EASTWOOD CENTRE REDEVELOPMENT

152-190 ROWE STREET AND 3 RUTLEDGE STREET, EASTWOOD
STATEMENT OF ENVIRONMENTAL EFFECTS

YUHUGROUP

ON BEHALF OF YUHU GROUP (AUSTRALIA) PTY LTD
AUGUST 2016

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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TABLE OF CONTENTS

TABLE OF CONTENTS

FIGURES:

PICTURES:

TABLES:

1 Introduction

1.1 OVERVIEW

This Statement of Environmental Effects (SEE) has been prepared for Yuhu Property (Australia) Pty Ltd (the applicant) in support of a Development Application (DA) for a mixed-use development at 152-190 Rowe Street and 3 Rutledge Street, Eastwood.

The DA seeks approval for the mixed use redevelopment of the subject site, including the following works:

- Demolition of all buildings and associated structures across the site;
- Construction of seven (7) buildings across the site accommodating the following land uses:
  - Retail and commercial uses at Lower Ground and Ground Levels, including a major supermarket, mini-major supermarket, speciality retail, fresh food, slow and fast food, kiosks, pharmacy, medical centre, gymnasium and commercial office space.
  - Shop top housing: 443 residential apartments across the upper levels of all buildings. Six (6) buildings accommodate above ground residential only (Buildings AA, BA, BB, CA, CB & DA) and the upper four levels of Building DB are residential.
  - Four levels of commercial office space (including ground level) within Building DB.
- Four levels of basement car parking and loading to service all activities on the site;
- Two new open air through site pedestrian links between Rowe Street and Rutledge Street and a publicly accessible market hall, supported by active frontages, outdoor seating and pedestrian amenities.
- New vehicle access arrangements for residents, visitors, retail patrons and service vehicles; and.
- Landscape works within the site.

Lodged concurrently to this DA is a draft VPA to provide for the significant upgrade to Rowe Street Mall to create an enhanced public domain. This has been developed in accordance with the City of Ryde Council's Planning Agreement Policy, July 2015.

1.2 SUPPORTING DOCUMENTATION

The following technical and design documents have been prepared to accompany this DA and are provided as appendices to this SEE as identified in **Table 1**.

TABLE 1 – SUPPORTING DOCUMENTATION

CONSULTANT	INPUT	APPENDIX
HDR Rice Daubney	Architectural Drawings	A
	Shadow and Sun Access Analysis	A
	SEPP 65 Analysis and Design Report	B
McGregor Coxall	Landscape Concept	C
Rygate Surveyors	Survey Plan	D

CONSULTANT	INPUT	APPENDIX
Urbis	Town Planning, including Clause 4.6 Objection CPTED Assessment Draft VPA Offer	E G V
Dibbs Barker	Legal Advice Draft VPA	F V
Extent Heritage	Heritage Impact Statement	H
Calibre Consulting	Civil Engineering Soil and Water Management Flood Study Stormwater Management Report	I I J K
ARUP	BASIX and Energy Efficiency Report Acoustic Assessment	L M
Windtech	Pedestrian Wind Environment Study Solar Light Reflectivity Analysis	N Q
Colston Budd Rogers Kafes (CBRK)	Transport Report	O
Arcadis	Building Services Concept Report	P
Steve Watson and Partners	BCA Assessment Report Accessibility Consultants	R
Exova Warringtonfire	Fire Statement	S
Elephants Foot	Waste Management Plan	T
WT Partnership	Cost Summary Report	U
Jeffery and Katauskas	Geotechnical Report	W

1.3 COST OF WORK AND PLANNING FRAMEWORK

The 'cost of works' for the proposed development for the purpose of determining the DA fee is calculated in accordance with clause 255(1) of the *Environmental Planning and Assessment Regulation 2000* at:

- **Total: $276,753,423 (including GST)**

The costs of works are detailed in the Quantity Surveyors Cost Estimate prepared by WT Partnership and lodged with this application at **Appendix U**.

As the estimated cost of works exceed $20 million the proposal will be assessed by City of Ryde Council and determined by the Sydney East Joint Regional Planning Panel (JRPP).

1.4 STRUCTURE OF THIS REPORT

This report provides the following:

- **Section 2** – provides a background to the approved development on the subject site.
- **Section 3** - documents the pre-lodgement consultation with Council that been undertaken.
- **Section 4** – provides a description of the site context, including identification of the site, existing development on the site, and surrounding development.
- **Section 5** – provides a detailed description of the proposed development.
- **Section 6** – provides an assessment of relevant matters under Section 79C of the EP&A Act 1979.
- **Section 7** – provides an assessment of the key planning considerations.
- **Section 8** – provides a summary and conclusion.

2 Planning Background

2.1 APPROVED DEVELOPMENT APPLICATION (LDA2007-0936)

A Development Application (LDA 2007-0936) for the redevelopment of the site was approved on 3 February 2009. The approval, valid until 3 February 2014, comprised approval for:

> *Redevelopment of Eastwood Shopping Centre – including demolition of the existing Shopping Centre, associated car parking structures and the Masonic Temple and construction of a Mixed Commercial/ Residential development.*

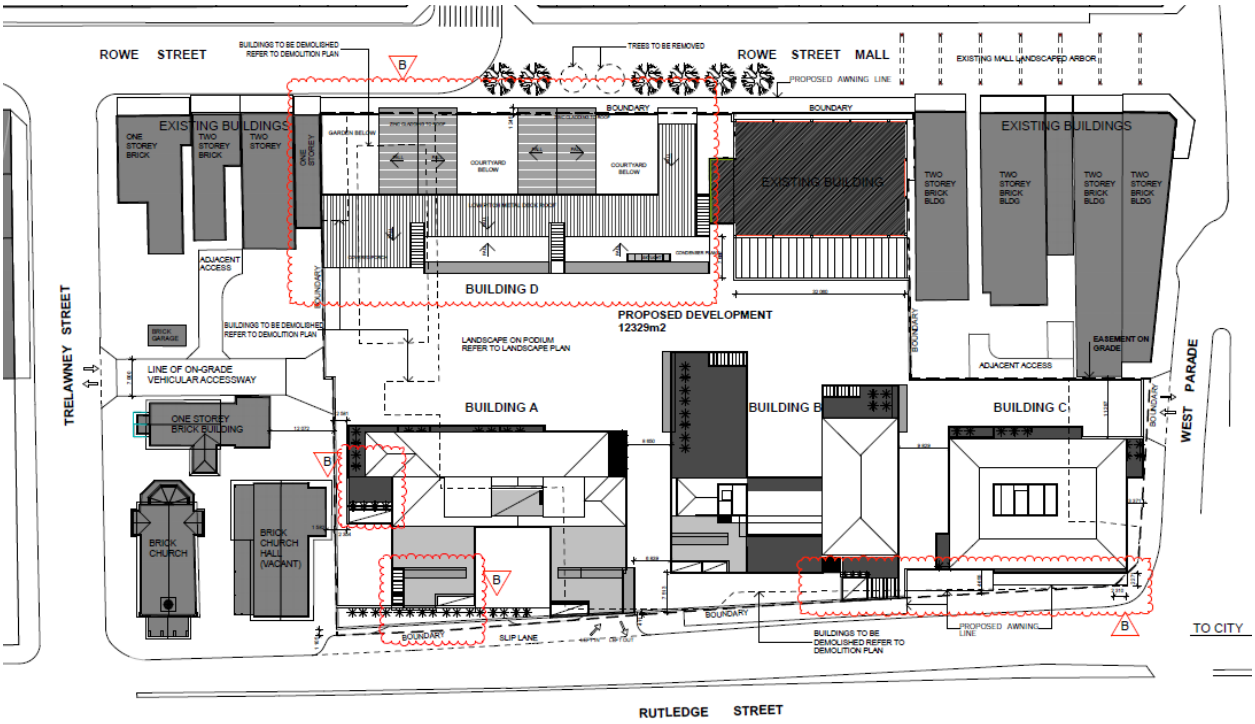
The approval included a number of conditions of consent to be satisfied as part of the development. In general, the conditions are generally standard and have been reviewed as part of the preparation of this Development Application to ensure any potential issues relating to the redevelopment of the site are captured in this fresh application.

The approved building form is shown on the Plans referenced at Condition 1 of LDA 2007-0936, except where the vehicle access ramp to Trelawney Street was required to be amended. **Figure 1** demonstrates the approved site layout, which included the following:

- A four level podium built across the site, accommodating retail (two levels) and car parking (two levels).
- Sleeving of the podium car parking levels at the Rowe Street frontage with commercial and residential land use.
- Above podium residential buildings fronting Rutledge Street (Buildings A, B & C) – all residential access proposed from West Parade.
- An internal north to south through site link connecting Rowe and Rutledge Streets.
- Additions and alterations to the existing commercial building fronting Rowe Street (Building D), including new shopfronts to Rowe Street, refit of the existing commercial uses and construction of residential apartments above – access to the residential apartments from the western end of Rowe Street.
- Two levels of basement car parking and two levels of above ground car parking.
- All vehicle access from Trelawney and Rutledge Streets.

The development consent has lapsed.

FIGURE 1 – APPROVED SITE LAYOUT (LDA 2007-0936)

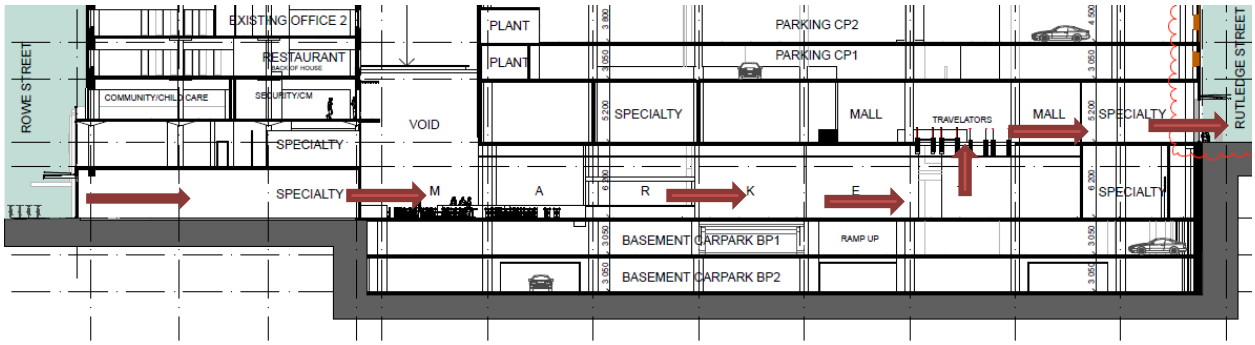


2.1.1 THROUGH SITE CONNECTION

The approved development dealt with the steep grade change between the Rowe and Rutledge Street frontage by internalising all development and proposing the installation of vertical circulation measures such as lifts and travellators. **Figure 2** shows the proposed pedestrian circulation through the site.

As a result, many of the approved spaces where pedestrian activity is anticipated to be high, such as the supermarket, food market (kiosks) and mini major tenancies are lacking natural light and ventilation. This issue has sought to be remediated through the current development proposal (discussed further in the following sections of this report).

FIGURE 2 – APPROVED SECTION SHOWING PEDESTRIAN CIRCULATION THROUGH SITE (LDA 2007-0936)



2.1.2 BUILT FORM

The approved built form across the site is shown in the following perspectives, which was proposed in accordance with the preferred built form as shown in the Draft Eastwood Town Centre Master Plan (Draft Master Plan).

FIGURE 3 – 3D PERSPECTIVE APPROVED BUILT FORM FROM THE SOUTH EAST (LDA 2007-0936)

FIGURE 4 – 3D PERSPECTIVE APPROVED BUILT FORM FROM THE NORTH WEST (LDA 2007-0936)

Generally, the approved development was consistent with the principles for building height in the Draft Master Plan by providing lower scaled buildings fronting the Rowe Street that provide an appropriate scale relationship to future buildings to the north. Taller buildings were proposed to front Rutledge Street, with the tallest building located in the south eastern corner of West parade and Rutledge Street adjacent to the railway line.

2.1.2.1 BUILDING HEIGHT

The maximum height of the approved development is 12 storeys (RL115.050). This relates to the tallest building on the site, located on the south eastern corner across from the railway line – as shown in the Rutledge Street elevations at **Figures 5 and 6.**

As part of the approved development, a SEPP 1 objection was required to be prepared to exceed the Height of Buildings Standard of the Ryde LEP. This was accepted by Council as part of the approval.

FIGURE 5 – APPROVED RUTLEDGE STREET BUILDING HEIGHTS (LDA 2007-0936)

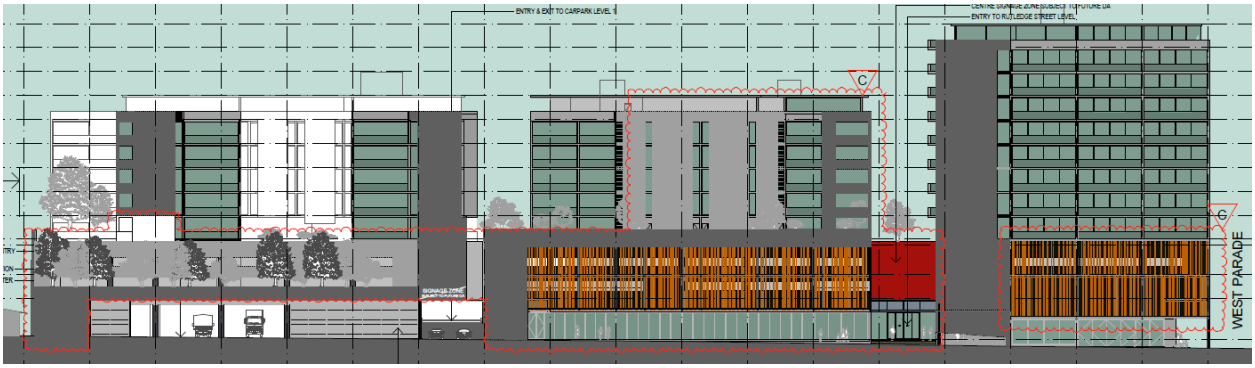
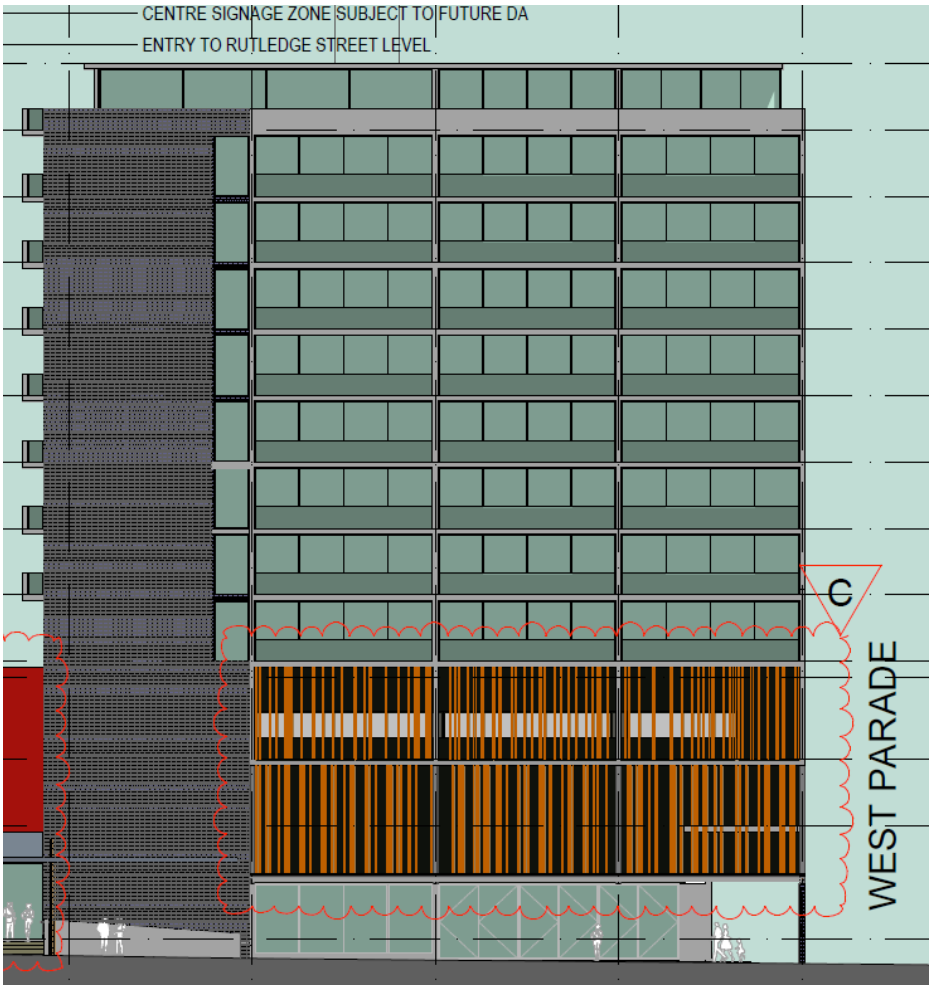


FIGURE 6 – APPROVED 12 STOREY BUILDING ON SOUTH EASTERN CORNER (LDA 2007-0936)



2.2 PREVIOUS SCHEMES

The applicant has previously sought feedback from Council on alternative development schemes for the site; these have considered a number of redevelopment scenarios and building typologies across the site.

A pre-assessment submission for a Planning Proposal for the Eastwood Shopping Centre was lodged with Council on 11 November 2014. The proposed scheme included a mixed use redevelopment on the site with towers ranging from 10 to 30 storeys in height.

Council's feedback (letter dated 19 January 2015) expressed concern over the building heights that greatly exceed the LEP Height of Buildings standard. However, recognising that the proposed taller building forms presented the opportunity to open up the site, providing more space for public areas, noting that:

> *The taller heights could only be supported if the current proposal is amended to include more space that is of real public benefit.*

Other Council comments were provided as follows (summarised below):

THE THROUGH SITE LINK

- Proposed on the western edge of the development between Rowe and Rutledge Streets.
- Significant lack of shopfront activation.
- Not centrally located.
- Lack of integration with retail functions.

RETAIL PLANNING

- "Old school" with internalised shopping facilities.
- Should provide better street connections.
- Should provide stronger connection to the natural environment.
- Provide a diversity of retail offer.

URBAN DESIGN

- Site is an opportunity to stitch the site into and strengthen the existing town centre and provide meaningful public benefit.
- Integrate with existing buildings on the street frontage, including heritage buildings.
- Prioritise pedestrian movements.
- Consolidate and centralise pedestrian links on the site with active frontages and pedestrian desire lines.
- Configuration of internal mall space should promote a strong engagement with the external environment.
- Rutledge Street frontage to be reconsidered and provide a positive experience/ relationship to the public domain.
- Proposed podium communal open space does not benefit the community as it is not visible or accessible to the public.

TRAFFIC AND CARPARKING

- General support for car park provision (capacity) and layout.
- Vehicle access ramps need more consideration/ redesign.
- Guidance provided on traffic assessment that will be required to be undertaken and used to support the proposal.

STORMWATER

- Additional guidance on stormwater management to be addressed.

APPLICANT RESPONSE

As outlined in the succeeding sections of this report, the current redevelopment scheme has sought to address the majority of the concerns raised through this earlier consultation with Council.

In particular, the current development proposes a significant reduction in building height from that originally envisaged; a reduction of 17 storeys (a maximum of 30 storeys down to 13 storeys in the current proposal).The current proposal incorporates this major reduction in building height while realising significant public benefits through the opening up of the site to provide meaningful areas of publically accessible open space.

As demonstrated in the proposed development plans, the built form has been developed in response to site constraints and the design development for the built form and massing across the site. The proposal envisages a development scheme which achieves design excellence through built form and place making. This has been achieved through use of building scale and arrangement of a significant central plaza space as a key feature of the site.

A fundamental shaper of the proposed development throughout the design of the proposal has been the contribution of the development to the pedestrian environment on the site and linkages to the surrounding public realm. Taking on board Council's comments relating to the location, design, layout and activation treatment the key design principles employed throughout are:

- Extending the public domain into the site
- Extending activation through the site
- Providing logical and convenient pedestrian circulation through the site

The proposed through site link has been designed and laid out to integrate all levels of the development, horizontally and vertically, this includes retail tenancies at all three levels opening out onto The Street to provide activation. The Street provides access to the lower levels, while also allowing pedestrians to remain at street level and transition up to Rutledge Street via a direct route.

It is on this basis, and as shown in the proposed development plans supported by the Design Report and the justification within this report, that the current proposal presents a development has been subject to a well-considered and robust analysis and design response process to fully understand and respond to Council's comments.

3 Pre-lodgement Consultation

3.1 INTRODUCTION

The Applicant has met with Council on various occasions throughout the design development of the proposal, where a range of planning, design and technical matters were discussed to provide the project team an understanding of Council's considerations for the assessment of the development proposal. This section of the report summarises the following pre-lodgement discussions and explains how Council's considerations have been addressed, based on the following liaison with Council:

- 9 October 2015: Introductory presentation to Senior Planning Officers
- 13 April 2016: UDRP Meeting No. 1
- 5 July 2016: UDRP Meeting No. 2
- Stormwater engineering correspondence
- Traffic modelling correspondence
- Pre-lodgement of Development Application (Accept-Check and Lodge process)

3.2 PRESENTATION TO COUNCIL – HEIGHT OF BUILDINGS

The applicant has explored a number of options regarding the design of building heights across the site, as set out in the preceding section at 2.2.

On 9th October 2015 the presentation to Council gave an introduction to the proposal to redevelop the site and also set out the building heights proposed across the site. It is noted that these building heights and overall site layout was similar to that in the current proposal lodged with this application. However, refinements have been made since this time in response to Council comments and as part of the design evolution.

This presentation outlined the proposed approach to the Development Application, which included a preliminary Clause 4.6 objection to the Height of Buildings standard as prescribed by the Ryde Local Environmental Plan (RLEP) 2014.

Follow up correspondence from Council (dated 21 October 2015) outlined a suggested approach for addressing the proposed building heights above the RLEP standards. This included submitting a final version of the planning justification – the Clause 4.6 objection, to Council with a comprehensive legal opinion prepared by a suitably qualified planning law expert addressing the issue of applying Clause 4.6 in the circumstances and the manner proposed.

On this basis, a detailed Clause 4.6 – Objection to the Height of Buildings standard of the RLEP 2014 was submitted to Council on 20 June 2016 with a legal opinion prepared by Dibbs Barker on whether the consent authority is empowered to grant consent to the proposal as set out in the Development Application package. These documents are provided at **Appendix E and Appendix F** of this application.

In summary, the legal opinion prepared for Council review found that:

> *The consent authority can lawfully grant consent to the DA (assuming there is Secretarial concurrence or equivalent where delegated) despite the building height, by accepting the 4.6 Request because:*
>
> *1. Clause 4.6 of Ryde LEP permits the grant of consent to development that contravenes a development standard;*
>
> *2. The maximum building height control in clause 4.3 of the Ryde LEP is a development standard;*

3. Clause 4.3 is not excluded by clause 4.6 (except as it relates to Ryde Town Centre);

4. The 4.6 Request deals with the matters required by clause 4.6(3)(a) and (b); and

5. The consent authority can reasonably be satisfied that the content of the 4.6 Request has merit and that it is in the public interest.

3.3 UDRP MEETING – 13 APRIL 2016

The first pre-lodgement meeting with Council Officers and the City of Ryde Urban Design Review Panel was held on 13 April 2016.

In summary, the UDRP indicated general support for the retail strategy, public domain arrangement, access, loading and parking, public and private interface, and building orientation.

The follow up meeting minutes confirmed the Panel's comments. **Table 2** sets out the Panel meeting minutes issued and sets out the design response to these matters.

TABLE 2 – UDRP MEETING NO. 1 COMMENTS AND RESPONSE

UDRP COMMENTS MEETING NO. 1	RESPONSE
In principle, the extension of The Avenue through the site is a positive change to the town centre pedestrian network which the Panel supports. However, the current design is problematic in that: ▪ Large openings providing access and light and air to the supermarket entrance and retail. ▪ The grade change between Rowe and Rutledge is achieved by stairs, escalators and (presumably) a lift for disabled access at the south (Rutledge end). ▪ The residential building at the north-west corner of the site overhangs the connection for about half its width and length. The panel recommends that: ▪ The slots down to the basement level are substantially narrowed to provide greater width for the connection at street level	The supermarket is provided within the lower ground retail space and in this location avoids any blank walls or loading within the public domain. The proposed slots down to the basement level create a light filled, open to the sky space visually and physically connected to the ground level and the public domain. This in turn increases passive surveillance of this space and makes it more desirable for pedestrians to access. The proposed supermarket has been designed to provide a sufficient draw from the ground level and promote movement between building planes and therefore further activation on the ground level for people accessing the supermarket. The proposed extension of the Avenue is considered to be of a generous width and allows the lower ground plane to achieve a greater width. The width of pedestrian access to cross the site at ground floor level is consistent with the widths of pedestrian footpaths in The Avenue and the awning covered spaces in Rowe Street along the shop fronts. The following hierarchy of publicly accessible spaces for the town centre is proposed: ▪ Rowe Street is the primary public space in the Eastwood Town Centre and has a width of 20 metres. It is pedestrianised street between The Avenue and W Parade; – The extension of The Avenue; – Laneway; – Market Hall; and – The Hanging Garden. Therefore, the proposed width to the extension of the Avenue is appropriate and does not overstate its importance in the public

UDRP COMMENTS MEETING NO. 1	RESPONSE
	domain hierarchy.
The Avenue Extension – This link is continuously graded up from Rowe to Rutledge to eliminate the stairs and escalators.	The proposed extension to The Avenue has been designed and laid out to integrate all levels of the development, horizontally and vertically. The ongoing challenge for this pedestrian through site link has been to deal with the grade separation between Rutledge Street and Rowe Street. The Relative Levels of the Rutledge Street frontage at the entry to the Avenue is RL 74.05 and at the Rowe Street frontage is RL 68.82, a difference is 6.22 metres. Please refer to the site survey, sections and perspectives submitted for an understanding of the relationship between the street frontages and the importance of the visual connections between the ground plane and levels below. This proposed link from Rowe Street to Rutledge Street has been well thought out to provide a strong and accessible public link with ample opportunities for activation. The UDRP recommended gradient would mean stepped shopfronts are created making the space inherently inflexible, tables and chairs associated with any food operations would not be able to be accommodated on sloped terrain and public seating would also be required to be terraced. The space would also be further encumbered by required handrails across the length of the space. Therefore, the proposed design is considered to be a superior outcome in terms of amenity, functionality and activation. The section provided through the site between Rowe and Rutledge Streets with the proposed opening to the lower ground level compared with the suggested enclosure and continuous grade. A photograph of the pedestrian link at Central Park, Broadway from the retail centre with a supermarket to the park, shows an example of how wide stairs can be a suitable urban element to address level changes. Please refer to the sightline study to demonstrate the width and alignment of the proposed link is appropriate to achieve high levels of amenity to pedestrians using the link and will not impact on levels of comfort, day light and viewpoints for users of this space. The proposed width is considered appropriate and does not overstate the importance of the space in the public domain hierarchy.
The Market Place – The proposed “market place” is supported as a use on the site; however it should be located on Rowe Street, to support the community life of this existing public domain focus, rather than drawing energy away from it. It would also then benefit from sunlight in winter – as proposed it would be cold and overshadowed. A more flexible use of this	The proposed ‘marketplace’, as shown on the development plans, is intended as a tenancy space that the development will programme and occupy with a market like mix (refer to perspective and precedent images). It is proposed that this space will look and feel as a seamless integration and extension of the public domain however will remain as part of the shopping centre redevelopment on the Applicant’s land. The Panel comments regarding its relocation on Rowe Street will not

UDRP COMMENTS MEETING NO. 1	RESPONSE
space would be more beneficial to the town centre. Market uses could be one of many. The adaptability of the space and its structure for a variety of uses should be demonstrated. Particular consideration of how the space is used when not activated is also needed – for example at night or after shopping hours.	encourage and foster life and activation within the development site nor result in an integrated mix of land uses through to Rutledge Street. As part of the proposal a hierarchy of spaces has informed the design. This includes Rowe Street to remain as the primary public space, The Avenue a secondary space and Market Place as a tertiary space. We note that this proposal is supported by the Council controls which seek to reinforce the street wall on the Rowe Street boundary alignment so as not to erode the street wall and create a consistency and strengthening of the streetscape. The lack of direct solar access into the Market Place is consistent with similarly functioning spaces, in order to protect the goods (typically food) and to provide all weather shelter for pedestrians. This space will be leased and tenanted with an appropriate mix of uses (as envisaged in the perspectives). Overall, it is considered to be a complimentary use to the Rowe Street Mall (open to the sky and programmed for market days, night markets, community events and the like), therefore maintaining its primary function in the hierarchy of spaces found in Eastwood.
The Panel does not support the concept of a "secret garden" covering the market place – it would be overshadowed by the development in winter and present safety and security risks and is therefore unlikely to be sufficiently used. A problem exacerbated by the proposed single point of connection, but not resolved even if additional points of access were provided.	The hanging garden design has been revised in response to the UDRP comments. Access to the hanging garden will be to the general public and an additional access provided to the eastern of the garden for common use by residents. Please refer to the open space diagrams submitted, which demonstrate the daylight achieved within the hanging garden throughout the year. Good solar access is provided during the modelling of the day for much of the year. Full shadow analysis throughout the year is provided within the Architectural Drawings. Further, a CPTED report, prepared by Urbis, provided at **Appendix G**, addresses safety and security measures proposed to be employed within the hanging garden. This includes opportunities to maximise passive surveillance and promote high levels of safety within this space.
Built form and scale – In broad terms the overall height and scale of the proposal is considered acceptable. The provision of new north-south links between Rowe and Rutledge Streets creates a finer public realm grain and a logical basis for separating the proposed building masses and is strongly supported. However, particularly in the absence of a limit on density, any exceedance of the LEP height limits (which occur all across the site in the current scheme), would need to be more carefully considered and would need a strong public benefit justification for Panel support. For	The Panel's acceptance of the overall height and scale across the site is duly noted. The points raised by the Panel have been carefully considered and are included in the submitted Clause 4.6 Variation Request to support the proposed building height and demonstrate the better planning outcome that results from the positioning of additional height in specific, well considered locations in contrast to the areas where a reduced building height is proposed to provide opportunities for open space, a sense of spaciousness and a superior urban design outcome.

UDRP COMMENTS MEETING NO. 1	RESPONSE
example, the extension of the Avenue as a through-site pedestrian spine and the market place provided they meet the location and design parameters outlined above, may provide such justification.	
In order to maximise winter sun to potential communal open space in the centre of the site and maintain an appropriate scale on Rowe Street, buildings here should comply with the LEP height limit. On Rutledge Street, particularly towards the eastern (West Parade) end of the site additional height would be more appropriate for consideration (as currently indicated).	Please refer to the shadow analysis that demonstrates how solar access has been provided to communal open spaces within the site. The elevations within the drawing set demonstrate the compliance with the LEP height limits to maintain an appropriate scale on Rowe Street. In addition, as encouraged by the Panel, additional height has been located on Rutledge Street towards the eastern (West Parade) end of the site.
The Z-shaped apartment building is over-scaled in plan and needs to be broken down into three or four separate buildings. All apartment buildings should comply with SEPP65 ADG separation distances	The proposed building elevations submitted demonstrate the architectural response to the Panel's comments to further break the length of building. All buildings have been designed to comply with the ADG separation distances, and in some cases – across the communal spaces, generously exceed these distances resulting in high levels of amenity for future occupants.
Sustainability – Building and open space location and orientation must be carefully considered in the further development of the proposal.	The open space diagrams submitted demonstrate the daylight achieved within the hanging garden. Further, a CPTED report, provided at **Appendix G**, addresses safety and security measures proposed to be employed within the hanging garden. This will include opportunities to maximise passive surveillance and promote high levels of safety within this space. A landscape package, **Appendix C**, provides a robust justification of this proposed hanging garden. These plans and planting schedules demonstrate the accessibility, proposed planting, design and high levels of functionality of this proposed high quality open space.
Amenity – Given the need to reconsider the location and massing of the apartment buildings, detailed assessment of amenity is not warranted at this stage. Compliance with the relevant parts of the ADG should be achieved. For residential entries to work along the two pedestrian links through the site, these links need to be visually open, well-lit, overlooked by adjacent residential uses and publically inviting to provide a clear sense of address and safety. This means the links need to be	The amenity of the residential component of the mixed use development has been developed in accordance with the design criteria of the Apartment Design Guide (SEPP 65). The proposed pedestrian links are designed as part of the public domain as a key concept of the design. Specifically, the materiality will be similar and will include a lack of threshold conditions or closure lines. The integration of entry points and mix of land uses is vitally important for surveillance and activation and will result in safer and more vibrant spaces within the mixed use development (Refer to plans that illustrate residential entries) and located directly from public street frontages or publicly accessible spaces in the development.

UDRP COMMENTS MEETING NO. 1	RESPONSE
perceived as part of the town centre not part of the shopping centre.	
The conceptual approach to vertical articulation of the facades and the material change from external to internal spaces is supported. The translation of this concept into the proposed elevations is not evident with the facades appearing more monolithic in detail and materiality. The approach to the architecture lacks an authentic approach to a finer grain articulation and scale implied in the concept.	The vertical articulation of the facades and the material change from external to internal spaces has been further developed as the scheme has progressed. Please refer to the building elevations provided within the drawing set that demonstrate the vertical articulation and materiality that has been introduced since the last UDRP meeting, as the detailed design of the scheme has evolved.

3.4 SECOND UDRP MEETING – 5 JULY 2016

The Applicant met with the UDRP on 5 July 2016. This was the second meeting with the UDRP and a comprehensive response to the Panels earlier comments was provided in a written document along with a visual presentation. Further comments were provided by the Panel and these have sought to be further addressed through the current proposal. The particulars of these matters discussed are set out within the Table 3:

TABLE 3 – UDRP MEETING NO. 2 COMMENTS AND RESPONSE

UDRP MEETING NO. 2 COMMENTS	RESPONSE
In principle, the extension of The Avenue through the site is a positive change to the town centre pedestrian network which the Panel supports. The previous advice from the Panel suggested that the link be graded from Rowe Street to Rutledge Street. The Panel agrees that the cross section does not work and that stairs are required. The Panel remains concerned with the extent of level change and the narrowness of the through site link path of travel as opposed to the supermarket access. The precedent of Central Park appears to have a similar level change but introduces a number of landings to create a more inviting stair climb. The precedent also benefits from the park situated at the termination of the link and along the western side (as opposed to being enclosed along both sides by development). The Panel supports a more generous stair design which includes intermediate landings and generous stair runs. The definition and proportion of the urban space is critical to the legibility and character of the connection. A comparison of two different widths proposed for the link were discussed in the meeting with the applicant	Please refer to the response provided earlier in Section 3.3 of this report. The proposed width of the link has been carefully designed to align with the intent of the functionality of the space and to maintain the hierarchy of spaces within the Town Centre.

UDRP MEETING NO. 2 COMMENTS	RESPONSE
preferring the narrower space and the western portion of the link defined as a colonnade. The Panel is of the view that the wider link is a better proportion, both in relation to the vertical scale of adjacent buildings and the level change between the Rowe Street and Rutledge Street.	
The proposal exceeds the permissible height by 2 storeys in the mid-block and 1 – 3 storeys along Rutledge Street. The applicant has not adequately justified the height non-compliance within the context of the town centre, in consideration of the scale transition with the lower scale residential neighbourhood to the south, or in relation to additional overshadowing impacts to the south. Rowe Street Rowe Street is the main retail street of Eastwood Town Centre and is characterized by 2 storey, fine grain shop fronts. The proposed 6 storey street edge is articulated vertically with ground floor shopfronts defining the street interface. The building would fit better within the context if it included a strong 2 storey datum expressed in the façade (similar to the approved DA). Rutledge Street Rutledge Street is the boundary between the town centre and the R2 residential zone to the south. The proposal includes 10, 11 and 13 storey buildings built to boundary with sheer walls to the full height proposed. There is insufficient consideration of how the proposed form would transition along Rutledge Street. The Panel supports the articulation of discrete building forms along the street and recommends refinements: ▪ Eliminate the bridging floors between buildings DA and DB. ▪ Reduce height of link between CA and CB to 6 storeys. ▪ Express a datum either through an upper level setback or architectural expressions that continues the 4 or 5 storey datum at buildings DB or DA. ▪ Amend the façade treatment to the commercial building to incorporate greater consideration of scale and building modelling. A taller corner at Rutledge Street and West Parade	The points raised by the Panel have been carefully considered and are included in the submitted Clause 4.6 Variation Request to support the proposed building height and demonstrate the better planning outcome that results from the positioning of additional height in specific, well considered locations in contrast to the areas where a reduced building height is proposed to provide opportunities for open space, a sense of spaciousness and a superior urban design outcome.

UDRP MEETING NO. 2 COMMENTS	RESPONSE
reinforces its location within the town centre and is generally supported subject to façade design refinements. The Panel strongly supports the undergrounding of the powerlines along Rutledge Street. If the powerlines are retained a setback along this frontage may be required as in the previous DA approval. The applicant should discuss this with Council.	
There is no FSR applicable on the site. The Panel does not support the height non-compliance as the proposal does not adequately demonstrate that the proposed quantum of development is a positive built form and open space outcome on the site. In particular, resolution of the following is needed: ▪ legibility of through site links and elimination of bridging floor levels above the links ▪ adequate and useful communal open space accessible to each building ▪ scale transition along Rutledge Street ▪ demonstration that solar access and cross ventilation complies	This advice is contradictory to the earlier minutes received (see section 3.3 of this report). The application has sought to address the panel comments where applicable and therefore the proposed building height has been maintained across the site in response to the overall design ethos and density solutions sought for the site.
Demonstration that solar access and cross ventilation meet the ADG requirements is needed for each level. Sun's-eye-views should be provided for solar access verification. The achievement of cross ventilation at internal corners and using 'ear' windows is questioned. A number of single aspect units are shown as cross ventilated.	Please refer to the ADG compliance report at **Appendix B**. These matters are addressed in detail in the Design Report.
The Panel does not support publically accessible open space above the market. This space has limited access and is segregated from active retail areas and circulation spaces. As communal open space the area above the market contributes to outlook for surrounding buildings but is only directly accessible from building DA. As a centrally located space with generous proportions and good sun light, additional access from surrounding buildings would be greatly beneficial. More detail is needed to assess the use and functionality of the proposed communal open spaces. The following spaces are of concern: courtyard space between CA and CB is undersized for the intensity of	The function and accessibility of the hanging garden and open space areas have been further defined and cemented into the proposed development; this is able to be seen in the plans provided at **Appendix A**. It is considered that these spaces contribute positively to the development and provide a range of spaces for future visitors and residents to use and enjoy. Given the wide range and differing makeup of the open space areas provided the development caters for a number of levels of functionality to ensure that an adequate provision of open space is provided to meet demand.

UDRP MEETING NO. 2 COMMENTS	RESPONSE
development proposed around it, the linking space between CA and BB is narrow and has limited use and is overshadowed, courtyard at building DA is significantly impacted in use by the entry to the pool below and associated circulation. There is a lack of useful communal space directly accessible to building AA. The corridor of building AA could be extended on level 6 to provide direct resident access to the proposed COS on the roof of building DB. This would require reconfiguring apartment layouts at the southern end of the building.	
The Panel raises the following amenity concerns: ▪ Internal corners in building CA/CB and building BA/BB with bedroom outlook to balcony; Building DA at Level 2; and Building DA/DB at Level 7 – 9. Elimination of the bridging floors would remove this issue. ▪ Apartments under the bridging levels between building DA and DB are overshadowed and have limited daylight and outlook. ▪ There are some instances of deep narrow balconies. The ADG provides guidance on balcony depth, size and orientation. ▪ Deep notches to the corridor in Building CB are excessive and of limited value for daylight. It is also noted that these notches do not facilitate cross ventilation as the ADG recommends a proportion that is 2 times wider than deep is needed to facilitate natural ventilation. ▪ The outlook of apartments at Level 1 facing the market relies on a successful landscape planted edge to the market structure. More detail is needed to show how this edge will be achieved and how glazed awnings are integrated. The sections and the montage do not align.	In response to these comments: ▪ The bridge link has been maintained to support the stormwater solution for the site, provide visual interest in the built form and support high quality apartments with high levels of amenity. Appropriate privacy measures will be adapted throughout the development as required. ▪ The ADG compliance report at **Appendix D** confirms compliance of the proposal with the ADG requirements for both solar access and natural ventilation across the site. ▪ The landscape concept for the proposed hanging garden is provided in **Appendix C**. This includes a comprehensive planting scheme for this space and confirms that the planted edge can be successfully achieved as demonstrated and will be maintained into the future.
The location of residential lobbies to building BB from the eastern through site link and to buildings AA and DA from the main through site link remain a concern. The location of entries along the links is supported if these links feel truly public, invite pedestrian activation during and after retail hours and are sufficiently overlooked by apartments above. The detail of glazed awnings at the market and the colonnade along the western side of the main link will need to address	The residential lobbies have been located in this area to ensure that they are in a publicly accessible area that is activated at all times and are visible from surrounding apartments. The awnings have been specifically designed to provide transparency through into these areas to promote passive surveillance.

UDRP MEETING NO. 2 COMMENTS	RESPONSE
surveillance and safety.	
There appears to be a lack of 3 bedroom apartments. It is not clear how adaptable housing is provided.	The adaptable apartments are shown on the plans at **Appendix A** and include 44 adaptable units. 21 3 bedroom units are provided in response to demand in the town centre.
The Panel appreciates the conceptual approach to the external and internal façades but for a development of this scale the architectural expression is too consistent and monotonous. This exacerbates its scale. The proposal could be improved by expressing greater architectural diversity across the 7 proposed buildings to better respond to the fine grain scale of Rowe Street and the Eastwood Town Centre. The reference to the fine grain rhythm along Rowe Street could be further developed by expressing the predominant two-storey existing building height. While the drawings are preliminary and do not yet demonstrate materiality, the Panel is concerned that the façade design has not progressed and that the previous conceptual approach to the facades demonstrated a more compelling approach with a nuanced articulation of base, middle and top. The vertical expression along Rutledge Street does not adequately address the scale transition across Rutledge Street and at the edge of the town centre.	The building facades as shown in the elevation plans have been progressed significantly since the UDRP meeting, the proposed façade detail is attached at **Appendix A**. In accordance with the Panels advice, the façade expression has been developed to respond to the fine grain scale of Rowe Street and the Eastwood Town Centre. Materiality and building articulation has been used to ensure the ground and level 1 facade provide a human scale to the buildings and break up the building bulk. The upper levels have been designed as a “cap” on the building and create a variation in the building form.

3.5 STORMWATER

Ongoing consultation has been undertaken with Council’s Drainage Engineering team regarding the stormwater strategy proposed for the site. Most recently the Council Engineers commented on a preliminary stormwater drainage concept by email to Calibre Consulting on 24 June 2016.

Council provided the following advice:

> *The proposal should seek to discharge to public drainage infrastructure located in West Parade (highly preferable and where ever possible) and the drainage line continuing down the “The Avenue” - given that this infrastructure presents an easier upgrade path if required.*
>
> *The drainage line in Trelawney Street as well as the line draining Eastwood Mall (northeast of your catchment “E”) should be avoided given both lines traverse private property, are constructed over and therefore have a very limited level of service and ability to be upgraded.*

These requirements reflect Council’s concern about the current flooding in Rowe Street Mall, and sought to reduce this flooding by diversion of flows from the subject land that currently contribute to that flooding by discharging to Rowe Street Mall.

In response to Council's comments, the current proposal has diverted virtually all of the catchment that used to flow towards Rowe Street Mall towards West Parade as requested by Council. Stormwater drainage and flooding matters are further addressed within Section 6 of this report.

3.6 TRAFFIC MODELLING

Ongoing consultation has been undertaken with Council's Traffic Engineering team regarding the traffic modelling and approach to assessment for the site. Most recently the proposed methodology for traffic modelling was sent to Council's traffic engineer for review and acceptance.

Further liaison with Roads and Maritime Services (RMS) has been undertaken which identified the traffic modelling of Rutledge Street required as part of the proposal. This includes an assessment of existing conditions (including traffic counts) assessment of future traffic conditions (with development traffic and other approved developments and background growth). In particular the modelling needs to assess the proposed access off Rutledge Street.

On this basis, the traffic modelling is currently being undertaken in accordance with Council and RMS advice.

3.7 CONCLUSION

Consultation with Council officers and the UDRP has been undertaken to ensure Council has been involved in the project development. Key matters discussed covered relate to:

- Urban Design and residential amenity
- Consistency with relevant planning controls
- Traffic modelling
- Stormwater management

Comments and issues raised by Council during the consultation have been considered and incorporated into the development application where possible.

4 Pre-lodgement of Development Application

A copy of the Development Application was lodged with Council as part of the Accept-Check and Lodge process on 22 July 2016. This process allows for an initial review to be undertaken by Council prior to the formal lodgement of the Development Application. The current application has responded to the matters raised in Councils letter, dated 10 August 2016, as follows:

PROPOSED HEIGHT, CLAUSE 4.6, PLANNING PROPOSAL & VOLUNTARY PLANNING AGREEMENT (VPA) ISSUES

The DA documentation includes a detailed Clause 4.6 – Objection to the Height of Buildings standard of the RLEP 2014 (**Appendix E**) setting out a justification for the proposed building heights that stands alone on its merits as providing a better planning outcome than a strictly compliant scheme.

In addition, the DA package includes an offer for a draft Voluntary Planning Agreement (draft VPA) prepared in accordance with the Environmental Planning and Assessment Act 1979 and the City of Ryde Council's Voluntary Planning Agreements Policy, July 2015. The draft VPA is attached at **Appendix V** and provides the opportunity for a significant public benefit to be realised through this mechanism.

That the execution of the draft VPA is dependent upon the development being approved as proposed. Should the consent authority not support the additional storeys above the building height control, then the draft VPA will not be executed.

AMOUNT OF RETAIL/ COMMERCIAL SPACE

The application documents the key figures in terms of existing vs. proposed retail and commercial floor space – Net Leasable Area (NLA). **Table 7** and **Table 9** at Section 6 of this report clearly demonstrate that the proposal will result in an increase in both retail and commercial NLA when compared to the existing floor space on the site, as follows:

- Retail: +2,092m^2
- Commercial: +377m^2

ACCEPT, CHECK AND LODGE PROCESS

- A Traffic Report prepared by Colston Budd Rogers Kafes (CBRK) is attached at **Appendix O**.
- A final Building Services Concept Report prepared by Arcadis is attached at **Appendix P**.
- A Waste Management Plan prepared by Elephants Foot is attached at **Appendix T**.
- A copy of the Survey Plans prepared by Rygate Surveyors are provided at A0.
- The Architectural Package at **Appendix A** includes a schedule of materials and finishes and 3D Perspective images.
- A Demolition and Construction Management Plan will be prepared as part of the satisfaction of conditions of consent. A builder has not yet been engaged for the project and therefore the detail required to prepare this documentation is not yet available.
- The BCA Assessment Report has been updated at **Appendix R** to include details regarding accessibility of the proposal.
- The proposal will maintain the retail and commercial floor space provided by the existing shopping centre and therefore an Economic Impact Statement is not required for this application.
- The response to Council's Urban Design Panel Review comments (received 10 August 2016) is provided at Section 3.4 of this report.
- The BASIX plans are provided at A3 at **Appendix L**, to ensure they are a readable scale.

5 Site and Locality

5.1 SITE DESCRIPTION

The subject site is located at 152-190 Rowe Street and 3 Rutledge Street, Eastwood, as identified in **Figure 7** below. The subject site has an area of 12,755m^2, and represents the largest private landholding in the Town Centre under single ownership.

FIGURE 7 – SUBJECT SITE

The subject site includes the following properties as described in **Table 4**:

TABLE 4 – SUBJECT SITE PROPERTY DESCRIPTIONS

ADDRESS	LOT/ DP	ADDRESS	LOT/ DP
152-160 Rowe Street	Lots 1, 2 and 3, DP 1082714 Lots 1 and 2, DP 15579 Lot 1, DP 315919 Lot 1, DP 583398 Lot A, DP 342118	178-180 Rowe Street	Lot 1, DP 173607 Lot 7, DP 656027 Lot A, DP 317789
168 Rowe Street	Lot 2, DP 583398	186 Rowe Street	Lot 8, DP 1098697

ADDRESS	LOT/ DP	ADDRESS	LOT/ DP
170 Rowe Street	Lot 1, DP 105344	188 Rowe Street	Lot 1, DP 331280
172-176 Rowe Street	Lots 1 and 2, DP 211809	190 Rowe Street	Lot 201, DP 1134152
		3-5 Rutledge Street	Lot A, DP 374497 Lot Pt25, DP 4231

The site features the following street frontages:

- North: Rowe Street Pedestrian Mall, 117m
- East: West Parade, 35m
- West: Trelawney Street, 99m
- South: Rutledge Street, 148m

The site currently accommodates a retail shopping centre, Eastwood Shopping Centre, providing approximately 12,500m² of retail space anchored by a Woolworths supermarket as well as 2,400m² of commercial space.

Existing buildings on the site range in height from one to eight storeys with the taller building forms fronting Rowe Street Mall. The site also includes a prominent Masonic Temple fronting Rowe Street, as shown in **Figure 8**.

FIGURE 8 – EXISTING SITE PHOTOGRAPHS: EASTWOOD SHOPPING CENTRE

PICTURE 1 – TALLER BUILDING FORMS FRONTING ROWE STREET

PICTURE 2 – EXISTING MASONIC TEMPLE ON ROWE STREET

On site car parking, a total of 426 spaces (289 publically available) are currently provided for the shopping centre within a multi-level car park building on Rutledge Street and ad-hoc at grade sealed parking areas, both centrally on the site and on the Rutledge Street frontage.

The Rutledge Street frontage of the site is dominated by car parking structures, vehicle access and loading and servicing areas. Large expanses of blank walls and an at grade car parking area front Rutledge Street.

Vehicle access to the site is shown at **Figure 9** and currently provided as follows:

- Via an access road from Trelawney Street – multi level car park, other at grade parking areas.
- West Parade – loading and servicing area.
- Single crossovers from Rutledge Street – at grade parking areas on this frontage.

FIGURE 9 – EXISTING SITE ACCESS ARRANGEMENTS

5.2 SURROUNDING ENVIRONS

The surrounding environs are described in **Table 5.**

TABLE 5 – SURROUNDING ENVIRONS

DIRECTION	DESCRIPTION
North	▪ Immediately north of the site, including the opposite side of Rowe Street, is the Rowe Street Pedestrian Mall which consists of a range of retail, medical, and commercial services, and an array of food and drink premises. Rowe Street is characterised by low scale 1-2 storey traditional shop fronts, and the 8-10 storey existing shopping centre and commercial office tower on the subject site. ▪ Further north of the site is Eastwood Park which includes two sports fields and two activity playgrounds. Other features of Eastwood Park include BBQ facilities, cycle ways, picnic areas and shaded walking paths. ▪ Hillview Road, also further north of the site, offers transport options (Sydney Buses) to Sydney's

DIRECTION	DESCRIPTION
	Northern Suburbs including Epping, Ryde and Macquarie Park.
South	▪ South of the site, on the opposite side of Rutledge Street, is characterised by low density residential neighbourhoods with large lots and wide roads. Housing types in the residential neighbourhood includes Federation housing, Californian bungalows, red-brick units, and contemporary single storey dwellings. Significant development on this side of Rutledge Street includes the KU Eastwood Preschool. ▪ Further south of the site is the suburb of Denistone, which unlike Eastwood, is predominantly a residential hub characterised by low density development. The Denistone train station is located at the centre of the suburb and is partially surrounded by Darvall Park.
East	▪ Approximately 300m east of the site is Eastwood train station which is served by Sydney Trains T1 Northern Line and NSW TrainLink Central Coast & Newcastle Line Services. Sydney Buses also operate nine routes via Eastwood Station, including to Circular Quay, Parramatta, Epping, West Ryde, Macquarie Centre, Auburn, Chatswood and Marsfield. ▪ Further east of the site, beyond the train station is further retail, medical, and commercial services, and an array of food and drink premises. Significant development on this side of the train station includes ALDI Eastwood, and the Eastwood Police Station. There are also a number of post-war unit buildings located on this side of the train station.
West	▪ Adjoining the subject site to the south west, at 7-9 Rutledge Street, is a fenced off development site. Council have granted consent to a staged development on the adjoining site comprising two allotments for a mixed use development including 613m^2 of retail space and 100 residential apartments (LDA 2011/0612). ▪ West of the site, on the opposite side of Trelawney Street, is Eastwood Public School; a co-educational primary school from K-6. ▪ Directly adjacent to Eastwood Public School is a low density residential neighbourhood characterised by relatively small blocks, semi-detached Federation housing, and contemporary rendered dwellings. ▪ Further west of the site is Brush Farm Park which consists of sports fields, playgrounds and bushland reserves.

6 Proposed Development

6.1 OVERVIEW

The Architectural Design package prepared by HDR Rice Daubney, describes the proposed development, as:

> *Yuhu Properties, the proponent, has embarked on a major project which will consolidate and enhance the Eastwood Town Centre nature. The redevelopment of a significant area located on Rowe St in the heart of Eastwood, will include seven residential buildings with 443 apartments, two levels of retail, a commercial building, a medical centre and a singular landscape that integrates in the whole development. There are also four levels of car parking underneath. First two parking levels are internally connected and provide a car park required for retail and commercial area, while third and fourth levels are for residents use.*

The DA seeks approval for the mixed use redevelopment of the subject site, including the following works:

- Demolition of all buildings and associated structures across the site;
- Construction of seven (7) buildings across the site accommodating the following land uses:
  - Retail and commercial uses at Lower Ground and Ground Levels, including a major supermarket, mini-major supermarket, speciality retail, fresh food, slow and fast food, kiosks, pharmacy, medical centre, gymnasium and commercial office space.
  - Shop top housing: 443 residential apartments across the upper levels of all buildings. Six (6) buildings accommodate above ground residential only (Buildings AA, BA, BB, CA, CB & DA) and the upper four levels of Building DB are residential.
  - Four levels of commercial office space (including ground level) within Building DB.
- Construction of a bridge link between two residential buildings as part of the stormwater strategy for the site.
- Four levels of basement car parking and loading to service all activities on the site;
- Two new open air through site pedestrian links between Rowe Street and Rutledge Street and a publicly accessible market hall, supported by active frontages, outdoor seating and pedestrian amenities.
- New vehicle access arrangements for residents, visitors, retail patrons and service vehicles; and.
- Landscape works within the site.

Lodged concurrently to this DA is a draft VPA to provide for the significant upgrade to Rowe Street Mall to create an enhanced public domain. This has been developed in accordance with the City of Ryde Council's Planning Agreement Policy, July 2015.

6.2 NUMERICAL OVERVIEW

A summary of the numerical information is provided in **Table 6**.

TABLE 6 – KEY DEVELOPMENT INFORMATION

COMPONENT	PROPOSAL
Site Area	**12,755m^2**
GFA	
▪ Retail	11,103 m^2
▪ Residential	39,115.5 m^2
▪ Commercial	2,597 m^2
▪ Gym	346m^2
▪ Medical Centre	687m^2
Total GFA	**53,848.5 m^2**
Height (maximum)	
▪ Building AA	21.2m to 26.8m / Part 6 and Part 8 storeys
▪ Building BA	20.35m to 21.95m / 6 storeys
▪ Building BB	21.4m to 27.65m / Part 6 and Part 8 storeys
▪ Building CA	35.9m to 38.3m / 11 storeys
▪ Building CB	42.4m to 44.4m / 13 storeys
▪ Building DA	36.85m to 39.65m / 11 storeys
▪ Building DB	33.85m to 35.8m / 10 storeys
Unit mix	
▪ 1 bedroom	167
▪ 2 bedroom	255
▪ 3 bedroom	21
Total residential units	**443**
Parking	
▪ Retail	444 car spaces (including 14 accessible spaces)
▪ Residential	511 car spaces (including 86 accessible spaces)
▪ Residential: visitor	46 car spaces (including 2 accessible spaces)
▪ Commercial	35 car spaces (including 3 accessible spaces)

COMPONENT	PROPOSAL
▪ Gym	17 car spaces
▪ Medical Centre	27 car spaces
Total car spaces	**1,110**

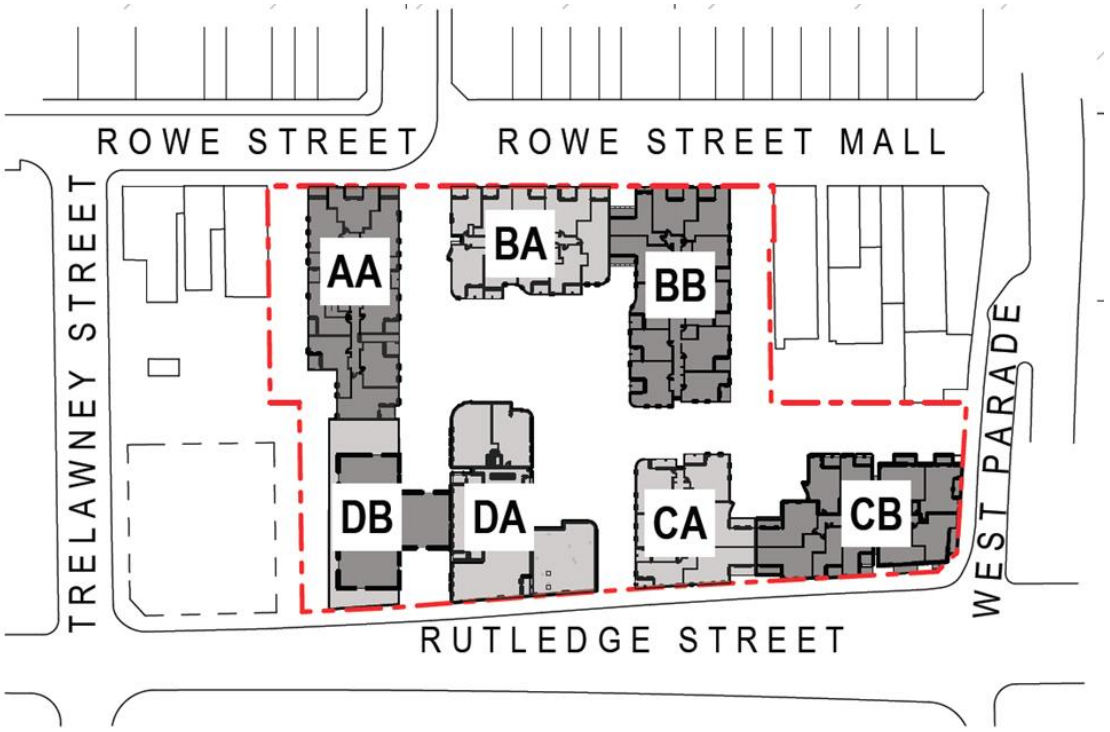
6.3 DEVELOPMENT OPPORTUNITIES

The proposed development has been influenced by and designed in response to the following significant stimuli that apply to the site and the surrounding context:

- The detailed site and context analysis undertaken, as demonstrated in the Design Report at **Appendix B**.
- The characteristics of the surrounding area and recently approved developments within the Eastwood Town Centre.
- The need to maintain and enhance the retail and commercial offer of the Eastwood Shopping Centre to continue to service Eastwood and surrounding suburbs and meet the evolving shopping and service of a growing population.
- The ability to leverage off the site's well serviced location, availability of public transport options and prime location within the core of the town centre to create a pre-eminent shopping and residential destination, as supported at a State policy level in *A Plan for Growing Sydney*.
- The opportunity to totally redevelop the site and provide a brand new development with a mix of complementary land uses in a high quality architecturally responsive building.
- Design principles that seek to extend and enhance the public realm experience within the Eastwood Town Centre, including landscaping treatment, activation and increased safety and security.
- The future vision for the Eastwood Town Centre, as expressed in the Eastwood Town Centre Development Control Plan, 2014.
- The development standards as set out in the Ryde Local Environmental Plan, 2014.
- The existing development approval on the subject site and on neighbouring sites.

The resulting development scheme is described in the following sections. Buildings are referenced alphabetically, as shown in **Figure 10**.

FIGURE 10 – BUILDING IDENTIFICATION PLAN



6.4 PEDESTRIAN ENVIRONMENT

A fundamental shaper of the proposed development throughout the design of the proposal has been the contribution of the development to the pedestrian environment on the site and linkages to the surrounding public realm. The key design principles employed throughout are:

- Extending the public domain into the site
- Extending activation through the site
- Providing logical and convenient pedestrian circulation through the site

On this basis, a hierarchy of spaces has been developed for the proposal to inform the treatment and intended function of each space, this is shown in **Figure 11**.

FIGURE 11 – PROPOSED HIERARCHY OF SPACES

The proposal includes the following moves to create an exemplary pedestrian experience for residents and visitors to the site, based on the set out hierarchy of spaces, which complements the existing hierarchy of public places in the Eastwood Town Centre.

6.4.1 THE STREET

This is the key north to south connection through the site, which acts as a pedestrian extension of The Avenue – a road (also carrying vehicle traffic) which terminates to the north of the site. The Street is proposed to be open to the sky and provides access between the lower ground level and the ground levels of Rowe and Rutledge Street through a combination of stairs and lifts to cater to all patrons.

The proposed through site link has been designed and laid out to integrate all levels of the development, horizontally and vertically, this includes retail tenancies at all three levels opening out onto The Street to provide activation. The Street provides access to the lower levels, while also allowing pedestrians to remain at street level and transition up to Rutledge Street via a direct route.

A challenge for this pedestrian through site link has been to deal with the grade separation between Rutledge Street and Rowe Street. The level of Rutledge Street at the entry to The Street is RL 74.05 and at the Rowe Street frontage RL 68.82, a difference of 6.22 metres. **Figure 12** demonstrates the proposed pedestrian circulation methods employed to enable people to move through The Street. With reference to **Figure 12**, the stairs down to the lower ground are shown in the foreground and direct access to the south (Rutledge Street) via pedestrian circulation areas are shown on the right and left of the image. The Hanging Garden can be seen to the left of the image with the Market Hall below.

FIGURE 12 – VIEW OF THE STREET, THROUGH THE PROPOSED DEVELOPMENT, FROM ROWE STREET LOOKING SOUTH TO RUTLEDGE STREET.

6.4.2 THE LANEWAY

The Laneway is proposed as a secondary pedestrian connection running north-south through the site for pedestrians. From Rowe Street, the Laneway proposes to provide access to the Market Hall and grades up to Rutledge Street via stairs to access the medical centre and pharmacy tenancies on either side.

As shown in **Figure 13**, the Laneway will be full activated by retail tenancies and residential entries as shown in the floor plans for the proposed development (**Appendix A**).

FIGURE 13 – THE PROPOSED LANEWAY

PICTURE 3 – LOCATION PLAN

PICTURE 4 – ARTIST IMPRESSION

6.4.3 THE HANGING GARDEN

The Hanging Garden sits above the Market Hall and is accessible from the eastern side of the Street (public) and the western side of the Laneway (residents), as shown in **Figure 14**.

FIGURE 14 – HANGING GARDEN LAYOUT AND ACCESS

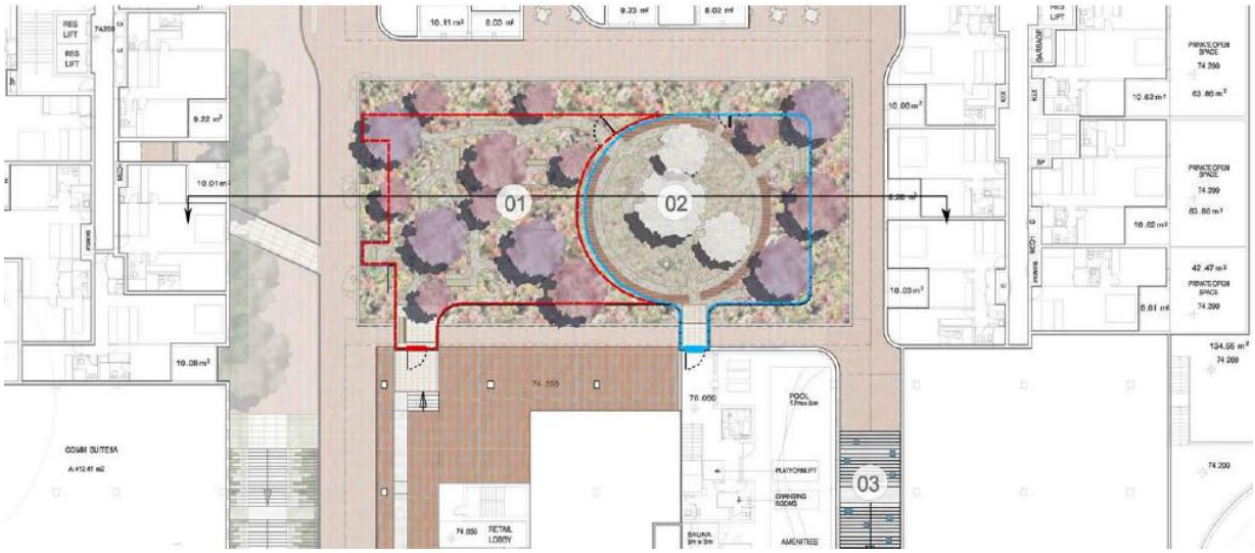


Figure 14 demonstrates that the Hanging Garden area is for use both by the public (red area) and residents (blue area). The proposed hanging garden provides solitude away from the main pedestrian circulation spaces, the Market Hall beneath and The Street and The Laneway links, in an accessible location. The Hanging Garden also provides green outlook to apartments facing the space and adds an attractively designed element of visual interest for those passing through the site. The proposed landscaping concept for the Hanging garden is shown in **Figure 15**. In addition, **Figures 12, 17 & 18** all demonstrate views of the Hanging Garden from respective approaches throughout the site.

FIGURE 15 – PROPOSED LANDSCAPE CONCEPT FOR HANGING GARDEN

6.5 PUBLIC DOMAIN AND LANDSCAPING

The proposed public and private domain areas within the development have been designed with regard to the principles listed below:

- The provision of high quality land/active public domain that allow for a variety of uses and user groups;
- A public domain scheme that reinforces clear and accessible connections through the town centre;
- The provision of a landscape that harnesses the potential for WSUD within its design;
- Provision of a high quality and comfortable environment that prioritises the pedestrian, and encourages safe and legible movement to, from, and within the site;
- Provision of comfort for residents through considered private and communal landscape spaces;
- Increased biodiversity and environmental protection through plant species choice and hard materials;
- Low water consumption planting;
- High quality, low maintenance, robust streetscape materials; and
- A public domain that has been designed with regard to crime prevention through its design (consideration of CPTED principles).

A comprehensive landscape scheme is proposed for the site and shown in the images in this section and fully documented within the Landscape Package prepared by McGregor Coxall and provided at **Appendix C.**

6.6 RETAIL USES

The proposal includes the reinstatement and significant upgrade of the Eastwood Shopping Centre at ground (Rowe and Rutledge Streets) and lower ground levels to continue to serve the retail and service needs of the surrounding community. The section provided at **Figure 16** demonstrates the arrangement of the three retail levels as a section through the site and their relationship to the street levels.

FIGURE 16 – PEDESTRIAN CIRCULATION THROUGH THE RETAIL CORE

The proposed retail layouts are shown on the floor plans and represented in the perspectives at **Figures 17 and 18** and include the following elements:

- **Lower Ground Level**: A major supermarket in the eastern section and a number of fresh food and speciality retail fronting The Street (north – south pedestrian connection through the site).
- **Ground Level (Rowe Street):** A number of individual shop fronts directly accessible from Rowe Street, designed to match the fine grained pattern of existing shop fronts on Rowe Street.
- **Internal to the site (accessed off Rowe Street):** A mini-major supermarket, kiosks spaces and a number of fast and slow food tenancies located around a central market hall area. Speciality retail tenancies are proposed to line the western side of this level, fronting The Street (north – south pedestrian connection through the site).
- **Ground Level Rutledge Street**: Retail tenancies (Mini Major Yum Cha), a medical centre and a pharmacy directly fronting and accessible from Rutledge Street. A gym on the south eastern corner of the site, fronting both Rutledge Street and West Parade.
- **Internal to the site (accessed off Rutledge Street):** Retail tenancies on the eastern side of The Street (north – south pedestrian connection through the site), and access to the commercial building on the western side of The Street.

FIGURE 17 – THE PROPOSED MARKET HALL WITH THE HANGING GARDEN ABOVE

6.6.1 RETAIL FLOOR SPACE

The proposal represents an increase in Net Leasable Area (NLA) retail floor space of 2,092m^2 within the Eastwood Centre when compared with the existing provision on site, as detailed in **Table 7**.

TABLE 7 – EXISTING AND PROPOSED RETAIL NLA FIGURES

RETAIL TENANCY	EXISTING NLA	PROPOSED NLA	PROPOSED CHANGE
Major	1,968m^2	5,176m^2	+3,208m^2
Mini Major	-	1,670m^2	+1,670m^2
Fresh Food	-	830m^2	+830m^2
Restaurant/ takeaway	-	2,134m^2	+2,134m^2
Speciality	7,739m^2	1,829m^2	-5,910m^2
Kiosk	-	160m^2	+160m^2
TOTAL	**9,707m^2**	**11,799m^2**	**+2,092m^2**

FIGURE 18 – ENTRY TO THE PROPOSED PEDESTRIAN STREET FROM THE RUTLEDGE STREET APPROACH

6.7 RESIDENTIAL LIVING

The proposed residential buildings are referenced as AA, BA, BB, CA, CB & DA, and the upper four levels of Building DB. The residential uses are located above ground level in all buildings and have been designed and laid out to provide high levels of residential amenity to future occupants.

6.7.1 RESIDENTIAL AMENITY

The proposed development has been designed to provide a high standard of residential amenity, having regard to the characteristics, orientation and configuration of the site.

An Architectural Design Verification Statement prepared by HDR Rice Daubney in accordance with SEPP 65 and the Regulations are provided at **Appendix B** and provide an assessment against SEPP 65 Design Quality Principals and the Apartment Design Guide.

The residential buildings incorporate areas of both private and communal open space for residents use. This includes three roof gardens at Level 1, Level 6 and on the roof of the commercial building as follows:

- Level 1: an interconnected open area between Buildings BB, CA, CB and DA, also with an entrance to The Hanging Garden through the indoor communal swimming pool.
- Level 6: a roof garden within the northern section of Building AB and at the ground level of Building DB.
- Commercial Building (DB): a communal garden with an enclosed hall for residents' meetings or events.

Six separate entries are provided to the buildings through residential lobbies at ground floor level, as shown in **Figure 19**. The entry points have been designed in accordance with Crime Prevention Through Environmental Design (CPTED) principals to ensure they are provide safe, efficient and easily identifiable access for residents and visitors.

FIGURE 19 – PROPOSED RESIDENTIAL ENTRY POINTS

6.7.2 UNIT MIX

The unit mix for the proposed development is shown at **Table 8**.

TABLE 8 – PROPOSED UNIT MIX

APARTMENT TYPE	NUMBER	% MIX
1 bedroom	167	37%
2 bedroom	255	58%
3 bedroom	21	5%
TOTAL	**443**	**100%**

6.8 OFFICE PREMISES

The building labelled as DB, located in the south western corner of the site on Rutledge Street, accommodates four levels of commercial office tenancies, including ground level where it is directly accessible from The Street. This building is eight levels in height, with the remainder of the four upper most levels incorporating residential units.

The proposal represents an increase in Net Leasable Area (NLA) commercial (office, medical centre and gym) floor space of 377m^2 within the Eastwood Centre when compared with the existing provision on site, as detailed in **Table 9**.

TABLE 9 – EXISTING AND PROPOSED COMMERCIAL NLA FIGURES

COMMERCIAL TENANCY	EXISTING NLA	PROPOSED NLA	PROPOSED CHANGE
Office	2,961m^2	2,303m^2	-658m^2
Gym	-	346m^2	+346m^2
Medical Centre	-	689m^2	+689m^2
TOTAL	**2,961m^2**	**3,338m^2**	**+377m^2**

6.9 BUILT FORM

The proposal includes built form across the subject site ranging from 6 to 13 storeys, as shown by the massing diagram at **Figure 20**.

FIGURE 20 – PROPOSED BUILDING MASSING

The proposed building massing has been designed to:

- Locate building height in areas where it can be accommodated, with minimal amenity and visual impacts, in order to provide for meaningful open space and pedestrian circulation areas at ground level.
- Provide breaks in the building form to reduce building bulk and massing and provide for views into the site from external and internal spaces to the site.
- Provide definition of streets and public open spaces.
- Achieve view sharing principles.

- Maintain sunlight to communal and public open spaces areas.
- Address streets (internal and external) with retail and commercial frontages and residential entrances.
- Utilise pedestrian links and open space areas through the site to break building elements which contribute to solar access and natural ventilation.

6.10 MATERIALS AND FINISHES

The proposed materials and finishes are shown on *Drawing Number DA 6001* within the Architectural Drawings at **Appendix A**. The proposed materials board has been developed to relate to the built form within the surrounding Eastwood Town Centre, while offering differentiation for both residents and visitors to create a positive urban response.

The development presents a refined approach to architectural expression, and a palette of quality materials that will set a benchmark for future developments in the town centre.

The Architectural Design Report provides the following comments in regards to the aesthetics of the proposed development:

The selection of the materials also comes from the materiality in the Town Centre. The whole development will be built in bricks. Externally in red bricks, such as a numerous nearby buildings, and internally in white bricks. Internal spaces in white bricks will bring a bright and fresh environment to residents and will highlight exotic colours from the plants in The Hanging Garden.

The building forms and their articulation relate to vehicular and pedestrian access and movement, as well as street and open space frontages, each requiring differing approaches to scale and in response to the Council UDRP comments.

These differing requirements have been addressed using a limited palette that has been deployed in a manner appropriate to each aspect.

6.11 VEHICULAR ACCESS

The proposed vehicle access strategy is shown on the architectural plans. This includes three clearly defined and well separated vehicle access points to the proposed basement car park on the site, shown in **Figure 18**, as follows:

- **Rutledge Street**: The two existing one way vehicle entry points have been consolidated toward the eastern end of the site to minimise vehicle crossovers and opportunities for pedestrian conflict. This new access is left in, left out only.
- **Trelawney Street**: the existing in and out vehicle access remains in the same location and has been reconfigured to allow for safer vehicle movements and separation of two way traffic.
- **West Parade**: The two existing access points have been consolidated to provide one entry/ exit point with a left in, right out only onto West Parade for loading dock access. This has been designed to ensure vehicle movements can be safely accommodated on the adjoining road.

Access to basement parking, service vehicle entry and exit points, and vehicular footpath crossovers are minimised through a ‘shared basement’ proposal between buildings. The minimisation of basement entry and exit points is fundamental to the creation of an active and accessible public realm.

6.12 PARKING

Retail, commercial, residential and visitor parking including cars, accessible spaces, service vehicles, motorbikes and cycles is provided with four basement levels. **Table 10** provides a summary of the proposed parking provision.

TABLE 10 – CAR PARKING SUMMARY

BASEMENT LEVEL	CAR SPACES
Basement Parking Level 1	263 spaces
Basement Parking Level 2	276 spaces
Basement Parking Level 3	283 spaces
Basement Parking Level 4	288 spaces
TOTAL	**1,110 spaces**

6.13 BRIDGE LINK: STORMWATER STRATEGY

The proposed stormwater drainage concept for the site incorporates the attenuation of peak runoff from the site using On-Site Detention (OSD), the capture and onsite use of roofwater in tanks, and the improvement of the quality of stormwater discharge using Water Sensitive Urban Design (WSUD) principles.

Specifically, the proposal includes the diversion of the majority of the catchment that used to flow towards Rowe Street towards West Parade in order to alleviate flooding on Rowe Street (as requested by Council).

The proposal includes a three storey bridge link connecting the upper levels of Buildings DA and DB, fronting Rutledge Street. The bridge link is vital for providing stormwater drainage across the site in accordance with the stormwater strategy for the site as endorsed by Council's Drainage Engineers. Calibre Consulting provides the following explanation:

> *The building at the north-east corner, fronting Rowe Street Mall, can be drained to West Parade by a new stormwater pipeline through the mall. However, the drainage system in West Parade is not deep enough for a drainline to run all the way from the second building fronting Rowe Street Mall. Fortunately, the high level bridge connection allows the roofwater drainage from the building to the west to be connected to the roofwater drainage system in the building to the east, and from there to the new drainline.*
>
> *The effect of these drainage measures is to virtually eliminate the catchment, and hence the stormwater runoff, that used to drain towards Rowe Street Mall. This could not have been achieved without the bridges linking the buildings at a higher level.*

6.14 WASTE MANAGEMENT

Construction and operational waste management procedures are described in detail the Waste Management Plan to be provided at **Appendix T**.

6.15 PROPOSED HOURS OF OPERATION

Table 11 provides the hours of operation proposed for the non-residential uses.

TABLE 11 – PROPOSED HOURS OF OPERATION

PROPOSED USE	DAYS OF WEEK	OPERATING HOURS
Supermarket	Monday to Sunday	6.00am to midnight
Retail premises (shops, restaurants)	Monday to Sunday	6.00am to midnight
Medical centre	Monday to Sunday	7.00am to 9.00pm
Gymnasium	Monday to Sunday	24 hours

6.16 DRAFT VOLUNTARY PLANNING AGREEMENT

Lodged concurrently to this DA is an offer for a draft Voluntary Planning Agreement (draft VPA) prepared in accordance with the Environmental Planning and Assessment Act 1979 and the City of Ryde Council's Voluntary Planning Agreements Policy, July 2015. The draft VPA is attached at **Appendix V**.

Yuhu proposes to prepare and submit for Council's consideration a VPA under the terms of the Council's adopted policy. It is proposed that the VPA will include a concept design for an upgrade to Rowe Street Mall (Rowe Street Mall Upgrade Works) to create an enhanced public domain, which exceeds the public domain works that would ordinarily be associated with the DA and comprises the following works:

- Upgraded arbour frame;
- New fixed tables;
- Reinstate existing green canopy on upgraded arbour frame;
- New catenary lighting;
- New timber benches;
- New water feature;
- New steel planters; and
- New native tree planting.

McGregor Coxall Landscape Architects have prepared Landscape Concept Plans that include the proposed Rowe Street Mall upgrade works and are provided at **Appendix C**.

The indicative costing of the Rowe Street Upgrade Works has been estimated by WT Partnership Quantity Surveyors to be $1,407,863.00 (Incl. GST). Refer to Cost Estimate at **Appendix U**.

It should be noted that the execution of the draft VPA is dependent upon the development being approved as proposed. Should the consent authority not support the additional storeys above the building height control, then the draft VPA will not be executed.

7 Section 79C Planning Assessment

7.1 INTRODUCTION

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the key planning legislation in NSW. The Act provides guidelines for Councils to make new policies and assess development applications (EP&A Act).

This section of the report contains an assessment of the proposed development against the relevant heads of consideration contained in Section 79C (1) of the EP&A Act. In determining a development application the consent authority must take into account a range of matters relevant to the development including the provisions of environmental planning instruments; impacts on the built and natural environment, the social and economic impacts of the development; the suitability of the site; and whether the public interest would be served by the development. The assessment includes only those matters under Section 79C (1) that are relevant to the proposal as follows:

> *(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:*
>
> *(a) the provisions of:*
>
> *(i) any environmental planning instrument, and*
>
> *(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
>
> *(iii) any development control plan, and*
>
> *(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
>
> *(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and*
>
> *(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,*
>
> *(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,*
>
> *(c) the suitability of the site for the development,*
>
> *(d) any submissions made in accordance with this Act or the regulations,*
>
> *(e) the public interest*

Detailed consideration of Section 79C(1)(a) (b), (c), (d) and (e) matters is provided in the sections below.

7.2 COMPLIANCE WITH RELEVANT STATUTORY PLANS AND POLICIES

Under Section 79C (1) of the EP&A Act the consent authority is required to take into account the relevant provisions of any environmental planning instrument, draft instrument, or development control plan in their assessment of a DA. The following legislation is considered relevant to the proposed development:

- *Environmental Planning and Assessment Act 1979 (EP&A Act);*
- Heritage Act 1977
- A Plan for Growing Sydney;
- NSW Long Term Transport Master Plan;
- NSW State Government: Making it Happen;
- *State Environmental Planning Policy 55 – Remediation of Land (SEPP 55);*
- *State Environmental Planning Policy 65 – Design Quality of Residential Flat Development (SEPP 65) and supporting Apartment Design Guide (ADG);*
- *State Environmental Planning Policy (Building Sustainability Index: BASIX);*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *Ryde Local Environmental Plan 2014 (as amended by State Environmental Planning Policy Amendment (North Ryde Station Precinct) 2013); and*
- *Eastwood Town Centre Development Control Plan 2013.*

The consistency and compliance with the relevant strategic and statutory plans and policies is detailed in the following sections.

7.2.1 OBJECTIVES OF THE EP&A ACT

The objects of the EP&A Act provide a policy framework against which the proposal is required to be considered. An assessment of the proposed development against the objectives of the EP&A Act is provided in **Table 12.**

TABLE 12 – OBJECTIVES OF THE EP&A ACT

OBJECTIVES	RESPONSE
(a)(i) encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment.	The proposal responds to the existing condition of the site. Specialist studies have been carried out in relation to the heritage, archaeological, stormwater and geotechnical features of the sites. The proposed works address the outcomes of these studies and proposes mitigation measures to properly manage all identified impacts. Additionally, the proposal seeks to develop the land, provide housing and a retail centre and open space provisions.
(a)(ii) encourage the promotion and co-ordination of the orderly and economic use and development of land.	The proposed redevelopment of the site promotes the efficient development of the land to accommodate a range of complementary land uses that will contribute to the revitalisation of the existing town centre.

OBJECTIVES	RESPONSE
(a)(iii) encourage the protection, provision and co-ordination of communication and utility services.	Existing utilities and services are coordinated in the civil works to serve the development of the subject site.
(a)(iv) encourage the provision of land for public purposes.	This application will provide for open spaces for the benefit of the existing and future local community.
(a)(v) encourage the provision and co-ordination of community services and facilities.	The proposal includes the provision of a new community facility, consistent with the draft VPA.
(a)(vi) encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats.	The proposal will have no impacts on the native plant and animal species and ecological communities.
(a)(vii) encourage ecologically sustainable development.	The principles of ecologically sustainable development have been considered as part of this proposal.
(a)(viii) encourage the provision and maintenance of affordable housing.	The proposal provides a range of unit types which are improve affordability of housing in the local area.
(b) promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and	The development application will be determined by the Sydney Planning Panel. The Applicant has consulted with Council in the preparation of this application.
(c) provide increased opportunity for public involvement and participation in environmental planning and assessment.	The proposal will be placed on exhibition for public comments in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000*.

7.2.2 HERITAGE ACT 1977 (HERITAGE ACT)

The Heritage Act promotes identification and conservation of the State's heritage. The Heritage Act also establishes the circumstances under which a proposal would be referred to the Heritage Council of NSW for separate approval. The subject site is not listed on the State Heritage Register of NSW under the Heritage Act.

The subject site does not feature any heritage items and has previously been significantly disturbed. A Heritage Impact Statement (HIS) has been prepared by Extent Heritage to address the potential impacts of the development on the heritage significance of neighbouring heritage items and conservation areas. The HIS is attached at **Appendix H** and the findings are detailed at Section 7 of this report.

7.3 KEY STRATEGIC PLANS AND POLICIES

An assessment of the proposed development against the key strategic plans and policies is provided in **Table 13**.

TABLE 13 – CONSISTENCY WITH KEY STRATEGIC PLANS AND POLICIES

INSTRUMENT/STRATEGY	COMMENTS
Strategic Plans	
A Plan for Growing Sydney	The *Plan for Growing Sydney 2014* identifies Eastwood as being located within Sydney's Global Economic Corridor, centrally located between Parramatta and Macquarie Park (Direction 1.6). In this case, Eastwood is an important location for expanding employment opportunities and mixed use activities due to its strategic location within the corridor and proximity to public transport services. In accordance with its identified importance within the Eastwood Town Centre, the proposal seeks to contribute mixed use activity, including high density housing, employment and retail opportunities. The proposed development will contribute 443 additional apartments to the centre, and includes approximately 15,000m^2 of retail and commercial floor space. This represents an increase in the current floor space provided on the site in line with projected demand from the surrounding catchment and will continue to strengthen Eastwood's location within the Global Economic corridor and promote synergies with other nearby centres to make a significant contribution to economic growth. This DA is also consistent with the priorities for the North Subregion identified in the Plan as the proposed redevelopment will: ▪ Enhance the role of the subregion as Sydney's global economic driver. ▪ Strengthen connections within Global Sydney and the Global Economic Corridor city shapers. ▪ Provide capacity for employment growth. The aims and objectives of the Plan for Growing Sydney and the priorities for the North District (District Plans still to be released) have informed the preparation of the DA for the revitalisation of the Eastwood Centre. The proposed development will deliver key social infrastructure to the centre, including providing housing close to public transport and amenities. It will also deliver sustainable well-designed buildings and well-connected active local laneways. The redevelopment of the Eastwood Centre site will make a valued contribution to economic growth in Sydney, and in Eastwood, through the increase in jobs and housing.
NSW Long Term Transport Masterplan	The proposed DA is consistent with NSW Long Term Transport Master Plan as it: ▪ Supports the intensification of activity around established transport infrastructure ▪ Provides for bicycle parking that will support the Master Plan's intent to invest in the cycling network.
NSW: Making it Happen	The proposed DA is consistent with goals of NSW Making it Happen as it aims to: ▪ Contribute to improving the economy of Sydney through the creation of an innovative building design, a variety of retail tenancies, the opportunities to connect to digital infrastructure and the unique connectivity afforded by the location adjacent to the train station. ▪ Promote patronage on public transport by improving the legibility and accessibility to the available services and encouraging the use of alternative forms of

INSTRUMENT/STRATEGY	COMMENTS
	sustainable transport through providing for bicycle parking facilities. ▪ Enhance, through the introduction of public space, the cultural and creative opportunities within the site. ▪ Continue to engage with the community and key stakeholders throughout the planning processes.

7.4 STATE ENVIRONMENTAL PLANNING POLICIES

7.4.1 STATE ENVIRONMENTAL PLANNING POLICY 65: DESIGN QUALITY OF RESIDENTIAL APARTMENT DEVELOPMENT

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.

HDR Rice Daubney, the project architects, have undertaken an assessment of the proposal in regard to the Design Criteria of the Apartment Design Guide (ADG) under SEPP 65, being solar access and natural ventilation.

Assessments of the proposed development against the 9 design quality principals of SEPP 65 and the ADG are required to be prepared with Design Verification Statements, by architects that are registered under the *Architects Act 2003*.

In accordance with SEPP 65 an assessment under the ADG and a Design Verification Statement have been prepared and are attached at **Appendix B.**

SOLAR ACCESS

Under SEPP 65 and the accompanying Apartment Design Guide (ADG), at least 70% of private open spaces and living rooms within new developments should receive at least two hours of direct sunlight access between 9am and 3pm at the winter solstice. In dense urban settings, such as Eastwood, this requirement is reduced to two hours.

The proposal includes 314 out of 443 apartments (70.8%) that achieve a minimum of 2 hours direct sun to living spaces in mid-winter, in accordance with the 70% required by the ADG.

The design achieves a high level of amenity and the ADG objectives for building amenity and daylight access due to the breaking up of the building forms into seven distinct buildings. This provides for greater opportunities for apartments to feature expanses of glazing to provide for solar access into primary living areas.

The proposal includes 82 apartments that receive no direct sunlight between 9 am and 3 pm at mid-winter. This results in a total of 18.5%, which exceeds the ADG maximum of 15%. In this case, the proposal is constrained by the north-south orientation of the site, including the large expanse of the site that faces south to Rutledge Street, and the lower height limits and existing scale that exists on the northern site frontage. The proposal has sought to maximise the north, east and west facing aspects of the site by locating the commercial tenancies to the south and breaking up the built form to provide natural paths for light to penetrate the site.

In addition, the apartments accommodated within the bridge link (between Buildings DA and DB) provide for exemplary levels of residential amenity due to the large expanses of glazing provided on either side and the L-shaped apartments created.

NATURAL VENTILATION

Under SEPP 65, the ADG criteria require at least 60% of residential units are naturally cross ventilated. Where a development proposes to vary the standard, it is required to incorporate design features to ensure natural ventilation can be achieved.

The proposal includes 231 out of 443 apartments (60.5%) to be naturally cross ventilated, in which their dual aspects on the corners of the broken up building form allow a natural ventilation path through the apartment. The proposal satisfies the ADG criteria resulting in a high level of amenity for future occupants. It is also noted that 229 out of 443 apartments (60%) within the first 9 storeys are naturally cross ventilated in accordance with the ADG standards.

All apartments meet the maximum building depth of 18m as specified in the ADG.

APARTMENT SIZE AND MIX

The proposal fully complies with the minimum apartment sizes under SEPP 65. The majority of dwellings proposed in the development exceed the minimum apartment sizes, all apartments have been well proportioned, well planned and are provided with good quality balcony spaces.

The proposal provides a mix of 1, 2 and 3 bedroom dwellings with a range of sizes and layouts and all meet the minimum ceiling heights as set out in the ADG.

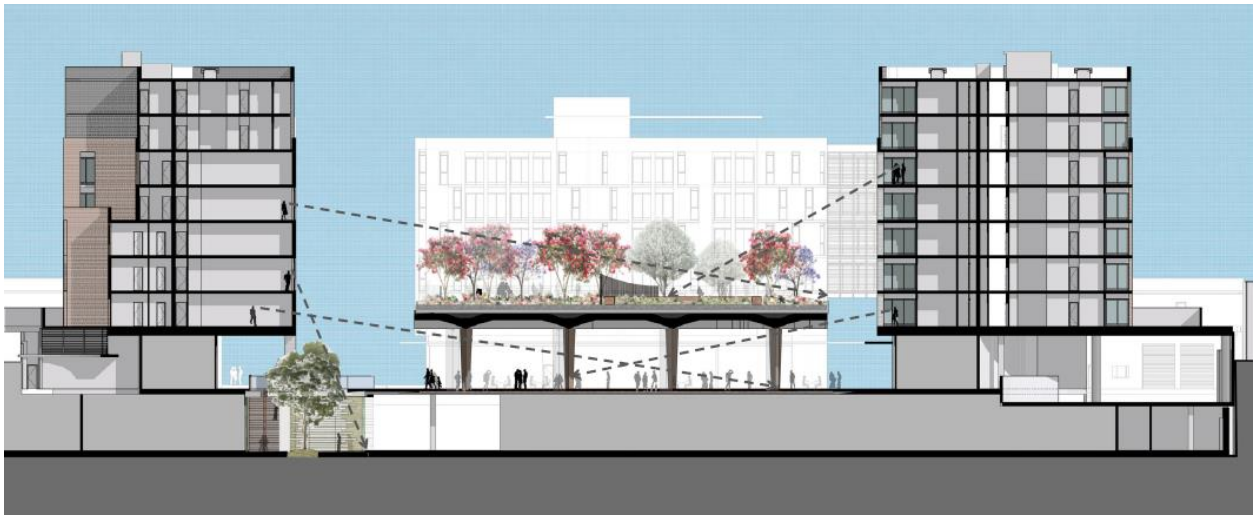
The proposal includes 44 adaptable apartments, comprising 10% of the total apartments. These are provided at different levels across all seven buildings, and have been assessed in the BCA Report (at **Appendix R**) to be compliant or able to comply with relevant Australian Standards. Please refer to *Drawing Numbers DA1901 and DA1902* for the plans showing the design and layout of the adaptable units (**Appendix A**).

BUILDING SEPARATION

The proposed separation distances to side and rear boundaries and between buildings have been designed in accordance with the ADG design criteria. These separation distances enable the built form proposal to be realised on the site and provide appropriate levels of amenity for future residents and respect the existing neighbours.

An increased setback is provided to those buildings fronting the Hanging Garden (Buildings AA, BA, BB & DA) which provides for a large section of the site to be clear of built form and high levels of amenity as a result of views into the garden area. **Figure 21** demonstrates views provided into the Hanging Garden from surrounding residential buildings.

FIGURE 21 – OPPORTUNITIES FOR PASSIVE SURVEILLANCE FROM SURROUNDING APARTMENTS



For these reasons the proposed building separation is considered an appropriate response on the site, to the adjoining properties, the streetscape character and site context.

7.4.2 STATE ENVIRONMENTAL PLANNING POLICY – BASIX

ARUP Engineers have prepared an energy efficiency assessment report, relating to compliance with the Building Sustainability Index (BASIX) for residential apartments and Section J of the BCA for the retail tenancies. The report is included in **Appendix L**.

The report determines that, subject to the detailed design recommendations of the report:

- The apartments achieve compliance with BASIX standards for water and energy efficiency (BASIX certificates are attached to the BASIX report); and
- The external walls and glazed windows of the retail premises meet the requirements of Parts J1 and J2 of the BCA respectively.

7.4.3 STATE ENVIRONMENTAL PLANNING POLICY – INFRASTRUCTURE

The aim of the SEPP is to facilitate the effective delivery of infrastructure across NSW by identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure such a classified roads and prescribing consultation requirements for certain development.

TRAFFIC GENERATING DEVELOPMENT (CLAUSE 104)

Developments listed in the Schedule 3 of the SEPP are to be referred to RMS. Schedule 3 lists categories and sizes or capacity of developments which both have site access to a classified road (or within 90m) and access to any road. Certain characteristics of the development proposal trigger referral to the RMS for comment, such as:

- Commercial premises with floor space of more than 2,500m^2;
- Parking for 50 or more motor vehicles; and
- Shops of 500m^2 or more.

Given the volume of the proposed commercial (retail) floor space and the number of parking spaces proposed, the proposal will be referred to the RMS for comment.

Further discussion on the proposed traffic and car parking is provided at **Section 7** of this report.

7.4.4 STATE ENVIRONMENTAL PLANNING POLICY 64 – ADVERTISING AND SIGNAGE

SEPP 64 aims to:

(a) to ensure that signage (including advertising):

(i) is compatible with the desired amenity and visual character of an area, and

(ii) provides effective communication in suitable locations, and

(iii) is of high quality design and finish, and

(b) to regulate signage (but not content) under Part 4 of the Act, and

(c) to provide time-limited consents for the display of certain advertisements.

The applicant is in the process of securing the retail tenants and their signage requirements are not yet finalised. Therefore, consent for the design of signage on the building will be lodged as a separate development application.

The design of the building, including the height, bulk and scale and the architectural features, has allowed for potential signage zones to be provided in the future in appropriate locations to provide effective signage for key tenants.

It is recommended that the separate development application for signage include a comprehensive signage strategy to promote a consistent approach for the high quality signage, which complements the architectural expression of the buildings and the desired character of the mixed use precinct described in the Eastwood Town Centre DCP 2014.

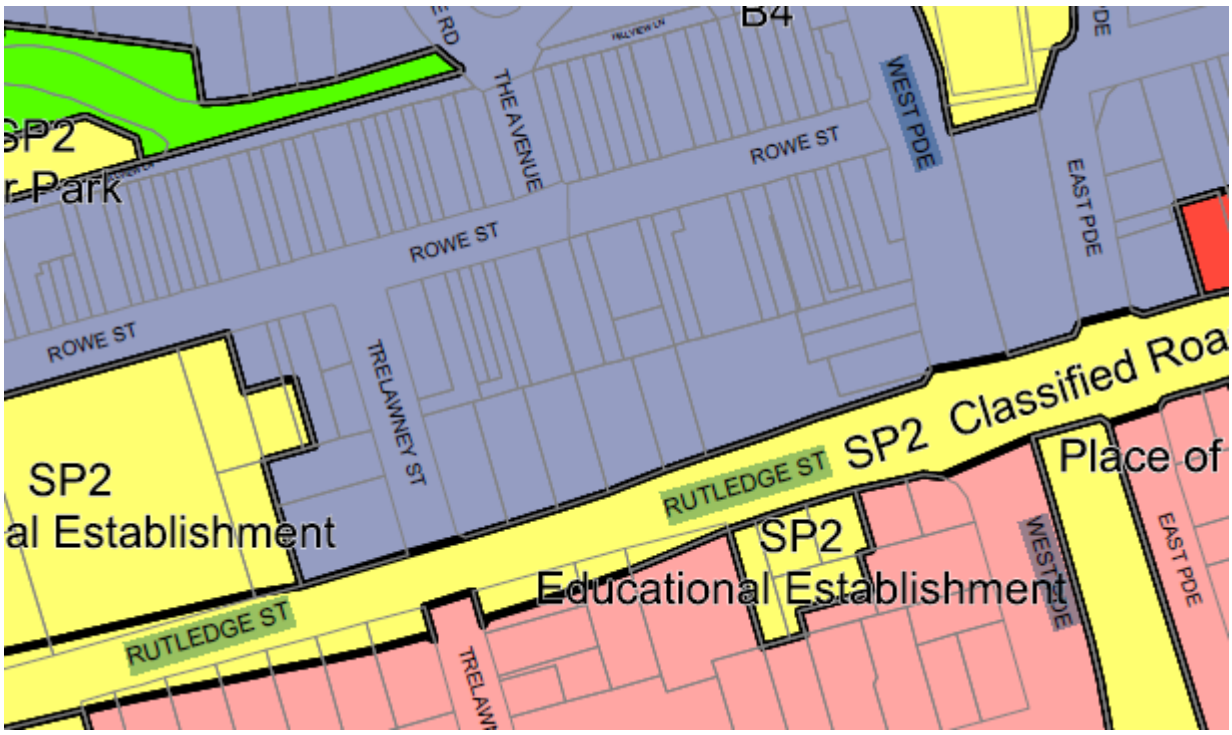
7.5 RYDE LOCAL ENVIRONMENTAL PLAN 2014

The relevant sections of the *Ryde Local Environment Plan 2014* (RLEP) are as follows:

7.5.1 LAND USE ZONING AND PERMISSIBILITY

The site is zoned B4 Mixed Use under the RLEP as shown in **Figure 22**.

FIGURE 22 – ZONING MAP (RLEP 2014)



The objectives of the B4 Mixed Use zone are:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To ensure employment and educational activities within the Macquarie University campus are integrated with other businesses and activities.*
- *To promote strong links between Macquarie University and research institutions and businesses within the Macquarie Park corridor.*

The proposed development is consistent with the relevant objectives of the B4 Mixed Use zone through:

- Provision of diverse and compatible land uses - residential, retail and commercial activities, to provide vibrancy and activity within the precinct while allowing for the successful operation of each. The proposal will serve the workforce, visitors and the wider community.
- Integration of a variety of land uses in a location that is highly accessible through public transport – Eastwood Railway Station and various bus routes, and encourages walking and cycling through provision of bicycle facilities to provide for cycling initiatives.
- The introduction of through site links, pedestrian plazas and reduction of vehicular crossings; providing a significant opportunity to activate the street and retail frontages at the ground plane.

Land use permissibility within the B4 Mixed Use zone is summarised in **Table 14** as follows:

TABLE 14 – B4 MIXED USE LAND USE (RLEP 2014)

ZONE	LAND USES
Permitted with consent	Boarding houses; Building identification signs; Business identification signs; Child care centres; **Commercial premises;** Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; **Medical centres;** Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; **Shop top housing;** Waste or resource transfer stations; Any other development not specified in item 2 or 4
Prohibited	Agriculture; Air transport facilities; Animal boarding or training establishments; Biosolids treatment facilities; Camping grounds; Caravan parks; Depots; Eco-tourist facilities; Farm buildings; General industries; Heavy industrial storage establishments; Heavy industries; Home occupations (sex services); Industrial training facilities; Resource recovery facilities; Sewage treatment plants; Sex services premises; Signage; Vehicle body repair workshops; Vehicle repair stations; Waste disposal facilities; Water recycling facilities; Water supply systems

The proposed development incorporates the following land uses, all of which are permissible within the B4 Mixed Use zone:

- Commercial premises;
- Medical centres; and
- Shop top housing.

7.5.2 HEIGHT OF BUILDINGS

The Height of Building Map specifies maximum heights of 21.5 metres (Rowe Street) and 33.5 metres (Rutledge Street) as shown in **Figure 23**.

FIGURE 23 – HEIGHT OF BUILDINGS MAP (RLEP 2014)

Clause 4.3 (Height of Buildings) of the RLEP includes objectives for the site as follows:

- *To ensure that street frontages of development are in proportion with and in keeping with the character of nearby development,*
- *To minimise overshadowing and to ensure that development is generally compatible with or improves the appearance of the area,*
- *To encourage a consolidation pattern and sustainable integrated land use and transport development around key public transport infrastructure,*
- *To minimise the impact of development on the amenity of surrounding properties,*
- *To emphasise road frontages along road corridors.*

The development proposes to exceed the maximum HOB development standard for specific buildings as set out in **Table 15** and shown in the building massing plan at **Figure 24**. Therefore, the proposal seeks to vary the development standard.

TABLE 15 – BUILDING HEIGHT CONTROLS COMPARISON WITH PROPOSED DEVELOPMENT

LOCATION	BUILDING	HOB STANDARD (MAX)	PROPOSED HEIGHT (STOREYS)	PROPOSED HEIGHT (RANGE) (METRES)	DIFFERENCE TO HOB STANDARD (RANGE) (METRES)
Rutledge Street	CA	33.5m	11 storeys	35.9m to 38.3m	+2.4m to +4.8m
	CB	33.5m	13 storeys	42.4m to 44.4m	+8.90m to +10.90m
	DA	33.5m	11 storeys	36.85m to 39.65m	+3.35m to +6.15m
	DB	33.5m	10 storeys	33.85m to 35.8m	+0.35m to +2.30m

LOCATION	BUILDING	HOB STANDARD (MAX)	PROPOSED HEIGHT (STOREYS)	PROPOSED HEIGHT (RANGE) (METRES)	DIFFERENCE TO HOB STANDARD (RANGE) (METRES)
Rowe Street	AA	21.5m	Part 6 and Part 8 storeys	21.2m to 26.8m	-0.3m to +5.30m
	BA	21.5m	6 storeys	20.35m to 21.95m	- 1.15m to +0.45m
	BB	21.5m	Part 6 and Part 8 storeys	21.4m to 27.65m	-0.10m - + 6.15m

FIGURE 24 – PROPOSED BUILDING MASSING COMPARISON TO HOB STANDARDS

An assessment of the proposed variation has been undertaken in accordance with the requirements of the *RLEP 2014 Clause 4.6 Exceptions to Development Standards* and is attached at **Appendix E**. The written request for the objection to the Height of Buildings control under Clause 4.6(3) of the RLEP 2014 should be read in conjunction with HDR Rice Daubney Design Report provided at **Appendix B**, which provides extensive analysis of key assessment considerations including solar access and visual impact.

In summary, with reference to the Clause 4.6 objection at **Appendix E**, the proposed exceedance of the Height of Buildings control is considered to be justified based on the following key points:

- As demonstrated in the proposal, the built form has been developed in response to site constraints and the design development for the built form and massing across the site. The proposal envisages a development scheme which achieves design excellence through built form and place making. This has been achieved through use of building scale and arrangement of a significant central plaza space as a key feature of the site.

- Analysis of a design alternative that complies with the HOB standards demonstrates that additional floor space on the site is able to be achieved, without realising the better environmental planning outcomes that will be achieved for the proposed development in terms of a publicly accessible open air plaza space and accessible through site links and reduced overshadowing impacts.

- The podium height, building massing and level of articulation responds well to existing adjoining properties and provides a high level of active frontage. The desired character of a 'market town' concept is achieved through provision of specialty retail at ground level, well-articulated shop entries, well defined lobby spaces, and well positioned vertical transport configurations.

- The additional height will not result in any detrimental amenity impacts (overshadowing, views or privacy) to surrounding development when compared to a complying design. Nor will the extent of the non-compliance result in any adverse visual impact on the locality.

- The proposed built form and height is consistent with the desired future character of the Eastwood Town Centre, as envisaged by the Ryde DCP 2014 at Clause 2.2.2 and will provide for a vibrant and viable commercial centre well integrated with a mix of appropriate land uses and open space areas.

- The non-compliance will not hinder the development's ability to satisfy the objectives of the B4 Mixed Use zone.

Based on the reasons outlined, it is concluded the request is well founded and the particular circumstances of the case warrant flexibility in the application of the maximum height of building development standard.

7.5.3 HERITAGE

The subject site does not feature any heritage items and has previously been significantly disturbed. A Heritage Impact Statement (HIS) has been prepared by Extent Heritage to address the potential impacts of the development on the heritage significance of neighbouring heritage items and conservation areas. The HIS is attached at **Appendix H** and the findings are detailed at Section 7 of this report.

7.5.4 STORMWATER MANAGEMENT

Clause 6.4 of RLEP requires that the consent authority in determining a development application to be satisfied that water permeable surfaces are maximised, on-site stormwater retention for alternatives to mains water supply, groundwater or river water, and avoid significant adverse impacts of stormwater runoff on adjacent properties, native bushland and receiving waters.

Stormwater management measures have been incorporated into the proposal including capturing roof runoff and reusing some of the water in the landscaping concept plan, as an alternative to potable water supply. Water quality treatment measures have been integrated into the stormwater management system and are detailed within the Stormwater Drainage Concept provided at **Appendix K**.

7.6 RYDE DEVELOPMENT CONTROL PLAN (2014)

The Ryde Development Control Plan (DCP) 2014 Part 4.1 Eastwood Town Centre sets out the following vision for Eastwood:

> ***Eastwood Town Centre- Future Character Statement***
>
> *In the future, Eastwood will be a place designed for the enjoyment and utility of pedestrians and a place which allows convenient access for people between home, work, shopping and leisure. It will also be a place that has:*
>
> *- a high level of aesthetic amenity at street level;*
>
> *- safe attractive and convenient public spaces;*
>
> *- a vibrant, viable and profitable commercial centre;*
>
> *- well-used robust and attractive active and passive recreation and public space;*
>
> *- an appropriate mix and arrangement of land uses, which satisfactorily serve and integrate with the surrounding residential activities.*

The compliance table (**Table 16**) outlines the extent to which the proposed developments is consistent with the *Ryde Development Control Plan (DCP) 2014 Part 4.1 Eastwood Town Centre.*

TABLE 16 – KEY CONTROLS FOR THE EASTWOOD TOWN CENTRE AT PART 4.1 OF THE RYDE DEVELOPMENT CONTROL PLAN 2014

OBJECTIVE	CONTROL	COMMENT
3.1 Mixed Use Development To establish diverse land uses, services and facilities within the Centre; To encourage the development of well used safe and attractive public places; and To increase the number of persons living close to public transport.	a. Active public uses, such as restaurants, cafes, community facilities, entries to business premises and retail should be located at street level. b. Public and commercial uses should be accommodated in the level/s immediately above street level. c. Residential land uses are discouraged at the street level within the Eastwood Urban Village Precinct. Residential development may be provided at upper levels of development.	The proposal provides for a variety of active public uses at ground and lower ground levels. Commercial activity is restricted to the less pedestrianised areas of the site, and integrated into the frontage activation scheme for the proposal. All residential activity is provided in upper levels of the development.
3.2 Flooding and Stormwater Management	a. A stormwater inundation impact assessment and stormwater management strategy is to be submitted for all developments to the satisfaction of Council.	Stormwater management measures and water quality treatment measures have been integrated into the stormwater management system and are detailed within the Stormwater Drainage Concept provided at **Appendix K**.

OBJECTIVE	CONTROL	COMMENT
3.3.1 Setbacks To ensure that the existing traditional scale element of the streetscape is retained To reinforce the established and accepted streetscape characteristics of Eastwood when considered from the pedestrian perspective. To clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security;	a. Buildings must comply with the maximum height limit shown on the Height of Buildings Map under Ryde Local Environmental Plan 2014. b. Setbacks at the upper levels shall be provided. Parapets, fronting retail/pedestrian priority streets should reflect existing predominant parapet lines. c. New buildings are to have street frontages built predominantly to the street alignment (front boundary) for up to 9.5 m measured from the street level. d. Buildings may be constructed to the side and rear boundaries for up to 9.5 m from street level. e. Buildings (including balconies) must be setback a minimum of 3 m from all boundaries above 9.5 m from street level.	The proposed exceedance for the Height of Buildings control is addressed above and comprehensively within the Clause 4.6 objection at **Appendix E** to this application. The proposal complies with the required setbacks on Rowe Street. In this case the upper two levels are setback in excess of the required 3m to provide a recessive building form that will not impact on the pedestrian scale of Rowe Street. The setbacks to Rutledge Street are not strictly required given its existing treatment. However, the proposal seeks to enhance this frontage through building articulation and modulation, breaks in the building form, passive surveillance from upper level apartments and the activation of this frontage.
Urban Design/ Exterior Finishes To contribute positively to the streetscape by means of high quality architecture; To provide architectural interest especially at visually prominent parts of buildings such as lower storeys and roof tops; To present appropriate design responses that complement the streetscape; To maintain a pedestrian scale in the articulation and detailing of the storeys levels of the building; and To contribute to a visually interesting skyline.	a. Building exteriors are to be designed to avoid extensive expanses of blank glass or solid wall. b. Balconies and terraces should be provided, particularly where buildings overlook public spaces. c. The siting and configuration of buildings should take into account the impact on surrounding development and public spaces in terms of amenity, shadowing and visual privacy. In this regard at least 2 hours of sunlight access must be maintained in public spaces in Rowe Street. d. The tops of buildings are to be designed so that they: i. Integrate with the design of the building and conceal plant and equipment; and	The proposed architectural design and materials and finished have been designed in accordance with the standards set out in this clause. The proposal presents a high quality building aesthetic designed by award winning architects. The proposed design scheme includes an appropriate design response for the site and surrounding streetscape. The proposal responds to the local setting and incorporates a finer grain of detail at the pedestrian level. Materials are proposed based on scale, life expectancy, durability, future desired character of the whole area and appropriateness to their particular location, specifically the use of brick across the site. In summary, the proposed built form presents a well-considered building form that responds to the key site

OBJECTIVE	CONTROL	COMMENT
	ii. Promote a visually distinctive and interesting skyline.	characteristics and framework set by the specific DCP controls to ensure the buildings are appropriate for this location and compatible with the surrounding built form typologies.
Corner Allotments To ensure buildings situated on corner allotments provide for visual interest and ad-dress the intersections that they front.	The design of buildings on corner allotments must address the following: i. The height of adjacent buildings; ii. Ensure that the building turns the corner; iii. The incorporation of distinctive architectural features to enhance the streetscape, for example clocks, flag poles, public spaces, etc; iv. Giving the corner a splayed, concave, convex or square recess treatment such that it signifies the intersection; and v. Design incorporating the removal of clutter such as power poles and advertising signage from around intersections.	The subject site includes the corner of Rutledge Street and West Parade (south east). In this regards, the proposal addresses this street corner by wrapping the development around this corner and seeks to create a prominent building on this key intersection. The design ethos at this corner has sought to create a landmark building in recognition of the following factors: The gateway location of the corner to the Eastwood Town Centre; The proximity to the Eastwood Train Station; A marker for the shopping centre site; A response to the width of Rutledge Street at this point and the separation available from neighbouring residents.
3.4.1 Parking Design and Location To encourage additional on-street parking in appropriate locations. To ensure that off-street parking does not interfere with the safety of pedestrians. To encourage high quality design.	a. The creation of additional on-street car parking is encouraged. b. Car parking should be located below ground level. Where this is not practicable (e.g. due to flood impacts) parking must not be visible from the street. c. In order to minimise vehicular conflict between residents' delivery and customer vehicles, car parking associated with residential uses should be separated from parking for other land uses.	The proposal includes a well-planned car parking and vehicle access strategy to serve the development. All proposed car parking is located within four basement levels. The safety, efficiency and operation of the proposed vehicle access and car parking arrangements have been assessed by CBRK Traffic Engineers as being appropriate to serve the site, this assessment is attached at **Appendix O**.

OBJECTIVE	CONTROL	COMMENT
3.4.2 Location of Vehicle Access and Footpath Crossings Reduce the number of vehicle access points and associated footpath crossing. The design and location of vehicle access to development is to minimise: Conflicts between pedestrian and vehicles on footpaths, Visual intrusion and disruption of streetscape continuity.	a. New vehicle access points are restricted in retail/pedestrian priority streets. Where practicable, vehicle access is to be from lanes and minor streets rather than major pedestrian streets or major arterial roads such as Rutledge Street, First Avenue, or Blaxland Road. b. Service vehicle access is to be combined with parking access and limited to a maximum of one access point per building.	Access to basement parking, service vehicle entry and exit points, and vehicular footpath crossovers are minimised through a 'shared basement' proposal between buildings. The minimisation of basement entry and exit points is fundamental to the creation of an active and accessible public realm.
Design of Vehicle Access Minimise the number of vehicular crossing for any development. Reinforce the rhythm of the streetscape through the provision of visual interest.	a. Vehicle access is to be a single crossing, perpendicular to the kerb alignment. b. Vehicle access ramps parallel to the street frontage will not be permitted. c. Active uses or items of visual interest above vehicle access points are required in the horizontal line of sight of pedestrians. d. Vehicle entries are to buildings are to be well designed and include high quality finishes to walls and soffit. No service ducts or pipes are to be visible from the street.	
3.5.1 Street Frontage Activities To provide for active street frontages along all retail/pedestrian priority streets. To ensure uses such as retailing, cafes and restaurants, and other uses that interact with the public are located along all retail/pedestrian priority streets. To promote of streetscape variety and diversity at the pedestrian	a. Active uses contribute to personal safety in the public domain and comprise: i. Community and civic facilities. ii. Recreation and leisure facilities. iii. Shops. iv. Commercial premises v. Residential uses, particularly entries and foyers. However, these should not occupy more than 20% of the total length of each street frontage. b. Where required, active uses must comprise the street frontage for a depth of at least 10 m.	Rowe Street is identified in the DCP as a Retail/ Pedestrian Priority Street. The proposal incorporates active street frontages for the length of Rowe Street to promote the continuation of pedestrian activity on this frontage. In addition, the proposal includes a variety of active uses fronting the internal through site links and on Rutledge Street to improve the amenity of these currently underutilised areas. Further, the residential apartments provided in the upper levels of the proposed buildings provide

OBJECTIVE	CONTROL	COMMENT
level	c. Vehicle access points may be permitted where active frontage is required if there are no practicable alternatives. d. Blank roller- shutter type doors are not permitted on ground level shop fronts. e. Serviced apartments hotels and motels shall not have apartments at the ground level. Locate retail, restaurants and / or other active uses at the ground level.	passive surveillance of the pedestrian areas below to improve safety in these areas.
3.5.2 Circulation To provide pedestrian links in accordance with the Circulation Strategy (Figure 4.1.05). To ensure developments are designed in a manner which reinforces the Circulation Strategy (refer Figure 4.1.05).	a. Where circulation is provided through a site or within a building serving to connect 2 points, the thoroughfare should function as a shortcut, be continuous and level with pedestrian streets / areas and incorporate adjoining active retail and / or commercial edges. b. Entry and exit points for vehicles are to be designed in a manner that reinforces the Circulation Strategy	The proposal is strongly aligned with the Circulation Strategy outlined in the DCP. The proposed through site links that connect Rowe and Rutledge Streets are generally in accordance with the potential pedestrian access indicated in the strategy and seek to provide visibility and permeability through the site for ease of pedestrian access. The vehicle circulation patterns on the surrounding streets will not be impacted on from the proposal.
3.5.4 Landscaping & trees	To create attractive public spaces and walkways. To enhance built form.	A comprehensive landscape scheme is proposed for the site and shown in the images throughout the report and fully documented within the Landscape Package prepared by McGregor Coxall and provided at **Appendix C**.
3.5.5 Awnings and Weather Protection To provide shelter from the natural elements along pedestrian routes. To ensure the usability of public spaces. To encourage walking within the centre.	Buildings with frontage to any street must incorporate an awning or other form of weather protection along that boundary. b. The pavement level of a covered walkway shall be at the same level as the footpath to which it is adjacent. c. The height of a colonnade, awning or covered way shall not be less than 3 metres or greater than 4.5 metres measured to the soffit.	The proposal includes fully compliant awnings on the Rowe Street and Rutledge Street frontages to provide pedestrians with appropriate weather protection. With regard to the colonnade that lines both sides of The Street (the north – south connection through the site), this has been designed to provide pedestrians with adequate weather protection while using the site. In particular, given the space is designed for pedestrians to relax and stop while shopping or as a space for dining the

OBJECTIVE	CONTROL	COMMENT
	d. The width of a colonnade, awning or covered way shall not be less than 3 metres.	width of the colonnade is greater than a typical street awning. This ensures pedestrians have room to move through the site with adequate circulation space provided whilst being protected from the elements.
3.6 Signage	a. Reduce visual clutter through the control and co-ordination of signage. b. Reinforce the streetscape and enhance the individual architectural features of buildings.	The applicant is in the process of securing the retail tenants and their signage requirements are not yet finalised. Therefore, consent for the design of signage on the building will be lodged as a separate development application. The design of the building, including the height, bulk and scale and the architectural features, has allowed for potential signage zones to be provided in the future in appropriate locations to provide effective signage for key tenants.
3.7.1 Sunlight To provide access to sunlight in public spaces. Sun access during lunchtime hours is highly desirable in all public spaces. Some public spaces, particularly those with sun access, are heavily used throughout the day. To maximise use of public spaces. Use of some public spaces is substantially increased by sun access, so overshadowing effects of development outside the lunchtime period should also be considered.	a. Major public spaces should receive a minimum of 50% sunlight on the ground plane for at least 2 hours between 10am and 2pm on June 21. b. In new residential developments, windows to north-facing living areas should receive at least 3 hours of sunlight between 9am and 5pm on June 21 over a portion of their surface. North facing windows to living areas of neighbouring dwellings should not have sunlight reduced to less than the above 3 hours. c. All development proposals of 2 storeys or more are to be accompanied by shadow diagrams.	A significant open space, the Rowe Street Pedestrian Mall, is located directly north of the subject site and is not overshadowed by the development. The application is supported by shadow diagrams, included with the Architectural Package at **Appendix A**. As demonstrated in the attached shadow diagrams, the proposed building height pattern will result in some improvements to the overshadowing of properties to the south when compared with the shadow cast by the complying LEP height envelopes. This analysis acknowledges there are areas of improvement and areas when there is additional shadow cast. However, on balance the areas where the sun access is improved outweigh the loss of sun to other areas. The areas most impacted upon from any additional shadow created relates to the railway line to the east which is unaffected in amenity terms.

OBJECTIVE	CONTROL	COMMENT
3.7.2 Wind Standards To maximise public safety and comfort. The shapes, location and height of buildings are to be designed to promote public safety and comfort at ground level. The us-ability of open terraces on buildings also depends on comfortable conditions being achieved.	a. Building design is to minimise adverse wind effects on recreation facilities, on open terraces within developments and on the public domain.	The proposal has been designed with regard to the Wind Assessment prepared by Windtech, **Appendix N**, to ensure that any potential wind impacts on open space, public and private, are managed so that residents and visitors can enjoy the facilities provided within the development.
3.7.3 Energy Efficiency of Buildings To maximise energy efficiency and sustainable design. Buildings should optimise their passive and operational energy efficiencies, reduce pollution, include waste minimisation systems and use construction materials from renewable resources.	a. New buildings should be designed to ensure that energy usage is minimised	An Energy Efficiency Statement has been prepared by ARUP and is included at **Appendix L**. The statement provides a summary of the comprehensive energy efficiency strategies for the proposed development and confirms that the development complies with the NCC Section J energy efficiency requirements, as well as the BASIX requirements for Class 2 apartments.
3.7.4 Vibration and Noise Mitigation To minimise noise nuisance. New buildings shall mitigate the effects of noise by using insulation. In particular, residential buildings, services apartments and the like should be insulated for noise reduction. To encourage new developments within 100m of the railway line to consider urban design as a means of mitigating noise and vibration impacts.		An Acoustic Assessment has been prepared by ARUP and is included at **Appendix M**. The assessment identifies key acoustic considerations for the proposed development and establishes relevant acoustic criteria derived from relevant local council, state and national standards and guidelines. A noise and vibration survey was conducted between Tuesday 1 March and Wednesday 9 March 2016. The outcomes of these assessments have provided recommendations that have been accommodated within the proposal to manage acoustic and vibration impacts.
3.7.5 Reflectivity	a. The use of highly reflective glass is discouraged. b. New buildings and façades should not result in uncomfortable glare that causes discomfort or threatens safety of pedestrians or drivers.	A reflectivity assessment has been undertaken for the proposed building facades. This is attached at **Appendix Q** and confirms that the proposed new buildings and façades will not result in uncomfortable glare that causes discomfort or threatens safety of

OBJECTIVE	CONTROL	COMMENT
	c. Visible light reflectivity from building materials used on the façades of new buildings should not exceed 18%.	pedestrians or drivers.
3.7.6 External Lighting of Buildings To encourage use of lighting to highlight certain architectural features of a building rather than floodlighting whole façades. To encourage designs that provide lighting with minimal energy consumption. To control the effects of adverse impacts on neighbouring land uses.	a. Any external lighting of buildings is to be considered with regard to: i. The integration of external light fixtures with the architecture of the building (for i. example, highlighting external features of the building); ii. The contribution of the visual effects of external lighting to the character of the building, surrounds and skyline; iii. The energy efficiency of the external lighting system; and iv. The amenity of residents in the locality.	All proposed external lighting of the building will be designed in accordance with this control and will ensure it contributes positively to the surrounding environment, amenity of neighbours and is energy efficient.
4.2.1 Urban and Environmental Design To ensure new buildings contribute positively to the urban built form and environment. To ensure appropriate scale and good environmental amenity, such as sun access. To ensure a built form of a high quality that successfully integrates environmental sustainability with architectural design.	a. Development on corners must address all street frontages. Entries, windows and other architectural elements should be placed to reinforce the corner. b. Provide building articulation elements including awnings, verandahs, decks, loggias, pergolas, bay windows and recessed doors. c. Windows and entries shall be placed to overlook public spaces and streets to provide surveillance opportunities. d. Balconies may not be continuous along the whole length of building facades. e. Provide solar protection, including awnings, recessed windows, roof overhangs, external shutters and screens to the western and northern elevations of buildings. f. Where sites are amalgamated express the prevalent historic	As demonstrated in the proposal, the built form has been developed in response to site constraints and the design development for the built form and massing across the site. The proposal envisages a development scheme which achieves design excellence through built form and place making. This has been achieved through use of building scale and arrangement of a significant central plaza space as a key feature of the site. The proposed built form and height is consistent with the desired future character of the Eastwood Town Centre, as envisaged by the Ryde DCP 2014 at Clause 2.2.2 and will provide for a vibrant and viable commercial centre well integrated with a mix of appropriate land uses and open space areas. In particular, the frontage to Rowe Street has been designed to maintain the fine grained scale of the shopfronts fronting the Pedestrian Mall to ensure integration with the traditional streetscape and will

OBJECTIVE	CONTROL	COMMENT
	Eastwood Town Centre lot structure in the design of new buildings particularly at street level.	continue to express the prevalent historic Eastwood Town Centre lot structure at street level.
4.2.2 Residential Private Open Space To contribute to the character and environmental quality of the landscape of the Small Centres. To enhance the micro-climate created by development, in development and the Small Centres. To ensure that every dwelling in the Ryde Small Centres has access to usable private open space.	Refer to the SEPP 65 Residential Flat Design Code (Planning NSW) - Open Space. a. Single aspect apartments set below the natural ground level are not permitted. b. Comply with SEPP 65 Rule of Thumb.	Private open space areas are provided to all residential apartments in accordance with the provisions in SEPP 65 and the accompanying Apartment Design Guide (ADG). Please refer to the ADG compliance table prepared by the Architect at **Appendix B** and Section 6.4.1 of this report for further details.
4.2.3 Solar Access and Sun Shading To provide solar access to habitable rooms and external areas of dwellings in mid-winter. To achieve the development of living and working environments not reliant on artificial heating, cooling, and lighting with passive heating/cooling, solar orientation, and appropriate shading treatments.	Refer to the SEPP 65 Residential Flat Design Code (Planning NSW) - Daylight Access. a. Comply with SEPP 65 Rule of Thumb. b. The SEPP 65 controls for light wells apply to apartments below ground level for the purpose of satisfying SEPP 65 requirements.	Solar access is provided to 70.8% of the total number of apartments (443) within the proposed development. This is in accordance with the 70% required by SEPP 65 and the accompanying Apartment Design Guide (ADG). Please refer to the ADG compliance table prepared by the Architect at **Appendix B** and Section 6.4.1 of this report for further details.
4.2.4 Visual Privacy To maximise the visual privacy of on-site and neighbouring residents. To maximise outlook and views from habitable rooms and private open space without compromising visual privacy	Refer to the SEPP 65 Residential Flat Design Code (Planning NSW) - Visual Privacy. a. Comply with SEPP 65 Rule of Thumb.	Appropriate levels of visual privacy are provided to all residential apartments in accordance with the provisions in SEPP 65 and the accompanying Apartment Design Guide (ADG). Please refer to the ADG compliance table prepared by the Architect at **Appendix B**.
4.2.5 Acoustic Privacy To achieve an appropriate acoustic environment.	Refer to the SEPP 65 Residential Flat Design Code (Planning NSW)- Acoustic Privacy. a. Acoustic separation between commercial and	Appropriate levels of acoustic privacy are provided to all residential apartments in accordance with the provisions in SEPP 65 and the accompanying Apartment Design Guide (ADG). Please refer to the

OBJECTIVE	CONTROL	COMMENT
	residential uses shall be attained.	ADG compliance table prepared by the Architect at **Appendix B**.
4.2.8 Building Depth To promote sustainable built form. To improve the amenity of buildings for users. To improve cross ventilation.	a. Building depth must comply with the Building Depth Control Drawing b. Achieve natural ventilation in residential buildings by having window openings in opposite directions and walls where possible. Comply with SEPP 65 Rule of Thumb. c. Where alternative building envelopes and amalgamation patterns are proposed the maximum overall depth of buildings is 18m unless design excellence can be demonstrated and natural ventilation is achieved.	The proposed building depth has been designed in accordance with the provisions in SEPP 65 and the accompanying Apartment Design Guide (ADG) to maximise natural cross ventilation opportunities for apartments. Please refer to the ADG compliance table prepared by the Architect at **Appendix B**.
4.2.9 Active street frontages To enhance personal safety and security within the small centre	a. Provide ground level active uses where indicated on the Active Street Frontages Control Drawing Figure.	The proposal incorporates active uses, including shops, food tenancies, cafes, gyms, medical centre and kiosks at ground level to the external street frontages and internally within the pedestrianised areas on the site. This exceeds the requirements as shown in the Active Street Frontages Control Drawing Figure within the DCP.
4.2.10 Awnings + Entry Canopies To create a consistent streetscape. To contribute to pedestrian amenity (all-weather protection), safety and security (lighting).	a. Provide continuous awnings as indicated in Awnings Control Drawing b. Awning height is to be generally a minimum of 3m from the pavement and setback minimum 1m from the kerb edge. The heights of adjoining awnings should be considered. c. Design awnings to protect pedestrians from sun and rain. Glazed awnings will not be permitted where awnings are required unless it can be demonstrated that: i. A cleaning and maintenance regime will be established; and ii. Solar protection (shade) can be achieved; and iii. Lighting will be installed to the underside of the awning that will light	The proposal includes fully compliant awnings on the Rowe Street and Rutledge Street frontages to provide pedestrians with appropriate weather protection. With regard to the colonnade that lines both sides of The Street (the north – south connection through the site), this has been designed to provide pedestrians with adequate weather protection while using the site. In particular, given the space is designed for pedestrians to relax and stop while shopping or as a space for dining the width of the colonnade is greater than a typical street awning. This ensures pedestrians have room to move through the site with adequate circulation space

OBJECTIVE	CONTROL	COMMENT
	the footpath. d. Provide lighting, preferably recessed, to the underside of awnings, sufficient to ensure a high level of safety and security for pedestrians at night.	provided whilst being protected from the elements. Further entrance canopies and appropriate lighting are proposed to be provided at all residential and commercial building entrances to ensure weather protection and uphold high safety and security standards.
4.2.11 Services Access and Parking To provide adequate and accessible parking and on-site service areas. To provide size and number of service areas in proportion to the scale and intensity of the proposed use. To ensure that service facilities do not detract from the amenity of nearby public spaces and residential areas.	Service Access: On-site car and service vehicle access must be provided and designed in accordance with the following: i. a driveway must be established that is of adequate strength, width and design for the intended car and service vehicle characteristics. ii. the driveway is to be designed such that service vehicle movement is in a forward direction, both when entering and exiting the site; iii. on-site manoeuvrability must be unimpeded for all site users. b. Generally service vehicle access is to be combined with parking access. c. Waste and recycling are to be provided in accordance with DCP Part 7.2 Waste Minimisation and Management Facilities for Waste. Parking: All carparking is to be provided underground. Note: Refer to the CoR DCP 2014 Part 9.3 Parking Controls. Services: All services infrastructure including fire hydrants, gas meters and the like shall be located within the building envelope and are not to be visible from the public domain.	Please refer to the following reports that confirm that the proposal has been designed to meet the Services Access and Parking controls of the DCP: ▪ Traffic and Transport Impact Assessment at **Appendix O** ▪ Waste Management Plan at **Appendix T** ▪ Services Report at **Appendix P** In addition, all proposed parking to serve the development is contained within four basement car parking levels.
4.3.1 Access and the Public Domain To reduce vehicular conflicts through good design of building entrances and reducing footpath	a. To be in accordance with the City of Ryde Public Domain Technical Manual and are to be implemented by the developer.	The proposed site layout seeks to minimise pedestrian and vehicle conflicts by reconfiguring the current vehicle access arrangements and reducing the number of vehicle crossovers to the site.

OBJECTIVE	CONTROL	COMMENT
cross-overs. To clearly differentiate uses and separate conflicting uses. To use appropriate lighting levels. To encourage 'safe' pedestrian access and mobility.	b. Adequate parking and safe convenient access to buildings for people with disabilities must be provided. c. To provide active frontage and quality building design, where applicable vehicular access ramps must enter and exit from the rear lane. d. Vehicular traffic must be separated from pedestrians and vehicular access points clearly identified with paving, signage and the like. e. Loading docks must be located to the rear of the retail / commercial premises so that vehicles do not stand on any public road, footway and vehicles entering and leaving the site move in a forward direction.	The pedestrian environment immediately adjacent to the site has been enhanced through the proposal as the proposed built form and land use scheme will activate the street and internal site frontages and encourage pedestrian activity. All vehicle movements are limited to West Parade (loading), Trelawney Street and Rutledge Street – well clear of the pedestrianised areas designated on the sites frontage. The pedestrian and vehicle areas are clearly demarcated so as not to cause confusion and promote safety of all users.
4.3.2 Landscape Character To create a memorable landscape image for the small centre, which builds on the positive characteristics of topography, landscape character and views. To protect, through planning controls, those spaces in private lands that contribute to the character and quality of the small centre. To create tree planting, to reinforce spatial quality & build on the palette of existing species in the street, provide shade for pedestrians, and improve the image of the small centre.	a. Select street trees based on the scale of buildings, width of the street, aspect, and on environmental parameters such as soil type shall be provided in accordance with the City of Ryde Public Domain Technical Manual.	A comprehensive landscape scheme has been prepared for the site by McGregor Coxall, attached at **Appendix C**. This landscape package includes site plans, sections, species selection, landscape infrastructure and maintenance guidelines. The proposed landscaping will create a memorable landscape image for the centre, which builds on the positive characteristics of topography, landscape character and views.
4.3.3 Urban Elements and Finishes To coordinate paving and urban elements within the small centres.	a. Provide paving, seats, benches and bins as selected by Council in accordance with Eastwood Village in the City of Ryde Public Domain Technical Manual.	The relevant provisions of this clause have been provided for within the comprehensive landscape scheme prepared for the site by McGregor Coxall, attached at **Appendix C.**

OBJECTIVE	CONTROL	COMMENT
To improve the image, quality and amenity of streets and public spaces through quality paving, lighting and street furniture. To ensure that the selection of urban elements and level of provision is based on the hierarchy of streets and intensity of use.	b. Provide seating and shelter (awnings or bus shelter) at all bus stops, and provide seating at community facilities and drop off points. Seating shall be in accordance with Eastwood Village in the City of Ryde Public Domain Technical Manual. c. Provide new street lighting to council satisfaction.	
4.3.4 Signage To reduce visual clutter through the control and coordination of signage. To reinforce the streetscape and enhance the character of the area.	a. Signage shall comply with DCP Part 9.1 Signage.	The applicant is in the process of securing the retail tenants and their signage requirements are not yet finalised. Therefore, consent for the design of signage on the building will be lodged as a separate development application. The design of the building, including the height, bulk and scale and the architectural features, has allowed for potential signage zones to be provided in the future in appropriate locations to provide effective signage for key tenants.
Part 7.1 Energy Smart, Water Wise	1. To encourage the design of energy efficient buildings in the City of Ryde; 2. To ensure site planning and building design optimise solar access to land and buildings; 3. To decrease the total energy use in buildings through reductions in heat loss and energy consumption for the purposes of heating and cooling; and 4. To encourage the construction and use of buildings that reduce the current level of attributed greenhouse gas emissions and natural resource consumption.	An Energy Efficiency Statement has been prepared by ARUP and is included at **Appendix L**. The statement provides a summary of the energy efficiency strategies for the proposed development and confirms that the development complies with the NCC Section J energy efficiency requirements, as well as the BASIX requirements for Class 2 apartments. Specifically, the residential component of work complies with the following BASIX requirements: ▪ Energy- 20% reduction. ▪ Water- 40% reduction. ▪ Thermal Comfort - pass or fail for the building envelope.
Part 7.2 Waste Minimisation and Management	Waste minimisation: 1. To minimise resource	A Waste Management Plan (WMP) has been prepared by Elephant's Foot and is included at **Appendix T**. The report

OBJECTIVE	CONTROL	COMMENT
	requirements and construction waste through reuse and recycling and the efficient selection and use of resources. 2. To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction. 3. To encourage building designs, construction and demolition techniques which minimise waste generation. 4. To maximise reuse and recycling of household waste and industrial/commercial waste.	provides an assessment of the estimated quantities of waste materials generated from the operational phases of the development, and explains the proposed management processes. The WMP has been prepared with reference to the Ryde's Development Control Plan 2014 – Part 7.2 Waste Minimisation and Management.
Part 8.2 Stormwater and Floodplain Management	To ensure that the collection and conveyance of stormwater from development is undertaken in a safe manner without adverse impact to property or public safety and does not adversely impact downstream conditions. To minimise or prevent degradation of the environment from stormwater drainage systems, by implementing water sensitive urban design (WSUD) principals. To ensure that development is designed with consideration for overland flows and/ or flooding that may potentially occur during large storm events,	A Stormwater Management Plan has been prepared by Calibre Consulting and is included at **Appendix K**. The report addresses potential soil and water management issues for the subject site and proposed development including erosion and sediment controls during construction, site stormwater drainage, and water quality controls.
Part 9.2 Access for People With Disabilities	Ensure that builders, developers and others provide access for people with disabilities in new and refurbished premises as required by the Disability Discrimination Act 1992 and the new Commonwealth Disability (Access to Premises-Buildings) Standards. Provide design criteria that achieve access for people with disabilities	A Building Code of Australia Assessment Report has been prepared by Steve Watson and Partners and is included at **Appendix R**. This report presents the findings of an assessment undertaken of the proposed design to ensure that access for people with disabilities is provided as required by the Disability Discrimination Act 1992 and the new Commonwealth Disability (Access to Premises-Buildings) Standards.

OBJECTIVE	CONTROL	COMMENT
	Promote the concept of an accessible environment for the whole community	
Part 9.3 Parking Controls	To minimise traffic congestion and ensure adequate traffic safety and management; To ensure an adequate environmental quality of parking areas (including both safety and amenity); To minimise car dependency for commuting and recreational transport use, and to promote alternative means of transport - public transport, bicycling, and walking. To provide adequate car parking for building users and visitors, depending on building use and proximity to public transport. To minimise the visual impact of car parking when viewed from the public domain and adjoining sites. To maximise opportunities for consolidated areas of deep soil planting and landscaping.	An assessment of traffic and transport impacts has been prepared by CBRK and is included at **Appendix O**. The assessment examines, among other transport matters, the adequacy of the proposed off-street parking provision and the proposed parking layout with respect to internal circulation and vehicle manoeuvrability. Please refer to **Table 17** for an overview of the proposal's compliance with the DCP car parking rates.

In accordance with Part 9.3 of the Ryde DCP the maximum parking rates and the proposal's parking provision, demonstrating compliance, are set out in **Table 17.**

TABLE 17 – PROPOSED CAR PARKING

USE	TOTAL AREA / DWELLINGS	REQUIRED RATE	PROPOSED SPACES
Residential			
1 bedroom	167	0.6 – 1 space per 1 bedroom dwelling 101 – 167 spaces required	
2 bedroom	255	0.9 – 1.2 spaces per 2 bedroom dwelling 230 - 306 spaces required	
3+ bedroom	21	1.4 - 1.6 spaces per 3	

USE	TOTAL AREA / DWELLINGS	REQUIRED RATE	PROPOSED SPACES
		bedroom dwelling 29 - 34 spaces required	
Visitor	443	1 space per 5 dwellings (visitors) 89 spaces required	
Total Residential		360 – 507 spaces + 89 visitor	Total 557 spaces provided
Retail	11,103m^2	1 space per 25m^2 GFA 444 spaces required	444 spaces provided
Commercial	2,597m^2	1 space per 40 m^2 GFA 65 spaces required	65 spaces provided
Recreation Facilities (indoor) / Gymnasium	346m^2	1 – 1.5 spaces per 20 m^2 GFA 17 – 26 spaces required	17 spaces provided
Health Consulting Rooms	687m^2	1 space / doctor or dentist 1 space / 2 employees 1 patient's space/doctor or dentist The number of doctors and staff is unknown, hence the RMS rate of 4 spaces per 100m^2 has been applied, resulting in a requirement for 27 spaces	27 spaces provided
Total		**1,002 spaces**	**1,110 spaces**

As detailed in **Tables 16 and 17**, the proposed development demonstrates a high level of compliance with all of the development controls under the DCP 2014.

8 Key Planning Considerations

8.1 LAND USE

The proposed mixed use development has been designed to create a sense of identity and place through implementing the following principles:

- Appropriate location of uses;
- Sound understanding of market preferences;
- Diversity of offering;
- Review of opportunities and constraints of the site and the locality;
- Creating a sense of place and local identity; and
- Appropriately balance increasing level of activity and vibrancy with residential amenity.

The proposal responds to these principles to create a place for people, as follows:

- The proposal is designed as a publicly accessible space that is seamlessly connected to the public domain to the north and south through key pedestrian connection points and well-celebrated openings into the site. It will provide a unique experience for residents and visitors for shopping, social gathering and outdoor dining.
- A focus on ground level activity is provided with opportunities for restaurants, cafes and outdoor dining areas, with vertical connections provided in locations that are logical and will not interrupt pedestrian foot traffic.
- Separate, well defined and easily identifiable pedestrian entries are provided to each of the land uses – in particular the residential lobbies are proposed in areas with good pedestrian access, passive surveillance and are clearly identified.

8.2 ACCESS AND CONNECTIVITY

The proposal has been designed to support pedestrian movement and connectivity through the site and provide secondary frontages for retail and residential buildings.

Key access and connectivity elements adopted for the proposed mixed use development are:

- Physically connect Rowe and Rutledge Streets for pedestrians (north – south);
- Remove the physical barriers to walking through the site;
- Links through the site that are visually connected from surrounding streets;
- Ease of orientation and navigation from one place to another within the site;
- Logical arrangements and locations for new public spaces for people to walk and connect to the from surrounding streets; and
- Provides multiple connections and direct access into the ground floor and lower ground retail centre.

8.3 PUBLICLY ACCESSIBLE OPEN SPACE

Publicly accessible spaces that are unique and have legible access will encourage people to enter and spend time within the site. The following principles have been employed to ensure high quality publicly accessible open spaces, which:

- Feel comfortable to walk through, sit, talk and relax and are safe throughout the day and at night;
- Have clear links with the public realm;
- Accommodate a range of activities;
- Have adequate sunlight, shade and shelter from harsh weather conditions and provide adequate sunlight reach to areas designed for outdoor dining and seating;
- Capture cooling breezes in summer and avoid harsh wind effects on the pedestrian environment;
- Provide opportunities for outdoor seating and landscaping;
- Designed to meet the needs of all people including the elderly and those with physical disabilities and the young;
- Well overlooked and has quality lighting that enhances visibility and safety at night; and
- Multiple entry points and exit points are provided to public spaces.

The proposal responds to the principles for public spaces, as follows:

- The proposed publicly accessible spaces are designed to accommodate pedestrian foot traffic, whilst allowing gathering spaces, with opportunities for seating and landscaping;
- Multiple pedestrian connection points are provided with wide frontages to public streets that will promote sightlines and high visibility for pedestrians;
- The spaces are activated with retail frontages and building entrances; and
- The spaces are defined by built form.

8.4 BUILT FORM AND SCALE

The key built form and scale principles considered in the preparation of the development application for the Eastwood Centre are as follows:

- Provide a diversity of building heights;
- Create visual interest in the Eastwood skyline;
- Position residential buildings to optimise views, privacy, and solar access for building occupants;
- Ensure that the scale of development is compatible with the function of Eastwood as an area where employment opportunities and residential growth can be accommodated based on its location within Sydney's Global Economic Corridor, identified in *A Plan for Growing Sydney*;
- Articulate buildings to create unique building character and identity, with a diversity of architectural expressions that are all connected;
- Mixed use buildings are located to address and define the public domain;
- High quality and durable building materials, finishes, and use of colour to highlight building elements;

- Building facades to be vertically proportioned to accentuate height and break down the bulk of buildings; and

- Building entrances are clearly articulated and easily identifiable for residents and visitors.

In accordance with these key principals, the proposal includes built form across the subject site ranging from 6 to 13 storeys, as shown by the massing diagram at **Figure 24**.

The proposed building massing has been designed to:

- Locate building height in areas where it can be accommodated, with minimal amenity and visual impacts, in order to provide for meaningful open space and pedestrian circulation areas at ground level;

- Provide breaks in the building form to reduce building bulk and massing and provide for views into the site from external and internal spaces to the site;

- Provide definition of streets and public open spaces;

- Achieve view sharing principles;

- Maintain sunlight to communal and public open spaces areas;

- Locate building height to reduce overshadowing impacts when compared to the LEP compliant height envelope (refer to shadow analysis section in this report);

- Address streets (internal and external) with retail and commercial frontages and residential entrances; and

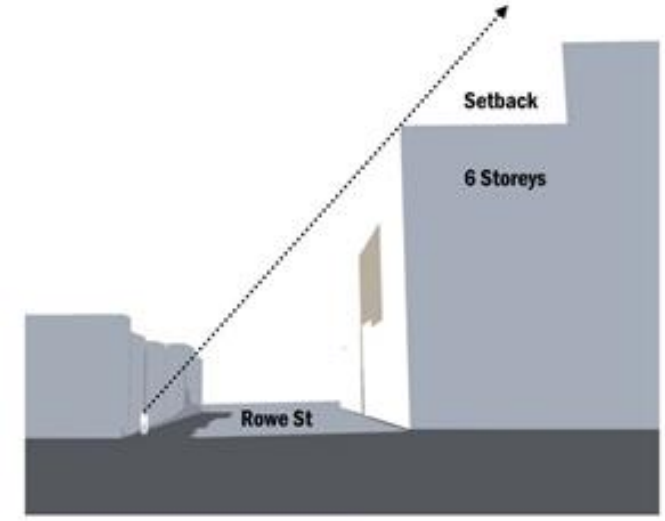
- Utilise pedestrian links and open space areas through the site to break building elements which contribute to solar access and natural ventilation.

The arrangement of the built form across the site has been designed to respond to the characteristics of the site and the surrounding development in the town centre while achieving the future vision for the Eastwood Town Centre as expressed in the DCP and meeting the built form objectives of both the LEP and DCP controls. The Architectural Design Report provides a design ethos that was employed in the built form massing for the proposal at **Appendix B**. The design rationale for the built form is set out as follows:

8.4.1 ROWE STREET

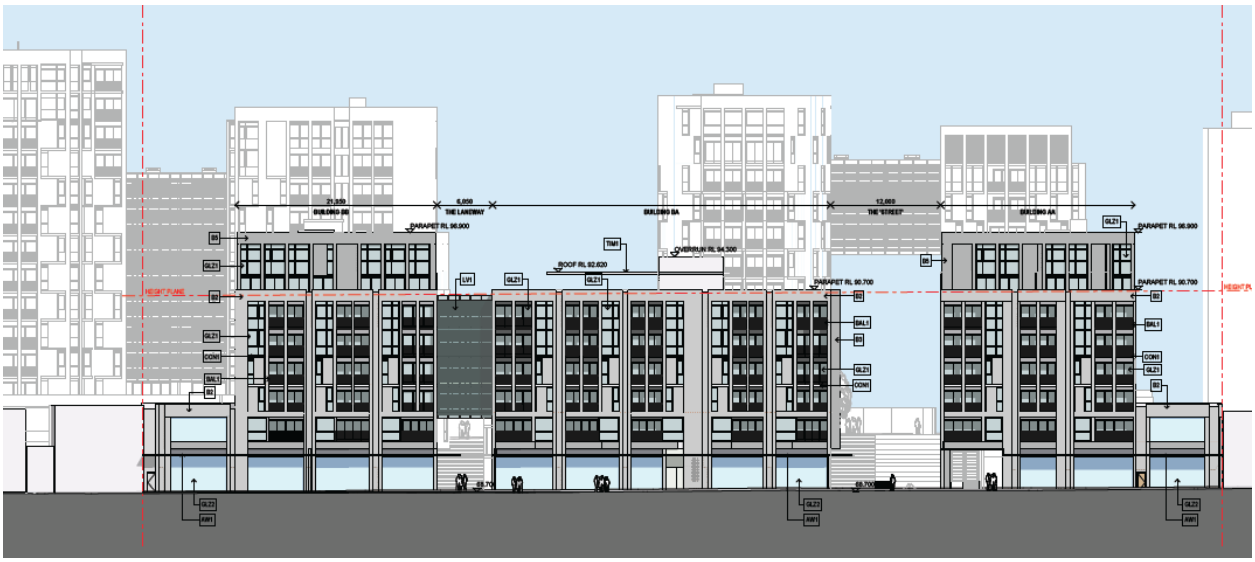
The proposals presentation to Rowe Street has been designed to respond to the existing façade rhythm of the shop fronts on Rowe Street. This includes fine grained, small scale shop fronts to continue this pattern of development fronting the Rowe Street Pedestrian Mall; this is further enhanced through building articulation and modulation. Development on Rowe Street is six storeys in height at the street frontage with two upper levels setback to minimise their appearance and so as not to overwhelm the pedestrian scale on Rowe Street, as shown in **Figure 25**.

FIGURE 25 – BUILDINGS AA, BA AND BB INCORPORATE SETBACKS FOR UPPER LEVELS ON ROWE STREET



Although new buildings toward the centre of the Rowe Street frontage will be higher than the traditional shopfronts, reference to the existing street wall will be demonstrated within the development through upper level setbacks, the use of matching and complementary materials and building articulation and modulation. Vertical modulation is reinforced to provide a finer grain to the north elevation. It is noted that the building heights on Rowe Street are generally in keeping with the maximum building heights prescribed by the LEP on this section of the site (21.5m). These proposed built form responses will ensure integration with the new buildings and the existing building heights on Rowe Street, as shown in **Figure 26**.

FIGURE 26 – PROPOSED ROWE STREET ELEVATION



8.4.2 HEIGHT TRANSITION

The built from internal to the site has been designed as a transition area, i.e. providing a stepping up from the low scale built form on Rowe Street to the more robust, taller, built form fronting Rutledge Street, in conjunction with providing for centrally located open space areas at ground level to open up the site. Built form in this area is typically 8 storeys in height. The higher development within the centre of the site has been designed to mark the presence of the shopping centre and clearly identifies the town centre as the gathering and activity space within Eastwood.

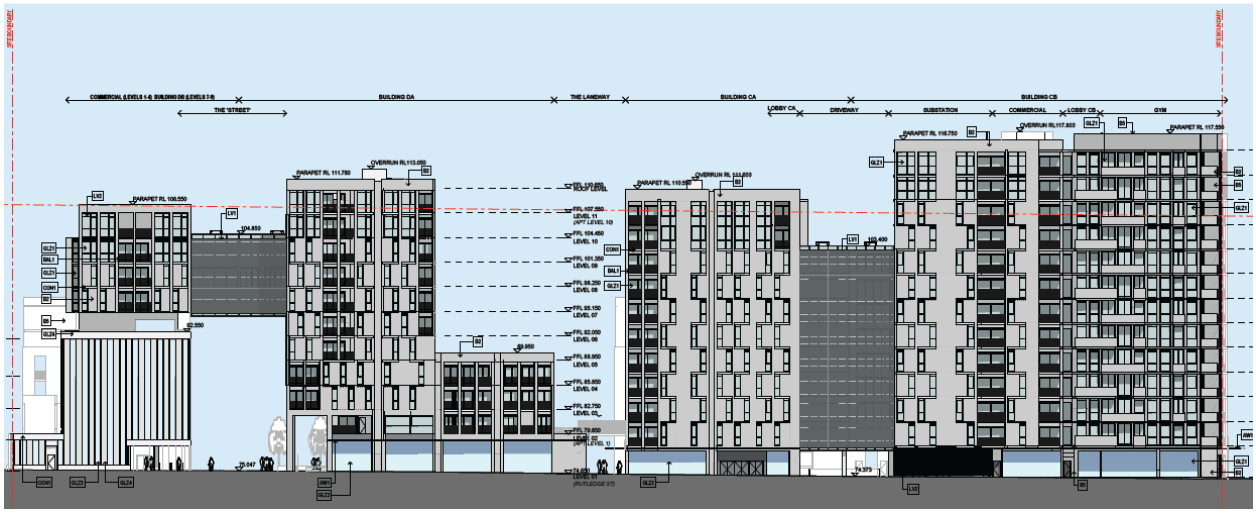
8.4.3 RUTLEDGE STREET

The proposed façade response on Rutledge Street has benefited from the generous separation across Rutledge Street, the highly trafficked nature of Rutledge Street and the currently neglected treatment of this streetscape on the northern side of Rutledge Street. The proposal seeks to define this frontage and create a streetscape representative of a key site within the town centre which identifies the scale and importance of the function of the site.

Important in the definition of any new character for Rutledge Street has been the low scale residential nature of the properties found on the southern side of Rutledge Street. However, these properties are well separated from the site across the road reserve, with additional generous front setbacks for dwellings from the street. The proposed additional building height above that specified in the LEP, in this case 2.5 storeys, would be indiscernible given the scale of buildings permitted by the LEP on the northern side of Rutledge Street. Further, the large separation distances afforded to the residential properties on the southern side will ensure the built form does not dominate the streetscape and a sense of spaciousness and openness to the sky above would be achieved.

The proposal includes a range of building heights, 10 – 13 storeys, which have been designed to respond to the width of Rutledge Street, including the more recent 11 storey development at 7-9 Rutledge Street, to ensure a robust built form presence at this interface. The buildings on this frontage are broken up horizontally across the length of Rutledge Street to create modulation in the streetscape and provide views into the site. Vertically, the building expression is proposed to include upper level setbacks and materials and finishes that reference the surrounding character of Eastwood, as shown in **Figure 27**.

FIGURE 27 – PROPOSED RUTLEDGE STREET ELEVATION



With regard to the tallest building proposed on the site (Building CB), 13 storeys on the south eastern corner, it has been specifically designed as a marker for the site given its prominent location. This proposed taller building is at a significant corner that is well separated from residential land uses and, as demonstrated by the shadow analysis, the additional height will not have additional impacts on solar access for properties on the southern side of Routledge Street. The location of the additional building height benefits from the non-sensitive train line to the east and will allow for the realisation of a marker building to identify the Eastwood Shopping Centre site. Additional upper level setbacks and building modulation ensure the visual bulk of the building is further mitigated.

8.4.4 BRIDGE LINK

The design of the proposed three storey bridge link connecting the upper levels of Buildings DA and DB, fronting Rutledge Street is two-fold. As well as being vital to the stormwater strategy for the site, the bridge link provides for visual interest in the site and high levels of residential amenity for the apartments in the link space.

The bridge link provides a connecting element across The Street (north – south through site link) that physically bridges the airspace and seeks to link the two sites of this pedestrian connection. The width of The Street at the ground plane is approximately 12-19m across its length. This generous width provides for efficient pedestrian circulation and clear sightlines into the site creating visual connections across the site. The addition of the bridge link across the pedestrian area below seeks to tie the two sides of the site together and is proposed at an appropriate height above the ground plane so as to be at a respectful scale that will not impact on the pedestrian environment below.

The proposed bridge link is only three storeys in height and will maintain generous views to the sky above from vantage points within the site while providing visual interest in the building design with opportunities from passive surveillance from the apartments accommodated within the built form.

FIGURE 28 – VIEW SOUTH, TOWARDS RUTLEDGE STREET, SHOWING THE BRIDGE LINK

8.5 SOLAR ACCESS AND OVERSHADOWING

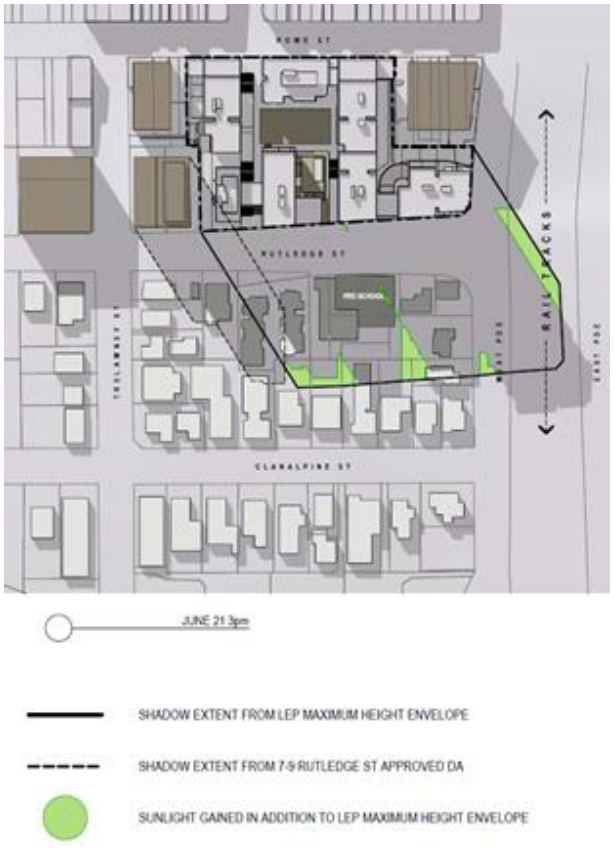
In terms of overshadowing, the proposed built form placement within the site has been influenced by the mitigation of overshadowing impacts on neighbouring sites. As demonstrated by the shadow diagrams provided at **Figures 29 and 30**, the proposal results in a reduction of shadow impacts when compared with the maximum allowable height envelope for the site.

As shown by the green areas on the shadow diagrams, the sun access gains achieved by the proposal (above those resulting from the LEP heights) are particularly noteworthy for a number of residential properties on the southern side of Rutledge Street and for the rear yards of residential properties on Clanalpine Street. In particular, the rear yard of the dwelling at 2 West Parade which would be entirely in shadow at the Equinox under the LEP heights is afforded sun access through the proposed scheme.

On this basis, impacts associated with the proposed development are acceptable, particularly since there are no significant solar access impacts on neighbouring properties or the public domain as a result of the height variation.

FIGURE 29 – SHADOW DIAGRAM AT 21 JUNE 9.00AM (LEFT) AND SHADOW DIAGRAM AT 21 JUNE 12.00 NOON (RIGHT)

FIGURE 30 – SHADOW DIAGRAM AT 21 JUNE 3.00PM



8.6 BCA AND ACCESSIBILITY

A Building Code of Australia Assessment Report has been prepared by Steve Watson and Partners and is included at **Appendix R**. This report presents the findings of an assessment undertaken of the proposed design against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia (BCA) 2016.

The assessment confirms the proposed design is capable of achieving compliance with the BCA. Some aspects of the design are proposed to be addressed by way of a fire engineered Alternative Solution to meet the relevant Performance Requirements of the BCA. These aspects will need to be addressed by an Accredited C10 Fire Engineer.

A detailed assessment will also need to be undertaken to verify compliance prior to the issue of a Construction Certificate.

8.7 ACOUSTIC AND VIBRATION IMPACTS

An Acoustic Assessment has been prepared by ARUP and is included at **Appendix M**. The assessment identifies key acoustic considerations for the proposed development and establishes relevant acoustic criteria derived from relevant local council, state and national standards and guidelines.

A noise and vibration survey was conducted between Tuesday 1 March and Wednesday 9 March 2016. Both attended and unattended measurements were taken to establish the existing noise environment and gain a preliminary understanding of potential rail vibration impact on the development.

The key findings of the assessment are summarised as follows:

- Based on preliminary calculations, it is envisaged that residential areas of the development will generally be able to achieve internal noise intrusion criteria via implementation of appropriate glazing types.
- Noise impacts associated with communal spaces for residents will be able to be addressed via standard management practices to be implemented by the operator of the facility.
- The vibration levels extrapolated from the rail vibration measurements are significantly below the criteria and not expected to be perceptible as vibration.
- There is a potential for vibration and ground borne noise impacts associated with operation of the heavy vehicle turntable proposed at Ground Level. Appropriate specification and installation of this component will be required as the design progresses.
- Vibration impacts associated with the proposed pool are not expected to be an issue as the pool is not located above noise sensitive areas.
- Typical sound insulating constructions for walls and partitions, doors and seals, and floors and ceilings have been provided to achieve national requirements and as a reference of best practice in commercial and retail developments.
- The noise emission of mechanical plant associated with the development will be controlled so that the operation of such plant does not adversely impact nearby residential properties and other dwellings within the same development.

The recommendations provided are to be reviewed and revised accordingly during the detailed design of the project.

8.8 HERITAGE AND ARCHAEOLOGY

A Statement of Heritage Impact has been prepared by Extent Heritage and is included at **Appendix H**. The assessment considered the heritage impact of the proposed development on the neighbouring heritage item "Summer Hayes" and the heritage values of the wider Eastwood area. The key findings of the Statement of Heritage Impact are summarised as follows:

- Based on the history of cultivation and ground disturbance on the subject site, it can be concluded that the study area has a low archaeological potential.
- As the curtilage of the subject site does not contain any heritage items or conservation areas, the demolition of all structures within the development area is acceptable.
- The proposed development will not represent a new or unwarranted visual impact on heritage in the vicinity or the wider heritage values of Eastwood
- An area survey has demonstrated that the existing Eastwood Shopping Centre building is highly visible from all vantage points around Eastwood including the Conservation Area and Eastwood Park. Accordingly, while contemporary in nature and up to 6 storeys higher than the existing shopping centre, the proposed development will not represent a new or unwarranted visual impact on heritage in the vicinity or the wider heritage values of Eastwood.
- The proposed buildings have been sufficiently set back from the "Summer Hayes" shops, retaining the prominent street frontage and corner positioning of the item. Furthermore, the "Summer Hayes" shops will continue to form a visual gateway to the Eastwood shopping area on either side of Rowe Street.

A series of protective and mitigation measures have been provided to protect the heritage aspects of the site during all stages of development. These measures are summarised as follows:

Before works commence:

- A photographic archival recording must be undertaken of the Eastwood Masonic Hall prior to demolition. The archival recording must be carried out in accordance with the relevant Guidelines;
- Prior to works commencing, contractors shall be briefed as to the sensitive nature of the neighbouring site and informed of any recommended mitigation measures.

During works:

- During works, due care shall be taken in the vicinity of the "Summer Hayes" heritage item;
- No building or excavation materials are to be stockpiled against the side of neighbouring houses, or within the front setback;
- Ground disturbing works should be limited to the footprint of the development; and
- In the event of any type of unexpected discovery during excavation works, work should cease in the affected area and an archaeologist be contacted to assess the discovery. In the event of a significant discovery, the Office of Environment and Heritage should be notified. Excavation may continue in other areas outside the discovery zone. If technically feasible, works should be relocated to avoid any in situ archaeological features, particularly structural building remains.

Provided these recommendations are adopted, the proposed works are not expected to have any adverse impacts on the heritage values of Eastwood.

8.9 WASTE MANAGEMENT

A Waste Management Plan (WMP) has been prepared by Elephant's Foot and is to be submitted at **Appendix T**. The report provides an assessment of the estimated quantities of waste materials generated from the operational phases of the development, and explains the proposed management processes. The WMP has been prepared with reference to the Ryde's Development Control Plan 2014 – Part 7.2 Waste Minimisation and Management and will be submitted shortly.

8.10 SERVICING

An assessment of the servicing requirements of the site and proposed development has been undertaken by Arcadis and is included at **Appendix P**. The report details the services brief for the following:

- Mechanical Services (Heating, Ventilation and Air Conditioning).
- Electrical Services (Supply, reticulation, lighting, power, voice and data cabling, access control, and MATV).
- Vertical Transport (passenger, goods and machine room lifts, moving walks and escalators).
- Hydraulic Services (Stormwater / rainwater, sanitary plumbing, sewerage, trade waste, domestic hot and cold water, gas, fire hydrant and hose reels).
- Fire Protection (Sprinklers, Fire + Smoke Detection, OWS and portable fire extinguishers).

The assessment confirms the proposed redevelopment of the site can be appropriately serviced to meet the servicing, safety and capacity requirements for the proposed operations on site.

8.11 FLOODING

The Flood Study prepared by Calibre Consulting, attached at **Appendix J,** identifies the areas within the local area that are flood affected.

The flood mapping shows that the subject site is not flood impacted. As the site is not flood affected the proposed development will not impact on the existing flood extents.

8.12 STORMWATER MANAGEMENT

A Stormwater Management Plan has been prepared by Calibre Consulting and is included at **Appendix K**. The report addresses potential soil and water management issues for the subject site and proposed development including erosion and sediment controls during construction, site stormwater drainage, and water quality controls. The key findings of the report are summarised as follows:

GROUNDWATER AND SEEPAGE CONTROL

The report at **Appendix K** confirms that subsurface conditions will consist of clay and silty clay over weathered shale and siltstone and groundwater seepage will occur at the soil/rock interface and through joints and bedding partings within the rock, which may increase during and following rainfall. The report recommends managing the seepage during construction using a combination of gravity drainage and conventional sump and pump techniques.

A sump and pump will be used to periodically remove seepage water from the basement excavation. Water that is pumped out during construction will be treated in a similar fashion to site stormwater runoff. After construction, a pumped drainage system will be provided under the lowest basement floor to collect and pump out ongoing seepage which would otherwise result in unacceptable damp conditions within the basement. Drainage points along the basement wall perimeter will be installed to direct seepage into a collection point for pumping out into the Council stormwater drainage system. Inflow rates are expected to be low, given the relatively impervious nature of the soils.

Given the low permeability of the clay and weathered rock the effect on the regional groundwater table will be minimal. Seepage rates will be more accurately estimated by borehole drilling following demolition, and confirmed on site during excavation. Given the anticipated low inflow rates, it is anticipated that a licence for groundwater extraction from the Office of Water will not be required.

STORMWATER DRAINAGE

In accordance with Council's requirements the stormwater drainage concept incorporates the attenuation of peak runoff from the site using On-Site Detention (OSD), the capture and onsite use of roofwater in tanks, and the improvement of the quality of stormwater discharge using Water Sensitive Urban Design (WSUD) principles.

The piped drainage system through the buildings and outside will be designed to convey the 100yr ARI storm runoff. The OSD tanks will be designed to have sufficient capacity to attenuate runoff from the 100yr ARI storm so that the peak discharge does not exceed the 5-year ARI runoff from the developed catchment. Overland flow paths will be provided with sufficient capacity to convey the full 100yr ARI storm runoff.

All OSD and basement pumpout systems will discharge to Rowe Street and West Parade, with 62% of the site's discharge being directed towards West Parade and virtually no runoff being directed to the Rowe Street Mall.

Stormwater drainage from the roof and through the building including all connections into the rainwater tanks will be designed by the building hydraulic engineer. Detailed design drawings of the building hydraulics will be made available during submission of documents for Construction Certificate approval.

WSUD initiatives being implemented include:

- Reduction to the peak stormwater discharge flows out of the site by means of an OSD system;
- Reduction to site runoff volume through rainwater harvesting and re-use;
- Treatment of stormwater runoff prior to discharge into Council's stormwater drainage system; and
- Reduction in potable water usage through the use of water saving taps, plumbing fixtures and rainwater re-use.

A stormwater hydrology and pollution impact model was prepared for the proposed development using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software. The results from the MUSIC model demonstrate the proposed water quality treatment system exceeds the water quality objectives required by City of Ryde for discharge into their drainage systems.

8.12.1 EROSION AND SEDIMENT CONTROLS

During construction, soil erosion and sedimentation control measures will be installed in all areas disturbed and affected by construction activities to prevent silt and sediment from leaving the construction site. A concept plan for Erosion and Sediment Control for the site has been prepared and is included in **Appendix I**. Further details of these measures will be prepared and provided as part of the Civil Design Drawings for Construction Certificate.

All construction phase erosion and sediment control measures will be provided and installed in accordance with Hornsby Shire Council's guidelines and Landcom's "Managing Urban Stormwater - Soils and Construction" [2004].

8.13 SOCIAL AND ECONOMIC IMPACTS

The proposed development integrates a mix of housing, retail and commercial uses in a highly accessible location. Many of the daily needs of residents will be provided at the Eastwood Centre, including a range of retail tenancies and a full line supermarket, a medical centre and other speciality shops. New publicly accessible open spaces are proposed which provide opportunities for public gathering and promote social interaction.

The proposed mixed use development of the Eastwood Centre will have the following positive social impacts:

- The mix of retail, commercial and high density residential uses, will continue to promote Eastwood a vibrant place with people around;
- Creates a 'community heart' that has a variety of different uses and activities during the day and at night.
- The mix of uses brings a variety of activities that create a lively community and encourage social interaction.
- The publicly accessible spaces encourage people to socialise, for example, seating and viewing areas, places to eat and drink and places to place in, explore and relax.

8.13.1 HOUSING MIX AND AFFORDABILITY

The proposed development is considered to make a positive impact on housing choose and affordability in the locality, consistent with SEPP 65. Smaller dwellings with a mix of studio, 1, 2, and 3 bedroom units are proposed which provides additional choice to the detached and semi-detached dwellings, which are the predominant housing stock in the surrounding Local Government Areas.

8.13.2 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN GUIDELINES

A Crime Prevention Through Environmental Design (CPTED) Assessment has been prepared by Urbis Social Planning and is included at **Appendix G**. The assessment is an independent specialist study undertaken to identify and analysis potential improvements to design which may help to reduce crime and anti-social behaviour as required in NSW Government best practice guidelines.

As stated by the NSW Government, CPTED aims to influence the design of buildings and places by:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture.
- Increasing the effort required to commit crime, by increasing the time, energy or resources which need to be expended.
- Reducing the potential rewards of crime, by minimising, removing or concealing "crime benefits".
- Removing conditions that create confusion about required norms of behaviour.

The report assesses CPTED principles against the design of the proposed development. Where crime risks are identified, the report makes recommendations in accordance with professional standards and statutory obligations. The assessment has been informed by a demographic profile, a crime profile, a policy review and consultation with key stakeholders.

The proposed development has been reviewed. Potential safety and security risk areas associated with the proposed development which should be the focus of design mitigations include:

- Car park areas;
- Entry and exit points;
- The Hanging Garden; and
- Construction areas.

Recommendations have included access control measures (barriers, fences), active surveillance measures (CCTV, security), adequate lighting, adequate wayfinding and security signage, and use of appropriate landscaping and materials. These are to be adopted in the design development please prior to the Construction Certificate stage.

8.14 WIND

A Pedestrian Wind Environment Study has been undertaken by Windtech to provide an assessment of the impact of the mixed-use development on the amenity of the wind environment in and around the site, and is included at **Appendix N**.

Testing was performed using Windtech's boundary layer wind tunnel, which has a 3.0m wide working section and has a fetch length of 14m. Measurements were made in the wind tunnel at selected critical trafficable outdoor locations within and around the development from 16 wind directions at 22.5 degree increments using a 1:300 scale detailed model. The effects of nearby buildings and land topography have been accounted for through the use of a proximity model, which represents an area with a radius of 375m from the development site.

Peak gust and mean wind speeds were measured at selected critical outdoor trafficable locations within and around the subject development. Wind velocity coefficients representing the local wind speeds are derived from the wind tunnel and are combined with a statistical model of the regional wind climate (which accounts for the directional strength and frequency of occurrence of the prevailing regional winds) to provide the equivalent full-scale wind speeds at the site. These wind speed measurements are compared with criteria for pedestrian comfort and safety, based on gust wind speeds which are representative of an annual recurrence, and Gust-Equivalent Mean (GEM) wind speeds which are representative of approximately a weekly recurrence. Comparison is also made with the existing wind conditions around the site.

The results of the study indicate that treatments are required for certain locations to achieve the desired criteria for pedestrian comfort and safety. To improve wind conditions of the development, in-principle ameliorative treatments have been recommended as follows:

> *Retention of the existing tree planting on Level 1 of the western aspect of the development.*
>
> *The inclusion of densely foliating shrubs/hedge planting capable of growing to a height of 2m within the proposed landscaped terrace on the southern end of the through-site link.*
>
> *The inclusion of a 2m high impermeable balustrade on the western aspect of Level 1 Public Park (The Secret Garden).*
>
> *The inclusion of the proposed tree planting within the Level 1 Public Park (The Secret Garden).*
>
> *The inclusion of an impermeable canopy extending over the Level 1 laneway between the proposed Pharmacy and Medical Centre.*
>
> *The inclusion of additional awnings on the southern aspect of the development, extending over the car park entrance and south-eastern corner of the development.*
>
> *The inclusion of densely foliating landscaping around the eastern resident's communal space on Level 2.*
>
> *The inclusion of a 2m high impermeable balustrade on the northern aspect of the eastern resident's communal space on Level 2.*

The recommendations set out in the Wind Impact Assessment can be incorporated in the development scheme to ensure any potential wind impacts on the proposal are managed. On this basis, the report concludes:

> *With the inclusion of these treatments to the final design, the results of this study indicate that wind conditions for all outdoor trafficable areas within and around the proposed development will be suitable for their intended uses.*

8.15 TRAFFIC, TRANSPORT, PARKING AND ACCESS

An assessment of traffic and transport impacts has been prepared by CBRK and is attached at **Appendix O.** The assessment examines the following aspects of the proposal:

- The suitability of the proposed vehicular access arrangements.
- The adequacy of the proposed off-street parking provision.
- The proposed parking layout with respect to internal circulation and vehicle manoeuvrability.
- The proposed internal site servicing and loading arrangements.

The Transport Report provides the following summary assessment of the proposal:

> *Car parking the proposed development would increase retail, commercial and residential densities close to good public transport services;*
>
> *The proposed parking provision is appropriate;*
>
> *Access and internal layout are appropriate and will be designed to comply with the requirements of AS2890.1-2004, AS2890.2-2002 and As2890.6-2009;*
>
> *The additional traffic generated by the proposed development will be similar to the previously approved mixed use development on the site; and*
>
> *Detailed traffic analysis of the traffic impacts of the proposed development will be provided in the supplementary traffic reports when the traffic modelling requested by RMS and Council has been completed.*

8.16 ENERGY EFFICIENCY

An Energy Efficiency Statement has been prepared by ARUP and is included at **Appendix L**. The statement provides a summary of the energy efficiency strategies for the proposed development and confirms that the development complies with the NCC Section J energy efficiency requirements, as well as the BASIX requirements for Class 2 apartments. Specifically, the residential component of work complies with the following BASIX requirements:

- Energy- 20% reduction.
- Water- 40% reduction.
- Thermal Comfort - pass or fail for the building envelope.

The key BASIX inclusions are summarised as follows:

- Energy efficient water cooled centralised chiller and boiler plant supplying four pipe fan coil units with efficient motors (brushless DC motors).
- Low glazing throughout.
- Swimming pool heating via heat pumps.
- Dishwasher 4 star energy and 4.5 star water rating.
- Clothes dryer 2 star energy rating.
- Natural ventilation of common area corridors.
- Individual apartment WC exhaust to façade connected to local lighting circuit.

- Kitchen canopy extract- individual ducted to the façade.
- LED (or fluorescent) lighting in corridors controlled by occupancy sensors.
- LED lighting in apartments.
- High insulation levels to the floors above the car park.
- Rainwater tanks for irrigation.
- Water efficient appliances.

8.17 SOLAR LIGHT REFLECTIVITY

Solar Light Reflectivity Analysis has been prepared by Windtech Consultants and is included at **Appendix Q**. The report provides an analysis of the effect of potential solar glare from the proposed Eastwood Centre development.

The study identifies any possible adverse reflected solar glare conditions affecting motorists, train drivers, pedestrians and to occupants of neighbouring buildings. Where necessary, recommendations are made to mitigate any potentially adverse effects. The study assesses compliance with the controls for solar glare from *State Environmental Planning Policy No. 65* (SEPP65, Part 04 (Designing the Building) for Amenity), and the accompanying Apartment Design Guide (ADG), as well as the *City of Ryde Development Control Plan 2014*.

A site survey was undertaken to obtain photographs of the critical sightlines of motorists on the surrounding streets. Viewpoints of train drivers from the adjacent railway line were also analysed. The photographs are calibrated and are able to be overlaid with a glare meter, which provides the opportunity to determine the extent, if any, of potential solar glare reflections from the subject development.

The results of the study indicate that, to avoid any adverse glare to motorists and pedestrians on the surrounding streets, train drivers, occupants of neighbouring buildings, and to comply with the abovementioned planning control requirements, it is recommended that:

- All western aspect windows of Penthouse AA0601 have a maximum normal specular reflectance of visible light of 11%.
- The glazed portions of the western aspect of the commercial suites located at the south-western corner of the development (on Levels 2 to 5) have a maximum normal specular reflectance of visible light of 11%.
- The glazing used on the southern-aspect balustrades of the following balconies be restricted to have a maximum normal specular reflectance of visible light of 8%:
  - Level 6: DA0603, DA0602
  - Level 7: DB0704, DA0703, DA0702
  - Level 8: DB0804, DA0803, DA0802
  - Level 9, DB0904, DA0903, DA0902
  - Level 10: DA1003, DA1002
  - Level 11: DA1103, DA1102
- The glazing used on the northern aspect of Apartments BB0410 and BB0510 (including on the balcony balustrade) have a maximum normal specular reflectance of visible light of 13%.
- All other glazing have a maximum normal specular reflectance of visible light of 18%.

It should be noted that the most reflective surface on the façade of a building is the glazing. Reflected solar glare from concrete, brickwork, timber, etc., is negligible (i.e.: less than 1% normal specular reflectance) and hence will not cause any adverse solar glare effects. Note also that, for any painted or powder-coated metallic surfaces on the exterior façade of the development, the maximum normal specular reflectance of visible light for those types of surfaces is in the range of 1% to 5%, which is well within the abovementioned limit.

With the incorporation of these recommendations, the subject development will not cause adverse solar glare to pedestrians and motorists in the surrounding area, train drivers, or to occupants of neighbouring buildings, and will comply with the planning controls regarding reflectivity from SEPP65 and the City of Ryde Development Control Plan 2014.

8.18 SITE SUITABILITY

In accordance with the matters for consideration under Section 79C of the Act, an assessment of the site suitability has been carried out.

The assessment concludes that the site is highly suitable for the proposed development for the following reasons:

- The proposed development is permissible in the B4 Mixed Use Zone of the RLEP 2014, and fully aligns with the objectives of the relevant built form standards to provide for a site responsive design that provides high levels of amenity to residents and visitors and is well integrated with surrounding development.

- The proposed development is appropriate for the sites central location within the heart of the Eastwood Town Centre and has excellent access to nearby transport and public recreation services. A proposed new retail centre is being provided as part of the development proposal, which will provide future residents of the site with convenient access to shopping needs.

- Existing infrastructure is either sufficient for the proposed works or can be easily augmented to support the proposal; and

- The proposed development has been designed generally in accordance with the site specific controls which apply to the site. Where the proposal departs from the Council's controls, it has been demonstrated that the proposal still achieves the objectives of the controls.

8.19 PUBLIC SUBMISSIONS

No submissions regarding the application have been made at the time of writing this SEE.

8.20 THE PUBLIC INTEREST

Urbis consider the proposed development is in the public interest as the proposal will have a number of important positive economic and social impacts. These are listed below:

Economically:

- The proposed construction of a new retail and commercial development will generate employment opportunities for the Ryde community.

- The neighbourhood retail centre of the proposal will contribute to the maintenance of a competitive economy.

- Local residents will be provided with a wider range of retail facilities, conveniently located within walking distance of residential areas and accessible by public transport options. The extension of choice will also promote greater competition, with possible benefits in terms of keener prices and better quality.

Socially:

- The two new permeable and active pedestrian through site links will enliven the site and contribute to the revitalisation of the Eastwood Town Centre.

- The proposed draft VPA will provide for a significantly enhanced public domain in Rowe Street. This has been developed in accordance with the City of Ryde Council's Planning Agreement Policy, July 2015.

- The proposal promotes increased opportunity for residential living in Eastwood in a range of dwelling sizes suited to the proximity of the site to public transport services and tertiary education institutions, retail and commercial employment opportunities.

9 Conclusion

The Statement of Environmental Effects (SEE) has been prepared by Urbis on behalf of Yuhu Property (Australia) Pty Ltd to accompany a Development Application (DA) to Ryde Council for 152-190 Rowe Street and 3 Rutledge Street, Eastwood.

The purpose of this Statement of Environmental Effects has been to:

- Present the proposed development of the Eastwood Centre; and
- Provide a detailed assessment of relevant matters of consideration having regard to the provisions of section 79C of the *Environmental Planning & Assessment Act 1979.*

The proposed development has been assessed against Council's planning policies and is considered to be generally consistent with these provisions. Where the proposal departs from the Council's controls, it has been demonstrated that the proposal still achieves the objectives of the controls.

The compelling reasons why a positive assessment and determination of the project should prevail are summarised below:

- **The design responds positively to the site conditions and the surrounding built environment**. The design has been formulated having close regard to the desired character for the site conditions, views, solar access and the surrounding built form;
- **Act as a catalyst for the renewal** of the Eastwood Town Centre and set a precedent for exemplary urban design outcomes for this centre;
- **Reinforce Eastwood as an important centre within Sydney's Global Economic Corridor** through the provision of a high quality architecturally designed development;
- **Proposes residential dwellings that are highly liveable**.
- **Proposes a mix of uses that are compatible and complementary with the objectives and vision for the Eastwood Town Centre**, establishing a vibrant main street retail precinct with logical and activated connections through the site.
- **Promote sustainable transport initiatives** – public transport, walking and cycling.
- **Includes the provision of new publicly accessible spaces: the Market Hall, The Street, The Laneway and the Hanging Garden**, which will improve connectivity and permeability within the site and be functional and useable urban spaces for the local community.
- Proposes a draft VPA to achieve a **significant upgrade to the public realm** of the Rowe Street Pedestrian Mall in accordance with the City of Ryde Council's Planning Agreement Policy, July 2015.

Having considered all the relevant considerations under Section 79C of the EP& Act 1979, it is concluded that the proposal represents a sound development outcome that respects and responds to the prominent site location and the amenity of surrounding developments. The proposal therefore is considered well-worthy of Council support and ultimately approval from the Sydney East Joint Regional Planning Panel.

Disclaimer

This report is dated August 2016 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Yuhu Group (Australia) Pty Ltd (**Instructing Party**) for the purpose of a Statement of Environmental Effects to be submitted with the Development Application (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

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