APP Corporation

Statement of Environmental Effects

PROPOSED RESIDENTIAL DEVELOPMENT
1-5 BATHURST STREET, LIVERPOOL

Date: October 2016

Contents

Figures

Tables

Appendices

1. Introduction

1.1. Summary

This Statement of Environmental Effects (SEE) is submitted to Liverpool City Council (the Council) in support of a Development Application (DA) for a new residential flat development at 1-5 Bathurst Street, Liverpool (hereafter referred to as the site).

The DA seeks approval for:

- excavation of the site including demolition of existing structures and other improvements including tree removal;
- construction of a nine (9) storey residential apartment building with two basement levels of car parking**;**
- 97 residential apartments comprising of;
    - 11 x 1 bedroom apartments;
    - 76 x 2 bedroom apartments; and
    - 10 x 3 bedroom apartments;
- a total Gross Floor area (GFA) of 8,443m^2 ;
- a Floor Space Ratio (FSR) of 3.07:1;
- new vehicular access in the form of a dual width driveway from Bathurst Street;
- car parking for 112 vehicles (including 10 accessible spaces); and
- Approximately 400m² of communal open space in the form of an at-grade turfed area and rooftop terrace at Level 8.

This SEE has been prepared by APP Corporation Pty Limited (AAP) on behalf of Binah By Design. It is based on the plans prepared by Algorry Zappia & Associates 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 proposal in terms of the relevant matters for consideration under section 79C(1) of the *Environmental Planning and Assessment Act 1979* (the Act).

1.2. Consultation with Council and the Design Excellence Panel

A Design Excellence Panel (DEP) meeting was held on the 21 July 2016 and comments from the meeting have been provided (refer to **Appendix A**). Deep soil planting, building separation and the provision of quality open space were the key issues identified by the DEP. Section 3.1 of this report provides a detailed response in regards to how the design has evolved and incorporated the DEP comments.

2. Site Analysis

2.1. Site Location and Context

The site is located on the north-western edge of the Liverpool Commercial Core within the Liverpool City Centre (refer to Figures 1 and 2). It is situated approximately 900m north-west of the Liverpool Railway Station and approximately 700m to the west of the Liverpool Public Hospital. The site is bounded by Lachlan Street to the north and Bathurst Street to the east.

The area surrounding the site is characterised as mixed residential, containing a range of detached dwellings and apartment buildings varying in height from six (6) storeys through to nine (9) storeys. High density residential development is bordered by the Hume Highway to the west and north, and Liverpool Pioneers Memorial Park (inclusive of a cemetery) to the east.

Liverpool City Centre Development Control Plan (Part 4) identifies the site within the commercial core and suitable for mixed use development and supporting residential accommodation. The immediate area surrounding the site is undergoing a continual transition from older three (3) storey apartment blocks and detached dwellings to larger six (6) to nine (9) storey apartment blocks.

2.2. Site Description

The site has an area of 2,744.3m^2, is rectangular in shape, comprising of three (3) lots and is legally described as Lots D, E and F in Deposited Plan (DP) 33121.

A Site Survey Plan prepared by Grinsell and Johns is included at **Appendix B.** The site has a 42m frontage to Lachlan Street and a 57m frontage to Bathurst Street. There is limited vegetation on the site in the form of two medium sized trees along the western boundary and grassed areas.

Figure 1 Location Plan showing the site and boundary of the Liverpool City Centre

Figure 2 Aerial Photograph of the site (source: Near Maps May 2016)

2.3. Topography

The site is generally flat, exhibiting only a slight 0.5 metre fall from the north-western corner through to the south-eastern corner (refer to Survey Plan included at **Appendix B**).

2.4. Existing Development

The site is currently occupied by a dwelling house on Lot E and two residential apartment buildings on Lots D and F. The house is a single level, red brick construction. The residential walk up apartment buildings are both two storey in height, and of a similar age and construction to the adjacent house.

Photographs of existing development on the site are provided in Figures 3-5 below.

Figure 3 View of existing two storey residential flat development on Lot D, from the east looking west

Figure 4 View of existing single storey dwelling on Lot E, from the east looking west

Figure 5 View of existing two storey residential flat development on Lot F, from the east looking west

2.5. Surrounding Development

The properties to the east of the site on the opposite side of Bathurst Street comprise modern residential flat developments of 8 and 9 storeys at 2-4, 6-8 and 10-12 Bathurst Street. These high rise buildings are constructed of a range of materials including face brick work, rendered facades and steel framing features. Balconies at the upper levels are typically orientated to overlook the primary street frontages and communal open space areas.

To the north of the site across Lachlan Street exist a number of single storey detached brick dwellings situated on larger blocks. These houses are remnant stock representative of the areas' traditional built form which is transitioning towards higher density living. To the north-east of the site, at 65 Lachlan Street is a brick residential flat development, being one of the smaller contemporary flat developments in the surrounding area.

To the south and west of the site are contemporary flat building developments comprising of 7 to 9 storey forms. The facades of the developments are modern and comprise an almost semi-industrious appearance incorporating steel frame features and fixed aluminium privacy screens to the outer faces of balconies.

Photographs of the surrounding area are included below.

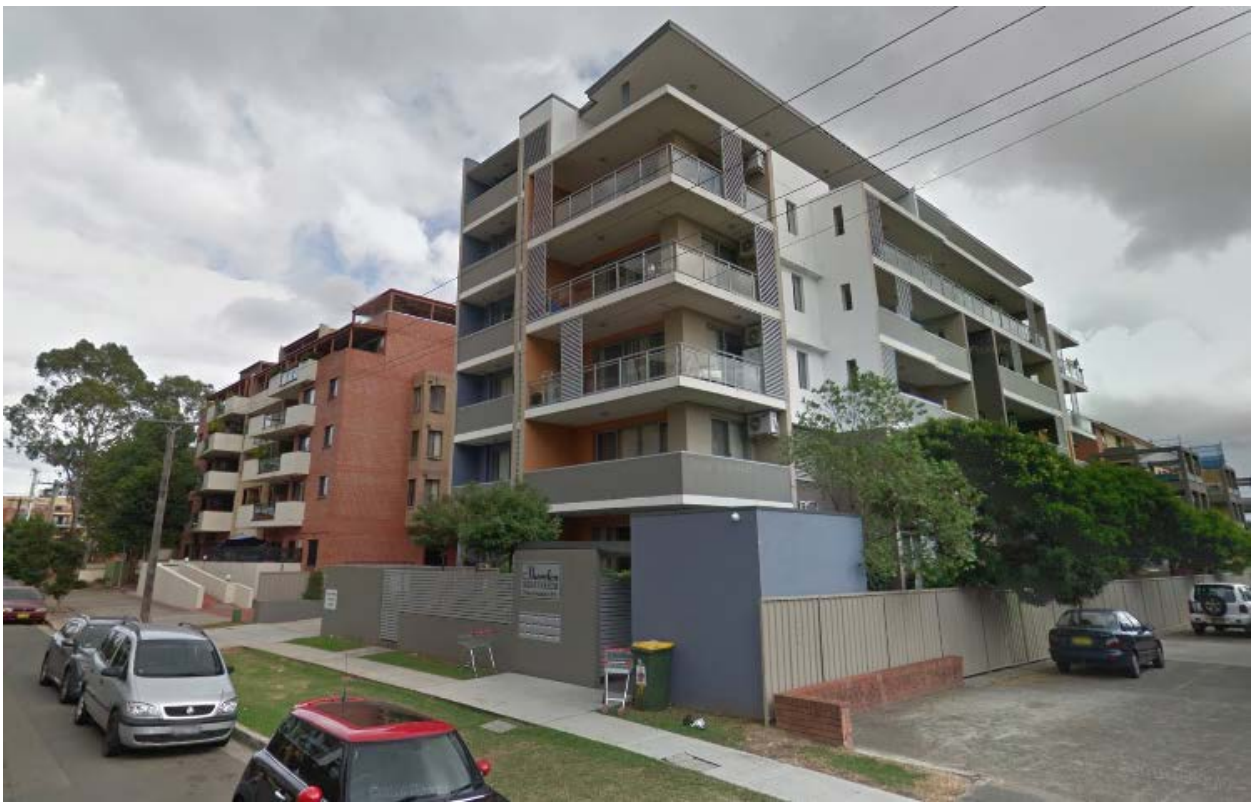


Figure 6 View of the adjoining developments to the south at 7-11 Bathurst Street

Figure 7 View of the property at 6-8 Bathurst Street to the east

Figure 8 View of the property at 2-4 Bathurst Street to the east

Figure 9 View of the adjoining properties to the north-west of the site on Lachlan Stree

Figure 10 View of the sites along Castlereagh Street to the west of the site currently under construction

Figure 11 View of the detached dwellings located to the north on Lachlan Street

Figure 12 View of the property to the north-east at 12 Lachlan Street

3. Proposed Development

This section of the report provides a detailed description of the proposed development, which comprises the following:

- excavation of the site including demolition of existing structures and other improvements including tree removal;
- construction of a nine (9) storey residential apartment building with two basement levels of car parking**;**
- 97 residential apartments comprising of;
    - 11 x 1 bedroom apartments;
    - 76 x 2 bedroom apartments; and
    - 10 x 3 bedroom apartments;
- a total Gross Floor area (GFA) of 8,443m^2 ;
- a Floor Space Ratio (FSR) of 3.07:1;
- new vehicular access in the form of a dual width driveway from Bathurst Street;
- car parking for 112 vehicles (including 10 accessible spaces); and
- Approximately 400m² of communal open space (at ground floor and level 8).

Architectural Drawings, Photomontages and a SEPP 65 Design Statement prepared by Algorry Zappia & Associates are included at **Appendix C**.

Photomontages of the proposed development are reproduced in Figures 13-16 below.

Figure 13 View of the proposal from Bathurst Street looking north west

Figure 14 View of the proposal from the intersection of Bathurst and Lachlan Street looking south west

Figure 15 View of the proposal from Lachlan Street looking south east

Figure 16 View of the proposal from Castlereagh Street looking east

3.1. Design Principles

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) applies to mixed use developments with a residential component of 3 or more storeys. A SEPP 65 Design Statement has been prepared by Algorry Zappia & Associates and is included at **Appendix C**. An assessment is provided below.

Principle 1: Context & Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character.

Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighborhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Proposal

The site is situated on the western side of Bathurst Street in the Liverpool City Centre. In this context the site is situated at the northern end of the Liverpool CBD. It is a locality which has experienced significant redevelopment over the past several years and, in the immediate vicinity of the site exist six, five and four storey residential flat buildings, as well as nine storey residential flat buildings along Bathurst Street.

The most significant element contributing to the character of this locality is the strongly defined street edge comprising a 6 through to 10 storey street wall. Each of the established residential flat buildings along Bathurst Street, Copeland Street, Castlereagh Street and Lachlan Street are built to the 4.5m setback with balconies and terraces encroaching into the setback. The effect is that the symmetrical building walls define the street-grid pattern.

The proposed development employs distinctly contemporary language which is consistent with the desired future character of the area. Liverpool City Centre is undergoing a major transition. The development is intended not to replicate, but to complement and positively contribute to its future surrounding context. The proposal exhibits a contemporary form which is consistent with the form and character of surrounding residential flat development in the precinct.

Principle 2: Built Form & Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Proposal

The bulk of the building generally complies with the controls in the Liverpool DCP 2008. The proposed height of 28.5 metres is under the maximum permissible height of 35 metres in the Liverpool LEP 2008. The reduced height has been adopted to ensure the overshadowing impacts to the adjoining property to the south are minimised insofar as possible. The reduced height is also warranted in this corner location where the form towards the north across Lachlan Street transitions down towards the Hume Highway.

The Design Excellence Panel raised about the potential overshadowing impacts caused to the adjoining developments along Castlereagh Street and Bathurst Street. In response to this comment the design has evolved from a solid 'L' shaped building to a building that appears as three separate buildings from the street. The additional break up and reliefs provided in the form allow for additional sunlight to penetrate through to the adjoining properties to the west and south.

The scale of the proposed development, in terms of height, setback and site coverage is consistent with the Liverpool Design Excellence Panel suggestions and is also consistent with the scale of adjoining development.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Proposal

The density of the proposed development when assessed as a floor space ratio is 3.07:1. This density marginally exceeds the maximum permissible FSR of 3:1 under Clause 4.4 of LLEP 2008. The proposed density exceeds the FSR control by 2.3%.

The maximum building depth achieved is 22m which is more than the permitted 18m under the ADG and Liverpool DCP 2008.

Notwithstanding these variations, the proposed density is considered to be appropriate as it positively responds to the planning intentions for this locality in terms of delivering a high concentration of housing with good access to transport, services and facilities. The relevant variations which deliver the densities on this site have been suitably justified in this report and in the Table of Compliance appended.

The bulk, scale and number of dwellings provided for in this development is compatible with adjoining and surrounding residential flat buildings.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and livability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Proposal

A minimum of 2 hours solar access is achieved for 75% of the units.

80% are naturally cross ventilated.

The design of the proposed building provides a good balance of units facing public streets and apartments facing the internal communal open space with attention to privacy and security issue. Building materials from the demolition will be salvaged and recycled off-site as stated within the proposed construction waste management plan. The proposal meets the requirement of BASIX Certificate and achieves a 6.5 NatHERS star rating.

Principle 5: Landscape

Good design recognizes that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, coordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks.

Good landscape design optimizes usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Proposal

The Design Excellence Panel made suggestions about increasing open space and deep soil planting. These suggestions have been incorporated into the design with the addition of the terrace on level 8 and the reorientation of an access path to consolidate deep soil planting. The proposal comprises of 36.7% landscaped area of which 13% is deep soil area. The proposal consists of perimeter landscape treatment, including street frontages and deep soil at the corner and at the back of the property. A communal open space area is also provided on the level 8 terrace which is landscaped with potted and hanging plants.

The building separations principally accommodate pedestrian movements, including disabled access, as well as a passive recreational space for the residents of the property giving the best connection with the internal communal open space. Densely planted garden areas are provided surrounding the entire building in order to deliver a vegetated buffer separation to the adjoining properties and to embellish the street frontages.

The communal open space provided in the south-western corner of the property is designed to give recreational opportunities for residents of different age groups and includes barbeque areas, play equipment and seating for individuals or groups, integrated in a large area of deep soil and turfed areas which accommodates appropriately scaled trees, with a good balance of evergreen, deciduous trees and shade structures.

Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Proposal

The development provides 11% of one bedroom apartments, 79% of two bedrooms apartments and 10% of three bedrooms apartments, ensuring a good mix of units and size. 10% of the units are designed to meet the requirements of AS 4299-1995 Adaptable Housing. 20% of units in total are designed to meet the accessible design standards, including the 10% requirement for adaptable housing.

The unit layout is consistent with the better design practice guidelines contained within the NSW Apartment Design Guide and serve to achieve good acoustic privacy. Window and balcony locations, together with the use of blade wall privacy screens, will ensure satisfactory visual privacy both internal and external to the site.

Each unit is designed to maximize natural cross ventilation and solar access. Private internal storage spaces are provided in each units as well as enclosed private storage at basement level. Balconies exceed minimum size requirements whilst maximizing ground floor private open space. The residential amenity of the development is further improved by the provision of generously proportioned, high quality communal open space and roof top terrace.

Principle 7: Safety

Good design optimizes safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximize passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

Proposal

The building has been designed to provide clearly defined pedestrian entries at the ground floor level which comply with all access regulations and codes (i.e. AS 1428.1). The threshold between public communal and private areas is clearly defined to ensure a sense of ownership between public and private domains. The building maintains direct site lines to the residential lobby, and through to the street. All entrance lobbies will be provided with lighting at night to ensure passive surveillance is provided to the street. All accesses are well distinguished with different materials and architectural design features. Most of the apartments overlook generally two aspects of the property, avoiding blind corners and hidden spaces.

A security key system will be provided for each of the units, as well as secure car parking located in two basement levels accessible only via swipe key.

Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

Proposal

The proposed development provides a good mix of unit sizes and includes 11 x one-bedroom units; 76 x two bedroom units and 10 x three-bedroom units. This proposed unit mix satisfies the DCP requirements, as well as the Apartment Design Guide providing for a good choice of diverse and affordable housing types. Communal open space is well connected through the internal lobbies and supports the operational life of the building accommodating recreational facilities for a range of age groups. The subject site is well serviced in terms of access to social facilities and the proposal will add to the supply and choice of housing opportunities within the Liverpool CBD.

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Proposal

The aesthetic treatment of the development has sought to emphasise horizontal expression and provides elegant yet simple street facades. These facades integrate with the architectural language of surrounding sites whilst avoiding visual pastiche. Each elevation is dressed by balcony balustrades and careful attention has been paid to manipulating the materials, colours and treatments to deliver distinctive design features. The design has also achieved well-defined base, middle and top portions, with light weight metal cladding used to define the top two storeys of the tower addressing the corner.

Proposed materials have been selected on the basis of proven durability. Proposed colours include a mixed pallet of earthy tones which are consistent with surrounding buildings. The proposal will make a positive contribution to the built form of the Liverpool City Centre.

3.2. Development Statistics

Table 1 provides a summary of the key development statistics for the proposed development.

Table 1 Development Statistics

Element	Proposed
Site Area	2,744.30m^2
Gross Floor Area (GFA)	8,443m^2
Floor Space Ratio (FSR)	3.07:1
Building Height[1]	28.5m
Building Setbacks	
North (Lachlan Street)	4.5m (to the building line)
East (Bathurst Street)	4.5m (to the building line)
West	Generally 3m
South	Generally 6m
Development Mix	
- 1 bedroom	11
- 2 bedroom	76
- 3 bedroom	10
- Total	97
Adaptable apartments	10 (11%)

[1] ***building height*** (or ***height of building***) means the vertical distance between ground level (existing) and the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Element	Proposed
Communal Open Space	400m^2
Car Parking Spaces	112

3.3. External Materials and Finishes

The proposed external materials and finishes are shown in Table 2 and on the Architectural Drawings prepared by Algorry Zappia & Associates included at **Appendix C** and reproduced below in Figure 17.

Table 2 Proposed external materials and finishes

Element	Proposed
External brick wall and concrete slab render	Dulux natural white
External brick wall (ground floor)	Dulux wind spray
External brick wall	Austral engage
Composite metal panel cladding	Stryum T29 Anodised

Figure 17 Proposed Materials and Finishes

3.4. Vehicular Access and Parking

Vehicular access for residents and visitors is provided at the south eastern end of the site on Bathurst Street. From here, access to the basement car parking levels (Basement 1 and 2) is proposed via an internal access driveway and ramps.

Car parking within the proposed development is distributed as follows:

Table 3 Distribution of Car Parking Spaces

Level	Number of spaces
Basement Level 1	
Residential	44

Level	Number of spaces
(Including 7 accessible)	
Visitor (including 1 accessible)	10
Service Bay	1
Total (excluding Service Bay)	54
Basement Level 2	
Residential (including 2 accessible)	63
Visitor	0
Service Bay	1
Total (excluding Service Bay)	63
Bicycle parking	42
Motor cycle	6

3.5. Pedestrian Access

The main pedestrian access to the building and central lobby is proposed at ground floor directly from Bathurst Street. Two gated secondary entrances are provided on Lachlan Street, one from the north-western corner of the site and another entrance directly accessed from the northern edge of the building (**Refer to Appendix C Sheet A06**). From all entrances, residents can access the residential lobby through a secure door. From the residential lobby, pedestrians can then access one of three lifts which provide access to all levels. The lift also provides access to the basement car parking levels below. A maximum of 5 residential apartments are directly accessible from a central lobby within each storey of the development.

3.6. Demolition and Tree Removal

Development consent is sought for the demolition of all existing structures on the site. The demolition works will be controlled and managed in accordance with the Building and Demolition Codes and relevant Australian Standards. Any asbestos identified within the structures prior to works will need to be safely removed in accordance with the National Model Code of Practice for the *Safe Removal of Asbestos*.

Existing trees along the western boundry will be removed as part of the demolition works.

3.7. Landscaping and Open Space

The proposed development provides 1007.2m^2 of landscaped areas in the form of deep soil zones, soft landscaped areas and ground level communal open space. In addition, a 90m^2 garden roof terrace is proposed at Level 8. The total landscaped area represents 36.7% and the deep soil zone equates to 13% of the site.

Perimeter landscaped gardens are proposed around the base of the new buildings and throughout the at-grade open space area located within the western part of the site. The street frontages to Lachlan and Bathurst Streets

will also be suitably landscaped with resilient native shrubs and trees. For additional details on the proposed landscaping strategy refer to the landscape plans prepared by Vision Dynamics appended at **Appendix D**.

Communal open space

In both the courtyard and terrace portions of communal areas of open space will have controlled access for residents use only. These spaces will provide residents with a number of amenities including:

- Communal benches and tables and gas barbeques;
- Lawn area with feature tree planting; and
- Paved and decked areas including decorative pebbles.

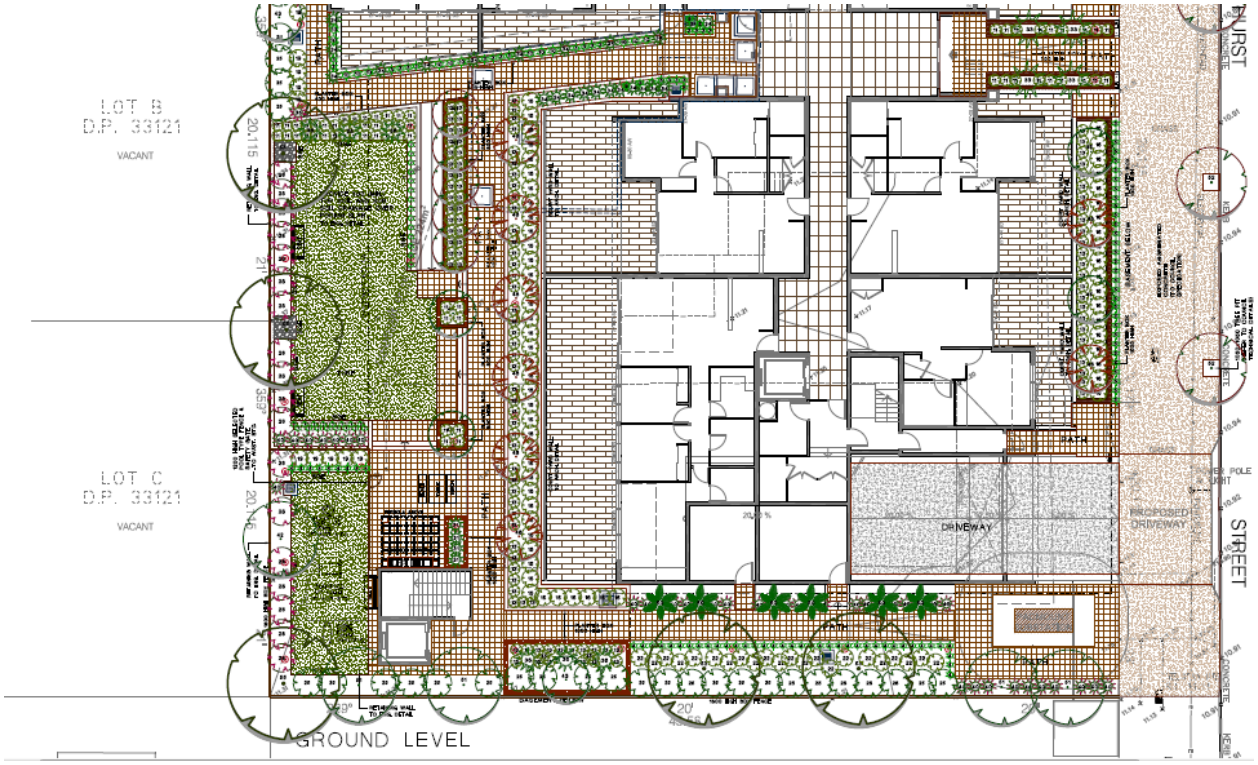


Figure 18 Extract of the Landscape Plan prepared by Vision Dynamics showing the Courtyard portion of the open space

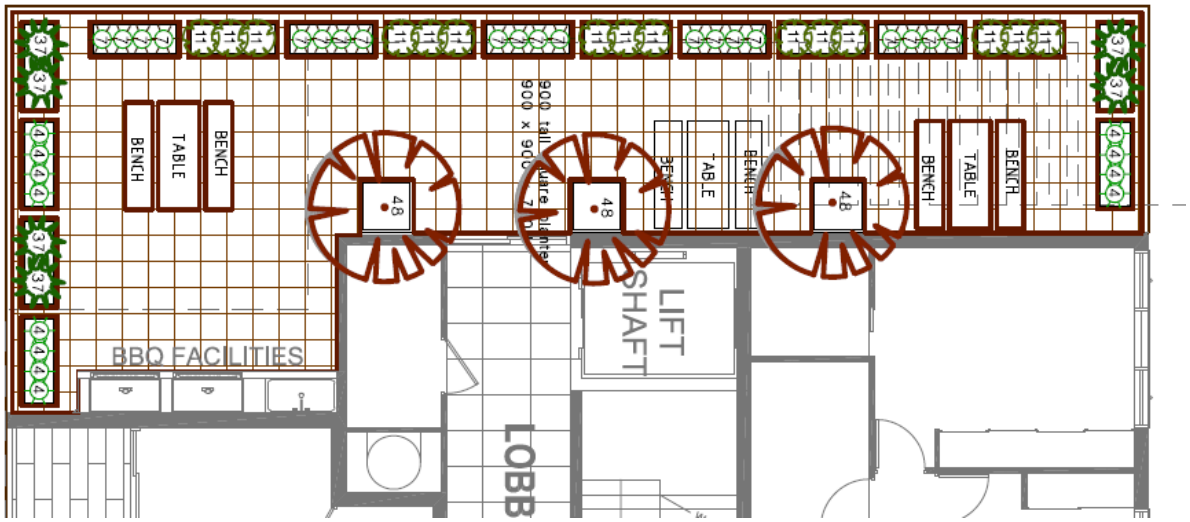


Figure 19 Extract of the Landscape Plan prepared by Vision Dynamics showing the terrace portion of the open space

Footpath upgrade and street tree planting

The proposed development also includes an upgrade (new street trees and paving) along Lachlan and Bathurst Streets. It is noted that the Landscape Plan proposes some landscaping within the Lachlan and Bathurst Street road reserves. The applicant raises no issue with the inclusion of a condition of consent requiring this area to be landscaped in accordance with the proposed landscape concept plan and Council's relevant requirements.

3.8. Residential Amenity

The proposed development provides for a high level of residential amenity.

Unit size

The proposed development provides for generous apartment sizes, ranging from:

- 52.55m^2 – 58.53m^2 for 1 bedroom apartments;
- 70.54m^2 – 83.74m^2 for 2 bedroom apartments; and
- 95.52m^2 – 106.13m^2 for 3 bedroom apartments.

The proposed apartment sizes are consistent with the minimum requirements as set out in the NSW Government's Apartment Design Guide, enabling well organised, functional, high quality apartment layouts.

A schedule of unit sizes (internal and external areas) and areas of storage is included at **Appendix C**.

Private Open Space

Each apartment is provided with an area of open space in the form of a balcony or terrace area accessed from the main living room. The proposed areas of private open space range from:

- 12.66m^2 – 24.12m^2 for 1 bedroom apartments;
- 10.08m^2 – 48.43m^2 for 2 bedroom apartments; and
- 27.01m^2 – 61.64m^2 for 3 bedroom apartments.

All areas of private open space have a minimum depth of 2.3 m and are capable of accommodating a table and chairs.

Storage

Each apartment within the proposed development has been provided with an adequate area for storage. The area of storage provided to each apartment is detailed in **Appendix C**.

Natural Ventilation

The proposed configuration of the buildings and apartments results in the majority benefiting from reasonable levels of natural ventilation. Algorry Zappia & Associates have confirmed that 80% of all apartments (i.e. 79 apartments) are cross ventilated.

Outlook and Views

Apartments facing north look out towards Hume Highway, east and south facing apartments look out towards Georges River.

Daylight and Sunlight Access

Shadow Diagrams, prepared by Algorry Zappia & Associates are included at **Appendix C**. Algorry Zappia & Associates have confirmed that 75% of apartments (i.e. 73 apartments) achieve a minimum 2 hours of sunlight to the living rooms and private open spaces between 9.00 am and 3.00 pm in mid-winter.

3.9. Civil and Engineering Design

A Stormwater Concept Plan and report for the proposed development has been prepared by S&G Consultants Pty Ltd and is included at **Appendix E**. It has been prepared in accordance with the 'Liverpool City Council's On-site Stormwater Detention Technical Specification (June 2003) and Floodplain Management Plan.

3.10. Waste Management

Garbage disposal shoots are located on every floor adjacent to each of the three lift shafts (refer to **Appendix C)**. Garbage shoots will discharge into three separate 1100L mixed garbage bins, located on lower level 1 at the base of each shoot. The number of bins and size of compactors required will be detailed in a Waste Management Plan included at **Appendix F**.

4. Planning Framework

4.1. Relevant Legislation, Plans and Policies

In accordance with s.79C(1)(a) of the Act, the relevant strategies, policies, planning instruments and development controls applying to the proposed development are:

- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65);
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- Liverpool Local Environmental Plan 2008 (Liverpool LEP 2008); and
- Liverpool Development Control Plan 2008 (Liverpool DCP 2008).

4.2. Zoning and Objectives

The site is zoned R4 High Density Residential pursuant to Liverpool LEP 2008. Within the R4 zone, residential flat buildings are permissible with development consent.

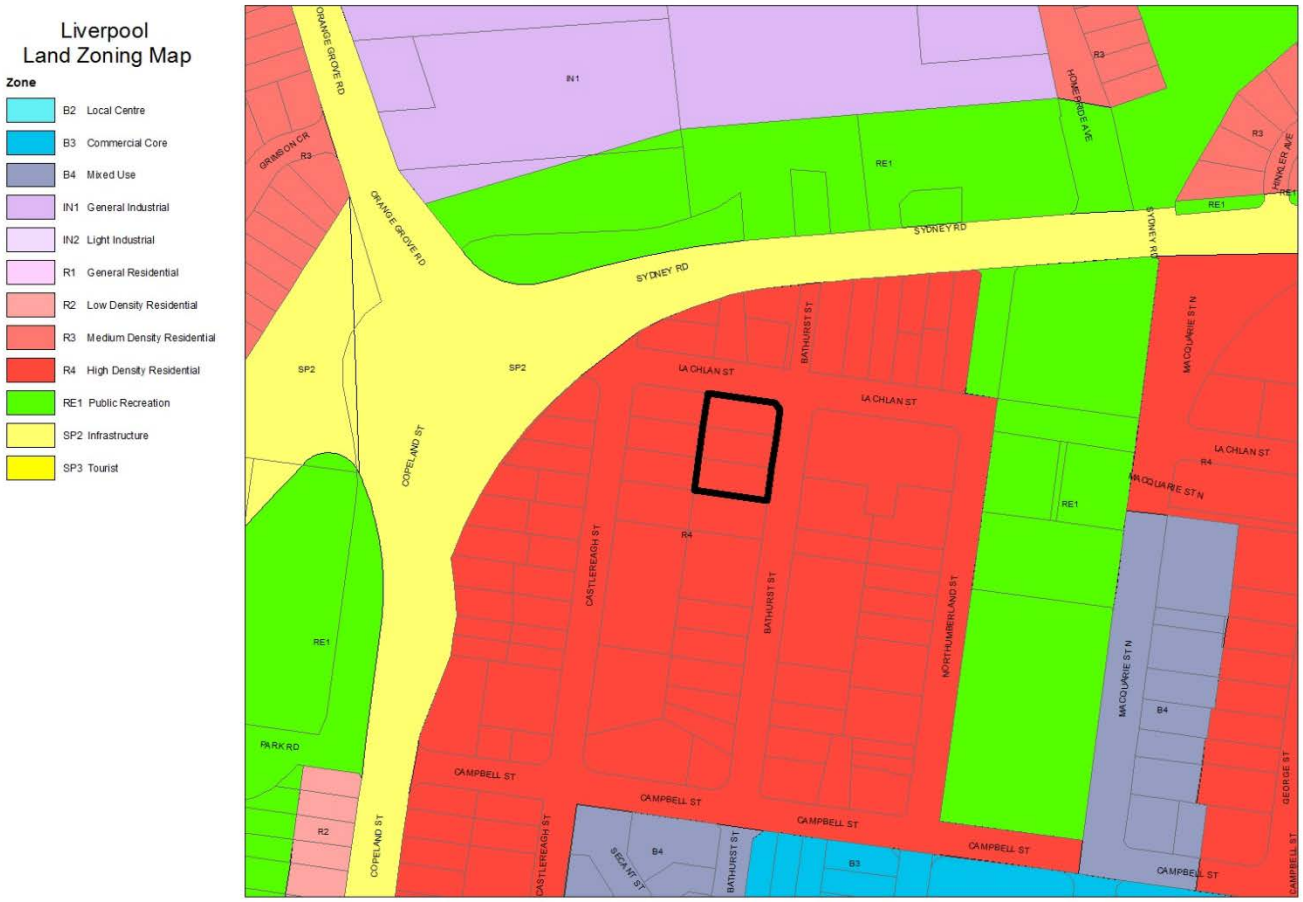


Figure 20 Extract of Zoning Plan (Liverpool LEP 2008)

The objectives of the R4 High Density Residential Zone are:

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a high concentration of housing with good access to transport, services and facilities.

- To minimise the fragmentation of land that would prevent the achievement of high density residential development.

As the site is located in the Liverpool City Centre (Part 4 of Liverpool DCP 2008), the objectives stated in Clause 7.1 also apply.

Clause 7.1 states that *'before granting consent for development on land in the Liverpool city centre, the consent authority must be satisfied that the proposed development is consistent with such of the following objectives for the redevelopment of the city centre as are relevant to that development:*

a) to preserve the existing street layout and reinforce the street character through consistent building alignments,
b) to allow sunlight to reach buildings and areas of high pedestrian activity,
c) to reduce the potential for pedestrian and traffic conflicts on the Hume Highway,
d) to improve the quality of public spaces in the city centre,
e) to reinforce Liverpool railway station and interchange as a major passenger transport facility, including by the visual enhancement of the surrounding environment and the development of a public plaza at the station entry,
f) to enhance the natural river foreshore and places of heritage significance,
g) to provide direct, convenient and safe pedestrian links between the city centre (west of the rail line) and the Georges River foreshore.

4.3. Key Planning Controls

The key planning controls relevant to the proposed development are set out in Table 1 below.

Table 4 Key Planning Controls

Control	Provisions
Liverpool Local Environmental Plan 2008	
Clause 4.1- Minimum Lot Size	The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than 2000sqm.
Clause 4.3 – Height of Buildings	A maximum height of 35m is permitted for the site.
Clause 4.4 – Floor Space Ratio (FSR)	Although the LEP FSR map identifies a maximum FSR of 2:1 applying to the site, the maximum FSR permitted for the site in accordance with Clause 4.4(2B) is 3:1.
Clause 5.9 – Preservation of trees or vegetation	A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation to which any such development control applies without the authority conferred by: a) Development consent, or b) A permit granted by the Council.

Clause 5.10 – Heritage Conservation	Development consent is required for any of the following: (a) Altering the exterior of any of a heritage item, (b) Erecting a building on land on which a heritage item is located or that is within a heritage conservation area, or (c) Subdividing land on which a heritage item is located or that is within a heritage conservation area.
Clause 7.4 – Building Separation in Liverpool City Centre	Development consent must not be granted to development for the purposes of a building unless the separation distance from neighbouring buildings and between separate towers, or other separate raised parts, of the same building is at least: a) 12 metres for parts of buildings between 25 metres and 45 metres above ground level (finished).
Clause 7.5 – Design Excellence in Liverpool City Centre	Development consent must not be granted to development involving the construction of a new building unless the consent authority considers that the development exhibits design excellence.
Clause 7.8– Flood Planning	Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development: (a) is compatible with the flood hazard of the land, and (b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and (c) incorporates appropriate measures to manage risk to life from flood, and (d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding, and (f) is consistent with any relevant floodplain risk management plan adopted by the Council in accordance with the Floodplain Development Manual.
Clause 7.14 – Minimum Building Street Frontage	Development consent must not be granted to development for the purpose of a residential flat building unless the site on which the building is to be erected has at least one street frontage to a public street (excluding service lanes) of at least 24 metres.
Clause 7.31 – Earthworks	Before granting development consent for earthworks, Council is to consider the following:

	a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality, b) the effect of the development on the likely future use or redevelopment of the land, c) the quality of the fill or the soil to be excavated, or both, d) the effect of the development on the existing and likely amenity of adjoining properties, e) the source of any fill material and the destination of any excavated material, f) the likelihood of disturbing relics, the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area.
Liverpool Development Control Plan 2008	
PART 1- GENERAL CONTROLS FOR DEVELOPMENT	
Section 2- Landscaping and Incorporation of Existing Trees	Land will need to provide landscaping or retain existing trees as part of a development.
Section 6 – Water Cycle Management	Buildings are to incorporate appropriate stormwater management systems.
Section 8 – Erosion and Sediment Control	Appropriate erosion and sediment control measures are to be incorporated both during and following works.
Section 14 – Demolition of Existing Developments	All demolition work must comply with the relevant Australian Standards. Further, a Waste Management Plan is to be submitted with the DA to provide details on the estimated amount of waste generated and how it will be appropriately managed during the various phases of development.
Section 20 – Car Parking and Access	Car parking spaces are to be provided in accordance with Section 4.3 of Part 4 of the DCP.
Section 22 – Water Conservation	New dwellings are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).
Section 23 – Energy Conservation	New dwellings are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).
Section 25 – Waste Disposal and Re-use Facilities	1. A waste management plan shall be submitted with a DA to outline the amount of waste expected to be generated and how it will be appropriately disposed of during the three phases of development. 2. Waste management facilities shall be provided and

	designed to ensure that the storage and collection of waste is user friendly for the occupant and waste collection contractor. 3. For buildings greater than three storeys a waste room or compartment must be provided on each floor of the building for the intermediate storage of garbage and/or recycling. Sufficient space must be allocated for access by residents, storage of bins and each manoeuvring of bins.
PART 4- DEVELOPMENT IN THE LIVERPOOL CITY CENTRE	
Section 2.1- Building Form	Building to Street Alignment and Street Setbacks 1. A 4m landscaped street setback must exist. 2. The external facades of buildings are to be aligned with the streets that they front. Street Frontage Heights A street frontage height of between 15-25m is required in this area. Building Depth and Bulk Above 25m in height. The gross floor area permitted above this height is 20% of the total gross floor area of the development, up to the maximum permissible height shown on the Height of Buildings map in the Liverpool LEP 2008.A maximum GFA of 500sqm per floor is required. Boundary Setbacks Habitable rooms: Side- 3m Rear- 6m Non-habitable rooms: Side- 12m Rear- 12m
Section 2.3 – Site Cover and Deep Soil Zones	1. The maximum site cover for residential development is 50%. 2. The deep soil zone shall comprise no less than 15% of the total site area and they must accommodate existing mature trees as well as allowing for the planting of trees/shrubs that will grow to be mature plants. No dimension of these zones should be less than 6m.
Section 2.4 – Landscape Design	1- Landscape species are to be selected in accordance with Council's planning schedule. 2- Landscaped areas are to be irrigated (with recycled water). 3- Public spaces are to be designed so that at least 50% of the open space provided has a minimum of 3 hours of sunlight between 10am and 3pm on 21st June.
Section 3.2 – Active Street Frontages and Address	Residential developments are to provide a clear street

	address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets.
Section 3.4 – Safety and Security	All development is to address the 'Safer by Design principles' to ensure developments are safe and secure for pedestrians and occupants.
Section 3.5- Awnings	Street frontage awnings are to be provided for all new developments. The DCP stipulates that weather protection must be provided to entrances of building constructed within the Liverpool City Centre.
Section 3.6 – Vehicle Footpath Crossings	One additional vehicle entry point is permissible in the area of this site. Ensure vehicle entry points are integrated into the building design.
Section 3.8 – Building Exteriors	Building materials and façade treatments are to positively contribute to the streetscape and public domain.
Section 4.1 - Pedestrian Access and Mobility	1. Main entry points should be clearly visible from primary street frontages and enhanced as appropriate. 2. The design of facilities for disabled persons must comply with the relevant Australian Standards. 3. Pedestrian access ways are to be designed to enable easily accessible internal access as well as be made with durable materials.
Section 4.2 – Vehicular Driveways and Manoeuvring Areas	1. Vehicle access is to be integrated into the building design so as to be visually recessive. 2. All vehicles must be able to enter and leave the site in a forward direction. 3. The design of the driveways, car parking spaces etc. are to meet the relevant Australian Standards.
Section 4.2 – On Site Car Parking	1. Car parking and bicycle spaces are to be provided in accordance with the table outlined within Section 4.2 of DCP 2008. 2. All parking spaces are to meet the relevant Australian Standards. 3. A minimum of 2% of the required car parking spaces are to be allocated to people with disabilities. 4. Onsite parking is to be provided in basement parking. 5. For commercial development comprising employment for 20 persons or more, adequate change and shower facilities are to be provided.
Section 5.1 - Energy Efficiency	New dwellings are to demonstrate compliance with

	State Environmental Planning Policy – Building Sustainability Index (BASIX).
Section 5.2 - Water Conservation	New dwellings are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).
Section 5.3 – Reflectivity	New buildings and facades should not result in glare that causes or threatens safety of pedestrians or drivers. Visible light reflectivity from building materials must not exceed 20%.
Section 5.6 – Waste	1. A waste management plan shall be submitted with a DA to outline the amount of waste expected to be generated and how it will be appropriately disposed of during the three phases of development. 2. Waste management facilities shall be provided and designed to ensure that the storage and collection of waste is user friendly for the occupant and waste collection contractor. 3. Space must be available for the storage of 80L/week/dwelling of general waste and of 80L/week/dwelling of recycling.
Section 5.7- Floodplain and Water Cycle Management	The habitable floor level of all dwellings is to be at least 0.5m above the 1% flood level.
Section 6.1 – Housing Choices and Mix	1. Each residential development is to comply with the following mix and size: - Studio and one bedroom units must not be less than 10% of the total mix of units within each development, - Three or more bedroom units must not be less than 10% of the total mix of units within each development. 2. 10% of all dwellings must be designed to be capable of adaptation for disabled or elderly residents. Where possible, adaptable dwellings should be on the ground level or have lift access from the basement level to the relevant level within the development. 3. The DA must be accompanied by certification from an accredited Access Consultant confirming that the adaptable units are able to be modified to meet the relevant adaptable housing Australian Standard.

Figure 21 Heritage Map (Liverpool LEP 2008)

Figure 22 Excerpt from Liverpool Flood Map

5. Environmental and Planning Assessment

The following is our assessment of the environmental effects of the proposed development as described in the preceding sections of this report. The assessment includes only those matters under section 79C(1) of the Act that are relevant to the proposal.

The key planning issues associated with the proposed development are as follows:

- Compliance with Planning Framework;
- Built Environment;
- Energy Efficiency;
- Safety and Security;
- Access and Parking;
- Equitable Access;
- Social and Economic Impacts;
- Heritage;
- Overshadowing;
- Site Suitability;
- Streetscape and Public Domain;
- Public Interest.

5.1. Compliance with Planning Framework

An assessment of the proposed development against the provisions of the relevant statutory planning instruments and controls as set out in Section 4.3 is included at **Appendix G**. In summary, the proposed development complies with the majority of the relevant planning controls outlined in section 4 of this report in that it:

- does not cause any material environmental impacts to adjoining properties or the public domain in terms of excessive overshadowing, privacy, access to daylight and ventilation;
- does not result in any unacceptable visual impact or view loss;
- achieve appropriate massing and spaces between buildings;
- exhibits design excellence;
- has acceptable impacts on adjoining properties; and
- is consistent with the desired future character of the area which encourages contemporary buildings in a higher density setting.

Liverpool Local Environmental Plan 2008

The proposed development complies with the objectives of the R4 High Density Residential zone by providing additional housing in close proximity to services and public transport and is permissible use within the R4 zone. However, the proposed development exceeds the maximum permissible floor space ration control of 3:1and the building separation clause of 9m as prescribed by Liverpool LEP 2008 (refer to **Table 1**). Given the site's location within the residential area of the Liverpool City Centre and within walking distance to the Liverpool train station, commercial core and other community facilities, the site is well placed to provide a higher form of residential development. As demonstrated throughout this SEE, the proposed development will not result in any significant adverse environmental impacts to future surrounding development, in particular residential uses. The proposed

density of the development, with an FSR of 3.06:1 and reduced height of 28.5m is considered appropriate for the site as outlined within the Clause 4.6 variations prepared by APP included at **Appendix J and K**.

Liverpool Development Control Plan 2008

The proposed development generally complies with the relevant provisions of Liverpool DCP including the provisions relating to Liverpool city centre. Where minor non-compliances are identified they have been suitably justified as part of the assessment table of compliance provided attached at **Appendix G.**

5.2. Built Environment

The redevelopment of the site is consistent with Council's vision for the high density residential development within the city centre and is compatible with existing and future land uses surrounding the site. The redevelopment of the site will improve the vitality and amenity of the area and the site itself. The proposal has been designed to respond to the urban design parameters determined by the existing built context, site conditions, relevant planning controls and surrounding heritage listed items. It is considered that the redevelopment of the site and the proposal's high quality urban and architectural design will significantly improve the visual character of the site and may act as a positive catalyst for other quality redevelopment in the area.

5.3. Energy Efficiency

The proposed residential development has been assessed against the compulsory requirements of BASIX (refer to BASIX Certificate (included at **Appendix H**). In summary, the proposed development achieves:

- 40% reduction in mains supply for water use (target is 40%);
- 21% reduction in energy/greenhouse gas emissions (target is 20%); and
- A 'pass' in terms of thermal comfort (target is a 'pass').

5.4. Safety and Security

The proposed development optimises safety and security both internal to the development and for the public domain, in that it:

- Provides clear sightlines within the street and public domain areas;
- Building entries are obvious and clearly defined and will be appropriately lit;
- Promotes casual surveillance the existing streets and minimises crime risk by providing balconies and windows to habitable rooms which face the street;
- Separate secure vehicular and pedestrian entrance points are provided to minimise potential risks to pedestrians when accessing the proposed building;
- Includes appropriate lighting at street level in all public areas (subject to appropriate conditions);
- All areas at ground level will have clear delineation between public and private spaces this will be achieved through the uses of:
    - Clearly defied paths and landscaped areas;
    - Visually permeable fencing; and
    - Security gates and doors

5.5. Access and Parking

The proposed development is complies with Council's car parking. The layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions, ramp gradients and aisle widths. The proposed development will not have any unacceptable parking or loading implications.

5.6. Equitable Access

An Access Review report has been prepared by iAccess Consultants and is included at **Appendix I**. The proposed development has been designed to comprise the following elements to allow easy access:

- An accessible pathway from Bathurst Street to Residential lift Lobby;
- Access to the entrance doorway of each sole occupancy unit, where there a lift installed;
- Access to garbage collection room on each level of the residential;
- Accessible pathways to communal open spaces at Ground Floor and to the level 8 terrace;
- 10 accessible car spaces; and
- 10 Adaptable units.

The iAccess report makes a number of recommendations in regards to the finishing details of the building to ensure compliance with the access requirements set out in the BCA. The key recommendations are:

- The door release button within the lobby is to be mounted between 900-1100mm AFFL and not closer than 500mm of an internal corner;
- The access control equipment will need to be located between 900-100 mm AFFL and not positioned within 500mm of an internal corner;
- The detailing of the fire stairs will need to satisfy requirements of NCC Clause D3.3(a)(iii) which requires fire isolated stairs to satisfy the requirements of Clause 11.1(f) and (g) of AS1428.1:2009;
- The detailing of the letterboxes will need to comply with the rules of Australia Post and AS4253:1994 - Mailboxes;
- The slip resistance of the ground floor finishes will need to satisfy the requirements of NCC Table D2.14 and Table 3A of the HB198:2014. The extract from HB198 indicates the slip resistance levels to be satisfied;
- Doors to visitable and adaptable dwellings will need to have lever hardware compliant to Clause 13.5 of AS1428.1:2009. Lever hardware will need to be mounted between 900-1100mm AFFL.

The applicant raises no issue with the inclusion of a condition of consent requiring these recommendations be complied with.

On the basis of the iAccess Assessment, the proposed development is capable of complying with the requirements of:

- Part D3, E3.6 and F2.4 of the Building Code of Australia (BCA); and
- Liverpool Council's LDCP 2008 Part 4, Development in Liverpool City Centre- 10% of all dwellings to be capable of adaptation.

5.7. Social and Economic Impacts

In relation to social impacts, the proposed development:

- provides day and night time activation of the site, through the arrangement of living spaces and balconies orientated to the street and the introduction of multiple residential entry points along Bathurst and Lachlan Streets;
- allows for greater casual surveillance of internal and external spaces on the site promoting safety;
- provides a mix of apartment types to suit a range of people including 11 adaptable apartments;
- all apartments benefit from good levels of natural ventilation; and
- promotes state government initiatives in relation to urban consolidation by increasing residential density in close proximity to required services and public transport.

In relation to employment, the proposed development will:

- increase employment opportunities during the construction phase and once completed;
- increase the demand for local employment opportunities from the 96 households located in the proposed development; and
- during construction and once completed generate additional economic activity both locally and outside of the area.

The proposed development will have an overall positive social and economic impact.

5.8. Heritage

Lachlan and Bathurst Streets are both locally listed heritage items under Liverpool LEP 2008. All streets in the area bounded by the Hume Highway, Copeland Street, Memorial Avenue, Scott Street, Georges River and Main Southern Railway Line (excluding Tindall Avenue and service ways) are of local heritage significance. No alteration to heritage significant street grid pattern is proposed. The proposed development will have no significant adverse impact on the surrounding heritage items.

5.9. Overshadowing

Shadow diagrams for 9am, 12 noon and 3pm on June 21 and December 21 are provided in the set of architectural drawings prepared by Algorry Zappia & Associates, included at **Appendix C**. The proposed overshadowing impacts are as follows:

June 21

- Overshadowing extends predominantly over the residential properties directly south of the subject site between 9am and 3pm;
- At 9am the three (3) residential buildings south west of the site along Castlereagh Street are predominantly overshadowed;
- By 12 noon the shadow has tracked further south, with two neighbouring buildings along Bathurst Street becoming partially overshadowed;
- By 3pm the shadow has progressed south east and three properties on the opposite side of Bathurst Street become overshadowed
- The proposed development does not result in any overshadowing to the north or east of the site.

The extent of the overshadowing will most likely be contained to the residential properties located on Bathurst Street to the south and west of the site. The proposed overshadowing will result in negligible amenity impacts to No. 7 Bathurst Street as the development will achieve a minimum of 4 hours of sunlight between 9am and 5pm in accordance with the requirements of the ADG (refer to shadow diagrams included at **Appendix C**).

With respect to the likely overshadowing of the residential adjacent properties, it should be noted that the areas surrounding the site have been marked for future redevelopment. It is expected that over the coming years, the older residential flat buildings will be redeveloped, resulting in taller building forms. Specifically, the site and surrounding area is envisaged to comprise high density residential uses of up to 80 m in height. Taking into account the future context of the area, the extent of the proposed overshadowing is not considered to be unreasonable.

5.10. Site Suitability

Having regard to the characteristics of the site and its location, the site is considered suitable for the development of the nature proposed in that:

- it is of a sufficient size and dimension to accommodate the proposal;
- it has excellent access to existing and planned public transport opportunities;
- existing utility services are available to service the demand generated by the proposal; and
- it does not contain any natural features that would impede the development.

5.11. Streetscape and Public Domain

The proposed development will result in considerable improvements to the streetscape in terms of aesthetics, amenity and activity.

5.11.1. Bathurst Street

The proposal addresses Bathurst Street and in doing so will improve the character of this street. It will also improve opportunities for casual surveillance, by providing balconies and living rooms which overlook the street, thereby creating a more active street edge.

The vehicular entrance into the basement levels from Bathurst Street has been designed to be visually recessive such that it does not overwhelm the façade. By contrast, the main pedestrian entrance to the building has been visually identified by a prominent arch and steel beam framework around the entrance.

5.11.2. Lachlan Street

The design of the proposed development, along this site frontage will make a positive contribution to Lachlan Street. The development is of a high quality design that will establish a benchmark for other sites within the immediate area.

In summary, the proposed development:

- provides high quality and durable finishes which positively contribute to the residential character and visual amenity of the locality;

- has a high level of architectural design which will make a positive contribution to the residential amenity for future occupants in terms of solar access, natural ventilation, visual and acoustic privacy, overlooking, overshadowing, outlook and views; and
- has been designed to physically and architecturally address all the street frontages with a similar orientation to that of surrounding development; and will shield car parking from view from the street.

5.12. Public Interest

The public interest is best served by the orderly and economic use of land for permissible purposes in a form which is cognisant of and does not impact unreasonably on development on surrounding land and which satisfies a market demand for more housing in south-western Sydney, within proximity to where residents work.

6. Conclusion

The proposed development at 1-5 Bathurst Street, Liverpool is permissible with development consent in the R4 High Density Residential zone under Liverpool Local Environmental Plan 2008 and complies with the objectives of the R4 zone.

The proposed development consisting of 9 storeys accommodating 97 units of residential accommodation as well as two levels of basement parking is considered to be in keeping with other residential flat developments surrounding the site and would result in a more consistent streetscape along Bathurst Street. The proposed development would also be in line with Liverpool Council's vision for higher density living within Liverpool city centre.

The proposed development departs from the maximum FSR and Building Separation standards in Liverpool LEP 2008. Variations pursuant to Clause 4.6 has been included at **Appendix J and K**, justifying the departure from these standards.

The proposed development is assessed to have planning merit in the following respects:

- Overall, the height, scale and bulk of the proposed development is consistent with existing developments along Bathurst and Lachlan Streets and the surrounding area;
- The developments which currently exist on the site are out of keeping with the envisioned character of the locality. The proposed development will improve the streetscape and increase passive surveillance;
- There will be no unreasonable impact to adjoining properties in terms of solar access, visual and acoustic privacy or views primarily due to adequate separation distances between the proposed development and adjoining residences.
- pedestrian and vehicle access and car parking is provided in accordance with relevant standards, and the traffic generation is relatively minor with no unacceptable implications for the road network;
- the site is suitable for the proposed development in terms of its size, access, existing infrastructure and absence of any significant environmental constraint.

In light of the merits of the proposal and the absence of any significant adverse environmental effects, the DA is considered worthy of Council's support. We therefore have no hesitation in recommending that the application be approved subject to Council's standard conditions.

Appendices

Appendix A

Design Excellence Meeting Minutes

LIVERPOOL CITY COUNCIL

Minutes

LIVERPOOL DESIGN EXCELLENCE PANEL

Property:	**1-5 Bathurst Street Liverpool**
Application Number:	**PL-83/2016**
Panel Members Present:	**Olivia Hyde, Geoff Baker, Jon Johannsen, Roger Hedstrom**
Assessing Officer/Unallocated:	**Rodger Roppolo**
Officers in Attendance:	**Rodger Roppolo, Nelson Mu**
Applicants Name and / or Representatives:	**Synergy Development Group**
Date of Meeting:	**Thursday 21 July 2016**
Item Number:	**3**
Pre DA ☒	**Post Lodgement** ☐
Chair:	**Olivia Hyde**
Apologies:	**Nil**
Convenor:	**Jan McCredie**

GENERAL INFORMATION

The Liverpool Design Excellence Panel (the Panel), comments are to assist Liverpool City Council in its consideration of the pre-development application.

The absence of a comment under any of the principles does not necessarily imply that the Panel considers the particular matter has been satisfactorily addressed, as it may be that changes suggested under other principles will generate a desirable change.

The 9 design quality principles will be grouped together where relevant, to avoid the unnecessary repetition of comments.

PROPOSAL

Proposed residential development

PANEL COMMENTS

The 9 design principles were considered by the panel in discussion of the pre-development application. These are 1] **Context, 2] Built Form+ Scale 3] Density 4] Sustainability 5] Landscape 6] Amenity, 7] Safety 8] Housing Diversity +Social Interaction 9] Aesthetics.**

The Design Excellence Panel makes the following comments in relation to the project:

The architects presented the scheme.

- Open up the design on the north / western side to create the separation of the two buildings and to provide more sunlight access to buildings at the rear of the site
- The development will appear as three buildings from the street
- The design layout creates more deep soil

Compliance

- Complies with height and FSR but distributes floor space in a lower height building form so that building depth does not comply
- The design must comply with the building depth and separation distances of the ADG and solar access

The panel has noted that on some sites applicants wish to reduce the permissible height of a building and still retain the permissible FSR. This is resulting in buildings that are lower in height but larger in footprint. If proposals do not meet the required separation distances, set-backs and depth of building requirements the FSR is to be reduced so that it relates to the reduced height.

The Panel made the following comments.

Deep Soil and Planting:

- Locate the pathway adjacent to the building along the western facade to consolidate the deep soil and so allow for more significant planting, including large trees, to be introduced along the western boundary.

Communal Open Space

The panel was concerned about the quality of the communal open space, specifically lack of sun, and suggested:

- Introduction of a roof terrace to provide a sunny communal open space. Terrace to have an adjacent room for communal use, some shade, barbeque, WC and lift access.

Open Space

- The Panel suggested that the private open space on the ground floor units (and the apartments) could be accessed from the street to increase activation.

Natural light

- Ensure that there is adequate natural light to the lift lobbies.

Overall Design

- If the above issues are addressed a DA can be prepared for Council.

General

Quality of construction and Material Selection
Consideration must be given by the applicant to the quality of materials and finishes. All apartment buildings are to be made of robust, low maintenance materials and be detailed to avoid staining weathering and failure of applied finishes. Render is discouraged.

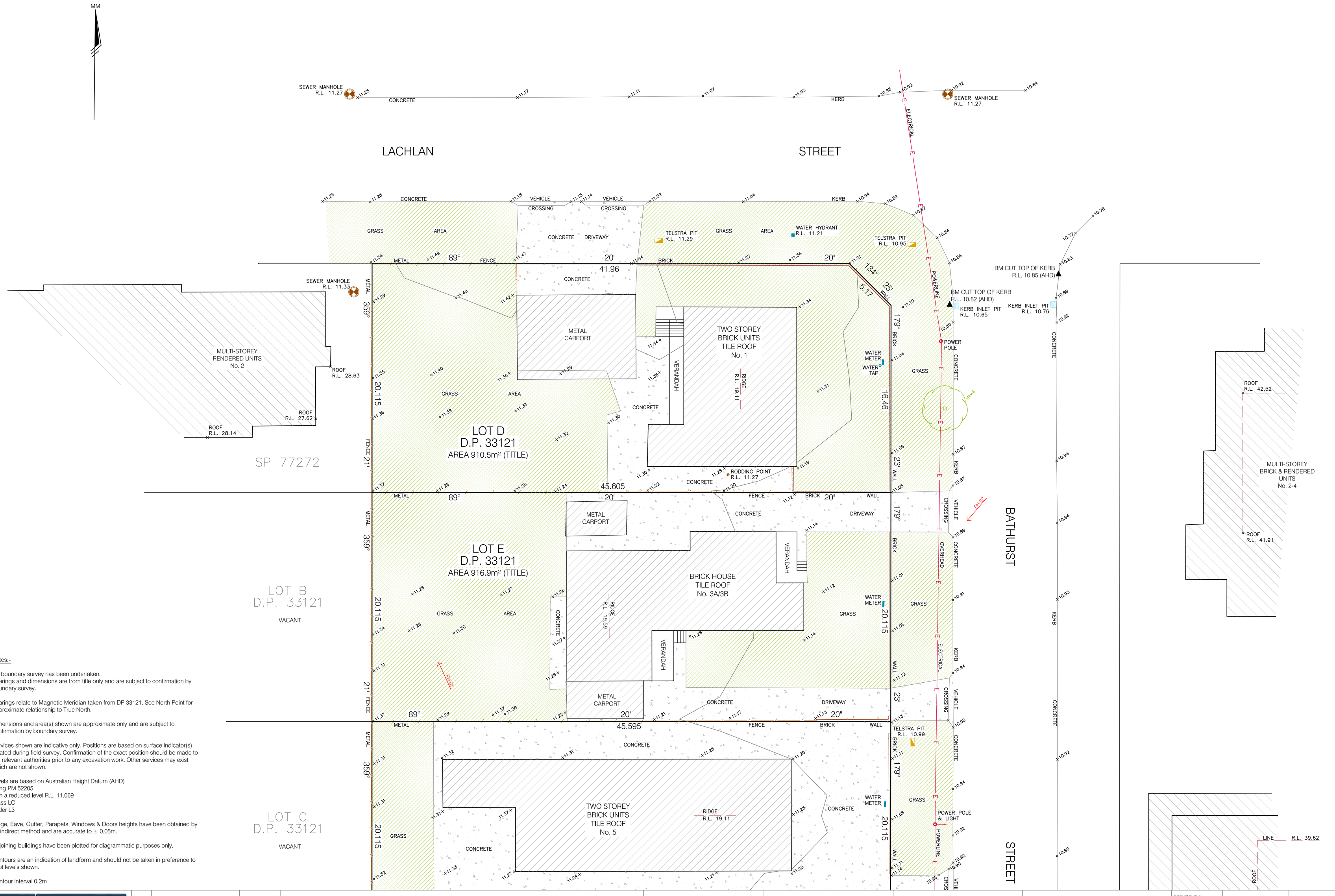
Floor-to-floor height
The Panel recommends a floor-to-floor height of 3050mm if required. This enables a floor-to-ceiling height of 2.7m to be easily achieved without bulkheads or dropped ceilings.

Detail section:
In order to provide clearer understanding of how the façade and balcony areas can be detailed, a 1:20 scaled section is to be provided at DA submission that can also show how services and drainage are intended.

This application does not need to be reviewed by the Panel again.

Appendix B

Site Survey – Prepared by Project Surveyors



Notes:-

No boundary survey has been undertaken.
Bearings and dimensions are from title only and are subject to confirmation by boundary survey.

Bearings relate to Magnetic Meridian taken from DP 33121. See North Point for approximate relationship to True North.

Dimensions and area(s) shown are approximate only and are subject to confirmation by boundary survey.

Services shown are indicative only. Positions are based on surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may exist which are not shown.

Levels are based on Australian Height Datum (AHD)
using PM 52205
with a reduced level R.L. 11.069
Class LC
Order L3

Ridge, Eave, Gutter, Parapets, Windows & Doors heights have been obtained by an indirect method and are accurate to ± 0.05m.

Adjoining buildings have been plotted for diagrammatic purposes only.

Contours are an indication of landform and should not be taken in preference to spot levels shown.

Contour interval 0.2m

LAWRENCE GROUP
SURVEYING | TOWN PLANNING | AERIAL SURVEYING
Head Office
Level 1, 183 Oxford Road
Mosman NSW 2088
PO Box 198, Cremorne NSW 2090
T: 1300 765 315
F: 1300 765 316
E: info@lawrencegroup.com.au
W: www.lawrencegroup.com.au

Issue	Amendment	Date

LEGEND

PH 01 → - APPROXIMATE LOCATION OF PHOTO TAKEN
PHOTOS LOCATED ON SHEET 2

CLIENT
SYNERGY DEVELOPMENT GROUP

PROJECT
No. 1 - 5 BATHURST STREET, LIVERPOOL

DRAWING TITLE
DETAIL & LEVEL SURVEY

TITLE INFORMATION

Lot:	LOTS D, E, F
Plan No.:	DP 33121
Title / Folio:	D/33121 E/33121 F/33121
L.G.A.:	LIVERPOOL
Parish:	ST LUKE
County:	CUMBERLAND

QUALITY ASSURANCE

Surveyor:	CE		
Drawn:	PL		
Checked by:	CE	Date:	24.03.2016
Approved by:	CE	Date:	24.03.2016

COMPLETION OF QUALITY ASSURANCE IS EVIDENCE THAT THE SURVEY WORKS UNDERTAKEN AND THE DRAWING HAVE BEEN VERIFIED AS CONFORMING WITH THE REQUIREMENTS OF THE QUALITY PLAN. WHERE THE QUALITY ASSURANCE IS INCOMPLETE ALL INFORMATION ON THIS DRAWING IS INTENDED FOR PRELIMINARY PURPOSES ONLY AS IT IS UNCHECKED.

Date of Survey:	15.03.2016
Date of Plan:	24.03.2016
Datum:	AHD
Co-ords:	
Scale:	1:150
(Original size A1)	
Cad ref :	163357-DETL-001A.dwg
Sheet	1 of 2
JOB NUMBER	163357
DRAWING NUMBER / ISSUE	DETL-001 / A

Appendix C

Architectural Drawings; Photo Montages and SEPP 65 Design Statements

U R B A N D E S I G N S T A T E M E N T

Villa and Villa Architects

1-3-5 BATHURST STREET, LIVERPOOL

Lot D-E-F – DP33121

RESIDENTIAL DEVELOPMENT

97 Residential Apartments

• e: Eduardo@villaandvilla.com.au
Level 4, 24 Hickson Road, Millers Point NSW 2000 • telephone: 92477667 • fax: 92477665