From: Planz Town Planning
Sent: 16 Mar 2018 18:17:22 +1000
To: Info (Shared);Natacha Jones
Subject: 1 of 2 - Planz Town Planning submit new development application for Material Change of Use - Service Station - Lots 701 and 702 M3565 - Byrnes Street, Mareeba - Porkdig Pty Ltd
Attachments: 2. DA form 1 - 81735 - MCU - Byrnes Street, Mareeba.pdf, 3. 81735 MCU Service Station planning report 255 Byrne St as Lodged 19 March 2018.pdf, Appendix 5 155-001-001R Traffic Impact Assessment Rev B.PDF, 1. P81735 Cover Letter MCU - Service Station, Byrne Street, Mareeba.pdf

Hello Info@ and Natacha

This is email 1 of 2 containing material for the new development application for service station at Byrnes St.

The relevant information for the application is:

Applicant: Porkdig Pty Ltd. c/- Planz Town Planning
Mailing address: PO Box 181 Edge Hill, Cairns QLD 4870
Landowner: Porkdig Pty Ltd.
Application Fee: 7,530.00 - please contact me and I will pay by credit card.

The attachments are:

1. P81735 Cover Letter MCU - Service Station, Byrne Street, Mareeba.pdf
2. DA form 1 - 81735 - MCU - Byrnes Street, Mareeba.pdf
3. 81735 MCU Service Station planning report 255 Byrne St as Lodged 19 March 2018.pdf
Appendix 5 155-001-001R Traffic Impact Assessment Rev B.PDF

Kind regards

Susie Lord
Planz Town Planning
Ph: 07 4041 0445

PO Box 181
Edge Hill QLD 4870

www.planztp.com

DA Form 1 – Development application details

Approved form (version 1.0 effective 3 July 2017) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development**, use this form (*DA Form 1*) **and** parts 4 to 6 of *DA Form 2 – Building work details.*

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008.* For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: *All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).*

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) *(individual or company full name)*	Porkdig Pty. Ltd.
Contact name *(only applicable for companies)*	C/- Planz Town Planning
Postal address *(P.O. Box or street address)*	PO Box 181
Suburb	Edge Hill
State	QLD
Postcode	4870
Country	Australia
Contact number	07 4041 0445
Email address *(non-mandatory)*	info@planztp.com
Mobile number *(non-mandatory)*	0447 323 384
Fax number *(non-mandatory)*	
Applicant's reference number(s) *(if applicable)*	P81735

2) Owner's consent

2.1) Is written consent of the owner required for this development application?

☐ Yes – the written consent of the owner(s) is attached to this development application
☒ No – proceed to 3)

PART 2 – LOCATION DETAILS

3) Location of the premises *(complete 3.1) or 3.2), and 3.3) as applicable)*

***Note**: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.*

3.1) Street address and lot on plan

☒ Street address **AND** lot on plan (*all lots must be listed*), ***or***

☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises *(appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon; all lots must be listed).*

a)	Unit No.	Street No.	Street Name and Type	Suburb
		255	Byrnes Street	Mareeba
	Postcode	Lot No.	Plan Type and Number *(e.g. RP, SP)*	Local Government Area(s)
	4880	702	M3565	Mareeba Shire Council
b)	Unit No.	Street No.	Street Name and Type	Suburb
		1	Herberton Street	Mareeba
	Postcode	Lot No.	Plan Type and Number *(e.g. RP, SP)*	Local Government Area(s)
	4880	701	M3565	Mareeba Shire Council

3.2) Coordinates of premises *(appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)*

***Note**: Place each set of coordinates in a separate row. Only one set of coordinates is required for this part.*

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) *(if applicable)*
		☐ WGS84 ☐ GDA94 ☐ Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) *(if applicable)*
		☐ 54 ☐ 55 ☐ 56	☐ WGS84 ☐ GDA94 ☐ Other:	

3.3) Additional premises

☐ Additional premises are relevant to this development application and their details have been attached in a schedule to this application

☒ Not required

4) Identify any of the following that apply to the premises and provide any relevant details

☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

☐ In a tidal area

Name of local government for the tidal area *(if applicable)*:

Name of port authority for tidal area *(if applicable)*:

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

☒ Listed on the Environmental Management Register (EMR) under the *Environmental Protection Act 1994*

EMR site identification: Lot 701 M3565

☐ Listed on the Contaminated Land Register (CLR) under the *Environmental Protection Act 1994*

CLR site identification:

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see DA Forms Guide.

☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application

☒ No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

☒ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

☒ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☐ Code assessment ☒ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)*:

Material change of use for a Service Station, Food and Drink Outlet and Advertising Devices

e) Relevant plans

***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms guide: Relevant plans.*

☒ Relevant plans of the proposed development are attached to the development application

6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

☒ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

☒ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☐ Code assessment ☒ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)*

Material change of use for a food and drink outlet and advertising devices

e) Relevant plans

***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*

☒ Relevant plans of the proposed development are attached to the development application

6.3) Additional aspects of development

☒ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

☐ Not required

Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	☒ Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	☐ Yes – complete division 2
Operational work	☐ Yes – complete division 3
Building work	☐ Yes – complete *DA Form 2 – Building work details*

Division 1 – Material change of use

***Note**: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.*

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition *(include each definition in a new row)*	Number of dwelling units *(if applicable)*	Gross floor area (m^2) *(if applicable)*
Service station	Service Station	N/A	Approx.: 172m^2
Fast food outlet with drive through	Food and drink outlet	N/A	Approx.: 143m^2

8.2) Does the proposed use involve the use of existing buildings on the premises?
☐ Yes
☒ No

Division 2 – Reconfiguring a lot

***Note**: This division is only required to be completed if any part of the development application involves reconfiguring a lot.*

9.1) What is the total number of existing lots making up the premises?
One

9.2) What is the nature of the lot reconfiguration? *(tick all applicable boxes)*	
☐ Subdivision *(complete 10))*	☐ Dividing land into parts by agreement *(complete 11))*
☐ Boundary realignment *(complete 12))*	☐ Creating or changing an easement giving access to a lot from a construction road *(complete 13))*

10) Subdivision 10.1) For this development, how many lots are being created and what is the intended use of those lots:				
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?	
☐ Yes – provide additional details below ☐ No	
How many stages will the works include?	
What stage(s) will this development application apply to?	

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?				
Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment

12.1) What are the current and proposed areas for each lot comprising the premises?

Current lot		Proposed lot	
Lot on plan description	Area (m^2)	Lot on plan description	Area (m^2)

12.2) What is the reason for the boundary realignment?

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? *(attach schedule if there are more than two easements)*

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? *(e.g. pedestrian access)*	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

***Note**: This division is only required to be completed if any part of the development application involves operational work.*

14.1) What is the nature of the operational work?

- ☐ Road work
- ☐ Drainage work
- ☐ Landscaping
- ☐ Stormwater
- ☐ Earthworks
- ☐ Signage
- ☐ Water infrastructure
- ☐ Sewage infrastructure
- ☐ Clearing vegetation
- ☐ Other – please specify:

14.2) Is the operational work necessary to facilitate the creation of new lots? *(e.g. subdivision)*

- ☐ Yes – specify number of new lots:
- ☒ No

14.3) What is the monetary value of the proposed operational work? *(include GST, materials and labour)*

$

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application

Mareeba Shire Council

16) Has the local government agreed to apply a superseded planning scheme for this development application?

- ☐ Yes – a copy of the decision notice is attached to this development application
- ☐ Local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- ☒ No

PART 5 – REFERRAL DETAILS

17) Do any aspects of the proposed development require referral for any referral requirements?

***Note**: A development application will require referral if prescribed by the* Planning Regulation 2017.

- ☐ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **chief executive of the Planning Regulation 2017:**

- ☐ Clearing native vegetation
- ☒ Contaminated land *(unexploded ordnance)*

- ☐ Environmentally relevant activities (ERA) *(only if the ERA have not been devolved to a local government)*
- ☐ Fisheries – aquaculture
- ☐ Fisheries – declared fish habitat area
- ☐ Fisheries – marine plants
- ☐ Fisheries – waterway barrier works
- ☐ Hazardous chemical facilities
- ☐ Queensland heritage place *(on or near a Queensland heritage place)*
- ☐ Infrastructure – designated premises
- ☐ Infrastructure – state transport infrastructure
- ☒ Infrastructure – state transport corridors and future state transport corridors
- ☐ Infrastructure – state-controlled transport tunnels and future state-controlled transport tunnels
- ☐ Infrastructure – state-controlled roads
- ☐ Land within Port of Brisbane's port limits
- ☐ SEQ development area
- ☐ SEQ regional landscape and rural production area or SEQ Rural living area – community activity
- ☐ SEQ regional landscape and rural production area or SEQ Rural living area – indoor recreation
- ☐ SEQ regional landscape and rural production area or SEQ Rural living area – residential development
- ☐ SEQ regional landscape and rural production area or SEQ Rural living area – urban activity
- ☐ Tidal works or works in a coastal management district
- ☐ Urban design
- ☐ Water-related development – taking or interfering with water
- ☐ Water-related development – removing quarry material *(from a watercourse or lake)*
- ☐ Water-related development – referable dams
- ☐ Water-related development – construction of new levees or modification of existing levees *(category 2 or 3 levees only)*
- ☐ Wetland protection area

Matters requiring referral to the **local government:**

- ☐ Airport land
- ☐ Environmentally relevant activities (ERA) (*only if the ERA have been devolved to local government)*
- ☐ Local heritage places

Matters requiring referral to the **chief executive of the distribution entity or transmission entity:**

- ☐ Electricity infrastructure

Matters requiring referral to:

- The **chief executive of the holder of the licence**, if not an individual
- The **holder of the licence**, if the holder of the licence is an individual

- ☐ Oil and gas infrastructure

Matters requiring referral to **the Brisbane City Council:**

- ☐ Brisbane core port land

Matters requiring referral to the **Minister under the Transport Infrastructure Act 1994:**

- ☐ Brisbane core port land
- ☐ Strategic port land

Matters requiring referral to the **relevant port operator:**

- ☐ Brisbane core port land (below high-water mark and within port limits)

Matters requiring referral to the **chief executive of the relevant port authority:**

- ☐ Land within limits of another port

Matters requiring referral to the **Gold Coast Waterways Authority:**

- ☐ Tidal works, or development in a coastal management district in Gold Coast waters

Matters requiring referral to the **Queensland Fire and Emergency Service:**

- ☐ Tidal works, or development in a coastal management district

18) Has any referral agency provided a referral response for this development application?		
☐ Yes – referral response(s) received and listed below are attached to this development application ☒ No		
Referral requirement	Referral agency	Date of referral response
Identify and describe any changes made to the proposed development application that was the subject of the referral response and the development application the subject of this form, or include details in a schedule to this development application *(if applicable)*.		

PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules

☒ I agree to receive an information request if determined necessary for this development application

☐ I do not agree to accept an information request for this development application

***Note**: By not agreeing to accept an information request I, the applicant, acknowledge:*

- *that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties*
- *Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.*

Further advice about information requests is contained in the DA Forms Guide.

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? *(e.g. a preliminary approval)*

☐ Yes – provide details below or include details in a schedule to this development application

☒ No

List of approval/development application references	Reference number	Date	Assessment manager
☐ Approval ☐ Development application			
☐ Approval ☐ Development application			

21) Has the portable long service leave levy been paid? *(only applicable to development applications involving building work or operational work)*

☐ Yes – the yellow local government/private certifier's copy of the receipted QLeave form is attached to this development application

☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid

☒ Not applicable

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

☐ Yes – show cause or enforcement notice is attached

☒ No

23) Further legislative requirements

Environmentally relevant activities

23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

☐ Yes – the required attachment (form EM941) for an application for an environmental authority accompanies this development application, and details are provided in the table below

☒ No

***Note**: Application for an environmental authority can be found by searching "EM941" at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.*

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

☐ Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a **hazardous chemical facility**?

☐ Yes – *Form 69: Notification of a facility exceeding 10% of schedule 15 threshold* is attached to this development application

☒ No

***Note**: See www.justice.qld.gov.au for further information.*

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

☐ Yes – this development application is accompanied by written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

***Note**: See www.qld.gov.au for further information.*

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

***Note**: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.*

Koala conservation

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work within an assessable development area under Schedule 10, Part 10 of the Planning Regulation 2017?

☐ Yes

☒ No

***Note**: See guidance materials at www.ehp.qld.gov.au for further information.*

Water resources

23.6) Does this development application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, taking overland flow water or waterway barrier works**?

☐ Yes – the relevant template is completed and attached to this development application

☒ No

***Note**: DA templates are available from www.dilgp.qld.gov.au.*

23.7) Does this application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water** under the *Water Act 2000*?

☐ Yes – I acknowledge that a relevant water authorisation under the *Water Act 2000* may be required prior to commencing development

☒ No

***Note**: Contact the Department of Natural Resources and Mines at www.dnrm.qld.gov.au for further information.*

Marine activities

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?**

☐ Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*

☒ No

***Note**: See guidance materials at www.daf.qld.gov.au for further information.*

Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000?*

☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development

☒ No

***Note**: Contact the Department of Natural Resources and Mines at www.dnrm.qld.gov.au for further information.*

Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995?*

☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development

☒ No

***Note**: Contact the Department of Environment and Heritage Protection at www.ehp.qld.gov.au for further information.*

Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the Water Supply Act)?

☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the Water Supply Act is attached to this development application

☒ No

***Note**: See guidance materials at www.dews.qld.gov.au for further information.*

Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

☐ Yes – the following is included with this development application:

- ☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work *(only required if application involves prescribed tidal work)*
- ☐ A certificate of title

☒ No

***Note**: See guidance materials at www.ehp.qld.gov.au for further information.*

Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

☐ Yes – details of the heritage place are provided in the table below

☒ No

***Note**: See guidance materials at www.ehp.qld.gov.au for information requirements regarding development of Queensland heritage places.*

Name of the heritage place:		Place ID:	

Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*

☒ No

Decision under section 62 of the *Transport Infrastructure Act 1994*

23.15) Does this development application involve new or changed access to a state-controlled road?

☒ Yes - this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)

☐ No

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist	
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 ***Note**: See the Planning Regulation 2017 for referral requirements*	☒ Yes
If building work is associated with the proposed development, Parts 4 to 6 of *Form 2 – Building work details* have been completed and attached to this development application	☐ Yes ☒ Not applicable
Supporting information addressing any applicable assessment benchmarks is with development application ***Note**: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see DA Forms Guide: Planning Report Template.*	☒ Yes
Relevant plans of the development are attached to this development application ***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*	☒ Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued *(see 21))*	☐ Yes ☒ Not applicable

25) Applicant declaration

☒ By making this development application, I declare that all information in this development application is true and correct

☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

***Note**: It is unlawful to intentionally provide false or misleading information.*

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application.
All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.
Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002.*

PART 9 – FOR OFFICE USE ONLY

Date received: | | Reference number(s): | |

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment *Note: For completion by assessment manager if applicable*	
Description of the work	
QLeave project number	
Amount paid ($)	
Date paid	
Date receipted form sighted by assessment manager	
Name of officer who sighted the form	

The *Planning Act 2016,* the Planning Regulation 2017 and the DA Rules are administered by the Department of Infrastructure, Local Government and Planning. This form and all other required development application materials should be sent to the assessment manager.

Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

a) What is the type of development? *(tick only one box)* ☐ Material change of use ☐ Reconfiguring a lot ☒ Operational work ☐ Building work
b) What is the approval type? *(tick only one box)* ☒ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval
c) What is the level of assessment? ☐ Code assessment ☒ Impact assessment *(requires public notification)*
d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)*:
2 x pylon signs and 4 x fascia signs
e) Relevant plans ***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.* ☒ Relevant plans of the proposed development are attached to the development application

APPLICATION FOR A DEVELOPMENT PERMIT

Material Change of Use: Service Station, Food Drink Outlet & Advertising Devices

1 Herberton St & 255 Byrnes St, Mareeba

19 MARCH 2018

PREPARED BY

PLANZ TOWN PLANNING PTY LTD

on behalf of

PORKDIG PTY LTD

CREATING GREAT PLACES FOR PEOPLE

CONTENTS

APPLICATION SUMMARY

Application Details	
Proposal	Material change of use for: 1. Service Station 2. Food and Drink Outlet 3. Advertising Devices
Applicant	Porkdig Pty Ltd
Property Owner	Porkdig Pty Ltd
Address	1 Herberton St & 255 Byrnes St, Mareeba
Real Property Description	Lot 701 M3565 (1 Herberton St) Lot 702 M3565 (255 Byrnes St)
Lot Size	Lot 701: 1,019m^2 Lot 702: 1,012m^2
Zone	Centre Zone
Current Use	Lot 701: Service Station Lot 702: Residential dwelling
Level of Assessment	Impact
Local Plan	Mareeba Local Plan - Precinct A – Town Centre Core
Applicable Codes	Strategic Framework Centre zone code Mareeba local plan code Commercial activities code Industrial activities code Airport environs overlay code Advertising devices code Landscaping code Parking and access code Works services and Infrastructure code
Referral Triggers	Schedule 10, Part 9, Division 4, Subdivision 2: ▪ Table 4 - Item 1 - Material change of use of premises near a State transport corridor.

1.0 INTRODUCTION

The application is for the construction of a single storey, service station and food and drink outlet over 1 Herberton St (Lot 701 M3565) St & 255 Byrnes St (702 M3565) Mareeba. This development will include:

- The demolition of the existing service station at 1 Herberton St
- The demolition of the existing dwelling at 255 Byrnes St
- The amalgamation the two lots to create a total site area of 2,031m^2
- A new service station with ancillary shop (approx. 172m^2)
- A food and drink outlet with drive through (approx. 143m^2)
- Ancillary car wash facility
- Advertising devices.

The proposed uses of Service Station and Food and Drink outlet are impact assessable in the Centre zone. The Planning Scheme defines the uses as follows:

> ***Service station:*** *Premises used for the sale of fuel including petrol, liquid petroleum gas, automotive distillate and alternative fuels.*
> *The use may include, where ancillary, a shop, food and drink outlet, maintenance, repair servicing and washing of vehicles, the hire of trailers, and supply of compressed air.*
>
> ***Food and drink outlet:*** *Premises used for preparation and sale of food and drink to the public for consumption on or off the site. The use may include the ancillary sale of liquor for consumption on site*
> *Includes: Bistro, café, coffee shop, drive-through facility, kiosk, milk bar, restaurant, snack bar, takeaway, tea room.*

The development has been architecturally designed for the site in consultation with the future occupants. In particular, the development:

- Supports the viability of the hierarchy and network of activity centres and maintains Mareeba as the major regional activity centre, which accommodates the most significant concentrations of regional-scale business, retail, entertainment etc.

- Promotes a mix of commercial, business, professional, accommodation and retail activities
- Meets the needs of the local community, local economy, visitors and tourists through safe, accessible and convenient points of service
- Is situated in an accessible, well-connected location with access to cycling and pedestrian networks
- Is designed to have minimal impact on the character, amenity and environment of the surrounding area
- Has negligible impact on the natural environment or the environmental values of the area.

The proposed service station will be a Mobil franchise, operated by Trinity Petroleum Services Pty Ltd (Trinity Petroleum). Trinity Petroleum is a locally owned and operated business with a strong customer base, supplying wholesale and retail fuel from the Torres Strait Islands in the north, Gladstone in the south and Mt Isa in the west for the last 36 years.

Trinity Petroleum's retail division includes 18 Mobil branded retail service station outlets located between Townsville and Cooktown.

Trinity Petroleum acknowledge our unique, biodiverse regional location, and has developed a strategy to convert 5 of the Mobil branded retail sites to E10, ethanol-based fuel.

The food and drink outlet will likely be occupied by a franchise that has not yet established in Mareeba Shire. The food and drink outlet will contribute to the diversity of food and drink options in Mareeba and the wider area.

2.0 THE SITE

The development will be located at 1 Herberton St & 255 Byrnes St, Mareeba (Lots 701 & 702 M3565) **Figure 1**. The combined site area will be 2,031m^2. The buildings and structures will be demolished to facilitate the proposed development i.e. the existing:

- 24-hour service station with ancillary shop and maintenance repair servicing (Lot 701)
- dwelling house and ancillary outbuildings (Lot 702).

The site is a corner lot, adjoined by two properties and located within the "Centre Zone". The site is situated due south of the 'heart' of the Mareeba town centre, as such the current area is in transition from residential to commercial/centre uses.

Figure 1: Aerial view of site.

The subject site is adjoined by 251 Byrnes Street, to the north, a furniture and appliance showroom. The showroom is constructed from masonry brick, built to the common boundary of Lot 702 and contains no openings on the adjoining (southern) elevation. The Mareeba Square shopping complex, containing a full-line supermarket is within 70m of the site (**Figure 2**).

The subject site is adjoined by 3 Herberton Street, to the east, a dwelling house with an outbuilding. At the closest point the dwelling is situated approximately 2m from the common boundary with Lot 701.

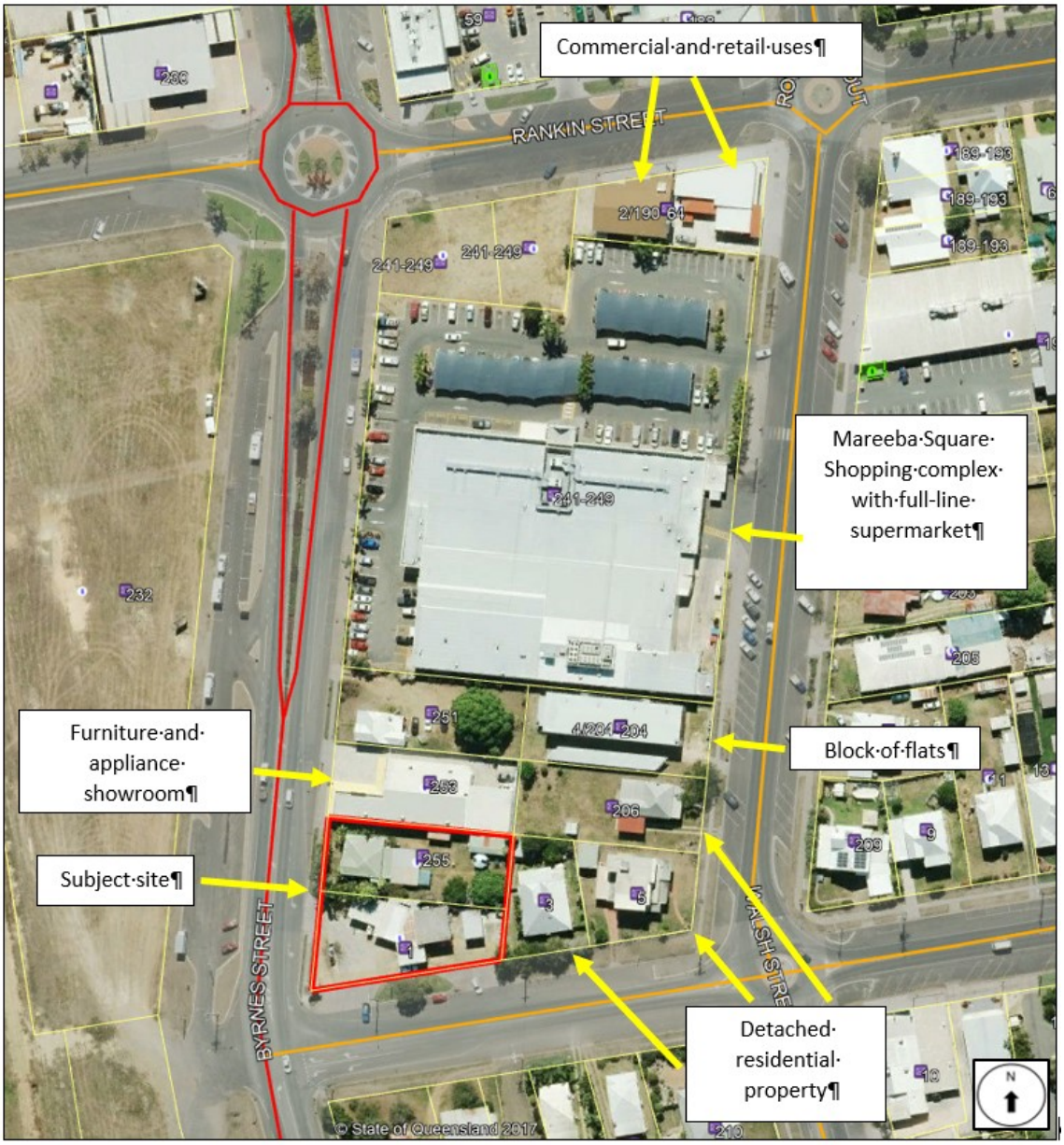


Figure 2: Aerial view of site and adjoining properties.

3.0 THE USE

3.1 Design and siting

The service station and food and drink outlet will be setback 29m Byrnes Street, and 4m to Herberton Street. These setbacks are a practical and expected outcome for this form of development and it is noted that buildings built to the road frontage are not common in this part of Byrnes Street.

The building will be setback 4.5m from the common boundary with the adjoining residential premises at 3 Herberton Street and the design addresses amenity, privacy and overlooking. It is noted that the driveway access and garage for 3 Herberton St are located on the common boundary with the subject site.

Compliance: The setback distances are established in the Centre zone code and the Local Plan code. The acceptable outcomes of these codes allow buildings to be built to the road frontage/s of the site. Side setbacks may also be 0m to side rear and front.

The development satisfies the Acceptable Measures as it is sited in a manner that considers and respects:

- the siting and use of adjoining premises
- access to sunlight and daylight for the site and adjoining sites
- privacy and overlooking
- opportunities for casual surveillance of adjoining public spaces
- appearance of building bulk
- relationship with pedestrian spaces
- makes efficient use of land
- is consistent with the bulk and scale of surrounding buildings
- appropriately balances built and natural features.

This part of the town centre core precinct is largely in transition from residential uses to centre uses. The proposed setbacks allow the service station function of the development to effectively take place.

The development makes efficient use of the land by capitalising on the existing service station use. The proposal is of a modest height and is consistent with the bulk and scale of surrounding buildings.

3.2 Hours of operation and staff

The proposed use is intended to be a 24-hour operation. The existing service station on Lot 701 currently runs a 24-hour operation. The applicant is looking to maintain the 24-hour sale of fuel and sundries. The food and drink outlet may operate 24 hours although it is likely that this aspect may typically close by 10pm, by the time many food premises are closed. The proposed operating hours are reasonable in the Centre zone, which is intended to diversity and grow the commercial base in Mareeba.

It is expected that in peak hours the food and drink outlet would employ approx. 6 full-time equivalent employees. It is expected that throughout the early morning and late evening, fewer employees will be required to manage a considerably lesser demand for food and beverage.

The service station would employ approximately 2 full-time equivalent employees to manage usual work hours and peak hours. The workforce would likely be reduced to one person in late evenings and early morning hours, due to lesser demand.

Figure 3 shows that the site is located within a 10 minute walk of the residential and employment centres of Mareeba.

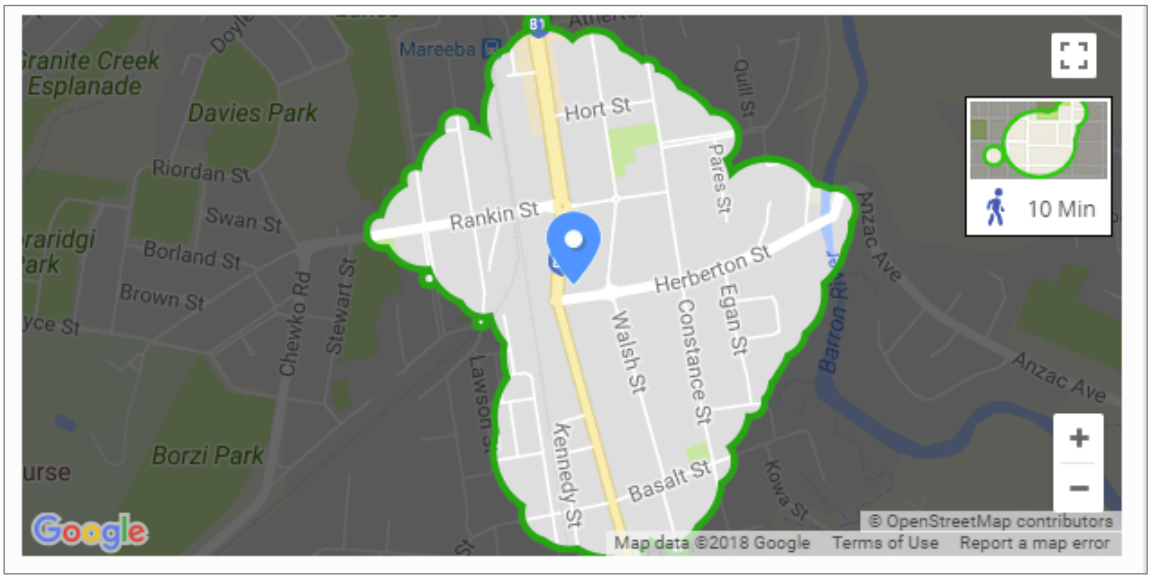


Figure 3: 10 minute walkable catchment from the site

3.3 Access and Parking

Trinity Petroleum operate 18 service stations across Far North Queensland and understand the requirements of best practice and providing sufficient parking and site access to support the viable operation of a service station.

11 parking spaces are provided on-site including, 1 PWD space, 1 RV space, 2 spaces (possibly carwash / vacuum spaces), and 7 parking spaces at the front of the service station/fast food outlet.

There are queuing areas onsite at the bowsers and in the fast food drive through as well as a post-order customer waiting area for 1 vehicle.

Compliance: The proposal complies with the planning scheme requirements for on-site parking as the proposal would require 6 parking spaces and queuing for 6 vehicles. The requirements for delivery vehicles (HRV) is 1space per use – i.e. 3 spaces, however there is 1 space provided which is sufficient to accommodate the demand likely to be generated by the use, having regard to the:

(a) nature of the use
(b) location of the site
(c) proximity of the use to public transport services
(d) availability of active transport infrastructure.

The main assessment consideration for a service station is the provision of suitable access and parking is provided for all types of vehicles, ensuring that parking is provided in a way that does not compromise the safety and efficiency of the surrounding road network.

A Transport impact assessment has been undertaken by CivilWalker Engineering. The assessment concluded that the proposal would not result in any impacts on road safety, access and frontage, intersection delay or road link capacity that warrant any mitigation measures to be implemented.

Swept path analysis were undertaken. Analysis demonstrated that the following vehicles could enter and exit the site in a forward gear (See Appendix 1 of the Transport Impact Assessment):

- A Fuel tanker (assumed 19m semi-trailer),
- Services vehicle for waste removal and delivery of goods (MRV), and
- Passenger vehicles (Austroads B99 cars).

The Transport impact assessment also concludes that on-site parking geometry (as per proposed site and floor plans) meets the requirements of the AS/NZS 2890. Therefore, the proposal complies with vehicular access requirements for a service station (**Figure 4**).

The proposal demonstrates that:

(a) spaces designed in a manner to meet the requirements of the user

(b) ensure safe and efficient access between the road and premises

(c) minimize interference with the function and operation of roads

(d) spaces and associated manoeuvring areas are safe, functional and provide equitable access

(e) Premises are adequately serviced to meet the reasonable requirements of the development.

Table 9.4.3.3E Vehicular Access Requirements		
Service station use – Acceptable solution		**Proposal**
(a)	a maximum width of 9 metres of any vehicle crossover across a footpath;	Proposal complies. Byrnes Street crossover– 8m width Herberton Street crossover – 7.8m width
(b)	a minimum separation of 12 metres between any vehicle crossover and a road intersection;	Proposal complies, there is in excess of 12m between each crossover and the Byrnes Street and Herberton Street intersection.
(c)	a separate entrance and exit; and	Proposal complies. Proposal provides for a separate entrance and exit
(d)	a minimum separation between vehicle crossovers of 14 metres.	Proposal complies. There is in excess of 14m between each crossover.

Figure 4: Compliance with vehicular access requirements.

3.4 Landscaping

The performance criteria of the Landscaping code seeks landscaping on all street frontages and site boundaries. The acceptable measures nominate 10% landscaping, although in this instance the landscaped area is approximately 3.6%. The landscaping has been strategically located in areas where screening is needed. A 1.5 metre strip of landscaping will extend along the entirety of the common boundary to No. 3 Herberton Street to alleviate amenity impacts to occupiers of No. 3. There will also be landscaping to both street frontages to soften the bulk of the development. Landscaping is not required on the northern boundary with Better Electrical as the building is built to the boundary.

The landscaping will

- complement the character of the immediate surrounds

- provide an appropriate balance between built and natural elements
- provide a source of visual interest.
- complement the scale and appearance of the development and streetscape, by:
  - screening and buffering land uses
  - assisting to break up and soften elements of built form
  - screening areas of limited visual interest
  - preserving the amenity of sensitive land uses.

3.5 Advertising devices

2 illuminated pylon signs are proposed in this development. The advertising devices are of varying heights, sizes and locations:

- 2 x illuminated pylon advertising devices, situated at the intersection of Byrnes and Herberton Streets.
  - Food and drink signage:
    - Overall height: 8.1m
    - Face: Height: 1.8m x Width: 1.8m x Depth: Approx.: 500mm
  - Service Station signage:
    - Overall height: 8.61m
    - Face: Height: 4.3m x Width: 2.5m x Depth Approx.:350mm

4 illuminated facia signs are proposed:

- 2x illuminated fascia signs of “Mobil” affixed to the large awning over the fuel pumps. Signage will be situated on both the Byrnes Street and Herberton Street frontages of the awning. Height: 650mm x Width: 1.8m x Depth: approx.: 300mm.
- 1 x illuminated sign on the Herberton street frontage, affixed to the exterior wall of the main building for the food and drink outlet. The device would measure: Height: 1.8m x Width: 1.8m x Depth: approx. 300mm for the food and drink outlet.
- 1 x illuminated sign for the food and drink outlet on the Byrnes Street frontage of the main building measuring, Height: 600mm x Width: 5m x Depth: approx. 300mm for the food and drink outlet. Although this device will be limited in views due to the proposed fuel station awning.

Compliance: The Proposed advertising devices satisfy the performance outcomes of the Advertising devices code as they are to advertise the business/premises and are located on the property to which the advertising relates.

There is an existing Mobil pylon sign at this location (to be demolished). It is observed that there is no consistent height to pylon signs in the area. A number of pylon signs exceeding the height of the main building are present within the Centre zone.

Signage will be of a location, size and number that would not significantly contribute to visual clutter from advertising devices. Illumination of advertising devices will be of an appropriate LUX, as per Australian Standards ensuring that the safety of motorists is not compromised as a result of the illumination levels. Further, advertising devices would not:

- Resemble traffic control devices
- Give instructions to traffic
- Resemble a hazard or warning light
- Cause interference with the visibility and effectiveness of hazard or warning lights
- Encroach on to any part of a road, road reserve, pedestrian or cycle path
- Incorporate highly reflective lighting
- Move, revolve, strobe or flash
- Be painted or erected on a roof or structure (other than an awning)
- Incorporate foul language or visual content
- Protrude above a roofline/parapet.

Therefore, it is considered that the proposed height, style and illumination of proposed signage is appropriate in context of the proposed development type and location.

3.6 Infrastructure

The existing site is connected to mains sewer, mains water, electricity and telecommunications. Therefore, it is expected that the proposed development would also be connected to existing town infrastructure.

3.7 Infrastructure Charges

It appears that the credit associated with the removal of the 3br dwelling unit and the industrial shed (126m^2) is similar to the demand from the new 126m^2 commercial tenancy.

Existing use	GFA	Proposed use	GFA
Service Station, Shop / Food and drink outlet / Workshop	191.03m^2	Service Station, Shop / Food and drink outlet	315m^2
Dwelling House	1 x 3br unit (208m^2)	As above	As above.

4.0 PLANNING CONSIDERATIONS

4.1 Statement Assessment and Referral

The *Planning Regulations* and State Mapping (**Figure 5**) set out the matters of interest to the State for development assessment. Where the State is a Referral agency for a development application the *State Development Assessments Provisions* (SDAP) apply (**Appendix 3**). The site is mapped for development within 25m of a State-controlled road.

Figure 5: Mapping layers for State Matters of Interest

4.2 Environmental Management Register

The development is considered to be assessable development as it involves a material change of use of premises for land identified on the Environmental Management Register. Lot 701 M3565 (existing Service Station) is considered to be a Notifiable Activity, specifically, *34 Service stations – operating a commercial service station*.

The proposed development will involve the removal of the existing fuel storage tanks, to be replaced with new, larger fuel storage tanks in the approximate location as the existing.

For avoidance of doubt, the property is not identified on the Contaminated Land Register.

See Appendix 3 of this report for search response, issued by the State Government.

4.3 Mareeba Shire Planning Scheme Assessment

The proposed use is Impact Assessable Development against the Mareeba Shire Council Planning Scheme – July 2016. The assessment and compliance table for this development is shown below. The proposal satisfies the Purpose and Overall Outcomes of the Planning Scheme Codes, as identified in **Appendix 1**.

In considering the proposal against the relevant codes, there are Performance Outcomes and Acceptable Outcomes which are to be considered:

1. Assessable development must demonstrate that the Performance Outcomes can be achieved.
2. The Acceptable Outcomes that are nominated in the Codes are just one means by which the Performance Outcomes may be achieved.

Planning Scheme Assessment Table Codes		Applicability
Zone Code	Centre zone	✓
Local Plan	Mareeba Local Plan – Precinct A – Centre Core.	✓
Overlay Codes	Agricultural land	n/a
	Airport environs -	✓
	Bushfire hazard	n/a
	Environmental significance	n/a
	Extractive Resources	n/a
	Flood hazard	✓
	Heritage	n/a
	Hill and slope	n/a
	Regional infrastructure corridors and substations	n/a
	Residential dwelling house and outbuilding	n/a
	Scenic amenity	n/a
	Transport infrastructure	n/a
Use Codes	Commercial activities	✓
	Industrial activities	✓
Other Development Codes	Advertising devices	✓
	Landscaping	✓
	Parking and access	✓
	Reconfiguring a lot	n/a
	Works, services and infrastructure	✓

5.0 STRATEGIC FRAMEWORK

The Strategic Framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs in the planning scheme area for the life of the planning scheme. The strategic framework has five themes that collectively represent the intent of the scheme:

1. Settlement pattern and built environment;
2. Natural resources and environment
3. Community identity and diversity
4. Transport and infrastructure; and
5. Economic development;

5.1 Applicable sections of Strategic Framework

Although each theme has its own section, the strategic framework in its entirety represents the policy intent for the planning scheme. Those elements of the Strategic Framework that are relevant to this application are included below:

3.3 Settlement pattern and built environment

3.3.2 Element—Activity centres network

(1) The scale of development in *activity centres* is consistent with their role and function within the defined hierarchy of *activity centres*, which consists of a *major regional activity centre,* a *village activity centre, rural activity centres and rural villages*.

(2) Centre activities are focussed in *major regional activity centres*, particularly development which draws on a wide catchment. Other *activity centres* promote local self-containment by facilitating a diverse range of services in support of local catchments and communities.

(3) Other than small scale *industry areas*, commercial activities will not occur outside *centre areas* unless there is an overriding need in the public interest, there are no alternative sites in *centre areas*, there is no adverse impact on *centre areas* or the area surrounding the development and the site is readily accessible by a range of transport modes.

(4) Ribbon or strip commercial activities along *state-controlled roads* and *local collector roads* is generally avoided outside of the *centre areas* where possible.

(5) *Centre areas* provide vibrant settings for community activity, social interaction and trade. Each centre retains its individual character.

(6) *Centre areas* provide high quality and attractive streetscapes, active shopfronts, comfortable pedestrian environments and spaces for social interaction.

3.3.3 Element—Major regional activity centre

(1) The role and function of Mareeba as the *major regional activity centre* for services in Mareeba Shire is strengthened. Mareeba is to accommodate the most significant concentrations of regional-scale business, retail, entertainment, government administration, secondary and tertiary educational facilities and health and social services within the shire.

(2) Development within Mareeba over time enhances the Shire's self-sufficiency in terms of services offered, business and employment opportunities.

(3) Mareeba is characterised by a relative lack of development constraints, and is supported by an expanding major industry area and Mareeba Airport. Mareeba has significant residential, industrial and commercial growth potential.

(4) The centre area of Mareeba continues to be focussed on the core area around Byrnes Street (between Rankin and Lloyd Streets), with significant expansion of centre activities within underutilised sites within the Byrnes Street core, in Walsh Street and south along Byrnes Street. New development will improve the streetscape of the town centre including streetscape improvement.

(5) Regional scale services and employment are provided in Mareeba, including:

- (a) primary, secondary and tertiary educational establishments;
- (b) major supermarkets and large format retailers;
- (c) factory outlets and warehouses;
- (d) government administration;
- (e) hospitals and social services;
- (f) major recreation and health and fitness facilities.

3.7. Economic development theme

3.7.1 Strategic outcomes

(3) Mareeba Shire is increasingly provided with retail and business opportunities and improved government services to enhance self-sufficiency. These opportunities and services are consolidated through the clustering and co-location of commercial uses in activity centres and are particularly focussed within Mareeba. Kuranda, as a village activity centre, maintains its level of self-reliance through servicing its local catchment with a range of services and employment opportunities.

(11) Major employment generators within Mareeba Shire continue to support the economy and are protected from development which may prejudice their ongoing operation. New and expanded employment generators are promoted in appropriate locations across the shire, including within activity centres and rural areas.

3.7.6 Element - Retail and commercial development

(1) Commercial development will be facilitated by:

(a) consolidation and co-location of centre activities in existing centre areas;
(b) identification of space adjacent to centre areas to cater for the expansion of commercial activities;
(c) infrastructure provision in areas identified as able to cater for new commercial development;
(d) maintenance of a high standard of infrastructure, services and amenity in existing commercial areas to support further business investment and expansion.

(2) Out-of-centre retail development is avoided and should only occur if there is a clearly demonstrated over-riding community need and evidence demonstrating that the development would not adversely impact existing centre areas.

(3) Centre areas provide a vibrant, busy setting for community activity, social interaction and local trade and exchange. Each centre area retains its relaxed rural atmosphere and unique character, and provides for a high level of pedestrian activity.

(4) The following features are integrated or provided by new commercial development:
(a) attractive streetscapes with shade trees and awnings;
(b) active shop fronts;
(c) pedestrian and cyclist comfort and convenience;
(d) universal design principles;
(e) spaces for community activity and social interaction;
(f) CPTED initiatives.

5.2 Addressing the Mareeba Shire Council planning scheme Strategic Framework

The proposed development would support the ongoing operation of Mareeba as the regional activity centre. The proposed Service station and food and drink outlet would contribute towards the diversification of the region's range of quality services in a regional centre location. The proposal would result in a larger service station than that of the existing service station, promoting jobs in the region. Additionally, the future uses would contribute towards the economic growth of Mareeba within the Town Centre and maximise the currently underutilised land in the core precinct.

Therefore, it is considered that the proposal would improve the vibrancy and economy of Mareeba by the provision of uses that would create options for locals and promote users to stop and spend time and money in the region.

APPENDIX 1: ASSESSMENT AGAINST THE PLANNING SCHEME

6.2.1 Centre zone code

The purpose of the Centre zone code is to provide for a mix of uses and activities. These uses include, but are not limited to, business, retail, professional, administrative, community, entertainment, cultural and residential activities. Centres are found at a variety of scales based on their location and surrounding activities.

Mareeba Shire Council's purpose of the Centre zone code is to facilitate the orderly development of the network of centres to meet the needs of the communities throughout the shire. The purpose of the code will be achieved through the following overall outcomes:

(a) Promotion of a mix of commercial, business, professional, accommodation and retail activities;
(b) Industries such as service and low impact industries may be appropriate where they are for the provision of trade, service or light industries that are of a compatible scale with commercial activities and preferably do not adjoin residential areas;
(c) Residential development is facilitated where it can integrate and enhance the fabric of the centre and is located behind or above commercial development;
(d) Development provides a high level of amenity and is reflective of the surrounding character of the area;
(e) Development is generally established in accessible, well-connected locations with access or future access to public transport, cycling and pedestrian networks;
(f) Development does not compromise the viability of the hierarchy and network of activity centres, namely:
(g) Mareeba as a major regional activity centre, which accommodates the most significant concentrations of regional-scale business, retail, entertainment, government administration, secondary and tertiary educational facilities and health and social services within the shire;
(h) Kuranda as a village activity centre, which accommodates services, arts and cultural facilities, sports and recreation facilities, business and employment uses to support the village and its constituent surrounding rural and rural residential communities;
(i) Chillagoe and Dimbulah as Rural activity centres, which provide commercial and community services to their rural catchments; and
(j) Biboohra, Irvinebank, Julatten, Koah, Mutchilba, Mt Molloy, Myola and Speewah as rural villages, that have limited centre activities and other non-residential activities.

Table 6.2.1.3A—Centre zone code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant Response
For accepted development subject to requirements and assessable development		
Height		
PO1 Building height takes into consideration and respects the following: • the height of existing buildings on adjoining premises; • the development potential, with respect to height, on adjoining premises;	AO1 Development has a maximum building height of: • 8.5 metres; and • 2 storeys above ground level.	**Complies.** The maximum building height would be 5.5m and the development would be single storey in nature.

Performance outcomes	Acceptable outcomes	Applicant Response
• the height of buildings in the vicinity of the site; • access to sunlight and daylight for the site and adjoining sites; • privacy and overlooking; and • site area and street frontage length.		
Siting		
PO2 Development is sited in a manner that considers and respects: • the siting and use of adjoining premises; • access to sunlight and daylight for the site and adjoining sites; • privacy and overlooking; • opportunities for casual surveillance of adjoining public spaces; • air circulation and access to natural breezes; • appearance of building bulk; and • relationship with pedestrian spaces.	AO2.1 Buildings are built to the road frontage/s of the site. Note—Awning structures may extend into the road reserve where provided in accordance with PO5.	**Complies.** See section 3.1 of the Report, Design and siting.
	AO2.2 Buildings are setback and boundary treatment(s) are undertaken in accordance with **Table 6.2.1.3B.**	**Complies.** See section 3.1 of the Report, Design and siting.
Accommodation density		
PO3 The density of Accommodation activities: • contributes to housing choice and affordability; • respects the nature and density of surrounding land use; • does not cause amenity impacts beyond the reasonable expectation of the planned	AO3 Development provides a maximum density for Accommodation activities of: • 1 dwelling or accommodation unit per 120m^2 site area; and • 1 bedroom per 60m2 site area.	**Not applicable.** The proposal does not involve the creation of dwellings.

Performance outcomes	Acceptable outcomes	Applicant Response
accommodation density for the centre; and • is commensurate to the scale and frontage of the site.		
Site cover		
PO4 Buildings and structures occupy the site in a manner that: • makes efficient use of land; • is consistent with the bulk and scale of surrounding buildings; and • appropriately balances built and natural features.	AO4 Site cover does not exceed 90%.	**Complies with AO.**
For assessable development		
Building design		
PO5 Building facades are appropriately designed to: • provide an active and vibrant streetscape; • include visual interest and architectural variation; • maintain and enhance the character of the surrounds; • provide opportunities for casual surveillance; • include a human scale; and • encourage occupation of outdoor space.	AO5.1 Buildings address and provide pedestrian entrances to: • the primary pedestrian frontage where a single frontage lot or multiple frontage lot that is not a corner lot; • the primary and secondary frontages where a corner lot, with a pedestrian entrance provided on each frontage and/or as part of a corner truncation; and • any adjoining public place, with the main entrance provided on this boundary.	**Complies.** The building facades are appropriately designed. Facades contribute towards an active and vibrant streetscape through variation of the built form. Windows to the front and side elevations provide opportunities for casual surveillance
	AO5.2 Building frontages: • are broken into smaller, 10 metre wide components by doors, display windows, pillars and structural elements;	**Complies.** Frontages are well articulated, whereby frontages are broken into smaller 10 metre wide components through openings, projections and recesses

Performance outcomes	Acceptable outcomes	Applicant Response
	• are articulated with projections and recesses; • include windows where the bottom of the window is located between 0.6 metres and 0.9 metres above the footpath level; and • have a minimum 40% of the building facade facing the street is comprised of windows that are not painted or treated to obscure transparency.	The proposal includes windows whereby the bottom of the window is between 0.6 and 0.9 above the footpath. Contains windows facing the street.
	AO5.3 Buildings incorporate cantilevered awnings that are: • provided along the full length of the building's frontage to the street; • setback 0.6 metres from the face of the kerb or to match the alignment of the awning/s of the adjoining building/s; • a minimum of 3 metres and a maximum of 4.2 metres above the finished level of the footpath from the underside of the awning; and • truncated at the corner with a 2-metre single cord truncation where located on a corner site.	**Not applicable** Refer to discussion in section 3 of this report.
PO6 Development complements and integrates with the established built character of the Centre zone, having regard to: • roof form and pitch; • eaves and awnings;	AO6 No acceptable outcome is provided.	**Complies.** Refer to discussion in section 3 of this report. The development: • integrates with the established built character of the Centre zone.

Performance outcomes	Acceptable outcomes	Applicant Response
• building materials, colours and textures; and • window and door size and location.		• incorporates interesting roof forms of various heights. • includes eaves and awnings create interest and provide shelter for users. • includes building materials are of a good standard, colours and textures of materials are in keeping with the Centre zone. • includes windows and door size location are of a suitable size and location.
Accommodation activities		
PO7 Accommodation activities are appropriately located in buildings in the Centre zone, having regard to: • the use of adjoining premises; and • the provision of an active and vibrant streetscape.	**AO7** Accommodation activities are located above the ground floor.	**Not applicable.** The proposed development does not involve accommodation activities.
Amenity		
PO8 Development must not detract from the amenity of the local area, having regard to: • noise; • hours of operation; • traffic; • advertising devices; • visual amenity; • privacy; • lighting; • odour; and • emissions.	AO8 No acceptable outcome is provided.	**Complies.** The development would not detrimentally detract from the amenity of the local area. It is to be taken into consideration that the existing service station is a 24-hour operation. It is considered that the proposal would not result in detrimental harm to the locality as the development would be appropriately screened from the dwelling house to the east, ensuring that their privacy is not detrimentally affected.

Performance outcomes	Acceptable outcomes	Applicant Response
		The building to the north of the subject site is a showroom. The showroom is built to the boundary. Thus, no amenity protection is required.
PO9 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: • noise; • hours of operation; • traffic; • advertising devices; • visual amenity; • privacy; • lighting; • odour; and • emissions.	AO9 No acceptable outcome is provided.	**Complies.** See, Section 3 -The Use.

Table 6.2.1.3B—Setbacks and treatments to side and rear boundaries

Design	Where adjoining land in the Low density residential zone, the Medium density residential zone or the Rural residential zone	Where including windows facing the side boundary	All other instances
Building and structure setback	2 metres	1 metre	0 metres
Boundary treatment	• Landscape strip with a minimum width of 1.5 metres; and • 1.8-metre-high solid screen fence	Screening to windows where required to prevent overlooking or privacy impacts	Blank wall including low maintenance finishes and materials

7.2.2. Mareeba local plan code

The purpose of the Mareeba local plan code is to:
(a) Facilitate the continued use of the historic stables area adjacent to the Mareeba Racecourse for residential horse keeping;
(b) Facilitate the continued development of the Mareeba Airport;
(c) Facilitate efficient development that accords with local lifestyle and amenity expectations;
(d) Identify and direct urban growth opportunities;
(e) Facilitate a more vibrant and integrated town centre;
(f) Enhance accessibility to, and activation of, the Barron River and Centenary Lakes as important physical assets for Mareeba;
(g) Enhance Mareeba's heritage and cultural elements; and
(h) Facilitate the development of an appropriate site for special industry.

Ten precincts have been identified in the Mareeba local plan to achieve this purpose:
(a) The Town centre core precinct will be maintained as the retail and cultural heart of Mareeba. Development will be managed to increase the walkability of the precinct and better integrate the street and built environments. Character elements of the precinct will be maintained and new buildings or works to existing buildings will be respectful of character values.

The purpose of the code will be achieved through the following overall outcomes:
(a) Development recognises and protects the town centre as Mareeba's most important commercial and social asset that is supported by substantial public and private investment in buildings, infrastructure and culture;
(b) Development within the Town centre core precinct promotes greater walkability and integration between street and built environments through the consolidation and effective design of retail and commercial facilities;
(c) Development within the Town centre fringe precinct, accommodates destination-specific premises that requires car and service vehicle access;
(d) Development provides opportunities for greater utilisation of, and improved public access to, the Barron River and open spaces;
(e) Development protects Mareeba's heritage places and tourist and cultural assets and enhances opportunities for their public appreciation;
(f) Development facilitates the continuing growth of the Mareeba Airport for passenger and freight movements and industry associated with the airport's primary function. Activities in the Mareeba Airport precinct will be limited to ensure they do not compromise efficient aircraft operation;
(g) Development in the Stable precinct facilitates the combination of stables and houses whilst maintaining a low density to minimise impacts;
(h) Development provides for the expansion, establishment and relatively unconstrained operation of Special industry in the Noxious and hazardous industry precinct; and
(i) The establishment and operation of a range of industries in the Industrial park precinct is supported.

Table 7.2.2.3—Mareeba local plan - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant Response
For accepted development subject to requirements and assessable development		
If affected by the vegetated buffer area		
PO1 has not been included as the subject site is not affected by the vegetated buffer area.		

Performance outcomes	Acceptable outcomes	Applicant Response
If in the Stable precinct		
PO2 has not been included as the subject site is not within the Stable precinct.		
If on a site with a frontage to the Byrnes Street core element		
PO3 has not been included as the subject site is not within the Byrnes Street core element.		
If on a site affected by the Town centre fringe 6 metre setback element		
PO4 has not been included as it is not affected by the Town centre fringe 6 metre setback.		
If in the Town centre fringe precinct		
PO5 has not been included as it is not in the Town centre fringe precinct.		
For assessable development		
PO6 Development in the Mareeba local plan area: • promotes and does not prejudice the ongoing operation of Mareeba as the major regional activity centre of the Shire; • provides growth or redevelopment in areas within close proximity to the Town centre core precinct; • locates Community facilities in accessible locations within walking distance of the Town centre core precinct; and • contributes to the vibrancy and local identity of the Mareeba community.	AO6 No acceptable outcome is provided.	**Complies.** The proposed development would not prejudice the ongoing operation of Mareeba as the regional activity centre. The proposal would positively contribute towards the economic growth of Mareeba within the Town Centre core precinct. The proposal would provide an opportunity for motorists to stop in Mareeba and spend money in the region. It is considered that the proposal would positively contribute towards the vibrancy, local identity and economy of Mareeba by the provision of uses that would promote users to stop and spend time and money in the region.
PO7 Development does prejudice the future construction of the Mareeba Bypass.	AO7 Development involving permanent buildings or structures does not occur on land affected by the Mareeba bypass element.	**Complies.** Development is not situated in proximity to the future Mareeba Bypass.
PO8 Development integrates the following elements identified on the Mareeba local plan maps: • open space elements; • indicative collector roads as higher order road linkages;	AO8 No acceptable outcome is provided.	**Complies.** The development is not affected by elements identified on local plan maps.

Performance outcomes	Acceptable outcomes	Applicant Response
• indicative minor roads in a similar design as shown as mapped; and • possible connections as important road linkages between developments.		
PO9 Development integrates small-scale local retail centres that: • service the local neighbourhood; and • do not prejudice the ongoing operation of the Mareeba town centre.		**Complies.** The existing land use is a service station, it is considered that the proposed land use/s would continue to service the local neighbourhood and support the operation of the Town Centre.
If in the Stable precinct		
PO10 has not been included as the development is not in the Stable precinct.		
If in the Mareeba Airport precinct		
PO11 has not been included as the proposed development is not in the Mareeba Airport precinct.		
If in the Town centre core precinct		
PO12 Development is to be of a scale and form which complements the character of the precinct, having regard to: • building location; • building height; • interface with the street; and • scale of windows, doors and structural elements	AO12 No acceptable outcome is provided.	**Complies.** The proposed development will be of a scale and form which complements the character of the Town centre core precinct. The building will be appropriately sited, set back from the street frontages. The development will be of an appropriate bulk and mass that is in keeping with the size of the lot and adjoining properties. Openings and structural elements will be of a contemporary style containing a number of window and door openings.
PO13 The character and style of buildings in the main street, including those representing the booming tobacco period of the 1950's and 1960's is maintained and protected.	AO13.1 Buildings are re-used for new uses without alteration to their: • height; • width (at street frontage); • vertical or horizontal patterning; and • materials.	**Complies.** Although located on Byrnes Street, the existing buildings to be demolished on lots 701 and 702 are not of a particular character or style significant to the main street of Mareeba. Neither building is representative of the booming

Performance outcomes	Acceptable outcomes	Applicant Response
	Note—Refer to Planning Scheme Policy 1 – Character Area Design Guidelines for additional guidance in relation to the development outcomes sought.	tobacco period the 1950's and 1960's.
	AO13.2 Development on sites identified as building façade to be retained that retains the external (street facing) facade(s) of the building will qualify for a 10% reduction on car parking.	**Not applicable.** Subject site/s are not identified as having building façades, to be retained.
If in the Town centre fringe precinct		
PO14 has not been included as the proposed development is not in the Town centre fringe precinct.		
If in the Noxious and hazardous industry precinct		
PO15 has not been included as the proposed development is not in the Noxious and hazardous industry precinct.		
If in the Industrial park precinct		
PO16 has not been included as the proposed development is not in the industrial park precinct.		
If in the Northern investigation precinct		
PO17 has not been included as the proposed development is not in the Northern investigation precinct.		
If in the North-eastern expansion precinct, South-eastern expansion precinct or South-western expansion precinct		
PO18 - PO21 have not been included as the proposed development is not located within in the expansion precincts.		

9.3.2 Commercial activities code

The purpose of the Commercial activities code is to ensure Commercial activities are appropriately located, designed and operated to service the Shire while not impacting on the character and amenity of the area. The purpose of the code will be achieved through the following overall outcomes:

(a) Commercial activities meet the needs of the local community, visitors and tourists through safe, accessible and convenient points of service;
(b) Commercial activities have minimal impacts on the natural environment or the environmental values of the area;
(c) Commercial activities reinforce and do not prejudice the role and function of established or designated centres;
(d) Commercial activities minimise impacts on the character and amenity of the surrounding area and surrounding land uses, particularly residential uses; and
(e) Commercial activities do not compromise the viability of the hierarchy and network of centres, namely:
    (i) Mareeba as a major regional activity centre, which accommodates the most significant concentrations of regional-scale business, retail, entertainment, government administration, secondary and tertiary educational facilities and health and social services within the shire;
    (ii) Kuranda as a village activity centre, which accommodates services, arts and cultural facilities, sports and recreation facilities, business and employment uses to support the village and its constituent surrounding rural and rural residential communities;
    (iii) Chillagoe and Dimbulah as Rural activity centres, which provide commercial and community services to their rural catchments; and
    (iv) Biboohra, Irvinebank, Julatten, Koah, Mutchilba, Mt Molloy, Myola and Speewah as rural villages, that have limited centre activities and other non-residential activities.

Table 9.3.2.3—Commercial activities code – For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For accepted development subject to requirements and assessable development		
PO1 Buildings are finished with high quality materials, selected for their durability and contribution to the character of the area.	AO1 Building design does not incorporate: • highly reflective materials such as high-performance glass or untreated galvanised metals; or • unrelieved, unpainted or un-rendered finishes; or • unarticulated concrete finishes; or • unarticulated cladding systems; or • fluorescent or iridescent paints; or • use of single colour or surface treatment.	**Complies.** The building will be finished with high quality materials, selected for their durability and contribution to the character of the area.
If for Sales office		
PO2-PO3 have not been inserted as the proposal is not for a Sales office.		

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
Visual amenity and character		
PO4 Commercial activities protect and enhance the character and amenity of the locality and streetscape through the appropriate location and screening of: • air conditioning; • refrigeration plant; • mechanical plant; and • refuse bin storage areas.	AO4 No acceptable outcome is provided.	**Complies.** As per the floor plans and elevations, plant and refuse shall be located on the side and rear boundaries, screened and not visible to the street.
Location and size		
PO5 Commercial activities are located and designed: • to be commensurate to the scale and nature of land uses located and intended to be located in the immediate vicinity; and • consistent with the intent of the activity centre hierarchy for Mareeba Shire.	AO5 No acceptable outcome is provided.	**Complies.** It is considered that commercial activities are located and designed to be in keeping with existing land uses and the vision for the Mareeba core centre precinct and the role of Mareeba as a regional centre.
If for Service station or Car wash		

PO6
The site is of a suitable size, shape and configuration to accommodate all aspects of the use, such as:
• the building/s and associated storage areas;
• any ancillary activities;
• fuel delivery and service vehicles;
• vehicle access and on-site manoeuvrability; and
• landscaping.
	AO6.1
	The site has a:
	• minimum area of 1,500m2; and
	• minimum frontage of:
	  ○ 30 metres to each road where the site is a corner site; or
	  ○ 40 metres otherwise.
		Complies.
		The site is of a suitable size, shape and configuration to accommodate all aspects of the use, including ancillary activities.
		
		The site has an area of 2,031m^2.
		Site frontages are in excess of the AO requirements:
		• Byrnes street frontage: 46.95m
		• Herberton Street frontage: 51.96m.

Performance outcomes	Acceptable outcomes	Applicant response
		See Part 7 of the attached Transport impact assessment by CivilWalker. The assessment concludes that the site has the ability to accommodate site access, on-site parking and on-site servicing arrangements.
	AO6.2 Bulk fuel storage tanks are situated on the site no closer than 8 metres to any road frontage.	**Complies.** See part 7 of the Transport impact assessment and associated swept path analysis's which concludes that movements of a fuel tanker can be accommodated on site.
	AO6.3 Bulk fuel storage tanks are situated on the site: • so that fuel delivery vehicles are standing wholly within the site when discharging fuel into the tanks; and • ensuring that the movement of other vehicles on the site is not restricted when fuel delivery occurs.	**Complies.** See part 7 of the Transport impact assessment and associated swept path analysis's which concludes that movements of a fuel tanker can, HRV and passenger car can be accommodated on site.
	AO6.4 Fuel pumps, car wash bays and facilities including air and water points are: • orientated to minimise vehicle conflicts associated with manoeuvring on site; and • located so that vehicles using or waiting to use the facilities are standing wholly within the site and in locations which do not restrict the movement of other vehicles on the site.	**Complies.** See Part 7 of the attached Transport impact assessment undertaken by CivilWalker. The assessment concludes that the site has sufficient, access, parking and servicing arrangements to accommodate the proposed development.

Performance outcomes	Acceptable outcomes	Applicant response
PO7 The use must provide for the collection, treatment and disposal of all solid and liquid wastes such that: • the off-site release of contaminants does not occur; and • there are no significant adverse impacts on the quality of surface water or ground water resources.	AO7 No acceptable outcome is provided.	**Will be complied with.**

9.3.5 Industrial activities code

The purpose of the Industrial activities code is to ensure Industrial activities are:
(a) appropriately located within designated industrial areas;
(b) established and operated in an efficient manner with minimal impact on the character, scale, amenity and environmental values of the surrounding area; and
(c) managed to allow for progressive rehabilitation where involving Extractive industry.

The purpose of the code will be achieved through the following overall outcomes:
(d) Industrial activities are appropriately located having regard to topography, surrounding land uses, natural environment, accessibility, local character and potential social and community impacts;
(e) Industrial activities meet the needs of the local community and the local economy through well located, safe and convenient points of service;
(f) Industrial activities are designed to have minimal impact on the character, amenity and environment of the surrounding area;
(g) Industrial activities provide a safe working environment;
(h) Industrial activities are designed to promote sustainability and energy efficiency;
(i) Industrial activities are co-located with complimentary and compatible uses;
(j) External impacts associated with Extractive industry operations do not impact on the character and amenity of the surrounding area and the safety and wellbeing of the community;
(k) Extractive industry operations are adequately separated from potentially incompatible land uses; and
(l) Extractive industry sites are progressively rehabilitated.

9.3.5.3 Criteria for assessment

Table 9.3.5.3—Industrial activities code– For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For accepted development subject to requirements and assessable development		
Separation		
PO1 Industrial activities are appropriately separated from sensitive uses to ensure their amenity is maintained, having regard to: • noise; • odour; • light; and • emissions. Note—Development proposed to be located closer than the separation distances specified in AO2 requires supporting investigations to demonstrate that the expected impacts from the industry use have been adequately mitigated in consideration of the local context.	AO1 Development is separated from sensitive uses as follows: • medium impact industry– 250 metres; or • high impact industry–500 metres; or • special industry– 1.5 kilometres.	**Complies.** The development will be for a Service station and food and drink outlet. Considering the existing use of the land is a service station, it is not considered that the proposed increased scale and intensity of the service station would be of a significant intensity to warrant detrimental harm to adjoining occupiers.
For assessable development		

Performance outcomes	Acceptable outcomes	Applicant response
Amenity		
PO2 Industrial activities protect and enhance the character and amenity of the locality and streetscape through the appropriate location and screening of: • air conditioning; • refrigeration plant; • mechanical plant; and • refuse bin storage areas.	AO2 No acceptable outcome is provided.	**Complies.** All plant and bins will be screened from the street in a dedicated area to the side and rear of the development – see floor plans.
PO3 Development avoids and, where unavoidable, mitigates impacts on ground water, particularly where ground water is heavily drawn upon for irrigation or domestic purposes.	AO3 No acceptable outcome is provided.	**Complies.** It is not considered that the proposed development would result in impacts on ground water.
If for Extractive industry		
PO4 The site has sufficient area and dimensions to safely accommodate: • the extractive use; • vehicular access and on site vehicular movements; • buildings including staff facilities; • parking areas for visitors and employees; • storage areas and stockpiles; • any environmentally significant land; and • landscaping and buffer areas. Note—Refer to Planning Scheme Policy 3 - Extractive Industry.	AO4 No acceptable outcome is provided.	**Complies.** The site area is 2,031m^2. The subject site has sufficient area and dimensions to safely accommodate: • the use; • vehicular access and on site vehicular movements; • buildings including staff facilities; • parking areas for visitors and employees; • storage areas and stockpiles; and • landscaping and buffer areas. There is no environmentally significant land to consider at this location.

Performance outcomes	Acceptable outcomes	Applicant response
PO5 Extractive industry is established and operated in a way that does not impact on public safety.	AO5 Safety fencing is provided for the full length of the perimeter of the site and is appropriately signed with warning signs advising of the nature of the use and any danger or hazard.	**Not applicable.** The development does not involve extractive industry.
PO6 Extractive industry is appropriately located to adequately mitigate visual, noise, vibration and dust impacts on sensitive uses.	AO6 All aspects of the Extractive industry are setback from all boundaries: • 200 metres where not involving blasting or crushing; and • 1,000 metres for where involving blasting or crushing. Note—Refer to Planning Scheme Policy 3 - Extractive Industry.	**Not applicable.** The development does not involve extractive industry.
PO7 The Extractive industry is designed and managed to appropriately address its interface with the natural environment and landscape, having regard to: • water quality; • existing vegetation; and • declared plants.	AO7.1 The Extractive industry does not cause a reduction in the quality of ground water or receiving surface waters.	**Not applicable.** The development does not involve extractive industry.
	AO7.2 Vegetation is retained on site that contributes towards alleviating the impact of the development on the visual amenity of surrounding sensitive land uses.	**Not applicable.** The development does not involve extractive industry.
	AO7.3 No declared plants are transported from the site.	**Not applicable.** The development does not involve extractive industry.
PO8 Extractive industry actively integrates rehabilitation into the ongoing operations on the site to progressively restore the site to its original (or an improved) condition, having regard to matters of:	AO8 No acceptable outcome is provided.	**Not applicable.** The development does not involve extractive industry.

Performance outcomes	Acceptable outcomes	Applicant response
• locally prevalent plant species; • plant spacing; • local climatic conditions; • locations of waterways and wetlands; • ongoing maintenance; • potential habitat opportunities; • erosion and sediment control; and • fencing. Note—A revegetation plan must be prepared by a suitably experienced person in the field of natural area revegetation and rehabilitation, at a standard acceptable to Council, which addresses the items identified in Performance Outcome PO8.		

8.2.2 Airport environs overlay code

The purpose of the Airport environs overlay code is to protect the current and ongoing operations of established airports, aerodromes and aviation infrastructure in Mareeba Shire.

The purpose of the code will be achieved through the following overall outcomes:
(a) The ongoing operation of Mareeba Airport and its associated infrastructure are protected from incompatible development;
(b) Aerodromes in Chillagoe and Dimbulah are maintained to support recreation, mining and rural uses;
(c) Operational airspace is protected;
(d) Threats to aviation safety such as bird and bat strike and distraction or blinding of pilots are avoided or minimised;
(e) State significant aviation facilities associated with the Mareeba Airport are protected from encroachment by sensitive land uses; and
(f) Development in the vicinity of airports, aerodromes and aviation infrastructure does not compromise public safety.

Table 8.2.2.3 - Airport environs overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For accepted development subject to requirements and assessable development		
Protection of operational airspace		
PO1 Development does not interfere with movement of aircraft or the safe operation of an airport or aerodrome where within the: • Airport environs: OLS area of Mareeba Airport identified on Airport environs overlay map (OM-002c); or • Airport environs: OLS area of Cairns Airport identified on Airport environs overlay map (OM-002c.1); or • 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome identified on Airport environs overlay map (OM-002f); or • 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on Airport environs overlay map (OM-002f).	**AO1.1** Development does not exceed the height of the Obstacle Limitation Surface (OLS) where located within the Airport environs: OLS area of: • Mareeba Airport identified on Airport environs overlay map (OM-002c); or • Cairns Airport identified on Airport environs overlay map (OM-002c.1).	**Not applicable.** Proposal is not located within the Obstacle Limitation Surface.
	AO1.2 Development has a maximum height of 10 metres where within the 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	**Not applicable.** Proposal will be a maximum height of 8.6m (advertising device) and will be located outside of the 1km buffer for the Mareeba Airport.
	AO1.3 Development has a maximum height of 15 metres where within the 'Airport environs: Airport buffer - 3 kilometres' of	**Not applicable.** Proposal will be a maximum height of 8.6m (advertising device) and will be located

Performance outcomes	Acceptable outcomes	Applicant response
	an aerodrome identified on **Airport environs overlay map (OM-002f)**.	outside of the 3 kilometres buffer for the Mareeba Airport.
Lighting		
PO2 Development does not include lighting that: • has the potential to impact on the efficient and safe operation of Mareeba Airport or an aerodrome; or • could distract or confuse pilots.	**AO2** Development within the 'Airport environs: Distance from airport - 6 kilometres' area for Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)** does not: • involve external lighting, including street lighting, that creates straight parallel lines of lighting that are more than 500 metres long; and • does not contain reflective cladding upwards shining lights, flashing lights or sodium lights.	**Complies.** Development is located within the 8km buffer. Development will not: • Involve external lighting, including street lighting, that creates straight parallel lines of lighting that are more than 500 metres long; and • Contain reflective cladding upwards shining lights, flashing lights or sodium lights.
Noise exposure		
PO3 Development not directly associated with Mareeba Airport is protected from aircraft noise levels that may cause harm or undue interference.	**AO3** Sensitive land uses are acoustically insulated to at least the minimum standards specified by AS2021 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction where located within the 'Airport environs: 20-25 ANEF' area identified on **Airport environs overlay map (OM-002d)**.	**Not applicable.** Development is not located within the ANEF contours as per, Airport environs overlay map (OM-002d).
Public safety		
PO4 Development does not compromise public safety or risk to property.	**AO4** Development is not located within the 'Airport environs: Mareeba Airport public safety	**Not applicable.** Development is not located within the Mareeba Airport public safety area' identified on

Performance outcomes	Acceptable outcomes	Applicant response
	area' identified on **Airport environs overlay map (OM-002e)**.	Airport environs overlay map (OM-002e).
State significant aviation facilities associated with Mareeba Airport		
PO5 Development does not impair the function of state significant aviation facilities by creating: • physical obstructions; or • electrical or electro-magnetic interference; or • deflection of signals.	**AO5.1** Development within 'Airport environs: Zone B (600 metre buffer)' for the 'Saddle Mountain VHF' facility identified on **Airport environs overlay map (OM-002a.1)** does not exceed a height of 640 metres AHD.	**Not applicable.** Development is not located within 'Airport environs: Zone B (600 metre buffer)' for the 'Saddle Mountain VHF' facility identified on Airport environs overlay map (OM-002a.1).
	AO5.2 Development within 'Airport environs: Zone B (4,000 metre buffer)' for the 'Hahn Tableland Radar (RSR)' facility identified on **Airport environs overlay map (OM-002a)** does not exceed a height of 950 metres AHD, unless associated with Hann Tableland Radar facility.	**Not applicable.** Development is not located within 'Airport environs: Zone B (4,000 metre buffer)' for the 'Hahn Tableland Radar (RSR)' facility identified on Airport environs overlay map (OM-002a).
	AO5.3 Building work does not occur within 'Airport environs: Zone A (200 metre buffer)' of the 'Biboohra CVOR' facility identified on **Airport environs overlay map (OM-002a)** unless associated with the Biboohra CVOR facility.	**Not applicable.** Development is not located within 'Airport environs: Zone A (200 metre buffer)' of the 'Biboohra CVOR' facility identified on Airport environs overlay map (OM-002a).
	AO5.4 Development within 'Airport environs: Zone B (1,500 metre buffer)' of the 'Biboohra CVOR' facility identified on **Airport environs overlay map (OM-002a)**, but outside 'Zone A (200 metre buffer)' identified on **Airport environs overlay map (OM-002a)**, does not include: • the creation of a permanent or temporary physical line	**Not applicable.** Development is not located within any buffer of the 'Biboohra CVOR' facility identified on Airport environs overlay map (OM-002a).

Performance outcomes	Acceptable outcomes	Applicant response
	of sight obstruction above 13 metres in height; or • overhead power lines exceeding 5 metres in height; or • metallic structures exceeding 7.5 metres in height; or • trees and open lattice towers exceeding 10 metres in height; or • wooden structures exceeding 13 metres in height.	
For assessable development		
Mareeba Airport		
Protection of operational airspace		
PO6 Development within the vicinity of Mareeba Airport or an aerodrome does not interfere with the: • movement of aircraft; or • safe operation of the airport or facility.	**AO6.1** Development involving sporting and recreational aviation activities such as parachuting, hot air ballooning or hang gliding, does not occur within the Airport environs: OLS area of: • Mareeba Airport identified on Airport environs overlay map (OM-002c); or • Cairns Airport identified on Airport environs overlay map (OM-002c.1).	**Not applicable.** The development will not involve: sporting and recreational aviation activities such as parachuting, hot air ballooning or hang gliding.
	AO6.2 Development involving temporary or permanent aviation activities does not occur within the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	**Not applicable.** Development will not involve temporary or permanent aviation activities.
PO7 Development does not affect air turbulence, visibility or engine operation in the	**AO7** Development does not result in the emission of a gaseous plume, at a velocity exceeding	**Not applicable.** Development does not involve the emission of a gaseous plume, at a velocity exceeding

Performance outcomes	Acceptable outcomes	Applicant response
operational airspace of Mareeba Airport or regional aerodromes.	4.3 metres per second, or smoke, dust, ash or steam within: • the Airport environs: OLS area of Mareeba Airport identified on Airport environs overlay map (OM-002c); or • the Airport environs: OLS area of Cairns Airport identified on Airport environs overlay map (OM-002c.1); or • the 'Airport environs: Airport buffer - 1 kilometre' of a regional aerodrome identified on Airport environs overlay map (OM-002f).	4.3 metres per second, or smoke, dust, ash or steam.
Managing bird and bat strike hazard to aircraft		
PO8 Development in the environs of Mareeba Airport or an aerodrome does not contribute to the potentially serious hazard from wildlife (bird or bat) strike.	**AO8.1** Development within the 'Airport environs: Distance from airport - 8 kilometres' Bird and bat strike zone of Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)** provides that potential food and waste sources are covered and collected so that they are not accessible to wildlife.	**Complies.** Development is located within the 'Airport environs: Distance from airport - 8 kilometres' Bird and bat strike zone of Mareeba Airport identified on **Airport environs overlay map (OM-002b).** Potential food and waste sources would be covered and collected so that they would not be accessible to wildlife.
	AO8.2 Development within the 'Airport environs: Distance from airport - 3 kilometres' Bird and bat strike zone of Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome	**Not applicable.** Development is located beyond the 'Airport environs: Distance from airport - 3 kilometres' bird and bat strike buffer.

Performance outcomes	Acceptable outcomes	Applicant response
	identified on **Airport environs overlay map (OM-002f)** does not include: • food processing; or • abattoir; or • intensive horticulture; or • intensive animal husbandry; or • garden centre; or • aquaculture.	
	AO8.3 Putrescible waste disposal sites do not occur within the 'Airport environs: Distance from airport - 13 kilometres' Bird and bat strike zone of: • Mareeba Airport identified on Airport environs overlay map (OM-002b); or • Cairns Airport identified on Airport environs overlay map (OM-002b.1).	**Nota applicable.** Development does not involve a putrescible waste disposal site

9.4.1 Advertising device

The purpose of the Advertising devices code is to regulate the location, siting, number, content and design requirements for advertising devices to protect the visual character and amenity of the urban and rural areas of the region, whilst supporting the promotion of business and enterprise.

The purpose of the code will be achieved through the following overall outcomes:

(a) Advertising devices are designed, sited and integrated so that they do not detract from the existing character and amenity of an area and contribute to a coherent and harmonious streetscape;
(b) Advertising devices are of a scale, dimension and quality to minimise adverse visual impacts;
(c) Advertising devices do not result in visual clutter;
(d) Advertising devices do not impact on pedestrian or road safety and do not obscure the view of any official traffic, safety or information sign;
(e) Advertising devices are constructed and maintained to ensure a high standard of public safety through structural integrity, design and construction;
(f) Advertising devices primarily provide, clear and effective identification of business and commercial premises, community uses and events with limited product advertising;
(g) In the Rural zone advertising devices are limited to maintain the landscape character of the area; and
(h) Billboards are limited to identified localities.

Table 9.4.1.3A—Advertising devices code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For accepted development subject to requirements and assessable development		
Public safety		
PO1 Advertising devices are designed, sited and constructed to maintain the efficient function of road infrastructure and not impede safe vehicular and pedestrian movements.	AO1.1 Advertising devices do not: (a) resemble traffic control devices; or (b) give instructions to traffic; or (c) resemble a hazard or warning light through colour or method of operation, if visible from a road; or (d) cause interference with the visibility and effectiveness of hazard or warning lights; or (e) encroach onto any part of a road, road reserve, pedestrian or cycle path; or (f) incorporate highly reflective materials and finishes; or	**Complies.** See Part 3.5 of the Report, Advertising devices.

Performance outcomes	Acceptable outcomes	Applicant response
	(g) cause significant visual or physical obstruction of, or distraction to, vehicular or pedestrian traffic.	
Character and amenity		
PO2 Advertising devices are designed and located to: (a) avoid visual clutter; (b) avoid overshadowing of adjoining premises or public places; (c) prevent loss of daylight or sunlight access for nearby uses; (d) be consistent with the built and natural character of the immediate surrounds; and (e) allow for the identification of premises, uses and business.	AO2.1 Advertising devices: (h) do not move, revolve, strobe or flash; (i) are not painted or erected on a roof (excluding awnings) or structure (such as a silo or tank); (j) do not incorporate overt or explicit language or visual content that is likely to be offensive to the general public; (k) primarily advertise a business and/or commercial premises rather than products; (l) are located on the property to which the advertising relates; (m) do not protrude above the roofline or parapet; and (n) are limited to those devices identified in Table 9.4.1.3B.	**Complies.** See Part 3.5 of the Report, Advertising devices.
	AO2.2 The number, type and design of advertising devices complies with **Table 9.4.1.3D**.	**Complies.** See Part 3.5 of the Report, Advertising devices
For assessable development		
Character and amenity		
PO3 Advertising devices are: (a) designed and engineered to a standard that satisfies the wind classification for the particular area;	AO3 No acceptable outcome is provided.	**Complies.** Advertising devices would be: • designed and engineered to a standard that satisfies the wind classification for the particular area;

Performance outcomes	Acceptable outcomes	Applicant response
(b) appropriately secured and supported so as to cause no injury or damage to persons or property; (c) not displayed on or attached to a tree, roadside pole or official traffic or safety sign; and (d) appropriately separated from any electricity infrastructure.		• appropriately secured and supported so as to cause no injury or damage to persons or property; • not displayed on or attached to a tree, roadside pole or official traffic or safety sign; and • appropriately separated from any electricity infrastructure.
PO4 Freestanding advertising devices, where located on land fronting a state-controlled road, are appropriately located and designed to: (a) not impact on the safety and efficiency of the state-controlled road network; and (b) preserve rural character and landscape values.	AO4 Freestanding advertising devices: (a) have a maximum sign face area of 18m2 and a maximum sign face width of 6 metres; (b) are sited a minimum of 1 kilometre from all existing freestanding advertising devices whether or not they are on the same side of the road; (c) are of a design and colour that is compatible with existing adjacent development; and (d) are only located on properties with frontage to either side of the sections of State-controlled road identified in **Table 9.4.1.3C.**	**Complies.** See Part 3.5 of the Report, Advertising devices

9.4.2 Landscaping code

The purpose of the Landscaping code is to ensure all development is landscaped to a standard that:
(a) complements the scale and appearance of the development;
(b) protects and enhances the amenity and environmental values of the site;
(c) complements and enhances the streetscape and local landscape character; and
(d) ensures effective buffering of incompatible land uses to protect local amenity.

The purpose of the code will be achieved through the following overall outcomes:
(a) Landscaping is a functional part of development design and is commensurate with the intended use;
(b) Landscaping accommodates the retention of existing significant on site vegetation where appropriate and practical;
(c) Landscaping treatments complement the scale, appearance and function of the development;
(d) Landscaping contributes to an attractive streetscape;
(e) Landscaping enhances the amenity and character of the local area;
(f) Landscaping enhances natural environmental values of the site and the locality;
(g) Landscaping provides effective screening both on site, if required, and between incompatible land uses;
(h) Landscaping provides shade in appropriate circumstances;
(i) Landscape design enhances personal safety and reduces the potential for crime and vandalism; and
(j) Intensive land uses incorporate vegetated buffers to provide effective screening of buildings, structures and machinery associated with the use.

Table 9.4.2.3A—Landscaping code - For accepted development subject to requirements and assessable development

Performance Outcomes	Acceptable Outcomes	Applicant Response
For accepted development subject to requirements and assessable development		
PO1 Development, other than in the Rural zone, includes landscaping that: • contributes to the landscape character of the Shire; • compliments the character of the immediate surrounds; • provides an appropriate balance between built and natural elements; and • provides a source of visual interest.	**AO1** Development, other than in the Rural zone, provides: • a minimum of 10% of the site as landscaping; • planting in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species; • for the integration of retained significant vegetation into landscaping areas; • on-street landscaping works in accordance with the Design Guidelines set out in Section D9 Landscaping, of the Planning Scheme Policy 4 - FNQROC Regional Development Manual.	**Complies.** The proposed landscaping will: • Contribute to the landscape character of the Shire. • Complement the character of the immediate surrounds. • Provide an appropriate balance between built and natural elements; and • Provide a source of visual interest.

Performance Outcomes	Acceptable Outcomes	Applicant Response
	Note—Where development exceeds a site cover of 90%, areas of landscaping may be provided above ground level to achieve a total supply of landscaping equivalent to 10% of the site area.	
PO2 Development, other than in the Rural zone, includes landscaping along site frontages that: • creates an attractive streetscape; • compliments the character of the immediate surrounds; • assists to break up and soften elements of built form; • screen areas of limited visual interest or servicing; • provide shade for pedestrians; and • includes a range and variety of planting.	AO2 Development, other than in the Rural zone, includes a landscape strip along any site frontage: • with a minimum width of 2 metres where adjoining a car parking area; • with a minimum width of 1.5 metres in all other locations; and • in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species. Note—Where development is setback from a frontage less than 1.5 metres, the setback area is provided as a landscape strip	**Complies.** See Part 3.4 of the report, landscaping.
PO3 Development includes landscaping and fencing along side and rear boundaries that: • screens and buffer land uses; • assists to break up and soften elements of built form; • screens areas of limited visual interest; • preserves the amenity of sensitive land uses; and • includes a range and variety of planting.	AO3.1 Development provides landscape treatments alongside and rear boundaries in accordance with **Table 9.4.2.3B.**	**Complies.** See section 3.4 of the report, Landscaping. Development will include landscaping and fencing alongside and rear boundaries that: • screens and buffer land uses; • assists to break up and soften elements of built form; • screens areas of limited visual interest; • preserves the amenity of sensitive land uses; and • includes a range and variety of planting.
	AO3.2	**Complies.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
	Shrubs and trees provided in landscape strips alongside and rear boundaries: • are planted at a maximum spacing of 1 metre; • will grow to a height of at least 2 metres; • will grow to form a screen of no less than 2 metres in height; and • are mulched to a minimum depth of 0.1 metres with organic mulch.	See above.
	AO3.3 Any landscape strip provided along a side or rear boundary is designed in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species.	**Complies.** See above.
PO4 Car parking areas are improved with a variety of landscaping that: • provides visual interest; • provides a source of shade for pedestrians; • assists to break up and soften elements; and • improves legibility.	AO4.1 Landscaping is provided in car parking areas which provides: • a minimum of 1 shade tree for every 4 parking spaces, or part thereof, where the car parking area includes 12 or more spaces; • a minimum of 1 shade tree for every 6 parking spaces, or part thereof, otherwise; and • where involving a car parking area in excess of 500m2: • shade structures are provided for 50% of parking spaces; and • a minimum of 10% of the parking area as landscaping. Note—Where a shade structure is provided over part of a car parking area, shade tree planting is not	**Complies.** See section 3.4 of the report, Landscaping.

Performance Outcomes	Acceptable Outcomes	Applicant Response
	required in this area of the car parking area.	
	AO4.2 Landscaping in car parking areas is designed in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species.	**Complies.**
PO5 Landscaping areas include a range and variety of planting that: • is suitable for the intended purpose and local conditions; • contributes to the natural character of the Shire; • includes native species; • includes locally endemic species, where practical; and • does not include invasive plants or weeds.	AO5.1 Plant species are selected from the Plant Schedule in Planning Scheme Policy 6 - Landscaping and preferred plant species.	**Complies.** Landscaping areas will include a range and variety of planting that: • are suitable for the intended purpose and local conditions; • contribute to the natural character of the Shire; • include native species; • include locally endemic species, where practical; and • do not include invasive plants or weeds.
	AO5.2 A minimum of 25% of (new and existing) plants is provided as larger, advanced stock with a minimum plant height of 0.7 metres and mulched to a minimum depth of 0.1 metres with organic mulch.	**Complies.**
PO6 Landscaping does not impact on the ongoing provision of infrastructure and services to the Shire.	AO6.1 Tree planting is a minimum of • 2 metres from any underground water, sewer, gas, electricity or telecommunications infrastructure; and • 4 metres from any inspection chamber.	**Complies.** Landscaping will not impact on the ongoing provision of infrastructure and services to the Shire.
	AO6.2	**Complies.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
	Vegetation below or within 4 metres of overhead electricity lines and power poles has a maximum height of 3.5 metres at maturity.	Vegetation will not exceed 3.5 metres in height at maturity
	AO6.3 Vegetation adjoining an electricity substation boundary, at maturity, will have: • a height of less than 4 metres; and • no foliage within 3 metres of the substation boundary, unless the substation has a solid wall along any boundary.	**Not applicable** Development site does not adjoin an electricity substation.
For assessable development		
PO7 Landscaping areas are designed to: • be easily maintained throughout the ongoing use of the site; • allow sufficient area and access to sunlight and water for plant growth; • not cause a nuisance to occupants of the site or members of the public; and • maintain or enhance the safety of pedestrians through the use of Crime Prevention Through Environmental Design principles.	AO7 No acceptable outcome is provided.	**Complies.** Landscaping areas will be designed to: • be easily maintained throughout the ongoing use of the site; • allow sufficient area and access to sunlight and water for plant growth; • not cause a nuisance to occupants of the site or members of the public; and • maintain or enhance the safety of pedestrians through the use of Crime Prevention Through Environmental Design principles.

9.4.3 Parking and access code

The purpose of the Parking and access code is to ensure:
(a) parking areas are appropriately designed, constructed and maintained;
(b) the efficient functioning of the development and the local road network; and
(c) all development provides sufficient parking, loading/service and manoeuvring areas to meet the demand generated by the use.

The purpose of the code will be achieved through the following overall outcomes:
(a) Land uses have a sufficient number of parking and bicycle spaces designed in a manner to meet the requirements of the user;
(b) Parking spaces and associated manoeuvring areas are safe, functional and provide equitable access;
(c) Suitable access for all types of vehicles likely to utilise a parking area is provided in a way that does not compromise the safety and efficiency of the surrounding road network;
(d) Premises are adequately serviced to meet the reasonable requirements of the development; and
(e) End of trip facilities are provided by new major developments to facilitate alternative travel modes.

Table 9.4.3.3A—Parking and access code – For accepted development subject to requirements and assessable development

Performance Outcomes	Acceptable Outcomes	Applicant Response
For accepted development subject to requirements and assessable development		
Car parking spaces		
PO1 Development provides sufficient car parking to accommodate the demand likely to be generated by the use, having regard to the: (a) nature of the use; (b) location of the site; (c) proximity of the use to public transport services; (d) availability of active transport infrastructure; and (e) accessibility of the use to all members of the community.	**AO1** The number of car parking spaces provided for the use is in accordance with **Table 9.4.3.3B**. Note—Car parking spaces provided for persons with a disability are to be considered in determining compliance with AO1.	**Complies.** The proposal provides for sufficient car parking to accommodate the demand likely to be generated by the uses. See Part 3.3 of the report, Access and Parking.
Vehicle crossovers		
PO2 Vehicle crossovers are provided to: (a) ensure safe and efficient access between the road and premises;	AO2.1 Vehicular access to/from Council roads is designed and constructed in accordance with the Standard drawings in Planning Scheme Policy 4 - FNQROC Regional Development Manual.	**Complies.** See Part 3.3 of the report, Access and Parking.

(b) minimize interference with the function and operation of roads; and (c) minimise pedestrian to vehicle conflict.	AO2.2 Development on a site with two or more road frontages provides vehicular access from: (a) the primary frontage where involving Community activities or Sport and recreation activities, unless the primary road frontage is a State-controlled road; or (b) from the lowest order road in all other instances.	**See above.**
	AO2.3 Vehicular access for particular uses is provided in accordance with **Table 9.4.3.3E**.	**Proposal complies with Service station use requirements in Table 9.4.3.3E.** See Part 3.3 of the report, Access and Parking.
PO3 Access, manoeuvring and car parking areas include appropriate pavement treatments having regard to: (a) the intensity of anticipated vehicle movements; (b) the nature of the use that they service; and (c) the character of the surrounding locality.	AO3 Access, manoeuvring and car parking areas include pavements that are constructed in accordance with **Table 9.4.3.3C**.	**Proposal will comply.**
For assessable development		
Parking area location and design		
PO4 Car parking areas are located and designed to: (a) ensure safety and efficiency in operation; and (b) be consistent with the character of the surrounding locality.	AO4.1 Car parking spaces, access and circulation areas have dimensions in accordance with AS/NZS 2890.1 Off-street car parking.	**Complies.** See attached Traffic Impact Assessment by CivilWalker Engineering. Complies with AS/NZS 2890.1 Off-street car parking for 90-degree car parking.
	AO4.2	**Complies.**

	Disabled access and car parking spaces are located and designed in accordance with AS/NZS 2890.6 Parking facilities - Off-street parking for people with disabilities.	See attached Traffic Impact Assessment by CivilWalker Engineering.
	AO4.3 The car parking area includes designated pedestrian routes that provide connections to building entrances.	**Complies.** There is a 1.5m wide footpath located between the 7 car parks and the front of the main building.
	AO4.4 Parking and any set down areas are: (a) wholly contained within the site; (b) visible from the street where involving Commercial activities, Community activities, Industrial activities or a use in the Recreation and open space zone; (c) are set back behind the main building line where involving a Dual occupancy, Multiple dwelling, Residential care facility or Retirement facility; and (d) provided at the side or rear of a building in all other instances.	**Complies.** • Parking is wholly contained within the site. • Parking is visible from the street. • Parking is provided at the front of the building to accommodate the drive through at the rear of the building, and to allow typical vehicular movements of a service station
Site access and manoeuvring		
PO5 Access to, and manoeuvring within, the site is designed and located to: (a) ensure the safety and efficiency of the external road network; (b) ensure the safety of pedestrians;	AO5.1 Access and manoeuvrability is in accordance with : (a) AS28901 – Car Parking Facilities (Off Street Parking); and (b) AS2890.2 – Parking Facilities (Off-street Parking) Commercial Vehicle Facilities.	**Complies** See attached Traffic Impact Assessment by CivilWalker. Section 7 of the report concludes that all on-site parking is in keeping with AS/NZS:2890.

(c) provide a functional and convenient layout; and (d) accommodate all vehicles intended to use the site.	Note—Proposal plans should include turning circles designed in accordance with AP34/95 (Austroads 1995) Design Vehicles and Turning Path Templates.	
	AO5.2 Vehicular access has a minimum sight distance in accordance with Part 5 of AUSTROADS.	**Complies.** There will be no on-site obstructions limiting sight distance.
	AO5.3 Vehicular access is located and designed so that all vehicles enter and exit the site in a forward gear.	**Complies** See attached Traffic Impact Assessment by CivilWalker Engineering. As indicated by the swept path analysis (Appendix 1 of the Transport Assessment) All vehicles will be able to enter and exit the site in a forward gear.
	AO5.4 Pedestrian and cyclist access to the site: (a) is clearly defined; (b) easily identifiable; and (c) provides a connection between the site frontage and the entrance to buildings and end of trip facilities (where provided).	**Complies.** Pedestrian access to the development will be facilitated by the existing road verges.
PO6 Development that involves an internal road network ensures that it's design: (a) ensure safety and efficiency in operation; (b) does not impact on the amenity of residential uses on the site and on adjoining sites, having regard to matters of: (i) hours of operation; (ii) noise	AO6.1 Internal roads for a Tourist park have a minimum width of: (a) 4 metres if one way; or (b) 6 metres if two way.	**Not applicable.** No internal road to be provided.
	AO6.2 For a Tourist park, internal road design avoids the use of cul-de-sacs in favour of circulating roads, where unavoidable, cul-de-sacs provide a full turning circle for vehicles towing caravans having:	**Not applicable.** No internal road to be provided.

(iii) light; and (iv) odour; (c) accommodates the nature and volume of vehicle movements anticipated to be generated by the use; (d) allows for convenient access to key on-site features by pedestrians, cyclists and motor vehicles; and (e) in the Rural zone, avoids environmental degradation.	(a) a minimum approach and departure curve radius of 12 metres; and (b) a minimum turning circle radius of 8 metres.	
	AO6.3 Internal roads are imperviously sealed and drained, apart from those for an Energy and infrastructure activity or Rural activity.	**Not applicable.** No internal road to be provided.
	AO6.4 Speed control devices are installed along all internal roads, apart from those for an Energy and infrastructure activity or Rural activity, in accordance with Complete Streets.	**Not applicable.** No internal road to be provided.
	AO6.5 Internal roads, apart from those for an Energy and infrastructure activity or Rural activity, are illuminated in accordance with AS 4282 (as amended) - Control of Obtrusive effects of outdoor lighting.	**Not applicable.** No internal road to be provided.
	AO6.6 Where involving an accommodation activity, internal roads facilitate unobstructed access to every dwelling, accommodation unit, accommodation site and building by emergency services vehicles.	**Not applicable.** No internal road to be provided.
	AO6.7 For an Energy and infrastructure activity or Rural activity, internal road gradients: (a) are no steeper than 1:5; or (b) are steeper than 1:5 and are sealed.	**Not applicable.** No internal road to be provided.

Servicing		
PO7 Development provides access, maneuvering and servicing areas on site that: (a) accommodate a service vehicle commensurate with the likely demand generated by the use; (b) do not impact on the safety or efficiency of internal car parking or maneuvering areas; (c) do not adversely impact on the safety or efficiency of the road network; (d) provide for all servicing functions associated with the use; and (e) are located and designed to minimise their impacts on adjoining sensitive land uses and streetscape quality.	AO7.1 All unloading, loading, service and waste disposal areas are located: (a) on the site; (b) to the side or rear of the building, behind the main building line; (c) not adjacent to a site boundary where the adjoining property is used for a sensitive use.	**Complies.** As per proposed site plans, all unloading, loading, service and waste disposal areas will be located: • on the site; • to the side or rear of the building, behind the main building line; and • not adjacent to a site boundary where the adjoining property is used for a sensitive use.
	AO7.2 Unloading, loading, service and waste disposal areas allow service vehicles to enter and exit the site in a forward gear.	**Complies.** See attached Traffic Impact Assessment by CivilWalker Engineering. Unloading, loading, service and waste disposal areas allow service vehicles to enter and exit the site in a forward gear.
	AO7.3 Development provides a servicing area, site access and maneuvering areas to accommodate the applicable minimum servicing vehicle specified in **Table 9.4.3.3B**.	**Complies with PO.** See part 3 of this report.
Maintenance		
PO8 Parking areas are used and maintained for their intended purpose.	AO8.1 Parking areas are kept and used exclusively for parking and are maintained in a suitable condition for parking and circulation of vehicles.	**Will be complied with.** Parking areas will be kept and used exclusively for parking and are maintained in a suitable condition for parking and circulation of vehicles.
	AO8.2 All parking areas will be compacted, sealed, drained, line marked and maintained until such time as the development ceases.	**Will be complied with.** All parking areas will be compacted, sealed, drained, line marked and maintained until such time as the development ceases.
End of trip facilities		

PO9 Development within the Centre zone; Industry zone or Emerging community zone provides facilities for active transport users that: (a) meet the anticipated demand generated from the use; (b) comprise secure and convenient bicycle parking and storage; and (c) provide end of trip facilities for all active transport users.	AO9.1 The number of bicycle parking spaces provided for the use is in accordance with **Table 9.4.3.3D**.	**Complies.** 1 bike park to be provided. There is sufficient room to provide bicycle parking in front of car park 1, adjacent the window to the 'Service Area', on the proposed floor plans.
	AO9.2 End of trip facilities are provided in accordance with **Table 9.4.3.3D**.	**Not applicable.** No end of trip facilities are specified in the Table 9.4.3.3D for this use.
If for Educational establishment or Child care centre where involving more than 100 vehicle movements per day or Renewable energy facility, Sport and recreation activities or Tourist park		
PO10 The level of traffic generated by the development on the surrounding local road network must not result in unacceptable impacts on adjacent land and local road users.	AO10 A traffic impact report is prepared by a suitably qualified person that identifies: (a) the expected traffic movements to be generated by the facility; (b) any associated impacts on the road network; and (c) any works that will be required to address the identified impacts.	**Not applicable.** The proposed development is not for: • Educational establishment, • Child care centre, • Renewable energy facility, • Sport and recreation activities; or • Tourist park
If for Educational establishment or Child care centre where involving more than 100 vehicle movements per day or Renewable energy facility, Sport and recreation activities or Tourist park		
PO11 The level of traffic generated by the development on the surrounding local road network must not result in unacceptable impacts on adjacent land and local road users.	AO11 A traffic impact report is prepared by a suitably qualified person that identifies: (d) the expected traffic movements to be generated by the facility; (e) any associated impacts on the road network; and (f) any works that will be required to address the identified impacts.	**Not applicable.** The proposed development is not for: • Educational establishment, • Child care centre, • Renewable energy facility, • Sport and recreation activities; or • Tourist park

9.4.5 Works, services and infrastructure code

The purpose of the Works, services and infrastructure code is to ensure that all development is appropriately serviced by physical infrastructure, public utilities and services and that work associated with development is carried out in a manner that does not adversely impact on the surrounding area.

The purpose of the code will be achieved through the following overall outcomes:
(a) Development provides an adequate, safe and reliable supply of potable, fire-fighting and general use water in accordance with relevant standards;
(b) Development provides for the treatment and disposal of wastewater and ensures there are no adverse impacts on water quality, public health, local amenity or ecological processes;
(c) Development provides for the disposal of stormwater and ensures that there are no adverse impacts on water quality or ecological processes;
(d) Development connects to the road network and any adjoining public transport, pedestrian and cycle networks while ensuring no adverse impacts on the safe, convenient and efficient operation of these networks;
(e) Development provides electricity and telecommunications services that meet its desired requirements;
(f) Development is connected to a nearby electricity network with adequate capacity without significant environment, social or amenity impact;
(g) Development does not affect the efficient functioning of public utility mains, services or installations;
(h) Infrastructure dedicated to Council is cost effective over its life cycle;
(i) Work associated with development does not cause adverse impacts on the surrounding area; and
(j) Development prevents the spread of weeds, seeds or other pests.

Table 9.4.5.3 - Works, services and infrastructure code – For accepted development subject to requirements and assessable development

Performance Outcomes	Acceptable Outcomes	Applicant Response
For accepted development subject to requirements and assessable development		
Water supply		
PO1 Each lot has an adequate volume and supply of water that: (a) meets the needs of users; (b) is adequate for fire-fighting purposes; (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	AO1.1 Development is connected to a reticulated water supply system in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual other than where located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated water supply service area.	**Will be complied with.** The subject site is situated within the Priority infrastructure area and would be connected to Council's reticulated water supply.
	AO1.2	**Not applicable.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
	Development, where located outside a reticulated water supply service area and in the Conservation zone, Rural zone or Rural residential zone is provided with: (a) a bore or bores are provided in accordance with the Design Guidelines set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual; or (b) on-site water storage tank/s: (i) with a minimum capacity of 90,000L; (ii) fitted with a 50mm ball valve with a camlock fitting; and (iii) which are installed and connected prior to the occupation or use of the development.	
Wastewater disposal		
PO2 Each lot provides for the treatment and disposal of effluent and other waste water that: (a) meets the needs of users; (b) is adequate for fire-fighting purposes; (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	AO2.1 Development is connected to a reticulated sewerage system in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual other than where located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated sewerage service area.	**Will be complied with.** The subject site is situated within the Priority infrastructure area and would be connected to Council's reticulated sewerage system.
	AO2.2	**Not applicable.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
	An effluent disposal system is provided in accordance with ASNZ 1547 On-Site Domestic Wastewater Management (as amended) where development is located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated sewerage service area.	
Stormwater infrastructure		
PO3 Stormwater infrastructure is designed and constructed to collect and convey the design storm event to a lawful point of discharge in a manner that mitigates impacts on life and property.	AO3.1 Where located within a Priority infrastructure area or where stormwater infrastructure is available, development is connected to Council's stormwater network in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**Will be complied with.** The subject site is situated within the Priority infrastructure area and would be connected to Council's stormwater network.
	AO3.2 On-site drainage systems are constructed: (a) to convey stormwater from the premises to a lawful point of discharge; and (b) in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**Will be complied with.**
Electricity supply		
PO4 Each lot is provided with an adequate supply of electricity	AO4 The premises:	**Will be complied with.** The proposed development will be connected to the electricity supply network.

Performance Outcomes	Acceptable Outcomes	Applicant Response
	(a) is connected to the electricity supply network; or (b) has arranged a connection to the transmission grid; or (c) where not connected to the network, an independent energy system with sufficient capacity to service the development (at near average energy demands associated with the use) may be provided as an alternative to reticulated electricity where: (i) it is approved by the relevant regulatory authority; and (ii) it can be demonstrated that no air or noise emissions; and (iii) it can be demonstrated that no adverse impact on visual amenity will occur.	
Telecommunications infrastructure		
PO5 Each lot is provided with an adequate supply of telecommunication infrastructure	AO5 Development is provided with a connection to the national broadband network or telecommunication services.	**Will be complied with.** Development will be provided with telecommunication services.
Existing public utility services		
PO6 Development and associated works do not affect the efficient functioning of public utility mains, services or installations.	AO6 Public utility mains, services are relocated, altered or repaired in association with the works so that they continue to function and satisfy the	**Will be complied with.** Development will not affect the function of public infrastructure.

Performance Outcomes	Acceptable Outcomes	Applicant Response
	relevant Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	
Excavation or filling		
PO7 Excavation or filling must not have an adverse impact on the: (a) streetscape; (b) scenic amenity; (c) environmental values; (d) slope stability; (e) accessibility; or (f) privacy of adjoining premises.	AO7.1 Excavation or filling does not occur within 1.5 metres of any site boundary.	**PO will be complied with.** Development will not have an adverse impact on the: • streetscape; • scenic amenity; • environmental values; • slope stability; • accessibility; or • privacy of adjoining premises.
	AO7.2 Excavation or filling at any point on a lot is to be no greater than 1.5 metres above or below natural ground level.	**See above.**
	AO7.3 Earthworks batters: (a) are no greater than 1.5 metres in height; (b) are stepped with a minimum width 2 metre berm; (c) do not exceed a maximum of two batters and two berms (not greater than 3.6 metres in total height) on any one lot; (d) have a slope no greater than 1 in 4; and (e) are retained.	**See above.**
	AO7.4 Soil used for filling or spoil from excavation is not stockpiled in locations that can be viewed from: (a) adjoining premises; or	**See above.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
	(b) a road frontage, for a period exceeding 1 month from the commencement of the filling or excavation.	
	AO7.5 All batters and berms to be constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**See above.**
	AO7.6 Retaining walls have a maximum height of 1.5 metres and are designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	**See above.**
	AO7.7 Excavation or filling at any point on a lot is to include measures that protect trees at the foot or top of cut or fill batters by the use of appropriate retaining methods and sensitive earth removal or placement and in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	**See above.**
For assessable development		
Transport network		
PO8 The development has access to a transport network of adequate standard to provide for the safe and efficient	AO8.1 Vehicle access, crossovers, road geometry, pavement, utilities and landscaping to the frontage/s of the site are	**Will be complied with.** The development is located within the Priority infrastructure network

Performance Outcomes	Acceptable Outcomes	Applicant Response
movement of vehicles, pedestrians and cyclists.	designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	The development will have access to a transport network of adequate standard to provide for the safe and efficient movement of vehicles, pedestrians and cyclists. See the attached Transport impact assessment by CivilWalker.
	AO8.2 Development provides footpath pavement treatments in accordance with Planning Scheme Policy 9 – Footpath Paving.	**Will be complied with.**
Public infrastructure		
PO9 The design, construction and provision of any infrastructure that is to be dedicated to Council is cost effective over its life cycle and incorporates provisions to minimise adverse impacts.	AO9 Development is in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**Will be complied with – as applicable.**
Stormwater quality		
PO10 Development has a non-worsening effect on the site and surrounding land and is designed to: (a) optimise the interception, retention and removal of waterborne pollutants, prior to the discharge to receiving waters; (b) protect the environmental values of waterbodies affected by the development, including upstream, on-site and downstream waterbodies;	AO10.1 The following reporting is prepared for all Material change of use or Reconfiguring a lot proposals: (a) a Stormwater Management Plan and Report that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC	**Will be complied with.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
(c) achieve specified water quality objectives; (d) minimise flooding; (e) maximise the use of natural channel design principles; (f) maximise community benefit; and (g) minimise risk to public safety.	Regional Development Manual; and (b) an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia), including: (i) drainage control; (ii) erosion control; (iii) sediment control; and (iv) water quality outcomes.	
	AO10.2 For development on land greater than 2,500m^2 or that result in more than 5 lots or more than 5 dwellings or accommodation units, a Stormwater Quality Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) is prepared that demonstrates that the development: meets or exceeds the standards of design and construction set out in the Urban Stormwater Quality Planning Guideline and the Queensland Water Quality Guideline; (b) is consistent with any local area stormwater water management planning; (c) accounts for development type, construction phase, local climatic conditions and design objectives; and	**Not applicable.** The site is less than 2,500m^2

Performance Outcomes	Acceptable Outcomes	Applicant Response
	(d) provides for stormwater quality treatment measures reflecting land use constraints, such as soil type, landscape features (including landform), nutrient hazardous areas, acid sulfate soil and rainfall erosivity.	
PO11 Storage areas for stormwater detention and retention: (a) protect or enhance the environmental values of receiving waters; (b) achieve specified water quality objectives; (c) where possible, provide for recreational use; (d) maximise community benefit; and (e) minimise risk to public safety.	AO11 No acceptable outcome is provided.	**Not applicable.**
Excavation or filling		
PO12 Traffic generated by filling or excavation does not impact on the amenity of the surrounding area.	AO12.1 Haul routes used for transportation of fill to or from the site only use major roads and avoid residential areas.	**Not applicable.**
	AO12.2 Transportation of fill to or from the site does not occur: (a) within peak traffic times; and (b) before 7am or after 6pm Monday to Friday; (c) before 7am or after 1pm Saturdays; and (d) on Sundays or Public Holidays.	**Will be complied with as appropriate.**
	AO13.1	**Will be complied with as appropriate.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
PO13 Air pollutants, dust and sediment particles from excavation or filling, do not cause significant environmental harm or nuisance impacts.	Dust emissions do not extend beyond the boundary of the site.	
	AO13.2 No other air pollutants, including odours, are detectable at the boundary of the site.	**Will be complied with as appropriate.**
	AO13.3 A management plan for control of dust and air pollutants is prepared and implemented.	**Will be complied with as appropriate.**
PO14 Access to the premises (including driveways and paths) does not have an adverse impact on: (a) safety; (b) drainage; (c) visual amenity; and (d) privacy of adjoining premises.	AO14 Access to the premises (including all works associated with the access): (a) must follow as close as possible to the existing contours; (b) be contained within the premises and not the road reserve, and (c) are designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	**Will be complied with as appropriate.**
Weed and pest management		
PO15 Development prevents the spread of weeds, seeds or other pests into clean areas or away from infested areas.	AO15 No acceptable outcome is provided.	**Will be complied with as appropriate.**
Contaminated land		
PO16 Development is located and designed to ensure that users and nearby sensitive land uses are not exposed to	AO16 Development is located where: (a) soils are not contaminated by pollutants which	**Will be complied with.**

Performance Outcomes	Acceptable Outcomes	Applicant Response
unacceptable levels of contaminants	represent a health or safety risk to users; or (b) contaminated soils are remediated prior to plan sealing, operational works permit, or issuing of building works permit.	
Fire services in developments accessed by common private title		
PO17 Fire hydrants are located in positions that will enable fire services to access water safely, effectively and efficiently.	AO17.1 Fire hydrants are located in accessways or private roads held in common private title at a maximum spacing of: (a) 120 metres for residential development; and (b) 90 metres for any other development.	**Not applicable.**
	AO17.2 Fire hydrants are located at all intersections of accessways or private roads held in common private title.	**Not applicable.**

APPENDIX 2: SITE PHOTOS

Photo 1: No. 253 (showroom) and No. 255 Byrnes Street (existing house to be demolished as part of the proposal).

Photo 2: No. Herberton Street (Existing Service Station to be demolished) and No. 3 Herberton Street (adjoining dwelling).

Photo 3: Existing site and pylon sign

APPENDIX 3: STATE GOVERNMENT REFERRALS

State Code 1: Development in a state-controlled road environment

The purpose of this code is to protect **state-controlled roads**, **future state-controlled roads** and other infrastructure in **state-controlled roads** from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near, **state-controlled roads**. Specifically, this code seeks to ensure:

1. development does not create a safety hazard for users of a **state-controlled road**, by increasing the likelihood or frequency of fatality or serious injury
2. development does not compromise the structural integrity of **state-controlled roads**, **road transport infrastructure** or **road works**
3. development does not result in a worsening of the physical condition or operating performance of **state-controlled roads** and the surrounding road network
4. development does not compromise the state's ability to construct **state-controlled roads** and **future state-controlled roads**, or significantly increase the cost to construct **state-controlled roads** and **future state-controlled roads**
5. development does not compromise the state's ability to maintain and operate **state-controlled roads**, or significantly increase the cost to maintain and operate **state-controlled roads**
6. development does not compromise the structural integrity of **public passenger transport infrastructure** located on **state-controlled roads** or compromise the operating performance of public passenger transport services on **state-controlled roads**
7. the community is protected from significant adverse impacts resulting from environmental emissions generated by vehicles using **state-controlled roads**.

Table 1.2.1: Development in a state controlled road environment

Performance outcomes	Acceptable outcomes	Response
Buildings and structures		
PO1 The location of buildings, structures, infrastructure, services and utilities does not create a safety hazard in a state-controlled road, or cause damage to, or obstruct road transport infrastructure	**AO1.1** Buildings, structures, infrastructure, services and utilities are not located in a state-controlled road. AND	**Complies.** No part of the building, structure/s, infrastructure, services and utilities would be located in a state-controlled road.
	AO1.2	**Complies with Performance outcome.** The existing service station site benefits from access to the state-controlled road.

Performance outcomes	Acceptable outcomes	Response
	Buildings, structures, infrastructure, services and utilities can be maintained without requiring access to a state-controlled road.	Pre-lodgement advice has been sought from SDLGP (Brett Nancarrow) regarding the location of vehicle access to and from the site.
PO2 The design and construction of Buildings and structures does not create a safety hazard by distracting users of a state-controlled road.	**AO2.1** Facades of buildings and structures facing a state-controlled road are made of non-reflective materials. OR	**Will be complied with**
	AO2.2 Facades of buildings and structures do not reflect point light sources into the face of oncoming traffic on a state-controlled road. AND	**Will be complied with**
	AO2.3 External lighting of buildings and structures is not directed into the face of oncoming traffic on a state-controlled road and does not involve flashing or laser lights. AND	**Will be complied with**
	AO2.4 Advertising devices visible from a state-controlled road are located and designed in accordance with the Roadside advertising guide, Department of Transport and Main Roads, 2013.	**Will be complied with**
PO3 Road, pedestrian and bikeway bridges over a state-controlled road are designed and constructed to prevent projectiles from being thrown onto a state-controlled road.	**AO3.1** Road, pedestrian and bikeway bridges over a state-controlled road include throw protection screens in accordance with section 4.9.3 of the Design criteria for bridges and other structures manual, Department of Transport and Main Roads, 2014.	**Not applicable**
Filling, excavation and retaining structures		
PO4 Filling and excavation does not interfere with, or result in damage to, infrastructure or services in a state-controlled road.	No acceptable outcome is prescribed.	**Will be complied with as applicable**

Performance outcomes	Acceptable outcomes	Response
Note: Information on the location of services and public utility plants in a state-controlled road can be obtained from the Dial Before You Dig service. Where development will impact on an existing or future service or public utility plant in a state-controlled road such that the service or public utility plant will need to be relocated, the alternative alignment must comply with the standards and design specifications of the relevant service or public utility provider, and any costs of relocation are to be borne by the developer.		
PO5 Filling, excavation, building foundations and retaining structures do not undermine, or cause subsidence of, a state-controlled road. Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment, prepared in accordance with Volume 3 of the Road Planning And Design Manual 2nd edition, Department of Transport and Main Roads, 2016, is provided.	No acceptable outcome is prescribed.	**Will be complied with as applicable**
PO6 Filling, excavation, building foundations and retaining structures do not cause ground water disturbance in a state-controlled road. Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment, prepared in accordance with Volume 3 of the Road planning and design manual 2nd edition, Department of Transport and Main Roads, 2016, is provided.	No acceptable outcome is prescribed.	**Will be complied with as applicable**
PO7 Excavation, boring, piling, blasting or fill compaction during construction of a development does not result in ground movement or vibration impacts that would cause damage or nuisance to a state-controlled road, road transport infrastructure or road works. Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment, prepared in accordance with Volume 3 of the Road Planning And Design Manual	No acceptable outcome is prescribed.	**Will be complied with as applicable**

Performance outcomes	Acceptable outcomes	Response
2nd edition, Department of Transport and Main Roads, 2016, is provided.		
PO8 Development involving the haulage of fill, extracted material or excavated spoil material exceeding 10,000 tonnes per year does not damage the pavement of a state-controlled road. Note: It is recommended a pavement impact assessment is provided in accordance with the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	**AO8.1** Fill, extracted material and spoil material is not transported to or from the development site on a state-controlled road.	**Not applicable** Development does not require the transportation of fill, extracted material, and spoil material.
PO9 Filling and excavation associated with the construction of vehicular access to a development does not compromise the operation or capacity of existing drainage infrastructure for a state-controlled road.	No acceptable outcome is prescribed.	**Not applicable** Vehicular access already exists.
PO10 Fill material used on a development site does not result in contamination of a state-controlled road.	**AO10.1** Fill material is free of contaminants including acid sulfate content. Note: Soils and rocks should be tested in accordance with AS 1289.0 – Methods of testing soils for engineering purposes and AS 4133.0-2005 – Methods of testing rocks for engineering purposes. AND	**Will be complied with as applicable**
	AO10.2 Compaction of fill is carried out in accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes.	**Will be complied with as applicable**
PO11 Filling and excavation does not cause wind-blown dust nuisance in a state-controlled road.	**AO11.1** Compaction of fill is carried out in accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes. AND	**Will be complied with as applicable**
	AO11.2 Dust suppression measures are used during filling and excavation activities such as wind breaks or barriers and dampening of ground surfaces.	**Will be complied with as applicable**

Performance outcomes	Acceptable outcomes	Response
Stormwater and drainage		
PO12 Development does not result in an actionable nuisance, or worsening of, stormwater, flooding or drainage impacts in a state-controlled road.	No acceptable outcome is prescribed.	**Complies** The proposal would not result in an actionable nuisance, or worsening of, stormwater, flooding or drainage impacts in a state-controlled road.
PO13 Run-off from the development site is not unlawfully discharged to a state-controlled road.	**AO13.1** Development does not create any new points of discharge to a state-controlled road. AND	**Complies**
	AO13.2 Stormwater run-off is discharged to a lawful point of discharge. Note: Section 3.4 of the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013, provides further information on lawful points of discharge. AND	**Complies**
	AO13.3 Development does not worsen the condition of an existing lawful point of discharge to the state-controlled road.	**Complies**
PO14 Run-off from the development site during construction does not cause siltation of stormwater infrastructure affecting a state-controlled road.	**AO14.1** Run-off from the development site during construction is not discharged to stormwater infrastructure for a state-controlled road.	**Will be complied with as applicable**
Vehicular access to a state-controlled road		
PO15 Vehicular access to a state-controlled road that is a limited access road is consistent with government policy for the management of limited access roads.	**AO15.1** Development does not require new or changed access to a limited access road. Note: Limited access roads are declared by the transport chief executive under section 54 of the Transport Infrastructure Act 1994 and are identified in the DA mapping system. OR	**Not applicable** Development is not situated on situated a Limited access road.

Performance outcomes	Acceptable outcomes	Response
	AO15.2 A new or changed access to a limited access road is consistent with the limited access policy for the state-controlled road. Note: Limited access policies for limited access roads declared under the Transport Infrastructure Act 1994 can be obtained by contacting the relevant Department of Transport and Main Roads regional office. AND	**Not applicable** Development is not situated on situated a Limited access road.
	AO15.3 Where a new or changed access is for a service centre, access is consistent with the Service centre policy, Department of Transport and Main Roads, 2013 and the Access policy for roadside service centre facilities on limited access roads, Department of Transport and Main Roads, 2013, and the Service centre strategy for the state-controlled road. Note: The Service centre policy, Department of Transport and Main Roads, 2013, Access policy for roadside service centre facilities, Department of Transport and Main Roads, 2013 and the relevant Service centre strategy for a state-controlled road can be accessed by contacting the relevant Department of Transport and Main Roads regional office.	**Not applicable**
PO16 The location and design of vehicular access to a state-controlled road (including access to a limited access road) does not create a safety hazard for users of a state-controlled road or result in a worsening of operating conditions on a state-controlled road. Note: Where a new or changed access between the premises and a state-controlled road is proposed, the Department of Transport and Main Roads will need to assess the proposal to determine if the vehicular access for the development is safe. An assessment can be made by Department of Transport and Main Roads as part of the development assessment process and a decision under section 62 of Transport Infrastructure Act 1994 issued where sufficient information is provided.	**AO16.1** Vehicular access is provided from a local government road.	**Proposal complies with PO** The proposed development is located on a corner site. Vehicular access already exists from the state-controlled road and a local road. The access is going to be moved from its current location, further from the intersection, resulting in improved vehicular movement and a safer outcome for all road users. A Transport impact assessment was undertaken, by CivilWalker Engineers. The report concluded that the proposal would not result in a significant increase in traffic

Performance outcomes	Acceptable outcomes	Response
		generation, and therefore no mitigation measures are required.
	OR all of the following acceptable outcomes apply: **AO16.2** Vehicular access for the development is consistent with the function and design of the state-controlled road. AND	**See above**
	AO16.3 Development does not require new or changed access between the premises and the state-controlled road. Note: A decision under section 62 of the Transport Infrastructure Act 1994 outlines the approved conditions for use of an existing vehicular access to a state-controlled road. Current section 62 decisions can be obtained from the relevant Department of Transport and Main Roads regional office. AND	**See above**
	AO16.4 Use of any existing vehicular access to the development is consistent with a decision under section 62 of the *Transport Infrastructure Act 1994*. Note: The development which is the subject of the application must be of an equivalent use and intensity for which the section 62 approval was issued and the section 62 approval must have been granted no more than 5 years prior to the lodgement of the application. AND	**See above**
	AO16.5 Onsite vehicle circulation is designed to give priority to entering vehicles at all times so vehicles do not queue in a road intersection or on the state-controlled road.	**See above**
PO17	**AO17.1**	**Proposal complies with AO.**

Performance outcomes	Acceptable outcomes	Response
Vehicular access to a state-controlled road or local government road (and associated road access works) are located and designed to not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian or cycle access to public passenger transport infrastructure and public passenger services.	Vehicular access and associated road access works are not located within 5 metres of existing public passenger transport infrastructure. AND	No known bus stops were present on the Byrnes Street frontage of the site.
	AO17.2 The location and design of vehicular access for a development does not necessitate the relocation of existing public passenger transport infrastructure. AND	**Proposal complies with AO.** No known bus stops were present on the Byrnes Street frontage of the site.
	AO17.3 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles using a vehicular access do not obstruct public passenger transport infrastructure and public passenger services or obstruct pedestrian or cycle access to public passenger transport infrastructure and public passenger services. AND	**Proposal complies with AO.** On-site vehicle circulation is designed to give priority to entering vehicles at all times
	AO17.4 The normal operation of public passenger transport infrastructure or public passenger services is not interrupted during construction of the development.	**Proposal Complies with AO.** The normal operation of public passenger transport infrastructure or public passenger services will not be interrupted during construction of the development.
Vehicular access to local roads within 100 metres of an intersection with a state-controlled road		
PO18 The location and design of vehicular access to a local road within 100 metres of an intersection with a state-controlled road does not create a safety hazard for users of a state-controlled road.	**AO18.1** Vehicular access is located as far as possible from the state-controlled road intersection. AND	**Complies.** See Transport Impact Assessment, undertaken by CivilWalker.
	AO18.2 Vehicular access is in accordance with volume 3, parts, 3, 4 and 4A of the Road Planning And Design Manual, 2nd edition, Department of Transport and Main Roads, 2016.	**Complies.** See Transport Impact Assessment, undertaken by CivilWalker

Performance outcomes	Acceptable outcomes	Response
	AND	
	AO18.3 Onsite vehicle circulation is designed to give priority to entering vehicles at all times so vehicles do not queue in the intersection or on the state-controlled road.	**Complies.** See Transport Impact Assessment, undertaken by CivilWalker
Planned upgrades		
PO19 Development does not impede delivery of planned upgrades of state-controlled roads.	**AO19.1** Development is not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road. Note: Land required for the planned upgrade of a state-controlled road is identified in the DA mapping system. OR	**Complies.** Development is not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road.
	AO19.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road.	**Complies.**
	OR all of the following acceptable outcomes apply: **AO19.3** Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road are able to be readily relocated or removed without materially affecting the viability or functionality of the development. AND	**Not applicable**
	AO19.4	**Not applicable**

Performance outcomes	Acceptable outcomes	Response
	Vehicular access for the development is consistent with the function and design of the planned upgrade of the state-controlled road. AND	
	AO19.5 Development does not involve filling and excavation of, or material changes to, land required for a planned upgrade to a state-controlled road. AND	**Not applicable**
	AO19.6 Land is able to be reinstated to the pre-development condition at the completion of the use.	**Not applicable**
Network impacts		
PO20 Development does not result in a worsening of operating conditions on the state-controlled road network. Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified traffic impact assessment is provided, prepared in accordance with the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	No acceptable outcome is prescribed.	**Complies.** A Transport impact assessment was undertaken of the proposed development by Civil Walker Engineers. The assessment concluded that the proposed development would not result in any impacts to road safety, access and frontage, intersection delay or road link capacity that warrant any mitigation measures to be implemented.
PO21 Development does not impose traffic loadings on a state-controlled road which could be accommodated on the local road network.	**AO21.1** The layout and design of the development directs traffic generated by the development to the local road network.	**Complies.** See above.
PO22 Upgrade works on, or associated with, a state-controlled road are built in accordance with Queensland road design standards.	**AO22.1** Upgrade works required as a result of the development are designed and constructed in accordance with the ***Road planning and design manual***, 2nd edition, Department of Transport and Main Roads, 2016.	**No upgrade works are proposed to take place.**

Performance outcomes	Acceptable outcomes	Response
	Note: Road works in a state-controlled road require approval under section 33 of the Transport Infrastructure Act 1994 before the works commence.	

Table 1.2.2: Environmental emissions

Performance outcomes	Acceptable outcomes	Response
Noise		
Accommodation activities		
PO23 Development involving an accommodation activity or land for a future accommodation activity minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in habitable rooms.	**AO23.1** A noise barrier or earth mound is provided which is designed, sited and constructed: 1. to meet the following external noise criteria at all facades of the building envelope: a. ≤60 dB(A) L_{10} (18 hour) façade corrected (measured L_{90} (8 hour) free field between 10pm and 6am ≤40 dB(A)) b. ≤63 dB(A) L_{10} (18 hour) façade corrected (measured L_{90} (8 hour) free field between 10pm and 6am >40 dB(A)) 2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013. If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used. In some instances the design of noise barriers and mounds to achieve the noise criteria above the ground floor may not be reasonable or practicable. In these instances, any relaxation of the criteria is at the discretion of the Department of Transport and Main Roads.	**Not applicable** Proposal is not for an accommodation activity or the future land use for an accommodation activity.

Performance outcomes	Acceptable outcomes	Response
	OR all of the following acceptable outcomes apply: **AO23.2** Buildings which include a habitable room are setback the maximum distance possible from a state-controlled road or type 1 multi-modal corridor. AND	**Not applicable** Proposal is not for an accommodation activity or the future land use for an accommodation activity.
	AO23.3 Buildings are designed and oriented so that habitable rooms are located furthest from a state-controlled road or type 1 multi-modal corridor. AND	**Not applicable** Proposal is not for an accommodation activity or the future land use for an accommodation activity.
	AO23.4 Buildings (other than a relevant residential building or relocated building) are designed and constructed using materials which ensure that habitable rooms meet the following internal noise criteria: 1. ≤35 dB(A) Leq (1 hour) (maximum hour over 24 hours). Statutory note: Noise levels from a state-controlled road or type 1 multi-modal corridor are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013. Habitable rooms of relevant residential buildings located within a transport noise corridor must comply with the Queensland Development Code MP4.4 Buildings in a transport noise corridor, Queensland Government, 2015. Transport noise corridors are mapped on the DA mapping system.	**Not applicable** Proposal is not for an accommodation activity or the future land use for an accommodation activity.
PO24	**AO24.1**	**Not applicable**

Performance outcomes	Acceptable outcomes	Response
Development involving an accommodation activity or land for a future accommodation activity minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in outdoor spaces for passive recreation.	A noise barrier or earth mound is provided which is designed, sited and constructed: 1. to meet the following external noise criteria in outdoor spaces for passive recreation: a. ≤57 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6am and 12 midnight ≤45 dB(A)) b. ≤60 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6am and 12 midnight >45 dB(A)) 2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013. OR	Proposal is not for an accommodation activity or the future land use for an accommodation activity.
	AO24.2 Each dwelling has access to an outdoor space for passive recreation which is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure. AND	**Not applicable** Proposal is not for an accommodation activity.
	AO24.3 Each dwelling with a balcony directly exposed to noise from a state-controlled road or type 1 multi-modal corridor has a continuous solid gap-free balustrade (other than gaps required for drainage purposes to comply with the Building Code of Australia).	**Not applicable** Proposal is not for an accommodation activity.
Child care centres		
PO25	**AO25.1**	**Not applicable**

Performance outcomes	Acceptable outcomes	Response
Development involving a: 1. child care centre; or 2. educational establishment minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in indoor education areas and indoor play areas.	A noise barrier or earth mound is provided which is designed, sited and constructed: 1. to meet the following external noise criteria at all facades of the building envelope: a. ≤58 dB(A) L_{10} (1 hour) façade corrected (maximum hour during normal opening hours) 2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013. If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.	Proposal is not for a child care centre.
	OR all of the following acceptable outcomes apply: **AO25.2** Buildings which include indoor education areas and indoor play areas are setback the maximum distance possible from a state-controlled road or type 1 multi-modal corridor. AND	**Not applicable** Proposal is not for a child care centre
	AO25.3 Buildings are designed and oriented so that indoor education areas and indoor play areas are located furthest from the state-controlled road or type 1 multi-modal corridor. AND	**Not applicable** Proposal is not for a child care centre
	AO25.4 Buildings are designed and constructed using materials which ensure indoor education areas and indoor play areas meet the following internal noise criteria:	**Not applicable** Proposal is not for a child care centre

Performance outcomes	Acceptable outcomes	Response
	1. ≤35 dB(A) Leq (1 hour) (maximum hour during opening hours). Statutory note: Noise levels from a state-controlled road or type 1 multi-modal corridor are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013, is provided.	
PO26 Development involving a: 1. child care centre; or 2. educational establishment minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in outdoor education areas and outdoor play areas.	**AO26.1** A noise barrier or earth mound is provided which is designed, sited and constructed: 1. to meet the following external noise criteria in each outdoor education area or outdoor play area: a. ≤63 dB(A) L_{10} (12 hour) free field (between 6am and 6pm) 2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013. OR	**Not applicable** Proposal is not for a child care centre
	AO26.2 Each outdoor education area and outdoor play area is shielded from noise generated from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure.	**Not applicable** Proposal is not for a child care centre
Hospitals		

Performance outcomes	Acceptable outcomes	Response
PO27 Development involving a hospital minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in patient care areas.	**AO27.1** Hospitals are designed and constructed using materials which ensure patient care areas meet the following internal noise criteria: 1. ≤35 dB(A) Leq (1 hour) (maximum hour during opening hours). Statutory note: Noise levels from a state-controlled road or type 1 multi-modal corridor are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the State Development Assessment Provisions Supporting Information – Community Amenity (Noise), Department of Transport and Main Roads, 2013.	**Not applicable** Proposal is not for a hospital.
Vibration		
Hospitals		
PO28 Development involving a hospital minimises vibration impacts from vehicles using a state-controlled road or type 1 multi-modal corridor in patient care areas.	**AO28.1** Hospitals are designed and constructed to ensure vibration in the treatment area of a patient care area does not exceed a vibration dose value of 0.1m/s$^{1.75}$. AND	**Not applicable** Proposal is not for a hospital.
	AO28.2 Hospitals are designed and constructed to ensure vibration in the ward area of a patient care area does not exceed a vibration dose value of 0.4m/s$^{1.75}$. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified vibration assessment report is provided.	**Not applicable** Proposal is not for a hospital.
Air and light		
PO29 Development involving an accommodation activity minimises air quality impacts from a state-controlled road or type 1 multi-modal corridor in outdoor spaces for passive recreation.	**AO29.1** Each dwelling has access to an outdoor space for passive recreation which is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure.	**Not applicable** Proposal is not for a dwelling.
PO30	**AO30.1**	**Not applicable**

Performance outcomes	Acceptable outcomes	Response
Development involving a: 1. child care centre; or 2. educational establishment minimises air quality impacts from a state-controlled road or type 1 multi-modal corridor in outdoor education areas and outdoor play areas.	Each outdoor education area and outdoor play area is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure.	Proposal is not for a: 1. child care centre 2. educational establishment.
PO31 Development involving an **accommodation activity** or **hospital** minimises lighting impacts from a state-controlled road or type 1 multi-modal corridor.	**AO31.1** Buildings for an **accommodation activity or hospital** are designed to minimise the number of windows or transparent/translucent panels facing a state-controlled road or type 1 multi-modal corridor. OR	**Not applicable** Proposal is not for and accommodation activity or hospital.
	AO31.2 Windows facing a state-controlled road or type 1 multi-modal corridor include treatments to block light from a state-controlled road or type 1 multi-modal corridor.	**Not applicable** Proposal is not for an accommodation activity or hospital.

Search response - Environmental Management register

Queensland Government

Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Nik
PO Box 181
Edge Hill QLD 4870

Transaction ID: 50440190 EMR Site Id: 13930 01 March 2018
Client Reference:
Cheque Number:

This response relates to a search request received for the site:
Lot: 701 Plan: M3565

EMR RESULT

The above site IS included on the Environmental Management Register.
Lot: 701 Plan: M3565
Address: 1 HERBERTON STREET
MAREEBA 4880

The site has been subject to the following Notifiable Activity or Hazardous Contaminant.
SERVICE STATIONS - operating a commercial service station.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated.
The EMR/CLR does NOT include:-

1. land which is contaminated land (or a complete list of contamination) if EHP has not been notified
2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if EHP has not been notified

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority

Page 1 of 1

APPENDIX 4: PROPOSAL PLANS

Drawing or Document	Reference	Date
Building Area Plan	12 – A03 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Site Plan	12 - A04 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Floor Plan – Level 1	12 - A06 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Elevations	12 - A11 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Perspective Sketch 1	12 - A21 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Perspective Sketch 2	12 - A22 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Perspective Sketch 3	12 - A23 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Perspective Sketch 4	12 - A24 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018
Perspective view back corner	12 - A26 Michael Ferris and Ptnrs Pty Ltd.	06/02/2018

APPENDIX 5: TRAFFIC IMPACT ASSESSMENT

PLANZ
Town Planning

07 4041 0445
0447 323 384
plan@planztp.com
PO Box 181 Edge Hill, QLD 4870
ABN 83 128 085 870

planztp.com

CivilWalker
Engineering | Project Management

Porkdig Pty Ltd

Herberton Street Service Station
Mareeba
Traffic Impact Assessment

155-001-001R

Revision B

March 2018

Prepared by:

CivilWalker
Engineering | Project Management

GLF Developments Pty Ltd
t/a CivilWalker

ACN 139 545 387 ABN 84 139 545 387

PO Box 509
Palm Cove Qld 4879

Document Control

Revision	Date	Reason	Author
A	01.03.18	Initial Issue	DJW
B	15.03.18	For Approval	DJW

CivilWalker
Engineering | Project Management

Contents

CONTENTS

CivilWalker
Engineering | Project Management

Figures

CONTENTS

CivilWalker
Engineering | Project Management

Photographs

Tables

Appendices

CONTENTS

1. Introduction

1.1 Background

Porkdig Pty Ltd propose to develop the adjacent sites located at 255 Byrnes Street and 1 Herberton Street, Mareeba to provide an upgraded service station, including a retail area and food / drink outlet. The site is more formally described as Lots 702 (Byrnes Street) and 701 (Herberton Street) on M3565. **Figure 1.1** below identifies the site location.

Figure 1.1 – Site Location

The proposed development is described on Michael Ferris and Partners' drawings A01 to A11, which are attached as **Appendix A**.

1.2 Pre-Lodgement Meeting Notes

The applicant sought pre-lodgement advice from the Department of Infrastructure, Local Government and Planning prior to submission of a Development Application. This advice was received on 21 November 2017 and is attached as **Appendix B**.

The pre-lodgement advice noted that to assist in addressing the State Development Assessment Procedures, any Development Application for the proposal should include a Traffic Impact Assessment Report certified by a Registered Professional Engineer of Queensland. The report should be undertaken in accordance with the Department of Transport and Main Roads' (TMR) Guide to Traffic Impact Assessment (GTIA).

In accordance with those requirements, the report should provide the following information:

- Increased traffic generation rates associated with the proposed redevelopment of the existing Mobil Service Station including the projected customer numbers and the number, type and size of all vehicles, including heavy vehicles, that will access the proposed redevelopment.
- A traffic assessment of the Byrnes Street / Herberton Street intersection to demonstrate:
    - That any increase in traffic generation from the proposed redevelopment via Herberton Street will not impact on the Level of Service, safe operation and management of the Byrnes Street / Herberton Street intersection;
    - That the existing capacity of the auxiliary left turn lane into Herberton Street will not be impacted by increased traffic flows along Byrnes Street into the proposed redevelopment; and
    - That the auxiliary left lane is not required to be extended to improve traffic flows.
- Mitigation measures to ensure that any traffic impacts resulting from the proposed development do not compromise the safe and efficient management and operation of the Byrnes Street / Herberton Street intersection and the auxiliary left turn lane.

The pre-lodgement advice also noted:

- That based on the preliminary plans issued to the Department of Infrastructure, Local Government and Planning that the Byrnes Street access driveway may require widening;
- The Byrnes Street / Herberton Street intersection would require signalisation at some point in the future, that development of the vacant site opposite the existing Mobil Service Station on Byrnes Street (Lot 78 on SP152626) would accelerate the need for this signalisation, that a Development Application is currently before Council for development of that site; and
- Recommendation that the applicant undertake an access assessment to determine an acceptable and safe access arrangement via Herberton Street, whereby increased right out traffic movements can safely merge with traffic at the current intersection.

1.3 Scope and Study Area

The scope of this Traffic Impact Assessment, which has been undertaken in accordance with TMR's "Guide to Traffic Impact Assessment (September 2017)" is to:

- compile, analyse and document the effect that the proposed development is likely to have on the operation of the road network;
- recommend works to mitigate any identified impacts; and
- assess the specific items raised within the pre-lodgement advice received from the Department of Infrastructure, Local Government and Planning.

The study area is defined by the proposed development site and the vicinity of the Byrnes Street / Herberton Street intersection.

1.4 Definitions

Terms, acronyms and abbreviations used throughout this report are listed below with their meaning for ease of reference.

Table 1.1 – Definitions

Term / Acronym / Abbreviation	Peak Traffic Generated (vph)
AADT	Annual Average Daily Traffic. The total volume of traffic passing a roadside observation point over the period of a calendar year, divided by the number of days in that year.
Capacity	The number of vehicles that can be accommodated on road infrastructure before it fails to function as it was intended.
DOS	Degree of Saturation.
LOS	Level of Service. A qualitative index for ranking operating conditions on roads based on factors such as speed, flow rate, travel time, freedom to manoeuvre, interruptions, comfort, safety and convenience.
Peak Hour	The hour(s) of the day having the highest traffic volume and / or number of passengers.
RPEQ	Registered Professional Engineer of Queensland.
SIDRA	Signalised and Un-Signalised Intersection Design and Research Aid traffic modelling software.
SDAP	State Development Application Procedures.
TMR	Department of Transport and Main Roads.
Traffic	A generic term covering all vehicles and people using a road.
Trip Generation	The number of trips produced or attracted by the proposed development.
Traffic Volume	The number of vehicles or pedestrians passing a given point on a road during a specified period of time.
vpd	Vehicles Per Day.
vph	Vehicles Per Hour.
Year of Opening	The year in which the development is proposed to commence operation.

2. Existing Conditions

2.1 Land Use and Zoning

The subject site is comprised of two existing allotments (Lots 701 and 702 on M3565). Lot 701 is located on the corner of Herberton and Byrnes Streets and is occupied by an existing Mobil fuel station and a service garage. Lot 702 is located immediately adjacent to (and north of) Lot 701 and is occupied by an existing detached dwelling. **Photographs 2.1** and **2.2** below show the existing site.

Photograph 2.1 – Lot 701 (Existing Fuel Station and Service Garage)

Photograph 2.2 – Lot 702 (Existing Detached Dwelling)

Mareeba Shire Council's Zone Map for the Mareeba Centre (refer **Appendix C**) identifies both Lots 701 and 702 site zoning as "Centre". An extract from Council's zoning map is provided below in **Figure 2.1** for information ("Centre" zoning coloured blue).

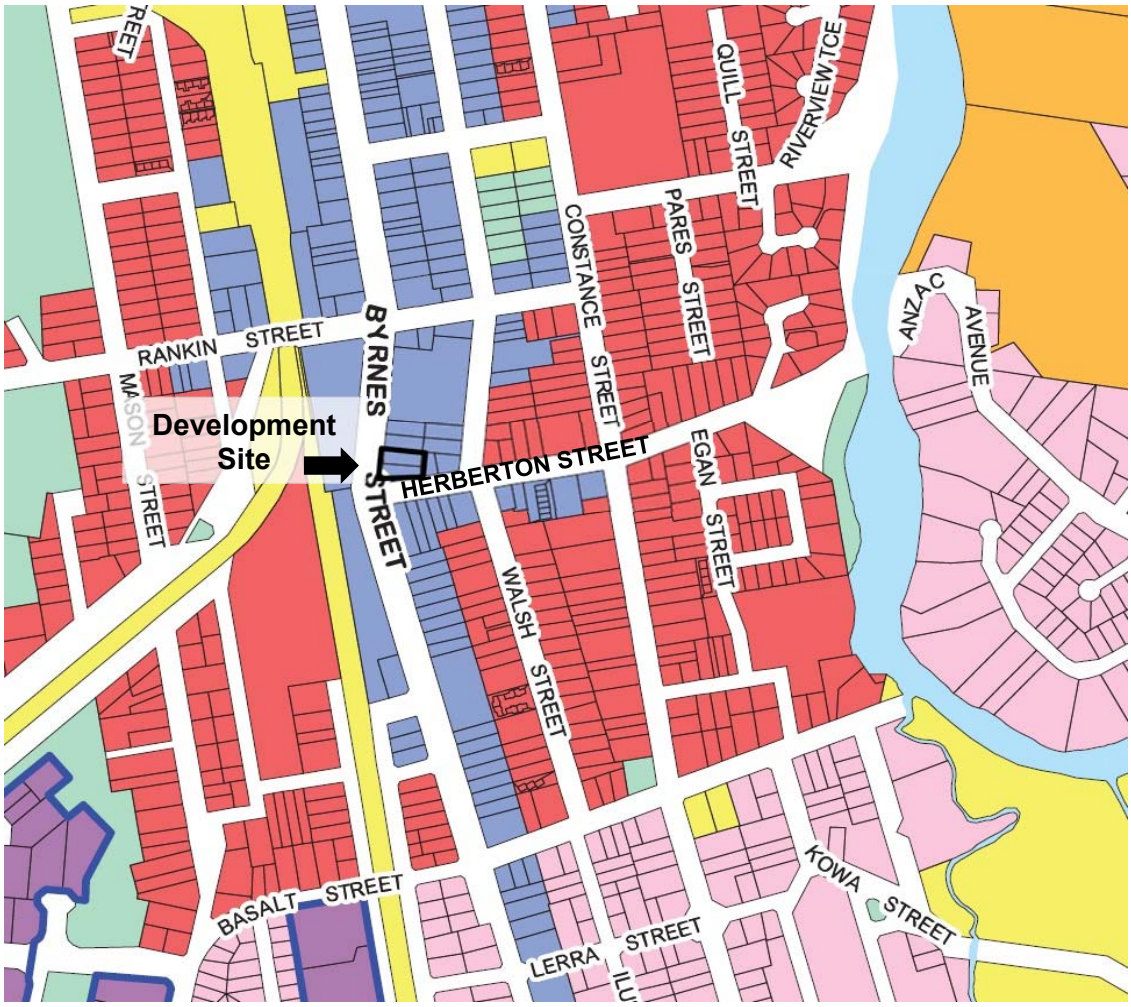


Figure 2.1 – Extract from Mareeba Shire Council Zone Map

2.2 Adjacent Land Uses and Approvals

The site is surrounded by land uses as identified in **Figure 2.1** above, which are characterised by "centre", "medium density residential", "community facilities" and "low density residential".

A search on Council's website has revealed a development application for a proposed retail shopping precinct on the vacant land parcel (Lot 78 on SP152626) opposite the development site on Byrnes Street. This is consistent with the pre-lodgement advice provided by the Department of Infrastructure, Local Government and Planning. The application seeks to develop that site to provide a supermarket and specialty retail stores.

No other development applications have been identified within close proximity.

2.3 Surrounding Road Network Details

The site is located at the intersection of Byrnes and Herberton Streets, which is located immediately south of the Mareeba CBD. Details of the key roads surrounding the development site are provided in **Table 2.1** below.

Table 2.1 – Surrounding Road Network Details

Road	Hierarchy	Owner	Cross Section	Speed Limit
Byrnes (Rankin – Llyod)	State Controlled	TMR	Four Lane, Median Divided, Two Way	50
Byrnes (Basalt - Rankin)	State Controlled	TMR	Two Lane, Median Divided, Two Way	50
Rankin	Local Collector	MSC	Two Lane, Un-Divided, Two Way	60
Basalt	Local Collector	MSC	Two Lane, Un-Divided, Two Way	50
Walsh	Local Collector	MSC	Two Lane, Un-Divided, Two Way	50
Constance	Local Collector	MSC	Two Lane, Un-Divided, Two Way	50

2.3.1 Road Network Planning

Several upgrades to the existing road network (within 500m of the development site) have been identified as detailed below. Copies of the preferred upgrade layouts are provided in **Appendix F**.

- Byrnes Street / Basalt Street
  This intersection is located approximately 500m south of the site. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to provide full signalisation. The timing for this upgrade is unknown.

- Byrnes Street / Rankin Street
  This intersection is located approximately 230m south of the site. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to provide full signalisation. Discussions with TMR have revealed that this upgrade is considered high priority and that the works may commence within the next 12 months.

- Walsh Street Shopping Centre Access
  The Walsh Street shopping centre access is located approximately 210m north-east of the proposed site. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to rationalise the entry and exit points to a single location, install a centre median to remove right-turn manoeuvres to and from the shopping centre and relocate the dedicated pedestrian crossing northward to improve clearance from the loading zone. The timing for this upgrade is unknown.

- Rankin Street / Walsh Street
  This intersection is located approximately 240m north-east of the proposed site. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to provide adjustments to the existing roundabout to include a centre median

along Rankin and Walsh Streets within close proximity of the intersection to prevent unsafe right-hand turn movements, provide pedestrian storage areas within the new medians to improve pedestrian crossing safety and provide islands to more appropriately direct turning traffic. The timing for this upgrade is unknown.

- Herberton Street / Constance Street
  This intersection is located approximately 300m east of the proposed site. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to provide a new roundabout including centre medians, provision of pedestrian storage areas within the new medians to improve pedestrian crossing safety and provision of islands to more appropriately direct turning traffic. The timing for this upgrade is unknown.

- Herberton Street / Byrnes Street
  This is the intersection on which the development site is located. The preferred upgrade identified by the Mareeba CBD Traffic Management Study Planning Report is to provide full signalisation, however the report notes that the intersection could operate as an un-signalised tee-intersection for approximately 5 years. The report notes that this would require an auxiliary left-turn lane from Byrnes Street onto Herberton Street.

  It is understood that the proposed upgrade to the Herberton Street / Byrnes Street intersection mentioned above is due to existing issues with a particular delayed movement at the intersection. This will be explored further within this report. Furthermore, an auxiliary left-hand turn lane already exists at the intersection.

2.3.2 Public Transport

Public transport within Mareeba is represented by the Trans-North bus and coach service, which operates a passenger service between Atherton and Cairns and all towns / villages in between. A single bus stop is located within Mareeba at Arnold Park located at 171 – 179 Walsh Street (next door to the police station) from which scheduled departures occur. The location is shown in **Figure 2.2** below.

Figure 2.2 – Bus Stop Location

Scheduled departures from the Mareeba bus stop are at 6:30am, 9:30am and 4:00pm Monday to Friday, 6:30am and 9:30am on Saturday plus 9:30am and 4:00pm on Sunday. The service is a "hail and ride" where passengers are encouraged to hail the driver at any location on the route where it is safe for the coach to pull over. A copy of the bus timetable is attached for information as **Appendix D**.

Trans-North were contacted on Wednesday 28 February to determine the route the coach takes after departing the Arnold Street bus stop. A local spokesperson confirmed that the coach does not have a specific route it follows other than it eventually makes its way onto Byrnes Street, but the intersection it utilises to do so depends on the driver.

2.3.3 Cyclist Facilities

The only dedicated cyclist facilities within the development site vicinity are the on-road cycle lanes on Byrnes Street (refer **Figure 2.3** below).

Photograph 2.3 – Dedicated Cycle Lanes on Byrnes Street

TMR's Principal Cycle Network Plan identifies existing and future high order bicycle routes that make up the regional cycle network. These routes function as the "arterial roads" or "highways" of the cycle network and connect major destinations within towns and throughout the region. They are the highest order routes in the overall cycle network.

The most recent principal cycle network maps for Mareeba are provided within TMR's Principal Cycle Network Plan for Far North Queensland (included as **Appendix E**). This map identifies Byrnes Street, Constance Street and Rankin Street as future principal routes. It also identifies Walsh Street (between Rankin and Herberton Streets) and Herberton Street (between Walsh Street and the Barron River, but not at the development site frontage) as principal routes. The future principal routes within close proximity of the development site are shown in **Figure 2.3**.

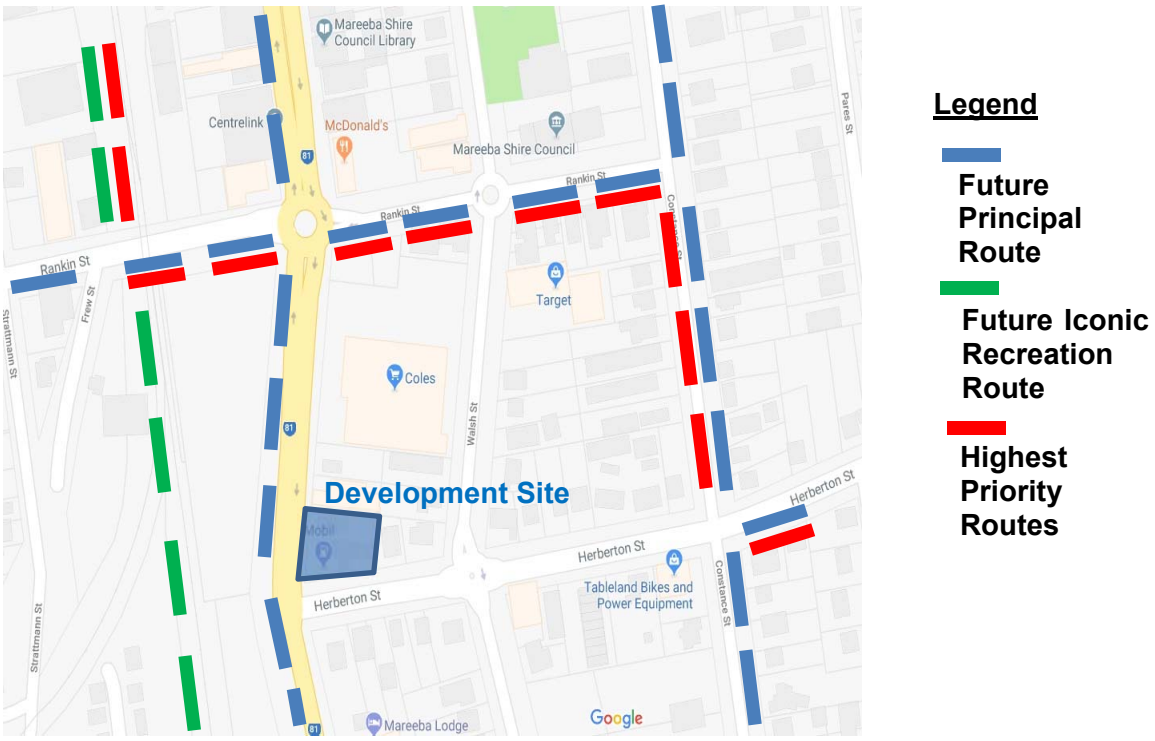


Figure 2.3 – TMR Principal Cycle Network Routes

TMR have prioritised the principal cycle route along Herberton Street, Constance Street, Rankin Street and Railway Avenue as "highest priority routes" which are planned to be delivered within the next 10 years (the design horizon for this traffic impact assessment).

2.3.4 Pedestrian Facilities

There are no dedicated pedestrian pathways along the development site frontage on either Byrnes or Herberton Streets, however pedestrians do utilise the road verge to travel past the site. It is noted that the area does not attract significant pedestrian activity because there are not a lot of attractors within the vicinity of the development site. The main attractor within close proximity is the Mareeba Square shopping centre on Walsh Street. Most pedestrians that travel down Herberton Street most likely turn to travel up either Walsh Street or Constance Street, before the Byrnes Street intersection. This is demonstrated by the traffic count that was undertaken by Matrix Traffic and Transport Data (**Appendix G**) which shows significantly more activity at the Constance Street intersection. No traffic count was undertaken for the Walsh Street intersection.

2.3.5 Other Transport Infrastructure

An existing rail line travels within the site vicinity. It is located approximately 100m west of the site as shown in **Figure 2.4**. The rail line crosses the road network at Rankin Street where control is in the form of stop signs. There are two scheduled crossings per week with other additional irregular crossings occurring.

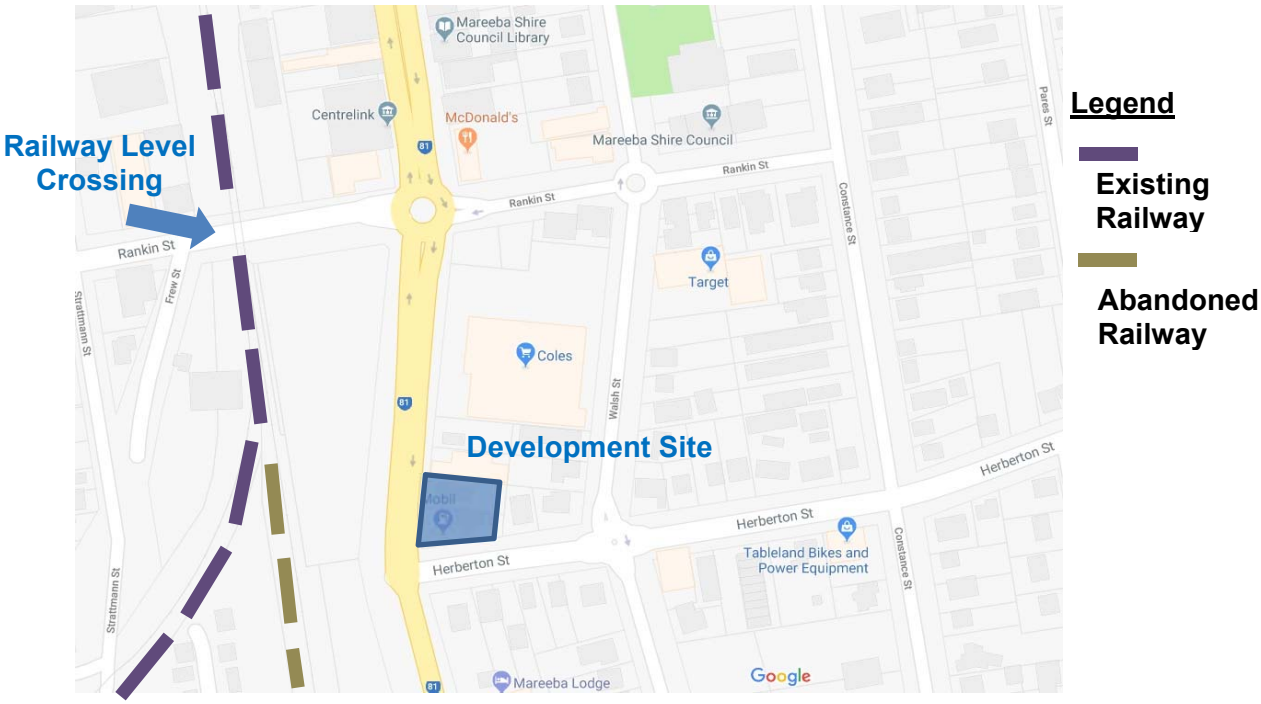


Figure 2.4 – Existing Railway Infrastructure

2.4 Traffic Volumes

Traffic counts were obtained from the Mareeba CBD Traffic Management Study, which included count data undertaken at the intersection of Byrnes and Herberton Streets on Tuesday 21st February 2017 by Matrix Traffic and Transport Data (refer **Appendix G)**. The counts were undertaken during a weekday (Tuesday) that did not coincide with either a public holiday or school holiday. It is also noted that weather conditions were fine. It is therefore considered that the count would reasonably represent a typical day of traffic in the area.

The data identifies that peak hours were 7:45am to 8:45am and 2:45pm to 3:45pm, with the morning peak hour observing the highest traffic flows. **Figures 2.5** and **2.6** below summarise the peak traffic movements on each of the intersection legs for the counts undertaken in February 2017.

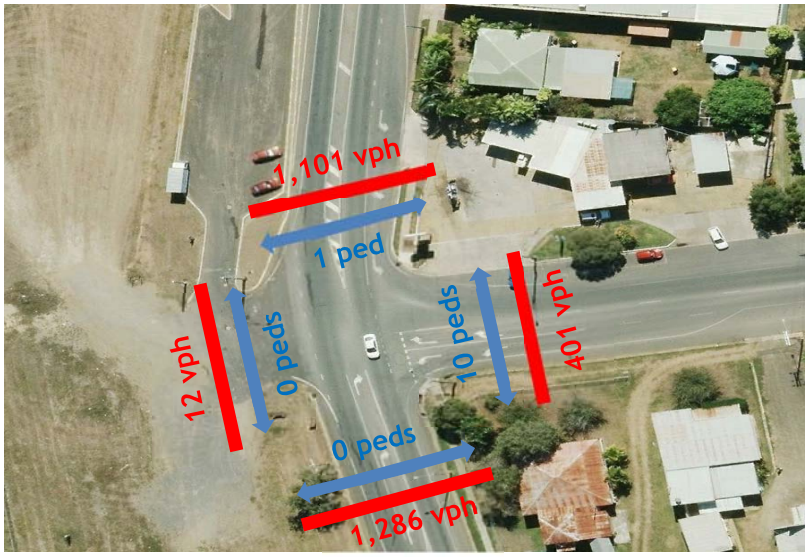


Figure 2.5 – Morning Peak Hour Traffic Demand

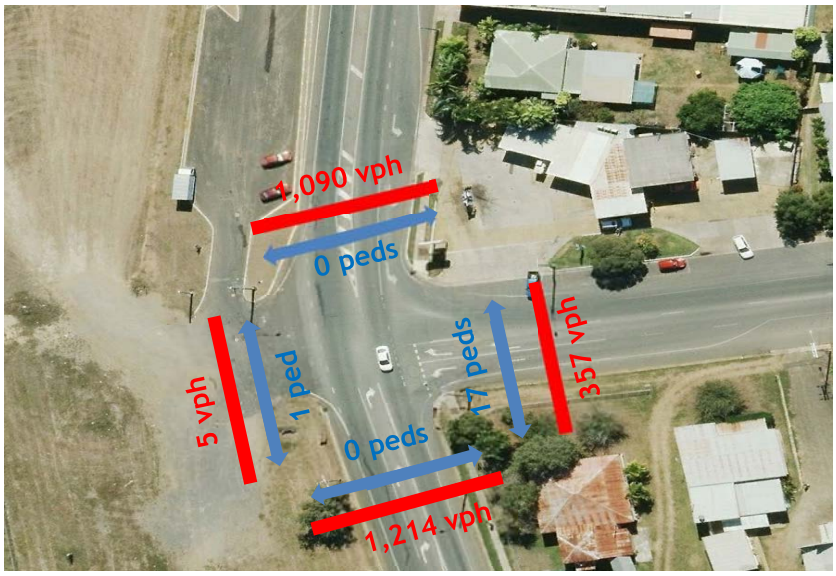


Figure 2.6 – Afternoon Peak Hour Traffic Demand

2.5 Traffic Growth

The Mareeba CBD Traffic Management Study Planning Report reviewed traffic data with historic population and population forecasts provided by the Queensland Government Statisticians Office (QGSO) to determine traffic growth within the Mareeba CBD area (refer Section 2.2 of that report).

It noted that the QGSO projections indicated Mareeba's population will grow from the 2015 estimated population of 11,035 to 14,607 by the year 2036, representing a growth of 1.5% per annum. The report further noted that a review of historic daily traffic data captured at TMR's permanent counter on Byrnes Street (just south of Herberton Street) indicated that the traffic growth between 2002 and 2015 was approximately 2.0%. The higher traffic growth (compared to estimated population growth) figure can be explained by other regional factors influencing the traffic numbers, which may include growth in traffic to and from Cairns and increasing tourist traffic within the area.

A traffic growth rate of 2% per annum has been adopted for the purpose of this report.

2.6 Existing Intersection Performance

The existing Byrnes and Herberton Street intersection has been modelled using SIDRA Intersection 7. **Figure 2.7** below shows the form of intersection modelled.

Traffic was adjusted to allow for a year of growth (at 2%) from when the traffic count was undertaken in February 2017 until February 2018, which represents the "existing scenario". The traffic numbers adopted are detailed in **Figure 2.8**.

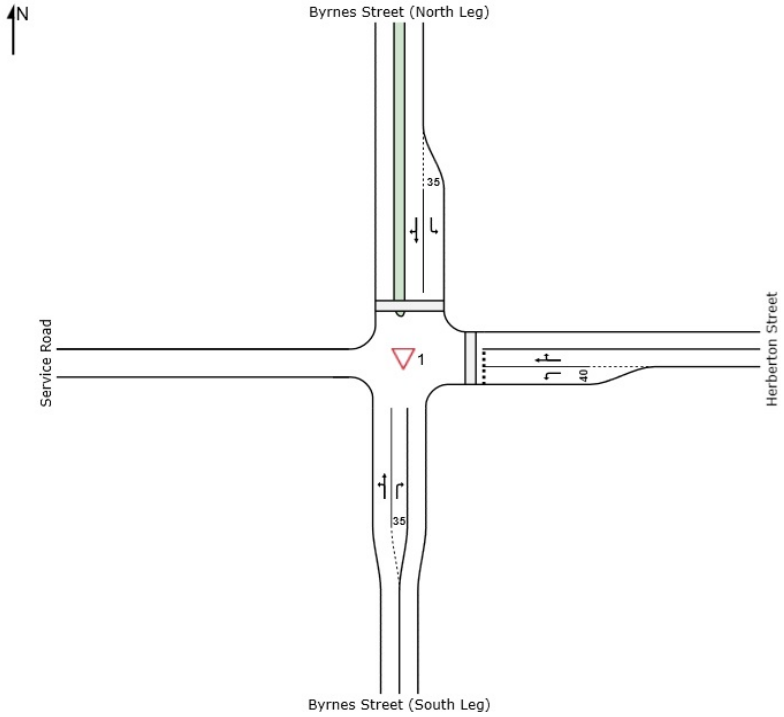
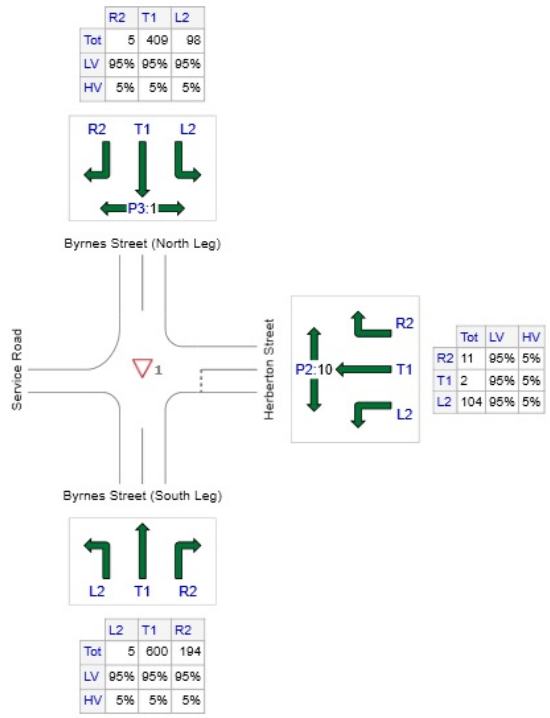


Figure 2.7 – Intersection Form Modelled



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	799	759	40
E: Herberton Street	117	111	6
N: Byrnes Street (North Leg)	512	486	26
Total	1428	1357	71

Figure 2.8 – Adopted Traffic Flows (Existing AM Peak 2018)

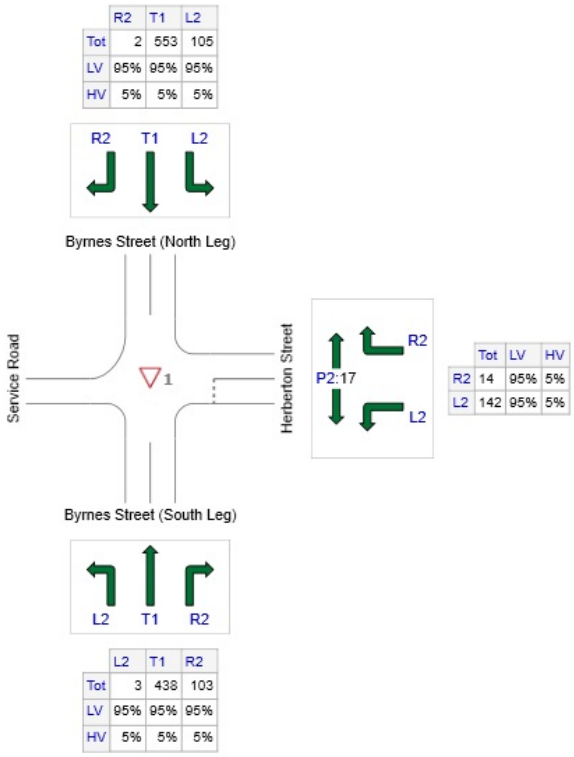


Figure 2.9 – Adopted Traffic Flows (Existing PM Peak 2018)

The core performance elements that have been used to assess the intersection are the Degree of Saturation and Level of Service, based on delay.

2.6.1 Degree of Saturation Performance Criteria

Degree of Saturation is a pass / fail performance indicator. If the reported value is greater than the acceptable value for any lane or leg, then the intersection is deemed not to be acceptable. The Austroads Guide to Traffic Management Part 12 identifies the following acceptable performance criteria for Degree of Saturation at different intersection types:

- Signals 0.90
- Roundabouts 0.85
- Priority Controlled 0.80
- Continuous Lanes 0.98

The existing Byrnes and Herberton Street intersection is priority controlled and therefore, the adopted acceptable degree of saturation for the intersection is 0.80.

2.6.2 Level of Service Performance Criteria

Level of Service is defined in terms of service measures such as speed and travel time, freedom to manoeuvre, traffic interruptions, comfort and convenience. There are six levels of service defined within the Austroads Guide to Traffic Management Part 12, varying from LOS “A” to “F”. Key LOS conditions are described below:

- LOS “A” – Good Operation (critical delay < 14 seconds / vehicle)
  Represents a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream;

- LOS “B” – Acceptable Delays (critical delay 15 – 28 seconds / vehicle)
  Represents a condition of stable flow where drivers still have reasonable freedom to select their desired speed and to manoeuvre within the traffic stream;
- LOS “C” – Satisfactory (critical delay 29 – 42 seconds / vehicle)
  Represents a condition which is also of stable flow, but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream.
- LOS “D” – Near Capacity (critical delay 43 – 56 seconds / vehicle)
  Represents a condition which is close to the limit of stable flow. All drivers are restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor and small increases in traffic flow will generally cause operational issues;
- LOS “E” – At Capacity (critical delay 57 – 70 seconds / vehicle)
  Represents a condition when traffic volumes are at or close to capacity and there is virtually no freedom to select desired speed or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances cause traffic flow breakdown.
- LOS “F” – Beyond Capacity (critical delay > 70 seconds / vehicle)
  Represents a condition that is beyond capacity. The amount of traffic approaching the point under consideration exceeds that which can pass through. Flow breaks down resulting in queueing and high delays.

Whilst assessment of an intersection’s performance is determined based on average LOS, the TMR Guide to Traffic Impact Assessment notes that for priority-controlled intersections, where average peak hour delays for any turn movement exceeds 42 seconds (becomes LOS “D”), then the intersection should be upgraded for safety reasons, where it is practical to do so.

Movement summary results for the above scenarios are contained within **Appendix H** and are summarised in **Table 2.2** below.

Table 2.2 – Intersection Delay Analysis Results

Scenario	DOS	Avg Delay (sec)	95th Back Queue (m)
AM Peak Hour – Existing (2018)	0.317	2.6	7.4
PM Peak Hour – Existing (2018)	0.292	2.5	5.6

The summarised results above show that in both the AM and PM Peaks, the degree of saturation for the intersection is considerably below the performance criteria value of 0.80 and the intersection LOS is of an “A” standard based on the average delay.

However, it is noted that the critical movement within the analysis (right-hand turn from Herberton Street onto Byrnes Street) experiences a delay of 44.8 seconds in the AM peak. In accordance with the TMR Guide to Traffic Impact Assessment, where the average peak hour delay for any turn movement exceeds 42 seconds, then the intersection should be considered for upgrade for safety reasons where it is practical to do so. It is therefore considered that the existing Herberton Street / Byrnes Street intersection be considered for upgrade by TMR in accordance with their requirement for safety reasons to mitigate delay with the right-hand turn movement from Herberton Street.

Section 4 of this report will consider impact assessment of the proposed development and any proposed mitigation measures. This will determine whether it is reasonable for any upgrades to the existing intersection to be undertaken as part of the development by the developer.

2.7 Road Safety Issues

Road safety issues within this section of the report are limited to consideration of the Byrnes / Herberton Street intersection and direct access to the subject site.

The Mareeba CBD Traffic Management Study Planning Report reported on observed issues at various intersections within the Mareeba CBD area. The study noted that to ensure the known traffic and safety issues of intersections were considered within the study, site observations of the network performance were considered. In addition, meetings with Council, TMR and the Mareeba Police Traffic Division were held during the study process to discuss any issues that were known to exist.

Whilst the Byrnes Street / Herberton Street intersection formed part of the study area, no observed issues were identified in the resulting Planning Report with any of the abovementioned parties.

The safety issues identified by CivilWalker as part of this report are limited to potential issues and not as a result of any particular observations. The potential issues have been identified as follows:

- Existing delays for right hand turn movements from Herberton Street into Byrnes Street. These delays may result in motorists making poor decisions to undertake a manoeuvre as a result of frustration rather than because an appropriate gap is available;
- Potential increase in the number of pedestrians crossing Herberton Street may lead to an increase in likelihood of conflict between pedestrians and vehicles;
- Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with vehicles on Byrnes Street and Herberton Street; and
- Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with pedestrians on Byrnes Street and Herberton Street.

These risks have been further considered within **Section 5.2** of this report.

2.8 Site Access

The site consists of two existing land parcels, which contain four (4) separate access points. Two (2) are on Byrnes Street and two (2) are on Herberton Street. These existing access points are identified in **Figure 2.10** below.

Figure 2.10 – Existing Site Access Points

2.9 Parking

There are two existing car parks on the Herberton Street frontage of the site. These are shown in **Photograph 2.4** below.

Photograph 2.4 – Herberton Street On-Street Car Parks

Due to the presence of an auxiliary left-hand turn lane at the intersection, there are no on-street car parks on the Byrnes Street site frontage (refer **Photograph 2.5**).

Photograph 2.5 – Byrnes Street Site Frontage

On-site parking opportunities for the existing sites are limited to the internal driveway of the detached dwelling and the bowser positions of the existing fuel station.

3. Proposed Development

3.1 Development Site Plan

The proposed development seeks to redevelop the existing Mobil Service Station located on the corner of Byrnes and Herberton Streets. The proposal includes amalgamation of two (2) lots, being Lots 701 and 702 on M3565 and will include:

- 170m² service station and associated retail area;
- 148m² commercial kitchen and dining room with drive through facility;
- Two (2) car cleaning bays;
- Service areas, including a waste enclosure;
- On-Site Parking; and
- Landscaping.

The development is further described on Michael Ferris and Partners' drawings A01 to A11 (refer **Appendix A**).

3.2 Operational Details

3.2.1 Year of Opening

Based on consideration of the timelines required to obtain approvals and undertake the necessary construction activities, the year of opening has been adopted as 2019 and is referred to as the "Base Case". It is noted that the development will be undertaken in a single stage.

3.2.2 Access Arrangements

Access to the site is proposed via two separate locations, being Byrnes Street and Herberton Street. Byrnes Street will be a left-in / left-out arrangement only (due to the existing median strip) while Herberton Street will allow for left-in / left-out and right-in / right-out movements. The proposed access arrangement will result in removal of two existing accesses.

Pedestrian access to the development will be facilitated by the existing road verges.

3.2.3 Parking Arrangements

The proposed development will provide a total of seven (7) car parks (including a space for people with disability) all aligned at 90 degrees to the service station building.

A user class of 3A has been adopted for assessing the car parking geometric requirements in accordance with the requirements of AS/NZS 2890.1 "Parking Facilities Part 1: Off-Street Car Parking", which allows for short term, high turn-over parking and is considered appropriate for this type of development.

Figure 2.2 of AS/NZS 2890.1 identifies requirements for the length and width of car parking spaces and the width of circulating aisles for varying parking angle configurations. For a user class of 3A with 90-degree parking, spaces are required to be 2.6m wide and 5.4m long. The car parks provided are 2.7m wide, 5.4m long and therefore meet those requirements. The circulating

aisle provided within the development (between car parks / bowsers and bowsers / western kerb) are 6.2m and 6.3m respectively, which also meet the requirements.

AS/NZS 2890.6 “Parking Facilities Part 6: Off-Street Parking for People with Disabilities” identifies requirements for disabled parking spaces. For a single disabled park at a 90-degree angle, a width of 2.4m and length of 5.4m is required with an additional space (2.4m wide and 5.4m long) adjacent to the car park to allow for a disabled person to manoeuvre in and out of their vehicle. The additional space is required to be chevroned and a bollard placed centrally and 800mm from the edge of the aisle to prevent other vehicles accessing it and blocking the space. The proposed development allows for a disabled car park 2.7m wide with a 2.4m wide chevroned space adjacent to it. The length of these spaces is documented at 5.4m to match adjacent car park lengths. The disabled car park therefore complies with AS/NZS 2890.6.

A designated space for a recreational vehicle has also been provided. It has been positioned on the layout to allow for convenient access, whilst allowing for access for a B99 vehicle to the adjacent bowser.

3.2.4 Servicing Arrangements

The development allows for a service area that includes a loading zone for delivery of services / goods and a waste refuse area. The servicing arrangement geometry has been configured such that the waste collection vehicle utilises the loading zone. The loading zone and waste refuse areas are separated from expected pedestrian movements.

Allowance has also been made for a fuel tanker (19m semi-trailer allowed) to access the site for fuel deliveries.

Swept path analysis has been undertaken for the movements identified below. Sketches showing the swept path analysis results are attached as **Appendix I**:

- Fuel Tanker access;
- Service Vehicle (MRV) access; and
- Large Car (B99) access.

4. Development Traffic

4.1 Traffic Generation

The amount of traffic generated from the proposed development has been determined through peak hourly trip generation rates provided within Appendix 3A "Trip Generation Rates" of the TMR Road Planning and Design Manual. Assessment of the existing land use generated traffic has been compared to the proposed development land use generated traffic to determine the increase in generated trips as a result of the development.

In determining the proposed development traffic generation, the fast food outlet component was calculated to include a 20% reduction in traffic as a result of cross-utilisation between land uses on the site. That is, 20% of fast food outlet trade was assumed to form part of a linked trip for which a vehicle trip is already made to the development site. The logic associated with this reduction in generated traffic is that upon obtaining fuel (or participating in a retail use associated with the service station) a small proportion of patrons are likely to purchase fast food.

The "Development Traffic Generation" adopted is the difference between the existing and proposed land uses, i.e. the increase in traffic generation as a result of the development. **Table 4.1** details the traffic generation adopted.

Table 4.1 – Traffic Generation

Land Use	Yield	Peak Traffic Generation Rate	Peak Traffic Generation (vph)
Existing Scenario			
Detached Residence	1 dwelling	0.85	1
Service Station + Convenience	80m²	66 vph / 100m²	53
Service Garage	50m²	6 vph / 100m²	3
Sub-Total (Existing Scenario)			***57***
Developed Scenario			
Service Station + Convenience	102m²	66 vph / 100m²	67
Fast Food Outlet	148m²	12 vph / 100m² (- 20%)	14
Car Wash	2 bays	1	1
Sub-Total (Existing Scenario)			***82***
Total Additional Traffic Due to Development			**25**

It was considered appropriate to include additional generated traffic for the car wash component of the development because not all service stations with convenience centres contain this service. However, no data was available to determine peak traffic generation rates for this component. A figure of 1 vehicle in the peak hour has been adopted. This is considered reasonable because it is expected that most patrons would elect to wash their vehicle outside of the peak hour during quieter times because the activity is typically undertaken at the vehicle owner's convenience.

4.2 Trip Distribution

Given the volume of traffic on Byrnes Street, it is considered that the majority of visitors to the site will be travelling southbound on Byrnes Street, or westbound on Herberton Street. This is considered a reasonable assumption due to the fuelling and fast food options available north of the site. With higher order-controlled intersections available for access to those northern sites, making a right-hand turn movement from Byrnes Street into those developments would be more desirable. The adopted traffic distribution has been adopted as shown in **Figure 4.1**.

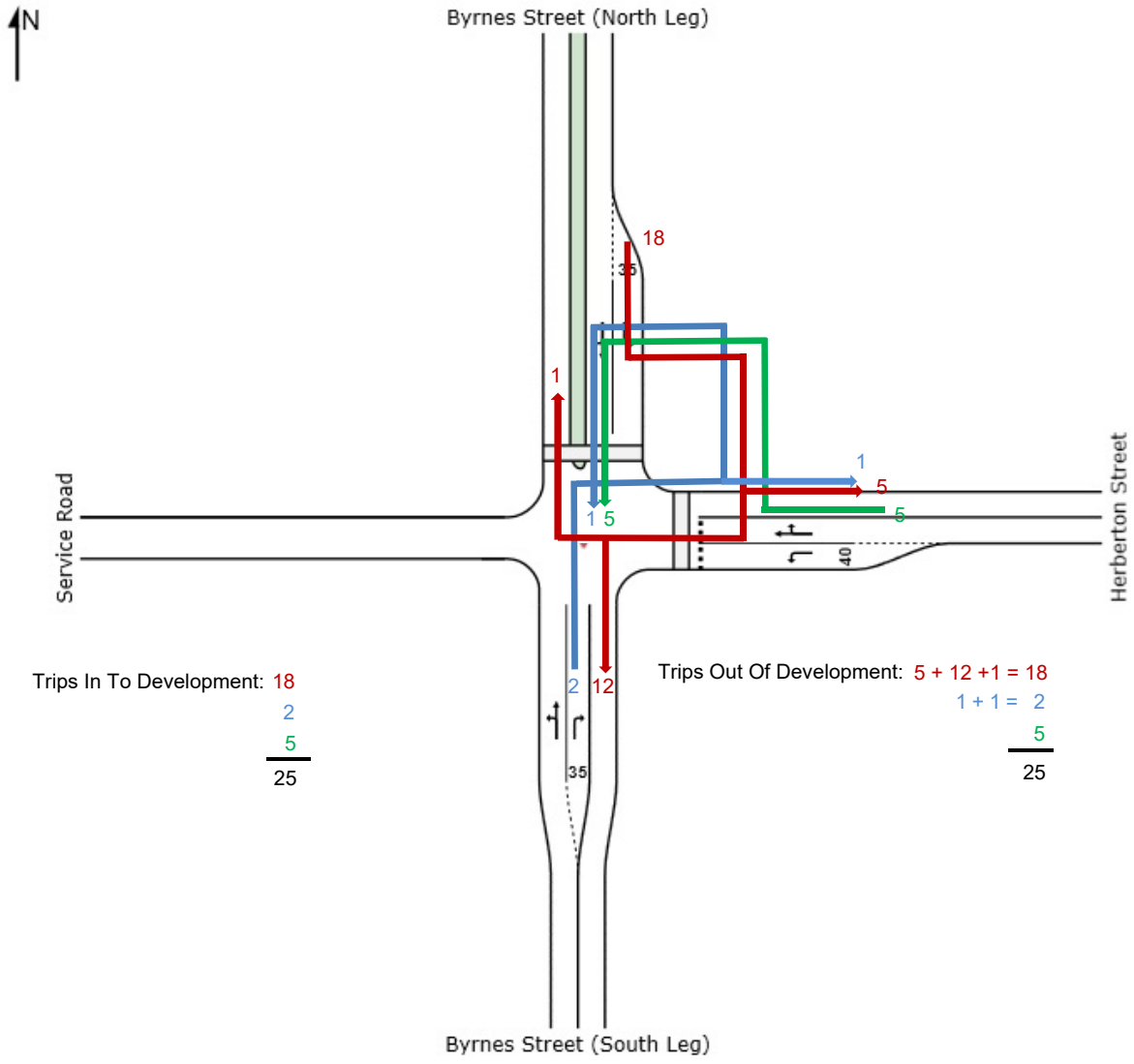


Figure 4.1 – Generated Traffic Distribution

4.3 Development Traffic Volumes on the Network

The proposed development will generate an additional 25 vehicles within the peak hour compared to the existing land use. This compares with 1,456 vehicles through the intersection in the AM peak and 1,386 vehicles in the PM peak base case, representing 1.7% and 1.8% of the peak hour volume, respectively.

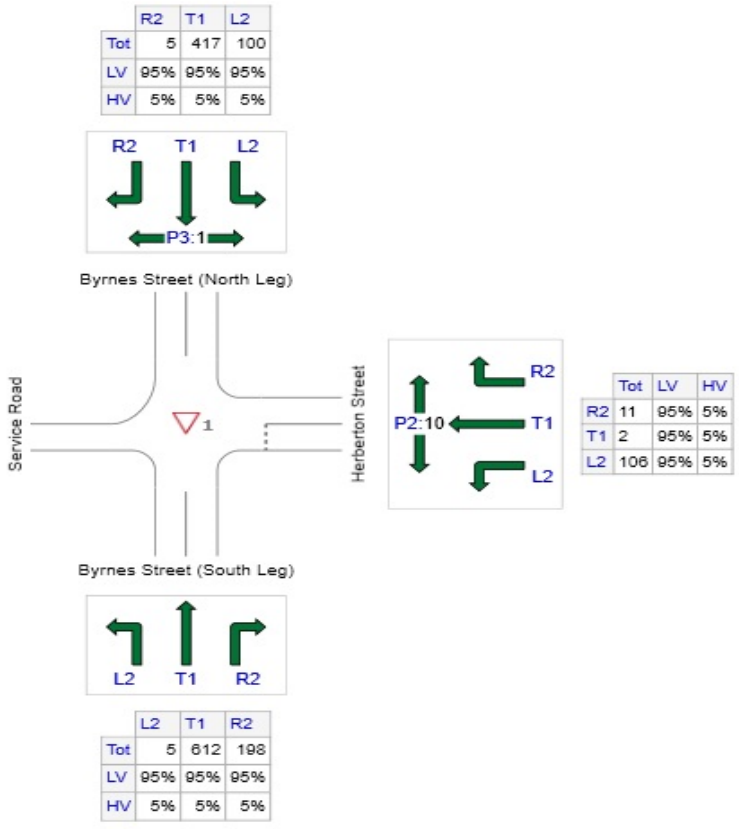
This is not considered to be a significant increase in traffic and furthermore, the proportion of the additional generated traffic compared to the network traffic will reduce as the surrounding network traffic organically grows.

Therefore, assessment of the additional development traffic on the surrounding network was not considered warranted.

5. Impact Assessment and Mitigation

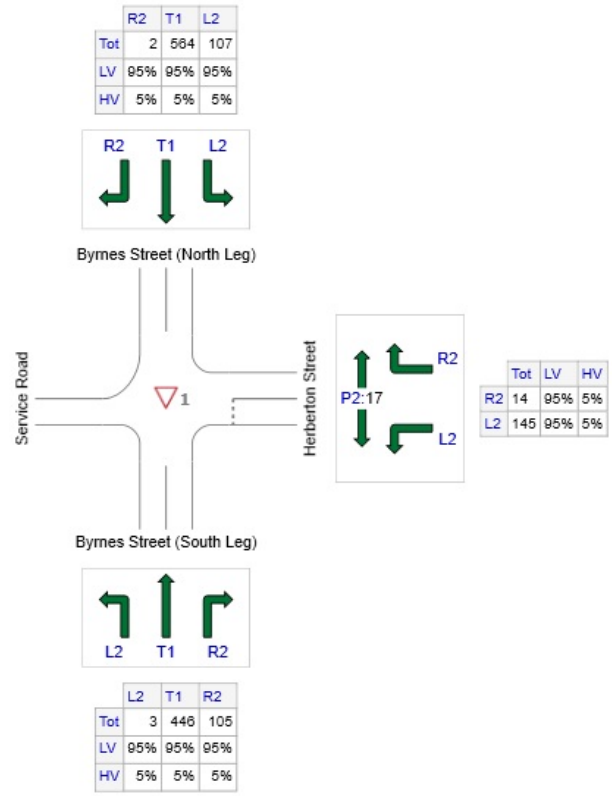
5.1 Pre-Development and Post-Development Traffic Volumes

As mentioned in **Section 2.4**, traffic counts were obtained from the Mareeba CBD Traffic Management Study, which included 2017 count data undertaken at the intersection of Byrnes and Herberton Streets. Traffic was determined for the pre-development scenario (the year of opening 2019 or "Base Case") by applying a traffic growth rate of 2% (refer **Section 2.5**) to those volumes. Pre-development (Base Case) traffic volumes are presented in **Figures 5.1** and **5.2**.



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	815	774	41
E: Herberton Street	119	113	6
N: Byrnes Street (North Leg)	522	496	26
Total	1456	1383	73

Figure 5.1 – Pre-Development (2019 Base Case) Traffic Volumes AM Peak



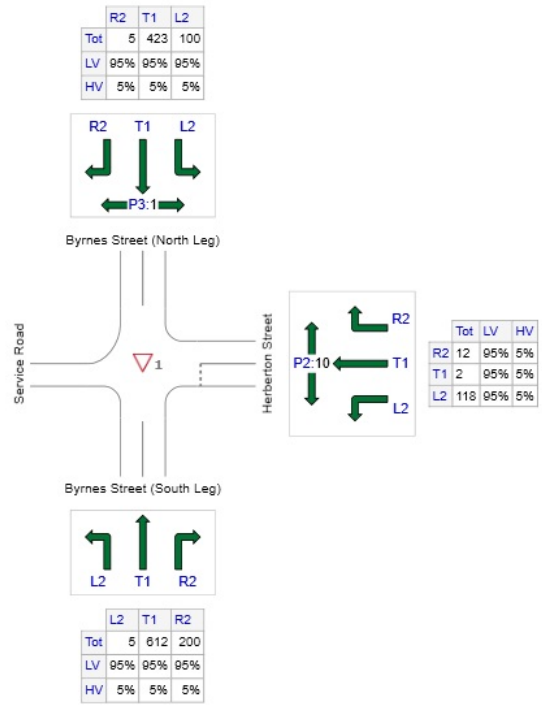
	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	554	526	28
E: Herberton Street	159	151	8
N: Byrnes Street (North Leg)	673	639	34
Total	1386	1317	69

Figure 5.2 – Pre-Development (2019 Base Case) Traffic Volumes PM Peak

In determining the post-development traffic, two profiles were calculated for both AM and PM peaks. These were:

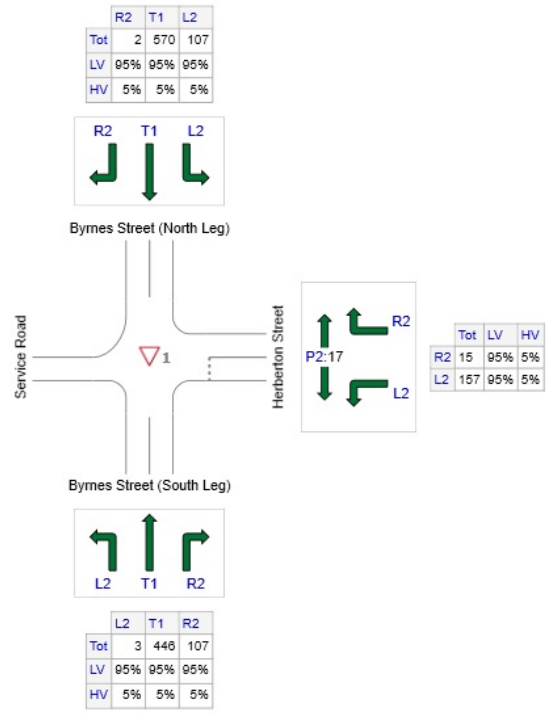
- pre-development traffic volumes plus additional traffic generated by the development; and
- pre-development traffic volumes grown (using 2% growth) to a 10-year horizon of 2029 plus the additional traffic generated by the development.

Note that traffic growth is not applied to the development generated traffic because this traffic is dependent on the services available within the development, which will not change during the assessment period. Post-development traffic volumes are presented in **Figures 5.3** to **5.6** below.



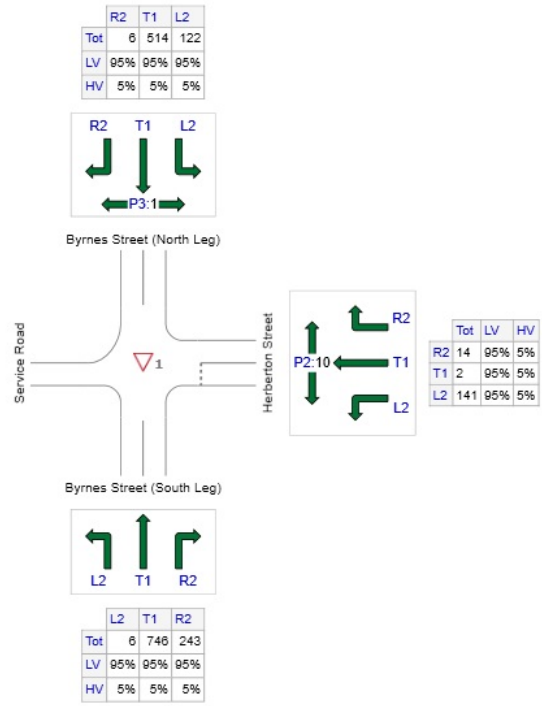
	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	817	776	41
E: Herberton Street	132	125	7
N: Byrnes Street (North Leg)	528	502	26
Total	1477	1403	74

Figure 5.3 – Post-Development (2019) Traffic Volumes AM Peak



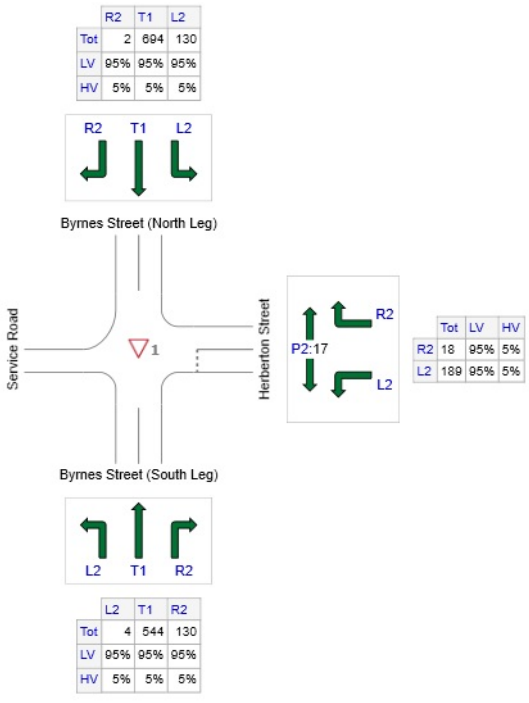
	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	556	528	28
E: Herberton Street	172	163	9
N: Byrnes Street (North Leg)	679	645	34
Total	1407	1337	70

Figure 5.4 – Post-Development (2019) Traffic Volumes PM Peak



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	995	945	50
E: Herberton Street	157	149	8
N: Byrnes Street (North Leg)	642	610	32
Total	1794	1704	90

Figure 5.5 – Post-Development (2029) Traffic Volumes AM Peak



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: Byrnes Street (South Leg)	678	644	34
E: Herberton Street	207	197	10
N: Byrnes Street (North Leg)	826	785	41
Total	1711	1625	86

Figure 5.6 – Post-Development (2029) Traffic Volumes PM Peak

5.2 Road Safety Impact Assessment and Mitigation

All new developments may potentially affect road safety due to:

- Increase in traffic volume;
- Increase in the number of conflict points between vehicles and other vehicles, pedestrians and cyclists;
- The presence of new infrastructure, such as access roads and driveways;
- Changes to vehicle types from the previous land use; and
- Changes to on-street parking.

In accordance with the GTIA, the desired outcome of a new development is that a road or intersection's safety is not significantly worsened as a result of the development. The GTIA defines "significantly worsened" in terms of the change in safety risk rating (e.g. from low to medium, or from medium to high).

It is noted that safety is not readily quantifiable and the condition of a road can not be defined as being absolutely safe or absolutely unsafe. Rather, road safety is a relative measure bench marked against an existing condition or an acceptable risk threshold. For impacts of development on road safety, risk is considered in terms of changes in the likelihood (how often an event or situation is expected to take place) and consequence (the effect, result or outcome of something occurring).

An assessment is necessary for new developments to determine if there is likely to be any significant change to the level of road safety risk on the road and / or intersection as a result of the development. This has been undertaken by:

- Identifying the current safety risks relevant to the development area;
- Identifying the likely new risks or modification to existing risks resulting from the development; and
- Recommending mitigation works to allow for a no significant worsening of safety risks as a result of the development.

Safety risks have been identified and scored in accordance with the GTIA risk scoring matrix and has been prepared for both pre-development and post-development scenarios. The area considered during the safety assessment is identified below in **Figure 5.7**.

Figure 5.7 – Safety Assessment Area

Table 5.1 – Risk Assessment

	Pre Development			Post Development				Post Development & Mitigation		
Risk Item	Likelihood	Consequence	Risk Score	Likelihood	Consequence	Risk Score	Mitigation Measures	Likelihood	Consequence	Risk Score
1. High delays for the right-hand turn movement from Herberton Street onto Byrnes Street. The addition of development traffic to the intersection will lead to increased delays.	1	3	L	2	3	M	Refer **Section 5.4.3** and **Section 5.5** of this report.	2	3	M
2. Potential increase in the number of pedestrians crossing at Herberton Street leading to an increase in pedestrian / vehicle conflicts	2	4	M	3	4	M	No increase in Risk Score, therefore no Mitigation measure required.	3	4	M
3. Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with vehicles on Byrnes Street and Herberton Street.	2	2	L	1	2	L	No increase in Risk Score, therefore no Mitigation measure required.	1	2	L
4. Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with pedestrians on Byrnes Street and Herberton Street.	2	3	M	1	3	L	Risk Score reduced, therefore no Mitigation measure required.	1	3	L

Notwithstanding Risk Item 1, **Table 5.1** identifies that no mitigation measures are required. Risk Items 2 and 3 do not result in any net increase in the risk score and therefore no mitigation measures are required. Risk Item 4 results in a decrease in risk due to the reduction in number of accesses as a result of the development.

5.3 Construction Traffic Impact Assessment and Mitigation

During construction, safety will be assessed and mitigated by the Principal Contractor. The Principal Contractor will have responsibilities under Workplace Health and Safety Regulations and those conditions imposed by Council if the development is approved. The Principal contractor will be required to prepare and implement a safety plan to meet the relevant authority's requirements.

5.4 Access and Frontage Impact Assessment and Mitigation

The location and configuration of accesses to a road from the development can affect safety and efficiency of the road by:

- Providing an additional location where turning vehicle movements conflict with through vehicle movements;
- Providing new access or intersection infrastructure that could affect the safety of traffic, pedestrians and cyclists or the location of a bus stop, footpath and cycleway infrastructure; and
- Affect the implementation of planned or corridor improvements such as road widening, intersection upgrades, footpaths, cycle routes, etc…

Development of land and the associated re-configuration of the associated frontage should be undertaken to:

- Maintain continuity of footpaths and cycling infrastructure along the frontage;
- Maintain continuity of drainage infrastructure;
- Provide no adverse impact on bus-stops; and
- Provide no adverse impact on the existing road carriageway geometry.

In accordance with the GTIA, the desired outcomes are to:

- Minimise impacts on the through carrying function of a road;
- Provide new accesses that do not worsen the safety or efficiency of the road; and
- Provide new frontage works that allow for the continuity of the adjacent or planned infrastructure across the road.

5.4.1 Accesses

As noted in **Section 3.2.2**, the development proposes to have two separate access points. One will be located on Byrnes Street and the other on Herberton Street. This will result in a reduction in accesses along both roads because there is currently an access for the detached dwelling and an access for the existing service station on Byrnes Street and two separate access on Herberton Street for the existing service station. The proposed arrangement will also result in:

- continuity of the existing road verge;
- will not impact on other drainage infrastructure (note that kerb and channel will be reinstated at redundant crossover locations and new crossovers will be constructed to suit the new driveway geometry);
- will not impact on the existing road carriageway infrastructure; and
- will not impact on other infrastructure (e.g. bus stops).

5.4.2 Vehicle Movements

As noted in **Section 3.2.4**, swept path analysis has been undertaken for the proposed new development accesses to confirm that the design vehicles can appropriately manoeuvre in and out of the site. That analysis has confirmed that appropriate access is available.

5.4.3 Traffic Analysis

Finally, to complete assessment of the proposed development in accordance with TMR's desired outcomes and to demonstrate that safety and efficiency of the road network is not significantly worsened, traffic analysis has been carried out for the site frontage intersection of Byrnes Street and Herberton Street. Analysis was undertaken for the opening year (base case 2019) and the required 10-year design horizon (2029).

Movement summary results for the analysis is contained within **Appendix J** and are summarised in **Table 5.2** below.

Table 5.2 – Intersection Analysis Results

Scenario	DOS	Avg Delay (sec)	95th Back Queue (m)
2019 AM – Pre-Development	0.323	2.6	7.8
2019 AM – Post Development	0.323	2.7	8.1
2019 PM – Pre-Development	0.297	2.5	5.8
2019 PM – Post Development	0.301	2.6	6.6
2029 AM – Pre-Development	0.394	3.6	13.2
2029 AM – Post Development	0.406	3.7	13.5
2029 PM – Pre-Development	0.363	3.4	9.9
2029 PM – Post Development	0.366	3.6	11.0

The summarised results above show that the intersection adjacent to the access and frontage of the proposed development operate well within acceptable limits over the 10-year design horizon, with DOS no greater than 0.406 and an average intersection LOS of "A" based on the average delay.

However, it is noted that the critical movement within the analysis (right-hand turn from Herberton Street onto Byrnes Street) experiences delays as detailed in **Table 5.3** below.

Table 5.3 – Critical Movement Delays (Right-Hand Turn Movement from Herberton Street)

Scenario	DOS	Avg Delay (sec)	95th Back Queue (m)
2019 AM – Pre-Development	0.150	47.6	3.3
2019 AM – Post Development	0.165	49.2	3.6
2019 PM – Pre-Development	0.130	37.8	2.9
2019 PM – Post Development	0.142	38.6	3.1
2029 AM – Pre-Development	0.373	119.3	7.9
2029 AM – Post Development	0.406	125.7	8.7
2029 PM – Pre-Development	0.310	81.7	6.7
2029 PM – Post Development	0.337	85.6	7.4

Whilst DOS results remain well below the acceptable limit, the average delay is high, reaching a maximum of 2 minutes in the 2029 post development AM Peak.

In accordance with the GTIA, where the average peak hour delay for any movement exceeds 42 seconds, then the intersection should be considered for upgrade for safety reasons where it is practical to do so. It is noted that this movement experiences a delay that triggers TMR's requirement for upgrade prior to the development occurring in 2018 and is therefore an existing

issue. It is considered unreasonable that any upgrade be made a condition of the proposed development based on the 42 second criteria because it is an existing issue.

5.5 Intersection Delay Impact Assessment and Mitigation

An increase in vehicles through an intersection as a result of development will likely increase traffic delays. All development generates impacts on road intersections however, TMR considers that it is unreasonable to require a development to quantify impacts on intersection delays unless the development creates an increase in traffic over a particular threshold level. TMR notes that these threshold levels apply to any intersection where the development traffic exceeds 5% of the base traffic for any movement in the peak periods at the year of opening.

In accordance with the GTIA, the desired outcome is to allow for the sum of intersection delays on base traffic not to increase the aggregate intersection average delays by more than 5% as a result of the development.

For intersections assessed within the impact assessment area, TMR considers it unreasonable to require the mitigation of impacts where the development increases average delay to base traffic movement by less than 5% in the aggregate.

The following scenarios were analysed for the intersection to assess intersection delay in accordance with the GTIA requirements:

- Scenario 1 – Base Case AM Peak (year of opening 2019);
- Scenario 2 – Base Case PM Peak (year of opening 2019);
- Scenario 3 – Base Case AM Peak + Development; and
- Scenario 4 – Base Case PM Peak + Development.

Movement summary results for the above scenarios are contained within **Appendix J** and are summarised in **Table 5.4** below.

Table 5.4 – Intersection Delay Analysis Results

Scenario	DOS	Avg Delay (sec)	95th Back Queue (m)
1. 2019 AM Peak – Pre Dev	0.323	2.6	7.8
2. 2019 PM Peak – Pre Dev	0.297	2.5	5.8
3. 2019 AM Peak - Post Dev	0.323	2.7	8.1
4. 2019 PM Peak - Post Dev	0.301	2.6	6.6

The results demonstrate that the Byrnes Street / Herberton Street intersection is operating below capacity with an acceptable DOS and LOS in the pre-development scenarios.

With addition of the extra traffic generated by the development, the intersection continues to operate below capacity limits with insignificant increases in average intersection delay in both the AM and PM peaks.

The increase in intersection delay was then calculated in accordance with the GTIA shown in **Figure 5.8**.

$$ID = \sum_{i=1}^{n} WD - \sum_{i=1}^{n} BC$$

where:

ID	is aggregate intersection-delay impact vehicle-minutes.
WD	is 'with development' intersection vehicle-minutes for design peak periods. This is calculated by multiplying the 'with development' average delay by movement to the base case volume on each movement, thus not counting the impact as delays to development traffic, only to pre-existing traffic that is affected by these additional delays.
BC	is base case intersection vehicle-minutes for design peak periods
n	is the number of intersections in the impact assessment area
i	is each intersection within the impact assessment area.

Figure 5.8 – Extract from GTIA

Utilising the results from a series of SIDRA output files, the key inputs to the above formula are as follows:

Table 5.5 – Aggregate Intersection Delay Impact Calculation

Scenario	Sum WD (vehicle-seconds)	Sum BC (vehicle-seconds)	Percentage Increase In Delay (%)
AM Peak	3,829	3,788	1.1
PM Peak	3,520	3,480	1.2

The above results demonstrate that the proposed development increases network delay by 1.1% in the AM Peak and 1.2% in the PM Peak, which does not exceed the 5% criteria. Therefore, in accordance with the GTIA, it is considered unreasonable to require any mitigation works at the intersection as a result of the development, with regard to intersection delay.

Attention is drawn back to **Section 2.6** of this report, where a detailed analysis of the existing intersection performance was undertaken. The results of that analysis were that both the AM and PM Peaks DOS for the intersection was considerably below the performance criteria value of 0.80 and the intersection LOS was of an “A” standard. The critical movement within the analysis was the right-hand turn from Herberton Street onto Byrnes Street, which experienced delay of 44.8 seconds in the AM peak.

In accordance with the GTIA, where the average peak hour delay for any turn movement exceeds 42 seconds, the intersection should be considered for upgrade for safety reasons where it is practical to do so. It is therefore considered that the existing Herberton Street / Byrnes Street intersection be considered for upgrade in accordance with TMR’s requirement for safety reasons to mitigate delay with the right-hand turn movement from Herberton Street. However, based on the requirements of the GTIA, it is not considered to be the responsibility of the proposed development to undertake these upgrade works.

5.6 Road Link Capacity Assessment and Mitigation

As detailed in **Section 4.1**, the proposed development will generate an additional 25 vehicles within the peak hour compared to the existing land use. This represents a minor increase to the total intersection traffic of 1.8% in the morning peak and 1.9% in the afternoon peak hour. This is not considered a significant increase and therefore assessment of the development's impact on the surrounding road capacity is not considered warranted.

Because the proposed development represents an upgrade to an almost identical land use, increase in heavy vehicle usage is not expected to increase. This is because:

- similar service vehicles will access the site to deliver goods;
- similar waste vehicles will access the site to remove refuse; and
- similar fuel tankers will access the site to supply fuel.

Based on the above, further assessment of road link capacity or consideration of mitigation measures is not considered warranted in this case.

6. Commentary on Pre-Lodgement Notes

As noted in **Section 1.2**, pre-lodgement advice was received from the Department of Infrastructure, Local Government and Planning on 21 November 2017. That pre-lodgement advice noted the following was required:

- Details of increased traffic generation rates associated with the proposed redevelopment of the existing Mobil Service Station including the projected customer numbers and the number, type and size of all vehicles, including heavy vehicles, that will access the proposed redevelopment.
- A traffic assessment of the Byrnes Street / Herberton Street intersection to demonstrate:
    - That any increase in traffic generation from the proposed redevelopment via Herberton Street will not impact on the Level of Service, safe operation and management of the Byrnes Street / Herberton Street intersection;
    - That the existing capacity of the auxiliary left turn lane into Herberton Street will not be impacted by increased traffic flows along Byrnes Street into the proposed redevelopment; and
    - That the auxiliary left lane is not required to be extended to improve traffic flows.
- Mitigation measures to ensure that any traffic impacts resulting from the proposed development do not compromise the safe and efficient management and operation of the Byrnes Street / Herberton Street intersection and the auxiliary left turn lane.

The pre-lodgement advice also noted:

- That based on the preliminary plans issued to the Department of Infrastructure, Local Government and Planning that the Byrnes Street access driveway may require widening;
- The Byrnes Street / Herberton Street intersection would require signalisation at some point in the future, that development of the vacant site opposite the existing Mobil Service Station on Byrnes Street (Lot 78 on SP152626) would accelerate the need for this signalisation, that a Development Application is currently before Council for development of that site; and
- Recommendation that the applicant undertake an access assessment to determine an acceptable and safe access arrangement via Herberton Street, whereby increased right out traffic movements can safely merge with traffic at the current intersection.

The purpose of this **Section 6** is to respond specifically to each of the above items, directing the reader to the sections within this report that provide details / responses.

6.1 Dot Point 1 - Increased Traffic Generation

Details of traffic generation associated with the development are provided in **Section 4.1**. These figures represent projected customer numbers within the peak hour. It is unlikely that service vehicles will attend the site within those peak hours, however the type and size of all service vehicles (including the heavy fuel tanker) that are likely to access the development are discussed in **Section 3.2.4**.

6.2 Dot Point 2 – Traffic Assessment

Traffic Assessment of the Byrnes Street / Herberton Street intersection with regard to traffic flows (ie Level of Service, Degree of Saturation etc…) are provided as follows:

- Existing Intersection Performance – **Section 2.6**;
- Opening Year Intersection Performance – **Section 5.4.3**;
- 10-year Design Horizon Intersection Performance – **Section 5.4.3**;
- Intersection Delay Impact Assessment – **Section 5.5**;

Commentary on the proposed development's impact on the intersection performance is also provided within those sections.

With regard to the auxiliary left turn lane from Byrnes Street onto Herberton Street, a separate analysis was required. This is because the traffic turning from the turn lane does not travel through the intersection and therefore, the intersection analysis does not account for the additional 18 vehicles (refer **Section 4.2**) that turn into the development before the intersection.

For the purpose of assessing impact on the auxiliary lane, the SIDRA model was modified to allow for these 18 vehicles by sending them through the intersection and assessing the difference in intersection performance. **Table 6.1** below provides modelling results.

Table 6.1 – Byrnes Street to Herberton Street Auxiliary Left Turn Lane

Scenario	DOS	Avg Delay (sec)	95th Back Queue (m)
AM Peak Hour – Post Development (2029)	0.417	3.8	13.9
PM Peak Hour – Post Development (2029)	0.366	3.7	11.0

The results above demonstrate a minor increase in DOS, however LOS for the leftihand turn movement remain at a level of "A" for both the AM and PM peaks. It is therefore not considered warranted to extend the left-hand auxiliary turn lane.

6.3 Dot Point 3 – Mitigation Measures

Reference is made to **Section 5** of this report, which details assessment and mitigation measures for the following:

- Road Safety;
- Construction;
- Access and Frontage;
- Intersection Delay; and
- Road Link.

6.4 Dot Point 4 – Access Driveway

The pre-lodgement advice noted that the Byrnes Street access driveway as presented on the architectural drawings may require widening. A swept path assessment was undertaken to assess the preliminary documented driveway accesses. This determined that widening of both driveways was required to accommodate the design vehicle movements. Refer to **Section 3.2.4** and **Appendix I**.

6.5 Dot Point 5 – Development of Lot 78 on SP152626

The pre-lodgement advice noted that The Byrnes Street / Herberton Street intersection would require signalisation at some point in the future and that development of the vacant site opposite the existing Mobil Service Station on Byrnes Street (Lot 78 on SP152626) would accelerate the need for this signalisation. It was also noted that a Development Application is currently before Council for development of that site. This advice is acknowledged.

6.6 Dot Point 6 – Development of Lot 78 on SP152626

The pre-lodgement advice recommended assessment of the access arrangement from Herberton Street. Analysis has been undertaken considering swept path movements from the development site to determine that safe egress is available. Reference is made to **Section 3.2.4** and **Appendix I**.

7. Conclusions and Recommendations

The scope of this Traffic Impact Assessment was to undertake the following for the proposed site redevelopment at 255 Byrnes Street and 1 Herberton Street:

- compile, analyse and document the effect that the proposed development is likely to have on the operation of the road network;
- recommend works to mitigate any identified impacts; and
- assess the specific items raised within the pre-lodgement advice received from the Department of Infrastructure, Local Government and Planning.

Assessment of the specific items raised within the pre-lodgement advice is discussed in **Section 6** above. This section provides a summary of the impacts and mitigation measures proposed.

The subject site is to be accessed by two separate cross overs as detailed below (reduced from the existing four cross overs currently accessed by the site):

- left-in / left-out from Byrnes Street; and
- left-in / left-out and right-in / right-out from Herberton Street.

Vehicles that will access the site will include a fuel tanker (assumed to be a 19m semi-trailer), service vehicles for waste removal and delivery of goods (assumed to be Austroads MRV vehicles) and site patrons (assumed to be Austroads B99 cars). A swept path analysis has been undertaken for each of these vehicles, which demonstrates that movements can be accommodated.

An assessment of site car parking has been assessed and it was confirmed that the parking geometry meets the requirements of AS/NZS 2890.

7.1 Summary of Impacts and Mitigation Measures Proposed

In accordance with the requirements of GTIA, assessment of impacts have been considered for:

- road safety;
- construction traffic;
- access and frontage;
- intersection delay; and
- road link capacity.

7.1.1 Road Safety

Safety risks were identified and scored in accordance with the GTIA risk scoring matrix for both pre-development and post-development scenarios. The potential risks identified were as follows:

- Existing delays for right hand turn movements from Herberton Street into Byrnes Street;
- Potential increase in the number of pedestrians crossing Herberton Street may lead to an increase in likelihood of conflict between pedestrians and vehicles;
- Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with vehicles on Byrnes Street and Herberton Street; and
- Adjustment to the number of vehicle access points on the site and the resulting change to risk of conflicts with pedestrians on Byrnes Street and Herberton Street.

Scoring resulted in no increase in risk for each of the first three identified items and resulted in a net decrease in risk score for the forth item. It is therefore considered that the proposed development does not represent a reasonable impact on road safety.

7.1.2 Construction Traffic

During construction, safety will be assessed and mitigated by the Principal Contractor. The Principal Contractor will have responsibilities under Workplace Health and Safety Regulations and those conditions imposed by Council if the development is approved. The Principal contractor will be required to prepare and implement a safety plan to meet the relevant authority's requirements.

7.1.3 Access and Frontage

The proposed access arrangement will result in a reduction in the existing accesses on both Byrnes Street (reduction of one access) and Herberton Street (reduction of one access) and will not impact on the site frontage arrangements. Continuity of the existing road verge will be maintained, drainage infrastructure will be maintained, no bus stops are interfered with and the existing road carriageway infrastructure will not be impacted upon.

Vehicle movements have been assessed by undertaking a swept path analysis, which demonstrates adequate allowance is provided for access.

A traffic analysis has also been undertaken to assess the adjacent intersection performance, which demonstrates that there is no change in level of service.

It is therefore considered that the proposed development does not represent a reasonable impact on the access or frontage.

7.1.4 Intersection Delay

Assessment has determined that additional generated traffic from the proposed development increases network delay by 1.1% in the AM peak and 1.2% in the PM Peak. This does not exceed the 5% threshold nominated by TMR and therefore in accordance with the GTIA, TMR considers it unreasonable to require the development to quantify impacts on intersection delay.

7.1.5 Road Link Capacity

The proposed development will generate an additional 25 vehicles within the peak hour compared to the existing land use. This represents a minor increase to the total intersection traffic of 1.8% in the morning peak and 1.9% in the afternoon peak hour. This is not considered a significant increase. Furthermore, the size and type of vehicles accessing the post development site will not differ materially from those that visit the existing fuel station. Therefore, assessment of the development's impact on the surrounding road capacity was not considered warranted.

7.2 Conclusion

Based on the above assessment, it is considered reasonable to conclude that the proposed development does not result in any impacts on road safety, access and frontage, intersection delay or road link capacity that warrant any mitigation measures to be implemented. Construction traffic impacts will be assessed by the Principal Contractor during the operational works phase of the project to comply with assessment manager conditions if the proposal is approved.

7.3 Certification Statement and Authorisation

Preparation of a Traffic Impact Assessment constitutes a professional engineering service as defined under the Professional Engineers Act 2002 and therefore must be undertaken by, or under the direct supervision of, a Registered Professional Engineer of Queensland.

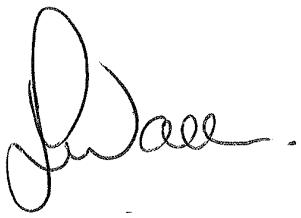
Despite the involvement of various disciplines in the investigation, assessment and documentation, the determination of impacts on the transport network operation and on transport infrastructure and the identification of impact mitigation strategies are matters that require relevant engineering expertise and experience.

As a professional engineer registered by the Board of Professional Engineers of Queensland pursuant to the Professional Engineers Act 2002 as competent in my areas of nominated expertise, I understand and recognise:

- The significant role of engineering as a profession, and that
- The community has a legitimate expectation that my certification affixed to this engineering work can be trusted, and that
- I am responsible for ensuring its preparation has satisfied all necessary standards, conduct and contemporary practice.

As the responsible RPEQ, I certify:

- I am satisfied that all submitted components comprising this traffic impact assessment, listed in Table 11.1, have been completed in accordance with the Guide to Traffic Impact Assessment published by the Queensland Department of Transport and Main Roads and using sound engineering principles, and
- where specialised areas of work have not been under my direct supervision, I have reviewed the outcomes of the work and consider the work and its outcomes as suitable for the purposes of this traffic impact assessment, and that
- the outcomes of this traffic impact assessment are a true reflection of results of assessment, and that
- I believe the strategies recommended for mitigating impacts by this traffic impact assessment, embrace contemporary practice initiatives and will deliver the desired outcomes.



15.03.2018

Signed: …… Date: ……

Name: Daryl James Walker RPEQ No. 19806 (Competencies – Civil)

Address: PO Box 509, Palm Cove Qld 4879
Email: daryl@civilwalker.com.au

Table 7.1 – Traffic Impact Assessment Certification Components

Traffic Impact Assessment Components to Which this Certification Applies	✓
1. Introduction	
Background	✓
Scope and Study Area	✓
Pre-Lodgment Meeting Notes	✓
2. Existing Conditions	
Land Use and Zoning	✓
Adjacent Land Uses / Approvals	✓
Surrounding Road Network Details	✓
Traffic Volumes	✓
Intersection Performance	✓
Road Safety Issues	✓
Site access	✓
Parking	✓
3. Proposed Development Details	
Development Site Plan	✓
Operational Details	✓
Proposed Access and Parking	✓
4. Development Traffic	
Traffic Generation	✓
Trip Distribution	✓
Development Traffic Volumes on the Network	✓
5. Impact Assessment and Mitigation	
With and Without Development Traffic Volumes (Pre- and Post-Development)	✓
Construction Traffic Impact Assessment and Mitigation	✓
Road Safety Impact Assessment and Mitigation	✓
Access and Frontage Impact Assessment and Mitigation	✓
Intersection Delay and Impact Assessment and Mitigation	✓
Road Link Capacity Assessment and Mitigation	✓
6. Conclusions and Recommendations	
Summary of Impacts and Mitigation Measures Proposed	✓
Certification Statement and Authorisation	✓

CivilWalker
Engineering | Project Management

Appendix A

Michael Ferris & Partners
Proposed Development Drawings

A1 Original

4000

6000

Car Wash 1

Car Wash 2

9

REFUSE AREA

11200

Loading Area

LOADING ZONE

3600

365

1500

400

935

400

260

384

2400

Office and Store Room

Service Area

Cold Room

1

2

3

Retail Area

Plant

4

5

6

7

Commercial Kitchen

Dining Room

8 Waiting Area

RV

Air

Byrnes Street

Herberton Street

1 Level 1 SITE shaded
1 : 100

200mm 150 100 50 0

Issue
Sketch Design

Rev Date Description

Michael Ferris and Ptnrs Pty Ltd.
21 Kamerunga Rd Stratford , Cairns, Qld.
Ph 07 40552544 Mob 0412855515 e : ferris15@bigpond.com
Michael Ferris
Registered Architect 001841

Job
Project Name

Client
Owner

Address
Enter address here

Job No.
12-

Scale
1 : 100

Drawing Title
Site Plan

Dwg No. A05

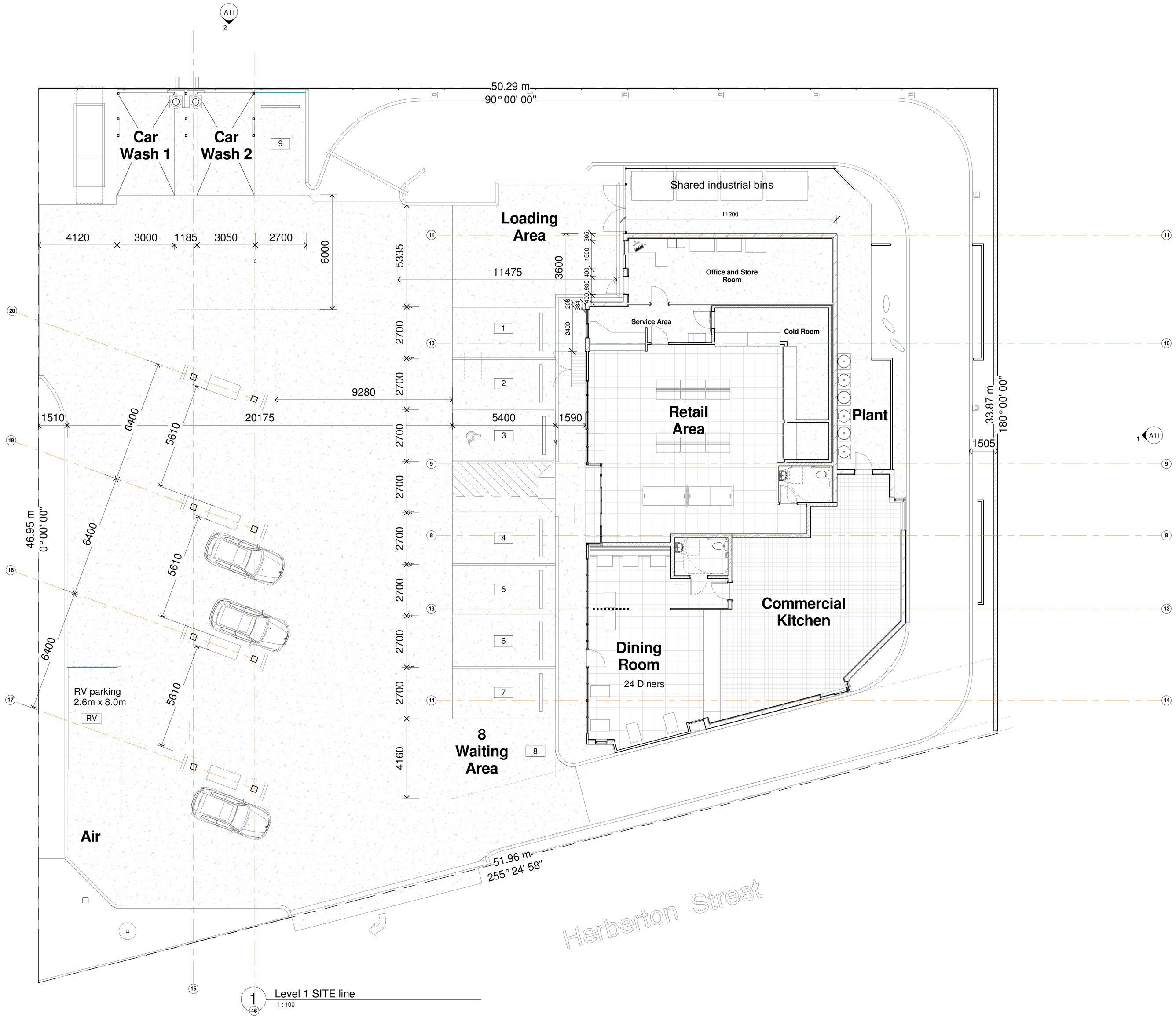
Rev

Date
16/03/2018
9:26:38 AM

Chk
JM

Appr.

A1 Original



1 Level 1 SITE line
1 : 100

200mm
150
100
50
0

Issue
Sketch Design

Rev	Date	Description

Michael Ferris and Ptnrs Pty Ltd.
21 Kamerunga Rd Stratford , Cairns, Qld.
Ph 07 40552544 Mob 0412855515 e : ferris15@bigpond.com
Michael Ferris
Registered Architect 001841

Job
Project Name

Client
Owner

Address
Enter address here

Job No.
12-

Scale
1 : 100

Drawing Title
Floor Plan - Level 1

Dwg No. A06

Rev

Date
16/03/2018
9:26:40 AM

Chk
JM

Appr.

CivilWalker
Engineering | Project Management

Appendix B

Dept. of Infrastructure, Local Government and Planning
Pre-Lodgement Advice

Queensland Government

Department of Infrastructure, Local Government and Planning

Our reference: 1711-2491 SPL

21 November 2017

Mr Michael Ferris
21 Kamerunga Rd
Stratford QLD 4870
ferris15@bigpond.com

Dear Mr Ferris

Pre-lodgement advice

Thank you for your correspondence received on 13 November 2017 in which you sought pre-lodgement advice from the Department of Infrastructure, Local Government and Planning regarding the proposed development described below.

Reference information

Departmental role:	Referral agency
Departmental jurisdiction:	10.9.4.2.4.1 – Material change of use of premises near a State transport corridor

Location details

Street address:	1 Herberton Street, Mareeba
Real property description:	Lot 701 on M3565 and Lot 702 on M3565
Local government area:	Mareeba Shire Council
Existing use:	Mobil Service Station (Lot 701) and Residential Dwelling (Lot 702)

Details of proposal

Development type:	Material change of use and Reconfiguring a lot
Development description:	Redevelopment of the existing Mobil Service Station in Mareeba. The new development will include an adjoining lot which is currently residential. The new development will also include a food and drink outlet.

Supporting information

Drawing/report title	Prepared by	Date	Reference no.	Version/issue

Far North Queensland regional office
Ground Floor, Cnr Grafton and Hartley Street, Cairns
PO Box 2358, Cairns QLD 4870

Floor Plan - Level 1	Michael Ferris and Ptnrs Pty Ltd	10/11/2017	A06	-
Area Plan	Michael Ferris and Ptnrs Pty Ltd	10/11/2017	A03	
Perspective Sketch 1	Michael Ferris and Ptnrs Pty Ltd	10/11/2017	A21	-

The department has carried out a review of the information provided and the impacts of the proposal. The following advice outlines the matters of interest to the department and matters that should be addressed if you proceed with lodging your development application. This advice is valid for a period of nine months from the date of issue, unless a change in legislation or statutory instrument occurs that affects the advice.

Proposed development

1. The proposal seeks to redevelop the existing Mobil Service Station located on the corner of Byrnes Street and Herberton Street in Mareeba.
2. The proposal includes the amalgamation of two lots - Lot 701 on M3565 and Lot 702 on M3565.
3. The redeveloped service station will include a retail area, three (3) car cleaning bays and a food and drink outlet with a drive through facility.
4. The proposal plans show changed access arrangements for both Byrnes Street and Herberton Street.

Requested advice

5. Advice is sought on the location of vehicle access to and from the site as well as any other relevant advice.

SARA referral triggers

6. A development application for the proposed development requires referral to SARA under the following provisions of the Planning Regulation 2017:
    - Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 – Material change of use of premises near a State transport corridor. The current SARA referral fee for this trigger is **$3130.**
7. As SARA fees are subject to change, it is recommended you check Schedule 10 of the Planning Regulation or contact the department prior to lodging your application to confirm the applicable fee(s).

Application requirements

8. Any development application for the above matters is required to be supported by the following mandatory information:
    - the consent of the owner of the land (if the applicant is not the owner)
    - the prescribed SARA fee under the Planning Regulation
    - DA Form 1
    - any supporting information the DA form(s) states is mandatory supporting information for the application.
9. Copies of the DA forms are available from: https://planning.dilgp.qld.gov.au/planning/resources.
10. With reference to question 23.15 in DA Form 1, the development application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994.*

11. A development application should also include a response to the relevant state codes in the version of the State Development Assessment Provisions (SDAP) which is current at the time of lodgement.
12. The relevant code for the proposed development is *State Code 1: Development in a state-controlled road environment.* All of the relevant performance outcomes in Table 1.2.1 and 1.2.2 need to be addressed.
13. Further information on the SDAP, including response templates, is available from: http://www.dilgp.qld.gov.au/sdap.

Traffic Impact Assessment Report

14. To assist in addressing the SDAP a development application for the proposal should include a traffic impact assessment report certified by a Registered Professional Engineer of Queensland (RPEQ).
15. The Traffic Impact Assessment Report should be undertaken in accordance with the Guide to Traffic Impact Assessment (GTIA) and provide the following information:
    - Increased traffic generation rates associated with the proposed redevelopment of the existing Mobil Service Station in Mareeba. This should include projected customer numbers and the number, type and size of all vehicles, including heavy vehicles, that will access the proposed redevelopment.
    - A traffic assessment of the Byrnes Street / Herberton Street intersection to demonstrate:
        - that any increase in traffic generation from the proposed redevelopment via Herberton Street will not impact on the Level of Service, safe operation and management of the Byrnes Street / Herberton Street intersection; and
        - that the existing capacity of the Auxiliary left turn (AUL) lane into Herberton Street will not be impacted by increased traffic flows along Byrnes Street into the proposed redevelopment; and
        - that the AUL lane is not required to be extended to improve traffic flows.
    - Mitigation measures to ensure that any traffic impacts resulting from the proposed redevelopment do not compromise the safe and efficient management and operation of the Byrnes Street / Herberton Street intersection and the AUL lane.
16. Note that based on its preliminary desktop assessment and strategic future traffic planning in this area, the Department of Transport and Main Roads is of the opinion that the AUL lane will require extension to improve traffic flows.

Byrnes Street access

17. Byrnes Street (Mareeba-Dimbulah Road) is a State-controlled road within the department's jurisdiction.
18. The Byrnes Street access, as shown on the proposal plans, may require widening to accommodate the number and types of vehicles that will utilise the access.

Herberton Street access

19. The proposed development is seeking an access arrangement via Herberton Street, which is a Council controlled road outside of the department's jurisdiction.
20. The department is aware that the Mareeba CBD Traffic Management Study prepared by AECOM in October 2017 identified the need to signalise the Byrnes Street / Herberton Street intersection in the future.
21. The study acknowledged that any future development of Lot 78 on SP152626, directly across from the proposal site, would accelerate the need for an upgrade of the intersection.
22. A development application has recently been lodged with Mareeba Shire Council for a Shopping Centre on Lot 78.

23. Any future upgrading of the Byrnes Street / Herberton Street intersection is likely to impact on the proposed new access arrangement via Herberton Street, particularly increased right-out traffic movements via Herberton Street.
24. It is strongly advised that the applicant seek further advice from council in relation to the proposed Herberton Street access.
25. It is also recommended that the applicant undertake an access assessment to determine an acceptable and safe access arrangement via Herberton Street, whereby increased right-out traffic movements can safely merge with through traffic at the current intersection or upgraded intersection via Herberton Street.

This pre-lodgement advice does not constitute an approval or an endorsement that the department supports the development proposal. Additional information may be required to allow the department to properly assess the development proposal when a formal application has been lodged.

The department can arrange a pre-lodgement meeting including the Department of Transport and Main Roads if you would like to discuss this advice in more detail.

For further information, including requesting a meeting, please contact Jenny Sapuppo, Senior Planning Officer, on 5644 3212 or via email CairnsSARA@dilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

Brett Nancarrow
Manager (Planning)

CivilWalker
Engineering | Project Management

Appendix C

Mareeba Shire Council
Zoning Map

Mareeba SHIRE COUNCIL

LEGEND

Zones

- Centre
- Community Facilities
- Conservation
- Emerging Community
- Industry
  - A — Trades and Services Precinct
  - B — General Industry Precinct
  - C — Heavy Industry Precinct
- Low Density Residential
- Medium Density Residential
- Recreation and Open Space
- Rural
- Rural Residential
  - A — 4,000 Square Metre Precinct
  - B — 1 Hectare Precinct
  - C — 2 Hectare Precinct

Other Elements

- Cadastre
- Local Plan Boundary
- Mareeba Shire Coucil Boundary
- Watercourse

Information

Whilst every care is taken to ensure the accuracy of this product, neither the Mareeba Shire Council or the State of Queensland make any representations or warranties aboutits accuracy, reliabiltity, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs that may occur as a result of the product being naccurate or incomplete in any way or for any reason.

All data depicted on this map has been sourced from either the Mareeba Shire Council or the State of Queensland from the latest datasets available at the time of map compilation.

Map compilation date: January 2016.

Note

Where information on the map is obscured by text or other map elements contact Council for a determination.

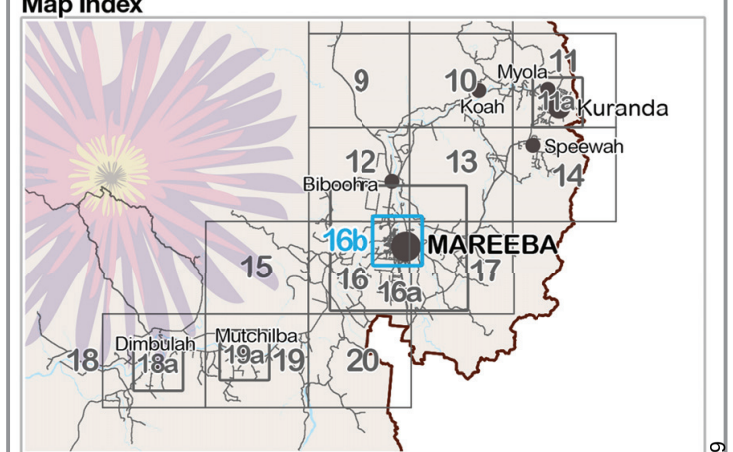
N W E S

0 0.2 0.4 0.6 0.8 1.0

1:20,000 (kilometres)

Geocentric Datum of Australia 1994 (GDA94)

Map Index



Zone Map - Mareeba Centre

ZONE MAP - ZM016b

CivilWalker
Engineering | Project Management

Appendix D

Trans-North Bus and Coach Timetable

Trans North Bus & Coach

CAIRNS TO KURANDA SHUTTLE

Departs From	Shuttle Runs Daily *(Except Christmas Day)*				
CAIRNS Central Rail Station	6.45am	8.45am	11.30am	1.30pm	*3.00pm
CAIRNS 79 Abbott Street	6.50am	8.50am	11.35am	1.35pm	3.05pm
SMITHFIELD Bus Shelter	7.05am	9.05am	11.50am	1.50pm	3.30pm
KURANDA	7.25am	9.25am	12.10pm	2.10pm	3.55pm

KURANDA TO CAIRNS SHUTTLE

Departs From	Shuttle Runs Daily *(Except Christmas Day)*				
KURANDA	*7.30am	9.30am	12.30pm	2.15pm	4.10pm
RAINFORESTATION	7.35am	9.35am	12.35pm	2.20pm	4.15pm
CAIRNS Central Rail Station	8.30am	10.15am	1.15pm	3.00pm	4.55pm

*7.30am Shuttle via Caravonica, Trinity Bay High, TAFE - *Excluding Weekends & Public Holidays*
*3.00pm Shuttle via TAFE, Trinity Bay High, Caravonica - *Excluding Weekends & Public Holidays*

ATHERTON TABLELANDS TO CAIRNS

Departs From	Monday to Friday			Saturday		Sunday	
	1	*2*	*3*	*1*	*2*	*1*	**2**
ATHERTON	6.00am	9.00am	3.30pm	6.00am	9.00am	9.00am	3.30pm
MAREEBA	6.30am	9.30am	4.00pm	6.30am	9.30am	9.30am	4.00pm
SPEEWAH	6.55am	9.55am	4.25pm	6.55am	9.55am	9.55am	4.25am
KURANDA	7.15am	10.05am	4.35pm	7.15am	10.05am	10.05am	4.35pm
CAIRNS Service Terminates	8.30am	11.15am	5.35pm	8.30am	11.15am	11.15am	5.35pm

CAIRNS TO ATHERTON TABLELANDS

Departs From	Monday to Friday			Saturday		Sunday	
	1	*2*	*3*	*1*	*2*	*1*	**2**
CAIRNS Central Rail Station	8.45am	3.30pm	5.45pm	8.45am	3.30pm	3.30pm	5.45pm
SMITHFIELD Bus Shelter	9.00am	3.45pm	6.00pm	9.00am	3.45pm	3.45pm	6.00pm
KURANDA	9.20am	4.15pm	6.25pm	9.20am	4.15pm	4.15pm	6.25pm
SPEEWAH	9.25am	4.20pm	6.30pm	9.25am	4.20pm	4.20pm	6.30pm
MAREEBA	9.55am	4.50pm	6.55pm	9.55am	4.50pm	4.50pm	6.55pm
ATHERTON Service Terminates	10.30am	5.25pm	7.30pm	10.30am	5.25pm	5.25pm	7.30pm

Atherton/Cairns Services - No Services on *CHRISTMAS DAY* or *GOOD FRIDAY*
Sunday Service *1* on *PUBLIC HOLIDAYS* - No Sunday Service **2** on *LONG WEEKENDS*

For further information please see overleaf
or visit *www.transnorthbus.com.au*

09.05.2016

Trans North - Atherton - Ph 4095 8644 during office hours

Trans North services are "Hail & Ride"

Please hail the driver anywhere enroute where it is safe for the bus to pull over.

For a small surcharge passengers travelling to Cairns may also be set down at:

Cairns Airport ($5) **Greyhound Terminal ($3)**
Cairns Hospitals ($3) **Pease Street Eye Surgery ($3)**

*Please advise driver of required destination when boarding the bus and also note that Trans North services **do not pick up** from any of the above.*

Bus stops are located at:

- Cairns - Platform 1 Cairns Central Railway Station Cairns
- Cairns - Orchid Plaza 79 Abbott Street Cairns *(Kuranda Shuttle Only)*
- Cairns T.A.F.E. – Newton Street *(Kuranda Shuttle Only - 7.30am & 3.00pm Services)*
- Smithfield - Bus Shelter near the traffic lights on the Kennedy Highway at the bottom of the Kuranda Range
- Kuranda - 15 Therwine Street – Opposite Information Centre
- Speewah – Speewah Road bus shelter in front of tavern
- Mareeba - Arnold Park, 171-179 Walsh Street (next door to Police Station)
- Atherton - 54 Main Street – Near Just Chillin' Juice Bar

Connections are available to and from:

- *Malanda & Yungaburra* – Monday to Friday (School Days only) with Emerson's Hail & Ride - Ph: 4096 5262
- *Ravenshoe & Herberton* – Monday to Friday with Kerry's Bus Service - Ph: 0427 841 483
- *Chillagoe & Dimbulah* – Monday, Wednesday & Friday with Chillagoe Bus Service - Ph: 4094 7155 Mob: 0414 947 155

Ticket Sales:

Purchase tickets from the driver as you board the bus or from Piagnos News, 142 Byrnes Street Mareeba

Trans North – Atherton **Ph:** *4095 8644 during office hours*
Email: *atherton@transnorthbus.com.au*
Web: *www.transnorthbus.com.au*

09.05.2016

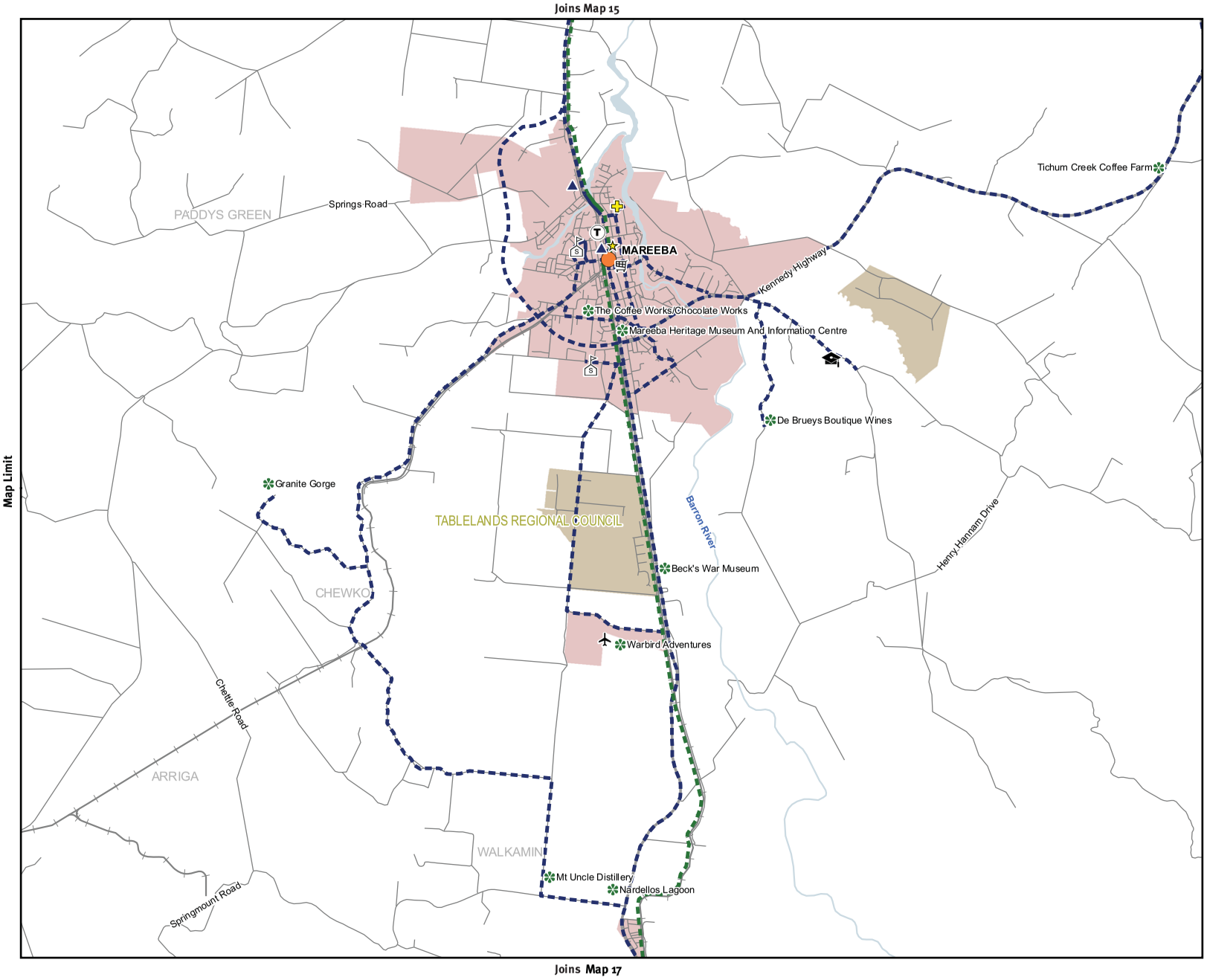
CivilWalker
Engineering | Project Management

Appendix E

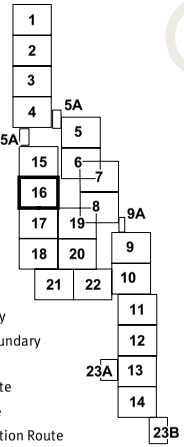
Principal Cycle Network Plan, Far North Queensland
Mareeba Map

Part 2: Network maps

Map 16



Disclaimer: For information only. *All routes subject to feasibility investigations.* The information shown on this map does not represent Australian, state or local government policy. The Department of Transport and Main Roads does not guarantee or make any representations as to its accuracy or completeness, nor will the Department accept any responsibility for any loss or damage arising from its use.



LEGEND

- Railway Line
- Waterway / Waterbody
- Local Government Boundary

Cycle Route Categories

- Existing Principal Route
- Future Principal Route
- Existing Iconic Recreation Route
- Future Iconic Recreation Route

Regional Land Use Categories

- Urban Footprint
- Rural Living Area

Regional Activity Centres

- Principal
- Major
- District
- Village
- Rural

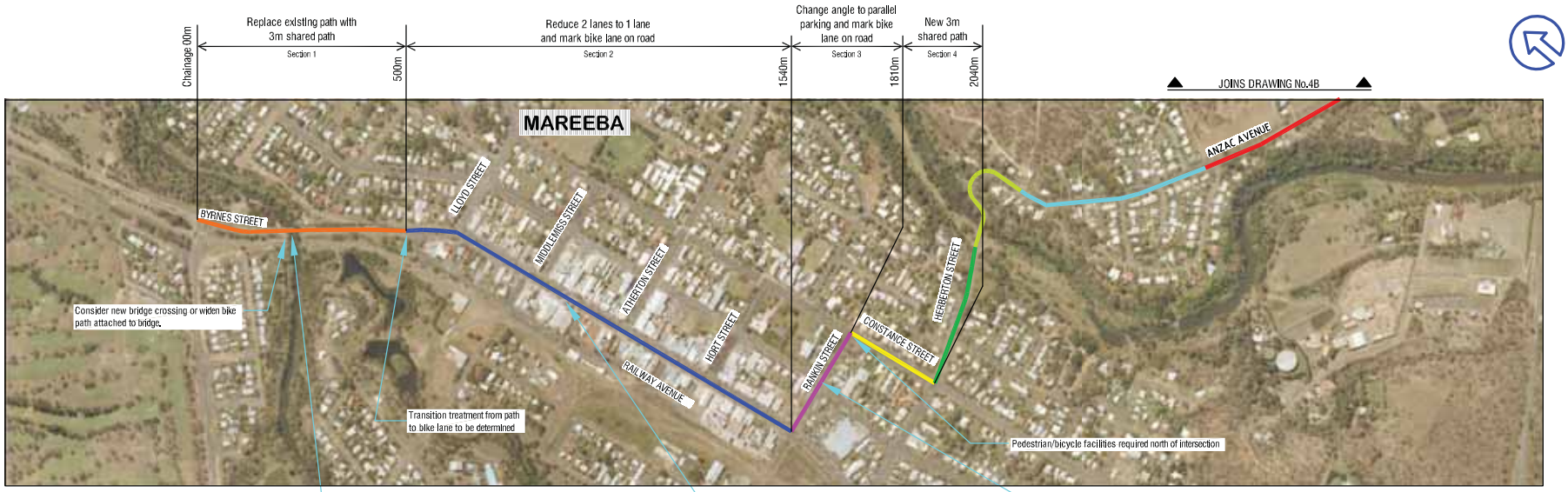
Regional Destinations

- Airport
- Defence/Industrial Facility
- Hospital
- Library
- Major Shopping Centre
- High School
- Tertiary Education
- Railway Station
- Transport Interchange
- Regional Attraction
- Locality

N

SCALE 1:85,000
0 1 2
kilometres

Concept design - Mareeba East to Mareeba central business district



Section 1

Section 2

Section 3

CONCEPT ONLY

Subject to detailed feasibility investigations.

0 100 200 300 400 500 METRES

Principal Cycle Network Plan for Far North Queensland
Mareeba East to Mareeba central business district
Proposed Link Alignment
Drawing No. 4A Date: 29.05.09

Queensland Government

Concept design - Mareeba East to Mareeba central business district

Section 5

Section 7

Section 8

0 100 200 300 400 500 METRES

CONCEPT ONLY

Subject to detailed feasibility investigations.

Principal Cycle Network Plan for Far North Queensland
Mareeba East to Mareeba central business district
Proposed Link Alignment
Drawing No. 4B Date: 29.05.09

CivilWalker
Engineering | Project Management

Appendix F

Mareeba CBD Traffic Management Study
Road Network Preferred Upgrade

MAREEBA CBD TRAFFIC STUDY
BYRNES AND BASALT STREETS
OPTION 3
SKETCH-C3

NOT TO BE USED FOR CONSTRUCTION
DRAWING IN PROGRESS DATE: 14/06/2017

60535485
ISSUE-3
18/04/17

CONCEPT

AECOM

60535485
ISSUE-1
12/06/17

NOT TO BE USED FOR CONSTRUCTION

DRAWING IN PROGRESS	DATE: 14/06/2017

0 5 10 15 20m

MAREEBA CBD TRAFFIC STUDY
BYRNES AND RANKIN STREETS
OPTION 3

SKETCH-F3

Last modified: 14 Jun 17 - 13:48
CAD Ref: P:\605x\60535485\5. CAD\25-Sketches\60535485-SKETCH-J3.dwg

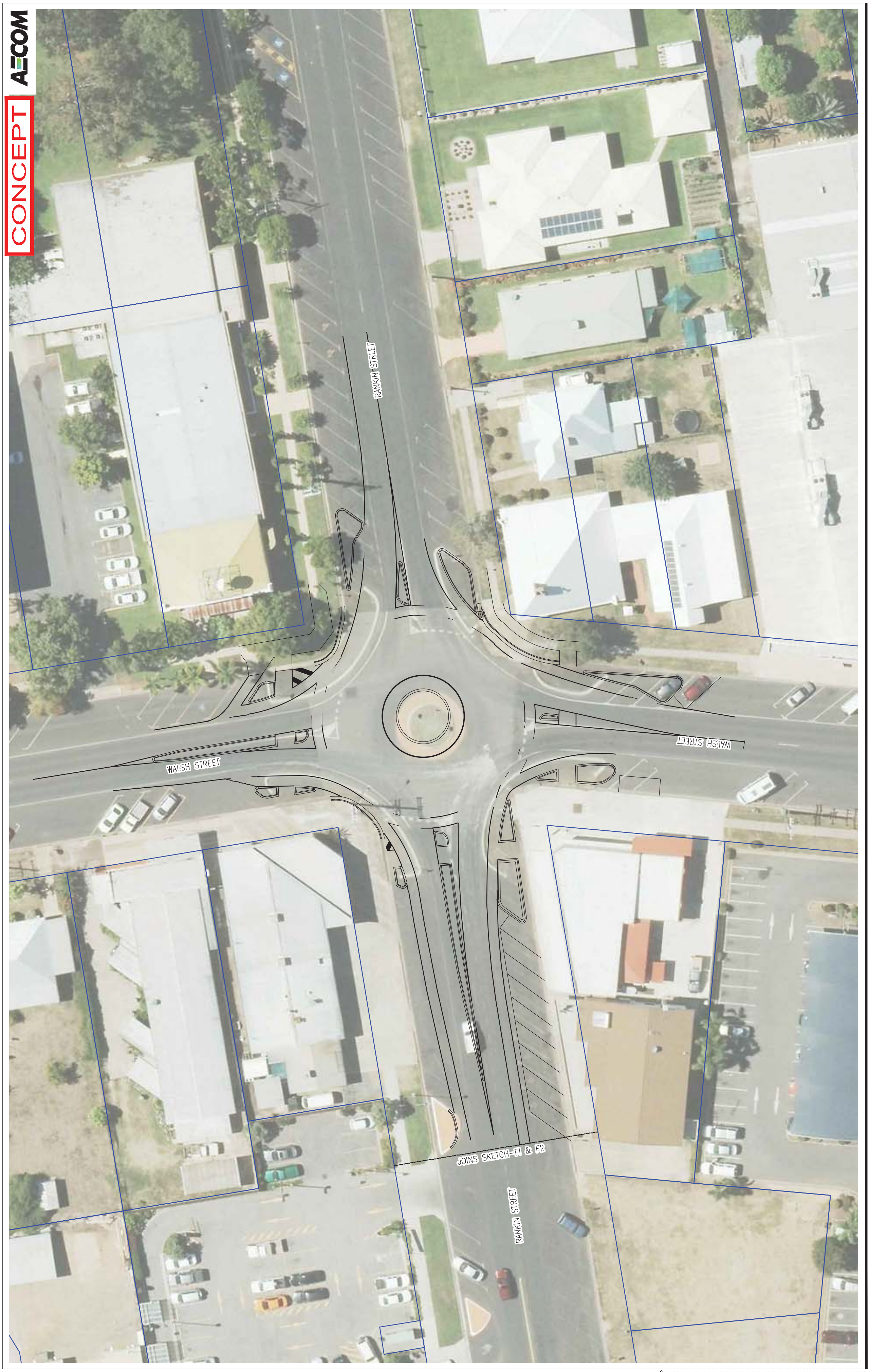
60535485
ISSUE-1
12/06/17

NOT TO BE USED FOR CONSTRUCTION

DRAWING IN PROGRESS | DATE: 14/06/2017

0 2 4 6 8 10m

MAREEBA CBD TRAFFIC STUDY
□ ALSH STREET COLES ACCESS
OPTION 3
SKETCH-J3



MAREEBA CBD TRAFFIC STUDY
□ALSH AND RANKIN STREETS
OPTION 2
SKETCH-□2

0 2 4 6 8 10m

NOT TO BE USED FOR CONSTRUCTION

DRAWING IN PROGRESS | DATE: 14/06/2017

60535485
ISSUE-3
18/04/17

CONCEPT

AECOM

60535485
ISSUE-3
18/04/17

NOT TO BE USED FOR CONSTRUCTION

DRAWING IN PROGRESS	DATE: 14/06/2017

0 2 4 6 8 10m

MAREEBA CBD TRAFFIC STUDY
HERBERTON AND CONSTANCE STREETS
OPTION 2

SKETCH-E2

CONCEPT

AECOM

60535485
ISSUE-3
18/04/17

NOT TO BE USED FOR CONSTRUCTION

DRAWING IN PROGRESS	DATE: 14/06/2017

0 5 10 15 20m

MAREEBA CBD TRAFFIC STUDY
BYRNES AND HERBERTON STREETS
OPTION 3

SKETCH-D3

CivilWalker
Engineering | Project Management

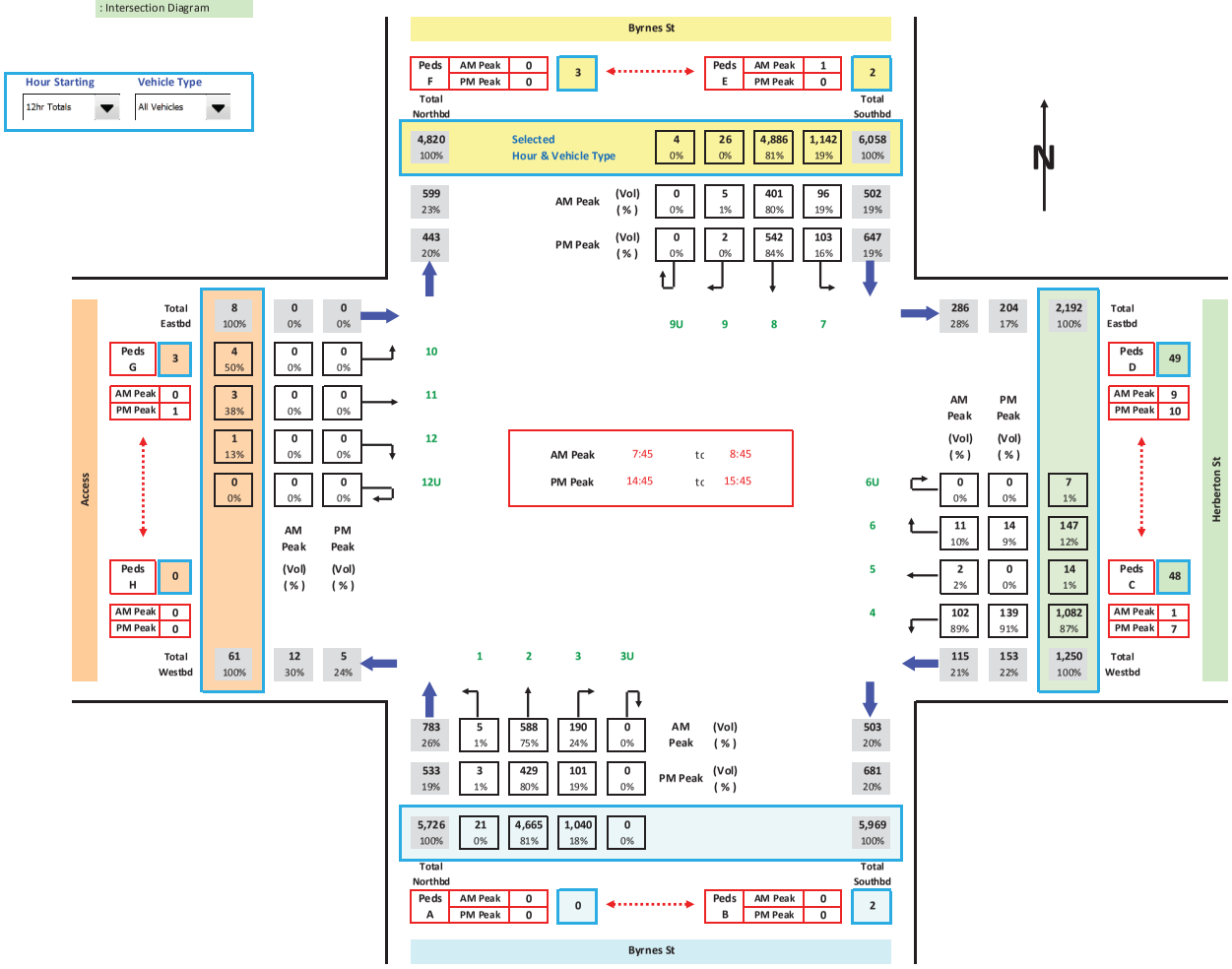
Appendix G

Traffic Counts
(Extract from Mareeba CBD Traffic Management Study)

Job No. : Q1854
Client : AECOM
Suburb : Mareeba
Location : 5. Byrnes St / Herberton St

Day/Date : Tue, 21st Feb 2017
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

MATRIX Traffic and Transport Data

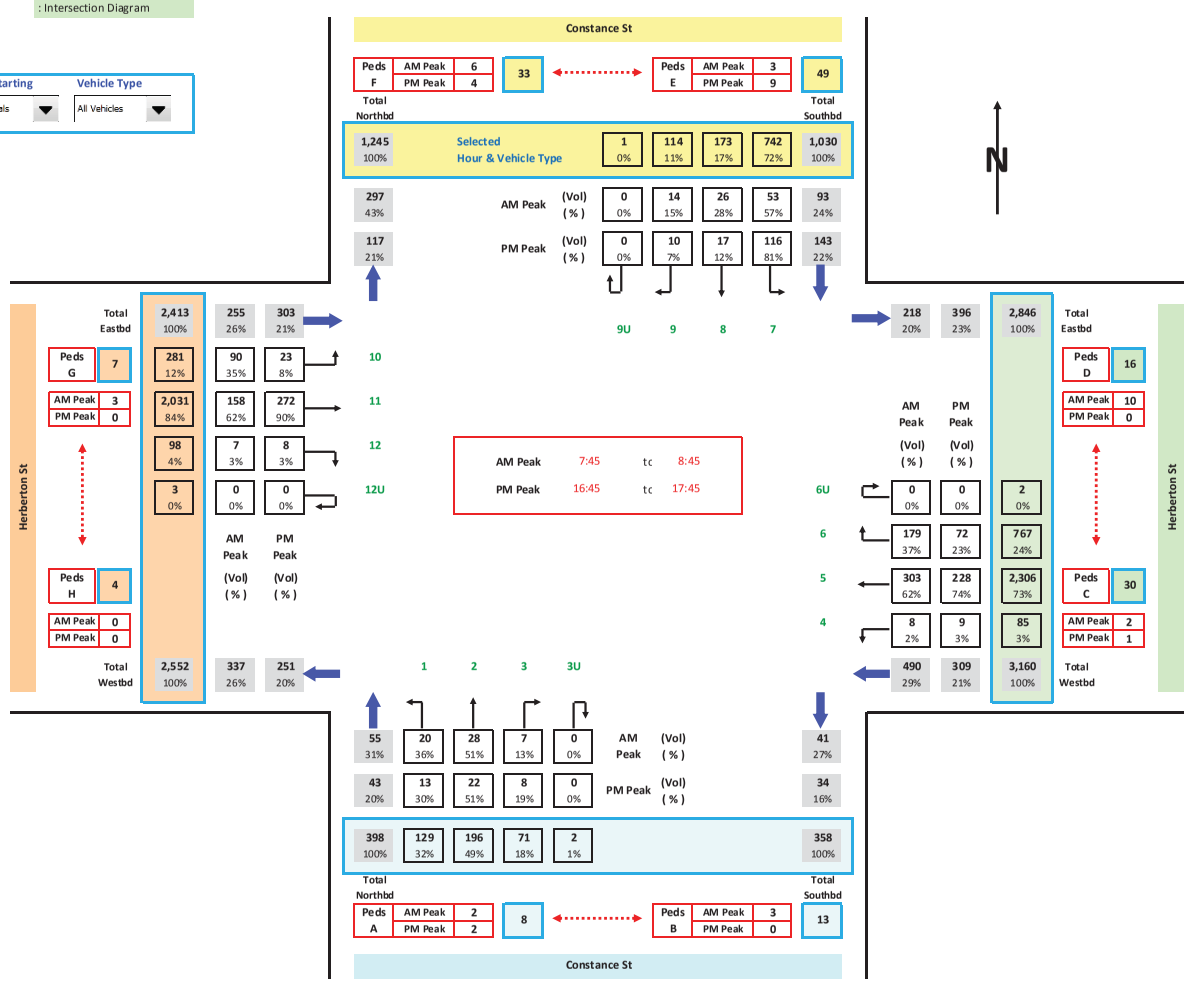


Job No. : Q1854
Client : AECOM
Suburb : Mareeba
Location : 6. Herberton St / Constance St

Day/Date : Tue, 21st Feb 2017
Weather : Fine
Description : Classified Intersection Count
: Intersection Diagram

MATRIX Traffic and Transport Data

Hour Starting: 12hr Totals
Vehicle Type: All Vehicles



CivilWalker
Engineering | Project Management

Appendix H

Existing Intersection SIDRA Output

MOVEMENT SUMMARY

Site: 1 [2018 Existing AM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	5	5.0	0.317	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	600	5.0	0.317	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	194	5.0	0.245	8.8	LOS A	1.0	7.4	0.56	0.79	38.5
Approach		799	5.0	0.317	2.2	NA	1.0	7.4	0.14	0.20	53.2
East: Herberton Street											
4	L2	104	5.0	0.126	7.0	LOS A	0.5	3.3	0.46	0.70	41.2
5	T1	2	5.0	0.141	34.4	LOS C	0.4	3.1	0.92	0.96	11.9
6	R2	11	5.0	0.141	44.8	LOS D	0.4	3.1	0.92	0.96	12.7
Approach		117	5.0	0.141	11.0	LOS A	0.5	3.3	0.51	0.73	35.7
North: Byrnes Street (North Leg)											
7	L2	98	5.0	0.053	5.6	LOS A	0.0	0.0	0.00	0.58	36.0
8	T1	409	5.0	0.220	0.1	LOS A	0.1	0.6	0.02	0.01	59.5
9	R2	5	5.0	0.220	9.3	LOS A	0.1	0.6	0.02	0.01	25.4
Approach		512	5.0	0.220	1.2	NA	0.1	0.6	0.02	0.12	55.0
All Vehicles		1428	5.0	0.317	2.6	NA	1.0	7.4	0.12	0.21	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2018 Existing PM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	3	5.0	0.231	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	438	5.0	0.231	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
3	R2	103	5.0	0.162	10.0	LOS A	0.6	4.5	0.60	0.83	37.0
Approach		544	5.0	0.231	1.9	NA	0.6	4.5	0.11	0.16	54.1
East: Herberton Street											
4	L2	142	5.0	0.211	8.5	LOS A	0.8	5.6	0.56	0.81	39.3
6	R2	14	5.0	0.123	36.0	LOS C	0.4	2.7	0.89	0.95	14.6
Approach		156	5.0	0.211	10.9	LOS A	0.8	5.6	0.59	0.82	35.9
North: Byrnes Street (North Leg)											
7	L2	105	5.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	553	5.0	0.292	0.0	LOS A	0.0	0.2	0.01	0.00	59.9
9	R2	2	5.0	0.292	8.1	LOS A	0.0	0.2	0.01	0.00	25.6
Approach		660	5.0	0.292	0.9	NA	0.0	0.2	0.00	0.09	56.4
All Vehicles		1360	5.0	0.292	2.5	NA	0.8	5.6	0.11	0.20	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

CivilWalker
Engineering | Project Management

Appendix I

Swept Path Analysis

REVISIONS

NO.	DATE	DESCRIPTION	DESIGN	APPROVED
3	15/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
2	14/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
1	26/02/18	INITIAL ISSUE		

CLIENT
MICHAEL FERRIS
AND PARTNERS

SCALE
1:250 1:500 0 5 10 15 A1 A3
ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

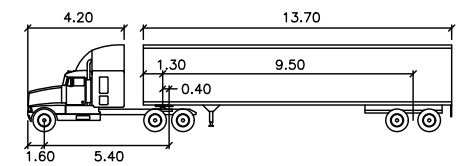
CivilWalker
Engineering and Project Management

DRAWN KCDD CHECKED DJW
DESIGNED KCDD CHECKED DJW
APPROVED D.J. Walker
DATE: 26/02/18 RPEQ: 19806

HERBERTON STREET FUEL STATION, MAREEBA

19m SEMI FUEL TANKER ACCESS

DRAWING NO. 155-001-SK1
REVISION 3



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		

REVISIONS				
NO.	DATE	DESCRIPTION	DESIGN	APPROVED
3	15/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
2	14/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
1	26/02/18	INITIAL ISSUE		

CLIENT

MICHAEL FERRIS AND PARTNERS

SCALE

1:250 0 5 10 15 A1
1:500 A3

ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

CivilWalker
Engineering and Project Management

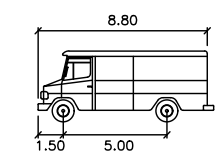
DRAWN KCDD CHECKED DJW
DESIGNED KCDD CHECKED DJW
APPROVED D.J. Walker
DATE: 26/02/18 RPEQ: 19806

HERBERTON STREET FUEL STATION, MAREEBA

19m SEMI FUEL TANKER ACCESS

DRAWING NO. 155-001-SK3

REVISION 3



SVEH

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 26.2

REVISIONS				
3	15/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
2	14/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
1	26/02/18	INITIAL ISSUE		
NO.	DATE	DESCRIPTION	DESIGN	APPROVED

CLIENT

MICHAEL FERRIS AND PARTNERS

SCALE

1:250 0 5 10 15 A1
1:500 A3

ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

CivilWalker
Engineering and Project Management

DRAWN	KCDD	CHECKED	DJW
DESIGNED	KCDD	CHECKED	DJW
APPROVED	D.J. Walker		

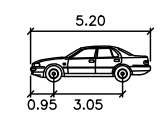
DATE: 26/02/18 RPEQ: 19806

HERBERTON STREET FUEL STATION, MAREEBA

SERVICE VEHICLE (MRV) ACCESS

DRAWING NO. 155-001-SK4

REVISION 3



B99

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

REVISIONS				
NO.	DATE	DESCRIPTION	DESIGN	APPROVED
3	15/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
2	14/03/18	SITE LAYOUT REVISED	KCDD	D.J.W.
1	26/02/18	INITIAL ISSUE		

CLIENT

MICHAEL FERRIS AND PARTNERS

SCALE

1:250 0 5 10 15 A1
1:500 A3

ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

CivilWalker
Engineering and Project Management

DRAWN	KCDD	CHECKED	DJW
DESIGNED	KCDD	CHECKED	DJW
APPROVED	D.J. Walker		

DATE: 26/02/18 RPEQ: 19806

HERBERTON STREET FUEL STATION, MAREEBA

AS2890.1 99 PERCENTILE VEHICLE (B99) ACCESS

DRAWING NO. 155-001-SK5

REVISION 3

CivilWalker
Engineering | Project Management

Appendix J

Development Scenarios SIDRA Output

MOVEMENT SUMMARY

Site: 1 [2019 Base Case AM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	5	5.0	0.323	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	612	5.0	0.323	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	198	5.0	0.253	8.9	LOS A	1.1	7.8	0.57	0.80	38.3
Approach		815	5.0	0.323	2.2	NA	1.1	7.8	0.14	0.20	53.1
East: Herberton Street											
4	L2	106	5.0	0.129	7.1	LOS A	0.5	3.4	0.47	0.70	41.1
5	T1	2	5.0	0.150	36.5	LOS C	0.4	3.3	0.92	0.97	11.3
6	R2	11	5.0	0.150	47.6	LOS D	0.4	3.3	0.92	0.97	12.2
Approach		119	5.0	0.150	11.3	LOS A	0.5	3.4	0.52	0.73	35.4
North: Byrnes Street (North Leg)											
7	L2	100	5.0	0.054	5.6	LOS A	0.0	0.0	0.00	0.58	36.0
8	T1	417	5.0	0.224	0.1	LOS A	0.1	0.6	0.02	0.01	59.5
9	R2	5	5.0	0.224	9.4	LOS A	0.1	0.6	0.02	0.01	25.4
Approach		522	5.0	0.224	1.2	NA	0.1	0.6	0.02	0.12	55.0
All Vehicles		1456	5.0	0.323	2.6	NA	1.1	7.8	0.13	0.21	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2019 Base Case PM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	3	5.0	0.235	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	446	5.0	0.235	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
3	R2	105	5.0	0.169	10.2	LOS A	0.6	4.7	0.60	0.84	36.9
Approach		554	5.0	0.235	2.0	NA	0.6	4.7	0.11	0.16	54.0
East: Herberton Street											
4	L2	145	5.0	0.219	8.6	LOS A	0.8	5.8	0.56	0.81	39.1
6	R2	14	5.0	0.130	37.8	LOS C	0.4	2.9	0.90	0.96	14.1
Approach		159	5.0	0.219	11.2	LOS A	0.8	5.8	0.59	0.82	35.7
North: Byrnes Street (North Leg)											
7	L2	107	5.0	0.058	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	564	5.0	0.297	0.0	LOS A	0.0	0.2	0.01	0.00	59.9
9	R2	2	5.0	0.297	8.2	LOS A	0.0	0.2	0.01	0.00	25.6
Approach		673	5.0	0.297	0.9	NA	0.0	0.2	0.00	0.09	56.4
All Vehicles		1386	5.0	0.297	2.5	NA	0.8	5.8	0.12	0.20	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2019 Base Case AM + Dev]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	5	5.0	0.323	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	612	5.0	0.323	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	200	5.0	0.258	9.0	LOS A	1.1	8.1	0.57	0.81	38.2
Approach		817	5.0	0.323	2.3	NA	1.1	8.1	0.14	0.20	53.0
East: Herberton Street											
4	L2	118	5.0	0.145	7.1	LOS A	0.5	3.8	0.47	0.71	41.0
5	T1	2	5.0	0.165	37.8	LOS C	0.5	3.6	0.93	0.97	11.0
6	R2	12	5.0	0.165	49.2	LOS D	0.5	3.6	0.93	0.97	11.9
Approach		132	5.0	0.165	11.4	LOS A	0.5	3.8	0.52	0.74	35.3
North: Byrnes Street (North Leg)											
7	L2	100	5.0	0.054	5.6	LOS A	0.0	0.0	0.00	0.58	36.0
8	T1	423	5.0	0.228	0.1	LOS A	0.1	0.6	0.02	0.01	59.5
9	R2	5	5.0	0.228	9.5	LOS A	0.1	0.6	0.02	0.01	25.4
Approach		528	5.0	0.228	1.2	NA	0.1	0.6	0.02	0.11	55.1
All Vehicles		1477	5.0	0.323	2.7	NA	1.1	8.1	0.13	0.22	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2019 Base Case PM + Dev]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	3	5.0	0.235	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	446	5.0	0.235	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
3	R2	107	5.0	0.173	10.2	LOS A	0.7	4.8	0.61	0.84	36.8
Approach		556	5.0	0.235	2.0	NA	0.7	4.8	0.12	0.16	53.9
East: Herberton Street											
4	L2	157	5.0	0.239	8.8	LOS A	0.9	6.6	0.57	0.82	38.8
6	R2	15	5.0	0.142	38.6	LOS C	0.4	3.1	0.90	0.96	13.9
Approach		172	5.0	0.239	11.4	LOS A	0.9	6.6	0.60	0.83	35.4
North: Byrnes Street (North Leg)											
7	L2	107	5.0	0.058	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	570	5.0	0.301	0.0	LOS A	0.0	0.2	0.01	0.00	59.9
9	R2	2	5.0	0.301	8.2	LOS A	0.0	0.2	0.01	0.00	25.6
Approach		679	5.0	0.301	0.9	NA	0.0	0.2	0.00	0.09	56.4
All Vehicles		1407	5.0	0.301	2.6	NA	0.9	6.6	0.12	0.21	52.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2029 Pre Dev AM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	6	5.0	0.394	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	746	5.0	0.394	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	241	5.0	0.362	11.0	LOS A	1.8	13.2	0.64	0.91	35.9
Approach		993	5.0	0.394	2.7	NA	1.8	13.2	0.16	0.22	52.1
East: Herberton Street											
4	L2	129	5.0	0.179	7.9	LOS A	0.6	4.7	0.53	0.78	39.9
5	T1	2	5.0	0.373	93.4	LOS F	1.1	7.9	0.97	1.01	5.2
6	R2	13	5.0	0.373	119.3	LOS F	1.1	7.9	0.97	1.01	5.6
Approach		144	5.0	0.373	19.2	LOS B	1.1	7.9	0.57	0.80	28.7
North: Byrnes Street (North Leg)											
7	L2	122	5.0	0.066	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	508	5.0	0.275	0.2	LOS A	0.1	1.1	0.03	0.01	59.3
9	R2	6	5.0	0.275	11.6	LOS A	0.1	1.1	0.03	0.01	25.4
Approach		636	5.0	0.275	1.3	NA	0.1	1.1	0.02	0.12	54.9
All Vehicles		1773	5.0	0.394	3.6	NA	1.8	13.2	0.14	0.23	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2029 Pre Dev PM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	4	5.0	0.287	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	544	5.0	0.287	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	128	5.0	0.262	12.9	LOS A	1.0	7.6	0.72	0.91	34.1
Approach		676	5.0	0.287	2.5	NA	1.0	7.6	0.14	0.18	52.9
East: Herberton Street											
4	L2	177	5.0	0.329	11.1	LOS A	1.4	9.9	0.68	0.91	36.2
6	R2	17	5.0	0.310	81.7	LOS F	0.9	6.7	0.96	1.01	7.6
Approach		194	5.0	0.329	17.3	LOS B	1.4	9.9	0.70	0.92	30.1
North: Byrnes Street (North Leg)											
7	L2	130	5.0	0.070	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	688	5.0	0.363	0.0	LOS A	0.0	0.3	0.01	0.00	59.9
9	R2	2	5.0	0.363	9.5	LOS A	0.0	0.3	0.01	0.00	25.5
Approach		820	5.0	0.363	0.9	NA	0.0	0.3	0.01	0.09	56.4
All Vehicles		1690	5.0	0.363	3.4	NA	1.4	9.9	0.14	0.22	50.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2029 Post Dev AM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	6	5.0	0.394	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	746	5.0	0.394	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	243	5.0	0.368	11.2	LOS A	1.9	13.5	0.65	0.91	35.8
Approach		995	5.0	0.394	2.8	NA	1.9	13.5	0.16	0.23	52.0
East: Herberton Street											
4	L2	141	5.0	0.197	8.0	LOS A	0.7	5.3	0.53	0.79	39.8
5	T1	2	5.0	0.406	99.2	LOS F	1.2	8.7	0.98	1.02	4.9
6	R2	14	5.0	0.406	125.7	LOS F	1.2	8.7	0.98	1.02	5.4
Approach		157	5.0	0.406	19.7	LOS B	1.2	8.7	0.58	0.81	28.4
North: Byrnes Street (North Leg)											
7	L2	122	5.0	0.066	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	514	5.0	0.278	0.2	LOS A	0.1	1.1	0.03	0.01	59.3
9	R2	6	5.0	0.278	11.6	LOS A	0.1	1.1	0.03	0.01	25.4
Approach		642	5.0	0.278	1.3	NA	0.1	1.1	0.02	0.12	54.9
All Vehicles		1794	5.0	0.406	3.7	NA	1.9	13.5	0.15	0.24	49.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1 [2029 Post Dev PM]

Byrnes Street / Herberton Street Intersection
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Byrnes Street (South Leg)											
1	L2	4	5.0	0.287	5.6	LOS A	0.0	0.0	0.00	0.00	41.4
2	T1	544	5.0	0.287	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
3	R2	130	5.0	0.269	13.0	LOS A	1.1	7.9	0.72	0.91	34.0
Approach		678	5.0	0.287	2.5	NA	1.1	7.9	0.14	0.18	52.8
East: Herberton Street											
4	L2	189	5.0	0.355	11.5	LOS A	1.5	11.0	0.69	0.92	35.8
6	R2	18	5.0	0.337	85.6	LOS F	1.0	7.4	0.96	1.01	7.3
Approach		207	5.0	0.355	17.9	LOS B	1.5	11.0	0.71	0.93	29.7
North: Byrnes Street (North Leg)											
7	L2	130	5.0	0.070	5.6	LOS A	0.0	0.0	0.00	0.57	36.0
8	T1	694	5.0	0.366	0.0	LOS A	0.0	0.3	0.01	0.00	59.9
9	R2	2	5.0	0.366	9.6	LOS A	0.0	0.3	0.01	0.00	25.5
Approach		826	5.0	0.366	0.9	NA	0.0	0.3	0.01	0.09	56.4
All Vehicles		1711	5.0	0.366	3.6	NA	1.5	11.0	0.14	0.23	50.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

PLANZ Town Planning

PO Box 181 Edge Hill QLD 4870
07 4041 0445
plan@planztp.com
97 Anderson Street Manunda QLD 4870
planztp.com
ABN 83 128 085 870

Our Ref: P81735

19 March 2018

Chief Executive Officer
Mareeba Regional Council
PO Box 154
Mareeba QLD 4880

Attention: Brian Millard

Dear Brian,

Material Change of Use (Service Station, Food and Drink Outlet and Advertising Devices)
1 Herberton St & 255 Byrnes St, Mareeba, described as Lot 701 M3565 and Lot 702 M3565

I am pleased to lodge this application for Material Change of Use (Service Station, Food and Drink Outlet and Advertising Devices) 1 Herberton St & 255 Byrnes St, Mareeba over Lot 701 M3565 and Lot 702 M3565.

The site is within 25m of a State transport corridor (Schedule 10, Part 9, Div 4, Sub-div 2, Table 4 1(a)) and referral to SARA is triggered for this application.

On the application form I have agreed to accept an information request if there is more information required.

The relevant information for the application is:

Applicant:	Porkdig Pty Ltd.
	c/- Planz Town Planning
Mailing address:	PO Box 181
	Edge Hill, Cairns QLD 4870
Landowner:	Porkdig Pty Ltd.
Application Fee:	**7,530.00**

If you require any further information please do call me.

Yours faithfully,

Nikki Huddy
Registered Planner (RPIA)

Att. DA form 1
Planning Report (including SDAP codes)
Proposal Plans, Elevations and Perspectives – by Michael Ferris and Partners Pty Ltd.
Traffic Impact Assessment – by CivilWalker