

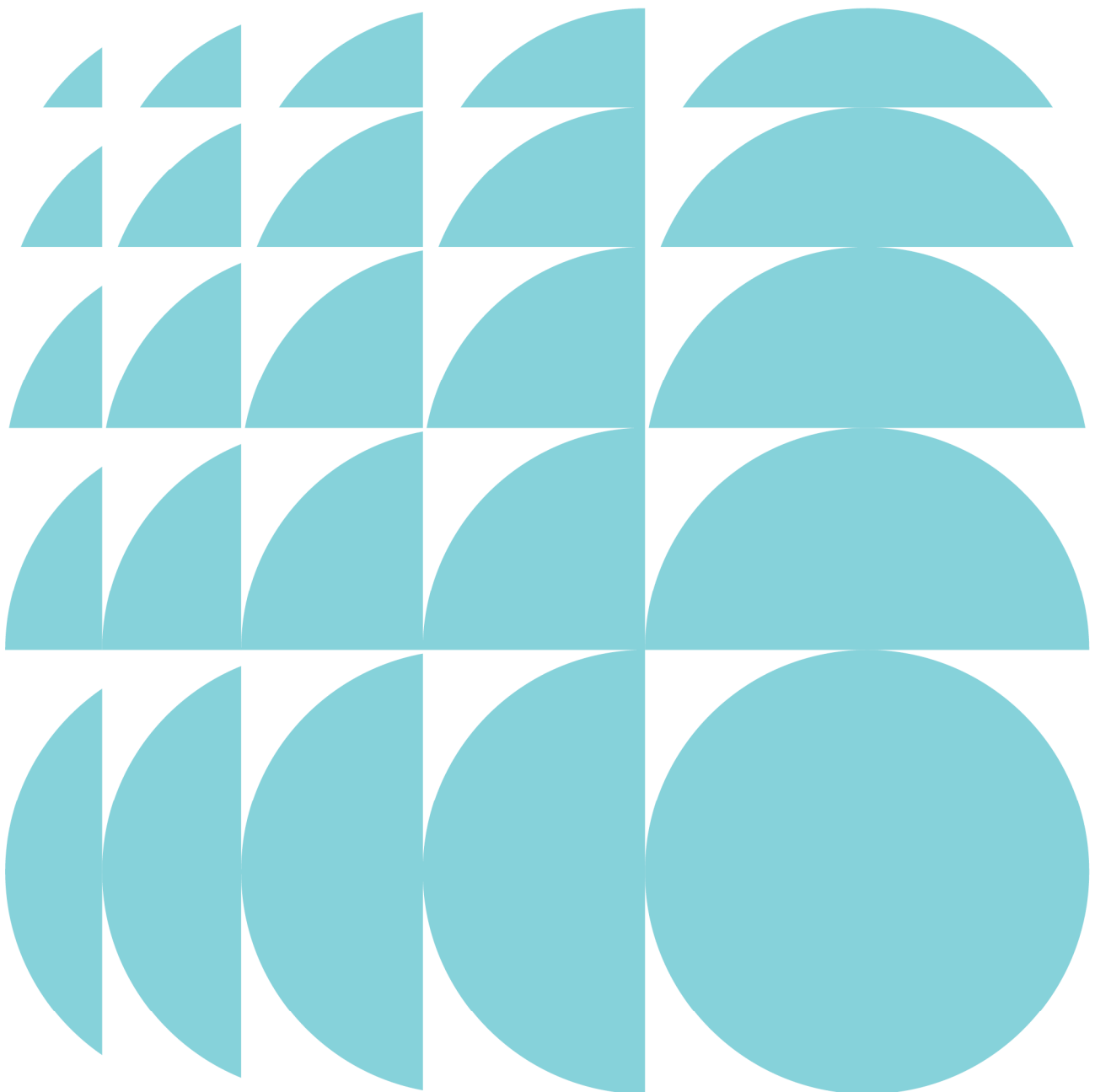
Development Application

Statement of Environmental Effects

Edmondson Park Frasers Town Centre
Residential Precinct 1 (Stage 2)

Submitted to Liverpool City Council
On behalf of Frasers Property Australia

21 November 2018 | 218133



CONTACT

Chris McGillick

Senior Urbanist

cmcgillick@ethosurban.com

9956 6962

Reproduction of this document or any part thereof is not permitted without prior written permission of ABN 13 615 087 931 Pty Ltd.

This document has been prepared by:

This document has been reviewed by:



Chris McGillick

21 November 2018

Michael Rowe

21 November 2018

Reproduction of this document or any part thereof is not permitted without written permission of Ethos Urban Pty Ltd. Ethos Urban operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

Contents

1.0	Introduction	5
2.0	Background	6
2.1	Concept Approval	6
2.2	The Frasers Bid and Concept Plan Modification	7
2.3	Part 3A Repeal	9
2.4	Consultation	10
3.0	Site Analysis	12
3.1	Site Location and Context	12
3.2	Site Description	13
3.3	Existing Development and Vegetation	13
3.4	Site Contamination	15
3.5	Heritage	15
3.6	Surrounding Development	16
4.0	Description of Proposed Development	18
4.1	Residential Precinct Stage 2 Description	19
4.2	Townhomes (Multi-dwelling Housing)	21
4.3	Terrace Housing (Attached Housing)	22
4.4	Studio Dwellings	24
4.5	Private Open Space	25
4.6	Parking	25
4.7	Access and Entries	25
4.8	Materials and Finishes	25
4.9	Mews	25
4.10	Landscaping and Public Domain	26
4.11	Infrastructure and Services	27
4.12	Subdivision	28
5.0	Assessment of Environmental Impacts	29
5.1	Compliance with Relevant Strategic and Statutory Plans and Policies	29
5.2	Consistency with the Concept Plan	30
5.3	Height	35
5.4	Frasers Town Centre Design Guidelines	35
5.5	Frasers Town Centre Public Domain Plan	36
5.6	Traffic	36
5.7	Flora and Fauna	37
5.8	Heritage	37
5.9	Water Cycle Management	38
5.10	Noise Impacts	38
5.11	Geotechnical	39
5.12	Contamination	40
5.13	Bushfire	40
5.14	Environmentally Sustainable Design	41
5.15	Building Code Compliance	42
5.16	Access and Universal Housing	42
5.17	Fire Engineering	43
5.18	Waste Management	43

Contents

5.19	Crime and Public Safety	43
5.20	Public Art Strategy	44
5.21	Construction Management	44

6.0	Conclusion	46
-----	------------	----

Figures

Figure 1	The Edmondson Park South Approved Concept Plan	6
Figure 2	Frasers Town Centre Plan as modified (Mod 4)	8
Figure 3	Context Plan	12
Figure 4	Aerial Photograph	13
Figure 5	Aerial view of the site (centre)	14
Figure 6	Aerial view of the site (looking west)	14
Figure 7	Aerial view of the site (looking east)	15
Figure 8	Edmondson Park Train Station	17
Figure 9	Soldiers Parade	17
Figure 10	Typical rural landscape surrounding the site	17
Figure 11	Vegetation part of the future regional park to the west of the site	17
Figure 12	Display Townhomes and Mews	17
Figure 13	Display Townhomes	17
Figure 14	Artists impression of Block A facing Bernera Road and Campbelltown Road	18
Figure 15	Stage 2 Development Area (shaded red)	19
Figure 16	Dwelling typology plan	20
Figure 17	Townhome typical section	21
Figure 18	Artist Impression of Townhome as viewed from Neighbourhood Street	22
Figure 19	Terrace and studio typical section	23
Figure 20	Artists Impression of Terraces viewed from Greenway Road	23
Figure 21	Terrace and Studio built form section	24
Figure 22	Drawing of Studio over garage, viewed from the laneway	24
Figure 23	Artist Impression of Mews	25
Figure 24	Landscape Plan	26
Figure 25	Courtyard planter beds and arbour	27
Figure 26	Noise affected dwellings	39
Figure 27	Bushfire Attack Level Diagram	41

Tables

Table 1	Edmondson Park Frasers Town Centre DA Status	8
Table 2	Summary of DEP Comments	10
Table 3	Summary of consistency with key strategic and statutory plans and policies	29

Contents

Table 4	Assessment of consistency with Concept Plan of Approval	30
Table 5	Car Park Assessment	37
Table 6	Status of Universal Housing	43

Appendices

A	Architectural Drawings and Design Report <i>Group GSA</i>
B	Landscape and Public Domain Plans <i>HASSELL</i>
C	Traffic Impact Assessment <i>Ason Group</i>
D	Water Cycle Management Statement <i>J. Wyndham Prince</i>
E	Interim Stormwater Management Strategy <i>J. Wyndham Prince</i>
F	Acoustic Assessment <i>Wilkinson Murray</i>
G	Geotechnical and Salinity Investigation <i>GeoEnviro Consultancy</i>
H	Remediation Action Plan <i>DLA Environmental Services</i>
I	Bushfire Planning Assessment <i>Eco Logical</i>
J	Bushfire Planning Assessment Addendum <i>Eco Logical</i>
K	ESD Statement <i>WSP</i>
L	BASIX <i>WSP</i>
M	BCA Assessment <i>Mckenzie Group</i>
N	Access Report <i>Morris Gooding Accessibility Consulting</i>
O	Fire Engineering Report <i>Olsen Fire and Risk Consulting</i>
P	Construction Waste Management Proforma

Contents

Ethos Urban

Q Waste Management Plan

GHD

R CPTED Assessment

Ethos Urban

S Public Art Plan

Queen and Crawford

T Water and Sewer Services Statement

Cardno

U Electrical Services Statement

Shelmerdines

V Gas and Telecommunications Statement

J.Wyndham Prince

W Subdivision Plan

Beveridge Williams

X Design Guidelines

Ethos Urban

Y Statement of Commitments Assessment

Ethos Urban

Z Design Guidelines Assessment

Ethos Urban

AA Construction Management Plan

Frasers

BB Preliminary Geotechnical and Contamination Review

Dames and Moore

CC Ingleburn Defence Site Stage 2 Environmental Investigation

SKM

DD Geotechnical, Contamination and UXO - Site Suitability Assessment

Golder Associates

EE Yield Plan

Landcom

FF Embedded Energy Statement

Frasers Property

GG Moderate Income Statement

Frasers Property

1.0 Introduction

This Statement of Environmental Effects (SEE) is submitted to Liverpool City Council (Council) in support of a Development Application (DA) for the construction of Stage 2 of Residential Precinct 1 of Edmondson Park Frasers Town Centre as shown on the plans at **Appendix A**.

Specifically, the DA seeks approval for:

- Construction of use of 128 residential dwellings including:
 - Townhome, terrace and studio dwelling typologies comprising:
 - 30 x 1 bedroom dwellings;
 - 32 x 2 bedroom dwellings;
 - 60 x 3 bedroom dwellings; and
 - 6 x 4 bed dwellings.
- Car parking for 194 vehicles (including 20 x 3.2m wide universal design compliant spaces);
- Subdivision of land;
- Landscaping and public domain improvements to Mews 2; and
- Provision of utilities and services.

This SEE has been prepared by Ethos Urban on behalf of Frasers Property Australia (Frasers), and is based on the Architectural Plans provided by Group GSA (**Appendix A**) and other supporting technical information appended to the report (see Table of Contents).

This report describes the site, its environs, the proposed development, and provides an assessment of the environmental impacts and identifies the steps to be taken to protect or lessen the potential impacts on the environment.

2.0 Background

2.1 Concept Approval

In March 2010 Landcom (now UrbanGrowth NSW (UGNSW)) lodged a Concept Plan (MP 10_0118) and concurrent Project Application (MP 10_0119) for the development of Edmondson Park South. The Concept Plan was approved by the Planning Assessment Commission (PAC) on 18 August 2011 and provides for a development on approximately 413 hectares comprising:

- residential development of 3,530 dwellings;
- development of the Edmondson Park town centre including 35,000-45,000 sqm of retail, business and commercial floor space, along with associated uses, including a single 'landmark development' of up to 30 metres in height within 300 metres of the proposed station;
- protection of approximately 150 hectares of conservation lands within regional parklands;
- adaptive relocation of three heritage listed 'Riley Newsum' pre-fabricated cottages, within the open space network, and retention of the Ingleburn Military Precinct and Mont St Quentin Oval;
- upgrade of Campbelltown Road with a maximum road width of 38.8 metres, and construction of three signalised intersections with Campbelltown Road;
- a temporary sales and information office and temporary signage associated with the sale of land;
- site remediation works;
- demolition of a number of existing buildings across the site; and
- associated infrastructure.

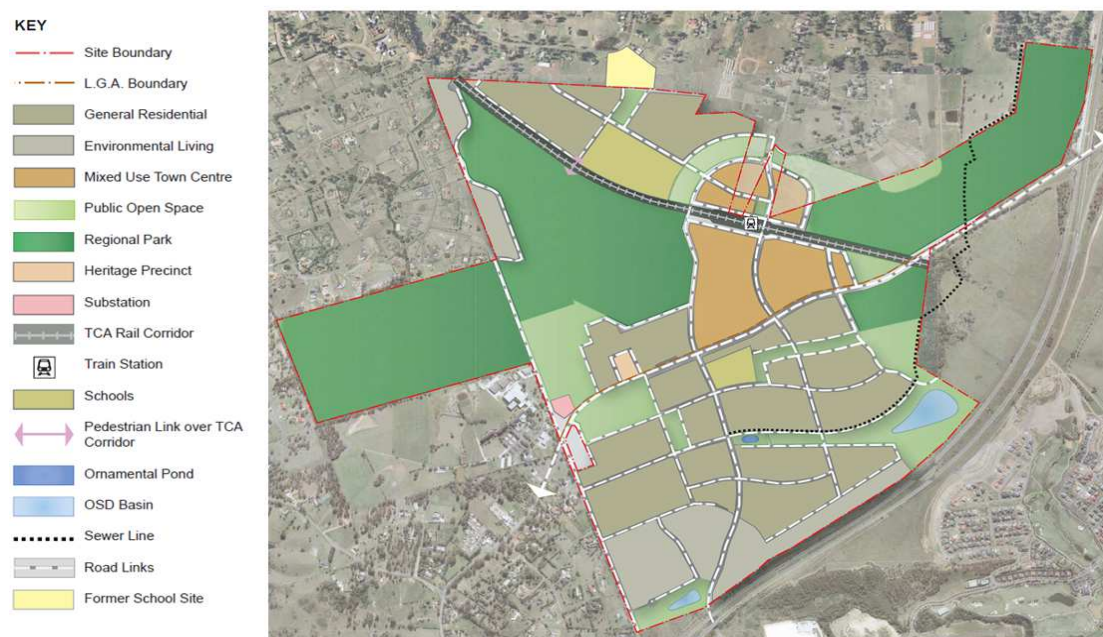


Figure 1 The Edmondson Park South Approved Concept Plan

In approving the Concept Plan, the PAC also made a series of determinations in relation to the scope of the Concept Plan approval, concurrent Project Approval and future consent arrangements, namely:

- approval to carry out future stages of the Edmondson Park development is subject to the terms (Schedule 1) and modifications set out in Schedule 2 of the Concept Plan Instrument of Approval and the Statement of Commitments as required under Schedule 2 of that same Instrument;

- pursuant to section 75P(1)(a) of the EP&A Act, future development is subject to the further environmental assessment requirements identified in Schedule 2, Part C of the Concept Plan Instrument of Approval;
- pursuant to section 75P(1)(c) of the EP&A Act, no further environmental assessment is required for the following works which are approved under section 75J of the Act (subject to the conditions set out in Schedule 3 of the approval) (herein referred to as the Project Approval);
 - remediation works in accordance with a remediation action plan relating to lots 1, 2, part lot 7 and part 8 DP 1127652;
 - remediation of unexpected contamination in accordance with the protocols set out in the concept plan;
 - demolition of existing buildings and other structures including paved roadways as set out in the concept plan;
 - construction and use of temporary sales office; and
 - temporary signage associated with the sale of the land; and
- pursuant to section 75P(1)(b) of the EP&A Act, approval to carry out future stages of the Edmondson Park development is subject to the provisions of Part 4 of the EP&A Act.

The Project Approval component of the approved Concept Plan has been modified once. The Modification, which was approved on 27 January 2012 related to the timing for preparation of a rehabilitation plan in Condition B1.2.

2.1.1 State Environmental Planning Policy (State Significant Precincts) Schedule 3 Part 12

To facilitate the redevelopment of the Edmondson Park site under the Concept Plan, the site was listed in Part 31 of Schedule 3 of the Major Development SEPP now referred to as “State Significant Precincts SEPP”.

The State Significant Precincts SEPP zones the Edmondson Park site whilst providing maximum building height, FSR and minimum lot size development standards. The listing also includes a range of miscellaneous provisions, including heritage listings and the requirement to prepare a Development Control Plan to guide the future redevelopment of the Edmondson Park site.

2.2 The Frasers Bid and Concept Plan Modification

In August 2014 UGNSW started a two-stage sale process to select a preferred tenderer to purchase and develop the future mixed use town centre site at Edmondson Park. In August 2015, UGNSW confirmed that Australand (now Frasers), had been awarded the tender for the purchase and development of the Town Centre (south of the railway line).

In March 2016 Frasers lodged a Section 75W Modification to the Concept Plan (Concept Plan (Mod 4)) to incorporate the winning concepts of the bid process with a number of consequential and related changes to the built form and public domain outcome for the site.

Modified Concept Plan (Mod 4)

The Concept Plan as modified (Mod 4) incorporate the winning Frasers concepts with several consequential and related changes to the built form and public domain outcome for the site.

The Master Plan for the Frasers Town Centre is structured around the key defining urban design principles to create a compact, mixed-use, safe, and well-connected walkable and cyclable Town Centre directly adjacent to the Edmondson Park rail/bus interchange.

The Frasers design establishes greater detail to the shape and function of the town centre. As shown in **Figure 2** the town centre will feature a mixed-use core in the north-west of the overall town centre, adjacent to the railway station.

The Town Centre Core will be surrounded by residential precincts that provide desirable medium density housing that complements the vibrant retail centre in the core and provides a transition in scale to the lower density

residential areas beyond. This DA is the second Stage development of the Residential Precincts being Residential Precinct 1, Stage 2.

The key modifications to the Concept Plan include:

- the introduction of a maximum GFA limit to the Town Centre Core;
- increasing the maximum building heights in the Town Centre Core; and
- increasing the number of dwellings from 912 to 1884.

The overall FSR remains unchanged from that approved under the Original Concept Plan, being 2.5:1 when applied to the overall site. However, the modified Concept Plan will see some quadrants being above the FSR while some will be below.

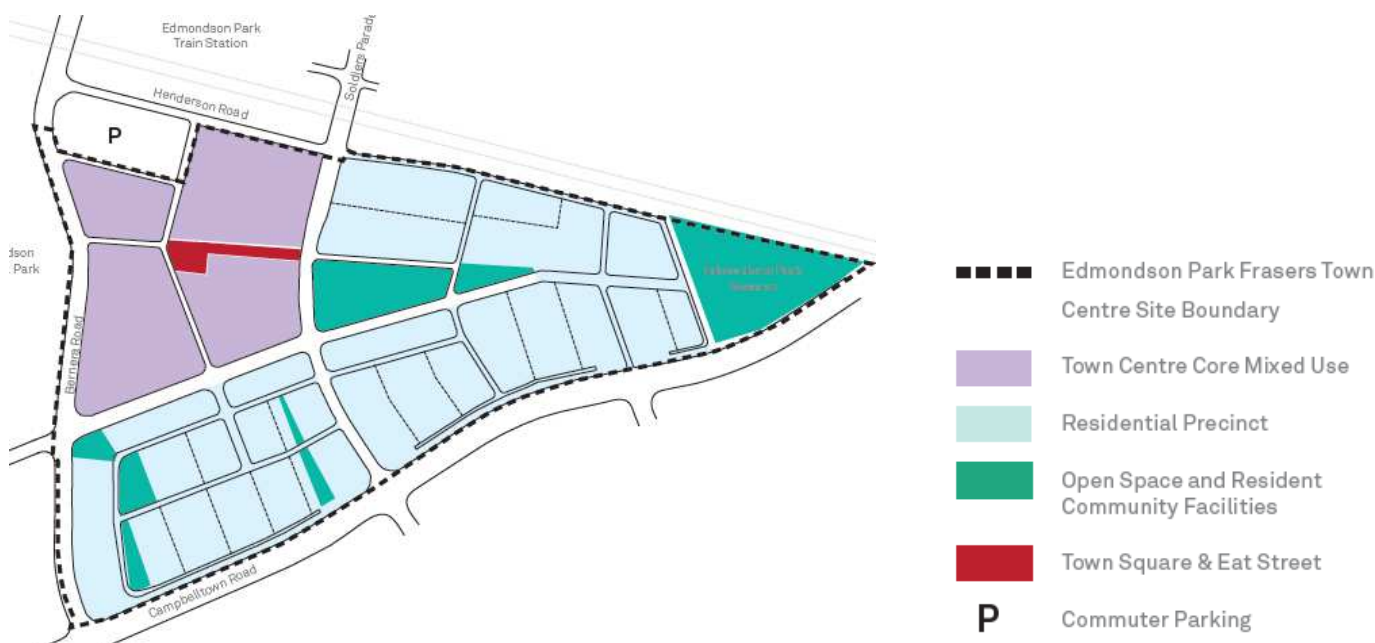


Figure 2 Frasers Town Centre Plan as modified (Mod 4)

Source: Design Guidelines

2.2.1 Frasers Development Applications

As a result of the scale of the Town Centre a number of separate DAs have and will be lodged for the site. The status of existing and indicative future development applications is provided at **Table 1** below.

Table 1 Edmondson Park Frasers Town Centre DA Status

DA	Subject	Lodged	Approved
621/2016	Sales and Marketing Centre	7 July 2016	30 January 2017
628/2016	Bulk Earthworks Town Core and Residential Precinct	8 July 2016	13 March 2017
801/2016	Sales and Marketing Centre Subdivision of Land	26 August 2016	22 December 2016
925/2016	Bulk Earthworks (Town Centre)	30 September 2016	24 May 2017
1260/2016	Roads and Infrastructure	21 December 2016	23 February 2018
583/2017	Residential Precinct 1 (Roads and Infrastructure)	4 August 2017	18 May 2018
583/2017 MOD 1	Residential Precinct 1 (Roads and Infrastructure) – Change to boundary	25 October 2018	-
779/2017	Residential Precinct 1 (Stage 1)	22 September 2017	6 August 2018

DA	Subject	Lodged	Approved
767/2017	Town Centre East	21 September 2017	17 September 2017 (deferred)
This application	Residential Precinct 1 (Stage 2)	-	-

A DA for the construction of Neighbourhood Street, Local Street 7 and 9 (west of Neighbourhood Street), Local Street 4 and Road 2 (west of Neighbourhood Street) including services and infrastructure within the roads across wider Residential Precinct 1 was approved by Council on 18 May 2018 (DA583/2017).

A DA for the construction of Stage 1 of Residential Precinct 1 including 104 dwellings, landscaping, local parks, residential facilities and Mews 3 was approved by Council on 6 August 2018 (DA779/2017). This included approval of the Community Title Sub-division for Residential Precinct 1.

The works sought for approval in this DA will integrate with the works that have been approved in the associated DA's listed above.

The project description for this application is provided at **Section 4.0**.

2.3 Part 3A Repeal

On 1 October 2011, Part 3A of the EP&A Act was repealed by the NSW Government, however transitional arrangements were introduced to apply to approved Part 3A projects.

Under Schedule 2, Clause 2 (Transitional Part 3A projects) of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017, the approved Concept Plan continues to have weight and force.

Reference is made to the following clauses which collectively have the effect of reinforcing the Concept Plan approval:

3B Provisions applying with respect to approval of concept plans

(1) This clause applies to development (other than an approved project) for which a concept plan has been approved under Part 3A, before or after the repeal of Part 3A, and so applies whether or not the project or any stage of the project is or was a transitional Part 3A project.

(2) After the repeal of Part 3A, the following provisions apply to any such development (whether or not a determination was made under section 75P (1) (b) when the concept plan was approved):

(a) if Part 4 applies to the carrying out of the development, the development is taken to be development that may be carried out with development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),

(b) if Part 5 applies to the carrying out of the development, the development is taken to be development that may be carried out without development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),

(c) any development standard that is within the terms of the approval of the concept plan has effect,

(d) a consent authority must not grant consent under Part 4 for the development unless it is satisfied that the development is generally consistent with the terms of the approval of the concept plan,

(e) a consent authority may grant consent under Part 4 for the development without complying with any requirement under any environmental planning instrument relating to a master plan,

(f) the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan,

(g) this clause applies instead of section 75P (2), but any direction, order or determination made under section 75P (2) in connection with the concept plan continues to have effect.

The DA's consistency with the provisions of Schedule 2, Clause 3B (Transitional Part 3A projects) is addressed at **Section 5.2** of this SEE.

2.4 Consultation

Liverpool City Council

Frasers and its consultant team have been engaged in on-going consultation with Liverpool City Council regarding the redevelopment of the entire Edmondson Park site including semi-formal meetings in an ongoing manner since early 2017. Council's comments during meetings and on-going consultation during the assessment of DA's have been incorporated in the proposed design where appropriate.

As agreed with Council planning officer, no formal pre-DA meeting was held for RP1 Stage 2 as the key issues related to the development typology were resolved as part of the Stage 1 development approval process (DA 779/2017). Key outcomes from the Stage 1 application have been incorporated into the Stage 2 design.

Design Excellence Panel

The proposal was presented to the Liverpool Design Excellence Panel on 16 August 2018. The Panel's comments were issued on 6 September 2018.

Table 2 Summary of DEP Comments

DEP Comment	Response
The Panel thanks the proponent for bringing the scheme to the Panel for consideration and the explanation provided by the applicant of the evolution of the scheme.	Noted.
The Panel confirms the applicant's advice that the issues raised in its previous minutes regarding Stage 1 of this project have been incorporated into Stage 2 of Residential Precinct 1. Notably, the revised Stage 2 scheme incorporates the following key amendments:	Noted. The relevant Stage 1 design considerations are included in the Stage 2 application.
<ul style="list-style-type: none"> - The width of the 2 and 3 bedroom dwellings has been increased to a minimum of 4m as recommended by the Panel; 	
<ul style="list-style-type: none"> - The spatial separation between opposite facing buildings is maintained at 8.6m inclusive of privacy measures; 	
<ul style="list-style-type: none"> - The block length of the buildings does not exceed 80m (52-68m); 	
<ul style="list-style-type: none"> - Additional windows have been added to the ends of buildings strongly articulated, large windows to improve the presentation of the buildings; and 	
<ul style="list-style-type: none"> - Additional tree canopy proposed aimed to provide continuous cover for the streets. 	
The Panel is pleased that the issues raised in its previously minutes have been satisfactorily attended to by the applicant.	
The Panel remain concerned about the effect of heat on the private courtyards and make specific note that the planting within these courtyards be heat tolerant, supported by a watering system that is managed as part of the communal space landscaping and is trellised to a pergola or similar that provides some privacy and shading in its own right.	As agreed with the Panel for Stage 1, rear courtyard planter boxes include automatic watering systems and are protected and maintained as required by strata by laws. Rear planters and arbours also include vegetation screening and shading that will assist in reducing the heat island effect.
The Panel recommends that the applicant explore the option of using coloured bricks as opposed to painting the bricks.	As outlined in the Design Report the Residential Precinct incorporates character schemes including 'Urban' and 'Park'. The urban scheme incorporates painted brickwork versus the park scheme which incorporates face brickwork. Painted brickwork has been tested successfully in the industry and is the preferred method of design by Frasers for this application.
The Panel is strongly supportive of the sustainability diagram in the architect's report and the various measures it shows that, taken together, can be expected to significantly reduce the development's environmental impact. These measures	Noted.

DEP Comment	Response
and the innovative strategies in site planning and building configuration (notably concealed at-grade parking, which further reduces the project's energy footprint by avoiding excavation and mechanical ventilation) combine to demonstrate how a new generation of medium density housing can help address our housing and climate change challenges.	

3.0 Site Analysis

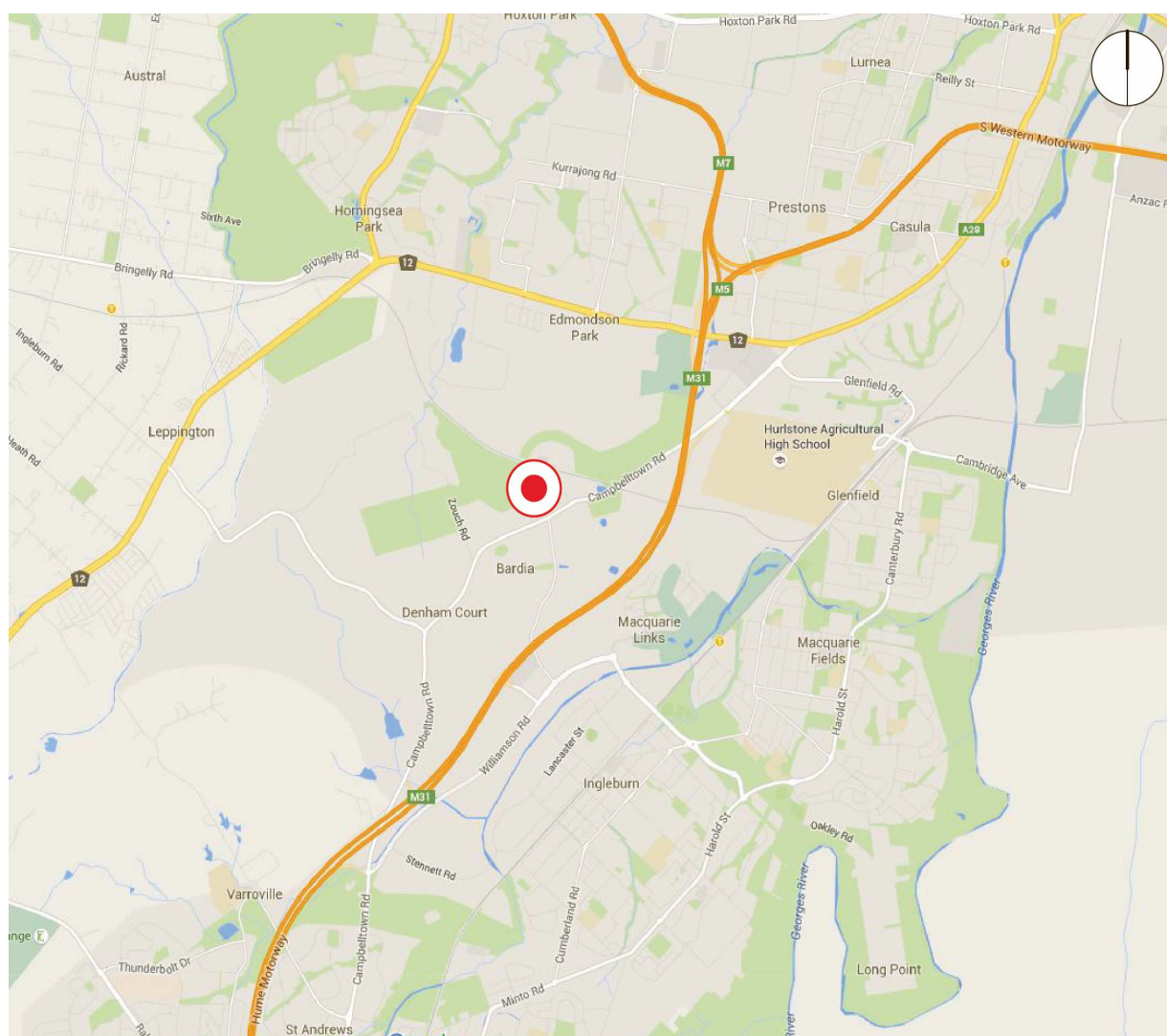
3.1 Site Location and Context

Edmondson Park is located to the north-west of the M5 Motorway and lies approximately 40 km to the south-west of Sydney CBD. The area subject to this application is within the Liverpool LGA. Campbelltown Road marks the boundary of the Liverpool and Campbelltown LGA's.

Edmondson Park is undergoing significant transformation from rural to urban land centred on the Edmondson Park railway station. Development of Edmondson Park will see the introduction of a new town centre featuring a diverse mix of commercial, mixed, retail and residential uses.

The Edmondson Park development site is generally bound by the South West Railway and Edmondson Park rail station, Campbelltown Road and Soldiers Parade.

The locational context of Edmondson Park is shown at **Figure 3**.



○ The Site

Figure 3 Context Plan

Source: Ethos Urban and Google

3.2 Site Description

The site is legally described as Lot 100 in DP 1238023, which is owned by Frasers Property Australia.

The site is approximately 12,600sqm and is irregularly shaped. Survey details are provided at **Appendix A**.

An aerial photo of the site in relation to the overall Edmondson Park Town Centre site is shown at **Figure 4**.



Figure 4 Aerial Photograph

Source: Ethos Urban and Nearmap

3.3 Existing Development and Vegetation

The site is presently vacant with no structures or vegetation on site. Approval for the clearance and bulk excavation of the site has been received (DA628/2016) and these works have begun as discussed at **Section 2.4**.

Construction of road and infrastructure within Residential Precinct 1 related to DA583/2017 have also begun.

Photographs of the site are provided at **Figure 5 - Figure 7**.



Figure 5 Aerial view of the site (centre)



Figure 6 Aerial view of the site (looking west)



Figure 7 Aerial view of the site (looking east)

3.4 Site Contamination

Many contamination studies and environmental site investigations have been undertaken to assess the extent and nature of contaminants within the Edmondson Park South site, as well as within the Town Centre.

The Geotechnical, Contamination and UXO Site Suitability Assessment prepared by Golder Associates and dated 10 September 2010 for the Concept Plan, concluded that there was some form of localised contamination, potential unexploded ordnance, and small arms ammunition on what was then termed 'the Defence Site' which includes the Edmondson Park Frasers Town Centre.

However, the Assessment noted that a NSW DECCW accredited Site Auditor was engaged by Defence in 2003 to carry out a non-statutory site audit of the Defence Lands. The Auditor concluded that the investigated and remediated areas were *"considered suitable for residential land use with gardens and accessible soils (home grown produce contributing to less than 10% fruit and vegetable intake, no poultry)"*.

The Concept Plan accordingly granted approval for implementation of the Remediation Action Plan and remediation of unexpected contamination finds in accordance with the protocols set out in the Contamination Management Plan as submitted with the original application. The proposals consistency with the Concept Approval is provided at **Section 5.2** and in relation to contamination at **Section 5.12**.

Additional information requested by Council in assessing Stage 1 has been included at **Appendix BB, CC and DD**, for information.

3.5 Heritage

At the time of the original Concept Plan the heritage listed 'Ingleburn Village site – three Riley Newsum Prefabricated cottages' were located within the Frasers Town Centre. These buildings were approved to be demolished by Liverpool Council under DA595/2014. The buildings were demolished in accordance with their development consent by UGNSW and there are now no listed heritage items within or in the immediate proximity of the site.

3.6 Surrounding Development

Generally, the surrounding landscape of the site is rural in character with limited development. The development surrounding the site include the following, shown in **Figure 8 - Figure 13**.

To the north

The Edmondson Park railway station is located approximately 350m to the north of the site. The station is fully developed and operating with regular services along the Southwest Railway line between Leppington and Liverpool. There are two large commuter car parks that service the station, one is south of the railway line and another is located north of the railway.

To the east

Immediately to the east is the Edmondson Park display centre which includes a sales office and townhome display homes. East of the site is Soldiers Parade which is currently the principle north-south road connection through Edmondson Park. Further east is the future residential precinct of Edmondson Park. At present this land is cleared of development and features vegetation of varying density with some areas of bulk earthworks in relation to DA628/2016.

To the south

The site is bound to the south by Campbelltown Road which provides regional connections to the Hume Highway and Hume Motorway. The Parkside land subdivision and new homes are located south of Campbelltown Road and is currently under construction. The wider Edmondson Park South residential development is located approximately 350m south of Campbelltown Road.

To the west

The Edmondson Regional Park is located to the west of the site opposite Zouch Road. Land that is between the site and the park is well vegetated and is designated to be part of a larger regional park. The Ingleburn Military precinct is located on Campbelltown Road.



Figure 8 Edmondson Park Train Station



Figure 9 Soldiers Parade



Figure 10 Typical rural landscape surrounding the site



Figure 11 Vegetation part of the future regional park to the west of the site



Figure 12 Display Townhomes and Mews



Figure 13 Display Townhomes

4.0 Description of Proposed Development

This chapter of the report provides a detailed description of the proposed development. Architectural Drawings are included at **Appendix A**.

This application seeks approval for the construction of Stage 2 of Residential Precinct 1 of the Edmondson Park Frasers Town Centre as shown on the plans at **Appendix A**. Specifically, the DA seeks approval for:

- Construction of use of 128 residential dwellings including:
 - Townhome, terrace and studio dwelling typologies comprising:
 - 30 x 1 bedroom dwellings;
 - 32 x 2 bedroom dwellings;
 - 60 x 3 bedroom dwellings; and
 - 6 x 4 bed dwellings.
- Car parking for 194 vehicles (including 20 x 3.2m wide universal design compliant spaces);
- Subdivision of land;
- Landscaping and public domain improvements to Mews 2; and
- Provision of utilities and services.

An artist's impression of the proposal is shown at **Figure 14**.



Figure 14 Artists impression of Block A facing Bernera Road and Campbelltown Road

Source: GSA

4.1 Residential Precinct Stage 2 Description

This application constitutes the second stage of residential development within the western residential precinct of Edmondson Park (Residential Precinct 1). Stage 2 will deliver 128 residential dwellings and will form the central component of this precinct.

The residential precinct will deliver a range of housing types including multi-dwelling housing, attached dwellings and studio dwellings. These typologies are referred to throughout the proposal as townhomes, terraces and studio dwellings respectively. The design of the dwellings and typologies is based on the Design Guidelines approved with the Concept Plan Modification (Mod 4), refer to **Section 5.4**.

The Stage 2 area is shown shaded red at **Figure 15** below. As outlined at Section 1.2.1 a separate DA has been approved for the construction of roads across the precinct (DA583/2017).

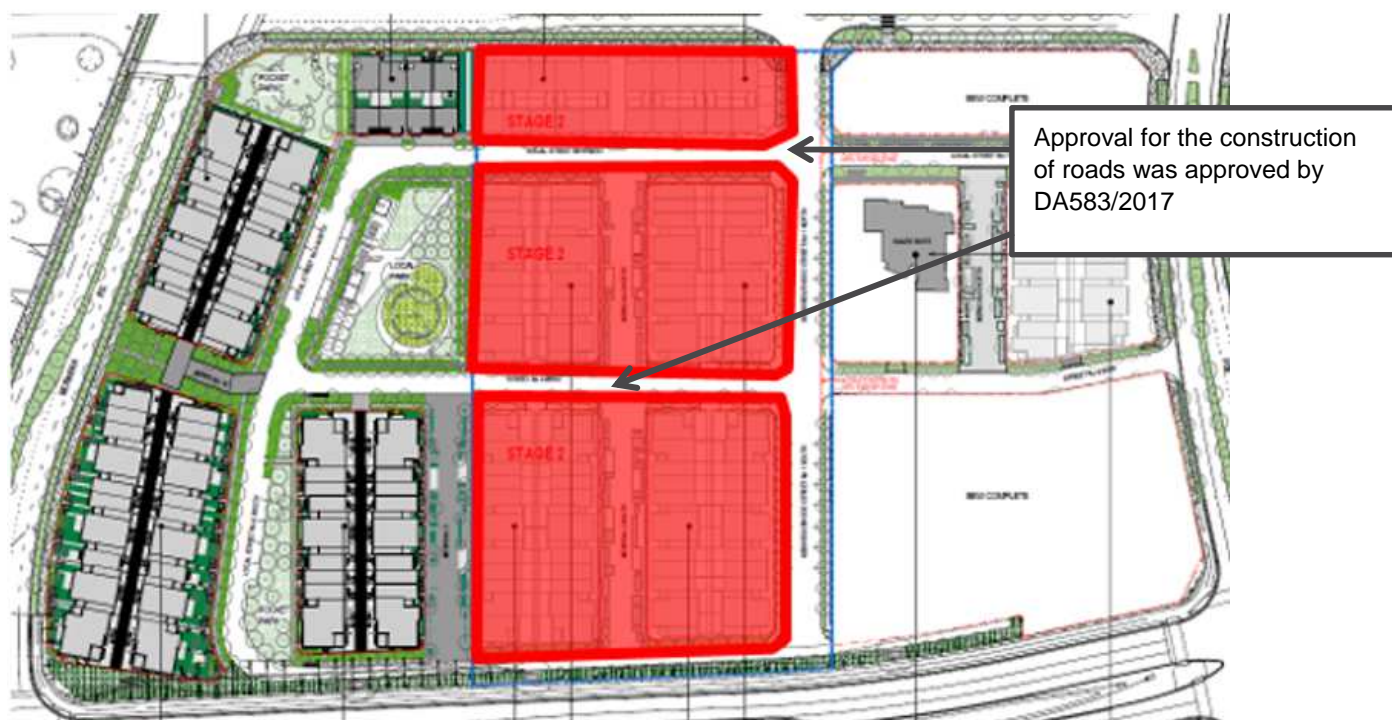


Figure 15 Stage 2 Development Area (shaded red)

Source: GSA

4.1.1 Built Form

The proposal seeks approval for the construction and occupation of five different town home typologies (8 different home types) including:

- 30 x 1 bedroom dwellings
- 32 x 2 bedroom dwellings
- 60 x 3 bedroom dwellings
- 6 x 4 bedroom dwellings

All of the multi-dwelling housing has been designed to have separate access at ground level. The layout of each typology is provided within the Architectural Drawings at **Appendix A**. The location of each typology is shown at **Figure 16**.



Figure 16 Dwelling typology plan

Source: GSA

4.2 Townhomes (Multi-dwelling Housing)

As shown on the architectural plans (and in the Design Guidelines), the townhomes provide a variety of single level and multiple level (3 storey) dwellings. The built form comprises of two separate three storey elements, separated by a shared covered car parking area and rear courtyard on level 1 (as shown in **Figure 17**). Vehicular access is limited to one point of entry and exit, which faces onto a local street and not to the mews, to minimize its impact.

Activating the Mews community road, each dwelling has a separate front entry door. All dwellings also have direct access to their car parking behind. Dwelling with 1-2 bedrooms, have 1 carpark space, and dwellings with 3-4 bedrooms have 2 carpark spaces. Visitors' car parking is provided on-street within the Mews.

The townhomes have a variety of one, two, three- and four-bedrooms configurations with their primary outdoor private space to the rear over the car park as well as balconies facing the Mews.

Ground floor dwellings are sleeved around an at-grade car park which is screened from the public domain. The first floors typically have a flow through living, dining, kitchen area that leads to the private open courtyard that maximises these private open areas.

The upper floors are typically where the bedrooms are located. In order to provide privacy and shading to the bedrooms as well as the main private open space, the use of architectural and landscape elements is incorporated into the design.

The form is consistent with the Design Guidelines identifying Mews style neighbourhoods featuring town homes, focused around a shared zone for vehicle and people movement, informal play and generous streetscape landscaping. An artist's impression of the townhome product as viewed from Neighbourhood Street is shown at **Figure 18**.

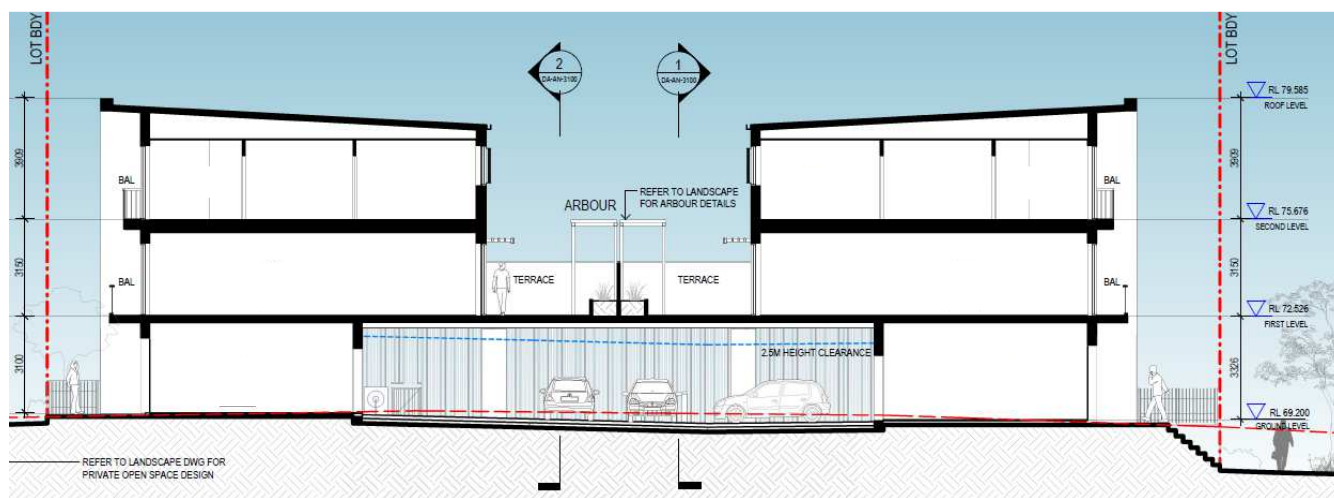


Figure 17 Townhome typical section

Source: GSA



Figure 18 Artist Impression of Townhome as viewed from Neighbourhood Street

Source: Group GSA

4.3 Terrace Housing (Attached Housing)

The proposal includes 10 x 3-bedroom terrace houses that front Greenway. The terraces feature a two-storey element containing the living area on ground with bedroom suites located on the first floor. The terrace is separated by a courtyard from a two-storey built element at the rear containing a ground floor garage servicing the terrace and adjacent, separate garage and studio dwelling above as shown at **Figure 20**. The courtyard is a flexible space that can be used for recreation with the potential for car parking if desired. The primary access point for the terrace homes is via Greenway Road; however, access is also available via the rear car park entry from the local street.

The layout of the terrace homes is provided within the Architectural Design Report at **Appendix A**.

An artist's impression of the terraces viewed from Greenway Road is shown at **Figure 21**.

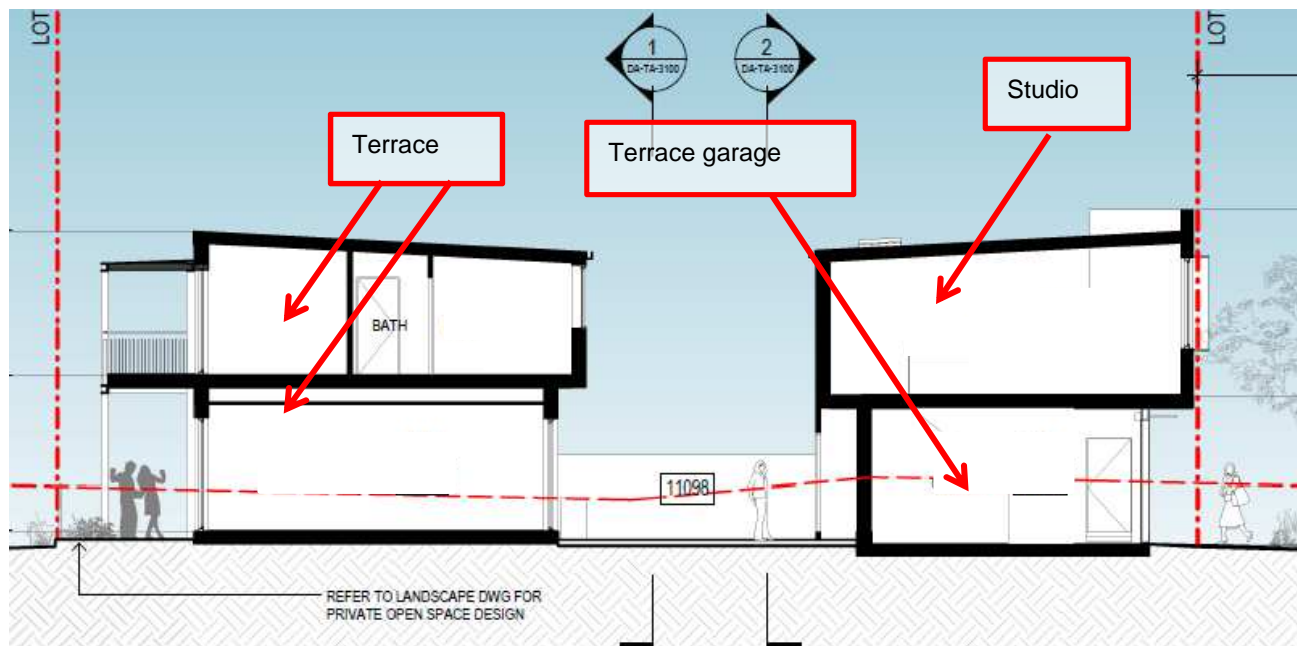


Figure 19 Terrace and studio typical section

Source: Group GSA



Figure 20 Artists Impression of Terraces viewed from Greenway Road

Source: Group GSA

4.4 Studio Dwellings

The proposal includes ten studio dwellings that are located above the rear garage of terrace housing with car parking servicing it below, as shown at **Figure 21**.

Each studio dwelling is located on the first floor with access to its own ground floor garage. Entry is provided directly from Local Street 7.

The layout of the terrace homes is provided within the Architectural Design Report at **Appendix A**. A drawing of the studio dwelling typology is shown at **Figure 22**.

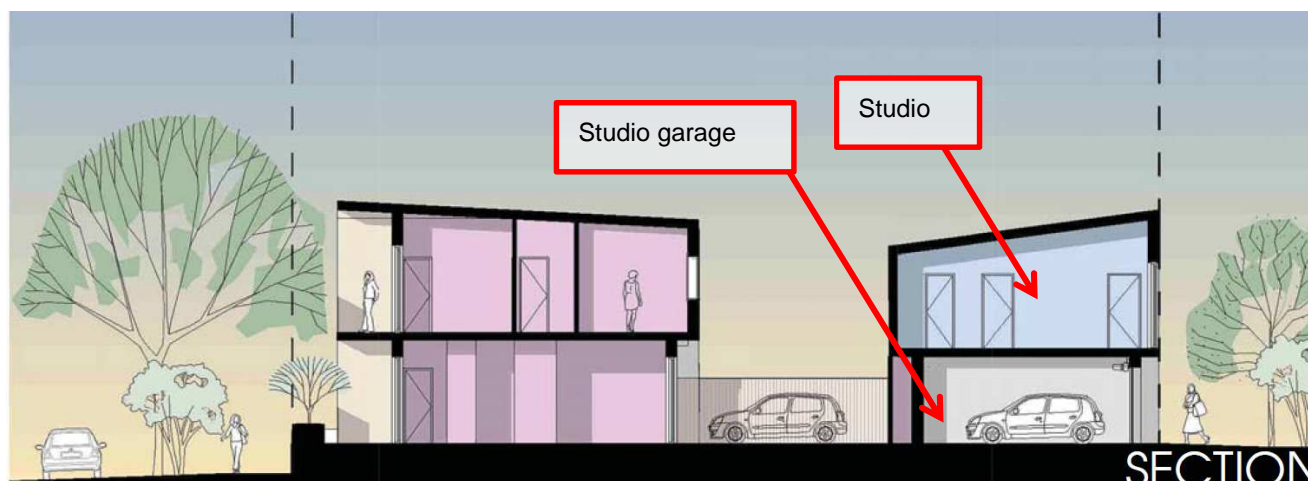


Figure 21 Terrace and Studio built form section

Source: Group GSA



Figure 22 Drawing of Studio over garage, viewed from the laneway

Source: Group GSA

4.5 Private Open Space

Each of the homes are provided with an area of private open space located off living spaces or bedrooms, either on the ground floor or raised over the covered car park. An area schedule of the private open space is provided as part of the Landscape Drawings at **Appendix B**.

4.6 Parking

It is proposed to provide 194 car parking spaces at Ground Level within the townhome, terrace and studio dwellings. All resident parking is provided within the development, with visitor parking provided at grade within the Mews. Additional on-street parking is included within the approved future public roads (DA583/2017) which can also be used for short stay residential visitor parking, if required.

4.7 Access and Entries

All townhomes, terraces and studio dwellings are provided with a separate private entry, accessed from the ground floor. All dwellings are provided with direct access to their respective parking areas, from within the dwelling.

4.8 Materials and Finishes

The design of the residential precinct will feature a series of neighbourhoods defined by their character, typically associated with their surrounding context. As described in the Design Report at **Appendix A**, the proposal includes a palette of colours, finishes and materials developed for the residential precinct to support the key principles of sustainability, lifestyle and engagement with the landscape.

4.9 Mews

The proposal includes construction of Mews 2. The mews will be privately owned (community association property), publicly accessible streets, operating as a shared neighbourhood space, allowing for limited, low speed vehicle movement, parking for residential visitors, trees and landscaped areas.



Figure 23 Artist Impression of Mews

4.10 Landscaping and Public Domain

Landscape plans have been prepared by HASSELL (**Appendix B**) which details the landscaping proposed to Mews 2 and the private open spaces of the development.

Landscaping to surrounding streets form part of DA583/2017 approved previously (Refer to **Section 2.4**).

It is noted the civil design of Mews 2 was approved as part of DA583/2017. This application seeks approval for the landscaping of the Mews. The landscape elements of the Mews are described below in further detail.

An overview of landscaping is provided at **Figure 24** below.

4.10.1 Mews Planting

The mews will be constructed with differentiated paving materials and include planted areas and mid-size tree species. The design of the public domain for the mews aims to provide an extension of the residences private open space into a community street where children can play safely within the local context of their home environment. These secondary community spaces for residents will create a place where pedestrians take priority over cars and where the public realm and private dwellings are appropriately integrated.



Figure 24 Landscape Plan

Source: Hassell

4.10.2 Private Open Spaces

The primary private open spaces of Townhomes on Level 1 incorporate integrated planter beds and arbour structure (see **Figure 25**). The planters incorporate screening vegetation and an irrigation system with an automatic fixed drop system that is self-operated via a soil moisture sensor. The layout of the entire irrigation system will ensure that planting receives the required amount of water to maintain healthy growth.

Detail of the planter and arbour is provided by Hassell at **Appendix B**.

4.11 Infrastructure and Services

Approval for all infrastructure services across RP1 was sought by DA583/2017. Required amendments to these services for the built form are sought by this DA.

Water and Sewer

A services statement has been prepared by Cardno (**Appendix T**). Sydney Water has confirmed feasibility requirements for the residential precinct. Stage 2 will be connected to Stage 0 water mains proposed as part of DA621/2016.



Figure 25 Courtyard planter beds and arbour

Power

An Electrical Services Letter has been prepared by Shelmerdine Consulting Engineers (**Appendix U**), confirming the discussions have occurred with Endeavour Energy to provide power to the precinct via new and existing high voltage feeders, new substations and new low voltage distributors. An application has been made to Endeavour Energy in relation to supply to the precinct.

Telecommunications

The existing pit and pipe infrastructure within Soldiers Parade will be extended along Local Roads 7 and 9 as part of DA583/2017. The cabling will further extend to service Stage 2 (this application). Final cabling arrangements will be determined in consultation with a telecommunications provider (**Appendix V**).

Gas

The existing gas main pipework from Campbelltown Road is proposed to be extended along Soldiers Parade and extended from Soldiers Parade into Local Roads 7 and 9 and extended throughout the road network to service Stage 2. Final arrangements will be determined in conjunction with Jemena (**Appendix V**).

4.12 Subdivision

The proposal includes subdivision to create 20 Torrens titled stratum lots as a continuation of the Community title sub-division approval received in Stage 1 (DA 779/2017) (see Subdivision Plan at **Appendix W**).

5.0 Assessment of Environmental Impacts

This section considers the planning issues relevant to the proposed development. It contains our assessment of the environmental impacts of the proposal and identifies the steps to be taken to prevent or mitigate the potential impacts on the environment

5.1 Compliance with Relevant Strategic and Statutory Plans and Policies

The DA's consistency and compliance with the relevant statutory plans and policies is in **Table 3** Summary of consistency with key strategic and statutory plans and policies below. Variations to, and non-compliance with, the key standards and guidelines highlighted in the table are discussed in the following sections of this environmental assessment.

Table 3 Summary of consistency with key strategic and statutory plans and policies

Plan	Comment																
SEPP 55	See Section 5.12.																
The Greater Metropolitan Regional Environmental Plan (GMREP) No. 2 – Georges River Catchment	The proposal is consistent with the aims and objectives and planning principles established by the deemed SEPP. Appropriate soil and water management protocols will be implemented to ensure the proposed works will not have an adverse impact to Georges River or its tributaries.																
SEPP (State Significant Precincts) 2005	<p>The site is within the Edmondson Park South State Significant Precinct under Schedule 3. Part 31.</p> <table> <tr> <td>Clause 10 – Zone</td><td>The proposed development is defined as multi-dwelling housing which is permissible with development consent in the B4 zone.</td></tr> <tr> <td>Clause 18 - Height</td><td>The maximum building height of the tallest structure is 11 – 12.5m which is less than the 24m maximum building height permitted by the SEPP. Refer to Section 5.3.</td></tr> <tr> <td>Clause 19 – Floor Space Ratio</td><td>The site has a maximum floor space ratio of 2.5:1. The proposal has a site area of 12,637sqm and a gross floor area of 14,208sqm. The overall floor space ratio is 1.12:1.</td></tr> <tr> <td>Clause 31 – Preservation of Trees</td><td>The Concept Plan along with the Biodiversity Certification Order and Edmondson Park Conservation Agreement set up the framework for the future clearance of the existing trees within the developable area of the Town Centre whilst retaining the native vegetation in the Reserve in the east of the site. Approval for clearing of trees has been approved under DA628/2016.</td></tr> <tr> <td>Clause 33 – Heritage Conservation</td><td>There are no indigenous or non-indigenous heritage items within or located in proximity to the site. The Statement of Commitments establishes protocols to be followed in the event of unexpected finds and other procedures as further discussed at Section 5.5.</td></tr> <tr> <td>Clause 34 – Public Utility Infrastructure</td><td>Confirmation has been obtained from relevant utility infrastructure suppliers that the site is capable of being adequately serviced (refer to Section 4.10).</td></tr> <tr> <td>Clause 36 – Development Control Plan</td><td>To guide future design and assist with the development assessment process the modified Concept Plan (mod 4) introduced a set of site specific Design Guidelines. The Concept Plan in conjunction with the Design Guidelines therefore makes the need for a separate DCP redundant. Once approved, the existing Edmondson Park DCP will no longer apply to the Frasers Town Centre. Accompanying Mod 4 of the Concept Plan is an amendment to this Clause of the SEPP.</td></tr> <tr> <td>Clause 37 – Relevant Acquisition Authority</td><td>The proposal does not include works to Campbelltown Road or Bernera Road which is identified by the Land Acquisitions Map. The proposal is therefore consistent with the requirements under Clause 37.</td></tr> </table>	Clause 10 – Zone	The proposed development is defined as multi-dwelling housing which is permissible with development consent in the B4 zone.	Clause 18 - Height	The maximum building height of the tallest structure is 11 – 12.5m which is less than the 24m maximum building height permitted by the SEPP. Refer to Section 5.3.	Clause 19 – Floor Space Ratio	The site has a maximum floor space ratio of 2.5:1. The proposal has a site area of 12,637sqm and a gross floor area of 14,208sqm. The overall floor space ratio is 1.12:1.	Clause 31 – Preservation of Trees	The Concept Plan along with the Biodiversity Certification Order and Edmondson Park Conservation Agreement set up the framework for the future clearance of the existing trees within the developable area of the Town Centre whilst retaining the native vegetation in the Reserve in the east of the site. Approval for clearing of trees has been approved under DA628/2016.	Clause 33 – Heritage Conservation	There are no indigenous or non-indigenous heritage items within or located in proximity to the site. The Statement of Commitments establishes protocols to be followed in the event of unexpected finds and other procedures as further discussed at Section 5.5.	Clause 34 – Public Utility Infrastructure	Confirmation has been obtained from relevant utility infrastructure suppliers that the site is capable of being adequately serviced (refer to Section 4.10).	Clause 36 – Development Control Plan	To guide future design and assist with the development assessment process the modified Concept Plan (mod 4) introduced a set of site specific Design Guidelines. The Concept Plan in conjunction with the Design Guidelines therefore makes the need for a separate DCP redundant. Once approved, the existing Edmondson Park DCP will no longer apply to the Frasers Town Centre. Accompanying Mod 4 of the Concept Plan is an amendment to this Clause of the SEPP.	Clause 37 – Relevant Acquisition Authority	The proposal does not include works to Campbelltown Road or Bernera Road which is identified by the Land Acquisitions Map. The proposal is therefore consistent with the requirements under Clause 37.
Clause 10 – Zone	The proposed development is defined as multi-dwelling housing which is permissible with development consent in the B4 zone.																
Clause 18 - Height	The maximum building height of the tallest structure is 11 – 12.5m which is less than the 24m maximum building height permitted by the SEPP. Refer to Section 5.3.																
Clause 19 – Floor Space Ratio	The site has a maximum floor space ratio of 2.5:1. The proposal has a site area of 12,637sqm and a gross floor area of 14,208sqm. The overall floor space ratio is 1.12:1.																
Clause 31 – Preservation of Trees	The Concept Plan along with the Biodiversity Certification Order and Edmondson Park Conservation Agreement set up the framework for the future clearance of the existing trees within the developable area of the Town Centre whilst retaining the native vegetation in the Reserve in the east of the site. Approval for clearing of trees has been approved under DA628/2016.																
Clause 33 – Heritage Conservation	There are no indigenous or non-indigenous heritage items within or located in proximity to the site. The Statement of Commitments establishes protocols to be followed in the event of unexpected finds and other procedures as further discussed at Section 5.5.																
Clause 34 – Public Utility Infrastructure	Confirmation has been obtained from relevant utility infrastructure suppliers that the site is capable of being adequately serviced (refer to Section 4.10).																
Clause 36 – Development Control Plan	To guide future design and assist with the development assessment process the modified Concept Plan (mod 4) introduced a set of site specific Design Guidelines. The Concept Plan in conjunction with the Design Guidelines therefore makes the need for a separate DCP redundant. Once approved, the existing Edmondson Park DCP will no longer apply to the Frasers Town Centre. Accompanying Mod 4 of the Concept Plan is an amendment to this Clause of the SEPP.																
Clause 37 – Relevant Acquisition Authority	The proposal does not include works to Campbelltown Road or Bernera Road which is identified by the Land Acquisitions Map. The proposal is therefore consistent with the requirements under Clause 37.																

5.2 Consistency with the Concept Plan

The Concept Plan (Mod 4) provides for the delivery of the winning Frasers concept for the Town Centre, and accordingly incorporates a framework for the heights, floor space, public domain, car parking, stormwater, bushfire and waste management. Accordingly, the future development applications within the Frasers Town Centre will be focused on the detailed design resolution of the Concept Plan design. The following sections demonstrate the DA's general consistency with the Concept Plan (as modified) and Statement of Commitments (as modified).

5.2.1 Concept Plan (Mod 4)

The transitional arrangements introduced during the NSW Government's repeal of the former EP&A Act's Part 3A provisions states that a consent authority must not grant consent to development unless it is satisfied that the development is generally consistent with the terms of an approved concept plan (Schedule 2, Clause 2 of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017). This application is accordingly required to be generally consistent with the Concept Plan as proposed to be modified (Mod 4).

Table 4 identifies where relevant conditions have been addressed and demonstrates that the proposal is generally consistent with the key requirements established by Concept Plan (Mod 4).

Table 4 Assessment of consistency with Concept Plan of Approval

Instrument of Approval		Consistency
Schedule 2, Part A – Administrative Conditions		
1.1	The Proponent shall carry out the Concept Plan generally in accordance with: a) the Concept Plan Application MP10_0118;	✓
1.1 b)	State Significant Site Study and Environmental Assessment – Edmondson Park concept plan and State significant site listing, prepared by JBA Planning and dated September 2010;	✓
1.1 c)	Preferred Project Report - Edmondson Park South state significant site listing and concept plan, prepared by JBA Planning and dated November 2010;	✓
1.1 d)	Request to modify major project MP 10_0118 (MOD 1), prepared by Landcom and dated January 2012	✓
1.1 e)	Section 75W Modification of Concept Plan and Project Approval MP 10_0118 (MOD 2), prepared by APP Corporation Pty Ltd and dated May 2016	✓
1.1 f)	Section 75W Modification Application (Mod 3), prepared by JBA Urban Planning Consultants and dated July 2016	✓
1.1 g)	Environmental Assessment Report – Concept Plan Modification and Major Development SEPP Amendment (Mod 4), prepared by JBA and dated March 2016	✓
1.1 h)	Consolidated Response to Submissions (Mod 4), prepared by JBA and dated March 2017; and	✓
1.1 i)	this approval.	✓
1.2	In the event of an inconsistency between: a) the modifications of this approval and any document listed from condition 1.1a) to 1.1h) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and	✓
1.2 b)	any document listed from condition 1.1a) to 1.1h) inclusive, the most recent document shall prevail to the extent of the inconsistency.	✓
1.3	Determination of Future Applications The determination of future applications for development on the Site is to be generally consistent with the terms of this approval.	✓
Schedule 2 Part B – Modifications to the Concept		
1.1	The concept plan is modified to require preparation of a development control plan instead of the proposed development control strategy. The development control plan is to be prepared in consultation with Liverpool and Campbelltown Councils and adopted by the Director-General prior to the lodgement of any application for subdivision of a subsequent stage, or construction of a dwelling. Prior to determination of any application for subdivision or development within the Edmondson Park town centre (outside the	N/A

Instrument of Approval		Consistency
	Fraser's Town Centre), the development control plan is to be amended to include built form and development controls for the remainder Edmondson Park town centre (outside the Fraser's Town Centre), including controls to achieve active street frontages for buildings within close proximity of the train station.	
1.2	The development control plan is to include appropriate design controls which will ensure that development in the vicinity of identified heritage items does not detract from the heritage significance of these items including associated views.	N/A
1.3	Traffic and transport The final design of Campbelltown Road, including any reduced road width (less than 38.8m) and kerbside parking, is to be determined through the detailed design being carried out by RTA in consultation with the Department and in accordance with the requirements of Part B, condition 1.6. The final design should fully explore opportunities to provide at grade pedestrian access across Campbelltown Road in the vicinity of the Mont St Quentin Oval and the Ingleburn Military Heritage Precinct.	N/A
1.4	Prior to undertaking works on Campbelltown Road the applicant must enter into a Works Authorisation Deed with RTA for the proposed works. All works on Campbelltown Road are to be designed and constructed to RTA requirements. All intersection approaches on Campbelltown Road are to provide a single 100m long right turn storage bay and must operate with double overlap diamond phasing. Campbelltown Road is infrastructure to be funded through the Growth Centres special infrastructure contribution area (SIC) levy. Urban Growth NSW must pay the required SIC levy or alternatively may enter into an agreement for the provision of a material public benefit in lieu of payment of the SIC levy, or any component thereof, for the construction of and dedication of road widening along Campbelltown Road.	N/A
1.5	Regional Park The concept plan is modified such that the environmental living lots proposed in the north west corner of the site are to be located entirely within the E4 Environmental Living zone, and outside the E1 National Parks and Nature Reserves Zone under the Major Development SEPP.	N/A
1.6	Heritage The final design of Campbelltown Road is to respond to the heritage value of the adjoining heritage items. Any proposed relocation of heritage items to accommodate the road would be required to be justified through a heritage impact assessment, have regard to the implications on the approval of the sale of the land by the Commonwealth under the Environmental Protection and Biodiversity Conservation Act 1999, and requires the written endorsement of the Director-General.	N/A
1.7	Decommissioning of Sewerage Treatment Plant The existing sewerage treatment plant is to be decommissioned as soon as practicable following the connection of the Bambi Kindergarten and Ingleburn North Primary School to the proposed Ash Road Carrier Stage 1.	N/A
Schedule 2 Part C – Further Environmental Assessment Requirements		
1.1	Built form and urban design Each subsequent residential subdivision application is to demonstrate how higher density development within that stage is to be located in close proximity to proposed services and public transport infrastructure.	✓ The Town Centre is within 200m of the Edmondson Park Railway Station, in accordance with the Yield Plan (see Appendix EE).
1.2	Each subsequent subdivision application outside of the Fraser's Town Centre is to demonstrate consistency with the development control plan to be prepared under Part B, condition 1.1.	N/A
1.3	Any future development application within the Fraser's Town Centre must demonstrate it is consistent with the: a) Fraser's Town Centre Maximum Height of Buildings Plan;	✓ Refer to Section 5.1, 5.3, 5.4 and 5.5.
1.3 b)	Fraser's Town Centre Maximum Gross Floor Area Plan;	
1.3 c)	Fraser's Town Centre Public Domain Plan; and	
1.3 d)	Fraser's Town Centre Design Guidelines (as amended by FEAR 1.3C).	

Instrument of Approval			Consistency																		
1.3A a)	Future development applications within the Frasers Town Centre Core are not to exceed the GFA and building heights specified in the table below: <table><tr><th>TCC Quadrant</th><th>Gross floor area (m2)</th><th>Maximum height (RL)</th></tr><tr><td>North West</td><td>20,000</td><td>99.5</td></tr><tr><td>North East</td><td>41,500</td><td>105.8</td></tr><tr><td>South West</td><td>55,500</td><td>95.7</td></tr><tr><td>South East</td><td>28,525</td><td>96.4</td></tr><tr><td>Total</td><td>145,025</td><td>Total</td></tr></table>		TCC Quadrant	Gross floor area (m2)	Maximum height (RL)	North West	20,000	99.5	North East	41,500	105.8	South West	55,500	95.7	South East	28,525	96.4	Total	145,025	Total	N/A
TCC Quadrant	Gross floor area (m2)	Maximum height (RL)																			
North West	20,000	99.5																			
North East	41,500	105.8																			
South West	55,500	95.7																			
South East	28,525	96.4																			
Total	145,025	Total																			
1.3A b)	Notwithstanding the GFA figures in a) above, GFA in any quadrant may exceed the maximum by up to 10 per cent, provided that the total GFA is not exceeded; and		N/A																		
1.3A c)	Notwithstanding the maximum height figures in a) above, only one building may be approved to a height of RL 132.9.		N/A																		
1.3B	Any development application for the landmark building (i.e. the building to RL 132.9) or the market hall must demonstrate design excellence through a design excellence strategy. This design excellence must include consideration of the site's character, suitability, layout, setbacks, architectural design, materials and finishes, articulation and detailing, relationship to the public domain, connectivity and street activation. The design excellence strategy must include an independent peer review and be approved by Liverpool City Council prior to the lodgement of the first development application for the landmark building or market hall.		N/A																		
1.3C	Prior to the lodgement of the first development application for above-ground or public domain works, the proponent must revise the Frasers Town Centre Design Guidelines as follows:		The Design Guidelines have been amended and approved by the Secretary (see Appendix X). Assessment of the Design Guidelines is provided at Section 5.4 and Appendix Z .																		
1.3C a)	Amend Section 1.5 to read: <i>Should development not adopt a design solution, it may propose an alternative design solution. This alternative solution will be assessed against the relevant performance criteria.</i>																				
1.3C b)	Amend Section 1.8 to include a map depicting Main Street and the activity streets																				
1.3C c)	Amend Section 4.2, Design Solution DS 2.3 to require the Soliders Parade frontage between Henderson Road and the Greenway will be predominantly sleeved by residential, commercial or retail uses																				
1.3C d)	Amend Section 4.2, Design Solution DS2.3 to require retail or commercial uses with a street address at the corners of Soldiers Parade and the Town Centre Core east-west street and the Greenway and Main Street																				
1.3C e)	Include a provision that the Liverpool Design Excellence Panel will review (in accordance with its normal procedures) all applications within its remit, in addition to all public domain works with a cost of works above \$10 million																				
1.3C f)	<i>Amend design characteristic in Part 3, Table 1 to read:</i> Diversity of architectural form and expression is achieved within a framework of visual compatibility between different buildings																				
1.3C g)	Amend design characteristic in Part 3, Table 1 to read: Community uses are centrally located to maximise accessibility to all dwellings and to provide a strong civic presence in the Town Centre																				
1.3C h)	Move the following provision from Section 4.1, DS 3.1 to Performance Criteria PC3: Maximum building height and Gross Floor Area for the Town Centre Core complies with the Concept Plan (as modified).																				
1.3C i)	Amend Section 4.1 to provide for setbacks and street alignments. Ground and first floor levels should be constructed to the street alignment, to provide an urban streetscape. Consideration must be given to podium forms for towers. The street wall height and tower must provide for a human scale at street level and allow for street tree planting in accordance with the Public Domain Plan.																				
1.3C j)	Amend Section 4.4, DS 4.8 to read: Access to car park entries and the loading dock(s) is from Bernera Road, Greenway and Soldiers Parade only. Service vehicle access is preferred from Bernera Road and Soldiers Parade.																				

Instrument of Approval		Consistency
1.3C k)	Amend Part 4, Table 2 so that parking is provided generally in accordance with the specified Town Centre Core Parking Rate.	
1.3C l)	Amend Section 5.2 to include measures to encourage windows to local street frontages. Where blank walls are unavoidable, ensure they face dwelling entries.	
1.3C m)	Amend the solar access requirement in Section 5, Tables 3 and 4 to require that 70 per cent of terraces and townhomes in each of the three residential stages receive at least two hours' solar access to principal living areas or private open space between 9am and 3pm on 21 June.	
1.3C n)	Amend the private open space provision in Section 5, Tables 3 and 4 to require that principal private open space must be accessed directly from living rooms.	
1.3C o)	Amend the dwelling size requirement in Section 5, Table 3 to require an additional 12m ² for a fourth bedroom and a minimum dwelling width of four metres. The revised Design Guidelines must be submitted to and approved by the Secretary prior to lodgement of the first development application for above ground building or public domain works. The revised Design Guidelines must also be provided to Council for information once approved by the Secretary.	
1.4	Traffic and transport Any future application which proposes additional intersections with Campbelltown Road is to be supported by a traffic analysis and is to have the concurrence of the RTA.	N/A
1.5	Any future application is to address the need for the relocation of Macdonald Road, with timing to be supported by a detailed traffic assessment to RTA's satisfaction.	N/A
1.6	Any future application for the Edmondson Park town centre outside the Frasers Town Centre and any future application for road infrastructure within the Frasers Town Centre must be supported by a detailed traffic and transport study, including a micro-simulation model. This should identify appropriate bus priority measures along the proposed Main Street, and ensure integration with the transport interchange, through consultation with Department of Transport.	N/A
1.6A	Any future application for road infrastructure within the Frasers Town Centre must be prepared in consultation with Transport for NSW and RMS. The proponent must consider any comments received during consultation. This requirement operates in addition to any consultation, concurrence or approval requirements under any other environmental planning instruments or legislation.	N/A
1.6B	The proponent must provide land dedication to RMS in accordance with the Plan of RMS Road Acquisition dated 27 June 2017 for the purposes of road widening along Campbelltown Road prior to determination of any development application for building works adjacent to Campbelltown Road. Land dedication for Campbelltown Road is to meet RMS requirements for road widening works.	N/A
1.7A	Car and bicycle parking within the Edmondson Park Town Centre must be provided in accordance with the Frasers Town Centre Design Guidelines (as amended by FEAR 1.3C).	✓ Refer to Section 5.6
1.8A	A Voluntary Planning Agreement in accordance with the public benefit offer dated 8 August 2017 between Frasers Property Australia Pty Ltd (or its nominated entity) and Liverpool City Council shall be prepared, publicly exhibited, executed and registered on the title of the land with the Office of Land and Property Information. The Voluntary Planning Agreement, as executed, must be registered on the title of the land prior to the lodgement of the first development application for residential or commercial floor space within the Frasers Town Centre, or as otherwise agreed with Liverpool City Council. A copy of the executed Voluntary Planning Agreement shall be submitted to the Secretary.	Frasers are continuing to work with council to enter into the VPA in accordance with the in-principle offer agreed by Frasers and Council as part of the Section 75W process.
1.9	Bushfire hazard Future subdivision applications must demonstrate compliance with the bushfire management measures outlined in the concept plan, and be in accordance with Planning for Bushfire Protection 2006.	✓ (See Section 5.13 below)
1.10	Future subdivision applications are to demonstrate that the APZs are located outside any area of public open space, unless agreed to by the relevant council, and outside the regional park, unless agreed to by Office of Environment and Heritage.	✓ (See Section 5.13 below)
1.11	Conservation Agreement	N/A (see Section 5.7 below)

Instrument of Approval		Consistency
	Prior to determination of any future application for any aspect of the concept plan which is inconsistent with the Conservation Agreement, the Conservation Agreement is to be amended by way of written agreement between the relevant parties to be consistent with the concept plan.	
1.12	<p>Vegetation management</p> <p>Each subsequent stage is to provide details on:</p> <p>strategies to manage interface issues between the construction site and both the regional park and any vegetation identified as an offset under the concept plan; and appropriate procedures for clearing of vegetation and strategies to retain mature trees where possible.</p> <p>Any procedures and strategies are to be carried into a vegetation management plan prior to commencement of works on the site.</p>	<p>✓</p> <p>(See Section 5.7 below)</p>
1.13	<p>Regional Park</p> <p>A future application for subdivision to create the regional park is to include an easement in favour of Sydney Water over the proposed sewer pipeline.</p>	N/A
1.14	Any future applications seeking approval for construction of buildings are to be accompanied by a Heritage Interpretation Strategy for the former Ingleburn Army Camp, Ingleburn villages and Indigenous cultural heritage, prepared by a suitably qualified heritage conservation practitioner in accordance with the NSW Heritage Office guidelines Interpreting Heritage Places and Items (2005) and Heritage Interpretation Policy (2005). The Heritage Interpretation Strategy is to be prepared in consultation with the Office of Environment and Heritage, the relevant council(s) and should include a detailed history of the Site.	N/A
1.15	Any future applications outside the Frasers Town Centre are to be accompanied by a Statement of Heritage Impact prepared by a suitably qualified heritage conservation practitioner in accordance with the NSW Heritage Office guideline Statements of Heritage Impact (2002) which assesses potential impacts of proposed works on heritage items and their settings.	N/A
1.16	Any future application to demolish, remove or relocate the Lecture Hall (Nissen Hut), the kitchen/dining complex (Mess Hall), and historic plantings, or the Riley-Newsum prefabricated cottages, is to be accompanied by a photographic archival recording of all items proposed to be relocated or demolished. The archival recording is to be prepared by a suitably qualified heritage conservation practitioner in accordance with the NSW Heritage Office guideline Photographic Recording of Heritage Items Using Film or Digital Capture (2006). Typical examples of elements and structures should be included as well as views and spatial relationships between elements. Copies of the archival recording are to be provided to the Department, Campbelltown City Council and Liverpool City Council.	N/A
1.17	Any future applications involving the relocation of prefabricated cottages is to demonstrate that work will be undertaken in association with specialist engineers and conservation practitioners.	N/A
1.18	Future applications are to identify how the detailed design has responded to opportunities to further mitigate impacts on Aboriginal archaeological heritage.	<p>✓</p> <p>See Section 5.8.2.</p>
1.19	Any future applications are to provide details of the nature and extent of any cut and fill that is required to be undertaken. Compliance with the relevant council's requirements (as relevant to cut and fill) should also be demonstrated.	N/A
1.20	Any future applications outside the Frasers Town Centre are to demonstrate compliance with the flood management measures outlined in the Part 3A Concept Plan, Water Cycle Management Plan prepared by J. Wyndham Prince, September 2010. Compliance with Campbelltown and Liverpool City Council requirements (as relevant to flooding) should also be demonstrated.	<p>✓</p> <p>Refer to Section 5.9 and Appendix D and E.</p>
1.21	Any future applications are to provide details on the proposed water sensitive urban design infrastructure, to the satisfaction of the consent authority. Future applications within the Frasers Town Centre must provide water sensitive urban design in accordance with the Water Cycle Management Plan Addendum Report prepared by J. Wyndham Prince, March 2016. Any increased water flow through the rail corridor may require the approval of Transport for NSW.	<p>✓</p> <p>Refer to Section 5.9 and Appendix D and E.</p>
1.22	Any future applications for residential lots adjacent to Cabramatta Creek are to demonstrate that the lot layout and dwelling locations can accommodate an adequate riparian corridor and associated buffer.	N/A

Instrument of Approval		Consistency
1.23	The channel restoration along corridor B (as identified in the concept plan) is to be designed to accommodate a 1:2 to 1:5 year flow and comprise a soft engineering solution	N/A
1.24	Any future applications for construction of buildings and associated structures (that are not defined as exempt or complying development) within the Site shall: a) include an assessment of construction impacts, including noise, traffic, soil and erosion (including acid sulphate soils where relevant), waste, and dust, and identify the mitigation and management measures that would be implemented to address these impacts;	✓ Refer to Section 5.21.
1.24 b)	demonstrate compliance with the Water Sensitive Urban Design principles established in the concept plan;	✓ Refer to Section 5.9.
1.24 c)	where applicable, demonstrate compliance with the commitments and management procedures detailed in the Vegetation Management Plan, including the strategy for retention of trees on site;	✓ Refer to Section 5.7.
1.24 d)	demonstrate that habitable floor levels are located above the 100 year ARI flood level plus 500mm freeboard, and that appropriate flood evacuation can be provided for dwellings located below the probable maximum flood level;	✓ Refer to Section 5.9.
1.24 e)	demonstrate compliance with the Planning for Bushfire Protection 2006;	✓ Refer to Section 5.13.
1.24 f)	demonstrate that ESD measures have been incorporated into the design of the buildings to reduce water and energy consumption in accordance with State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004; and	✓ Refer to Section 5.14.
1.24 g)	demonstrate existing or planned utilities are sufficient to service the proposed development.	✓ Refer to Section 4.9.
1.25	Noise assessments are required for dwellings located in the areas affected by traffic and rail noise. Future applications are to include detailed assessments of the design of the dwellings that confirm compliance with the noise goals outlined in the South Edmondson Park Concept Application, Noise and Vibration Impact Assessment, August 2010 prepared by Wilkinson Murray.	✓ (See Section 5.10 below)

5.2.2 Statement of Commitments

The DA will satisfy all relevant Statement of Commitments made in relation to the development as part of the Concept Plan. An assessment of the proposal's consistency with the approved Concept Plan Statement of Commitments is located at **Appendix Y**.

5.3 Height

Clause 18 in Part 31 of the State Significant Precincts SEPP establishes a maximum building height of 24m at the site. The proposal includes buildings between two and three storeys. The maximum height of any structure proposed is between 11 – 12.5m, which is less than the maximum permitted by the SEPP. The height of buildings is consistent with the built form guidelines established by the Design Guidelines (see **Section 5.4** below).

5.4 Frasers Town Centre Design Guidelines

The Frasers Town Centre Design Guidelines apply to the site following the approval of the Concept Plan (Mod 4) (refer to **Section 2.2**). The purpose of the Design Guidelines is to guide development of land within the town centre. The application of the Design Guidelines is provided at Section 1.5 of that document.

The town centre is designed to locate densities in proximity to services and transport infrastructure. The proposal is consistent with the Design Guidelines in that it is consistent with the vision, key elements, urban structure and residential precinct built form guidelines established by Part 2.0, 3.0 and 5.0 respectively.

The Urban Structure of the Frasers Town Centre is established by the Design Guidelines which includes the layout of key roads including neighbourhood and local streets. The proposal is consistent with this structure (the public roads were approved under DA583/2017).

The residential precinct built form guidelines at Section 5.0 provide performance criteria and design solutions for multi-dwelling housing, attached dwellings and studio dwellings as provided by this application. The design solutions are the preferred way of demonstrating the performance criteria. Should a design solution seek an alternative solution, an alternative solution can be proposed which is to be assessed against the performance criteria.

The proposal is consistent with the built form design solutions, including consistency with:

- Building height, setbacks and separation;
- Provision of open space;
- Provision of landscaping and private open space;
- Dwelling sizes;
- Storage;
- Solar access targets;
- Environmental sustainability targets;
- Provision of car and bicycle parking.

A more detailed assessment of the Residential Precinct design guidelines is provided at **Appendix Z**.

5.4.1 Setbacks

Units 12085, 12096, 12055, 12069, 12084, 12070, 12001, 12012, 12013, 12024, 12025, 12038, 12054, 12040 provide a predominantly 3m setback with a minor extent being less the minimum required due to the splays of the boundary to deliver the road geometry required for street corners and motorist sight lines.

Terrace unit 12123 provides a predominant 2.5m setback which reduces at the splayed corner.

Studio unit 12124 provides a predominant 1m setback which reduces at the splayed corner.

The proposed setback arrangement at splayed corners is consistent with the Stage 1 approval (DA779/2017).

It is noted that the side setback design solution allows a zero lot boundary. Due to the irregular alignment of boundaries there are minor variation to the setback design solution (less than 2m) for units 12070, 12040, 12138. All units remain within the boundary. The setback allows the built form arrangement to be delivered consistently across the precinct, while maintaining the performance criteria.

A more detailed assessment of the Residential Precinct design guidelines is provided at **Appendix Z**.

5.5 Frasers Town Centre Public Domain Plan

The Frasers Town Centre Public Domain Plan applies to the site following the approval of the Concept Plan (Mod 4) (refer to **Section 2.2**). The Public Domain Plan provides guidance for the coordination, design and construction of improvements to the public domain including for the Mews.

The proposal is generally in accordance with the Public Domain Plan, which is the basis for the Frasers design. The Mews provide an extension of the residences private open space into a community street where children can play safely within the local context of their home environment.

5.6 Traffic

A Traffic Impact Assessment has been prepared by Ason Group and is included at **Appendix C**. The report includes a complete assessment of the development of RP1 including consideration of the future development of the residential precinct, parking provision, access and internal design, traffic impacts and construction traffic management throughout the development of RP1. An assessment of those aspects relevant to this DA is provided below.

5.6.1 Parking

The proposal makes provision of a total of 194 off-street parking spaces, including 20 accessible parking bays. The required parking rates are drawn from the Design Guidelines. A summary of the Design Guidelines parking requirements and the proposal is provided at **Table 5** below.

Table 5 Car Park Assessment

Use	Proposal	Guidelines	Requirement	Proposed
Townhome 1-2 bedroom	52	1 space per unit	52	52
Townhome 3-4 bedroom	56	2 spaces per unit	112	112
Terrace 1-2 bedroom	0	1 space per unit	0	0
Terrace 3-4 bedroom	10	2 spaces per unit	20	20
Studio dwelling	10	1 space per unit	10	10
Total			194	194

In accordance with the Design Guidelines visitor parking is provided on-street, within the Mews.

5.6.2 Construction Traffic Management

The surrounding roads of RP1 are now completed. Construction access routes for Stage 1 – 3 are detailed within the Traffic Report at Figures 10-12.

A detailed Vehicle Movement Plan is not considered necessary at this stage, and will be provided as required, prior to the commencement of any work on site. A preliminary Construction Management Plan (CMP) has been prepared by Frasers for the Precinct. It sets out the methodology for the preparation of a Traffic Management Plan by the principal contractor (refer to Section 5.21).

5.7 Flora and Fauna

The Concept Plan along with the Biodiversity Certification Order and Edmondson Park Conservation Agreement set up the framework for the clearance of existing trees within the developable area of the Town Centre whilst retaining the native vegetation in the Reserve in the east of the site. Approval for clearing the site of vegetation was approved under DA628/2016.

5.8 Heritage

5.8.1 Non-Indigenous Heritage

At the time of the original Concept Plan the heritage listed 'Ingleburn Village site – three Riley Newsum Prefabricated cottages were located within the Frasers Town Centre. These buildings were approved to be demolished by Liverpool Council under DA595/2014. The buildings were demolished in accordance with their development consent by UGNSW and there are now no listed heritage items within or in the immediate proximity of the site.

The Statement of Commitments establish protocols to be followed should any non-indigenous historical archaeological be discovered during site excavation.

5.8.2 Indigenous Heritage

The Aboriginal Cultural Heritage Assessment submitted with the original Concept Plan confirms there are no Aboriginal Heritage sites within Frasers Town Centre.

Frasers are committed to managing potential impacts to non-indigenous heritage throughout the ongoing development of Frasers Town Centre.

The Statement of Commitments establish key protocols for the management and conservation of indigenous heritage in relation to salvage activities, construction activities, incident reporting and requirements for consultation

with the Aboriginal community where necessary. These protocols will be incorporated into induction and site management plans to be adopted by the contractor prior to the commencement of any site works.

5.9 Water Cycle Management

An assessment of Water Cycle Management has been provided by J. Wyndham Prince (**Appendix D**) that confirms the proposal is consistent with the Concept Plan (Mod 4) approval and Statement of Commitments.

An Interim Stormwater Management Strategy Report has been prepared by J Wyndham Prince **Appendix E**. The interim strategy will provide temporary stormwater devices to service the proposed development until such time that the regional devices, including detention basin proposed to the south of Campbelltown Road as part of the concept plan and bio-retention raingardens 13 and 14 are constructed.

The site is located in a catchment that does not drain into the creek systems on which regional basins are to be located; in addition, due to the size of the subject site, a broader regional detention basin is not required. Accordingly, the need for a regional basin under the Original Concept Approval is not triggered by the proposal. Further details of the Interim Stormwater Management Strategy are provided at **Appendix E**.

5.9.1 Flooding

Site excavation approved under (DA628/2016) will generally grade the site with a fall from the south-western corner to the north-eastern corner. The project designers have made every effort to ensure housing is located above the 100-year ARI plus 500mm freeboard however this has not been possible for every dwelling due to site fall. The assessment (**Appendix D**) confirms the proposed levels are acceptable as site cross fall will ensure that there is minimal risk to property in the event of the 100-year ARI. It is noted that the site is outside the mapped 100-year ARI flood path local stormwater. The assessment the risk to be minimal as:

- *Bernera Road adjacent to Blocks A North and South and the roads within RP1 are all designed to be on grade, with no trapped low points or sag points to facilitate build-up or ponding of stormwater along the western side of the development Blocks;*
- *the road drainage design in Bernera Road and throughout Residential Precinct 1 will ensure the 100yr ARI surface flow level will not overtop the kerb;*
- *in all cases, the verge has a cross fall toward the top of kerb to provide additional flow capacity; and*
- *the Stage 1 pocket park adjacent to the western side of Block B South grades to the north with no trapped low points or sags, and is lower than the finished floor levels at the entry points of the adjacent housing product.*

5.10 Noise Impacts

An acoustic assessment has been undertaken by Wilkinson Murray (**Appendix F**) consistent with that undertaken for the Concept Plan. The noise assessment identifies environmental noise sources which may impact residential receivers and recommends acoustic treatments to reduce these impacts to acceptable levels.

Appropriate noise levels for the proposal have been drawn from Edmondson Park South Development Control Plan 2012 and NSW Department of Planning's 'Development Near Rail Corridors and Busy Roads (Interim Guideline)' given proximity to Campbelltown Road. Based on these standards internal noise objectives for the residential use of 35dB(A) for bedrooms and 40dB(A) for other residential parts of the building were established.

Wilkinson Murray generated a noise model based on projected traffic flows. The modelling provides predicted noise levels for residential dwellings and indicates where noise levels at facades exceed noise objectives for day and night time periods.

The assessment includes consideration of future traffic noise levels including from Campbelltown Road, on residential dwellings within the site. The assessment indicates that portions of two buildings at the southern boundary of the site, adjacent to Campbelltown road will exceed day and night time objectives. The affected residences are shown at **Figure 26**.

The assessment provides detail of recommended deemed to comply façade and glazing materials and acoustic seals at Table 2-5 of **Appendix F**. Adoption of these mitigation measures will negate the need for individual acoustic assessment of traffic noise at each lot.

To comply with internal noise levels, it is necessary for some dwellings to close external windows to comply with internal noise levels. These homes are identified at Figure 2-3 of **Appendix F**. A number of options are available to provide adequate ventilation to habitable rooms when windows are closed due to traffic noise that indicatively may include:

- ducted fresh air supply;
- propriety acoustic wall ventilators; or
- ceiling or bulk mounted in-line ducted fans

Wilkinson Murray confirm that with the adoption of recommendations contained within the assessment the proposal is will comply with relevant acoustic requirements.

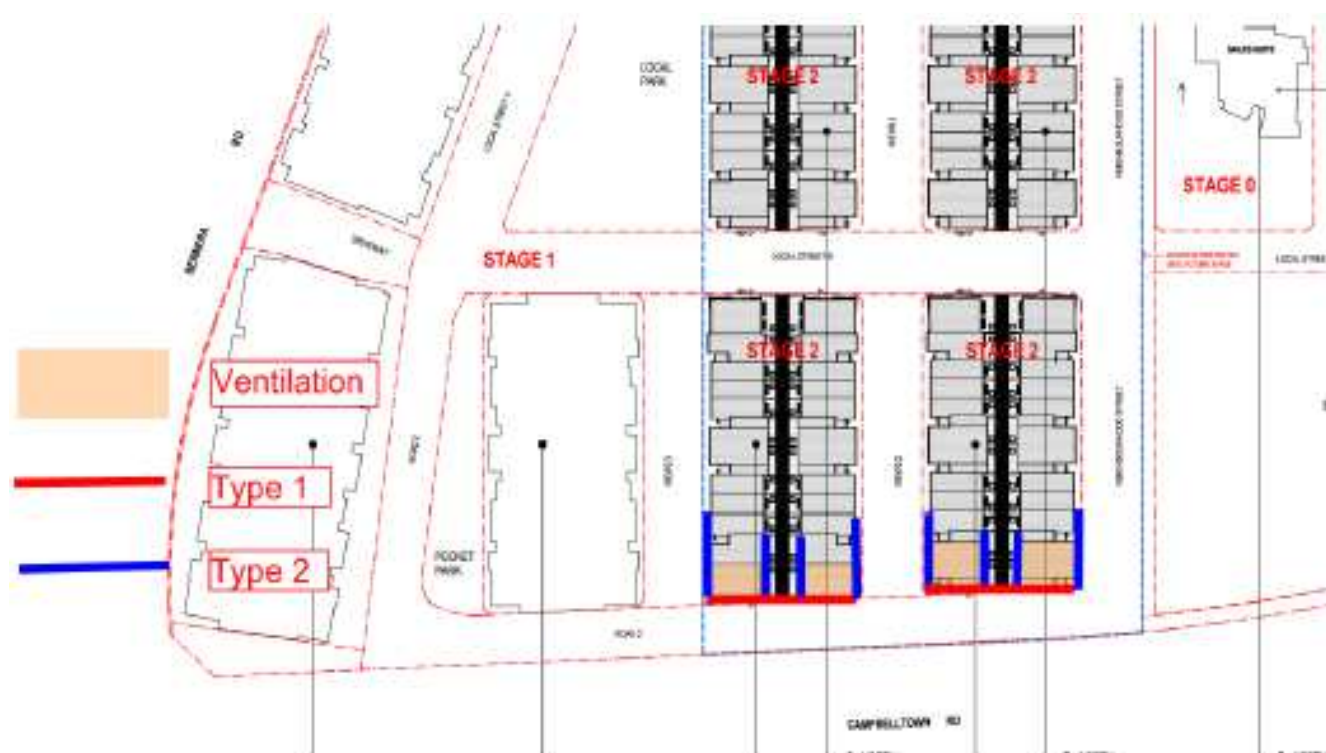


Figure 26 Noise affected dwellings

Source: Wilkinson Murray

5.11 Geotechnical

A Geotechnical and Salinity Investigation has been undertaken by GeoEnviro Consultancy (**Appendix G**). A number of test pits were excavated across the site through topsoil/fill, fill, natural soil and bedrock. The investigation found the subsurface generally consisted of:

- clayey silt of low liquid limit;
- fill consisting of gravelly clayey silt and gravelly silty clay;
- natural soil of high plasticity silty clay;
- ironstone gravel and shale gravel in natural clay; and
- shale and siltstone bedrock at depths ranging from 0.8m to 2.8m below the existing ground level.

The report presents design recommendations for building footings and foundations as well as pavement design recommendation for roads.

5.12 Contamination

Many contamination studies and environmental site investigations have been undertaken to assess the extent and nature of contaminants within the Edmondson Park South site as a whole, as well as within the Town Centre (included for information is that requested by Council for Stage 1 – see **Appendix BB, CC and DD**).

The Geotechnical, Contamination and UXO Site Suitability Assessment prepared by Golder Associates and dated 10 September 2010 for the Concept Plan (**Appendix DD**), concluded that there was some form of localised contamination, potential unexploded ordnances, and small arms ammunition on what was then termed ‘the Defence Site’ which includes the Edmondson Park Frasers Town Centre.

However, the Assessment noted that A NSW DECCW accredited Site Auditor was engaged by Defence in 2003 to carry out a non-statutory site audit of the Defence Lands. The Auditor concluded that the investigated and remediated areas were “*considered suitable for residential land use with gardens and accessible soils (home grown produce contributing to less than 10% fruit and vegetable intake, no poultry)*”.

In support of this application DLA Environmental Services has prepared a Remediation Action Plan (RAP) (**Appendix H**). The RAP sets remediation goals, management procedures and environmental safeguards to be implemented to ensure the Site will be rendered suitable for the future residential land use. DLA concludes that the site can be made suitable for the intended land-use subsequent to implementation of the RAP

To ensure the potential existence of isolated occurrences of contamination are appropriately managed an Unexpected Finds Protocol (UFP) has been developed by DLA (available at **Appendix H**).

Based on the above assessment, the site is suitable for the proposed use and the provisions of SEPP 55 have therefore been satisfied.

5.13 Bushfire

Ecological Australia has reviewed the proposal in relation to Bushfire (**Appendix I**). The addendum assessment provides supplementary information in addition to the Bushfire Planning Assessment submitted with Mod 4, dated March 2016 and included at **Appendix J** and considers the proposal against Planning for Bushfire Protection 2006 (PBP).

As shown on the asset protection zone diagram included in the report (**Figure 27**) the site and some buildings fall within a Bushfire Attack Level (BAL) – 12.5. These buildings are to be constructed in accordance with *Australian Standard 3959 Construction of buildings in bushfire-prone areas 2009*. The requirements of PBP will be included as part of conditions of approval.

Ecological confirm the proposal complies with *Planning for Bushfire Protection 2006* in accordance with Condition 1.24(e) of the Concept Plan subject to the relevant recommendations of the Bushfire Planning Assessment (dated March 2016) and addendum assessment (dated 1 August 2018) being applied.



Figure 27 Bushfire Attack Level Diagram

Source: Ecological

5.14 Environmentally Sustainable Design

The proposed development seeks to target a high standard of environmentally sustainable development (ESD). An ESD statement has been prepared by WSP in support of the proposal and is available at **Appendix K**. Under the Concept Plan, the following BASIX sustainability targets apply to the Frasers Town Centre Residential Precinct:

Residential Precincts Townhomes

- Energy: minimum 66

- Water: minimum 50

Residential Precincts Terraces

- Energy: minimum 62
- Water: minimum 48

Design initiatives that will support achieving the above targets include:

- Geothermal heat rejection for efficient air conditioning in larger residential precinct dwellings
- High efficiency air conditioning split systems for smaller residences
- On-site renewable energy sourced from photovoltaic (PV) arrays installed on the roofs of the residential blocks supplying the dwellings
- Connection of the Hoxton Park recycled water supply to dwellings for toilet flushing and laundry water.
- Water and energy efficient fixtures, fittings and appliances

5.14.1 BASIX

A BASIX Assessment and Preliminary Sustainability Development Report has been prepared by WSP Australia (refer **Appendix L**) that demonstrates that the proposed development will satisfy the relevant requirements for water, thermal and energy efficiency. Details of the proposals thermal performance is provided at **Appendix L**.

5.15 Building Code Compliance

The Building Code of Australia (BCA) Assessment of residential buildings and community buildings associated with the local park has been prepared by Mckenzie Group (**Appendix M**). The assessment demonstrates that the proposal can achieve compliance with the requirements of the Building Code of Australia (BCA) and other relevant codes and standards.

Where non-compliances have been identified, Deemed to Satisfy and performance-based solutions have been recommended. These solutions are capable of being provided prior to the issue of a Construction Certificate.

5.16 Access and Universal Housing

An Access Report has been prepared by Morris Gooding Accessibility Consulting (**Appendix N**). The report considers the proposals compliance with ingress and egress, paths of travel, common facilities, common use open areas and circulation.

The assessment confirms the proposal can achieve the accessibility objectives and all mandatory accessibility requirements. Where appropriate, the assessment makes recommendations to be incorporated at the detail design stage (Construction Certificate).

Frasers Statement of Commitment 71A, states:

“Frasers Property Australia will provide 20% of all dwellings across the Frasers Town Centre site as incorporating Liveable Housing Guideline’s silver level universal design features to provide housing that is appropriate for but not limited to seniors. Note: 20% will be achieved across the entire Town Centre and not specifically in each individual DA.”

The proposal includes 20 units (15.6 percent) that incorporate Universal Design features to provide housing that is appropriate for, but not limited to seniors. Consistent with the Statement of Commitments, 20 percent Universal Housing will be achieved across the whole town centre and not specific to each development application. The current status of Universal Housing across Edmondson Park is provided at **Table 6**.

Table 6 Status of Universal Housing

	Dwellings	Universal Housing	Proportion
Town Centre East	423	116	27.4%
Residential Precinct 1 (Stage1)	104	20	19.2%
Residential Precinct 1 (Stage 2)	128	20	15.6%

5.16.1 Affordable Dwellings

In accordance with commitment 71A, affordable dwellings will be available in the Town Centre and Residential Precincts. Frasers has undertaken an analysis of the affordability benchmark for moderate income housing at Edmondson Park to inform this commitment (refer to **Appendix GG**). This is a rolling target for Frasers across the entire Town Centre development, to be tracked by an annual audit.

Frasers would be happy for this to form part of a condition of consent utilising the commitment wording, ie. *Prior to the issue of the relevant Occupation Certificate the proponent must provide Council with the annual audit demonstrating how it has performed against its commitment to provide dwellings within a range of price points within Edmondson Park Frasers Town Centre, including 15% of dwellings suitable for purchase as moderate income housing (defined as 80% to 120% of the median gross household income in the Greater Sydney Region).*

5.17 Fire Engineering

A Fire Engineering Report has been prepared by Olsen Fire and Risk Consulting Engineers (**Appendix O**). The report confirms that the proposal can achieve compliance with the Building Code of Australia (BCA) through the implementation of performance base solutions as listed in the report. Preparation of the performance based solution and corresponding fire safety measures will not result in any material changes to the building design as per the architectural plans attached to this SEE.

5.18 Waste Management

A WMP has been prepared by GHD and is available at **Appendix Q**. The estimated volume of waste generated by Stage 1 is expected to be:

- 14,460L of garbage; and
- 24,960L of recycling.

To service the estimated waste, each residence will be supplied with 1 x 140L waste bin and 1 x 240L recycling bin to be stored on their property. Residents will be responsible for placing their bins kerbside, outside their dwelling for collection by Council's contractor. Those dwellings that face Greenway Road will place their bins at the rear laneway for collection. Where dwellings face a park, these residents have a nominated bin collection point at the closest road as identified in the WMP.

5.19 Crime and Public Safety

A Crime Prevention Through Environmental Design (CPTED) report has been prepared in accordance with the CPTED requirements set out under Section 79(C) of the EP&A Act 1979; the report is attached at **Appendix R**. The report identifies a number of recommendations to be incorporated into the detailed design of the proposed building which may serve to reduce the risk of criminal activity and encourage the safety of all users of the development.

The Crime Risk Assessment of the proposed development found the proposal to be rated in the 'low' category. Notwithstanding this, recommendations to further improve the safety and security of the development are provided below.

- In the absence of technical supervision, ensure natural surveillance is maximised in areas of shared amenity, such as the toilets and barbeques of the private open spaces.

- Ensure lighting in public areas and undercover car parks is adequate and meets Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas.
- Ensure natural surveillance in the undercover car park is maintained through lighting that is adequate to permit facial recognition and facilitates visibility into a vehicle.
- A Lux of 30 with a uniformity of 0.5 Uo should be consistently maintained in the undercover car parks.
- Consider the use of technical supervision, such as CCTV, if effective natural surveillance is not feasible.
- Ensure territorial enforcement is maintained and clearly shows definition of ownership. As fencing is not generally incorporated within the proposed development (other than in the Local Park), consider the uses of signage and wayfinding through private spaces of the proposed development.
- Ensure clarity of ownership is maintained to minimise conflict of the public and residents.
- Ensure management of space is implemented where conflict between public and private use is likely to occur i.e. share paths and speed limits.
- Ensure a prompt response to environmental maintenance is specified in the management procedures of the Owners Association.
- Ensure environmental maintenance is consistent and thorough, and the management authority of private spaces (likely the Owners Association) is clearly understood by users.
- Encourage resident's participation in notifying the Owners Association of environmental issues.
- Ensure environmental maintenance considers the prevention of crime through the minimisation concealment opportunities and the effectiveness lighting.
- Ensure the Owners Association has effective mechanisms in place for controlling activity in shared private spaces, and frequently review these mechanisms.
- Ensure pedestrian and vehicle access to the undercover carpark is restricted from the public.
- Promote the use of defensive vegetation and clarity of ownership by way of signage and wayfinding within shared private spaces.
- Ensure access to the undercover car parks is consistently controlled. The physical access control created by the car park security gates should be further assisted by technical access control, by way of electronic key/pass.
- Suggest the Owners Association engage in an annual review of safety and crime reduction techniques, following the construction and occupation of the surrounding Edmondson Park Town Centre.

5.20 Public Art Strategy

The Edmondson Park Frasers Town Centre Public Art Strategy has been prepared by Queen and Crawford on behalf of Frasers (**Appendix S**). The Strategy provides a framework for the consideration of public art across the Town Centre, including the residential public spaces related to this DA.

5.21 Construction Management

A preliminary Construction Management Plan (CMP) has been prepared by Frasers and is available at **Appendix AA**. The CMP provides a preliminary assessment of the proposed construction processes and methodology to be undertaken including in relation to:

- workplace health and safety management;
- traffic and pedestrian management;
- stakeholder engagement and community consultation;
- noise and vibration;
- site establishment;
- construction methodology;

- traffic management;
- pedestrian management;
- waste management; and
- on-site parking.

A final CMP will be prepared by the future contractor for the Town Centre once selected.

6.0 Conclusion

This DA seeks approval for the construction of 128 residential dwellings, landscaping and construction of Mews 2 and subdivision at Residential Precinct 1 of the Edmondson Park Frasers Town Centre.

The Concept Plan approval established the suitability of the site and assessed the general building form and environmental impacts, as well as the social and economic impacts of the proposed development.

The proposed works will facilitate the future delivery of a next generation town centre that draws on the key principles of successful historical town centres whilst integrating contemporary planning and urban design to achieve high quality density, amenity and place making.

The proposed development is consistent with the Terms of the Concept Plan (as modified) and the Statement of Commitments. The assessment of the DA has demonstrated that it will have no adverse or additional environmental effects beyond those already approved as being acceptable under the Concept Plan.

Given the planning merits described in this SEE, and in light of no adverse environment, social or economic impacts, it is requested that the subject DA be approved.