

FLAGSTONE CITY – STAGES 2-5

TRAFFIC PLANNING ASSESSMENT

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

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1. INTRODUCTION

1.1 BACKGROUND

Bitzios Consulting Pty Ltd (Bitzios) has been engaged by PEET Flagstone City Pty Ltd (PEET) to undertake a traffic and transport assessment for Stages 2-5 of the Flagstone City development located within the Greater Flagstone Priority Development Area (PDA).

Stages 2-5 (the subject site) is located within Context Area One of Flagstone City west of the Brisbane to Sydney rail line, as identified in the Context Plan endorsed by Economic Development Queensland (EDQ) in December 2015 (see Section 2.1).

A range of previous traffic and transport studies / planning has been completed for the Flagstone development which have been referenced in the preparation of this assessment (see relevant studies in Section 1.3). This report provides an overview and analysis of the traffic and transport related elements of the subject site including staging, access, layout design, connectivity and alternative transport provisions.

This report forms part of a response to the Information Request issued by the *Urban Land Development Authority* (ULDA) in relation to application reference DEV2012/403, and to the Further Issues Response issued by EDQ on 18th September 2018.

1.2 SCOPE OF ASSESSMENT

The overarching scope of this traffic planning assessment included:

- reviewing the access and movement strategy for Stages 2-5 and its connectivity with surrounding development (including the existing Stage 1);
- reviewing the proposed development against the relevant planning completed to date;
- estimating the trip generation and distribution for Stages 2-5 based on typical industry rates, previous planning, and broader transport modelling considering interim (2031) and ultimate design horizons;
- reviewing the forecast traffic volumes based on previous strategic modelling, including ultimate through traffic to identify the appropriate road hierarchies and road cross-sections throughout the subject site;
- identifying the likely intersection controls for key intersections within the subject site (this task is subject to further detailed analysis based on updated strategic modelling to be completed); and
- reviewing the alternative transport provisions throughout the site, including consideration of public and active transport facilities and connections.

Considering the significant amount of modelling and planning that has previously been completed by EDQ for the broader network, this study focuses on the specific provisions of Stages 2-5.

1.3 PREVIOUS STUDIES & PLANNING DOCUMENTS

The following previous transport studies and planning documents have been referenced / sourced throughout the preparation of this traffic planning assessment, including (but not limited to):

- endorsed *Flagstone City Movement Network Infrastructure Master Plan v2.0* (PEET, June 2015);
- *Flagstone City Access and Movement Strategy* (Cardno, March 2014);
- *Flagstone City – Traffic Planning Assessment* (Cardno, August 2012);
- *Greater Flagstone Priority Development Area – Traffic Modelling Report* (VLC, January 2017);
- relevant Context Area Plans associated with the Flagstone PDA;
- relevant EDQ Guidelines and Practice Notes;
- the *Greater Flagstone PDA Development Scheme*;
- the *Infrastructure Charging Offset Plan* (ICOP) maps.

The general planning and assessment methodologies adopted in the above have formed the basis for the planning and assessment undertaken for the subject site.

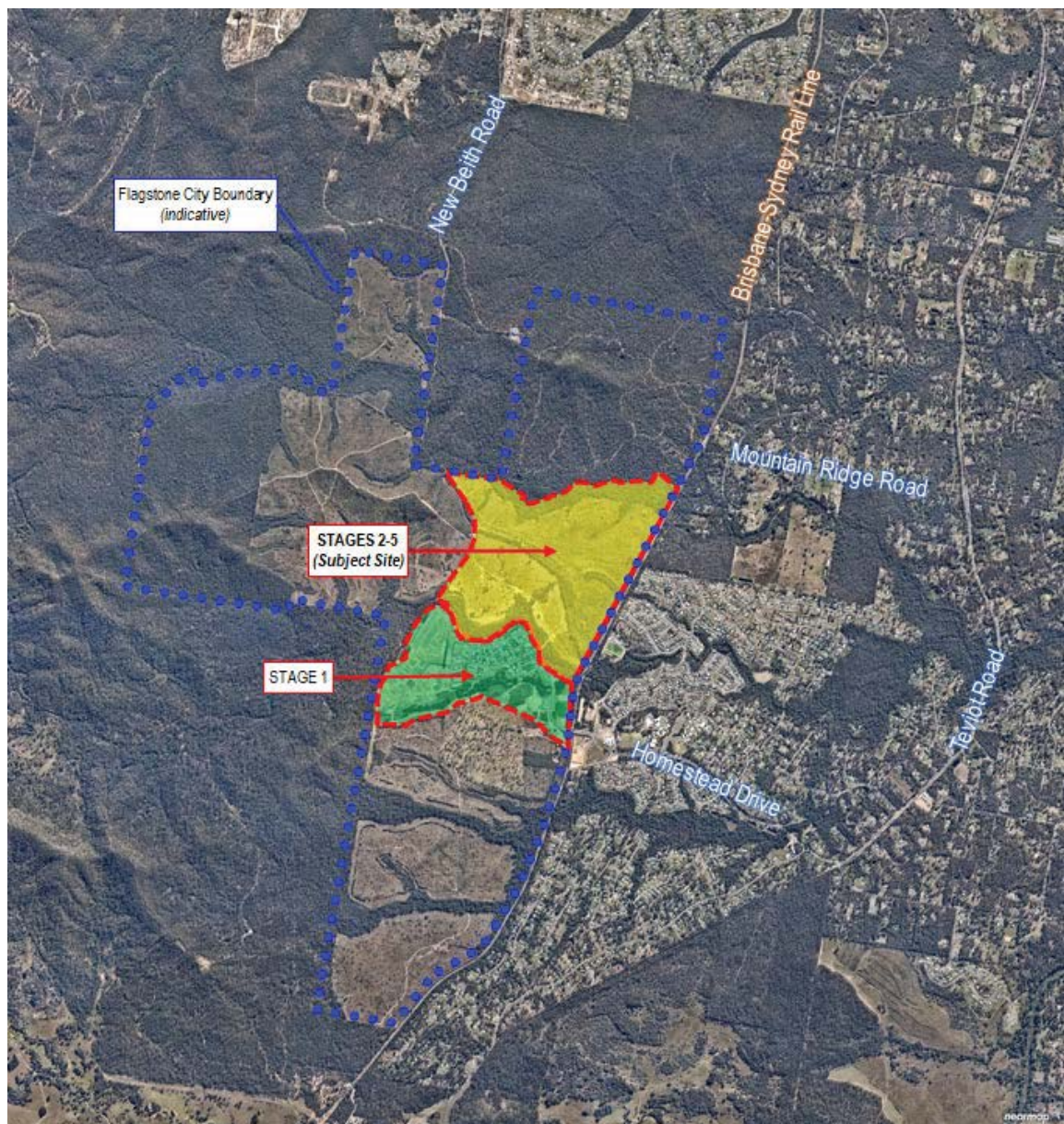
2. SITE LOCATION & PLANNING CONTEXT

2.1 SITE LOCATION

The subject site exists within the Greater Flagstone PDA, residing within the Logan City Council (Council) Local Government Area (LGA) for which EDQ is the Assessment Manager.

PEET's Flagstone City is one of the largest land holdings in the Flagstone PDA and currently consists predominantly of rural land and uncleared vegetation. The subject site (i.e. Stages 2-5) is located to the north of Stage 1 which is currently under construction and nearing completion with circa. 750 lots. Part of Stage 1 has been the construction of Flagstonian Drive to service the development, running north-south from Homestead Drive up to the boundary of Stage 2.

Figure 2.1 shows the indicative location of the Flagstone City boundary, the subject site (Stages 2-5), Stage 1 and the surrounding key roads.



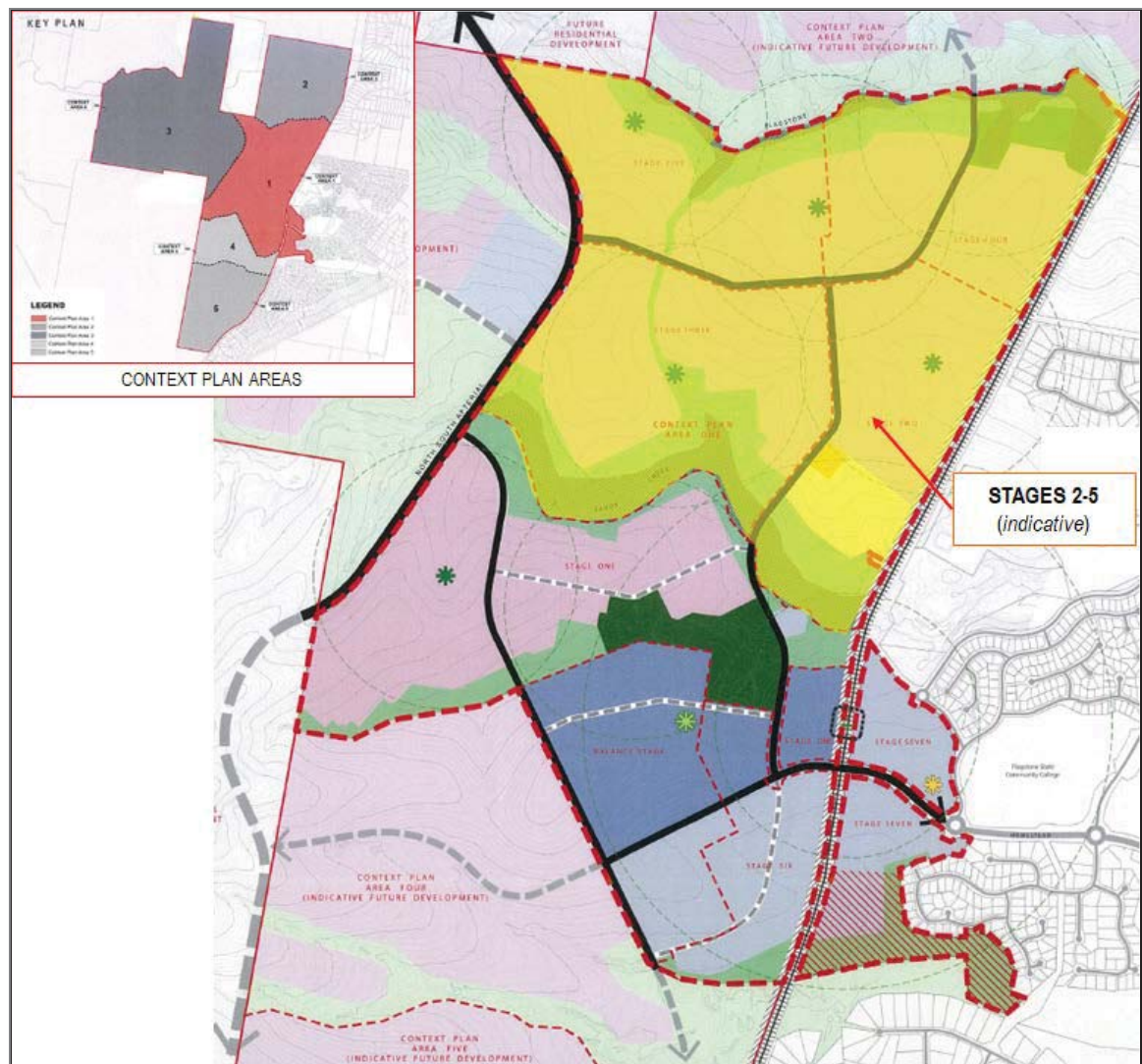
SOURCE: Nearmap

Figure 2.1: Site Location and Surrounds

As shown above, Flagstone City is primarily located to the west of the Brisbane-Sydney rail line which forms a key physical barrier for east-west connectivity with existing neighbourhoods.

2.2 CONTEXT PLAN AREA

Flagstone City consists of five (5) overarching Context Plan Areas. The subject site is located within Context Area One as shown in Figure 2.2.



SOURCE: Endorsed Context Plan Area One, <https://dsdmip.qld.gov.au/edq/greater-flagstone.html>

Figure 2.2: Context Plan Area One and Stages 2-5 Locality

Key transport elements identified in the Context Plan Area include:

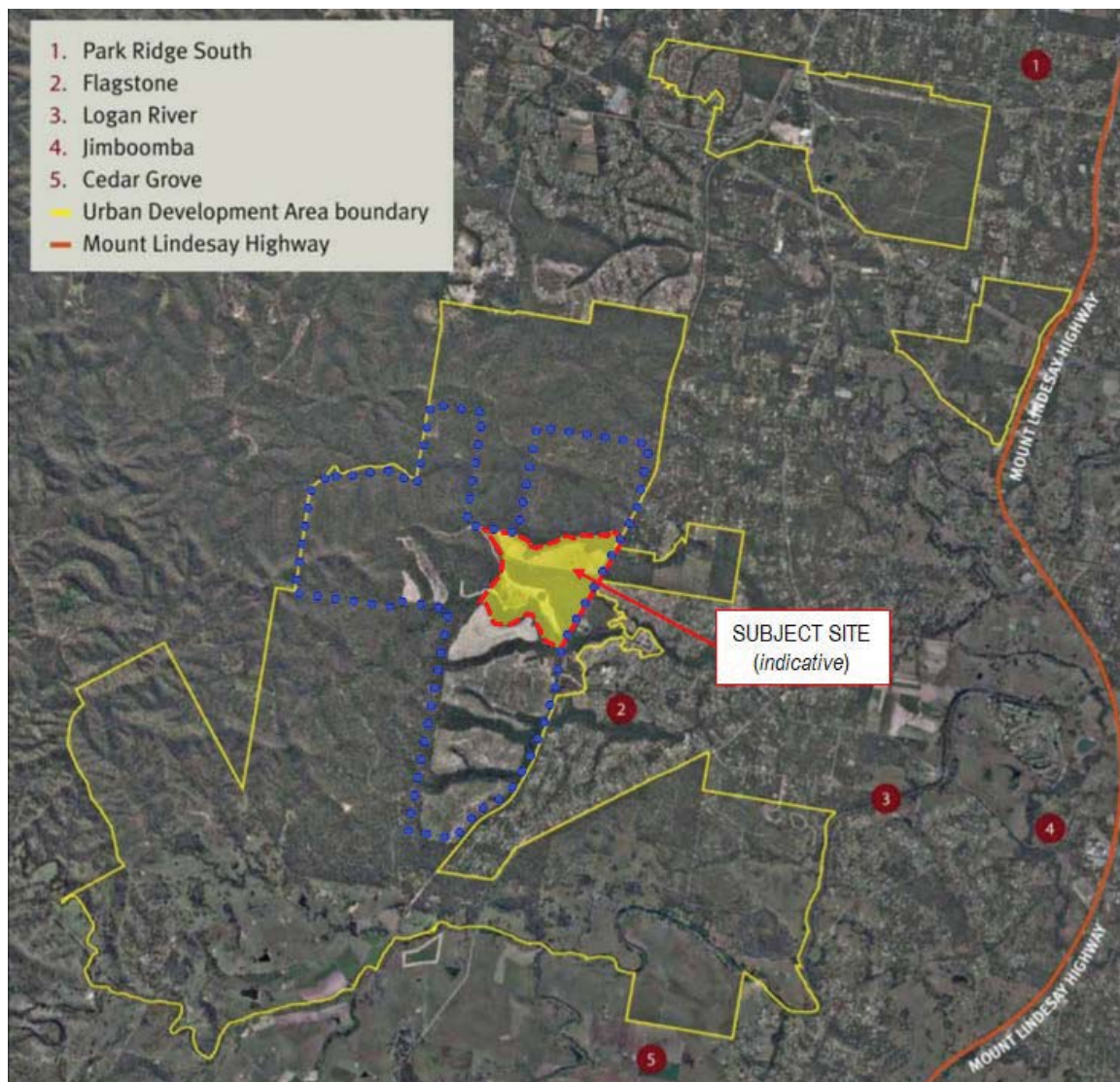
- the extension of Flagstonian Drive from Stage 1 through to the subject site;
- the intersection of Flagstonian Drive with a major (trunk) connector road within the subject site;
- the North-South Arterial road corridor forming the western boundary of the subject site;
- the Brisbane-Sydney rail line forming the eastern boundary of the subject site; and
- the indicative Flagstone Central Rail Station located near Homestead Drive.

The above key transport elements form the basis for transport planning and analysis undertaken for the subject site to date.

An updated Context Area Plan has been developed and included within the Flagstone City Movement Network IMP (v3.0).

2.3 GREATER FLAGSTONE PRIORITY DEVELOPMENT AREA (PDA)

The subject site is located within the Greater Flagstone PDA, which has been defined as a priority growth zone in the State Governments' *South-East Queensland Regional Plan 2009-2031*. Figure 2.3 shows the location of the subject site within the Greater Flagstone PDA.



SOURCE: Greater Flagstone PDA Development Scheme

Figure 2.3: Location of Subject Site within Greater Flagstone PDA

The Greater Flagstone PDA was declared on 8th October 2010 and is located west of Jimboomba within the southern part of Logan City Council (LCC) LGA. 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 and estimated to accommodate approximately 50,000 dwellings and up to 120,000 residents.

The larger of the PDA land areas is bordered by the Brisbane-Sydney rail line (which is predominantly a freight line) located east of the subject site, while the Mt Lindesay Highway is located further to the east.

2.3.1 Development Considerations

Given that the subject site is within the Greater Flagstone PDA it falls under the *Greater Flagstone PDA Development Scheme*. This Development Scheme is a key consideration for the development of the Access and Movement Strategy of the proposed development.

The following sections detail the key outcomes of the Development Scheme, and subsequent expected provisions and strategies.

Land Use Plan – Movement Network

The development contributes to:

- an effective, efficient and integrated movement network that provides a high level of safety and accessibility, maintains residential amenity and promotes the use of public and active transport particularly for local trips;
- a major road network that provides effective links between centres and the neighbourhoods they serve, and to the external road network, and accommodates a range of users including cars, service vehicles, pedestrians, cyclists and public transport;
- a road network that has a functional hierarchy, facilitates longer travel movements, provides multiple access routes to and through neighbourhoods and minimises traffic impacts on residential areas;
- the provision of a public transport network that is readily accessible to the community (90% of all dwellings should be within 400m of a potential public transport service), and provides effective links to centres, rail stations and external destinations; and
- a comprehensive active transport (walking and cycling) network based around major active transport spines, supplemented with local links and a safe permeable street network within neighbourhoods. The active transport network provides safe and direct links to key destinations including centres, railway stations, parks and schools.

Infrastructure Plan – Transport and Network Infrastructure

Table 2.1 lists the Transport and Network Infrastructure requirements as per the *Development Scheme*.

Table 2.1: Transport and Network Infrastructure

Infrastructure	Description of Works	When Required
Roads	Internal and trunk roads will be 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 UDA.
Public Transport ¹	Development will contribute to an interim public transport service for up to 5 years or until the fare box income exceeds 30% 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 8:00 to 5:00pm on weekends.	On the completion of the 200 th lot for the UDA or portion of the UDA.
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 UDA.

¹ Note, in relation to public transport, this item forms part of an existing approval over Flagstone City and is being addressed as part of Stage 1.

2.3.2 Connecting SEQ 2031 – An Integrated Regional Transport Plan for South East Qld

Connecting SEQ 2031 establishes a long-term plan to develop a sustainable transport system in South-East Queensland. The plan adopts an integrated approach that considers land use planning and the various modes of transport. Connecting SEQ 2031 has been developed as the guiding transport planning and policy document to support the desired regional outcomes of the *SEQ Regional Plan 2009–2031*.

In accordance with Connecting SEQ, Greater Flagstone is planned to include UrbanLink, ExpressLink services and improved active transport infrastructure.

UrbanLink Services

Flagstone will include UrbanLink services providing connectivity between Yarrabilba (east) and Springfield (west). Connecting SEQ 2031 identifies high frequency UrbanLink bus services on strategic corridors across the region as a key part of improving bus travel.

The 'turn up and go' UrbanLink bus network will provide:

- service frequencies of 15 minutes or better off-peak, 10 minutes or better during the peak period;
- high frequency, all day (6 am–9 pm), seven days per week;
- quality shelters and information;
- simplified high frequency network map with no need for a timetable; and
- a doubling of the proportion of residents within walking distance of 'turn up and go' services by 2031.

ExpressLink

ExpressLink services will also operate from Flagstone to Brisbane. The outer sections of the greater Brisbane metropolitan rail network will be operated as ExpressLink services. These services will use existing trains and will start at the end points of the greater Brisbane rail network, which, in 2031, are expected to include Flagstone (via Salisbury).

The ExpressLink network will operate much the same as express services operate today, running all stops to a change point (where UrbanLink services terminate), then stopping only at major transfer locations and activity centres. Passengers wanting to access other destinations will be able to transfer to an UrbanLink rail service or bus services or other ExpressLink stopping points.

The ExpressLink services will:

- provide fast, express running services (competitive or faster than car) between outer suburbs and inner Brisbane;
- be easier for passengers to understand with the same stopping patterns on all services;
- allows for transfers at key stations to access multiple destinations; and
- encourage people to travel off-peak.

Active and Sustainable Transport

Specific active transport infrastructure improvements are not included in Connecting SEQ 2031, although infrastructure improvements are to be focused within new growth communities such as Flagstone. To be effective, active transport infrastructure investment must be:

- connected – infrastructure investment in active transport needs to be targeted to fill the missing gaps in networks;
- coordinated – networks extend across local government boundaries and planning and delivery of networks needs to respond to this; and
- 'fit for purpose' – active transport infrastructure needs to be designed and delivered to meet the needs of most existing or potential users of the infrastructure.

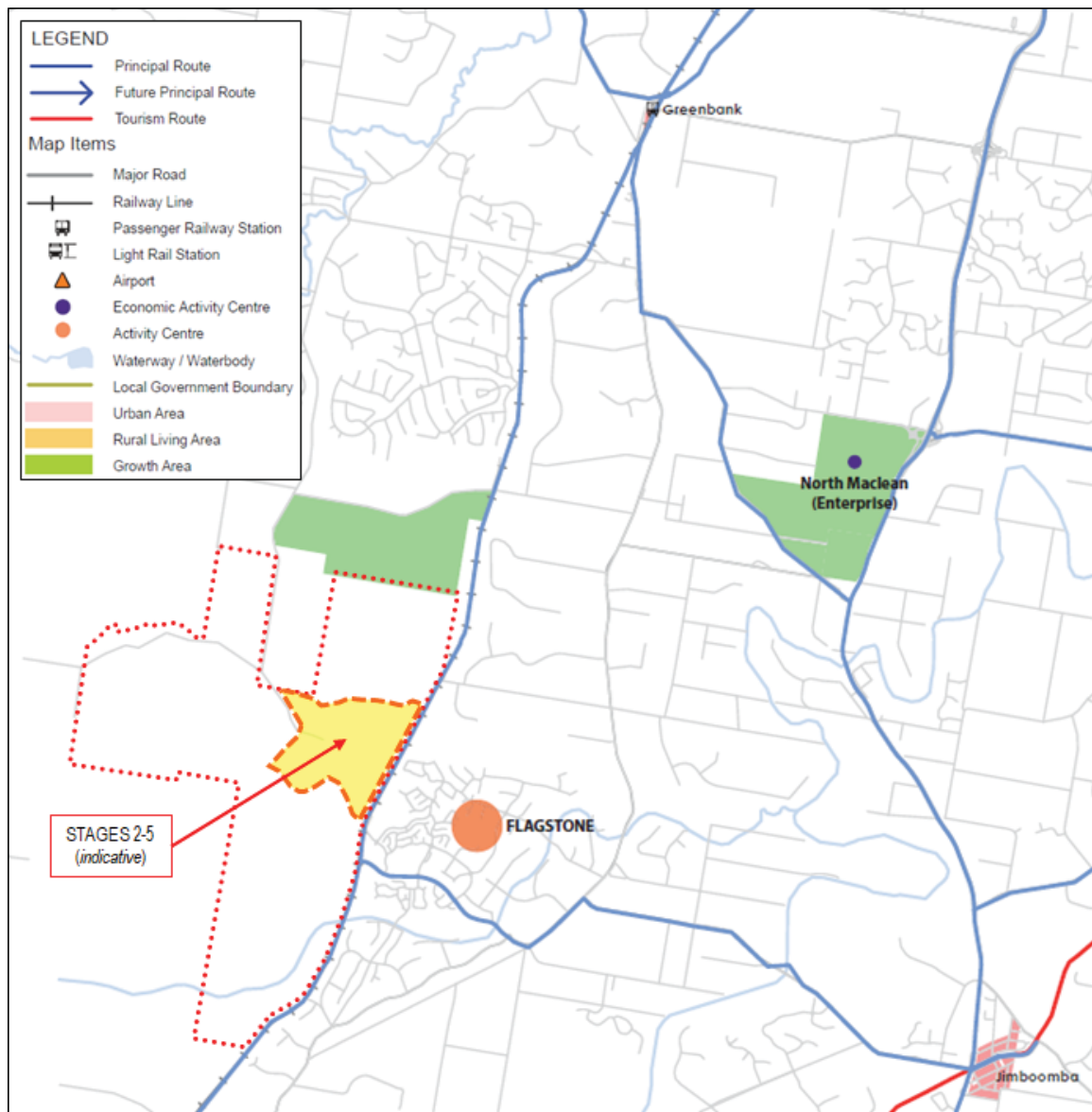
Priority projects for completing a safe, direct and connected active transport network include:

- Complete 5 – involves the planning, development and upgrade of networks within this 5km catchment, and any centre master planning exercise should take account of this catchment;
- Educated Ways – which will focus on improvements to active transport networks around schools and universities; and
- Connect To – which plans to develop and upgrade walking and cycling routes that connect to major public transport stops and stations.

In addition to the above, the *SEQ Principal Cycle Network Plan* (SEQ PCNP) identifies a Future Principle Route through Flagstone, connecting to Jimboomba (east) and Greenbank (north).

An extract from the SEQ PCNP is provided in Figure 2.4. This identifies the key principle cycle routes (and future cycle routes) in relation to the subject site are along Homestead Drive, and within the Brisbane-Sydney rail corridor.

This future planning has been carried through the transport planning considerations of the subject site.



SOURCE: SEQ Principal Cycle Network Plan

Figure 2.4: Extract: SEQ Principal Cycle Network Plan – Flagstone

Strategic Transport Goals

Connecting SEQ 2031 sets the following targets for Logan City Council:

- reduced trips taken by car from 85.8% to 73%;
- increase share of public transport trips from 5.5% to 10%;
- increase share of walking trips from 8.1% to 10%; and
- increase share of cycling trips from 0.6% to 7%.

As stated above, the Development Scheme includes a number of key transport, movement and infrastructure considerations and criteria to meet these strategic transport goals.

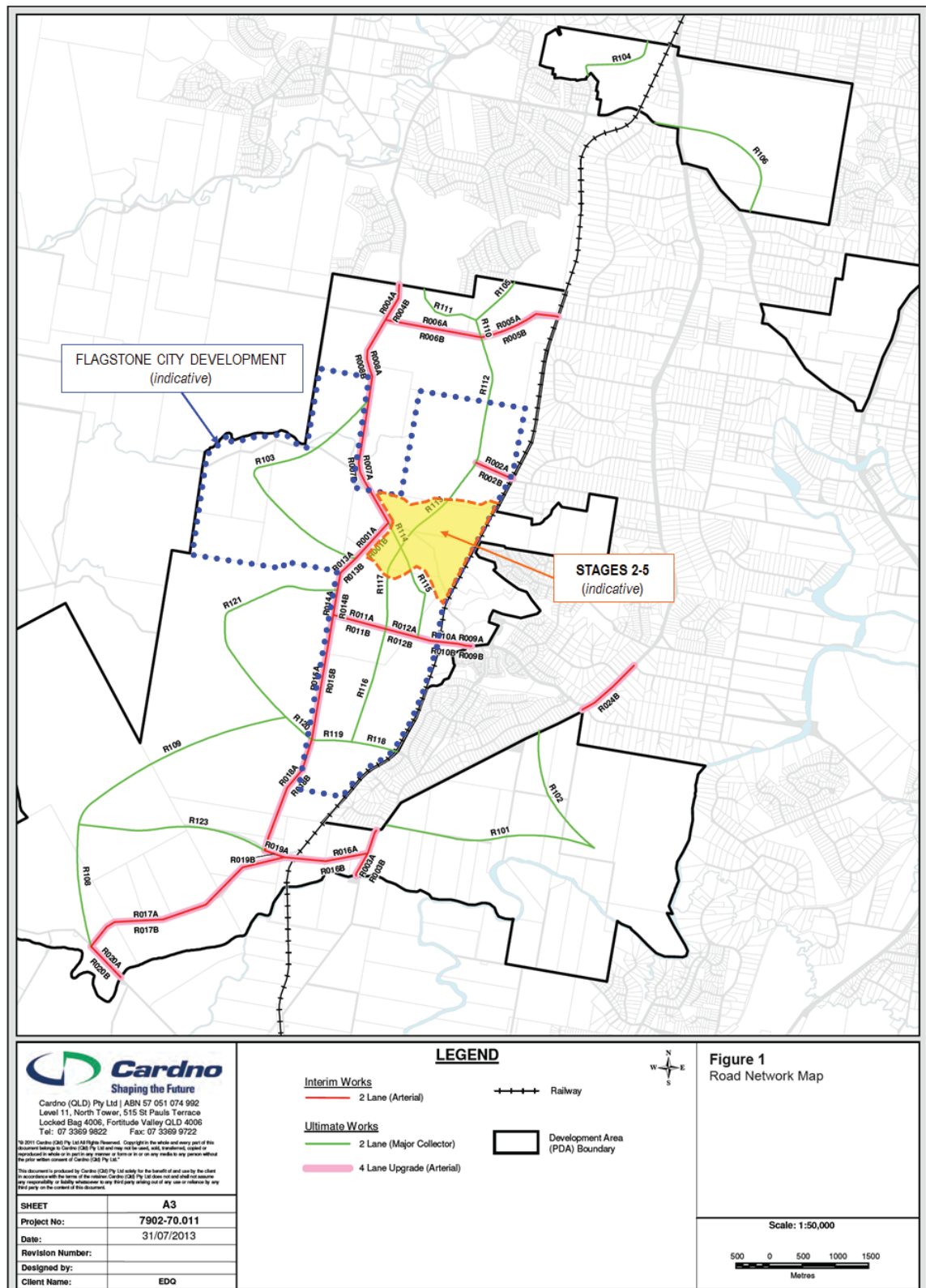
Furthermore, the Development Scheme includes the below 'Stretch targets' and goals as part of its Implementation Strategy:

- achieve a 20% share of all trips as active transport (walking and cycling) trips; and
- have sustainable transport with zero emission private vehicles, active travel and public transport that is safe and equitable for all members of the community.

2.3.3 Infrastructure Charging Offset Plan (ICOP): Road Network Plan

The ICOP for the Greater Flagstone PDA identifies the infrastructure charges and items that may be offset against these charges. The subsequent ICOP Maps include a number of potential upgrades to the existing network, however no time frames are provided.

As shown in Figure 2.5, two (2) key major connector roads are identified through the subject site, namely; Flagstonian Drive and “Road 2”. Whilst the ICOP map shows these as two (2) lane connector roads, more recent planning / modelling has identified four (4) lane corridors in these locations (see Section 4.5).



SOURCE: Greater Flagstone Infrastructure Charging Offset Plan (ICOP) Maps – Road Network Maps (edited by Bitzios)

Figure 2.5: Greater Flagstone PDA ICOP Road Network Map

3. DEVELOPMENT DETAILS

3.1 GENERAL

The subject site is comprised of four (4) stages (Stages 2-5) which consist of the following overall yields:

- 169.943ha total land area;
- 1,668 total lots (*max. residential potential of 1,727 dwellings*);
- net residential density of 15.6 dwellings/ha (*max. potential of 16.1 dwellings/ha*);
- one (1) commercial lot of 1.404ha (approximately 5,513m² GFA);
- one (1) community facility lot of 5,000m².

Major transport components of the subject site are summarised as follows:

- Flagstonian Drive (trunk connector): extending north-northwest from Stage 1 to the western boundary of the subject site (i.e. to the North-South Arterial);
- Road 2 (trunk connector): extending northeast from Flagstonian Drive to the northern boundary of the subject site;
- a major four-way intersection between Flagstonian Drive and Road 2;
- a four-way intersection on Flagstonian Drive servicing Stage 4 and Stage 5;
- two (2) three-way / T-intersections along Road 2 servicing Stage 3 and Stage 4;
- a T-intersection on Flagstonian Drive servicing Stage 2;
- neighbourhood connector standard roads intersecting with trunk connector roads servicing residential catchments / neighbourhoods;
- a network of neighbourhood access streets and laneways within residential catchments.

A snapshot of the overall subject site is provided overleaf in Figure 3.1, while a detailed plan is provided in **Appendix A**. Importantly, the above transport components align with the intent of planning completed to date and are generally in accordance with the ICOP road network map.

3.2 DEVELOPMENT YIELD

The overall development yield is summarised in Table 3.1 below.

Table 3.1: Development Yield

Lot Type	Stage 2	Stage 3	Stage 4	Stage 5	Total
Residential	249 (252)	436 (455)	438 (466)	545 (554)	1,668 (1,727)
Medium Density	-	-	-	1	1
Commercial	-	-	1	-	1
Community	-	-	1	-	1
TOTAL LOTS	249	436	440	546	1,671

The above table does not include Balance Super Lots and focuses on lots with traffic generating characteristics. Values shown in brackets identify the maximum residential potential when considering multiple residential lots.

As shown above, the total residential yield equates to 1,668 residential lots.

As detailed in **Appendix A**, the maximum residential yield potential equates to 1,727 dwellings when considering multiple residential lots.



Figure 3.1: Overall Subject Site Lot Layout

3.3 STAGING OVERVIEW & ACCESS STRATEGY

The below sub-sections provide an overview of the transport components associated with each stage of development and the relevant access strategy for each. This includes a brief discussion on roadway cross-sections as identified in the Movement IMP (v3.0), which have been provided in Appendix B of this report for ease of reference. The overall staging is provided in the Plan of Subdivision prepared by RPS.

Stage 2

Stage 2 includes a total of 249 residential lots. It consists of eight (8) sub-stages (2D-2K), noting that Stages 2A-2C form part of an existing approval inclusive of an educational establishment / school to the south. Stage 2 is bounded by the Brisbane-Sydney rail line in the east and the extension of Flagstonian Drive in the west (the extension of Flagstonian Drive occurs within Stage 3).

The primary access for Stage 2 is via a 22.1m Neighbourhood Connector road which intersects with Flagstonian Drive in a T-intersection configuration and continues north through to Stage 3, eventually intersecting with Road 2. Access to lots within Stage 2 occurs via:

- 16.5m Neighbourhood Access Streets; and
- 18.5m Neighbourhood Access Street.

The 22.1m Neighbourhood Connector includes provision for on-street parking and bus servicing, including a 3m off-road shared path (one (1) side) accommodating pedestrian / cyclist movements (considering the school to the south), and a pedestrian footpath on the opposite side.

Stage 3

Stage 3 includes a total of 436 residential lots, a corridor park, district recreation park, neighbourhood recreation park and conservation park. It consists of 17 sub-stages (3A-3Q), is located northeast of Stage 2 and bounded by the rail line in the east, Road 2 in the west and Flagstone Creek in the north.

The extension of Flagstonian Drive and construction of Road 2 forms part of Stage 3M. Flagstonian Drive maintains the current 32m reserve width (ultimately four-lanes) and Road 2 includes a 32m reserve (ultimately four-lanes). Access to Stage 3 is via connectivity with Stage 2 and extension of the 22.1m Neighbourhood Connector road connecting Road 2 via a T-intersection. Lot access in Stage 3 occurs via:

- 16.5m Neighbourhood Access Streets;
- 18.4m Neighbourhood Access Street; and
- 14.5m Neighbourhood Access Streets (*where adjacent a park*).

As per Stage 2, the 22.1m Neighbourhood Connector includes on-street parking, bus provisions, and active transport provisions (3m off-road shared path and footpath) and is reduced by 2m where adjacent a park.

Stage 4

Stage 4 includes a total of 438 residential lots, one (1) commercial lot, a community facility and a range of corridor, district, neighbourhood, local and conservation parks. It consists of 16 sub-stages (4A-4P), is located west of Road 2, north of Flagstonian Drive and south of Flagstone Creek. The North-South Arterial forms the western boundary.

The extension of Flagstonian Drive (northwest of Road 2) is included with Stage 4E while the extension of Road 2 to the northern boundary forms part of Stage 4O. The Flagstonian Drive extension includes an approximate 27m cross-section where it abuts the local linear park along the commercial lot and community lot frontages.

Primary access to Stage 4 is gained via a Neighbourhood Connector road which intersects with Flagstonian Drive and Road 2, is reduced by 2m where adjacent a park, and includes a wider reserve where it adjoins Flagstonian Drive (25.9m). The eastern portion of Stage 4 (4F-4H) is accessed internally (no direct access to Road 2) which includes 89 residential lots. Lot access within Stage 4 occurs via:

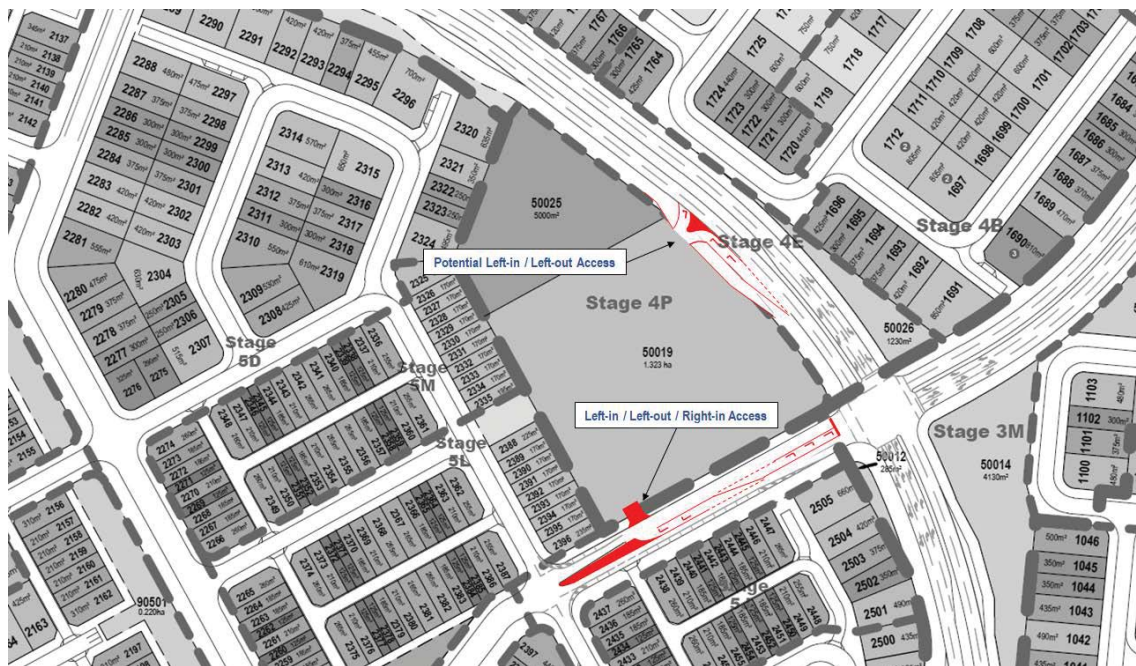
- 16.5m Neighbourhood Access Streets;
- 14.5m Neighbourhood Access Streets (*where adjacent a park*); and
- 6.5m rear lane.

The Neighbourhood Connector includes on-street parking lanes, footpaths on both sides, a 3m two-way separated cycle track (one side (park)) and has the ability to accommodate kerbside (in-lane) bus services.

The commercial lot is identified as a Neighbourhood Centre and is located adjacent to the community facility lot. Access to these lots will take place via Flagstonian Drive and the Stage 5 Neighbourhood Connector. The commercial lot is likely to gain access via the following arrangements:

- one (1) left-in / left-out access via the Flagstonian Drive frontage;
- one (1) left-in / left-out / right-in access via the ~28m median-divided Neighbourhood Connector road frontage along the south-eastern lot boundary.

The details of the access arrangements will be determined as detailed design progresses. However, an indicative only layout has been shown diagrammatically below in Figure 3.2 for the purposes of illustrating the likely commercial lot access arrangements. This arrangement maintains a pedestrian link through the linear connection to Stage 5 (south-west).



NOTE: The diagram above is indicative only, not to scale, and for information purposes only. Access arrangements are subject to detailed design and locations / configurations shown above are subject to change.

Figure 3.2: Commercial Lot Indicative Access Arrangements

The access arrangements are subject to future detailed design considerations, regardless it is considered these lots can be suitably accessed from the surrounding neighbourhoods and/or through-traffic.

Stage 5

Stage 5 includes a total of 545 residential lots, one (1) medium density lot and a range of corridor, neighbourhood, local and conservation park areas. It consists of 18 sub-stages (5A-5R) and is bounded by Flagstonian Drive to the east and north, the North-South Arterial in the west, and Sandy Creek to the south.

Primary access is gained via a 23.6m Neighbourhood Connector road which intersects with Flagstonian Drive in the west and east. The eastern connection joins with the Stage 4 intersection of Flagstonian Drive and bounds the commercial lot, widening out to an approximate 28m corridor (including central median).

This section of road forms a key entry gateway into Stage 5 and the neighbourhood centre. The alignment of the road follows a curve (approximate 30m inside curve radius) which borders a local recreation park. Due to the curve and location of the park, clear sight lines will be maintained allowing Safe Intersection Sight Distance (SISD) to be achieved for the minor road intersection in proximity to the curve. The curve radius will restrict vehicle speeds to approximately 40km/h (or less) and for the purposes of determining SISD, a 50km/h design speed has been adopted resulting in an SISD of 97m (measured along the path of travel on the major road).

Based on the above, the road alignment remains appropriate and capable of achieving minimum sight distance requirements. This also achieves the minimum horizontal line of sight for vehicles travelling eastbound on the inside of the curve based on speed and Stopping Sight Distance (SSD) in accordance with the *Austroads Guide to Road Design, Part 3 (AGRD3)*.

Lot access within Stage 5 occurs via:

- 16.5m Neighbourhood Access Streets;
- 14.5m Neighbourhood Access Streets (*where adjacent a park*); and
- 6.5m rear lanes.

The Neighbourhood Connector includes on-street parking, footpaths on both sides, a 3m two-way separated cycle track (one side) and has the ability to accommodate kerbside (in-lane) bus services. In addition, a 4m shared path is provided along the boundary of the Stage 5P park area connecting between Stage 5N (i.e. medium density allotment) and the Stage 5 Neighbourhood Connector.

3.4 PARKING ANALYSIS

An on-street parking analysis plan has been completed by RPS for each stage in accordance with EDQ's *Practice Note 11: Parking Analysis Plans*. The parking plan shows all indicative on-street car parking spaces based on the road function, pavement width and other features which may restrict parking, such as indicative driveway locations.

The required rate of provision for on-street parking is calculated as follows:

- *Required Rate of Provision:* 0.75 on-street spaces per 3 bed+ house;

The below table presents the key parking-related information for the site by stage, while the on-street parking plan is provided in the Plan of Development, Parking Management Plan prepared by RPS by stage.

Table 3.2: Parking Analysis Plan – by Stage

Variable	Stage 2	Stage 3	Stage 4	Stage 5	Total
Residential Lots	249	436	438	545	1,668
Rate of Provision	0.75 on-street spaces per 3 bed+ house				
Required Spaces	187	327	329	409	1,252
Provided Spaces	194	339	331	412	1,276

As shown above, the proposed development allows for the provision of approximately 1,279 on-street parking spaces overall, which exceeds the minimum requirements for the rate of provision. The above results in a proposed rate of provision of 0.76 on-street spaces per lot.

Given the above, the subject site complies with EDQ's requirements for on-street parking provision.

The Parking Analysis Plan prepared by RPS is provided in **Appendix C** for reference.

4. TRAFFIC ASSESSMENT

4.1 DESIGN HORIZONS

The design horizons for assessment within the PDA are currently governed by EDQ's modelled scenarios using the *Greater Flagstone Strategic Transport Model* (GFSTM) developed by VLC as follows:

- Interim (2031) Scenario; and
- Ultimate Scenario.

Traditionally the ultimate scenario has represented a future year of 2051 (which has formed the basis for previous modelling and planning). However, it is understood that more recent iterations of VLC's modelling represents a 2061 horizon.

Regardless of the year, this is simply referred to as the Ultimate Scenario which considers (essentially) full development of the Greater Flagstone PDA, and other relevant infrastructure projects. Hence, forms the basis for ultimate transport infrastructure planning (amongst other infrastructure) in the PDA.

4.2 DEVELOPMENT TIMEFRAME

The expected development timeframes for the subject site (Stages 2-5) are outlined indicatively below:

- 2018/19: Construction of Stage 2 begins;
- 2025/26: Final Stage of construction completed; and
- 2026/27: Residential traffic generation includes all proposed lots.

This has been based on a production turnover rate of approximately 210 lots per annum.

Importantly, this shows that the subject site is expected for completion prior to the 2031 design horizon which is understood to be consistent with the GFSTM testing to date.

4.3 TRIP GENERATION & DISTRIBUTION

The peak period trip generation assumptions have been adopted from the original *Flagstone City – Traffic Planning Assessment* (Cardno, August 2012) and are considered to remain representative for the site.

Table 4.1 shows the adopted trip generation rates within the subject site, including adopted daily rates.

Table 4.1: Adopted Peak Period Trip Generation Rates

Land Use Type	Trip Generation Rate			Units
	AM Peak (veh/h)	PM Peak (veh/h)	Daily (veh/d)	
Residential Low / Medium	0.60	0.60	6.0	per dwelling
Residential Medium	0.50	0.50	5.0	per dwelling
Residential High	0.40	0.40	4.0	per dwelling
Community Facilities	1.0	2.0	5.0	per 100m ²
Retail Centre	2.5	10.0	121	per 100m ²

As per the above, the adopted peak period trip distribution splits are outlined in Table 4.2.

Table 4.2: Adopted Peak Period Trip Distribution

Land Use Type	AM Peak Period		PM Peak Period		Daily	
	IN	OUT	IN	OUT	IN	OUT
Residential	30%	70%	60%	40%	50%	50%
Community Facilities	60%	40%	50%	50%	50%	50%
Retail Centre	60%	40%	50%	50%	50%	50%

The mode share adjustment factors have also been adopted from the original traffic planning assessment (Cardno, August 2012) and are outlined in Table 4.3.

Table 4.3: Adopted Mode Share Adjustment Factors

		Town Centre	Residential / Other	External
Internal	Town Centre	50%	84%	85%
	Residential / Other	84%	85%	85%
External		85%	85%	100%

4.4 PEAK PERIOD TRIP GENERATION

The resulting trip generation calculations for each stage are detailed below in Table 4.4 to Table 4.7. Only the land use types in each stage are included in the respective tables. Note that the *maximum potential residential dwellings* have been used for these calculations (refer RPS Plans of Subdivision).

Table 4.4: Stage 2: Development Peak Period Trip Generation

Land Use Type	Dwellings / GFA	Total Trips ¹ (veh/h)	Mode Share	Adjusted Trips ¹ (veh/h)	AM Peak Period		PM Peak Period	
					IN	OUT	IN	OUT
Res. Low/Med	252	151 / 151	85%	128 / 128	38	90	77	51
TOTALS		151 / 151		128 / 128	38	90	77	51

¹ The total trips are shown as AM / PM, this value only differs where different AM and PM trip rates are adopted for a single use.

Table 4.5: Stage 3: Development Peak Period Trip Generation

Land Use Type	Dwellings / GFA	Total Trips ¹ (veh/h)	Mode Share	Adjusted Trips ¹ (veh/h)	AM Peak Period		PM Peak Period	
					IN	OUT	IN	OUT
Res. Low/Med	455	273 / 273	85%	232 / 232	70	162	139	93
TOTALS		265 / 265		225 / 225	70	162	139	93

¹ The total trips are shown as AM / PM, this value only differs where different AM and PM trip rates are adopted for a single use.

Table 4.6: Stage 4: Development Peak Period Trip Generation

Land Use Type	Dwellings / GFA	Total Trips ¹ (veh/h)	Mode Share	Adjusted Trips ¹ (veh/h)	AM Peak Period		PM Peak Period	
					IN	OUT	IN	OUT
Res. Low/Med	466	280 / 280	85%	238 / 238	71	167	143	95
Retail	5,513m ²	138 / 551		117 / 468	70	47	234	234
Community ²	2,500m ²	25 / 50		21 / 43	13	8	22	22
TOTALS		443 / 881		376 / 749	154	222	399	351

¹ The total trips are shown as AM / PM, this value only differs where different AM and PM trip rates are adopted for a single use.

² Assumed 50% plot ratio for community facility lot to determine GFA.

Table 4.7: Stage 5: Development Peak Period Trip Generation

Land Use Type	Dwellings / GFA	Total Trips ¹ (veh/h)	Mode Share	Adjusted Trips ¹ (veh/h)	AM Peak Period		PM Peak Period	
					IN	OUT	IN	OUT
Res. Low/Med	554	332 / 332	85%	282 / 282	85	197	169	113
Res. Med ²	34	17 / 17		14 / 14	4	10	8	6
TOTALS		349 / 349		296 / 296	89	207	177	119

¹ The total trips are shown as AM / PM, this value only differs where different AM and PM trip rates are adopted for a single use.

² Conservatively assumed 50 dwellings / ha for medium density lot to determine indicative dwelling numbers.

Table 4.8 below provides a trip generation summary for the entire subject site (all stages).

Table 4.8: Stages 2-5 Peak Period Trip Generation Summary

Stage	AM Peak Period			PM Peak Period		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Stage 2	38	90	128	77	51	128
Stage 3	70	162	232	139	93	232
Stage 4	154	222	376	399	351	749
Stage 5	89	207	296	177	119	296
TOTALS	351	681	1,032	792	614	1,405

As shown above, the subject site is estimated to generate in the order of 1,000 and 1,400 trips overall in the AM and PM peak periods respectively.

4.5 DAILY TRIP GENERATION

The overall daily trip generation estimates for Stages 2-5 are summarised in Table 4.9 below. These calculations are based on the rates, distributions and mode share identified in Section 4.3 above.

Table 4.9: Stages 2-5 Daily Trip Generation Estimate

Stage	Daily Trip Generation by Land Use					Total Split		Total
	Res. Low	Res. Med	Res. High	Community	Retail	IN	OUT	
Stage 2	1,285	-	-	-	-	642	643	1,285
Stage 3	2,321	-	-	-	-	1,161	1,160	2,321
Stage 4	2,377	-	-	106	5,670	4,076	4,077	8,153
Stage 5	2,825	145	-	-	-	1,485	1,485	2,970
TOTALS	8,808	145	-	106	5,670	7,364	7,365	14,729

As shown above, the subject site is estimated to generate in the order of 14,700 daily trips overall.

It should be noted that the retail volumes noted above do not account for linked-trip discounts and/or drop-in (pass-by) trips associated with retail uses. Hence the above is considered a conservative maximum.

4.6 FORECAST TRAFFIC VOLUMES

As mentioned, VLC have developed the GFSTM on behalf of EDQ and have tested Interim (2031) and Ultimate Scenarios. The resultant daily volumes on key links through the subject site were documented in the *Greater Flagstone Priority Development Area – Traffic Modelling Report* (VLC, January 2017) and includes consideration of through traffic (amongst other detailed considerations). Whilst updated modelling is currently being undertaken, the findings of this previous study have been used in the determination of appropriate road hierarchy and typical cross-sections for the site based on forecast daily traffic volume.

It should be noted that a range of alternative network upgrade / access strategies were tested as part of the Interim (2031) modelling which largely focused on the Flagstone City area accessing the broader network (e.g. via connections / upgrades of Mountain Ridge Road, Homestead Drive, New Beith Road (North-South Arterial Road), etc.). For the purposes of determining the appropriate road hierarchies, the critical road volumes were adopted.

Based on the above, the forecast daily traffic volumes for the key spine roads within the subject site are shown below (*volumes are approximated and in relation to the subject site, Stages 2-5*).

Table 4.10: Forecast Daily Traffic Volumes – Key Spine Roads (VLC Model Outputs)

Year / Scenario	Key Spine Road	Location Description	Daily Volume (approx.)	Typical Cross-section Required (capacity)
Interim (2031)	Flagstonian Drive	South of Road 2	15,800 veh/day	two-lane cross-section
		Northwest of Road 2	15,000 veh/day	two-lane cross-section
	Road 2	North of Flagstonian Drive	9,700 veh/day	two-lane cross-section
	North-South Arterial	North of Flagstonian Drive	14,500 veh/day	two-lane cross-section
Ultimate	Flagstonian Drive	South of Road 2	20,400 veh/day	four-lane cross-section
		Northwest of Road 2	16,200 veh/day	two-lane cross-section
	Road 2	North of Flagstonian Drive	20,200 veh/day	four-lane cross-section
	North-South Arterial	North of Flagstonian Drive	40,000 veh/day	four-lane cross-section

Note, the 2031 volumes adopted above are largely based on Network C-2x from VLC's modelling which assumes connection via New Beith Road, Mountain Ridge Road and other additional external road upgrades.

As shown above, the forecast daily traffic volumes in relation to the subject site suggest that two-lane cross-sections could be implemented in the interim, with the majority of the key spine roads requiring four-lanes ultimately with exception to the western extent of Flagstonian Drive only requiring two-lanes in terms of environmental capacity.

This finding remains consistent with existing planning for Flagstone City, including the under-construction Stage 1 and Flagstonian Drive (south of Stage 2).

4.7 ROAD HIERARCHY

The adopted road hierarchy and typical cross-sections for the key spine roads are indicated in Table 4.11.

Table 4.11: Road Hierarchy and Typical Cross-section Parameters: Key Spine Roads

Road	Hierarchy	Reserve	Pavement	Lanes	Parking	Bus	Footpath	Cycling
INTERIM ARRANGEMENT								
Flagstonian Drive	Trunk Connector	32m	7m	2	No	Yes	1.5m (one side)	3.0m two-way cycle track
Road 2	Trunk Connector	32m	7m	2	No	Yes	1.5m (one side)	3.0m two-way cycle track
North-South Arterial ¹	Sub-Arterial	33m	7m	2	No	Yes	1.5m (one side)	3.0m two-way cycle track
ULTIMATE ARRANGEMENT								
Flagstonian Drive	Trunk Connector	32m	14m (+5m median)	4	No	Yes	1.5m (both sides)	3.0m two-way cycle track
Road 2	Trunk Connector	32m	14m (+5m median)	4	No	Yes	1.5m (both sides)	3.0m two-way cycle track
North-South Arterial ¹	Sub-Arterial	33m	14m (+5m median)	4	No	Yes	1.5m (both sides)	3.0m two-way cycle track

¹ Reserve widths, pavement widths & other provisions are indicative, & subject to further planning & development of North-South Arterial corridor.

Typical cross-sections are included in Appendix B and form part of the civil engineering package.

It is understood that EDQ are ultimately seeking to achieve 3.0m two-way cycle tracks down both sides of the North-South Arterial. The current typical cross-sections include this down one side of the North-South Arterial which complies with endorsed Movement IMP and previously approved typical sections.

Regardless, it is envisaged that a modified cross-section may be achievable within the existing proposed 33m reserve width, subject to further discussions with EDQ.

Table 4.12 outlines the hierarchy and cross-section details for other (local) roads within the subject site. These cross-sections are the typical cross-sections depicted in Appendix B.

Table 4.12: Road Hierarchy and Typical Cross-section Parameters: Local Roads

Road Hierarchy	Reserve*	Pavement	Lanes	Parking	Bus	Footpath	Cycling
Trunk Connector (UC-2L-3)	23.7m	11.8m	2	Yes	Yes	1.5m (both sides)	3.0m two-way cycle track
Trunk Connector (UC-2L-2)	21.9m	10m	2	No	Yes	1.5m (both sides)	3.0m two-way cycle track
Neighbourhood Connector (UC-2L-1)	20.2m	11.2m	2	Yes	Yes	1.5m (one / both sides)	3.0m two-way cycle track / shared path
Neighbourhood Access Street (UAS-2)	16.5m	7.5m	2	Yes	No	1.5m (one side)	On-road
Neighbourhood Access Street (UAS-1)	16.0m	8.3m	2	Yes	No	1.5m (one side)	On-road
Rear Lane (UAL-1)	6.5m	5.5m	1	No	No	No	No

* The reserve widths shown represent the minimum widths in a particular location, and wider reserves are achieved in general.

Further to the above, it is noted that specific areas throughout the subject site may include slight modifications to actual road width dependent on the design / localised constraints. In these locations, the typical cross-sections are applied accordingly to include the key parameters above, whilst considering verge width, services and landscaping requirements (if/as required). As previously identified, reserve widths are typically reduced by 2m where located adjacent a park. Specifically, a 4m shared path is provided along the park area in Stage 5 in place of the typical 3m separated cycle track + 1.5m footpath, allowing for a slightly reduced verge width to be achieved (see Section 6 for further details). Detailed road hierarchy layout plans have been developed by Meinhardt and included in the civil engineering package.

To further illustrate the road hierarchy considerations, an indicative daily link volume plan has been developed for Stages 2-5. This is based on the previous VLC volume outputs on key spine roads, and the estimated daily link volumes on key local roads (i.e. Neighbourhood Connector and above) as shown in Figure 4.1 overleaf. Whilst it is acknowledged that different link segments will carry different total volumes, this is dependent on more complex distribution splits to be determined by the GFSTM considering

accessibility, town centre and other attractors. Importantly, the maximum estimated link volumes are not likely to exceed the environmental capacity of the roads based on their nominated road hierarchy, and no capacity issues are expected.

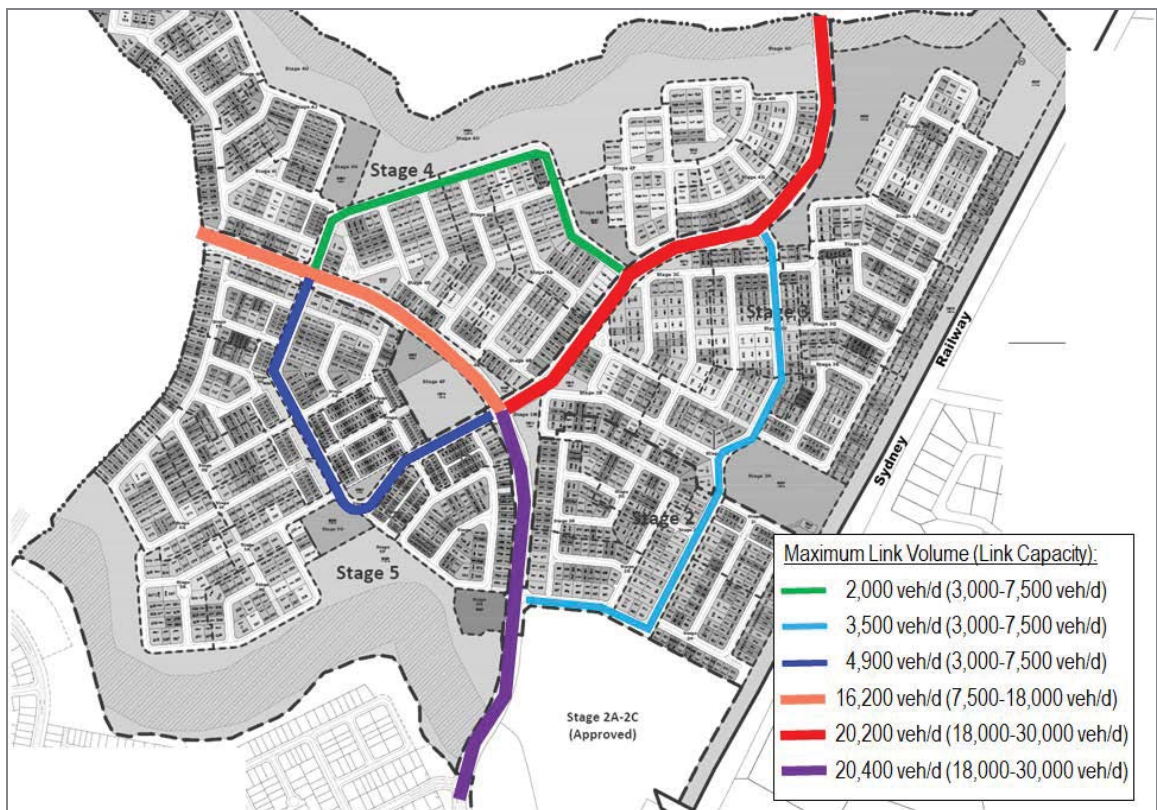


Figure 4.1: Daily Link Volume Estimates

4.8 KEY INTERSECTIONS

Intersection Locations

The key intersections along major spine roads within the subject site are shown below in Figure 4.2.



Figure 4.2: Stages 2-5: Key Intersection Locations

The above key intersections are listed in Table 4.13.

Table 4.13: Key Intersections Summary

Intersection ID	Major Approach	Minor Approach	Intersection Control
Intersection 1	Flagstonian Drive	Stages 4 & 5 Neighbourhood Connectors	Signalised (four-way)
Intersection 2	Flagstonian Drive	Road 2 & Stage 5 Neighbourhood Connector	Signalised (four-way)
Intersection 3	Flagstonian Drive	Stage 2 Neighbourhood Connector	Signalised (three-way)
Intersection 4	Road 2	Stage 4 Neighbourhood Connector	Priority (three-way)
Intersection 5	Road 2	Stage 3 Neighbourhood Connector	Signalised (three-way)

The provision of the signalised intersection arrangements is to accommodate traffic flows, active transport movements (e.g. pedestrians / cyclists) and manage delays through coordination (where required).

Intersection Spacing

The spacing of key intersections along the major spine roads are shown below in Figure 4.3.

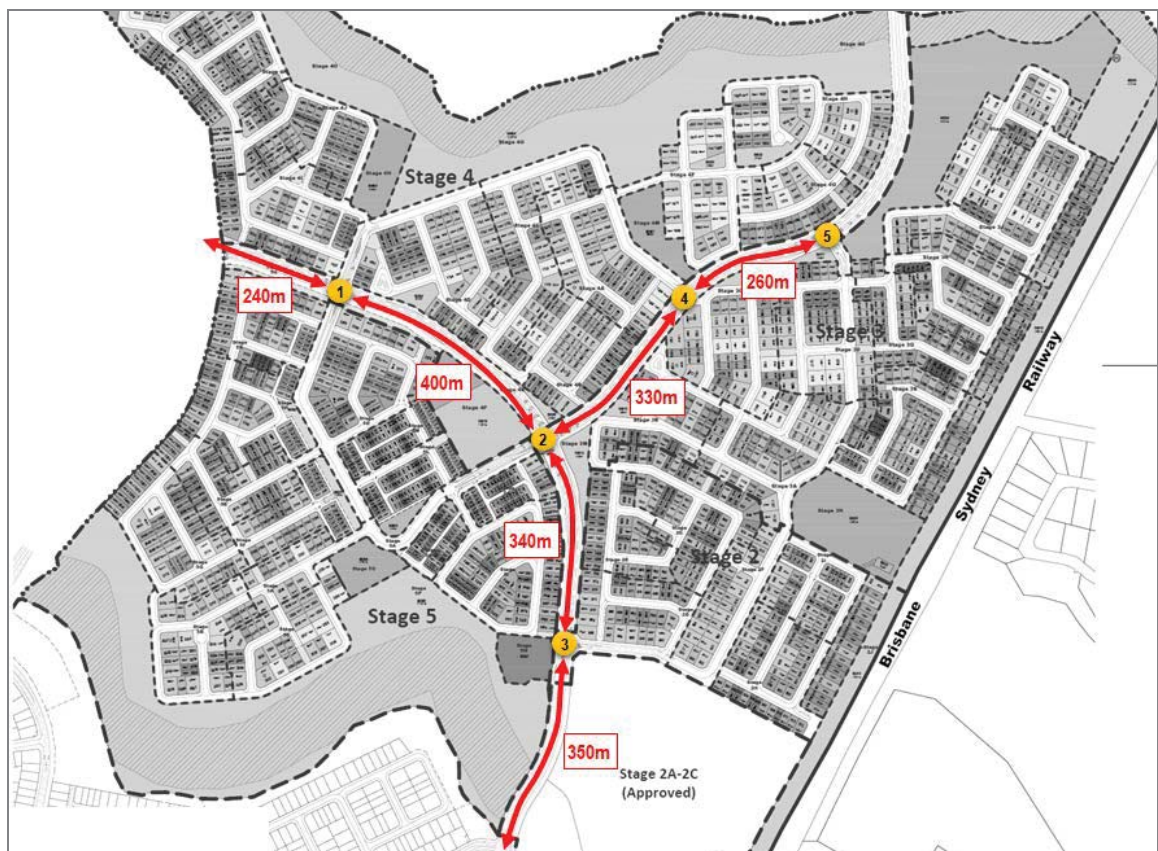


Figure 4.3: Stages 2-5: Key Intersection Spacing

Typical centre-to-centre spacing of intersections along trunk connector roads is 300m (where achievable). As shown above, two (2) key intersections are positioned marginally less than 300m from the nearest intersection. These include:

- Intersection 1: located approximately 240m from North-South Arterial Road; and
- Intersection 5: located approximately 260m from Intersection 4.

Intersection 1: this location is physically restricted due to the difficult topography associated with Stage 4 to the north. Regardless, a reduction in 60m spacing between intersections is considered marginal, and unlikely to impact the operation of the future North-South Arterial intersection. Efficient signal coordination and appropriate turn treatments can be implemented to achieve optimal intersection operation.

Intersection 5: this location also faces challenging topography and is positioned to optimise sight distances. This intersection is proposed as a signalised T-intersection and is not expected to experience operational performance issues. The spacing of 260m represents a marginal 40m reduction in the typical spacing which is unlikely to impact on the operation of nearby intersections.

Intersection Configurations

In determining the appropriate intersection layouts for the key intersections identified, a detailed modelling exercise is required to be undertaken. A micro-simulation (AIMSUN) model has been developed to test the vehicle interactions and determine intersection configurations for the subject site.

However, this micro-simulation modelling is required to be informed by cordon matrices (and other outputs) from VLC's updated modelling using the GFSTM. Once these cordon matrices are sourced, peak period demand matrices will be developed and tested in AIMSUN where intersection layouts can be confirmed. This process is currently underway (at the time of preparing this report) with ongoing discussions between PEET, VLC and EDQ.

As discussed with EDQ, it is understood that the detailed determination of intersection configurations will be completed as part of *Compliance Assessment*.

4.9 LOCAL INTERSECTIONS

Local, internal intersections (i.e. those not located on a trunk connector) shall be configured as per the following general principles:

- four-way intersections on connector standard roads shall be provided as small roundabouts;
- four-way intersections on access streets shall be provided as priority-controlled intersections designating priority to the higher order road;
- staggered / offset intersections are avoided wherever possible; and
- 'modified' T-intersection arrangements are implemented where necessary to designate priority and as speed control measures in local access streets.

On the basis of the above, the proposed layout for Stages 2-5 is generally well resolved and provides a safe and functional road layout with typical intersection arrangements achieved.

5. PUBLIC TRANSPORT PROVISIONS

5.1 BUS ROUTES & STOPS

There is currently minimal to no bus services for the Greater Flagstone PDA (with the exception of school routes) due to the current low passenger demand and lack of sufficient development density.

The only nearby bus service is understood to be route 540 running north-south along Mount Lindesay Highway at hourly frequencies between Beaudesert and Browns Plains. It connects key existing facilities outside the PDA, including; the Greenbank RSL Park 'n' Ride, the Park Ridge Park 'n' Ride, and Browns Plains Bus Station.

There are several key public transport projects / strategies / investigations associated with the Greater Flagstone PDA that aim to build accessible public passenger transport networks for the expected growth in the region. Some of these include (but not limited to):

- the *Salisbury to Beaudesert Passenger Rail* (which includes 11 new rail stations – including Flagstone Central, dual passenger lines and freight lines, and associated infrastructure);
- the *Mount Lindesay / Beaudesert Strategic Transport Network Investigation* (which investigated long-term (to 2056) passenger and freight transport links identifying key north-south and east-west corridors connecting centres); and
- the Department of Transport and Main Roads (TMR) *Greater Flagstone and Ripley Valley PDA Passenger Transport Infrastructure Investment Program (PTIIP)* (which identifies key bus routes to service the Greater Flagstone PDA out to 2031).

A significant amount of planning has previously been completed for the Flagstone City development area, therefore the following information presents key potential bus routes and stop locations for Stages 2-5 only, as shown in Figure 5.1.

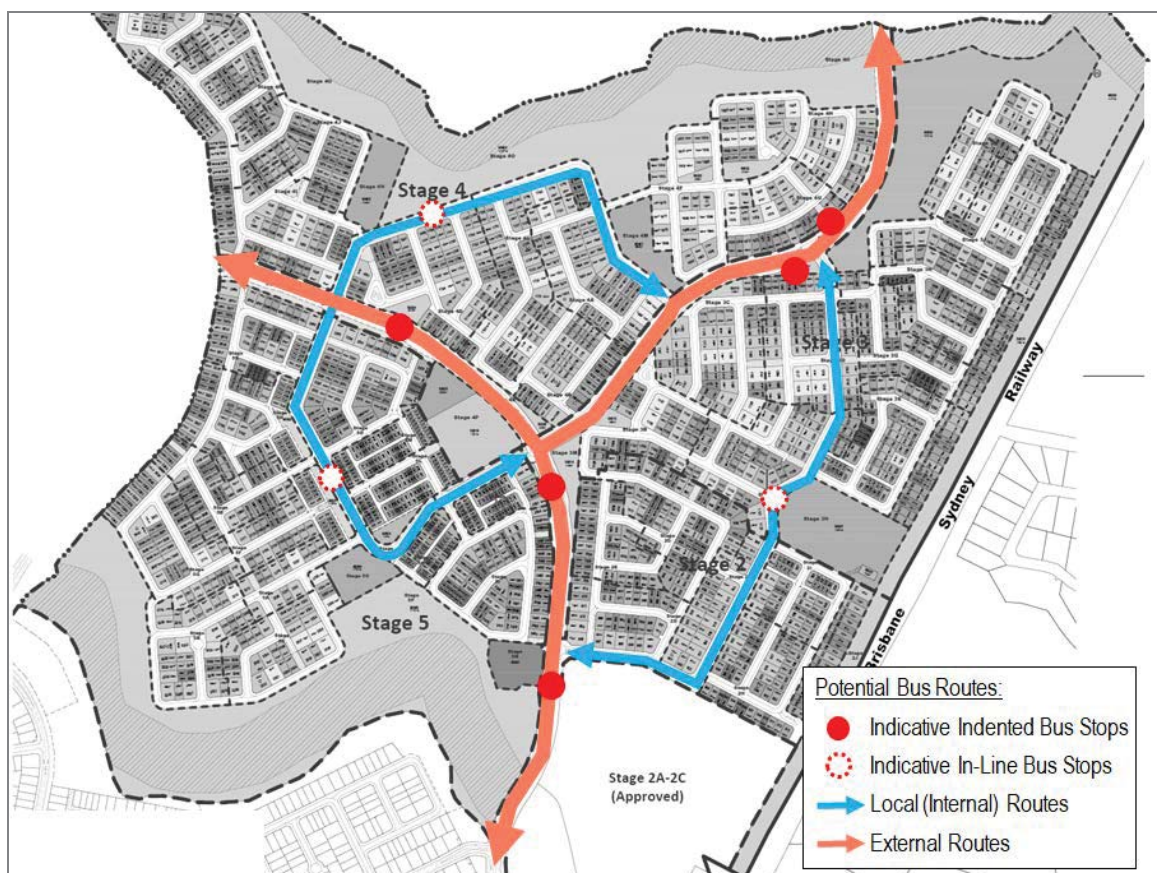


Figure 5.1: Stages 2-5: Potential Public Transport Routes

As shown above, key external routes traverse the major spine roads of Flagstonian Drive and Road 2, performing a broader network coverage function connecting with the North-South Arterial, the future planned rail stations of Flagstone and New Beith, and other local (internal) routes.

Similarly, local (internal) routes are envisaged to primarily traverse the Neighbourhood Connector standard roads servicing the local neighbourhoods, connecting with external routes and servicing the nearby CBD and transport hubs (rail stations, etc.).

Whilst detailed public transport planning has not been completed as part of this application, the proposed development layout is considered suitable to accommodate appropriate public transport provisions.

It is important to note, that the above bus stop locations (particularly those that are 'in-line' stops) are indicative only and are shown to demonstrate coverage within 400m catchments (see below). The location of these stops will be determined as part of TransLink's future route planning.

5.2 BUS STOP COVERAGE

Based on the indicative bus stop locations shown above, Figure 5.2 demonstrates the overall public transport coverage that can be achieved, showing 400m stop catchments for indicative stop locations.



Figure 5.2: Stages 2-5: Potential Public Transport Coverage

Based on the above, approximately 95% of all dwellings would be within 400m of a potential public transport service in accordance with the requirements of the Development Scheme.

It is envisaged that stops along the key spine roads would be provided as intermediate stops (indented where achievable), while stops on Neighbourhood Connector standard roads would be regular stops and operate in a kerbside / in-line configuration (*the location of these stops will be subject to TransLink's future route planning*).

The above public transport considerations associated with the subject site are expected to assist in reaching the public transport mode share targets and promote public transport use as the region grows.

6. ACTIVE TRANSPORT PROVISIONS

The lot layout and active transport provisions are considered to be well resolved throughout the subject site. Key spine roads will ultimately have 1.5m footpaths on both sides of the road, and a 3.0m separated two-way cycle track.

All Neighbourhood Connector roads will typically have 1.5m footpaths on both sides of the road, and a 3.0m two-way separated cycle track or a 3.0m shared path on one side. Neighbourhood Access Streets will typically have a 1.5m footpath on at least one side.

In addition, a 4m shared path has been provided along the park area in Stage 5 (i.e. between Stage 5N (medium density allotment) and the Stage 5 Neighbourhood Connector). This has been provided in-place of the typical 3m separated cycle track + 1.5m footpath allowing for a slightly reduced verge to be achieved, whilst still maintaining appropriate active transport provisions for cyclists and pedestrians. In addition, a 4m shared path has been provided along the Neighbourhood Connector of the Stage 4 park area (between Stage 4N, 4O and 4M) which is considered appropriate to service the surrounding area and park interface.

The provision of a 4m shared path is appropriate when considering the criteria outlined for shared paths in the *Austrorads Guide to Road Design: Part 6A, Paths for Walking and Cycling (AGRD6A) Section 5.1.4, Table 5.3* which is reproduced below for ease of reference.

Table 5.3: Shared path widths			
	Suggested path width (m)		
	Local access path	Regional path ⁽³⁾	Recreational path
Desirable minimum width	2.5	3.0	3.5
Minimum width – typical maximum	2.0 ⁽¹⁾ – 3.0 ⁽²⁾	2.5 ⁽¹⁾ – 4.0 ⁽²⁾	3.0 ⁽¹⁾ – 4.0 ⁽²⁾

1 A lesser width should only to be adopted where cyclist volumes and operational speeds will remain low.
 2 A greater width may be required where the numbers of cyclists and pedestrians are very high or there is a high probability of conflict between users (e.g. people walking dogs, in-line skaters etc.).
 3 May be part of a principal bicycle network in some jurisdictions.

SOURCE: AGRD6A, Section 5.1.4: Shared Paths, Table 5.3: Shared Path Widths

Figure 6.1: AGRD6A Shared Path Widths Extract

The above AGRD6A extract identifies that a 4m wide shared path is an appropriate treatment for both Regional and Recreational path types and is therefore considered appropriate as proposed.

Figure 6.2 overleaf shows the major active transport routes throughout the subject site, noting that all Neighbourhood Access Streets also have pedestrian footpath provisions.

Further to the below figure, throughout each neighbourhood a range of linear connections and parks are provided which support greater active transport trips and desire lines. This allows for improved connectivity and accessibility resulting in connected neighbourhoods and promoting active transport trips.

The proposed active transport provisions and connections are therefore considered appropriate and generally in accordance with the relevant requirements achieving the overall intent of the Development Scheme and Connecting SEQ.

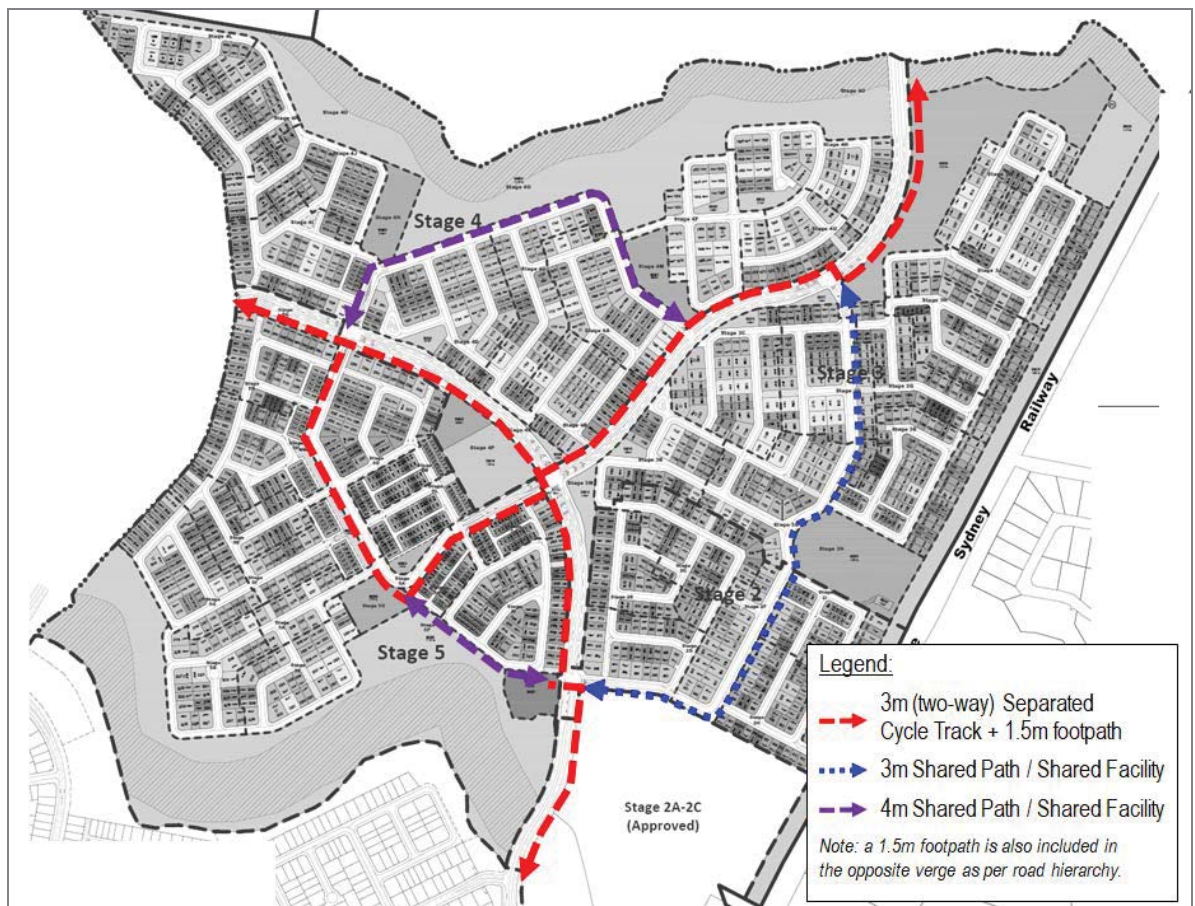


Figure 6.2: Stages 2-5: Key Active Transport Routes

7. SUMMARY & CONCLUSIONS

The key findings for Stages 2-5 of the Flagstone City development area are summarised below:

- the proposed Stages 2-5 development consists of a total of 1,668 residential lots with a max. residential potential of 1,727 dwellings (considering multiple dwelling lots);
- the major transport components within the subject site consist of:
 - Flagstonian Drive (Trunk Connector): extending north-northwest from Stage 1 to the western boundary of the subject site (i.e. to the North-South Arterial);
 - Road 2 (Trunk Connector): extending northeast from Flagstonian Drive to the northern boundary of the subject site;
 - a signalised four-way intersection between Flagstonian Drive and Road 2;
 - a signalised four-way intersection on Flagstonian Drive servicing Stage 4 and Stage 5;
 - two (2) three-way / T-intersections along Road 2 servicing Stage 3 and Stage 4;
 - a signalised T-intersection on Flagstonian Drive servicing Stage 2;
 - Neighbourhood Connector roads intersecting with Trunk Connector roads servicing residential catchments;
 - a network of Neighbourhood Access Streets and rear lanes within residential catchments.
- a parking analysis plan prepared by RPS demonstrates that achievable on-street parking meets EDQ's requirements of 0.75 on-street spaces per 3bed+ house;
- the development is estimated to generate in the order of 1,000 and 1,400 trips in the AM and PM peak periods respectively, and approximately 14,700 daily trips considering relevant trip rates and adopted mode share factors;
- the road hierarchy and typical cross-sections associated with key spine roads were determined based on daily volumes sourced from VLC modelling of Interim (2031) and Ultimate Scenarios, as follows:
 - Flagstonian Drive (south): Interim: 15,800 veh/d (two-lanes) | Ultimate: 20,400 veh/d (four-lanes);
 - Flagstonian Drive (north): Interim: 15,000 veh/d (two-lanes) | Ultimate: 16,200 veh/d (two-lanes);
 - Road 2: Interim: 9,700 veh/d (two-lanes) | Ultimate: 20,200 veh/d (four-lanes);
 - North-South Arterial: Interim: 14,500 veh/d (two-lanes) | Ultimate: 40,000 veh/d (four-lanes).
- the road hierarchy and typical cross-sections associated with other (local) roads have been designed to Neighbourhood Connector, Neighbourhood Access Street and rear lane standards which are considered suitable to service the relevant neighbourhoods and consistent with EDQ Guidelines;
- an estimation of daily link volumes indicates that the roads are suitably designed in terms of capacity, however the impending VLC modelling outputs will provide a more accurate indication of link volumes in the future;
- there are five (5) key intersections located along Flagstonian Drive and Road 2 which provide primary access to the relevant neighbourhoods, these are proposed to be signalised to accommodate traffic flows, active transport movements and manage delays through coordination (where required);
- two (2) key intersections are positioned with marginally less than the typical 300m intersection spacing (approx. 40-60m) which is not considered to impact operations of nearby intersections;
- detailed intersection configurations associated with Stages 2-5 will be determined using a micro-simulation (AIMSUN) model to be informed by cordon matrices (and other outputs) from VLC's updated modelling using the GFSTM – it is understood that this will be completed as part of compliance assessment (as discussed with EDQ);
- potential public transport routes and stops have been identified throughout Stages 2-5 to connect the neighbourhoods to the broader network and future planned rail stations;
- the proposed bus stop locations achieve the requirements of the Development Scheme with approximately 95% of all dwellings within 400m of a potential public transport service; and
- the proposed active transport provisions and connections are considered appropriate and generally in accordance with the relevant requirements achieving the overall intent of the Development Scheme and Connecting SEQ, with the provision of sealed footpaths, shared paths, separated two-way cycle tracks, and linear connections along key routes and connecting neighbourhoods.

APPENDIX A

OVERALL LOT LAYOUT



Land Budget Stages 2 – 5

Land Use	Stage 2	Stage 3	Stage 4	Stage 5	Overall
Area of Subject Site	16,865 ha	47,116 ha	54,576 ha	50,963 ha	169,343 ha
Area of Subject Site	16,865 ha	47,116 ha	54,576 ha	50,963 ha	169,343 ha
%	100.0%	100.0%	100.0%	100.0%	100.0%
Residential Allotments	10,284 ha	10,742 ha	21,369 ha	19,665 ha	71,058 ha
Residential Allotments	10,284 ha	10,742 ha	21,369 ha	19,665 ha	71,058 ha
%	60.9%	22.8%	39.2%	38.8%	41.9%
Community Facility Allotment	1,324 ha	—	—	—	1,324 ha
Community Facility Allotment	1,324 ha	—	—	—	1,324 ha
%	7.8%	0.0%	0.0%	0.0%	0.8%
Balance Super Allotments	1,587 ha	3,822 ha	0,747 ha	—	6,156 ha
Balance Super Allotments	1,587 ha	3,822 ha	0,747 ha	—	6,156 ha
%	9.3%	8.1%	1.4%	0.0%	3.6%
Total Area of Allotments	11,885 ha	23,564 ha	23,340 ha	20,332 ha	79,692 ha
Total Area of Allotments	11,885 ha	23,564 ha	23,340 ha	20,332 ha	79,692 ha
%	70.0%	49.9%	42.8%	40.1%	46.9%
Utilities	—	0,045 ha	—	—	0,045 ha
Utilities	—	0,045 ha	—	—	0,045 ha
%	0.0%	0.1%	0.0%	0.0%	0.0%
Total Area of Utilities	—	0,045 ha	—	—	0,045 ha
Total Area of Utilities	—	0,045 ha	—	—	0,045 ha
%	0.0%	0.1%	0.0%	0.0%	0.0%
Collector Road	1,453 ha	4,238 ha	4,559 ha	2,432 ha	12,682 ha
Collector Road	1,453 ha	4,238 ha	4,559 ha	2,432 ha	12,682 ha
%	8.6%	9.0%	8.4%	4.8%	7.5%
Local Road	3,534 ha	7,612 ha	9,528 ha	8,745 ha	29,419 ha
Local Road	3,534 ha	7,612 ha	9,528 ha	8,745 ha	29,419 ha
%	20.9%	16.2%	17.5%	17.2%	17.3%
Linear Connections	0,036 ha	0,178 ha	0,359 ha	0,459 ha	1,032 ha
Linear Connections	0,036 ha	0,178 ha	0,359 ha	0,459 ha	1,032 ha
%	0.2%	0.4%	0.7%	0.9%	0.6%
Entry Statements	—	—	—	—	—
Entry Statements	—	—	—	—	—
%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Area of New Road	5,023 ha	12,028 ha	14,446 ha	11,636 ha	43,133 ha
Total Area of New Road	5,023 ha	12,028 ha	14,446 ha	11,636 ha	43,133 ha
%	30.0%	25.6%	26.5%	22.8%	25.4%
Open Space	4,129 ha	14,787 ha	17,742 ha	36,659 ha	73,317 ha
Open Space	4,129 ha	14,787 ha	17,742 ha	36,659 ha	73,317 ha
%	24.5%	31.4%	32.5%	72.1%	43.5%
Direct Recreation Park (Wetland/Play)	2,650 ha	5,597 ha	10,710 ha	30,717 ha	50,174 ha
Direct Recreation Park (Wetland/Play)	2,650 ha	5,597 ha	10,710 ha	30,717 ha	50,174 ha
%	15.7%	11.9%	19.7%	60.5%	29.6%
Neighbourhood Recreation Park	5,010 ha	—	—	—	5,010 ha
Neighbourhood Recreation Park	5,010 ha	—	—	—	5,010 ha
%	29.8%	0.0%	0.0%	0.0%	2.9%
Local Recreation Park	2,345 ha	1,803 ha	0,704 ha	0,188 ha	5,040 ha
Local Recreation Park	2,345 ha	1,803 ha	0,704 ha	0,188 ha	5,040 ha
%	14.0%	3.8%	1.3%	0.4%	3.0%
Local Linear Recreation Park	—	—	—	—	—
Local Linear Recreation Park	—	—	—	—	—
%	0.0%	0.0%	0.0%	0.0%	0.0%
Stormwater Detention	—	—	—	—	—
Stormwater Detention	—	—	—	—	—
%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Open Space	11,479 ha	16,590 ha	19,004 ha	47,073 ha	94,146 ha
Total Open Space	11,479 ha	16,590 ha	19,004 ha	47,073 ha	94,146 ha
%	67.0%	35.1%	34.8%	92.9%	55.5%

Yield Breakdown Stages 2 – 5

Residential Allotments	Typical Size	Typical Area	Stage 2	Stage 3	Stage 4	Stage 5	Overall
Urban & Nano Allotments Product	4.7 x 11.5m	539 ²	—	—	—	8	8
Urban Lots	7.5 x 15m	1125 ²	—	—	—	6	6
Urban Terrace	12.7 x 27.5m	3500 ²	—	7	—	20	27
Subtotal	—	—	—	7	—	34	41
16m Deep Product	14 x 16m	224 ²	—	12	4	8	24
Subtotal	—	—	—	12	4	8	24
25m Deep Product	8.5 x 25m	212 ²	—	8	—	4	12
Villa Allotment	10 x 25m	250 ²	—	14	2	18	34
Courtyard Allotment	14 x 25m	350 ²	—	37	22	119	178
Premium Courtyard Allotment	16 x 25m	400 ²	—	17	8	9	34
Premium Traditional Allotment	20 x 25m	500 ²	—	4	—	8	12
Possible Multiple Residential Allotment	—	—	—	2	3	2	7
Subtotal 16m Deep Product	—	—	—	89	30	56	175
Subtotal 25m Deep Product	—	—	—	—	—	34	34
Terrace 4.5m Allotment	4.5 x 20m	90 ²	—	—	—	35	35
Terrace 6.5m Allotment	6.5 x 20m	130 ²	—	—	—	35	35
Terrace 7.5m Allotment	7.5 x 20m	150 ²	—	8	5	43	64
Terrace 9.5m Allotment	9.5 x 20m	190 ²	—	4	2	44	54
Subtotal	—	—	—	12	12	7	156
30m Deep Product	10 x 30m	300 ²	—	36	49	56	141
Villa Allotment	12 x 30m	375 ²	—	34	92	113	249
Premium Villa Allotment	14 x 30m	420 ²	—	50	94	113	257
Courtyard Allotment	16 x 30m	480 ²	—	27	55	64	146
Premium Traditional Allotment	20 x 30m	600 ²	—	21	32	10	63
Possible Multiple Residential Allotment	—	—	—	1	4	3	8
Subtotal	—	—	—	146	315	392	1146
Total Residential Allotments	—	—	249	436	438	545	1668
Residential Net Density	—	—	18.0 dwha	14.6 dwha	13.2 dwha	18.1 dwha	15.6 dwha
Super Lots	—	—	—	—	—	—	—
Medium Density Allotment	—	—	—	—	—	—	—
Commercial Allotment	—	—	—	—	—	—	—
Community Facility Allotment	—	—	—	—	—	—	—
Balance Super Allotments	—	—	—	—	—	—	—
Sub Total	—	—	—	—	—	—	—
Utilities	—	—	—	—	—	—	—
Sewer Pump Station	—	—	—	—	—	—	—
Sub Total	—	—	—	—	—	—	—
Total Allotments	—	—	250	443	445	546	1684
Maximum Potential Residential Dwellings (Includes Multiple Residential Allotments)	—	—	252	878	486	554	2150
Maximum Potential Net Residential Density	—	—	18.2 dwha	14.6 dwha	14.1 dwha	18.4 dwha	16.6 dwha

PEET

CLIENT

Flagstone Precinct 1

PROJECT

11 March 2020

DATE

110056

Job Ref.

WV / JC / MD

Comp By.

DG / MD

Chk By.

Economic Development Queensland

Local Authority.

REVISION

1. 11/03/2020: Road and Site Updates

2. 11/03/2020: Road and Site Updates

3. 11/03/2020: Road and Site Updates

4. 11/03/2020: Road and Site Updates

5. 11/03/2020: Road and Site Updates

6. 11/03/2020: Road and Site Updates

7. 11/03/2020: Road and Site Updates

8. 11/03/2020: Road and Site Updates

9. 11/03/2020: Road and Site Updates

10. 11/03/2020: Road and Site Updates

Source Information:

Registered Survey

Adjoining Information: DCDB

Contours: Bralies

Scale 1 : 3000 @ A1

0 15 30 60 90 120 150 180

Approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 0.1 metres.

The boundaries shown on this plan should not be used for final detailed engineers design.

Legend

Site Boundary

Proposed Stage Boundary

Existing Stage Boundary

Existing O100

Residential Allotment

Indicative Pump Station Location

10m Wide EMT (Railway)

6m Wide SPS Access EMT

Overall Allotment Layout - Sub - Staging

Stages 2 – 5

Plan of Subdivision

Scale 1 : 3000

Sheet A1

Plan Ref 110056 – 481

Rev I

URBAN DESIGN

100 VICTORIA ROAD

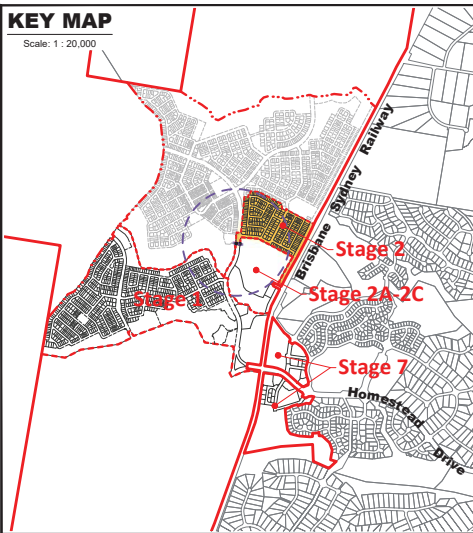
SYDNEY NSW 2000

02 9550 1000

W. 02 9550 1000

KEY MAP

Scale: 1 : 20,000



Legend

- Site Boundary
- Proposed Stage Boundary
- Proposed Sub Stage Boundary
- Existing Q100
- Possible Multiple Residential Allotment (Max. no. of dwellings)
- 10m Wide EMT (Railway)
- Indicative Indented Bus Stop Location
- Bus Stop Catchment (400m)

Note:

All dimensions and areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².
The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
Site boundaries: Registered Survey Plans / Vents.
Adjoining information: DCDB.
Contours: Bradshires.

Land Budget Stage 2

Land Use	Stage 2D	Stage 2E	Stage 2F	Stage 2G	Stage 2H	Stage 2I	Stage 2J	Stage 2K	Overall
Area of Subject Site	2.699 ha	1.919 ha	2.200 ha	3.086 ha	2.500 ha	1.844 ha	1.059 ha	1.581 ha	16.888 ha
Saleable Area	1.485 ha	1.343 ha	1.308 ha	2.213 ha	1.718 ha	1.158 ha	1.059 ha	1.581 ha	10.284 ha
Residential Allotments	1.485 ha	1.343 ha	1.308 ha	2.213 ha	1.718 ha	1.158 ha	1.059 ha	1.581 ha	10.284 ha
Balance Super Allotments	—	—	—	—	—	—	—	—	—
Total Area of Allotments	1.485 ha	1.343 ha	1.308 ha	2.213 ha	1.718 ha	1.158 ha	1.059 ha	1.581 ha	11.855 ha
Road	—	—	—	—	—	—	—	—	—
Collector Road	0.665 ha	—	0.788 ha	—	—	—	—	—	1.453 ha
Local Road	0.549 ha	0.576 ha	0.104 ha	0.837 ha	0.782 ha	0.686 ha	—	—	3.534 ha
Linear Connections	—	—	—	0.036 ha	—	—	—	—	0.036 ha
Entry Statements	—	—	—	—	—	—	—	—	—
Total Area of New Road	1.214 ha	0.576 ha	0.892 ha	0.873 ha	0.782 ha	0.686 ha	—	—	5.023 ha
Open Space	—	—	—	—	—	—	—	—	—
Commod Park	—	—	—	—	—	—	—	—	—
District Recreation Park	—	—	—	—	—	—	—	—	—
Neighbourhood Recreation Park	—	—	—	—	—	—	—	—	—
Local Recreation Park	—	—	—	—	—	—	—	—	—
Local Linear Recreation Park	—	—	—	—	—	—	—	—	—
Stormwater Detention	—	—	—	—	—	—	—	—	—
Total Open Space	—	—	—	—	—	—	—	—	—

Yield Breakdown Stage 2

Residential Allotments	Typical Size	Typical Area	Stage 2D	Stage 2E	Stage 2F	Stage 2G	Stage 2H	Stage 2I	Stage 2J	Stage 2K	Overall
Urban & Nano Allotments Product											
Urban Loft	4.7 x 11.5m	54m²	—	—	—	—	—	—	—	—	0.0%
Urban Allotments	7.5 x 16m	120m²	—	—	—	—	—	—	—	—	0.0%
Urban Terrace	6.2 x 27.5m	170m²	—	—	—	—	—	—	—	—	0.0%
Subtotal			—	—	—	—	—	—	—	—	0.0%
16m Deep Product											
Solar Allotment	14 x 16m	220m²	—	—	—	—	—	—	—	—	0.0%
Subtotal			—	—	—	—	—	—	—	—	0.0%
25m Deep Product											
Mobile Allotment	8.5 x 25m	213m²	—	—	—	—	—	—	—	—	0.0%
Villa Allotment	10 x 25m	250m²	2	5	—	8	10	4	—	—	29
Courtyard Allotment	14 x 25m	350m²	1	10	—	11	12	7	—	—	41
Premium Courtyard Allotment	16 x 25m	400m²	—	4	—	3	9	1	—	—	17
Premium Traditional Allotment	20 x 25m	500m²	—	—	—	—	—	—	—	—	—
Possible Multiple Residential Allotment	—	—	—	—	—	—	2	12	—	—	2
Subtotal			3	19	—	22	33	12	—	—	89
28m Deep Product											
Terrace 7.5m Allotment	7.5 x 28m	210m²	—	—	—	—	—	8	—	—	8
Terrace 9.5m Allotment	9.5 x 28m	265m²	—	—	—	—	—	4	—	—	4
Subtotal			—	—	—	—	—	12	—	—	12
30m Deep Product											
Villa Allotment	10 x 30m	300m²	5	6	—	16	1	1	7	—	36
Premium Villa Allotment	12.5 x 30m	375m²	10	6	2	5	2	—	9	—	34
Courtyard Allotment	14 x 30m	420m²	9	3	10	14	5	6	3	—	50
Traditional Allotment	20 x 30m	600m²	6	—	12	1	4	3	1	—	27
Premium Traditional Allotment	25 x 30m	720m²	—	—	—	—	—	—	—	—	—
Possible Multiple Residential Allotment	—	—	—	—	—	—	—	—	—	—	—
Subtotal			30	15	25	36	12	10	20	—	148
Total Residential Allotments			33	34	25	58	45	34	20	—	249
Residential Net Density			16.2 dw/ha	17.7 dw/ha	17.7 dw/ha	18.8 dw/ha	18.8 dw/ha	18.4 dw/ha	10.8 dw/ha	—	18.0 dw/ha
Super Lots			—	—	—	—	—	—	—	—	—
Balance Super Allotments			—	—	—	—	—	—	—	—	—
Sub Total			—	—	—	—	—	—	—	—	—
Total Allotments			33	34	25	58	45	34	20	—	250
Maximum Potential Residential Dwellings (Includes Multiple Residential Allotments)			33	34	26	58	47	34	20	—	252
Maximum Potential Net Residential Density			16.2 dw/ha	17.7 dw/ha	18.4 dw/ha	18.8 dw/ha	18.8 dw/ha	18.4 dw/ha	10.8 dw/ha	—	18.2 dw/ha

REVISION

A: 31/07/18 Amend Sub-Staging & Open Space
B: 21/11/2018 Further Issues Amendments
C: 22/02/2019 Further Issues Amendments
D: 07/03/2019 Further Issues Amendments
E: 17/06/2019 Stage 2-5 Layout Amendments
F: 19/07/2019 Stage 2-5 Layout Amendments
G: 24/07/2019 Incorporate EDO Feedback
H: 23/09/2019 Stage 2 & 3 Layout Amendments
I: 11/03/2020 Road and Bus Stops Updates

PROJECT

Flagstone Precinct 1

Job Ref. 110056 Date: 11 March 2020
Comp By: WNW/JC/MC DWG Name: Precinct 1 Stage 2
Chk'd By: DG / MD Locality: Flagstone
Local Authority: Economic Development Queensland

CLIENT

PEET

Plan of Subdivision
Stage 2 Overall
Allotment Layout

rps

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Scale 1 : 1500 Sheet A1 Plan Ref 110056 - 375 Rev I

Land Budget Stage 3																			
Land Use	Stage 3A	Stage 3B	Stage 3C	Stage 3D	Stage 3E	Stage 3F	Stage 3G	Stage 3H	Stage 3I	Stage 3J	Stage 3K	Stage 3L	Stage 3M	Stage 3N	Stage 3O	Stage 3P	Stage 3Q	Overall	
Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	%
Area of Subject Site	3,620 ha	2,396 ha	3,346 ha	3,248 ha	2,786 ha	0,909 ha	2,131 ha	2,590 ha	0,858 ha	3,589 ha	2,422 ha	0,927 ha	3,788 ha	2,391 ha	5,010 ha	4,123 ha	2,982 ha	47,116 ha	100.0%
Saleable Area																			
Residential Allotments	2,278 ha	1,321 ha	2,378 ha	2,153 ha	1,724 ha	0,909 ha	1,497 ha	1,696 ha	0,858 ha	2,296 ha	1,705 ha	0,927 ha	—	—	—	—	—	19,742 ha	41.9%
Balance Super Allotments	—	0.136 ha	0.128 ha	—	—	—	—	—	—	—	—	—	0.576 ha	—	—	—	—	2,982 ha	8.1%
Total Area of Allotments	2,278 ha	1,457 ha	2,506 ha	2,153 ha	1,724 ha	0,909 ha	1,497 ha	1,696 ha	0,858 ha	2,296 ha	1,705 ha	0,927 ha	0.576 ha	—	—	—	2,982 ha	23,564 ha	50.0%
Utilities																			
Sewer Pump Station	—	—	—	—	—	—	—	—	—	—	—	—	—	0.045 ha	—	—	—	0.045 ha	0.1%
Total Area of Utilities	—	—	—	—	—	—	—	—	—	—	—	—	—	0.045 ha	—	—	—	0.045 ha	0.1%
Road																			
Collector Road	0.552 ha	—	—	0.474 ha	—	—	—	—	—	—	—	—	3,212 ha	—	—	—	—	4,238 ha	9.0%
Local Road	0.723 ha	0.939 ha	0.804 ha	0.546 ha	1,062 ha	—	0.634 ha	0,894 ha	—	1,293 ha	0,717 ha	—	—	—	—	—	—	7,612 ha	16.2%
Linear Connections	0.067 ha	—	0.036 ha	0.075 ha	—	—	—	—	—	—	—	—	—	—	—	—	—	0.178 ha	0.4%
Entry Statements																		—	0.0%
Total Area of New Road	1,342 ha	0,939 ha	0,840 ha	1,095 ha	1,062 ha	—	0,634 ha	0,894 ha	—	1,293 ha	0,717 ha	—	3,212 ha	—	—	—	—	12,028 ha	25.5%
Open Space																			
Corridor Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,123 ha	4,123 ha	8.8%
Corporation (Wairoa Corridor Park)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,650 ha	—	2,650 ha	—
District Recreation Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,010 ha	—	—	5,010 ha	10.6%
Neighbourhood Recreation Park	—	—	—	—	—	—	—	—	—	—	—	—	—	2,346 ha	—	—	—	2,346 ha	5.0%
Local Recreation Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0%
Local Linear Recreation Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0%
Stormwater Detention	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0%
Total Open Space	—	—	—	—	—	—	—	—	—	—	—	—	—	2,346 ha	5,010 ha	4,123 ha	—	11,479 ha	24.4%

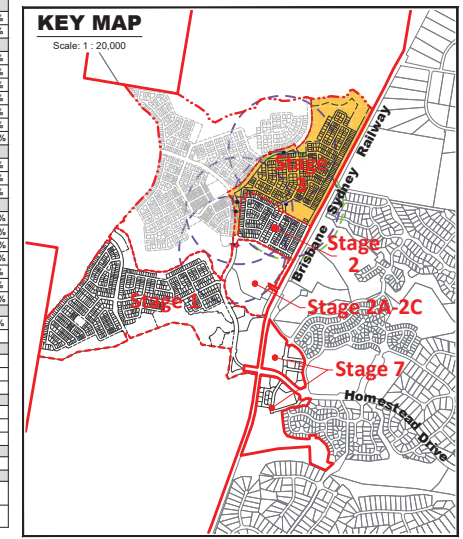
Note:
All dimensions and areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².
The boundaries shown on this plan should not be used for final detailed engineers design.
Road linemarkings and turn slots are indicative only and subject to detailed design.
Source Information:
Site boundaries: Registered Survey Plans / Veris.
Adjoining information: DCOB.
Contours: Bradshires.



Yield Breakdown Stage 3																					
Residential Allotments			Stage 3A	Stage 3B	Stage 3C	Stage 3D	Stage 3E	Stage 3F	Stage 3G	Stage 3H	Stage 3I	Stage 3J	Stage 3K	Stage 3L	Stage 3M	Stage 3N	Stage 3O	Stage 3P	Stage 3Q	Overall	
Typical Size Typical Area																					
Urban & Nano Allotments Product																					
Urban Loft			4.7 x 11.5m	50m²	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0%	
Urban Allotments			7.5 x 16m	120m²	—	—	—	—	7	—	—	—	—	—	—	—	—	—	7	1.6%	
Urban Terrace			6.2 x 27.5m	170m²	—	—	—	—	—	7	—	—	—	—	—	—	—	—	7	0.9%	
Subtotal					—	—	—	—	—	7	—	—	—	—	—	—	—	—	14	3.2%	
16m Deep Product																					
Squat Allotment			14 x 16m	220m²	—	—	4	—	—	4	—	—	4	—	—	—	—	—	12	2.8%	
Subtotal					—	—	4	—	—	4	—	—	4	—	—	—	—	—	12	2.8%	
25m Deep Product																					
Squat Allotment			8.5 x 25m	213m²	—	—	—	4	—	4	—	—	—	—	—	—	—	—	—	8	1.8%
Villa Allotment			10 x 25m	250m²	—	4	—	—	1	—	3	6	—	—	—	—	—	—	14	3.2%	
Courtyard Allotment			14 x 25m	350m²	8	4	1	—	9	—	8	7	—	—	—	—	—	—	37	8.5%	
Premium Courtyard Allotment			16 x 25m	400m²	3	1	1	—	3	3	—	4	—	—	—	—	—	—	18	4.1%	
Premium Traditional Allotment			20 x 25m	500m²	2	1	—	—	1	—	—	—	—	—	—	—	—	—	4	0.9%	
Possible Multiple Residential Allotment			—	—	—	1	1	1	1	—	2	1	—	2	—	—	—	—	9	2.1%	
Subtotal					14	10	3	1	19	—	20	17	—	6	—	—	—	—	90	20.6%	
28m - 30m Deep Product																					
Terrace 7.5m Allotment			7.5 x 28m	210m²	—	—	—	—	8	—	—	—	—	—	—	—	—	—	8	1.8%	
Terrace 9.5m Allotment			9.5 x 28m	265m²	—	—	—	—	4	—	—	—	—	—	—	—	—	—	4	0.9%	
Subtotal					—	—	—	—	12	—	—	—	—	—	—	—	—	—	12	2.8%	
30m Deep Product																					
Villa Allotment			10 x 30m	300m²	3	5	5	5	1	6	3	3	7	1	3	7	—	—	49	11.2%	
Premium Villa Allotment			12.5 x 30m	375m²	12	7	6	14	5	8	3	7	8	9	4	9	—	—	92	21.1%	
Courtyard Allotment			14 x 30m	420m²	9	5	11	10	11	4	9	5	3	15	10	2	—	—	94	21.6%	
Traditional Allotment			20 x 30m	600m²	8	2	10	8	—	—	1	6	—	10	9	1	—	—	55	12.6%	
Premium Traditional Allotment			24 x 30m	720m²	1	2	5	5	—	—	—	—	3	5	—	—	—	—	21	4.8%	
Possible Multiple Residential Allotment			—	—	—	—	3	—	—	—	—	—	1	—	—	—	—	4	0.9%		
Subtotal					33	21	40	42	17	18	16	21	18	38	32	19	—	—	315	72.2%	
Total Residential Allotments			47	31	43	47	48	18	40	45	18	48	32	19	—	—	—	—	436	100%	
Residential Net Density			15.3 dw/ha	13.7 dw/ha	13.4 dw/ha	16.9 dw/ha	17.2 dw/ha	18.8 dw/ha	18.8 dw/ha	17.4 dw/ha	21.8 dw/ha	13.4 dw/ha	13.2 dw/ha	20.5 dw/ha	—	—	—	—	14.5 dw/ha		
Super Lots			Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	
Balance Super Allotments			—	1	1	—	—	—	—	—	—	—	—	—	3	—	—	—	1	6	
Sub Total			—	1	1	—	—	—	—	—	—	—	—	3	—	—	—	—	1	6	
Utilities			Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	Lots	
Sewer Pump Station			—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	
Sub Total			—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	
Total Allotments			47	32	44	47	48	18	40	45	18	48	32	19	3	1	—	—	1	443	
Maximum Potential Residential Dwellings (Includes Multiple Residential Allotments)			48	31	52	48	49	18	42	46	18	50	34	19	—	—	—	—	—	455	
Maximum Potential Net Residential Density			15.6 dw/ha	13.7 dw/ha	16.2 dw/ha	17.3 dw/ha	17.6 dw/ha	18.8 dw/ha	19.7 dw/ha	17.8 dw/ha	21.8 dw/ha	13.9 dw/ha	14.0 dw/ha	20.5 dw/ha	—	—	—	—	—	15.2 dw/ha	

REVISION		PROJECT		CLIENT	
A: 17/07/18 - Amend District Recreation Park		Flagstone Precinct 1		PEET	
B: 31/07/18 Amend Sub-Staging & Open Space		Job Ref. 110056		Date: 11 March 2020	
C: 21/11/2018 Further Issues Amendments		Comp By: WW / JC / MD		DWG Name: Precinct 1 Stage 3	
D: 22/02/2019 Further Issues Amendments		Chk'd By: DG / MD		Locality: Flagstone	
E: 07/03/2019 Further Issues Amendments		Local Authority: Economic Development Queensland			
F: 15/03/2019 Stage 2-5 Layout Amendments					
G: 24/07/2019 Incorporate EDO Feedback					
H: 23/09/2019 Stage 2 & 3 Layout Amendments					
I: 11/03/2020 Road and Bus Stops Updates					

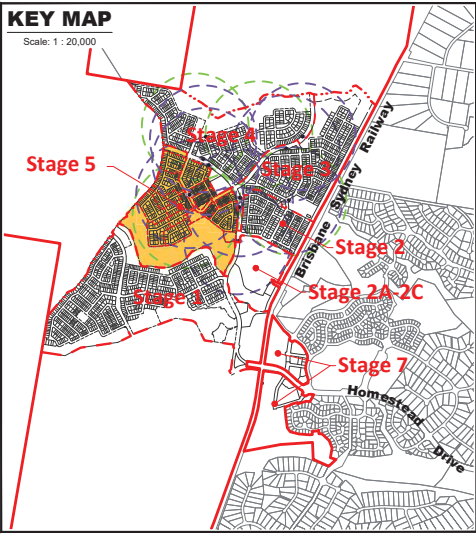
Plan of Subdivision		Stage 3 Overall Allotment Layout	
Scale 1 : 2000		Sheet A1	
Plan Ref 110056 - 382		Rev I	



Scale		Sheet		Plan Ref		Rev	
1 : 2000		A1		110056 - 382		I	

KEY MAP

Scale: 1 : 20,000



Legend

- Site Boundary
- Proposed Stage Boundary
- Proposed Sub Stage Boundary
- Existing Q100
- Residential Allotment (Max. no. of dwellings)
- Indicative Indented Bus Stop Location
- Indicative In-Line Bus Stop Location
- Bus Stop Catchment (400m)
- Neighbourhood Park Catchment (400m)

Note:

All dimensions and areas are approximate only, and are subject to survey and Council approval. Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Road linemarkings and turn slots are indicative only and subject to detailed design.

Source information: Site boundaries: Registered Survey Plans / Veris.

Adjoining information: DCDB.

Contours: Meinhardt.

Land Budget Stage 5

Land Use	Overall	
	Area	%
Area of Subject Site	50.963 ha	100.0%
Saleable Area		
Residential Allotments	19.663 ha	38.6%
Medium Density Allotment	0.660 ha	1.3%
Balance Super Allotments	—	0.0%
Total Area of Allotments	20.323 ha	39.9%
Road		
Collector Road	2.432 ha	4.8%
Local Road	8.745 ha	17.2%
Linear Connections	0.459 ha	0.9%
Entry Statements	—	0.0%
Total Area of New Road	11.636 ha	22.8%
Open Space		
Corridor Park	17.742 ha	34.8%
Corridor (Within Corridor Park)	19.710 ha	
District Recreation Park	0.00%	
Neighbourhood Recreation Park	0.704 ha	1.4%
Local Recreation Park	0.188 ha	0.4%
Local Linear Recreation Park	0.370 ha	0.7%
Swampwater Detention	—	0.0%
Total Open Space	19.004 ha	37.3%

Yield Breakdown Stage 5

Residential Allotments			Overall	
	Typical Size	Typical Area		
Urban & Nano Allotments Product				
Urban Loft	4.7 x 12.5m	50m²	8	1.5%
Urban Allotments	7.5 x 16m	120m²	6	1.1%
Urban Terrace	6.2 x 27.5m	170m²	20	3.7%
Subtotal			34	6.2%
16m Deep Product				
Squat Allotment	14 x 16m	220m²	8	1.5%
Subtotal			8	1.5%
25m Deep Product				
Mode Allotment	8.5 x 25m	213m²	4	0.7%
Villa Allotment	10 x 25m	250m²	18	3.3%
Courtyard Allotment	14 x 25m	350m²	19	3.5%
Premium Courtyard Allotment	16 x 25m	400m²	9	1.7%
Premium Traditional Allotment	20 x 25m	500m²	4	0.7%
Possible Multiple Residential Allotment	—	—	2	0.4%
Subtotal			56	10.3%
28m - 30m Deep Product				
Terrace 4.5m Allotment	4.5 x 28m	126m²	34	6.2%
Terrace 6.6m Allotment	6.6 x 28m	185m²	35	6.4%
Terrace 7.5m Allotment	7.5 x 28m	210m²	43	7.9%
Terrace 9.5m Allotment	9.5 x 28m	265m²	44	8.1%
Subtotal			156	28.6%
30m Deep Product				
Villa Allotment	10 x 30m	300m²	44	8.1%
Premium Villa Allotment	12.5 x 30m	375m²	83	15.2%
Courtyard Allotment	14 x 30m	420m²	108	19.8%
Traditional Allotment	20 x 30m	600m²	43	7.9%
Premium Traditional Allotment	25 x 30m	720m²	10	1.8%
Possible Multiple Residential Allotment	—	—	3	0.6%
Subtotal			291	53.4%
Total Residential Allotments			545	100%
Residential Net Density			18.1 dw/ha	
Super Lots			Lots	
Medium Density Allotment			1	
Balance Super Allotments			—	
Sub Total			1	
Total Allotments			546	
Maximum Potential Residential Dwellings (Includes Multiple Residential Allotments)			554	
Maximum Potential Net Residential Density			18.4 dw/ha	



TO BE READ IN CONJUNCTION WITH 110056 - 404

REVISION

A: 31/07/18 Amend Sub-Staging & Open Space
B: 24/10/18 Amend Layout
C: 03/12/2018 Further Issues Amendments
D: 22/02/2019 Further Issues Amendments
E: 07/03/2019 Further Issues Amendments
F: 15/07/2019 Amend Layout
G: 24/07/2019 Incorporate EDQ Feedback
H: 23/09/2019 Stage 2 & 3 Layout Amendments
I: 11/03/2020 Road and Bus Stop Updates

PROJECT

Job Ref. 110056 Date: 11 March 2020
Comp By: WW/JC/MD DWG Name: Precinct 1 Stage 5
Chk'd By: DG/MD Locality: Flagstone
Local Authority: Economic Development Queensland

Flagstone
Precinct 1

CLIENT

PEET

Plan of Subdivision
Stage 5 Overall
Allotment Layout

rps

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Scale
1 : 2000Sheet
A1Plan Ref
110056 - 403Rev
I

REVISION	
A	31/07/19 Amend Sub-Staging & Open Space
B	Amend Landscaping & Amenities
C	03/12/2019 Finalise Amendments
D	23/02/2019 Further Issue Amendments
E	19/07/2019 Further Issue Amendments
F	19/07/2019 Further Issue Amendments
G	24/07/2019 Incorporate EQO Feedback
H	24/07/2019 Stage 2,3,4 Issue Amendments
I	11/09/2020 Amend Sub-Staging & Open Space

Note:	Boundaries and areas are approximate only and are subject to survey and Council approval.
	Dimensions have been rounded to the nearest 0.1 metres.
	Areas have been rounded down to the nearest 3m ² .
	The boundaries shown on this plan are indicative only and subject to detailed design.
	Road frontages and turn slots are indicative only and subject to detailed design.
Source information:	
Site boundaries: THG	
Other information: DDB,	
Contours: L&S.	

CLIENT	PEET
PROJECT	Flagstone Precinct 1
Plan of Subdivision Stage 5 Overall Statistics	
Date:	11 March 2020
Drawn By:	WG / JCM
Checked By:	DD / MD
DWG Name:	Precinct 1 Stage 5
Job Ref:	110056
Local Authority:	Economic Development Queensland
Locality:	Flagstone
Scale:	Sheet
NTS	A1
Plan Ref:	Revis
110056 - 404	I

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Yield Breakdown Stage 5																							
Residential Allotments			Stage 5A	Stage 5B	Stage 5C	Stage 5D	Stage 5E	Stage 5F	Stage 5G	Stage 5H	Stage 5I	Stage 5J	Stage 5K	Stage 5L	Stage 5M	Stage 5N	Stage 5O	Stage 5P	Stage 5Q	Stage 5R	Overall		
Typical Area		Typical Size																					
Urban & Nano Allotments Product	Urban Loft	4.7 x 12.5m	50m²	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	—	—	8	1.5%	
	Urban Allotments	7.5 x 16m	120m²	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	6	1.1%	
	Urban Terrace	6.2 x 27.5m	170m²	—	—	—	—	—	—	—	—	—	—	9	11	—	—	—	—	—	20	3.7%	
	Subtotal	—	—	—	—	—	—	—	—	—	6	—	8	9	11	—	—	—	—	—	34	6.2%	
	16m Deep Product	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Squal Allotment	Squal Allotment	14 x 16m	220m²	—	—	—	2	2	—	2	2	—	—	—	—	—	—	—	—	—	8	1.5%	
	Subtotal	—	—	—	—	—	2	2	—	2	—	—	—	—	—	—	—	—	—	—	8	1.5%	
	23m Deep Product	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Mode Allotment	8.5 x 25m	213m²	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	0.7%	
	Villa Allotment	10 x 25m	250m²	—	—	—	—	—	—	2	9	—	—	—	—	—	—	—	—	—	3	18	
Premium Courtyard Allotment	Courtyard Allotment	14 x 25m	350m²	—	—	—	4	—	—	2	9	—	—	—	—	—	—	—	—	—	3	19	
	Premium Courtyard Allotment	16 x 25m	400m²	—	—	—	2	—	—	4	9	—	—	—	—	—	—	—	—	—	1	9	
	Premium Traditional Allotment	20 x 25m	500m²	—	—	—	—	—	1	—	5	—	—	—	—	—	—	—	—	—	4	0.7%	
	Possible Multiple Residential Allotment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	0.4%	
	Subtotal	—	—	—	3	—	9	—	—	1	8	23	—	—	—	—	—	—	—	—	12	56	
28m - 30m Deep Product	Terrace 4.5m Allotment	4.5 x 28m	126m²	—	—	—	—	—	—	—	—	8	6	10	10	—	—	—	—	—	—	34	6.2%
	Terrace 6.6m Allotment	6.6 x 28m	186m²	—	—	—	—	—	—	—	—	10	9	8	8	—	—	—	—	—	—	35	6.4%
	Terrace 7.5m Allotment	7.5 x 28m	210m²	—	—	—	—	10	—	9	—	5	1	7	7	—	—	—	—	—	4	43	
	Terrace 9.5m Allotment	9.5 x 28m	265m²	—	—	—	—	4	—	4	—	6	8	10	10	—	—	—	—	—	2	8.1%	
	Subtotal	—	—	—	—	—	—	14	—	13	—	29	24	35	35	—	—	—	—	—	6	156	
30m Deep Product	Villa Allotment	10 x 30m	300m²	—	3	1	8	11	2	3	7	6	1	—	—	—	—	—	—	—	2	44	
	Premium Villa Allotment	12.5 x 30m	375m²	1	2	3	15	11	6	17	8	10	1	—	—	—	—	—	—	—	9	83	
	Courtyard Allotment	14 x 30m	420m²	6	14	14	11	10	7	13	9	12	2	—	—	—	—	—	—	—	10	108	
	Traditional Allotment	20 x 30m	600m²	5	8	7	5	3	3	7	1	—	—	—	—	—	—	—	—	—	3	43	
	Premium Traditional Allotment	25 x 30m	720m²	1	1	6	—	—	—	2	—	—	—	—	—	—	—	—	—	—	10	1.8%	
Possible Multiple Residential Allotment	Possible Multiple Residential Allotment	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	0.6%	
	Subtotal	—	—	—	13	29	32	39	35	18	43	25	5	—	—	—	—	—	—	—	24	291	
	Total Residential Allotments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53.4%	
	Residential Net Density	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100%	
	Total Net Density	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.1 dw/ha	
Super Lots	Super Lots	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Medium Density Allotment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Balance Super Allotments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Sub Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Total Allotments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Potential Residential Dwellings (Includes Potential Net Residential Density)	Maximum Potential Residential Dwellings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Maximum Potential Residential Dwellings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Maximum Potential Residential Dwellings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Maximum Potential Residential Dwellings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Maximum Potential Net Residential Density	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Land Budget Stage 5																				
Land Use	Stage 5A	Stage 5B	Stage 5C	Stage 5D	Stage 5E	Stage 5F	Stage 5G	Stage 5H	Stage 5I	Stage 5J	Stage 5K	Stage 5L	Stage 5M	Stage 5N	Stage 5O	Stage 5P	Stage 5Q	Stage 5R	Overall	
	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	%
Area of Subject Site	1,623 ha	2,571 ha	2,627 ha	3,880 ha	2,174 ha	1,824 ha	2,949 ha	2,772 ha	3,957 ha	0,949 ha	0,749 ha	1,571 ha	1,099 ha	0,660 ha	0,704 ha	17,742 ha	2,327 ha	50,963 ha	100.0%	
Sealeable Area		1,670 ha	1,786 ha	2,133 ha	1,480 ha	1,103 ha	2,108 ha	1,795 ha	2,133 ha	0,777 ha	0,575 ha	0,851 ha	0,890 ha				1,672 ha	19,663 ha	38.6%	
Medium Density Allotment																		0,660 ha	1.3%	
Balance Super Allotments																			0.0%	
Total Area of Allotments	0,890 ha	1,670 ha	1,786 ha	2,133 ha	1,480 ha	1,103 ha	2,108 ha	1,795 ha	2,133 ha	0,777 ha	0,575 ha	0,851 ha	0,890 ha	0,660 ha			1,672 ha	20,323 ha	39.9%	
Road																				
Collector Road	0,431 ha			0,938 ha					0,442 ha								0,821 ha	2,432 ha	4.8%	
Local Road	0,466 ha	0,901 ha	0,805 ha	0,609 ha	0,620 ha	0,465 ha	0,841 ha	0,827 ha	1,325 ha	0,172 ha	0,163 ha	0,487 ha	0,209 ha				0,655 ha	8,745 ha	17.2%	
Linear Connections	0,036 ha		0,036 ha		0,074 ha	0,036 ha			0,057 ha		0,011 ha	0,045 ha					0,164 ha	0,459 ha	0.9%	
Entry Statements																			0.0%	
Total Area of New Road	0,933 ha	0,901 ha	0,841 ha	1,747 ha	0,694 ha	0,801 ha	0,841 ha	0,827 ha	1,824 ha	0,172 ha	0,174 ha	0,532 ha	0,209 ha				0,765 ha	11,636 ha	22.8%	
Open Space																				
Corridor Park																17,742 ha		17,742 ha	34.8%	
Conservation (Willow Corridor Park)																10,710 ha		10,710 ha		
District Recreation Park																				0.0%
Neighbourhood Recreation Park															0,704 ha			0,704 ha	1.4%	
Local Recreation Park												0,188 ha						0,188 ha	0.4%	
Local Linear Recreation Park						0,220 ha		0,150 ha										0,370 ha	0.7%	
Stormwater Detention																				0.0%
Total Open Space						0,220 ha		0,150 ha				0,188 ha			0,704 ha	17,742 ha		19,004 ha	37.3%	

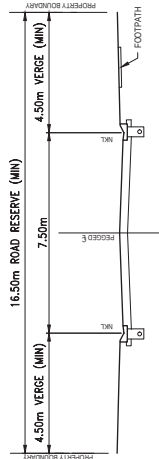
APPENDIX B

TYPICAL CROSS-SECTIONS

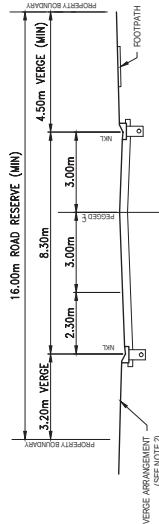
NOTES:

1. PAVEMENT CROSS FALL MAY BE NOMINATED AS EITHER 'ONE WAY CROSSFALL' OR 'TWO WAY CROSSFALL'.
2. VERGE ARRANGEMENT MAY INCLUDE KERB BUILD-OUTS TO ACCOMMODATE SERVICES AND/OR CONTROL TRAFFIC.
3. FOOTPATHS IN RESIDENTIAL SUBDIVISIONS MAY BE REDUCED BY 2.00m WHERE ROAD IS FRONTING PARK, KERB FRONTING PARK, (TYPICAL TYPE B1 OR EQUIVALENT).
4. THE ADDITION OF FURTHER CYCLE PATHS IS SUBJECT TO FURTHER ENGINEER ASSESSMENT. SHOULD CYCLE PATHS BE WARRANTED, THESE FACILITIES MAY TAKE THE FORM OF EITHER SHARED OFF-ROAD FACILITIES (FOR LOW VOLUME CYCLE ROUTES) OR SEPARATED OFF-ROAD FACILITIES.
5. PATH ONE VERGE TO AVOID DUPLICATION OF CYCLE TRACKS WITHIN THE ROAD RESERVE.
6. SEPARATED OFF-ROAD FACILITIES MAY BE CONFIGURED WITH A 3.00m WIDE CYCLE TRACK OR 3.00m WIDE SHARED CYCLE ROUTES.
7. THESE FACILITIES MAY BE REPLACED WITH LANDSCAPED STRIPS BETWEEN 0.30m TO 0.50m WIDE PLANTED WITH SUITABLE COMPACT SPECIES.
8. FOOTPATH CROSS FALL FROM THE PROPERTY BOUNDARY MAY BE REDUCED SUBJECT TO SERVICES CONSTRAINTS.

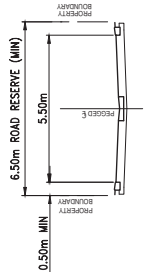
THESE CROSS SECTIONS APPLY TO ALL STAGES, EXCEPT FOR STAGE 1 AND STAGE 7 OF CONTEXT AREA 1, WHERE THE ROAD TYPOLOGY IS TO BE IMPLEMENTED GENERALLY IN ACCORDANCE WITH SKETCH NO.110 REV DATED NOV.14.



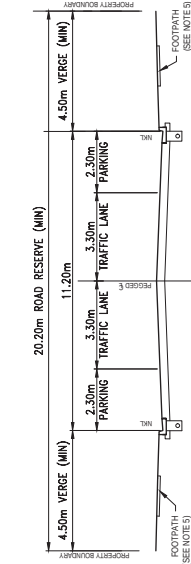
TYPE UAL-1
REAR LANE
6.50m Min. ROAD RESERVE
1 LANE - NO ON STREET PARKING
SEE NOTE 1



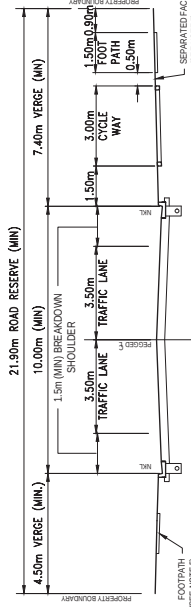
TYPE UAS-1
NEIGHBOURHOOD ACCESS STREET
18.00m Min. ROAD RESERVE (<3000 vpd)
2 WAY - ON STREET PARKING



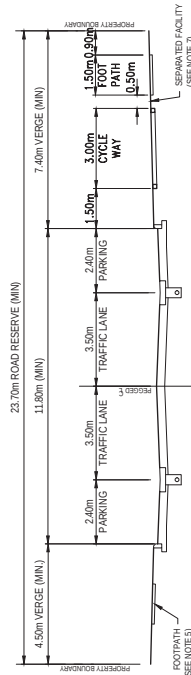
TYPE UAS-2
NEIGHBOURHOOD ACCESS STREET
18.50m Min. ROAD RESERVE (<3000 vpd)
2 WAY - ON STREET PARKING



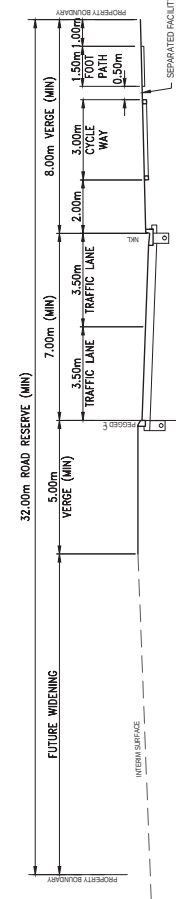
TYPE UC-2L-1
NEIGHBOURHOOD CONNECTOR (2 LANES)
20.20m Min. ROAD RESERVE (3000-7500 vpd)
2 LANES - ON STREET PARKING



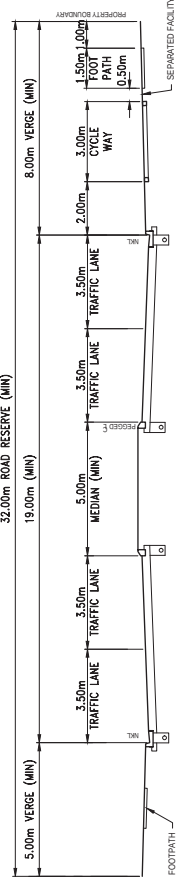
TYPE UC-2L-2
TRUNK CONNECTOR (2 LANES)
21.90m Min. ROAD RESERVE (7500-18000 vpd)
2 LANES - NO ON STREET PARKING



TYPE UC-2L-3
TRUNK CONNECTOR (2 LANES)
23.70m Min. ROAD RESERVE (7500-10000 vpd)
2 LANES - ON STREET PARKING



TYPE USA-4L-1
TRUNK CONNECTOR (2 LANES) INTERIM
32.0m ROAD RESERVE (<18000 vpd)
NO ON STREET PARKING



TYPE USA-4L-2
TRUNK CONNECTOR (4 LANES) ULTIMATE
32.0m ROAD RESERVE (18000-30000 vpd)
NO ON STREET PARKING

REV	DATE	DESCRIPTION
1	15/11/18	ISSUED FOR TENDER
2	15/11/18	CHANGES FOR TENDER
3	15/11/18	CHANGES FOR TENDER
4	15/11/18	CHANGES FOR TENDER
5	15/11/18	CHANGES FOR TENDER
6	15/11/18	CHANGES FOR TENDER
7	15/11/18	CHANGES FOR TENDER
8	15/11/18	CHANGES FOR TENDER
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99	15/11/18	CHANGES FOR TENDER
100	15/11/18	CHANGES FOR TENDER

VERIS	MADE JASON HARRY APR 2018	Approved by, for and on behalf of Meinhardt	MEINHARDT MEINHARDT URBAN PTY LTD A.B.N. 20 064 199 191 Brisbane - Level 2, 135 Wickham Terrace, Spring Hill QLD 4000 Gold Coast - Level 1, 30 Thomas Drive, Cherwood QLD 4117 Melbourne - Level 1, 100 Collins Street, Melbourne VIC 3000 Perth - Level 1, 100 St Georges Terrace, Perth WA 6000 Sydney - Level 1, 100 Market Street, Sydney NSW 2000 T +61 7 6238 4411 F +61 7 6238 4411 info@meinhardt.com.au www.meinhardt.com.au
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MEINHARDT	PEET FLAGSTONE CITY Pty. Ltd.	CLIENT	MEINHARDT URBAN PTY LTD A.B.N. 20 064 199 191 Brisbane - Level 2, 135 Wickham Terrace, Spring Hill QLD 4000 Gold Coast - Level 1, 30 Thomas Drive, Cherwood QLD 4117 Melbourne - Level 1, 100 Collins Street, Melbourne VIC 3000 Perth - Level 1, 100 St Georges Terrace, Perth WA 6000 Sydney - Level 1, 100 Market Street, Sydney NSW 2000 T +61 7 6238 4411 F +61 7 6238 4411 info@meinhardt.com.au www.meinhardt.com.au
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PROJECT	FLAGSTONE CITY - ROL APPLICATION - STAGES 25	PROJECT	FLAGSTONE CITY - ROL APPLICATION - STAGES 25
STAGE	STAGE 2	STAGE	STAGE 2
STAGE	ECONOMIC DEVELOPMENT QUEENSLAND	STAGE	ECONOMIC DEVELOPMENT QUEENSLAND
STAGE	INFORMATION	STAGE	INFORMATION
STAGE	NOT FOR CONSTRUCTION	STAGE	NOT FOR CONSTRUCTION
STAGE	15-888	STAGE	15-888
STAGE	S2-010	STAGE	S2-010
STAGE	B	STAGE	B

APPENDIX C

RPS PARKING ANALYSIS PLANS



Parking Breakdown

Total On-Street Visitor Parking Spaces Provided	194
Total Residential Dwellings	249
Total On-Street Visitor Parking Spaces Required (based on 0.75 per dwelling)	187



Typical Indented Parking Bay Arrangement
(In accordance with AS2890)
Scale 1 : 100

Parking Bay Diagram
Scale 1 : 100

Legend

General

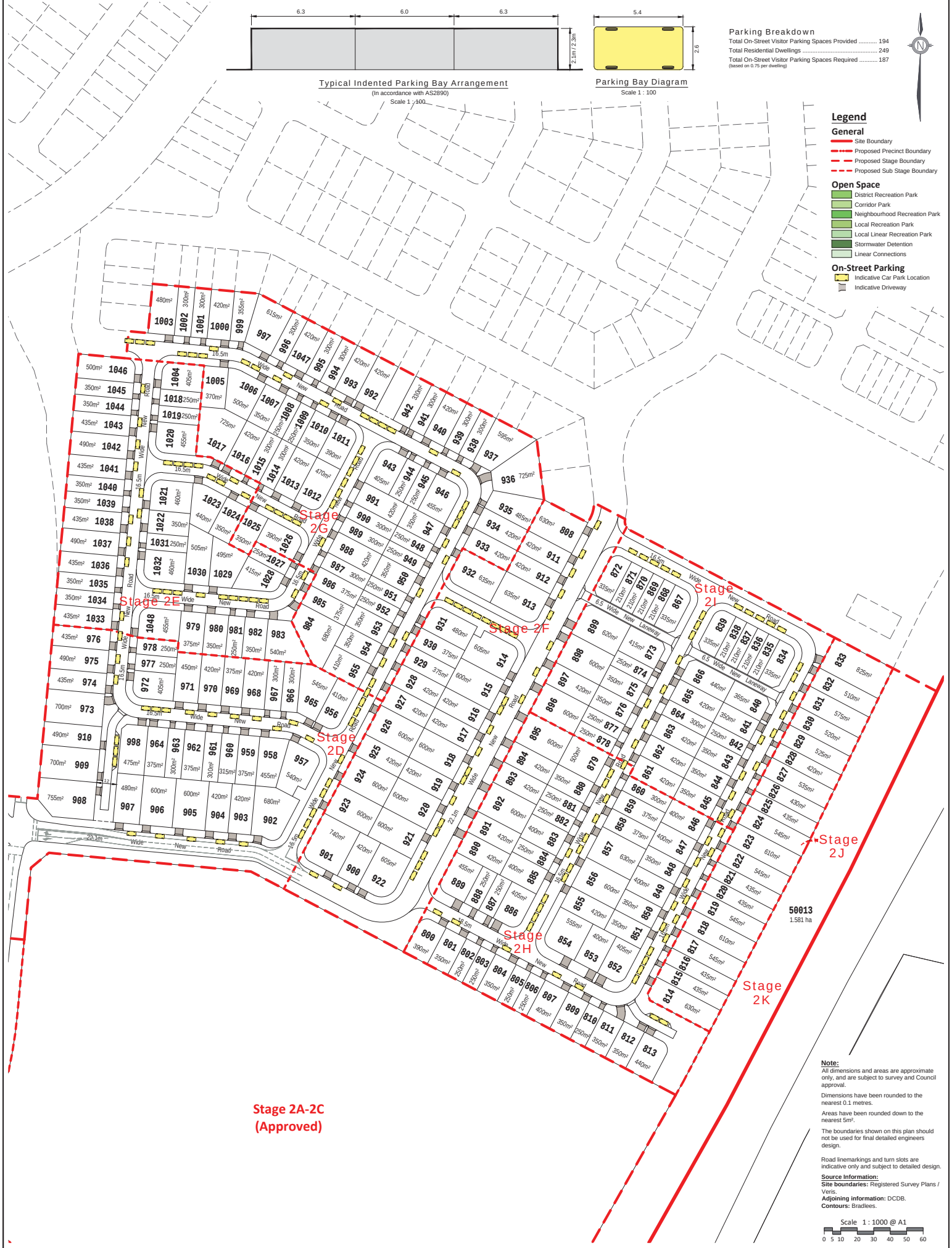
- Site Boundary
- Proposed Precinct Boundary
- Proposed Stage Boundary
- Proposed Sub Stage Boundary

Open Space

- District Recreation Park
- Corridor Park
- Neighbourhood Recreation Park
- Local Recreation Park
- Local Linear Recreation Park
- Stormwater Detention
- Linear Connections

On-Street Parking

- Indicative Car Park Location
- Indicative Driveway



Note:
All dimensions and areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².
The boundaries shown on this plan should not be used for final detailed engineers design.
Road linemarkings and turn slots are indicative only and subject to detailed design.

Source Information:
Site boundaries: Registered Survey Plans / Vets.
Adjoining information: DCDB.
Contours: Bradshires.

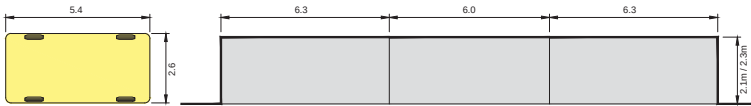
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REVISION A: 31/07/18 Amend Sub-Staging & Open Space B: 21/11/2018 Further Issues Amendments C: 22/02/2019 Further Issues Amendments D: 07/03/2019 Further Issues Amendments E: 17/06/2019 Stage 2-5 Layout Amendments F: 15/07/2019 Stage 2-5 Layout Amendments G: 24/07/2019 Incorporate EDO Feedback H: 28/09/2019 Stage 2 & 3 Layout Amendments I: 11/03/2020 Road and Bus Stops Updates	PROJECT Flagstone Precinct 1		CLIENT PEET Plan of Development Stage 2 Overall Parking Management Plan		 © COPYRIGHT PROTECTS THIS PLAN Unauthorized reproduction or amendment without written permission from RPS URBAN DESIGN Level 4 HQ South 520 Wattle Street PO Box 1509 Ferntree Gully VIC 3152 T +61 3 2539 9500 W rpsgroup.com
	Job Ref.	110056	Date:	11 March 2020	
	Comp By.	WNW/JC/MD	DWG Name.	Precinct 1 Stage 2	
	Chkd By.	DG / MD	Locality.	Flagstone	
	Local Authority.		Economic Development Queensland		



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Parking Bay Diagram

Scale 1 : 100

Typical Indented Parking Bay Arrangement

(in accordance with AS2890)

Scale 1 : 100

Legend

General

- Site Boundary
- Proposed Precinct Boundary
- Proposed Stage Boundary
- Proposed Sub Stage Boundary

Open Space

- District Recreation Park
- Corridor Park
- Conservation Within Corridor Park
- Neighbourhood Recreation Park
- Local Recreation Park
- Local Linear Recreation Park
- Stormwater Detention
- Linear Connections

On-Street Parking

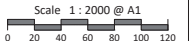
- Indicative Car Park Location
- Indicative Driveway

Parking Breakdown

Total On-Street Visitor Parking Spaces Provided	339
Total Residential Dwellings	436
Total On-Street Visitor Parking Spaces Required	327
(based on 0.75 per dwelling)	

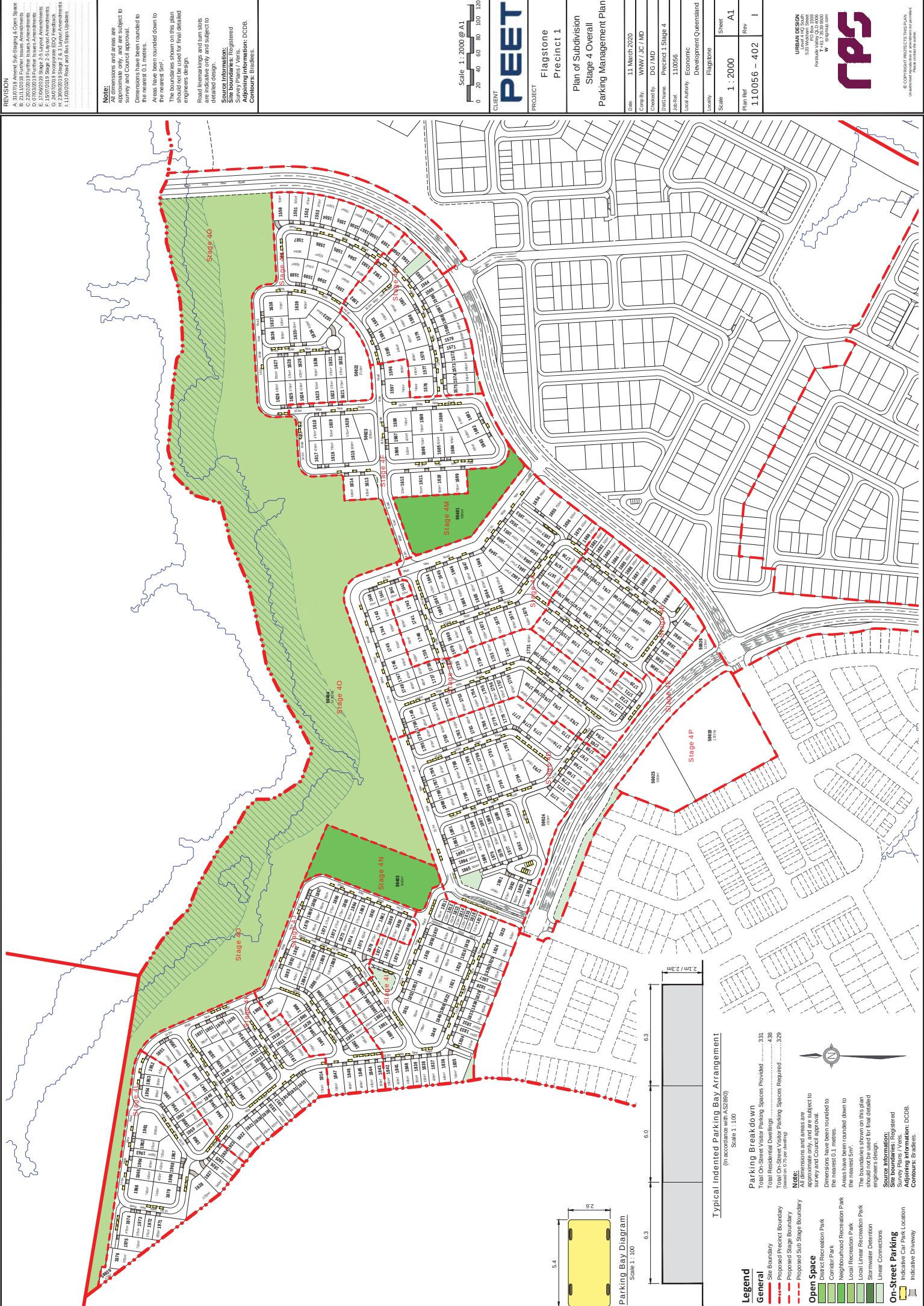


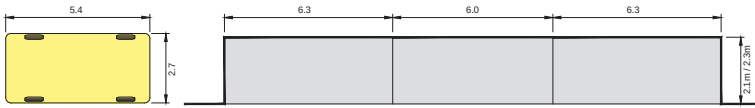
Note:
All dimensions and areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².
The boundaries shown on this plan should not be used for final detailed engineers design.
Road linemarkings and turn slots are indicative only and subject to detailed design.
Source Information:
Site boundaries: Registered Survey Plans / Veris.
Adjoining information: DCDB.
Contours: Bradfords.
Scale 1 : 2000 @ A1



REVISION A: 17/07/18 - Amend District Recreation Park B: 11/07/18 Amend Sub-Staging & Open Space C: 21/11/2018 Further Issues Amendments D: 22/02/2019 Further Issues Amendments E: 07/03/2019 Further Issues Amendments F: 15/07/2019 Stage 2-5 Layout Amendments G: 24/07/2019 Incorporate EDO Feedback H: 28/09/2019 Stage 2 & 3 Layout Amendments I: 11/03/2020 Road and Bus Stops Updates	PROJECT Flagstone Precinct 1		CLIENT PEET						 URBAN DESIGN Level 4 H2 South 100 York Street PO Box 1509 Fortitude Valley QLD 4006 T +61 7 3339 9600 W urpgroup.com			
	Job Ref. 110056		Date 11 March 2020		Plan of Development Stage 3 Overall Parking Management Plan							
	Comp By WW / JC / MD		DWG Name: Precinct 1 Stage 3									
	Chkd By DG / MD		Locality: Flagstone									
	Local Authority: Economic Development Queensland											
	Scale 1 : 2000		Sheet A1		Plan Ref 110056 – 390		Rev I					

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Parking Bay Diagram
Scale 1 : 100

Typical Indented Parking Bay Arrangement
(In accordance with AS2890)
Scale 1 : 100

Legend

General

- Site Boundary
- Proposed Precinct Boundary
- Proposed Stage Boundary
- Proposed Sub Stage Boundary

Open Space

- District Recreation Park
- Corridor Park
- Conservation Within Corridor Park
- Neighbourhood Recreation Park
- Local Recreation Park
- Local Linear Recreation Park
- Stormwater Detention
- Linear Connections

On-Street Parking

- Indicative Car Park Location
- Indicative Driveway

Note:

All dimensions and areas are approximate only, and are subject to survey and Council approval. Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Road line markings and turn slots are indicative only and subject to detailed design.

Source Information:

Site boundaries: Registered Survey Plans / Vets.
Adjoining Information: DCDB.
Contours: Meinhardt.

Parking Breakdown

Total On-Street Visitor Parking Spaces Provided	412
Total Residential Dwellings	545
Total On-Street Visitor Parking Spaces Required (based on 0.75 per dwelling)	409



Scale 1 : 1500 @ A1
0 10 20 40 60 80 100

REVISION
A: 31/07/18 Amend Sub-Staging & Open Space
B: 24/02/18 Amend Layout
C: 03/12/2018 Further Issues Amendments
D: 22/02/2019 Further Issues Amendments
E: 07/03/2019 Further Issues Amendments
F: 15/07/2019 Amend Layout
G: 24/07/2019 Incorporate EDO Feedback
H: 23/09/2019 Stage 2 & 3 Layout Amendments
I: 11/03/2020 Road and Bus Stops Updates

PROJECT		Flagstone Precinct 1	
Job Ref.	110056	Date	11 March 2020
Comp By	WW/JC/MD	DWG Name	Precinct 1 Stage 5
Chkd By	DG/MD	Locality	Flagstone
Local Authority	Economic Development Queensland		

CLIENT

PEET

Plan of Development
Stage 5 Overall
Parking Management Plan

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Scale	Sheet	Plan Ref	Rev
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