# URBAN DESIGN REPORT 50 BUSBY STREET, SOUTH BATHURST NSW 2795

JANUARY 2024

ClarkeHopkinsClarke



Allera & ClarkeHopkinsClarke acknowledges the Wiradjuri people, the traditional owners of the land where South Bathurst is situated and we pay our respects to elders past, present and emerging.

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Allera & ClarkeHopkinsClarke also acknowledge the Wiradjuri People as the Traditional Custodians of the land on which the project is situated.

We pay our respect to Aboriginal and Torres Strait Islander cultures and to Elders past, present and emerging. We recognise their custodianship over deep time and their continuing connection to lands, waters, and communities.

Photography by Martin David 2022 Blue Mountains, New South Wales, Australia

# **EXECUTIVE SUMMARY**

### **INTRODUCTION:**

50 Busby Street is located in South Bathurst, approximately 2km from the Bathurst CBD and within close proximity to various schools, TAFE and Charles Sturt University. The site is under single ownership, fronts Prospect and Busby streets and has a total area of 1.17 hectares. The site neighbours Logan Brae to the east and existing residential on Busby and Prospect streets.

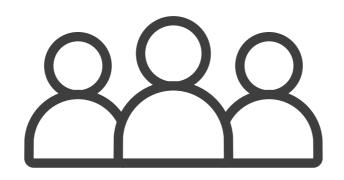
The proposed concept plan seeks to largely retain the existing cut and contours of the site in place from the previous use of the redundant and now vacant St Catherine's Aged Care Facility. The concept plan proposes a compelling new housing typology that is integrated with landscape amenity. It will be unmatched in the Bathurst local government area and intends to set a new benchmark in sustainable residential development.

With sustainability at it's heart, the concept plan proposes housing diversity within an established development footprint, maximising social benefits while minimising environmental impacts. The proposal will transform the site of an obsolete and redundant aged care facility into a familyfriendly residential community that celebrates and enhances the unique character of the site.



FIG. 01 AERIAL OF SITE

### THE PROPOSAL IS UNDERPINNED BY THE FOLLOWING OBJECTIVES



Encourage community and social interactions

Through the provision of well designed, activated and inclusive green spaces, streets and amenity that positively contribute to place creation and the identity of neighbourhood.

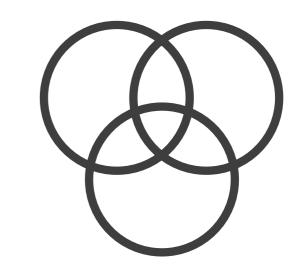


### Adopt Exemplary design

Design that is bespoke and responds to the unique characteristics of the site's environment.



### Provide housing diversity and choice





With a range of housing typologies, layouts and configurations to cater to varying household needs offering an inclusive and family-friendly environment.

### Minimise impact to surroundings By retaining the streetscape character of Busby and Prospect Streets, as well as providing a sensitive interface with surrounding properties.

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# INTRODUCTION



# **01.01 INTRODUCTION** INTRODUCTION

### **PROJECT BACKGROUND**

The Applicant has been in conversation with Council regarding the concept plan design. Over this time, the concept plan has evolved in response to Council's feedback. The Applicant will be undertaking community engagement with various initiatives to shortly commence. The Applicant is dedicated to working with Council on this remarkable site to create something truly special. The Applicant's intention for the site it to set a new benchmark in medium density dwellings for the region. The proposal seeks to leave a lasting legacy that the Applicant, Council and the Community can all be proud of.

### SITE DESCRIPTION

50 Busby Street is located in South Bathurst, approximately 2km from the Bathurst CBD and within close proximity to various schools, TAFE and Charles Sturt University. The site is under single ownership, fronts Prospect and Busby streets and has a total area of 1.17 hectares. The site neighbours Logan Brae to the east and existing residential on Busby and Prospect streets.

### PURPOSE OF REPORT

This urban design report supports the concept plan for 50 Busby street, South Bathurst, which seeks a rezoning to R3 medium density residential to establish a concept plan on the site, comprising of 97 dwellings. The concept plan contains two key precincts as shown below.





### LEGEND



# 01.02 INTRODUCTION **VISION**

"We aim to create a unique place that can build and foster a diverse sustainable community. A place that takes inspiration from local history and architecture. And, a place that connects its community through green, open, and landscaped places."



# 01.03 INTRODUCTION DESIGN EXCELLENCE

### PUBLIC DOMAIN

A community village green is proposed to provide a communal link between the different typologies on site. With pedestrian access paths from North, East and West, the village green promotes social engagement, a walkable precinct, as well as facilitating a deep soil planting zone.

### ARCHITECTURAL DESIGN

Architectural expression along the street interfaces has been enhanced, aligning with best practice design principles and optimised through colours, finishes, and materiality. Through intentional recession of building façades, the building articulation carefully balances the streets characteristics.

### CONTRIBUTION TO NATURAL, CULTURAL, VISUAL & BUILT CHARACTER OF BATHURST

Careful implementation of materiality and design language commonly found in Bathurst, produce a visual connection to the surrounding context. Additionally, through sensitive approaches to the interface between the site and adjoining lots, the visual and built character of the area are reinforced.

### SUSTAINABILITY

Environmental, societal and economic sustainability are at the core of the proposal. Introduction of commercial premises with direct access to the village green on the ground level foster an engaging community on site. Use of locally sourced materials, solar access and cross ventilation are some of the foundational attributes which enhance environmental and economic sustainability of the proposal.



\*Artists impression only

# **01.04 INTRODUCTION** CONNECTION TO COUNTRY

The Wiradjuri People are the original inhabitants of the land. The Wanbuul River (known as the Macquarie River) is a significant element within the landscape. Recognised as the largest Aboriginal tribe in Central New South Wales, the Wiradjuri tribe is known as the "people of three rivers".

The landscape consists of many significant ceremonial and cultural sites including Mount Canobolas, which served as a rich source of food, medicines and tools.

There are also many contemporary artists, architecture projects and landscape interpretations of local stories.



FIG. 06 PLACES FOR STORYTELLING



FIG. 07 PLACES FOR ART



# 01.05 INTRODUCTION URBAN DESIGN GUIDELINES FOR REGIONAL NSW



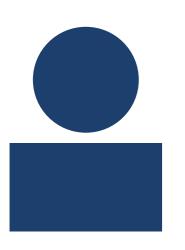
### **BETTER FIT**

To successfully design the regional urban form, identification of the regions cultural, natural, and indigenous assets must be made, and integrated into the proposal. Utilising the local character of the region as a positive design influence on urban planning will see a successful integration into the surrounding context. Combining the local character, and assets as stated previously, all while being sensitive and compassionate to the neighbouring buildings/ dwellings through the placement of forms on site.



### **BETTER PERFORMANCE**

Using the climatic and cultural conditions of the Bathurst area, a better performing proposal will integrate features of adaptive engineering, new technology and green infrastructure with minimal maintenance requirements to have a greater performance of relative success. Through careful use of native species alongside new technologies, good urban design will act as precedent for future developments in the area to build a more sustainable trajectory.



### **BETTER FOR PEOPLE**

Incorporating passive surveillance of public spaces, weather protection, and walkability of the area provide net benefits to the comfort of the community. Focusing on having walkable public realms within mixed typologies optimise the connection to the local environment through biophilic architecture interventions and allowing for physical activity to become a foundational component of the proposal.

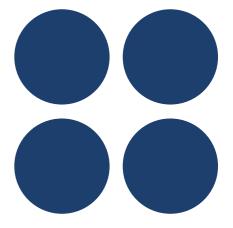
### **BETTER WORKING**

Being designed in response to immediate, and local context, the proposal should be fit for purpose, and function well when integrated to the context. This can be achieved through finding an economy of scale through masterplanning options which consider the life-cycle costs and serviceability of the proposal. Public space quality, waste management and power considerations are all to be taken into consideration throughout the planning.



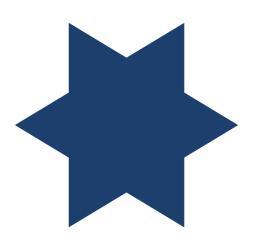
### **BETTER VALUE**

Increasing the value of the project, not only from a monetary prism, comes through design which benefits the social, environmental, and economic impact of the area. Through a longterm perspective, taking all stakeholders and elements of the built environment into consideration, the project will provide greater value through the prosperous design intentions. Designing a positively impacting proposal will introduce precedent to the local area, creating a ripple effect on the future of developments in the area.



### **BETTER FOR COMMUNITY**

Creating an equitable, and welcoming hub for the local community orchestrates a new arena for exchange. An area for inclusion and celebration of community, will be designed in collaboration with the local community. Gaining understanding from residents perspectives will enhance the ability for urban design to leave a positive footprint.



### **BETTER LOOK & FEEL**

Through careful and intentional design around the built form and spatial qualities, the proposal will strive to enhance the local environment. Using an appropriate and contextually conscious design language can reinforce the local heritage/ character meanwhile introducing modern and effective design assets to enhance the look & feel of the area.

# 01.06 INTRODUCTION BETTER PLACED FRAMEWORK



### **ENGAGE WITH THE HISTORY**

Identification of the uses, features, and cultural aspect which make up the local character of Bathurst to understand potential opportunities of the site. Opportunities which are sympathetic to the building heights, setbacks, and footprints; and complementary uses to the surrounding context.



### INTEGRATE WITH THE NATURAL ENVIRONMENT AND LANDSCAPE

Facilitating physical and visual links to landscape features of the area, and orientating new developments to optimise solar access are proven strategies to enhance urban design, and overall quality of development. Along with incorporating green infrastructure with public spaces inhabited by native ecosystems, the quality of development will enhance not only the immediate context, but the existing flora and fauna.



### **BALANCE URBAN GROWTH**

Balancing urban growth through understanding minimum number of lots required for economic development within an consciously designed urban network entails a successful proposal. Within this balance, understanding of the proposals long term impact on the local community and it's development goals.



### **INCREASE OPTIONS FOR DIVERSE AND HEALTHY LIVING**

Providing a diversity of typologies to accommodate a more diverse community with sufficient quantity and quality of open and communal space to support the future residents and users of the site. Along with reinforcing the economic development of the are through strategic inclusion of business', providing safe and attractive public spaces to facilitate urban growth within a diverse and evolved framework.



### PRIORITISE CONNECTIVITY, WALKABILITY, AND CYCLING OPPORTUNITIES

Providing new pedestrian connections within the urban design will have a greater impact on the revitalisation of areas that are currently being underutilised. Linking residential areas with integrated commercial/ retail premises to engage a users of the area will foster an intimate community.



### **RESPOND TO CLIMATIC CONDITIONS AND THEIR IMPACT**

Through Environmentally Sustainable Design interventions respondent to the local climate, the new development should minimise the impact of natural hazards such as floods, storms, and bushfires. These interventions should also positively impact the local environment through innovative systems and quantifiable measures to refrain from the urban heat-island effect.

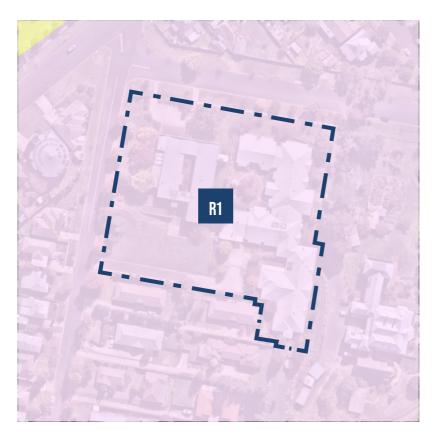
# O CO ANALYSIS



## **02.01 ANALYSIS EXISTING STATUTORY PLANNING CONTEXT**

Clarke Hopkins Clarke was appointed by Allera to undertake an Urban Design Review of the site in context of the broader land use and built form outcomes that have progressed for the surrounding land.

A redevelopment in place of the existing decommissioned aged care facility provides an opportunity to enhance local character through well considered design that sensitively responds to the site's surroundings.



### FIG. 09 LAND ZONING MAP

The site is currently located within the 'R1 General Residential' zone (NSW Planning Portal, 2023).

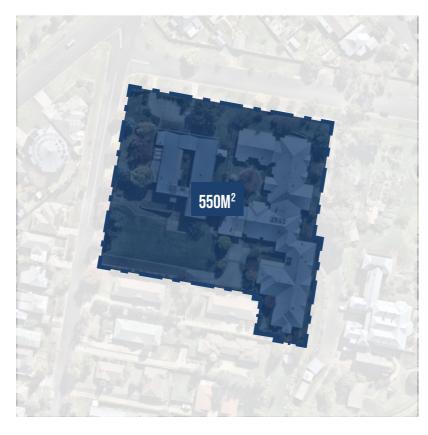


FIG. 11 MINIMUM LOT SIZE The R1 minimum lot size is 550m<sup>2</sup>. Under the Bathurst Heritage Conservation Zone, the minimum street frontage is to be consistent with adjoining lots.

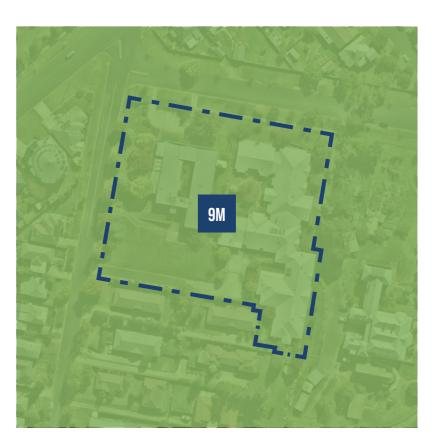


FIG. 10 BUILDING HEIGHT

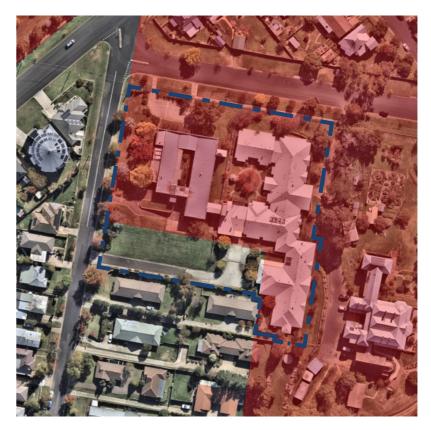


FIG. 12 HERITAGE CONSERVATION ZONE Approximately 80% of the proposed site is situated within the Bathurst Heritage Conservation Area.

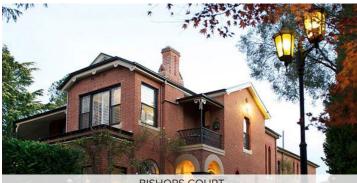
### Within the R1 'General Residential' zone, the LEP limits the height of buildings to 9m (Bathurst Regional DCP 2014).

# **02.02 ANALYSIS** HERITAGE Overlay extent





EYS HOUSE (STATE HERITAGE ITE



**BISHOPS COURT** 



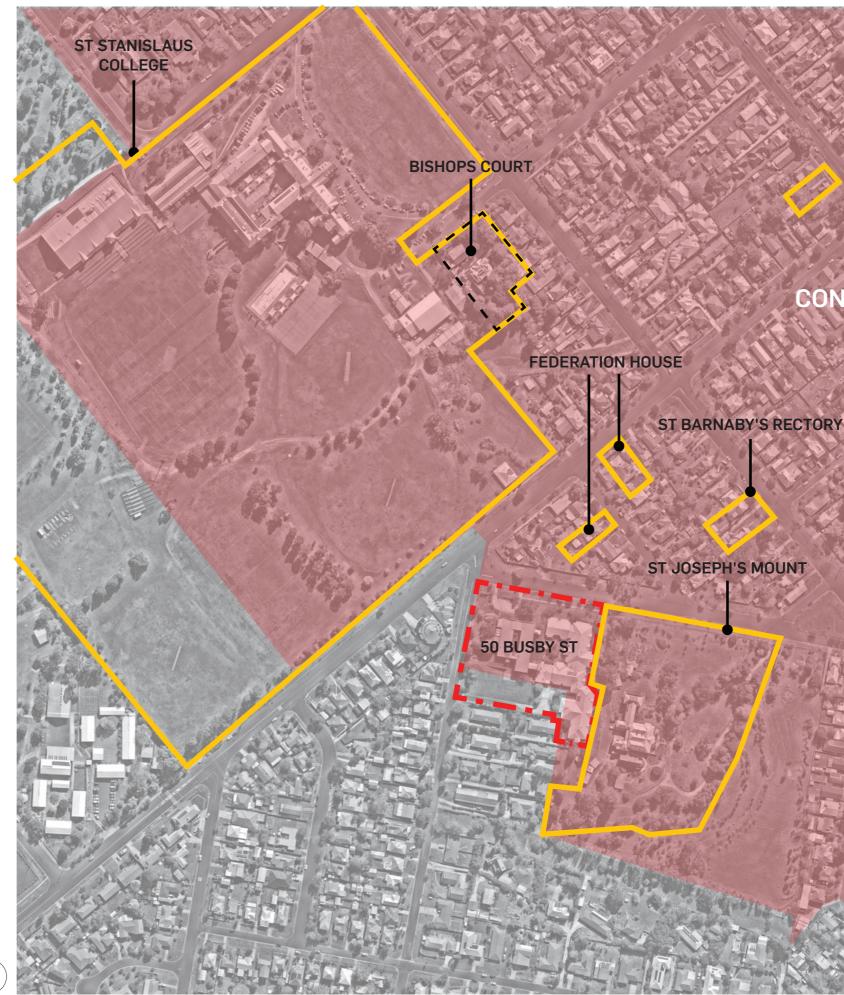


FIG. 13 SURROUNDING HERITAGE SITES

### BATHURST **CONSERVATION AREA**

**BEN CHIFLEYS HOUSE** (STATE HERITAGE ITEM)

### **02.03 ANALYSIS** PROPOSED **STATUTORY PLANNING CONTEXT**

This Urban Design Report is proposing the site controls be modified. Modifying the zoning control to be 'R3 - Medium Density Residential' to increase achievable site density. Within the proposed zoning modification, increasing the height controls from 9m to a combined 12m and 16m respectively.

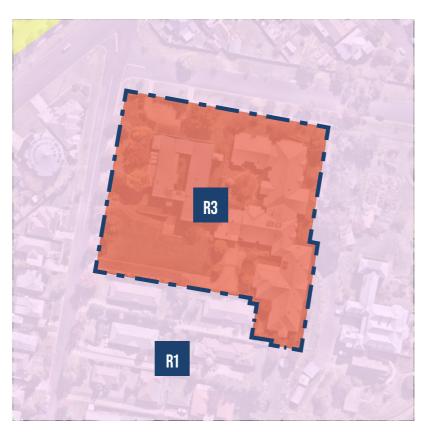


FIG. 14 LAND ZONING MAP The Planning Proposal is seeking to modify the current zone of the site to 'R3 Medium Density Residential'.

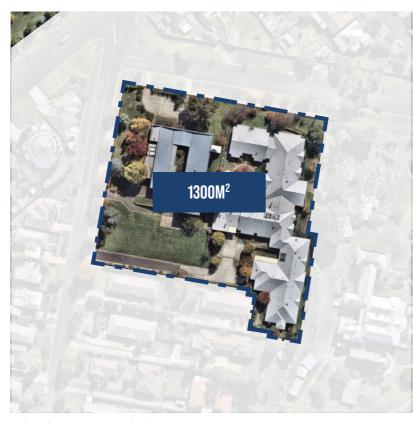


FIG. 16 MINIMUM LOT SIZE Minimum lot size to be set at  $1,300m^2$  to be consistent with the minimum lot size for residential flat buildings.



FIG. 15 BUILDING HEIGHT Within the proposed 'R3 MDR' zone, the PP proposes a building height limit change from 9m to 16m and 12m.



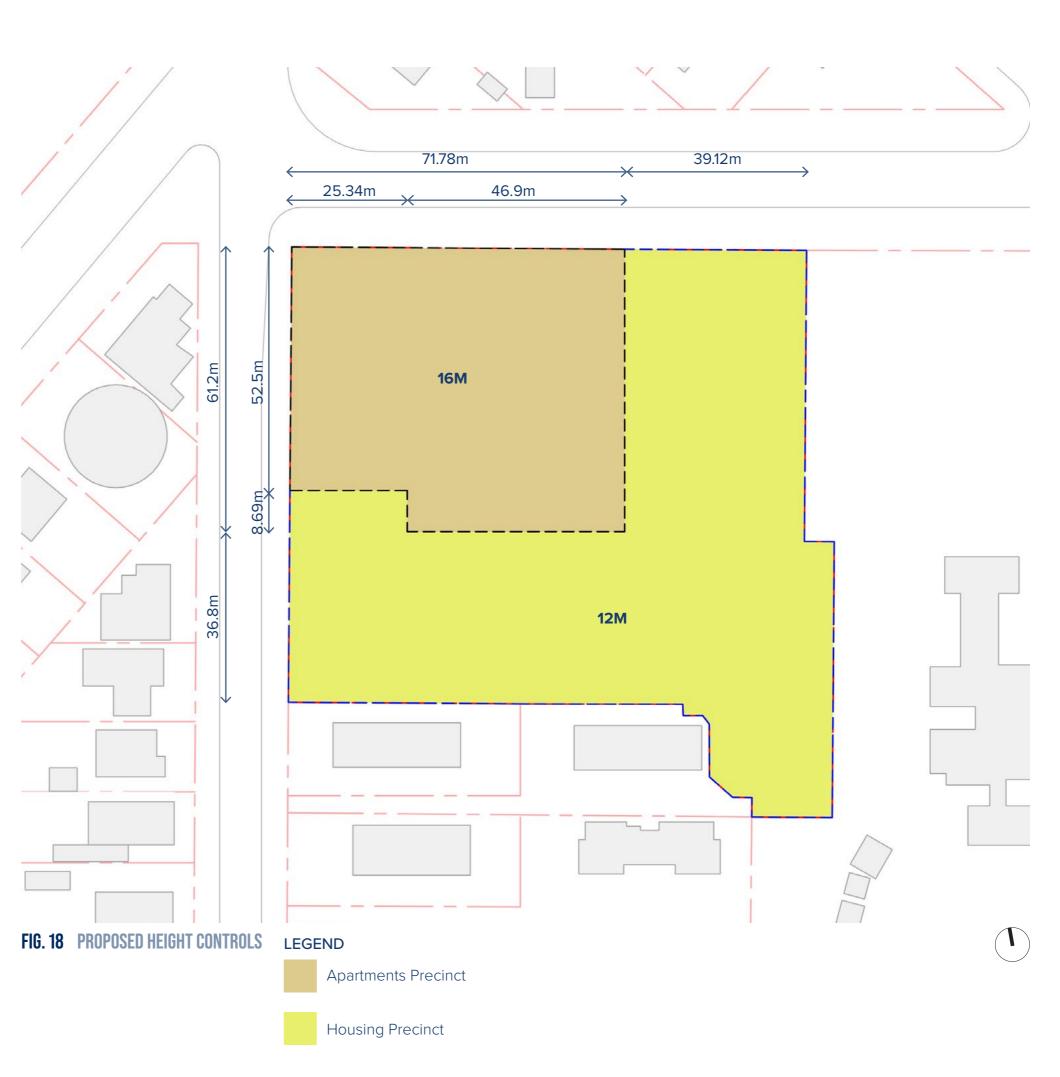
FIG. 17 ADDITIONAL PERMITTED USES Additional permitted uses proposed in the form of food and drink premises.

# 02.04 ANALYSIS HEIGHT OVERLAY EXTENT

The current height controls on the site sit at 9m. The proposal would see these height controls increased to a combination of 12m and 16m, responding to the unique topography of the site that has been cut and contoured as part of it's previous use as an aged care facility.

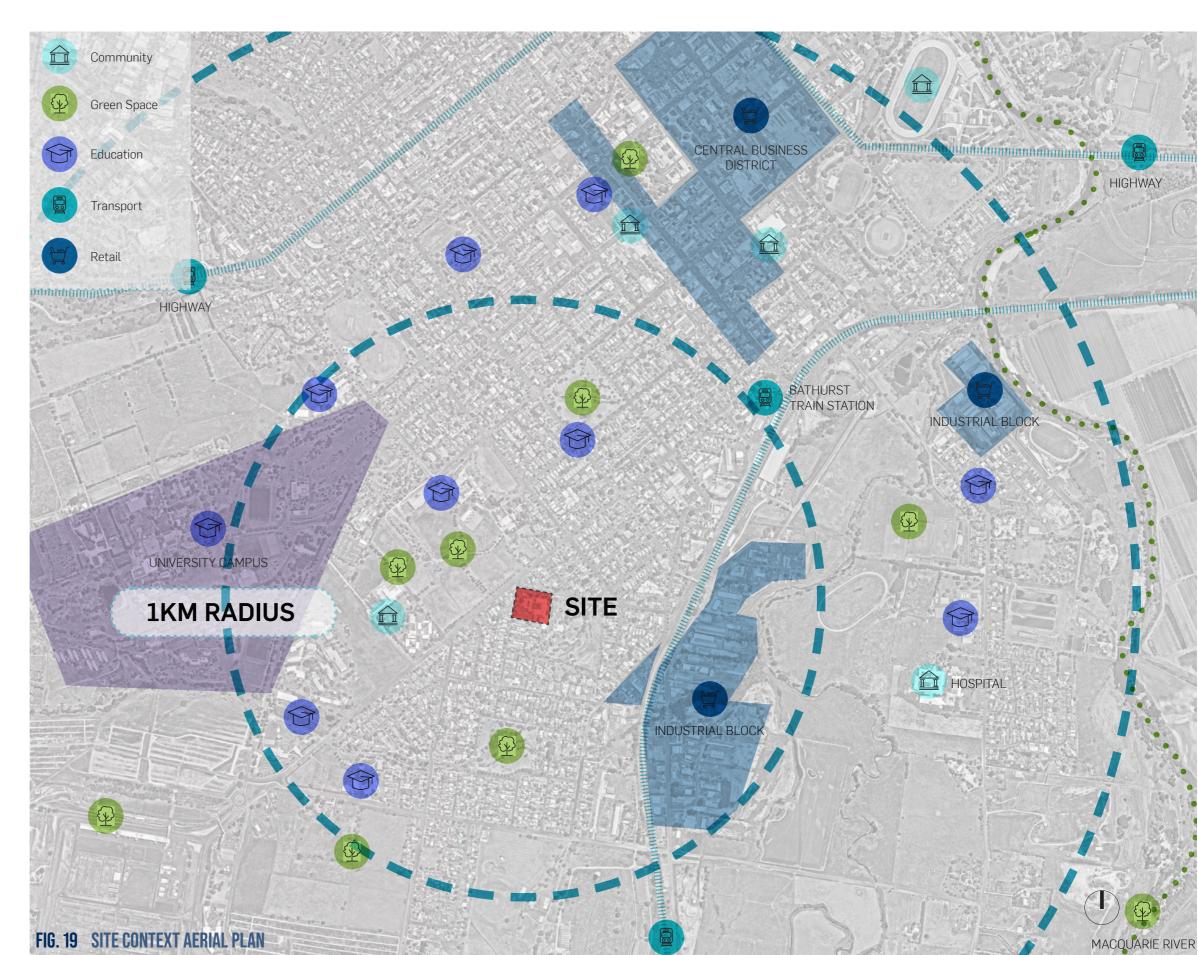
Maintaining a 12m height restriction around select boundaries is strategic in its solution to respond to the height and scale of the neighbouring dwellings whilst responding to the existing topography on the site.

Increasing the height to 16m, where there is a proposed Shop Top typology, will solidify the proposal as a new place-making feature of the area, simultaneously capturing the grand vistas of the surrounding Bathurst area.



# 02.05 ANALYSIS SITE CONTEXT

50 Busby Street is located in South Bathurst, approximately 2km from the Bathurst CBD and within close proximity to various schools, TAFE and Charles Sturt University. The site is under single ownership, fronts Prospect and Busby streets and has a total area of 1.17 hectares. With close proximity to public transport, green spaces and infrastructure, the site poses a unique opportunity to reinforce the local character of Bathurst while increasing housing diversity and density.

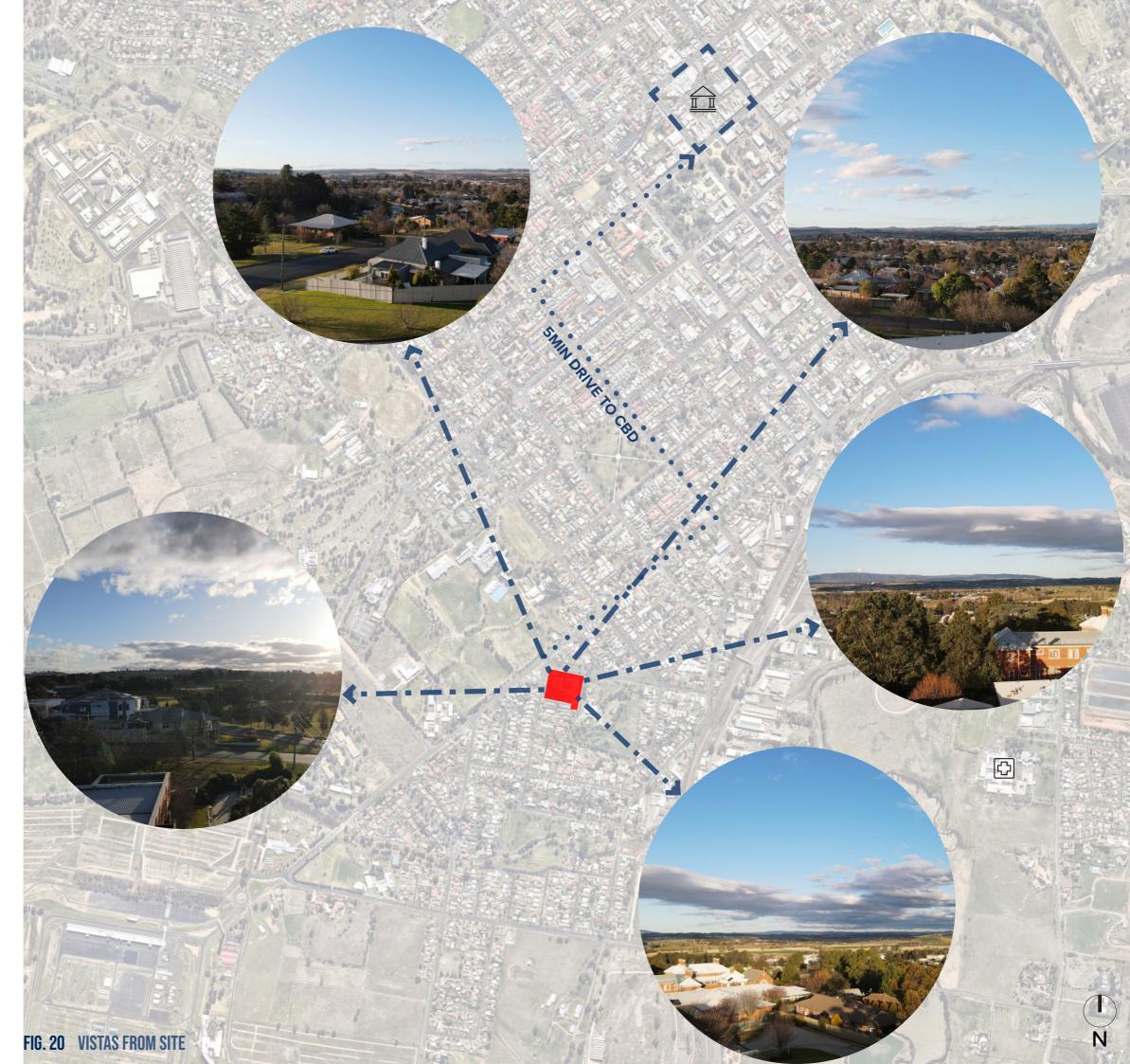


# 02.06 ANALYSIS **SITE OPPORTUNITIES**

Located within a 5 minute drive to the Bathurst CBD, key public infrastructure, and education institutes, 50 Busby Street poses a great opportunity to provide a well considered design that sensitively responds to the site's surroundings.

With impressive views of the surrounding area, the currently decommissioned St. Catherine's aged care facility currently does not adequately respond to the unique characteristics of the site, including the surrounding views of the Bathurst region. Providing thoughtfully designed residential dwellings, these views are able to be capitalised on without detracting from the local area.

Utilising the New South Wales Government Architects frameworks and guidelines, developing a sympathetic, country-centric and thoughtful proposal can become a precedent for future developments in the area, and regional New South Wales.



# 02.07 ANALYSIS SITE VISTAS

The site affords significant views of the Bathurst region including Mt Panorama and the Bathurst CBD from various vantage points.

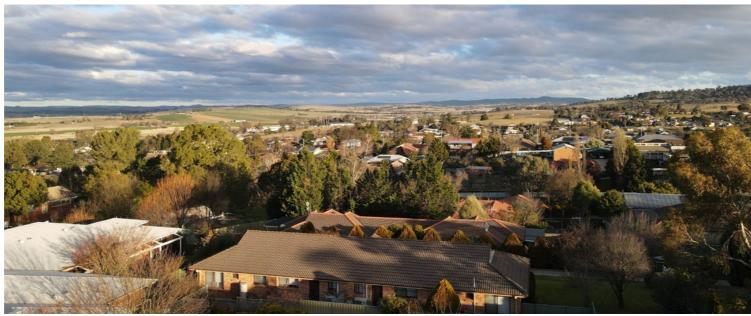
Built form will be considered from all aspects to ensure an architectural aesthetic that responds to site topography while offering premium views for its residents.



1. Northern View (Elevated)



**3.** Eastern View (Elevated)



**5.** Southern View (Elevated)

FIG. 21 SITE PHOTOS (2023)



Key Plan

 $(\mathbf{T})$ 



2. Northern View to Busby Street



4. Eastern view down Busby Street



6. Southern View to Prospect Street

# **02.08 ANALYSIS** EXISTING STREET INTERFACE

Busby & Prospect Streets both feature a mix of dwelling styles with landscaped nature strips along the road edges. The existing dwellings along Busby Street face away from the site, whilst the neighbouring dwellings to the south-west terrace down Prospect Street.

The site benefits from a gateway corner at the intersection of Busby and Prospect Streets and provides the opportunity to provide a well thought through retail presence offering convenience to the local community.



Key Plan



**1.** Busby Street (site on right)



3. View of site from Havannah Street

### FIG. 22 VIEWS TO & FROM SITE (2023)



**2.** Prospect Street (site on right)



4. Neighbouring dwellings on Busby Street (northern side of Busby Street)

### **02.09 ANALYSIS THE SITE**

The existing decommissioned St. Catherine's Aged Care Facility provides an opportunity to enhance the local area with a development focused on community, sustainability and well thought through design that responds to its local setting.

Redeveloping the site to allow for views of the surrounding area provides an opportunity to bring a higher density to the area, while remaining sensitive & compassionate to neighbours.



Key Plan



**1.** Existing Conditions - View of Logan Brae



4. Existing Conditions - View from Busby Street



2. Existing Conditions - Corridor of Eastern Wing



**5.** Existing Conditions - Driveway to Prospect St





7. Existing Conditions - Southern Entrance to Western 8. Existing Conditions - Undercroft of Eastern Wing

**FIG. 23 SITE PHOTOS (2023)** 

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9. Existing Conditions - View from Eastern Wing balcony to Logan Brae

Wing



**3.** Existing Conditions - View of courtyard



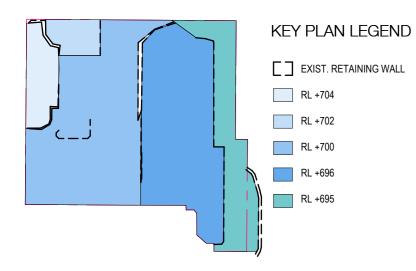
6. Existing Conditions - Driveway between Logan Brae & St. Catherine's



# 02.10 ANALYSIS EXISTING TOPOGRAPHY

The existing topographic conditions of the site feature a series of retaining walls. This has resulted in a site with heavy use of cut & fill.

The resulting outcome has developed a scheme that utilises the existing conditions of the site to minimise environmental impact, but also allows a desirable outcome for housing products.



### EXISTING TOPOGRAPHY LEGEND:



RETAINING WALL (1-3m) RETAINING WALL (3m+)

SITE BOUNDARY

### RL +704.00

1

RL HEIGHTS

GRADED BITUMEN DRIVEWAY

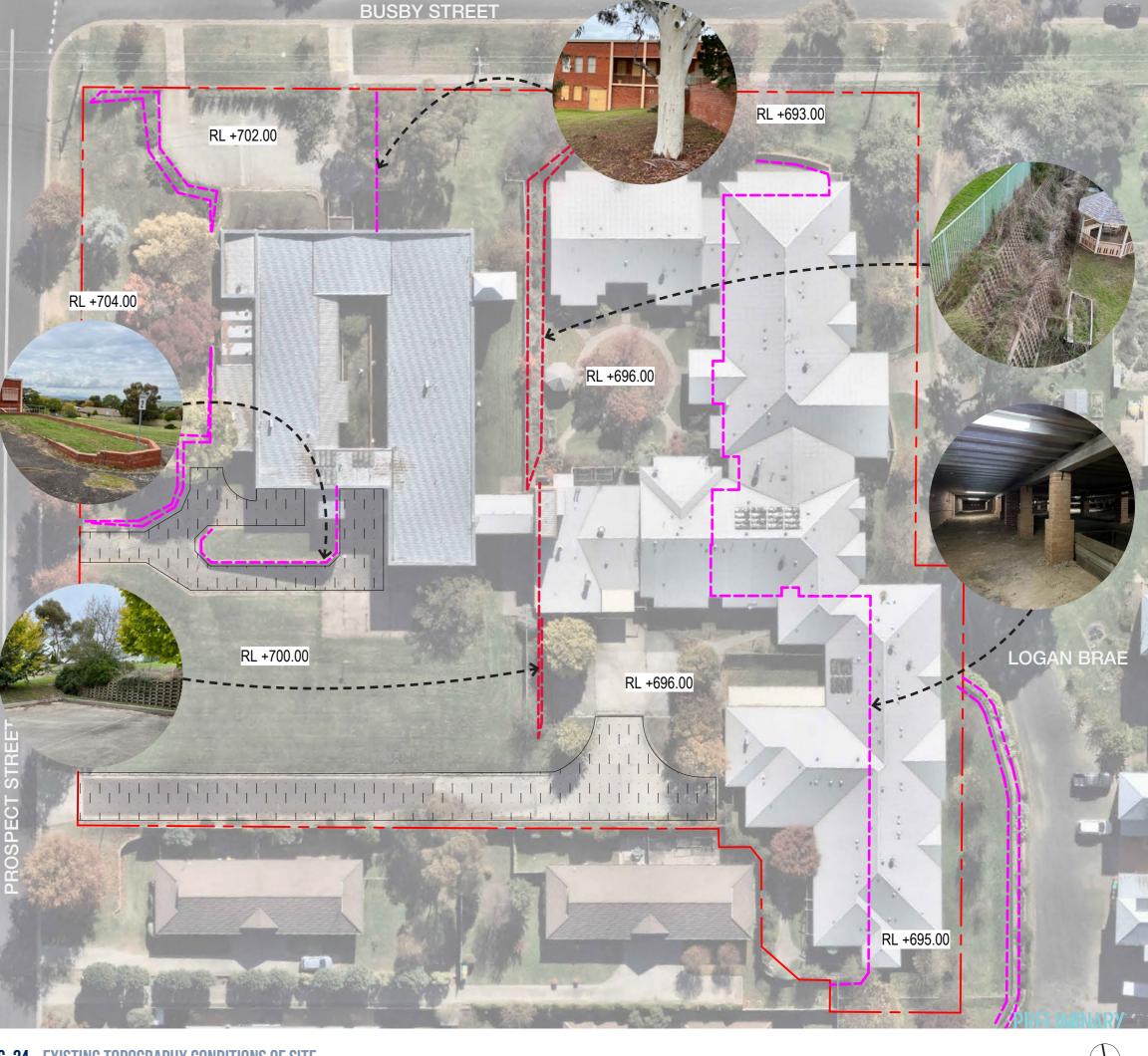


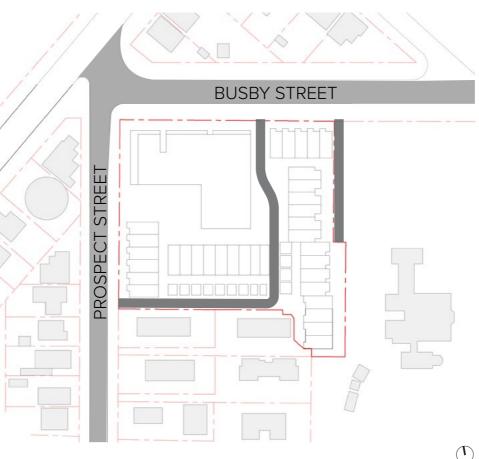
FIG. 24 EXISTING TOPOGRAPHY CONDITIONS OF SITE

# **02.11 ANALYSIS EVOLUTION OF MASTERPLAN**



### **1. EXISTING SITE CONDITIONS**

Existing site conditions are assessed to identify opportunities for adaptive re-use. From this assessment, existing buildings and on-grade car parks are deemed unsuitable for conversion to residential uses. This is due to poor orientation, topographical challenges, planning non-compliances, insufficient services/ parking provisions, inefficient layouts and poor public domain outcomes. The St Catherine's Aged Care Facility was deemed impractical and unfeasible for re-purposing, and demolishing, recycling and re-building was identified as the best and most sustainable approach.



### 2. DUAL STREET FRONTAGE STREETSCAPES

The existing streetscape character of Busby and Prospect streets is retained through the provision of appropriate landscaping within a 5.5 metre setback. Fronting the landscape buffer will be a combination of medium density housing and apartments that complement the surrounding context. These dwellings will be serviced by a new interior laneway that will have access to both Prospect and Busby Streets. The new laneway and housing lots aim to terrace with the fall of the land where required. They avoid steep gradients as this would result in an unacceptable and disjointed ground plane experience.



The proposed design of 50 Busby street ensures that the proposed dwellings on the peripheral of the site are sympathetic to the surrounding residential. Lower scale medium density uses have been proposed in the areas outlined in dark blue to strike a balance between overcoming topographical challenges and providing adequate privacy and setbacks.

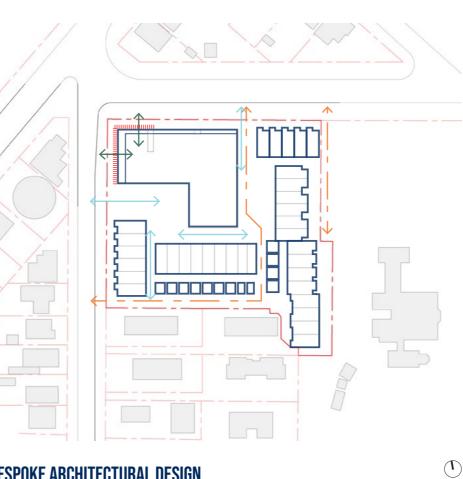


# **02.12 ANALYSIS EVOLUTION OF MASTERPLAN**



### **4. OPEN SPACE**

A connected public realm comprising of well thought through communal landscaped open spaces. The design of publicly accessible open spaces seeks to strike a balance between overcoming topographical challenges and providing generous usable areas, in the form of shaded lawns, landscaped gardens, meeting points and seating. The public domain network provides legible connections to the surrounding street network for future residents.



### **5. BESPOKE ARCHITECTURAL DESIGN**

Pedestrian permeability and walkability is carefully considered. As a result various links are established to connect pedestrians from both Busby and Prospect streets to future communal open space. Additionally, a central laneway is established to service rear loaded lots and reduce car dominance on local streets. Local streetscapes are designed to be welcoming places for people and together with other public spaces will enhance the identity of 50 Busby Street.

\*\*\*Activating the Busby and Prospect Streets interface through commercial premises establishes an invitation for passing pedestrians to enter and engage with the site.

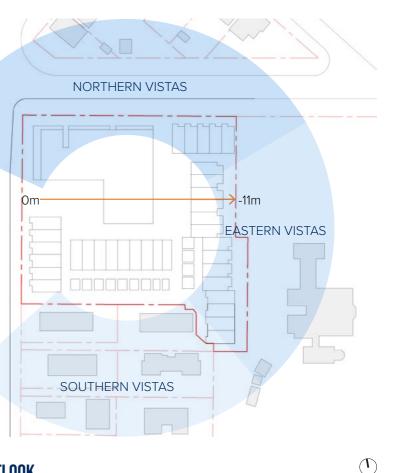
### LEGEND

- ←→ Pedestrian Access
- $\leftarrow \rightarrow$  Vehicle Access

Activated street interface

### **6. VIEWS AND OUTLOOK**

residential.



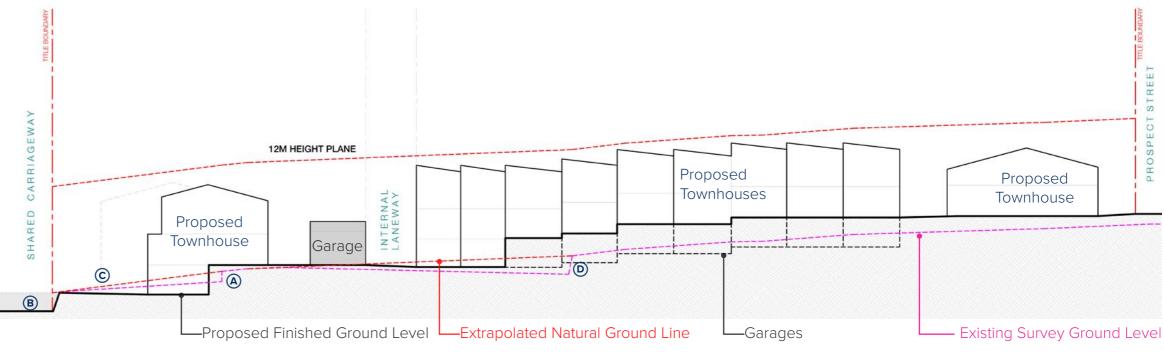
Design that adequately responds to the unique topography of the site, noting the ~11m of cross fall across the site from West to East. Dwellings are designed to maximise views whilst ensuring privacy to neighbouring

### **02.13 ANALYSIS HEIGHT, SCALE AND TOPOGRAPHY**



### TOPOGRAPHY

The site is highly disturbed from existing cut and fill as highlighted in the section diagrams. The proposed design repairs the topography and overcomes dramatic changes in existing ground levels to ensure an appropriate residential ground plane whilst working with the existing street interfaces and other site constraints.



### FIG. 26 CROSS SECTION A

Towards the Eastern boundary of the site, the 12m height restriction amendment illustrates the requirement for the change.

(C)



RETAINING WALL UNDERCROFT ON LOGAN BRAE INTERFACE

The existing cut on the site in this location (Δ) (existing undercroft area) has been utilised for split-level product to contain earthworks within the perimeter of the building.

Retention of the existing retaining wall (B) along the Logan Brae interface is key to minimise the impact of earthworks on site.



HEAVY GRADING ON SITE (LOGAN BRAE INTERFACE)



EXISTING RETAINING WALL (LOGAN BRAE INTERFACE)

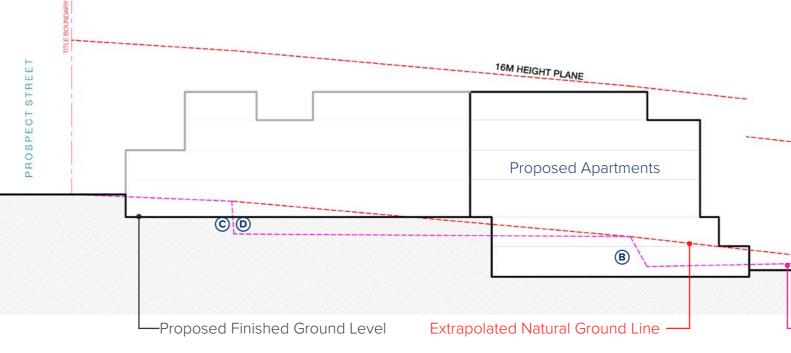


HEAVY GRADING & RETAINING WALLS ON SITE

### Note: Height plane is measured from Extrapolated Natural Ground Line

### **02.14 ANALYSIS HEIGHT, SCALE AND TOPOGRAPHY**





### FIG. 28 CROSS SECTION B



RETAINING WALL UNDERCROFT ON LOGAN BRAE INTERFACE

The existing cut on the site in this location (existing undercroft area) has been utilised for split-level product to contain earthworks within the perimeter of the building.

The existing cut on the site in this location (B) (existing retaining wall) has been utilised for the proposed basement of the apartment building in order to contain earthworks within the perimeter of the building.

At the existing western entry (from (C) Prospect St) the site features aggressive grading around retaining wall. This has been taken into account for minimising the earthworks required on site.

The existing cut on the site in this location (D) (existing retaining wall) has been utilised for the proposed basement of the apartment building in order to contain earthworks within the perimeter of the building.

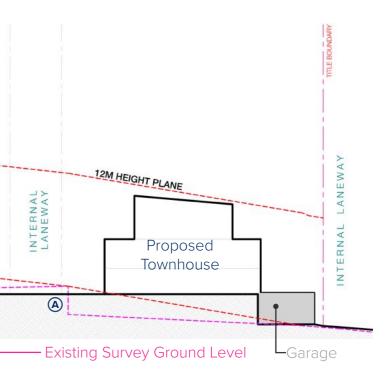


### TOPOGRAPHY

FIG. 27 KEY PLAN

The site is highly disturbed from existing cut and fill as highlighted in the section diagrams. The proposed design repairs the topography and overcomes dramatic changes in existing ground levels to ensure an appropriate residential ground plane whilst working with the existing street interfaces and other site constraints.









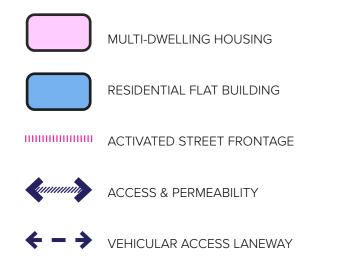
### Note: Height plane is measured from Extrapolated Natural Ground Line

# 

# CONCEPT



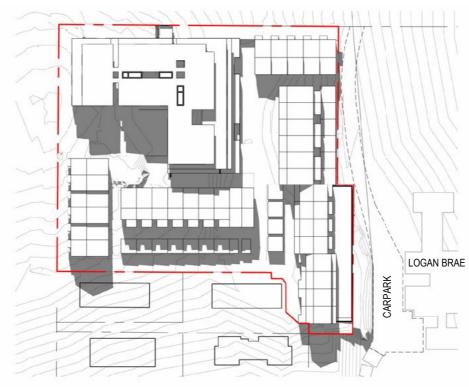
# 03.01 CONCEPT CONCEPT PLAN





# **03.02** CONCEPT - SUSTAINABILITY **SHADOW STUDY**

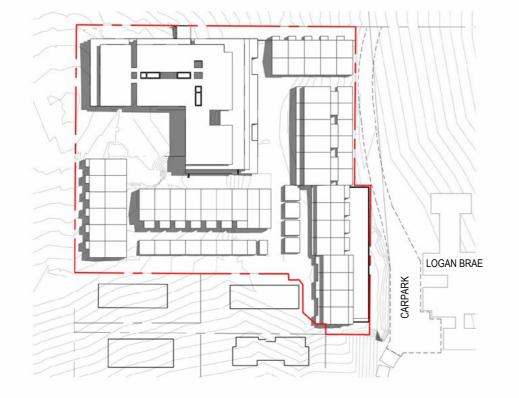


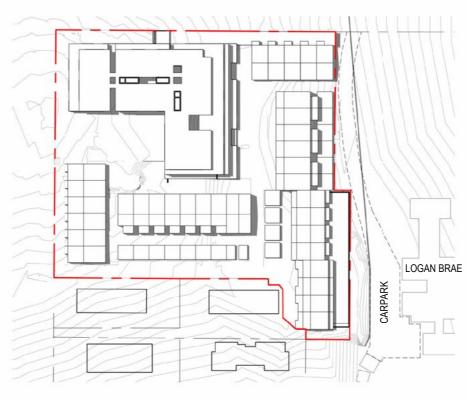


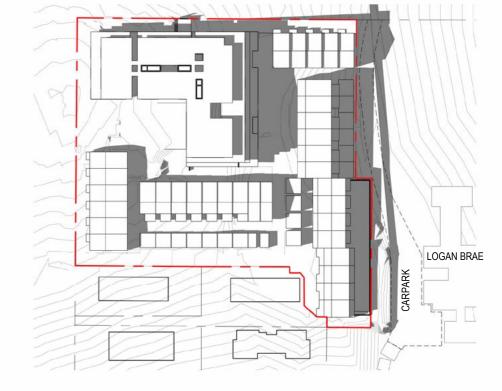
Winter Solstice - 09:00

Winter Solstice - 12:00

Winter Solstice - 15:00







Summer Solstice - 09:00 (DST)

Summer Solstice - 12:00 (DST)

ClarkeHopkinsClarke Allera FIG. 30 INDICATIVE CONCEPT MASTERPLAN - SHADOW DIAGRAM (NOT TO SCALE)

Summer Solstice - 15:00 (DST)



### **03.03 CONCEPT - SUSTAINABILITY SOLAR ACCESS**

The ADG requires at least 70% of apartments to receive a minimum of 3 hours of direct sunlight to their living space between 9am and 3pm at midwinter for all areas outside of the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.

It also requires a maximum of 15% of apartments receive no direct sunlight between 9am and 3pm at midwinter.

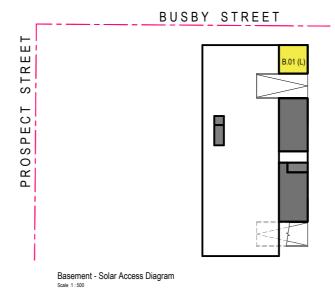
Maximising northerly or easterly aspect apartments where possible allow for adequate solar access into apartments. Conversely, southerly aspect apartments are orientated towards the significant views, and away from the desired aspect for direct sunlight.

As indicated in the diagrams, the ADG requirements are capable of being met.

\*Diagrams of apartment layouts are indicative only.



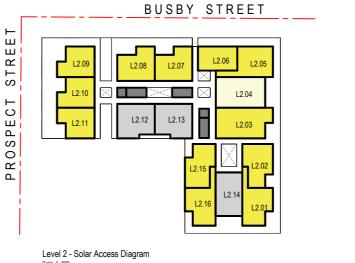
\*\*The layout shown, although indicative, illustrates the proposal's capability of compliance with over 70% of apartments achieving 3 hours of direct sunlight.





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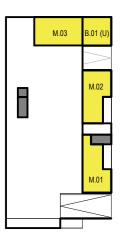




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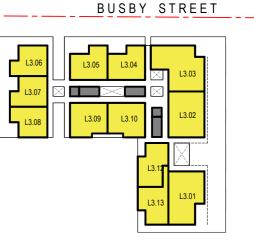


Mezzanine - Solar Access Diagram





Level 1 - Solar Access Diagram



Level 3 - Solar Access Diagram

# **03.04** CONCEPT - SUSTAINABILITY CROSS **VENTILATION**

The ADG requires at least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.

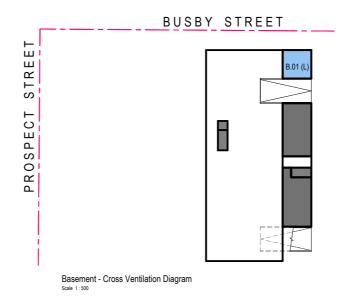
60% cross-ventilation can be achieved by limiting the number of apartments per floor plate by introducing cut-outs in the facade, as indicated in the indicative apartment layouts shown.

The building's consideration for substantial cross-ventilation and access to natural sunlight - as shown in the accompanying diagrams should be aspired towards at the architectural detailed building design stage and demonstrated respectively.

\*Diagrams of apartment layouts are indicative only.



\*\*The layout shown, although indicative, illustrates the proposal's capability of compliance with over 60% of the apartments achieving cross ventilation.



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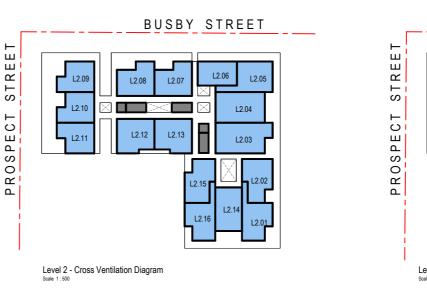
G 07

G.06

G.05

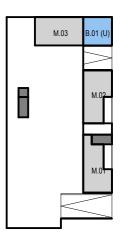
G 04

G 03

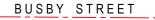


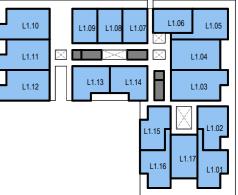
### FIG. 32 INDICATIVE CONCEPT APARTMENT LAYOUT - CROSS VENTILATION (NOT TO SCALE)

### BUSBY STREET



Mezzanine - Cross Ventilation Diagram Scale 1:500





Level 1 - Cross Ventilation Diagram



Level 3 - Cross Ventilation Diagram

### **03.05** CONCEPT - BREEZEWAYS **BREEZEWAYS**

A core component to the planning of the proposal is the open breezeways feature in the top shop typology. Utilising openings in the built form to maximise natural ventilation, minimises the reliance upon mechanical heating & cooling.

Collaboration between vertical voids and facade openings allow for double aspect apartments to maximise the amount that are capable of achieving desirable cross-ventilation.



Project: Kensington Assemble Housing (Hayball)

Nightingale Ballarat (Breathe Architecture) Project: Photographer: Derek Swalwell

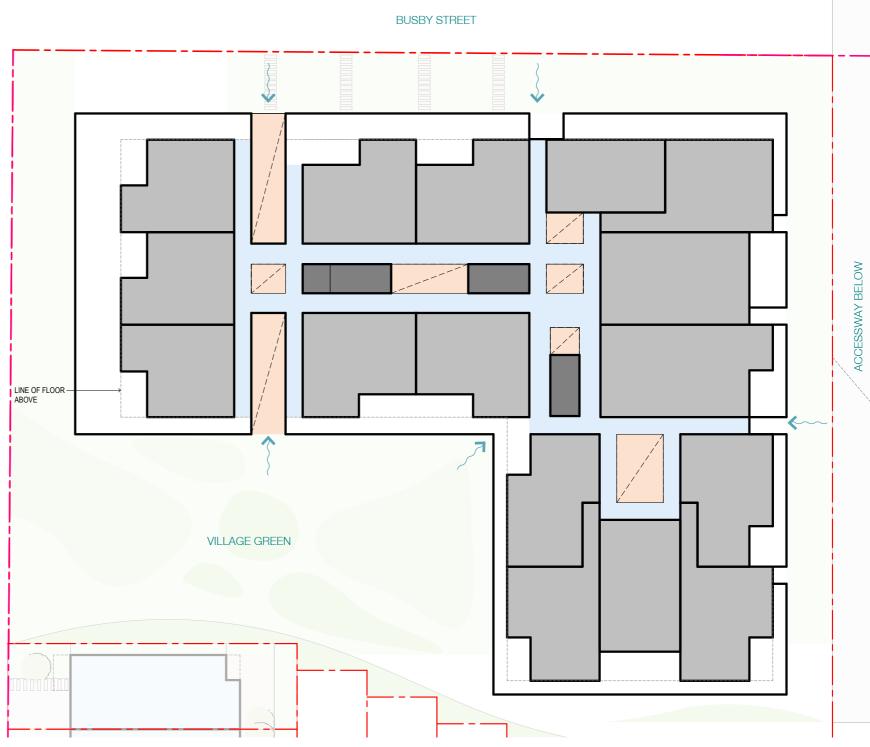


FIG. 33 INDICATIVE CONCEPT APARTMENT LAYOUT - BREEZEWAYS FOR MAXMISED CROSS VENTILATION (NOT TO SCALE)

	APARTMENT
	VERTICAL CIRCULATION (CORE)
	OPEN BREEZEWAY
	VERTICAL VOID
<b>{</b>	FACADE OPENINGS

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