

FOR INFORMATION
NOT FOR APPROVAL

1:1,250 @ A3

5.4 BASEMENT

BASEMENT

The indicative design scheme proposes all parking and the majority of service vehicle loading areas are located in basements. Basement areas have been carefully balanced with deep soil zones to maximise retention of and opportunities for significant trees, as well as to provide efficient layouts which will minimise excavation.

Basements are connected to minimize the number of required service vehicle ramps. The proposed basement layouts ensure that there are no basement areas under land which is be dedicated to council.

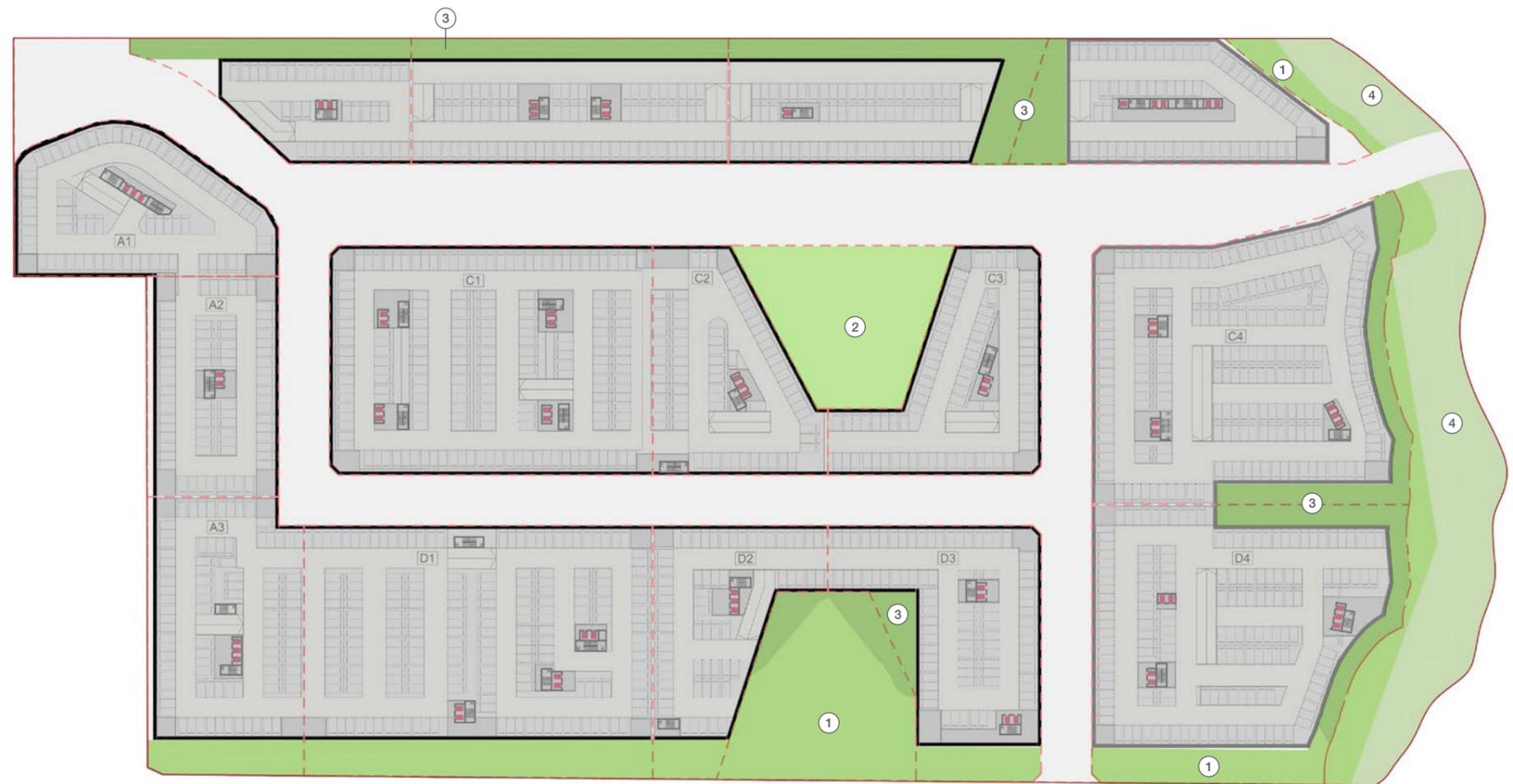
DEEP SOIL ZONES

To maximise opportunities to retain existing trees, the masterplan proposes large areas of deep soil along the Epping Road frontage of remnant bushland and adjacent to Shrimptons Creek.

Within the masterplan site, Deep soil is proposed in the areas of new public domain and along the northeastern boundary to allow future growth of significant trees.

The masterplan proposes several development lots which contain no deep soil, however the site as a whole will achieve over 15% deep soil area.

- 1 - Deep Soil within Ecological Corridor (6,037m². Area TBC)
- 2 - Deep Soil within Village Green (2,069m². Area TBC)
- 3 - Additional Deep Soil within Site Area (4,354m². Area TBC)
- 4 - Deep Soil within RE1 Zone (3,793m². Area TBC)



5.5 ENVELOPES + DESIGN GUIDELINES

While the indicative design scheme describes the likely size and arrangement of proposed buildings, in order to provide some future flexibility, this Concept Development Application seeks approval for more general building envelopes.

These general envelopes are accompanied by a set of design guidelines which ensure any future development applications are consistent with principles illustrated in the indicative design scheme.

The design guidelines, included at Appendix B, cover a range of criteria which each set out objectives and provisions for compliance. The criteria and their respective objectives are summarised as following.

CRITERION 1 NORTH EAST DEVELOPMENT LOTS (B1 - B2)

- / To allow for a potential future pedestrian and cycle connection from Main Street to Peach Tree Avenue
- / To provide opportunities for solar access to Main Street

CRITERION 2 PUBLIC AND COMMUNAL OPEN SPACE

- / To retain and enhance the existing publicly accessible open space along Shrimptons Creek corridor
- / To connect new public spaces to the existing open space network
- / To provide an adequate area of communal open space to enhance residential amenity and to provide opportunities for landscaping

CRITERION 3 DEEP SOIL ZONES

- / To retain existing mature trees and to support healthy tree growth
- / To provide passive recreation opportunities
- / To promote management of water and air quality

CRITERION 4 PUBLIC DOMAIN INTERFACE

- / To transition between private and public domain without compromising safety and security
- / To retain and enhance the amenity of the Shrimptons Creek corridor
- / To maximise the amenity of new streets and public open spaces

CRITERION 5 ACTIVE FRONTAGES

- / To provide active frontages with a distinctive civic character to Main Street
- / To ensure that public spaces and streets are activated along their edges
- / To maximise street frontage activity where ground floor apartments are located
- / To deliver amenity and safety for residents when designing ground floor apartments

CRITERION 6 PEDESTRIAN AND VEHICULAR ENTRY LOCATIONS

- / To provide building entries and pedestrian access that connects to and addresses the public domain
- / To provide accessible and easily identifiable building entries and pathways
- / To minimise conflicts between vehicles and pedestrians
- / To create high quality streetscapes

CRITERION 7 STREET WALL HEIGHT

- / To provide buildings that positively contribute to the physical definition of the public domain
- / To reduce the scale of buildings as perceived from the public domain

CRITERION 8 GROUND LEVEL STREET SETBACKS

- / To provide buildings that positively contribute to the physical definition of the public domain
- / To transition between private and public domain without compromising safety and security
- / To provide a landscape design which contributes to the streetscape and residential amenity

CRITERION 9 UPPER LEVEL SETBACKS

- / To reduce the scale of buildings as perceived from the public domain
- / To minimise the adverse wind impact of down drafts from tall buildings

CRITERION 10 ROOFTOPS

- / To maximise opportunities to use roof space for residential accommodation and open space
- / To incorporate sustainability features into the roof design
- / To minimise the visual impact of roof plant

CRITERION 11 FAÇADE EXPRESSION AND MATERIALS

- / To define and reinforce a distinctive character within the masterplan precinct
- / To express building functions
- / To create buildings which will improve with age

CRITERION 12 DESIGN EXCELLENCE

- / To ensure architectural diversity is achieved
- / To achieve a high standard of architectural and urban design, materials and detailing appropriate to the building type and location
- / To ensure the form and external appearance of the buildings improve the quality and amenity of the public domain
- / To ensure buildings meet sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency

CRITERION 13 UNIVERSAL DESIGN

- / Universal design features are included in apartment design to promote flexible housing for all community members
- / A variety of apartments with adaptable designs are provided



5.6 STAGING

The proposed staging plan is arranged to maximise the amount of public domain delivered in the first two stages of development. Stages are sequenced to maintain a consistent tenure split between social and market dwellings and to ensure that the necessary infrastructure comes online to service the relevant stages.





All computer generated images / artists impressions have been provided for illustrative purpose only, and are subject to authority approval

5.7 SUSTAINABILITY

The Ivanhoe Masterplan will achieve 6 Star Green Star using the Green Building Council of Australia’s current rating tool “Green Star – Communities v1.1” and subsequent releases as appropriate. The project aims to set new benchmarks in Sustainability under the following categories:

GOVERNANCE

Ivanhoe Estate will look to demonstrate leadership within the industry by establishing and maintaining strong governance practices. This will occur through engagement, transparency, as well as community and industry capacity building. We will look to ensure that the Ivanhoe Estate development is resilient to a changing climate. Some of the initiatives being explored include:

- / Transparency via design reviews with independent sustainability experts
- / Inclusive and comprehensive stakeholder engagement process
- / Site Specific Climate Resilience Strategies

LIVEABILITY

We aim to deliver a safe, accessible and culturally rich community at Ivanhoe Estate. Accordingly we will focus on the development of healthy and active lifestyles, and look to create a community with a high level of amenity, activity, and inclusiveness. Areas of investigation currently include:

- / Health and Fitness classes for all residents
- / A safe, walkable and accessible community
- / Dedicated Community Development Managers

ECONOMIC PROSPERITY

Ivanhoe Estate will look to promote prosperity and productivity through the creation of equitable living and housing, through investment in education and skills development, and through community capacity building. Current initiatives being explored include:

- / Provision of digital infrastructure
- / On site energy generation
- / Community infrastructure investment

ENVIRONMENT

Reducing the impact of urban development on the local ecosystem is an important objective for Ivanhoe Estate. Resource management and efficiency will be carefully considered through promoting infrastructure, transport, and buildings that have reduced ecological footprints. Accordingly, we will seek to reduce the impacts of this project on the local land and aquatic environments. Ideas currently under consideration include:

- / Ensuring WSUD (Water Sensitive Urban Design) principles are applied throughout the precinct
- / Urban Heat Island reduction and mitigation strategies
- / Waste management strategies
- / Life Cycle impacts analyses of materials used on site
- / Maximising the ecological value of site to be close to or exceeding existing

INNOVATION

Implementation of innovative practices, processes and strategies that promote sustainability in the built environment will occur throughout the lifetime of the development ensuring that Ivanhoe Estate is recognised as one of the most progressive projects in the country. A number of innovative concepts are being currently explored on this project including;

- / Transparent financial reporting on sustainability initiatives
- / Contractor education on sustainability
- / Innovative use of technology through an integrated infrastructure solution (Real Utilities)

6 STAR COMMUNITIES RATING TARGETS

Sustainable Site	Maximise the ecological value of site to be close to or exceeding existing (biodiversity, permeable surfaces, urban greening):
	1. Protect the existing Turpentine Ironbark Forest
	2. Maintain its functional connection to Shrimptons Creek riparian habitat through the site and with fauna crossings at road intersections.
	3. Mitigating the urban heat island effect with extensive landscaped public domain, green roofs, low-SRI roofs and solar PV.
	Mitigating the urban heat island effect with extensive landscaped public domain, light coloured roofs, green roofs and solar PV.
	Employ Water Sensitive Urban Design Manage stormwater. Manage urban stormwater with water sensitive urban design including swales and permeable detention basins
Transport & Connectivity	A connected and permeable site to encourage active transport and use of public transport
	At least one bicycle parking space to be provided for each dwelling and at least 200 provided for visitors
	Provision of 50 GoGet spaces
	Electric vehicle ready
	End of trip facilities for non-residential buildings
Community Health & Happiness	To fully quantify and track tangible health and well-being metrics through programs and partnerships including Live Life Get Active and Mission Australia’s Strengthening Communities amongst others.
	Public domain that encourages social interaction, has activated street frontages, is adaptable and comfortable, and is pedestrian-oriented
	A minimum 200 volunteer hours on various community activities specifically for Ivanhoe Estate.
Living Costs	Development reduces average living costs for households, and average operating costs for businesses, compared with business as usual
	Whole of life affordability strategy considering: Housing, Utilities, Food and Transit
	The CCAP Precinct report indicates in excess of a 40% reduction in living costs.
Local Economy	Integrate commercial opportunities within precinct, including spaces suitable for small business or home business operations and / or work from- home
	1. Community Hub – fitted out with offices and session rooms for the delivery of MA’s tenant support programs and also drop-in offices for the delivery of community services
	2. Social Enterprise Space – opportunities for social enterprise development in conjunction with the community.
	The Strengthening Communities program will deliver opportunities that MA and MAH can create through the operation of the residential community such as: 1) Landscaping, 2)Common area maintenance, 3) Administration of the Community Hub, and 4) Live Work Dwellings are incorporated in buildings along the main street which will be suitable for small business or home business



All computer generated images / artists impressions have been provided for illustrative purpose only, and are subject to authority approval

**APPENDIX A
DRAWINGS FOR
APPROVAL**



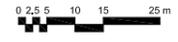
FOR APPROVAL

Key

- - - Site Boundary
- Zone RE1 Public Recreation (Interpreted from LEP Map PDF)
- Zone E2 Environmental Conservation (Interpreted from LEP Map PDF)
- Creek line (approximate) with Top of Bank (approximate)
- Riparian Corridor (Based upon ADWJ drawing G2180P96K01-013A)
- Existing Vegetation Community - Turpentine - Grey Ironbark Open Forest (Endangered / Critically Endangered) (approximate outline)
- Existing Vegetation Community - Turpentine - Smooth-barked Apple Mistle (Stability Forest) (approximate outline)
- Existing Buildings
- Vehicle & Cycle Access Point
- Pedestrian Access Point

Revision	Date	Description	Initial	Checked
3	14.12.17	Proposed adding site information omitted, wind rose updated	WM	MA
2	27.11.17	Submission for LAHC Assessment	WM	MA
1	20.11.17	Stage 1 DA Submission DRAFT	WM	MA

**Ivanhoe Estate Masterplan
Macquarie Park, NSW
Masterplan
Site Analysis Plan**



Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fit-up, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components. Do not scale drawings, refer to figure dimensions only. Any discrepancies should be referred to the architect for clarification. All drawings may not be reproduced or distributed without prior permission from the architect.

Scale: 1:1,000@B1, 1:2,000@B3

Drawn: WM Checked: MA

Project No: S12067

Status: For Information

Plot Date: 14/12/2017 4:27 PM

Plot File: S:\12000-12067\12067_Ivanhoe\1707_Cad\Plots\DA01-MP-003[3].dwg

Drawing No: [Revision]

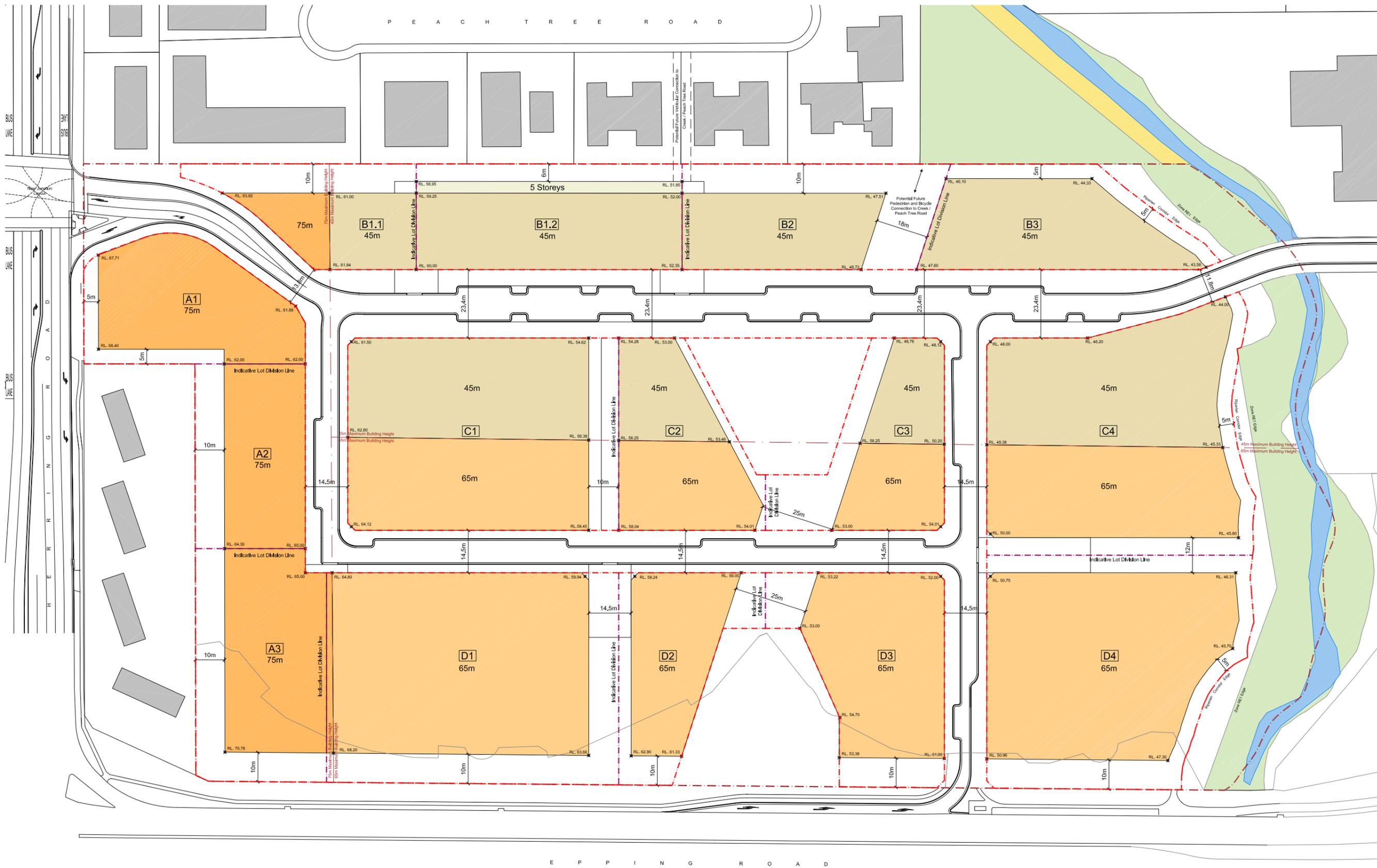
DA01.MP.003[3]

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email melb@bates-smart.com.au
http://www.bates-smart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@bates-smart.com.au
http://www.bates-smart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986





FOR APPROVAL

Key

- Site Boundary
- Lot Boundary
- Indicative Lot Division Line
- LEP Maximum Building Height Plane (Interpreted from LEP Map PDF)
- Creek line (approximate) with Top of Bank (approximate)
- Riparian Corridor edge (Based upon ADWI drawing Q218A-PSK-011-013-A)
- Zone RE1 Public Recreation (Interpreted from LEP Map PDF)
- Zone E2 Environmental Conservation (Interpreted from LEP Map PDF)
- Buildable Area below 75m Maximum Building Height
- Buildable Area below 65m Maximum Building Height
- Buildable Area below 45m Maximum Building Height
- 4 Storey buildable area above proposed ground level
- Existing Buildings

E P P I N G R O A D

Revision	Date	Description	Initial	Checked
3	14.12.17	Proposed updating site information omitted	WM	MA
2	27.11.17	Submission for LABC Assessment	WM	MA
1	20.11.17	Stage 1 DA Submission: DRAFT	WM	MA

**Ivanhoe Estate Masterplan
Macquarie Park, NSW
Masterplan
Envelope Control Plan**

0 2.5 5 10 15 25 m

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings under the supervision of any contractor.
All drawings are made in consultation with all architectural documents and all other construction documents.
Do not scale drawings - refer to figure dimensions only. Any discrepancies shall be referred to the architect for clarification.
All drawings may not be reproduced or distributed without prior permission from the architect.

Scale: 1:500@B1, 1:1,000@B3

Drawn: WM Checked: MA

Project No: S12067

Status: For Information

Plot Date: 14/12/2017 11:08 AM

Plot File: S:\12067-12099\12067_Users_JuanVes\0_Cad\Plan\DA01...
...1.MP.100[3].dwg

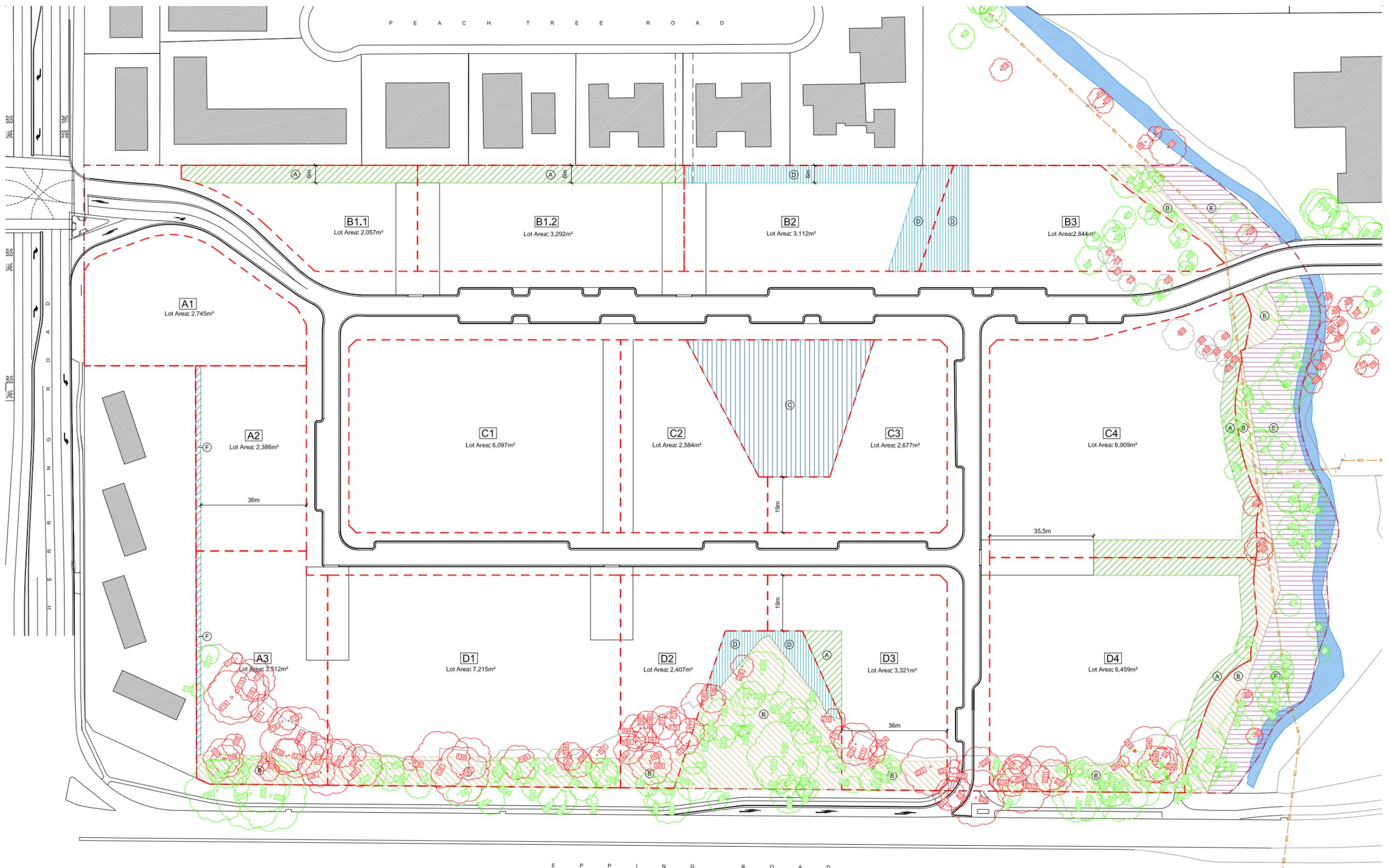
Drawing No: DA01.MP.100[3]

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email melb@bates-smart.com.au
http://www.bates-smart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@bates-smart.com.au
http://www.bates-smart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986





FOR APPROVAL

Site Area	82,789m ²
Potential Deep Soil % of Site Area	2,667m ² 3.2%
Potential for additional Deep Soil within Ecological Corridor	6,037m ² 7.3%
Potential for Deep Soil within Village Green	2,069m ² 2.5%
Other Potential for other Deep Soil	1,687m ² 2.0%

% of A + B + C + D of Site Area	15.1%
Potential Deep Soil within RE1 Zone	3,793m ² 4.6%
% of A + B + C + D + E of Site Area	19.6%
Potential Deep Soil under minimum dimensions (excluded from calculations)	223m ² 0.3%
Trees intended for retention	
Trees Intended for removal	
Existing Sewer - ADWJ drawing 300001-SSK-001_A	

Notes, as per Apartment Design Guide - June 2015

- A minimum 7% of a site area must be provided as deep soil area.
- Deep Soil zone minimum dimensions to be:
 - None for sites less than 650m²
 - 3m for sites from 650 to 1,500m²
 - 6m for sites greater than 1,500m²
- On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:
 - 10% of the site as deep soil on sites with an area of 650 - 1,500m²
 - 15% of the site as deep soil on sites greater than 1,500m²

Revision	Date	Description	Initial	Checked
3	14.12.17	Proposed adjusting site information omitted	WM	MA
2	27.11.17	Submission for LAHC Assessment	WM	MA
1	20.11.17	Stage 1 DA Submission: DRAFT	WM	MA

Ivanhoe Estate Masterplan
Macquarie Park, NSW
Masterplan
Deep Soil Areas



Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and the location of all components. Do not scale drawings, refer to figures (dimensions only). Any discrepancies should be referred to the architect for clarification. All drawings may not be reproduced or distributed without prior permission from the architect.

Scale	1:500@B1, 1:1,000@B3
Drawn	WM Checked MA
Project No.	S12067
Status	For Information
Plot Date	14/12/2017 11:08 AM
Plot File	S:\12000-12067\12067_Ivanhoe\70_Cad\Files\DA\DA01-MP.200(3).dwg
Drawing No.	[Revision] DA01.MP.200(3)

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email melb@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batesmart.com.au
http://www.batesmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986





All computer generated images / artists impressions have been provided for illustrative purpose only, and are subject to authority approval

APPENDIX B
DEVELOPMENT
DESIGN GUIDELINES

IVANHOE MASTERPLAN

DEVELOPMENT DESIGN GUIDELINES
DOCUMENT NO. S12067-002
ISSUE E

FEBRUARY 2018

CLIENT

Aspire Consortium
Fraser's Property Australia, Citta Property Group and Mission Australia Housing



CONSULTANTS

Architecture & Urban Design Bates Smart
Urban Planning Ethos Urban

PROJECT NUMBER

S12067

BATESSMART™

**ARCHITECTURE
INTERIOR DESIGN
URBAN DESIGN
STRATEGY**

MELBOURNE

1 Nicholson Street Melbourne
Victoria 3000 Australia
T +61 3 8664 6200
F +61 3 8664 6300

SYDNEY

43 Brisbane Street
Surry Hills New South Wales
2010 Australia
T +61 2 8354 5100
F +61 2 8354 5199

WWW.BATESSMART.COM

ABN 68 094 740 986

CONTENTS		
01	NORTHEAST DEVELOPMENT LOTS (B1, B2, B3)	04
02	PUBLIC AND COMMUNAL OPEN SPACE	05
03	DEEP SOIL ZONES	06
04	PUBLIC DOMAIN INTERFACE	07
05	ACTIVE FRONTAGES	08
06	PEDESTRIAN AND VEHICULAR ENTRY LOCATIONS	09
07	STREETWALL HEIGHT	10
08	GROUND LEVEL STREET SETBACKS	11
09	UPPER LEVEL SETBACKS	12
10	ROOFTOPS	13
11	FAÇADE EXPRESSION AND MATERIALS	14
12	DESIGN EXCELLENCE	15
13	UNIVERSAL DESIGN	16

01. NORTH EAST DEVELOPMENT LOTS (B1-B2)

OBJECTIVES

- A. To allow for a future pedestrian and cycle connection from Main Street to Peach Tree Avenue
- B. To provide opportunities for solar access to Main Street

PROVISIONS

- 1. Lot B1/B2 should be separated into three discrete buildings
- 2. Building separation should be of sufficient width to provide a pedestrian and cycle connection to Peach Tree Avenue



BATESSMART.

02. PUBLIC AND COMMUNAL OPEN SPACE

OBJECTIVES

- A. To retain and enhance the existing publicly accessible open space along Shrimptons Creek corridor.
- B. To connect new public spaces to the existing open space network.
- C. To provide an adequate area of communal open space to enhance residential amenity and to provide opportunities for landscaping.

PROVISIONS

1. The Shrimptons Creek Corridor is to be embellished and dedicated to Council as public open space.
2. A Village Green of 3,300 sqm usable area should be provided between Lots C2 and C3.
3. A Town Square of 1,300 sqm usable area should be provided between Lots C1 and C2.
4. A Forest Playground of 3,900 sqm usable area should be provided between Lots D2 and D3.
5. Publicly accessible open spaces should connect Shrimptons Creek, the Village Green, Town Square, and Epping Road landscape corridor.
6. Each lot should provide a mix of public and communal open space with a combined minimum area equal to 25% of the lot area, except Lots A1 and B3 which are not required to provide public or communal open space.



BATESSMART™

03. DEEP SOIL ZONES

OBJECTIVES

- A. To retain existing mature trees and to support healthy tree growth.
- B. To provide passive recreation opportunities.
- C. To promote management of water and air quality.

PROVISIONS

1. The area of deep soil within site, excluding RE1 zoned land, should be no less than 15%.
2. Deep soil zones should have a minimum dimension of 6m, except where they abut a side boundary or road reserve which also provides deep soil, where a minimum dimension of 3m is acceptable.



- Deep Soil
- Deep Soil in RE1 Zone

BATESSMART™

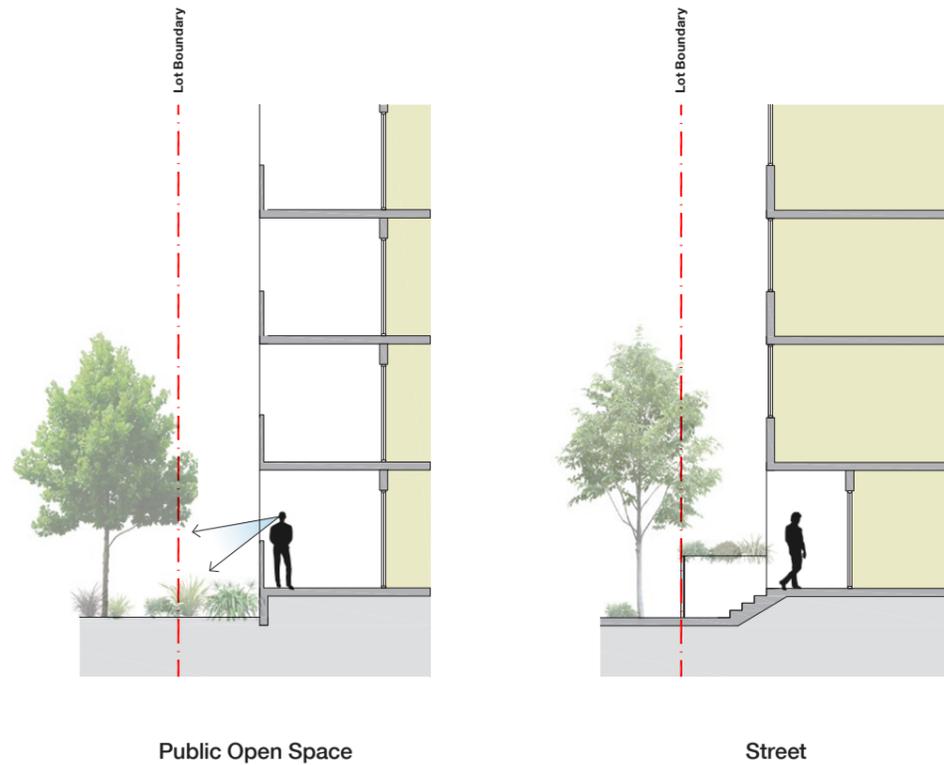
04. PUBLIC DOMAIN INTERFACE

OBJECTIVES

- A. To transition between private and public domain without compromising safety and security.
- B. To retain and enhance the amenity of the Shrimptons creek corridor.
- C. To maximise the amenity of new streets and public open spaces.

PROVISIONS

- 1. When fronting streets: terraces, balconies and courtyard apartments should have direct street entry, wherever possible.
- 2. Apartments, balconies and courtyards fronting the Shrimptons Creek landscape corridor, Epping Road landscape corridor, or Village Green should be physically separated but provide passive surveillance.
- 3. Community and retail uses should provide an active frontage to the Village Green.
- 4. Communal open space should be clearly defined and separate from the public domain.



BATESSMART.

05. ACTIVE FRONTAGES

OBJECTIVES

- A. To provide active frontages with a distinctive civic character to Main Street.
- B. To ensure that public spaces and streets are activated along their edges.
- C. To maximise street frontage activity where ground floor apartments are located.
- D. To deliver amenity and safety for residents when designing ground floor apartments.

PROVISIONS

- 1. Buildings A1 and B3 should accommodate a childcare centre at ground level
- 2. Buildings C1 and C2 should accommodate retail and / or communal uses at ground level fronting the Town Square
- 3. Building B2 should provide community uses at ground level fronting Main Street and the Village Green
- 4. Building D3 should provide ground level office space for the community housing provider.
- 5. Direct street access should be provided to ground floor apartments
- 6. Two-storey residential typologies should be considered on street frontages of apartment buildings fronting neighbourhood streets.



BATESSMART.

06. PEDESTRIAN AND VEHICULAR ENTRY LOCATIONS

OBJECTIVES

- A. To provide building entries and pedestrian access that connects to and addresses the public domain.
- B. To provide accessible and easily identifiable building entries and pathways.
- C. To minimise conflicts between vehicles and pedestrians
- D. To create high quality streetscapes

PROVISIONS

- 1. Primary building entries should address the street.
- 2. Vehicle entries should avoid Main St where possible.
- 3. Internal loading docks will be shared wherever possible to limit the amount of driveways to improve public amenity and streetscapes.
- 4. Loading docks will be used for both garbage collection and move ins / move outs wherever possible.
- 5. Where internal dedicated loading docks are not possible, on-street loading zones will be discretely located near building entries.



- ▲ Pedestrian Entry
- ▲ Vehicular Entry

BATESSMART™

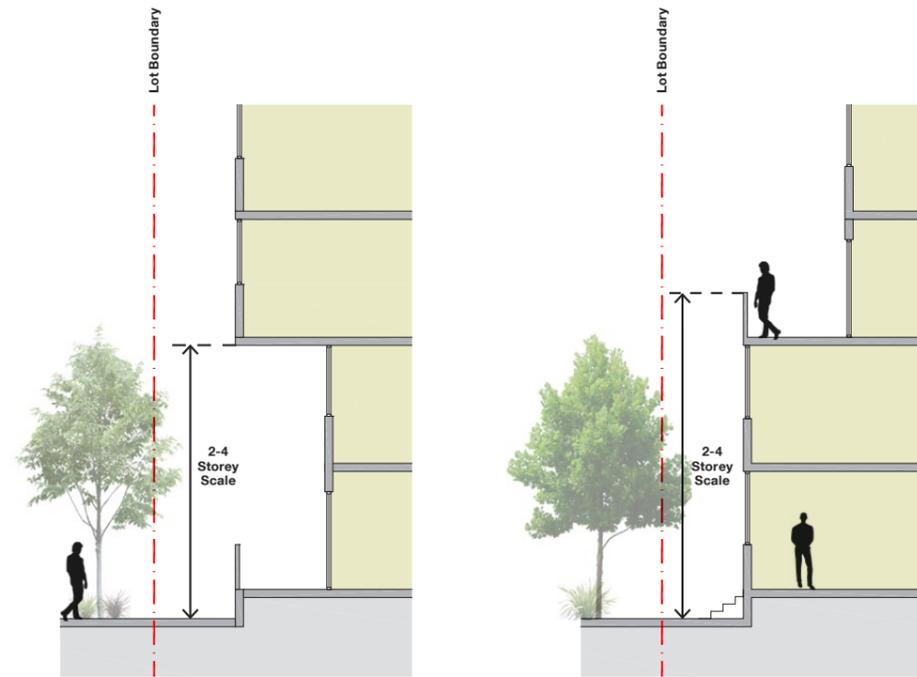
07. STREET WALL HEIGHT

OBJECTIVES

- A. To provide buildings that positively contribute to the physical definition of the public domain.
- B. To reduce the scale of buildings as perceived from the public domain.

PROVISIONS

- 1. On residential streets, buildings should express a 2-4 storey scale on the lowest levels of the building.



Residential Street

Residential Street

BATESSMART™

08. GROUND LEVEL STREET SETBACKS

OBJECTIVES

- A. To provide buildings that positively contribute to the physical definition of the public domain
- B. To transition between private and public domain without compromising safety and security
- C. To provide a landscape design which contributes to the streetscape and residential amenity

PROVISIONS

- 1. On residential streets, the lower levels of buildings can be built to the lot boundary.
- 2. On main street, the lower levels of buildings should be set back a minimum of 2m from the lot boundary on average.
- 3. On residential streets, any setback zone should be landscaped to balance street activation and residential amenity.



BATESSMART™

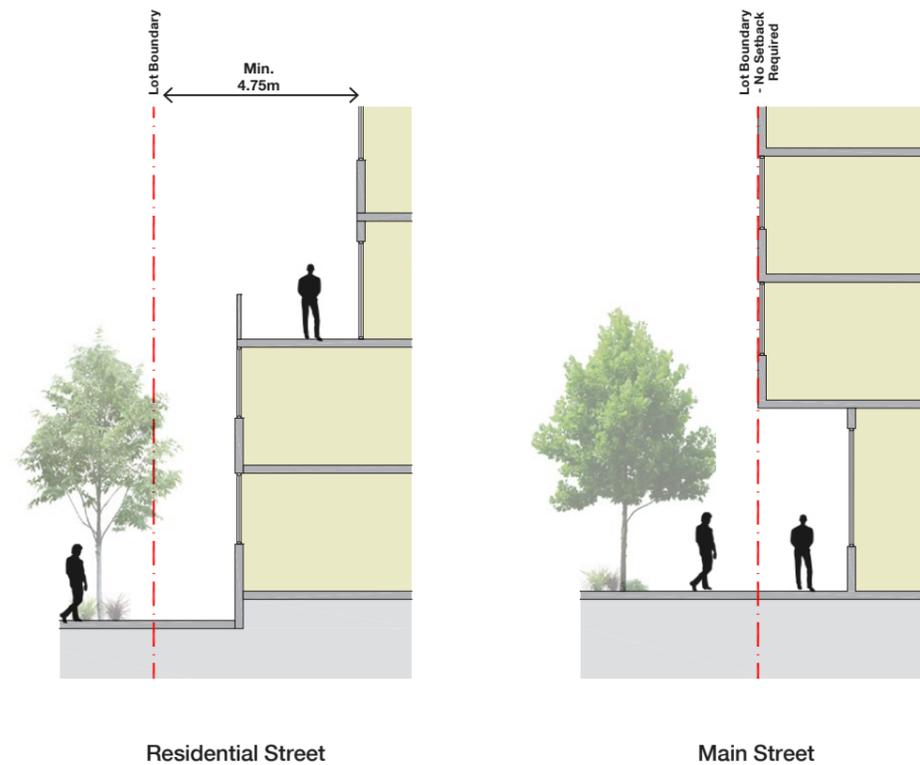
09. UPPER LEVEL SETBACKS

OBJECTIVES

- A. To reduce the scale of buildings as perceived from the public domain.
- B. To minimise the adverse wind impact of down drafts from tall buildings

PROVISIONS

- 1. On residential streets, upper floors of buildings should be set back a minimum of 4.75m from the lot boundary.
- 2. On Main Street, upper levels of buildings can be built to the lot boundary, subject to building separation requirements of SEPP65.



BATESSMART™

10. ROOFTOPS

OBJECTIVES

- A. To maximise opportunities to use roof space for residential accommodation and open space.
- B. To incorporate sustainability features into the roof design.
- C. To minimise the visual impact of roof plant.

PROVISIONS

1. Private and communal roof terraces should be provided where possible.
2. Roofs that are overlooked by other buildings should provide either communal open space or landscape planting.
3. Plant areas should be screened from view.
4. Upper level roofs should accommodate solar panels.

11. FAÇADE EXPRESSION AND MATERIALS

OBJECTIVES

- A. To define and reinforce a distinctive character within the masterplan precinct.
- B. To express building functions.
- C. To create buildings which will improve with age.

PROVISIONS

1. The lower levels of residential buildings should use masonry as the predominant facade material.
2. White render should be avoided as the primary facade material.
3. Façade materials should be self-finished, durable and low maintenance.
4. Use of colour in building façades should focus on warm, naturally occurring hues.

12. DESIGN EXCELLENCE

OBJECTIVES

- A. To ensure architectural diversity is achieved.
- B. To achieve a high standard of architectural and urban design, materials and detailing appropriate to the building type and location.
- C. To ensure the form and external appearance of the buildings improve the quality and amenity of the public domain.
- D. To ensure buildings meet sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency.

PROVISIONS

- 1. Architects should be selected from the Government Architect's 'Pre-qualification Scheme for Strategy and Design Excellence' or collaborate with a pre-qualified Architect.
- 2. No architect can design more than five blocks.
- 3. All detailed development applications should be designed in accordance with the principles of 'Better Placed'.
- 4. Each residential building will be designed to achieve a 5 Star Green Star Design & As Built rating.

13. UNIVERSAL DESIGN

OBJECTIVES

- A. Universal design features are included in apartment design to promote flexible housing for all community members.
- B. A variety of apartments with adaptable designs are provided.

PROVISIONS

- 1. 100% of social dwellings should incorporate the Liveable Housing Guideline's silver level universal design features
- 2. 5% of market and affordable dwellings should be wheelchair adaptable to meet the requirements of AS4299 Class C.