OF HEAVY VEHICLES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A				N/A	
WORKS VEHICLES ENTERING OR LEAVING WORKSITE.	Increased truck traffic on Clarke Road to access the site increases risk of collision with local traffic	Possible	Major	Past	Site fencing, warning signage, modifications to road alignment/ crossover	Unlikely	Major
		High				Medium	
STEP 6 - PREPARE TRAFFIC MANAGEMENT PLAN							
Prepare the TMP in accordance with Clause 15 of the RMA Code of Practice Worksite Safety – Traffic Management (2023).							
STEP 7 - CARRY OUT THE WORK							
Provide feedback following implementation for any improvement opportunities. The implemented Traffic Guidance Scheme shall be reviewed on site.							

Appendix D

Stakeholder Consultation (to be included following consultation)

Appendix E

Implementation & Install/Remove Checklists

IMPLEMENTATION CHECKLIST

Job Details

Date		**Time Arrived On-Site**		**Time Left Site**	
TGS plan number(s) implemented			**TC Team Leader**		
Location of Works					
Works Being Undertaken					
Works Contractor Name			**Works Contractor Supervisor**		
Worksite First Aider					
Estimated Traffic Volume (if known)			**Minimum Clearance between Workers and Traffic**		

Planning

Has a traffic management plan been selected or provided	**YES**	**NO**	**N/A**
Is the traffic management plan available for inspection	**YES**	**NO**	**N/A**
Is the plan relevant for work	**YES**	**NO**	**N/A**
Are written authorisations for temporary roadwork speed limits provided	**YES**	**NO**	**N/A**
Are documented changes to the traffic management plan available	**YES**	**NO**	**N/A**
Have temporary roadwork speed limits been determined correctly	**YES**	**NO**	**N/A**

Advance Warning and Speed Reduction Signs (Specify details for each direction)

Direction of Travel (e.g. Eastbound, Westbound)		Direction of Travel (e.g. Eastbound, Westbound)	
Time Advanced Warning Implemented (24hr)		Time Advanced Warning Implemented (24hr)	
Time Advance Warning Removed (24hr)		Time Advance Warning Removed (24hr)	
Normal traffic speed through area	km/h	Normal traffic speed through area	km/h
Reduced worksite traffic speed	km/h	Reduced worksite traffic speed	km/h
Time Reduced Speed Implemented (24hr)		Time Reduced Speed Implemented (24hr)	
Time Reduced Speed Removed (24hr)		Time Reduced Speed Removed (24hr)	

Lane Closure / Shuttle-flow / Access and Egress Details

Direction of Travel (e.g. Eastbound, Westbound)		Type of control (e.g. lane closure, shuttle-flow or entry/exit etc)	
Time Implemented		Time Removed	

Signage / Markings / Devices

(Please circle correct answer for the following questions. If answered No and explanation in notes is required)

Are all signs, markings and devices installed according to the plan?	**YES**	**NO**	**N/A**
Have any contradictory, distracting or superfluous signs or markings been covered up or removed?	**YES**	**NO**	**N/A**
Are signs appropriate for current conditions? (e.g. symbolic worker signs not displayed / not visible when no workers on site; road condition signs after worksite vacated.)	**YES**	**NO**	**N/A**
Is signage suitably placed, especially for vehicles approaching at high speed? (e.g. check sight distance, advance warning sign distance, height of signs above ground, vehicle queue length not beyond signage, potential 'end of queue' issues.)	**YES**	**NO**	**N/A**
Are multi-message signs being used correctly?	**YES**	**NO**	**N/A**

Are the signs free from damage and defect? (e.g. easy to read; check shadow & glare issues.)	YES	NO	N/A
Are sign mountings secure, stable and not a hazard to road users?	YES	NO	N/A
Are signs in pairs where needed? (Note: recommended on high speed high volumes roads and multi-lane roads.)	YES	NO	N/A
Are flashing arrows signs available and in use where required?	YES	NO	N/A
Are sign sizes correct?	YES	NO	N/A

Worksite and Work Zone Separation			
High visibility clothing appropriate for conditions and used correctly? (e.g. day/night; meet AS4602-1999 and AS1906; clean; fastened; personnel visible.)	YES	NO	N/A
Are clearances between workers and adjacent traffic being maintained?	YES	NO	N/A
Have safety barriers (where used) been installed correctly? (e.g. units connected; recommended length, proper end treatment installed; water filled where required, correct rating for speed zone, no go zones observed.)	YES	NO	N/A
Has containment fence been installed where required? (e.g. workers/pedestrians/cyclists separation.)	YES	NO	N/A
Other Road Users			
Has possible traffic congestion been considered and steps taken to avoid it?	YES	NO	N/A
Have the effects of the works on public transport been considered?	YES	NO	N/A
Have needs of other road users been provided for? (e.g. pedestrians, cyclists, wheelchairs)	YES	NO	N/A
Has proper access to side roads and properties been provided?	YES	NO	N/A
Incidents / Accidents			
Were there any traffic related accidents / incidents during implementation? (if Yes, detail in Notes below)	YES	NO	N/A

Notes / Feedback / Improvements

Monitoring Times of Set Up (Note times signs and devices were checked)

Time Checked	Situation Witnessed	Action Taken to Rectify:

Work Area Sketch (Signage, Layout and Worksite)

INSTALLATION / REMOVAL CHECKLIST

Each time a TMP is installed and removed the date and times shall be recorded. This record is to be returned to the Traffic Team on completion of the works.

Job No.:	**TMP Number:**
Location of works:	
Works description:	

Date: (dd/mm/yy)		
Start Chainage:		
End Chainage:		
	Implemented Time: (24hr Format – hh:mm)	**Removal Time:** (24hr Format – hh:mm)
Advance Warnings		
Speed Reductions		
Single Lane Closure		
Double Lane Closure		
Triple Lane Closure		
Quad Lane Closure		
Quint Lane Closure		
Ramp/Fwy Closure		

Comments: