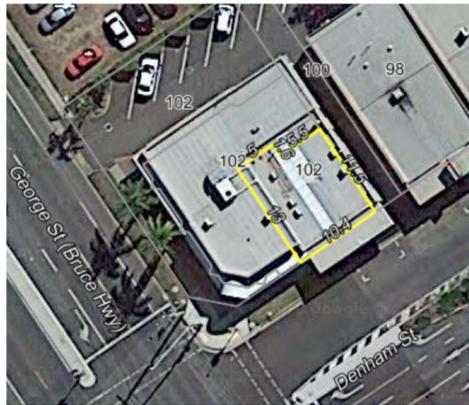




COMMON AREA



L 1 / BUP 100002



L 2 / BUP 100002

PROPERTY SURVEY
(no scale)

ROCKHAMPTON REGIONAL COUNCIL

AMENDED PLANS APPROVED

5 July 2019

DATE

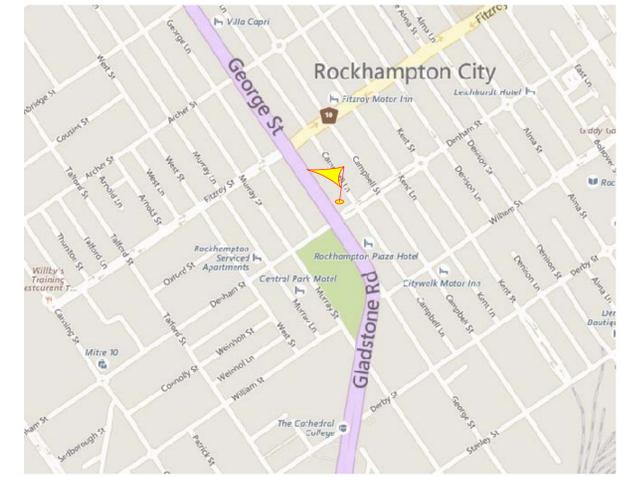
These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/41-2018

Dated: 30 August 2018



**EXIST: BUILDING
CNR GEORGE ST & DENHAM ST**



LOCALITY



SITE PLAN

Scale 1:200



NOTE:
ALL CONSTRUCTION TO BE CONFINED TO PERIMETERS OF BUILDING PLOT AREA OF L 2
NO APPLICATION FOR CONSTRUCTION OVER BUILDING L 1



GEORGE ST



CNR GEORGE & DENHAM ST

ARTIST IMPRESSION

<p>Espin Capital Pty Ltd PO Box 749, Subiaco, WA, 6904 M: 08 93909318 P: 08 93649955</p>	
<p>Project: MESH PANEL STRUCTURE 9 x 3m STATIC Panel 9 x 3m Curved screen</p>	
<p>Location: 102 DENHAM ST ROCKHAMPTON QLD</p>	
<p>Revision: 4</p>	<p>SHEET SIZE: A1</p>
<p>Date: 17/05/2019</p>	<p>S1 of 2</p>

ROCKHAMPTON REGIONAL COUNCIL
APPROVED PLANS
 These plans are approved subject to the current conditions of approval associated with
Development Permit No.: D/41-2018
Dated: 30 August 2018



One coat render system with integral 'Dune' colour



Colorbond Flashing 'Jasper' colour



Curved Aluminium Sheet to Fascia Light Grey



Metal Cladding Type- Lysaght Longline 305 or similar approved



Metal Cladding Colour- Monument Matt Finish



Colorbond Flashing 'Jasper' colour



Curved Aluminium Sheet to Fascia Light Grey

maarch*

*Mark Aronson Architecture
 RESIDENTIAL COMMERCIAL SPECIAL PROJECTS

Client: Espin Capital

Project: 102 Denham Street, Rockhampton

Project Number: 18021

Drawing: Material Selection

Date: 13/07/2018

ROCKHAMPTON REGIONAL COUNCIL

APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/41-2018

Dated: 30 August 2018

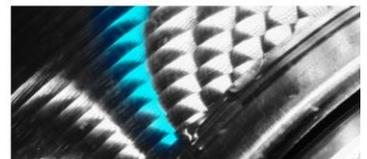
**ELECTRONIC ADVERTISING DEVICE
102 DENHAM STREET, ROCKHAMPTON
TRAFFIC ENGINEERING ASSESSMENT**

19 JULY 2018

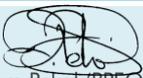
PREPARED FOR:

ESPIN CAPITAL

Private Equity



DOCUMENT CONTROL RECORD

DOCUMENT					
Report Title:	Electronic Advertising Device – 102 Denham Street, Rockhampton				
Client:	Espin Capital				
Project Number:	18-403				
VER	PURPOSE	DATE	AUTHOR	CHECKED	APPROVED
2	FINAL	19/07/18	CG	JPG	 Adam Pekol (RPEQ: 5286)

COPYRIGHT

This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part may be produced without prior permission. Requests and inquiries concerning reproduction and rights should be directed to:

The Director
 Pekol Traffic and Transport
 GD02, 67 St Pauls Terrace
 Spring Hill QLD 4000

DISCLAIMER

This document is produced solely for the benefit of and use by our client in accordance with the terms and conditions of our appointment. PTT does not accept liability to third parties arising from their use of or reliance upon the contents of this report.

TABLE OF CONTENTS

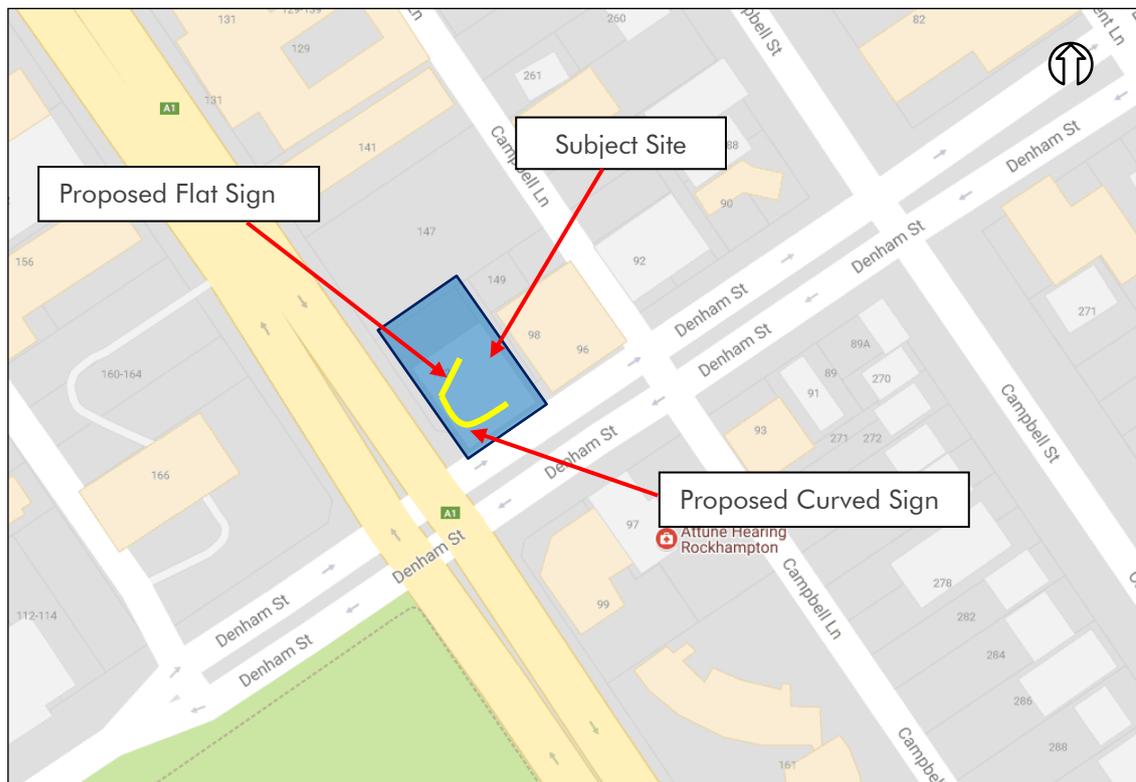
1.0 INTRODUCTION	1
1.1 Background	1
1.2 Aim	1
1.3 Methodology	1
1.4 Documents	1
1.5 Scope of Report	2
2.0 EXISTING CONDITIONS	3
2.1 Site Location	3
2.2 Road Network	3
2.3 Road Attributes	4
3.0 PROPOSED ELECTRONIC ADVERTISING DEVICE	5
3.1 Proposed Sign	5
3.2 Restriction Notice Area	5
3.3 Advance Visibility	8
3.4 Line of Sight	9
3.5 Design	9
3.6 Operations	9
4.0 ROAD SAFETY ASSESSMENT	11
4.1 Approach	11
4.2 Average Crash Rate	12
5.0 CONCLUSIONS AND RECOMMENDATIONS	13
5.1 Conclusions	13
5.2 Recommendations	13
APPENDIX A: TRAFFIC DATA	
APPENDIX B: DRIVERS FIELD OF VISION	

1.0 INTRODUCTION

1.1 Background

In April 2018, PTT was commissioned by Espin Capital to undertake a traffic engineering assessment for a proposed electronic advertising device located at 102 Denham Street, Rockhampton. The subject site is shown in Figure 1.1.

Figure 1.1: SITE LOCATION



1.2 Aim

The aim of this assessment was to evaluate the impact of the proposed electronic advertising devices in terms of safety and driver distraction with respect to its location, design and operation.

1.3 Methodology

In preparing this report, a desktop assessment was conducted to determine the existing signage and traffic operations in the area as they apply to Department of Transport and Main Roads's (TMR) Roadside Advertising Manual (2017) (RAM).

1.4 Documents

The following documents were reviewed to produce this report:

- Department of Transport and Main Roads (TMR) Roadside Advertising Manual (2017) (RAM)

1.5 Scope of Report

This report begins by summarising the characteristics of the subject site (Chapter 2), followed by a description of the proposed electronic advertising device (Chapter 3). The crash history for the site is then discussed (Chapter 4). The report concludes with a summary of key findings (Chapter 5).

2.0 EXISTING CONDITIONS

2.1 Site Location

The subject site is described as Lot 0 and 2 on BUP100002 at 102 Denham Street, Rockhampton and is in a specialised centre zone. Currently, a community service centre (Suncare Community Services) is located at the site. The site is bounded by:

- George Street to the west
- Denham Street to the south
- a vacant lot to the north
- commercial building to the east

2.2 Road Network

Denham Street is under the jurisdiction of Rockhampton Regional Council (RRC). It has two lanes in each direction with a posted speed of 50km/h in the vicinity of the site. George Street is a State controlled road under the jurisdiction of the Department of Transport and Main Roads (TMR). It has two lanes in each direction with a posted speed of 60km/h in the vicinity of the site. The proposed advertising device will have two faces (a flat face and curved face) and will be located to face southbound and northbound traffic on George Street and eastbound traffic on Denham Street.

Figure 2.1: ADVERTISING LOCATION



2.3 Road Attributes

Annual Average Daily Traffic (AADT) data was obtained from TMR for the George Street / Denham Street intersection, and is attached in Appendix A. On average, a total of 23,000 vehicles enter this intersection each day. Table 2.1 outlines the attributes for this intersection.

Table 2.1: ROAD ATTRIBUTES

ATTRIBUTE	GEORGE STREET	DENHAM STREET
Road Hierarchy	Main Road	Council Road
Directionality	Two-way	Two-way
Number of Lanes	4	4
Speed Limit (Km/h)	60km/h	50km/h
Jurisdiction	TMR	RRC

3.0 PROPOSED ELECTRONIC ADVERTISING DEVICE

3.1 Proposed Sign

The proposed static electronic sign is described as an 'Electronic Billboard Sign'. It is proposed to have two LED screen panels as follows:

- 9.0m by 3.0m (27m²) flat screen
- 9.0m by 3.0m (27m²) curved screen

3.2 Restriction Notice Area

The proposed sign is to be positioned to face northbound and southbound traffic on George Street and eastbound traffic on Denham Street. It is located within the Restriction Notice Area for the adjacent George Street / Denham Street intersection. TMR's RAM designates a Restriction Notice Area as a defined area outside the road reserve on a State-controlled road where the Department has determined that the installation of an advertising device is not preferred. In the restriction notice area, TMR may only provide comment on the proposed sign location, with the relevant local government being the controlling authority (ie Rockhampton Regional Council).

As shown in Figure 3.1, an important traffic sign (directional sign) is also in close proximity to the proposed electronic advertising device.

Figure 3.1: RESTRICTION NOTICE AREA

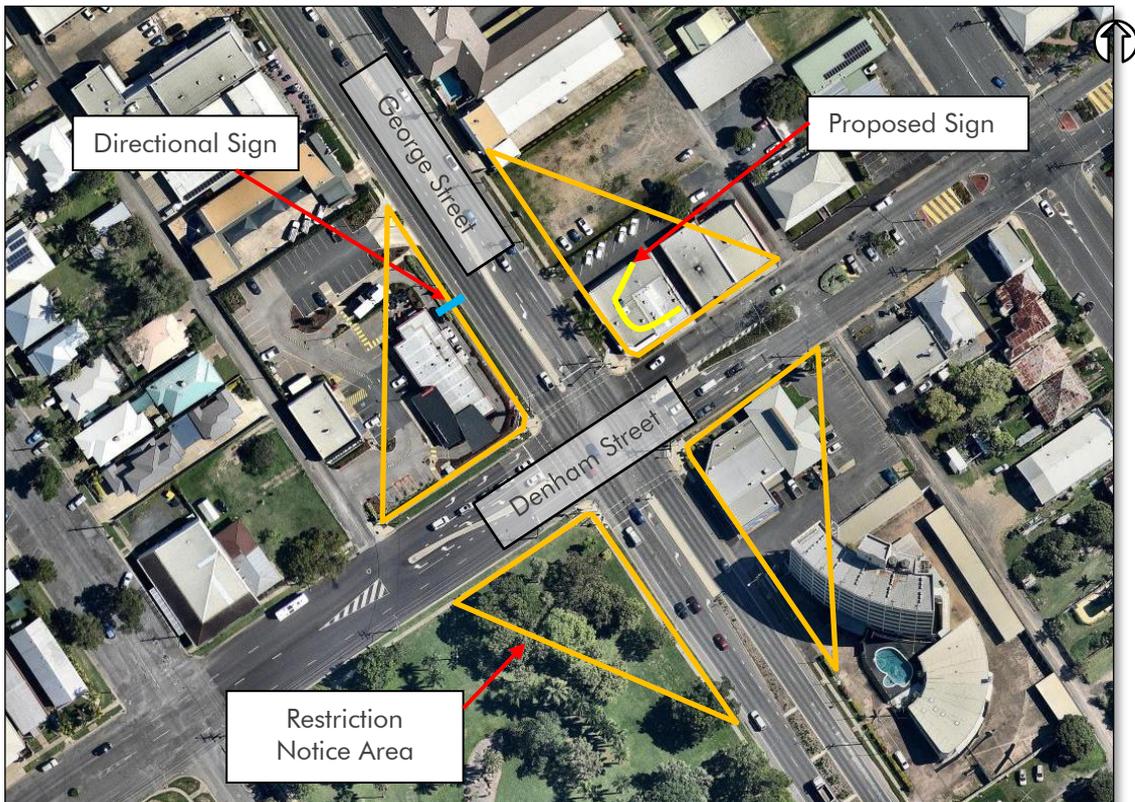


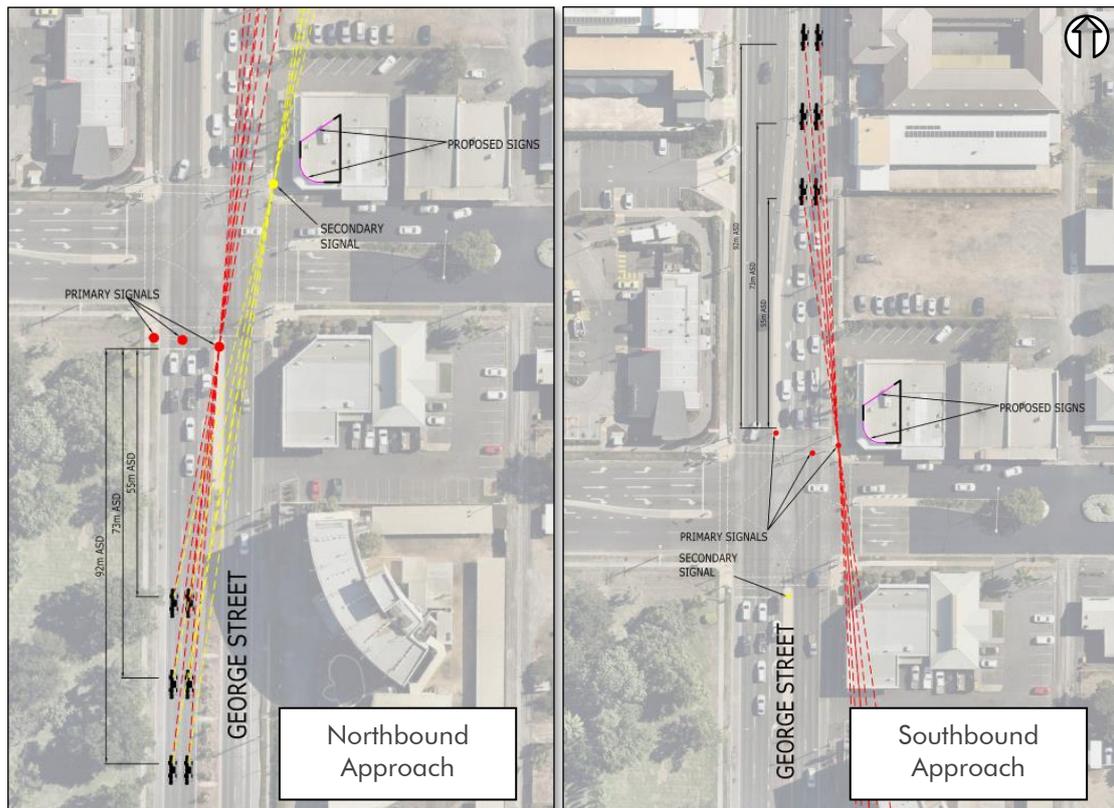
Table C1 in TMR’s RAM designates that an electronic advertising device not be placed within 36m either side of an important traffic sign, for a 60km/h road. The directional sign is located approximately 42m from the south-facing sign face. Therefore, the location of the proposed sign is does not fall within the restriction notice area for the sign, as indicated in Figure 3.1.

As shown in Figure 3.1, the proposed sign is located within the Restriction Notice Area for the Denham Street / George Street signalised intersection, which is inconsistent with the RAM. However, the sign is located within a low-speed urban environment.

3.2.1 Driver’s Field of Vision

As the sign is located within a Restriction Notice Area, further analysis was carried out to determine if the sign is within a driver’s field of vision to the primary or secondary traffic signals at the signalised intersection, and therefore to determine whether the sign poses as a hazard to traffic. The sign is not within a driver’s field of vision to the traffic signals for northbound and southbound traffic on George Street, as indicated in Figures 3.2 and in Appendix B.

Figure 3.2: DRIVER’S FIELD OF VISION GEORGE STREET



The proposed electronic advertising device is also visible from the eastbound approach on Denham Street. As demonstrated in Figure 3.3, the proposed sign is within a driver’s field of vision to the primary signals from the eastbound approach in plan view. However, the proposed sign is not within a driver’s field of vision in vertical elevation, as demonstrated in Figure 3.4. Therefore, the

sign is outside the bounds of a driver's field of vision to the primary and secondary signals from the eastbound approach.

Figure 3.3: DRIVER'S FIELD OF VISION EASTBOUND APPROACH

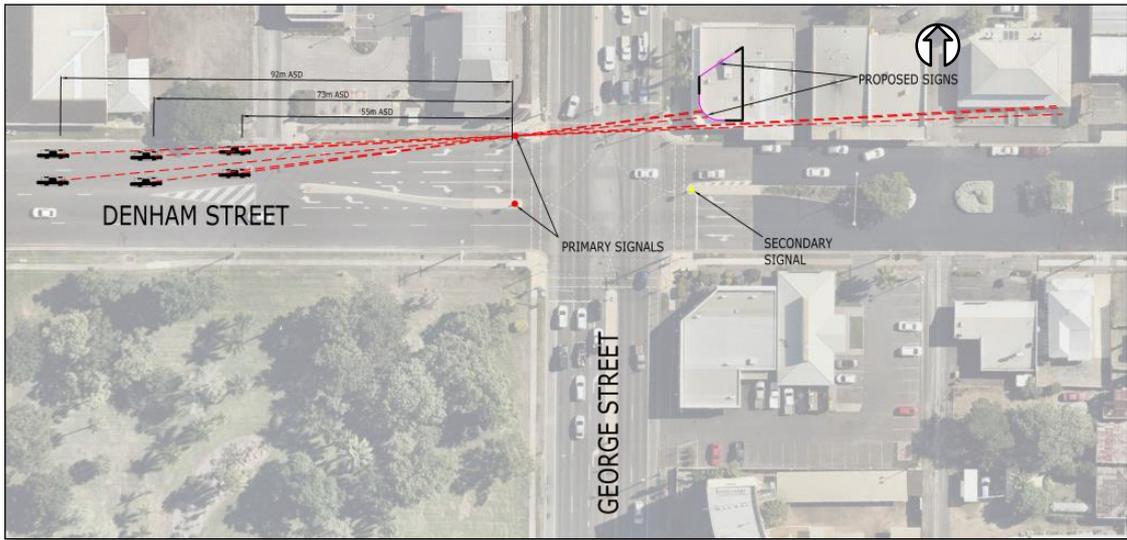
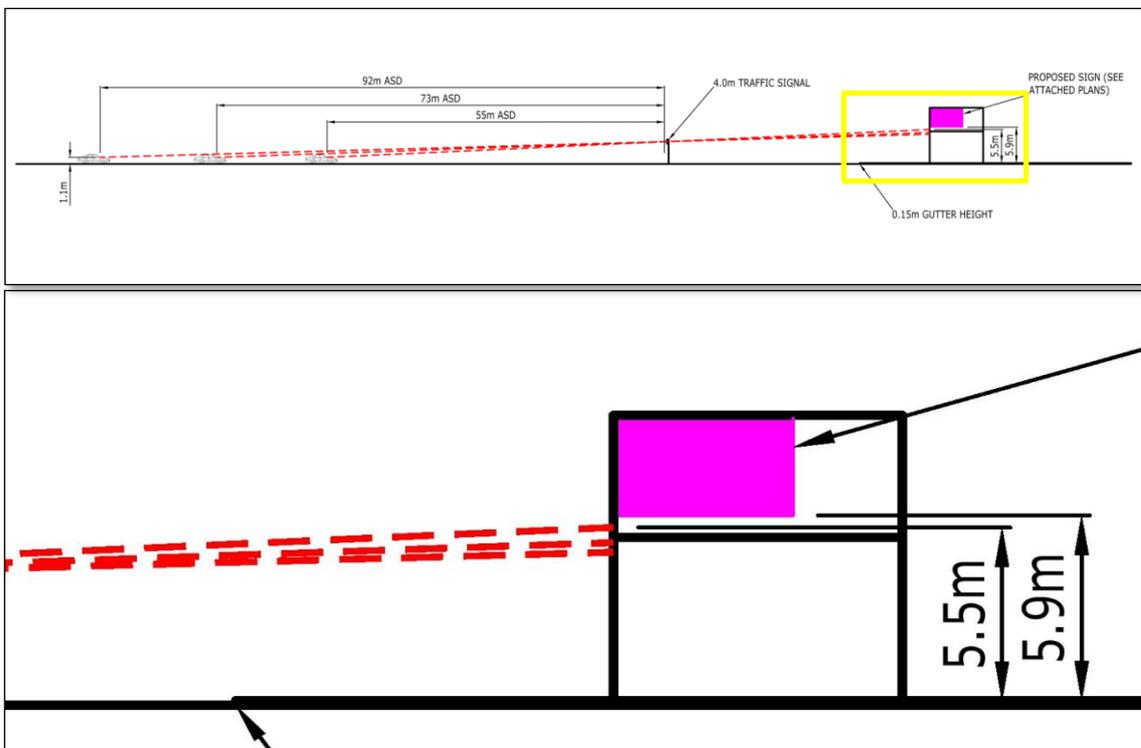


Figure 3.4: DRIVER'S FIELD OF VISION EASTBOUND VERTICAL ELEVATION



As the proposed sign is located within a low-speed urban environment and is not within a driver's field of vision to the primary and secondary signals from all of the applicable approaches, the sign is not likely to pose as a hazard to motorists despite being located within a Restriction Notice Area.

3.3 Advance Visibility

TMR's RAM requires three seconds (ie approximately 50m at 60km/h and 42m at 50km/h) of advanced visibility to view and read the proposed advertising device. Figures 3.5 and 3.6 show the view of the sign on approach from the northbound and southbound approaches on George Street. Figure 3.7 shows the eastbound approach on Denham Street. Thus, there is adequate advance visibility to view and read the sign from all three approaches.

Figure 3.5: VIEW OF SIGN ON GEORGE STREET NORTHBOUND APPROACH



Figure 3.6: VIEW OF SIGN ON GEORGE STREET SOUTHBOUND APPROACH



Figure 3.7: VIEW OF SIGN ON DENHAM STREET EASTBOUND APPROACH



3.4 Line of Sight

TMR’s RAM requires that electronic billboards do not obstruct a driver’s line of sight to official traffic signs, exit ramps, on-ramps, intersections, other decision making / traffic conflict areas or road users. Further, if an electronic device is located where it will appear in the background of traffic signals, the traffic signals must be fitted with standard target boards applicable to all devices. As shown in Figures 3.5 to 3.7 the proposed sign will not obstruct the driver’s line of sight to any important traffic signals, official signs or intersections. A desktop inspection of the site found that the traffic signals at the intersection are fitted with target boards, consistent with TMR’s RAM. Therefore, the sign complies with these criteria.

3.5 Design

The devices are classified as a High Impact EDC Sign with proposed dimensions of 9m x 3m of electronic display for both signs.

As per Section 3.1 of TMR’s RAM, there will be no impact or obstruction to other businesses, residents or the visual amenity of the surrounding area from the sign. The device is proposed to have no movement or rotation. It is recommended that the electronic sign support be certified as being structurally sufficient in accordance with the Building Act 1975. Therefore, the design is in accordance with Section 3.1 of TMR’s RAM.

3.6 Operations

3.6.1 Proposed Location

We have been advised that the proposed sign will be a ‘Large Format’, non-rotating advertising device showing one still image at a time. It will be located in a mixed use area with medium-high-

ambient lighting and therefore has been classified as a Lighting Environment Zone 2 as per TMR's RAM.

3.6.2 Brightness

Due to the location of the proposed sign, it is recommended a maximum average luminance level of 350 cd/m² be maintained at all hours of the day, as consistent with Table D1 in Appendix D of TMR's RAM

The proposed advertising device will meet the following requirements, in line with TMR's RAM:

- will be located at an angle such that luminance levels are as uniform as possible for the viewer
- any retro-reflective material will be rotated approximately 5 degrees away from normal line of vehicle headlight beams in order to minimise specular reflection
- will not contain flashing point sources
- all lighting associated with the advertising device will be directed solely on the advertising device and its immediate surroundings
- illumination does not include any reflective letters or strips

3.6.3 Reflectance

The sign should be oriented at least five degrees from right angles with the driver's line of sight to prevent glare from low sunlight reflections.

3.6.4 Dwell Time

The proposed sign should display one static advertisement at a time (ie no split screens) to reduce driver comprehension time and should be displayed for a minimum amount of time (dwell time). Consistent with section 3.6.1.1 of TMR's RAM, it is recommended that:

- the minimum dwell time is 10 seconds as the device is visible from a state-controlled road with a speed limit less than 80 km/h (i.e George Street)
- change times between advertisements should be instantaneous (ie less than 0.5 seconds)
- all messages remain static
- the device does not display sequential or multi-framed messages

3.6.5 Display Content

Consistent with good roadside advertising practice, it is recommended that the displayed images:

- are directly and easily interpreted as to convey the required advertising message quickly
- do not give instructions to "stop" or similar
- do not imitate traffic control devices
- will not go blank between advertisements
- minimise emotional content that may affect emotional biases

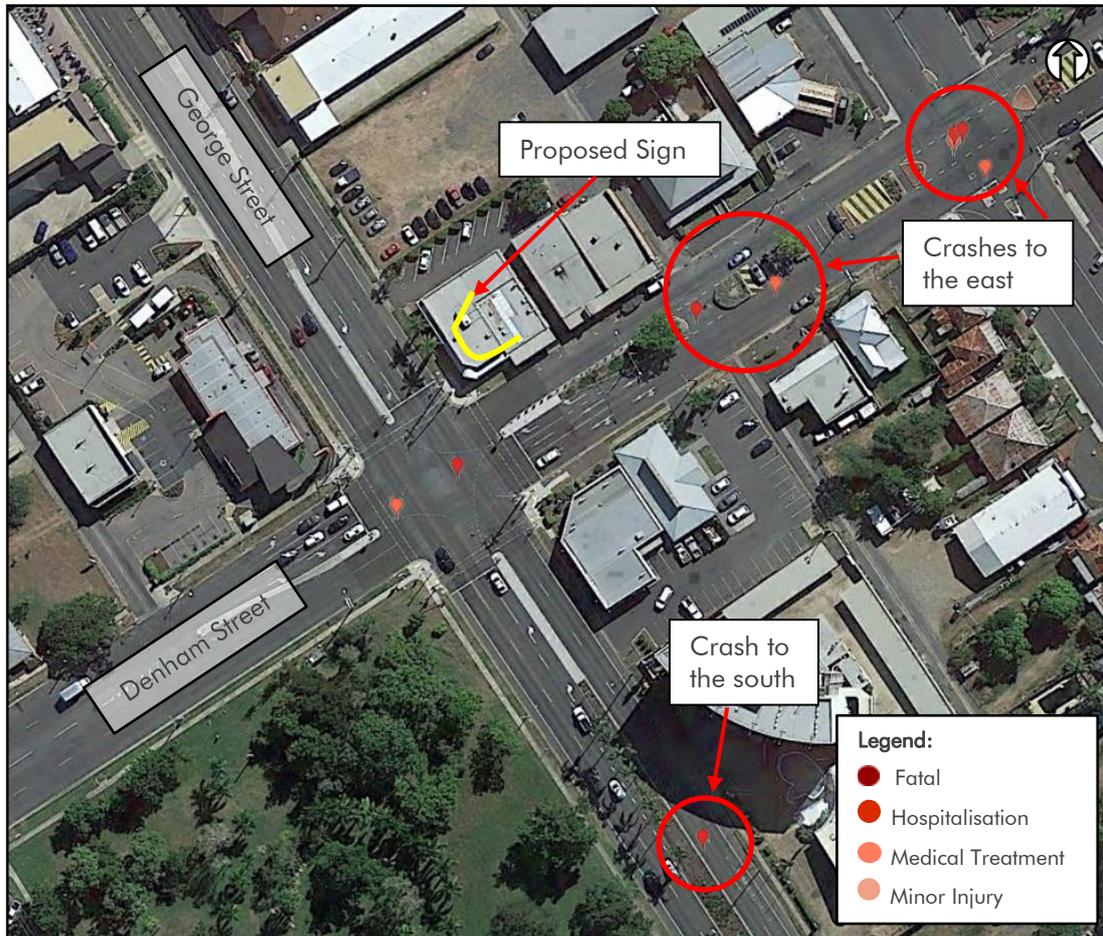
4.0 ROAD SAFETY ASSESSMENT

4.1 Approach

TMR's RAM states that further restrictions will apply to sections of road with a crash rate higher than the critical crash rate and to intersections with a high Killed or Seriously Injured (KSI) rate in the last five years.

The most recent available crash data provided by TMR for the past five years (2012-2016) was analysed to determine the crash rate for this section of road. The analysis was conducted for the George Street / Denham Street signalised intersection, with the results shown in Figure 4.1. There were six crashes reported within a 100m radius of the signalised intersection. Crashes located east of the intersection and south of the intersection, as indicated in Figure 4, were not included in the analysis as the proposed electronic advertising device is not visible from these locations, given the distance of the crashed from the intersection and their direction of travel involved in the reported crashes. Therefore, three crashes occurring at the George Street / Denham Street intersection were included in the analysis.

Figure 4.1: CRASH LOCATIONS AND SEVERITY (2012-2016)



The RAM states that a KSI of three or more in the past five years is considered high. The intersection has recorded one hospitalisation and no fatalities over the past five years. Therefore the section of road proximate to the site has a low KSI rate of one.

4.2 Average Crash Rate

The George Street / Denham Street signalised intersection was analysed using the approach detailed by Jurewicz and Bennett (2008)¹ to calculate the crash rate, as shown in Table 4.2. Traffic volumes were obtained from TMR as outlined in Section 2.3. The results of this analysis show the crash rate of the proposed site to be below the Queensland average.

SITE	NUMBER OF CRASHES (2012-2016)	AADT (vpd)	CRASH RATE (crashes/10M VE)
George Street / Denham Street	3	23,000	0.72
Queensland Average (Urban Signalised)			1.89

Jurewicz, C and Bennett, P (2008), "Casualty Crash Rates for Australian Jurisdictions", Australasian Road Safety Research, Policing and Education Conference, Adelaide, South Australia

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

We have undertaken a review of the proposed electronic sign located at 102 Denham Street, Rockhampton. The impact of the sign has been assessed in terms of traffic safety and driver distraction. The main points to note are:

- the sign will be located to face northbound and southbound on George Street, and eastbound traffic on Denham Street
- the sign is located within a restriction notice area, as per TMR's RAM
- the sign is unlikely to pose as a hazard to traffic as it is not within a driver's field of vision to the primary or secondary signals of the adjacent intersection and is located within a low-speed urban environment.
- adequate advance visibility is provided to view the sign
- traffic signals are fitted with target boards, consistent with TMR's RAM
- the adjacent intersection has a low KSI rate of one
- recent crash data suggests there are no atypical safety issues at this location

5.2 Recommendations

It is recommended that:

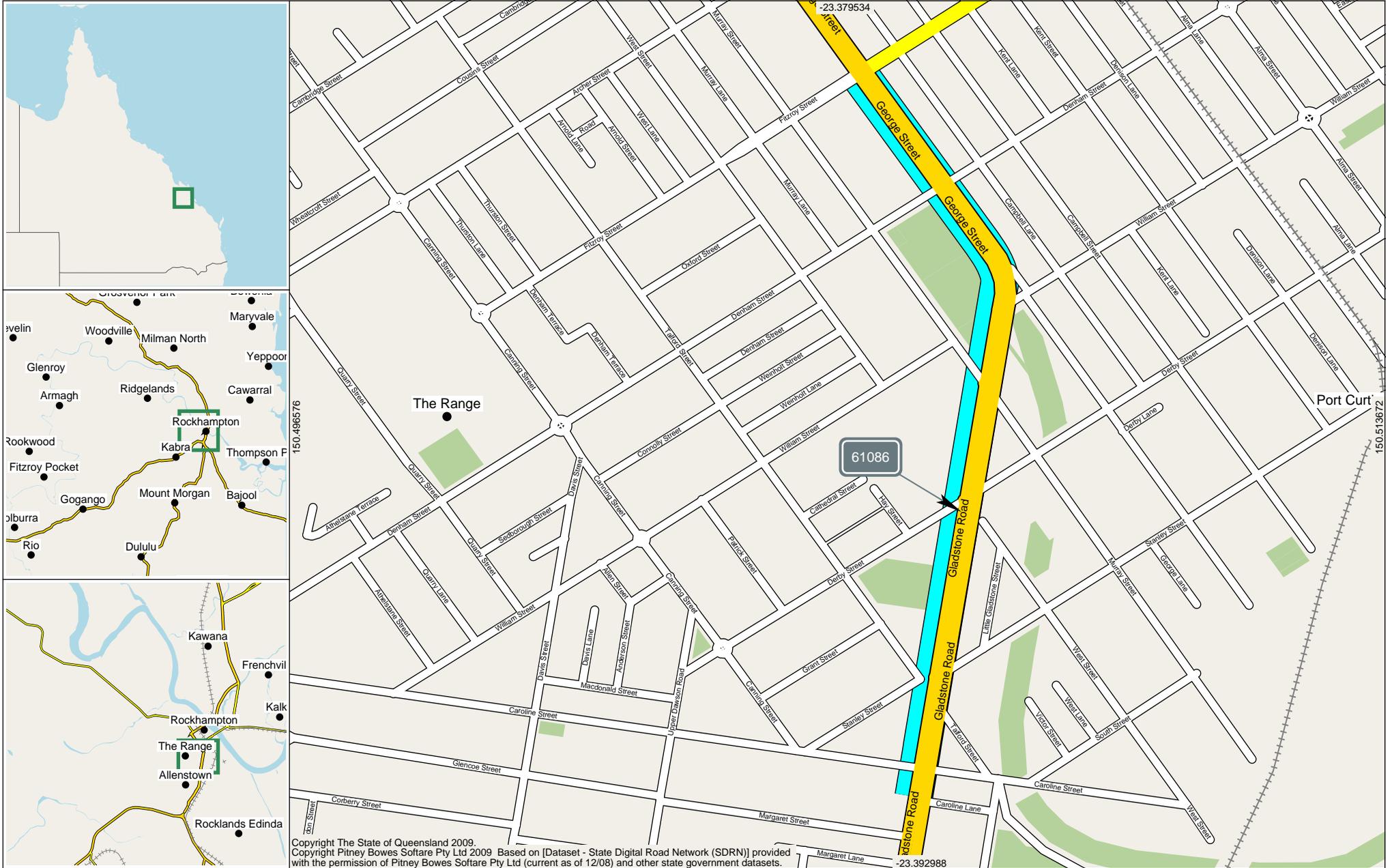
- the sign display one static image at a time and has a dwell time of 10 seconds
- the electronic sign support be certified as being structurally sufficient in accordance with the Building Act 1975
- the displayed images are easily interpreted
- the displayed images cannot be confused with any traffic signs or devices
- the displayed images do not direct traffic to 'stop' or similar

In our professional opinion, the location of the proposed electronic advertising device has a below average crash rate. Therefore, is not expected to pose an unacceptable risk to traffic safety and operations provided the above recommendations are taken into account.

**APPENDIX A
TRAFFIC DATA**

AADT Segment Report

Area 404 - Fitzroy District Road Section 10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)
Road Segment from 119.737km to 121.051km Segment Site 61086 Traffic Year 2016 Data Collection Year 2016

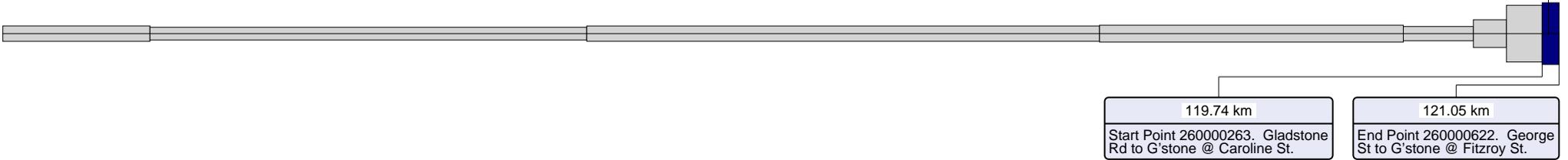


AADT Segment Report

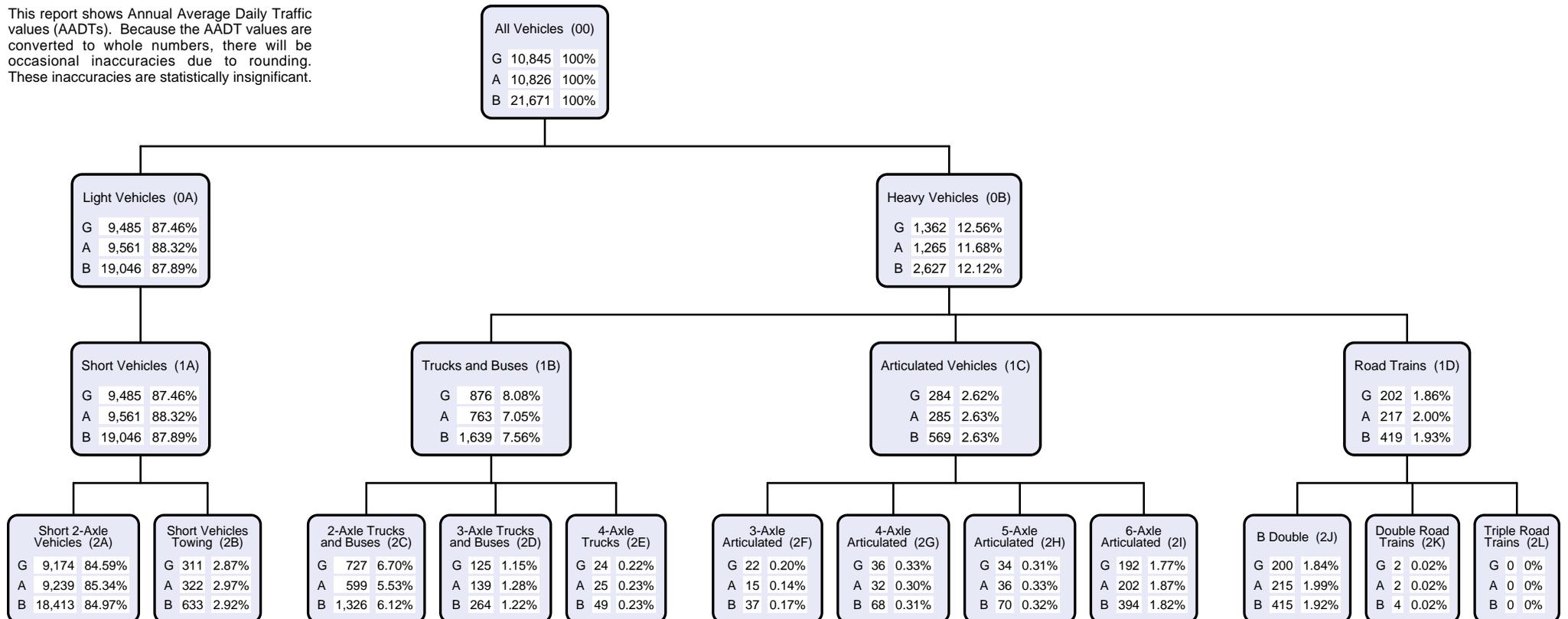
Area 404 - Fitzroy District Road Section 10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)
 Road Segment from 119.737km to 121.051km Segment Site 61086 Traffic Year 2016 Data Collection Year 2016

Site 61086. Point 260000791.
 Gladstone Rd Traffic Lights @ Derby St.
 120.22 km

The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.



AADT Segment Annual Volume Report

Provides summary data for the selected AADT Segment of a Road Section. Summary data is presented as both directional information and a combined bi-directional figure. The data is then broken down by Traffic Class, when available. The report also includes maps displaying the location of both the AADT Segment and the traffic count site.

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segments

The State declared road network is broken into Road Sections and then further broken down into AADT Segments. An AADT Segment is a sub-section of the declared road network where traffic volume is similar along the entire AADT Segment.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitan District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

AADT Values

AADT values are displayed by direction of travel as:

- G Traffic flow in gazetted direction
- A Traffic flow against gazetted direction
- B Traffic flow in both directions

Data Collection Year

Is the most recent year that data was collected at the data collection site.

Please Note:

Due to location and/or departmental policy, some sites are not counted every year.

Gazetted Direction

Is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazetted direction is from Brisbane to Gympie.

Maps

Display the selected location from a range of viewing levels, the start and end position details for the AADT Segment and the location of the traffic count site.

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazetted Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Segment Site

Is the unique identifier for the traffic count site representing the traffic flow within the AADT Segment.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Vehicle Class

Traffic is categorised as per the Austroads Vehicle Classification scheme. Traffic classes are in the following hierarchical format:

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A

1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D

1B = 2C + 2D + 2E

1C = 2F + 2G + 2H + 2I

1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles

2-Bin

0A Light vehicles

0B Heavy vehicles

4-Bin

1A Short vehicles

1B Truck or bus

1C Articulated vehicles

1D Road train

12-Bin

2A Short 2 axle vehicles

2B Short vehicles towing

2C 2 axle truck or bus

2D 3 axle truck or bus

2E 4 axle truck

2F 3 axle articulated vehicle

2G 4 axle articulated vehicle

2H 5 axle articulated vehicle

2I 6 axle articulated vehicle

2J B double

2K Double road train

2L Triple road train

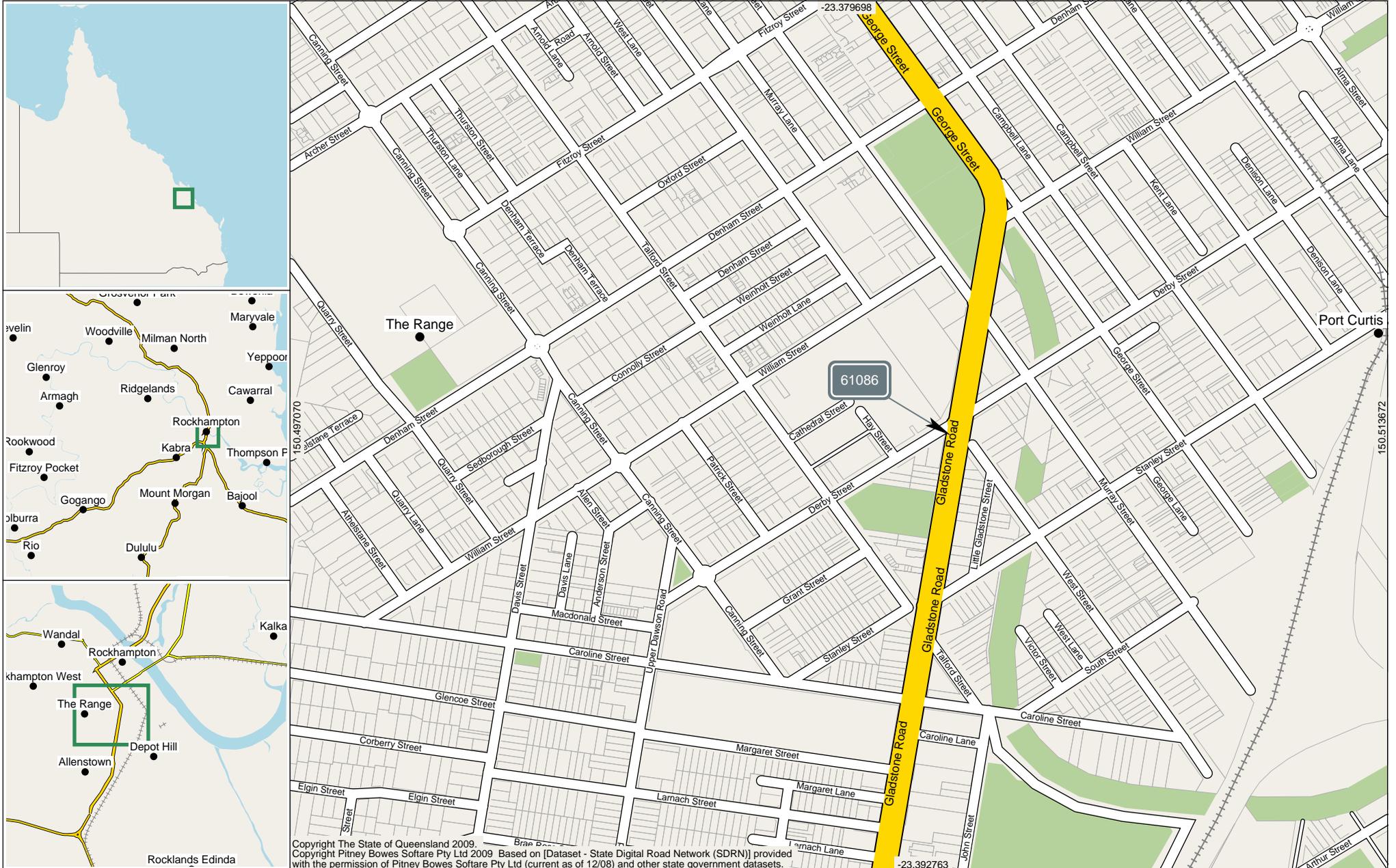
Copyright

Copyright The State of Queensland (Department of Transport and Main Roads) 2013

Licence

<http://creativecommons.org/licenses/by-nd/3.0/au>

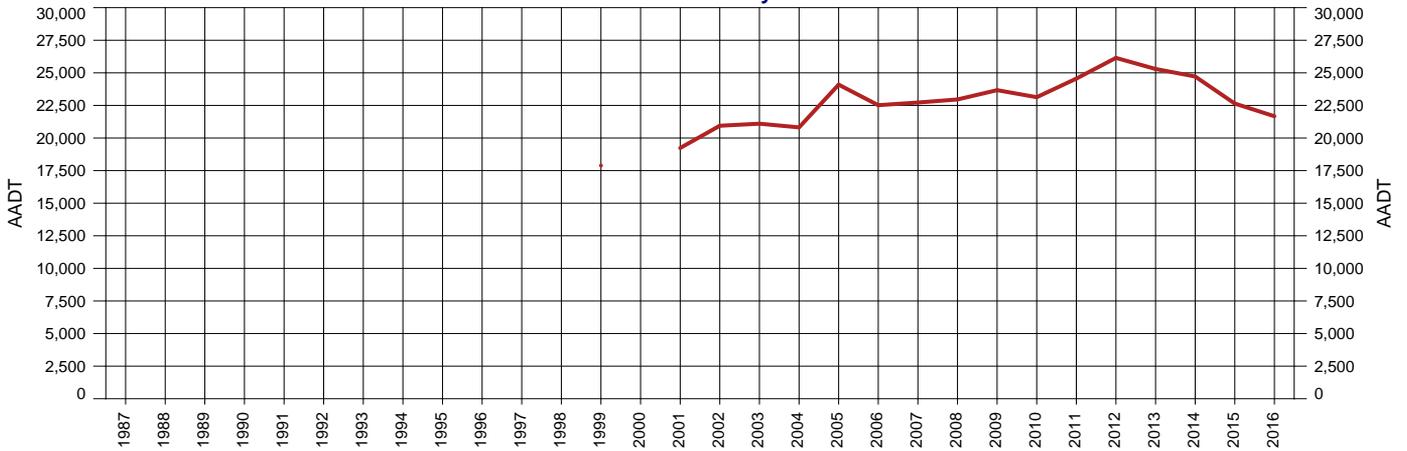
This work is licensed under a Creative Commons Attribution 3.0 Australia (CC BY-ND) Licence. To attribute this material, cite State of Queensland (Department of Transport and Main Roads) 2013



Area 404 - Fitzroy District
 Road Section 10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)
 Site 61086 - Bruce Hwy(Gladstone Rd) @ Derby St
 Thru Dist 120.225
 Type C - Coverage
 Stream TB - Bi-directional traffic flow

Year 2016 Growth last Year -4.29%
 AADT 21,671 Growth last 5 Yrs -3.83%
 Avg Week Day 22,537 Growth last 10 Yrs -1.14%
 Avg Weekend Day 17,553

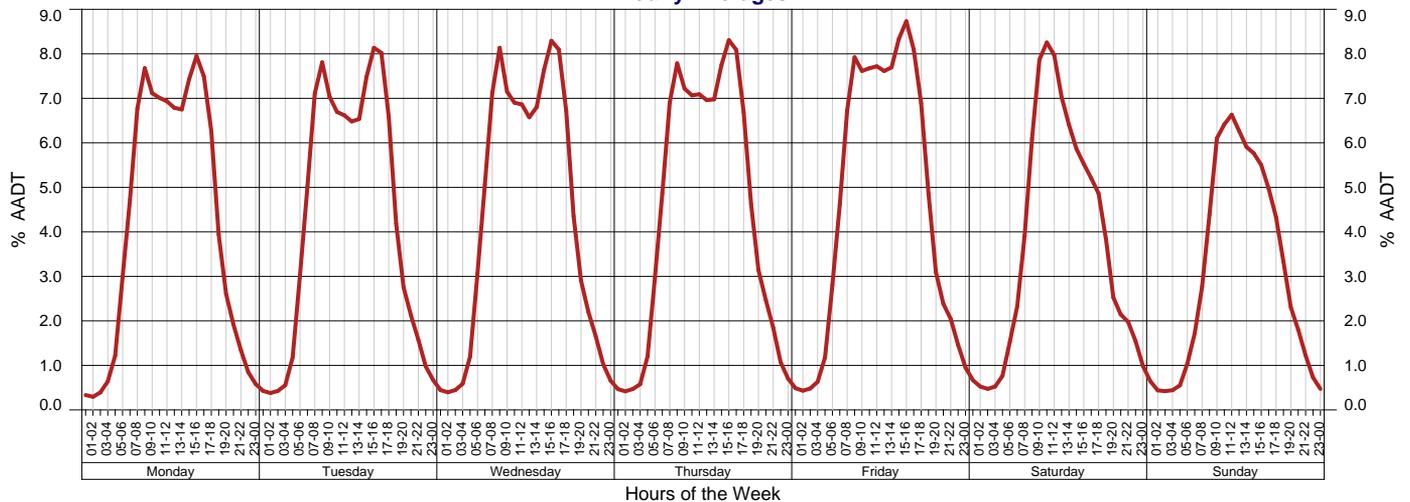
AADT History

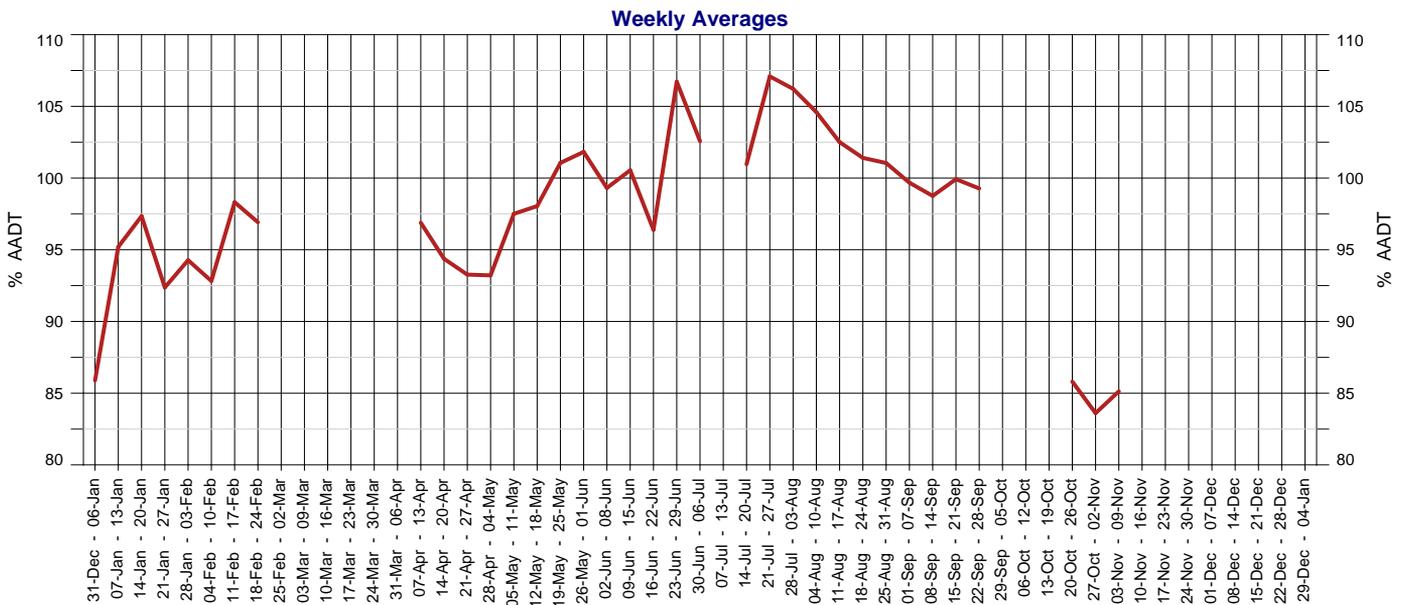
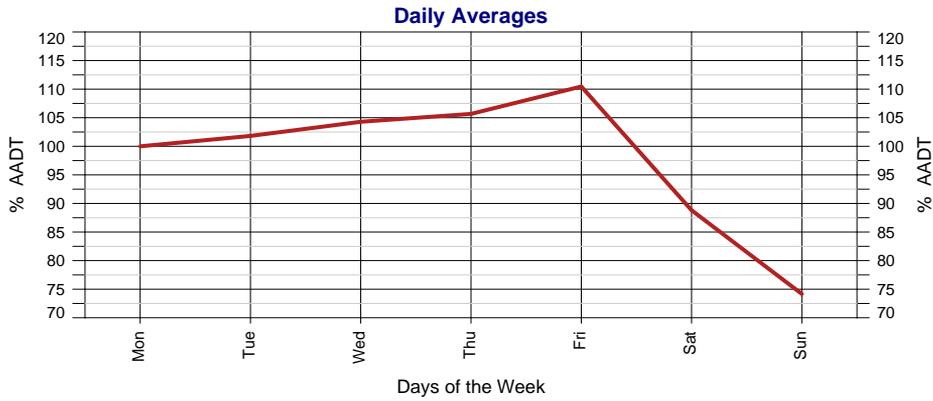


Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2016	21,671	-4.29%	-3.83%	-1.14%
2015	22,642	-8.40%	-2.11%	-0.55%
2014	24,718	-2.28%	0.67%	1.07%
2013	25,296	-3.25%	1.92%	1.69%
2012	26,146	6.47%	3.38%	2.44%
2011	24,558	6.16%	1.98%	1.95%
2010	23,132	-2.27%	-0.09%	
2009	23,670	3.10%	1.53%	2.28%
2008	22,958	1.04%	1.31%	
2007	22,722	0.91%	1.57%	
2006	22,518	-6.54%	2.51%	
2005	24,094	15.75%		
2004	20,816	-1.34%	2.52%	
2003	21,098	0.75%		
2002	20,941	8.87%		

Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2001	19,235			
2000				
1999	17,882			
1998				
1997				
1996				
1995				
1994				
1993				
1992				
1991				
1990				
1989				
1988				
1987				

Hourly Averages





2016 Calendar

January							February							March							April						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
				1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6					1	2	3
4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13	4	5	6	7	8	9	10
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20	11	12	13	14	15	16	17
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27	18	19	20	21	22	23	24
25	26	27	28	29	30	31	29							28	29	30	31				25	26	27	28	29	30	

May							June							July							August						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
						1			1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
30	31						6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
2	3	4	5	6	7	8	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
9	10	11	12	13	14	15	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
16	17	18	19	20	21	22	27	28	29	30				25	26	27	28	29	30	31	29	30	31				
23	24	25	26	27	28	29																					

September							October							November							December						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
					1	2	31					1	2					1	2	3					1	2	3
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	

Days on which traffic data was collected.

Annual Volume Report

Displays AADT history with hourly, daily and weekly patterns by Stream in addition to annual data for AADT figures with 1 year, 5 year and 10 year growth rates.

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT History

Displays the years when traffic data was collected at this count site.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitan District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Avg Week Day

Average daily traffic volume during the week days, Monday to Friday.

Avg Weekend Day

Average daily traffic volume during the weekend, Saturday and Sunday.

Calendar

Days on which traffic data was collected are highlighted in green.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

- G Traffic flowing in Gazettal Direction
- A Traffic flowing against Gazettal Direction
- B The combined traffic flow in both Directions

Growth Percentage

Represents the increase or decrease in AADT, using a exponential fit over the previous 1, 5 or 10 year period.

Hour, Day & Week Averages

The amount of traffic on the road network will vary depending on the time of day, the day of the week and the week of the year. The ebb and flow of traffic travelling through a site over a period of time forms a pattern. The Hour, Day and Week Averages are then used in the calculation of AADT.

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The unique identifier and description of the physical location of a traffic counting device. Sites are located at a Through Distance along a Road Section.

Stream

The lane in which the traffic is travelling in. This report provides data for the combined flow of traffic in both directions.

Thru Dist or TDist

The distance from the beginning of the Road Section, in kilometres.

Type

There are two types of traffic counting sites, Permanent and Coverage. Permanent means the traffic counting device is in place 24/7. Coverage means the traffic counting device is in place for a specified period of time.

Year

Is the current year for the report. Where an AADT Year record is missing a traffic count has not been conducted, for that year.

Copyright

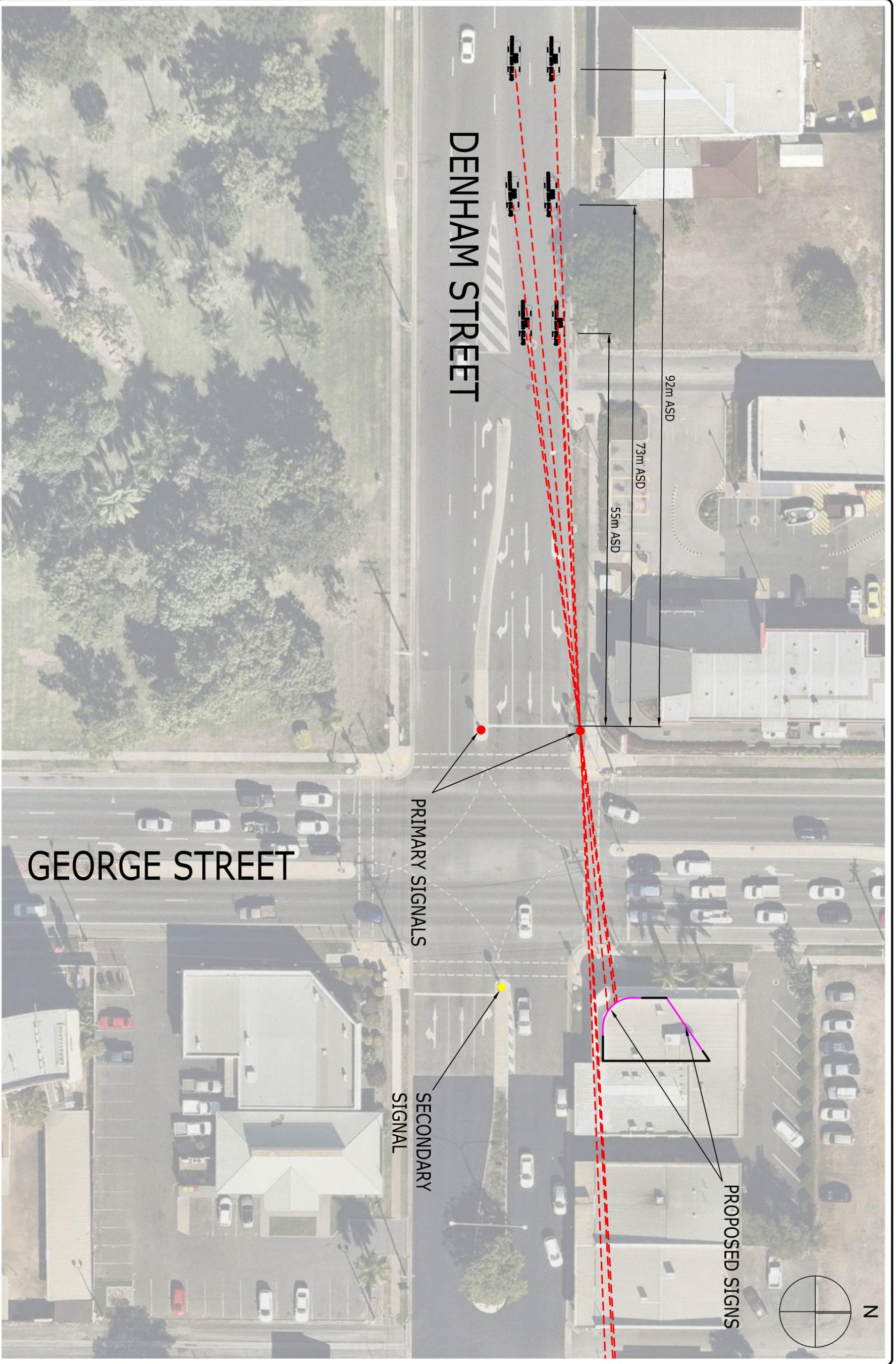
Copyright The State of Queensland (Department of Transport and Main Roads) 2013

Licence

<http://creativecommons.org/licenses/by-nd/3.0/au>

This work is licensed under a Creative Commons Attribution 3.0 Australia (CC BY-ND) Licence. To attribute this material, cite State of Queensland (Department of Transport and Main Roads) 2013

**APPENDIX B
DRIVER'S LINE OF SIGHT**



DENHAM STREET

GEORGE STREET

PROPOSED SIGNS

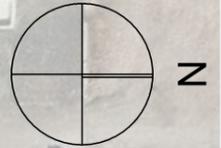
SECONDARY SIGNAL

PRIMARY SIGNALS

92m ASD

73m ASD

55m ASD

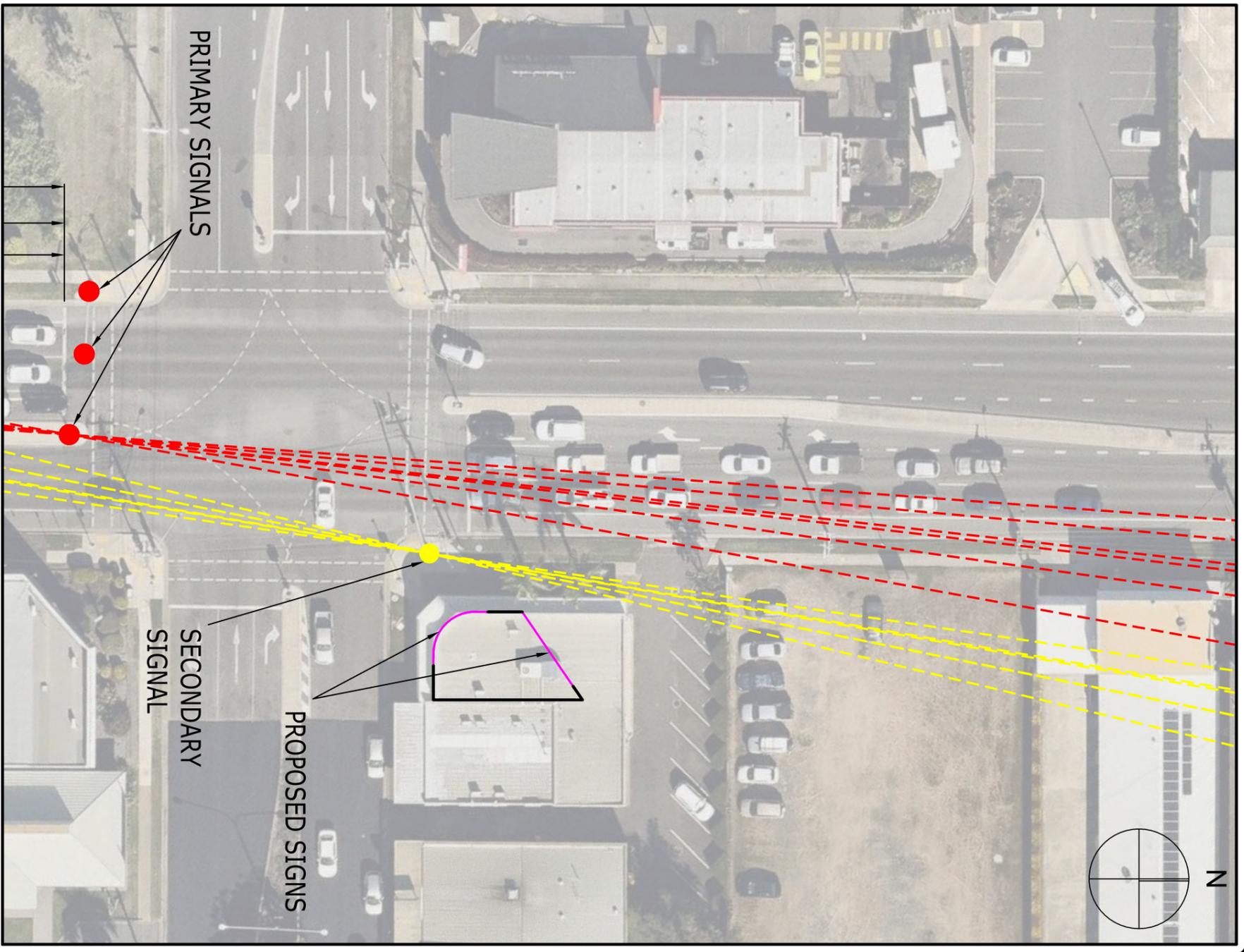
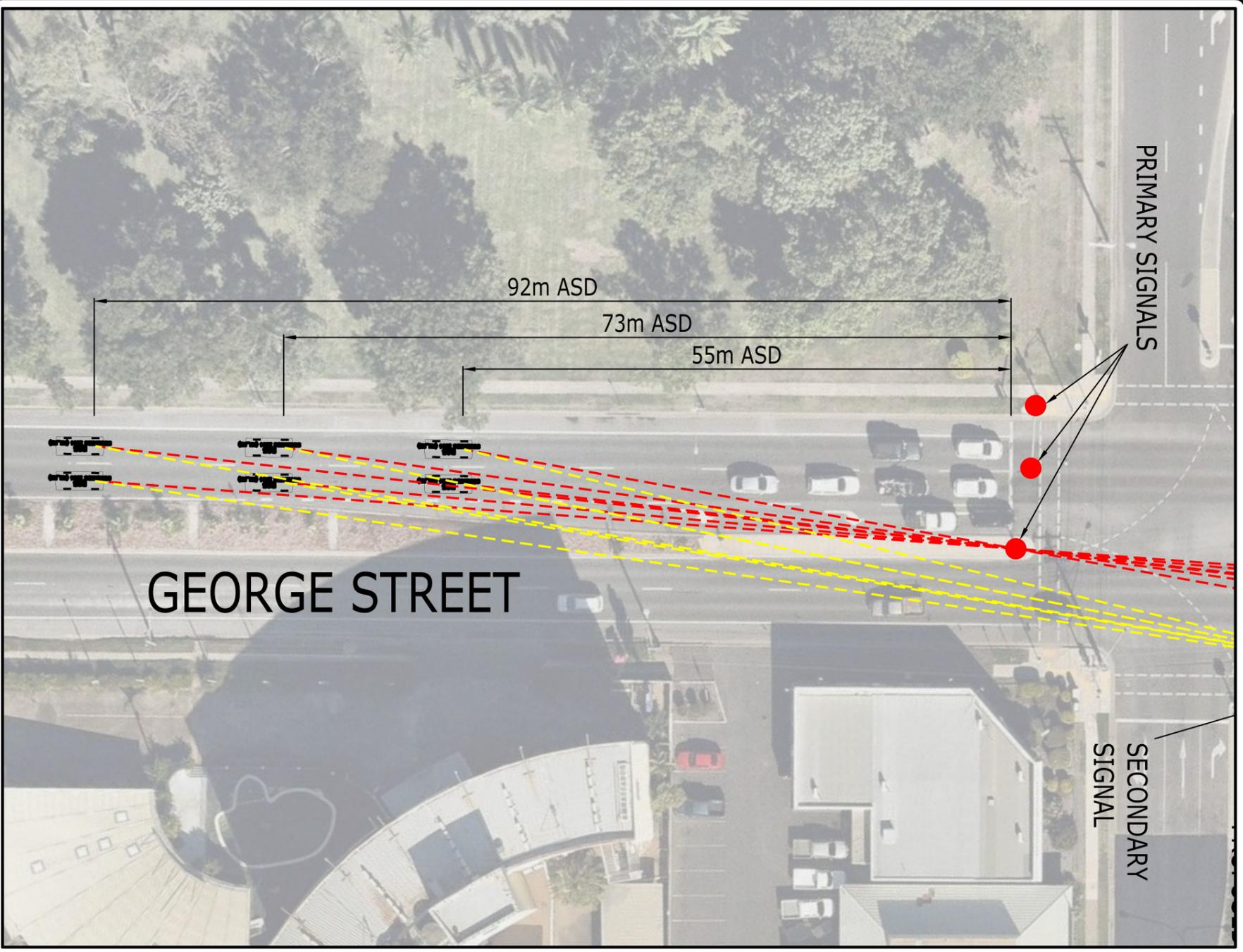


PEKOL TRAFFIC & TRANSPORT
 ABN 96 067 593 962
 WWW.PTT.COM.AU
 P 07 3839 6771
 Level G 67 St Pauls Tee Spring Hill Q 4000

REV.	AMENDMENTS	DNR	DATE

PROJECT TITLE:	102 DENHAM STREET SIGN
DRAWING TITLE:	DRIVERS FIELD OF VISION - EASTBOUND

CLIENT:	ESPIN CAPITAL		
DATE:	18/07/18	SCALE:	1:500
DRAWING NO.:	18-403/01	REV:	A
		DRAWN:	CG
		APPROVED:	JPG
		JOB NO.:	18-403




PEKOL TRAFFIC & TRANSPORT
 P 07 3839 6771 WWW.PTT.COM.AU
 Level G 67 St Pauls Tee Spring Hill Q 4000

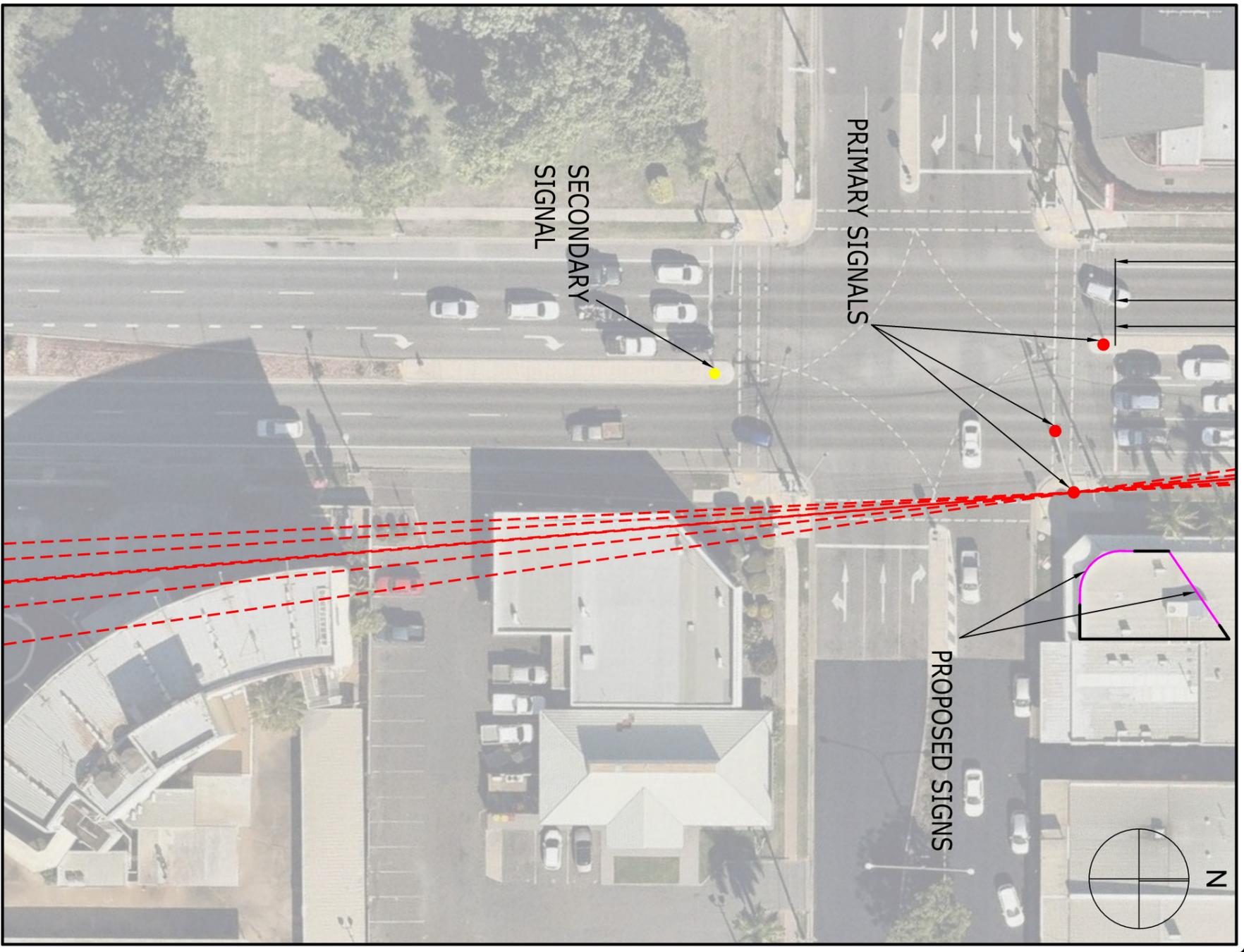
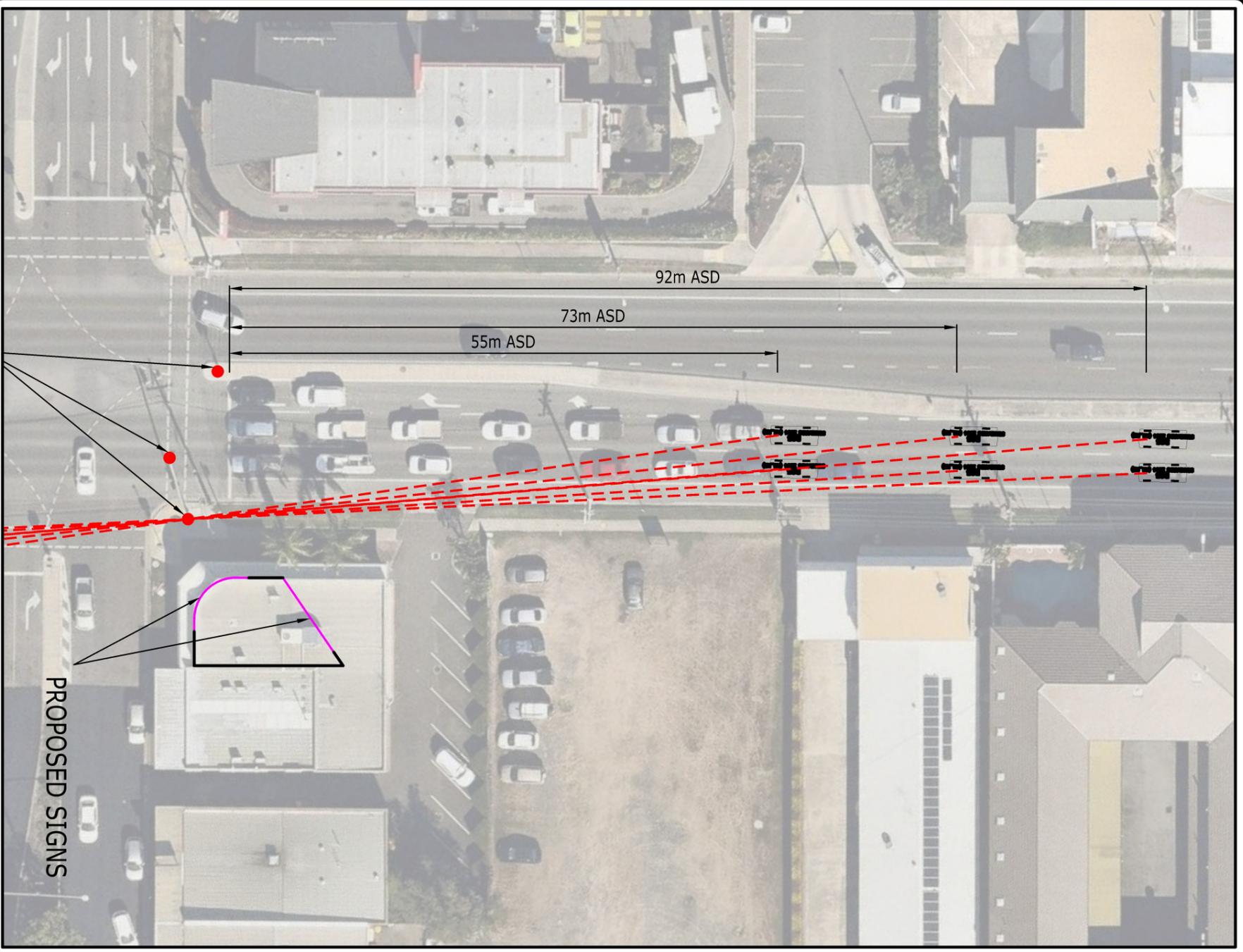
REV.	AMENDMENTS	DRN	DATE

PROJECT TITLE:
102 DENHAM STREET SIGN

DRAWING TITLE:
DRIVER'S FIELD OF VISION - NORTHBOUND

CLIENT:
ESPIN CAPITAL

DATE: 18/07/18	SCALE: 1:500	DRAWN: CG	APPROVED: JPG
DRAWING NO. 18-403/02	REV. A	JOB NO. 18-403	




PEKOL TRAFFIC & TRANSPORT
 P 07 3839 6771 ABN 96 067 593 962
 WWW.PTT.COM.AU
 Level G 67 St Pauls Tee Spring Hill Q 4000

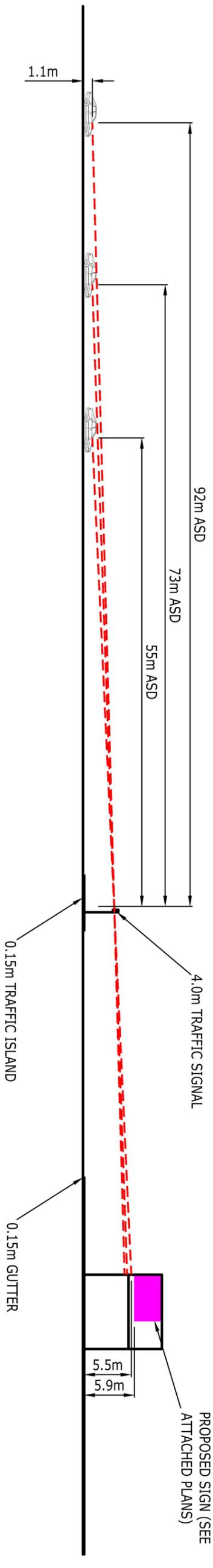
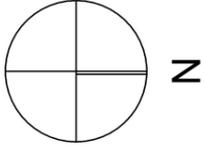
REV.	AMENDMENTS	DRN	DATE

PROJECT TITLE:
102 DENHAM STREET SIGN

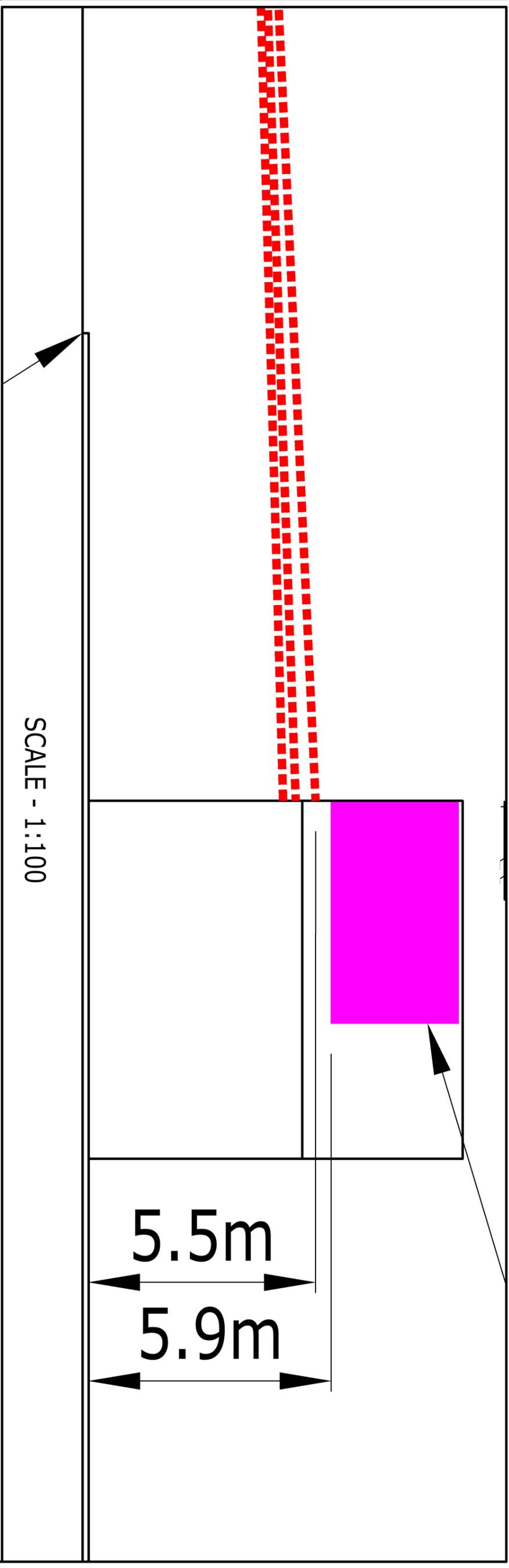
DRAWING TITLE:
DRIVER'S FIELD OF VISION - SOUTHBOUND

CLIENT:
ESPIN CAPITAL

DATE: 18/07/18	SCALE: 1:500	DRAWN: CG	APPROVED: JPG
DRAWING NO. 18-403/03	REV. A	JOB NO. 18-403	



SCALE - 1:500



PTT
PEKOL TRAFFIC & TRANSPORT

PEKOL TRAFFIC & TRANSPORT
ABN 96 067 593 962
WWW.PTT.COM.AU
P 07 3839 6771
Level G 67 St Pauls Tee Spring Hill Q 4000

REV.	AMENDMENTS	DRN	DATE

PROJECT TITLE:
102 DENHAM STREET SIGN

DRAWING TITLE:
EASTBOUND ELEVATION DENHAM STREET

CLIENT: ESPIN CAPITAL

DATE: 18/07/18	SCALE: AS SPECIFIED	DRAWN: CG	APPROVED: JPG
DRAWING NO. 18-403/04	REV. A	JOB NO. 18-403	