University of Newcastle Honeysuckle City Campus Development Volume 2 - Design Guidelines



THE UNIVERSITY OF NEWCASTLE AUSTRALIA

CONCEPT PLAN SUBMISSION
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1. Introduction

1. Introduction

1.1 The Site

1.1.1 Site Description

The new Honeysuckle City Campus is located on a series of connected lots between Honeysuckle Drive and Civic Lane within the Honeysuckle redevelopment precinct.

The site is bounded by Honeysuckle Drive to the north, a private lot with Right of Public Access known as Settlement Lane to the east, Civic Lane to the south, Worth Place to the west and future Civic Link to the east. The site includes Wright Lane - a private lot with Right of Access / Right of Carriageway that runs along the northern edge of Sites 2 and 3.

The total area made up of Sites 1, 2 and 3, and Wright Lane is 22,069m^2.

The full site area is made up of the following parcels:

- Lots 1, 2 and 3 DP 1163346 (Site 1);
- Lot 21 DP 1165985 (part Sites 2 and 3);
- Part Lot 2 DP 1226145 (part Sites 2 and 3, referred to as Rail Corridor within this report); and
- Part Lot 4 DP 1111305 (part Wright Lane).

Sites 1, 2 and 3 are owned by the UON, acquired from Hunter and Central Coast Development Corporation (HCCDC).

Immediately to the south of Site 3 is 468 Hunter Street, a property already owned by UON. While not included in the site area, this Concept Plan considers this site as an important opportunity to create a future pedestrian connection between the Honeysuckle City Campus and NeW Space.

1.1.2 Site Capacity

The maximum floor space for the site is based on existed and planned zoning for the site. Planning controls for former rail corridor on Sites 2 and 3 have been recently updated by Newcastle City Council.

The calculations that have been used to formulate the Concept Plan are as follows:

Site	Site Area	FSR	GFA
1	8,546m^2	2.5:1	21,365m^2
2	6,174m^2	3.0:1	18,522m^2
3	5,692m^2	3.0:1	17,076m^2
Wright Lane East*	1,885m^2	2.0:1	3,770m^2
Wright Lane West*	2,099m^2	2.5:1	5,248m^2
Total	**24,396m^2**		**65,981m^2**

* Parcel aligns with FSR map

Floor space will be distributed across the precinct to ensure the best functional and urban design outcome.

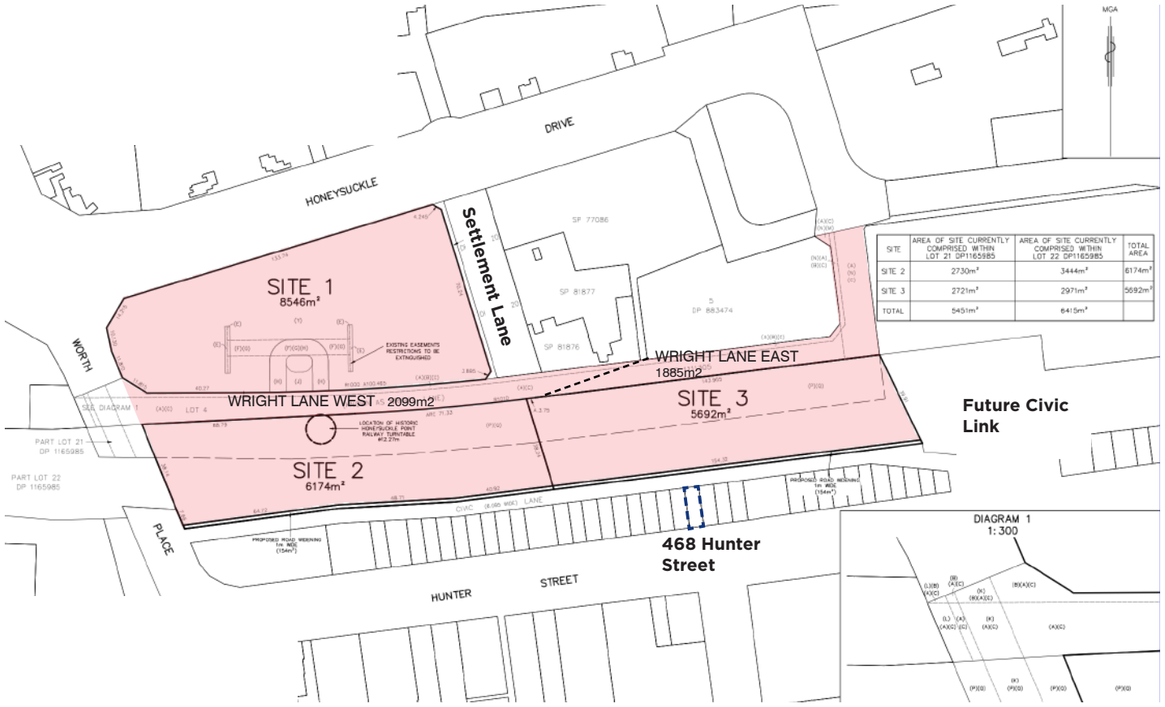


Figure 1.1 Land Ownership



Figure 1.2 Location Plan

1. Introduction

1.2 Planning Context

1.2.1 Local Environment Plan

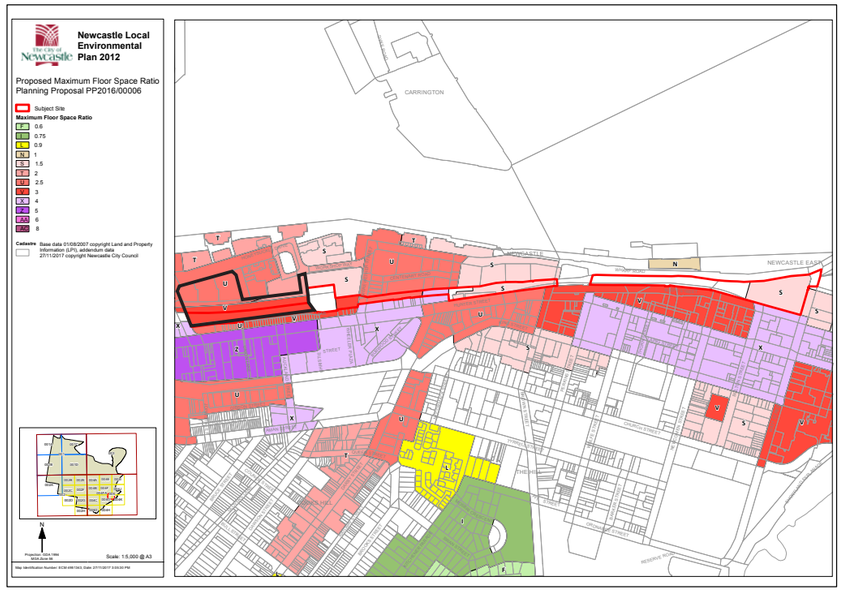
A planning proposal to amend the Newcastle LEP for the former rail corridor land was endorsed by Newcastle City Council on 12 December 2017. The amendments have now been gazetted.

The amended controls are shown in Table 1.1.

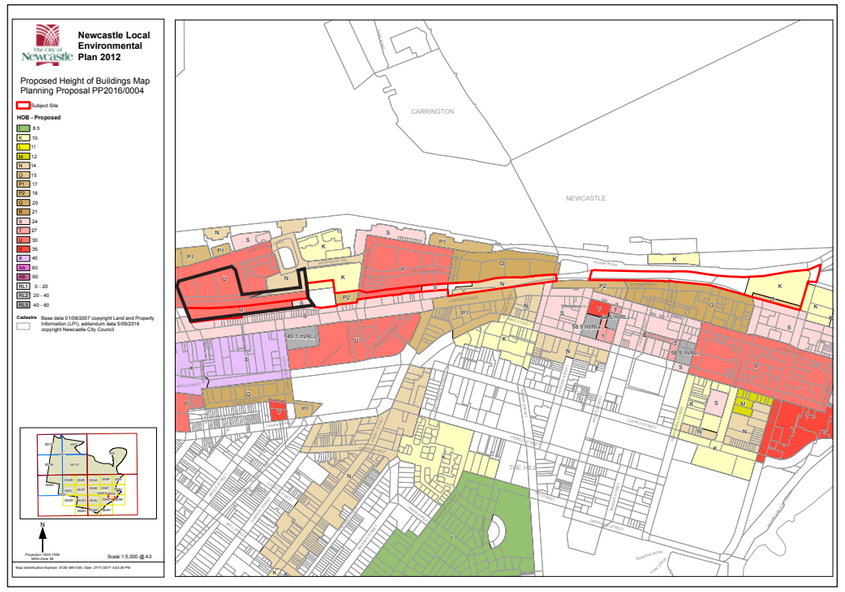
The Concept Plan is generally in compliance with these amended controls.

LEP Amendments	Master Plan Compliance
Land Zoning Site 2 (rail corridor) = B4 Mixed Use	Yes
Height of Buildings Site 1 = 30m (as existing) Site 2 (rail corridor) = 30m Site 3 (rail corridor) - partial = 30m Site 3 (rail corridor) - partial = 24m at eastern end adjacent Civic Link	
Floor Space Ratio Site 1 = 2.5:1 (as existing) Sites 2 and 3 (rail corridor) = 3:1	Yes, receipt of additional GFA possible through design excellence provisions

Table 1.1 LEP Requirements



Maximum Floor Space Ratio, Planning Proposal



Height of Buildings, Planning Proposal

Figure 1.3 Zoning Plans

1. Introduction

1.2.2 Development Control Plan

In December 2017, Newcastle City Council endorsed amendments to Section 6.01 Newcastle City Centre of the DCP following submission of the planning proposal for rezoning of the rail corridor land in December 2017.

The Concept Plan generally complies with the intent of the DCP, however there are some areas where the proposed design guidelines vary from the DCP.

The proposed variations from DCP controls are shown in Table 1.2.

DCP Requirement	Concept Plan Design Guidelines
A1 Street wall heights 16m street wall	Surrounding buildings do not have 16m street wall, are approx. 7-8 storeys with consistent setback. Master Plan proposes podium street walls of at least 2 storyes and up to 16m is acceptable.
A2 Building setbacks 0m setback	0m general setback to Honeysuckle Drive and Worth Place supported. A 3m setback is required to Settlement Lane to enable an infrastructure services corridor. A 3m setback is proposed to Wright Lane to enable generous landscaped public domain along this pedestrian spine
A9 Landscaping New developments to incorporate landscaping and communal open space. Landscaping at upper levels and roof tops encouraged through roof gardens and green walls.	This new provision is supported by the Concept Plan with proposed roof top landscaping and significant areas of communal open space.
B1 Access Network B1.4 Street and block network is permeable and accessible to promote pedestrian use	The Concept Plan allows for future connections between Hunter Street and Civic Lane. There is potential for the Master Plan to deliver a new link at 468 Hunter St.
B2 Views and Vistas *B2.1 Public views and sight lines to key public spaces, the waterfront, prominent heritage items and landmarks are protected.* New vista proposed to be retained along Settlement Lane from Civic Lane.	A new vista from Civic Lane along Settlement Lane is enabled by the Concept Plan. Proposed building setback to Settlement Lane will improve public domain, enhancing pedestrian connection to the waterfront.
B3 Active Street Frontages Active frontages map identifies required active frontage at Civic Link, and highly desired active frontage at Worth Place at former rail corridor	Supported by the Concept Plan
B7 Infrastructure *B7.1 Stormwater, water and sewerage infrastructure is integrated into each site and does not create negative off-site impacts.*	Supported by the Concept Plan
B8 Site Amalgamation *B8.1 Surplus rail corridor land is amalgamated with adjoining land to create useable sites that are consistent with the desired character of the area.*	Supported by the Concept Plan. Sites proposed to be amalgamated as per draft DCP.
E Civic Link *E1. Civic Lane provides an accessible, attractive link between Civic Link/Hunter Street and Wright Lane/Workshop Way. Vehicular and service access to the properties on the northern side of Hunter Street and the new developments between Civic Lane and Wright Lane is from Civic Lane.* 16m street wall along Wright Lane and at Civic Link 24m height limit.	Supported. Civic Lane to be used to service lots B, D, E, F. Setback on northern side of Civic Lane to enable servicing, footpath and adequate setback for any future residential development between Hunter Street and Civic Lane. Concept Plan proposes to transition height at Civic Link
7.03.02 Parking Provision *(Existing DCP)* Except for residential development, car parking for development in the Newcastle City Centre is provided at the rate of one space per 60m² gross floor area.	Not achieved by the Concept Plan. Refer Transport Assessment by ARUP

Table 1.2 DCP Requirements

Chapter Two

2. Design Principles

2. Design Principles

2.1 Master Plan Principles

A series of design principles for the Campus underpin the master plan response and have been prepared to guide future development.

Engaged

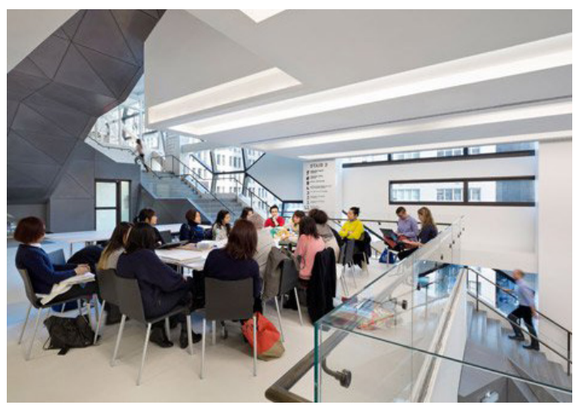
- Create a strong, **visible** UON presence in the Newcastle CBD that is welcoming to students, staff and visitors and contributes to a **sense of identity and place**.
- Contribute to the **vibrancy** of the Newcastle CBD during the **day and night** by designing the urban environment to be have **safe** and **open** connections, with ground level activation.
- Create an **urban campus** that is **integrated** with the CBD and enables boundaries between university and city to be **dissolved** through **physical and visual links** in the built form and public domain.











2. Design Principles

Unique

- Create a campus environment that is a **vibrant** and attractive **destination** offering a **variety** of spaces and experiences for UON students, staff and visitors, but that also **welcomes** the wider Newcastle community
- Respond to the unique **history** of the site by reinterpreting the **locomotive, industrial and indigenous heritage** of the place through opportunities in the design of public domain, landscape and building spaces
- Design the public domain as an **urban campus heart** that provides enjoyable places for people to meet and gather, and that maximises **solar access** and connections to its location between the **waterfront and city**.

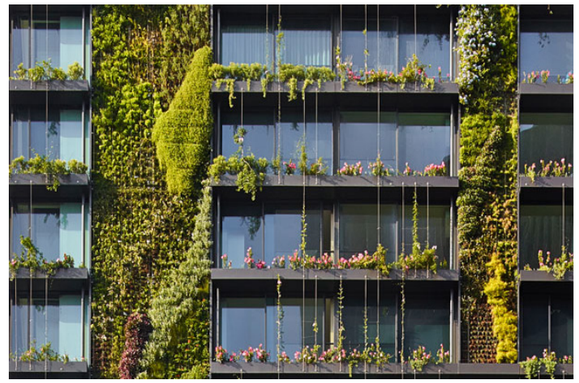




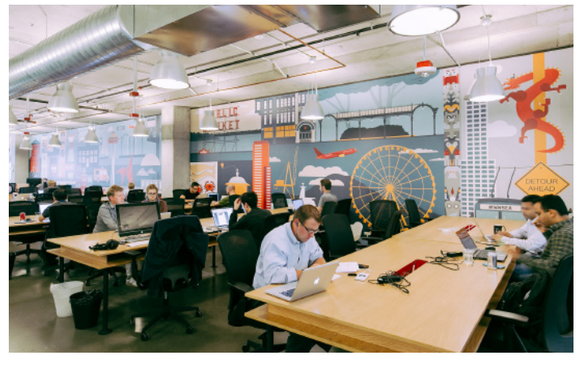


Sustainable

- Create a **world class**, sustainable facility that demonstrates a commitment to **social environmental and economic leadership**
- Social: Reinforce UON's relationship with the wider **Newcastle community** and meet **social responsibilities** by dissolving the boundaries between university and city
- Environmental: Meet the challenges of a **low-carbon future** though energy efficient and environmentally sustainable design and operation of the Campus
- Economic: Design and develop accessible and engaging work/study environments that **attract leading academic talent**







3. Site Wide Guidelines

3. Site Wide Guidelines

3.1 Illustrative Plan

The Honeysuckle City Campus will be one of Newcastle CBD's most significant developments. The development will be a catalyst for the urban renewal of Newcastle and will have the opportunity to leverage investment committed by government supporting this renewal.

The mixed use, integrated education precinct will have 24 hour a day activation that is engaged with the community and integrated with uses across the CBD education precinct, as well as the Honeysuckle waterfront.



Figure 3.1 Illustrative Precinct Plan



Figure 3.2 Artists Impression, Aerial View

3. Site Wide Guidelines

3.2 Planning Principles

The illustrative plan presents a cohesive concept for the site and its relationship to the CBD.

Key planning principles are:

- Campus Heart located at the core of the campus with good solar access and amenity
- Respond to place and heritage through interpretation of heritage turntable in the Campus Heart
- Built form positioned to enable easy through site links from Worth Place to Civic Link, and from Hunter Street to the waterfront
- Ground level activation fronting major pedestrian links and Campus Heart
- Recognising NeW Space as the flagship UON building in the CBD with a secondary UON address at Honeysuckle Drive

All elements will be subject to further architectural and public domain design.

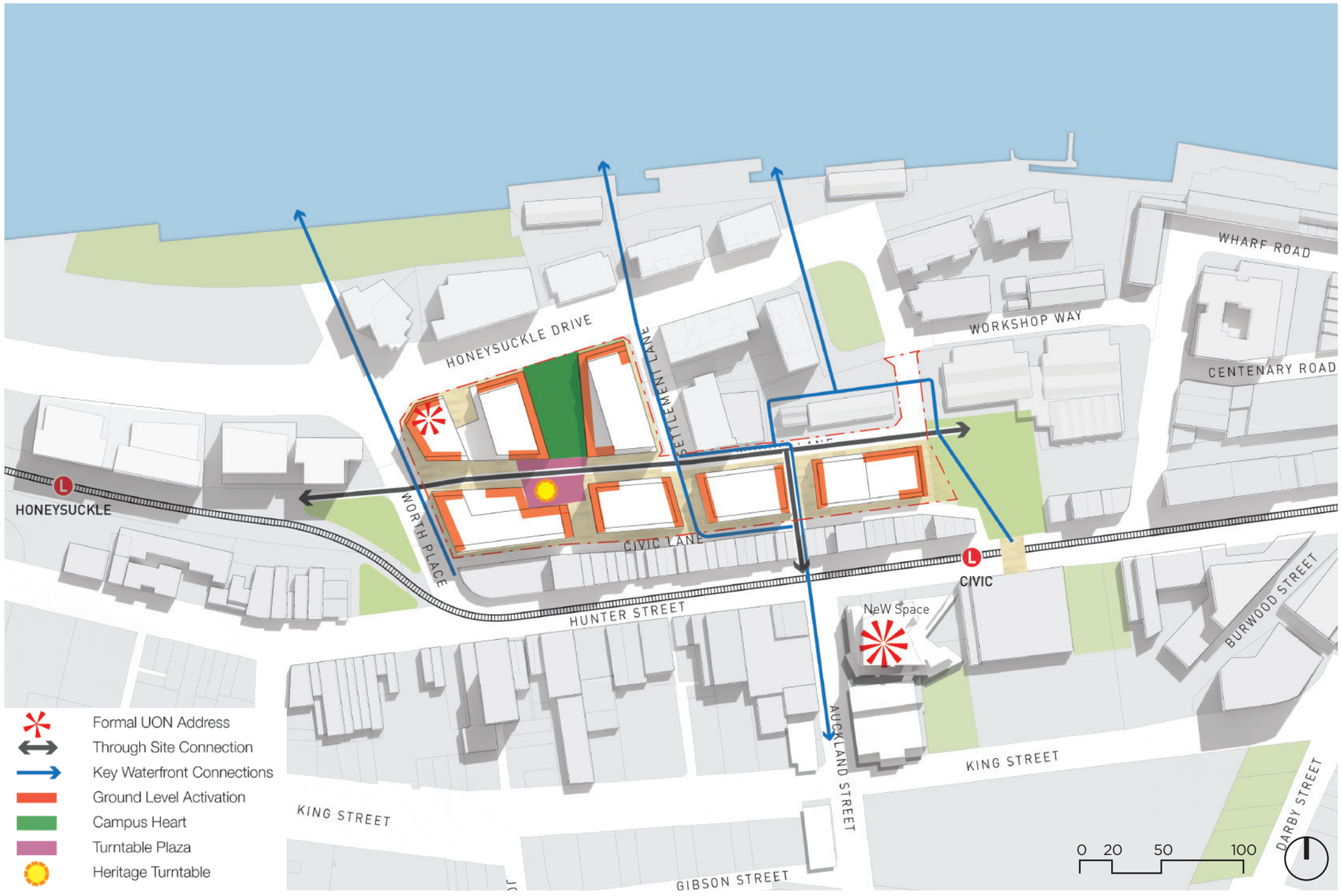


Figure 3.3 Planning Principles Diagram

3. Site Wide Guidelines

3.3 Development Parcels

Floor space will be distributed across the precinct to ensure the best functional and urban design outcome.

The table below outlines the GFA for each lot proposed in Concept Plan:

Lot	GFA	Site	Stage	Use
Lot A1	4,000m²	Site 1	1a	Academic
Lot A2	10,770m²	Site 1		Academic
Lot B	11,480m² ~386 beds	Site 2	1b	Student Accommodation
Lot C	11,595m²	Site 1		Academic
Lot D	8,525m²	Site 2		Academic
Lot E	8,210m²	Site 3		Academic
Lot F	11,035m²	Site 3		Academic
Total GFA	**65,615m2**			

Gross floor area (GFA) refers to the Council definition of floor space which counts all internal floor space above ground excluding voids and plant areas.

Scaling factors have been applied to the gross building envelope (GBA) to calculate GFA. This allows for loose fit envelopes and reflects the different floor type requirements:

- Academic buildings - 85% GBA to GFA
- Student Accommodation - 80% GBA to GFA

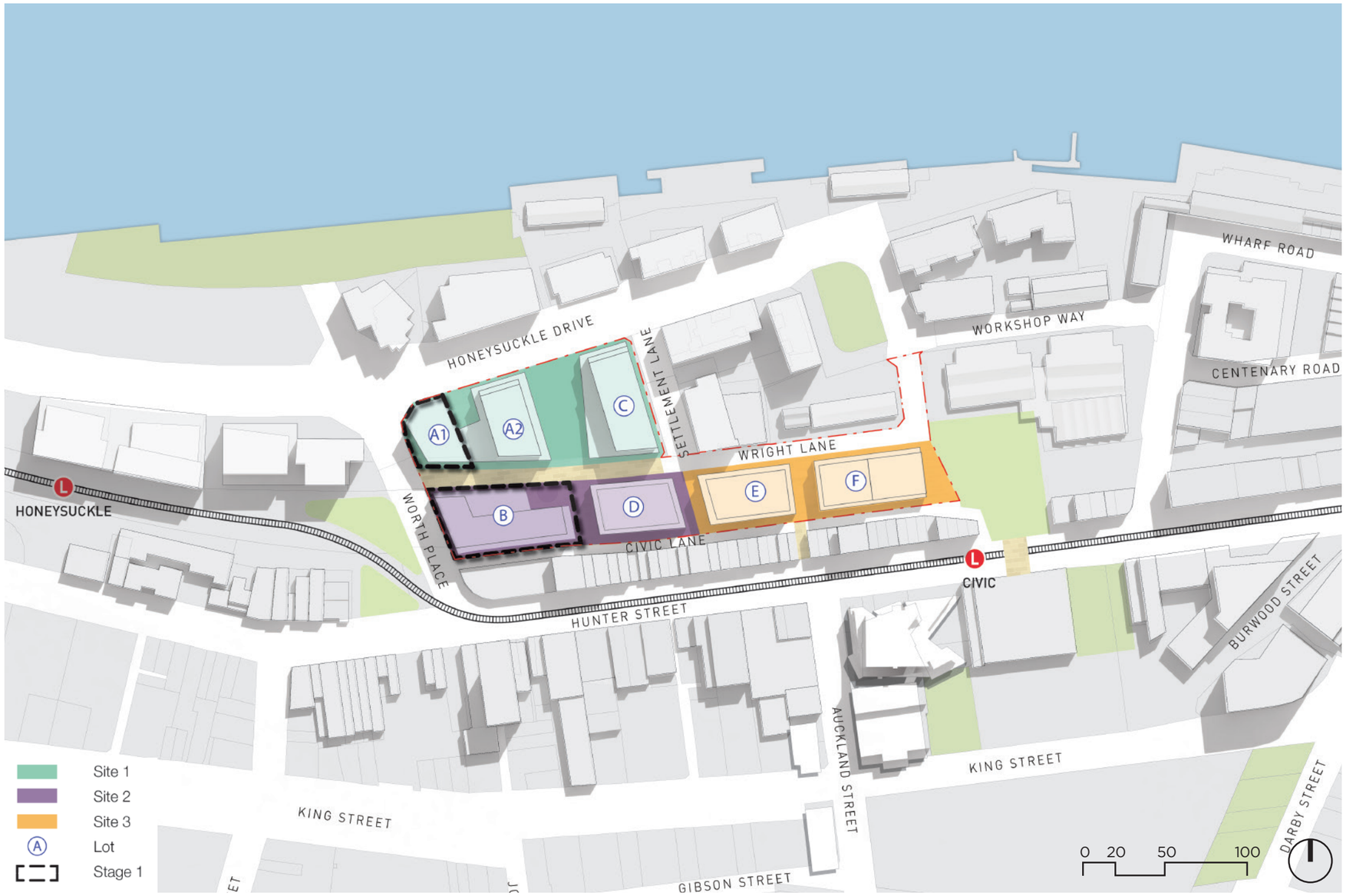


Figure 3.4 Development Parcels Diagram

3. Site Wide Guidelines

3.4 Height

The revised LEP height controls apply over the precinct. The majority of the site has a 30m height limit. A small area adjacent to Civic Link at Civic Lane has a 24m height limit.

Key assumptions underpinning the height response are:

- A maximum height of 8 storeys for academic buildings (floor to floor height min. 3.65m)
- A maximum height of 9 storeys for accommodation (floor to floor height min. 3.1m)
- Floor to floor height at ground level should be greater than of the storeys above
- There may be minor intrusions of rooftop plant areas above the height limit

Building heights for the development may be flexible, however the following principles should be used to determine building heights:

- Buildings should be appropriately scaled and positioned to allow for good solar access to the Campus Heart and Turntable Plaza during winter as well as summer.
- Taller buildings should be located along Civic Lane, transitioning down in height at Civic Link
- Buildings along Honeysuckle Drive should take advantage of views to the north over the Hunter River
- Podiums are used throughout to create human scaled spaces.

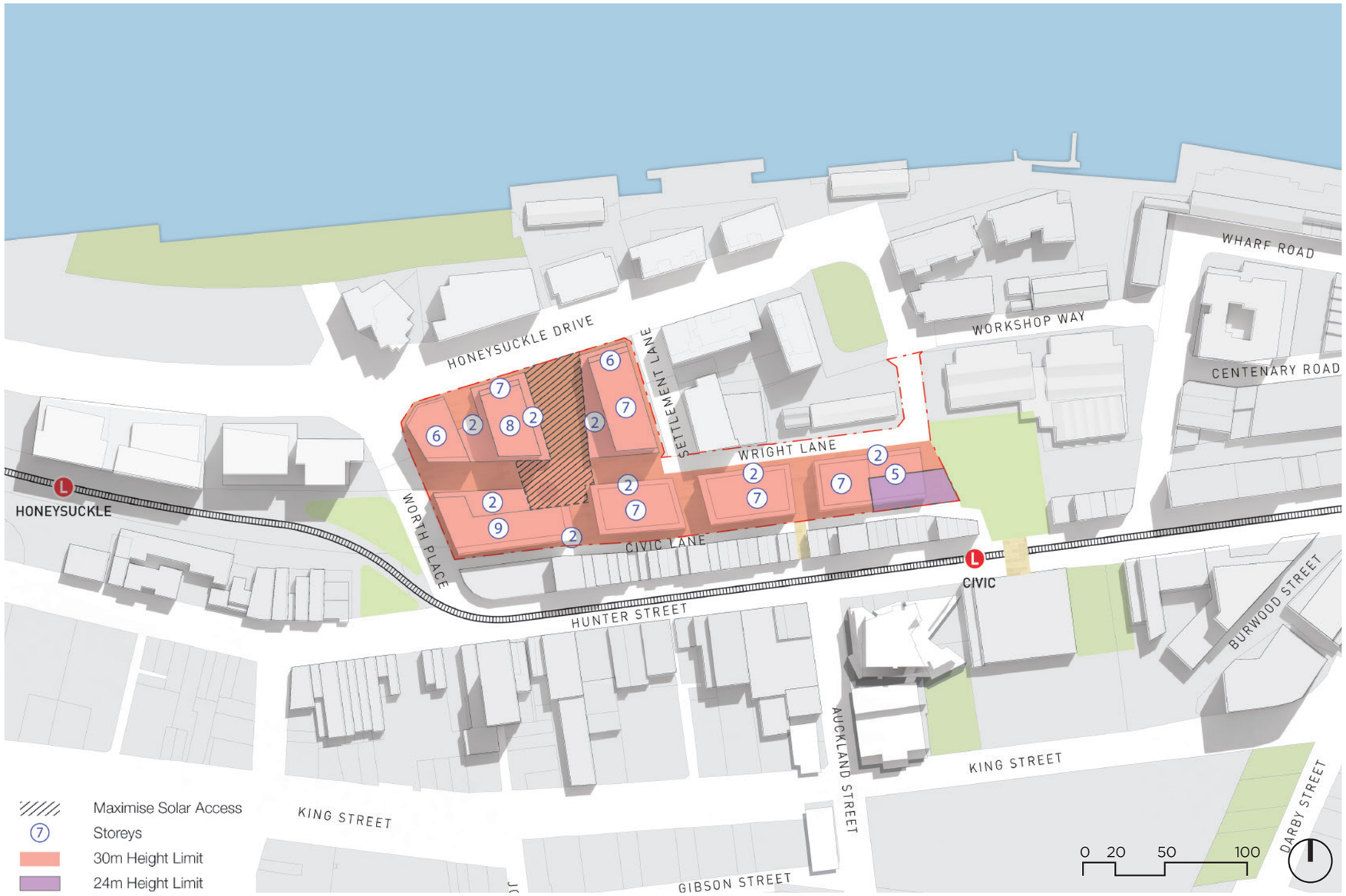


Figure 3.5 Height Diagram

3. Site Wide Guidelines

3.5 Setbacks

The Concept Plan proposes a variety of setbacks to create suitably scaled public domain for the pedestrian environment of a university campus within a CBD.

Proposed setbacks:

Frontage	Setback
Honeysuckle Drive	0m Setback above 2 storey podium and 6/7 storeys
Worth Place	0-3m
Wright Lane	3m Setback above 2 storey podium
Civic Lane	2m Setback above 2 storey podium
Settlement Lane	3m to enable underground services corridor within setback
Mid Block Pedestrian Links	Setback above 2 storey podium
Civic Link	3-15m landscape setback to transition to open space

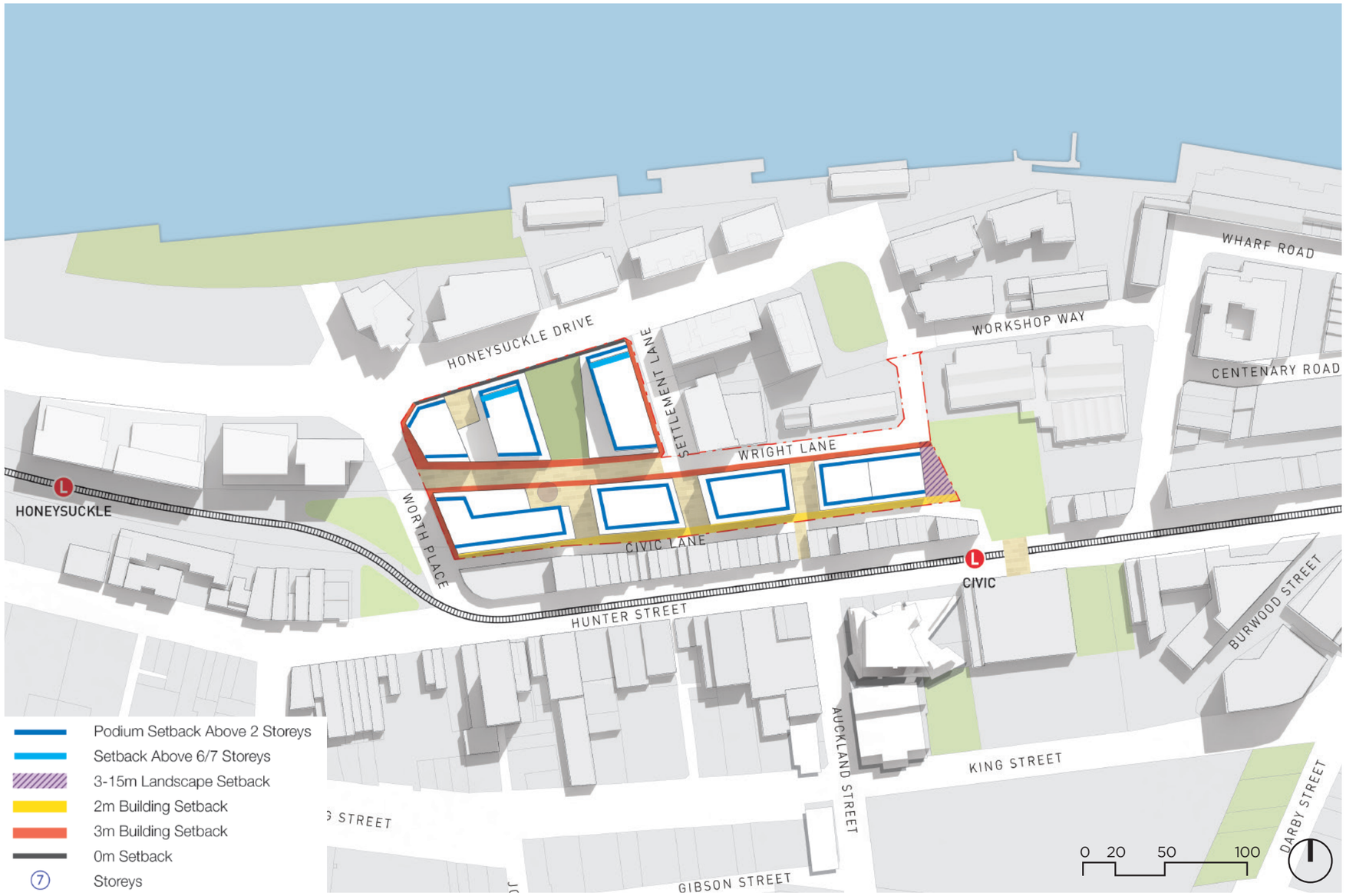


Figure 3.6 Setbacks Diagram

3. Site Wide Guidelines

3.6 Identity & Address

The design resolution of the buildings should respond to the importance of the Campus and where most students and visitors will access the site. Honeysuckle Drive on the northern edge of the site will be the formal address of the Campus.

Elements that will contribute to the identity and address of the Campus include:

- Formal address on Honeysuckle Drive
- Building form sculpted to create views into the Campus Heart from Worth Place and refurbished rail corridor
- Creation of active public spaces at ground level that engage with the city
- Opportunities to showcase UON's activity though building facades
- Feeling of porosity through the site, enabling new north-south and east-west pedestrian links
- Positioning of service access points along the secondary facades including Civic Lane and Settlement Lane. Service access should not be provided from Honeysuckle Drive and Worth Place, and any service access from Wright Lane limited.

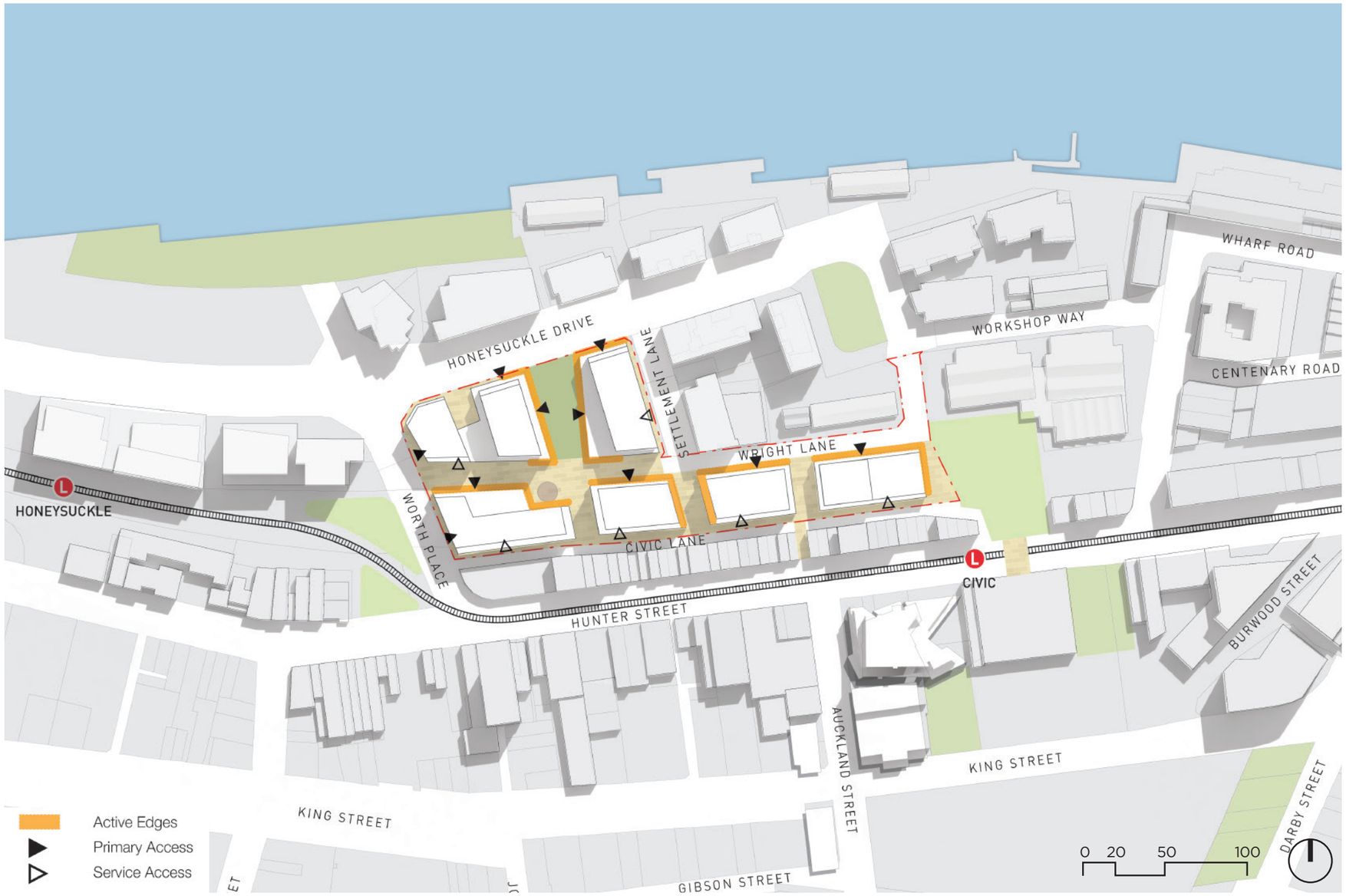


Figure 3.7 Identity and Address Diagram

3. Site Wide Guidelines

3.7 Site Infrastructure

The enabling works investigations indicate that adequate infrastructure to service the site appears to be available.

The Concept Plan has been designed to respond to some key infrastructure requirements including:

- Provision for two new chamber substations on the Campus. One will be developed in each stage and will replace the existing substation located on Civic Lane in the south-west corner of the site
- Allowance for overland flow along Wright Lane.
- Setback along Settlement Lane to allow for underground services infrastructure due to the existence of a subterranean car park under Settlement Lane.

The following flood planning levels guide the design of structures on the site (from ADW Johnson):

Area	Level
Minimum Property and On-ground Garaging	2.28m AHD
Minimum Habitable Floor Level	2.58m AHD
Minimum Upper Floor Level Stairway Exit	3.38m AHD
Basement Parking Entry/Exit Crest/ Flood Barrier	3.38m AHD

The Flood Information Certificate from Newcastle City Council for Lot1 DP1163346 (western part of Site 1), indicates a minimum floor level for occupiable rooms of 2.51m AHD.

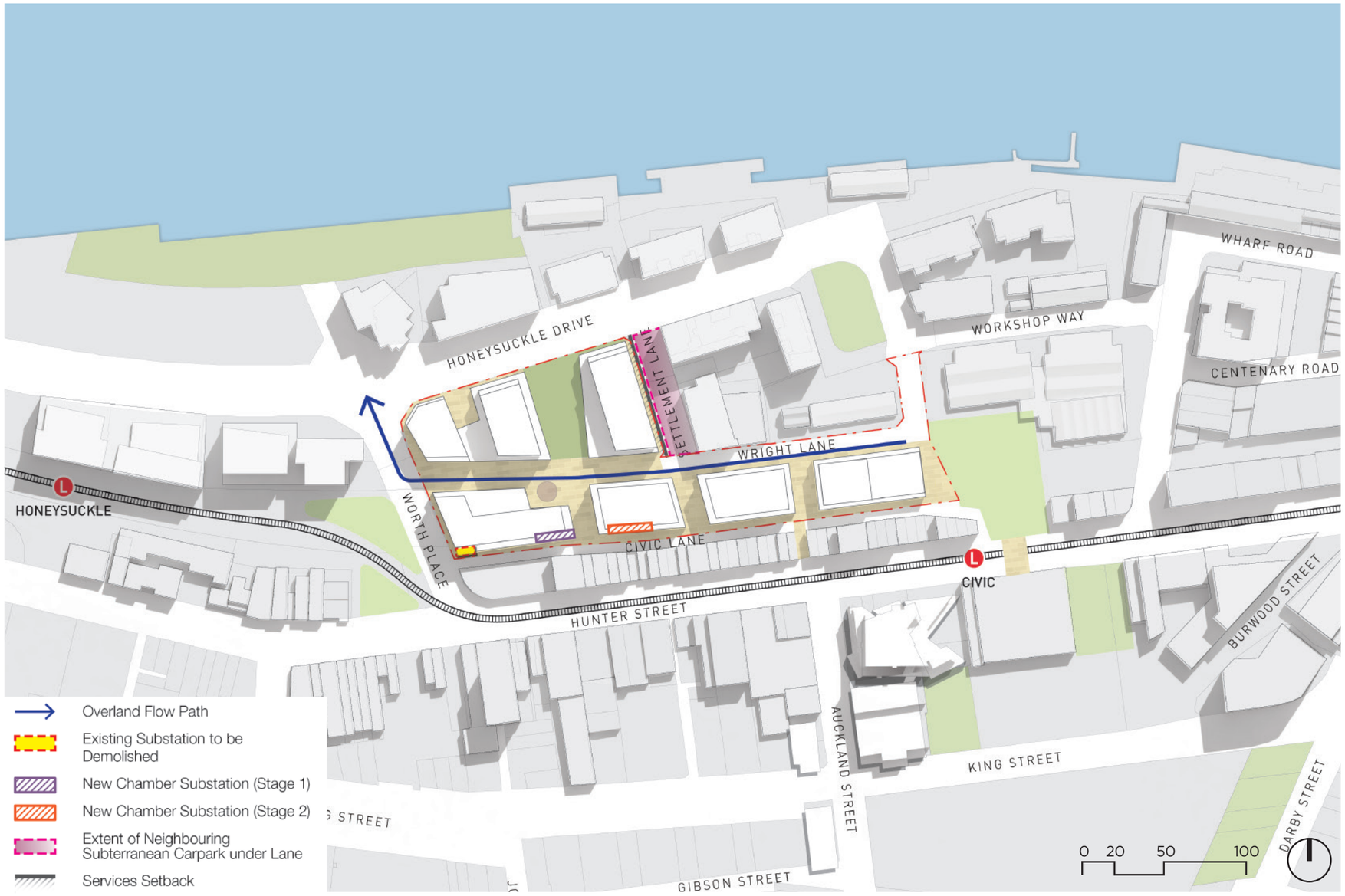


Figure 3.8 Site Infrastructure Diagram

Chapter Four

4. Public Domain Strategies

4. Public Domain Strategies

4.1 Site Interfaces

Located in an urban CBD environment, the Campus has several key interfaces with the surrounding public realm including streets, open spaces and future development opportunities.

Key elements are:

- New links between Civic Lane, Wright Lane and Honeysuckle Drive create permeability across the precinct to the waterfront
- Widening Civic Lane will improve access, amenity and safety
- Potential closure of Wright Lane to traffic between Settlement Lane and Worth Place will enhance the experience of users at the Campus, reinforcing the east-west 'park to park' green connection and creating a safe Campus heart
- A setback along Settlement Lane will enable an enhanced landscape pedestrian zone and reinforce links to the waterfront.

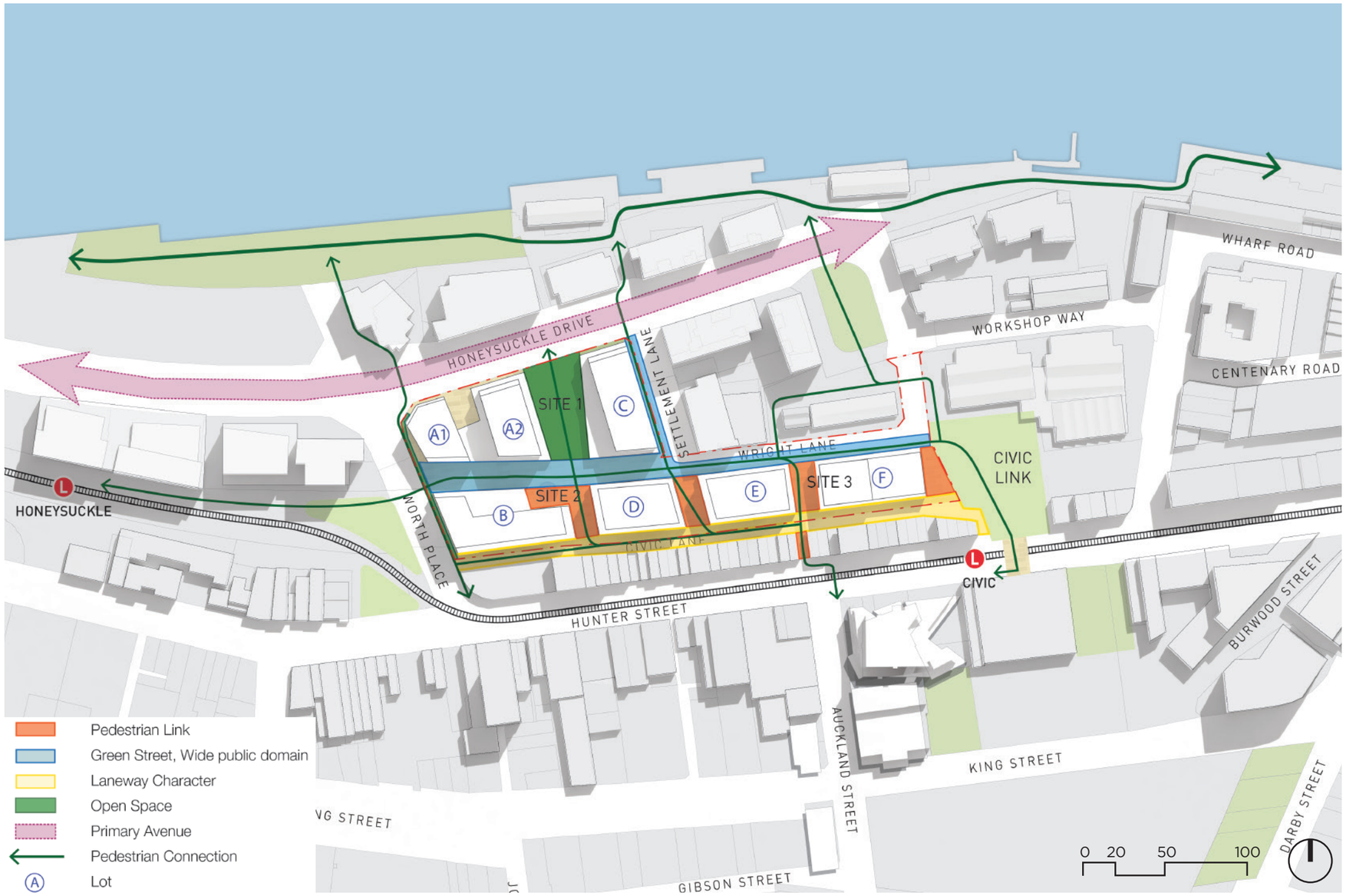


Figure 4.1 Site Interfaces Diagram

4. Public Domain Strategies

Section A

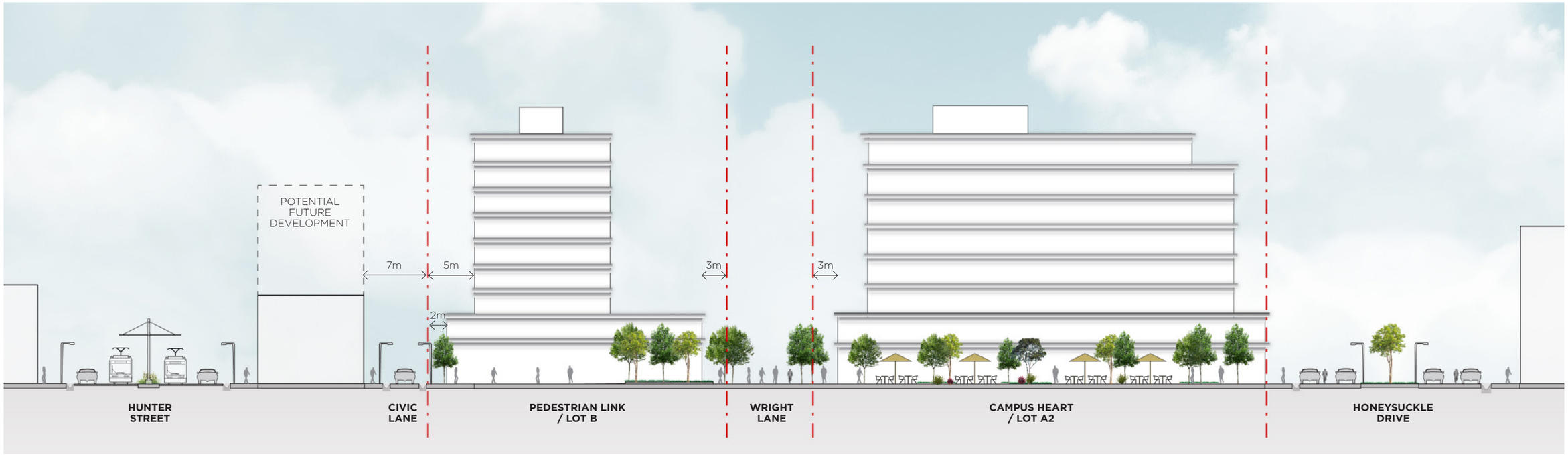


Figure 4.2 Section A

Civic Lane
Civic Lane sits outside the site, however a 2m setback is proposed for all development on Sites 2 and 3 along Civic Lane. A 5m setback above the podium is proposed to enable future residential development between Civic Lane and Hunter Street.

This setback can also enable a safer pedestrian environment along Civic Lane, contributing to a permeable campus.

Wright Lane
Wright Lane lies between Sites 1 and 2 an. Between Settlement Lane and Worth Place, it is proposed that this part of the lane could be pedestrianised with vehicular access restricted to emergency vehicles only, subject to RMS approval. Wright Lane will remain open to traffic from Settlement Lane to the east.

A 3m setback to buildings fronting Wright Lane is proposed to enable a generous public domain for a high pedestrian traffic area through the central spine of the Campus.

Campus Heart
The Campus Heart will span between the site boundaries from Honeysuckle Drive to Wright Lane and will act as a new public open space on the Campus.

The Campus Heart will enable a clear pedestrian link through to the Honeysuckle waterfront using established links on the northern side of Honeysuckle Drive.

The surrounding buildings of the Campus should provide active ground level uses fronting onto the Campus Heart to activate the space.



4. Public Domain Strategies

Section B

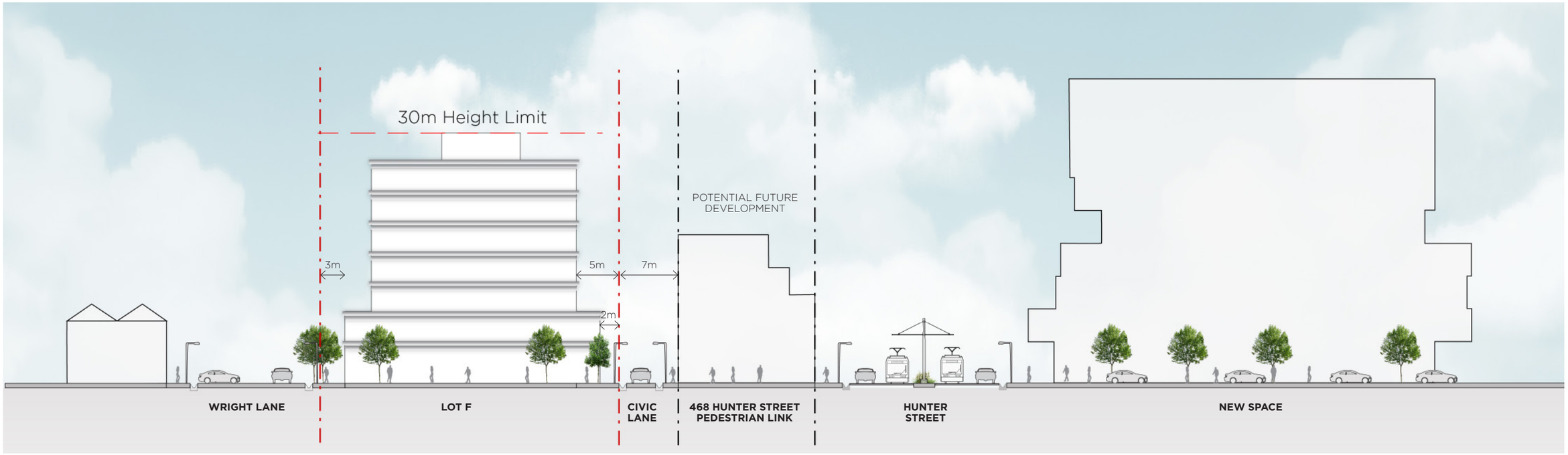


Figure 4.3 Section B

Wright Lane
Wright Lane between Settlement Lane and Workshop Way is proposed to remain open to vehicular traffic and sits outside the site.

A 3m setback to buildings fronting Wright Lane is proposed to enable a generous public domain and a high level of pedestrian amenity outside Campus buildings within this high pedestrian traffic area. Wright Lane connects into the planned Civic Link open space.

Civic Lane
Civic Lane continues along the southern edge of the UON development and sits outside the site.

A 2m setback is proposed for all development on Sites 2 and 3 along Civic Lane with a 5m setback above the podium to enable future residential development between Civic Lane and Hunter Street. This setback can also enable a safer pedestrian environment along Civic Lane, contributing to a permeable campus.

468 Hunter Street
The property at 468 Hunter Street is currently owned by UON and could be used as a future pedestrian link between the Honeysuckle City Campus and NeW Space.

Works to 468 Hunter Street are not included within this project, however site planning for the Honeysuckle City Campus responds to a potential future link.



4. Public Domain Strategies

Section C

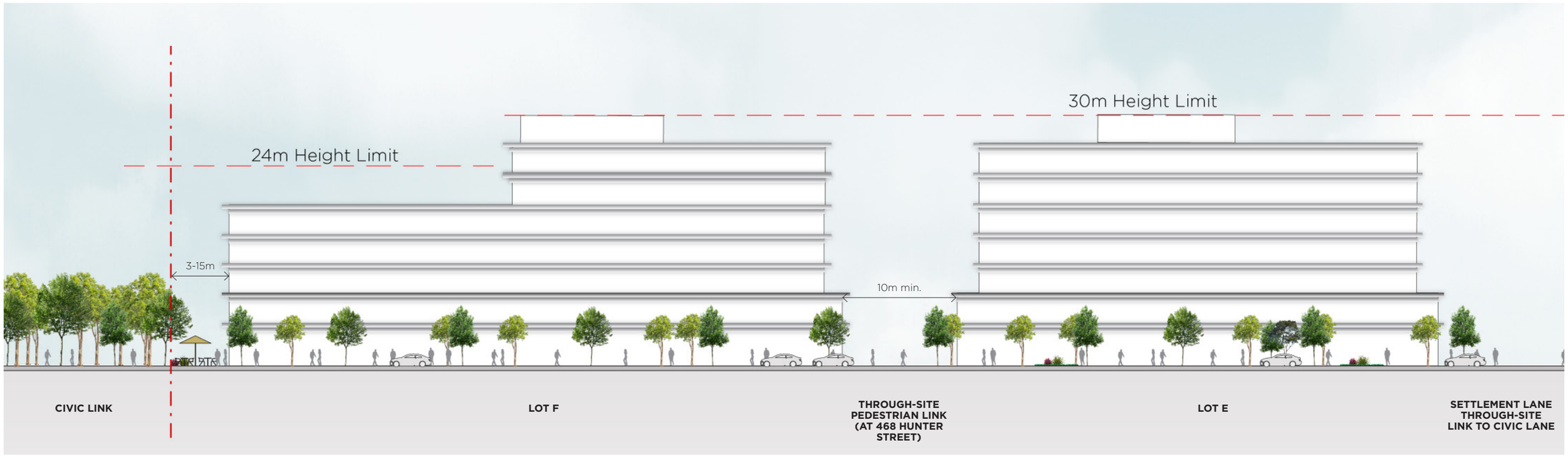
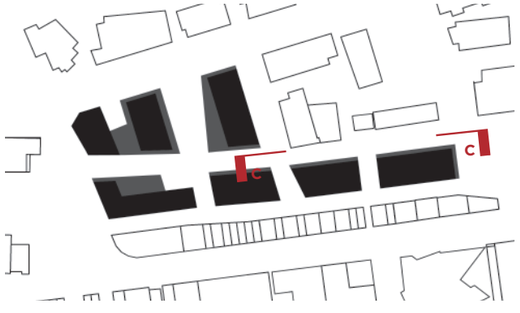


Figure 4.4 Section C

Civic Link
Lot F addresses the planned Civic Link open space. The building height transitions down at Civic Link to respond to the low scale of surrounding buildings including the Newcastle Museum located within State heritage listed former railway workshops.

Through-Site Pedestrian Links
Built form has been positioned to enable clear through-site links between Wright Lane and Civic Lane, with potential connections continuing through to Hunter Street. Links through to Hunter Street are not included within the scope of this project however the project enables links to be created by UON or by others in the future.

The through-site link between Lots E and F should have a minimum width of 10m.



4. Public Domain Strategies

4.2 Public Domain

Fundamental to the design of the UON Honeysuckle City Campus, will be the vision achieved through the public domain within the site.

A clear visual identity created by a public domain structure of links, open spaces and civic spaces, and a strong palette of colours, textures and plants will create a network of integrated spaces.

Sustainable landscape principles underpin all aspects of the public domain, in particular the consideration of climate and microclimate, soil and water regimes, recycling, endemic planting and provision of ecological and habitat areas.

The landscape will be managed to evolve and develop over time, providing parklands and natural habitats that are acclimatised, and integrated into a diverse urban ecology.

In developing the open space response for the Honeysuckle City Campus, a series of landscape objectives have been identified:

- To establish a structured hierarchy of open space defined and reinforced by the urban form;
- To create a comprehensive landscape setting and distinctive visual identity; and
- To create an environment that are in harmony with local environmental conditions;
- To ensure that climate and microclimate defines the landscape response;
- To plan for an evolving and gradually maturing natural and urban ecology;
- To ensure the efficient use of resources and natural systems in the creation of sustainable soils and irrigation methods;
- To instil user awareness of coexistence with natural systems and environments; and
- To establish endemic ecologies where appropriate;

Connectivity

The plan seeks to create a high level of connectivity across the precinct that is integrated through the open spaces and the network of cycleways and footpaths. Buildings address streets, footpaths and open spaces, helping to make places feel safer and more legible.

Extension of the green network will be achieved through improved landscaped pedestrian and visual linkages with surrounding developments, open spaces and topographical features.

The public domain of the Campus will remain open and accessible to the public at all hours of the day and night.

Activity

Open spaces will have a degree of flexibility and versatility so that can be used for a variety of uses over time and to enable people to enjoy different activities in the same space.

Legibility

Creating views and vistas assists with legibility across the precinct and helps integrate the new development into the Newcastle CBD, opening up key north-south visual and physical links between the waterfront and Hunter Street.

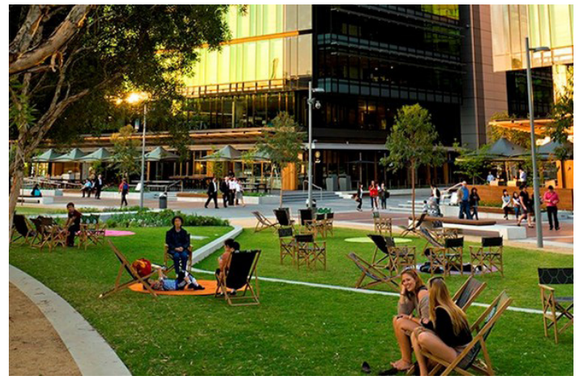
The definition of these links with themed planting and detailing will help with wayfinding across the campus.

Environmental Sustainability

The landscape and public domain must showcase environmentally sustainable design through environmental initiatives such as introducing water management elements, managing and controlling the runoff from roadways and construction sites and encouraging the return of aerial and terrestrial wildlife through improved landscape linkages.

Maintenance

The Plan reinforces a robust landscape infrastructure that is easily managed and reduces extensive maintenance requirements.





4. Public Domain Strategies

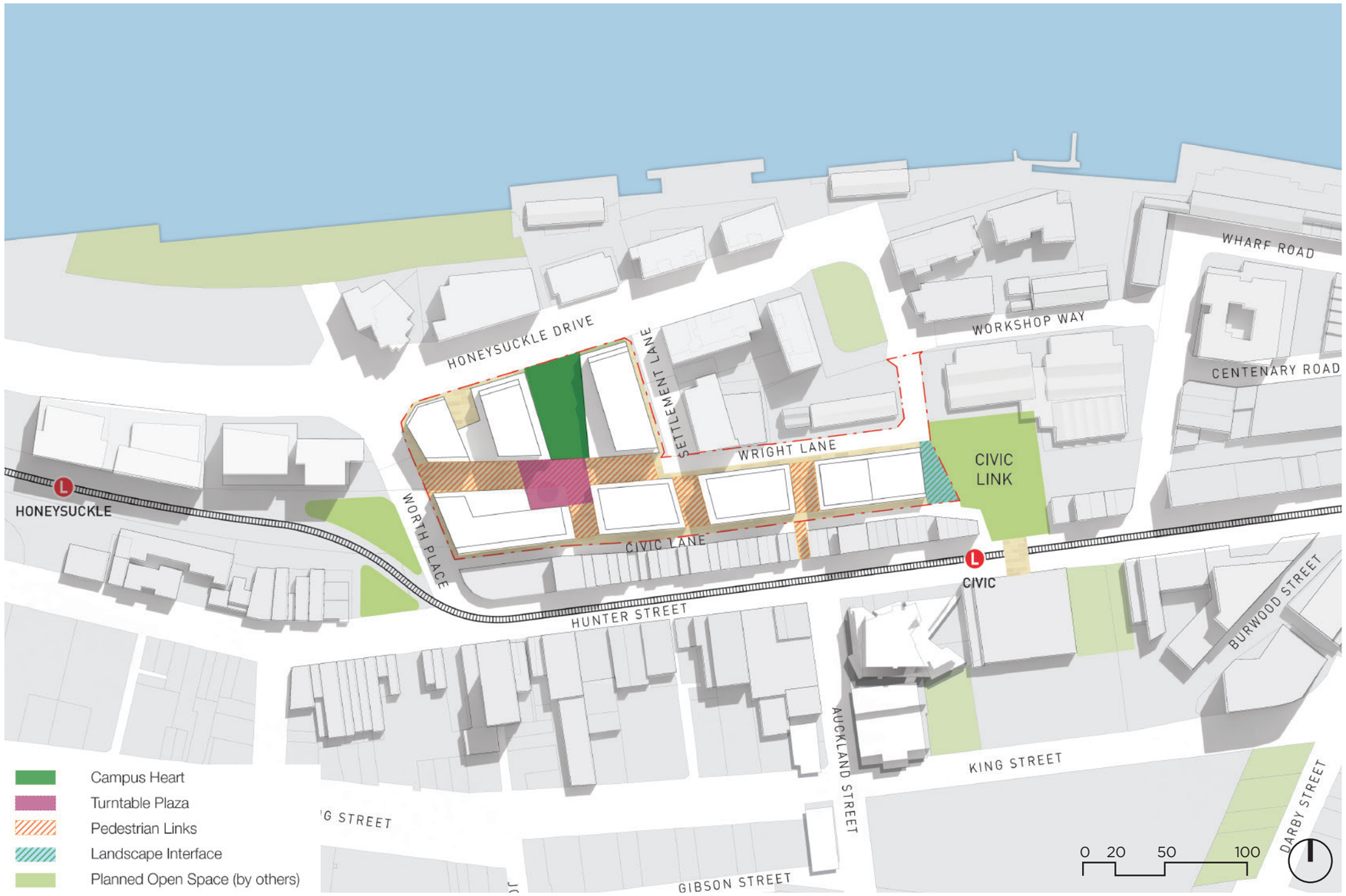


Figure 4.5 Public Domain Diagram

Chapter Five

5. Public Domain Elements

5. Public Domain Elements

5.1 Planting

The Honeysuckle City Campus precinct will be defined by streets, laneways and tree lined avenues that soften and scale the built areas of the public domain. The streetscapes have been designed to prioritise pedestrians, then cyclists, public transport and lastly private vehicles.

There is an opportunity to reflect some of the forest planting of the Callaghan campus to the site through the use of appropriate species. Coastal forest trees such as spotted gum (Corymbia maculate) and smooth barked apple (Angophora costata) endemic to Callaghan may be appropriate at Honeysuckle.

The area is outside Newcastle City Council's City Centre precinct however some elements of the City Centre Public Domain Technical Manual may be brought through into the campus.

All planting should consider the principles outlined in the Callaghan Campus – Landscape Management Plan.

5.1.1 Wright Lane

Wright Lane is the main east-west pedestrian spine through the Campus and into the wider precinct. The rhythm and structure of the landscape framework will be set by a double avenue of large street trees that will define and frame the pedestrian mall.

The canopy will create a green corridor and provide shade and seasonal variation. Species should be chosen for their height, habit and feature bark and presence within the Newcastle CBD.

Areas of soft planting will punctuate the space, defining areas for building entries, outdoor dining or retail uses that open out onto the spine.

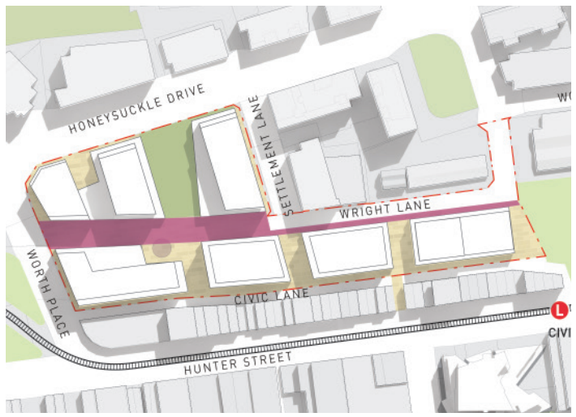


Figure 5.1 Wright Lane Key Plan







5. Public Domain Elements

5.1.2 Campus Heart

This new space within the wider Honeysuckle precinct is conceived as a large meeting space that can be used for gatherings, events and market days for the University and wider community. The evenly spaced street trees are smaller in height, have fine foliage characteristics with a dense crown that will provide a strong visual feature.

The pedestrian zone that transitions through the space will be framed by intermittent landscape segments or ‘outdoor rooms’, suitable for passive recreation and building break out spaces.

These rooms will be defined by the rhythm of the street trees, will give way to building entrances retail and cafes and be mixture of hard and soft landscape surfaces.





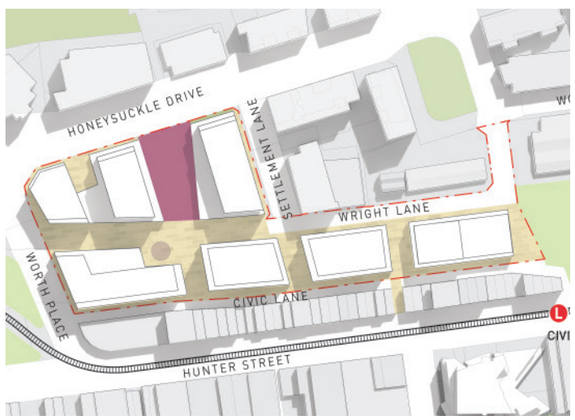
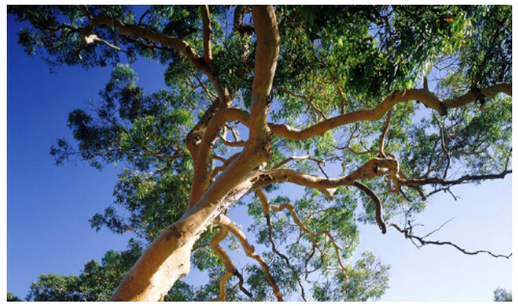


Figure 5.2 Campus Heart Key Plan



Coastal Banksia ‘honeysuckle’



Smoothe Barked Apple



Spotted Gum

5. Public Domain Elements

5.1.3 Turntable Plaza

This largely hard paved space is located around the site of the heritage turntable. This space expresses heritage interpretation of the former rail yard uses through surface treatment and materiality, and will reveal and interpret the heritage turntable currently located below ground level.

The space is designed as a more intimate passive recreation space, connected to ground level cafes and building frontages. Pedestrians circulate around the plaza along Wright Lane and through the mid-block link to the east of the plaza.

Soft landscaping along Wright Lane around the turntable will provide shade, without detracting from the heritage significance of the site.





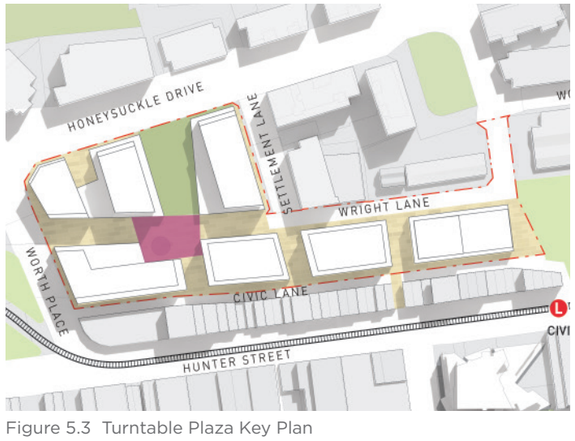


Figure 5.3 Turntable Plaza Key Plan

5.1.4 Civic Link Interface

The landscaped setback at Civic Link enables outdoor activity at the ground floor of the building on lot F fronting Civic Link.

The space will incorporate both soft and hard paved space to enable activity while responding to the landscaped character of the adjacent public space.



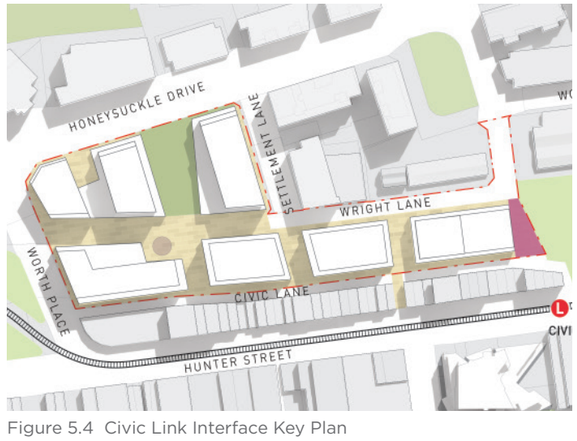


Figure 5.4 Civic Link Interface Key Plan

5. Public Domain Elements

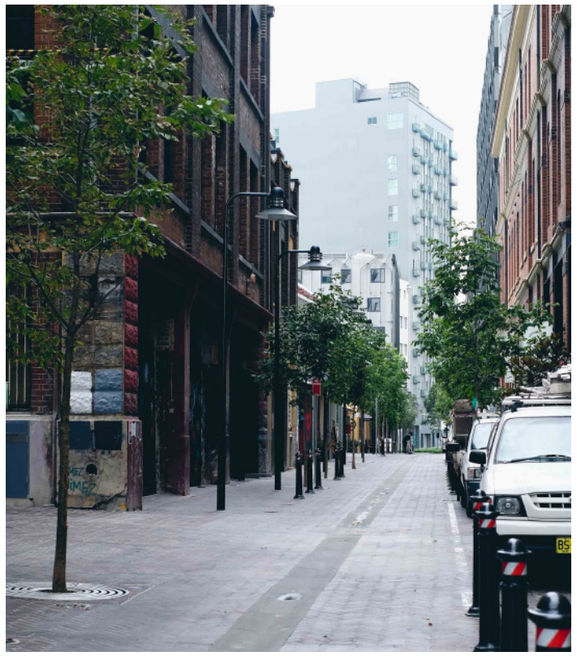
5.1.5 Civic Lane

Civic Lane is a one-way service lane and connects with a series of north-south through-site pedestrian links. Civic Lane will primarily be hard paved, with a change in ground material where it becomes a shared zone at Civic Link and at pedestrian crossing points. The Civic Lane carriageway is outside of the Campus boundaries.

Some soft landscaping may mark the primary pedestrian access points between buildings.

A footpath should be provided to enable safe pedestrian movement along the Lane at the rear of the Campus buildings.





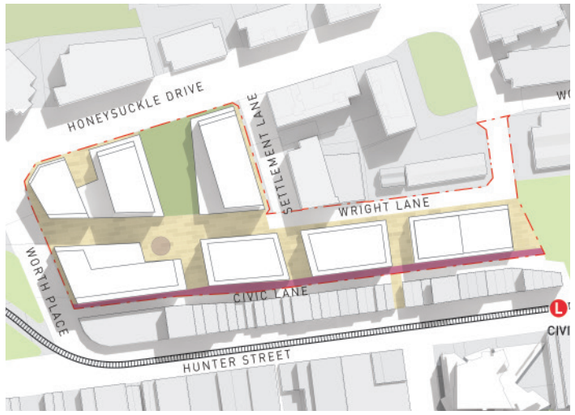


Figure 5.5 Civic Lane Key Plan

5.1.6 Mid-Block Pedestrian Links

Mid-block pedestrian links between lots B, D, E and F will be primarily hard paved to enable clear and safe pedestrian movement in a north-south direction. Soft planting will be provided where it does not impede pedestrian movement, to indicate areas for people to gather or pause.

Where the mid-block link meets Civic Lane, the landscape treatment should indicate to pedestrians that they are entering a shared zone with vehicles.

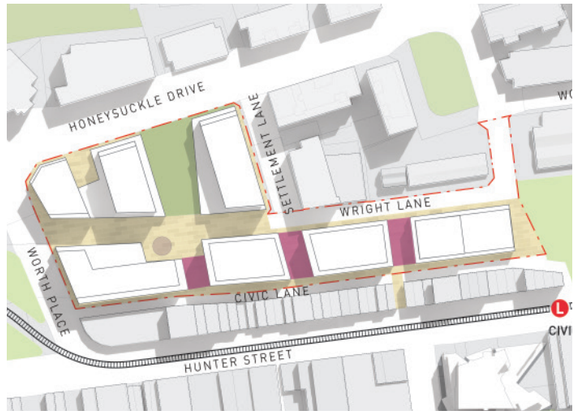


Figure 5.5 Mid-Block Pedestrian Links Key Plan





5. Public Domain Elements

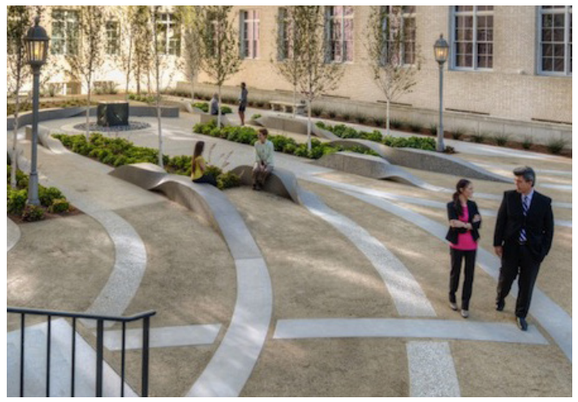
5.2 Paving

Paving materials in the Honeysuckle City Campus are to meet City of Newcastle standards at interfaces and delineate the different character and use of areas within the campus and public domain. The palette will be a mix of honed concrete pavers, insitu concrete paths and granite paving.

Other surface treatments within the campus will take a softer organic approach and will consist of timber, sandstone and decomposed granite as a juxtaposition to the CBD environment and to indicate passive recreation or more intimate gathering places. The softer materials pallete aims to provide an urban response to the ‘bush’ identity of the Callaghan Campus.



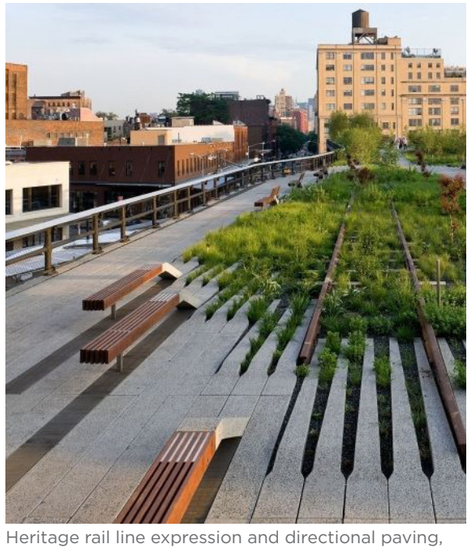
Directional feature paving, Times Square



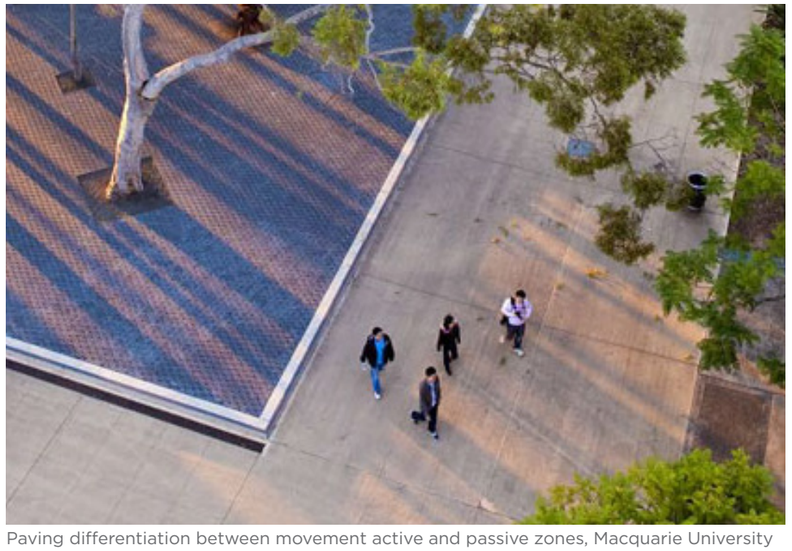
Decomposed granite with paved concrete ribbons, Civic Centre Plaza, San Francisco



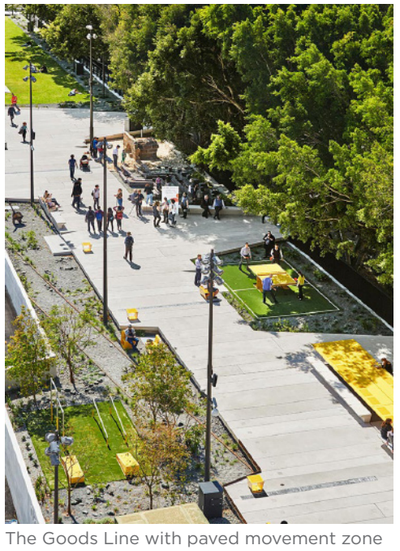
Paving types delineate between movement and passive zones. Rice University, Houston



Heritage rail line expression and directional paving, Highline New York



Paving differentiation between movement active and passive zones, Macquarie University



The Goods Line with paved movement zone and more intimate passive recreation zones marked by a change in materials

5. Public Domain Elements

5.3 Public Domain Lighting

Successful precincts work both during the day and at night with lighting a crucial element that both attracts people and helps navigate precincts. Very often, the highest usage of the Honeysuckle City Campus will be after hours and it is essential that lighting is functional and inviting.

There are three areas where lighting plays a role:

Identity

Lighting can reinforce the identity and character of an area or precinct at night. Through effects, lighting can highlight key elements or simply unify a precinct through a common approach. Lighting can be used to create various emotions that could range from fantasy to reverence.

Safety

Security lighting is essential. If people do not feel safe, they will stay away. Lighting main circulation paths and adjoining areas so that there are no dark spots or shadows that could harbour threats will add to the enjoyment of users.

Variety

Lighting can be used to change the character and mood of a place on a seasonal or special event purpose. The lighting of elements to reflect a holiday or season is an effect and popular device to add variety or interest to a place.

A number of principles have been identified. These include:

Precinct Lighting
In order to unify the precinct, a common lighting colour is proposed. The adoption of a warm white light as a standard is intended to unify the precinct and improve colour rendering.

Iconic Building Lighting
The lighting of the key facades reinforces the precinct's identity and creates landmarks within the precinct. These will be dramatic and exciting elements of the campus precinct. Illuminated advertising and signage will be limited (refer to Signage section).

Gateway Lighting
The introduction of specialised lighting at key entry points reinforces the sense of the precinct as a unique place. This sense of identity and anticipation will enhance the experience and perception of the Honeysuckle City Campus.

Open Space Lighting
Each space will have its own character and identity. Lighting of these spaces at night is important whether they are in use or not. Animated or moving projections over horizontal (and some vertical) planes may be used. Selected buildings can be lit with variable coloured lighting to emphasise entry points.

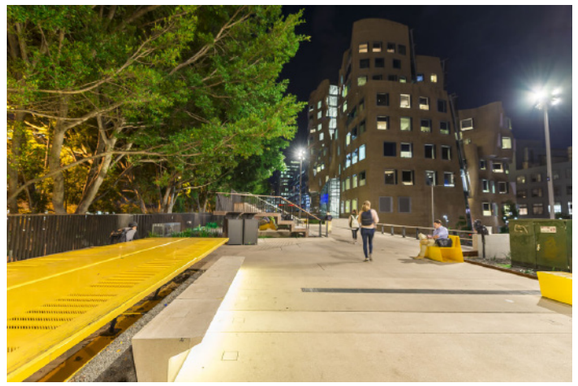
Provision should be made for temporary lighting that can be installed for events and used before and during special occasions. Each space will have the minimum level of security lighting needed through the later night hours.

Solar lighting to be investigated.

Street Lighting
Street lighting shall be provided to at least City of Newcastle standards. Metal halide lamps that provide a white light that better renders flesh tones are to be used across the precinct.

Public lighting divided into smart poles and pedestrian poles. Smart poles may be used along Civic Lane in conjunction with City of Newcastle plans to upgrade the laneway.

Adequate lighting should be provided at any shuttle bus stop location for the Campus to provide a safe and visible environment for people to wait.



Precinct lighting creates safe pedestrian environments at night, Goods Line



Iconic building lighting and unique open space lighting, Buchanan St, Glasgow



Public art can incorporate lighting to create an iconic place at night. Temporary installation by LOT, Flatiron Plaza, NY

5. Public Domain Elements

5.4 Street Furniture

A uniform suite of street furniture is to be used through the Campus to ensure that the various zones of the Campus are integrated with a discrete background language.
The selected suite will be high quality manufactured street furniture that will be able to sustain both heavy use and exposure to the marine environment.

The final suite will be selected in detailed design of the public domain.

A palette of benches, bus stops, bicycle racks, area lighting, bollards (with lights), bins, tree guards and tree rings will make up the selection. The chosen group of products will provide a fresh and contemporary appearance appropriate to the environmental requirements of the development.

The elements are to include:
- street lights
- benches
- bicycle racks
- bus shelters
- area lighting
- bollards
- bins
- tree guards



City of Sydney contemporary street furniture palette



Bicycle parking at Barangaroo

5. Public Domain Elements

5.5 Public Art

The provision of public art within open space is an important step in contributing to a sense of 'place' on the Campus and within the precinct and to the creation of a truly public domain.

These installations will provide visitors with an intellectual aspect to the environment to complete the cultural enrichment that can be gained by enjoying what the open space has to offer.

Several principles underpin the strategy:

- Public artworks are to be integrated into the public domain
- Artwork should provide interest, create engagement and be the expression of contemporary UON culture
- A description of each work and its concept will accompany the artwork as a story of its installation.
- All artworks within the public domain shall be first approved by UON.
- Heritage interpretation can be achieved through public art (refer to Heritage Interpretation section).



Public art may engage people at night through installations incorporating video, light or projections.
Quartier des Spectacles, Montreal



Public art may engage with the history or concealed layers of the site within the public domain.
'Subway Map Floating on a NY Sidwalk' by Francoise Schein.

5. Public Domain Elements

5.6 Heritage Interpretation

The site has a rich history including indigenous heritage, and the transformation associated with the construction of the rail line and workshops, the evolution of Hunter Street and the transformation of the harbour.

The remnants of the locomotive turntable are an important artefact remaining on the site.

There is an opportunity to integrate heritage interpretation of significant elements into the design based on the advice of specialist heritage consultants.

Interpretation of the turntable within the open space of the Campus Heart is a key opportunity to express the history of the site and create a memorable and pleasant place for the UON community to gather.



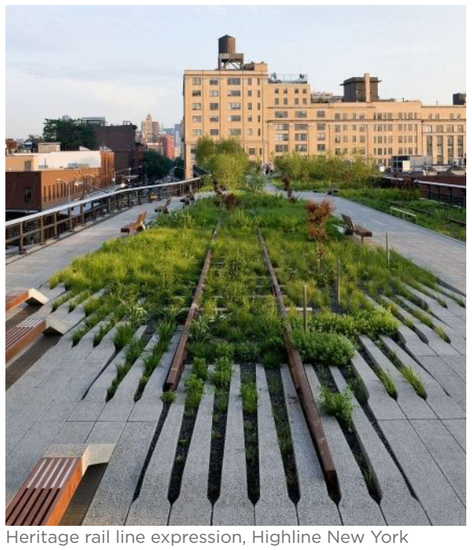
Heritage interpretation, Australian Technology Park



Heritage interpretation, Ballast Point Park



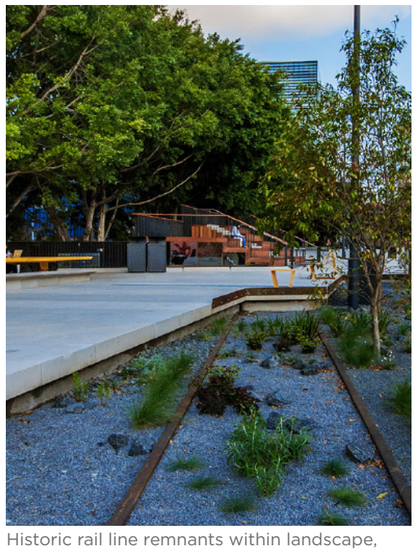
Boilerhouse heritage adaptation, WSU Rydalmere



Heritage rail line expression, Highline New York



Heritage interpretation of former turntable, Roundhouse Turntable Plaza Vancouver



Historic rail line remnants within landscape, Goods Line



Artists Impression: Wright Lane looking west towards Turntable Plaza

Chapter Six

6. Built Form Elements

6. Built Form Elements

6.1 Articulation

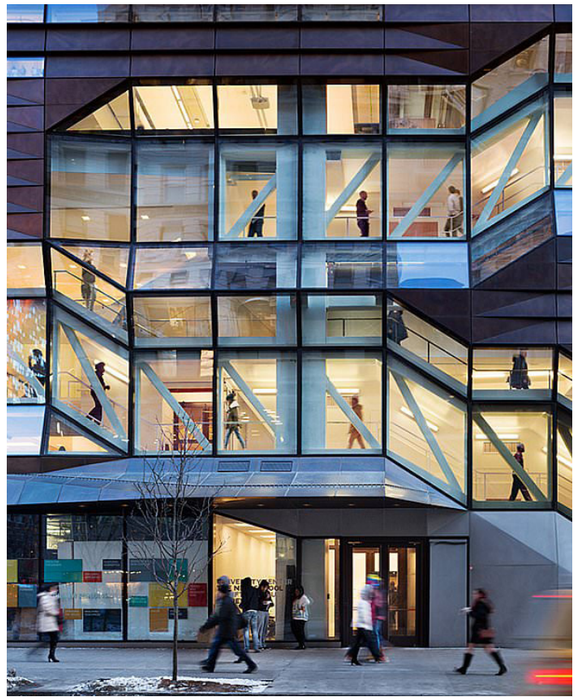
The key architectural objective of the Master Plan is the development of a high quality architecture that responds appropriately to its environmental and site context. The development of a rich and interesting architecture on sites is dependent on both the massing of buildings and their detailing and articulation.

Building articulation is to be generated through the expression of overall massing as well as separate parts of a building, such as entries, access stairs, walkways, sun shading and balconies. Elements that are required to moderate environmental conditions, such as sunlight, breezes and screening, are to be designed to enliven a building's facade.

- Buildings must demonstrate contemporary expression and environmental responsiveness and function must respond to place, environment and the urban character of the Honeysuckle Citiy Campus precinct.
- Historical styles are not permitted.
- Building entries must be clearly articulated and be visible from the public domain.
- The use of fixed awnings at a consistent height between buildings is encouraged to provide weather protection and articulation of entries.
- Elements such as balconies and sun shading that create a sense of scale or rhythm on the facades are to be employed to add to the richness of the architectural expression.



Colonnade distinguishes the building's ground floor
University of Birmingham Library, UK



Facade transparency shows internal vertical circulation.
The New School University Centre, NY



Vertical screens provide shading and facade articulation,
Melbourne School of Design, University of Melbourne

6. Built Form Elements

6.2 Materials

The Master Plan seeks to apply a common palette of materials appropriate to place and environment that will unify the buildings within the campus precinct. While not overly proscriptive, these seek to create a common language and reinforce the contemporary and modern expression of buildings in the precinct.

- A common materials palette is required for the precinct, with a clear distinction between low rise and high rise elements to be expressed.
- Materials should be light in colour, and predominantly neutral in tone along with glazing. Natural materials including timber and concrete are encouraged. Accent colours may emphasise key locations including important corners and vistas.
- The podium of each should be include brickwork as a unifying design element throughout the campus with unique material and design expression provided at building entries and around areas of glazing.
- Western facades should be predominantly solid or they must include sun shading devices.
- Northern facades should be predominantly glazed with sun shading.
- Reflective glass is not permitted
- Low glare roof materials must be used.
- Develop a contemporary architectural expression that creates a human scale to the public domain enlivened by smaller scale articulation elements such as louvres, balconies, roof overhangs.
- Use a range of materials that are appropriate to function, maintenance, and scale.
  - low rise podium facades that can easily be seen by the pedestrian should comprise high quality durable materials with developed architectural details.
  - Materials for higher elements that are more difficult to service and maintain should be low maintenance, while less detail may be required.



Glazing with sun shading screening provided to exposed facades
Sir Samuel Griffith Centre



Neutral materials palette with differentiation between podium and upper levels
Newcastle Courthouse

6. Built Form Elements

6.3 Building Lighting

Successful developments work both during the day and at night. Lighting is a crucial element that both attracts visitors and assists them in navigating sites.

The careful illumination of buildings and open spaces for access, accents and building identification within private lots will contribute to the success and night time experience of the Honeysuckle City Campus.

Internal illumination should be allowed to shine through the glazing, thereby offering a 'glowing jewel' effect. Such lighting is to be carefully controlled to avoid excess energy use.

- Lighting should integrate fixture style with the building's architectural character.
- Investigate opportunities to utilise solar (photovoltaic) technology, high efficiency fixtures or alternative energy sources as energy saving measures.
- Buildings must have a strong night-time building presence and entries be visible from their primary vehicular and pedestrian access points.
- Building lighting should be integrated with access, wayfinding, signage and public art strategies for the Campus
- Across the site, white metal halide light must be used for external lighting rather than yellow sodium vapour lamps.
- Visible point sources of building illumination must be minimised with appropriate consideration of glare and lighting positioning.



Building lighting is integrated with signage and and has a strong night-time presence
The New School, New York

6. Built Form Elements

6.4 Building Signage

The adoption of signage controls is aimed at creating a cohesive, attractive and informative signage package that allows identification of buildings but does not impact the character and quality of the new campus:

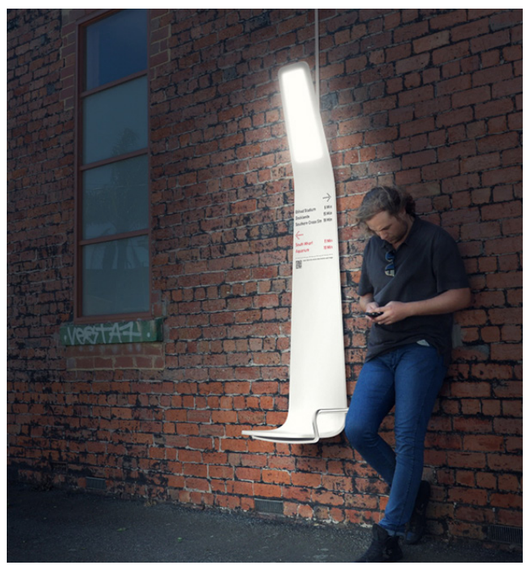
- Building identification signage must relate only to UON.
- Building identification signage is to be a maximum size of 25m2.
- Signage lighting is to be arranged and maintained so that the light source is not directly visible from a public right-of-way or adjacent property.
- As part of the detailed proposal submission, a plan is to be submitted for approval by UON showing the location of the proposed signage and detailing dimensions, proposed colour, material, copy, and method of illumination.
- Building Approval must be obtained prior to erecting, altering, displaying or relocating a temporary or permanent signage.
- Buildings must have street numbers prominently displayed on the main street elevation. Numbers must be 500 millimetres in height, non- illuminated and mounted 3 metres above the ground floor level.

The University has adopted a unified signage strategy across both the Callaghan and Ourimbah campuses. The strategy aims to present a cohesive and defined presence both on campus and in the local community as a university of distinction, with outstanding teaching and research and to be a responsive, dynamic and strong organisation.

All signage at Honeysuckle should be consistent with this strategy.



Callaghan Campus signage



Illuminated wayfinding integrated with a rest seat. ‘tranSIT’ by Troy Turner



Fixed building identification signage, The New School, New York

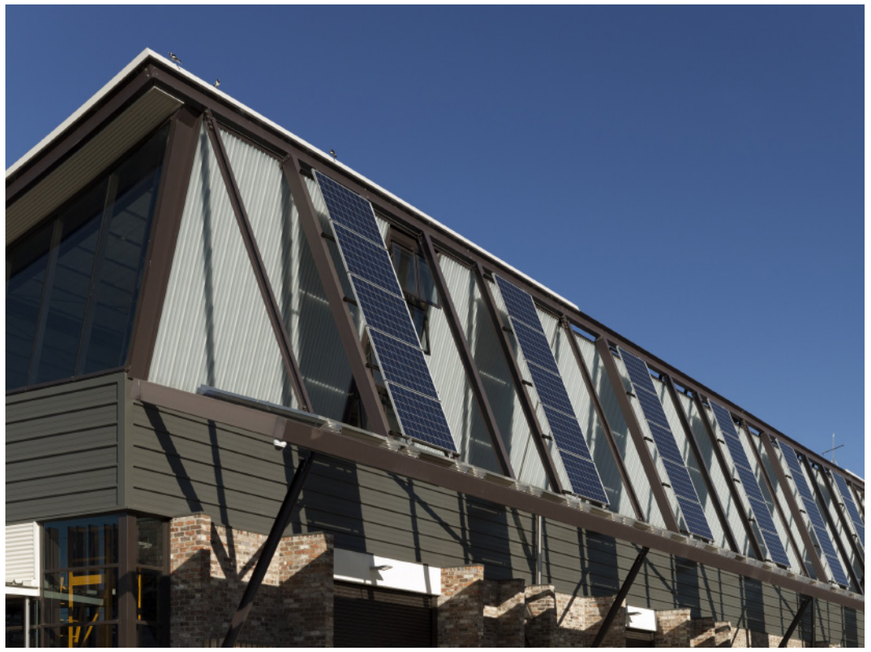
6. Built Form Elements

6.5 Sustainability

The University of Newcastle is committed to incorporating sustainability into its actions and practices as part of its responsibility to the community and the environment, as well as promoting a healthy workplace and campus for staff and students. This means promoting connections to the global community and environment through knowledge gained from research, utilising creative approaches to learning and teaching and modelling sustainability in its campus operations.

New development within the Honeysuckle Campus precinct is required to:

- maintain, respect and restore biodiversity
- create quality, comfortable, healthy and safe environments
- ensure responsible resource use (especially non-renewable resources)
- explore energy collection, energy conservation and waste re-use
- consider adaptation, recycling, and deconstruction of buildings and materials
- minimise pollution and environmental impacts
- balance capital, efficiency and building lifecycle costs.
- development on the site shall be capable of achieving the following targets:
  - Buildings should achieve a minimum 5-star Green Star rating.
  - Buildings should achieve a minimum 5-star NABHERS rating.



Photovoltaic cells are integrated with the roof form to enable energy collection
Sustainable Buildings Research Centre, University of Wollongong, photographer: Richard Glover



Building screening creates comfortable internal spaces, while ground level planting enhances biodiversity and regulates the microclimate.
Melbourne School of Design, University of Melbourne

6. Built Form Elements

Chapter Seven

7. Lot Guidelines

7. Lot Guidelines

7.1 Lot A1

Site	1
GFA	4,000m²
Indicative Max. Height	6 storeys + rooftop plant / lift motor rooms

Setbacks

Honeysuckle Drive	0m 3m above podium
Worth Place	0-3m
Wright Lane	3m 5m above podium

Guidelines

The primary address for Building A1 is on Worth Place. This prominent corner site will also be viewed along Worth Place from Hunter Street.

The ground level should have a more generous floor to floor height than storeys above.

Servicing of the building will be from Wright Lane, however should not compromise the amenity of this highly visible building frontage.

Building A1 should plan for a physical connection to Building A2 at ground and first floor.

The Flood Information Certificate for this site indicates that the minimum floor level for occupiable rooms on the site is 2.51m AHD. The lowest basement level is -3.38m AHD.

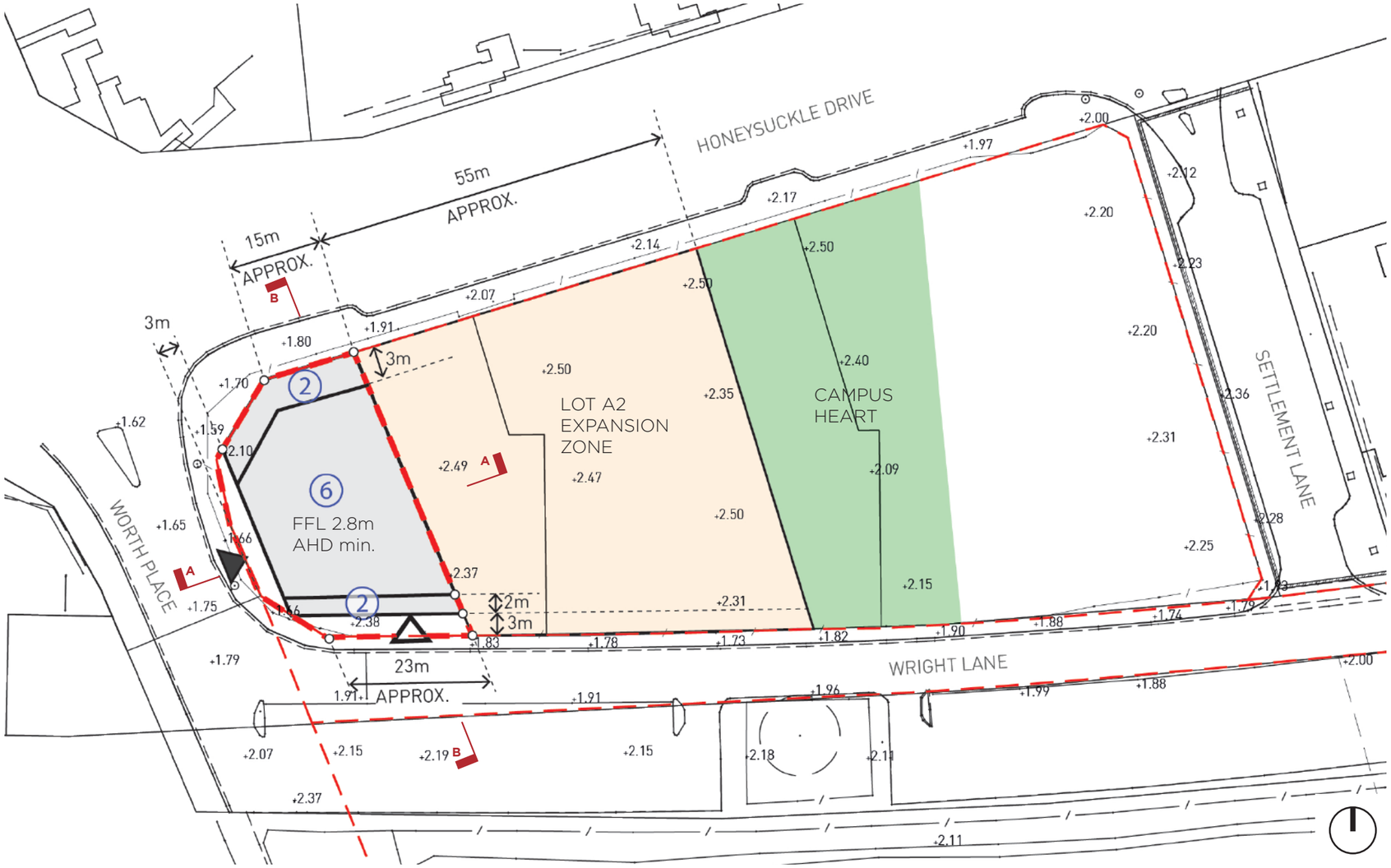
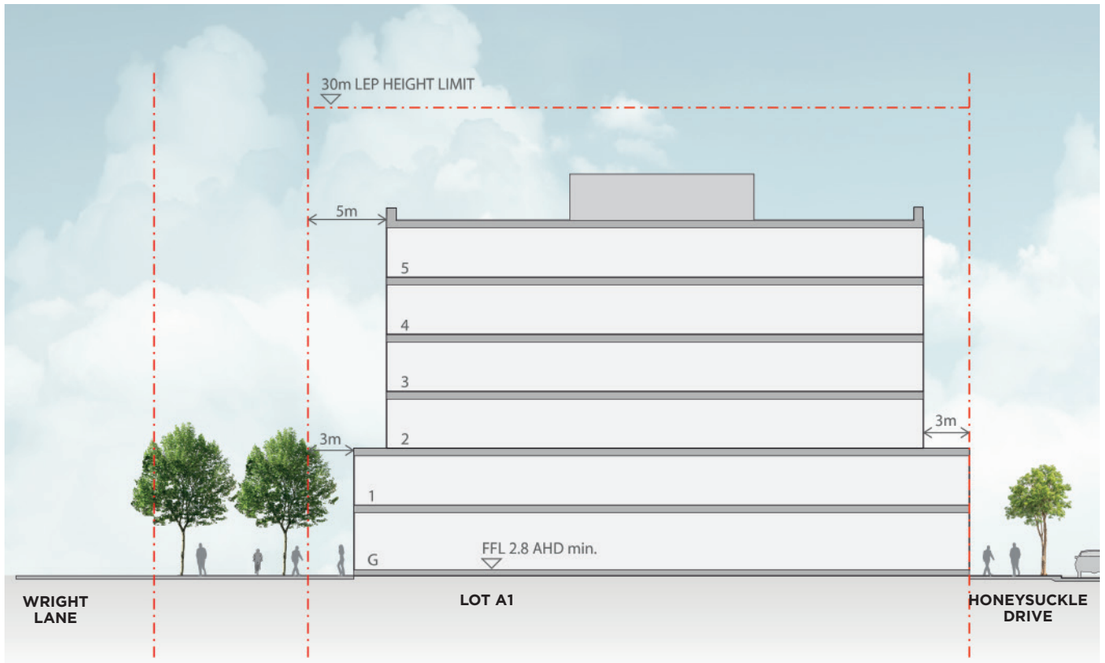
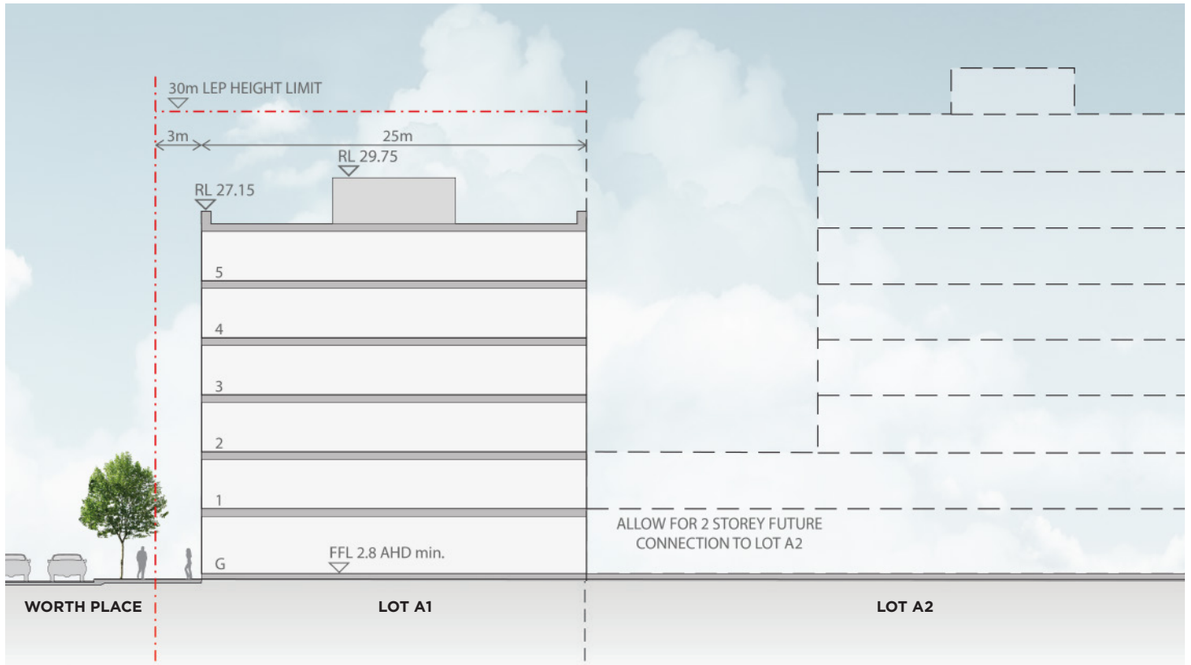


Figure 7.1 Lot A1 Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.2 Lot A1 Sections

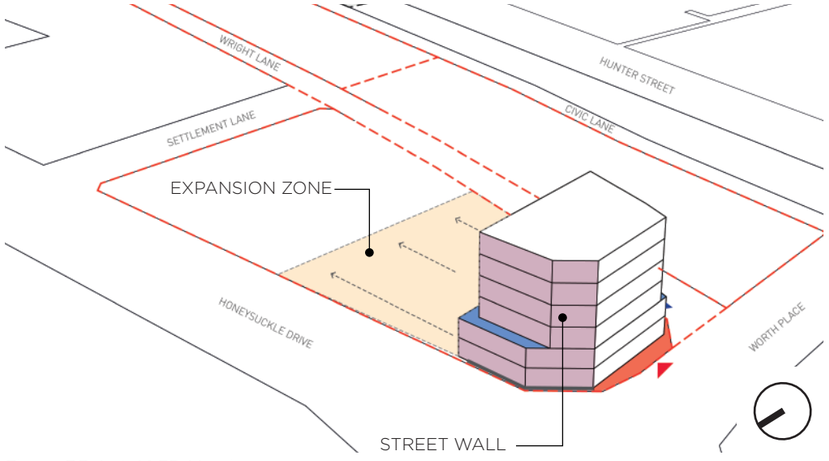


Figure 7.3 Lot A1 3D Massing

7. Lot Guidelines

7.2 Lot A2

Site	1
GFA	10,540m²
Indicative Max. Height	8 storeys rooftop plant / lift motor rooms

Setbacks

Honeysuckle Drive	0m 3m above podium 6m above 7 storeys
Wright Lane	3m 5m above podium
Campus Heart	3m above podium

Guidelines

The primary address for Building A2 is on Honeysuckle Drive. Additional access points should be provided from the Campus Heart.

The ground level should have a more generous floor to floor height than the storeys above.

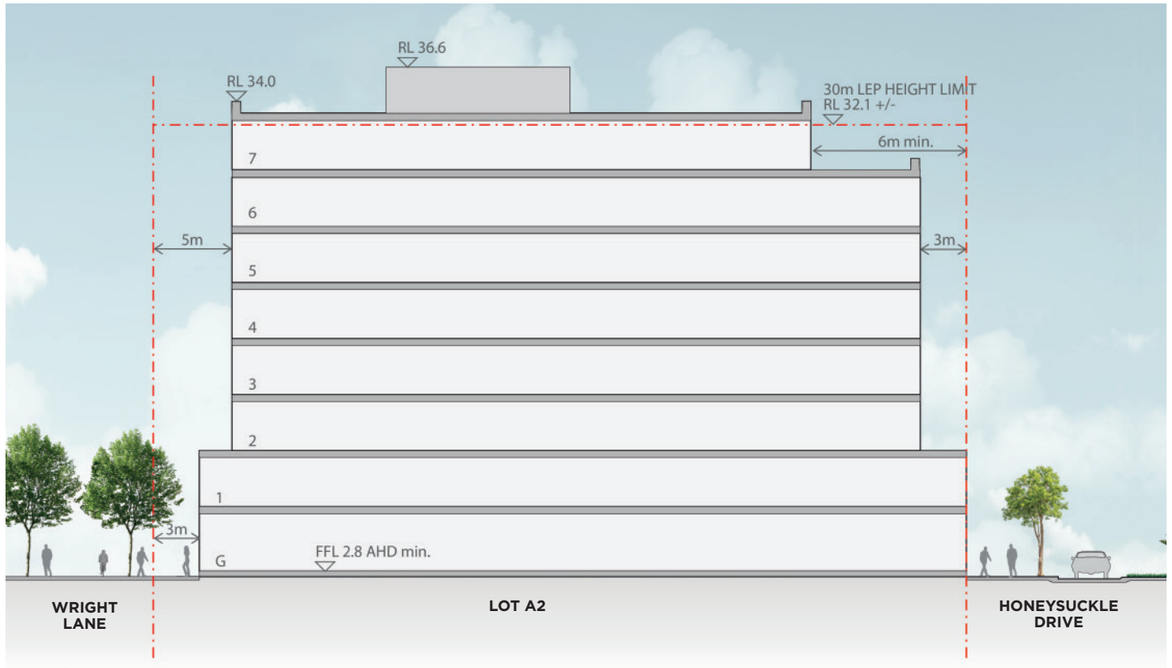
Servicing of the building will be through Building A1. Servicing may be provided from Wright Lane if pedestrian priority and amenity can be demonstrated.

Building A2 should have a 2 storey podium connection to Building A1 with the podium providing street wall definition to Honeysuckle Drive.

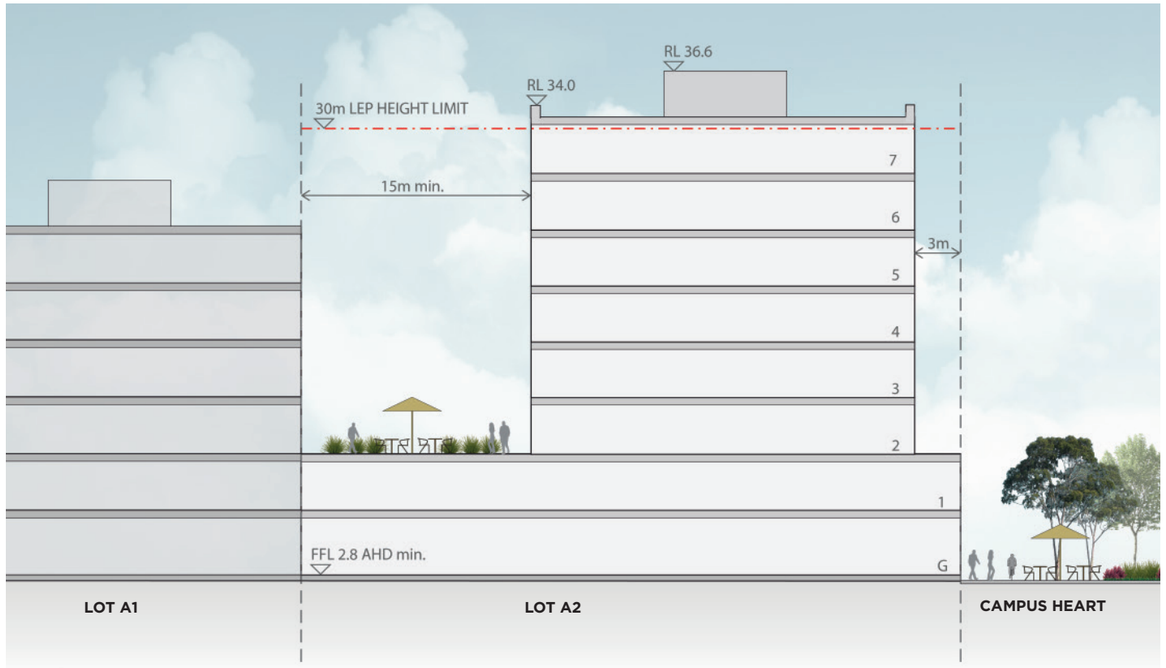


Figure 7.4 Lot A2 Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.5 Lot A2 Sections

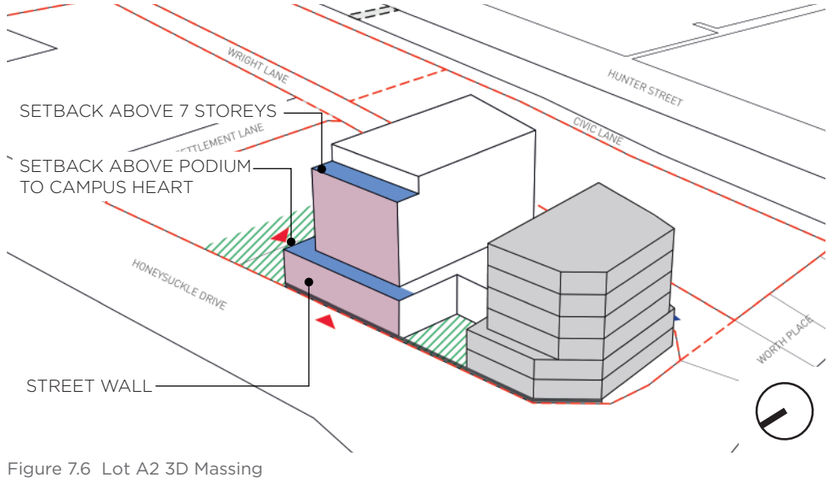


Figure 7.6 Lot A2 3D Massing

7. Lot Guidelines

7.3 Lot B

Site	2
GFA	11,480m²
Indicative Max. Height	9 storeys + rooftop plant / lift motor rooms

Setbacks

Worth Place	3m
Wright Lane	3m 5m above podium
Civic Lane	2m 5m above podium
Pedestrian Link	3m above podium

Guidelines

The primary address is on Worth Place with additional frontage to Wright Lane. This is a prominant site with a high level of visibility from Hunter Street along Worth Place, as well as from Honeysuckle Drive.

Servicing of the building will be from Civic Lane.

Adequate setbacks should be provided around the heritage turntable. While indicative setbacks have been shown, these should be agreed with the heritage architect for the project.

The building on Lot B may be expanded towards the east, however pedestrian permeability should be retained between Lots B and D with a minimum building separation of 15m.

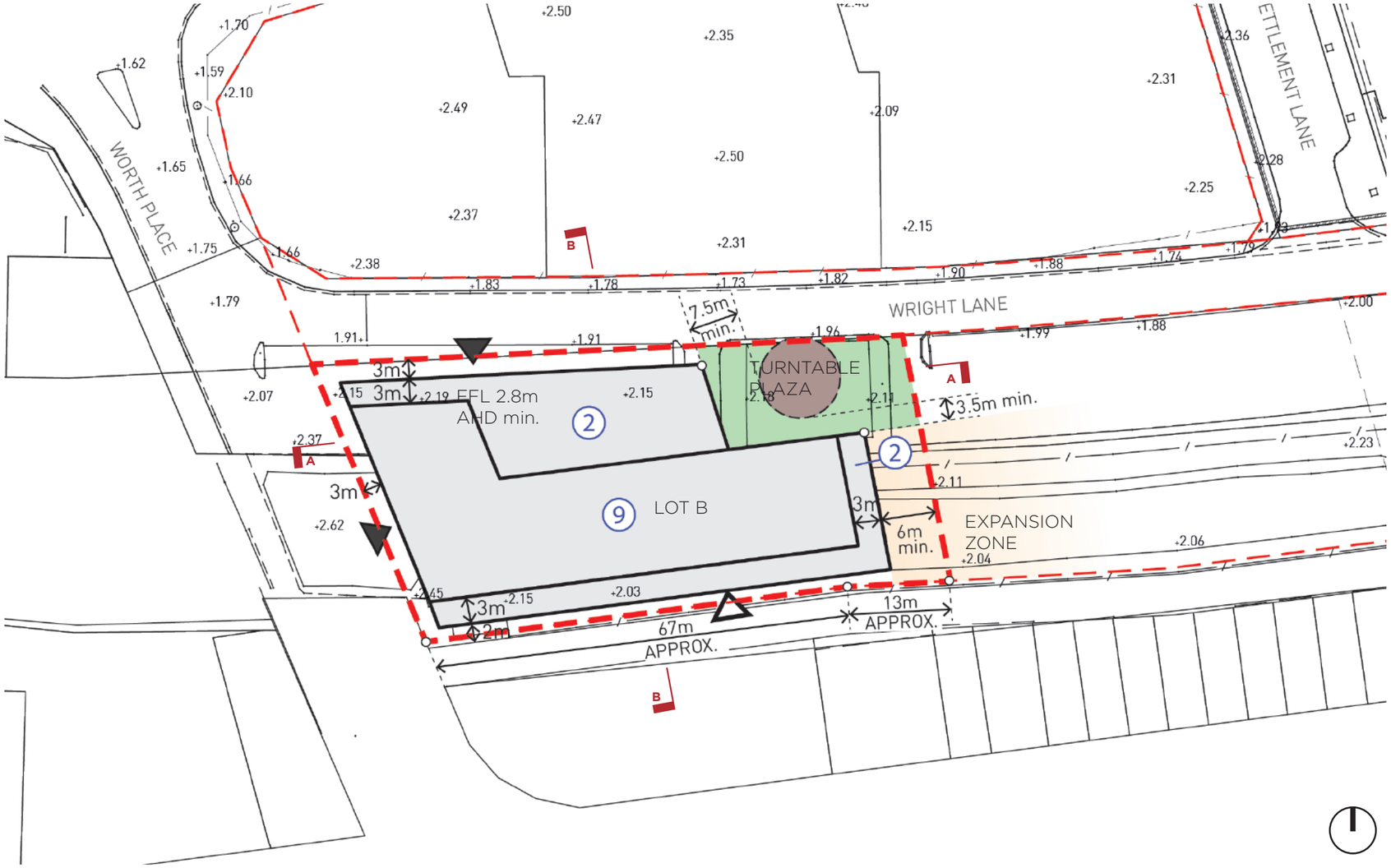
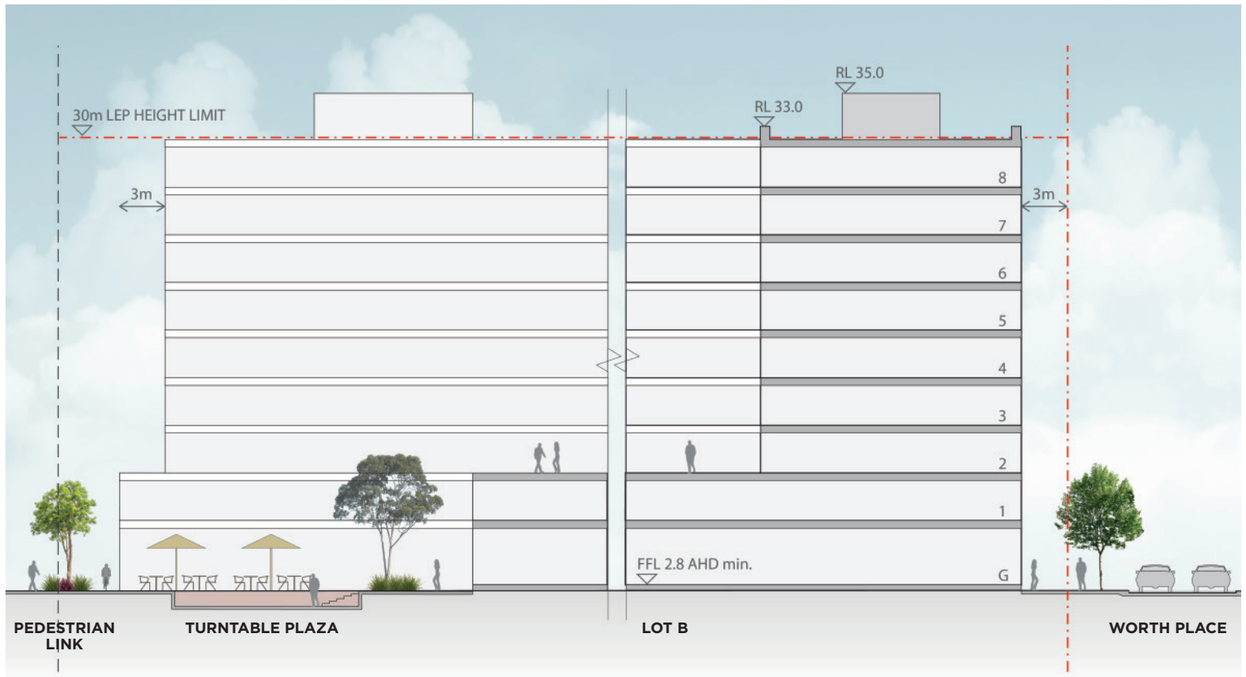
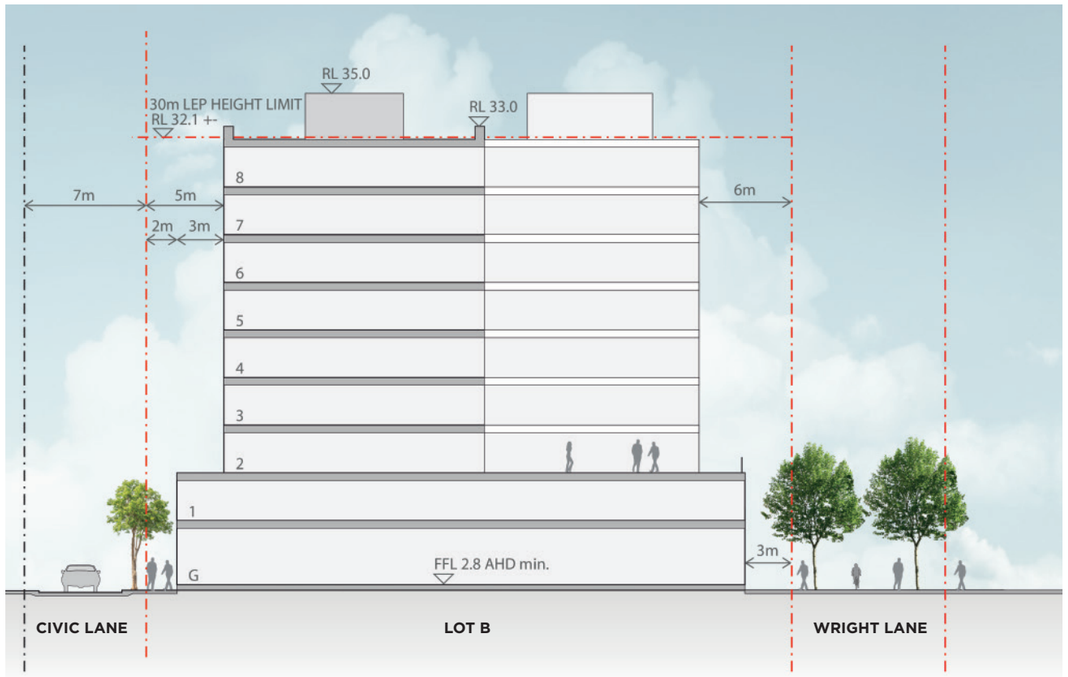


Figure 7.7 Lot B Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.8 Lot B Sections

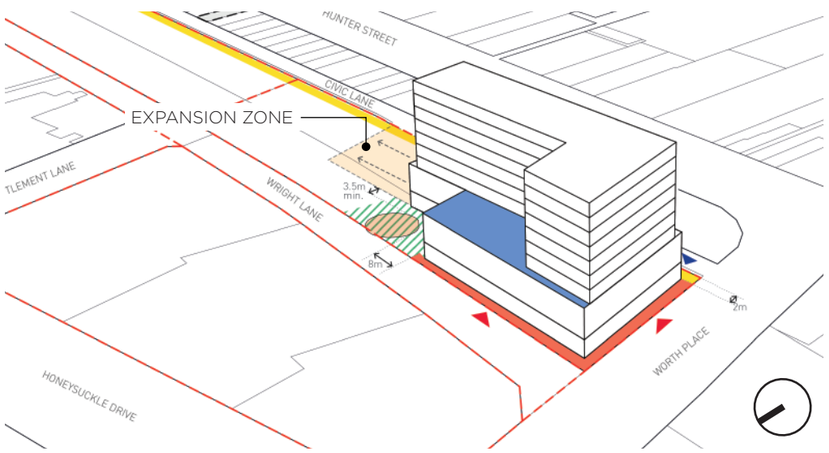


Figure 7.9 Lot B 3D Massing

7. Lot Guidelines

7.4 Lot C

Site	1
GFA	11,595m²
Indicative Max. Height	7 storeys + rooftop plant / lift motor rooms

Setbacks

Honeysuckle Drive	0m 3m above podium Minimum 6m setback above 6 storeys
Wright Lane	3m 5m above podium
Settlement Lane	3m

Guidelines

The primary address is on Honeysuckle Drive with additional frontage to the Campus Heart. This site has a high level of visibility from Honeysuckle Drive.

Servicing of the building will be from Settlement Lane.

A setback must be provided to Settlement Lane to enable new underground services due to the subterranean carpark under Settlement Lane.

The building on Lot C should not overshadow the Campus Heart.

Lot C may have elevated pedestrian links to Lot D across Wright Lane if required and permitted.

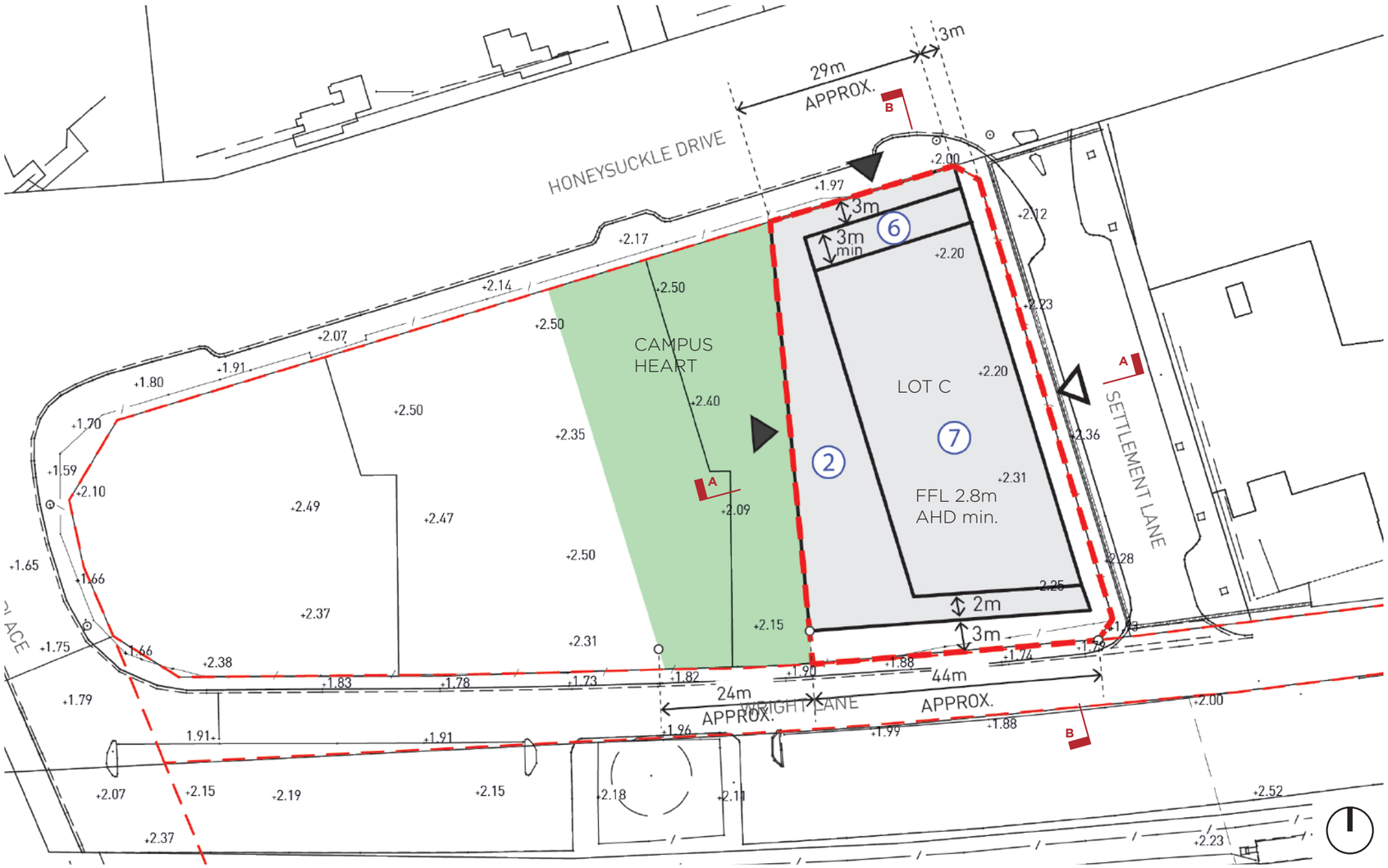
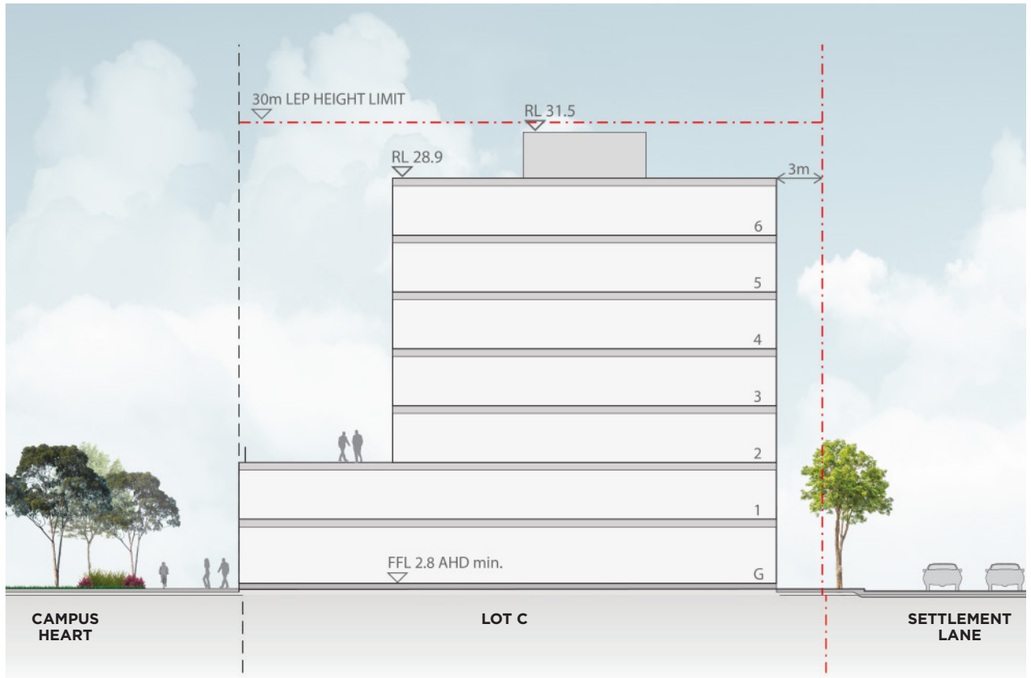
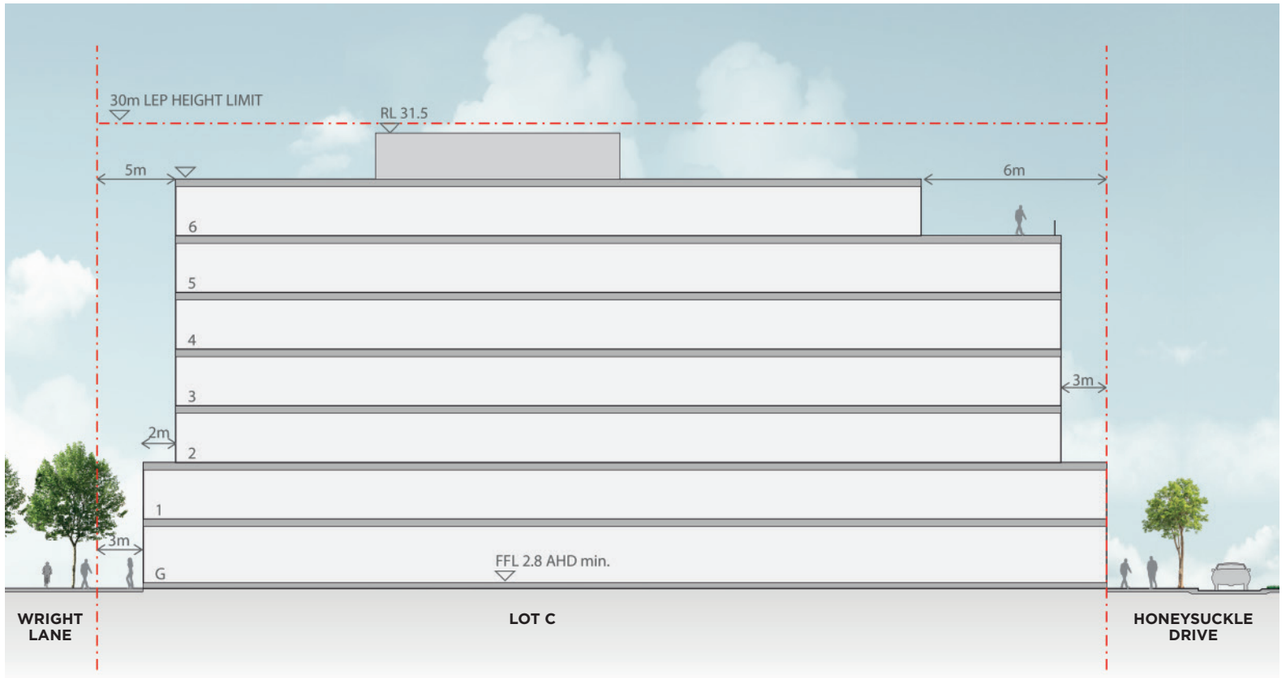


Figure 7.10 Lot C Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.11 Lot C Sections

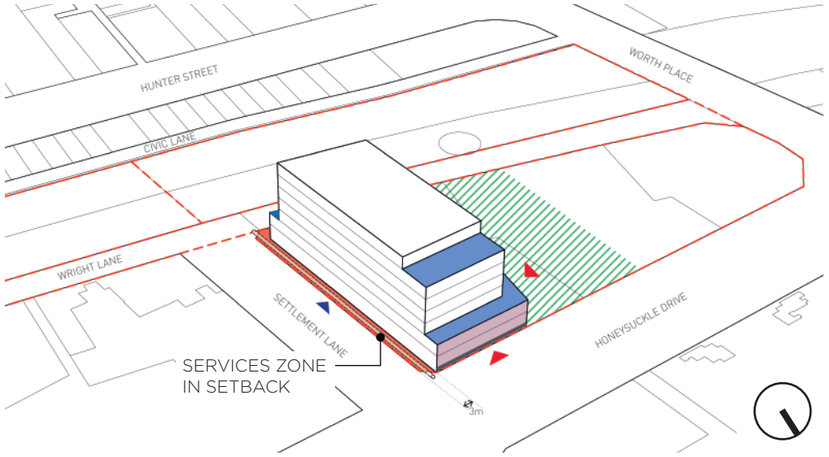


Figure 7.12 Lot C 3D Massing

7. Lot Guidelines

7.5 Lot D

Site	2
GFA	8,525m²
Indicative Max. Height	7 storeys + rooftop plant / lift motor rooms

Setbacks

Wright Lane	3m 5m above podium
Civic Lane	2m 5m above podium
Pedestrian Links	3m above podium

Guidelines

The primary address is on Wright Lane. Servicing of the building will be from Civic Lane.

A through-site visual and pedestrian connection should be maintained to the east of the building from Civic Lane along Settlement Lane to the waterfront.

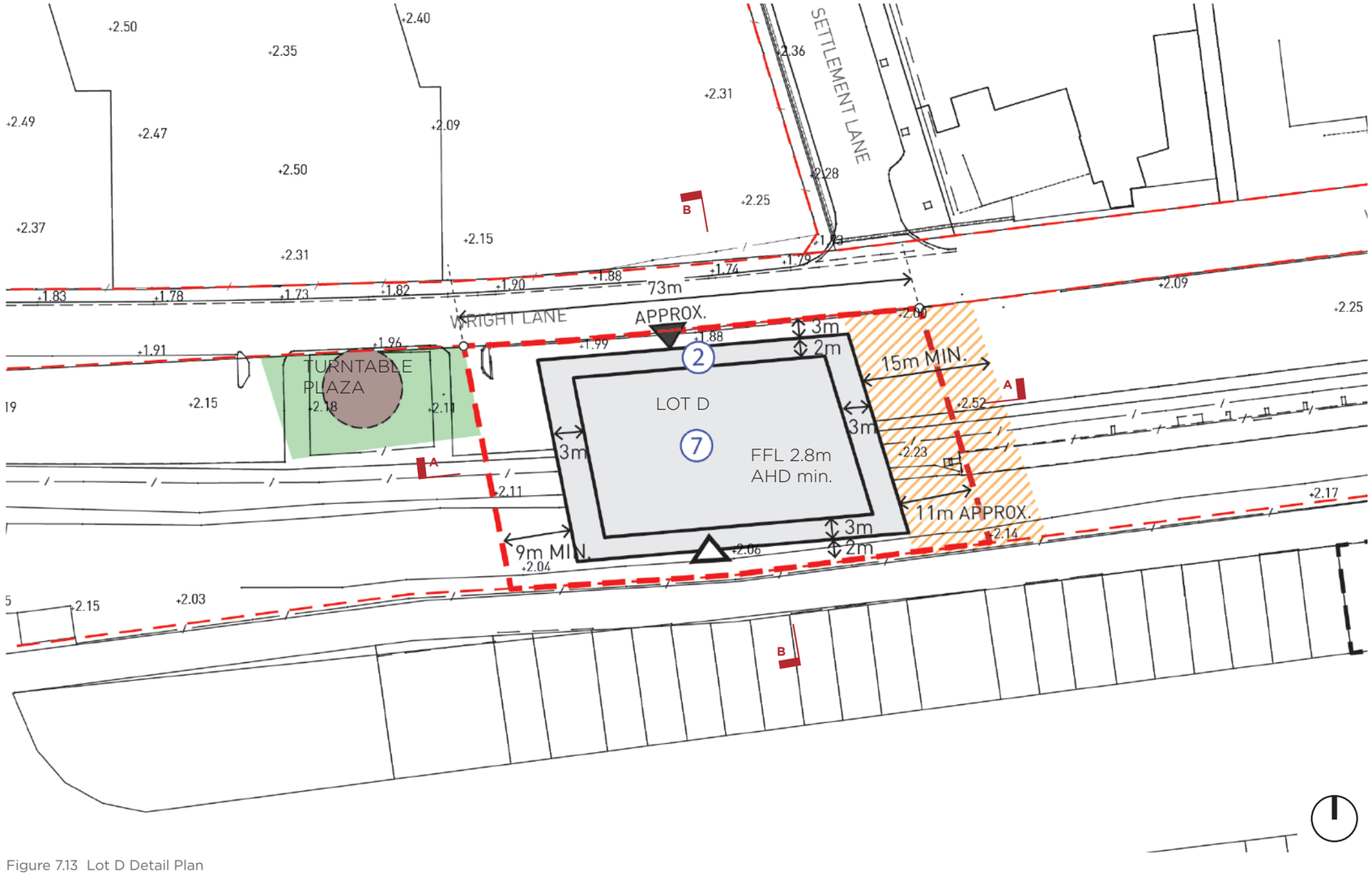
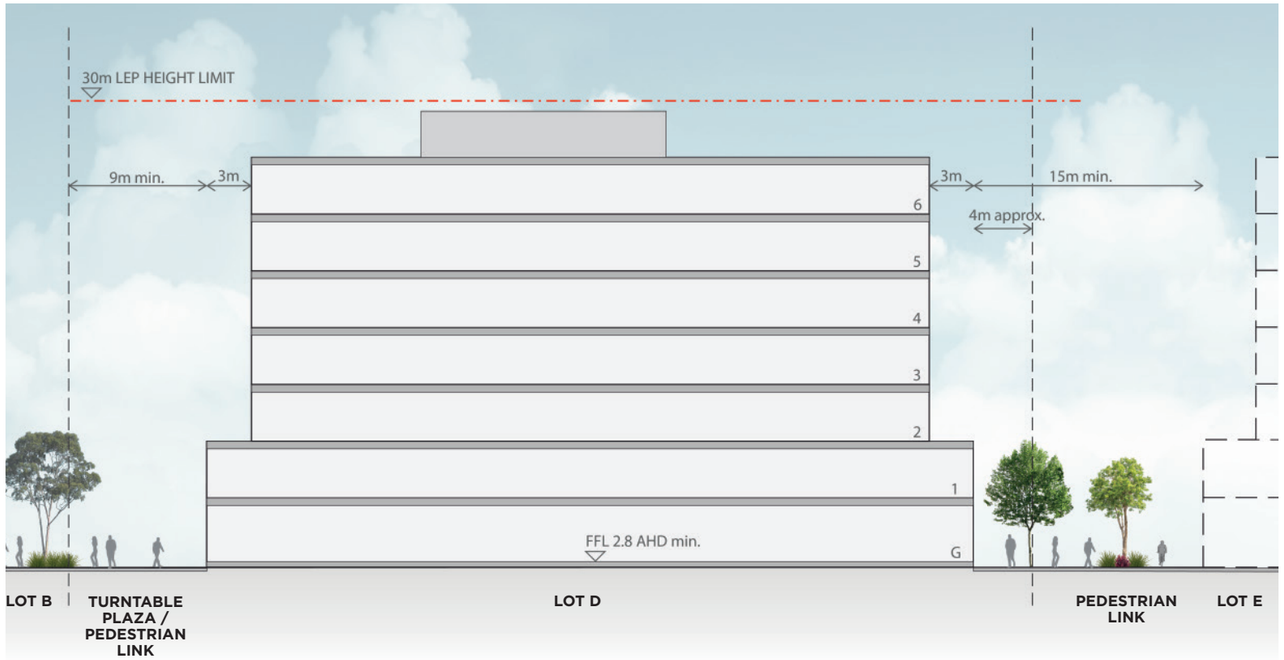
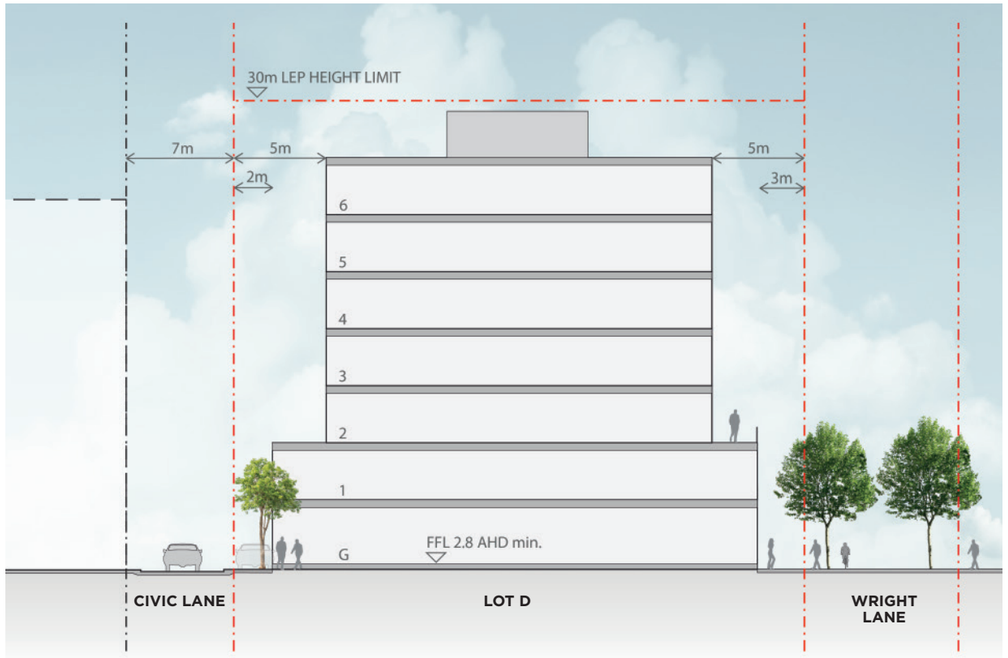


Figure 7.13 Lot D Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.14 Lot D Sections

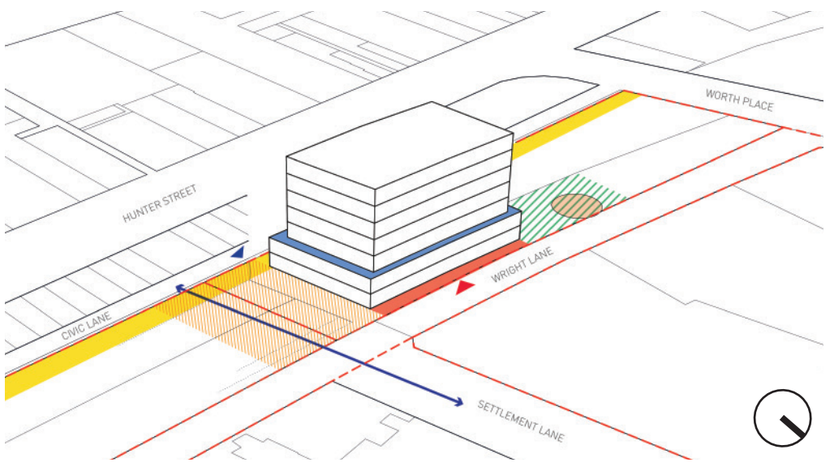


Figure 7.15 Lot D 3D Massing

7. Lot Guidelines

7.6 Lot E

Site	3
GFA	8,210m²
Indicative Max. Height	7 storeys + rooftop plant / lift motor rooms

Setbacks

Wright Lane	3m 5m above podium
Civic Lane	2m 5m above podium
Pedestrian Link	3m above podium

Guidelines

The primary address is on Wright Lane. Servicing of the building will be from Civic Lane.

The building should enable a future pedestrian link through 468 Hunter Street and between Civic Lane and Wright Lane.

A through-site visual and pedestrian connection should also be maintained to the west of the building from Civic Lane along Settlement Lane to the waterfront.

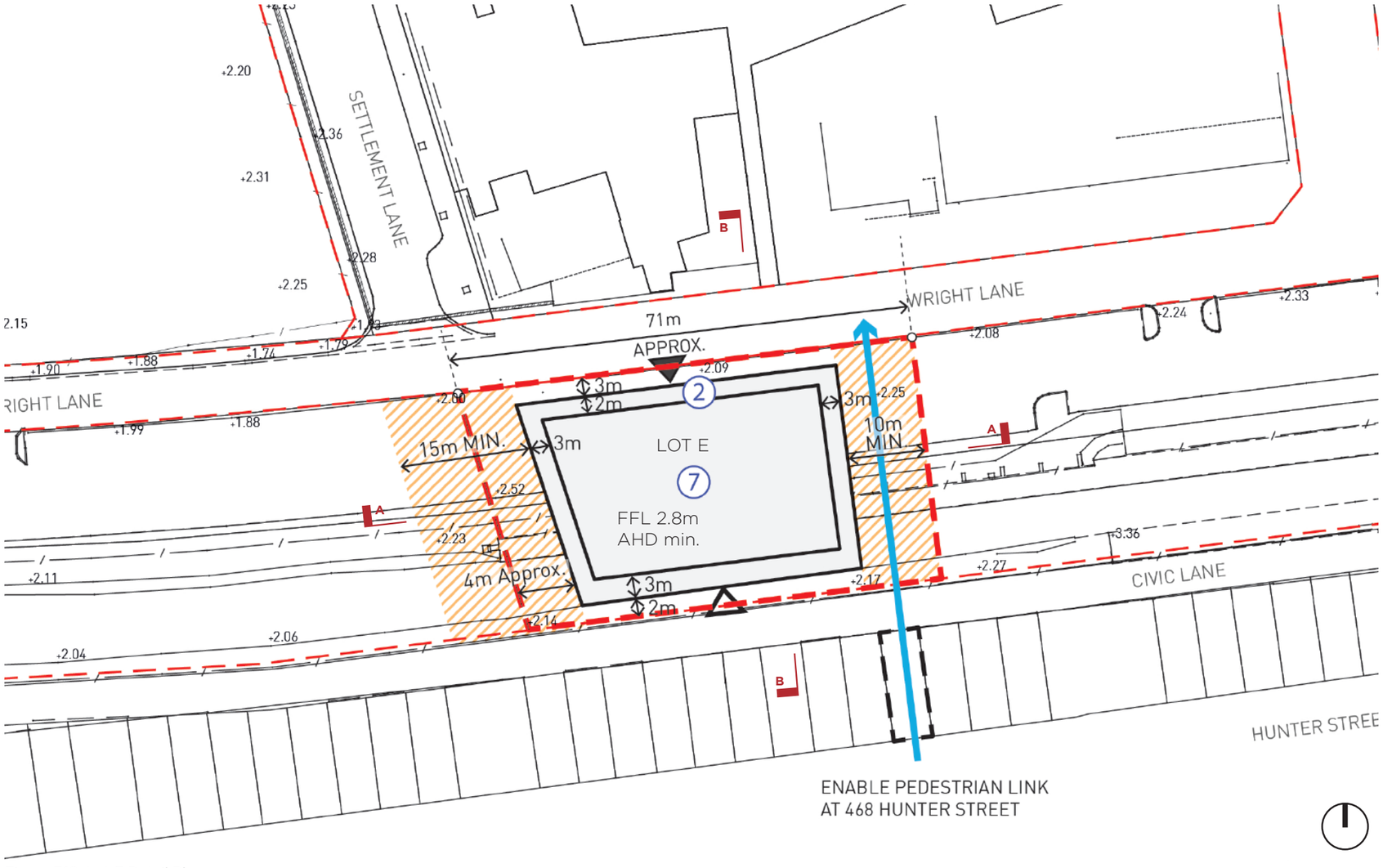
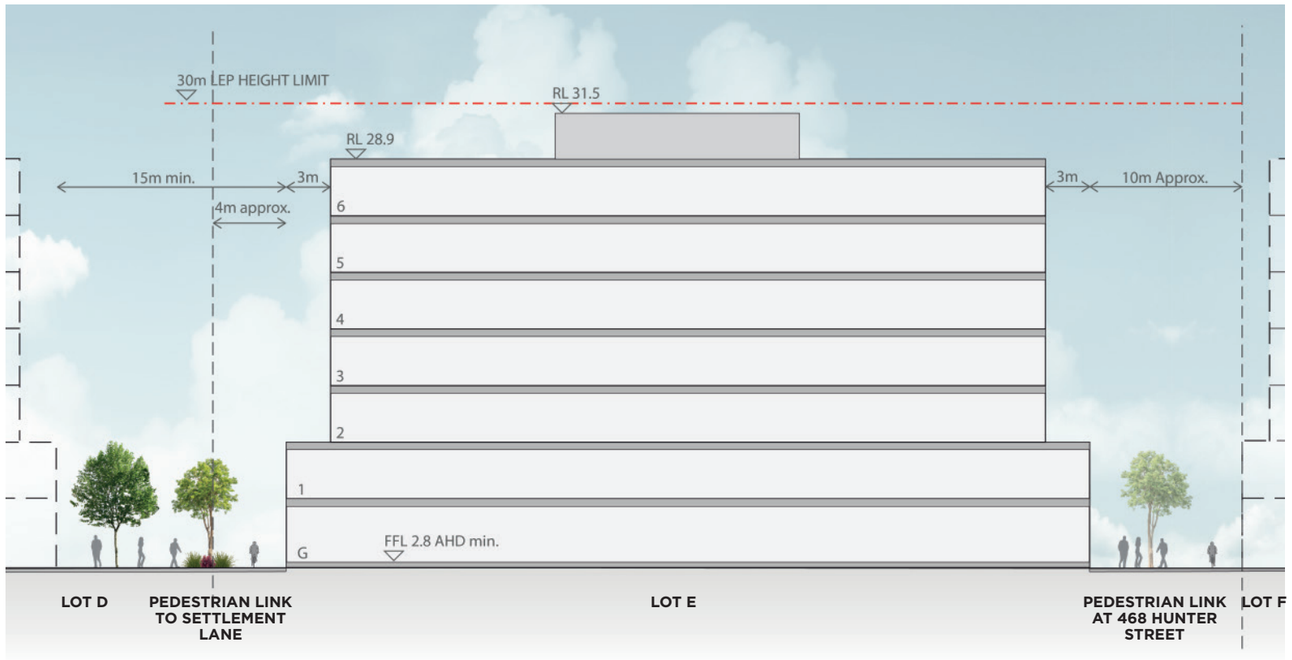
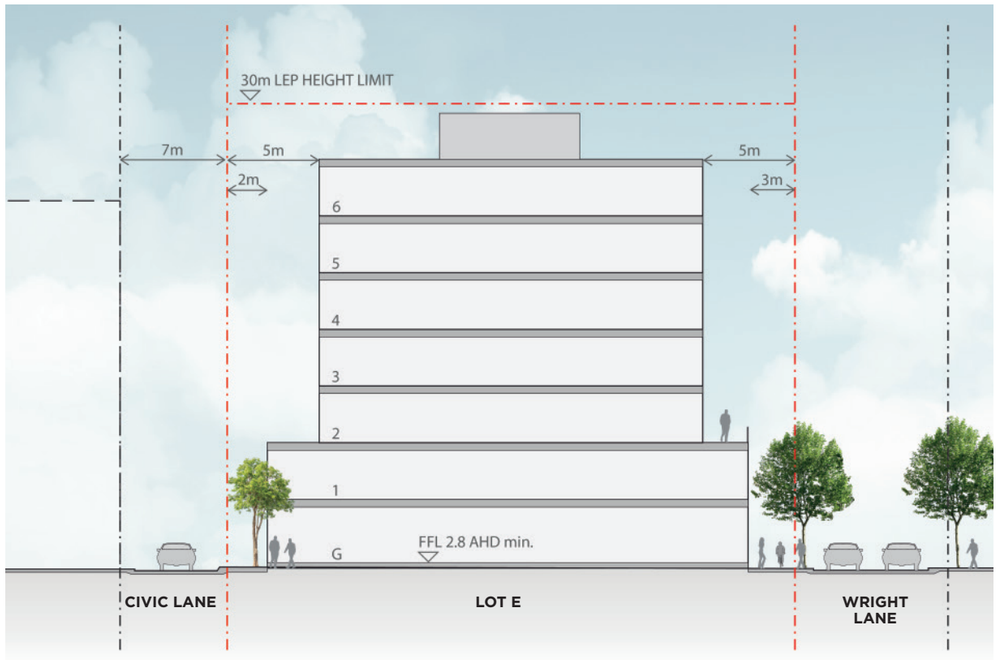


Figure 7.16 Lot E Detail Plan

7. Lot Guidelines



Section A



Section B

Figure 7.17 Lot E Sections

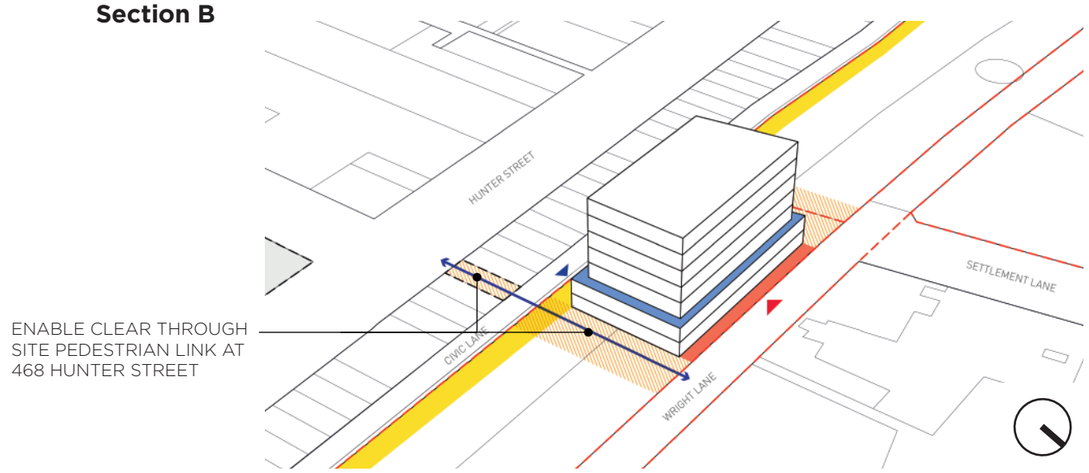


Figure 7.18 Lot E 3D Massing

7. Lot Guidelines

7.7 Lot F

Site	3
GFA	11,035m^2
Indicative Max. Height	5-7 storeys + rooftop plant / lift motor rooms

Setbacks

Wright Lane	3m 5m above podium
Civic Lane	2m 5m above podium
Pedestrian Link	3m above podium
Civic Link	3-15m

Guidelines

The primary address is on Wright Lane. Servicing of the building will be from Civic Lane.

The building should enable a future pedestrian link through 468 Hunter Street and between Civic Lane and Wright Lane.

The building's height should be lower than Building E to transition down in scale towards Civic Link. The building should be set back to Civic Link to enable ground level outdoor activation and include a landscaped setback.

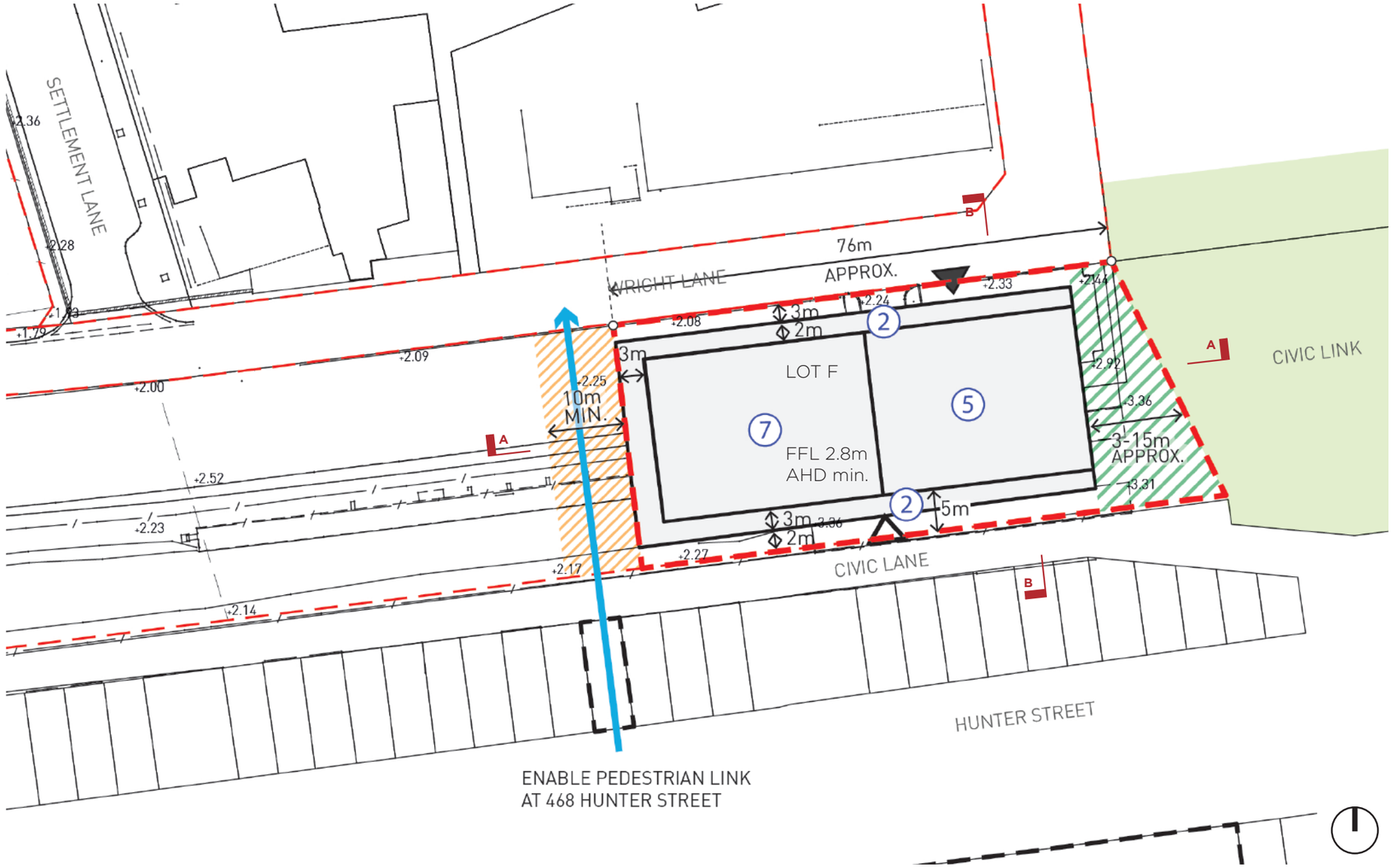
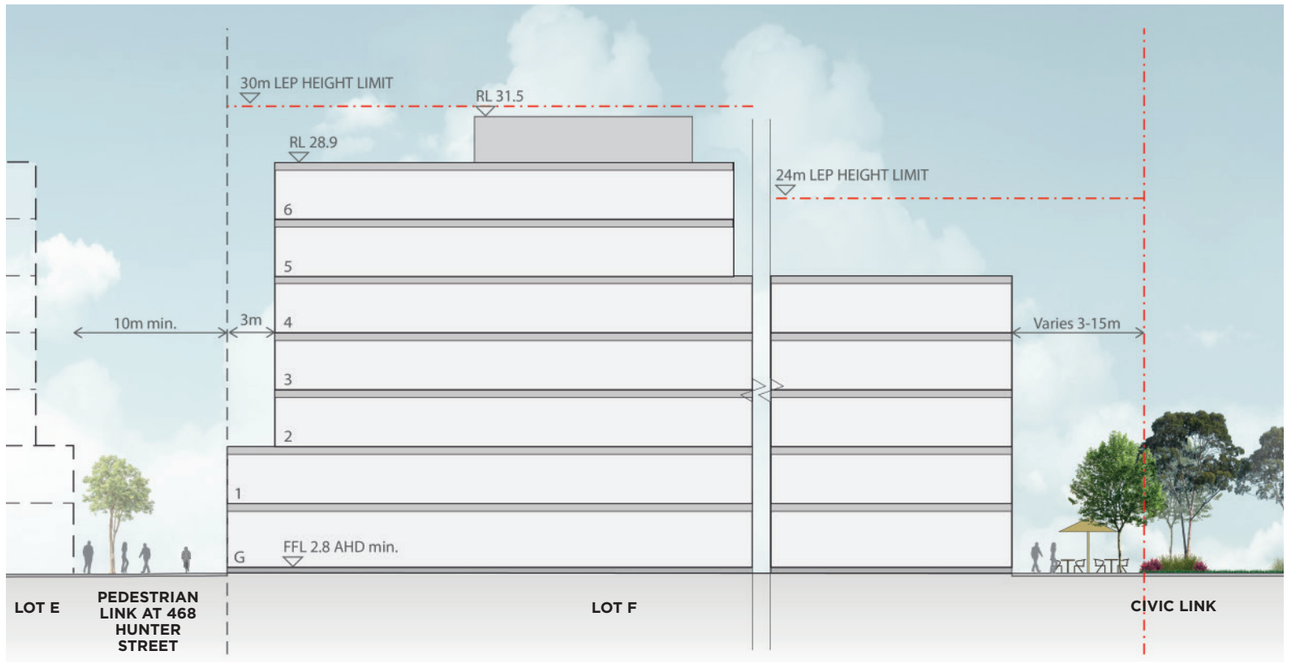


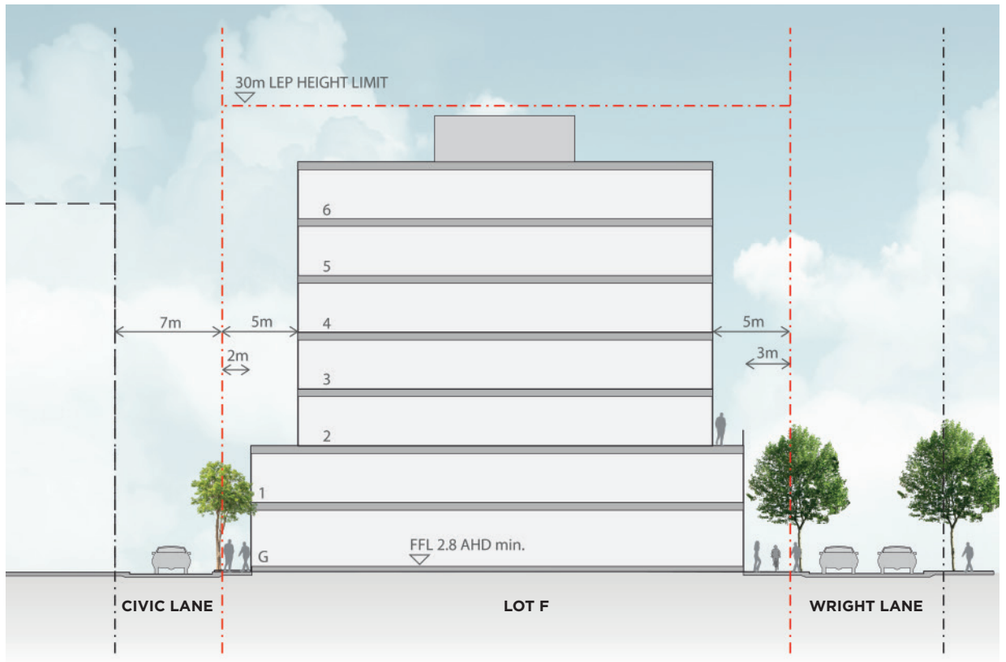
Figure 7.19 Lot F Detail Plan

7. Lot Guidelines



Section A

Figure 7.20 Lot F Sections



Section B

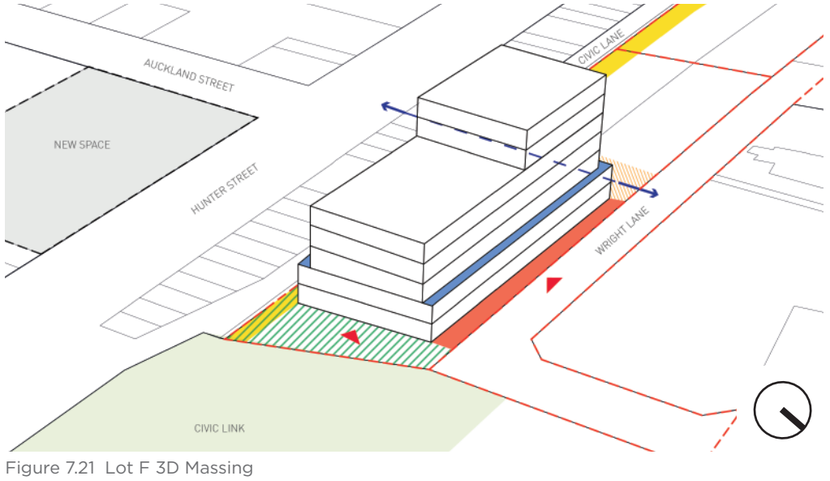


Figure 7.21 Lot F 3D Massing

Appendix 2A

Site Survey

(A) RIGHT OF ACCESS VARIABLE WIDTH (DP1087271)
(B) EASEMENT FOR UNDERGROUND ELECTRICITY CABLES AND ACCESS THERETO 2 WIDE & VARIABLE (DP883474)
(C) RIGHT OF CARRIAGEWAY VARIABLE WIDTH (DP1094788)
(E) EASEMENT FOR SUPPORT 1.0 WIDE (DP1163346)
(F) RIGHT OF CARRIAGEWAY 6.49 WIDE LIMITED IN HEIGHT TO RL 3.2 AND LIMITED IN DEPTH TO RL 1.0 (DP1163346)
(G) RIGHT OF CARRIAGEWAY 6.49 WIDE LIMITED IN HEIGHT TO RL 15.3 AND LIMITED IN DEPTH TO RL 7.7 (DP1163346)
(H) RIGHT OF CARRIAGEWAY 6.49 & 6.7 WIDE LIMITED IN HEIGHT TO RL 13.1 AND LIMITED IN DEPTH TO RL 1.0 (DP1163346)
(J) RIGHT OF CARRIAGEWAY VARIABLE WIDTH LIMITED IN HEIGHT TO RL 13.1 AND LIMITED IN DEPTH TO RL 5.2 (DP1163346)
(K) RIGHT OF CARRIAGEWAY 8 WIDE (DP1193695)
(L) EASEMENT FOR SEWER MAIN4 WIDE (DP883474)
(M) EASEMENT FOR WATER SUPPLY VARIABLE WIDTH (DP883474)
(N) RIGHT OF CARRIAGEWAY VARIABLE WIDTH (DP1111305)
(P) EASEMENT FOR NOISE, VIBRATION & ELECTROLYSIS (WHOLE OF LOT) (DP1193695)
(Q) EASEMENT FOR DRAINAGE WORKS (WHOLE OF LOT) (DP1193695)
(Y) EASEMENT FOR NOISE, VIBRATION AND ELECTROLYSIS (AB255044) – AFFECTS ALL OF SITE 1

MGA

DRIVE

HONEYSUCKLE

SITE 1
8546m²

SITE 2
6174m²

SITE 3
5692m²

WORTH PLACE

(KNOWN AS WRIGHT LANE)

CIVIC (6.095 WIDE) LANE

HUNTER STREET

SEE DIAGRAM 1

LOT 4

PART LOT 21
DP 1165985

PART LOT 22
DP 1165985

PT 21
DP 1096520

SP 77086

SP 81877

SP 81876

5
DP 883474

DP 1111305

PT LOT 22
DP 1165985

EXISTING EASEMENTS RESTRICTIONS TO BE EXTINGUISHED

LOCATION OF HISTORIC HONEYSUCKLE POINT RAILWAY TURNTABLE ø12.27m

PROPOSED ROAD WIDENING 1m WIDE (154m²)

PROPOSED ROAD WIDENING 1m WIDE (154m²)

SITE	AREA OF SITE CURRENTLY COMPRISED WITHIN LOT 21 DP1165985	AREA OF SITE CURRENTLY COMPRISED WITHIN LOT 22 DP1165985	TOTAL AREA
SITE 2	2730m²	3444m²	6174m²
SITE 3	2721m²	2971m²	5692m²
TOTAL	5451m²	6415m²	

DIAGRAM 1
1:300

NOTE:

- LOCATION OF RAILWAY TURNTABLE (AND DIMENSIONS) TAKEN FROM REPORT BY EJE WRIGHT LANE TURNTABLE – 20160620(002) 17.PDF,(SUPPLIED)
- ALL DIMENSIONS AND AREAS ARE APPROXIMATE ONLY AND SUBJECT TO DEV. APPROVAL SURVEY AND FINAL PLAN
- ONLY EASEMENTS AFFECTING SITES 1, 2 AND 3 AND LOT 4 DP1111305 SHOWN
- THE BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN COMPILED FROM SURVEY PLANS, ON PUBLIC RECORD. NO FIELD SURVEY HAS BEEN UNDERTAKEN TO DETERMINE THE ACCURACY OF THE BOUNDARIES AS SHOWN. AS SUCH THESE DIMENSIONS COULD BE OUT OF DATE AND INCORRECT BY MODERN STANDARDS. THIS PLAN SHOULD NOT BE USED FOR DESIGN OR CONSTRUCTION OF BUILDING WORKS CLOSE TO OR ON THE BOUNDARY, WITHOUT FURTHER SURVEY INVESTIGATION.
- THE BOUNDARIES OF ADJOINING PROPERTIES SHOWN ON THIS PLAN ARE BASED ON INFORMATION DERIVED FROM LPI. AT THIS STAGE NO FIELD SURVEY HAS BEEN UNDERTAKEN TO DETERMINE THE ACCURACY OF THE BOUNDARIES AS SHOWN.
- THIS PLAN MUST REMAIN UNALTERED AS ISSUED BY MONTEATH AND POWYS. ALTERING ANY PART OF THIS PLAN DESTROYS THE INTEGRITY OF THE PLAN. ANY REVISIONS REQUESTED MUST BE ISSUED BY MONTEATH AND POWYS.
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REVISIONS

No	REVISION	SVY	DFT	CHK	DATE
3	ADDITIONAL CHANGES TO PLAN - SITE 3 EASTERN BOUNDARY AND ROAD WIDENING	.	SS	ES	8/11/16
2	TABLE SHOWING SITE AREAS COMPRISED WITHIN LOTS 21 & 22	.	SS	ES	4/11/16
1	ISSUE TO CLIENT	.	KE	ES	03.11.16

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E survey@monteathpowys.com.au W www.monteathpowys.com.au

Surveyed	Drafted	Checked
.	SS/KE	ES

REGISTERED SURVEYOR

Scale @A1 : 1:600
@A3 : 1:1200

Original Size A1

DO NOT SCALE

Client: URBAN GROWTH

Title: PLAN OF SITES 1, 2 AND 3 BEING PART OF A PROPOSED SUBDIVISION OF LOT 21 AND 22 DP 1165985 AND LOTS 1, 2 AND 3 DP 1163346

CAD File: 160500c_03 Ref No: 16/0500 Date: 08.11.2016

Sheet No. 1/1

Revision 3

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