



Construction Traffic Management Plan (CTMP)

The Grounds
at
177 The Boulevard, Ivanhoe East

Prepared For
JWLand Construction Pty Ltd

December, 2020
G25778R-01C CTMP

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

Construction Traffic Management Plan (CTMP)

The Grounds

at

177 The Boulevard, Ivanhoe East

##This CTMP has been updated for the new builder JWLand Construction Pty Ltd. No other changes have been made to this CTMP##

Document Control

Issue No.	Type	Date	Prepared By	Approved By
A	Initial Issue	23/10/2018	J. Crapper	A. Coyle
B	Updated Issue	26/03/2019	J. Crapper	A. Coyle
C	JWLand Issue	03/12/2020	J. Crapper	A. Coyle

Our Reference: G25778R-01C CTMP

COPYRIGHT: The ideas and material contained in this document are the property of Traffix Group (Traffix Group Pty Ltd – ABN 32 100 481 570). Use or copying of this document in whole or in part without the written permission of Traffix Group constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Traffix Group's client, and is subject to and issued in connection with the provisions of the agreement between Traffix Group and its client. Traffix Group accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

G25778R-01C CTMP

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

Table of Contents

1	Introduction.....	1
2	Reference Documents	1
3	Site Information	2
3.1	Site Details	2
3.2	Road Network & Land Use	3
3.3	Responsible Road Authorities	5
3.4	Public Transport	5
4	Project Details.....	6
4.1	Construction Activities	6
4.2	Project Timing and Staging	6
4.3	Work Hours	6
4.4	Worker Parking	7
5	Stage 1: Basement Retention.....	8
5.1	Site Opportunities and Constraints.....	8
5.2	Site Layout.....	8
5.3	Truck Movements	9
5.4	Truck Access Routes.....	9
5.5	Swept Paths.....	10
5.6	Traffic Management Plans	10
5.7	Pedestrians / Cyclists	10
5.8	Parking	11
5.9	Public Transport	11
5.10	Traffic Impacts.....	11
6	Stage 2: Construction	12
6.1	Site Opportunities and Constraints.....	12
6.2	Site Layout.....	12
6.3	Truck Movements	12
6.4	Truck Access Routes.....	12
6.5	Swept Paths.....	12
6.6	Traffic Management Plans	12
6.7	Pedestrians / Cyclists	12
6.8	Parking	13
6.9	Public Transport	13
6.10	Traffic Impacts.....	13
7	Stakeholders	14

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

7.1	Council.....	14
7.2	VicRoads.....	14
8	Further Information	15

List of Figures

Figure 1:	Locality Map	2
Figure 2:	Aerial Photograph	3
Figure 3:	Wamba Road – View South.....	4
Figure 4:	The Boulevard – View West	4
Figure 5:	Cedric Street – View East	4
Figure 6:	Wilfred Road – View East	4
Figure 7:	PTV Map (for Banyule)	5
Figure 8:	Worker Parking Areas.....	7
Figure 9:	Truck Access Routes	10

List of Tables

Table 1:	Construction Staging	6
Table 2:	Stage 1 Truck Movements	9
Table 3:	Stage 1 Parking Changes.....	11
Table 4:	Stage 2 Truck Movements	12
Table 5:	Contact Details.....	15

List of Appendices

Appendix A	Stage 1: Basement Retention
Appendix B	Stage 2: Construction

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

1 Introduction

Traffix Group has been engaged by JWLand Construction Pty Ltd to prepare a construction traffic management plan (CTMP) report associated with works for the proposed residential development at 177 The Boulevard, Ivanhoe East.

This report provides a detailed traffic engineering assessment of the parking and traffic issues associated with construction activities for the proposed development.

2 Reference Documents

This Construction Traffic Management Plan (CTMP) has been prepared in accordance with:

- Road Management Act 2004 Code of Practice Worksite Safety - Traffic Management (2010),
- AS 1742.3 Manual of Uniform Traffic Control Devices Part 3: Traffic Control devices for Works on Roads (2009), and
- VicRoads Supplement to AS 1742.3 Manual of Uniform Traffic Control Devices Part 3: Traffic Control devices for Works on Roads (2015).
- www.banyule.vic.gov.au.

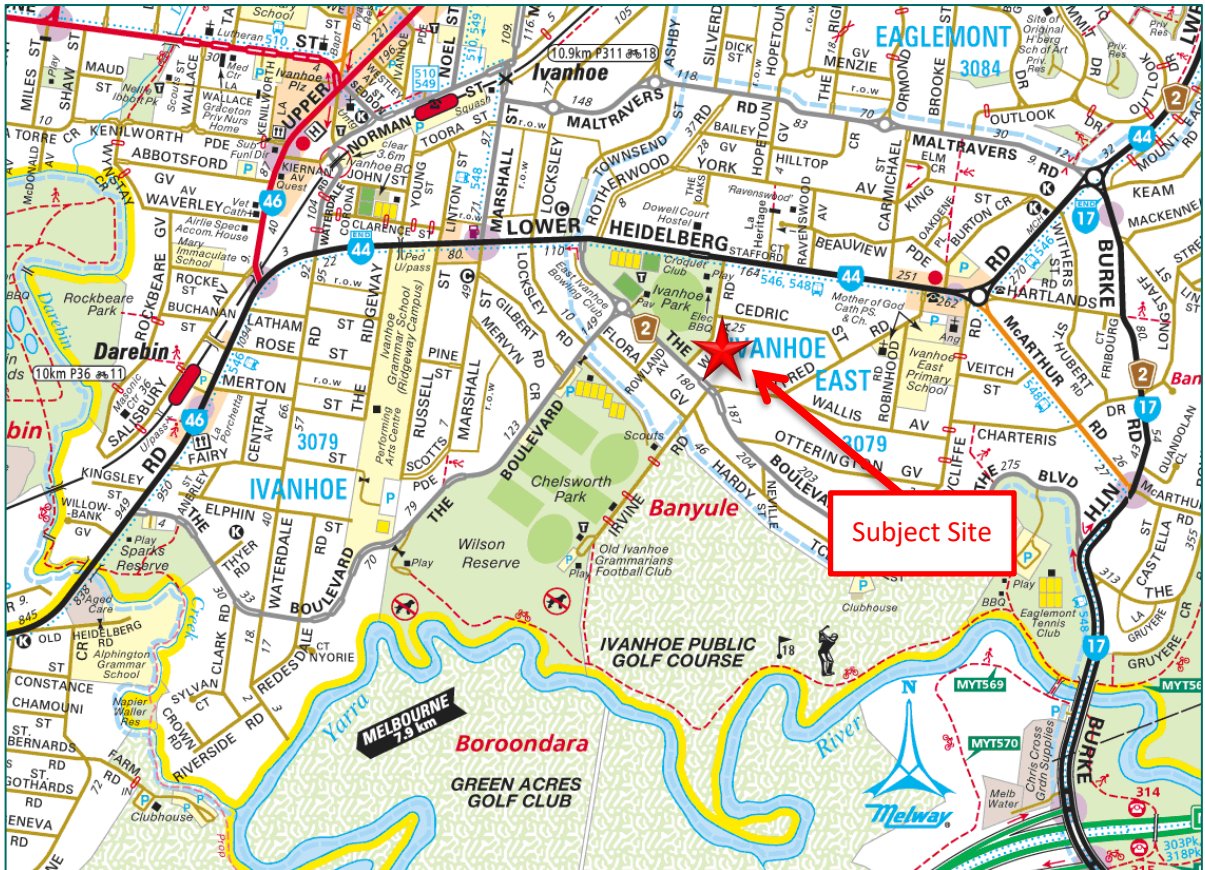
Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

3 Site Information

3.1 Site Details

The subject site is bounded by Wamba Road, Cedric Street, The Boulevard and Wilfred Road. A locality plan of the site is presented in Figure 1 and an aerial photograph in Figure 2. The site has multiple existing residential crossovers to the above local streets.



Reproduced with permission from Melway Publishing Pty Ltd.

Figure 1: Locality Map

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds



Source: NearMap

Figure 2: Aerial Photograph

3.2 Road Network & Land Use

Land use in the surrounding area is generally residential with Ivanhoe Park located on the west side of Wamba Road and Chelsworth Park to the south west.

The Boulevard is a local connector road operating along the south-western boundary of the site. It provides a connection between Heidelberg Road and Banksia Street.

A connection to Lower Heidelberg Road is also provided via a short section of road approximately 200 metres west of the site.

The Boulevard typically has a carriageway width of approximately 10.5 metres and accommodates a single lane of traffic and kerbside parking in both directions. A traffic management treatment is provided at the intersection of The Boulevard, Wilfred Road and Irvine Road by way of kerb outstands and narrow central islands.

Within the site's proximity, parking is unrestricted.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

Wamba Road is a local access road running between Lower Heidelberg Road at the north and The Boulevard at the south along the site’s western boundary. In the vicinity of the subject site, Wamba Road has a carriageway width of approximately 5.5 metres which provides for two-way traffic. Kerbside parking is permitted along the majority of the east side and some indented parallel parking is provided on the west side at its northern and southern extents.

Parking is unrestricted in nature.

Wilfred Road is a local access street operating in a southwest-northeast direction between The Boulevard and Lower Heidelberg Road. In the vicinity of the site, Wilfred Road has a carriageway width of 9.2 metres and provides for two-way traffic and unrestricted kerbside parking on both sides.

In the vicinity of No. 1 and No. 3 Wilfred Road, the street effectively operates as two separated one-way carriageways due to a wide separator treatment located at the intersection of Wilfred Road and The Boulevard.

Cedric Street is a local access street providing an east-west connection between Wilfred Road and Wamba Road. In the vicinity of the subject site, Cedric Street has a carriage way width of approximately 7.7 metres accommodating two-way traffic and kerbside parking on both sides.

Photographs of the surrounding roads are shown in Figure 3 to Figure 6.

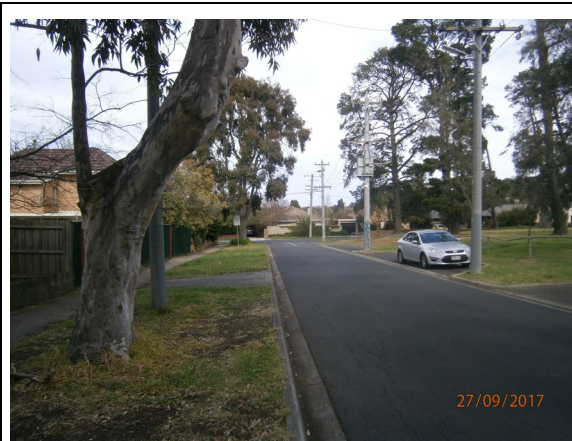


Figure 3: Wamba Road – View South



Figure 4: The Boulevard – View West



Figure 5: Cedric Street – View East



Figure 6: Wilfred Road – View East

Construction Traffic Management Plan (CTMP)

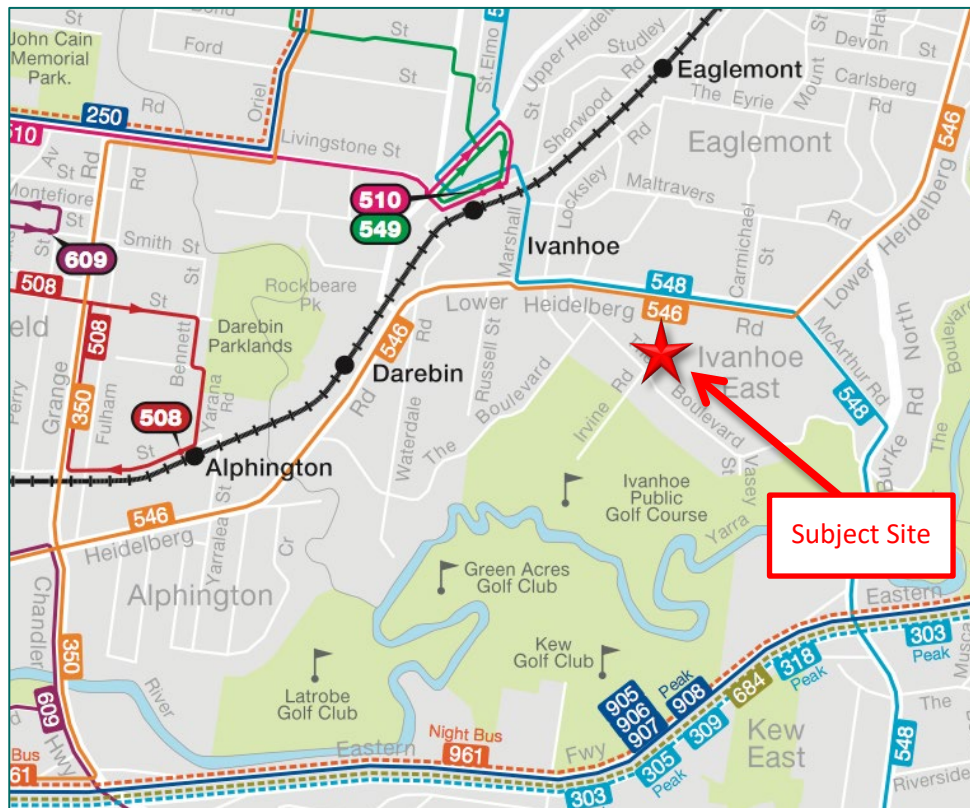
177 The Boulevard, Ivanhoe East: The Grounds

3.3 Responsible Road Authorities

VicRoads is the responsible road authority for Lower Heidelberg Road and Burke Road North and Banyule City Council is the responsible road authority for Wamba Road, Cedric Street, The Boulevard and Wilfred Road and all other local streets in the vicinity of the subject site.

3.4 Public Transport

The subject site is well served by public transport with the Ivanhoe and Darebin railway stations (Hurstbridge line) located 1.2km to the north west and 1.5km to the west of the site respectively. In addition, bus routes 548 and 546 travel along Lower Heidelberg Road approximately 150m to the north of the site. Route 548 generally operates between 6am and 7pm on weekdays at a 20 minute frequency. Route 546 generally operates between 7am and 7pm on weekdays at a 30 minute frequency.



Source: PTV (<http://ptv.vic.gov.au/>)

Figure 7: PTV Map (for Banyule)

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

4 Project Details

4.1 Construction Activities

This CTMP is for works that are proposed to be undertaken at the subject site for the construction of a residential development comprised of four distinct components:

- Building A is located to the north-west of the site and is an apartment building with primary pedestrian access via Wamba Road.
- Building B is an apartment building with primary pedestrian access via The Boulevard.
- Building C is an apartment building with primary pedestrian access via Wilfred Road.
- A townhouse development, comprised of 11 dwellings is proposed at the Cedric Street site.

4.2 Project Timing and Staging

The staging and estimated duration of works for Construction stage of the project is outlined in the CMP and summarised in Table 1.

Table 1: Construction Staging

Construction Stage	Works	Start	Finish
Stage 1	Basement Retention	Apr 2019	Jun 2019
Stage 2	Construction	Jul 2019	Dec 2020

Traffic management will be required throughout the project for the deliveries, loading, unloading and various construction activities at the site.

4.3 Work Hours

JWLand Construction will ensure working hours for general construction works, except where for practical reasons the activity is unavoidable (and thus communicated and approved by Council), are between:

- **Monday to Friday:** 7:00am to 6:00pm,
- **Saturday:** 9:00am to 3:00pm,
- **Good Friday, ANZAC day and Christmas day:** No construction activities, and
- **Sunday and all other public holidays:** Out of hours permits to be applied for as required.

It is noted that truck movements (without an out of hours permit) will be restricted to the following days and times:

- **Monday to Friday:** 7:00am to 3:00pm and 4:00pm to 6:00pm, and
- **Saturday:** 9:00am to 3:00pm.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

4.4 Worker Parking

JWLand Construction has advised that up to 30 workers will be working on-site at any one time for Stage 1 and up to 150 works for Stage 2.

At this location, public transport is a viable travel option and construction workers will be actively encouraged to use the available train and bus options. Further, JWLand Construction will discourage the use of private vehicles and will facilitate storage facilities on site to enable construction workers an easy choice to leave tool boxes on-site in lockable storage.

If required, workers will be directed to park in the Ivanhoe Park car park, subject to agreement with Council and the relevant sporting clubs (Ivanhoe Football Club, Ivanhoe Cricket Club, East Ivanhoe Bowling Club, Ivanhoe Park Croquet Club and Ivanhoe Tennis Club). In addition, parking is also possible along the frontages to Ivanhoe Park. Potential parking areas are shown in green below.

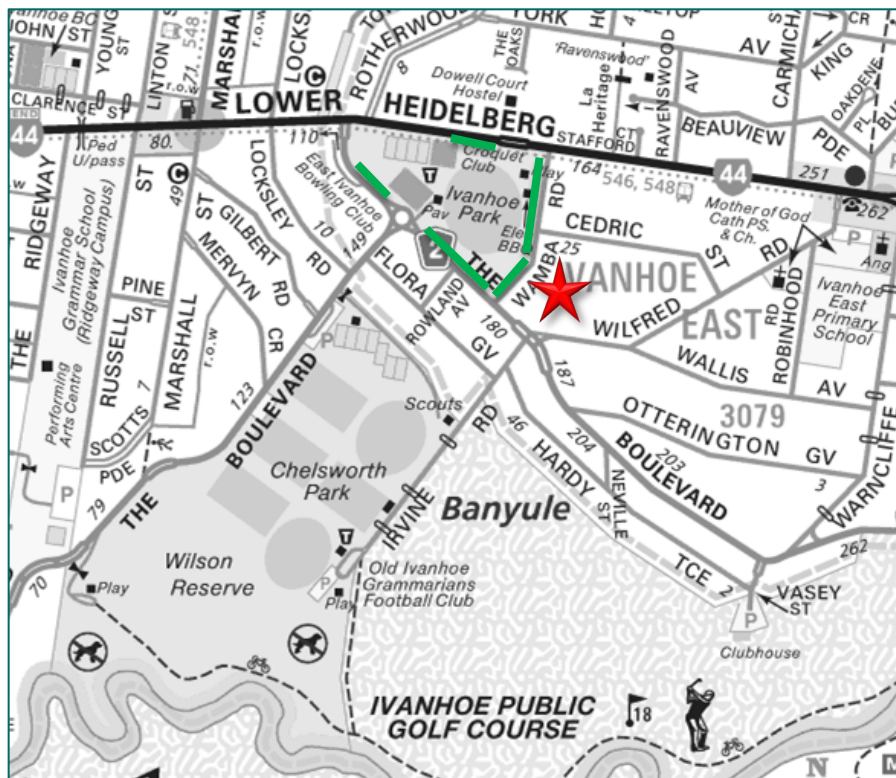


Figure 8: Worker Parking Areas

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

5 Stage 1: Basement Retention

The proposed site layout for this stage is attached as Appendix A.

5.1 Site Opportunities and Constraints

Site opportunities:

- Four local street frontages – local traffic streets, unrestricted parking.

Site constraints:

- Cedric Street – overhead power lines.
- The Boulevard – collector road, overhead power lines.
- Wilfred Road – overhead power lines.
- Access between arterial roads and site for trucks.

Council has advised that the following roads should not be used for truck access to and from the site:

- Cedric Street (east of Wamba Road).
- Wilfred Road (east of site).
- Wamba Road (north of site).

5.2 Site Layout

Key traffic management features of this stage are:

- 2.1m high hoarding around the site.
- Main site access gates on The Boulevard and Wilfred Street.
- Secondary site access gate on Wamba Road to only be used when required.
- Cedric Street gate to only be used by light vehicles.
- On site material storage zones.
- Construction worker amenities and Project Office on the site.
- 19m semi trailers to enter from Burke Road North / The Boulevard, and exit to Upper Heidelberg Road / The Boulevard.
- All other smaller trucks and vehicles to enter and exit via Upper Heidelberg Road / The Boulevard.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

5.3 Truck Movements

Table 2: Stage 1 Truck Movements

Item	Semi-Trailers per day (up to 19m)	Rigid Truck per day (up to 12.5m)	Agitator Truck (8.8m)		Other Vehicles per day (up to 8.8m)
			Pours per week	Trucks per day	
Basement Retention	1-3	2-4	2	10	5-10

JWLand Construction will coordinate the arrival of deliveries to the site to minimise any queuing on the surrounding roads. In addition, there are sufficient area within the site to store waiting trucks.

5.4 Truck Access Routes

To minimise impacts on the surrounding community, two truck access routes will be used:

- 19m semi trailers to enter from Burke Road North / The Boulevard, and exit to Upper Heidelberg Road / The Boulevard.
- All other smaller trucks and vehicles to enter and exit via Upper Heidelberg Road / The Boulevard.

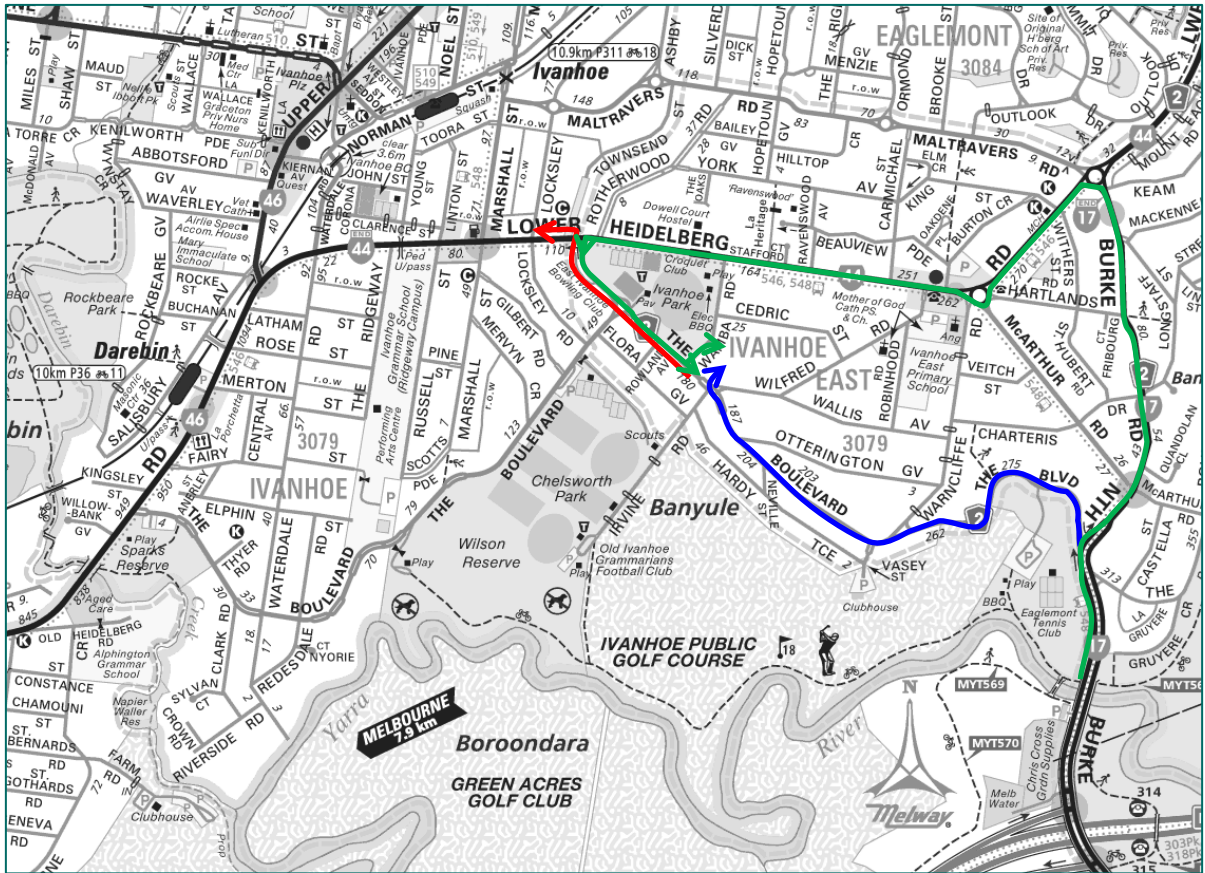
Traffic controllers will assist the movement of trucks to and from the site access points as required.

A map outlining the proposed truck access routes is presented in Figure 9. The access routes are shown with:

- **Blue line** – 19m semi trailer access route,
- **Green line** – all other trucks and light vehicles access route,
- **Red line** – all trucks and lights vehicles egress route.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds



Reproduced with Permission of Melways Publishing Pty Ltd

Figure 9: Truck Access Routes

Delivery vehicles will wait outside of the works area until they are contacted to access the site. This will ensure that the exit and entry movements are not occurring at the same time and as a result the delays will be kept to a minimum.

5.5 Swept Paths

Swept paths have been prepared for the critical truck movements in Appendix A. Swept paths with a red cross indicate that the swept path is not possible without mounting traffic islands or kerbs.

5.6 Traffic Management Plans

Traffic management plans for this stage are included in Appendix A.

5.7 Pedestrians / Cyclists

As all crane loading and concrete pumping is to occur within the site boundaries, delays to pedestrians and cyclists will only occur during access and egress at the crane loading and concrete pumping zones on The Boulevard, Wilfred Road and Wamba Road.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

5.8 Parking

As shown on the site layout plan, there are a number of proposed changes to parking as follows.

Table 3: Stage 1 Parking Changes

Road / Location	Side	Existing Restriction	Proposed Restriction	No. of Spaces	Comment
Wilfred Road	North Side	Unrestricted	Works Zone	9	To facilitate truck access to Gates 6 and 7. Site frontage.
Wilfred Road	South Side	Unrestricted	No Stopping	1	To facilitate truck egress from Gates 6 and 7. Residential frontage.
The Boulevard (Wamba Road to Wilfred Road)	North Side	Unrestricted	Works Zone	5	To facilitate truck access and egress to and from Gates 3 and 4. Site frontage.
The Boulevard (Wamba Road to Wilfred Road)	South Side	Unrestricted	No Stopping	2	To facilitate truck access and egress to and from Gates 3 and 4. Residential frontage.
Wamba Road (Cedric Street to The Boulevard)	East Side	Unrestricted	Works Zone	8	To facilitate truck access and egress to and from Gate 2. Site frontage.

5.9 Public Transport

No public transport services will be impacted by the proposed construction works.

5.10 Traffic Impacts

The following roads will be impacted by the works:

- The Boulevard – minor impact when trucks are entering and exiting the loading zones on The Boulevard (primary site access) and Wilfred Road (primary site access),
- Wilfred Road – minor impact when trucks are entering and exiting the loading zone on Wilfred Road (primary site access).
- Wamba Road – minor impact when trucks are entering and exiting the loading zone on Wamba Road (secondary site access),
- Cedric Street – very low impact as site access only used by light vehicles.

6 Stage 2: Construction

The proposed site layout for this stage is attached as Appendix B.

6.1 Site Opportunities and Constraints

As per Stage 1.

6.2 Site Layout

Key traffic management features of this stage (in addition to Stage 1) are:

- Concrete pumping zones within site.
- Crane lifting zones within site.

6.3 Truck Movements

Table 4: Stage 2 Truck Movements

Item	Semi-Trailers per day (up to 19m)	Rigid Truck per day (up to 12.5m)	Agitator Truck (8.8m)		Other Vehicles per day (up to 8.8m)
			Pours per week	Trucks per day	
Construction	5-10	5-8	2	15-20	10

JWLand Construction will coordinate the arrival of deliveries to the site to minimise any queuing on the surrounding roads. In addition, there are sufficient area within the site to store waiting trucks.

6.4 Truck Access Routes

As per Stage 1.

6.5 Swept Paths

As per Stage 1.

6.6 Traffic Management Plans

As per Stage 1.

6.7 Pedestrians / Cyclists

As per Stage 1.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

6.8 Parking

As per Stage 1.

6.9 Public Transport

As per Stage 1.

6.10 Traffic Impacts

As per Stage 1.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

7 Stakeholders

7.1 Council

A meeting was held on 13 March 2019 at Council's officers attended by Council (Mark Bernhardt, Janice Ng and Ana Caicedo), Hamilton Marino (Sebastian Fekete) and Traffix Group (Anthony Coyle). The following items were discussed:

- Council indicated do not use Cedric and Wilfred as truck routes.
- Council identified that there may be some pavement condition issues on The Boulevard. Although not a preferred route for trucks, it is preferable to using Cedric and Wilfred. Council to provide some further information regarding pavement condition.
- Prepare two TMPs – 19m semi (panel) trucks entering via The Boulevard / Burke Road North, exit to Upper Heidelberg Road / The Boulevard. All other smaller trucks and vehicles to only use Upper Heidelberg Road and The Boulevard.*
- Prepare swept paths for the desired truck movements.
- Parking in Ivanhoe Park may require lease with Council (similar to LXRA project).
- Provide details of the parking restrictions. Council officers will enforce the restrictions e.g. No Stopping, Construction Zone, etc.
- Dust control measures required.
- Truck movement times weekdays 7am-3pm and 4pm-6pm to avoid school pick up times.
- Work hours on Saturday are 9am-3pm.

* It is noted that one overall TMP has been prepared so that the location of signs do not need to change every day. However, the location of the traffic controllers will change depending on the gates being used and the truck access route.

7.2 VicRoads

As the posted speed limits will be reduced to 40km/h, a Memorandum of Authorisation will be required from VicRoads.

Construction Traffic Management Plan (CTMP)

177 The Boulevard, Ivanhoe East: The Grounds

8 Further Information

Further information regarding this CTMP can be obtained by contacting the personnel in Table 5.

Table 5: Contact Details

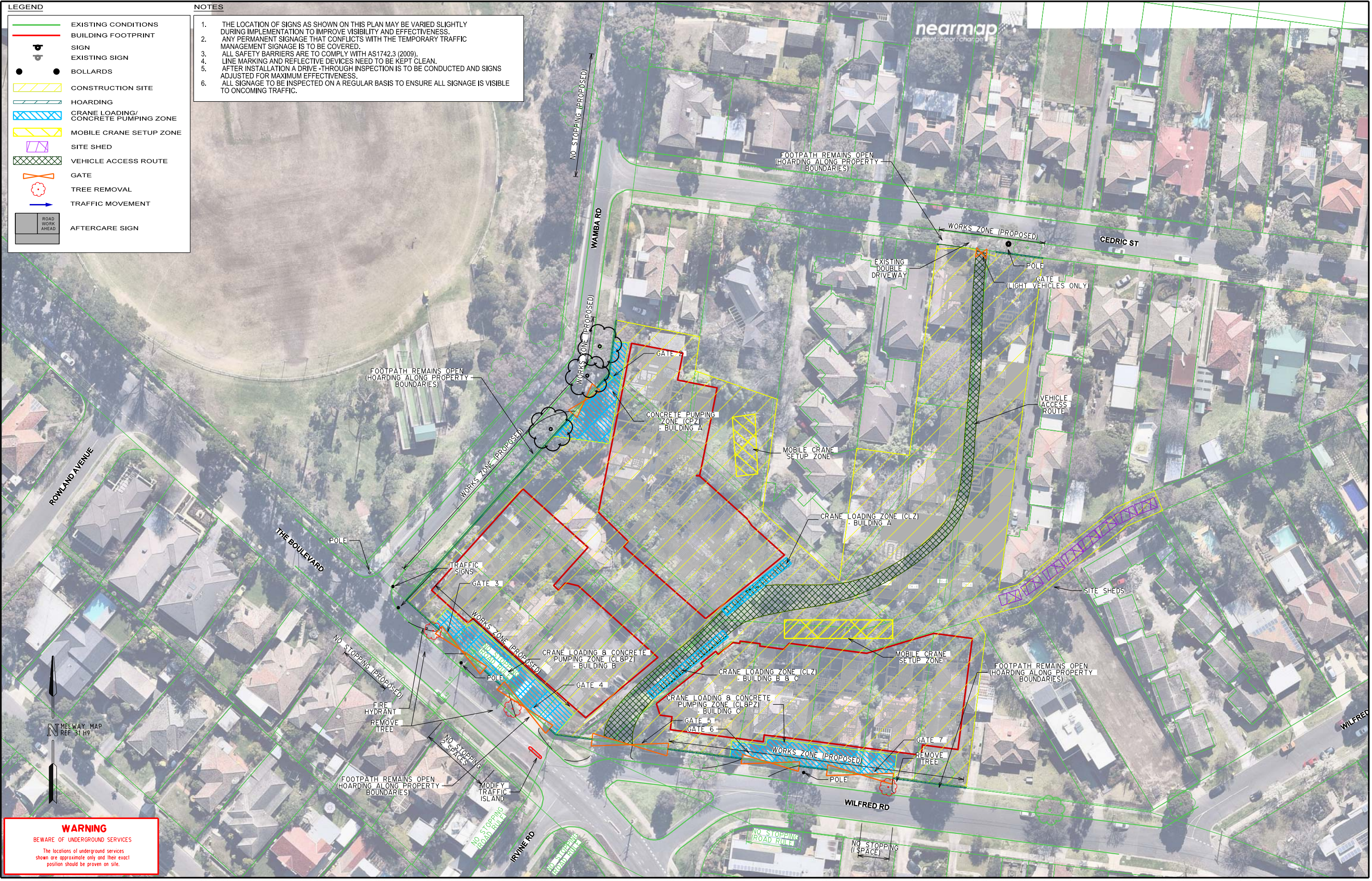
Name	Company	Tel:	Email:
Jay Courtney	JWLand Construction	0425 475 426	Jay.Courtney@jwland.com.au
Anthony Coyle	Traffix Group	9822 2888 0400 188 313	anthony@traffixgroup.com.au

Appendix A: Stage 1: Basement Retention

Appendix B: Stage 2: Construction

LEGEND	
	EXISTING CONDITIONS
	BUILDING FOOTPRINT
	SIGN
	EXISTING SIGN
	BOLLARDS
	CONSTRUCTION SITE
	HOARDING
	CRANE LOADING/ CONCRETE PUMPING ZONE
	MOBILE CRANE SETUP ZONE
	SITE SHED
	VEHICLE ACCESS ROUTE
	GATE
	TREE REMOVAL
	TRAFFIC MOVEMENT
	AFTERCARE SIGN

- NOTES**
1. THE LOCATION OF SIGNS AS SHOWN ON THIS PLAN MAY BE VARIED SLIGHTLY DURING IMPLEMENTATION TO IMPROVE VISIBILITY AND EFFECTIVENESS.
 2. ANY PERMANENT SIGNAGE THAT CONFLICTS WITH THE TEMPORARY TRAFFIC MANAGEMENT SIGNAGE IS TO BE COVERED.
 3. ALL SAFETY BARRIERS ARE TO COMPLY WITH AS1742.3 (2009).
 4. LINE MARKING AND REFLECTIVE DEVICES NEED TO BE KEPT CLEAN.
 5. AFTER INSTALLATION A DRIVE-THROUGH INSPECTION IS TO BE CONDUCTED AND SIGNS ADJUSTED FOR MAXIMUM EFFECTIVENESS.
 6. ALL SIGNAGE TO BE INSPECTED ON A REGULAR BASIS TO ENSURE ALL SIGNAGE IS VISIBLE TO ONCOMING TRAFFIC.



ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES

- 1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
- 2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
- 3 LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVARD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED	S LAW
CHECKED/ APPROVED	A COYLE
FILE NAME	GRP25778-01.dgn

Traffic Engineers and Transport Planners
 Suite 8/431 Burke Road TEL: (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
 CITY OF BANYULE
SITE LAYOUT PLAN

SCALE 0 5 10 15 20

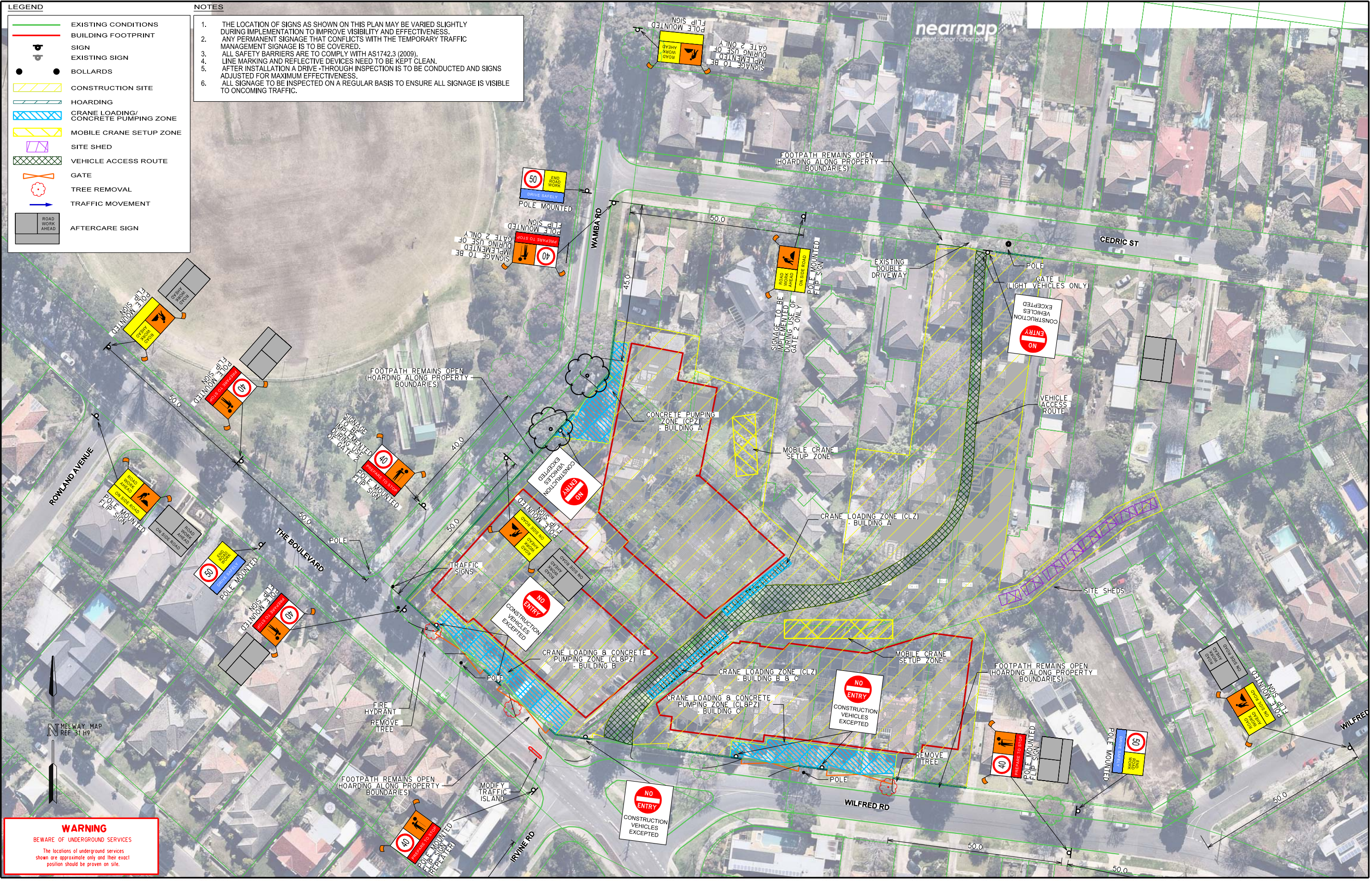
SHEET No. 1 of 3 DWG No. G25778-01-10

LEGEND

- EXISTING CONDITIONS
- BUILDING FOOTPRINT
- SIGN
- EXISTING SIGN
- BOLLARDS
- CONSTRUCTION SITE
- HOARDING
- CRANE LOADING/ CONCRETE PUMPING ZONE
- MOBILE CRANE SETUP ZONE
- SITE SHED
- VEHICLE ACCESS ROUTE
- GATE
- TREE REMOVAL
- TRAFFIC MOVEMENT
- AFTERCARE SIGN

NOTES

1. THE LOCATION OF SIGNS AS SHOWN ON THIS PLAN MAY BE VARIED SLIGHTLY DURING IMPLEMENTATION TO IMPROVE VISIBILITY AND EFFECTIVENESS.
2. ANY PERMANENT SIGNAGE THAT CONFLICTS WITH THE TEMPORARY TRAFFIC MANAGEMENT SIGNAGE IS TO BE COVERED.
3. ALL SAFETY BARRIERS ARE TO COMPLY WITH AS1742.3 (2009).
4. LINE MARKING AND REFLECTIVE DEVICES NEED TO BE KEPT CLEAN.
5. AFTER INSTALLATION A DRIVE-THROUGH INSPECTION IS TO BE CONDUCTED AND SIGNS ADJUSTED FOR MAXIMUM EFFECTIVENESS.
6. ALL SIGNAGE TO BE INSPECTED ON A REGULAR BASIS TO ENSURE ALL SIGNAGE IS VISIBLE TO ONCOMING TRAFFIC.



ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES

1. BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
2. ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
3. LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVAD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED
SLAW

CHECKED/APPROVED
A COYLE

FILE NAME
GRP25778-01.dgn

Traffic Engineers and Transport Planners

Suite 8431 Burke Road TEL : (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
CITY OF BANYULE

TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20

SHEET No. 2 of 3

DWG No. G25778-01-11



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

- NOTES**
1. THE LOCATION OF SIGNS AS SHOWN ON THIS PLAN MAY BE VARIED SLIGHTLY DURING IMPLEMENTATION TO IMPROVE VISIBILITY AND EFFECTIVENESS.
 2. ANY PERMANENT SIGNAGE THAT CONFLICTS WITH THE TEMPORARY TRAFFIC MANAGEMENT SIGNAGE IS TO BE COVERED.
 3. ALL SAFETY BARRIERS ARE TO COMPLY WITH AS1742.3 (2009).
 4. LINE MARKING AND REFLECTIVE DEVICES NEED TO BE KEPT CLEAN.
 5. AFTER INSTALLATION A DRIVE-THROUGH INSPECTION IS TO BE CONDUCTED AND SIGNS ADJUSTED FOR MAXIMUM EFFECTIVENESS.
 6. ALL SIGNAGE IS TO BE INSPECTED ON A REGULAR BASIS TO ENSURE ALL SIGNAGE IS VISIBLE TO ONCOMING TRAFFIC.

LEGEND

	EXISTING CONDITIONS
	BUILDING FOOTPRINT
	SIGN
	EXISTING SIGN
	BOLLARDS
	CONSTRUCTION SITE
	HOARDING
	CRANE LOADING/ CONCRETE PUMPING ZONE
	MOBILE CRANE SETUP ZONE
	SITE SHED
	VEHICLE ACCESS ROUTE
	GATE
	TREE REMOVAL
	TRAFFIC MOVEMENT
	AFTERCARE SIGN

ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES

1. BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
2. ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
3. LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVAD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED	S LAW
CHECKED/ APPROVED	A COYLE
FILE NAME	GRP25778-01.dgn

TraffixGroup
Traffic Engineers and Transport Planners
Suite 8/431 Burke Road TEL : (03) 9822-2888
GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
CITY OF BANYULE
TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20
SHEET No. 3 of 3
DWG No. G25778-01-12

WARD



LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
8.80

8.8m MRV
meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

NO STOPPING
2 SPACES



8.8m MRV
As shown - Traffic Final

8.8m MRV
As shown - Traffic Final

WILFRED RD

2.1
NO STOPPING SPACE

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
8.80

8.8m MRV
meters

Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 34.0

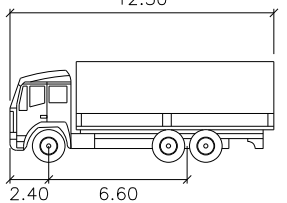
WARD

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

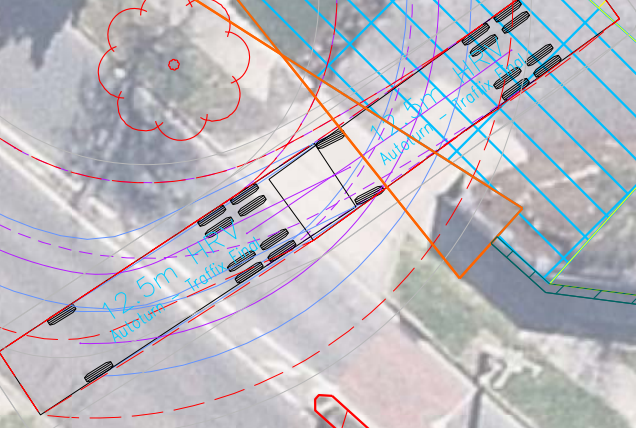
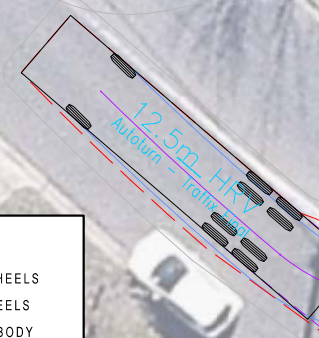
VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
12.50



2.40 6.60

12.5m HRV

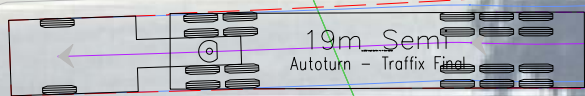
Width : 2.50 meters
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 35.2



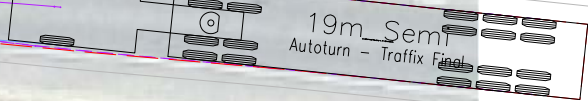
NO STOPPING
2 SPACES



DRIVING ON
OPPOSING LANE

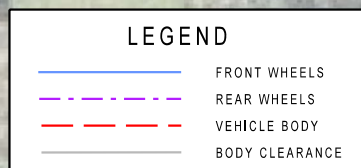


LOWER HEIDELBERG RD

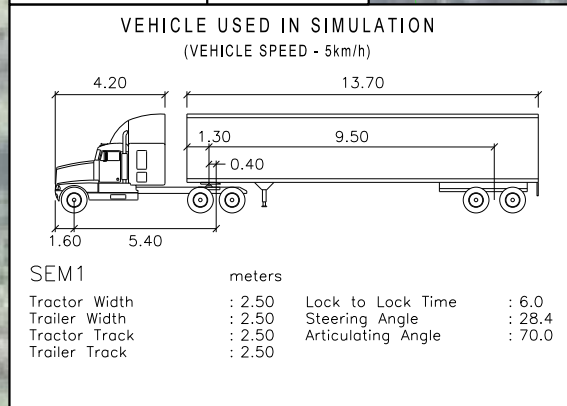


DRIVING SLIGHTLY
OVER KERB

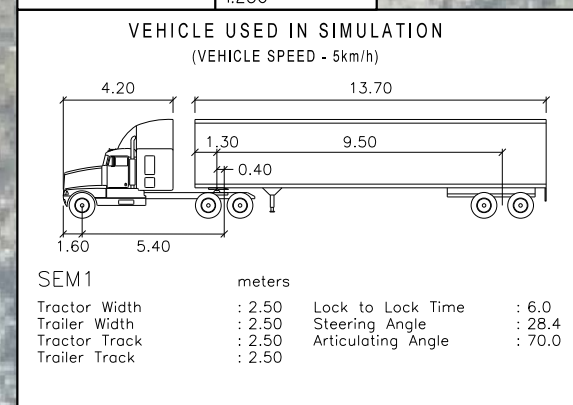
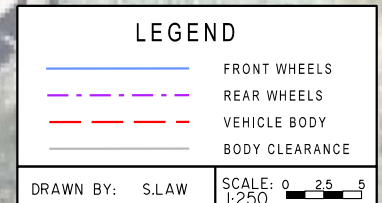
19m SEMILEFT TURN



DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250



19m SEMILEFT TURN



9m SEMIFORWARD MOVEMENT

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

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

SEM1	Tractor Width	: 2.50	Lock to Lock Time	: 6.0
	Trailer Width	: 2.50	Steering Angle	: 28.4
	Tractor Track	: 2.50	Articulating Angle	: 70.0
	Trailer Track	: 2.50		

9m SEMIFORWARD MOVEMENT

LEGEND

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

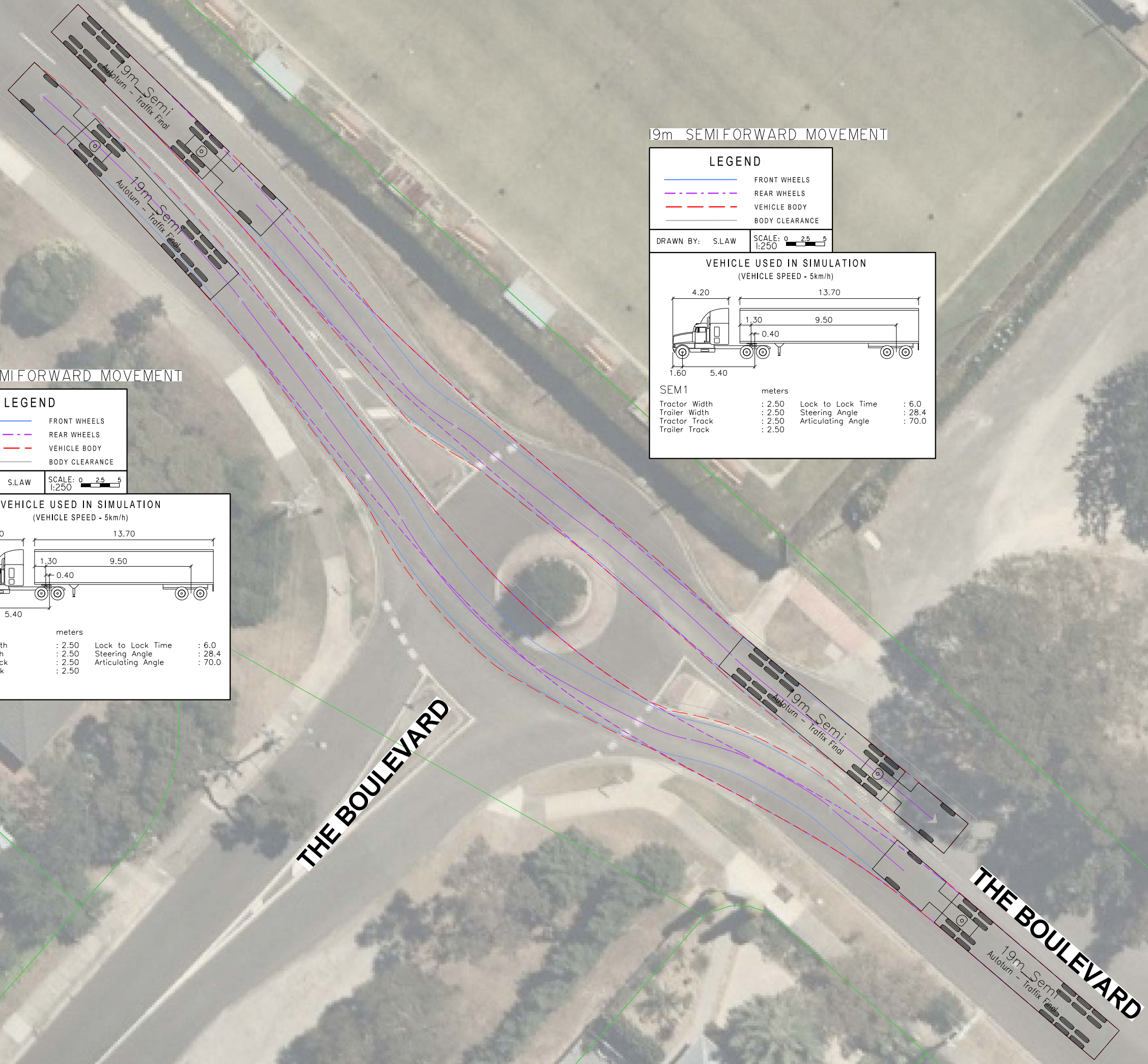
DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

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

SEM1	Tractor Width	: 2.50	Lock to Lock Time	: 6.0
	Trailer Width	: 2.50	Steering Angle	: 28.4
	Tractor Track	: 2.50	Articulating Angle	: 70.0
	Trailer Track	: 2.50		

THE BOULEVARD

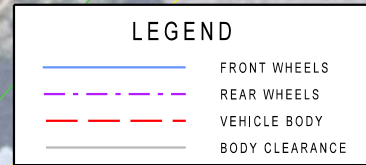
THE BOULEVARD



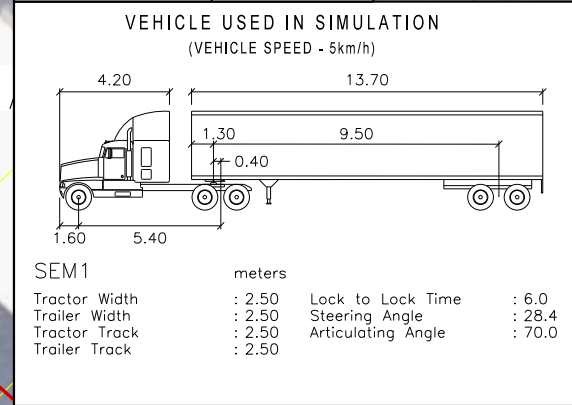
TRAFFIC SIGNS

GATE 3

19m SEMILEFT TURN ENTRY



DRAWN BY: S.LAW SCALE: 0 2.5 5 1:250



CONCRETE & PZ)

WORKS ZONE PROPOSED

POLE

CRANE LOADING & CONCRETE PUMPING ZONE (CL&PZ) - BUILDING C

CRANE LOADING & CONCRETE PUMPING ZONE (CL&PZ) - BUILDING C

GATE 5

GATE 6

WHICH REMAINS OPEN ALONG PROPERTY BOUNDARIES)

WORKS ZONE (P)

MODIFY TRAFFIC ISLAND

DRIVING OVER KERB

CRANE LOADING & CONCRETE PUMPING ZONE (CL&PZ) - BUILDING B

CRANE LOADING ZONE (CLZ) - BUILDING B & C

CRANE LOADING & CONCRETE PUMPING ZONE (CL&PZ) - BUILDING C

GATE 4

GATE 5

GATE 6

WORKS ZONE (PROPOSED)

19m SEMIRIGHT TURN

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

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

SEM1		meters	
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

POLE

CLOSED

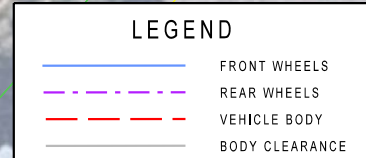
MODIFY TRAFFIC ISLAND

IRVINE RD

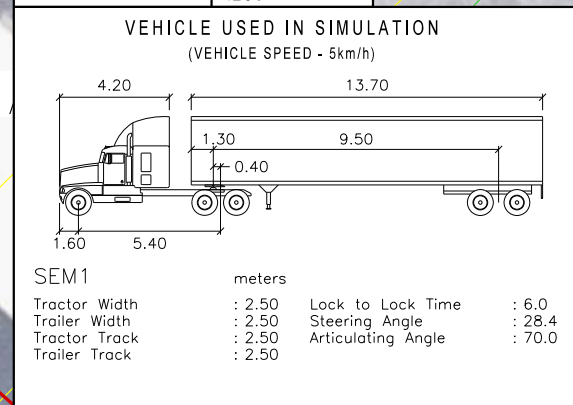
POLE

PHYSICS
GATE 3

19m SEMILEFT TURN



DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250



PROPOSED

POLE

CR

CONCRETE
&PZ)

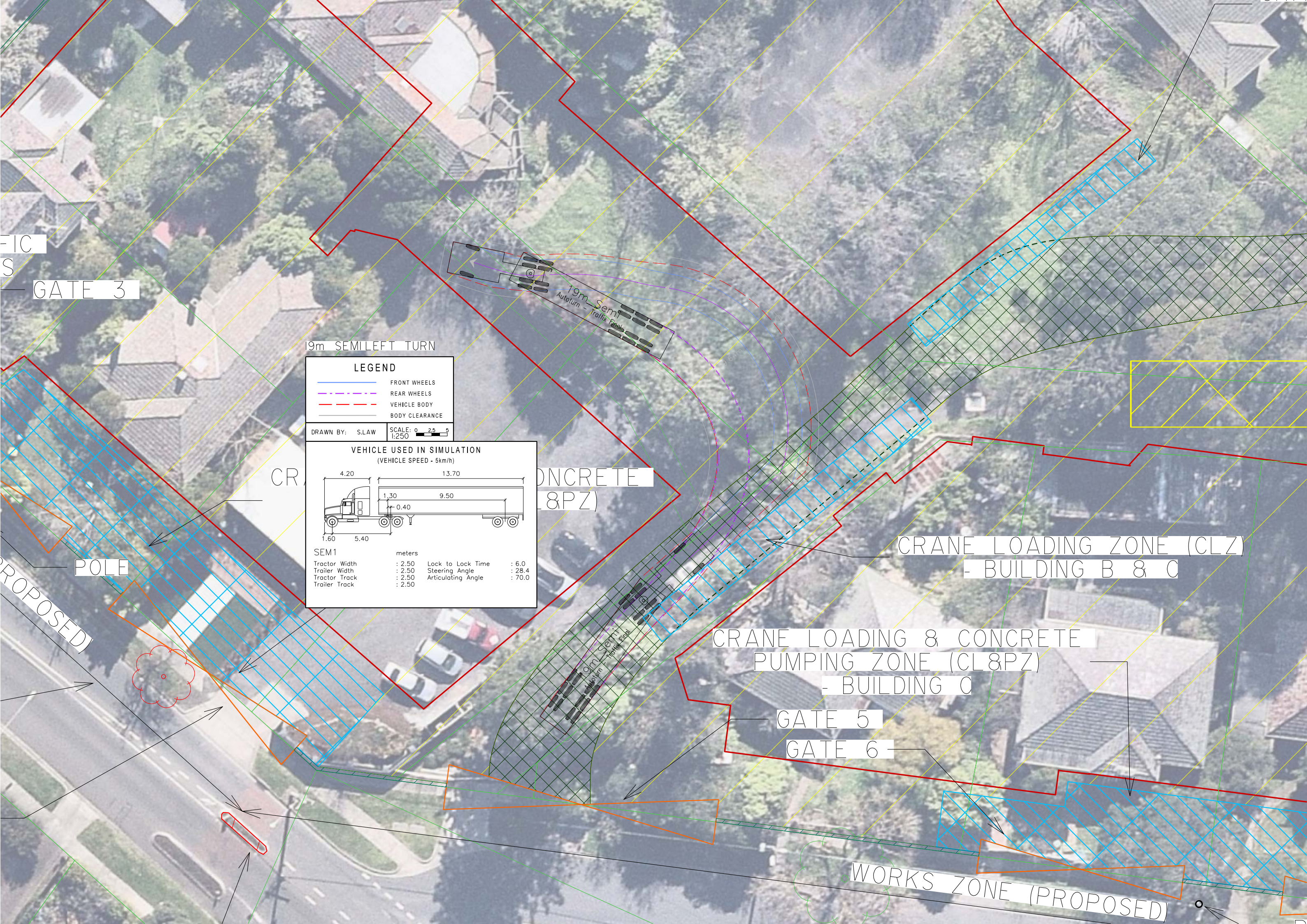
CRANE LOADING ZONE (CLZ)
- BUILDING B & C

CRANE LOADING & CONCRETE
PUMPING ZONE (CL&PZ)
- BUILDING C

GATE 5

GATE 6

WORKS ZONE (PROPOSED)



C

GATE 3

19m SEMIREVERSE MOVEMENT

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

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

SEM1	units	values
Tractor Width	meters	: 2.50
Tractor Length	meters	: 5.40
Tractor Wheelbase	meters	: 1.60
Trailer Width	meters	: 1.30
Trailer Length	meters	: 9.50
Trailer Wheelbase	meters	: 0.40
Lock to Lock Time	seconds	: 6.0
Steering Angle	degrees	: 28.4
Articulating Angle	degrees	: 70.0

CONCRETE
(CL&PZ)

CRANE LOADING ZONE (CLZ)
- BUILDING B & C

CRANE LOADING & CONCRETE
PUMPING ZONE (CL&PZ)
- BUILDING C

GATE 5

GATE 6

WORKS ZONE (PROPOSED)

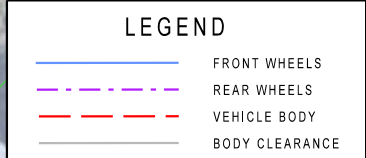
POLE

PROPOSED

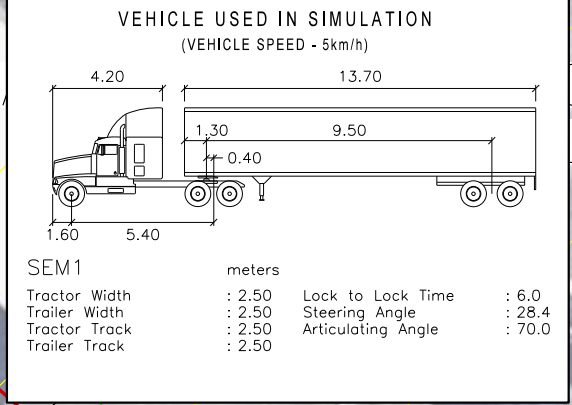
TRAFFIC SIGNS

GATE 3

19m SEMIRIGHT TURN EXIT



DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250



WORKS ZONE (PROPOSED)

POLE

CR

CONCRETE
(CL8PZ)

CRANE LOADING ZONE
- BUILDING B & C

CRANE LOADING & CONCRETE
PUMPING ZONE (CL8PZ)
- BUILDING C

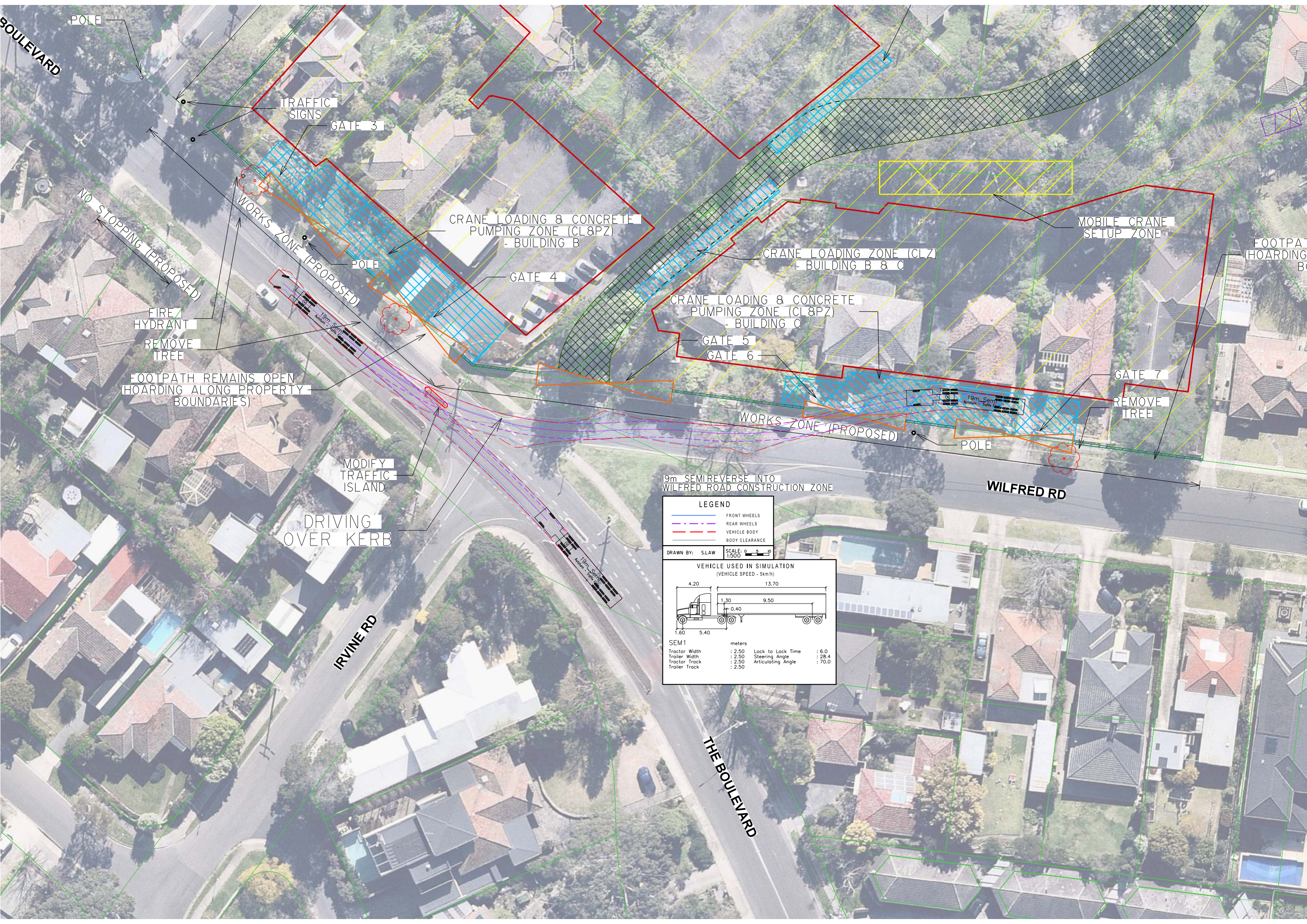
GATE 5

GATE 6

IS OPEN
PROPERTY

MODIFY
TRAFFIC
ISLAND

WORKS ZONE (PROPOSED)



19m SEMIREVERSE INTO WILFRED ROAD CONSTRUCTION ZONE

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 5 10
1:500

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

SEM1	Tractor Width	: 2.50	Lock to Lock Time	: 6.0
	Trailer Width	: 2.50	Steering Angle	: 28.4
	Tractor Track	: 2.50	Articulating Angle	: 70.0
	Trailer Track	: 2.50		

- BUILDING B

CRANE LOADING ZONE (CLZ)

- BUILDING B & C

GATE 4

CRANE LOADING & CONCRETE PUMPING ZONE (CL&PZ)

- BUILDING C

GATE 5

GATE 6

WORKS ZONE (PROPOSED)

DRIVING OVER TRAFFIC ISLAND

19m Semi Autoturn - Traffix Final

POLE

WILFRED RD

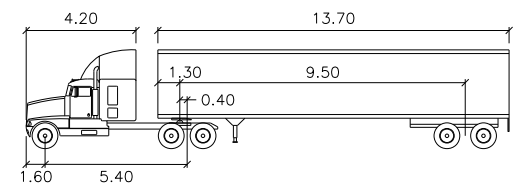
19m SEMI LEFT TURN EXIT THEN RIGHT TURN

LEGEND

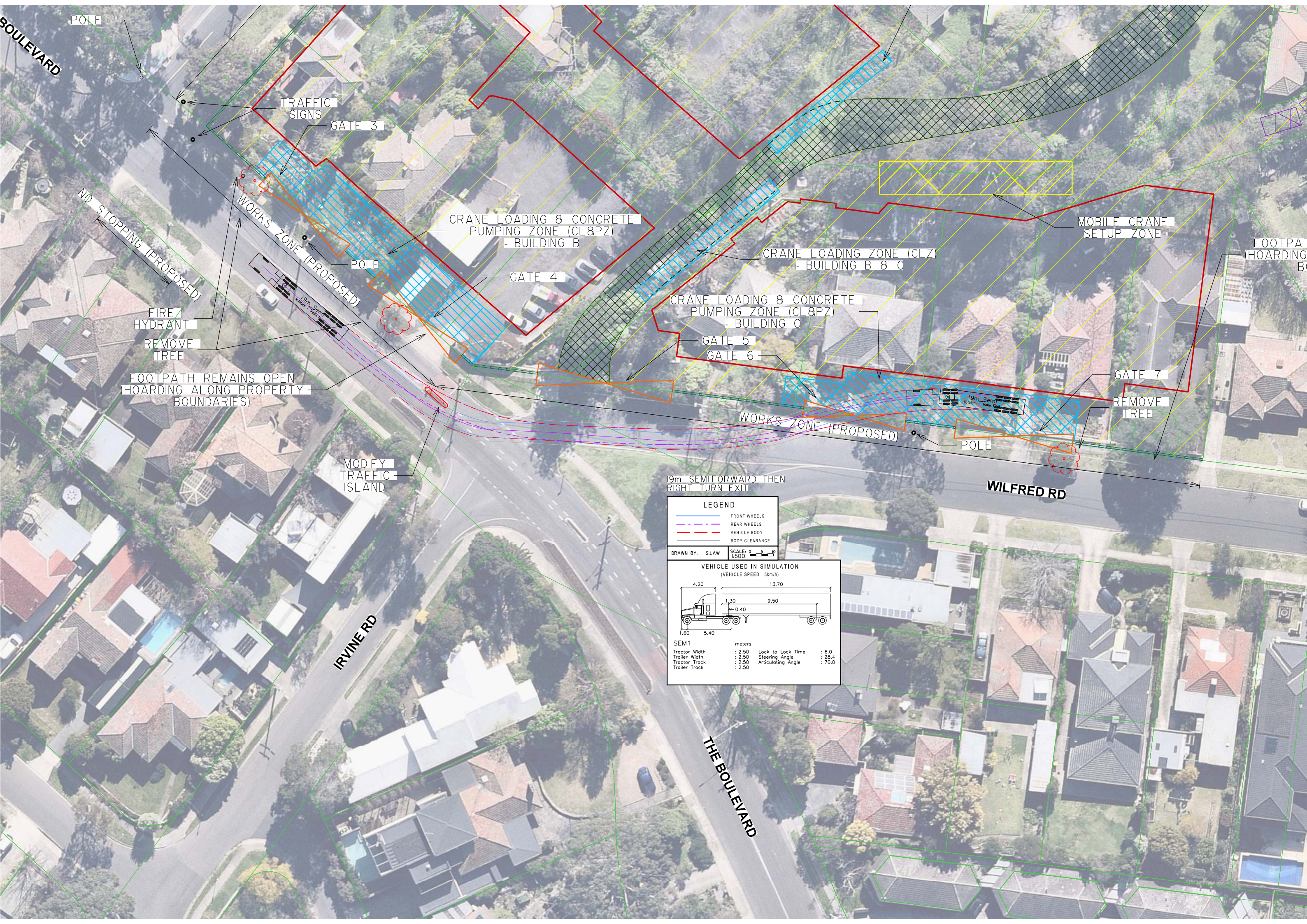
- FRONT WHEELS
- - - REAR WHEELS
- - - VEHICLE BODY
- - - BODY CLEARANCE

DRAWN BY: S.LAW SCALE: 0 2.5 5
1:250

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



SEM1		meters	
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		



BOULEVARD

POLE

TRAFFIC SIGNS

GATE 3

NO STOPPING (PROPOSED)

WORKS ZONE (PROPOSED)

FIRE HYDRANT

REMOVE TREE

FOOTPATH REMAINS OPEN (HOARDING ALONG PROPERTY BOUNDARIES)

MODIFY TRAFFIC ISLAND

CRANE LOADING & CONCRETE PUMPING ZONE (CL&CPZ) - BUILDING B

GATE 4

CRANE LOADING ZONE (CLZ) - BUILDING B & C

CRANE LOADING & CONCRETE PUMPING ZONE (CL&CPZ) - BUILDING C

GATE 5

GATE 6

MOBILE CRANE SETUP ZONE

FOOTPATH HOARDING B

GATE 7

REMOVE TREE

WORKS ZONE (PROPOSED)

POLE

WILFRED RD

IRVINE RD

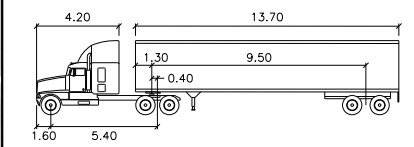
19m SEMI FORWARD THEN RIGHT TURN EXIT

LEGEND

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

DRAWN BY: S.LAW SCALE: 0 5 10 1:500

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



SEM1	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

THE BOULEVARD

9M SEM

NORTHBOUND ACCESS / EGRESS TO BUILDING B CONSTRUCTION ZONE



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

SEM1		meters	
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

LEGEND

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

9M SEM

- LEFT TURN FROM BURKE ROAD INTO THE BOULEVARD



THE BOULEVARD

BURKE RD

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

SEM1

	Tractor	Trailer
Width	4.20	13.70
Track	1.60	5.40
Wheel Offset	1.30	0.40
Length	-	9.50

SEM1		meters	
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

LEGEND

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

9M SEM - LEFT TURN FROM THE BOULEVARD INTO WILFRED ROAD



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

SEM1	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

LEGEND

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

TRAFFIC CONTROLLER POSITIONS FOR GATE 2

ENTRY & EXIT = 1 TC

TRAFFIC CONTROLLER TO ASSIST IN MANAGING VEHICLE AND PEDESTRIAN MOVEMENTS WHILE BUILDING A CPZ IS IN USE (GATE 2)

8.8m RIGHT TURN ENTRY

LEGEND
 FRONT WHEELS
 REAR WHEELS
 VEHICLE BODY
 BODY CLEARANCE

DRAWN BY: SLAW SCALE: 1:250

VEHICLE USED IN SIMULATION (VEHICLE SPEED - 5km/h)
 8.80

8.8m MRV meters
 Width : 2.50
 Track : 2.50
 Lock to Lock Time : 6.0
 Steering Angle : 34.0

8.8m REVERSE ON SITE AND FORWARD EXIT

LEGEND
 FRONT WHEELS
 REAR WHEELS
 VEHICLE BODY
 BODY CLEARANCE

DRAWN BY: SLAW SCALE: 1:250

VEHICLE USED IN SIMULATION (VEHICLE SPEED - 5km/h)
 8.80

8.8m MRV meters
 Width : 2.50
 Track : 2.50
 Lock to Lock Time : 6.0
 Steering Angle : 34.0



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

ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES
 1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
 2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
 3 LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVARD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED
 SLAW
 CHECKED/APPROVED
 A COYLE
 FILE NAME
 GRP25778-01.dgn

Traffic Engineers and Transport Planners
 Suite 8/431 Burke Road TEL: (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
 CITY OF BANYULE
TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20
 SHEET No. 3 of 3
 DWG No. G25778-01-12



TRAFFIC CONTROLLER POSITIONS FOR GATE 3 & 4

ENTRY = 1 TC

EXIT = 2 TC

TRAFFIC CONTROLLER TO ASSIST IN MANAGING VEHICLE AND PEDESTRIAN MOVEMENTS WHILE BUILDING B CBPZ IS IN USE (GATE 3 & 4)

TRAFFIC CONTROLLER TO ASSIST IN MANAGING VEHICLE AND PEDESTRIAN MOVEMENTS WHILE BUILDING B CBPZ IS IN USE (GATE 3 & 4)

19m SEMIFORWARD IN AND FORWARD OUT

LEGEND

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

DRAWN BY: SLAW SCALE: 1:100


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

4.20	1.30	0.40	9.50
1.60	5.40		

SEM1

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Tractor Height	: 2.50	Steering Angle	: 28.6
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

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

ISSUE	ISSUE DESCRIPTION	ISSUE DATE	GENERAL NOTES	DESIGNED	 Traffic Engineers and Transport Planners Suite 8/431 Burke Road TEL: (03) 9822-2888 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444 www.traffixgroup.com.au	177 THE BOULEVARD - IVANHOE EAST CITY OF BANYULE TRAFFIC MANAGEMENT PLAN		
			1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018) 2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL 3 LOCAL ROAD - WAMBA ROAD (SPEED ZONE 50km/h) - CEDRIC STREET (SPEED ZONE 50km/h) - THE BOULEVARD (SPEED ZONE 50km/h) - WILFRED ROAD (SPEED ZONE 50km/h)	SLAW		SCALE	0 5 10 15 20	SHEET No. 3 of 3
C	CLIENT COMMENTS ADDED	26 MAR 2019		CHECKED/APPROVED A COYLE		GRP25778-01.dgn		DWG No. G25778-01-12
B	CLIENT COMMENTS ADDED	22 MAR 2019		FILE NAME				
A	INITIAL ISSUE	23 OCT 2018						



ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES

- 1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
- 2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
- 3 LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVARD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED	SLAW
CHECKED/APPROVED	A COYLE
FILE NAME	GRP25778-01.dgn

Traffic Engineers and Transport Planners
 Suite 8/431 Burke Road TEL: (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
 CITY OF BANYULE
TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20

SHEET No. 3 of 3 DWG No. G25778-01-12



ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
3 LOCAL ROAD
- WAMBA ROAD (SPEED ZONE 50km/h)
- CEDRIC STREET (SPEED ZONE 50km/h)
- THE BOULEVARD (SPEED ZONE 50km/h)
- WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED	S LAW
CHECKED/APPROVED	A COYLE
FILE NAME	GRP25778-01.dgn

Traffic Engineers and Transport Planners
 Suite 8/431 Burke Road TEL: (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
 CITY OF BANYULE
TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20

SHEET No. 3 of 3 DWG No. G25778-01-12



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

ISSUE	ISSUE DESCRIPTION	ISSUE DATE
C	CLIENT COMMENTS ADDED	26 MAR 2019
B	CLIENT COMMENTS ADDED	22 MAR 2019
A	INITIAL ISSUE	23 OCT 2018

GENERAL NOTES
 1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE: NEARMAP OCT 2018)
 2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
 3 LOCAL ROAD
 - WAMBA ROAD (SPEED ZONE 50km/h)
 - CEDRIC STREET (SPEED ZONE 50km/h)
 - THE BOULEVAD (SPEED ZONE 50km/h)
 - WILFRED ROAD (SPEED ZONE 50km/h)

DESIGNED
SLAW
 CHECKED/APPROVED
A COYLE
 FILE NAME
GRP25778-01.dgn

Traffic Engineers and Transport Planners
 Suite 8/431 Burke Road TEL: (03) 9822-2888
 GLEN IRIS VICTORIA 3146 FAX: (03) 9822-7444
 www.traffixgroup.com.au

177 THE BOULEVARD - IVANHOE EAST
 CITY OF BANYULE
TRAFFIC MANAGEMENT PLAN

SCALE 0 5 10 15 20
 SHEET No. 3 of 3
 DWG No. G25778-01-12