Issue History

File Name	Prepared	Reviewed	Issued by	Date	Issued to
P6034.001T Wyatt Road Kagaru_Context Area Traffic Planning	J. Tham	A. Payne	A. Payne	04/08/2023	Richard Fulcher via email: rfulcher@welcogroup.com.au
P6034.002T Wyatt Road Kagaru_Context Area Traffic Planning	J. Tham	A. Payne	A. Payne	07/08/2023	Richard Fulcher via email: rfulcher@welcogroup.com.au
P6034.003T Wyatt Road Kagaru_Context Area Traffic Planning	J. Tham	A. Payne	A. Payne	28/03/2024	Richard Fulcher via email: rfulcher@welcogroup.com.au

Wyatt Road - Kagaru Context Area

Traffic Planning Context

1. Introduction

1.1 Overview

This Technical Memorandum has been prepared to provide a high-level review of the traffic and transport components of the proposed Context Area plan located at Wyatt Road, Kagaru incorporating Lot 27 S311174, Lot 12 S31468, Lot 11 SP 310604 Lot 21 SP164832, Lot 20 SP149887 and Lot 10 SP310604.

The purpose of this technical memo is to outline the overarching traffic and transport planning context and key transport infrastructure that will service the Context Area, and how it relates to current planning within the Flagstone Priority Development Area (PDA).

1.2 Background

The proposed Context Area is located within the southern portion of the Flagstone PDA and planned to include the following land uses:

- Low density residential catchments
- A medium density residential development area
- A neighbourhood centre
- A range of parklands including a district recreation park
- Substantial conservation land / green corridors.

A copy of the Context Area plan prepared by Saunders Havill Group is provided at **Attachment A**.

The context area abuts two other sites with endorsed Context Area plans, namely:

- Flinders Precinct 01 – Context Plan Endorsed Oct 2017
- Undullah – Context Plan Endorsed January 2018.

1.3 Relevant Planning Documents

The following planning documents have been considered throughout the preparation of this traffic context planning document, including (but not limited to):

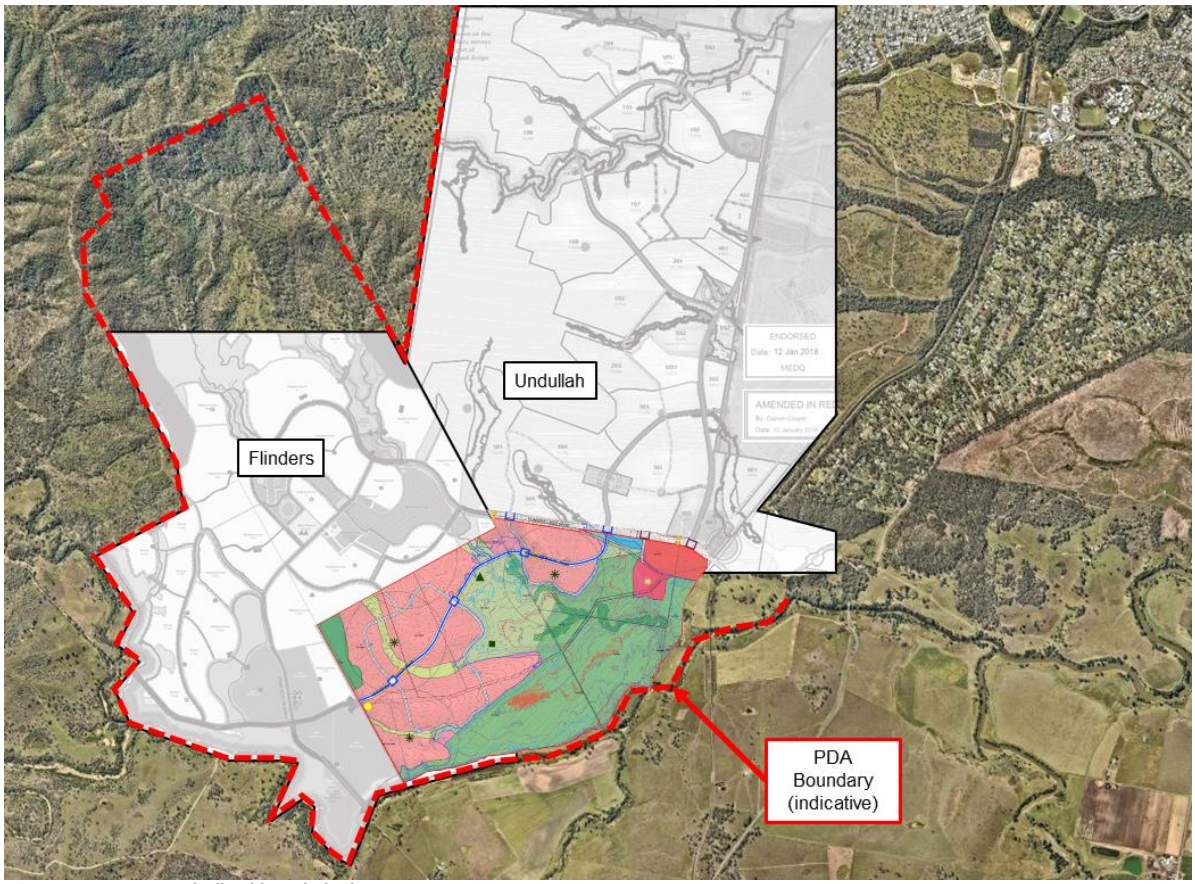
- The Development Charging Offset Plan (DCOP)
- The Greater Flagstone PDA Development Scheme
- Relevant endorsed Context Area plans associated with adjoining properties (as above)
- Relevant outcomes of the South Logan Strategic Transport Modelling (SLSTM) undertaken by Veitch Lister Consulting
- Relevant Economic Development Queensland (EDQ) Guidelines and Practice Notes
- Wyatt Road Realignment Review (2023)

2. Planning Context

2.1 Site Location

The context area is located within the Greater Flagstone Priority Development Area (PDA) within the Logan City Council (Council) LGA, for which EDQ is the Assessment Manager. The context area is bounded by Undullah to the north and Flinders Precinct to the west.

The location of the Context Area and surrounds is shown indicatively in Figure 2.1.



Source: Nearmap (edited by Bitzios)

Figure 2.1: Context Area Site Location and Surrounds

As shown, the proposed Context Area plan accounts for currently endorsed context areas in the immediate vicinity with transport connections to the north and west integrated within the plans.

2.2 Greater Flagstone PDA

2.2.1 Overview

The Greater Flagstone PDA was declared on the 8th of October 2010 and is located west of Jimboomba within the southern part of Council's LGA. Key PDA information is as follows:

- The PDA is made up of three (3) separate land areas totalling 7,188ha
- It is projected to experience significant growth in employment and industry
- It is estimated to accommodate approximately 50,000 dwellings & 120,000 residents.

The larger PDA land area is bordered by the Brisbane-Sydney rail line (which is predominately a freight line at present) located east of the subject site, while the Mount Lindesay Highway is located further to the east.

2.2.2 Development Considerations

Given that the subject site is within the Greater Flagstone PDA (formerly UDA) it falls under the *Greater Flagstone PDA Development Scheme*. This Scheme is a key consideration for the development of the transport infrastructure of the context area.

Key transport and network infrastructure considerations from the Development Scheme are reproduced below.

Table 2.1: Transport and Network Infrastructure

Infrastructure	Description of Works	When Required
Roads	Internal and trunk roads required to service the development as agreed with the relevant entity	To be constructed at the time the development is being undertaken and delivered before improvements are demanded by additional loading from developments within the development area
Public Transport	Development will contribute to an interim public transport service for up to 5 years or until the fare box income exceeds 40% of running costs, whichever is sooner. This service is to provide a minimum of half hourly services in peak time and hourly services at other times from 6:00am to 9:00pm on weekdays and 8:00am to 5:00pm on weekends	On the completion of the 200th of the development area or portion of the development area
Active Transport	Active transport infrastructure required to service the development	To be constructed at the time development is being undertaken
Other Networks	Network infrastructure improvements will be undertaken in conjunction with the relevant responsible authority	Delivered before improvements are demanded by additional loading from developments within the development area

Other key transport considerations for development include:

- Connecting SEQ 2031 – An Integrated Regional Transport Plan for Southeast QLD
- Public transport services and infrastructure
- Active and sustainable transport initiatives and infrastructure.

The above key Development Scheme components have been considered throughout the development of the PEET land, and for the development of CA3 Context Plan.

2.3 Development Charges and Offset Plan (DCOP)

The DCOP is a policy document which is intended to provide guidance to the Minister for Economic Development Queensland (MEDQ) on infrastructure matters for a development within the PDA.

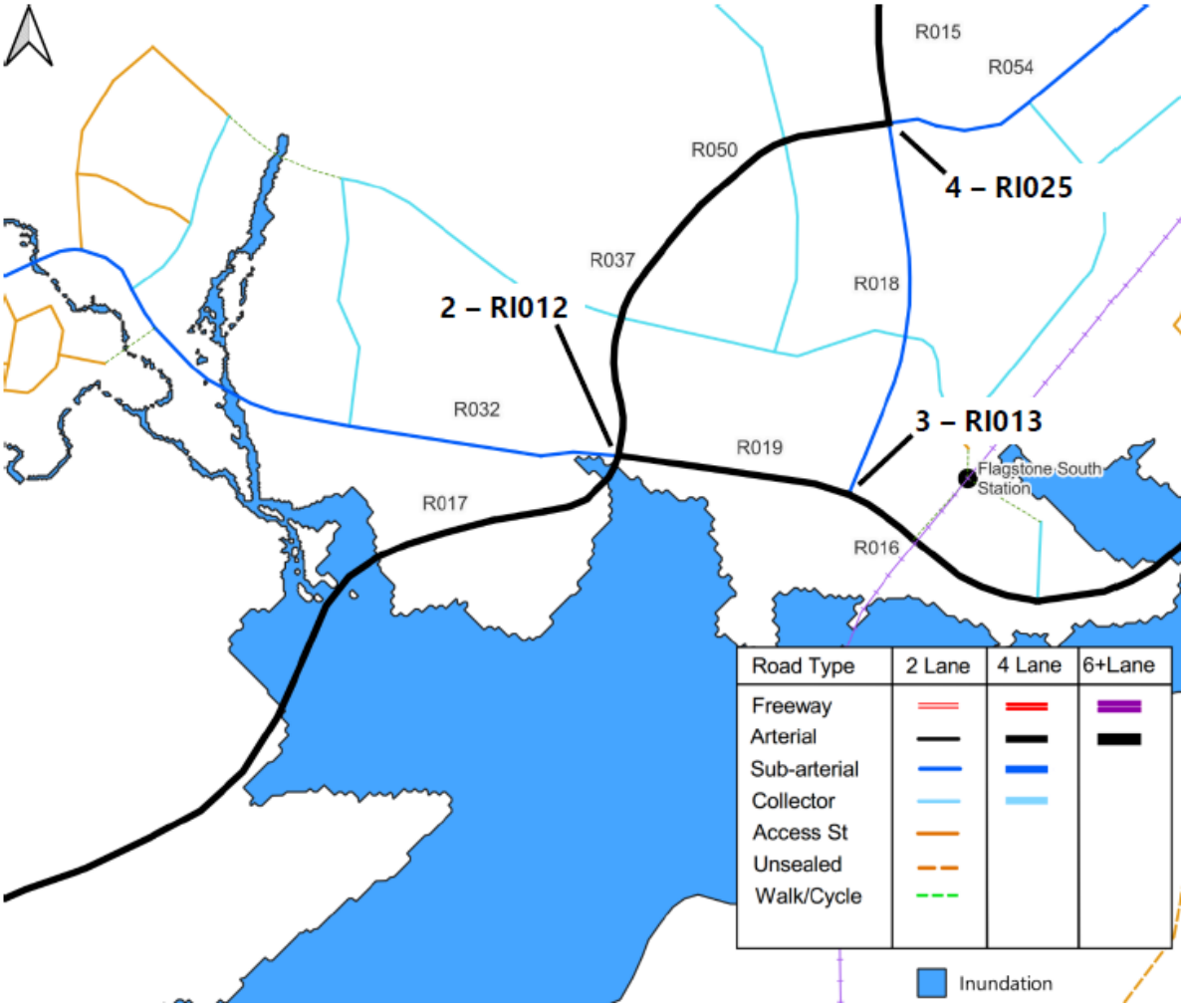
The Development Charges will contribute to funding the cost of Infrastructure which is proposed to service development and for the provision of Trunk Infrastructure for the following networks within the PDA:

- Water supply
- Sewerage
- Transport
- Parks and open space
- Community facilities.

2.4 Wyatt Road Realignment Review

The currently planned Wyatt Road alignment (DCOP road ID R017) crosses a substantial floodplain area within the Kagaru Context Area. As such, VLC was engaged by EDQ to investigate alternate Wyatt Road alignments with greater flood resilience. The findings of this investigation are detailed in the *Wyatt Road Realignment Review* (2023).

While it is not confirmed by EDQ if the findings of this review will be actioned, based on the strategic modelling undertaken, the VLC recommended realignment of Wyatt Road and changes to the surrounding trunk road network, as illustrated in Figure 2.2.



Source: Wyatt Road Realignment Review (2023) prepared by VLC

Figure 2.2: Potential Wyatt Road Realignment

Key changes from the DCOP associated with the recommended realignment include:

- Realignment of Wyatt Road (R017)
- Increase of Flinders Lake Drive (R019) hierarchy from sub-arterial to arterial
- Removal of the southern leg of the Flinders Lake Drive / New Beith Road intersection (RI013)
- Modification of R037/R050 through Undullah to a 4-lane arterial
- Downgrade of the southern extent of New Beith Road (R018) to a 2-lane cross-section.

3. Transport Infrastructure

3.1 Overview

The key transport infrastructure components shown within the context area plan are detailed in Table 3.1.

Table 3.1: Key DCOP Items – Transport Infrastructure

Infrastructure	ICOP ID	Location	Details	Description
Road Network	R019A/B	Eastern portion of Flinders Lake Drive	2-Lane Trunk Connector (Interim) 4-Lane Trunk Connector (Ultimate)	*Context Area northern boundary adjacent commercial precinct*
	R017A/B	Wyatt Road Arterial through Context Area	2-Lane Arterial (Interim) 4-Lane Arterial (Ultimate)	*Context Area through connection*
	R032	Flinders Lake Drive, west of the intersection with the realigned Wyatt Road	2-Lane Trunk Connector	*Forms boundary between Context Area & Undullah*
Intersections	RI013A/B	New Beith Road / Wyatt Road / Flinders Lake Drive	Traffic Signals (T-Intersection)	*Signalised flinders Lake Drive / New Beith Road intersection*
	RI012	Flinders Lake Drive / Undullah Trunk Connector	Traffic Signals (4-Way)	*Signalised Southern Access to Undullah*

Figure 3.1 shows the basic road network and intersection inclusions proposed in the Context Area plan provided at **Attachment A**.

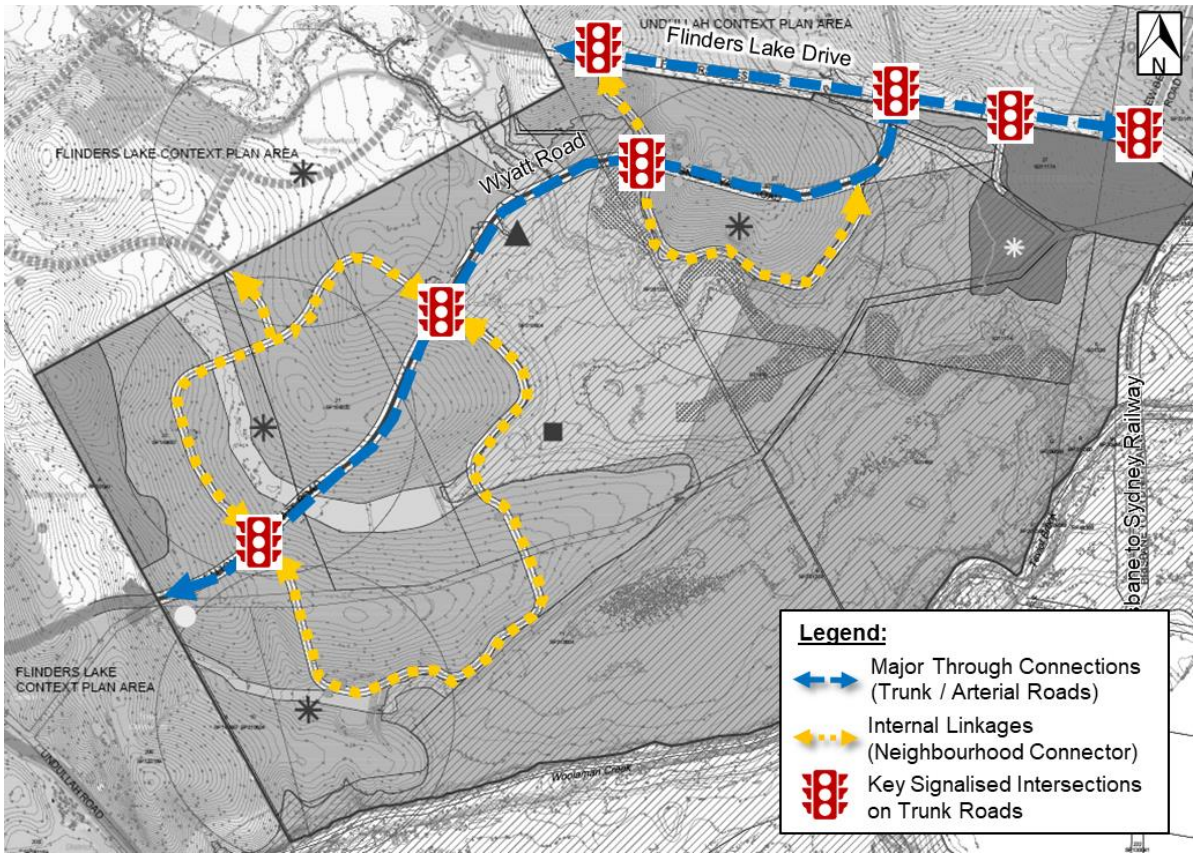


Figure 3.1: Transport Network Overview

As shown above, the proposed Context Area largely aligns with the existing planning for key transport infrastructure in the area, as detailed in the DCOP mapping. Some differences are however identified namely:

- Realignment of the future Wyatt Road arterial (R017A/B) through the Context Area
- Modification of RI012 to a 4-way intersection
- Additional key signalised intersections along the future arterial road through the Context Area.

These key differences align with the recommended scenario as detailed in the VLC *Wyatt Road Realignment Review* (2023).

3.2 Road Network

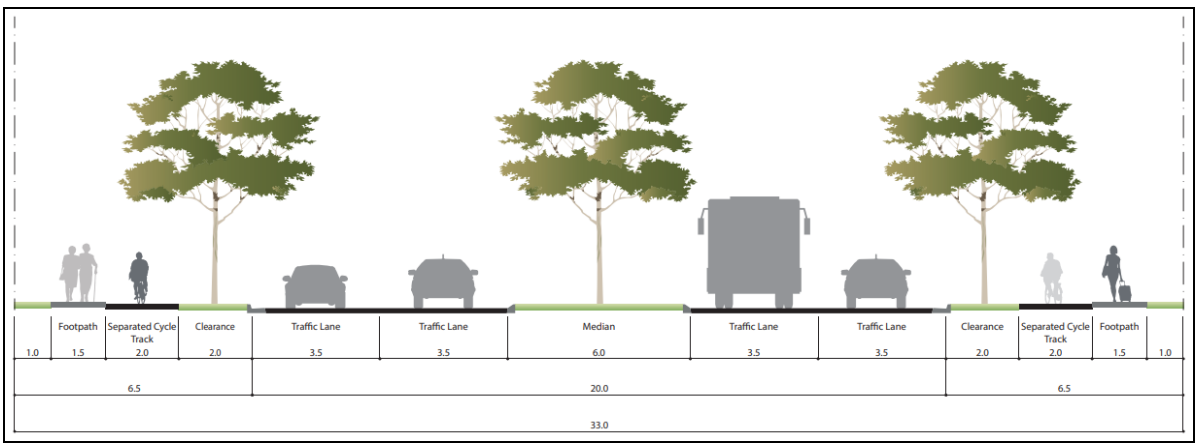
3.2.1 Wyatt Road Alignment

The alignment of the future arterial road along the existing Wyatt Road corridor through the subject site traverses a substantial length of flood-prone conservation corridor. As such, a realigned arterial road alignment is proposed consistent with the VLC review. This revised alignment is considered to still meet the intent of the DCOP by providing an arterial connection through the subject site while also providing the following benefits:

- Facilitates more direct vehicle access to residents within the context area as neighbourhood connectors may connect directly to the arterial road
- Active transport facilities and public transport services available on the realigned arterial road are located in closer proximity for most residents in the context area compared to the existing Wyatt Road alignment
- The revised alignment covers substantially less of the conservation corridor within the Context Area and is therefore expected to result in substantially lower environment and flood impacts.

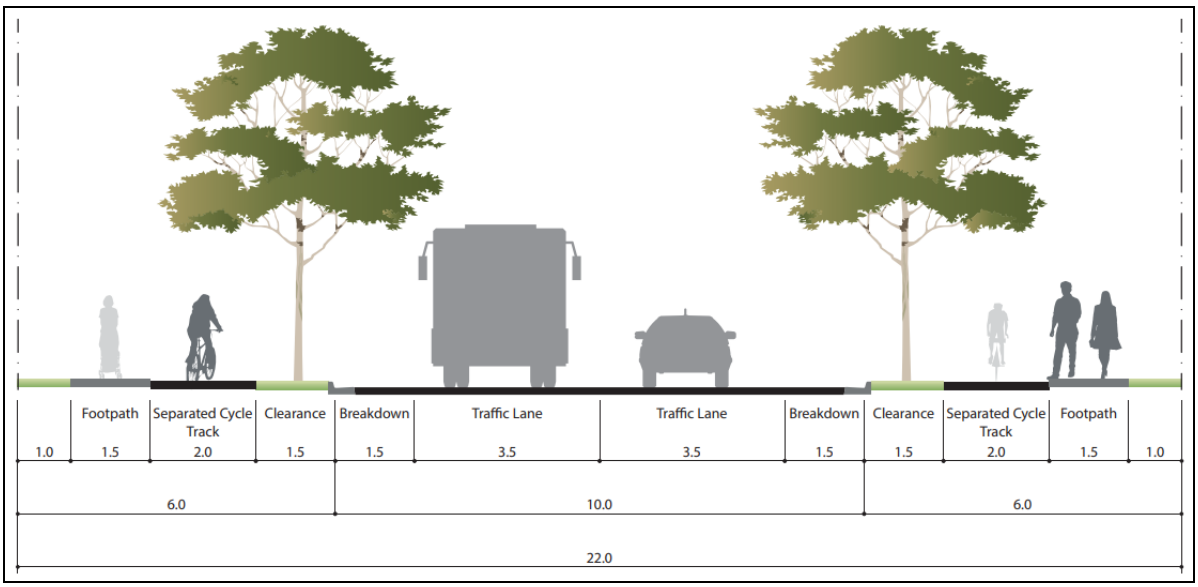
3.2.2 Cross-Sections

Key cross-sections of the ultimate road network within the Context Area are illustrated in Figure 3.2 to Figure 3.4.



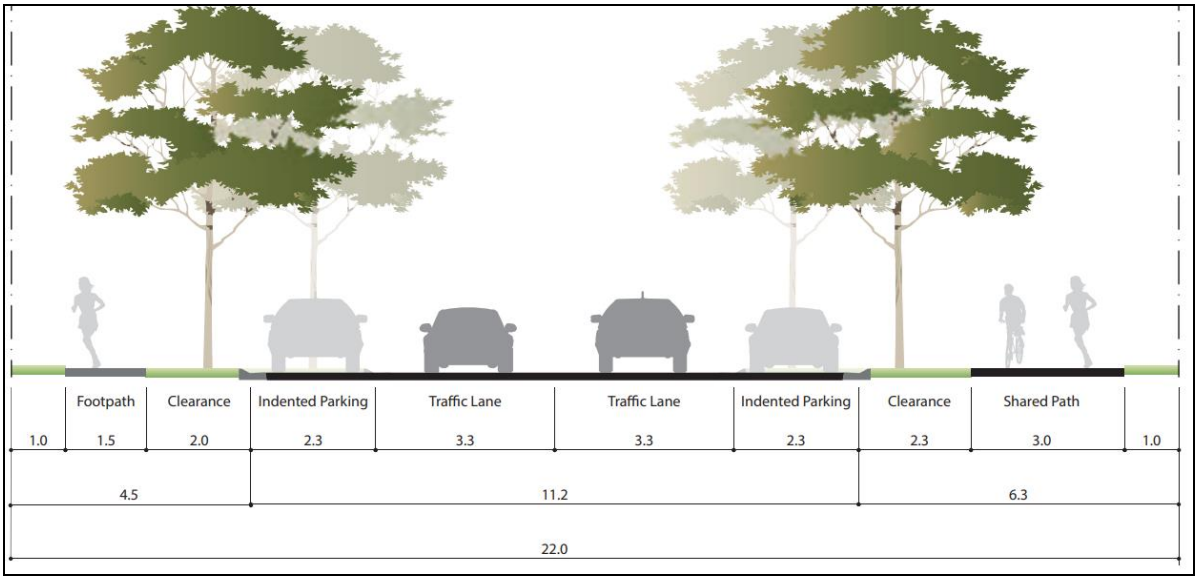
Source: EDQ PDQ Guideline No. 6: Street and Movement Network (2019)

Figure 3.2: Proposed Cross-Section – 4 Lane Trunk Road



Source: EDQ PDQ Guideline No. 6: Street and Movement Network (2019)

Figure 3.3: Proposed Cross-Section - 2 Lane Trunk Road



Source: EDQ PDQ Guideline No. 6: Street and Movement Network (2019)

Figure 3.4: Proposed Cross-Section - Neighbourhood Connector

As shown above, key road cross-sections shall be provided in accordance with the relevant requirements of the EDQ Guideline No. 6: Street and Movement Network.

Further minor access roads will ultimately provide direct access and connectivity to internal catchment areas to be detailed in more specific future application as with further progression of development of the Context Area. Future minor road cross-sections are expected to also generally align EDQ's Guideline No. 6: Street and Movement Network and will provide suitable local access and active transport connectivity.

Given the above, the proposed context area road network caters for the current planning and connectivity with neighbouring developments, achieving appropriate access for the area through the future interim and ultimate arrangements.

3.3 Alternate Transport

3.3.1 Active Transport

Key active transport routes and links through the site will be progressed in greater detail beyond the context plan stage. Key, active transport links are expected to include the following:

- Major links within trunk road reserves
- Minor links within neighbourhood connector road reserves

Width of on-street active transport provisions of the road types above are detailed in the proposed cross-sections shown in Section 3.2.2. Figure 3.5 provides a high-level overview of the key (potential) future active transport linkages.

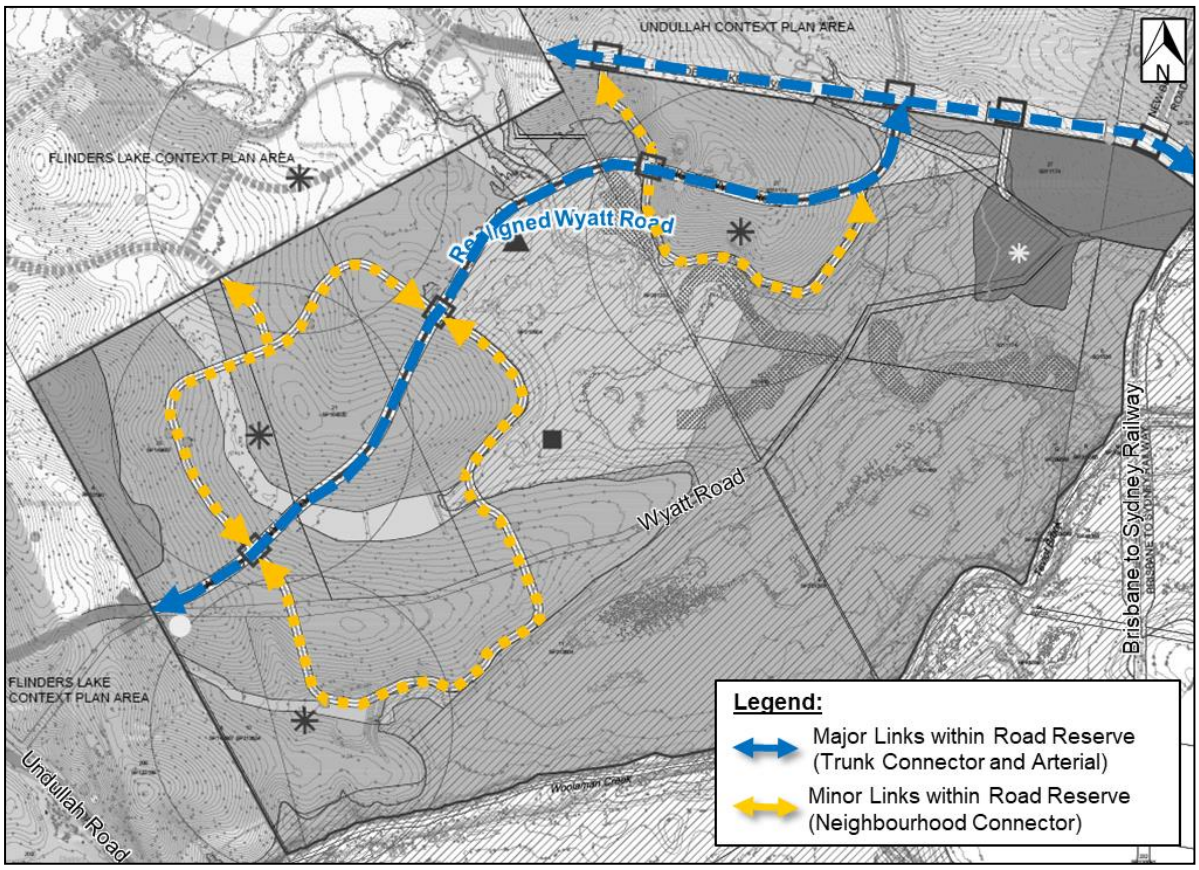


Figure 3.5: Indicative Active Transport Linkages

The above active transport linkages are considered appropriate to service the area and connect with neighbouring properties. It is noted that residential areas will also be serviced by lower order roads (e.g. Neighbourhood Access Streets, Laneways), with active transport provisions delivered within the road reserve in accordance with the relevant cross-section. This will be supplemented with (for example) cross-block links, linear corridors and connections to the major active transport infrastructure surrounding the slope affected land.

Off-street active transport connections shall also be provided through regional parklands proposed. Details of these off-street connections will be outlined as a part of future applications relevant to the regional parks.

3.3.2 Public Transport

It is proposed that major / high frequency public transport be facilitated within trunk roads with additional local bus routes able to service residential catchments via internal local connector roads. Figure 3.6 shows the indicative bus routes through the Context Area and 400m walkable catchments from potential bus stop locations along these routes.

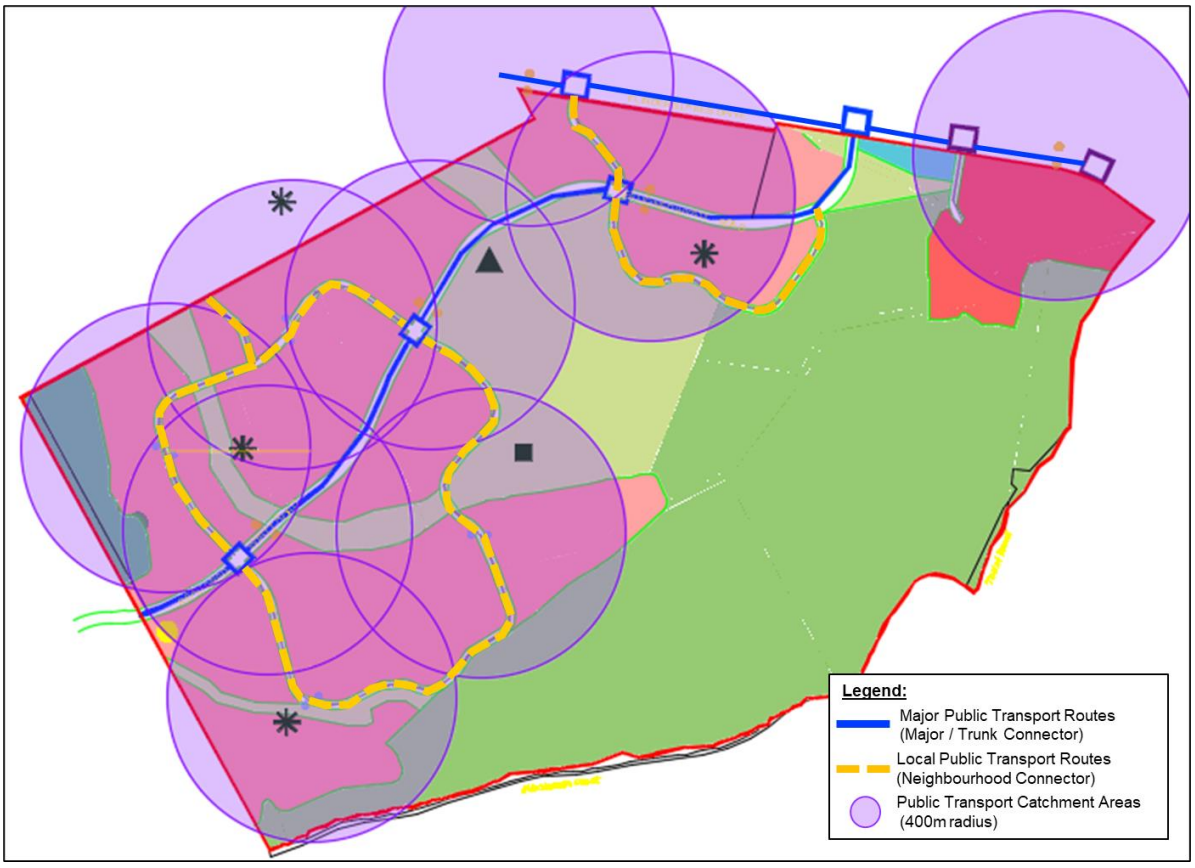


Figure 3.6: Indicative Public Transport Routes

As shown above, over 90% of the residential catchment is able to be within 400m of a potential public transport service in line with the requirements of the Flagstone Development Scheme. It should however be noted that details of public transport services will be determined at future stages, subject to consultation from relevant stakeholders (i.e. EDQ, TransLink, etc.).

3.3.3 Integrated Alternate Transport Map

Key trip attractors within the proposed context area and surrounding development areas include retail and commercial precincts, parklands and schools. A future public transport interchange servicing future bus and heavy rail services is also present. These key attractors, with proposed internal active transport links are illustrated in Figure 3.7.

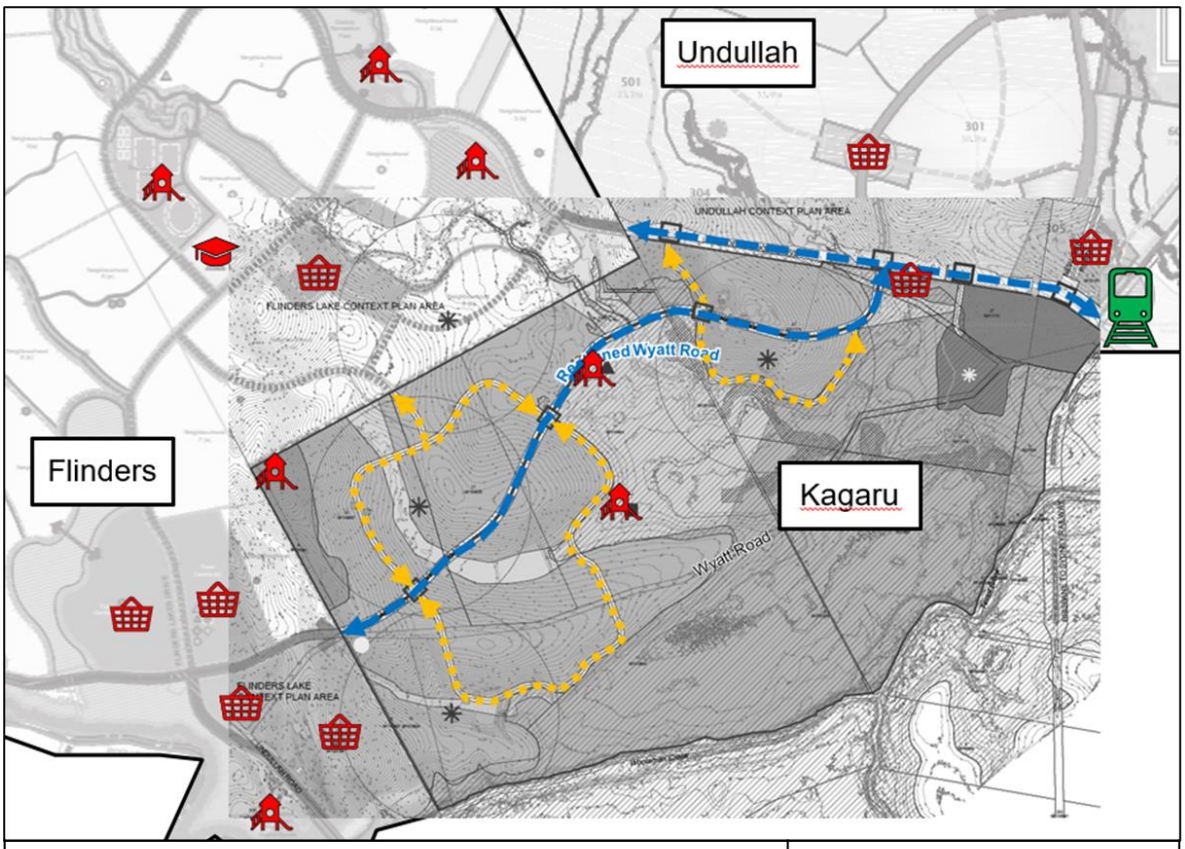


Figure 3.7: Integrated Alternate Transport Map

As shown, the proposed active transport connections on trunk and connector roads will provide direct active transport links to key trip attractors both within the context area, and to nearby centres in adjoining development areas. Proposed shared paths and separated cycle ways within the road reserve will also facilitate high quality active transport connectivity to public transport services, including the future heavy rail and bus service interchange near the north-east corner of the proposed context area.

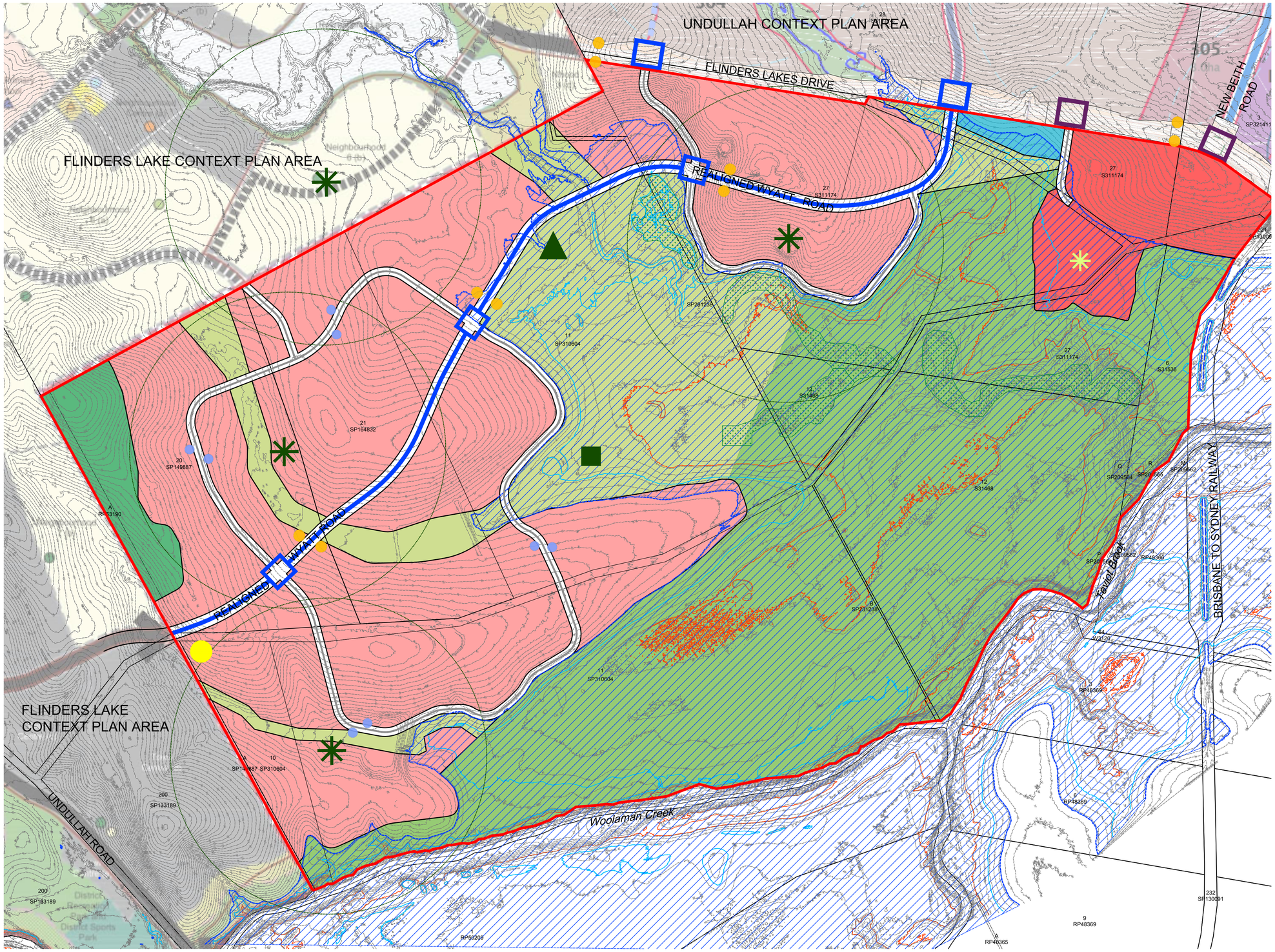
4. Concluding Statement

Based on the high-level information provided herein, the proposed context plan is considered to align well with existing planning and transport network infrastructure and allows for connectivity with surrounding properties for all modes of transport. Where the context plan deviates from the DCOP, it is considered an improved outcome and/or consistent with the intent of endorsed transport planning in the area.

Further detailed transport network provisions will be progressed as more detailed planning and design progresses for the area, regardless; the context area plan is considered to be able to achieve the overarching intent and key elements of the Development Scheme based on the contextual information provided herein.

Attachment A: Context Area Plan

CONTEXT PLAN



NOT TO BE USED FOR ENGINEERING DESIGN OR CONSTRUCTION

NOTES

This plan was prepared as a conceptual layout only. The information on this plan is not suitable for any other purpose.

Property dimensions, areas, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey. These may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions.

No reliance should be placed on the information on this plan for detailed subdivision design or for any financial dealings involving the land.

Pavements and centrelines shown are indicative only and are subject to Engineering Design.

Saunders Havill Group therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of the Saunders Havill Group. Unless a development approval states otherwise, this is not an approved plan.

PROJECTION - GDA2020 MGA56
SUBJECT BOUNDARIES OBTAINED FROM DCDB

LEGEND

- Context Plan Area
- Major Contour (1.0m interval)
- Flood Level - RL 35.2
- ARI 20 - RL 32.6 AHD
- ARI 5 - RL 29.8 AHD
- Pre-Development DFE Flood Extents
- Fill Locations (compensatory earthworks)
- Urban Residential (min 15 dw/ha)
- Medium Density Residential (20-50 dw/ha)
- Neighbourhood Centre
- District Recreation Park
- Major Linear Park
- Local Linear Park (where not Regional Sports or Regional Recreation)
- Environmental Park
- State Wetland
- Neighbourhood Recreation Park
- Neighbourhood Recreation Park (400m Walking Catchment)
- Wyatt Road Realignment - 33m Urban Arterial
- 22m Neighbourhood Collector Road
- '4-way Signalised Intersection'
- Signalised T Intersection
- Potential School Site PS015 - 'Subject to State Acquisition'
- Regional Recreation Park - Refer to Greenspace IMP
- Regional Sports Park - Refer to Greenspace IMP
- Potential Police Station P003 (0.6ha) - Subject to State Acquisition
- Indented Bus Bay
- Local In-lane Bus Stop

SCALE A1 1:5000 @A3 1:10000 - LENGTHS ARE IN METRES

50 0 50 100 150 200 250 300 350 400 450 500 550 600

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