

LEGEND

Cadastral

- Lot
- Site

Post_02.0p_Velocity

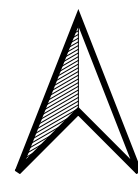
Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s

Post_02.0p_vvec



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

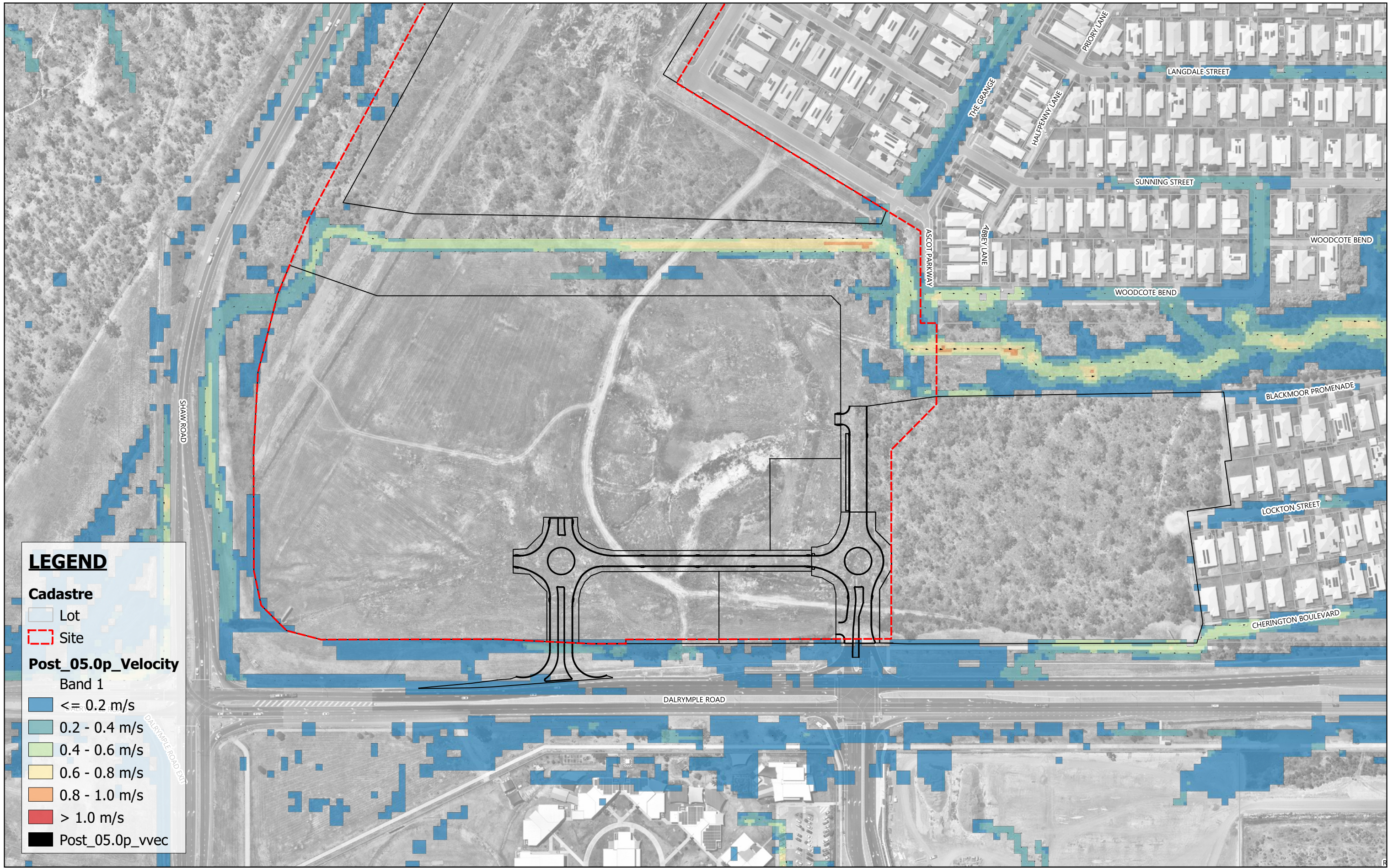
182 SHAW ROAD, SHAW

Flood Velocity - Post Development - 2% AEP

Mar 2025

P001406

F14



LEGEND

Cadastre

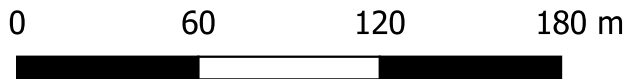
- Lot
- Site

Post_05.0p_Velocity

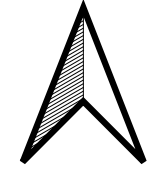
Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s

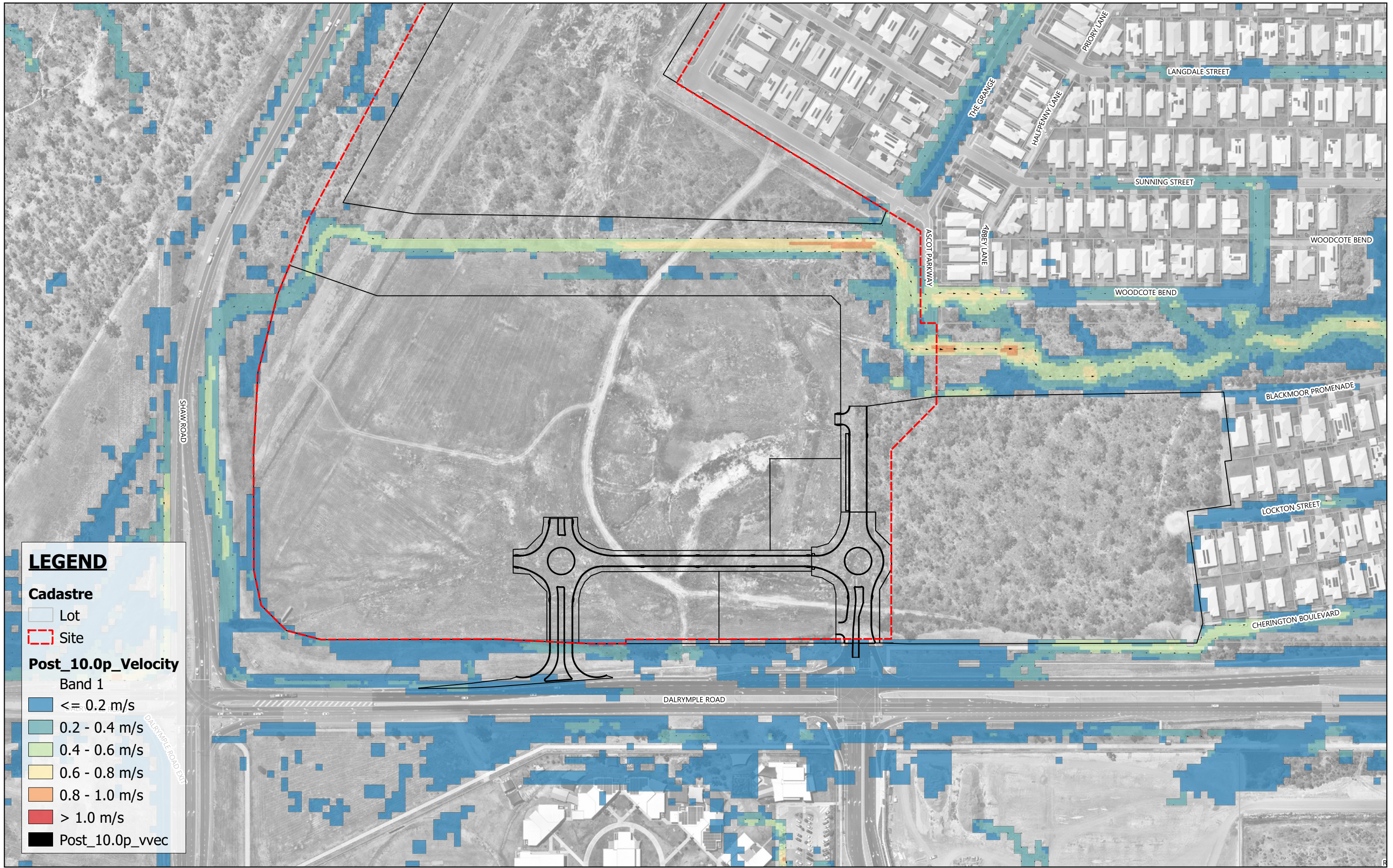
Post_05.0p_vvec



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD	Mar 2025
182 SHAW ROAD, SHAW	P001406
Flood Velocity - Post Development - 5% AEP	F15



LEGEND

Cadastral

- Lot
- Site

Post_10.0p_Velocity

Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s
- Post_10.0p_vvec



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

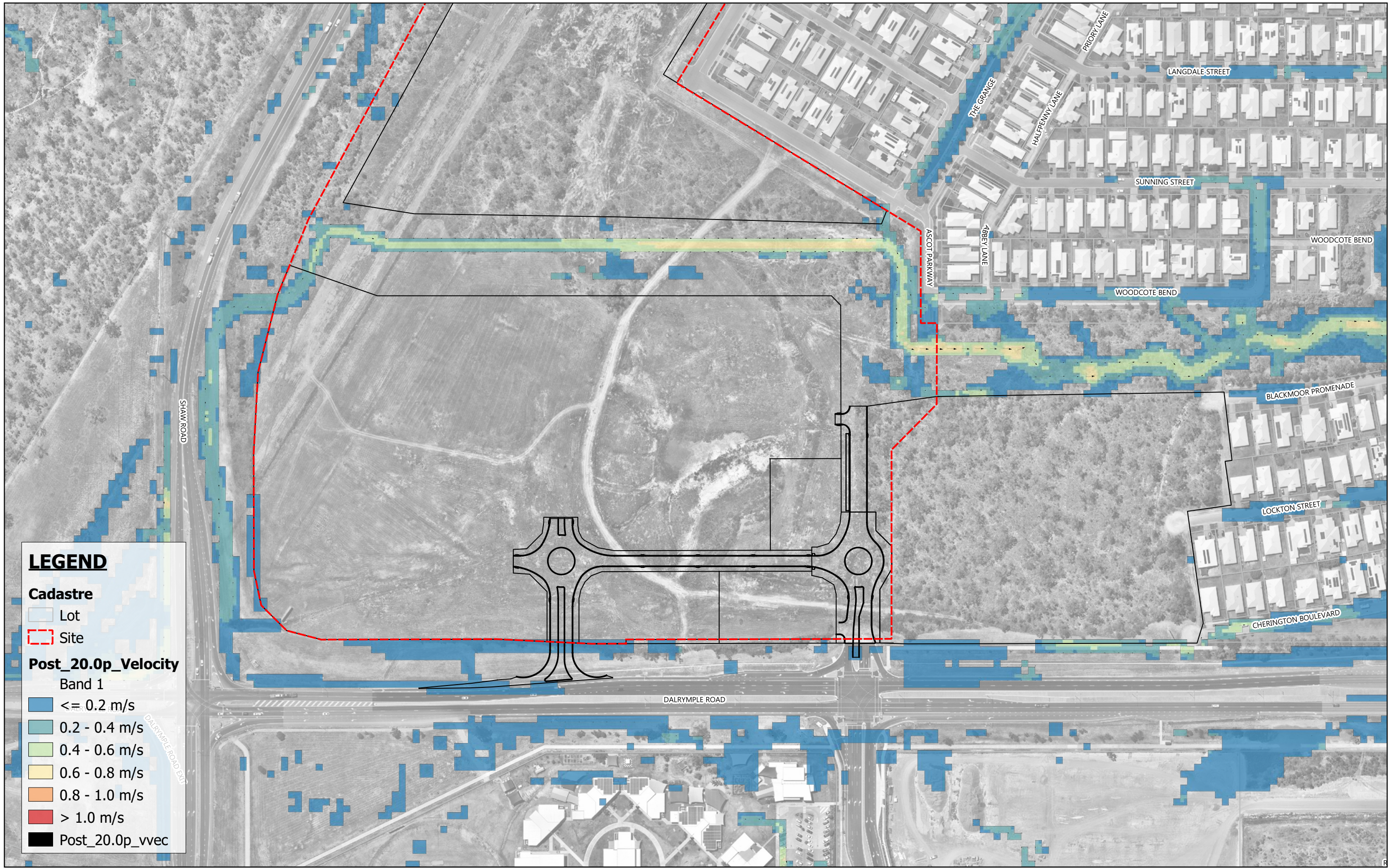
182 SHAW ROAD, SHAW

Flood Velocity - Post Development - 10% AEP

Mar 2025

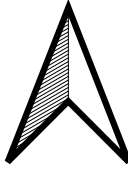
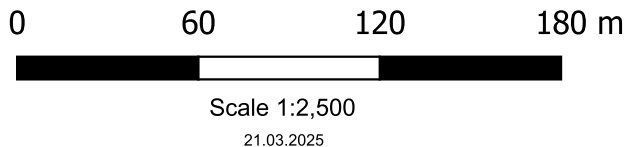
P001406

F16

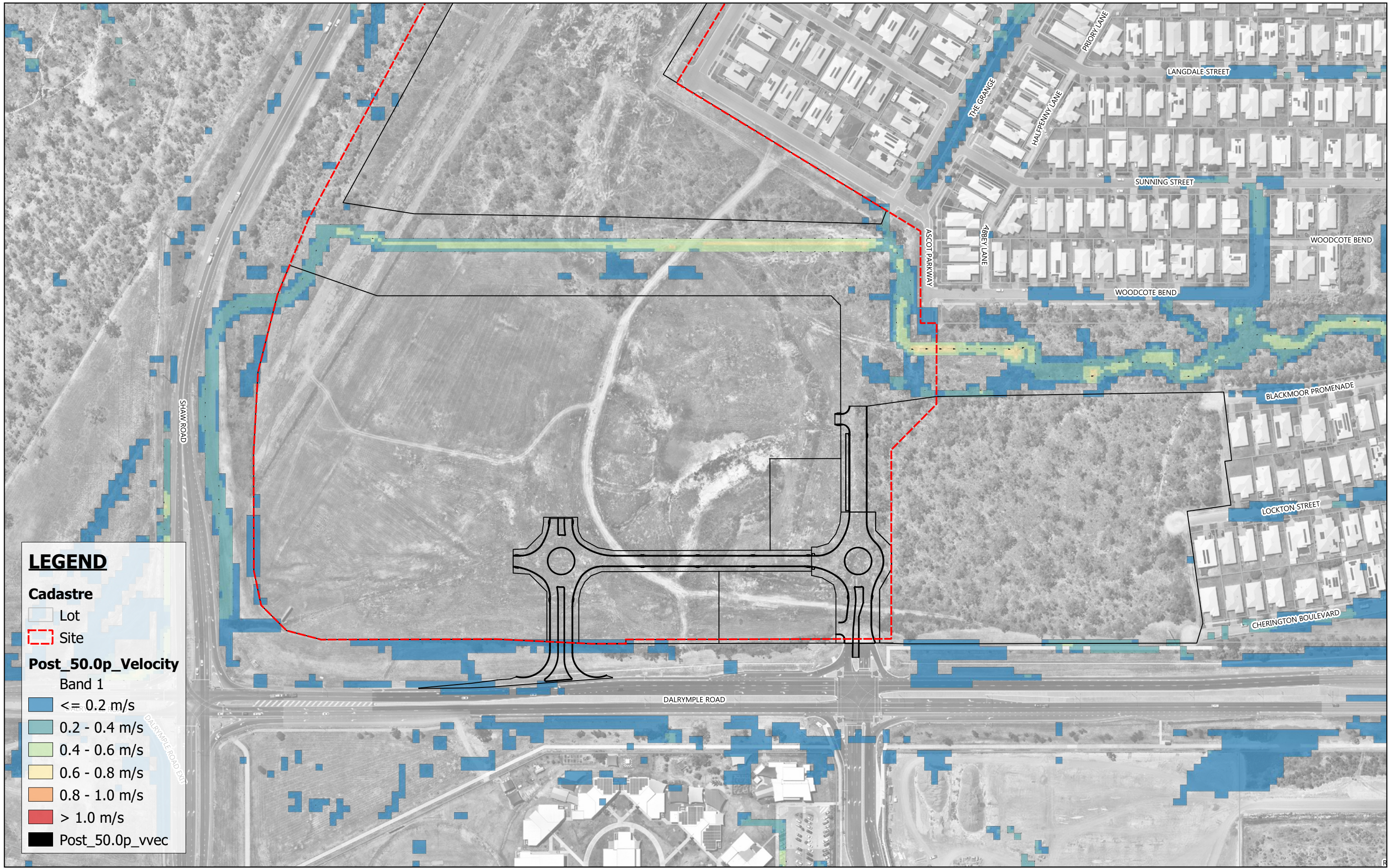


LEGEND

- Cadastral**
- Lot
 - Site
- Post_20.0p_Velocity**
- Band 1
- <= 0.2 m/s
 - 0.2 - 0.4 m/s
 - 0.4 - 0.6 m/s
 - 0.6 - 0.8 m/s
 - > 1.0 m/s
 - Post_20.0p_vvec



PARKSIDE DEVELOPMENT PTY LTD	Mar 2025
182 SHAW ROAD, SHAW	P001406
Flood Velocity - Post Development - 20% AEP	F17



LEGEND

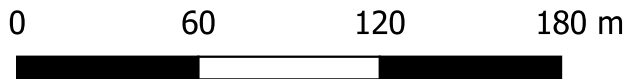
Cadastral

- Lot
- Site

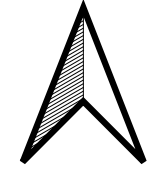
Post_50.0p_Velocity

Band 1

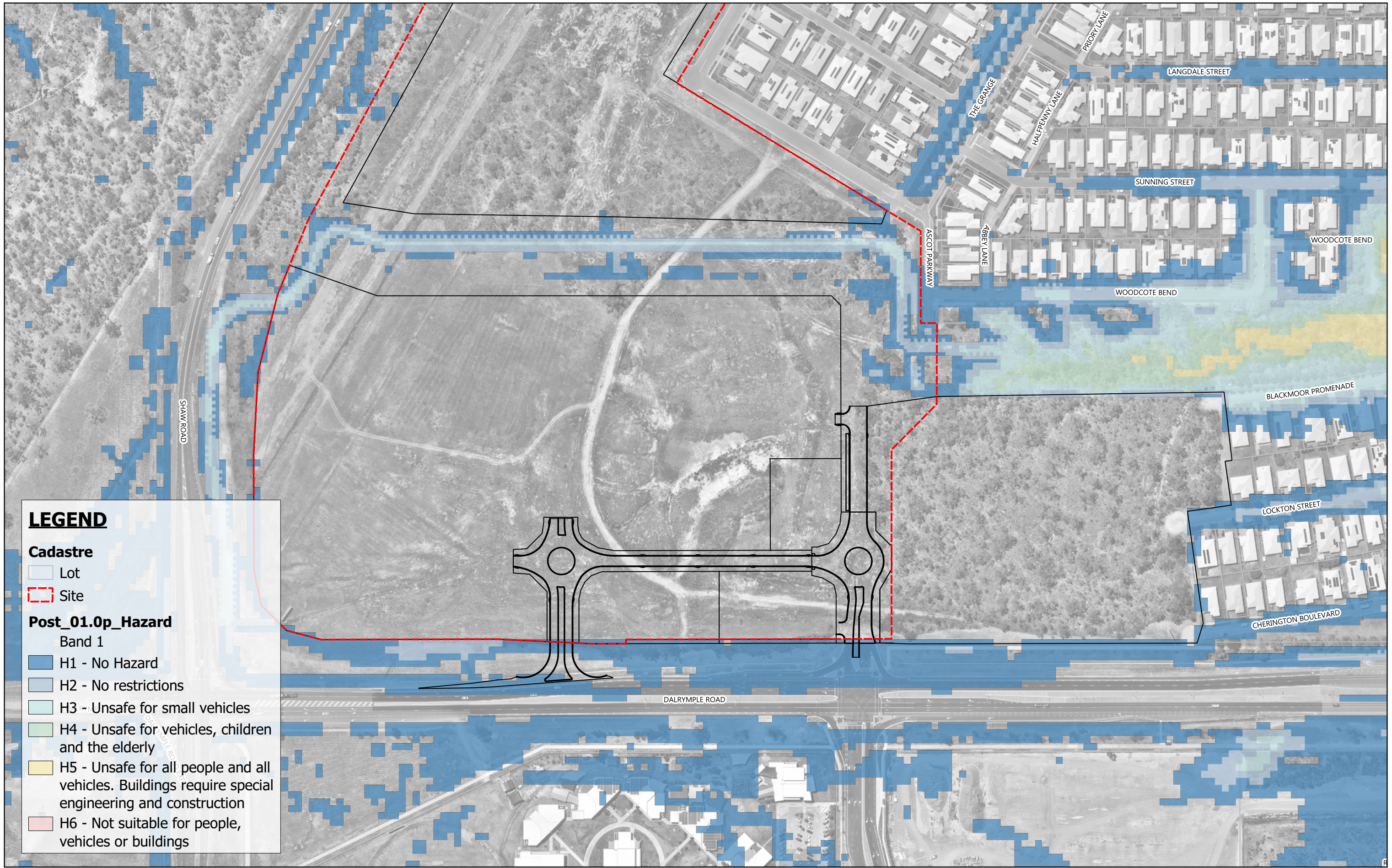
- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s
- Post_50.0p_vvec



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD	Mar 2025
182 SHAW ROAD, SHAW	P001406
Flood Velocity - Post Development - 50% AEP	F18



LEGEND

Cadastral

- Lot
- Site

Post_01.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

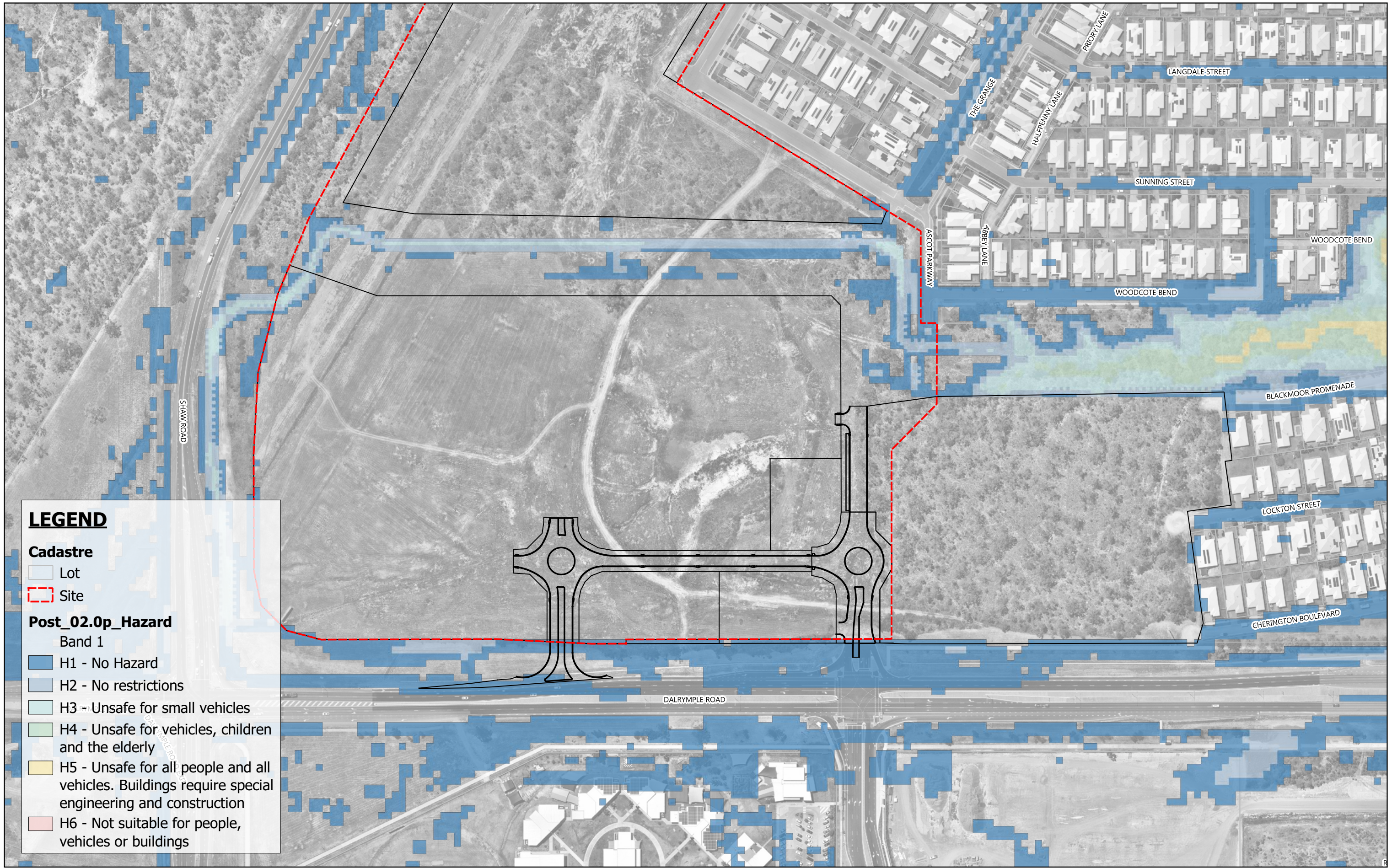
182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 1% AEP

Mar 2025

P001406

F19



LEGEND

Cadastre

- Lot
- Site

Post_02.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

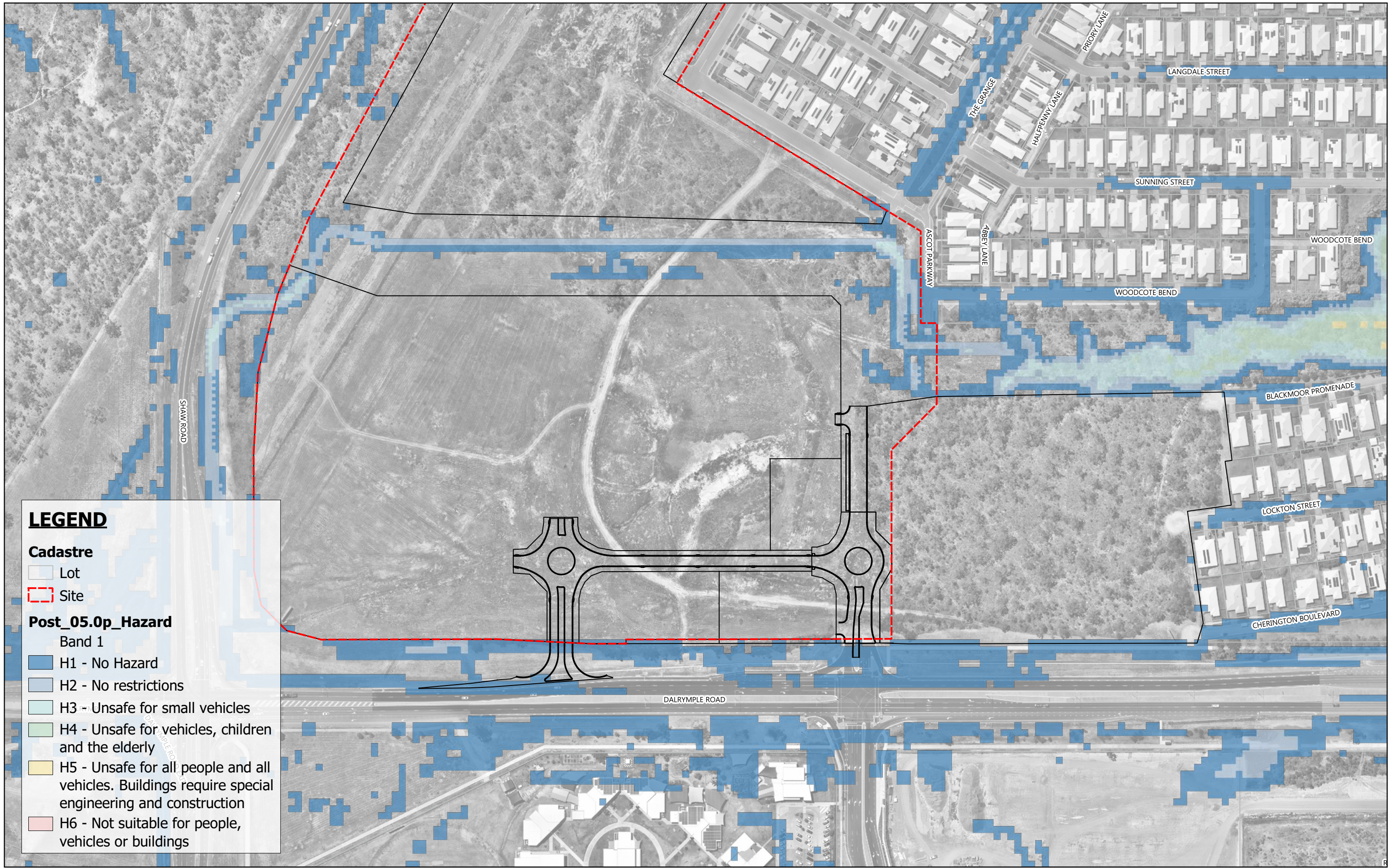
182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 2% AEP

Mar 2025

P001406

F20



LEGEND

Cadastral

- Lot
- Site

Post_05.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

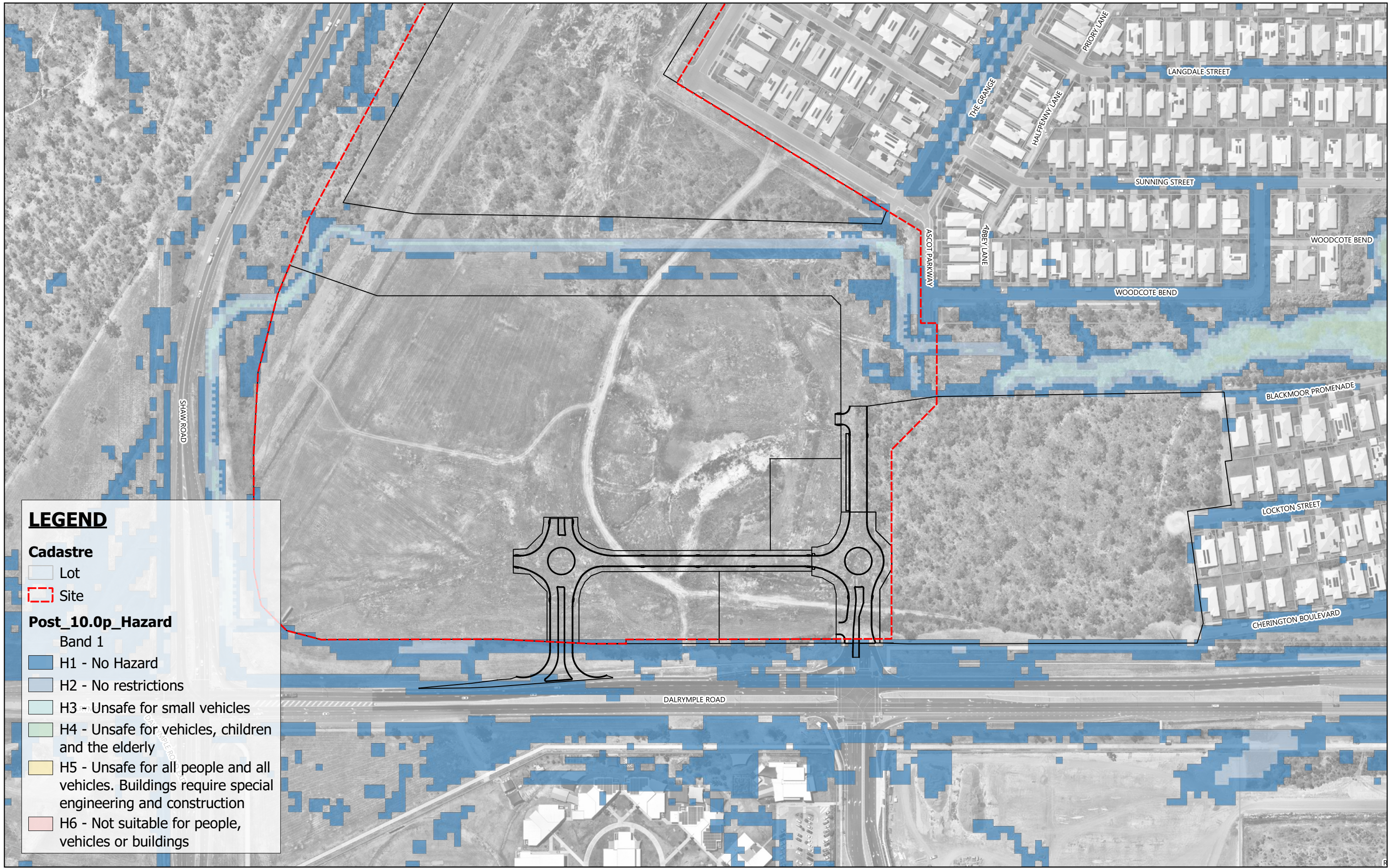
182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 5% AEP

Mar 2025

P001406

F21



LEGEND

Cadastral

- Lot
- Site

Post_10.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

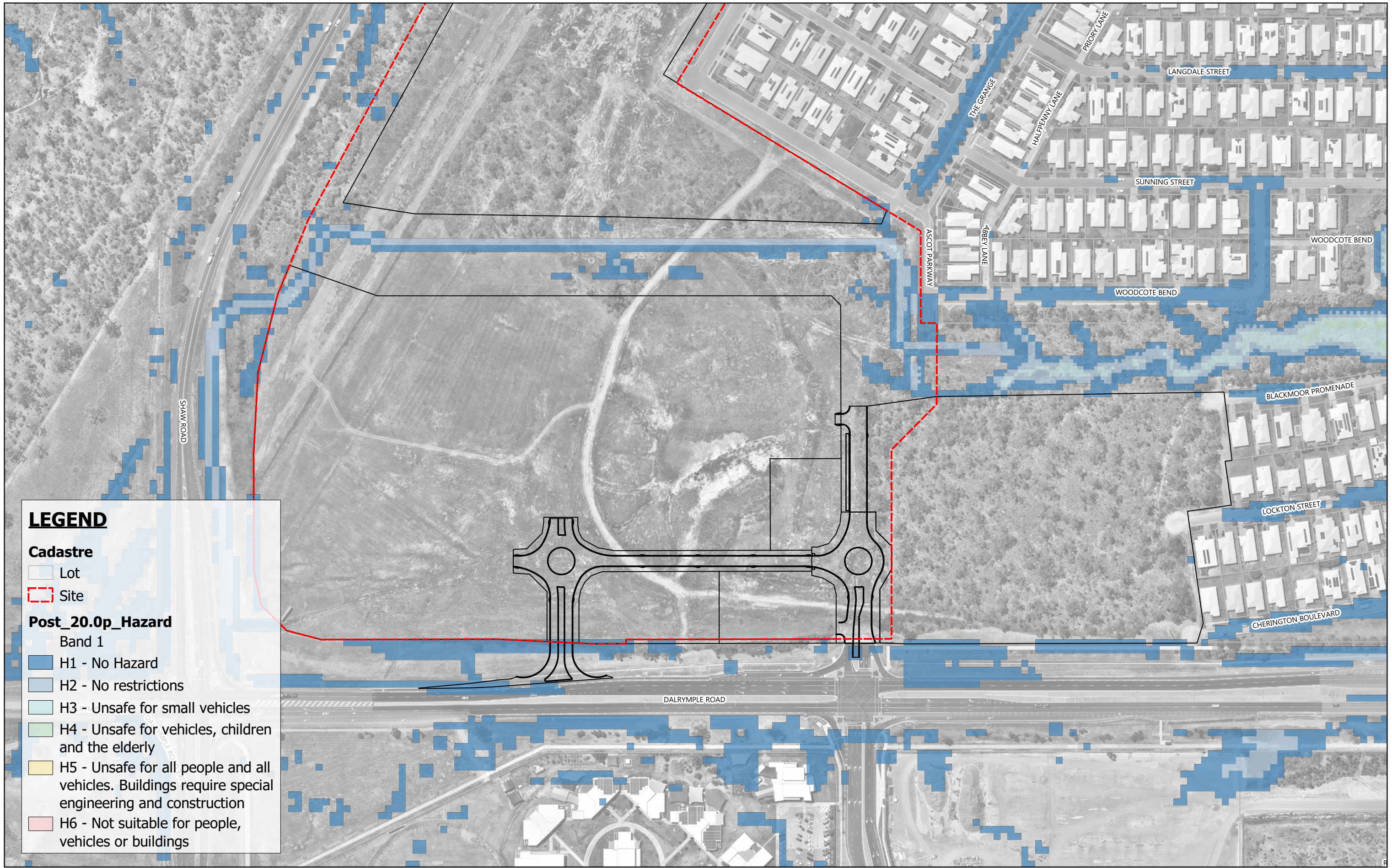
182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 10% AEP

Mar 2025

P001406

F22



LEGEND

Cadastral

- Lot
- Site

Post_20.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

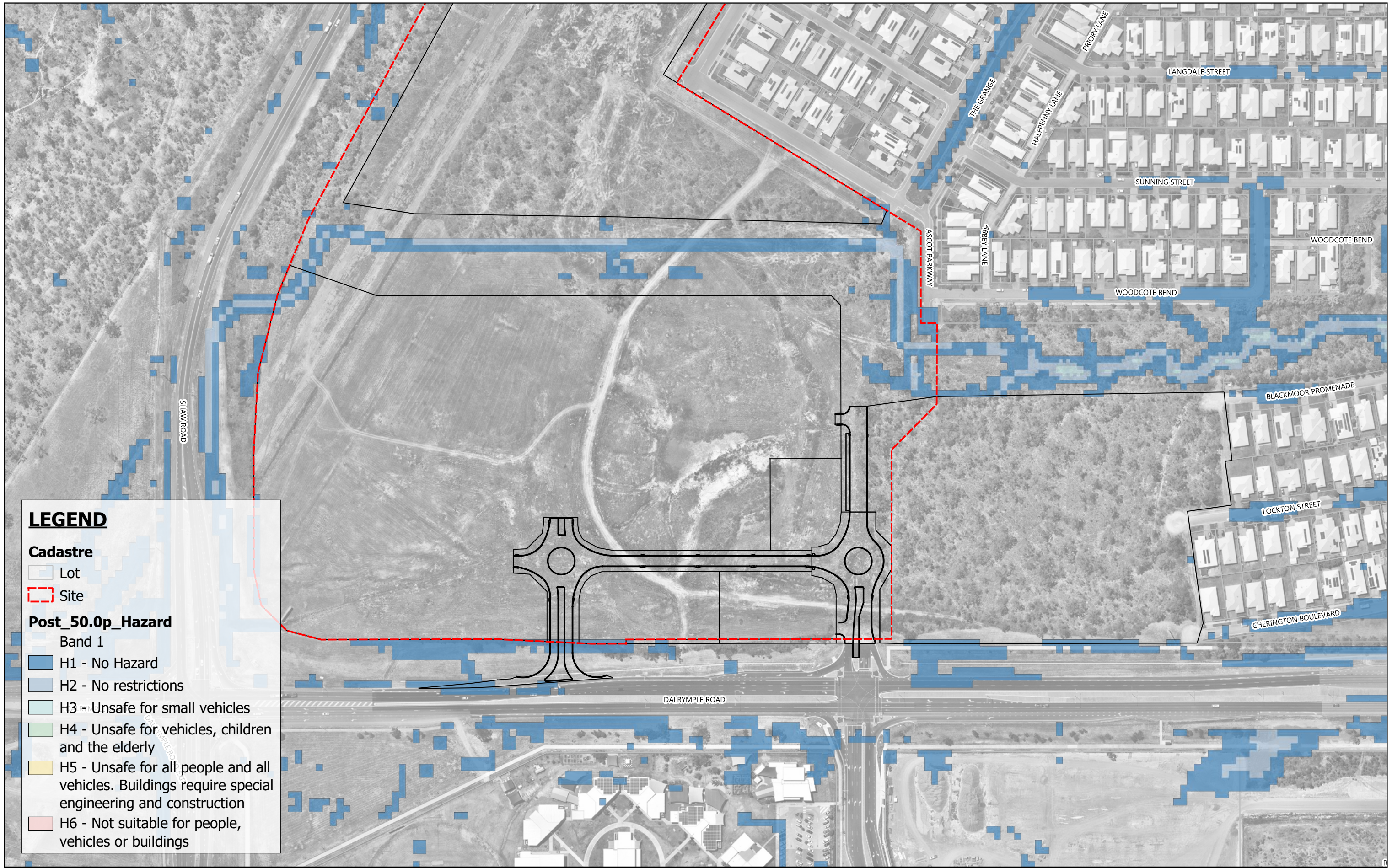
182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 20% AEP

Mar 2025

P001406

F23



LEGEND

Cadastre

- Lot
- Site

Post_50.0p_Hazard

- Band 1
- H1 - No Hazard
 - H2 - No restrictions
 - H3 - Unsafe for small vehicles
 - H4 - Unsafe for vehicles, children and the elderly
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
 - H6 - Not suitable for people, vehicles or buildings



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

182 SHAW ROAD, SHAW

Flood Hazard - Post Development - 50% AEP

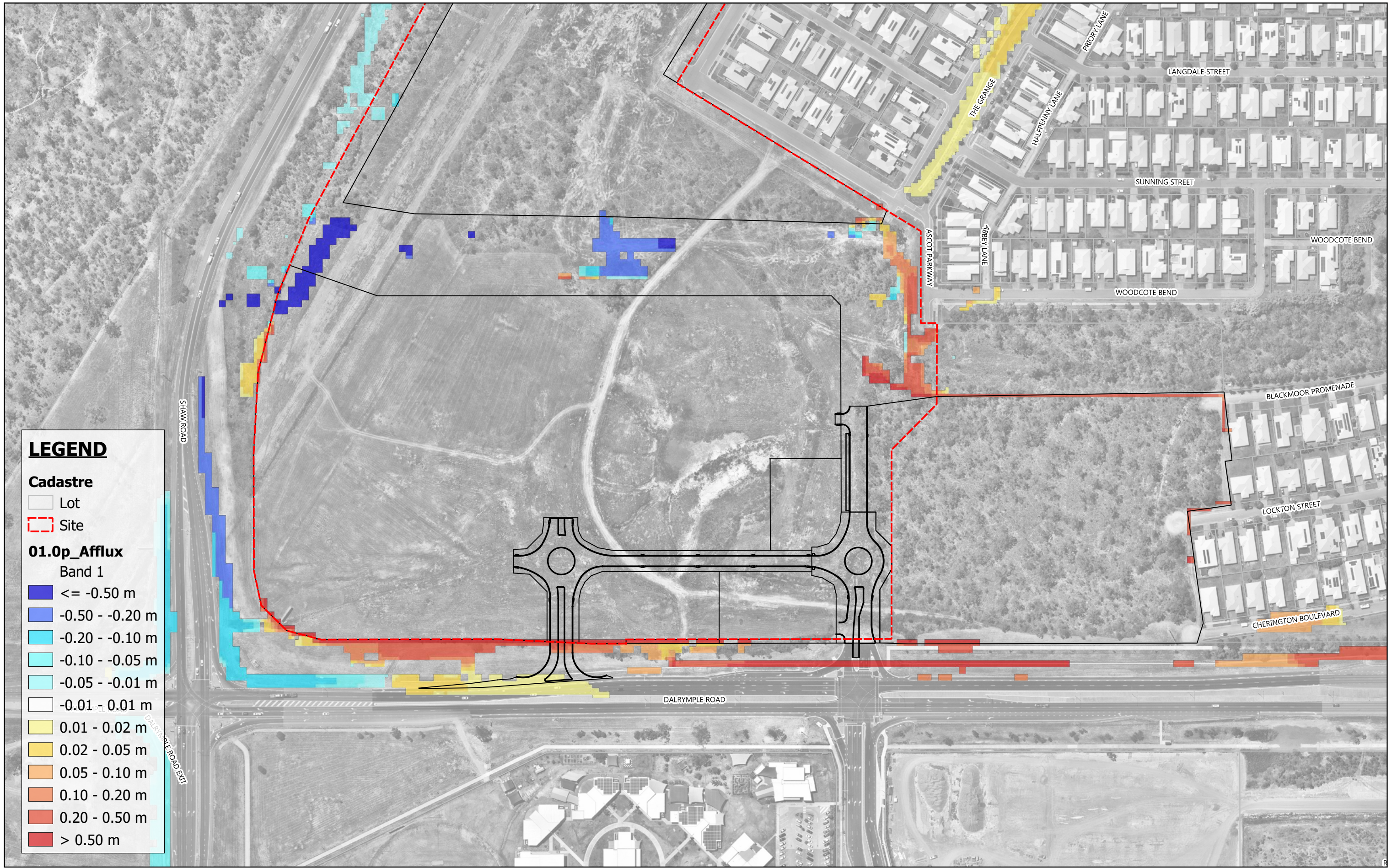
Mar 2025

P001406

F24

APPENDIX G

HYDRAULIC MODEL IMPACT ASSESSMENT



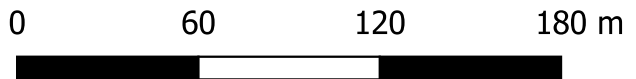
LEGEND

Cadastre

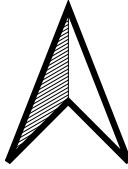
- Lot
- Site

01.0p_Afflux
Band 1

- <= -0.50 m
- 0.50 - -0.20 m
- 0.20 - -0.10 m
- 0.10 - -0.05 m
- 0.05 - -0.01 m
- 0.01 - 0.01 m
- 0.01 - 0.02 m
- 0.02 - 0.05 m
- 0.05 - 0.10 m
- 0.10 - 0.20 m
- 0.20 - 0.50 m
- > 0.50 m



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

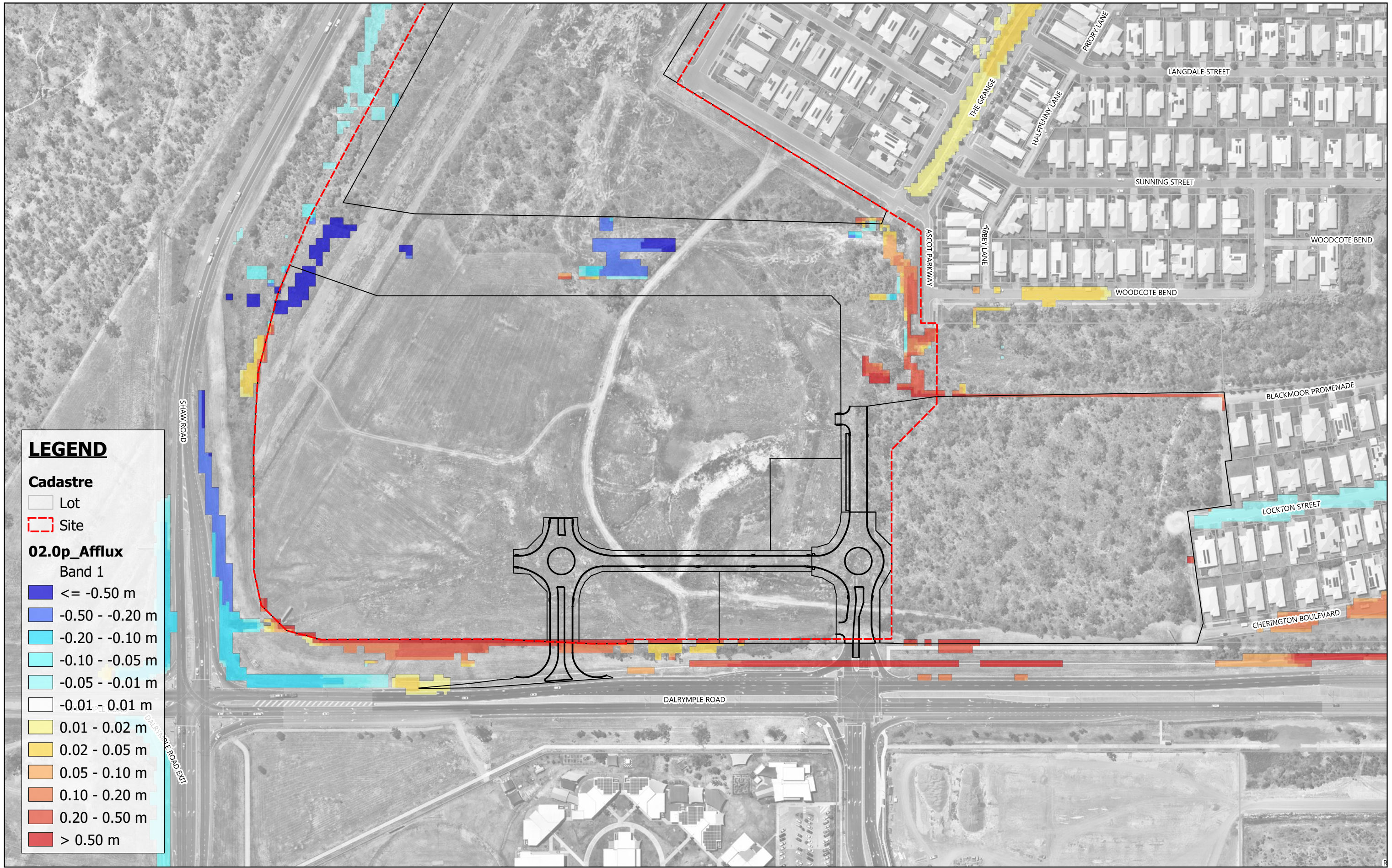
182 SHAW ROAD, SHAW

Flood Level - Impact Assessment - 1% AEP

Mar 2025

P001406

G01



LEGEND

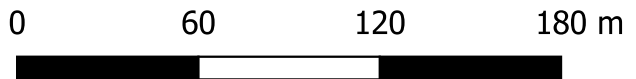
Cadastre

- Lot
- Site

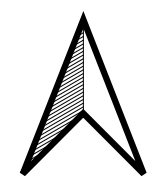
02.0p_Afflux

Band 1

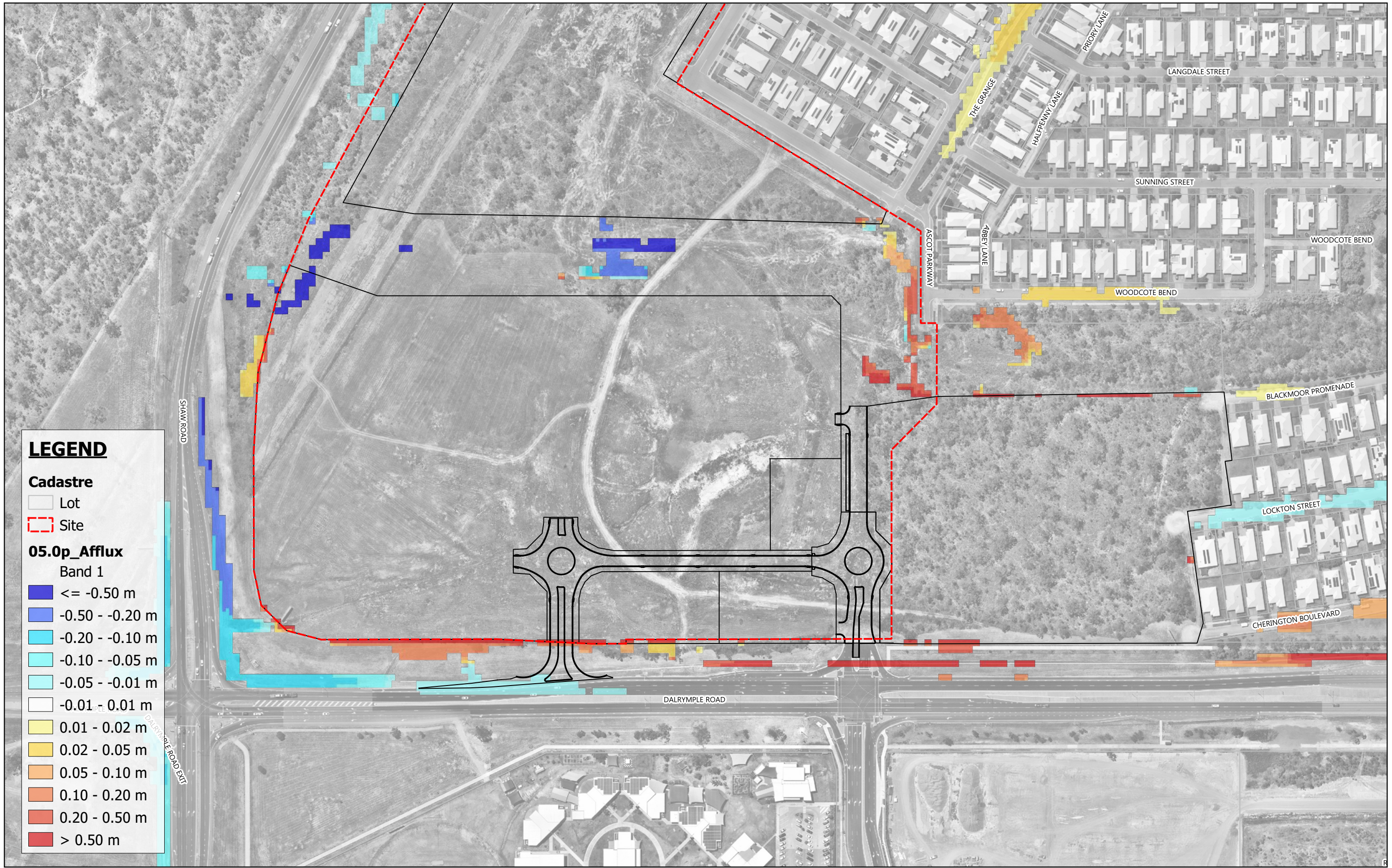
- <= -0.50 m
- 0.50 - -0.20 m
- 0.20 - -0.10 m
- 0.10 - -0.05 m
- 0.05 - -0.01 m
- 0.01 - 0.01 m
- 0.01 - 0.02 m
- 0.02 - 0.05 m
- 0.05 - 0.10 m
- 0.10 - 0.20 m
- 0.20 - 0.50 m
- > 0.50 m



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD	Mar 2025
182 SHAW ROAD, SHAW	P001406
Flood Level - Impact Assessment - 2% AEP	G02



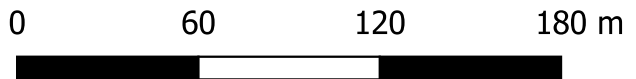
LEGEND

Cadastre

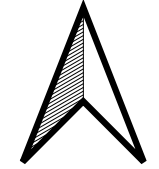
- Lot
- Site

05.0p_Afflux
Band 1

- <= -0.50 m
- 0.50 - -0.20 m
- 0.20 - -0.10 m
- 0.10 - -0.05 m
- 0.05 - -0.01 m
- 0.01 - 0.01 m
- 0.01 - 0.02 m
- 0.02 - 0.05 m
- 0.05 - 0.10 m
- 0.10 - 0.20 m
- 0.20 - 0.50 m
- > 0.50 m



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

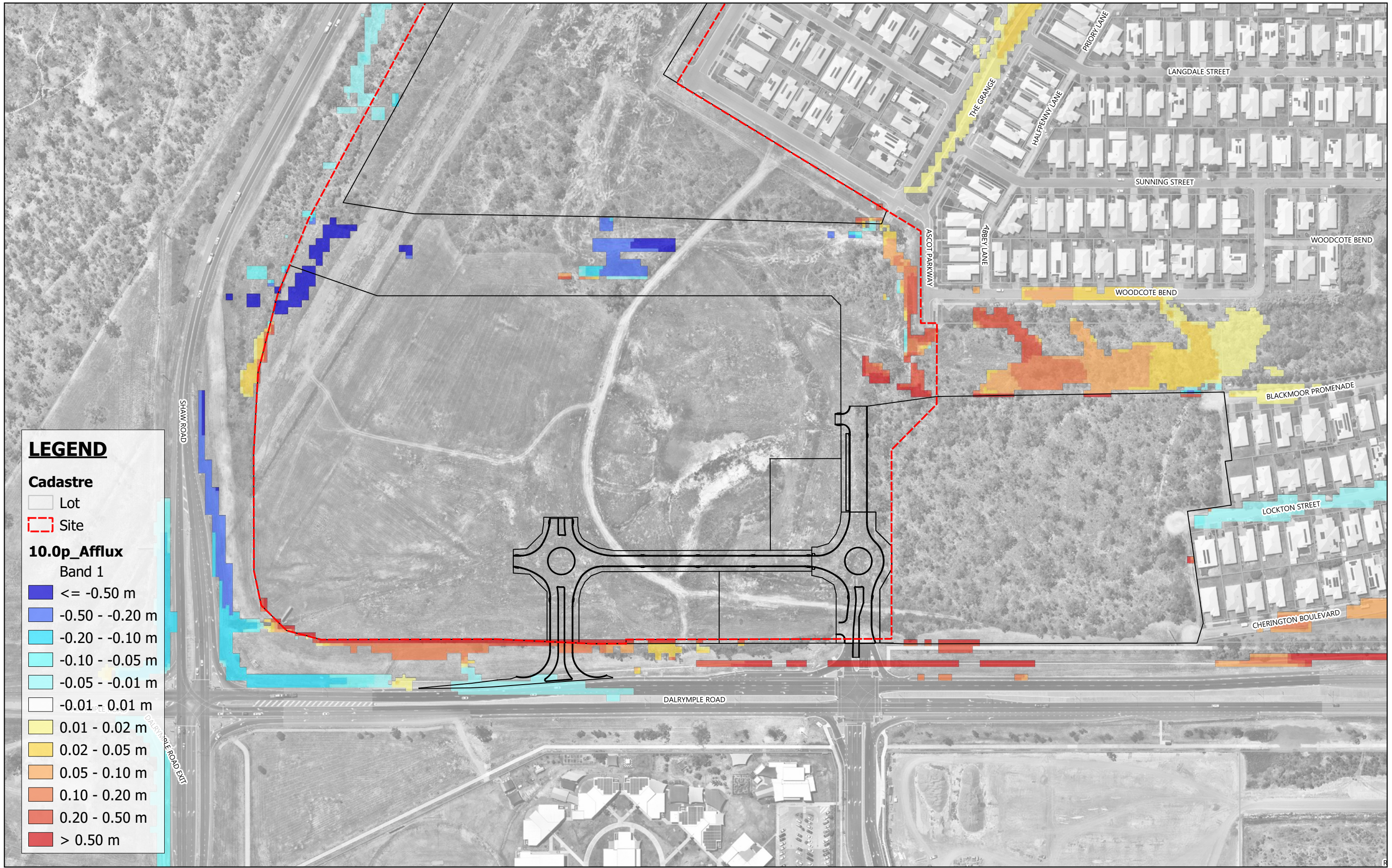
182 SHAW ROAD, SHAW

Flood Level - Impact Assessment - 5% AEP

Mar 2025

P001406

G03



LEGEND

Cadastre

- Lot
- Site

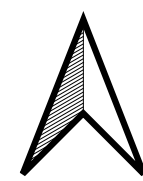
10.0p_Afflux

- Band 1
- $\leq -0.50\text{ m}$
 - $-0.50 - -0.20\text{ m}$
 - $-0.20 - -0.10\text{ m}$
 - $-0.10 - -0.05\text{ m}$
 - $-0.05 - -0.01\text{ m}$
 - $-0.01 - 0.01\text{ m}$
 - $0.01 - 0.02\text{ m}$
 - $0.02 - 0.05\text{ m}$
 - $0.05 - 0.10\text{ m}$
 - $0.10 - 0.20\text{ m}$
 - $0.20 - 0.50\text{ m}$
 - $> 0.50\text{ m}$

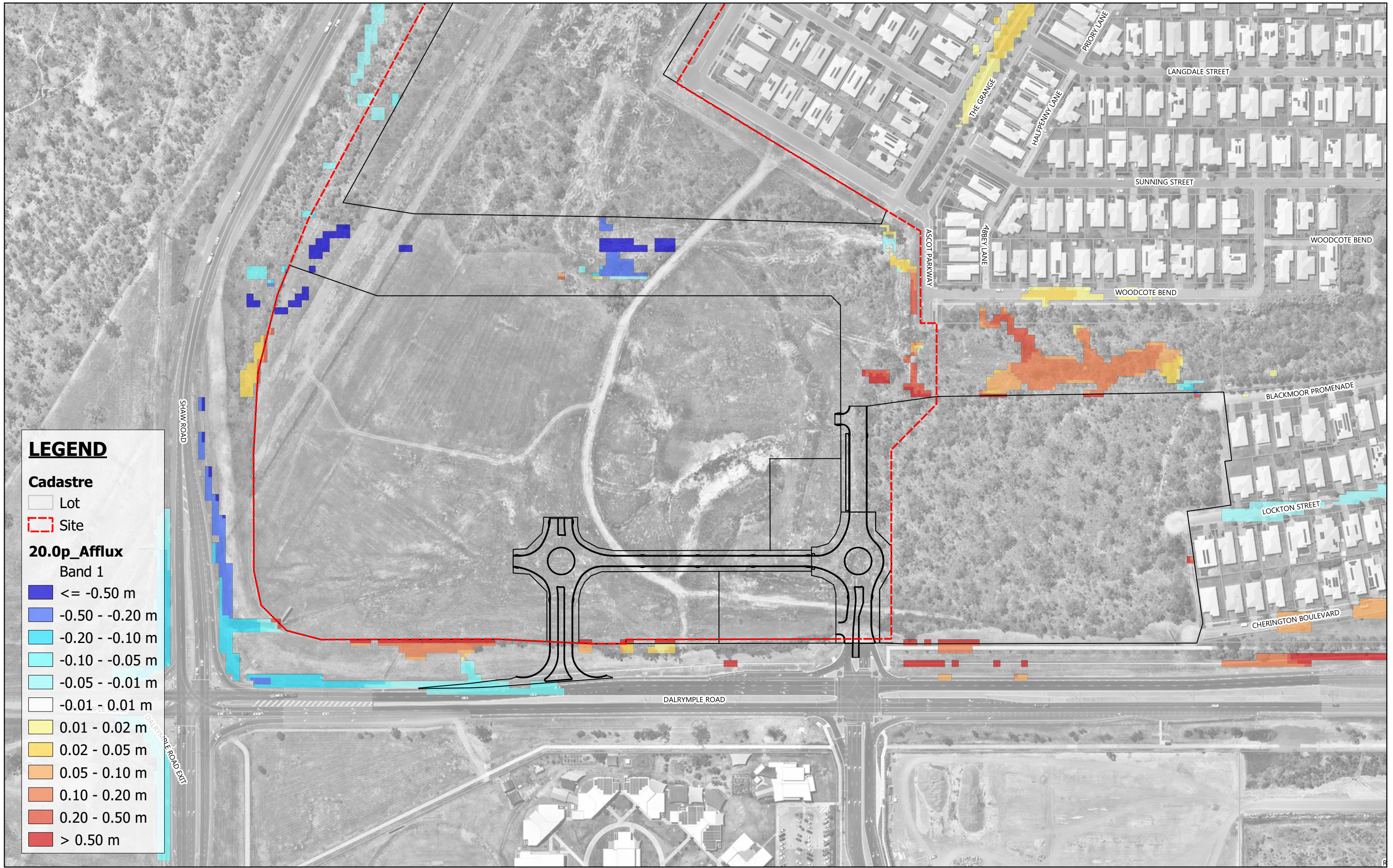


Scale 1:2,500

21.03.2025



PARKSIDE DEVELOPMENT PTY LTD	Mar 2025
182 SHAW ROAD, SHAW	P001406
Flood Level - Impact Assessment - 10% AEP	G04

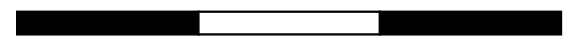


LEGEND

- Cadastre**
- Lot
 - Site
- 20.0p_Afflux**
- Band 1
- $\le -0.50\text{ m}$
 - $-0.50 - -0.20\text{ m}$
 - $-0.20 - -0.10\text{ m}$
 - $-0.10 - -0.05\text{ m}$
 - $-0.05 - -0.01\text{ m}$
 - $-0.01 - 0.01\text{ m}$
 - $0.01 - 0.02\text{ m}$
 - $0.02 - 0.05\text{ m}$
 - $0.05 - 0.10\text{ m}$
 - $0.10 - 0.20\text{ m}$
 - $0.20 - 0.50\text{ m}$
 - $> 0.50\text{ m}$

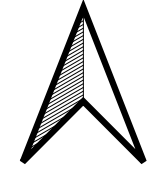


0 60 120 180 m



Scale 1:2,500

21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

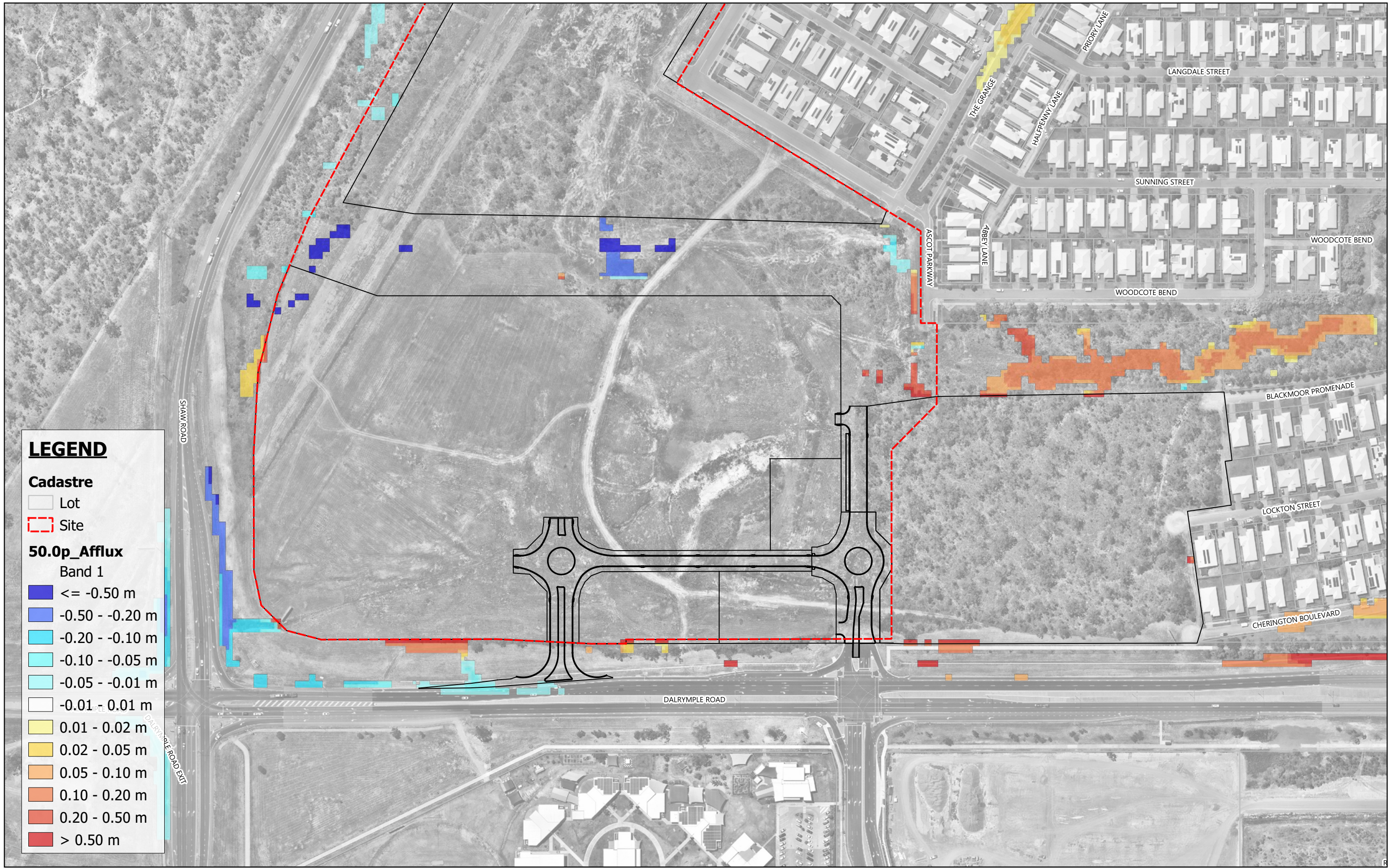
182 SHAW ROAD, SHAW

Flood Level - Impact Assessment - 20% AEP

Mar 2025

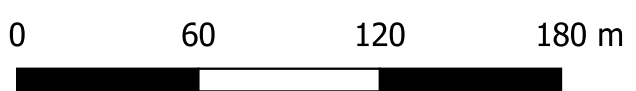
P001406

G05

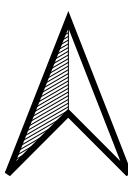


LEGEND

- Cadastre**
- Lot
 - Site
- 50.0p_Afflux**
Band 1
- <= -0.50 m
 - 0.50 - -0.20 m
 - 0.20 - -0.10 m
 - 0.10 - -0.05 m
 - 0.05 - -0.01 m
 - 0.01 - 0.01 m
 - 0.01 - 0.02 m
 - 0.02 - 0.05 m
 - 0.05 - 0.10 m
 - 0.10 - 0.20 m
 - 0.20 - 0.50 m
 - > 0.50 m



Scale 1:2,500
21.03.2025



PARKSIDE DEVELOPMENT PTY LTD

Mar 2025

182 SHAW ROAD, SHAW

P001406

Flood Level - Impact Assessment - 50% AEP

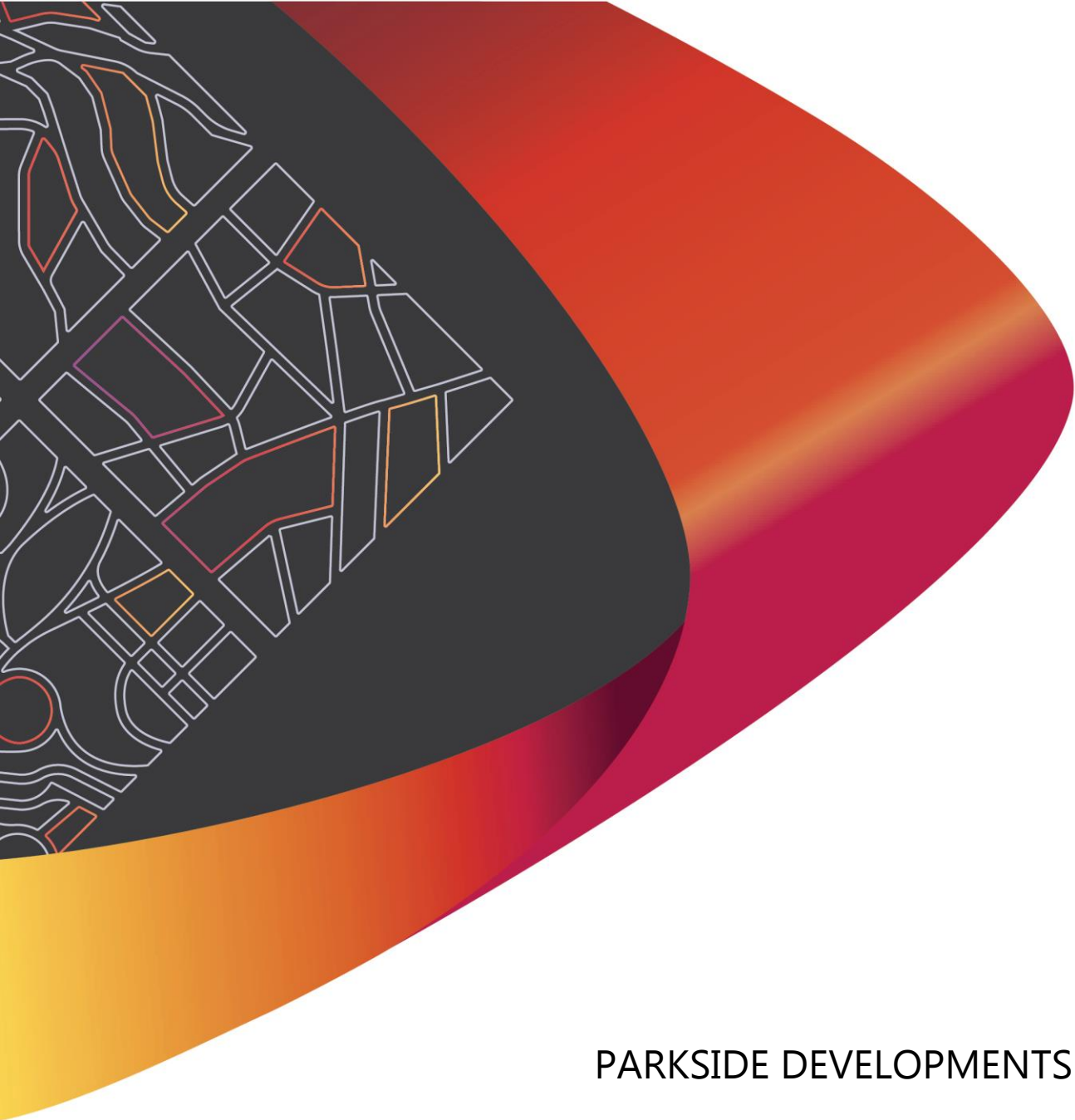
G06

APPENDIX C

Amended Traffic Impact Assessment prepared by Premise

brazier motti





PARKSIDE DEVELOPMENTS PTY LTD

GREATER ASCOT TOWN CENTRE STAGE 1

TRAFFIC IMPACT ASSESSMENT

Report No: P001406/R01

Rev: C1




24 March 2025



Premise

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DOCUMENT AUTHORISATION					
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DRAFT	24/07/24	For review			
A	29/08/24	For comment			
B	07/11/24	For submission			
C	04/03/25	Information request / advice notice response – for comment			
C1	24/03/25	Information request / advice notice response – for submission			
Prepared By		Reviewed By		Authorised By	
Prineth Fernando		Bradley Jones		Bradley Jones	

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1. INTRODUCTION

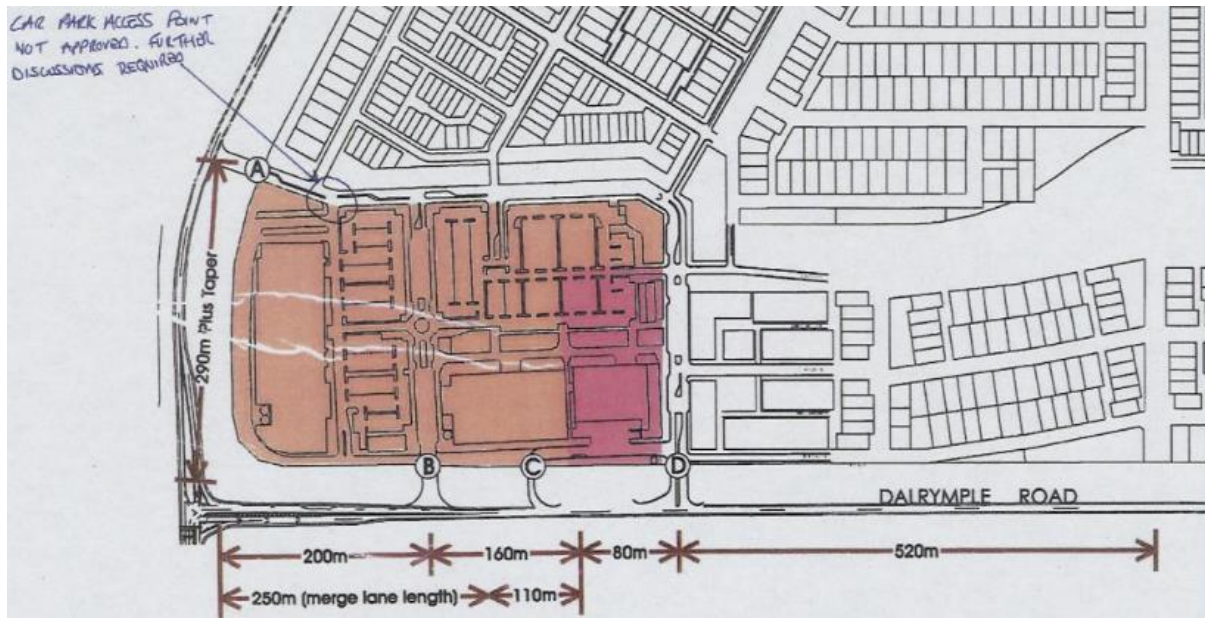
Parkside Developments Pty Ltd (Parkside) is proposing to develop Stage 1 of the Greater Ascot town centre on the northeast corner of Dalrymple Road / Shaw Road intersection in Shaw. Premise Townsville Pty Ltd (Premise) has been engaged by Parkside to prepare a Traffic Impact Assessment (TIA) for the Stage 1 of the proposed Greater Ascot Town Centre.

1.1 Background

On 28 May 2013, the Townsville City Council (TCC) approved, subject to conditions, the Development Permit – Material Change of Use (Impact) MI11/0064 for the Neighbourhood Centre at 890 Dalrymple Road, as enclosed in Appendix A. The application was supported by the "Greater Ascot Neighbourhood Centre, Townsville: Traffic Impact Assessment", TPAR023/R01revB dated 13 July 2012 which was prepared by UDP Horman Traffic (now Premise) in accordance with Department of Transport and Main Roads' (TMR's) "Guidelines for Assessment of Road Impacts of Developments" (GARID). GARID was superseded by TMR's "Guide to Traffic Impact Assessment" (GTIA) in July 2017. Also, since approval of MI11/0064, Townsville City Plan SC6.4.5.2 Traffic Impact Assessment has been adopted which provides guidelines for assessment of traffic impacts on TCC transport networks.

The TCC approval of MI11/0064 includes Concurrence Agency Response – Conditions dated 28 September 2012 from TMR. TMR Condition 3 states that no access to or from Dalrymple Road is permitted at location "B" as shown on Attachment 1 which is reproduced below as Figure 1.

Figure 1: Attachment 1 of TMR Concurrence Agency Response – Conditions for MI11/0064



The Concurrence Agency Response states under the reasons for Condition 3 that:

Specifically, this LILO [left-in-left-out] access point is located within the merge lane on Dalrymple Road. This merge lane is required to accommodate the double right turn movement from Shaw Road. An access point on this merge lane would create conflict between merging vehicles on Dalrymple Road and vehicles exiting the Subject Land at this location.

This reasoning is no longer valid as the duplication of Dalrymple Road between Shaw Road and Greater Ascot Avenue in 2023/ 2024 removed this merge.

Application number MCU24/0117 for childcare centre (120 children), service station, car wash, food and drink outlet and low impact industry combined with RAL24/0075 – Greater Ascot (Neighbourhood Centre) being Stage 1 of Greater Ascot Town Centre was submitted in November 2024. The development application was accompanied by “Greater Ascot Town Centre Stage 1: Traffic Impact Assessment” (P001406/R01revB) dated 7 November 2024 which was prepared in accordance with the current TMR and TCC guidelines. Amendments to P001406/R01revB were requested by TCC in an Information Request dated 18 December 2024 and the State Assessment and Referral Agency (SARA) in an Advice Notice dated 3 January 2025. Refer Section 1.3 for additional information regarding the TCC Information Request and SARA Advice Notice.

1.2 Scope and Study Area

The site is located at 890 Dalrymple Road in Shaw with a property description of Lot 2 on SP 107219. The location of the site is shown in Figure 2. It is bounded by Dalrymple Road to the south, Shaw Road to the west, and Greater Ascot internal roads to the north and east. The impact assessment area consists of Dalrymple Road fronting the subject site, including the Dalrymple Road / Shaw Road traffic signals, Dalrymple Road / Bishop Putney Avenue traffic signals and the proposed LILO access located approximately 200m east of the Dalrymple Road / Shaw Road traffic signals. The expected opening year for Stage 1 of the Town Centre is 2026 and 2036 has been assumed as the completion date for the balance of the Town Centre.

Figure 2: Site location and the surrounding road network (Source: Queensland Globe)



1.3 Information Requests

The Advice Notice issued by SARA, 2411-43630 SRA dated 3 January 2025, is enclosed in Appendix B. The Information Request issued by TCC, MCU24/0117 dated 18 December 2024, is enclosed in Appendix C. This report has been updated to address Request Item 3 of TCC's Information Request and Item 1 of SARA's Advice Notice.

2. EXISTING CONDITIONS

2.1 Land Use and Zoning

As shown by Figure 3, the subject site is currently zoned as an “emerging community” zone under the TCC Planning Scheme.

Figure 3: Zone map showing the subject site location (Source: TownsvilleMAPS – Townsville City Plan)



2.2 Adjacent Land Uses / Approvals

As shown in Figure 3, the subject site is bounded by:

- > Dalrymple Road to the south
- > Shaw Road to the west
- > Greater Ascot internal roads to the north and east

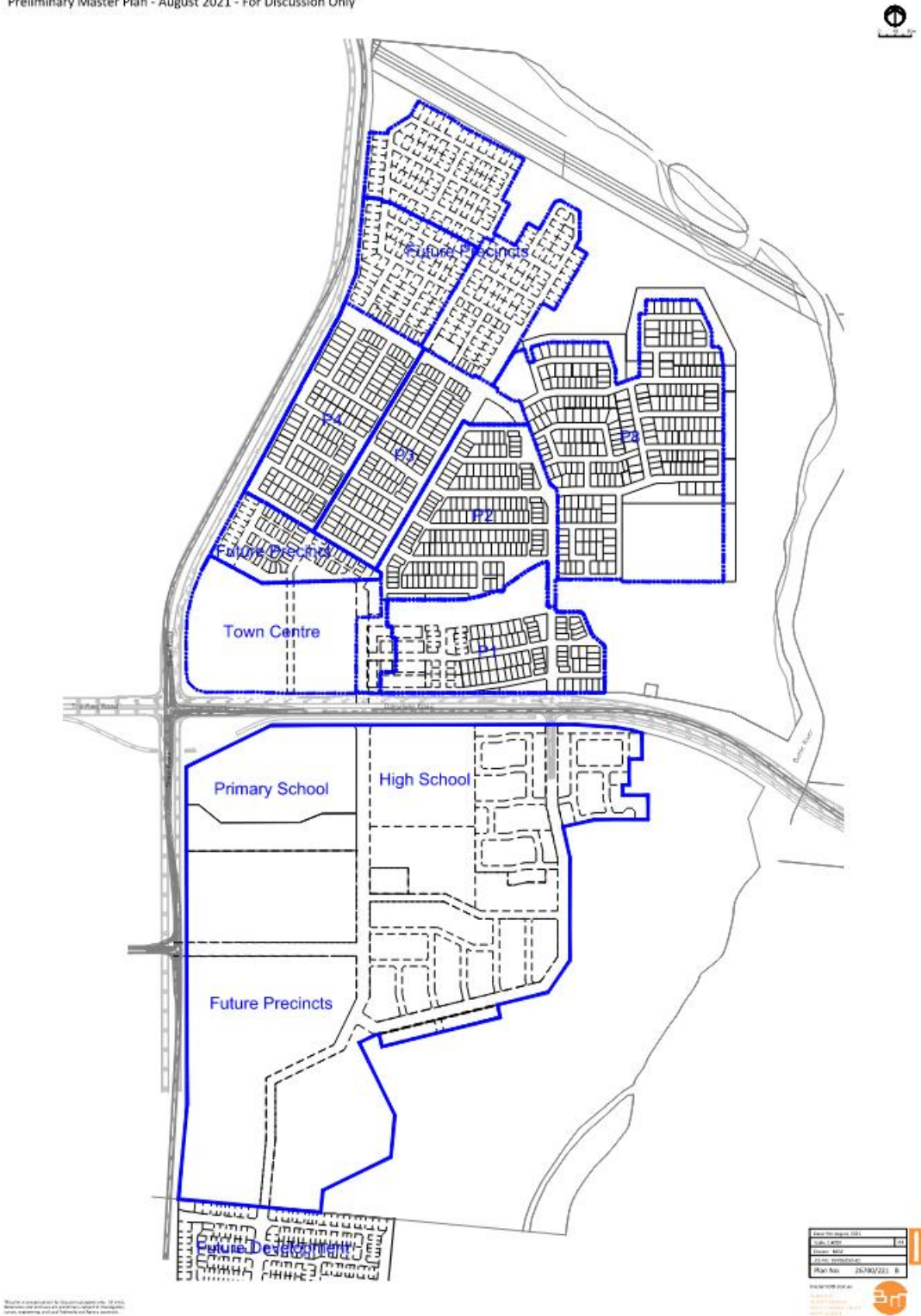
The sites to the north and east of the subject site are zoned as “residential”, the site to the south is zoned as “emerging community” and the vacant site to the west is zoned as “rural”.

St Benedict’s Catholic School occupies land directly to the south on the opposite side of Dalrymple Road to the subject site.

Figure 4 shows master planning for Greater Ascot which shows that existing low density residential development between the subject site and Bohle River is to be expanded north and west with a street network which radiates from the town centre.

Figure 4: Greater Ascot preliminary master plan (Source: Brazier Motti)

Preliminary Master Plan - August 2021 - For Discussion Only



2.3 Surrounding Road Network Details

2.3.1 ROAD LINKS

2.3.1.1 Shaw Road

Shaw Road generally comprises of an undivided carriageway providing a single lane in each direction with wide sealed shoulders within the vicinity of the site. It is a State-Controlled Road (SCR) under the governing authority of TMR. The posted speed limit on Shaw Road is 80km/h in the vicinity of the site. Shaw Road forms a signalised intersection with Dalrymple Road with the subject site located in the northeast corner. Shaw Road is an approved type 1 road train route.

2.3.1.2 Dalrymple Road

Dalrymple Road comprises of two lanes in each direction divided by a median along the frontage of the site as shown by Figure 5. It is a Local Government Road (LGR) under the governing authority of TCC. The posted speed limit on Dalrymple Road is 80km/h along the frontage of the site.

Figure 5: Dalrymple Road looking west from Bishop Putney Avenue along the eastbound carriageway



2.3.1.3 Bishop Putney Avenue

Bishop Putney Avenue is a two-way, two-lane, undivided road in the north-south direction. It is a LGR administered by TCC. Bishop Putney Avenue currently serves the St Benedict's Catholic School. It will form a four-way intersection controlled by traffic signals to access the proposed town centre as part of the Stage 1 works.

2.3.2 INTERSECTIONS

TMR supplied STREAMS data for the signalised intersections of Dalrymple Road with Shaw Road and Bishop Putney Avenue.

2.3.2.1 Shaw Road / Dalrymple Road Signalised Crossroads

Figure 6 shows the layout of the signalised crossroads formed by Dalrymple Road and Shaw Road. Additional detail regarding lane discipline and the phase arrangement are shown by the STREAMS drawing enclosed in Appendix D. The intersection features high angle left turn treatments on all approaches and no pedestrian crossing facilities. Through traffic travelling in both directions along Shaw Road is provided with two (2) lanes through the intersection which is required to start merging 100m downstream of the intersection to form one (1) lane 200m downstream of the intersection. Exclusive right turn lanes are provided on both Shaw Road approaches with two (2) right turn lanes on the south leg into Dalrymple Road eastbound and one (1) right turn lane on the north leg into Dalrymple Road westbound. Split phasing of the Dalrymple Road approaches allows the east and west intersection legs to have shared through-and-right turn lanes. Both Dalrymple Road approaches provide two (2) lanes in addition to the left turn slip lanes with the east approach providing a shared through-and-right lane and an exclusive right turn lane and the east approach providing an exclusive through lane and a shared through-and-right lane. Note that works carried out in the 2023 / 2024 financial year duplicated Dalrymple Road between Shaw Road and Greater Ascot Avenue removing the merge referenced in the reasons for Condition 3 of the MI11/0064 Concurrence Agency Response (refer Section 1.1).

Figure 6: Dalrymple Road / Shaw Road signalised crossroads (Source: Google Earth)



2.3.2.2 Dalrymple Road / Bishop Putney Avenue Signalised Crossroads

Figure 7 shows the layout of the signalised crossroads formed by Dalrymple Road and Bishop Putney Avenue. Note that the north leg of the intersection is currently only a stub and will be extended to provide access to the proposed development. The intersection features pedestrian crossings of all intersection legs with high angle left turn treatments on all approaches. Pavement markings indicate that supervised children’s crossings are or will be provided on the two (2) slip lanes on the western side of the intersection. Two (2) lanes are provided for traffic travelling in each direction along Dalrymple Road and two (2) lanes are also provided for traffic departing St Benedicts Catholic School which wishes to turn right from Bishop Putney Avenue to Dalrymple Road eastbound. All other movements are provided with a single exclusive lane. The STREAMS drawing enclosed in Appendix E indicates that the traffic signals phase arrangement provides a leading right turn phase on Dalrymple Road with split phasing for the Bishop Putney Avenue approaches.

Figure 7: Dalrymple Road / Bishop Putney Avenue signalised crossroads (Source: Google Earth)



2.4 Traffic Volumes

Traffic surveys were undertaken at the Shaw Road / Dalrymple Road traffic signals and the Dalrymple Road / Bishop Putney Avenue traffic signals between 3.00pm and 6.00pm on 30 January 2025 (Thursday). The observed peak hours were 4.00pm to 5.00pm at the Shaw Road / Dalrymple Road traffic signals and 3:00pm to 4:00pm at the Dalrymple Road / Bishop Putney Avenue traffic signals. The earlier peak hour at the Dalrymple Road / Bishop Putney Avenue traffic signals is likely due to the influence of St Benedict's Catholic School. For the purposes of assessing the traffic impact of the proposed development the design peak hour is taken to be 4:00pm to 5:00pm. The data reports are enclosed in Appendix F.

2.4.1 DALRYMPLE ROAD

The evening peak hour two-way traffic on Dalrymple Road between the Shaw and Bishop Putney Avenue is 1,255 vehicles per hour (vph), with 509vph in the eastbound direction and 746vph in the westbound direction.

The evening peak hour two-way traffic on Dalrymple Road west of the Shaw Road / Dalrymple Road traffic signals is 531vph, with 185vph in the eastbound direction and 346vph in the westbound direction.

The evening peak hour two-way traffic on Dalrymple Road east of the Dalrymple Road / Bishop Putney Avenue traffic signals is 1,235vph, with 512vph in the eastbound direction and 723vph in the westbound direction.

2.4.2 SHAW ROAD

The evening peak hour two-way traffic on Shaw Road north of Dalrymple Road is 1,601vph, with 830vph in the northbound direction and 771vph in the southbound direction.

The evening peak hour two-way traffic on Shaw Road south of Dalrymple Road is 1,239vph, with 614vph in the northbound direction and 625vph in the southbound direction.

2.4.3 BISHOP PUTNEY AVENUE

The evening peak hour two-way traffic on Bishop Putney Avenue is 129vph, with 73vph in the northbound direction and 56vph in the southbound direction.

2.5 Intersection and Network Performance

2.5.1 SHAW ROAD / DALRYMPLE ROAD SIGNALISED CROSSROADS

STREAMS data supplied by TMR indicates that the Shaw Road / Dalrymple Road traffic signals are one (1) of three (3) intersections in the intersection group which controls the state-controlled intersections associated with the Townsville Ring Road / Dalrymple Road split diamond interchange. The Time of Day Plan Introduction Schedule indicates that the intersection group currently operates on a “master isolated” plan at all times.

Cycle analyser data was supplied by TMR for Thursday 23 May 2024. Review of data for the period from 4:00PM to 5:00PM which corresponds to the peak hour identified from traffic count data (refer Section 2.4) indicates that:

- > There was a total of 33 cycles which started during the analysis period;
- > Cycle times varied from 76sec to 156 sec with the average cycle time being 109sec;
- > The phase sequence during all cycles was ADEF.

2.5.2 DALRYMPLE ROAD / BISHOP PUTNEY AVENUE SIGNALISED CROSSROADS

STREAMS data supplied by TMR indicates that the Shaw Road / Bishop Putney Avenue traffic signals are one (1) of five (5) intersections in the intersection group which coordinates movements along Dalrymple Road through local government intersections between the state-controlled roads of Thuringowa Drive and Shaw Road. The Time of Day Plan Introduction Scheme indicates that the intersection group currently operates on a bidirectional light traffic plan at all times, however, the Intersection Details report indicates that no control plans have been defined for the Dalrymple Road / Bishop Putney Avenue traffic signals.

Cycle analyser data was supplied by TMR for Thursday 23 May 2024. Review of data for the period from 4:00PM to 5:00PM which corresponds to the design peak period identified from traffic count data (refer Section 2.4) indicates that:

- > There was a total of 36 cycles which started during the analysis period;
- > Cycle times varied from 30sec to 242sec with the average cycle time being 96sec;
- > Phases B, C and E were not called. This is consistent with the function of phases B and C being served by the leading right turn phase F, and phase E providing for traffic exiting the northern leg of the intersection not being required until development occurs to the north of the intersection;
- > Phases D was called 17 times and phase E was called 25 times during the hour. Phase D and E both had an average duration of 15sec with a maximum length of 19sec.

2.6 Road Safety Issues

Road safety issues within the assessment area were assessed based on the reported crash data provided by TMR for a period from 1 January 2007 to 31 January 2024. TMR provided crash data for all reported crashes on Shaw Road between Tompkins Road and Hervey Range Road and on Dalrymple Road between Bruce Highway and Golf Links Drive. The crash reports provided by TMR are enclosed in Appendix G.

The assessment area consists of Dalrymple Road including the Dalrymple Road / Shaw Road traffic signals and the Bishop Putney Avenue / Dalrymple Road traffic signals. There has been a total of 20 reported crashes in the assessment area. Out of the 20 crashes, seven (7) crashes resulted in hospitalisation, eight (8) resulted in medical treatment, one (1) resulted in minor injury and four (4) resulted in property damage only.

2.6.1 DALRYMPLE ROAD / SHAW ROAD TRAFFIC SIGNALS

14 crashes have been recorded at the Dalrymple Road / Shaw Road traffic signals during this period. A summary of the types of crashes are listed below.

- > One (1) crash involving turning vehicles in the opposite approach
- > Two (2) crashes involving vehicles in the adjacent approach
- > Eight (8) rear end crashes
- > Three (3) loss of control and going off-path type crashes

2.6.2 DALRYMPLE ROAD / BISHOP PUTNEY AVENUE

One (1) rear end type crash has been recorded at the Dalrymple Road / Bishop Putney Avenue traffic signals during this period.

2.6.3 DALRYMPLE ROAD

Five (5) crashes have been recorded on Dalrymple Road between the Dalrymple Road / Shaw Road traffic signals and the Dalrymple Road / Bishop Putney Avenue traffic signals during this period. A summary of the types of crashes are listed below.

- > Three (3) rear end crashes
- > One (1) loss of control and going off-path type crash
- > One (1) crash involving lane changing

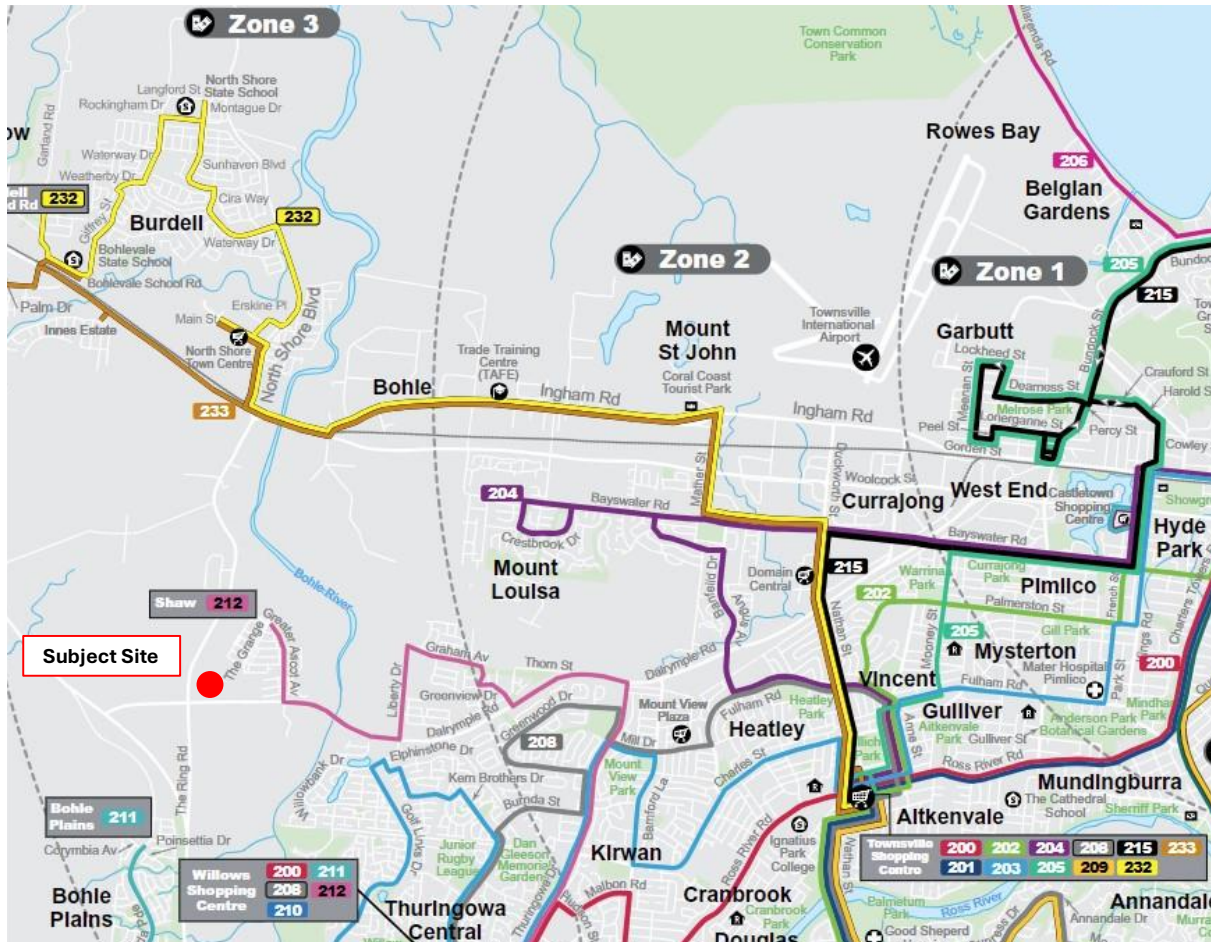
2.7 Site Access

Currently the only formal access to the development site is the stub which forms the northern leg of the Dalrymple Road / Bishop Putney Avenue traffic signals (refer Figure 7).

2.8 Public Transport

Public transport in Townsville generally consists of bus services. The subject site is located within Zone 3 of the Translink Townsville bus network as shown in Figure 8.

Figure 8: Townsville bus network plan (Source: Translink)



Bus route 212 services Greater Ascot Avenue approximately 500m east of the subject site. Bus route 212 operates Shaw to Willows Shopping Centre via Mt Louisa with services in both directions operating hourly between 8AM and 6PM Monday to Saturday. The service does not operate on Sundays.

2.9 Active Transport

2.9.1 BICYCLE NETWORK

Currently a wide sealed shoulder provides an on-road bicycle lane on Shaw Road and Dalrymple Road along the site frontage. Green bicycle lanes are generally provided at traffic signals as shown by Figure 5.

Shaw Road and Dalrymple Road in the vicinity of the site are identified as principal cycle routes in the Principal Cycle Network Plan.

2.9.2 PEDESTRIAN NETWORK

Pedestrian signals are provided on all four (4) legs of the Dalrymple Road / Bishop Putney Avenue intersections with pavement markings indicating that supervised children's crossings are or will be provided on the two (2) slip lanes on the western side of the intersection adjacent to St Benedict's Catholic School.

Paths are provided on both sides of Dalrymple Road east of Bishop Putney Avenue and on Bishop Putney Avenue south of Dalrymple Road. A path is provided only on the southern side of Dalrymple Road between Bishop Putney Avenue and Shaw Road.

3. PROPOSED DEVELOPMENT DETAILS

3.1 Development Site Plan

Appendix H contains the masterplan and staging plan for the Greater Ascot Town Centre. Figure 9 shows the Greater Ascot Town Centre Masterplan. Stage 1 of the development is situated in the southeast (bottom right) corner of the site. Figure 10 shows the Stage 1 area of the masterplan in more detail

Figure 9: Greater Ascot Town Centre Masterplan (Source: Cottee Parker)

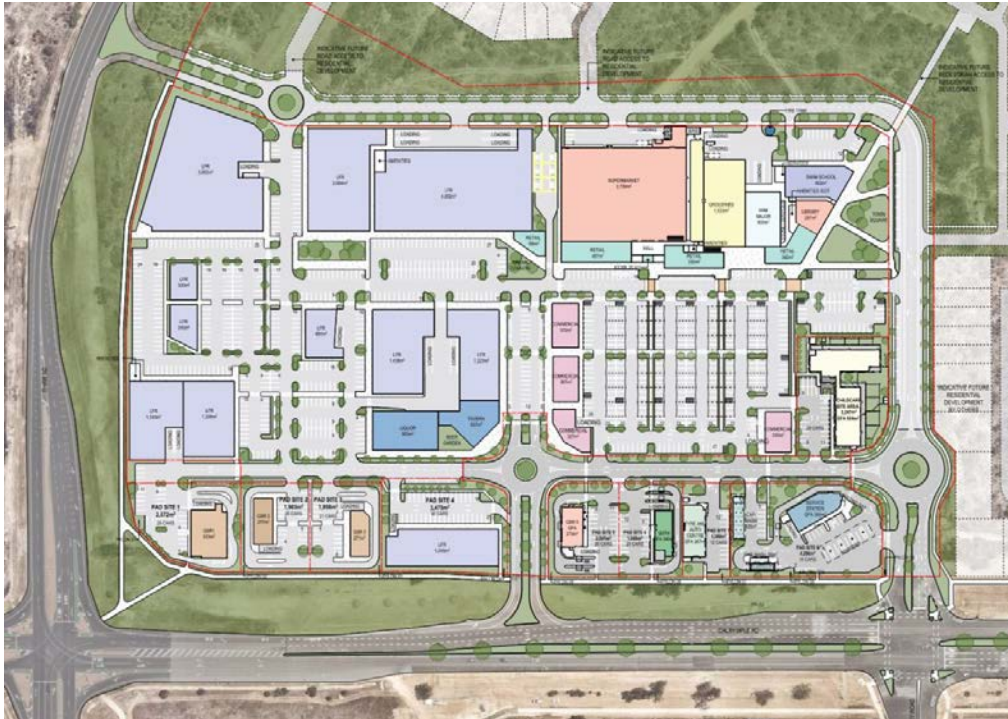
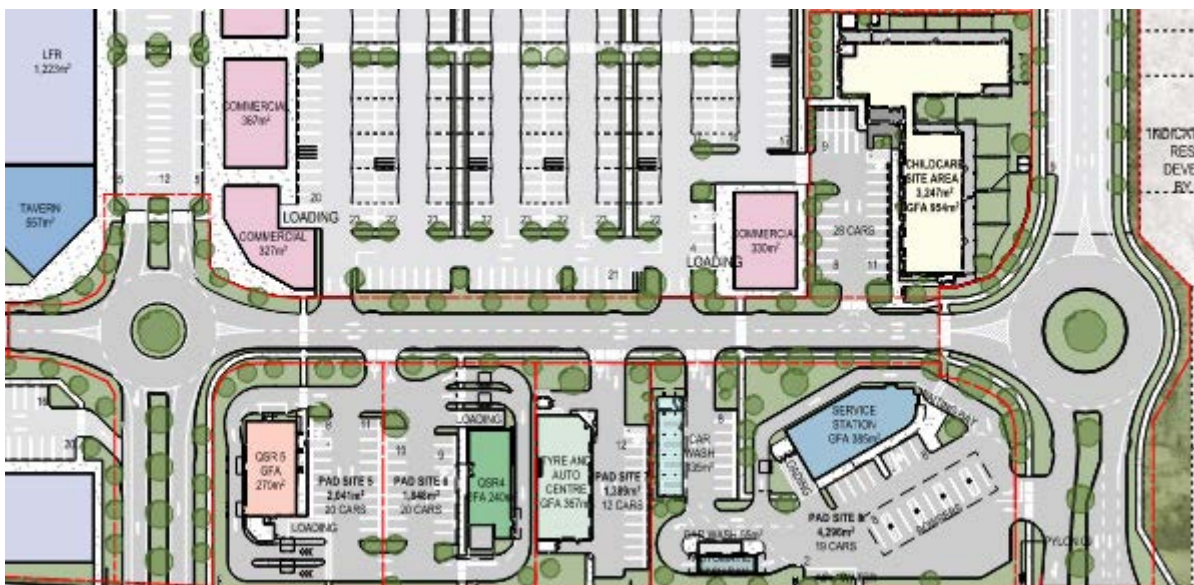


Figure 10: Greater Ascot Town Centre Master Plan – Stage 1 area (Source: Cottee Parker)



3.2 Operational Details

Stage 1 of the town centre has a Gross Leasable Floor Area (GLFA) of 2,406m² and comprises of the following components.

- > A service station, including a convenient store, with a GLFA of 385m² and a site area of 4,296m²
- > A carwash with a GLFA of 190m² on the service station site
- > A car service centre with a GLFA of 367m² and a site area of 1,389m²
- > Two (2) fast-food restaurants with a total GLFA of 510m²
- > A childcare centre with a GLFA of 954m² for 120 children

The balance of the town centre has a GLFA of 29,322m² and comprises of the following components.

- > Tavern, beer garden and liquor store with a total GLFA of 1,357m²
- > Three (3) fast food restaurants with a total GLFA of 1,081m²
- > 11 large format retail (LFR) tenancies with a total GLFA of 17,367m²
- > Retail stores including kiosks with a total GLFA of 1,342m²
- > Mini major with a GLFA of 600m²
- > Commercial tenancies with a total GLFA of 1,394m²
- > A grocery store with a GLFA of 1,533m²
- > A supermarket with a GLFA of 3,759m²
- > A library with a GLFA of 287m²
- > A swimming pool with a GLFA of 602m²

The expected opening year for Stage 1 of the Town Centre is 2026 resulting in a design year for stage 1 of the development of 2036 being 10 years after the completion of stage 1. By the design year it is assumed that the town centre will have been completely developed.

3.3 Proposed Access

Four (4) accesses are proposed for the ultimate town centre off the external road network.

- > New northern leg at the Dalrymple Road / Bishop Putney Avenue traffic signals
- > LILO access forming a T intersection with Dalrymple Road, over 200m east of the Dalrymple Road / Shaw Road traffic signals
- > LILO access forming a T intersection with Shaw Road, approximately 300m north of the Dalrymple Road / Shaw Road traffic signals

Two (2) roundabouts are proposed within the site, connected by an internal east-west road. Two (2) internal north-south roads connect the roundabouts to the town centre's main entrances off Dalrymple Road. These two accesses will be the only accesses provided as part of Stage 1 of the Greater Ascot Town Centre and are assessed as part of the TIA.

The service station proposed on the northwest corner of the Dalrymple Road / Bishop Putney Avenue traffic signals is proposed have a LILO access approximately 15m north of the traffic signals.

4. DEVELOPMENT TRAFFIC

4.1 Traffic Generation

Traffic generation for Stage 1 and the balance of the town centre was estimated following a review of the "Guide to Traffic Generating Development, RTA (2002)".

The "Guide to Traffic Generating Development, RTA (2002)" specifies the following for calculating peak hour vehicle trips for each amenity:

- > 'Section 3.6.2 Service stations and convenient stores' estimates 287 vehicle trips in the evening peak for a service station with convenient store facilities.
- > 'Section 3.6.4 Car tyre retail outlets' estimates one (1) evening peak hour vehicle trip per 100m² of site area. The car service station generates 14 evening peak hour vehicle trips.
- > 'Section 3.7.1 Drive-in take away food outlets' estimates 100 vehicles trips in the evening peak hour for a fast-food outlet with dine-in and drive-in takeaway facilities.
- > 'Section 3.11.3 Childcare centres' estimates 0.7 vehicles trips per child in the evening peak hour. The proposed childcare centre with capacity for 120 children generates 84 vehicle trips.
- > It is assumed that the traffic generation of the proposed carwash is included in the traffic generation of the service station site.
- > 'Section 3.7.2 Restaurants' estimates an evening peak hour trip generation of 5 vehicle trips per 100m² of GLFA. Therefore, it is estimated that the tavern, liquor store beer garden will generate 68 vehicle trips.
- > 'Section 3.6.1 Shopping centres' estimates a generation rate of 51 vehicle trips for fast trade department stores per 1000m² of GLFA in the evening peak hour. Therefore, the Mini major with a GLFA of 600m² will generate 31 vehicle trips.
- > 'Section 3.6.1 Shopping centres' estimates a generation rate of 46 vehicles trips for specialty shops per 1000m² of GLFA in the evening peak hour. Therefore, the retail/kiosk stores with a combined GLFA of 1,342m² will generate 62 vehicle trips.
- > 'Section 3.6.8 Bulky goods retail stores' estimates a generation rate of 2.5 vehicle trips per 100m² of GLFA in the evening peak hour. It is assumed that the 11 large format retail tenancies with a total GLFA of 17,367m² will generate a total of 447 vehicle trips.
- > 'Section 3.5 Offices and Commercial' estimates a generation rate of 2 vehicle trips per 100m² of GLFA in the evening peak hour. The commercial tenancies with a GLFA of 1,394m² will generate 28 vehicle trips. The library with a GLFA of 287m² is assumed to generated traffic at a similar rate to commercial tenancies resulting in generation of 6 vehicle trips by the library during the evening peak hour.
- > 'Section 3.6.1 Shopping centres' estimate a generation rate of 155 vehicle trips in the evening peak hour per 1000m² of GLFA for grocery stores and supermarkets. The proposed grocery store and supermarket generate 238 and 583 vehicle trips.
- > 'Section 3.8.2 Gymnasiums' estimate a generation rate of 9 vehicle trips per 100m² in the evening peak hour. The proposed swimming pool will generate 54 vehicle trips.

The traffic generated by Stage 1 and the balance of the town centre development are documented in Table 1. Stage 1 of the town centre is estimated to generate a total of 585vph with the fully developed town centre estimated to generate 2,402vph in evening peak hour.

Table 1: Traffic generated by Stage 1 and balance of the town centre and residential precincts

	Amenity	GLFA	Peak hour traffic
Stage 1	Service station and convenient store	385m ²	287vph
	Car service centre	367m ²	14vph
	Two (2) fast-food restaurants	510m ²	200vph
	Childcare centre	954m ²	84vph
	Carwash	190m ²	-
	Stage 1 total	2,406m²	585vph
Balance	Tavern, liquor store and beer garden	1,357m ²	68vph
	Three (3) fast-food restaurants	1,081m ²	300vph
	11 large format retail tenancies	17,367m ²	447vph
	Retail stores	1,342m ²	62vph
	Mini major	600m ²	31vph
	Commercial tenancies	1,394m ²	28vph
	Grocery store	1,533m ²	238vph
	Supermarket	3,759m ²	583vph
	Library	287m ²	6vph
	Swimming pool	602m ²	54vph
	Balance total	29,322m²	1,817vph
TOTAL	31,728m²	2,402vph	

If the entire town centre were assessed as a single land use, RTA specifies Thursday evening peak hour generation rates of 12.3 vehicles per 100m² of GLFA for shopping centres of less than 10,000m² GLFA, 7.6 vehicles per 100m² of GLFA for shopping centres of 10,000-20,000m² GLFA, 5.9 vehicles per 100m² of GLFA for shopping centres of 20,000-30,000m² GLFA and 4.6 vehicles per 100m² of GLFA for shopping centres of 30,000-40,000m² GLFA. Based on these generation rates, the peak hour traffic volumes estimated for Stage 1 and full development of the town centre are 296vph and 1,460vph. These estimates are significantly less than the total traffic generation estimated based on consideration of separate land uses.

RTA states with respect to shopping centres that:

- > The incidents of linked and multi-purpose trips can reduce overall trip generation rates;
- > A multi-purpose trip is where more than one shop or facility is visited; and
- > With multi-purpose trips, an average discount of about 20% is suggested, with this figure reducing with increasing centre size, with rates of 25% (less than 10,000m² GLFA), 20% (10,000-30,000m² GLFA) and 15% (over 30,000m² GLFA) indicative.

Based on a discount rate of 25% for multi-purpose trips for Stage 1 of the development, a total of 146vph will be discounted from Stage 1 development traffic resulting in a net traffic generation of **439vph** which is still 48% greater than the traffic generation of a shopping centre with the same GLFA.

Based on a discount rate of 15% for multi-purpose trips for the fully developed town centre, a total of 360vph will be discounted from the town centre traffic resulting in a net traffic generation of **2,042vph**. Even with discounting for multi-purpose trips the fully developed town centre generates 41% more when traffic generation is estimated based on separate land uses than when treating the entire town centre as a single shopping centre.

It is assumed that 50% of the traffic generated by the town centre is inbound and 50% is outbound during the Thursday evening peak hour.

4.2 Trip Distribution

The "Transport Assessment Guide draft document" (Queensland Transport, 1995) defines three (3) shopping centre trip types as follows:

- > New trips are trips which would have not appeared on either the immediate approaches, local network or regional network prior to the opening of the shopping centre. These trips only appear as a consequence of the opening of the centre.
- > Diverted trips are linked trips (i.e. in conjunction with another trip purpose) which are diverted off the regional road network to access the shopping centre.
- > Drop-in trips are linked trips (i.e. in conjunction with another trip purpose) which would have appeared in the local road network irrespective of the presence of the shopping centre.

Table 2 adapted from the "Guide to Traffic Management Part 12: Traffic Impacts of Development (AGTM12-16) shows the typical proportion of trips of various type for shopping centre development.

Table 2: Segmentation of traffic generation for shopping centre (AGTM12-16)

Development	Trip Segmentation		
	New	Diverted	Drop-in
Shopping centres > 20,000 m ²	63%	18%	19%
Shopping centres 3,000 m ² – 20,000 m ²	50%	22%	28%
Shopping centres < 3,000 m ²	50%	32%	18%
Fast food outlets	40%	25%	35%

Based on Table 2, the following is assumed for Stage 1 of the town centre:

- > 50% of development traffic (219vph) are new trips which are attracted from the surrounding area. New trips will be distributed in proportion to the existing pattern of weekday evening peak hour traffic exiting the study area, that is, 40% north, 25% east, 25% south and 10% west.
- > 32% of development traffic (140vph) are diverted trips which divert from Shaw Road to Dalrymple Road to access the town centre.
- > 18% of development traffic (79vph) are drop-in trips which will already be passing the development site on Dalrymple Road but drop-in to the town centre.

Based on Table 2, full development of the town centre will have a different segmentation of traffic than Stage 1. Furthermore, development of the Greater Ascot internal road network and the surrounding emerging community will result in through traffic on the extension of Bishop Putney Avenue north of Dalrymple Road. Therefore, the following is assumed for full development of the town centre

- > 63% of development traffic (1,286vph) are new trips which are attracted from the surrounding area. The distribution of new trips is assumed to be the same with full development of the town centre as at Stage 1.
- > 18% of development traffic (368vph) are diverted trips which divert from Shaw Road or Dalrymple Road to access the town centre.
- > 19% of development traffic (388vph) are drop-in trips which will already be passing the development site on the Greater Ascot internal road network but drop-in to the town centre.

4.3 Development Traffic Volumes on the Network

Based on the traffic generation estimated in Section 4.1 and trip distribution detailed in Section 4.2, Figure 11 and Figure 12 show the estimated development traffic volumes on the network in the Thursday evening peak hour at the completion of Stage 1 and full development of the town centre. Figures showing the new trips, diverted trips and drop-in trips are enclosed in Appendix I.

Traffic volumes have been rounded to the nearest whole number which may result in slight inconsistencies in values.

Figure 11: Development traffic at the completion of Stage 1

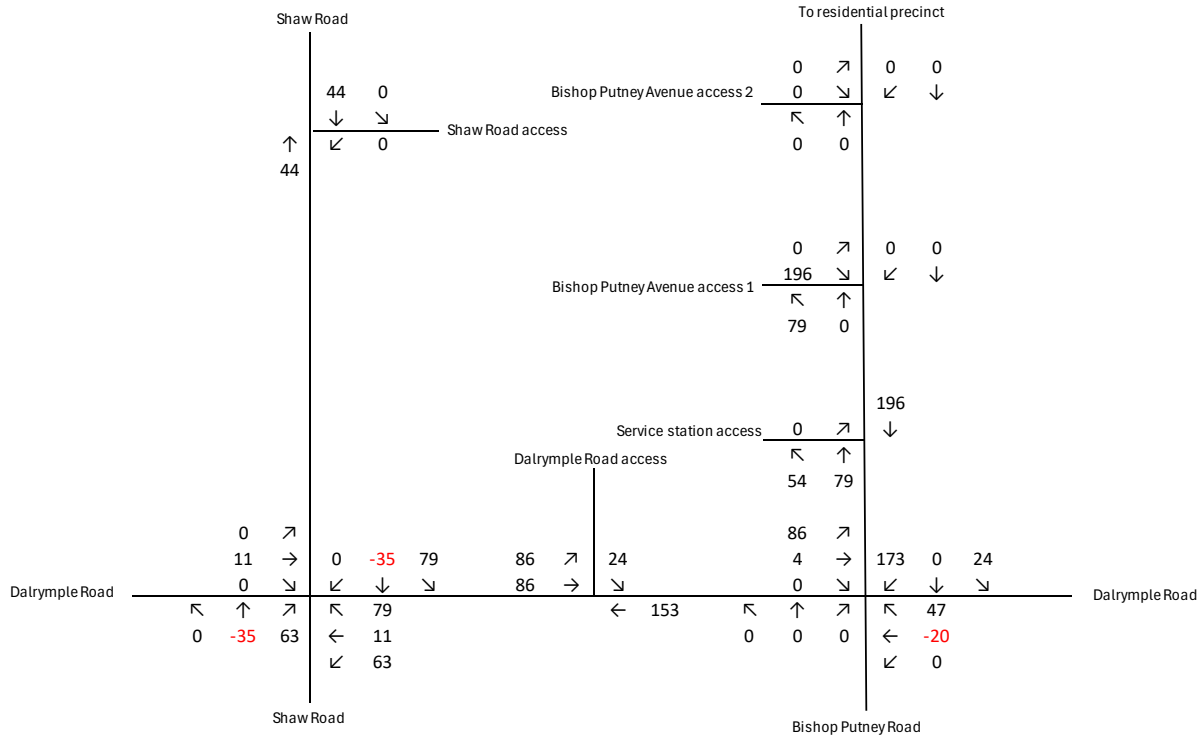
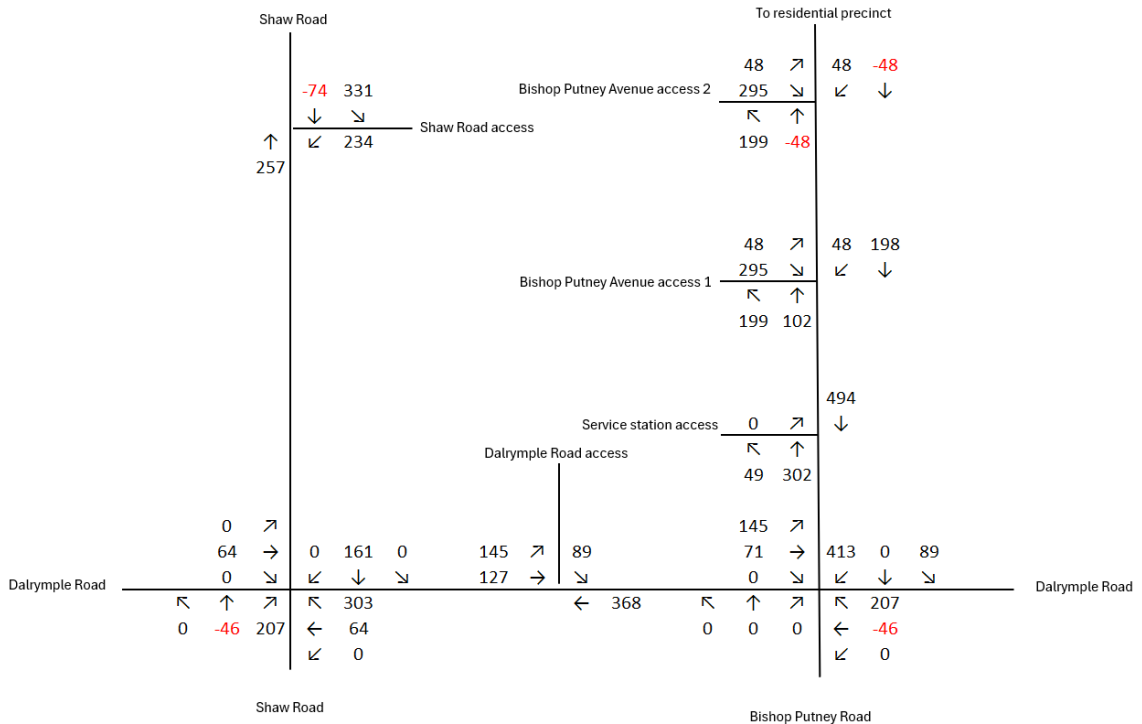


Figure 12: Development traffic at the completion of the town centre



5. IMPACT ASSESSMENT AND MITIGATION

5.1 With and Without Development Traffic Volumes

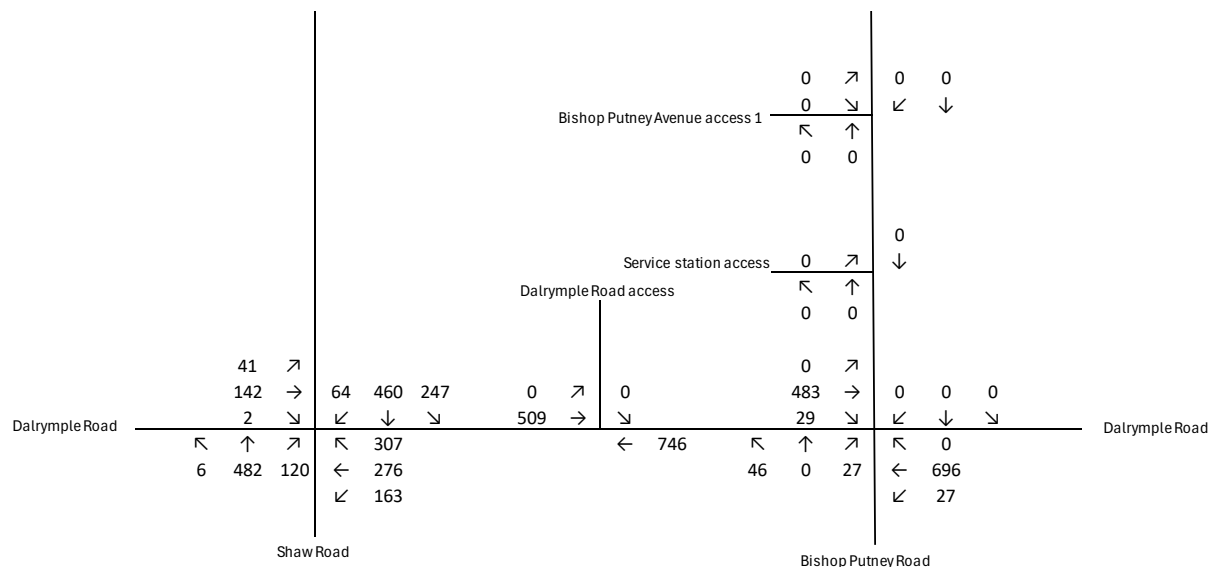
5.1.1 “WITHOUT DEVELOPMENT” TRAFFIC VOLUMES

5.1.1.1 Opening Year (2026) “Without Development” Traffic Volumes

Existing (2025) traffic volume data was taken from the traffic surveys undertaken at the Shaw Road / Dalrymple Road traffic signals and the Dalrymple Road / Bishop Putney Avenue traffic signals in January 2025. In accordance with TMR’s “Guide to Traffic Impact Assessment: Frequently Asked Questions (December 2017)” (GTIA:FAQ) as the anticipated year of opening for Stage 1 of the town centre is within three (3) years of the collection of traffic count data (refer Section 2.4), the existing (2025) traffic data is adopted as opening year (2026) “without development” traffic.

Figure 13 shows the “without development” traffic volumes for the opening year (2026).

Figure 13: “Without development” traffic volumes for the opening year (2026)



5.1.1.2 Design Year (2036) “Without Development” Traffic Volumes

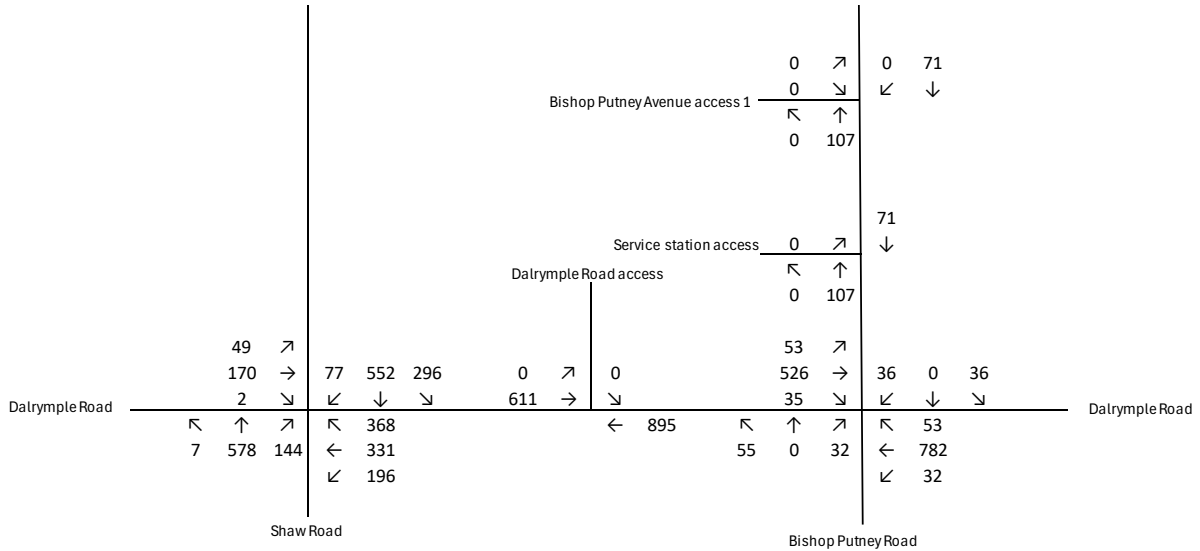
Based on TCC’s Information Request (refer Appendix C), a growth rate of 2% per annum is adopted to calculate the increase in background traffic between the collection of existing traffic volumes in 2025 (refer Section 2.4) and the 2036 which is 10 years after completion of Stage 1 of the town centre (design year) and the assumed completion date for the final stage of the town centre (Town Centre completion year).

With continuing development of the Greater Ascot internal road network and surrounding emerging communities (refer Section 2.2), it is expected that a proportion of the dwellings in the residential precinct north of the town centre will use the Greater Ascot internal road network to access the town centre. Section 3.3.1 of the “Guide to Traffic Generating Development, RTA (2002)” estimates a generation rate of 0.85 vehicle trips per dwelling in the weekday evening peak hour. A total of 178 vehicle trips, generated by 209 dwellings, will be added onto the intersection in the Thursday evening

peak hour. As a result, there will be a reduction in residential traffic heading eastbound at the Dalrymple Road / Bishop Putney Avenue traffic signals. It is assumed that the directional split for the trips generated by the residential precinct is 60% inbound and 40% outbound in the evening peak hour.

Figure 14 shows the “without development” traffic volumes for the design year (2036).

Figure 14: “Without development” traffic volumes for the design year (2036)

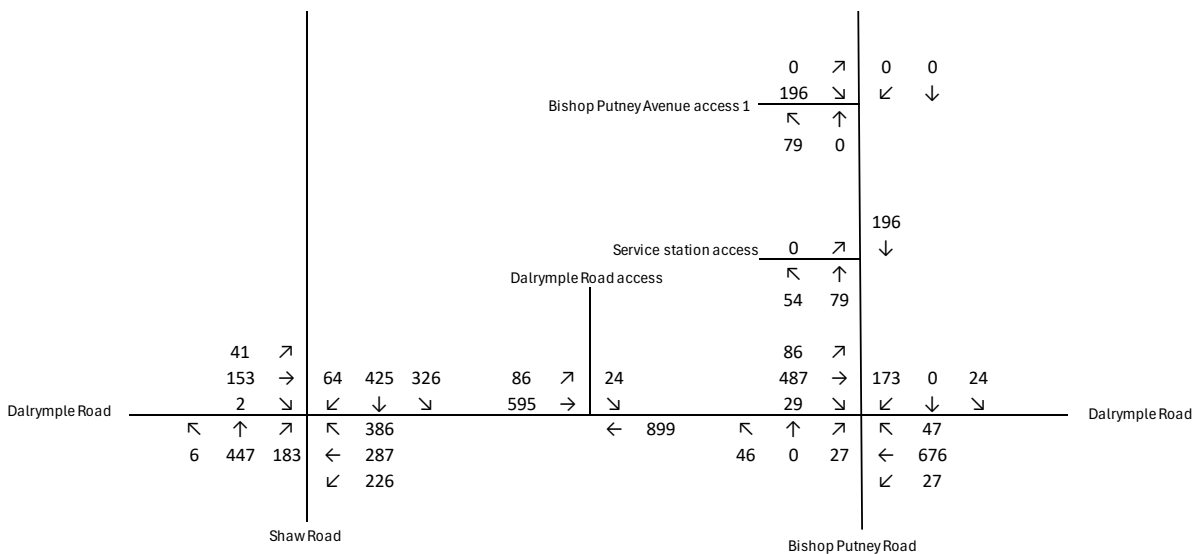


5.1.2 “WITH DEVELOPMENT” TRAFFIC VOLUMES

5.1.2.1 Opening Year (2026) “With Development” Traffic Volumes

“With development” traffic volumes shown in Figure 15 for the opening year (2026) is the sum of the development traffic in Figure 11 and “without development” traffic in Figure 13.

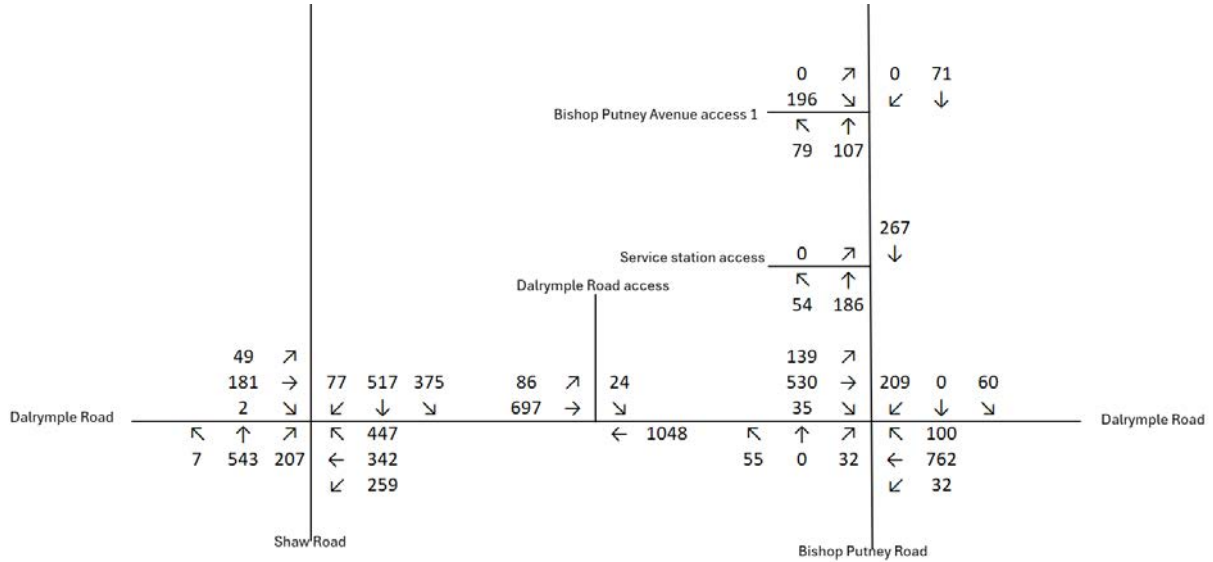
Figure 15: “With development” traffic volumes for the opening year (2026)



5.1.2.2 Design Year (2036) "With Development" Traffic Volumes

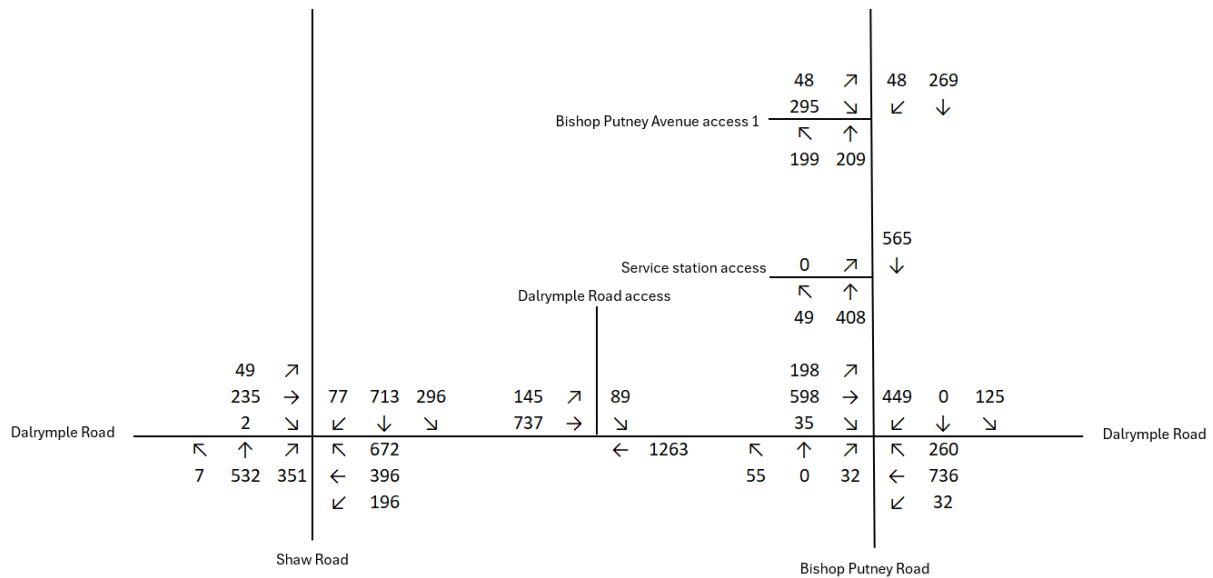
Figure 16 shows design year (2036) traffic volumes with stage 1 of the town centre. It is the sum of design year (2036) "without development" traffic shown by Figure 14 and stage 1 development traffic shown by Figure 11.

Figure 16: Design year (2036) traffic volumes with stage 1 of the town centre



"With development" traffic volumes shown in Figure 17 for the design year (2036) is the sum of the complete town centre development traffic in Figure 12 and design year (2036) "without development" traffic in Figure 14.

Figure 17: Design year (2036) traffic volumes with the complete town centre



5.2 Road Safety Impact Assessment and Mitigation

The GTIA specifies the following two (2) stage process for assessment of road safety impacts:

1. Risk Assessment to determine the change in risk profile associated with existing road safety issues as a result of the development
2. Safety Assessment to determine if changes to the road environment require either a road safety audit by an accredited road safety auditor, or a road safety assessment by either an accredited road safety auditor or a registered professional engineer of Queensland (RPEQ)

5.2.1 RISK ASSESSMENT

A road safety risk assessment was conducted in accordance with the risk assessment process specified by the GTIA, the risk assessment process involves the following steps for each risk item:

- > Evaluate potential consequences based on accident severity from 1, property damage only, to 5, fatality;
- > Evaluate potential likelihood from 1, rare, to 5, almost certain; and
- > Sum the potential consequence and likelihood values to determine the risk score with scores up to and including 4 considered low risk, 5 to 7 medium risk, and 8 or greater high risk.

Table 3 summarises the road safety risk assessment with further detail provided in the following sections.

Table 3: Road safety risk assessment

Risk item	Without development			With development			Mitigation measures	With development and mitigation		
	Likelihood	Consequence	Risk Score	Likelihood	Consequence	Risk Score		Likelihood	Consequence	Risk Score
Vehicles on adjacent approach (DCA 101, 106) at Dalrymple Road / Shaw Road traffic signals	1	4	M	2	4	M	No action.			
Opposing vehicles turning (DCA 202) at Dalrymple Road / Shaw Road traffic signals	1	3	L	2	3	M	The crash was in 2011 when the intersection was a three-legged intersection allowing filtered right turns. The intersection was converted to a four-legged intersection in 2016 removing the filtered right turns. No action required.	1	3	L
Rear end (DCA 301, 302, 303) at Dalrymple Road / Shaw Road traffic signals	2	4	M	3	4	M	No action.			
Off path (DCA 708, 802) at Dalrymple Road / Shaw Road traffic signals	1	4	M	2	4	M	No action.			
Rear end (DCA 301) at Dalrymple Road / Bishop Putney Avenue traffic signals	1	2	L	2	2	L	No action.			
Rear end (DCA 301, 303) on Dalrymple Road	1	4	M	2	4	M	No action.			
Lane changing (DCA 306) on Dalrymple Road	1	3	L	2	3	M	The crash was in 2014. The merging lane has been converted to a traffic lane in 2023, eliminating the need to merge into a single lane. No action required.	1	3	L
Off path (DCA 701) on Dalrymple Road	1	4	M	2	4	M	No action.			

5.2.1.1 “Without Development” Risk Assessment

To provide an objective assessment of the potential likelihood, Premise uses the average recurrence interval / frequency criteria listed in Table 4.

These criteria are more conservative than those suggested by TMR’s “Guide to Traffic Impact Assessment: Frequently Asked Questions (December 2017)” but are consistent with other TMR guidelines that three (3) fatal or serious injury (potential consequence 4) accidents in five (5) years (potential likelihood 4) is high risk and should be mitigated. It was found that the highest risk scores generally resulted from consideration of the highest consequence / most severe accidents.

Table 4: Potential likelihood evaluation criteria

Potential Likelihood	Average Recurrence Interval	Accidents over 16 years
Almost Certain (5)	≤ 1 year	16 or more
Likely (4)	≤ 2 years	8 to 15
Moderate (3)	≤ 4 years	4 to 7
Unlikely (2)	≤ 8 years	2 or 3
Rare (1)	> 8 years	1

Based on DCA crash groups, the following risk items are identified.

- > Dalrymple Road / Shaw Road traffic signals
 - Vehicles on adjacent approach (DCA 101, 106): There were a total of two (2) crashes. One (1) resulted in hospitalisation and one (1) resulted in property damage only. Therefore, the likelihood of a crash resulting in hospitalisation (potential consequence of 4) is rare (potential likelihood of 1). The risk score is medium.
 - Opposing vehicles turning (DCA 202): There was one (1) crash which resulted in medical treatment. Therefore, the likelihood of a crash resulting in medical treatment (potential consequence of 3) is rare (potential likelihood of 1). The risk score is low.
 - Rear end (DCA 301, 302, 303): There were a total of eight (8) rear end crashes. Three (3) resulted in hospitalisation, three (3) resulted in medical treatment and two (2) resulted in property damage only. Therefore, the likelihood of a crash resulting in hospitalisation (potential consequence of 4) is unlikely (potential likelihood of 2). The risk score is medium.
 - Off-path (DCA 708, 802): There were a total of three (3) crashes. One (1) resulted in hospitalisation, one (1) resulted in medical treatment and one (1) resulted in property damage only. Therefore, the likelihood of a crash resulting in hospitalisation (potential consequence of 4) is rare (potential likelihood of 1). The risk score is medium.
- > Dalrymple Road / Bishop Putney Avenue traffic signals
 - Rear end (DCA 301): There was one (1) rear end crash which resulted in minor injury. Therefore, the likelihood of a crash resulting in minor injury (potential consequence of 2) is rare (potential likelihood of 1). The risk score is low.
- > Dalrymple Road
 - Rear end (DCA 301, 303): There were a total of three (3) rear end crashes. One (1) resulted in hospitalisation and two (2) resulted in medical treatment. Therefore, the likelihood of a crash

resulting in hospitalisation (potential consequence of 4) is rare (potential likelihood of 1). The risk score is medium.

- Lane changing (DCA 306): There was one (1) crash which resulted in medical treatment. Therefore, the likelihood of a crash resulting in medical treatment (potential consequence of 3) is rare (potential likelihood of 1). The risk score is low.
- Off path (DCA 701): There was one (1) crash which resulted in hospitalisation. Therefore, the likelihood of a crash resulting in hospitalisation (potential consequence of 4) is rare (potential likelihood of 1). The risk score is medium.

5.2.1.2 With Development” Risk Assessment

To provide an objective assessment of the potential likelihood increase due to a development, Premise uses the volume ratio of with development traffic and without development traffic (“with development” traffic divided by “without development” traffic) listed in Table 5.

Table 5: Potential likelihood increase criteria

Potential Likelihood Increase	Volume Ratio (R)
+4 bands	$8 < R$
+3 bands	$4 < R \leq 8$
+2 bands	$2 < R \leq 4$
+1 band	$1.05 < R \leq 2$
No increase	$R \leq 1.05$

The volume ratio (R) is calculated by comparing the “with development” traffic volumes to “without development” traffic volumes in the complete development opening year (2036). R is 1.3 at the Shaw Road / Dalrymple Road traffic signals, 1.6 at the Dalrymple Road / Bishop Putney Avenue traffic signals and 1.7 on Dalrymple Road. Therefore, the potential likelihood increases by one (1) band as a result of the development traffic introduced onto the road network.

5.2.2 SAFETY ASSESSMENT

In addition to the risk assessment process in Section 5.2.1, any changes to access configurations, nearby intersections, bus stop locations, cycling facilities, footpaths and so on, once designed, should be assessed to identify if they introduce any additional safety issues. There are two (2) potential levels of assessment of these changes detailed in the GTIA, namely:

- > Road safety assessment; and
- > Road safety audit.

The level of assessment required relates to the road environment the development is accessing and the scale of the potential risk, based on the scale of the development. Table 6 and Table 7 define the level of safety risk, and the assessment required.

Table 6: Road environment safety matrix (level of risk)

Traffic volume (AADT)	Speed (km/h)		
	Up to 50 km/h	60 km/h to 70 km/h	80 km/h+
≤ 8000	Low	Medium	Medium
> 8000	Medium	Medium	High

Table 7: Type of road safety assessment based on road environment safety rating

Development type	Road environment safety rating		
	Low	Medium	High
Major Development	road safety assessment	road safety audit	road safety audit
Planning Act Development	road safety assessment	road safety assessment	road safety audit

With a posted speed limit of 80km/h and a traffic volume greater than 8,000vpd on Dalrymple Road, the road network is assessed by the GTIA to be a high-risk environment. Therefore, as the proposed development is a planning act development, a Road Safety Audit (RSA) is recommended. The RSA must be undertaken by an accredited road safety auditor registered on TMR register of approved RSA professionals.

5.3 Access and Frontage Impact Assessment

5.3.1 TURN WARRANT ASSESSMENT

Premise has reviewed the turn warrant requirements as part of the overall intersection review with reference made to the TMR’s Supplement to the Austroads Guide to Roads Design (AGRD), Part 4A (Figure 4A-A4). This assessment review is for the proposed LILO access on Dalrymple Road and the LILO access on Bishop Putney Avenue.

5.3.1.1 LILO access on Dalrymple Road

The turn warrant assessments of the LILO access on Dalrymple Road for the Stage 1 opening year (2026) and design year (2036) are shown in Figure 18 and Figure 19.

Figure 18: Turn warrant assessment at the LILO access on Dalrymple Road for Stage 1 opening year (2026)

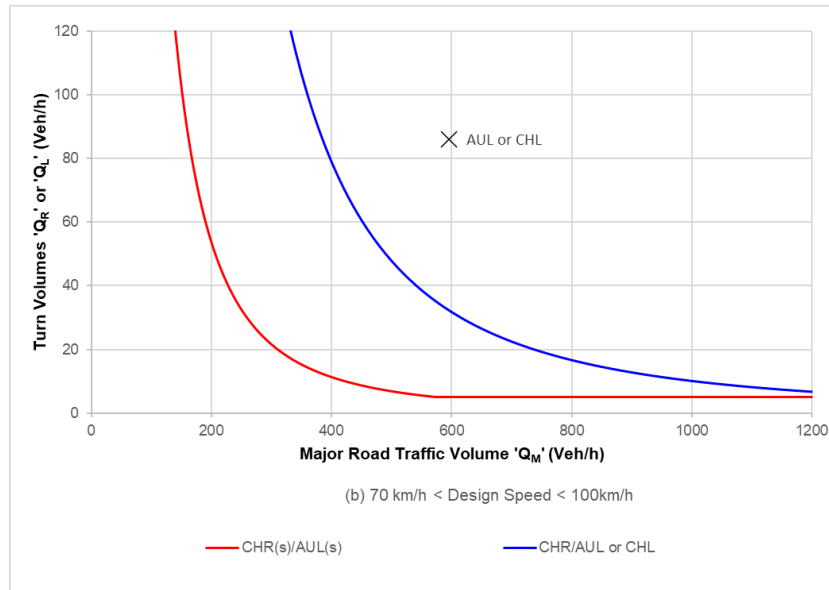
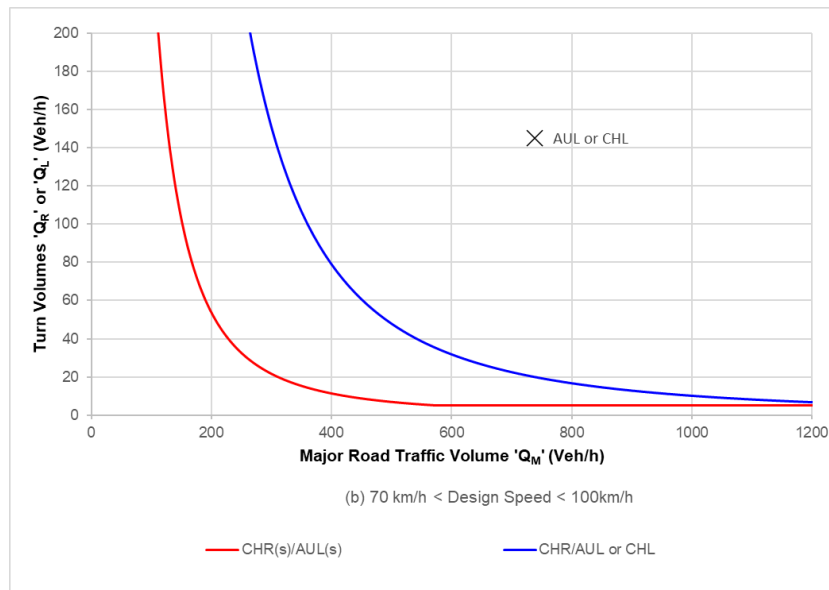


Figure 19: Turn warrant assessment at the LILO access on Dalrymple for Road design year (2036)



The access warrants a Channelised Left turn treatment (CHL) or an Auxiliary Left turn treatment (AUL) in the Normal Design Domain (NDD) for a design speed of 90km/h at the completion of Stage 1. This corresponds to a full length left turn deceleration lane. No further upgrades are required at the completion of the complete town centre.

5.3.1.2 LILO Access on Bishop Putney Avenue

The turn warrant assessments of the LILO access on to the service station on Bishop Putney Avenue for the Stage 1 opening year (2026) and design year (2036) are shown in Figure 20 and Figure 21.

Figure 20: Turn warrant assessment at the LILO access to the service station for Stage 1 opening year (2026)

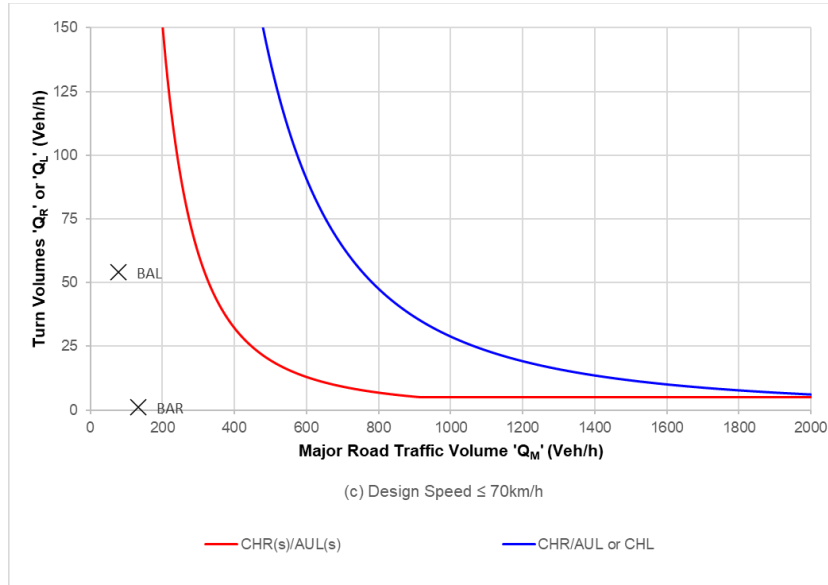
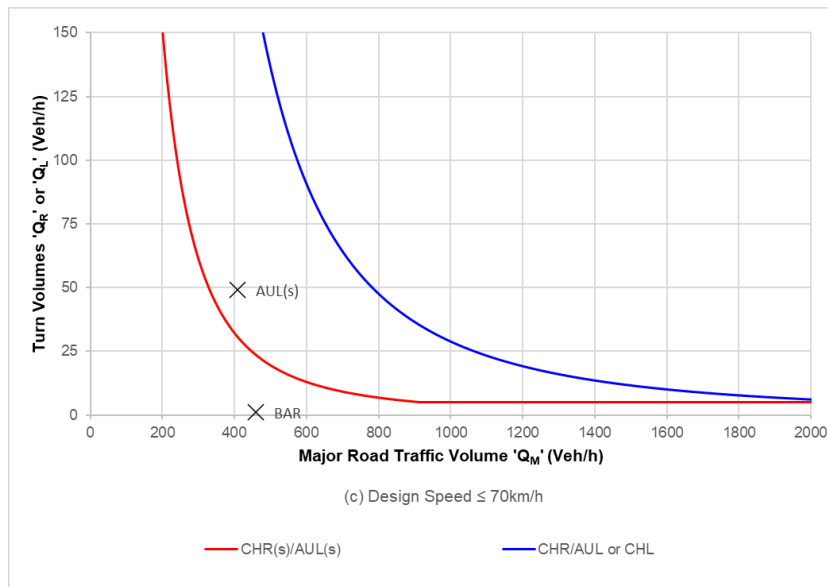


Figure 21: Turn warrant assessment at the LILO access to the service station for design year (2036)



The access warrants a Basic Left turn treatment in the NDD for a design speed of 50km/h at the completion of Stage 1, however, with future growth in through traffic on Bishop Putney Avenue the access may warrant an Auxiliary Left turn treatment with a short lane [(AUL(s))].

5.3.2 INTERSECTION ANALYSIS

Intersection performance has been assessed using SIDRA Intersection Version 9.1 (SIDRA). SIDRA is an advanced micro-analytical traffic tool for the evaluation of intersections. SIDRA reports intersection performance in terms of a range of parameters including:

- > Demand Volumes (V): The modelled number of vehicles arriving at the intersection during the assessment hour. Demand volumes are calculated by dividing the peak hour volume by the peak flow factor (PFF). SIDRA's default PFF of 95% has been adopted for all movements.
- > Degree of Saturation (DoS): The ratio of the demand volume, V, to the theoretical capacity. An intersection is considered to be operating at its practical capacity when the DoS reaches 0.85 for a roundabout and 0.90 for traffic signals.
- > Average Delay (D): The mean control delay including both queuing delay and geometric delay for all vehicles arriving during the assessment period including the delay experienced after the end of the flow period until the departure of the last vehicle arriving during the flow period. The GTIA specifies that average delays exceeding 42 seconds for any movement at a priority-controlled intersection or roundabout is a safety issue.
- > Back of Queue Length (Q): The maximum backward extent of the queue relative to the stop line or give-way / yield line during a signal cycle or gap acceptance cycle below which 95% of all queue lengths fall (95th percentile back of queue) or 50% of all queue lengths fall (average back of queue). The 95th percentile back of queue length is generally accepted as the maximum queue length for design purposes.

SIDRA modelling is based on the following assumptions:

- > The proportion of heavy vehicles (HV%) is 5% for all movements.
- > SIDRA default peak flow factor (PFF) of 95% is retained.
- > Pedestrian crossings (where present) are utilised by 30 pedestrians per hour.
- > Noting that traffic signals in the study area, despite being part of intersection groups, do not currently operate with coordinated cycle times (refer Section 2.5), traffic signals are assumed operate with the site optimum (minimum delay) cycle time.

5.3.2.1 Dalrymple Road / Bishop Putney Avenue Traffic Signals

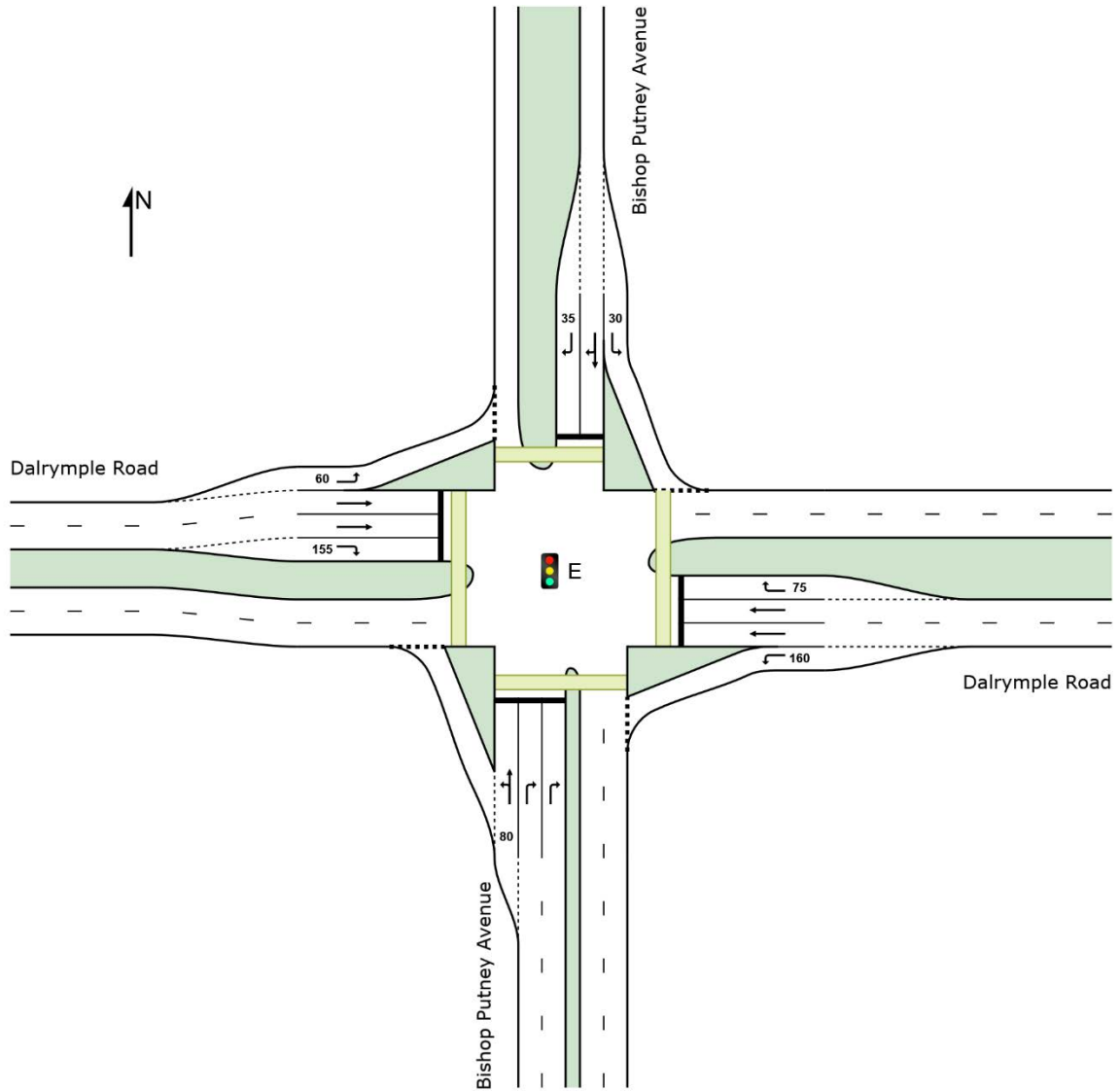
SIDRA analysis for the Dalrymple Road / Bishop Putney Avenue traffic signals is enclosed in Appendix J indicates that:

- > At completion of stage 1, based on opening year (2026) "with development" traffic shown by Figure 15, the existing intersection layout with the northern leg shown by development plans (refer Section 3.1) will operate below practical capacity with a maximum DoS of 0.585 with a cycle time of 90sec. This cycle time is consistent with cycle analyser data discussed in Section 2.5.2 which indicates the signals currently operate with cycle times in the range 30sec to 242sec and an average cycle time of 96sec. Vehicle queues will not impact on the operation of adjacent intersection and will generally be accommodated within the existing / proposed short lanes. The one exception is traffic exiting the proposed development which turns right from the north leg of Bishop Putney Drive to Dalrymple Road westbound. The 95th percentile back of queue length for this movement is determined by SIDRA to be 8 car lengths or 55m and would likely extend beyond the short right

turn lane shown on the architect's drawings though it would not be expected to impact on the adjacent roundabout. Possible solutions for this situation would be to either:

- Mark the right turn lane as the full-length lane with the through (and left) lane marked as a short lane (as on the south leg of the intersection); or
 - As the signals use split phasing for Bishop Putney Drive approaches, the through lane could be marked as a shared through-and-right lane.
- > With stage 1 development in the design year (2036) as shown by Figure 16, the existing intersection layout with the northern leg shown by development plans (refer Section 3.1) will operate below practical capacity with a maximum DoS of 0.708 with a cycle time of 90sec. With growth in Dalrymple Road traffic, traffic exiting the proposed development which turns right from the north leg of Bishop Putney Drive to Dalrymple Road westbound will have 18.8% chance of queuing into the adjacent roundabout if queuing in a single lane.
- > To mitigate the risk of the proposed roundabout being impacted by vehicles queuing on the north leg of Bishop Putney Avenue to turn right onto Dalrymple Road westbound it is recommended that the southbound through lane on Bishop Putney Avenue is marked as a shared through-and-right turn lane as shown by Figure 22. With the existing phase arrangement, the recommended Dalrymple Road / Bishop Putney Avenue signalised crossroads operates below practical capacity with a maximum DoS of 0.683 with a cycle time of 90sec. Vehicle queues can be accommodated within the existing / proposed short lanes and would not impact on adjacent intersections.
- > The recommended Dalrymple Road / Bishop Putney Avenue signalised crossroads layout shown by Figure 22 was analysed with design year (2036) traffic with full development of the proposed town centre as shown by Figure 17. With no change to the existing phase arrangement the traffic signals operate below practical capacity with the maximum DoS being 0.858 with a cycle time of 90sec. SIDRA modelling suggests the following potential queuing issues:
- Without allowing for signal coordination there is a 30% chance that vehicles queuing on the Dalrymple Road east to turn right into Bishop Putney Avenue northbound will overflow the existing short lane. This likelihood could be reduced with signal coordination along Dalrymple Road.
 - With no more than 19% of development traffic attracted from residential development within Greater Ascot (refer Section 4.2) and assuming all development traffic with destination to the west and north must turn right out of Bishop Putney Avenue (refer Figure 12), there is a 34.3% chance that traffic queuing on Bishop Putney Avenue north to turn right onto Dalrymple Road will impact on the operation of the proposed upstream roundabout. As future development applications are lodged with respect to ongoing development of the town centre this risk should be reassessed. The issue may be mitigated by upgrades to the Dalrymple Road / Bishop Putney Avenue traffic signals which could be delivered as part of a link improvement plan by TCC as the road authority responsible for Dalrymple Road, changes to the transport network internal to Greater Ascot (refer Figure 4), or behavioural changes such as mode shift or rescheduling of trips.

Figure 22: Recommended Dalrymple Road / Bishop Putney Avenue signalised crossroads Stage 1 layout



5.3.2.2 Proposed Roundabout

The roundabout that will be constructed north of the Dalrymple Road / Bishop Putney Avenue traffic signals as part of the development was analysed based on “with development” traffic volumes for the opening year (2026) and with the complete town centre for the design year (2036). A summary of the analysis is detailed below, and the SIDRA output reports are attached in Appendix K.

- > Stage 1 opening year (2026) “with development” traffic
 - The roundabout is operating below its practical capacity. The left and right movements on the west leg have the highest DoS of 0.124. All movements are operating at level of service (LoS) A with the maximum delay to any movement being 6.4sec and queues are not expected to exceed one (1) vehicle.
- > design year (2036) “with development” traffic including full town centre development
 - The roundabout is operating below its practical capacity with the maximum DoS being 0.301 on the south approach to the roundabout. All movements are operating at LoS A with the maximum delay to any movement being 6.8sec for right turners and 95th percentile back of queue lengths are approximately two (2) vehicles on all intersection legs.

5.3.3 INTERSECTION LAYOUTS

Initial review of development plans confirms that the design of the LILLO access on Dalrymple Road, Dalrymple Road / Bishop Putney Avenue signalised crossroads, and Bishop Putney Avenue access roundabout:

- > Comply with relevant Austroads guidelines; and
- > Can accommodate a 19m articulated vehicle which is the largest vehicle which may operate on Dalrymple Road without requiring a permit.

Design standards for site accesses and works on local government roads should be specified in conditions of approval to ensure compliance is achieved when detailed design commences.

5.3.4 SIGHT DISTANCES

The GTIA specifies minimum sight distance requirements for intersections as the Approach Sight Distance (ASD) required to the road surface at all intersections and accesses. ASD is defined in the “Guide to Road Design Part 4A: Unsignalised and Signalised Intersections” (Austroads 2017). Austroads also provides formulas for calculating the acceptable minimum sight distances.

ASD is the distance at which a driver can see any line marking on the road surface at the intersection. ASD should be sufficient to allow a driver to react to the intersection and, if necessary, come to a complete stop before entering the intersection. Minimum ASD is calculated using the formula;

$$ASD = \frac{R_T \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)}$$

where:

- R_T = reaction time (2 seconds for a higher speed urban area)
- V = design speed (90km/h on Dalrymple Road and 60km/h on Bishop Putney Avenue)
- d = coefficient of deceleration (0.61 for cars braking on dry, sealed roads)
- a = longitudinal grade (0 for a relatively flat grade)

5.3.4.1 LILO Access on Dalrymple Road

The reaction time is two (2) seconds for a high-speed urban area. Dalrymple Road has a posted speed limit of 80km/h at the site frontage, and therefore, a design speed of 90km/h is used in the ASD calculations. The coefficient of deceleration is 0.46 on normal road conditions in the Normal Design Domain (NDD). The minimum required ASD at the LILO access on Dalrymple Road is 119m. Figure 23 shows that visibility is unobstructed over the 420m from Shaw Road to Bishop Putney Avenue and therefore site distance at the proposed mid-block LILO access is acceptable.

Figure 23: Dalrymple Road looking east from Shaw Road to Bishop Putney Avenue



5.3.4.2 LILO to the Service Station

The proposed LILO access to the service station is located approximately 15m north of Dalrymple Road / Bishop Putney Avenue intersection. Due to the site constraints, the ASD calculated for the NDD cannot be achieved. Therefore, the ASD at the LILO access is calculated based on a range of values for the Extended Design Domain (EDD). ASD for the EDD is calculated by the same process as that used for the NDD. The main difference with EDD is that less conservative values which are below the lower bound of the NDD are used. The reaction time of 1.5 seconds and a coefficient of deceleration of 0.61 is used to calculate the ASD for the EDD.

Table 8 summarises the ASD values in both the NDD and EDD for design speeds up to 60km/h.

Table 8: The minimum required ASD values in NDD and EDD

Design speed	Minimum required ASD for NDD	Minimum required ASD for EDD
20km/h	15m	11m
25km/h	20m	15m
30km/h	25m	19m
40km/h	36m	27m
50km/h	49m	37m
60km/h	64m	48m

Based on the values in Table 8, a vehicle turning at the Dalrymple Road / Bishop Putney Avenue traffic signals left turn slip lane will have to do so at a speed of 20km/h or lower for the NDD and at a speed of 25km/h or lower for the EDD to comply with the 15m of ASD available at the LILO access to the service station.

It is expected that turning vehicles will slow down to give way to traffic coming through the traffic signals but without stop control of the slip lane it is not reasonable to rely on the vehicles travelling at less than 25km/h. A more reasonable turning speed for the left turn slip lane is considered to be 30km/h. Therefore, it is recommended that the LILO access is moved approximately 5m to the north to comply with the minimum required ASD for the EDD of 19m.

5.4 Intersection Delay Impact Assessment and Mitigation

As specified in the GTIA, TMR considers that it is unreasonable to require quantifying the impacts on intersection delays unless a proposed development creates an increase in traffic over a particular threshold level. This threshold level applies to all SCR intersections where the development traffic exceeds 5% of the base traffic for any movement in the design peak hour in the year of opening (2026). This impact assessment area is limited to the Shaw Road / Dalrymple Road signalised crossroads.

Intersection delay impacts are assessed using SIDRA (refer Section 5.3.2). If the additional delays created by traffic generated by the development exceeds 5% of the base traffic for any movement, it needs to be mitigated by upgrade works. All SIDRA outputs for the Intersection Delay Impact Assessment are attached in Appendix L. Preliminary analysis based on the optimum (least delay) cycle time resulted in a program determined cycle time of 70sec which is considered too short to align with existing intersection performance (refer Section 2.5.1). Therefore, a user given cycle time of 110sec was adopted for consistency with the average cycle time during the period from 4:00PM to 5:00Pm on Thursday 23 May 2024.

5.4.1 INTERSECTION DELAY WITHOUT DEVELOPMENT

SIDRA output for the Dalrymple Road / Shaw Road traffic signals for Stage 1 opening year (2026) “without development” traffic volumes as shown by Figure 13 is summarised in Table 9. The key points are:

- > The traffic signals are operating well below practical capacity with the maximum DoS being 0.553 < 0.90.
- > The maximum average delay to any movement is 63.4sec for the right turn from Shaw Road south to Dalrymple Road eastbound with the average delay to all vehicles being 32.7sec.
- > Short lanes can accommodate all 95th percentile back of queue lengths.

Table 9: SIDRA output for Stage 1 opening year (2026) “without development” traffic volumes

Movement	Volume (veh)	Degree of Saturation	Delay (sec)	Queue length (veh)
South approach: Shaw Road				
Left	6	0.005	8.4	0.1
Through	507	0.549	33.8	14.4
Right	126	0.553	63.4	3.5
East approach: Dalrymple Road				
Left	172	0.146	10.8	2.6
Through	291	0.470	31.7	12.4
Right	323	0.551	38.4	14.3
North approach: Shaw Road				
Left	260	0.177	7.0	2.1
Through	484	0.543	32.5	14.5
Right	67	0.517	61.9	3.7
West approach: Dalrymple Road				
Left	43	0.055	14.6	0.8
Through	149	0.552	56.3	4.2
Right	2	0.552	62.0	4.2

5.4.2 INTERSECTION DELAY WITH DEVELOPMENT

SIDRA output for the Dalrymple Road / Shaw Road traffic signals for Stage 1 opening year (2026) “with development” traffic volumes as shown by Figure 15 is summarised in Table 10. The key points are:

- > The traffic signals will continue to operate below practical with the maximum DoS being 0.627 < 0.90.
- > The maximum average delay to any movement is 63.8sec for the right turn from Shaw Road north to Dalrymple Road westbound with the average delay to all vehicles increasing by 1% to 33.0sec.
- > Short lanes will continue to accommodate all 95th percentile back of queue lengths.

Table 10: SIDRA output for Stage 1 opening year (2026) “with development” traffic volumes

Movement	Volume (veh)	Degree of Saturation	Delay (sec)	Queue length (veh)
South approach: Shaw Road				
Left	6	0.005	8.4	0.1
Through	471	0.559	36.2	13.7
Right	193	0.591	60.3	5.3
East approach: Dalrymple Road				
Left	238	0.183	9.2	2.9
Through	302	0.440	28.4	12.2
Right	406	0.623	36.7	18.0
North approach: Shaw Road				
Left	343	0.241	7.4	3.3
Through	447	0.627	38.6	14.5
Right	67	0.590	63.8	3.8
West approach: Dalrymple Road				
Left	43	0.058	16.4	0.9
Through	161	0.594	56.8	4.5
Right	2	0.594	62.4	4.5

5.4.3 INTERSECTION DELAY IMPACT AND MITIGATION

An intersection delay impact assessment was undertaken in accordance with the GTIA for the Dalrymple Road / Shaw Road traffic signals as shown by Table 11. This indicates that the net increase in delays to “without development” traffic as a result of stage 1 of the town centre is 3.0% which is acceptable, and no mitigation of intersection delay impacts is required.

Table 11: Dalrymple Road / Shaw Road traffic signals intersection delay impact assessment

Movement	Without Development			With Development		
	Demand Volume, V	Average Delay, D	Total Delay, BC (= VxD)	Average Delay, D'	Total Delay, WD (= VxD')	Delay Impact, ID (=WD-BC)
South Approach: Shaw Road						
Left	6	8.4	50.4	8.4	50.4	0.0
Through	507	33.8	17136.6	36.2	18353.4	1216.8
Right	126	63.4	7988.4	60.3	7597.8	-390.6
East Approach: Dalrymple Road						
Left	172	10.8	1857.6	9.2	1582.4	-275.2
Through	291	31.7	9224.7	28.4	8264.4	-960.3
Right	323	38.4	12403.2	36.7	11854.1	-549.1
North Approach: Shaw Road						
Left	260	7.0	1820.0	7.4	1924.0	104.0
Through	484	32.5	15730.0	38.6	18682.4	2952.4
Right	67	61.9	4147.3	63.8	4274.6	127.3
West Approach: Dalrymple Drive						
Left	43	14.6	627.8	16.4	705.2	77.4
Through	149	56.3	8388.7	56.8	8463.2	74.5
Right	2	62.0	124.0	62.4	124.8	0.8
Total	2430		79498.7		81876.7	2378.0
					103.0%	✓ 3.0%

5.5 Other Assessments

5.5.1 INTERSECTION SPACING

5.5.1.1 Access to service station on Bishop Putney Avenue

Based on the sight distance assessment in Section 5.3.4.2, it is recommended that the service station access on Bishop Putney Avenue is relocated 5m to the north to provide 20m of separation between the left turn slip lane and the service station access.

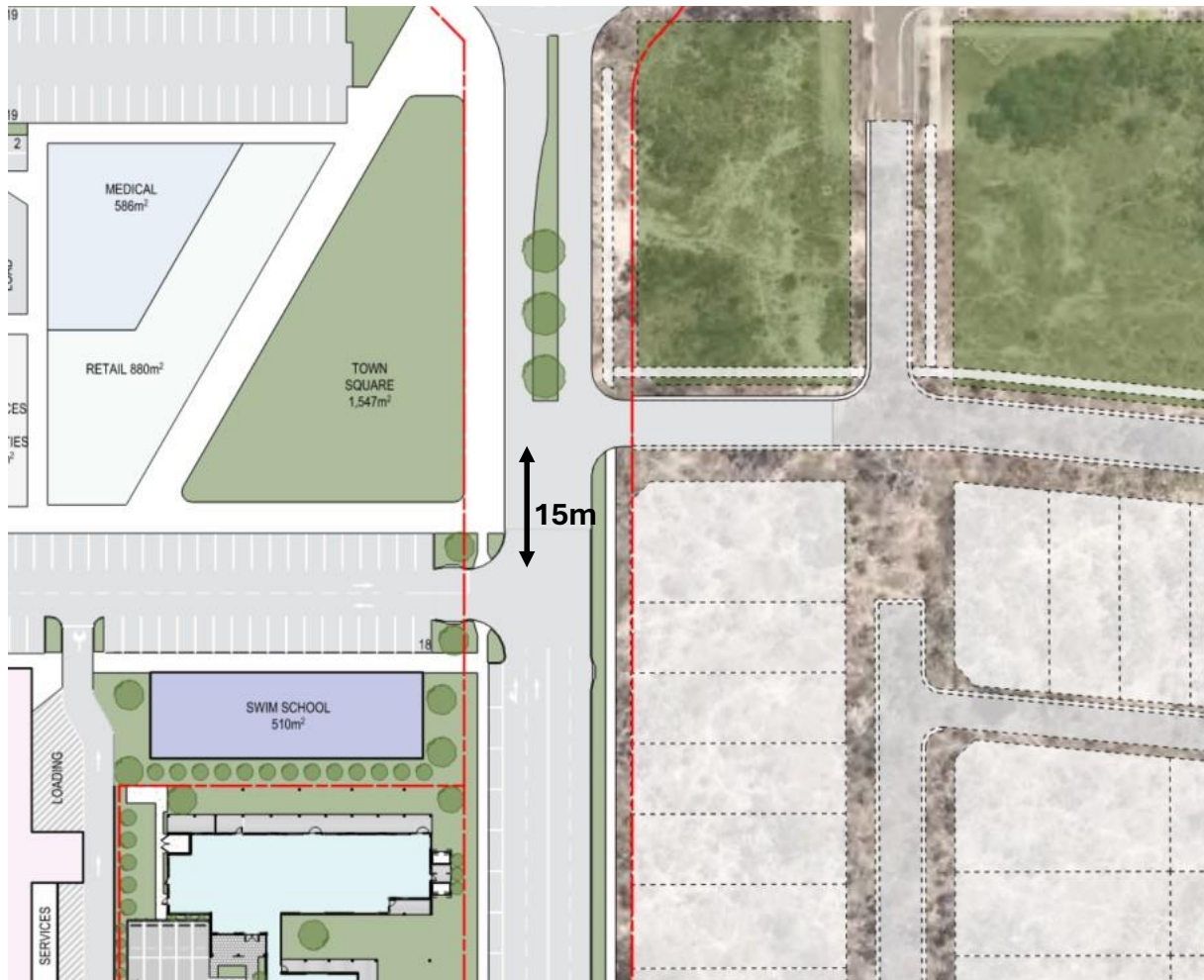
The turn warrant assessment undertaken in Section 5.3.1.2 determined that an AUL(s) turn treatment is required at the LILO access to the service station in the NDD. For a design speed of 50km/h. Austroads' 'Guide to Road Design Part 4A: Unsignalised and Signalised Intersections' specifies that the minimum diverge /deceleration length required for a short lane is 15m which is consistent with the access location recommended based on the sight distance assessment.

Moving the service station access 5m north will reduce the spacing between the service station access and the roundabout on Bishop Putney Avenue to approximately 19m. The output of the SIDRA analysis of the roundabout at the completion of the town centre is enclosed in K. The maximum expected queue length on the southern leg of the roundabout is 38m, which is equivalent to approximately five (5) vehicles. The queuing is likely to block egress from the service station in the peak hour but not the flow of entering traffic. Vehicles intending to turn left out of the service station will have to wait for queues from the roundabout to dissipate. This it is not expected to cause significant delays to vehicles exiting the service station as the queues at the roundabout will dissipate quickly with the roundabout operating at an acceptable level of service.

5.5.1.2 Staggered intersection

A staggered intersection proposed in a future stage of the town centre on the extension of Bishop Putney Drive north of the proposed stage 1 access roundabout has a separation of approximately 15m from a proposed street intersection connecting to residential development to the east as shown in Figure 24. This separation provides sufficient storage space for two (2) turning vehicles. It is recommended that two (2) right turn pockets are marked to guide drivers

Figure 24: Staggered intersection proposed on the new road



5.5.2 SARA ADVICE NOTICE RESPONSE

5.5.2.1 State Code Performance Outcomes

The SARA Advice notice enclosed in Appendix B states that previous assessments did not demonstrate compliance with performance outcomes PO19, PO20, PO25 and PO26 of 'State Code 1: Development in a state-controlled road environment' (State Code 1) as well as 'State Code 6: Protection of state transport network' (State Code 6). The following responds to the identified performance outcomes of State Code 1 (no performance outcomes from State Code 6 were identified).

- > PO19: New or changed access to a local road within 100 metres of an intersection with a state-controlled road does not compromise the safety of users of the state-controlled road.

No new or changed accesses to a local road are proposed within 100m of an intersection with a state-controlled road.

- > PO20: New or changed access to a local road within 100 metres of an intersection with a state-controlled road does not adversely impact on the operating performance of the intersection.

No new or changed accesses to a local road are proposed within 100m of an intersection with a state-controlled road.

- > PO25: Development does not compromise the safety of users of the state-controlled road network.

The road safety impact assessment contained in Section 5.2 indicates that the development does not compromise the safety of road users.

Based on analysis of 16 years of historic road crash data a number of potential safety issues were identified in the study area with all being assessed as low or medium risk. Of these issues, the development could potentially increase the risk of right turn opposed or lane change crashes from low to medium however, this potential increase in risk has already been mitigated by the removal of filter right turns from signalised intersections and the duplication of Dalrymple Road removing the eastbound merge on the Shaw Road traffic signals departure.

- > PO26: Development ensures no net worsening of the operating performance of the state-controlled road network.

The intersection delay impact assessment contained in Section 5.4 indicates that there will be no net worsening of the operating performance the state-controlled road network as a result of the development.

The intersection delay impact assessment completed in accordance with the GTIA indicates that the increase in delay to without development traffic due to stage 1 of the town centre will be 3.0% (<5%) which is acceptable.

5.5.2.2 Compliance with MI11/0064 Conditions

The SARA advice notice states that the proposed LILO access on Dalrymple Road is inconsistent with the previous state approval (refer Section 1.1). This statement relates to Condition 3 of the Concurrence Agency Response enclosed in Appendix A.

The Concurrence Agency Response states under the reasons for Condition 3 that:

Specifically, this LILO [left-in-left-out] access point is located within the merge lane on Dalrymple Road. This merge lane is required to accommodate the double right turn movement from Shaw Road. An access point on this merge lane would create conflict between merging vehicles on Dalrymple Road and vehicles exiting the Subject Land at this location.

This reasoning is no longer valid as the duplication of Dalrymple Road between Shaw Road and Greater Ascot Avenue in 2023/ 2024 removed this merge.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of Impact and Mitigation Measures

Parkside is proposing to develop Stage 1 of the Greater Ascot town centre on the northeast corner of Dalrymple Road / Shaw Road intersection in Shaw. A new road link will be constructed on the northern leg of the Dalrymple Road / Bishop Putney Avenue traffic signals, providing access to the town centre and residential precincts north of the proposed town centre. This TIA assesses the impacts of the traffic generated by the Stage 1 of the town centre and also considers the impacts of future town centre stages on accesses to be constructed as part of the stage 1 development.

Stage 1 of the town centre is expected to generate a total of 439 vehicle trips in the Thursday evening peak hour, of which 219 would be new trips, 140 diverted trips and 79 drop-in trips. The balance of the town centre is expected to generate a total of 2,042 vehicle trips in the Thursday evening peak hour, of which 1,286 would be new trips, 368 diverted trips and 388 drop-in trips.

The TIA is completed in accordance with the Guide to Traffic Impact Assessment (GTIA) resulting in the following conclusions and recommendations:

- > Condition 3 of the Development Permit – Material Change of Use (Impact) MI11/0064, prohibited the provision of the proposed left-in / left-out (LILO) on Dalrymple as it was located within the merge lane that was accommodating the double right turn movement from Shaw Road. This condition no longer applies as the merge lane has been removed. No new or changed accesses to a local road are proposed within 100m of an intersection with a state-controlled road.
- > Dalrymple Road has a posted speed limit of 80km/h and a traffic volume greater than 8,000vpd, and therefore, it is assessed by the GTIA to be a high-risk environment. It is recommended that a road safety audit (RSA) be undertaken, by a TMR accredited road safety auditor, to assess the proposed LILO access on Dalrymple Road and proposed changes to the lane arrangement at the Bishop Putney Avenue / Dalrymple Road traffic signals.
- > The LILO access on Dalrymple Road warrants a full length left turn deceleration lane.
- > The LILO access to the service station on Bishop Putney Avenue warrants an AUL(s) turn treatment with a short lane length of 20m. It is recommended that the service station access is moved approximately 5m to the north to provide a 20m short lane.
- > The minimum required approach sight distance (ASD) at the LILO access on Dalrymple Road is 119m. With 420m of unobstructed sight distance available between Shaw Road and Bishop Putney Drive available sight distance at the mid-block LILO access is acceptable.
- > The proposed LILO access to the service station on Bishop Putney Avenue is located approximately 15m north of Dalrymple Road / Bishop Putney Avenue intersection. Due to site constraints, the ASD was calculated using extended design domain (EDD) values. A vehicle turning at the left turn slip lane will have to do so at a speed of 25km/h or lower for the EDD to comply with an ASD of 15m. It can be assumed that the majority of the vehicles will be turning at a speed of 30km/h or lower. It is recommended that the LILO access is moved approximately 5m to the north to provide 19m of ASD corresponding to the minimum EDD requirement for a design speed of 30km/h.

- > Based on SIDRA analysis of the roundabout proposed the highest degree of saturation (DoS) is 0.301 which occurs with full development of the town centre. The roundabout is expected to operate well below its practical capacity (DoS < 0.85).
- > Based on SIDRA analysis of the Dalrymple Road / Bishop Putney Avenue traffic signals, it is recommended that the existing southbound through lane on Bishop Putney Avenue is converted to a shared through-and-right lane to support stage 1 of the town centres. This change will ensure that vehicles queueing on the north approach to Dalrymple Road do not adversely impact on the operation of the adjacent Bishop Putney Avenue access roundabout while retaining the existing phase arrangement at the Dalrymple Road / Bishop Putney Avenue signalised crossroads. When future development applications are submitted, queuing on Bishop Putney Avenue between Dalrymple Road and the access roundabout should be reassessed.
- > An intersection delay impact completed in accordance with the GTIA confirmed that stage 1 of the proposed town centre will result in no net worsening of the operating performance of the state-controlled road network.
- > A staggered intersection proposed in a future stage of the town centre on the extension of Bishop Putney Drive north of the proposed stage 1 access roundabout has a separation of approximately 15m from a proposed street intersection connecting to residential development to the east. This separation provides sufficient storage space for two (2) turning vehicles. It is recommended that two (2) right turn pockets are marked to guide drivers.

6.2 Certification Statement and Authorisation

This report was prepared by Prineth Fernando (RPEQ 32194) and Bradley Jones (RPEQ 19986). The Traffic Impact Assessment Certification in accordance with the GTIA is attached in Appendix M.

APPENDICES

APPENDIX A

Development Permit – Material Change of Use (MI11/0064)

PLANNING AND DEVELOPMENT

DEVELOPMENT ASSESSMENT



Date >> 04 October 2013



Parkside Development Pty Ltd
C/- Brazier Motti
595 Flinders Street
TOWNSVILLE QLD 4810

TOWNSVILLE CITY COUNCIL
ADMINISTRATION BUILDING
103 WALKER STREET

PO BOX 1268, TOWNSVILLE
QUEENSLAND 4810

TELEPHONE >> 07 4727 9001
FACSIMILE >> 07 4727 9052

enquiries@townsville.qld.gov.au
www.townsville.qld.gov.au

DEVELOPMENT APPLICATION NEGOTIATED DECISION NOTICE *Sustainable Planning Act 2009 (SPA)*

The request for a Negotiated Development Permit with **Material Change of Use (Impact) – (MI11/0064) Neighbourhood Centre** was assessed and partially **APPROVED SUBJECT TO CONDITIONS**. The decision was made on **3 October 2013**.

The following schedule provides all the relevant details.

1. Applicant details

Name and address	Parkside Development Pty Ltd C/- Brazier Motti 595 Flinders Street TOWNSVILLE QLD 4810
Applicant Reference	26700-003-02

2. Property description

Assessment number	13901025
Property address	890 Dalrymple Road SHAW QLD 4818
Legal description	Lot 6 SP 107219

3. Application details

Application number	MI11/0064
Assessing officer	Cassie James
Approval applied for	Development Permit
Development type	Material Change of Use (Impact)
Description	Neighbourhood Centre
Assessed under	City of Thuringowa Planning Scheme

4. Decision Notice History

Original Decision Decided	28 May 2013
Negotiated Decision Decided	3 October 2013

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5. Conditions

The conditions of this approval are set out in the Schedule of Conditions (attached). The conditions are identified to indicate whether the assessment manager or a concurrence agency imposed them.

6. The Nature of the changes

Condition 2	Commencement of Trade	Amended
Condition 3(b)	Amended Plans	Remain
Condition 15(i)	Carparking	Deleted
Condition 16(c)	Stormwater Drainage	Amended

7. Further development permits required for this development

Development Permit – Operational Work
Development Permit – Building Work

8. Compliance assessment required under part 10 of the *Sustainable Planning Act 2009*.

Condition 2 – Commencement of Trade
Condition 3 – Amended Plans
Condition 5 – Building Materials
Condition 12 – Screening of Plants & Utilities
Condition 15 – Car Parking
Condition 16 – Stormwater Drainage
Condition 17 – Stormwater Quality Management
Condition 18 – Sewerage Reticulation
Condition 19 – Water Supply
Condition 22 – Landscaping Plan
Condition 23 – Roadworks & Traffic
Condition 25 – Bicycle Facilities

9. Code for self assessable development

All self assessable development related to the development approval must comply with the relevant codes identified in the City of Thuringowa Planning Scheme 2003.

10. Referral agencies

Concurrence agency >> Department of Transport and Main Roads
PO Box 1089
TOWNSVILLE QLD 4810

Advice agency >> Department Of Environment And Heritage
Protection
Administration Officer
Permit and Licence Management
Implementation and Support Unit
GPO Box 2454
BRISBANE QLD 4001

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Advice agency >> Principal Town Planner
Ergon Energy
PO Box 15107
CITY EAST QLD 4002

Advice agency >> Powerlink Queensland
PO Box 1193
VIRGINIA QLD 4014

11. Submissions

There were 2 properly made submissions received regarding this application.

Perpetual Trustee Company Limited
C/- Dexus Wholesale Property Limited
PO Box R1822
ROYAL EXCHANGE NSW 1225

Stockland Commercial Property
C/- RPS Australia East
PO Box 977
TOWNSVILLE QLD 4810

12. Conflict with a relevant instrument

The assessment manager does not consider that this decision conflicts with a relevant instrument.

13. When approval lapses

Section 341 of the *Sustainable Planning Act 2009* establishes when an approval lapses.

14. Rights of appeal

Sections 461, 481, 482, 485, 488, 490 of the *Sustainable Planning Act 2009* indicate the Right of Appeal and these sections are attached for your information.

Yours faithfully

For Assessment Manager

Planning and Development

Appendices >> Conditions;
Referral Agency's Responses;
Adopted Infrastructure Charge Notice;
Submission List;
Rights of Appeal.

Enclosed >> Approved Plans

AMENDED DEVELOPMENT PERMIT

MATERIAL CHANGE OF USE (MI11/0064) NEIGHBOURHOOD CENTRE

1. Site Layout

- a) The proposed development must generally comply with drawings as referenced in the table below, which forms part of this application, except as otherwise specified by any condition of this approval.

DRAWING NAME	DRAWING NO.	REVISION NO.	REV./STAMP DATE
Site Plan: Master Plan	SD 1002	J	13 July 2012
Floor Plan	SD 2001	E	22 February 2013
Elevations	SD 3001	F	22 February 2013
Extent of Road and Pathway Networks	PAR071/SK04	2	1 March 2013

- b) The proposed development must comply with all conditions of this approval prior to commencement of the use.
- c) The proposed development must comply with all Planning Scheme requirements as applying at the date of this application, except as otherwise specified by any condition of this approval.

2. Commencement of Trade

The Neighbourhood Centre is not to commence trade until the number of dwellings in the Primary Trade Area as defined on *Map 2.1 – Greater Ascot Primary Trade Area* of the Location IQ Report (dated June 2012) reaches a minimum of ~~2,000~~ **1,900** constructed dwellings.

The Relevant Period for this approval applies up to and including a period of eighteen (18) months from the achievement of 1,900 constructed dwellings in the Primary Trade Area as defined on *Map 2.1 – Greater Ascot Primary Trade Area* of the Location IQ Report (dated June 2012).

3. Amended Plans

Prior to the issue of a Development Permit for Building Works, the developer must provide amended plans to Council for approval which includes the following:

- a) Provide updated plans removing the central parking on the Major Collector Access Road between Cherington Boulevard and Lockton Street.

Advice Note: The remainder of the centre parking is accepted, but may be required to be removed if the total traffic volume on the road exceeds 10,000 vpd, or if more than 50% of the total traffic volume is through traffic.

- b) The developer must either:
 - i) Provide a study in accordance with AustRoads Traffic & Road Use Management Manual - Pedestrian Crossing Facility Guidelines & Prioritisation System User Guide demonstrating the suitability of installing zebra crossings in the proposed locations; or
 - ii) Provide amended plans showing an alternative suitable means of providing pedestrian crossings across the Major Collector Access Road.
- c) Provide further details on the proposed bus stops along the Major Collector Access Road, including:
 - i) Confirmation from the Department of Transport and Main Roads that these stops are appropriately located; and
 - ii) Proposed design and location of bus shelters to be constructed by the developer.
- d) The centre car parking area between Lockton Street and Blackmoor Wood must be amended to accommodate a minimum of 4 shade trees.

4. Maximum Floor Area

The premises must have a maximum gross lettable area (GLA) of 5,464m².

5. Building Materials

Prior to the issue of a Development Permit for Building Work, the developer must submit to, and be approved in writing by Council the details of the external building materials and colours to be used as part of this development. In particular,

- a) Details of the treatments and materials proposed to be used on the building façade along the Dalrymple Road and Unnamed Eastern Road frontages to create visual interest (ie. public art, mixture of textures) for pedestrians at the street frontage;
- b) Amendments to the eastern elevation to show the detailed design treatments for the south-eastern façade of the Neighbourhood Centre. The treatment must provide aesthetic interest and allow recognition as a visual marker; and

- c) All buildings and structures associated with the use must be constructed from materials and painted an appropriate colour that is sympathetic to the surrounding environment.

6. Signage

Should signage associated with the use exceed 2m², the developer must submit plans of the signage as an application for Operational Works for approval by council prior to commencement of the use. Details must include the location of the signage, construction materials, size of the sign and graphic content. All signage must comply with the City of Thuringowa Planning Scheme Policy for Advertising Devices. Approved signs must be maintained to the satisfaction of council.

7. Storage of Materials and Machinery

All materials and machinery to be used during the construction period are to be wholly stored on the site, unless otherwise approved by council.

8. Storage

Goods, equipment, packaging material or machinery must not be stored or left exposed outside the building so as to be visible from any public road or thoroughfare. Any storage on site is required to be screened from view from all roads and adjacent properties.

9. Site Appearance

The site is to be kept in a clean and tidy condition at all times to the satisfaction of council.

10. Lighting

- a) The developer must ensure all internal and external lighting is fitted with shades and erected in a manner that ensures that adjoining premises and roads are not affected.
- b) Lighting must be provided in accordance with the *Australian/New Zealand Standard AS/NZS1158 Lighting for Roads and Public Spaces*.

11. Property Numbering

Effective property numbers must be erected at the premises prior to the commencement of the use and be maintained to the satisfaction of the Council.

The site identification numbers should be of reflective material, maintained free from foliage and other obstructions, and be large enough to be read from the street.

12. Screening of Plant and Utilities

- a) Plant and utilities including air-conditioners must not be visible from the street. The developer must submit a plan identifying the location of all plant and utilities and details of aesthetic screens. Details must be submitted to and approved by Council prior to the issue of a Development Permit for Building Works.
- b) The aesthetic screens must be installed prior to the commencement of the use and must be maintained thereafter to the satisfaction of Council.

13. Refuse Facilities

Refuse collection arrangements must be provided by the developer so as to achieve the requirements of the Centres Planning Area, in accordance with the *General Development Code of the City of Thuringowa Planning Scheme*. In particular,

- a) The storage area is to be of sufficient size to house all waste containers. The storage area is to be an imperviously paved area, graded and drained through an approved sediment/silt trap to a legal sewer connection with a hose cock and hose fitted in close proximity to the enclosure.
- b) The minimum overhead clearance required for mobile garbage (wheelie) bin refuse collection is 4200mm. Access for the collection of the bins is not to be impeded by any overhead obstructions such as trees, wires or other structures. This minimum height clearance is to be maintained at all times.
- c) The minimum overhead clearance required for bulk bin refuse collection is 6500mm. Access for the collection of bins is not to be impeded by any overhead obstructions such as trees, wires or other structures. This minimum height clearance is to be maintained at all times.
- d) The bulk refuse storage facilities must be:
 - i) a suitable enclosure with an impervious floor, with dimensions which exceed the size of the nominated bin size by at least 300mm at the rear and both sides and 600mm at the front;
 - ii) within the curtilage of the premises in an accessible location to receive the service;
 - iii) graded and drained through an approved sediment/silt trap to a legal sewer connection;
 - iv) provided with a hose cock and hose in close proximity to the enclosure.
 - v) enclosure must be screened and not visible from any street frontage.

14. Relocation of Utilities

The developer must be responsible for any relocation and/or alteration to any public utility installation required as a result of any works carried out in connection with this development at no cost to council.

15. Car Parking

- a) All car parking facilities, associated ramps and driveways must be constructed in accordance with council Standards and as detailed in the latest amendment of the Australian/New Zealand Standard AS/NZ 2890 and must be maintained thereafter to the standard.
- b) The minimum car parking classifications for off-street carparking applicable to this development are as per Table 1.1 in AS/NZS 2890.
- c) The layout of the on-site car parking spaces must be designed to ensure that all vehicles entering and leaving the site may do so in a forward direction.
- d) The developer must provide a minimum of two hundred and seventy-four (274) car spaces including disabled parking on site in accordance with Australian/New Zealand Standard AS/NZ2890.
- e) The developer must erect signage indicating the location of the entry and exits to the car parks, specific use bays (e.g. visitor, disabled, bus, taxi, bicycle, loading, etc.), as well as regulatory signs controlling movement within the car park.
- f) All exposed services provided within the car parking area must be suitably screened so as to conceal any unsightly elements. Details of such screening must be submitted to and approved in writing by council prior to the issue of a Development Permit for Building Work.
- g) The car parking area must be suitably screened so as to prevent light spillage from the car park areas and car headlights into adjoining properties and roads. Details of such screening must be submitted to and approved in writing by council prior to the issue of a Development Permit for Building Work.
- h) All signage and line marking for off-street car parking must comply with the requirements of AS/NZS2890 and AS1742 and associated standards.
- i) All signage and line marking for on-street car parking and traffic control must comply with the requirements of the Department of Transport and Main Roads (DTMR) Manual of Uniform Traffic Control Devices (MUTCD) and associated standards.

- j) ~~The developer must provide details to ensure the balance of the development site is treated to minimise dust nuisance (ie. bitumen sealing or grassed with irrigation) for approval prior to the issue of a Development Permit for Building Works.~~

16. Stormwater Drainage

Prior to the issue of a Development Permit for Building Works, certification by an appropriately qualified and experienced Registered Professional Engineer of Queensland (RPEQ) of the following requirements must be provided to achieve, in particular:

- a) The development site must be graded so that it is free draining. All runoff from storms naturally falling into this development site (including roof runoff) must be collected within the property boundaries and discharged to the lawful point of discharge through stormwater infrastructure constructed by the Developer.
- b) The developer must ensure that no ponding of stormwater occurs on adjacent allotments and that no stormwater formerly flowing onto their development site is diverted onto other neighbouring allotments.
- c) The developer must ensure that the post development discharge of stormwater from the subject land ~~does not exceed pre-development peak flows~~ **is in accordance with the Stormwater Management Master Plan for the Greater Ascot development, as agreed with Council.**
- d) Overland flow paths and underground drainage must be designed so as not to directly or indirectly cause nuisance to a downstream or adjoining property.
- e) Details of the stormwater infrastructure works must be submitted to and approved as part of Compliance Assessment for the development.
- f) Following the completion of any works for the purposes of stormwater drainage, a stormwater drainage certificate from a Registered Professional Engineer of Queensland (RPEQ) must be submitted to and endorsed by Council. The stormwater drainage certificate must verify that the completed stormwater works associated with the proposed use has been constructed in accordance with the approved design.

17. Stormwater Quality Management

A stormwater quality management plan (SQMP) must be submitted to and be approved by council prior to the issue of a Development Permit for Building Work. The SQMP must be prepared by a suitably qualified person*.

In particular, the SQMP must adopt the water quality strategy of council's Coastal Dry Tropics Water Sensitive Urban Design Technical Design Guidelines.

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The SQMP must be implemented in accordance with the guideline and incorporate any further reasonable requests from council. All works must be carried out in accordance with council Development Specifications.

- * Suitably Qualified Person as defined by the State Planning Policy 4/10 Healthy Waters.

18. Sewerage Reticulation

The developer must construct all necessary sewerage infrastructure to connect the site to the nearest existing sewerage infrastructure. Details of the sewerage reticulation works must be submitted and approved as part of Compliance Assessment for the development.

19. Water Supply

The developer must construct all necessary water infrastructure to connect this site to existing infrastructure. Construction of the water infrastructure must include all fittings and valves necessary to meet Council's current standards. Details of the water reticulation works must be submitted to and approved as part of Compliance Assessment for the development.

20. Soil Erosion Minimisation, Sediment Control and Dust Control

During the construction phase of this development the developer must be responsible for the installation and maintenance of adequate erosion and sediment control management. In particular,

- a) The contingent design, implementation and maintenance of measures must be provided in accordance with *Aus-Spec Specification - C211 Control of Erosion and Sedimentation*.
- b) During the construction and maintenance phases of this development the developer must be responsible for adequate mitigation measures being put in place for the suppression of dust so as not to cause a nuisance to neighbouring property.
- c) The developer must ensure that no sediment or litter is discharged from the site into stormwater. Stormwater inlet pits on and adjacent to the development must be protected to prevent the entry of sediment and litter.

21. Vegetation Disposal

All felled trees and waste vegetation on the site must be removed from site, unless an alternative method of disposal, such as wood chipping, is approved by Council. This material must be transported to the nearest approved waste disposal facility. Burning or burying of waste vegetation on site is not permitted.

22. Landscaping Plan

- a) Prior to any works commencing on site, a landscaping plan is required to be submitted to and be approved by council as part of Compliance Assessment against the applicable Landscaping Code and/or relevant approval.

The Landscape and Irrigation Design Plans must be prepared in accordance with the relevant sections of City of Thuringowa Planning Scheme - General Development Code 5.5.1 (Landscaping). As part of the landscaping plan the following items are to be included:

- * Details of shade trees or shade sails proposed for car parking areas.
- * The developer must provide at least 4 shade trees within the centre car parking area between Lockton Street and Blackmoor Wood.
- * Details showing any trees planted in hard stand areas being provided with a minimum of 4m³ of root-ball space to ensure suitable growth.
- * Details of landscaping to the proposed outdoor dining area to enhance the streetscape and improve the amenity of this space.
- * Details of landscaping proposed to the south of the subject site, specifically the areas on the site Masterplan (drawing no. SD1002 – Issue J) marked “street parking” and “open space” including the Dalrymple Road road reserve and the 2.5m shared pathway that is to form part of the Greater Ascot path network.
- * Details of the treatment to be provided on the eastern side of the supermarket building between the building and the road.
- * The developer must provide details of the proposed street enhancements along the eastern and southern road frontages, and must include but not be limited to:
 - * Pavement type;
 - * Landscaping, including street trees;
 - * Provision of approximately 4 street trees to be provided within the centre car park;
 - * Upgrade of kerb and channel;
 - * Public art;
 - * Street furniture;
 - * Shade structures and awnings;
 - * Driveway treatments; and

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- b) The landscape plans must be prepared by a suitably Qualified person who:
- is a Qualified Landscape Architect with current membership to the Australian Institute of Landscape Architects; and/or
 - is an experienced Landscape Designer
- c) All works must be completed in accordance with the approved landscaping plan and constructed to a standard detailed within City of Thuringowa Planning Scheme - General Development Code 5.5 (Landscaping). Following the approval of the plan, with or without amendments, the developer must implement the plan prior to the commencement of the use. Furthermore, all landscaped areas must be maintained thereafter to the satisfaction of council.

23. Roadworks and Traffic

- a) The developer must provide a new access driveway and crossover to the property boundary at the developer's expense generally in accordance with Council's relevant Standard Drawings for Driveway Access and Driveway Crossovers. The access may not be provided directly from Dalrymple Road or Shaw Road.
- b) During the construction phase, any damages to the road reserve (i.e. footpath/kerb and channel) must be replaced by the developer in accordance with Council's standards.

24. Bicycle Facilities

The applicant is to provide sufficient bicycle racks in accordance with AS 2890 and the AUSTRROADS Guide to traffic Engineering Practice Part 14 - Bicycles. Details of the locations and numbers provided must be submitted with Compliance Assessment for approval by council.

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25. Further Approvals Required

a) **Compliance Assessment**

A Compliance Assessment application associated with the following conditions must be submitted to Council for approval prior to the issue of a Development Permit for Building Works, unless otherwise approved by Council:

- Condition 2 – Commencement of Trade
- Condition 3 – Amended Plans
- Condition 5 – Building Materials
- Condition 12 – Screening of Plants & Utilities
- Condition 15 – Car Parking
- Condition 16 – Stormwater Drainage
- Condition 17 – Stormwater Quality Management
- Condition 18 – Sewerage Reticulation
- Condition 19 – Water Supply
- Condition 22 – Landscaping Plan
- Condition 23 – Roadworks & Traffic
- Condition 25 – Bicycle Facilities

All engineering and landscaping designs/documentation associated with such an application must be prepared and where necessary, certified by a suitably qualified/experienced person.

b) **Operational Works**

The Developer must obtain a Development Permit for Operational Works for any advertising devices not approved as part of the Plans of Development. The Development Permit for Operational Works must be approved prior to the commencement of use.

Concurrence Agency Conditions - Department Of Transport and Main Roads

Pursuant to Section 285 and Section 287 of the *Sustainable Planning Act 2009*, the Department of Transport and Main Roads advises that it has no objection to Townsville City Council issuing a Development Permit for Material Change of Use subject to the conditions, as attached. The applicant must comply with the Department of Transport and Main Roads conditions as outlined in the Department's correspondence dated 5 August 2011.

Advice Agency – Department of Environment & Heritage Protection

Pursuant to Section 292 of the *Sustainable Planning Act 2009*, **Department of Environment & Heritage Protection** advises that it has no objection to Townsville City Council issuing a Development Permit for Material Change of Use, as attached.

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Advice Agency – Ergon Energy

Pursuant to Section 292 of the *Sustainable Planning Act 2009*, **Ergon Energy** advises that it has no objection to Townsville City Council issuing a Development Permit for Material Change of Use, as attached.

Advice Agency – Powerlink Queensland

Pursuant to Section 292 of the *Sustainable Planning Act 2009*, **Powerlink Queensland** advises that it has no objection to Townsville City Council issuing a Development Permit for Material Change of Use, as attached.

ADVICE

1. Infrastructure Charges

An Adopted Infrastructure Charges Notice outlining the estimated infrastructure contributions payable relevant to the Development Permit is attached for your information.

2. Shop Fit Out

- a) Prior to any fit out of the intended food premise, a separate application to fit out the premises must be submitted to council's Environmental Health Services for the registration of the food premise. No fit out or construction may take place before approval is granted. A food premise is anywhere food or beverages are prepared, packed, stored, handled, serviced, supplied or delivered for sale. An application must also be made for a licence to operate a food premise.
- b) Prior to any fit out of the intended hairdresser/beauty salon, a separate application must be submitted to council's Environmental Health Services for licence issue. No fit out or construction may take place before approval is granted.
- c) Prior to any fit out of the intended Skin Penetration Establishment, a separate application must be submitted to council's Environmental Health Services for Licence issue. No fit out or construction may take place before approval is granted.

3. Waste Collection

- a) The owner/occupier of the premises is required to provide an adequate number of waste containers to manage the waste generated by the activities being undertaken onsite.

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- b) The proprietor is to arrange for the removal of waste from the premises by a suitably licensed waste transport contractor approved by the local government to transport waste under Section 369A of the *Environmental Protection Act 1994*. Adequate provision must be made for the collection of the waste storage containers within the premises.
- c) The collection of putrescibles waste arising from activities undertaken on this development must be collected and removed at periods not exceeding seven days.
- d) The collection of waste is to be undertaken so as to minimize, so far as reasonably practicable excessive noise to neighboring occupants. The collection method must ensure that waste is adequately managed to prevent escape or contamination.
- e) This development has the potential to generate or handle clinical and regulated waste material. Clinical and medical related waste is to be handled in accordance with AS/NZS 3816:1998 “Australian Standard/New Zealand Standard – Management of Clinical and Related Wastes”.
- f) Where practicable, all loading and unloading shall take place within the containment area (storage area). This area is to be constructed in such a way that any spills from loading or unloading are not permitted to escape to an area subject to storm water. No clinical and related wastes shall be disposed of via the storm water drainage system.

4. Connection to Council Water Supply

A copy of this permit and the approved water reticulation design must be submitted to council for connection to council's water supply. Council will respond to the application with a quotation for the work and upon payment will schedule the works for connection.

5. Connection to Council Sewer

A copy of this permit and the approved sewer reticulation design must be submitted to council for connection to council's sewer supply. Council will respond to the application with a quotation for the work and upon payment will schedule the works for connection.

6. Roadworks Approval

The developer is responsible for obtaining a Roadworks Approval in accordance with Local Laws 4 for the installation of any hoardings, gantries or temporary road closures of the footpath or road prior to the commencement of works. The application must include the following:

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- (i) Completed Roadworks approval application form
- (ii) Prescribed fee
- (iii) Traffic Management Plan prepared by a suitably qualified traffic professional detailing the traffic management measures put in place to manage all roadworks including pedestrians, cyclists and vehicles in accordance with the Manual of Uniform Traffic Control Devices Part 3 - Works on Roads.

If the works require closure of part of the road reserve, a temporary Road Closure Permit will be required. This permit allows for a section of road reserve to be closed for the purpose of works.

The Queensland Police Service is the issuing authority for these permits. An application will need to be made to Council for a letter of no objection prior to applying to the Queensland Police Service for the permit. The Traffic Management Plan will need to be included with the application to Council.

7. Haulage of Materials

- a) Where the development of the subject site requires materials to be imported or exported in excess of 2,500m³, the developer must obtain a separate council approval for the transport route. Specific conditions may apply, including contributions towards the cost of accelerated pavement degradation along haulage routes and/or repairs to haulage routes.
- b) The approval for the route of transport must show the period and time of transport during the construction phase of the development.

8. Environmental Considerations

Construction must comply with the *Environmental Protection Act 1994*, Policies and Guidelines.

9. Trade Waste Permit

The developer is advised that a Trade Waste Permit may be required and should confirm this with council's Trade Waste Inspector.

In these conditions:

- a) A reference to an Act includes all statutory instruments and subordinate legislation made under that Act; and,
- b) Terms used have the meaning contained in the Planning Scheme, the *Integrated Planning Act 1997/Sustainable Planning Act 2009* or the relevant legislation referred to in those conditions, as the case may be.

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10. Flammable and Combustibles

Where flammable and combustible liquids are stored or handled on site, advice regarding the requirements for storage and handling of Flammable and Combustible Liquids must be obtained from The Department of Industrial Relations – Work Place Health & Safety.

11. Noise

The hours of construction and building work on site must be limited to between:

- * 6.30 a.m. to 6.30 p.m. Monday to Saturday; with
- * No work on Sundays or Public Holidays.

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28 September 2012

The Chief Executive Officer
Townsville City Council
PO Box 1268
Townsville QLD 4810

Attention: Ramon Samanes

Dear Sir

CONCURRENCE AGENCY RESPONSE – CONDITIONS

Proposed Development: Development Permit for Material Change of Use for the purpose of Neighbourhood Centre
Real Property Description: Lot 6 on SP107219
Street Address: 299 Shaw Road, Shaw QLD 4814
Assessment Manager ref.: MI11/0064
Local Government Area: Townsville City Council

Reference is made to the referral agency material for the development application described above which was received by the Department of Transport and Main Roads (the department) under section 272 of the *Sustainable Planning Act 2009* (SPA) on 23 December 2011 and the proponents subsequent information response dated 13 July, 2012.

An assessment of the proposed development has now been undertaken against the purposes of the *Transport Infrastructure Act 1994* for state-controlled roads. Based on this jurisdiction, the department provides this concurrence agency response under section 285 of the SPA.

The department advises the assessment manager that it requires conditions to attach to any development approval for the application. The department would also like to provide advice about the application to the assessment manager under section 287(6) of the SPA.

Under section 325(1) of the SPA, the assessment manager must therefore attach this response, including the enclosed Department of Transport and Main Roads Concurrence Agency Conditions and Statement of Reasons, to any approval for the application.

Department of Transport and Main Roads
Program Delivery and Operations
Northern Region
146 Wills Street Townsville Queensland 4810
PO Box 1089 Townsville Queensland 4810

Our ref TMR11-000877
Your ref MI11/0064
Enquiries John Irving
Telephone +61 7 4720 7421
Facsimile +61 7 7420 7288
Website www.tmr.qld.gov.au
Email john.x.iring@tmr.qld.gov.au

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The department may change its concurrence agency response in accordance with section 290(1)(b) of the SPA.

The department encourages the applicant to review the proposed neighbourhood centre main street access arrangement and connectivity with Dalrymple Road. The department is concerned that based on the current proposal, the movement of vehicles to and from Dalrymple Road (which is a high speed urban arterial road (70km/ph)) into the proposed main street (which is a low speed town centre environment) will not function as intended. There may be insufficient traffic calming between the two roads to allow this internal road to function as a main street, for both pedestrians and motor vehicle movements.

The attached conditions of development, in particular the proposed Town Centre left in left out access point from Shaw Road, are not consistent with the Road Transport Infrastructure Agreement in Respect of Greater Ascot between the Department of Transport and Main Roads and Parkside Developments Pty Ltd dated 11 April 2011. If approved by Council, the infrastructure agreement should be amended to ensure it is consistent with this development proposal.

The department must be provided with a copy of the assessment manager's decision notice regarding the application within five (5) business days after the day the decision is made in accordance with section 334 of the SPA.

A copy of this response has been sent to the applicant for their information.

If you have any questions or wish to seek clarification about any of the details in this response, please contact John Irving, Town Planning Officer (Planning & Development Assessment) on (07) 4720 7421.

Yours sincerely

A handwritten signature in black ink that reads 'Gina Turner'.

Gina Turner

Manager (Corridor Management), Planning & Development Assessment

Enc. (Department of Transport and Main Roads Agency Conditions and Statement of Reasons)

C/c Parkside Development Pty Ltd
C/- Brazier Motti
595 Flinders Street
Townsville QLD 4810

PLANNING AND DEVELOPMENT
DEVELOPMENT ASSESSMENT



Our ref.: TMR11-000877
Your ref.: 26700-003-02

C/c Parkside Development Pty Ltd
C/- Brazier Motti
595 Flinders Street
Townsville QLD 4810

Attention: Susan Green

Please find attached correspondence for your information and action as required. Should you wish to discuss this correspondence, please contact John Irving, Town Planning Officer (Planning & Development Assessment) on (07) 4720 7421.

Yours sincerely

A handwritten signature in black ink that reads "Gina Turner".

Gina Turner
Manager (Corridor Management), Planning & Development Assessment

28 September 2012

Enc. (Department of Transport and Main Roads Agency Conditions and Statement of Reasons)

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
Development Permit for Material Change of Use for the purpose of Neighbourhood Centre			
1.	<p>Access arrangements and the development layout must be carried out generally in accordance with the following plan, except as modified by these concurrence agency conditions:</p> <ul style="list-style-type: none"> Submitted plan detailing proposed access locations prepared by Brazier Motti dated 27 September 2012. Drawing No. 26700/077 Rev. B as amended by TMR. (Attachment 1). Submitted plan titled 'Overall Stormwater Plan' prepared by UDP Consulting Engineers dated 8 June 2012. Drg. No. PAR071/SK02 Rev 1. Submitted plan titled 'Floor Plan- Neighbourhood Centre' prepared by Cottee Parker Architects Pty Ltd dated 5 July 2012. Drawing No SD 2001 Issue D. 	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act</i> 1994 (TIA).</p> <p>The Department of Transport and Main Roads' assessment of the development application was undertaken on the basis of the cited plans and report which depict how the proposed development will be carried out.</p>
2.	<p>(a) Vehicular access between Shaw Road and the development site is only permitted at access location "A", as detailed on the</p>	<p>(a)-(d)</p>	<p>The purposes of the <i>Transport Infrastructure Act</i> 1994 (TIA).</p>

No. Conditions of Development	Condition Timing	Jurisdiction and Reasons
<p>submitted plan prepared by Brazier Motti dated 27 September 2012 as amended by TMR (Attachment 1).</p> <p>AND</p> <p>(b) Access "A" shall be Left In/Left Out only and must be a minimum distance of 290 metres from the Shaw Road/Dalrymple Road intersection.</p> <p>AND</p> <p>(a) Access to the future town centre car park is not permitted within 100 metres of access "A" (see median continuation marked on Attachment 1).</p> <p>AND</p> <p>(d) Access A must be designed and constructed in accordance with The Department of Transport and Main Roads' <i>Road Planning and Design Manual</i>.</p>	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>Vehicular access at the permitted road access location minimises impacts on the safety and efficiency of the state-controlled road network.</p> <p>In accordance with Section 33 of the TIA, you must have written approval to carry out road works, including road access works on a state-controlled road. These development conditions do not constitute such approval. You will need to contact the Department of Transport and Main Roads on (07) 4720 7200 or towdawe@tmr.qld.gov.au to make an application for approval under section 33 of the TIA to carry out road works.</p>
<p>3. No access to or from Dalrymple Road is permitted at location "B" as shown on the submitted plan prepared by Brazier Motti dated 27 September 2012 as amended by TMR (Attachment 1) is permitted.</p>	<p>At all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA).</p> <p>Vehicular access at the permitted road access location minimises impacts on the safety and efficiency of the state-controlled road network.</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
4.	<p>(a) Vehicular access between Dairymple Road and the development site is only permitted at access location C and D, as detailed on the submitted plan prepared by Brazier Motti dated 27 September 2012 (Attachment 1).</p> <p>AND</p> <p>(b) Access C shall be Left Out only and must be a minimum distance of 360 metres from the Shaw Road/Dairymple Road intersection.</p>	<p>(a)-(e) Prior to the commencement of use and to be maintained at all times.</p>	<p>The location of this access point is within the functional area of the Shaw Road/Dairymple Road intersection which has the potential to significantly impact upon its safe and efficient function.</p> <p>Specifically, this LIFO access point is located within the merge lane on Dairymple Road. This merge lane is required to accommodate the double right turn movement from Shaw Road. An access point on this merge lane would create conflict between merging vehicles on Dairymple Road and vehicles exiting the Subject Land at this location.</p> <p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA). Vehicular access at the permitted road access location minimises impacts on the safety and efficiency of the state-controlled road network.</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
5	<p>AND</p> <p>(c) Access C shall incorporate a controlled boom gate, or similar, to restrict egress from the loading bay to delivery vehicles only.</p> <p>AND</p> <p>(d) Access D shall be an all movements signalised intersection and must be a minimum distance of 440 metres from the Shaw Road/Dalrymple Road intersection.</p> <p>AND</p> <p>(e) Both access C and D must be designed and constructed in accordance with The Department of Transport and Main Roads' <i>Road Planning and Design Manual</i>.</p>	<p>(a) - (b)</p> <p>At all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994 (TIA)</i> and section 282 <i>Sustainable Planning Act 2009 (Qld)</i></p> <p>The traffic impact report which forms the basis of the Infrastructure Agreement between the applicant and the department dated 11 April 2011 states the size of this commercial area to be 15,000m² of retail and offices. The ultimate development of the future town centre is likely to</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
	<p>impacts future development on the Subject Land may have on the existing and proposed future access points within the functional area of the Shaw Road/Dalrymple Road intersection. The TOA shall include:</p> <ul style="list-style-type: none"> i. Traffic generation rates for the town centre. ii. The volume of car parking proposed. iii. Identify the Gross Floor Area (GFA) of the proposed development. iv. Identify proposed tenure types and uses for the town centre. <p>AND</p> <p>(c) The TOA shall be prepared by a Registered Professional Engineer of Queensland (RPEQ) suitably qualified and experienced in traffic engineering, in accordance with the Department of Transport and Main Roads' <i>Guidelines for Assessment of Road Impacts of Development and AUSTRROADS' Guide to Traffic Engineering Practice Part 3 Traffic</i>.</p>		<p>generate in excess of 30,000m² of commercial Gross Floor Area (GFA). Therefore, future development of the balance site has the potential to generate a significant increase in anticipated traffic volumes.</p> <p>The Department of Transport and Main Roads must ensure the safe and efficient operation of the state-controlled road network.</p>
6	<p>The developer shall submit concept design plans for the permitted accesses, as detailed in Condition 2 and 4 above, (hereby known as the 'the works') to the Department of Transport and Main Roads', for the departments' written acceptance. The concept design plans are to be in accordance with the Department of Transport and Main Roads' <i>Road Planning and Design Manual, Specifications and Standard Drawings</i> current at the time of design</p>	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA) and the Department of Transport and Main Roads' <i>Road Planning and Design Manual</i></p> <p>The Department of Transport and Main Roads must ensure access between Shaw Road and the Subject Land and within the functional area of the</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
	and include, but not be limited to, kerb and channel, pavement, surfacing, drainage, line marking, electrical installation, landscaping, pedestrian and cycle provisions, relocation of services and lighting works. Where no Department of Transport and Main Roads' standard is available, the Australian Standards or similar shall be utilised at the discretion of the department.		Shaw Road/Dalrymple Road intersection do not adversely effect the safe and efficient operation of the state-controlled road network.
7	All plans, designs and documentation submitted by the developer as a consequence of the Department of Transport and Main Roads conditions must be: a) Certified by a Registered Professional Engineer of Queensland (RPEQ); and b) Provided in electronic format, along with two (2) paper copies.	At all times.	The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA) and <i>Professional Engineers Act 2002</i> .
8	All contractors engaged for design or construction works shall be: a) Pre-qualified under the Department of Transport and Main Roads prequalification system; and b) Able to demonstrate, to the Department of Transport and Main Roads' satisfaction, experience in civil design and/or construction works of a similar nature to those required as a result of these conditions.	At all times.	The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA).

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
9	<p>Subject to the Department of Transport and Main Roads' acceptance of the concept design plans provided pursuant to Condition 2 and 4, and no less than 12 weeks prior to the anticipated commencement of construction of the works, the developer must submit to the Department of Transport and Main Roads for the departments' consideration and written approval:</p> <ul style="list-style-type: none"> a. detailed engineering plans for the works b. a bill of works for the whole of the cost of the works, including management and supervision. c. A bond totalling 115% of the cost of the works. <ul style="list-style-type: none"> i. The bond may take the form of either bank cheque or a bank guarantee. ii. The bond shall consist of separable portions, 100% to be returned upon practical completion of the works and 15% to be returned after the completion of the twelve (12) month defects liability period or submission of 'as constructed' drawings to the Department of Transport and Main Roads, whichever is the latter. 	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA) and the Department of Transport and Main Roads' <i>Road Planning and Design Manual</i>.</p> <p>The Department of Transport and Main Roads must ensure access between Shaw Road and the Subject Land and within the functional area of the Shaw Road/Dalrymple Road intersection do not adversely effect the safe and efficient operation of the state-controlled road network.</p>
10	<p>Where the Department of Transport and Main Roads <i>Road Planning and Design Manual</i> is amended or updated after submission of the concept design plans, any amendment or update relevant to the proposed works must be incorporated into the detailed design plans.</p>	<p>At all times.</p>	<p>The Department of Transport and Main Roads' <i>Road Planning and Design Manual</i>.</p> <p>Design and construction must be carried out to the most recent policy standards to ensure the quality, safety and efficiency of the state-controlled road network.</p>

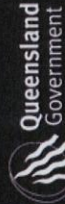
No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
11	<p>Within three (3) months of practical completion, the developer shall provide to the Department of Transport and Main Roads 'as constructed' drawings for the works. Where the developer fails to provide the 'as constructed' drawings required, the Department of Transport and Main Roads may have recourse to the maintenance bond for costs incurred in the department securing the 'as constructed' drawings.</p>	<p>Prior to obtaining a final inspection certificate or certificate of classification, whichever is applicable, or prior to the commencement of use, whichever occurs first.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA), section 347 of the <i>Sustainable Planning Act 2009</i> (Qld) and the Department of Transport and Main Roads' <i>Guidelines for the Assessment of Road Impacts of Development</i>.</p>
12	<p>(a) The management of stormwater (quantity and quality) post development must achieve a no worsening impact (on the pre-development condition) In particular, stormwater management for the development must ensure no worsening or actionable nuisance to the state-controlled road network caused by peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects.</p> <p>AND</p> <p>(b) Any excavation, filling, paving, landscaping, construction or any other works to the land must not:</p> <ol style="list-style-type: none"> i. create any new discharge points for stormwater runoff onto the state-controlled road; ii. interfere with and/or cause damage to the existing stormwater drainage on the state-controlled road; iii. surcharge any existing culvert or drain on the state-controlled road; iv. reduce the quality of stormwater discharge onto the state-controlled road. 	<p>(a) - (c) Prior to the commencement of use and to be maintained at all times.</p> <p>(d) Prior to obtaining a final inspection certificate or certificate of classification, whichever is applicable, or prior to the commencement of use, whichever occurs first.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA).</p> <p>The safety and efficiency of state-controlled roads can be adversely affected by changes to stormwater runoff as a result of development.</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
13	<p>AND</p> <p>(c) Open drains and associated stormwater infrastructure directly adjacent to Shaw Road and the functional area of the Shaw Road/Dalrymple Road intersection shall be designed in accordance with the Department of Transport and Main Roads guidelines and specifications and shall cater for, as a minimum, a 50 year average recurrence interval (ARI) rainfall event.</p> <p>AND</p> <p>(d) The applicant must provide RPEQ certification to the Department of Transport and Main Roads that the development has been designed and constructed in accordance with parts (a), (b) and (c) of this condition.</p>	At all times.	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA).</p> <p>Parking on the state-controlled road reserve adjacent to the site can impact on the safety and efficiency of the state-controlled road.</p>
14	<p>(a) Advertising signs are prohibited within the state controlled road reserve, namely Shaw Road and the functional area of the Shaw Road/Dalrymple Road intersection.</p>	At all times.	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA) and the Department of Transport and Main Roads' <i>Roadside Advertising Guide</i>.</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
	<p>AND</p> <p>(b) Any advertising signs erected on the Subject Land must not project into the corridor of Shaw Road or Dalrymple Road.</p>		<p>Advertising signs on or near to the state controlled road may obscure signage or distract drivers.</p>
15	<p>All on-site advertising viewable from the State-controlled road, namely Shaw Road, must conform to guidelines set for such signs in the Department of Transport and Main Roads' <i>Roadside Advertising Guide</i> (Part 5.5 Visual Amenity and Part 10.4 – Advertising beyond the boundaries, but visible from state controlled roads.</p>	<p>At all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA) and the Department of Transport and Main Roads' <i>Roadside Advertising Guide</i>.</p>
16	<p>Any landscaping on the Subject Land that is within 10 metres of the frontage with State-controlled Road network, namely Shaw Road and the functional area of the Shaw Road/Dalrymple Road intersection must be planted in accordance with the Department of Transport and Main Roads' Road Landscape Manual 2004, section C5 – Safety Requirements and Landscape Design.</p>	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA). Landscaping or other objects can impact on sight distance visibility at the intersection of the road access location and state-controlled road, affecting the safety of the state-controlled road network.</p>
17	<p>Any flood lights or illumination on the Subject Land must be shielded, directed downwards and away from the state-controlled road, namely Shaw Road.</p>	<p>Prior to the commencement of use and to be maintained at all times.</p>	<p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA). If lighting associated with the development</p>

No.	Conditions of Development	Condition Timing	Jurisdiction and Reasons
18	No dust/debris from the Subject Land must enter the State-controlled Road network, namely Shaw Road during the construction phase of the development.	To be maintained at all times during construction.	<p>causes unsafe glare or other nuisance, drivers may be distracted, affecting safety on the state-controlled road.</p> <p>The purposes of the <i>Transport Infrastructure Act 1994</i> (TIA).</p> <p>Dust and debris from development on the site can affect the state-controlled road, causing a safety hazard to road users.</p>

<p>Advice for state controlled roads</p> <p>Under section 33 of the <i>Transport Infrastructure Act 1994</i>, written approval is required from the Department of Transport and Main Roads to carry out road works, including road access works, on a state-controlled road. Please contact the Department of Transport and Main Roads on (07) 4720 7200 or towdawe@tmr.qld.gov.au to make an application for road works approval. This approval must be obtained prior to commencing any works on the state-controlled road reserve. The approval process may require the approval of engineering designs of the proposed works, certified by a Registered Professional Engineer of Queensland (RPEQ).</p> <p>An application for a Road Corridor Permit is required for any ancillary works and encroachments on the state-controlled road under section 50(2) and Schedule 6 of the <i>Transport Infrastructure Act 1994</i> and Part 5 and Schedule 1 of the <i>Transport Infrastructure (State-Controlled Roads) Regulation 2006</i>. Please contact the Department of Transport and Main Roads on (07) 4720 7200 or towdawe@tmr.qld.gov.au to make an application for a Road Corridor Permit. Ancillary works and encroachments include but are not limited to advertising signs or other advertising devices, paths or bikeways, buildings/shelters, vegetation clearing, landscaping and planting.</p>
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 <p>Queensland Government</p>	<p>Advice for state controlled roads</p> <p>Pursuant to Section 580 of the <i>Sustainable Planning Act 2009</i> it is a development offence to contravene a development approval, including any condition in the approval.</p> <p>Pursuant to Section 80 of the <i>Transport Infrastructure Act 1994</i>, the construction, augmentation, alteration or maintenance of a public utility plant on a state-controlled road reserve, must be in accordance with the Department of Transport and Main Roads' requirements.</p>	<p>Page 12 of 12</p>
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INFORMATION ATTACHMENT TO CONCURRENCE AGENCY RESPONSE

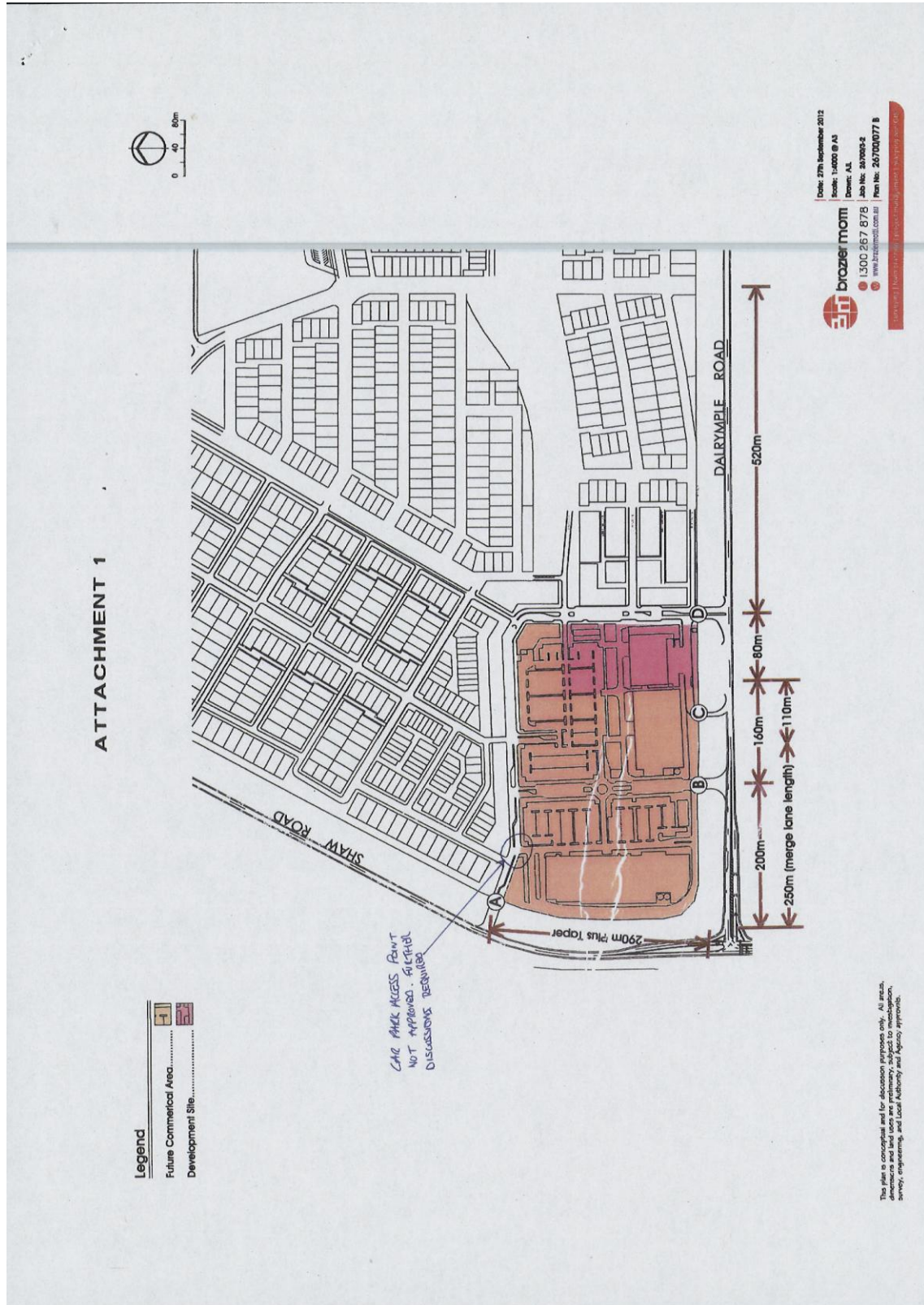
Representations on Referral Agency Response

If the applicant intends to make a representation to the Department of Transport and Main Roads (the department) regarding the attached concurrence agency response, the applicant needs to do this before the assessment manager decides the application. The assessment manager cannot decide the application before 10 business days after receiving the final concurrence agency response, pursuant to section 318(5) of the *Sustainable Planning Act 2009* (SPA).

The applicant will need to give the assessment manager written notice under section 320(1) of SPA to stop the decision-making period to make a representation to the department and subsequently contact the department to make the representation. The decision making period cannot be stopped for more than 3 months.

Planning and Environment Court Appeals

If an appeal is lodged in the Planning and Environment Court in relation to this application, the appellant must give written notice of the appeal to the department under Section 482(1) of the SPA. This notice should be forwarded to the Planning Law Team, Planning Management Branch, Department of Transport and Main Roads, GPO Box 213, Brisbane QLD 4001 within 2 days if the appeal is started by a submitter, or otherwise within 10 business days after the appeal is started.



Department of Environment
and Resource Management

Notice

Advice Agency Response - Referable Wetland

This notice is issued by the Department of Environment and Resource Management pursuant to section 292 (advice agency response) of the Sustainable Planning Act 2009 ("the Act").

Townsville City Council
PO Box 1268
TOWNSVILLE QLD 4810

cc. Parkside Development Pty Ltd
c/- Brazier Motti
595 Flinders Street
TOWNSVILLE QLD 4810

Attn: Ramon Samanes

Attn: Erin Berthelsen and Stephen Motti

Project reference: 351111
DERM Permit Number: SPAR03684412

Application Details

Assessment Manager Reference: MI11/0064 ATTN: Ramon Samanes

Date properly referred to DERM: 06 January 2012

Development approval applied for: Development permit

Aspect of development: Material Change of Use, other than for a domestic housing activity, if any part of the land is situated in a wetland management area
Sustainable Planning Regulation 2009 - Schedule 7, Table 3, Item 21

Development description: Material Change of Use – Neighbourhood Centre

Property/Location description: 299 Shaw Road SHAW QLD 4818 (Lot 5000 on SP243799)

Recommendation

The Chief Executive, Department of Environment and Resource Management (DERM), makes the following recommendation to the assessment manager:

Notice Advice Agency Response

Wetland:

The Assessment Manager should consider the potential impacts of the proposed development on wetland values, including the water quality, natural hydrological flows and ecological functioning of the wetland. Development should meet the following outcomes:

- Maintain ecological values of the wetland. There is no loss of wetland habitat and adverse impacts on the functioning and integrity of a wetland from development are avoided. A report prepared and certified by an appropriately qualified professional may assist the Assessment Manager to consider the impacts of the development on the ecological values and functioning of the wetland. If adverse impacts are unavoidable, the Assessment Manager is encouraged to ensure that the values lost are offset in order to achieve an environmental outcome equal or better than the wetland values that are impacted.

Where a wetland management area is mapped as a 'significant coastal wetland' under a Regional Coastal Management Plan it should be assessed against the policy for areas of state significance (natural resources). An Implementation Guideline should be consulted:
http://www.derm.qld.gov.au/services_resources/item_details.php?item_id=202304&topic_id=54.

For areas where a regional coastal management plan does not exist, where the wetland management area is also defined as a 'significant coastal wetland' under the State Coastal Management Plan – Queensland's Coastal Policy 2001 (SCMP), any approval is consistent with SCMP policy 2.8.1, Areas of state significance (natural resources).

- Maintain wetland water quality. The water quality of any waters in and linked to the wetland is maintained and managed to protect the environmental values of the wetland, and to ensure that the water quality objectives listed under Schedule 1 of the Environmental Protection (Water) Policy 2009 are achieved.
- Maintain wetland water regime. The existing water regime (including surface and groundwater) within and linked to the wetland is maintained and managed to protect existing natural hydrological processes within the wetland ecosystem. This includes safeguarding natural fluctuations in size and location of the wetland, and retaining and allowing for regeneration of native vegetation.

To ensure that the proposed development is able to meet the above outcomes, the Assessment Manager is encouraged to consider the requirement for a buffer area between any proposed works and the wetland. A wetland buffer has two components:

- a support area adjacent to the wetland that maintains and supports the environmental values of the wetland; and
- a separation area around the support area that protects the wetland from external threats such as sediment and nutrient discharge from surrounding landuse.

Buffer distances should be maximised in order to maintain existing biodiversity values, habitat connectivity and to minimise edge effects. Unless otherwise determined by a suitably qualified professional, the following buffer widths are accepted by DERM as precautionary buffer widths likely to absorb impacts from external uses.

- within urban areas, a minimum 50m buffer to wetland
- outside of urban areas a minimum 200m buffer to wetland
- for 'significant coastal wetlands', a buffer width of 200m to wetland

Notice
Advice Agency Response

Where required, revegetation of the buffer is recommended using native species representative of the pre-clearing regional ecosystem, with preference given to endemic species. Plants should be of local provenance where possible. A rehabilitation/ revegetation management plan including weed management strategies may assist in determining the rehabilitation requirements for the development. Conditioning of any approval with building or development envelope(s) may also be a useful way to give formal effect to any required buffer area.

The Assessment Manager should consider requiring applicants to provide a Stormwater Management Plan to demonstrate how stormwater, sediment and other run-off from the site (associated with the construction and operational phases of development) will be effectively managed to prevent adverse impacts on wetland values. Potential impacts are to be addressed through water sensitive urban design including compliance with South East Queensland Regional Plan 2009-2031 Implementation Guideline No. 7: Water sensitive urban design – design objectives for urban stormwater management. For areas outside of the South-east Queensland Regional Plan area any approval should recognise the requirements of the the Draft Urban Stormwater –Queensland Best Practice Environmental Management Guidelines 20091.

General information for assessment managers

The State's Native Title Work Procedures provide that responsibility for assessment of native title issues for an IDAS application rests with the assessment manager. Therefore, DERM as a referral agency for the relevant application has not provided notification to native title parties.

Additional information for applicants

It is a requirement of the Environmental Protection Act 1994 that if an owner or occupier of land becomes aware of a Notifiable Activity (as defined in Schedule 3 and Schedule 4 of the Environmental Protection Act 1994) being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the Department of Environment and Resource Management.

Aboriginal Cultural Heritage

Under section 23 of the Aboriginal Cultural Heritage Act 2003 a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage (the "cultural heritage duty of care"). Maximum penalties for breaching the duty of care are \$1,000,000 for a corporation and \$100,000 for an individual.

Applicants will comply with the duty of care in relation to Aboriginal cultural heritage if they are acting in accordance with cultural heritage duty of care guidelines gazetted under the Aboriginal Cultural Heritage Act 2003, available on the DERM website, or in accordance with an agreement with the Aboriginal party for the area or a cultural heritage management plan approved under part 7 of the Aboriginal Cultural Heritage Act 2003.

Applicants are also encouraged to undertake a search of the Aboriginal Cultural Heritage Database and the Aboriginal Cultural Heritage Register, administered by the Cultural Heritage Coordination Unit, DERM. Application forms to undertake a free search of the Cultural Heritage Register and the Database may be

¹ The Draft Urban Stormwater –Queensland Best Practice Environmental Management Guidelines 2009, is available at:
http://www.derm.qld.gov.au/environmental_management/water/environmental_values_environmental_protection_water_policy/draft_urb_an_stormwater_qbpm_guideline_2009.html

Notice
Advice Agency Response

obtained by contacting the Cultural Heritage Coordination Unit on (07) 3239 3647 or on the DERM website www.derm.qld.gov.au/cultural_heritage

Should you have any questions about the above, please contact Glenn Laanekorb on telephone 1300 130 372, quoting the above reference number.

Bleak

Delegate
Bernadette Carter
Delegate for the Chief Executive administering the
Coastal Protection and Management Act 1995,
Environmental Protection Act 1994,
Nature Conservation Act 1992.
Department of Environment and
Resource Management

Enquiries:
Glenn Laanekorb
Department of Environment and
Resource Management
Permit and Licence Management
Address: GPO Box 2454 BRISBANE QLD 4001
Telephone: 1300 130 372
Facsimile: 07 3896 3342
Email: palm@derm.qld.gov.au

9 January 2012



PLANNING AND DEVELOPMENT

DEVELOPMENT ASSESSMENT



23 January 2012

Chief Executive Officer
Townsville City Council
PO Box 1268
Townsville QLD 4810

Attention: Ramon Samanes

cc Parkside Development Pty Ltd
C/- Brazier Motti
595 Flinders Street
Townsville QLD 4810

Attention: Erin Berthelsen

Dear Ramon,

ADVICE AGENCY RESPONSE

MATERIAL CHANGE OF USE NEIGHBOURHOOD CENTRE GREATER ASCOT

299 Shaw Road Shaw
Lot 6, SP107219 (proposed Lot 5000 SP243799)

COUNCIL REFERENCE: MI11/0064
OUR REFERENCE: EE12/000044

This submission is made on behalf of Ergon Energy Corporation Limited ACN 087 646 062 (*Ergon Energy*) pursuant to section 292 (advice agency response) of the *Sustainable Planning Act 2009*. In accordance with section 292 (3), we request that the assessment manager treats this response as a properly made submission.

Ergon Energy acting as an advice agency has no objection to the proposed material change of use, subject to the following conditions being applied to any approval:

1. Development is carried out generally in accordance with the plans and reports provided as part of the application.
2. All Ergon Energy easement conditions must be maintained.
3. Natural ground level within the easement should not be altered without approval from Ergon Energy. Should any cut and/or fill be proposed within the easement, detailed civil design drawings showing proposed levels (and the location of Ergon Energy assets in relation to the proposed development) must be approved by Ergon Energy prior to any works commencing on site. Should changes (ie. realignment) to Ergon Energy infrastructure be proposed or required as part of the development, those changes are made with Ergon Energy's consent and at the developer/owner's expense (unless otherwise agreed to by Ergon Energy).

Ergon Energy Corporation Limited ABN 50 087 646 062
Ergon Energy Queensland Pty Ltd ABN 11 121 177 802



61 Mary Street
Brisbane QLD 4000
PO Box 15107
City East, Brisbane,
QLD 4002
Telephone (07) 3228 8222
Facsimile (07) 3228 8118
Website ergon.com.au

PLANNING AND DEVELOPMENT

DEVELOPMENT ASSESSMENT



4. Access to the easement and access along the easement must be available to Ergon Energy personnel and equipment at all times. Where fencing prohibits access to and along the easement area, gates must be supplied and installed at the developer/owner's expense.
5. The developer will be required to negotiate electricity supply arrangements by applying in writing to Ergon Energy, or by contacting Ergon Energy on 13 10 46. Early contact is recommended. Should the development require additional onsite infrastructure (ie. additional or upgraded pad mounted transformer), early contact with Ergon Energy (ie. prior to detailed design) can ensure any easement/design requirements are accounted for in a timely and efficient manner.

We respectfully request that a copy of the decision be provided in accordance with section 334 (1) (b) of the *Sustainable Planning Act 2009*.

DLGP are in the process of updating referral agency information available on their website. In the meantime, please note the address for all referrals to Ergon Energy is as follows:

Principal Town Planner
Ergon Energy
PO Box 15107
City East, Brisbane
QLD 4002

townplanning@ergon.com.au

Please contact me on 3228 7962 or via email address: ian.turton@ergon.com.au for any further information.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Ian Turton".

Ian Turton
Principal Town Planner
Ergon Energy



10 January 2012



COPY

Our ref: MSLink105820,
105817 (11/65/2)
DA 519

Brazier Motti
595 Flinders Street
TOWNSVILLE QLD 4810

cc. Townsville City Council
PO Box 1268
TOWNSVILLE QLD 4810

Attention: Erin Berthelsen
Your Ref:- 26700-003-02 DTMR Referral

Attention: Ramon Samanes
Your Ref:- MI11/0064

Dear Sir/Madam

**Alan Sherriff to Yabulu South to Townsville GT Transmission Line Corridor
Lot 6 on SP107219
Easement F on SP175715 - Dealing No 709012260
Easement C on RP719917 - Dealing No 601363708
Development Approval for Material Change on Use
Neighbourhood Centre at Corner of Dalrymple and Shaw Roads**

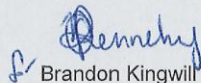
Thank you for your application received on 29 December 2011 regarding the above application. We have assessed your application and Powerlink does not object to the proposal subject to the following conditions:

Pursuant to the following item or items of Schedule 7 of the *Sustainable Planning Regulation 2009*, Powerlink Queensland is an advice agency for the above development application:

- Item 21, Table 2 of Schedule 7 of the *Sustainable Planning Regulation 2009* (reconfiguring a lot in certain circumstances);
- Item 7, Table 3 of Schedule 7 of the *Sustainable Planning Regulation 2009* (a material change of use in certain circumstances);

Powerlink Queensland acting as an advice agency under the *Sustainable Planning Act 2009* provides its response to the above application as **attached**.

Yours sincerely


Brandon Kingwill
Land Management Team Leader

Enquiries: Frances Jennings

Telephone: (07) 3860 2326

33 Harold Street, Virginia
PO Box 1193, Virginia, Queensland 4014, Australia
Telephone: (07) 3860 2111 Facsimile: (07) 3860 2100
Website: www.powerlink.com.au

Powerlink Queensland is the registered business name of the
Queensland Electricity Transmission Corporation Limited
ABN 82 078 649 233