URBAN DESIGN ANALYSIS REPORT

642-644 CANTERBURY ROAD, BELMORE, NSW.

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1. Introduction

- The sites bounded by Canterbury Rd, Liberty St and Platts Ave, offers a unique opportunity to develop a new retail and residential urban complex that removes the existing unsightly semi industrial use that compromises the housing stock immediately adjacent it on the south, and replace it with new, urbane and quality housing opportunities that can benefit from the sites proximity to Canterbury Hospital, local shopping and business centres, parks and adjacent Hotels and entertainment venues.
- The architectural queues will come from the modernist Bauhaus inspired J. Robbins Manufacturing Building directly opposite and the development will also implement best standard urban design experiences within and around the base of the building that promote a positive user experience via central, heavily landscaped courtyard spaces and hybrid shared vehicle and pedestrian walkways.



Fig. 1: Bird eye sketch perspective of the design looking North-East from Liberty Street (not to scale).

2. The Site 2.1 Location

- The site is located on the southern side of Canterbury Road, Belmore, between Platts Avenue and Liberty Street.
- Currently on site are lowgrade industrial and dis-used commercial units [that also occupy the 4 houses along Platts Avenue].
- The corner use [held in different ownership but considered in this report] is a service station with an ancillary auto electrical mechanic's workshop.



Fig. 2: Aerial Photo of the Subject Site (source Google Maps).

2. The Site 2.1 Location

This Urban Design Analysis Report examines the following:

- The broader contextual frameworks that should support such a development.
- Existing and future planning frameworks.
- Surrounding buildings, existing and proposed and their likely impacts in terms of the controls relative to this development.
- Proposed built form on the subject site and impact on the adjacent properties.
- The impact of the draft built form controls in terms of traffic and appropriateness of the dedication to Council of a 6m wide road reserve connecting Liberty Street and Platts Avenue.



Fig. 2: Aerial Photo of the Subject Site (source Google Maps).

2. The Site 2.2 Site Plan

- Exceptional site as a result of the amalgamation of sites at 642-644 Canterbury Road, 1-3 Platts Avenue and 2a/2b/2c/2d Liberty Street.
- Allows for high level urban design outcomes that integrates quality residential living with an integrated urban neighbourhood experience.
- It will treat the whole block as a totality and, by also allowing for the creation of a through-block laneway between Liberty Street and Platts Avenue, it aims to reinvigorate, encourage and enhance pedestrian connectivity and permeability into the residential zoning to maintain a human dimension as the Canterbury Road corridor develops with mixed use development.



2. The Site 2.3 Streetscape & Boundaries





Photo 1: Subject site looking South-East (source Google Street View)



Photo 2: Subject site looking South-West (source Google Street View)

2. The Site 2.3 Streetscape & Boundaries





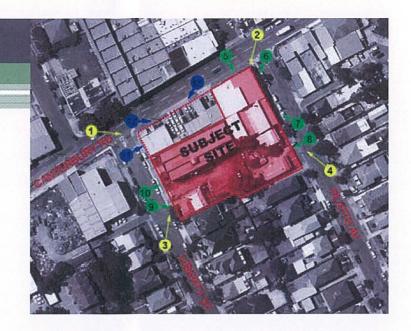


Photo 3: Subject site looking North-East (source Google Street View)

Photo 4: Subject site looking North-West (source Google Street View)

2. The Site 2.4 Existing Envelopes



Photo 5: 642-644 Canterbury Road (lots 1 & 2), looking South (source Google Street View).



Photo 7: 642-644 Canterbury Road (lots 1 & 2), looking North-West (source Google Street View).



Photo 6: 642-644 Canterbury Road (lots 1 & 2), looking South-West (source Google Street View).



Photo 8: 1-3 Platts Avenue (lots 4 & 5), looking West (source Google Street View).

2. The Site 2.4 Existing Envelopes



Photo 9: 2A Liberty Street (lot 51), looking South-East (source Google Street View).

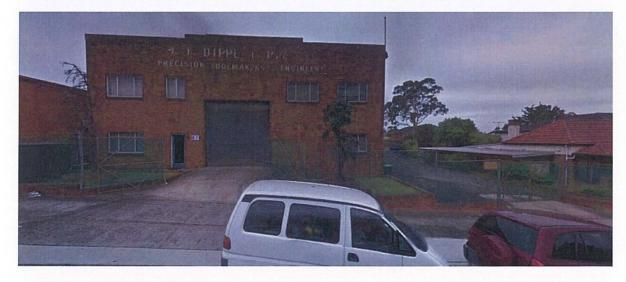


Photo 10: 2B/2C/2D Liberty Street (lots 1, 2 & B), looking East (source Google Street View).



2. The Site 2.4 Existing Envelopes



Photo 11: adjoining property looking North-East from Liberty Street (source Google Street View).



Photo 12: adjoining property looking South-East from Canterbury Road (source Google Street View).

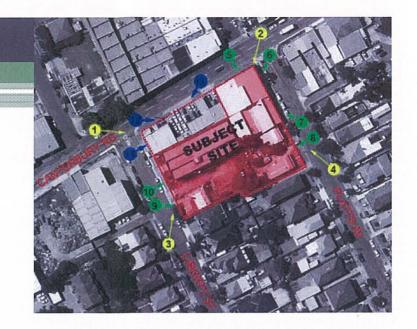




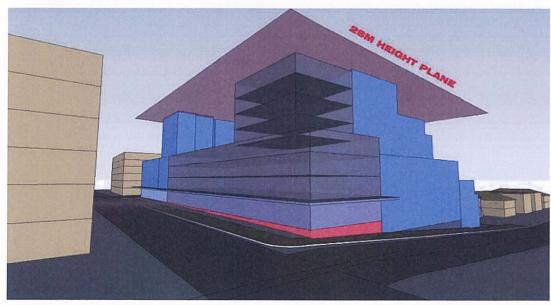
Photo 13: adjoining property looking South-West from Canterbury Road (source Google Street View).

3. Proposed Envelope

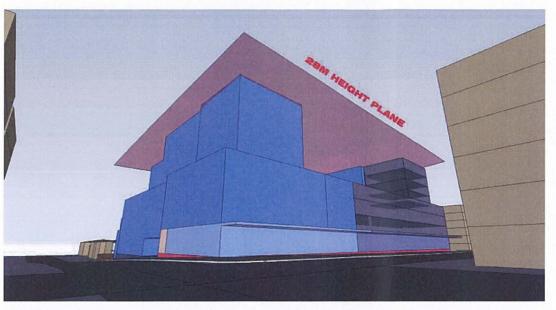
3.1 Built Form



<u>3D Perspective 1:</u> bird eye perspective of the proposed envelope looking North-East (not to scale).



<u>3D Perspective 3:</u> proposed envelope looking South-East from the corner of Canterbury Road & Liberty Street (not to scale).

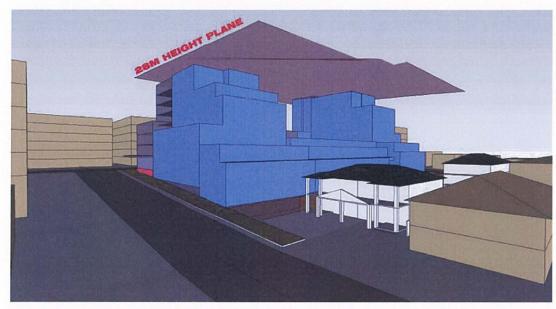


<u>3D Perspective 2:</u> proposed envelope looking South-West from the corner of Canterbury Road & Platts Avenue (not to scale).

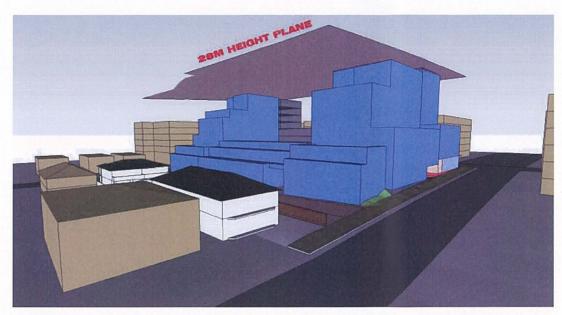


<u>3D Perspective 4:</u> proposed envelope emphasizing the void between blocks to allow higher sunlight access and cross ventilation efficiency (not to scale).

3. Proposed Envelope 3.1 Built Form

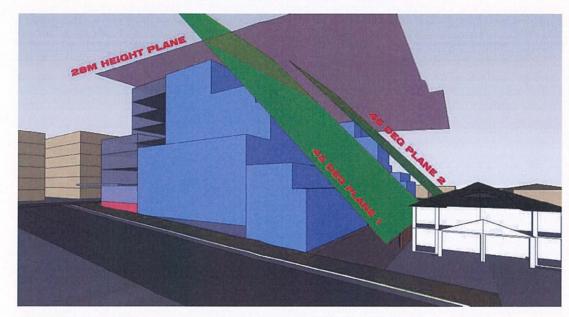


<u>3D Perspective 5:</u> proposed envelope looking North-East along Liberty Street (not to scale).

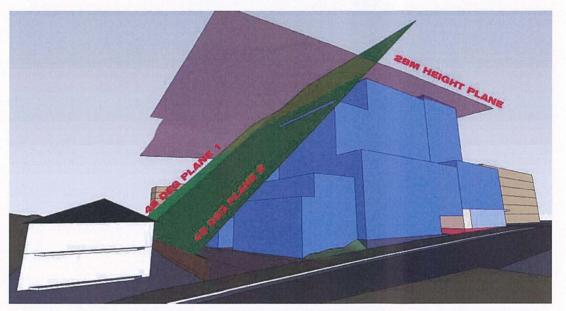


<u>3D Perspective 6:</u> proposed envelope looking North-West along Platts Avenue (not to scale).

3. Proposed Envelope 3.2 Transition



<u>3D Perspective 7:</u> 45 deg plane and proposed envelope looking North-East along Liberty Street (not to scale).



<u>3D Perspective 8:</u> 45 deg plane and proposed envelope looking North-West along Platts Avenue (not to scale).

4. Design Proposal

4.1 References & Inspirations



4. Design Proposal 4.2 Sketches



Sketch 1: Sketch Perspective – Bird eye looking north-west from Platt Avenue (not to scale).



Sketch 2: Sketch Perspective looking north-west from Platt Avenue with a closer look to the laneway (not to scale).

4. Design Proposal 4.2 Sketches



Sketch 3 (left): Sketch Perspective looking northeast from Liberty Street showing the access to the laneway and its harmony with surrounding houses (not to scale).

Sketch 4(right): Sketch Perspective of the laneway emphasizing the connection between design and community (not to scale).



4. Design Proposal 4.2 Sketches

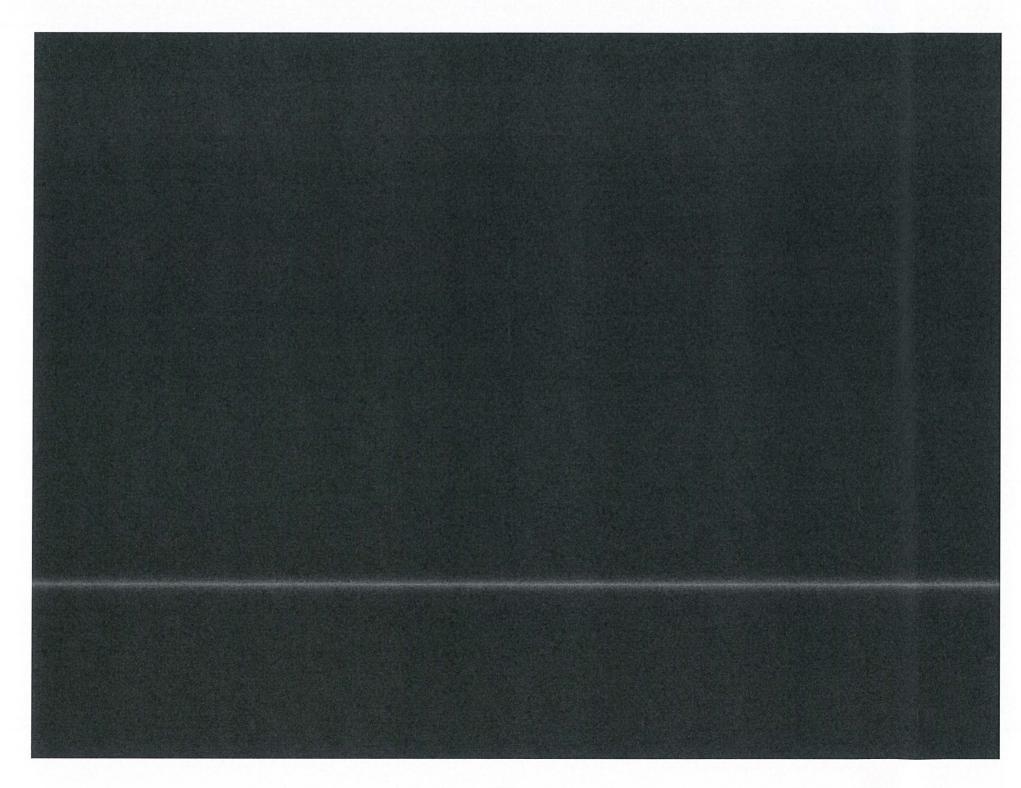




Sketches 5 & 6: Sketch Perspectives of Internal garden/pool courtyard facility (not to scale).

4. Design Proposal

4.3 Laneway & Open Space Concept



5. Photomontage



Fig. 4: Photomontage looking North-East from Liberty Street (not to scale).

5. Photomontage



Fig. 5: Photomontage looking North-West from Platts Avenue (not to scale).

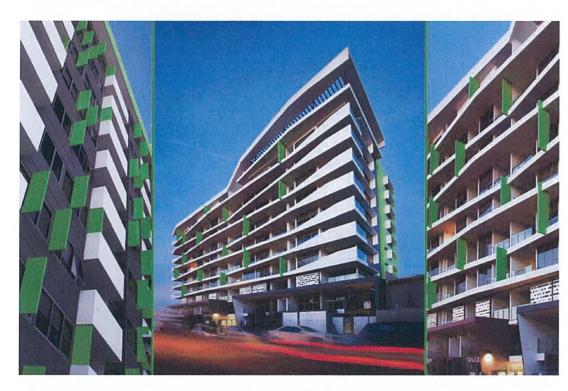
6.1 Context



"Good design responds and contributes to its context which can be defined as the key natural and built feature of the area."

- The design of the proposed residential area aims to bring a new purpose to a currently ineffective and partially disused parcel of land, while engaging with and enhancing its context. The subject site is at an interface transition zone between industrial/commercial and residential typology.
- The frontage of the site faces Canterbury Road that forms a strong boundary on the north-west side and provides good accessibility and northern exposure to the site. The other two boundaries are adjacent to business and residential development. The N/E corner form allows for a strong architectural expression.
- The overall development will consist of dwellings of various densities with green pockets around and responding towards the new shared laneway insertion.

6.2 Scale



"Good design provides an appropriate scale in terms of bulk and height that suits the scale of the street and the surrounding buildings."

- The proposed analysis suggest height planes that vary from 30/25/14 and zero meters. The overall massing steps and erodes its bulk as it moves down to the shared laneway space, transitioning to terrace style housing at this point to better link into the adjacent residential quarter.
- Trees will also be used as a way of mediating between the varying building scales to create an environment which is still comfortable for a human on the street level. This allows the proposed buildings to more sensitively fit within the current scale of the context.

6.3 Built Form



"Good design achieves an appropriate built form for a site and for the building's purpose, in terms of building alignments, proportions, building type and manipulation of building elements."

- The built form works with the pre existing force of the site.
 The higher bulk is kept to the Canterbury Road corners of the site to present a strong urban block edge. A lower central form is proposed so that light and aspect reach into the central courtyard/plaza space.
- Building elements are articulated with great consideration to create an optimum building form which allows for better aesthetics, better view vistas and provides outdoor terraces.
- All units have good views, taking advantage of vistas towards the district views.
- Parts of the buildings have been tailored specifically to achieve 3 hours of sun to dwellings on the lower side.

6.4 Density



"Good design has a density appropriate for the site and its context in terms of floor space yields or number of units or residents."

- The dwelling density is appropriate for the site and its future urban context. The proposed floor space ratio (FSR) is 2.7:1.
- The development has mix of 147 dwellings on a site area of 4557.8 sqm, giving a net dwelling density of 322 units per hectare.
- The dwelling types include one bedroom units, two bedrooms units, and three bedrooms units.
- The dwelling density is sustainable due to the location of the site being within range of services and basic human necessities like food and healthcare. Bus stations are located along Canterbury Road and train stations are located at a reasonable distance from the site.

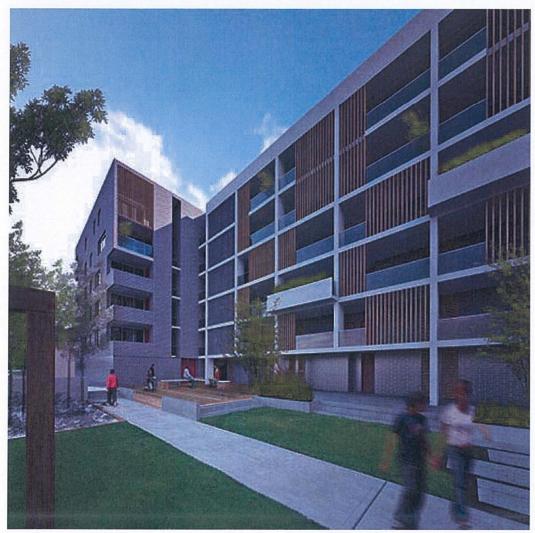
6.5 Resource, Energy and Water Efficiency



"Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction."

- In order to increase energy efficiency of the buildings, the buildings are designed to optimize heat storage in winter. They are oriented towards north such that each dwelling would be able to receive optimal sunlight throughout the year. Even the ones which do not face north are thoughtfully placed such that they still get to receive optimum daylight.
- Shadow analysis is carried out to study the availability of sunny spots in the site through the different seasons. Daylight access and natural cross ventilation is incorporated into the design to increase the building performance as well and decrease the amount of electrical energy used.
- Under initial examination it appears that 3 hours of direct sunlight can be achieved for at least 70% of the units.
- The use of appropriate unit layouts generates 71% of cross-ventilated apartments.
- Apart from detailed design, material selection will also be carefully considered to ensure long life and ease of maintenance for the development.

6.6 Landscape



"Good design recognizes that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both the residents and or the public domain."

- The communal open space in the courtyard area defined by the residential blocks allow for social activities which promote community bonding.
- This area will be the focal point of the development and will provide for many activities including swimming, play areas and a herb garden.
- Each apartment has a balcony that has been located to maximize light and views while considering privacy.
- There are multiple green spaces around the development that will form a network of social spaces and are extended from the ground level up the blocks where they become outdoor terraces. These areas function as spaces of conversation, meeting, and relaxation.
- Trees will also be planted on the street level along sidewalks to create a pleasant walking environment while mediating between buildings of various scales.