

Statement of Environmental Effects

Development Application for a Residential Flat Building Development, Community Room, Private Gymnasium and Neighbourhood Shops

Lot 101 DP 777404, 21 Atkinson Street, Liverpool

16 August, 2016

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Executive Summary

This report has been prepared as a Statement of Environmental Effects in assessment of a Development Application for a mixed use development comprising a residential apartment building, and at ground level, a community room, private gymnasium and 4 neighbourhood shops.

The land to which the application relates is known as 21 Atkinson Street, Liverpool and is situated at south western end of the roundabout at the intersection of Atkinson Street, Shepherd Street and Riverpark Drive, Liverpool. The site is situated to the north east of the Paper Mill Development at 20 Shepard Street.

The project will deliver 134 residential apartments over part 3 and part 7 to 10 storeys. A community room, private gymnasium and 4 neighbourhood shops are also proposed at ground floor level. The development will be provided with 162 parking spaces over three levels, including 1 partial basement level and 2 above ground levels.

The subject site is zoned R4 – High Density Residential under the provisions of Liverpool Local Environmental Plan 2008 (LLEP 2008). The proposed development is permissible with consent and is consistent with the zone objectives. The LEP sets out several specific requirements for development within the Liverpool City Centre including a requirement for new development to achieve design excellence.

Relevant to those requirements are development standards for maximum height of buildings (24m) and minimum separation between buildings (12m). The maximum height of the proposed development is 32m (excluding architectural roof features). The minimum building separation is 6m at two discrete points. This report includes written requests for variation to both development standards, which have been prepared in accordance with the requirements of clause 4.6 of the LEP.

Further in relation to design excellence, is a requirement for consideration to be given to environmental impacts of development, such as sustainable design, overshadowing, wind and reflectivity. The proposed development is considered to perform well in respect of all of these criteria. The design of the subject proposal has incorporated direct measures to minimise overshadowing impacts.

In addition to LLEP 2008, the proposed development has been assessed in accordance with the provisions of all other applicable environmental planning instruments. Details of the assessment against those instruments is provided at Section 4 of this report.

Liverpool Development Control Plan 2008 (DCP 2008) provides additional controls in relation to residential flat development within the Liverpool CBD. The proposed development is generally consistent with the relevant provisions, however variation is proposed in respect of setbacks, street frontage height, floor space arrangement (depth and width) and housing mix. Each of these non-compliances are relatively minor and in all cases are considered to be reasonable and appropriate departures from the DCP requirements in the circumstances of the case.

The proposed development has been assessed in accordance with the provisions of section 79C of the Environmental Planning and Assessment Act 1979 with details of the same forming **Section 5** of this report. Having regard to those matters, the proposed development is considered to be satisfactory and is recommended for Council's approval.

1 Introduction

This Statement of Environment Effects is submitted in accordance with Clause 50(1)(a) of the Environmental Planning and Assessment Regulation 2000 (The EPA Regulation 2000). The purposes of this Statement of Environmental Effects is:

- To provide a description of general information about the site and the proposed development in accordance with Clause 1 of Schedule 1 of the EPA Regulation 2000;

In accordance with Clause 2 of Schedule 1 of the EPA Regulation 2000, to provide the following information:

- The environmental impacts of the development;
- How the environmental impacts of the development have been identified;
- The steps to be taken to protect the environment or to lessen the expected harm to the environment.

To address the above statutory requirements, the report considers the following matters:

- Description of the site, surrounding development forms and the wider locality;
- Description of the proposed development;
- Assessment of the proposed development in accordance with all statutory controls and Council's Development Control Plans (DCPs);
- A broader environmental assessment of the proposal, having regard to the matters for consideration contained within Section 79C of the Environmental Planning and Assessment Act 1979 (The EPA Act 1979).

The proposed development is Local Development and is not Integrated Development. The proposed development does not require any additional approvals pursuant to Section 68 of the Local Government Act 1993.

2 Site Details

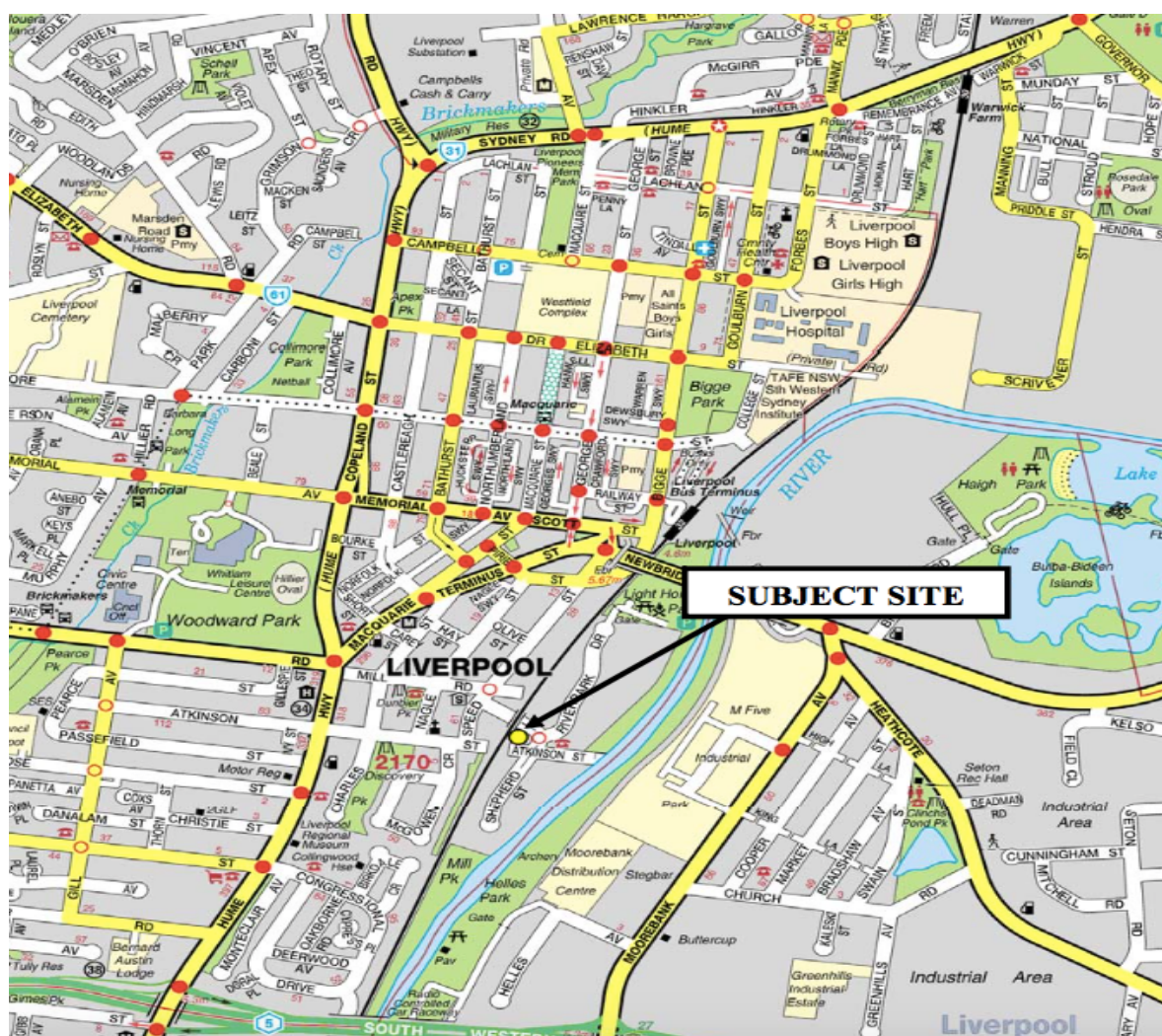
2.1 SITE LOCATION

The subject site is located on the south western end of the roundabout at the intersection of Atkinson Street, Shepherd Street and Riverpark Drive, Liverpool.

It is situated towards the southern edge of the Liverpool CBD and is approximately 930m to the south of Liverpool Railway Station. The site's location is shown in the Regional Context as Figure 1 and in the Local Context as an aerial photograph in Figure 2 respectively. A detailed site vide aerial photograph is provided as Figure 3 whilst an aerial perspective is included as

Figure 4.

Figure 1: Site Location (Regional Context)



Source: UBD

Figure 2: Site Location (Aerial Photograph)



Source: Nearmap

Figure 3: Aerial Photograph - Detailed Site View



Source: Nearmap

Figure 4: Aerial Perspective



Source: Nearmap

2.2 SITE DESCRIPTION

The subject site is described as Lot 101 DP 777404 and is commonly known as 21 Atkinson Street, Liverpool.

The total area of the allotment is 5412m².

The proposed development will have frontage to both Atkinson and Shepherd Streets.

2.3 EXISTING DEVELOPMENT

The site is presently developed with a large industrial building which was previously used for air conditioner manufacturing. The proposed development involves the demolition of all existing structures.

The site is burdened by three easements. An easement for underground mains 3m wide is situated at the southern end of the western boundary. At the south-eastern corner of the site is a padmount substation which benefits from an easement for electricity purposes as well as a small, 1m wide easement for underground mains between the substation and the public road.

The application proposes to relocate the padmount substation and associated easements at the south-eastern corner of the site. The 3m wide easement for underground main adjacent the western boundary will be retained.

2.4 SURROUNDING DEVELOPMENT

The subject site is bounded by public road on its northern, southern and eastern sides. The Main South Railway Line bounds the site's western boundary.

To the west is the south western rail corridor. Surrounding the remainder of the lot is Atkinson and Shepherd Streets.

To the north and west of the site across Shepherd Street are high and medium density residential development.

To the south lies industrial factories and workshops.

The Paper Mill Development site adjoins to the south east. A perspective image of this yet to be determined development is provided as Figure 5.

Figure 5: Perspective Image of the Approved Paper Mill Development



Source: Mayor's Presentation 28 July 2015

2.5 VEGETATION

The site is sparsely vegetated with both native and exotic trees and shrubbery, most of which is proposed to be removed.

Replacement landscaping as specified in the attached landscape plans is proposed to be undertaken in accordance with DCP 2008.

Large, mature street trees along Shepherd Street are proposed to be retained.

The subject site is not identified as containing environmentally significant land, pursuant to the mapping for the same contained within LLEP 2008.

2.6 TOPOGRAPHY AND DRAINAGE

The site is relatively level land with an excavation predominantly located to the south of the site adjacent to Atkinson Street.

The site is located slightly lower than the rail corridor to the west then plateaus towards Shepherd Street to the east.

Stormwater passing over the site can be drained to both Atkinson and Shepherd Streets.

In general terms it is fair to say that topography does not represent a constraint to development of the site or to the attainment of design excellence.

The application is accompanied by stormwater plans which have been prepared in accordance with Council drainage requirements.

2.7 ZONING

The subject site is zoned R4 High Density Residential pursuant to the provisions of LLEP 2008. Detailed assessment of the proposed development in accordance with all relevant planning controls is contained within **Section 4** of this Report.

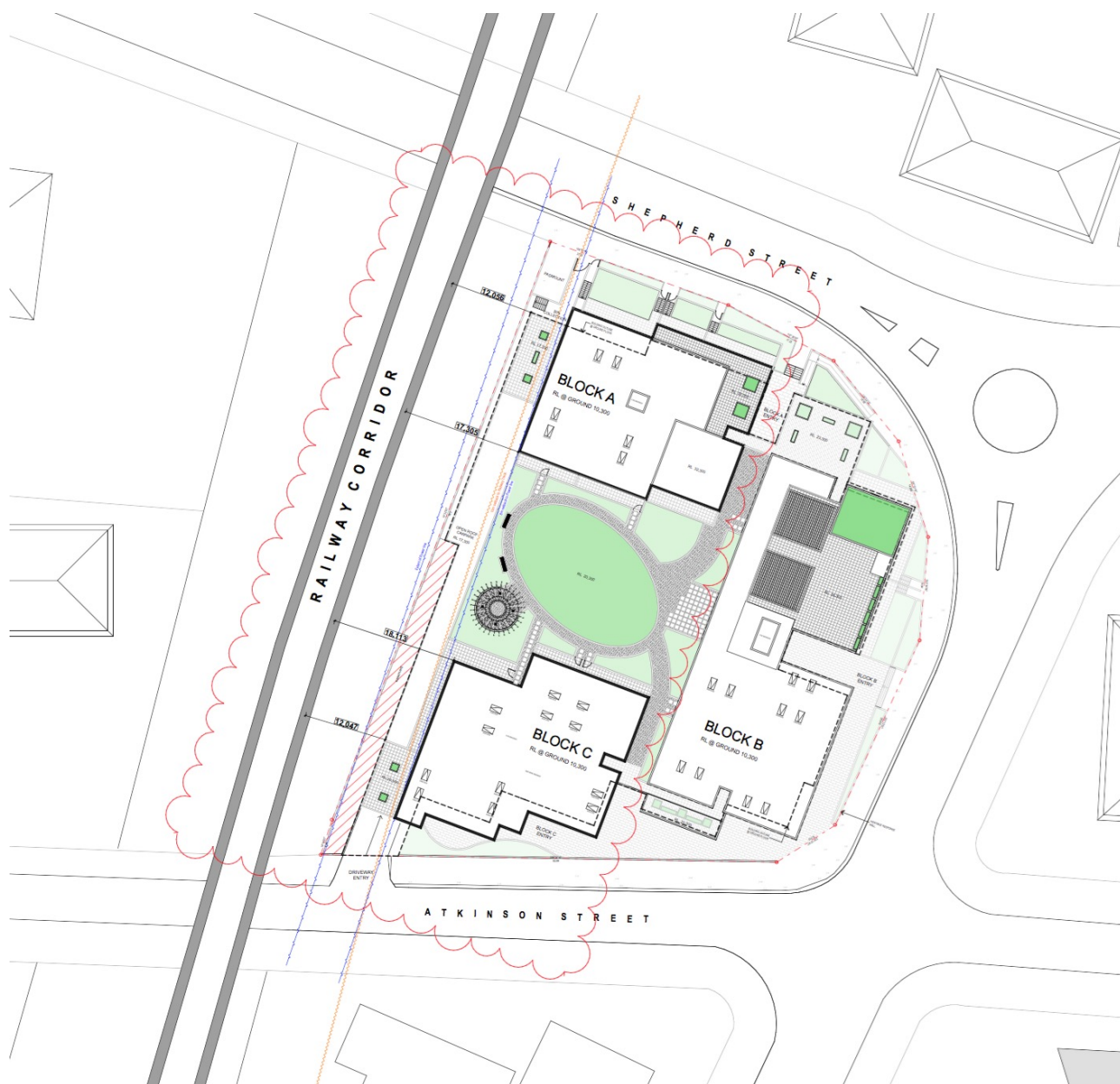
3 Proposed Development

The application involves the demolition of the existing warehouse/light-industrial buildings and construction of a part 3 and part 7 to 10 storey residential flat building. The development involves 1 level of partial basement parking and 2 above ground parking levels the latter of which are screened from public streets by active uses. Additionally, the development provides a community room, private gymnasium and 4 neighbourhood shops.

In aggregate, the development will deliver 134 residential apartments, comprising 24 x 1 bedroom, 103 x 2 bedroom and 7 x 3 bedroom dwellings. The community room and private gymnasium are situated at ground floor at the southern side of the site and occupy 78.62m² and 74.87m² respectively. The 4 neighbourhood shops are situated at the south-eastern corner of the site and have frontage to both Atkinson Street and Shepard Street. They occupy a gross floor area of between 43.1m² and 100m².

Total off-street parking provision is 162 spaces comprising 146 resident spaces, 13 resident visitor spaces and 3 spaces servicing staff and visitors of the neighbourhood shops. Additionally, 62 bicycle parking spaces and 11 motorcycle parking spaces are proposed.

The development provides a perimeter block building form for which, at above podium level there are three separate towers arranged around a large, centrally located communal open space area. The site plan of the proposed development is included below as Figure 6.

Figure 6: Proposed Development Site Plan

3.1 VEHICULAR AND PEDESTRIAN ACCESS AND PARKING PROVISION

Vehicular access is provided by way of a 6m wide combined ingress / egress driveway situated at the south-western corner of the site adjacent the railway corridor. The driveway ramps up to parking at first floor level. From first floor ramps provide access to ground and second floor levels. The following summarises parking, bicycle and motorcycle parking provided at each floor.

Ground Floor Level

Resident spaces	48 (inclusive of 2 disabled spaces)
Residential visitor spaces	Nil
Commercial staff/Visitor spaces	3 (inclusive of 1 disabled space)

Single bicycle racks	10
Subtotal	51 car and 10 bicycle spaces

Level 1 Parking

Resident spaces	36 (inclusive of 6 disabled spaces)
Residential visitor spaces	13
Motorcycle spaces	11
Single bicycle racks	27
Subtotal	49 car, 11 motorcycle and 27 bicycle spaces

Level 2 Parking

Resident spaces	62 (inclusive of 6 disabled spaces)
Single bicycle racks	25
Subtotal	62 car and 25 bicycle spaces

Total **162 car, 62 bicycle and 11 motorcycle spaces**

Pedestrian access is available from multiple locations around the public road frontage perimeter of the site and full separation from vehicle movement areas has been achieved.

3.2 GROUND FLOOR

Ground floor provides 5 x 2 and 1 x 2 bedroom dwellings which are orientated towards the northern boundary and the northern part of the eastern boundary. At the south-eastern corner of the site is situated 4 neighbourhood shops having a total area of 268m² and having individual areas between 43.1m² and 100m². The neighbourhood shops are orientated to the Atkinson Street / Shepard Street intersection. On the opposite side of this intersection is significant is the Paper Mill Development, which orientates a significant amount of commercial floor space to the intersection corner.

Adjacent the southern boundary is a community room (78.62m²) and a private gymnasium (74.87m²).

In addition to proposed floor space as described above, ground floor provides 5 large communal garbage rooms and various plant and switch rooms.

3.3 FIRST FLOOR AND SECOND FLOOR

First and second floors provides exclusively residential apartments comprising and first floor, 9 x 2 bedroom and 1 x 1 bedroom and 1 x 3 bedroom dwelling and at second floor 10 x 2 bedroom, 1 x 1 bedroom and 1 x 3 bedroom dwelling.

Built form is arranged as a perimeter block development orientated to all public street frontages.

3.4 TOWER BLOCKS A, B AND C

Third floor and above comprises three tower buildings arranged around a large, centrally located communal open space area. These are described as Blocks A, B and C on the plans. Block A is 5 storeys above podium, whilst Blocks B and C are 5 and 6 storeys above podium respectively.

A roof top communal open space area is provided at the north-eastern corner of Block B. Similarly, a rooftop communal open space is provided at the rooftop of Block B.

Perspective drawings of the proposed development have been included in the development plans, and are repeated below as Figure 7.

Figure 7: Perspective Images of the Proposed Development



4 Statutory Assessment

4.1 LIVERPOOL LOCAL ENVIRONMENTAL PLAN 2008

The subject site is zoned R4 High Density Residential. The zone objectives and land use table for the R4 High Density Residential zone is provided at Part 2 of the LEP as follows:

4.1.1 *Zone Objectives and Land Use Permissibility*

Zone R4 High Density Residential

1 Objectives of zone

- 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.

2 Permitted without consent

Home-based child care; Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dwelling houses; Educational establishments; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Kiosks; Multi dwelling housing; **Neighbourhood shops**; Places of public worship; Public administration buildings; Recreation areas; Residential care facilities; **Residential flat buildings**; Respite day care centres; Roads; Secondary dwellings; Serviced apartments; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

The proposal is permissible with consent as a “residential flat building” and “neighbourhood shops”. The use of the site as such is also consistent with the first five listed abovementioned objectives of the zone.

With regard to the proposed neighbourhood shops it is to be noted that there is no development standard nor other matter within the definition of "neighbourhood shop" which precludes more than one such land use per site. Nevertheless, during pre-lodgment discussions, Council officers have expressed an opinion that there is an implied limit of one neighbourhood shop per site.

Whilst there does not appear to be any specific legislative provisions supporting Council's interpretation, there is clearly land use planning merit in providing some level of limitation on the number of neighbourhood shops which are located in residential zones. Unfettered commercial floor space in the form of sub 100m² shops has the potential to erode the retail hierarchy.

However, in the case of the proposed development, the subject site has an area of 5412m². The minimum lot size under clause 4.1 of LLEP 2008 is 1000m². On this basis, the subject site could be subdivided into 5 separate allotments and as such, the land area could support 5 neighbourhood shops, even if Council's interpretation of 1 per site were adopted. The proposed development provides only 4 neighbourhood shops and as such, does not exceed the density of neighbourhood shops which could otherwise be accommodated on the land.

4.1.2 Principal Development Standards

Principal Development Standards are set out in Part 4 of the LEP. The following Table 1 provides a summary of compliance:

Table 1: LLEP 2008 Principal Development Standards Compliance Summary

Standard	Required	Provided	Complies?
Height of Buildings (Clause 4.3)	24m	Block A: 27m Block B: 28.8m Block C: 31m	No No No
Floor Space Ratio (Clause 4.4)	2.5:1 as per Table in Clause 4.4(2C)	2.3:1	Yes

Part 4.6 Exceptions to development standards

(1) *The objectives of this clause are as follows:*

(a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*

(b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

-
- (2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.
- (3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:
- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
 - (b) that there are sufficient environmental planning grounds to justify contravening the development standard.
- (4) Development consent must not be granted for development that contravenes a development standard unless:
- (a) the consent authority is satisfied that:
 - (i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and
 - (ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and
 - (b) the concurrence of the Director-General has been obtained.
- (5) In deciding whether to grant concurrence, the Director-General must consider:
- (a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and
 - (b) the public benefit of maintaining the development standard, and
 - (c) any other matters required to be taken into consideration by the Director-General before granting concurrence.
- (6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:

- (a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or
- (b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.

Note. When this Plan was made it did not include Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living.

- (7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).
- (8) This clause does not allow development consent to be granted for development that would contravene any of the following:
 - (a) a development standard for complying development,
 - (b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,
 - (c) clause 5.4.

The following sets out the grounds for variation to clause 4.3 and has been prepared having regard to the Department of Planning's Guide to SEPP 1 Objection as well as seminal Court decisions of *Wehbe v Pittwater Council* [2007] NSWLEC 827 (21 December 2007) and *Winten Property v North Sydney* (2001) 130 LGERA 79.

What is the Development Standard Being Varied?

The subject Request for Variation relates to maximum building height.

Under what clause is the development standard listed in the environmental planning instrument?

The development standard is contained within clause 4.3 of LLEP 2008.

What are the Objectives of the Development Standard?

The objectives of clause 4.3 are as follows:

(1) *The objectives of this clause are as follows:*

- (a) *to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
- (b) *to permit building heights that encourage high quality urban form,*
- (c) *to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
- (d) *to nominate heights that will provide an appropriate transition in built form and land use intensity.*

What is the Numeric Value of the Development Standard in the Environmental Planning Instrument

Clause 4.3 sets a maximum building height of 24m.

What is the Numeric Value of the Development Standard in the Development Application?

The application proposes a maximum building height of 31m (including architectural roof features).

What is the Percentage Variation Between the Proposal and the Environmental Planning Instrument?

The extent of variation is 7m or 29.2%.

What Are the Ways in Which Strict Compliance of the Standard can be Demonstrated to be Unreasonable or Unnecessary in the Circumstances of the Case?

The matter of *Wehbe v Pittwater Council* [2007] NSWLEC 827 (21 December 2007) sets out 5 ways in which compliance with a development standard can be demonstrated to be unreasonable or unnecessary in the circumstances of the case. The subject application relies on the first of the Wehbe Tests being, the objectives of the standard are achieved notwithstanding non-compliance with the standard.

How is Strict Compliance with the Standard Unreasonable or Unnecessary in the Circumstances of the Case?

Having regard to the Objectives of the development standard as well as the objectives of the R4 – High Density Residential zone, the following sets out the ways in which the proposed building height complies with both sets of objectives, notwithstanding numerical non-compliance:

The Height of the Proposed Development has been Designed to Respond to the Height of the South Eastern Adjoining Paper Mill Development

The height of buildings development standard for the subject site is the same as for the Paper Mill Site. The now approved Paper Mill Development proposes a maximum building height of 16 storeys or 53.27m. It was recommended for approval by Council and approved by the JRPP on 8 October 2015.

The Paper Mill Development proposal relies on heritage conservation incentives and responds to significant site constraints including Vegetated Riparian Zone and Foreshore Building Line. In response to those constraints and in order to achieve a large public plaza, the development provides a very significant variation to the height controls, exceeding the height limit by part 2 storeys and part 9 storeys.

Given that the Paper Mill Development is approved, it is appropriate that it be considered as part of the potential future context of the site.

The height of the proposed development height will provide a transitioning of development height from The Paper Mill Development back to 24m for land to the north of the site.

Reason for Variation 1: The Orientation and Corner Location of the Site Mitigates Adverse Impacts on Adjoining Property Owners

The site's corner location, together with the positioning of each building on the subject site results in the proposed building having no direct interface with other development. The subject site is adjoined by the rail corridor to the immediate west and Atkinson and Shepherd Streets for the remainder of the perimeter. Because the site has no directly adjoining neighbours, minimal overshadowing will occur to surrounding properties. No impacts are likely to occur to the residential properties across Shepherd Street to the north and west, or the factory units across Atkinson Street to the south.

The principal issue is the relationship in terms of bulk and scale as well as streetscape impacts. The following

Figure 8 provides a elevations of each of the three proposed buildings which gives a good indication of the existing ground levels of the site and how the design of each building will compliment the surrounding streetscape.

Figure 8: Northern Elevation



Figure 9: Southern Elevation



Figure 10: Eastern Elevation



Figure 11: Western Elevation

The areas of proposed height exceedance are positioned on the site so as to both minimise impact on surrounding properties and to achieve contextual relationship with the Paper Mill Development.

The combination of all these elements of the site planning and building design is such that the proposed height does not offend the objectives of the development standard or the zone objectives. Accordingly, strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstances of the case.

Reason for Variation 3: The Site's Corner Location Supports the Provision of Additional Height

It is a commonly accepted urban design theory that corner sites are capable of accommodating additional height compared to midblock locations. The reason for this is that the street intersection creates a void of un-built upon land around the corner site. This void can be filled by additional floor space and/or height without disruption to the overall perception of height and scape of development in the locality.

Given the site's corner location and large street frontages to both Atkinson and Shepherd Street, strict compliance with the development standard is considered to be unnecessary in order to attain the objectives of the development standard, particularly in terms of enhancing the streetscape and local area character.

For this reason, the proposed development is considered to be consistent with Objectives (b) (c) and (d). As such, strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstances of the case.

Reason for Variation 4: The Design Incorporates Floor Space Ratio Bonuses available under Clause 4.4 While Maintaining High Amenity and Livability

The FSR and Building Height combination applicable to the site without incorporating available bonuses is 1.5:1 and 24m. Clause 4.4(2B) of the LEP allows for floor space ratio bonuses, however there is are no corresponding bonuses for the height of buildings development standard.

Examination of the base line floor space ratio and height of buildings development standards indicates that the controls promote tall buildings with low site coverage, sited within generously proportioned landscaped areas. For example, on a hypothetical site of 1000m² the 1.5:1 FSR would allow 1500m² gross floor area. The 24m building height control tends to connote an 8 storey building. For 1500m² GFA to be accommodated within a single 8m high building, the floor plate per level would be 187.5m² or 18.75% site area.

If the same proportional relationship between floor space ratio and height of buildings were applied to the 2.5:1 FSR available under the bonuses under clause 4.4(2B) then the corresponding height of buildings development standard would be 39m.¹

The proposed development is well under the proportionately adjusted building height development standard after applying the FSR bonus. Notwithstanding the above, the design still facilitates a comparatively low site coverage within a generously proportioned landscaped setting.

Having regard to the above, the proposed building height is appropriate to the FSR bonus available to the subject application, is consistent with delivering a high quality building form, together with quality public areas. Accordingly, the proposed non-compliance is consistent with the objectives of the standard and strict compliance is unreasonable and unnecessary in the circumstances of the case.

Are There Sufficient Environmental Planning Grounds to Justify Contravening the Development Standard?

The environmental planning grounds on which justification for variation to the development standard is based are:

- The proposed additional height relates to likely future development within the immediate locality and will assist in delivering a transition in building height, scaling down from The Paper Mill Development.

¹ Adopting the same 1000m² hypothetical site, 2.5:1 FSR allows 2500m² GFA. For 18.75% site coverage, floor plate per level would be 187.5m². Accommodating 2500m² within 187.5m² floor plate would require a 13 storey building or a height of buildings development standard of 39m.

- The site enjoys access to floor space ratio bonuses which are not reflected in corresponding bonuses to the height of buildings development standard. In order to deliver the additional floor space available under the clause 4.4(2B) bonus, it is necessary to provide either additional height or additional site coverage. The proposed development delivers compliance with Apartment Design Guide communal open space Design Standards, but also necessitates modest additional height.
- There are little or no overshadowing impacts.
- The site's corner location supports additional height.

In our opinion, the above represents sufficient environmental planning grounds to support variation to the development standard.

Additional Matters: Would a Development Which Complied with the Standards be Unreasonable or Unnecessary in the Circumstances of the Case

This question is not specifically raised within the Department's SEPP 1 Guide, but rather arises from the matter of *Winten Property v North Sydney* (2001) 130 LGERA 79.

A development which complies with the standard would involve either additional site coverage, or a reduction in gross floor area. Either scenario would lead to inferior planning outcomes. A reduction in gross floor area would derogate from the operation of clause 4.4(2B) which aims to encourage the development of large sites and to maximise development opportunity within the Liverpool City Centre.

The alternative of increasing site coverage would reduce the quality and amenity of communal open space areas and / or proposed public areas at ground level. Given the absence of any consequential impacts arising from the height non-compliance, together with desirable urban design outcomes, reduction in proposed building height with corresponding increase in site coverage would lead to inferior design outcomes.

For these reasons, a development which complied with the standard would be unreasonable and unnecessary in the circumstances of the case.

Is the Request for Variation Well-founded?

This Request for Variation has identified the objectives of the development standard and has taken into account the objectives of the R4 – High Density Residential zone. The Request for Variation has demonstrated that the proposed exceedance of the statutory height limit is:

- Based on sound architectural design;
- Relates to likely future development in the locality,
- Does not result in any unreasonable impacts to adjoining land owners;

- Is an appropriate response to site constraints and opportunities having regard to the corner location of the site as well as its orientation.
- Represents a logical and desirable outcome in response to the floor space ratio bonuses available under LLEP 2008.

For these reasons, strict compliance with the development standard has been demonstrated to be unreasonable and unnecessary in the circumstances of the case.

The Request for Variation has also considered the postulate contained within *Winten Property v North Sydney (2001) 130 LGERA 79* as to whether a development which complied with the standard is unreasonable and unnecessary. The postulate is answered in the affirmative because design amendment to bring about compliance would do significant harm to architectural design outcomes which are important to the design and use of the roof top space of the buildings as communal open space, in circumstances where the proposed development height does not result in any unreasonable impacts on adjoining development.

Having regard to the above matters, the Request for Variation is considered to be well founded in this instance.

4.1.3 Miscellaneous Provisions

Part 5 of LLEPP 2008 provides miscellaneous provisions, with the relevant Parts listed below:

5.4 Controls relating to miscellaneous permissible uses

(7) Neighbourhood shops

If development for the purposes of a neighbourhood shop is permitted under this Plan, the retail floor area must not exceed 100 square metres.

Each of the proposed neighbourhood shops are less than 100m² in area.

See Section 4.1.1 in relation to the proposed number of neighbourhood shops.

5.6 Architectural Roof features

Clause 5.6 provides allowance for exceedance of maximum building height in certain circumstances. The proposed development does not rely on clause 5.6 in relation to proposed building height.

5.9 Preservation of trees or vegetation

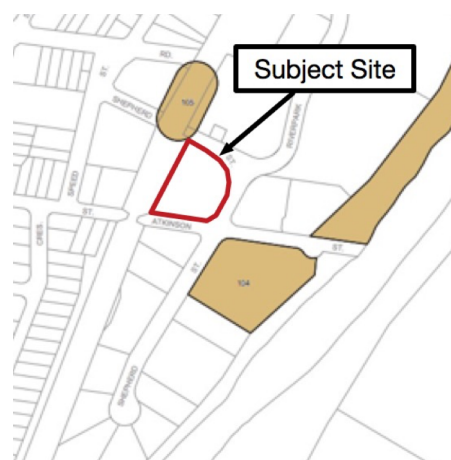
The objective of this clause is to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation.

The site contains a number of existing trees generally situated close to the street boundaries. The proposed development involves the removal all existing trees. The same is considered to be satisfactory subject to replacement planting as proposed.

5.10 Heritage Conservation

The subject site does not contain a heritage item, however it is adjoined to the north west and south east by heritage items, being:

- Item 104: McGrath Services Centre Building (formerly Challenge Woollen Mills, and Australian Paper Company's Mill) located at the corner of Shepherd and Atkinson Streets, Liverpool.
- Item 105, Railway Viaduct located at Shepherd Street and Mill Road, Main Southern Railway Line, Liverpool.



The application is accompanied by a Heritage Impact Statement which has been prepared by Graham Brooks and Associates. The report concludes that the heritage significance of the adjoining heritage items will not be adversely affected by the proposed development.

4.1.4 Additional Local Provisions

The relevant Sections to the proposed development are listed below:

Part 7 sets out additional controls for development within the Liverpool City Centre. The subject site is included within the land affected by Part 7 but is not identified as a key site on the Key Sites Map. The relevant Sections to the proposed development are listed below.

Clause 7.1 provides additional objectives for development within the Liverpool City Centre as follows:

7.1 Objectives for development in Liverpool city centre

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,*

Comment: Through the use of perimeter block building form and a strongly defined podium element, the proposed development strongly defines the street edge and appropriately reinforces the character of both streets.

(g) *to allow sunlight to reach buildings and areas of high pedestrian activity,*

Comment: The application is accompanied by shadow diagrams which, together with the orientation of the subject site, clearly show expected shadows cast by each of the three proposed tower buildings. A minimum of 3 hours of direct sunlight will be provided to the central communal open space area and the majority of the surrounding public domain. The proposed development is satisfactory having regard to the requirements of Clause 7.1(b).

(c) *to reduce the potential for pedestrian and traffic conflicts on the Hume Highway,*

Comment: The proposed development does not involve direct vehicular access to Hume Highway and does not introduce any unreasonable traffic impacts.

(g) *to improve the quality of public spaces in the city centre,*

Comment: The proposed development provides a high quality presentation to the public domain.

(g) *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,*

Comment: The proposed development will have no significant impact on Liverpool railway station.

(f) *to enhance the natural river foreshore and places of heritage significance,*

Comment: *The proposed development will not have any impact on the Georges River foreshore or items of heritage significance. The proposed development does not involve any alteration to the alignment or pavement of the public street.*

(g) to provide direct, convenient and safe pedestrian links between the city centre (west of the rail line) and the Georges River foreshore.

Comment: The proposed development does not affect any pedestrian access links so described.

The objective of Clause 7.2 is to protect specified public open space from excessive overshadowing. The subject site and its surrounds are not applicable to the land pursuant to this clause.

The objective of Clause 7.3 is to ensure that adequate car parking is provided for new buildings on land in certain zonings in the Liverpool City Centre. The zoning of the subject land is not applicable to those pursuant in this clause. A Traffic Impact Assessment accompanies this application.

Clause 7.4 sets out additional requirements in relation to building separation within the Liverpool City Centre. The relevant controls are:

- (a) 9 metres for parts of buildings between 12 metres and 25 metres above ground level (finished) on land in Zone R4 High Density Residential, and*
- (b) 12 metres for parts of buildings between 25 metres and 35 metres above ground level (finished) on land in Zone R4 High Density Residential, and*

The required separation distance between Blocks A and B is 12m against a minimum of 6m proposed.

The non-complying elements are the northern and southern ends of Tower B.

Clause 4.6 of LLEP 2008 permits variation to development standards where it can be demonstrated by written submission that compliance with the standard is unreasonable or unnecessary in the circumstances of the case. A written request for variation to the standard is provided at **Section 4.1.5** of this report.

Clause 7.5 sets out requirements for Design Excellence. Relevant matters for consideration are provided at subclause (3) and the following Table 2 provides commentary in relation to each matter.

Table 2: Design Excellence Assessment (Clause 7.5)

(3) In considering whether development exhibits design excellence, the consent authority must have regard to the following matters:

Criteria	Comment
<i>(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,</i>	The proposed development provides a mix of materials and detailing and delivers a good mix of horizontal and vertical expression. The pallet of construction materials incorporates painted concrete, light weight metal cladding and exposed face brick. Articulation and modulation of the façades has been achieved through setback variation, the use of mixed balcony treatments and variation in building materials. The development delivers a clear delineation of base, middle and top elements of the design and is considered to be well suited to the context of the site and its surrounding development, in terms of architectural expression and presentation to the public domain
<i>(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,</i>	The form, aesthetics and external appearance of the proposed development are considered to provide a positive contribution to the public domain.
<i>(c) whether the proposed development detrimentally impacts on view corridors,</i>	The subject site is not considered to be located within a significant view corridor.
<i>(d) whether the proposed development detrimentally overshadows Bigge Park, Liverpool Pioneers' Memorial Park, Apex Park, St Luke's Church Grounds and Macquarie Street Mall (between Elizabeth Street and Memorial Avenue),</i>	The proposed development does not result in any overshadowing of the referenced public open space areas.
<i>(e) any relevant requirements of applicable development control plans,</i>	See DCP assessment below. The application is considered to be consistent with the DCP requirements.

<i>(f) how the proposed development addresses the following matters:</i> <i>(i) the suitability of the site for development,</i> <i>(ii) existing and proposed uses and use mix,</i> <i>(iii) heritage issues and streetscape constraints,</i>	The site is well suited for higher density residential development as reflected by LEP zoning, height and floor space ratio controls together with consistency with DCP requirements. The proposed development is consistent with the zoning of the land and appropriate to the site's context and setting. The proposed development is considered to achieve a high standard of streetscape presentation. In our assessment the identification of nearby environmental heritage does not represent a constraint to residential flat building development of the site.
<i>(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,</i>	The proposed development has appropriately responded to surrounding residential flat buildings, including existing, proposed and presently under construction. Interface between the proposed development and adjoining buildings has been clearly communicated in the submitted plans and is considered to be satisfactory.
<i>(v) bulk, massing and modulation of buildings</i>	The bulk and scale of the development, when expressed in terms of floor space ratio is less than the maximum permissible for the site. The massing of the building has been carefully designed to reinforce both street edges and to achieve a streetscape presentation, which is compatible with existing and likely future development in the locality. The proposed design provides for a high level of facade modulation to all

	elevations. This assists in reducing the perceived bulk of the building and in creating a dynamic play of light and shadow.
<i>(vi) street frontage heights</i>	The proposed development achieves an 8 storey street frontage height to both street frontages. This is considered to be consistent with the street frontage height of surrounding developments and is also generally consistent with DCP 2008 standards (between 5 and 7 storeys). The minor variation from DCP 2008 prescribed street frontage heights is discussed at Table 4 below, however given consistency with adjoining and surrounding buildings, the proposed street frontage height is considered to be acceptable.
<i>(vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity</i>	We would defer to specialist urban design expertise with regard to detailed design assessment. Having regard to the orientation of the site, the overshadowing impacts of the proposed development are minimal.
<i>(viii) the achievement of the principles of ecologically sustainable development</i>	The principals of ecologically sustainable development are defined within Section 6(2) of the Protection of the Environment Administration Act 1991 as referenced within the Dictionary to LLEP 2008 and Section 4 of the Environmental Planning and Assessment Act 1979. The principals go to The Precautionary Principal; Inter-Generational Equity; Conservation of Biological Diversity and Ecological Integrity; Improve Valuation, Pricing and Incentive Mechanisms. The proposed development does not offend any of these principals.

<i>(ix) pedestrian, cycle, vehicular and service access, circulation and requirements</i>	Vehicular access provisions comply with AS2890.2 – Off-Street Parking Facilities. Pedestrian access is available from both street frontages. Consideration could be given to providing direct pedestrian access to ground level street facing units. Should Council be minded that way, a condition of consent could be imposed to that effect.
<i>(x) the impact on, and any proposed improvements to, the public domain</i>	The proposed development is considered to provide a positive contribution to the public domain.

Division 2 provides additional General Provisions and we make the following comments in respect of each of those matters.

Table 3: Division 2 Assessment Summary

Environmentally significant land	The subject site is not mapped as containing environmentally significant land.
Acid Sulfate Soils	The subject site is located within a mapped acid sulfate soils area – Class 5. An Acid Sulfate Assessment Report has been prepared by Geotechnique and submitted with the application. The report identifies that the “acid trail results for all samples analysed were below the Action Criteria of 18 mol ^H /tonne.
Flood Planning	The site is situated within a mapped flood planning area. A flood assessment has been prepared by SGC Consultants and submitted under separate cover. The Assessment indicates that compensatory flood storage must be provided and the same is proposed to be located beneath the basement of the proposed building.
Foreshore Building Line	The site is not located within a foreshore area
Minimum Dwelling Density	The site is not located within a minimum dwelling density locality

Minimum Building Frontage	Site width to Atkinson Street is 65.99m and even greater along Shepherd Street.
Development In Flight Paths	The site is not affected by aircraft noise.

Having regard to the above assessment, the proposed development is considered to be consistent with the requirements of LLEP 2008 in all respects but for variation to building separation requirements.

4.1.5 Request for Variation to Minimum Building Separation Requirements contained within Clause 7.4 of LLEP 2008

As stated above, Clause 4.6 of LLEP 2008 allows for variation to development standards in circumstances where written submission prepared by the applicant demonstrates that compliance with the standard is unreasonable or unnecessary in the circumstances of the case.

This request for variation to a development standard relates to clause 7.4(2)(b) which stipulates a minimum building separation between parts of buildings between 25m and 35m above natural ground level. The required separation distance is 12m between each of the proposed towers. The western elevation of Tower B involves a 6.7m length which is separated from Tower A by 6m. Similarly, a 17.2m length of the same elevation of Tower B is separated from Tower C by 6m.

The objectives to clause 7.4 are provided as subclause (1) as follows:

- (1) The objective of this clause is to ensure minimum sufficient separation of buildings for reasons of visual appearance, privacy and solar access.*

The proposed development is considered to be consistent with the above objective, notwithstanding the numerical non-compliance. The following sets out reasons why compliance with the standard is considered to be unreasonable or unnecessary in the circumstances of the case.

Reason for Variation 1: The Non-Compliance is Technical in Nature

The non-compliance arises because the design provides a 6m wide gap between Tower B and each of Towers A and C. An alternative design solution would be to simply attach Tower B to Towers A and C to create a single U-shaped courtyard building. Under that scenario, there would be no separation at all, and hence no minimum separation distance requirement.

However the proposed design is considered to deliver a superior outcome to the above alternative. The proposed 6m wide gaps between each of the buildings assists in reducing

apparent bulk and scale. It also allows solar access to the private open space areas of the south western corner units in Block B. To that extent, the proposed development delivers a better design outcome in terms of solar access than would the above alternative design which complies with the standard. Accordingly, the proposal is considered to be consistent with the solar access aspect of the objective and also delivers a better visual appearance. As such strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstances of the case. .

Reason for Variation 2: The Absence of Windows to the Encroaching Sections of each Building

To the extent that the objective of the building separation requirement is to preserve satisfactory privacy, it is relevant that the encroaching sections of each building do not provide any windows capable of facilitating overlooking. The window schedule submitted with the application indicates that all opposing windows which are within the minimum separation distances are highlight windows. While the schedule does not specify a minimum sill height, a condition of consent can be imposed requiring the same to be 1500mm. Accordingly, there are no privacy impacts as a consequence of the proposed non-compliance and for that reason, strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstance of the case.

Reason for Variation 3: The Absence of Overshadowing Impacts

The proposed building separation encroachments do not result in any additional overshadowing to the adjacent residential flat buildings and particularly to the balconies of the adjacent development. To the extent that the objective of the standard is to ensure sufficient solar access, strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstances of the case.

Reason for Variation 4: Irregular Site Shape and Expansive Street Frontage

It is considered that the subject site is an irregular shape with large street frontages to both Atkinson and Shepherd Streets. A fundamental principal of good design in area having high pedestrian density is to frame and define the public domain with a well defined street edge and street wall. However if Tower B were to be truncated so as to remove the 'offending' edges, the result would be that large void areas would be created at the north east and south east corners of the site. Both of these corners are visually significant and it is far more appropriate that those spaces be defined by edge treatment built form rather than left as amorphous ill-defined voids. As such, the proposed design is considered to deliver a better visual presentation to Shephard Street and Atkinson Street than would the above described complying arrangement.

Accordingly, strict compliance with the standard is considered to be unreasonable and unnecessary in the circumstance of the case.

The above reasons for variation to the standard have demonstrated that the objective of the standard will not be offended, as a consequence of the proposed building separation encroachment. For these reasons, the proposed variation is considered to be consistent with the public interest for the purposes of clause 4.6(4)(a)(ii) of LLEP 2008.

It is further noted that the proposed variation is not to a development standard referred to in clause 4.6(8). In the particular circumstances of the subject site and the proposed development, there is no public benefit in maintaining the standard and similarly, the proposed variation does not raise any matters of significance to state or regional planning (clause 4.6(5)(a) and (b)).

Having regard to the above matters, variation to the standard as proposed is considered to be reasonable and appropriate in the circumstances of the case.

4.2 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

Clause 7 of SEEP 55 requires that contamination be considered in the assessment of Development Applications. Given the previous commercial/industrial use of the site it is considered possible that the existing site has been contaminated. A preliminary hazard analysis has been prepared by Geotechnique and submitted under separate cover. The Assessment concludes that the site would be suitable for the proposed residential use, subject to sampling after existing buildings are removed. Any identified contamination would be required to be remediated during the Construction Certificate process.

4.3 STATE ENVIRONMENTAL PLANNING POLICY 65 (DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT)

Table 3: Design Quality of Residential Flat Development Assessment

PRINCIPLE	PROPOSED
Principle 1: Context and 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.	The context of the site is in a state of transition from former industrial land to a high density residential environment. Critical aspects of site context include the railway line to the west, Georges River to the east and the Paper Mill Development to the south east.

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 neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.	LDCP 2008, and particularly the Liverpool CBD provisions make clear that a strongly perimeter built form is appropriate in order to create a well defined street edge. The current design has emerged following an explorative process of multiple concept designs; wide ranging consultation with Council and specialist consultants. What is proposed is a contemporary design which is contextually appropriate to this south western firing area of the CBD.
Principle 2: Built Form and 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.	Key elements of scale include floor space ratio, height and building proportions. The proposed development provides a floor space ratio which is significantly less than the statutory maximum. It is noted in this regard that the applicable floor space ratio development standard is based on a sliding scale relative to site area. However whilst disproportionately greater floorspace is anticipated for larger sites such as the subject, the height of buildings development standard does not include similar bonus provisions for larger sites. Absent the floor space ratio bonus, the combination of floor space ratio and height of buildings development standards operate to promote tall and slender buildings occupying comparatively low site coverage. It is considered that this description of height and site coverage is squarely representative of the desired future character of the Liverpool CBD area. As such in order to maintain consistency in scale with likely future development (and including the approved Paper Mill Development) it is essential that where site area makes available the floor space ratio bonuses that the height of buildings development standard should be varied rather than to develop the site for larger but squatter buildings occupying a larger site coverage and affording less

	generous landscaped communal open space areas. This is the design direction which has been appropriately followed by the South Eastern adjoining Paper Mill Development and for which development consent has been granted despite significant non-compliance with the applicable height of buildings development standard. Moreover, the proposed building heights have been arranged to achieve a graduation in building scale from the very tall approved development at the Paper Mill site down to the 24 m height limit which can be expected to apply to adjoining developments to the north and west. For the above reasons the scale of the development is considered to be appropriate and highly responsive to the immediate site context as well as the desired future character for the locality. The principal concepts of the built form are as follows: · The apartment block is punctuated and broken down in mass relating directly to the scale of their neighbours enabling excellent daylight access. · All Street facades conform to the DCP mandate of 'base and upper' portions of a building promoting active ground floor uses. · Direct street access is available. These design concepts ensure consistency with this principle.
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	The density of the proposed development when expressed as a floor space ratio is well under the statutory maximum. The subject site is appropriately located relative to public transport, shopping and employment opportunities to support higher residential densities. Accordingly, the development is considered to be consistent with this principle.

environment.	
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 liveability 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.	The development meets the provisions under SEPP and BASIX which seeks to achieve energy and water efficiency and improved thermal performance of the proposed development. As part of the compliance with the SEPP and to meet the provisions contained within this part, the proposal will incorporate features relating to ESD in the design and construction of the development, including water efficient fixtures, energy saving devices and rainwater retention for irrigation of the garden areas. In terms of design elements, the residential components have been designed to achieve a high level of cross flow ventilation and generally good solar access consistent with the provisions contained within the Apartment Design Guide. These design principles ensure consistency with this principle.
Principle 5: Landscape Good design recognises 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, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat	The proposed development provides for communal open space, as well as private open space in the form of a courtyard or balcony in excess of the minimum requirements for each unit proposed. The landscaping will be carried out in accordance with the Landscape Concept Plan submitted with the development application. The scheme provides shading, areas for relaxation and greatly adds to the amenity of the development. These design principles ensure consistency with this principle.

values and preserving green networks. Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.	
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.	The design provides adequate levels of internal amenity for future occupants. Generally the units will have good sunlight and solar access, natural ventilation and have suitable visual and acoustic privacy. This is consistent with the provisions contained under the ADG. The units will have appropriate storage and effective floor layouts and will be provided with private open space area either in the form of a courtyard or balcony. The development will be required to comply with the requirements contained under the Building Code of Australia (BCA) which defines minimum acceptable construction outcomes to minimise noise transfer between units and provide for natural ventilation and daylight. Access for all is a fundamental tenet of the development.
Principle 7: Safety Good design optimises 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 maximise passive surveillance of public and communal areas promote safety. A positive relationship between public	The proposal provides good passive surveillance with sight lines across the site and to the adjacent streets, particularly at ground level with living areas of dwellings looking out onto both streets. This is encouraged as a design element under the Crime Prevention Through Environmental Design Principles (CPTED). Suitable street and ground level lighting will be provided

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.	within the development to maximise surveillance opportunities at night and to reduce concealed areas. Suitable lighting will be provided within and around each car parking area. As demonstrated within the accompanying plans and information, the development is consistent with the principles contained within CPTED.
Principle 9: 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 and providing opportunities for social interaction among residents.	The proposal will provide for a wide variety of apartment layouts and sizes which will compliment the type of housing within the available area. Affordability has been a key driver in the design of the apartments. The site is highly sustainable in terms of location to local public transport, leisure and infrastructure. These design principles ensure consistency with this principle.
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 a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	As described in Principle 1, from the outset, the decision to employ a distinctly contemporary language was taken. Form, material, finish and colour reinforce an inspirational proposal which embraces the principles established in DCP 2008. The aesthetic of the architectural design is therefore consistent with the objectives of Principle 10.

4.4 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The proposed development is identified as BASIX affected development. The application is accompanied by a BASIX Certificate and accordingly, the statutory obligations delivered under the SEPP have been appropriately discharged.

4.5 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

Division 17 of SEPP Infrastructure sets out requirements in relation to roads and traffic. Subdivision 2 sets out requirements for development in or adjacent to rail corridors and road reservations. As the development is located adjacent to the south west rail corridor, an Acoustic Report has been prepared in accordance with the requirements specified within clause 102 of the SEPP. This Report accompanies the Development Application.

Clause 104 together with Schedule 3, sets out consultation and referral requirements for traffic generating developments. The applicable threshold for apartment buildings not having frontage to a classified road is 300 dwellings. The dwelling yield of the proposed development is considerably below that threshold and accordingly, referral to the RMS is not required.

4.6 DEEMED STATE ENVIRONMENTAL PLANNING POLICY - GREATER METROPOLITAN REGIONAL ENVIRONMENTAL PLAN NO 2 - GEORGES RIVER CATCHMENT

Greater Metropolitan Regional Environmental Plan No. 2 - Georges River Catchment (REP 2) applies to the site and aims to maintain and improve the water quality of river flows of the Georges River and its tributaries. It sets out requirements to ensure that development is managed in a manner that is in keeping with the national, state, regional and local significance of the catchment.

The aims and objectives of REP 2 are provided at Clause 5 of the plan. The relevant aims and objectives of this plan are:

- a) to maintain and improve the water quality and river flows of the Georges River and its tributaries and ensure that development is managed in a manner that is in keeping with the national, State, regional and local significance of the Catchment,*
- b) to protect and enhance the environmental quality of the Catchment for the benefit of all users through the management and use of the resources in the Catchment in an ecologically sustainable manner,*
- c) to ensure consistency with local environmental plans and also in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment where there is potential to impact adversely on groundwater and on the water quality and river flows within the Georges River or its tributaries.*

The relevant aims and objectives of REP 2, as outlined above, relate to the impacts of development on water quality within the Georges River Catchment. In this respect, the

potential impacts of the development on water quality principally relate to soil and sediment control during the construction phase of the proposed development. The application is accompanied by a soil and sediment control plan which provides the mechanism by which such impacts can be appropriately mitigated.

The policy sets out general and specific planning principles, which are to be applied when a consent authority determines a Development Application. The proposed development is considered to be consistent with the general provisions, whilst none of the specific principles are relevant to the proposed development.

4.7 LIVERPOOL DEVELOPMENT CONTROL PLAN 2008

The proposed development has been assessed in accordance with the provisions of LDCP. The following **Table 1: Liverpool Development Control Plan – Compliance Assessment** provides a summary of that assessment:

Table 1: Liverpool Development Control Plan – Compliance Assessment

DCP Part 1 – General Controls for all Development

Part 1 – General Controls for all Development		
Requirement (Clause)	Proposed	Complies?
Tree Preservation (1.2)	See Landscape Plan	Yes
Landscaping and incorporation of Existing trees (1.3)	See Landscape Plan	Yes
Bushland and Fauna Habitat Preservation (1.4)	N/A	N/A
Bushfire Risk (1.5)	N/A	N/A
Water Cycle Management (1.6) Various controls in relation to stormwater design.	The application is accompanied by a stormwater concept plan.	Yes
Development near a Watercourse (1.7)	N/A	N/A
Erosion and Sediment Control (1.8)		
1. The development application shall be accompanied by either a Soil and Water Management Plan (SWMP) or an Erosion and Sediment Control Plan (ESCP).	The proposed development is accompanied by ESCP, which will be prepared in accordance with <i>Managing Urban Stormwater Soils and Construction</i> .	Yes
2. These plans shall be prepared in accordance with <i>Managing Urban Stormwater Soils and Construction</i> , also	The ESCP has been prepared in accordance with the requisite guidelines.	Yes

known as the <i>Blue Book</i> (current edition) produced by the <i>NSW Department of Housing</i>. The plans should form part of the engineering design drawings and be documented in the construction plans. 3. Various requirements for items to be included in the SWMP and ESCP	The plans include all the required elements.	Yes
Flooding Risk (1.9)	Site located within Flood Study area as per Council mapping. A Flood Report has been prepared and accompanies this Development Application.	Yes
Contaminated Land Risk (1.10)	Clause 7 of SEEP 55 requires that contamination be considered in the assessment of Development Applications. Given the previous commercial/industrial use of the site it is considered possible that the existing site has been contaminated. Although unlikely to be contaminated, a Preliminary Assessment Report is considered necessary in this instance and will be prepared accordingly.	Yes
Salinity Risk (1.11)	N/A	N/A
Acid Sulfate Soils Risk (1.12) 1. If acid sulfate soils are present and not likely to be disturbed, best practice measures employed to manage the quality of water leaving the site shall be detailed in the SEE or equivalent.	The proposed development has been classified as a Class 5 in the Liverpool Local Environmental An Acid Sulfate Soil Report accompanies this Development Application.	Yes

2. If acid sulfate soils are present and likely to be disturbed, an assessment of the potential risk from disturbance of the acid sulfate soils shall be undertaken. The analysis and assessment shall be approved by Council prior to the issuing of development consent.	Acid sulfate soils have been determined not to be present in actionable quantities.	Yes
3. If acid sulfate soils are present and likely to be disturbed an acid sulfate soils management plan shall be prepared in accordance with the guidelines. The acid sulfate soils management plan shall be approved by Council prior to the issuing of development consent.	No management plan required	Yes
4. Any acid sulfate soils analysis, assessments and management plans shall be undertaken or prepared by an appropriately qualified professional with experience in acid sulfate soils analysis and assessments as well as the preparation of acid sulphate soils management plans.	The acid sulfate soils analysis has been undertaken by an appropriately qualified geotechnical expert.	Yes
5. Council may require monitoring reports on the implementation of an acid sulfate soils management plan to be submitted.	No monitoring required in this instance.	Yes
Weeds (1.13)	N/A	N/A
Demolition of Existing Developments (1.14)	Demolition of existing buildings on the subject site are to be carried out in accordance with Council	Yes

	requirements including any conditions to be placed in any Consent.	
On-site Sewage Developments (1.15)	N/A	N/A
Aboriginal Archaeology (1.16)	N/A	N/A
Heritage and Archaeological Sites (1.17) 1.17.12 Development in the vicinity of a heritage item shall be designed to respect and complement the heritage item in terms of: • Scale; • Materials, colours and finishes; • Building and street alignment; • Landscaping and fencing. 1.17.13 Development in the vicinity of heritage items is to minimise the impact on the setting of the heritage item by: • Retaining and respecting significant views to and from the heritage item; • Retaining original or significant landscaping (especially plantings associated with the heritage item); • Providing an adequate area around the place to allow interpretation of the heritage item.	The proposed development is in the vicinity of heritage item 104 & 105 under Liverpool Local Environmental Plan 2008 and it will be designed to respect the heritage item. See Heritage Impact Statement accompanying this Development Application. The proposed development will minimise impact on the setting by retaining and respecting significant views to and from the heritage item	Yes Yes
Notification of Applications (1.18)	The application will be notified and advertised in accordance with Council policy.	Yes
Used Clothing Bins (1.19)	N/A	N/A
Car Parking and Access (1.20) 1.20.1 Overall Design Considerations 1. The need for traffic to move to and from the frontage road with minimum disruption to passing traffic and maximum pedestrian safety.	The proposed development will facilitate the movement of traffic with minimum disruption while ensuring pedestrian safety.	Yes

2. Provision of adequate capacity in circulation roadways and aisles to handle peak hour movements without congestion.	The proposed development will provide adequate capacity in circulation roadways and aisles to accommodate peak hour movements.	Yes
3. Avoid as far as practicable conflicts between intersecting streams of circulating traffic.	The proposed development will avoid conflicts between intersecting streams of traffic.	Yes
4. Minimum length travel paths between entry/exit points and car parking spaces.	The distance of the travel path between entry/exit points to the nearest car parking spaces are approximately 20m.	
Subdivision of Land and Buildings (1.21)	N/A	N/A
Water Conservation (1.22) <i>Residential</i> New dwellings, including a residential component within a mixed-use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with <i>State Environmental Planning Policy – Building Sustainability Index (BASIX)</i> .	The proposed development will comply with <i>State Environmental Planning Policy – Building Sustainability Index (BASIX)</i> . See BASIX Certificate accompanying this application.	Yes

Energy Conservation (1.23) <i>Residential</i> Dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with <i>State Environmental Planning Policy – Building Sustainability Index (BASIX)</i>. A complying BASIX report is to be submitted with all development applications containing residential activities.	The proposed development will comply with <i>State Environmental Planning Policy – Building Sustainability Index (BASIX)</i> and will be accompanied by a BASIX report with the development application. See BASIX Certificate accompanying this application.	Yes
Landfill (1.24) 1. All fill applied should be Virgin Excavated Natural Material (VENM), as defined by the <i>NSW Department of Environment and Climate Change</i>. Any fill involving material other than VENM is subject to referral to the State Government as potential Integrated Development or contaminated land assessment. 2. All filling in the vicinity of native vegetation must be local material (in order to minimise the spread of weeds). 3. Any excavation within the zone of influence of any other building will require a Dilapidation Report.	Any fill will be Virgin Excavated Natural Material (VENM), as defined by the <i>NSW Department of Environment and Climate Change</i>. Any fill will be Virgin Excavated Natural Material (VENM), as defined by the <i>NSW Department of Environment and Climate Change</i>. No retaining wall structures within easements.	Yes Yes Yes

4. Refer to the section on Salinity if cutting greater 500mm is to be undertaken. 5. No retaining wall structures will be permitted within any easements such as drainage easements. Retaining walls located on the boundary of two allotments or boundary to a public street or public reserve shall be of masonry construction. Other types of retaining wall structure may be permitted if the structure is located wholly within the property.	Site salinity has been determined to be satisfactory. No retaining wall structures within easements.	Yes Yes
Waste Disposal and Re-use Facilities (1.25) 16. A Waste Management Plan (WMP) shall be submitted with a Development Application for any relevant activities generating waste. The WMP is provided in three sections: – Demolition – Construction – On-going waste management. 17. The WMP shall show: – Estimated volumes of waste generated according to type – Information about reuse, recycling and disposal options for all types of waste produced on site during demolition, construction or ongoing waste generation activities.	See Waste Management Plan (WMP) accompanying this application. See Waste Management Plan accompanying this application.	Yes Yes

18. The WMP must then be implemented on site throughout the development process, demolition, construction and use of the development. During demolition and construction, the WMP together with proof of lawful disposal for all waste that is disposed of or otherwise recycled from the site must be retained onsite in a Waste Data File. Proof is to include a log book with associated receipt/invoices, waste classification and site validation certificate.	The WMP will be implemented throughout all stages of the development along with proof of lawful disposals onto a logbook.	Yes
19. All entries in the Waste Data File must include: – Time and Date – Description and size of waste – Waste facility used – Vehicle registrations and Company name –	Entries in the Waste Data File will include the required details.	Yes
20. The Waste Data File must be made available for inspection by any authorised Council Officer at any time during site works and at the conclusion of site works should be retained by the person responsible and made available for inspection by authorised Council Officers.	The Waste Data File will be made available for inspection by an authorised Council Officer at any time.	Yes
Outdoor Advertising and Signage (1.26)		
Various controls relating to advertising and signage.	The application does not propose signage at this stage.	N/A
Social Impact Assessment (1.27)		
Social Impact Assessment Required	A social impact assessment has been prepared and submitted under separate cover	Yes

Part 4 – Development in Liverpool City Centre		
Requirement (Clause)	Proposed	Complies?
<u>Controls for Building Form (2)</u>		
<u>Building Form (2.1)</u>		
<i>Building to Street Alignment and Street Setbacks</i>		
1. Street building alignment and street setbacks are to comply of 4 – 4.5m landscaped setback.	The proposal involves minor encroachments into the 4-4.5m setback line.	No. See discussion at Section 4.7.1.
2. The external facades of buildings are to be aligned with the streets that they front.	The facade of the proposed development is aligned with both Atkinson and Shepherd Streets.	Yes
3. Notwithstanding the setback controls, where development must be built to the street alignment (as identified in Figure 3), it must also be built to the side boundaries (0m setback) where fronting the street. The minimum height of development built to the side boundary is to comply with the minimum street frontage height requirement (15-20m).	The proposed development presents a 0m setback where required. The height of the street frontage is approximately 17m.	Yes
4. Balconies may project up to 1.2m into front building setbacks in the High Density Residential zone and up to 600mm in all other zones, provided the cumulative width of all balconies at that particular level totals no more than 50% of the horizontal width of the building façade, measured at that level.	The proposed development involves minor balcony encroachments into the front setback area of greater than 1.2m. The location of these encroachments is at the north-eastern and south-eastern corners of Block B. The balcony encroachments arise as a consequence of the curved site boundary and these locations. Across the totality of the	No. Minor non-compliance which is considered to be satisfactory on merit.

	development, balconies are generally contained within the front setback area. The proposed minor balcony encroachments do not derogate from the objectives of clause 2.1 of the DCP and are considered to be satisfactory given the site shape and dimensions.	
5. Minor projections into front building lines and setbacks for sun shading devices, entry awnings and cornices are permissible (see also Section 3.8 Building Exteriors).	The proposed development does not involve any setback encroachments for sun shade devices.	Not applicable
<i>Street Frontage Heights</i>		
1. The street frontage height of buildings must comply with the minimum (15m) and maximum (20m) heights (5 to 6 storeys) above mean ground level on the street front.	The proposed development does, in general, not adopt progressive setbacks as such, the street wall height is generally as per the total building height	No – See Section 4.7.2.
2. Notwithstanding the above, the street front height of any new building is to be consistent with the controls in Section 2.6 Solar Access.	Building heights have been designed so as to be in keeping with the controls in Section 2.6.	N/A
3. Notwithstanding the controls in Figure 5, the street frontage height controls of any new building adjacent to Heritage Items is to be appropriately scaled (refer to Section 7.1 Heritage Items and Special Heritage Areas.	The heritage report submitted with the application concludes that the proposed development is unlikely to have any impact on the significance on adjoining heritage items.	Yes
4. "Fake" building street walls	Fake facades not proposed.	Yes

(frames with the building line recessed behind) will not be permitted up to street frontage height level.		
<i>Building Depth and Bulk</i>		
1. The maximum of 500sqm floor plate sizes and 18m depth of residential buildings	The floor plate size of the proposed development will be >500 sqm and the depth of building will be >18m.	No. See Section 4.7.3.
2. Notwithstanding the above, the component of a building above the maximum specified street frontage is not to have a building length in excess of 45m.	The length of Block B is 75m. However it is separated by a 7m wide by 16m deep recess which divides its eastern elevation into 2 x 34m wide components.	Yes
<i>Boundary Setbacks and Building Depth and Bulk</i>		
1. The minimum building setbacks from the front, side and rear property boundaries are specified in Table 2 and illustrated generically in Figure 7. Applied to the proposed development these require varying setbacks between 3m and 9m.	The subject site has only 1 boundary which is not assessed as a front setback to a public road. The proposed setback to the Railway Corridor is generally nil.	No. See Section 4.7.4
2. In mixed use buildings, setbacks for the residential component are to be the distances specified in the table below for residential development in the specified zone.	Given the minor and limited extent of commercial floor space proposed, it is not considered appropriate to assess the subject application as a mixed use building. This is particular the case given the R4 – High Density Residential zoning of the site.	Yes

3. Buildings with a rear or side boundary to the rail corridor are to be setback a minimum of 12m with a landscaped area.	Nil setback proposed	No. See Section 4.7.4
<u>Site Cover and Deep Soil Zones (2.3)</u>		
<u>Landscape Design (2.4)</u>		
1. Landscaped areas are to be irrigated with recycled water.	Recycled water to be used on all landscaped areas.	Yes
2. Landscape species are to be selected in accordance with Council's schedule of Preferred Landscape Species.	See Landscape Plans for details.	Yes
3. Commercial and retail developments are to incorporate planting into accessible outdoor spaces.	See Landscape Plans for details.	Yes
4. Remnant vegetation must be maintained throughout the site wherever practicable.	Given the scale and extent of the proposed development, retention of existing vegetation is not practicable.	Yes
5. A long-term landscape concept plan must be provided for all landscaped areas, in particular the deep soil landscape zone. The plan must outline how landscaped areas are to be maintained for the life of the development.	See landscape concept plan for details.	Yes
6. Any new 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 (Winter Solstice).	The proposed development provides new public area at the southern and eastern boundaries. Given the orientation of the site, these areas will not achieve the requisite solar access. However this is considered to be a	No, however non-compliance is considered to be acceptable

<u>Planting on Structures (2.5)</u> 1. Areas with planting on structures are to be irrigated with recycled water. 2. Design for optimum conditions for plant growth by: – providing soil depth, soil volume and soil area appropriate to the size of the plants to be established, – providing appropriate soil conditions and irrigation methods, and – providing appropriate drainage. – Design planters to support the appropriate soil depth and plant selection by: – ensuring planter proportions accommodate the largest volume of soil possible and soil depths to ensure tree growth, and providing square or rectangular planting areas rather than narrow linear areas. 3. Increase minimum soil depths in accordance with: – the mix of plants in a planter for example where trees are planted in association with shrubs, groundcovers and grass, – the level of landscape management, particularly the frequency of irrigation, – anchorage requirements of large and medium trees,	function of site orientation rather than poor design. Recycles water to be used on all landscaped areas. All landscaping proposed to comply with the requirements in the DCP. See Landscape Plans for details. All landscaping proposed to comply with the requirements in the DCP. See Landscape Plans for details.	given the orientation of the site. Yes Yes Yes
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and soil type and quality. 4. Provide sufficient soil depth and area to allow for plant establishment and growth. The following minimum standards are recommended: – Large trees (over 8m high) minimum soil depth 1.3m, minimum soil volume 150m³ – Medium trees (2 – 8m high), minimum soil depth 1m, minimum soil volume 35m³ – Small trees (up to 2m high), minimum soil depth 0.8m, minimum soil volume 9m³ – Shrubs and ground cover, minimum soil depth 0.5m, no minimum soil volume.	See Landscape Plans for details.	Yes
<u>Amenity (3)</u> <u>Pedestrian Permeability (3.1)</u> <u>Active Street Frontages and Address (3.2)</u> <i>Street Address</i> 1. Street address is defined as: – a building that is not raised more than an weighted average of 700mm above street level, up to a maximum of 1.1m (refer to Section 3.3 Front Fences), and – contains entries, lobbies, and habitable rooms with clear glazing overlooking the street, and – excludes car parking areas.	N/A The proposed development delivers active street frontage for the full extent of the site's public road interface. Ground level street address is provided to all elevations. Car parking areas do not present to the street	N/A Yes Yes Yes

2. Street address is required on ground level of all areas identified in Figure 14.	The proposed development will provide a clear street address, direct access from the street and outlook over the street (habitable rooms with clear glazing windows).	Yes
3. 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.	Clear street address and direct access to ground level units is provided.	Yes
4. Provide multiple entrances for large developments including an entrance on each street frontage.	The proposed development is provided with multiple entrances in accordance with this control	Yes
5. Provide direct "front door" access to ground floor residential units.	The main entrance of the building will be accessible from the ground floor.	Yes
6. Residential buildings are to provide not less than 65% of the lot width as street address	The vast majority of the development is the residential component.	Yes
<u>Front Fences (3.3)</u>		
1. Front fences include fences to the primary and secondary street frontages, and side boundary fences forward of the building alignment.	The proposed development includes front fences to the ground floor apartments. Fencing in front of the neighbourhood shops, community room and private gymnasium is neither appropriate nor necessary.	Yes
2. Front fences are to be designed in accordance with Figures 14 and 15, and must not present a	The front fences are in accordance with the front fences control.	Yes

solid edge to the public domain greater than 1.3m above the footpath/public domain level (refer to Section 3.2 regarding Street Address). 3. The use of varied materials is preferred. The use of sheet metal is not permitted as a front fence material.		
<u>Safety and Security (3.4)</u> 1. Address "Safer-by-Design" principles to the design of public and private domain, and in all developments (including the NSW Police "Safer by Design" crime prevention through environmental design (CPTED) principles).	Sheet metal is not proposed to be used along any street frontage. The proposed development is considered satisfactory having regard to and address the principles of the "safer-by-design" Crime Prevention Through Environmental Design (CPTED).	Yes Yes
2. Ensure that the building design allows for passive surveillance of public and communal spaces, accessways, entries and driveways.	Good passive surveillance is achieved with sightlines across the site including the communal open space, access ways, entries and driveways which enhances the perception of safety.	Yes
3. Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and car parks.	No blind corners in pathways, stairwells, hallways, and car parks. The proposed development will be supported by lighting after dark where appropriate to reduce concealed areas.	Yes
4. Maximise the number of residential "front door" entries at ground level.	The design provides for high levels of passive surveillance of public and communal open space areas.	Yes

5. Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering.	The proposed development has maximised front entrance doors to each dwelling at ground level where possible.	Yes
6. Clearly define the development boundary to strengthen the transition between public, semi-private and private space. This can be actual or symbolic and can include landscaping, fences, change in paving material, etc.	The entrances provided by the proposed development will be easily identifiable due to it's location.	Yes
7. Provide adequate lighting of all pedestrian access ways, parking areas and building entries.	The proposed development will provide effective lighting along pedestrian access ways, parking areas and building entries.	Yes
8. Provide clear lines of sight and well-lit routes throughout the development.	Clear line of sight will be provided within the proposed development.	Yes
9. Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway.	The pedestrian pathways of the proposed development will feature a good casual surveillance.	Yes
<u>Vehicle Footpath Crossings (3.6)</u>		
<i>Location of Vehicle Access</i>		
1. No additional vehicle entry points will be permitted into the parking or service areas of development along those streets identified in the restrictions of vehicular entries maps.	The proposed development includes one vehicle access point.	Yes
2. In all other areas, one vehicle access point only (including the access for service vehicles and	The proposed development does not front a high pedestrian priority route.	Yes

parking for non-residential uses within mixed use developments) will be generally permitted.		
3. Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with high pedestrian priority routes identified in Figure 18 (marked yellow).	N/A	N/A
4. Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on-site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicle access points so that they are capable of shared access at a later date.	N/A	N/A
<i>Design of vehicle Access</i>		
1. Wherever practicable, vehicle access is to be a single lane crossing with a maximum width of 2.7m over the footpath, and perpendicular to the kerb alignment. In exceptional circumstances, a double lane crossing with a maximum width of 6m may be permitted for safety reasons (refer to Figure 18).	The proposed development will include vehicle access of a two way ingress/egress driveway crossing designed and dimensioned in accordance with the minimum width requirements under AS2890.1-2004. A lesser driveway width for this scale of development is not practicable.	Yes
2. Vehicle access ramps parallel to the street frontage will not be permitted.	The vehicle access ramp is parallel to the street frontage.	Yes
3. Ensure vehicle entry points are integrated into building design.	The vehicle entry points will be integrated into building design.	Yes

4. Doors to vehicle access points are to be roller shutters or tilting doors set back from the building facade.	Roller doors proposed.	Yes
5. Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.	The vehicle entrance point shall be incorporated into the front façade so as to blend well with the proposed building and surrounding locality.	Yes
<u>Pedestrian overpasses and Underpasses (3.7)</u>		
<u>Building Exterior (3.8)</u>		
1. Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of: – appropriate alignment and street frontage heights, – setbacks above street frontage heights, – appropriate materials and finishes selection, – facade proportions including horizontal or vertical emphasis, and – the provision of enclosed corners at street intersections.	No adjoining buildings as the property is surrounded entirely by Atkinson and Shepherd Streets and the rail corridor to the west. The proposed development and each building however has been designed so as to be in keeping with the existing surrounding development and future development likely in the immediate surrounds.	Yes
2. Balconies and terraces should be provided, particularly where buildings overlook public spaces. Gardens on the top of setback areas of buildings are encouraged.	The proposed development will provide balconies and terraces, with a small portion overlooking the communal open space. Refer to landscape details for plants on the balconies.	Yes
3. Articulate façades so that they address the street and add visual interest. Buildings are to be	The proposed development will have articulated facades which	Yes

articulated to differentiate between the base (street frontage height), middle and top in design.	have clearly defined parts of the building.	
4. Blank walls in general that address street frontages or public open space are discouraged. Where they are unavoidable building elements or landscaping must be used to break up large expanses of walls. In some cases an anti-graffiti coating will need to be applied to the wall to a height of 2 metres.	The parts of the building that address street frontages contain windows.	Yes
5. Finishes with high maintenance costs, those susceptible to degradation due to a corrosive environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.	All finishes to be of high quality and low maintenance. See schedule of external colours and materials accompanying this application.	Yes
6. To assist articulation and visual interest, expanses of any single material is to be avoided.	The proposed development will use a mix of material for the building exterior.	Yes
7. Limit sections of opaque or blank walls greater than 4m in length along the ground floor to a maximum of 30% of the building frontage.	Ground floors of each building have been designed in accordance with the requirements of the DCP.	Yes
8. Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass	N/A	N/A
9. Highly reflective finishes and curtain wall glazing are not permitted above ground floor	The proposed development will avoid the use of reflective finishes and curtain wall glazing	Yes

level (refer to Section 5.3).	above ground floor level.	
10. A materials sample board and schedule is required to be submitted with applications for development over \$1million or for that part of any development built to the street edge.	See schedule of external colours and materials accompanying this application.	Yes
11. Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space providing it does not fall within the definition of gross floor area and there is a public benefit, such as: – expressed cornice lines that assist in enhancing the streetscape, – projections such as entry canopies that add visual interest and amenity.	N/A	N/A
12. Communication towers such as mobile phone towers and the like, but excluding satellite dishes, are not to be located on residential buildings or mixed use buildings with a residential component.	N/A	N/A
13. Roof top structures, such as air conditioning, lift motor rooms, and the like are to be incorporated into the architectural design of the building.	The proposed development will incorporate roof top structures into the building design. These elements form key components of the design, particularly in the architectural roof feature requirements specified under the assessment of LLEP 2008.	Yes

<u>Corner Treatments (3.9)</u> 1. Buildings identified in Figures 20 and 21 are to address corner sites through architectural emphasis and use of distinguishing architectural features and materials to adjacent buildings, and an additional storey may be permitted onto the specified street frontage height range (refer to Figure 20 and Figure 6 Street Frontage Heights) below, 2. Notwithstanding the above, new corner buildings opposite or adjacent to Heritage Items are to respond to the Heritage Items in terms of height, scale and proportion. 3. Notwithstanding the above, new corner buildings opposite or adjacent to public open space are to comply with the sun access controls as set out in Liverpool LEP 2008. <u>Public Artworks (3.10)</u>	Each building in the proposed development satisfactorily addresses each street frontage through the use of distinguishing architectural features and materials. See Elevation Drawing for details. The proposed development is located in relative close proximity to a heritage item. See Heritage Impact Statement accompanying this application for further details. N/A N/A	Yes Yes N/A N/A
<u>Traffic and Access (4)</u> <u>Pedestrian Access and Mobility (4.1)</u> 1. Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor	The proposed main building entry point is clearly visible from the primary street frontage, Atkinson Street.	Yes

and occupant amenity.		
2. The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).	The proposed development has been designed to comply with the relevant Australian Standards (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).	Yes
3. Barrier free access is to be provided to not less than 20% of dwellings in each development and associated common areas.	Each building to be barrier free for at least 20% in all dwellings and common areas.	Yes
4. The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.	The development will provide pedestrian access at the ground floor from Atkinson Street.	Yes
5. The development must provide accessible internal access, linking to public stress and building entry points.	The proposed development will provide access to the building entry point.	Yes
6. Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.	Pedestrian access ways to be compatible with the surrounding locality with appropriate safety and accessible features in accordance with AS 1428.1.	Yes

<u>Vehicular Driveways and Manoeuvring Areas</u>		
1. Driveways should be: – provided from lanes and secondary streets rather than the primary street, wherever practical, – located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees, – located a minimum of 10m from the perpendicular of any intersection of any two roads, and – Located to minimise noise and amenity impacts on adjacent residential development.	The driveways are located in secondary streets (Atkinson Street), and located a minimum of 10m from an intersection of Atkinson Street and Shepherd Street. The Driveway is also located into account of services in within the road reserve. It is to minimise the potential noise and amenity impacts on the adjacent residential development on Atkinson Street.	Yes
2. Vehicle access is to be integrated into the building design so as to be visually recessive.	The driveway will be well integrated to the proposed building.	Yes
3. All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.	The location of the driveway will allow vehicle to enter and leave the site in a forward direction.	Yes
4. Design of driveway crossings must be in accordance with Council's standard Vehicle Entrance Designs, with any works within the footpath and road reserve subject to a Section 138 Roads Act approval.	The design of driveway crossings are to comply with the Council's Standard Vehicle Entrance Design.	Yes
5. Driveway widths must comply with the relevant Australian Standards.	The proposed driveway will comply with relevant Australian Standards.	Yes

6. Car space dimensions must comply with Australian Standard 2890.1.	The Car space dimensions are to comply with Australian Standard 2890.1 (AS 2890.1)	Yes
7. Driveway grades, vehicular ramp width/ grades and passing bays must be in accordance with the relevant Australian Standard, (AS 2890.1).	Driveway grades, vehicular ramp width/ grades and passing bays is to comply with AS 2890.1.	Yes
8. Access ways to underground parking should be sited to minimise noise impacts on adjacent habitable rooms, particularly bedrooms.	The proposed access way to underground parking has been located to minimised noise impacts.	Yes
<u>On Site Parking (4.3)</u>		
<i>General (All Development)</i>		
1. Except as separately provided for in the Liverpool LEP 2008, on site vehicle and bicycle parking is to be provided in accordance with: – 1 Space per two studio apartments – 1 space per one bedroom or two bedroom apartments – 1.5 spaces per three or more bedroom units – 1 space per 10 units or part thereof, for visitors – 1 space per 40 units for service vehicle (including removalist vans (and car washing bays, up to a maximum of 4 spaces per building.	The total number of car spaces that will be provided by the proposed development is 162 spaces. This comprises 156 resident spaces, 13 visitor spaces, 3 service vehicle spaces and 3 commercial parking spaces.	Yes
2. Car parking and associated internal manoeuvring areas provided over and beyond that	Car parking spaces and maneuverability is proposed to comply with AS 2890.1 2004 and	Yes

required by this Part is to be calculated towards gross floor area. Car parking above ground level is to have a minimum floor to ceiling height of 2.8m so it can be adapted to another use in the future. Onsite parking must meet the relevant Australian Standard (AS 2890.1 2004) – Parking Facilities or as amended. To accommodate people with disabilities provide a minimum of 2% of the required parking spaces, or minimum 1 space per development (whichever is the greater) as an appropriately designated and signed disabled parking space. Bicycle parking is to be in secure and accessible locations with weather protection.	other relevant Australian Standards.	
3. Required parking for service and delivery vehicles must be provided on site unless Council is satisfied that adequate dedicated on street „loading zone“ space(s) are available in the vicinity.	The proposed development has been designed to accommodate service and delivery vehicles on site.	Yes
<i>Developments in all other zones (Other than Commercial and Mixed Use Zones)</i> 9. Onsite parking for residential flat buildings (or residential flat building component of a mixed use development) is to be wholly in basement parking unless Council is satisfied that unique site conditions prevent achieving all parking in basements. Council may require	Parking spaces are generally located below ground level. Given the topography of the site, this is not the case for all parking areas, however in all cases, frontage buildings obscure visibility of the parking areas. The objectives and intent of the control is considered to	Yes

provision of a supporting geo-technical report or other supporting documentation, prepared by an appropriately qualified professional as information to accompany a development application to Council.	be satisfied.	
10. The impact of any on grade car parking must be minimised by: – Locating parking on the side or rear of the lot, away from the street frontage – Provision of fencing or landscaping to screen the view of cars from adjacent streets and buildings – Incorporating car parking into landscape design of the site (such as planting between parking bays to improve views, selection of paving material and screening from communal open spaces areas)	Car Parking for on site development which has been incorporated into the landscape and have also be locates on the side of the lot with the provision of fencing around the lot.	Yes
11. Natural ventilation should be provide to underground parking areas, where possible, with ventilation grills and structures: – Integrated into the overall façade and landscape design of the development – Not located on the primary street façade and – Oriented away from windows of habitable rooms and private open space areas	Natural ventilation will be provided by the proposed development.	Yes

<u>Environmental Management (5)</u> <u>Energy Efficiency Conservation (5.1)</u> 1. New dwellings, including dwellings within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). A complying BASIX report is to be submitted with all development applications containing residential activities. <u>Water Conservation (5.2)</u> 1. New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). <u>Reflectivity (5.3)</u> 1. New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. 2. Visible light reflectivity from building materials used on the facades of new buildings should not exceed 20%. 3. Subject to the extent and nature	The proposed development will be accompanied by a Building Sustainability Index (BASIX) Certificate in accordance with the Environmental Planning and Assessment Regulations 2000 and SEPP (BASIX) r004. The proposed development is to comply with the State Environmental Planning Policy Building Sustainability Index (BASIX). The facade of the proposed building will not produce high level of glare which causes threatens the safety of pedestrians or drivers due to the selection of material used. The building materials that will use no more than 20% reflective materials. A condition of consent can be	Yes Yes Yes Yes Yes
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of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required.	reasonably imposed specifying that glazing does not exceed a specified reflectivity index.	
<u>Wind mitigation (5.4)</u> 1. To ensure public safety and comfort, the following maximum wind criteria are to be met by new buildings: – 10m/second in retail streets, – 13m/second along major pedestrian streets, parks and public places, and – 16m/second in all other streets.	Engineering details to be provided at lodgement of the Construction Certificate application demonstrating compliance with the Building Code of Australia and relevant Australian Standards including wind ratings.	Yes
2. Site design for tall buildings (towers) should: – set tower buildings back from lower structures built at the street frontage to protect pedestrians from strong wind downdrafts at the base of the tower, – ensure that tower buildings are well spaced from each other to allow breezes to penetrate city centre, – consider the shape, location and height of buildings to satisfy wind criteria for public safety and comfort at ground level, and – ensure useability of open terraces and balconies.	The proposed development has been designed to ensure that the buildings are spaced from other tall buildings, consider its shape, location and height and ensure the useability of open terraces and balconies to minimise wind impacts and pedestrians discomfort at the ground level.	Yes
3. A Wind Effects Report is to be	N/A	N/A

submitted with the DA for all buildings greater than 35m in height.		
4. For buildings over 48m in height, results of a wind tunnel test are to be included in the report	N/A	N/A
<u>Noise (5.5)</u>		
1. An acoustic report is required for all noise affected locations, as identified in Figure 25. This report is to demonstrate that appropriate noise attenuation and barrier planning is to be implemented.	The proposed development is identified as one of the lots potentially affected by noise source 3 (railway). It will be accompanied by an acoustic report.	Yes
2. Sites adjacent to noise sources identified in Figure 25 are to be designed in a manner that any residential development is shielded from the noise source by virtue of the location and orientation of built form on the site. Depending on the type and scale of development, acoustic assessment may be required for sites outside the noise source 3 areas. Fig. 5.1	The residential component of the site will be located furthest away from the noise source.	Yes
3. An 8m setback is to be provided to any residential component of development located fronting onto Terminus Street.	N/A	N/A
4. An 8m setback is to be provided to any habitable building located adjacent to the Hume Highway	N/A	N/A

<u>Waste (5.6)</u> <i>Residential Development</i> 1. Provision must be made for the different types of waste generation (General Waste, Recycling, and Green Waste). 2. In dwellings not exceeding six (6) dwellings, individual waste storage facilities may be permitted. 3. In a development of more than six dwellings or where the topography, or distance to the street makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is: - Not visible from the street - Easily accessible to dwelling occupants - Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to an approved collection point), - Has water and drainage facilities for cleaning and maintenance; and - Does not immediately adjoin private open space, windows or clothes drying areas 4. Wherever a rear lane is present and waste removal is available, the rear lane is to be utilised for the removal of waste. 5. Subject to Council collection policy, common garbage	See Waste Management Plan N/A See Waste Management Plan See Waste Management Plan See Waste Management Plan	Yes N/A Yes Yes Yes
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storage areas must be sized to either accommodate the number of individual bins required or to accommodate sufficient larger bins with the minimum dimensions		
6. The size and number of the waste bins shall be determined having regard to the need for either on-site access by collection vehicles or the requirement for bins to be wheeled to the street for collection by a contractor. If transferred to the street for collection, the body corporate or a caretaker must be responsible for the movement of bins to their collection point.	See Waste Management Plan	Yes
<u>Floodplain and Water Cycle Management (5.7)</u> The following controls apply to development that is located within Council's identified floodplain. (Note: site specific investigations will need to be undertaken by proponents)		
1. The habitable floor level of all dwellings is to be at least 0.5m above the 1% flood level.	The proposed development will be in accordance to the 1% flood level. See Flood Report	Yes
2. All services associated with the development are to be either flood proofed or located at least 0.5m above the 1% flood level.	See Flood Report	Yes
3. Development is to comply with Council's adopted Floodplain Management Studies and Plans	The proposed development will comply with the Council's adopted Floodplain	Yes

for relevant catchments such as Georges River, Cabramatta Creek and the city centre.	Management Studies and Plans. See Flood Report.	
4. Development is to comply with the NSW Government's current Floodplain Management Manual	The proposed development will comply with NSW Government's Floodplain Management Manual 2005.	Yes
5. Development is not to make flooding any worse than existing conditions and demonstrate any mitigation measures for changes in floodplain, such as loss of flood storage	See Flood Study	Yes
6. Any Statement of Environmental Effects submitted with an application shall identify the flood impact and risk of flooding to residents as a result of the development. The Statement is to assess the development by considering the primary objective of the NSW Government's Flood Prone Land Policy, that is: – "to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, and to reduce private and public losses resulting from floods, utilising ecologically positive methods wherever possible."	The proposed development has considered the objectives NSW Government's Flood Prone Land Policy.	Yes
7. Development is to provide effective flood access and evacuation routes from flood prone areas. The routes shall:	The proposed development will provide effective flood access and evacuation routes.	Yes

– Remain accessible for sufficient period of time to evacuate people and possessions. – Consider both pedestrian and vehicular access – Consider access and evacuation during extreme flood up to and including PMF.		
8. Any basement car parking area is to be protected from inundation by flood equal to or greater than the 1% flood.	The driveway of the proposed development will minimise risk during floods.	Yes
9. The driveway providing access between the road and on-site car parking spaces must be provided at a level that minimises risk to persons and vehicles during floods.		
10. Any car parking areas that are at a level below the 5% flood level or more than 0.8m below the 1% flood level shall have appropriate warning systems and signs to assist in safe evacuation.	The car parking areas will provide safe pedestrian routes in the event of floods.	Yes
11. All exits from car parking areas shall be located such that pedestrian evacuation paths provide safe travel routes to a place of refuge above the PMF.	N/A	N/A
<u>Sewage Treatment Plant (5.8)</u> <u>Business where Trolleys are required (5.9)</u>	N/A	N/A
<u>Controls for Residential Development (6)</u> <u>Housing Choice and Mix (6.1)</u>		

In addition to the provisions for apartment mix as per Part 3 of the Residential Flat Design Code, the following additional controls apply. 1. To achieve a mix of living styles, sizes and layouts within each residential development, 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 to be less than 10% of the total mix of units within each development, and 2. For smaller developments (less than six dwellings) achieve a mix appropriate to the locality. 3. For development built by (or on behalf of) the Department of Housing, an alternative mix of unit types may be approved, subject to housing needs being demonstrated by the Department 4. For residential flat buildings and multi-unit housing, 10% of all dwellings (or at least one dwelling – whichever is greater) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "pre-adaptation" design details to ensure visitability is achieved.	The total mix of units are comprised of 18% one bedroom units and 6% (three bedroom units. N/A N/A Proposed development is designed accordance to AS 4299-1995 Adaptable Housing Standard.	No. See Section 4.7.5 N/A N/A Yes
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5. Where possible, adaptable dwellings shall be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities.	Adaptable dwellings are located on and above the ground floor for easy access. The proposed development includes lift access available within the building from the basement.	Yes
6. The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).	See Access Report accompanying this application.	Yes
7. Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces	Car parking and garages are to comply with AS 1428 and the Disability Discrimination Act 1992.	Yes

4.7.1 *Street Alignment and Setback*

Control 1 to clause 2.1 of Part 4 of DCP 2008 requires, by reference to Figure 3(a), a 4m - 4.5 m street building alignment. Pursuant to control 4 balconies may encroach up to 1.2 m into the setback area.

The proposed development generally meets or exceeds the setback requirement. However at the north-eastern and south-eastern corners of the site, where the site boundary is displayed, the proposed development approaches by up to 1.5 m in respect of building areas and by up to 2.5 m in respect of balcony areas. The following Figure 1 graphically illustrates the areas of non-compliance.

Figure 12: Proposed Setback Encroachments



The objectives to Clause 1.2 are:

- a) To achieve a strong and consistent definition of the public domain.
- b) To align external facades of buildings with the streets that they front.
- c) To provide front setbacks appropriate to building function and character.
- d) To establish the desired spatial proportions of the street and define the street edge.

- e) *To create a transition between public and private space.*
- f) *To locate active uses, such as shopfronts, closer to pedestrian activity areas.*
- g) *To allow an outlook to, and surveillance of, the street.*
- h) *To allow for street landscape character, where appropriate. To maintain sun access to the public domain*

Given the irregular shape of the site it is considered that the proposed building alignment remains consistent with these objectives despite the minor encroachments.

It is recognised that an amended design could achieve strict compliance however the same would result in either or both smaller buildings and irregular wall angles together with a significant reduction in the area of balconies of affected units.

Given the consistency of the proposed design with the objectives of the control together with the additional building costs and reduced amenity which would arise from an alternative but complying design it is considered that the minor encroachment as proposed is reasonable and appropriate in the circumstances.

4.7.2 Street Frontage Height

The Street Frontage provisions set out within Clause 2.1 of Part 4 of the DCP 2008 require a 5 to 6 storey (10 m - 15 m) street wall height beyond which is a requirement for a setback of unspecified distance.

The proposed development does not provide an additional setback above the 5th or 6th level and accordingly, the street wall height exceeds the standard.

Notwithstanding the above Control 3 requires that "the street frontage height controls of any new building adjacent to Heritage Items is to be appropriately scaled".

The massing arrangement of the proposed is compatible with that which has been approved for the Paper Mill Development. Given the greater contextual relationship between the subject site and the Paper Mill development, it is argued that strict application of the street wall height controls, which might have stronger contextual relevance on the western side of the railway line, can be more flexibly applied to the subject site given the Paper Mill approval.

In this regard, referencing the objectives of the control, it is considered that by reference to the approved massing of the Paper Mill development, that the proposed street frontage arrangement provides a "strong consistent and appropriate definition of the public domain"; will deliver a comfortable street environment for pedestrians; and will achieve satisfactory solar access".

Accordingly, variation to the street frontage height controls is considered to be satisfactory.

4.7.3 Floor Plates/Depth/Width

The building depth and bulk requirements of Table 1 Part 4 of DCP 2008 specify a maximum floor plate size of 500m² and a maximum building depth of 18m (excluding balconies). Part 4 Clause 2.1 of the DCP also requires a maximum building width of 45m.

The objectives to the building depth and bulk requirements are as follows:

- a) To ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy.*
- b) To achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.*

As a result of the site's irregular shape and corner location each building slightly exceeds these parameters in some areas. However with careful internal unit planning and orientation, it is considered that the proposed development is consistent with the above objectives despite the proposed numerical non-compliance.

In terms of building sustainability, the purpose of maximum building depth requirements is to promote solar access and cross ventilation opportunity. In respect of these metrics, the proposed development achieves 3 hours solar access and cross ventilation to all units where possible. As such, solar access and cross ventilation both comply with the Residential Flat Design Code rules of thumb.

The need for artificial heating and cooling is closely related to solar access and cross ventilation opportunity. However, it is further noted that the application is accompanied by BASIX certificates in further evidence of the proposed design delivering satisfactory energy efficiency outcomes.

The proposed exceedance of maximum floor plate and building depth and width is relatively minor in absolute terms and the design of the proposed development delivers significant internal separation distances. Accordingly, bulk and scale impacts are considered to be satisfactory.

For the above reasons, it is considered that variation to the building floor plate, including width and depth requirements contained within DCP 2008 are reasonable and appropriate in the circumstances.

4.7.4 Setback to Rail Corridor

The setback controls to clause 2.1 require a 12m setback to the railway corridor.

The proposed development adopts generally a 6.5m setback to the railway corridor and as such, does not comply with those requirements.

The proposed setback has been informed following liaison with Sydney Trains and is based on both derailment risk assessment and powerline blowout risk. Specialist report dealing with each of these issues are provided under separate cover.

The proposed development effectively minimises the railway setback to the maximum extent which still achieves satisfactory safety and setback from rail infrastructure. It is considered that this is an appropriate design response to the railway constraint.

It is likely that the intent of the 12m setback control is to provide a buffer distance between proposed dwellings and the railway line. The proposed development has responded to the intrusive noise impacts of the railway line by providing blank walls to the western elevation where it adjoins the railway line. The application is accompanied by an acoustic report which demonstrates that this will achieve satisfactory internal acoustic amenity.

We further note that the Design Excellence Panel resolved in its report of 19 May 2016 that it had no objection to the proposal to "waive" the 12m setback proposal, that being a reflection of the originally proposed design which did not ultimately meet with the satisfaction of Sydney Trains.

Having regard to the above, the proposed setback is considered to be consistent with the objectives of the control and lead to a better design outcome than would be the case if compliance were proposed.

4.7.5 Proposed Unit Mix

The minimum number of 3 bedroom units prescribed under Clause 6.1 of DCP 2008 is 10%, which equates to 14 units. The proposed development provides 7 x three bedroom units (6%) , a shortfall of 4%.

The objectives of the housing mix are:

- a) *Ensure that residential development provides a mix of dwelling types and sizes to cater for a range of household types.*
- b) *Ensure that dwelling layout is sufficiently flexible for residents' changing needs over time.*
- c) *Ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents.*
- d) *Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.*

The proposed development does provide a mix of dwelling sizes and whilst 6 less than the minimum number of three bed units is provided, the proposed number of 1 and 2 bedroom units exceeds the relevant minimum requirements.

Given that a mix of unit sizes is achieved and that household diversity is accommodated through a good mix of one and two bedroom units, a shortfall of 6 x 3 bedroom units is considered to be minor and satisfactory in the circumstances.

5 Section 79C Assessment

79C Evaluation

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

Table 2: Section 79C Assessment

Matters for consideration	Comment
<u>(1)(a)(i) any environmental planning instrument</u>	
What are the relevant EPIs	The relevant Environmental Planning Instruments are: • LLEP 2008 • SEPP 55 • SEPP 65 • SEPP (Infrastructure) 2007 • SEPP (BASIX) • GMREP 2
• Does the proposal satisfy the requirements of the EPI?	Yes, the proposal is consistent with all requirements contained within applicable environmental planning instruments.
• Is the land use permissible?	Yes.
• Is the proposal consistent with the aims and objectives of the EPI?	The proposed subdivision is considered to be satisfactory having regard to the general objectives of LLEP 2008 as well as the objectives of the R4 High Density Residential zone
• Does the proposal comply with any development standards in the EPI?	Yes.
• Are there advertising and referral	Yes, as required by Council

requirements? • Are there matters specified for consideration in the EPI? • Are there any other relevant provisions in the EPI? • Is a SEPP 1 objection required?	Yes, refer to Section 4 of this statement No No
<u>(1)(a)(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority</u> • What is the status of any draft EPIs? • In what ways does the draft EPI impact on the development proposal? • Are there savings and transitional clauses in the draft EPI? • Is the proposal consistent with the aims and objectives of the draft EPI? • What happens if the development is not consistent with the draft EPI?	There are no applicable draft environmental planning instruments Not applicable. Not applicable Not applicable Not applicable
<u>(1)(a)(iii) any development control plan</u> • What are the relevant DCPs? • Is the proposal consistent with the DCPs? • What are the aims and objectives of the DCPs? • Does the proposal comply with the development standards in the DCPs?	Liverpool DCP 2008 Yes These issues are discussed in detail above and are considered to be satisfactory. The proposed development is generally consistent with DCP 2008. Specific area of non-compliance together with detailed justification is provided at Sections 4.7.3 to

• If the proposal does not strictly comply with the standards in the DCP, does it have merit in satisfying the objectives of the standards? • Are there requirements for advertising consultation and notification in the relevant DCP? • Are there any matters specified for consideration in the DCP? • Are there any other special provisions?	4.7.5 inclusive. Yes, the proposed non-compliances are considered to satisfy the objectives of the DCP and relevant controls. Yes as required by Council. Yes, refer to Section 4.7 of this report. No.
<u>(1)(a)(iv) any matters prescribed in the regulations</u> Clause 92 • Does the NSW Coastal Policy 1997 apply to the land and if so does the development comply with the provisions of the Policy. • If the application requires the demolition of a building, the provisions of AS2601 apply Clauses 93,94 & 94A FIRE SAFETY • If the application is only for a change of use or the use of an existing building as a place of public entertainment, is the fire protection and structural capacity of the building appropriate to the building's proposed use? REBUILDING, ALTERATION, ENLARGEMENT OR EXTENSION OF ANEXISTING BUILDING	Not applicable. A condition of consent is recommended requiring demolition to occur in accordance with the requirements of AS2601. Not applicable.

- Does the existing building, require to be brought into total or partial conformity with the Building Code of Australia? TEMPORARY STRUCTURES - Is the fire protection and structural capacity of the structure appropriate to the proposed use of the structure?, and Is the ground or other surface on which the structure is to be erected sufficiently firm and level to sustain the structure while in use.	Not applicable. Not applicable. Yes
<u>(1)(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality</u> Context and Setting Relationship of proposal to: - Scenic qualities and features of the landscape. - Character and amenity of the locality. - Scale, bulk, height, character and density. Previous and existing land uses.	The proposed development is unlikely to have any adverse impacts on scenic qualities or natural features of the landscape. The proposed development is appropriate to the planned residential character of the locality. The bulk, scale, height, density and character of the development is compatible with existing and future residential development in the locality. Given the previous industrial use of the site it is considered possible that the existing site has been contaminated and that a

Potential Impacts on neighbouring properties Potential impacts in relation to: • Compatibility with adjacent land uses. • Overshadowing • Visual and acoustic privacy. • Views and Vistas Access, Transport and Traffic What impacts would occur on: • Travel demand • Dependency on motor vehicles • Traffic generation and capacity of local network • Public transport availability • Conflicts with and between transport modes • Traffic management Schemes • Vehicular parking	Preliminary Assessment Report will be prepared in this instance. The proposed development is consistent with the surrounding residential character of the locality, which is a mix between medium and high density development, including residential flat development. Having regard to the orientation of the site, there are no overshadowing issues. The proposed development has been designed to ensure minimal visual privacy impacts. Similarly, acoustic privacy to adjoining residences will also be preserved. The proposed development is unlikely to have any significant impacts on view and vistas from surrounding properties. The application is accompanied by a traffic and transport assessment which has been submitted under separate cover. The report confirms satisfactory traffic, transport and access impacts / arrangements.
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Public Domain How will the development impact on: • public recreational opportunities • amount, location, design, use and management of public spaces in the vicinity • pedestrian linkages to public spaces Utilities Impact of development on utility supply? Heritage Would the development affect heritage significance of the property or adjoining properties? Other land resources Would the development have an effect on conserving and using valuable land resources? Water How will the development impact on the conservation of water resources and the water cycle in terms of: • water needs • water saving devices • water supply sources • treatment, reuse and disposal of waste water • drainage • groundwater • tidal influences • water quality and Pollution	No significant impacts All utilities are available to the site No issues. See Heritage Impact Statement accompanying this application. No issues. No issues.
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• water management Plans Soils What effect would the development have on soil conservation? • Soil qualities • Instability • Proposed movement • Soil erosion and degradation • Sedimentation and pollution of water bodies • Use of highly fertile/productive soils • Remediation of contaminated soils • Management of acid sulfate soils Air and microclimate • Is the development going to affect air quality and microclimatic conditions? Flora and Fauna What effect would the development have on the maintenance of biodiversity? • Protection and management of critical habitats etc. • Wilderness areas and national parks • Wildlife corridors • Weeds, feral animal Activity • Disturbance to native fauna and habitats • Amount and location of vegetation disturbance • New vegetation Waste Is the development going to provide waste facilities and controls?	The subject site is identified as containing acid sulfate soils under LLEP 2008 mapping and an Acid Sulfate Soil Report accompanies this application. No issues. The proposed development will involve minimal tree removal with replacement planting proposed under the submitted the landscape plan. The site is not mapped as containing environmentally significant land under LLEP 2008 mapping. The application is accompanied by a waste management plan which details waste management during the construction phase of the development. Operational waste will be collected at point of source and then manually
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Energy Is the development going to conserve energy and be energy efficient? • Energy needs • Measures to save energy • Use of renewable and non-polluting energy sources • Energy use by-products and waste Noise and vibration Will the development generate offensive noise or vibration? Natural Hazards Are there risks to people, property and biophysical environment? • Geological/soil instability • Flooding • Bushfire risk Technological Hazards Are there risks to people, property and biophysical environment? • Industrial risk (hazardous and offensive industry) • Land contamination • Building fire risk Safety, security and crime prevention Would the development contribute to safety and security? • Risk assessment • Crime prevention • Natural surveillance • Access control • Territorial Reinforcement • Space Management	distributed to the central waste bins by a site cleaner. The proposed development is unlikely to result in significant energy demands. The application is accompanied by an Acoustic Impact Assessment. See Flood Impact Study accompanying this application for details of compliance. No issues. The proposed development is considered to be satisfactory having regard to the principles of Crime Prevention Through Environmental Design (CPTED).
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<i>Social Impact in the Locality</i> • Social cohesion • Community facilities and links • Social equity, displacement or change <i>Economic Impact</i> What would be the economic benefits and cost of the development? • Employment generation • Economic income • Existing and future Business <i>Site Design and internal design</i> Is the development design sensitive to environmental conditions and site attributes? • Size, shape and design of allotments • Proportion of the site covered by buildings • Size, form, appearance and design of buildings • Management of private and communal open space • Landscaping How would the development affect the health and safety of the occupants? • Lighting and ventilation • Building fire risk • Building materials • Access and facilities for the disabled	The proposed development will provide much needed additional housing opportunities to service the needs of the incoming residential population in Sydney. Accordingly, the proposed development is likely to result in positive social impacts. No significant effects. Site design and internal design have been addressed in detail within this report. The proposal provides for logical and efficient use of space and movement pathways. Good street access is delivered to existing and proposed roadways whilst proposed landscaping enhances the streetscape presentation and also provides shade and aesthetic enhancement to the proposed communal areas. The proposed development has been designed to comply with the Building Code of Australia and there are no health and safety concerns.
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Construction What would be the impacts of construction activities? • Issues listed above • Site safety • Environmental Protection • Staging construction Cumulative Impacts • Would any impacts have potential to act in unison?	Construction related impacts can be reasonably controlled through conditions of consent. No cumulative impacts.
<u>(1)(c) the suitability of the site for the development.</u> • Does the proposal fit the locality? • Are the constraints posed by adjacent development prohibitive? • Would the development lead to unmanageable transport demands and are there adequate transport facilities in the area? • Will the locality contain adequate recreational opportunities and public spaces for new occupants? • Are utilities and services available? • Is air quality and microclimate appropriate? • Are there hazardous land uses or activities nearby? • Are ambient noise levels suitable for the	Yes Yes No, transport adequate for proposal. Yes Yes Yes No Yes

development? • How critical is the site to water cycle? • Are the site attributes conducive to the development? • Is the site subject to natural hazards? • Are the soil characteristics appropriate for the development? • Is the development compatible with protecting any critical habitat or threatened species? • Is the site prime agricultural land? • Will the development prejudice the future use of the site for mineral and extractive resource?	Not critical Yes No Yes Not applicable No Not applicable
<u>(1)(d) any submissions made in accordance with this Act or the regulations</u>	Not available at this stage.
<u>(1)(e) the public interest.</u>	The proposed development is a permitted use within the subject R4 High Density Residential zone under LLEP 2008. The proposed development will provide additional housing opportunities for the growing Sydney population. There are no aspects of the proposed development which are considered to be contrary to the public interest.

6 Conclusion

The proposed development involves a part residential flat building, part commercial and part retail development of land at the south-western corner of the roundabout and intersection of Atkinson Street and Shepherd Street, Liverpool.

The subject site is zoned R4 – High Density Residential and the proposed development is both permissible with consent and consistent with the zone objectives.

The application has been assessed in accordance with the provisions of section 79C of the EP&A Act 1979 and having regard to those matters, is considered to be satisfactory and meritorious of consent.

The principal issues arising from the assessment of the application go to relatively minor non-compliances relating to building height and building separation under LLEP 2008. Written Request for Variation has been provided in respect of both of these non-compliances with development standards.

Some aspects of the proposed siting lead to non-compliance with setback requirements under DCP 2008, however in all cases, it is considered that the objective of the standard is satisfied and that the design as proposed leads to a better planning outcome than would occur if the development complied.

Having regard to the above, and in consideration of all s79C matters, the application is recommended for approval.