

City of Melville Local Planning Policy 4.4
Murdoch Health and Knowledge Precinct



MURDOCH HEALTH AND KNOWLEDGE PRECINCT

November 2016



LANDCORP

TABLE OF CONTENTS

TABLE OF CONTENTS	2		
PART 1 INTRODUCTION	3		
1 INTRODUCTION	4		
1.1 PROJECT VISION	4		
1.2 OBJECTIVES	4		
2 STRUCTURE AND PURPOSE	5		
2.1 PURPOSE	5		
2.2 STRUCTURE	5		
2.3 PLANNING AND POLICY	5		
3 APPROVAL PROCESS	7		
3.1 DESIGN REVIEW – PRE DEVELOPMENT APPLICATION	7		
3.2 DEVELOPMENT APPLICATION SUBMISSION	7		
3.3 DESIGN REVIEW PANEL	7		
PART 2 DESIGN REQUIREMENTS	9		
1 URBAN DESIGN	10		
1.1 DIVERSITY AND ACCESSIBILITY	10		
1.2 LAND USE AND ACTIVE EDGES	10		
1.3 PUBLIC ART	11		
1.4 SAFETY AND SURVEILLANCE	11		
1.5 ACCESS AND PARKING	12		
1.6 SIGNAGE	13		
2 BUILT FORM DESIGN	14		
2.1 PRIMARY BUILDING CONTROLS	14		
2.1.1 SETBACKS	15		
2.1.2 BUILDING LAYOUT AND ORIENTATION	15		
2.1.3 HEIGHT	15		
2.1.4 FLOOR LEVELS	15		
2.2 BUILT FORM CHARACTER	16		
2.2.1 COLONNADE	16		
2.2.2 PODIUMS	16		
2.2.3 TOWERS	16		
2.2.4 FACADES	16		
2.3 MATERIALS	17		
2.4 BUILDING ENTRANCES	17		
2.5 ROOF	17		
2.6 OUTDOOR LIVING AREAS	17		
2.7 BUILDING SERVICES	18		
2.8 BICYCLE PARKING AND END OF TRIP FACILITIES	19		
2.9 SCREENING	20		
2.10 ACOUSTICS	20		
2.11 LIGHTING	20		
2.12 CLIMATE RESPONSIVE DESIGN	21		
2.12.1 SOLAR ACCESS	21		
2.12.2 WIND	21		
3 LANDSCAPE DESIGN	22		
3.1 BIODIVERSITY AND HABITAT	22		
3.2 HARDSCAPING	22		
3.3 SOFTSCAPING	22		
3.4 WATER EFFICIENCY AND MAINTENANCE	22		
PART 3 SITE SPECIFIC REQUIREMENTS	23		



PART 1 INTRODUCTION

1 INTRODUCTION

1.1 PROJECT VISION

The vision for the Murdoch Health and Knowledge Precinct (MHKP) is to create a transit-based health and knowledge precinct that provides a range of complementary uses to the surrounding hospitals and education institutions, including; allied health, residential, office, retail and short-stay accommodation.

1.2 OBJECTIVES

COMMUNITY WELLBEING

- Create a diverse place of living, employment, amenity and leisure activity
- Provide easy and safe access to the public transport interchange
- Strengthen pedestrian and cycle connectivity to and within the precinct

DESIGN EXCELLENCE

- Create a distinctive community identity and sense of destination
- Create an exemplar Transit Oriented Development

ENVIRONMENTAL RESPONSIBILITY

- Efficiently and innovatively conserve resources on a centre-wide basis
- Protect and enhance existing environmental assets
- Lower car dependency and promote use of public transport

ECONOMIC HEALTH

- Create a vibrant precinct active at day and night, weekdays and weekends
- Provide a variety of complementary activities that support the primary health and education sectors

2 STRUCTURE AND PURPOSE

2.1 PURPOSE

Two separate documents have been prepared to guide development in the MHKP:

- i. This Local Planning Policy (LPP) is prepared in accordance with the Planning and Development (Local Planning Schemes) Regulations 2015 (the Regulations), which contains development controls for key design elements that will be administered by the City of Melville/Responsible Authority; and
- ii. The MHKP Design Guidelines which contain the design objectives, high-level design controls and design guidance to be administered by LandCorp with assistance from a Design Review Panel (DRP).

The applicant is to demonstrate that the proposal is consistent with the requirements of the LPP and Design Guidelines.

2.2 STRUCTURE

The Design Requirements in Part 2 are structured in two parts (Design Objectives and Development Controls) to assist proponents in preparing their designs and applications.

Design Objectives:

The Design Objectives outline the design intent underpinning the development controls. These Design Objectives are consistent across the LPP and Design Guidelines.

Development Controls:

The Development Controls of the LPP shall be met for all development proposals. They will collectively ensure that the Design Objectives are met. Also refer to the MHKP Design Guidelines for additional Design Controls.

Notwithstanding the above, in order to encourage innovation, applicants are also provided the opportunity to meet the objectives through alternative solutions to the satisfaction of the City of Melville, with guidance from the DRP.

2.3 PLANNING AND POLICY

This LPP has been adopted by the City of Melville under the Regulations. In determining any application for Approval to Commence Development (DA), the DRP and CoM/Responsible Authority will utilise this LPP in conjunction with the Design Guidelines, Activity Centre Structure Plan (ACSP), the Scheme and any relevant City Policy.

This LPP (and the associated Design Guidelines) supersede the Murdoch Activity Centre Mixed Use Precinct and Main Street Design Guidelines, prepared for the then Department for Planning and Infrastructure in June 2009. In the event of there being any inconsistency or conflict between any provision, requirement or standard of any Council Policy and the Design Guidelines, the LPP and Design Guidelines shall prevail.

The LPP shall be read in conjunction with:

Murdoch Health and Knowledge Precinct Design Guidelines

The Design Guidelines shall be read in conjunction with the LPP and complement the requirements of the LPP. Where the provisions of the Design Guidelines are in conflict with the LPP, the provisions of the LPP shall prevail.

City of Melville Local Planning Scheme No. 6

The MHKP is zoned 'Development' under the City of Melville Local Planning Scheme No. 6 (the Scheme). Where the provisions of the Design Guidelines are in conflict with the Scheme, the provisions of the Scheme shall prevail.

MURDOCH HEALTH AND KNOWLEDGE PRECINCT LOCAL PLANNING POLICY

Murdoch Specialised Activity Centre Structure Plan

The MHKP is included within the Murdoch Specialised Activity Centre Structure Plan (MSACSP) endorsed by the Western Australian Planning Commission (WAPC) in October 2013. The MSACSP supersedes the Murdoch Activity Centre Plan (Part A – Fiona Stanley Hospital and Health Precinct 2007).

The MSACSP is a strategic planning document to guide future development of the Murdoch Specialised Centre and should be read in conjunction with the Murdoch Mixed Use Precinct (MUP) ACSP. Where the provisions of the MSACSP are in conflict with the LPP, the provisions of the LPP shall prevail.

Murdoch Mixed Use Precinct Activity Centre Structure Plan

In accordance with the Scheme, the MHKP is also subject to the provisions of the Murdoch MUP Activity Centre Structure Plan (ACSP). The Murdoch MUP ACSP outlines the matters to be addressed by the LPP / Design Guidelines. The LPP / Design Guidelines provide greater detail than the ACSP to ensure adequate control over development to achieve quality and desirable built form outcomes.

Residential Design Codes

The requirements of the Residential Design Codes (R-Codes) apply in all respects except where modification is indicated by the LPP.

National Construction Code (NCC)

All construction shall comply with the current Building Code of Australia.

3 APPROVAL PROCESS

The process for a DA relating to all development within the MHKP is summarised in Figure 1 below. Minor modifications or changes of use for existing buildings are not subject to this approval process.

3.1 DESIGN REVIEW – PRE DEVELOPMENT APPLICATION

- Prior to lodgement of a DA, pre-application Design Guidelines review meetings will occur with the DRP. The City of Melville may participate in these meetings, if required.
- Following endorsement of the development plans, a DA can be made to the City of Melville.
- The DRP has the authority to provide endorsement for any variations to the requirements of the Design Guidelines and LPP, with final consideration and approval to be the responsibility of the City of Melville. Variations to the requirements will only be endorsed where such exemptions deliver built form design and sustainability excellence whilst still meeting the MHKP vision and objectives.

- Once the DRP has deemed the plans to substantially achieve ALL the mandatory design criteria or be satisfied with any justified variation, the plans will then be endorsed by the DRP, a final report with approval (or otherwise) letter attached and one full set returned. This written endorsement will be considered by the City of Melville in their assessment.

3.2 DEVELOPMENT APPLICATION SUBMISSION

- The applicant lodges a DA with the City of Melville with the accompanying DRP final report.
- The DA is assessed by the City of Melville (or Development Assessment Panel, if applicable) in the usual manner.

The diagram on the following page outlines the approval process required prior to any development commencing.

3.3 DESIGN REVIEW PANEL

The DRP will be specific to the Murdoch MUP and comprised of representatives from LandCorp, the City of Melville, the Office of the Government Architect, the Project Architect and other members as required. The final membership of the DRP will be determined by City of Melville and LandCorp.

MURDOCH HEALTH AND KNOWLEDGE PRECINCT
LOCAL PLANNING POLICY

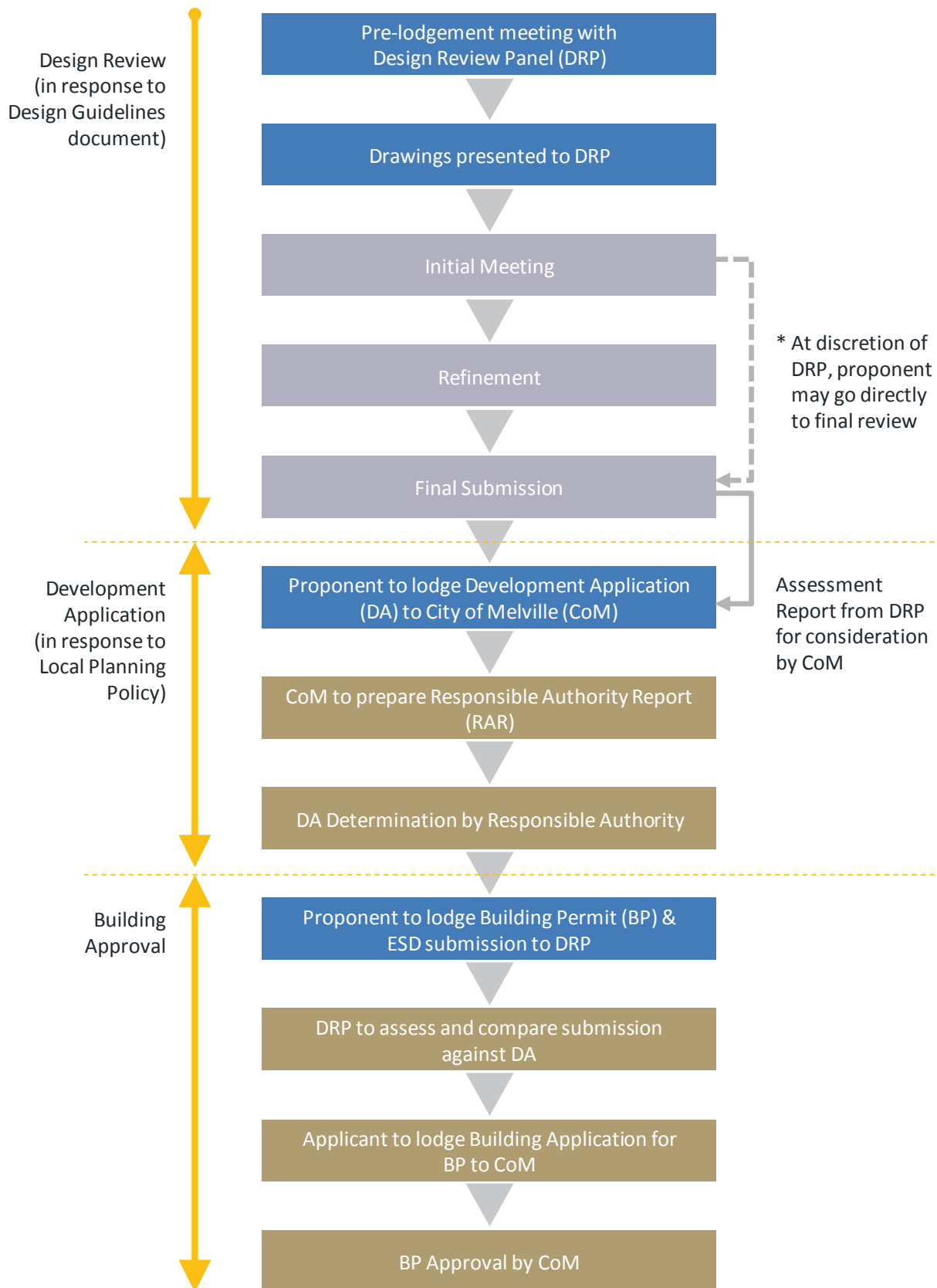


Figure 1: Approval process flowchart

PART 2 DESIGN REQUIREMENTS

1 URBAN DESIGN

1.1 DIVERSITY AND ACCESSIBILITY

Design Objective

To cater for a diverse range of residents, workers, shoppers and visitors to the precinct, with focus on accessibility and convenience.

1.2 LAND USE AND ACTIVE EDGES

The edges of all development sites have been designated as Primary, Secondary or Tertiary frontages according to Figure 2 below.

Design Objective

To create a diverse, vibrant and pedestrian-friendly precinct with a strong sense of identity and character, reinforced by land use and built form.

Development Controls

- Primary Frontages at ground level shall accommodate publicly accessible, 'active' uses as detailed within Part 3 Site Specific Requirements.
- In addition to the Primary Frontages uses, secondary frontages at ground level shall accommodate visibly active uses as detailed within Part 3 Site Specific Requirements.
- Tertiary Frontages at ground level are the only permissible locations for 'inactive' uses as detailed within Part 3 Site Specific Requirements.
- Above ground level, apartments, balconies and breakout spaces shall be located on Primary and Secondary Frontages, allowing activation and passive surveillance of the public realm as well as providing best aspect for residents and workers.

- Above ground level, Secondary and Tertiary Frontages are the only permissible locations for car parking areas and shall be screened from view or sleeved as outlined in 1.4 Access and Parking. On Primary Frontages above ground level, car parking areas shall be sleeved with an active and habitable land use such as residential or commercial.



- Primary frontages
- Secondary frontages
- Tertiary frontages

Figure 2: Development site frontages

1.3 PUBLIC ART

Design Objective

To incorporate public art which is innovative, imaginative, and thought provoking.

Development Controls

- Development proposals shall accord with the City of Melville Local Planning Policy CP-085 Provision of Public Art in Development Proposals.

1.4 SAFETY AND SURVEILLANCE

Design Objective

To maximise safety of the public realm, and create a safe and secure environment for residents, workers and visitors.

Development Controls

- Design of developments shall employ Crime Prevention through Environmental Design (CPTED) principles.
- Built form and land use shall be designed and oriented to promote passive surveillance of the public realm.
- Developments shall provide lighting, activation and surveillance of pedestrian routes at night, especially routes to/from Murdoch Station.

MURDOCH HEALTH AND KNOWLEDGE PRECINCT

LOCAL PLANNING POLICY

1.5 ACCESS AND PARKING

Design Objective

- To provide secure and clearly defined car parking for residents, workers and visitors, with the target of lowering car dependency and encouraging the use of alternative transport.
- To allow for efficient and clearly-defined movement of local, visitor and service vehicles, while minimising the impact of vehicles on the public realm.
- Residential developments shall provide direct pedestrian access to residential car parks from building foyers and individual apartment entrances.
- Vehicle access is permissible only on Tertiary Frontages. Refer to Part 3 for more detail on preferred vehicle access locations.
- A Parking Management Plan shall be submitted as part of the DA to demonstrate that all development proposals comply with the Design Objective.

Development Controls

Car parking bays shall be provided in accordance with the Murdoch MUP ACSP, summarised in the following table, taking into consideration the objectives and principles of the City of Melville Policy CP-079 Car Parking and Access, and the Murdoch Activity Centre Access and Parking Policy:

- Car parking areas shall be located at basement, ground or podium level, and either sleeved with an active and habitable use, or visually screened from view, as outlined in 1.1 Land Use and Active Edges and 2.2.4 Facades.
- Car parking areas shall be designed in accordance with AS-2890.1, to be well lit, safe and secure.
- Car parking areas shall be naturally ventilated.

LAND USE	Parking Supply Rate
Residential Tenants	<ul style="list-style-type: none"> • 1 & 2 bedroom dwellings - minimum of 1.1 parking spaces per dwelling • 3 bedroom dwellings - minimum 2 parking spaces per dwelling
Residential Visitors	<ul style="list-style-type: none"> • A minimum additional 5% of the residential tenant parking supply
Commercial and Commercial Health	<ul style="list-style-type: none"> • A maximum of 1 space per 60m² Gross Floor Area (GFA) • A minimum of 25% of the total permitted parking supply to be designated as public parking*
Hotel Accommodation Employee and Visitor	<ul style="list-style-type: none"> • A maximum of 1 space per 3 bedrooms • A minimum of 25% of the total permitted parking supply to be designated as public parking*
Large Retail (>1000m ²) Employee and Visitor	<ul style="list-style-type: none"> • A maximum of 1 space per 35m² GFA to be designated as public parking
Small Retail (<1000m ²) Employee and Visitor	<ul style="list-style-type: none"> • A maximum of 1 space per 50m² GFA to be designated as public parking
Scooter/motorbike parking bays	<ul style="list-style-type: none"> • A maximum of 1 space per 10 of the total parking bays
Small cars (as defined by AS-2890.1)	<ul style="list-style-type: none"> • A minimum of 15% of the total number of car spaces provided

*where more than 6 public parking bays are required

1.6 SIGNAGE

Design Objective

To provide clear and legible wayfinding into and within the precinct with signage that is integrated into built form and the public realm.

Development Controls

- Building and tenancy signage shall be integrated with building facades to avoid cluttering the public realm.
- Fiona Stanley Hospital (FSH) precinct signage shall be integrated into the design of Sites 1D and 7C where outlined in Part 3. Where applicable, FSH signage shall be relocated outside of the development site or integrated into built form, and shall not be retained as standalone signage within the development site. Developers shall liaise with FSH to ensure most up-to-date information.

2 BUILT FORM DESIGN

2.1 PRIMARY BUILDING CONTROLS

Design Objective

To create a sense of diversity across the precinct, to frame the public realm, and create a legible and cohesive urban form.

Development Controls

- Built form shall be oriented to address Primary and Secondary frontages. Where a development site has a Primary Frontage, the tower mass and height shall be aligned with the Primary Frontage, reinforcing the view corridors of the Boulevard and Barry Marshall Parade.
- Landmark sites shall be designed with form and character that appropriately responds to the importance of major view corridors. Landmark sites are identified in Figure 3 below. Refer to Part 3 for further detail on landmark views for each site.
- Developments shall co-ordinate with adjacent sites to create a cohesive built edge to the public realm, especially where a laneway or pedestrian arcade is shared between sites.



Figure 3: Precinct view corridors and landmark sites

2.1.1 SETBACKS

Design Objective

To establish the street proportions, streetscape character and the required separation distance between buildings in order to protect the amenity of adjoining developments and the public realm.

Development Controls

- Developments shall comply with the setback requirements outlined in Part 3.
- Small variations to setbacks to a maximum of 500mm are permitted to allow for architectural articulation of the façade.

2.1.2 BUILDING LAYOUT AND ORIENTATION

Design Objective

To optimise the built environment for occupants through building layout and orientation, considering solar access, shading and glare, ventilation, overlooking, and aspect.

2.1.3 HEIGHT

Design Objective

To create the desired character and proportions of the precinct streets, and provide appropriate density for the precinct.

Development Controls

- Maximum building heights are controlled by the restrictions of the Jandakot Aerodrome/CASA Obstacle Limitation Surface and FSH helipad. The total maximum height of any building (measured from AHD) shall be in accordance with these controls.
- Developments shall comply with minimum and maximum podium heights, and minimum tower heights, as outlined in Part 3.

- Developments on Sites 1C, 1D, 2A, 2B and 4 shall comply with the suggested maximum heights specified in Part 3, in order to achieve mandatory solar access requirements to the Conservation Area. If developers of these sites propose to exceed the suggested maximum heights, refer to 2.12.1 Solar Access for compliance demonstration requirements.

2.1.4 FLOOR LEVELS

Design Objective

To ensure floor levels and entrances to buildings appropriately interface with the ground plane where levels changes occur within sites.

Development Controls

- Ground floor levels shall be at the same level of the public realm on Primary and Secondary Frontages. Refer 1.1 Land Use and Active Edges for frontages diagram.
- Where levels vary around development sites, developments shall provide multiple entry points, split levels, and/or ramped arcades to address different public realm levels.

2.2 BUILT FORM CHARACTER

2.2.1 COLONNADE

Design Objective

To create a cohesive, consistent edge to the public realm, blur the threshold between public realm and built form, and define and frame a wider space for pedestrian movement.

Development Controls

- All Primary Frontages shall provide a colonnade zone as an extension of the public realm. The colonnade zone applies a four metre building setback at ground level and nil building setback to the site boundary at podium level. Refer to Figure 2.
- Alfresco areas, sun and wind protection, and signage shall be integrated into colonnade design to avoid cluttering the public realm.
- Paving and levels within the colonnade zone shall be consistent with the public realm.

2.2.2 PODIUMS

Design Objective

To provide human scale at street levels and above, and to break up the visual mass of development sites.

Development Controls

- Podiums shall have nil setback to the site boundary in order to frame and address the public realm. Refer also to 2.1.1 Setbacks and Part 3 Site-Specific Requirements.
- Podiums shall allow for rooftop breakout space overlooking public realm.
- If adjacent sites are amalgamated, podiums shall be visually distinct along the amalgamated boundary to break up the visual bulk of the development site.

2.2.3 TOWERS

Design Objective

To reinforce the masterplan and view corridors and to frame and address the public realm.

Development Controls

- Where a development site has a Primary Frontage, the tower mass and height shall be aligned with the Primary Frontage.
- Activated zones in towers shall address the public realm, providing activation and passive surveillance as well as allowing for best aspect.
- If adjacent sites are amalgamated, setbacks between towers shall apply as if the sites were not amalgamated, to break up the visual bulk of the development site and maintain view corridors between sites.

2.2.4 FACADES

Design Objective

To create building design of significant quality and architectural merit, that contributes to the immediate public realm and broader precinct as a whole.

Development Controls

- Primary and Secondary frontages at ground level shall be of a fine-grain scale, with multiple, clearly defined building entrances and spaces.
- Facade design shall maximise amenity and activation through provision of balconies, screening, shading, and natural ventilation. Facade screening shall balance privacy for residents with the requirement for visible activity.
- On frontages where it is permissible to locate ground- or podium-level car parking, vehicle access, loading docks and building service areas (refer 1.1 Land Use and Active Edges), these areas shall be visually screened from view, and provide an attractive and engaging interface to the public realm.

2.3 MATERIALS

Design Objective

To utilise materials of a very high quality, which are durable and appropriate to the climate and context.

Development Controls

- Materials and detailing shall be of very high quality. Use of 'faux' materials such as fake timber, stone or astroturf is not permitted.

2.4 BUILDING ENTRANCES

Design Objective

To create a defined address for buildings, which will contribute to the public realm.

Development Controls

- Foyers shall be stand-out, well-lit spaces, and provide visual interest to the public realm whether or not they are publicly accessible.
- Mailboxes, services cupboards and signage shall be fully integrated into the design of building entrances.
- Buildings shall be provided with a clear address onto one street. Provide separate 'addresses' for residential, commercial and retail areas within sites.

2.5 ROOF

Design Objective

To ensure roofs integrate into the overall design, and contribute to the activation of the built form both aesthetically and functionally.

Development Controls

- Building services and sustainability elements shall be incorporated into the roof design and concealed from view.

2.6 OUTDOOR LIVING AREAS

Design Objective

To create outdoor environments that provide amenity, activate the public realm, and add a diversity of spaces to the built form.

Development Controls

- Communal outdoor areas shall be located on Primary and Secondary frontages.
- Residential developments shall provide a communal outdoor garden for residents at a minimum of size of 15% of the lot area, at podium or rooftop level, incorporating deep planting zones (refer to 3.3 Softscaping) shelter, and allowance for a mix of active and passive recreational uses.
- Residential developments shall provide each dwelling with a private outdoor living area accessed directly from a habitable room with a minimum area of 10m² and a minimum dimension of 2.4m.

2.7 BUILDING SERVICES

Design Objective

To ensure services are hidden and integrated into the built form to minimise the impact of services on the public realm.

Development Controls

- Loading areas, service areas and waste storage shall be visually integrated within built form or streetscape, and screened to prevent visual, noise and odour intrusions.
- Services and plant equipment shall not be visible from the public realm or above the roofline of buildings. 'Feature' sustainability initiatives may be considered if proven to enhance the public realm.
- Air-conditioning units or condensers shall not be located on balconies unless screened from view and in addition to balcony minimum dimensional requirements as per 2.6 Outdoor Living Areas.
- An integrated Waste Management Strategy (WMS) shall be prepared in consultation with the City of Melville. The WMS shall address coordination of the movement of service vehicles and the management of service areas and refuse collection to minimise impact on the public realm.
- Waste collection and management shall accord with the City of Melville Local Planning Policy CP-090 Waste and Recyclables Collection for Multiple Dwellings, Mixed Use Developments and Non-Residential Developments.
- Drying areas shall be screened from view.
- Residential developments shall provide each dwelling with an enclosed, lockable storage area accessible from outside the dwelling, with a minimum area of 4m² and a minimum dimension of 1.5m. Storage areas shall not be visible from the public realm.

2.8 BICYCLE PARKING AND END OF TRIP FACILITIES

Design Objective

To encourage use of alternative transport by providing end-of-trip facilities and safe and secure bicycle parking.

Development Controls

- Secure bicycle parking and end-of-trip facilities shall be provided in accordance with the Murdoch Mixed Use Precinct Parking Strategy, summarised in the following table:

Land Use	Minimum Supply
Residential	1 bicycle park per 4 dwellings
Residential visitor	1 space per 16 dwellings
Commercial	1 space per 200m ² of GFA
Large Retail (>1000 m ²)	1 space per 300m ² GFA for employees; and 1 space per 200m ² GFA for visitors
Small Retail (<1000 m ²)	Cafe: 1 space per 25m ² GFA for employees and 2 spaces for visitors Restaurant: 1 space per 100m ² GFA and 2 spaces for visitors Take-away food outlet: 1 space per 100m ² GFA for employees and 1 space per 200m ² GFA for visitors All other small retail: 1 space per 200m ² GFA for employees; and 1 space per 200 square metres GFA for visitors
Hotel Accommodations	1 bicycle park per 40 units
End of Trip Facilities (excludes residential uses)	Developments required to provide 10 or more bicycle parking bays must also provide: <ul style="list-style-type: none"> A minimum of one female shower and one male shower, located in separate change rooms Additional shower facilities at a rate of one female shower and one male shower for every additional 10 bicycle parking bays, to a maximum of 5 female and 5 male showers per development. A locker for every bicycle parking bay provided.

- Bicycle parking facilities shall be designed, located and constructed in accordance with AS-2890.3 Bicycle Parking Facilities.
- Changing rooms shall be designed as secure lockable facilities, located adjacent to the showers in a well-lit area which is capable of easy passive surveillance.

2.9 SCREENING

Design Objective

To provide screening of significant design and material quality, which contributes to the public realm and precinct and enables surveillance of the public realm.

Development Controls

- Private courtyards for ground-level dwellings along Primary and Secondary Frontages shall be screened with fencing at least 50% visually permeable and no more than 1.5 m high when measured from the public realm level.
- Front fencing shall be designed to complement the built form design.
- Colorbond and super six style fencing is not permitted.

2.10 ACOUSTICS

Design Objective

To minimise the acoustic impact of development on adjacent buildings, and to provide acoustic protection against external noise for occupants.

Development Controls

- Prior to submission of a DA, an acoustic assessment shall be prepared for buildings affected by noise from surrounding roads as identified in Aecom's Noise Assessment (dated 29 October 2012). Refer to Part 3 for more detail.

2.11 LIGHTING

Design Objective

To provide lighting which does not negatively impact on the public realm or adjacent developments.

Development Controls

- All outdoor lighting shall be directed downwards with no light spill above the horizontal plane.
- Front outdoor/security lights shall be operated via a timed sensor with manual over-ride.
- Rear outdoor areas adjacent to laneways shall be well lit and incorporate motion activated light fittings.

2.12 CLIMATE RESPONSIVE DESIGN

Design Objective

To provide high-quality, efficient buildings that achieve the precinct objectives of integrated sustainable development.

Development Controls

- Developments shall achieve a minimum 'Australian Excellence' Green Star rating. This shall be demonstrated at DA stage and post-construction.
- Developments shall integrate environmental sustainability initiatives to create 'Design that is Sustainable, not Sustainable Design'. Alternative proposals for 'feature' sustainability initiatives may be considered if they are proven to enhance the public realm.

2.12.1 SOLAR ACCESS

Design Objective

To minimise the impact of development on solar access to the public realm and development sites, and to achieve mandatory sunlight requirements to the Conservation Area.

Development Controls

- If developments on Sites 1C, 1D, 2A, 2B or 4 are proposed to exceed the suggested maximum heights specified in Part 3, developers shall provide a solar modelling report at DA stage that demonstrates that the additional height does not impact negatively on the Conservation Area. Specifically, the report shall demonstrate that at least 95% of the Conservation Area receives at least 50% of available sunlight at all times of the year, assuming that all undeveloped sites are developed to their suggested maximums.

- Built form shall provide shade to a minimum depth of 2m of the public realm adjacent to Primary and Secondary frontages, at midday in summer months. Shade may be provided by a variety of elements such as colonnades, cantilevers, integrated canopies or balconies.
- Solar access modelling shall be provided at DA stage to assess overshadowing performance of building design proposals.

2.12.2 WIND

Design Objective

To minimise the impact of wind on the public realm and development sites.

Development Controls

- Built form shall be designed to achieve acceptable environmental wind conditions in the public realm in accordance with the following table:

Primary Frontages	Acceptable for stationary long term activities: Primary Peak gust speed during the hourly mean with a Frontages probability of exceedance of 0.1% in any 22.5o wind direction sector does not exceed 10 m/s.
Secondary & Tertiary Frontages	Acceptable for walking: peak gust speed during the hourly mean with a probability of exceedance of 0.1% in any 22.5o wind direction sector does not exceed 23 m/s.

- Built form shall incorporate setbacks, articulation and aerodynamic forms to minimise impact of wind on the public realm and adjacent development sites, especially retail frontages, alfresco areas, private and communal outdoor areas, and rooftop gardens.
- Wind modelling shall be provided at DA stage to assess wind performance of building design proposals.

3 LANDSCAPE DESIGN

Design Objective

To provide functional, sustainable landscape that is cohesive with and enhances the overall precinct, encourages interaction with the natural environment, and increases biodiversity and habitat for native fauna.

3.1 BIODIVERSITY AND HABITAT

Design Objective

To create a landscape that enhances the biodiversity and habitat values of the precinct.

Development Controls

- In accordance with the Environmental Protection and Biodiversity Conservation Act, all soft landscaping (communal and private) shall be planted with at least 70% native species, with at least 50% either species found in the project area or other native species suitable for foraging by Carnaby's Black Cockatoo. This provision excludes turfed areas.

3.2 HARDSCAPING

Design Objective

To create attractive hardscaped areas that present a landscape character that complements the wider public realm aesthetic.

Development Controls

- Hardscaping which is contiguous with the public realm at ground level shall use similar or complementary materials of an equivalent quality.

3.3 SOFTSCAPING

Design Objective

To improve residential amenity, local microclimate and promote management of water and air quality through the growth of healthy trees in deep root zones.

Development Controls

- Residential developments shall incorporate deep planting zones for small trees, located in the communal outdoor garden, at a minimum size of 4% of the lot area and a minimum soil depth of 450mm.
- Deep planting zones shall be located at podium or rooftop level.

3.4 WATER EFFICIENCY AND MAINTENANCE

Design Objective

To maximise opportunities for efficient use of water through best practice design.

Development Controls

- A Landscape and Irrigation Plan shall be provided as part of the Landscape Plan for Building Approval to assess suitability and water efficiency of proposed designs.
- Water efficient in-line drip irrigation shall be installed for all garden beds. Spray irrigation may be used on turf areas only.
- Private water bores are not permitted.

PART 3 SITE SPECIFIC REQUIREMENTS

1 ABOUT THIS SECTION

This section covers specific detail in how Objectives are met. The specific guidelines define the development requirements for each individual site, including land use, setbacks and minimum building height. It is mandatory to meet Specific Building Requirements.



Figure 4: Site Plan showing indicative development sites

SITE SPECIFIC REQUIREMENTS

Site 1A

Development Intent

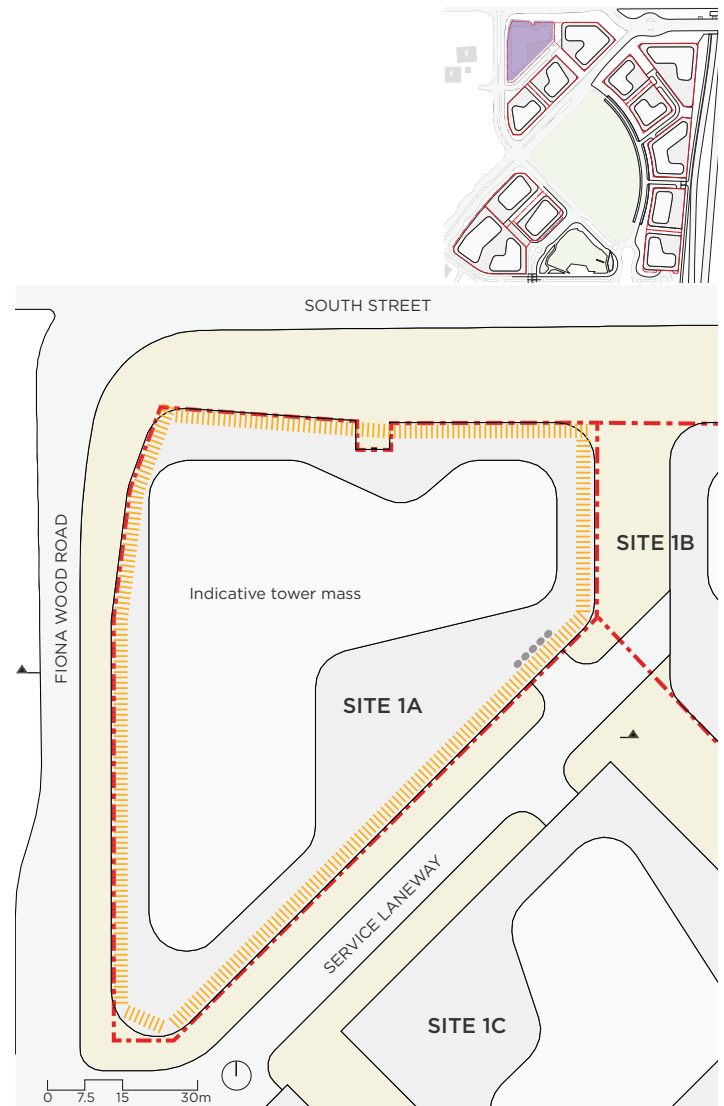
Site 1A is located in the South Street Precinct, at the north-west corner of the MHKP. It may be amalgamated with Site 1B. Site 1A has frontages to South Street to the north, and Fiona Wood Road to the west. Vehicle access is off the service laneway to the south.

Fiona Wood Road North is the main vehicle entry into the MHKP for people arriving from the north and the east. This is also the main route for people accessing Fiona Stanley Hospital and the wider health and education precincts from the north and east. With such high visibility, Site 1A is well suited to a major commercial development.

It is crucial that the design of this development respond appropriately to the importance of this location, and that it reinforces the identity of MHKP as distinct from the buildings of the surrounding area.

Specific Building Requirements

- Landmark design response to precinct entry location.
- Align tower height and mass with South Street and/or Fiona Wood Road North.
- There is the potential for transport noise from South Street to impact on noise levels. If residential development is proposed for this site, 'quiet house' design responses may be required to achieve internal noise levels for north-facing apartments. Development Applications shall be accompanied by an acoustic report addressing all relevant requirements.



LEGEND

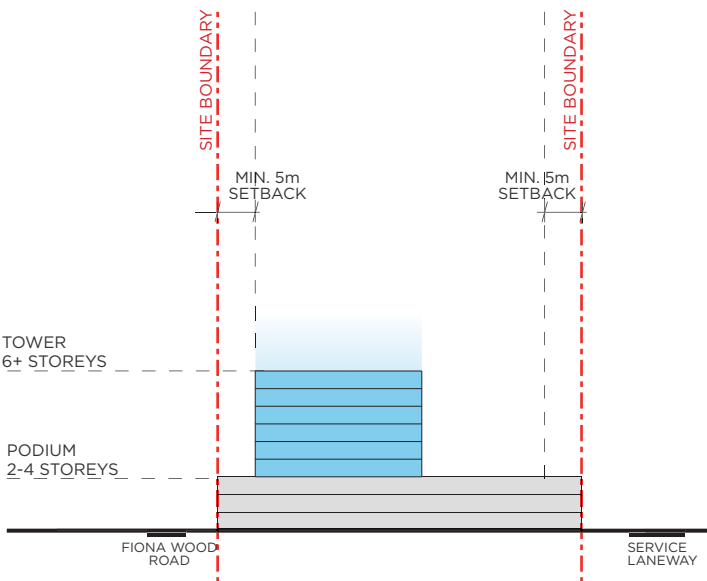
- ||||| Tertiary frontages
- Vehicle access
- .-.- Site boundary

PREFERRED USES

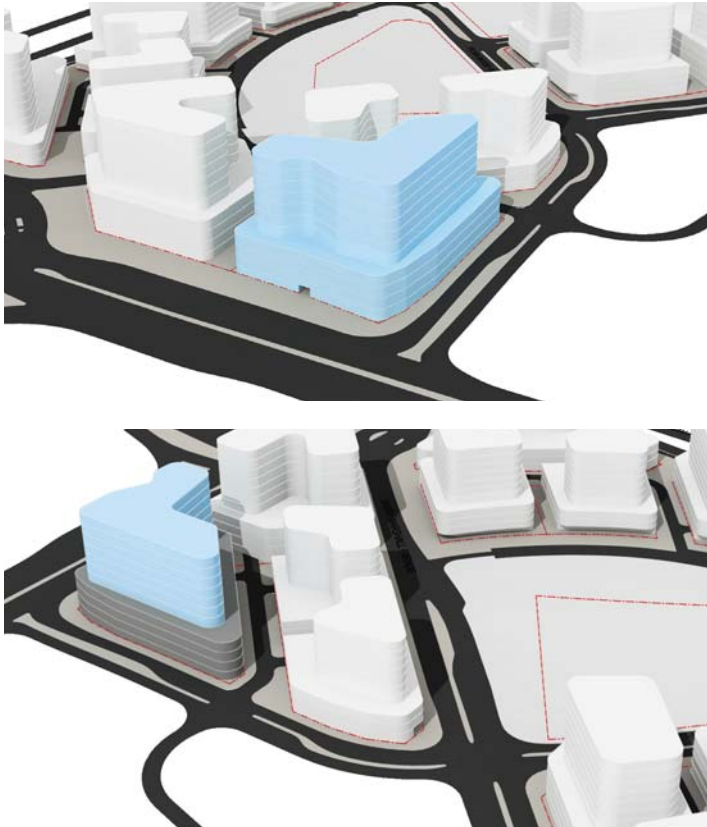
- Office
- Carpark

MURDOCH HEALTH AND KNOWLEDGE PRECINCT

LOCAL PLANNING POLICY



SECTION THROUGH SITE 1A



Site Area (subject to survey)	3,623 m ² Delivery as 1 site, or amalgamated with Site 1B
Preferred Land Uses, Ground Level	Shops, supermarket, food & beverage, small office, foyers
Preferred Land Uses, Podium Levels	Office, residential, serviced apartments, hotel
Preferred Land Uses, Tower Levels	Office, residential, serviced apartments, hotel
Vehicle and Service Access	Laneway to south
Building Heights, Podium	Minimum 2 storeys Maximum 4 storeys
Building Heights, Tower (including Podium)	Minimum 6 storeys
Setbacks, Ground Level	Mandatory 0-4m setback to all boundaries
Setbacks, Podium Levels	Mandatory 0m setback to all boundaries
Setbacks, Tower Levels	Minimum 5m setback to all boundaries
Minimum Residential Dwellings, Hotel Rooms or Serviced Apartments	0
Minimum Sustainability Rating	‘Australian Excellence’ Green Star

SITE SPECIFIC REQUIREMENTS

Site 1B

Development Intent

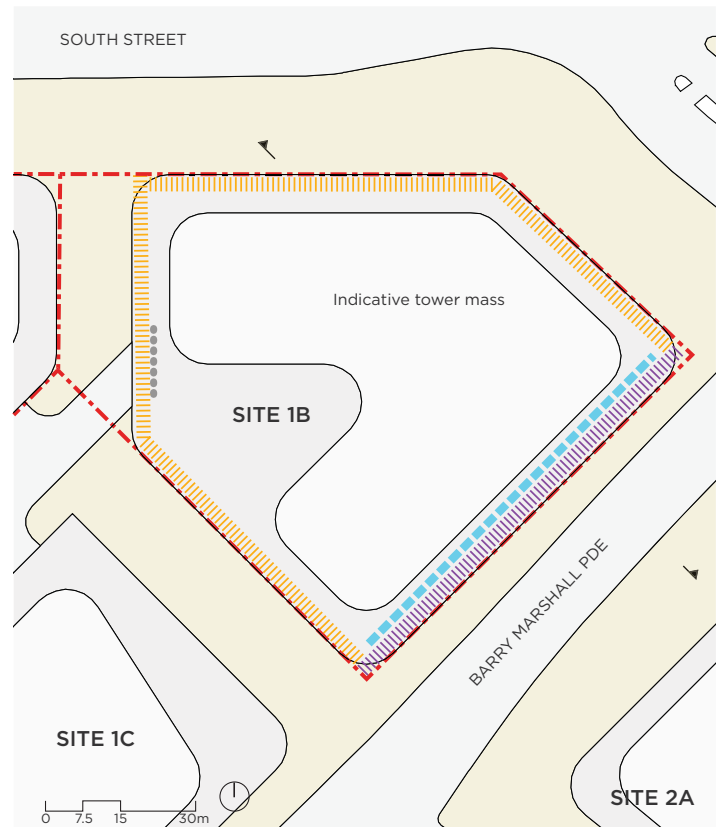
Site 1B is located in the South Street Precinct. It may be amalgamated with Site 1A. Site 1B has frontages to South Street to the north, and the bus-only portion of Barry Marshall Parade to the south-east. Vehicle access is off the service laneway to the west.

Barry Marshall Parade is a major pedestrian route linking Murdoch Station and the wider precinct. The ground floor of Site 1B is a prime location for retail and food & beverage activation on this frontage.

Site 1B is highly visible to people entering the precinct from Murdoch Station, as well as those passing on South Street, making it an ideal location for commercial development. The built form will reinforce the major view corridor of Barry Marshall Parade, and reinforce the identity of MHKP as distinct from the buildings of the surrounding area.

Specific Building Requirements

- Align tower height and mass with Barry Marshall Parade.
- There is the potential for transport noise from South Street and Murdoch Station to impact on noise levels. If residential development is proposed for this site, 'quiet house' design responses may be required to achieve internal noise levels for north-facing apartments. Development Applications shall be accompanied by an acoustic report addressing all relevant requirements.



LEGEND

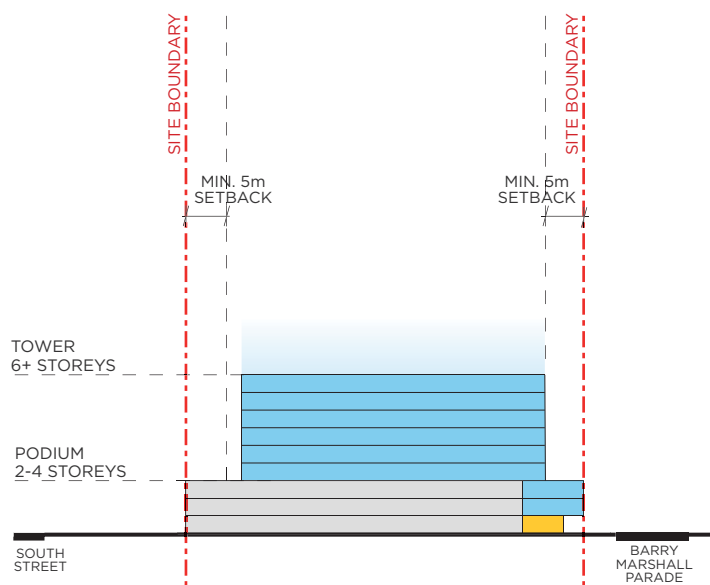
- Secondary frontages
- Tertiary frontages
- Ground level 4m colonnade
- Vehicle access
- Site boundary

PREFERRED USES

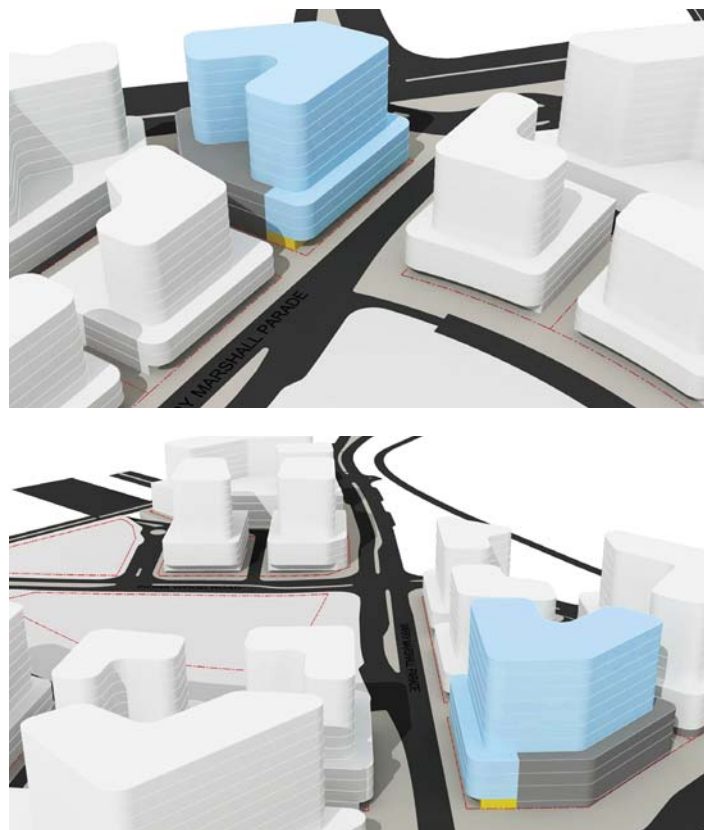
- Shop, Convenience Store, Corner Store, Restaurant
- Office
- Carpark

MURDOCH HEALTH AND KNOWLEDGE PRECINCT

LOCAL PLANNING POLICY



SECTION THROUGH SITE 1B



Site Area (subject to survey)	3,545 m ² Delivery as 1 site, or amalgamated with Site 1A
Preferred Land Uses, Ground Level	Shops, supermarket, food & beverage, small office, foyers
Preferred Land Uses, Podium Levels	Office, residential, serviced apartments, hotel
Preferred Land Uses, Tower Levels	Office, residential, serviced apartments, hotel
Vehicle and Service Access	Laneway to west
Building Heights, Podium	Minimum 2 storeys Maximum 4 storeys
Building Heights, Tower (including Podium)	Minimum 6 storeys
Setbacks, Ground Level	Mandatory 10m setback to west boundary, unless amalgamated with Site 1A Mandatory 0-4m setback to all other boundaries
Setbacks, Podium Levels	Mandatory 10m setback to west boundary, unless amalgamated with Site 1A Mandatory 0m setback to all other boundaries
Setbacks, Tower Levels	Minimum 10m setback to west boundary Minimum 5m setback to all other boundaries
Minimum Residential Dwellings, Hotel Rooms or Serviced Apartments	0
Minimum Sustainability Rating	'Australian Excellence' Green Star

SITE SPECIFIC REQUIREMENTS

Sites 1C & 1D

Development Intent

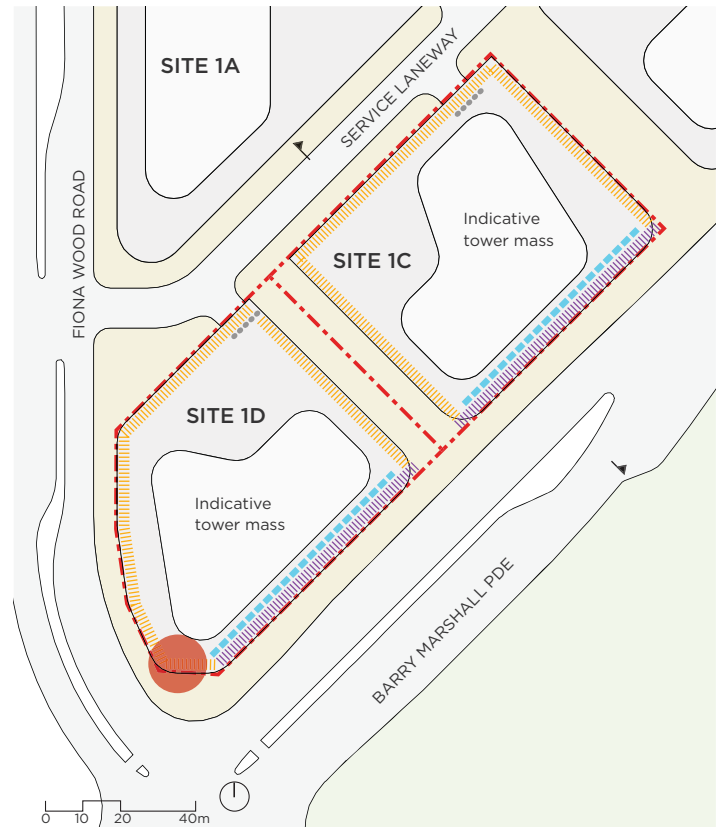
Sites 1C and 1D are located in the South Street Precinct, and may be delivered individually or amalgamated. The sites have frontages to Barry Marshall Parade to the south-east, and Fiona Wood Road North to the west. Vehicle access is off the service laneway to the north-west.

The intersection of Barry Marshall Parade and Fiona Wood Road is a major thoroughfare for people accessing MHKP, Fiona Stanley Hospital, and the wider health and education precincts, whether by car, bus, bicycle or on foot. It is crucial that the design of Site 1D responds appropriately to the importance of this landmark location.

Barry Marshall Parade is a major pedestrian route linking Murdoch Station and the wider precinct. The ground floor of the development will allow for future retail activation on this frontage. The podium and tower above will reinforce the major view corridor of Barry Marshall Parade, while affording maximum views over the POS and conservation area.

Specific Building Requirements

- Landmark design response to major intersection.
- Align tower height and mass with Barry Marshall Parade.
- Relocate or incorporate FSH signage into Site 1D. Refer to 1.6 Signage for more detail.
- If total building height exceeds 39m (measured from natural ground level), a solar modelling report is required at Development Application stage that demonstrates that the additional height does not impact negatively on the Conservation Area, as outlined in 2.12.1 Solar Access.



LEGEND

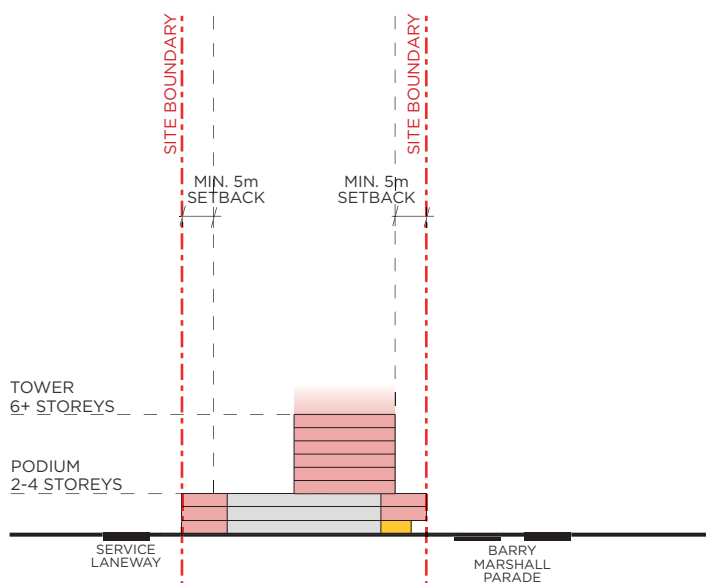
- Secondary frontages
- Tertiary frontages
- Ground level 4m colonnade
- Vehicle access
- Site boundary
- FSH signage

PREFERRED USES

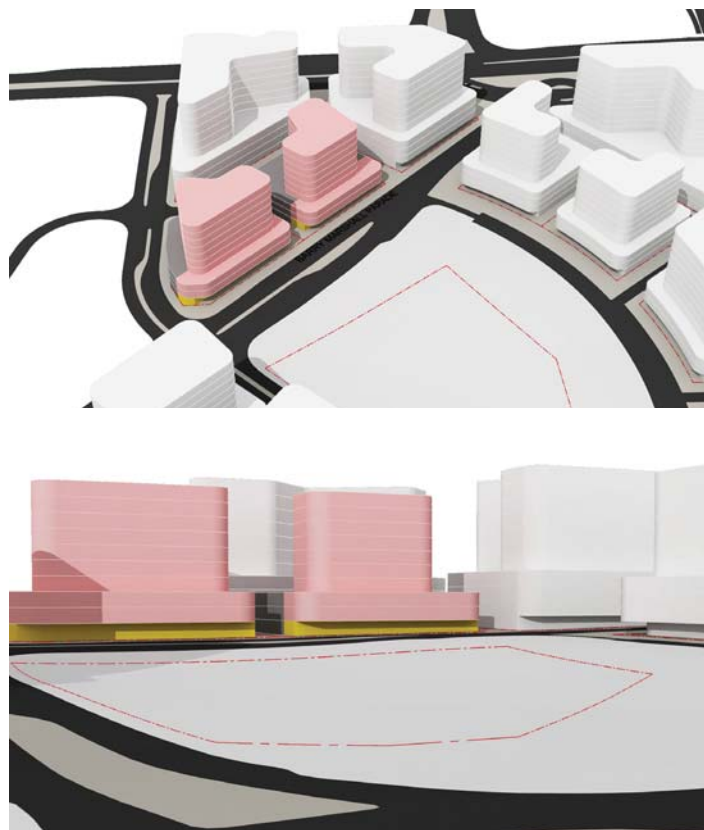
- Residential
- Shop, Convenience Store, Corner Store, Restaurant
- Carpark

MURDOCH HEALTH AND KNOWLEDGE PRECINCT

LOCAL PLANNING POLICY



SECTION THROUGH SITE 1C



Site Area (subject to survey)	Site 1C: 2,383 m ² Site 1D: 2,324m ² Delivery as 1 or 2 separate sites
Preferred Land Uses, Ground Level	Shops, supermarket, food & beverage, small office, foyers, residential
Preferred Land Uses, Podium Levels	Residential, serviced apartments, hotel, office
Preferred Land Uses, Tower Levels	Residential, serviced apartments, hotel, office
Vehicle and Service Access	Laneway to north-west
Building Heights, Podium	Minimum 2 storeys Maximum 4 storeys
Building Heights, Tower (including Podium)	Minimum 6 storeys 39m suggested maximum to avoid overshadowing Conservation Area
Setbacks, Ground Level	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0-4m setback to all other boundaries
Setbacks, Podium Levels	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0m setback to all other boundaries.
Setbacks, Tower Levels	Minimum 10m setback to shared boundary Minimum 5m setback to all other boundaries
Minimum Residential Dwellings, Hotel Rooms or Serviced Apartments	Site 1C: 56 Site 1D: 59
Minimum Sustainability Rating	'Australian Excellence' Green Star

SITE SPECIFIC REQUIREMENTS

Sites 7A & 7B

Development Intent

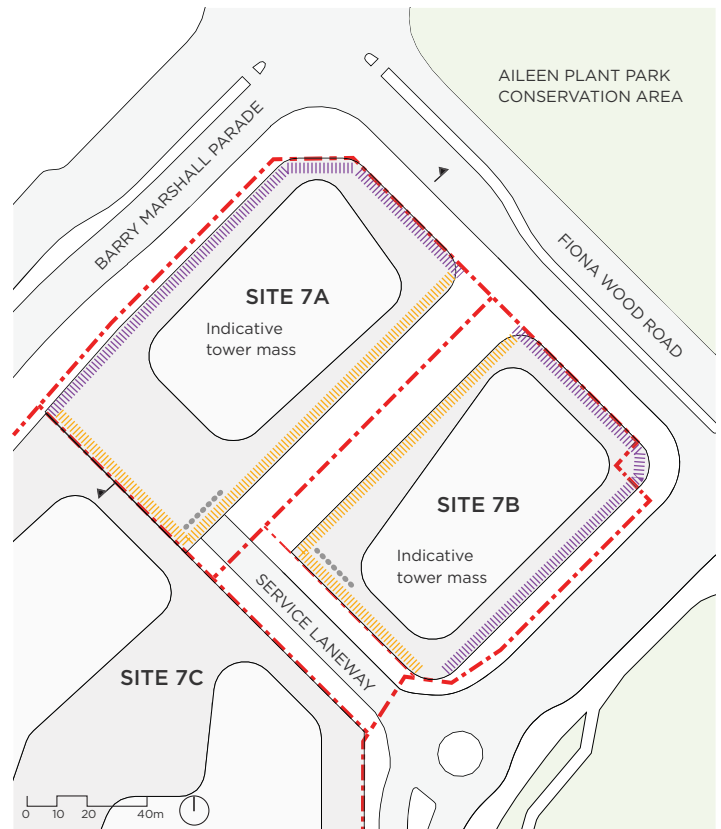
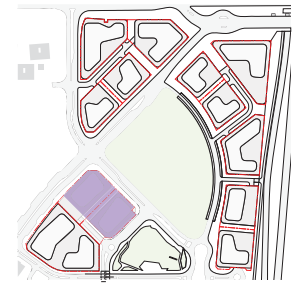
Sites 7A and 7B are located in the Health Precinct, and may be delivered individually, amalgamated, or as part of a Site 7 superlot. The sites have frontages to Barry Marshall Parade to the north-west, Fiona Wood Road to the north-east, and Yubarl Lane to the south-east. Vehicle access is off the service laneway to the south.

The intersection of Barry Marshall Parade and Fiona Wood Road is a major thoroughfare for people accessing MHKP, Fiona Stanley Hospital, and the wider health and education precincts, whether by car, bus, bicycle or on foot. It is crucial that the design of Site 7A responds appropriately to the importance of this landmark location.

Barry Marshall Parade is a major pedestrian route linking Murdoch Station with Fiona Stanley Hospital and the wider precinct. Yubarl Lane runs under Bedbrook Row, and is the main entry to the Fiona Stanley Hospital bicycle store and end-of-trip facilities. Sites 7A and 7B are therefore prime locations for retail, food & beverage, or a small supermarket to attract passing commuters.

Specific Building Requirements

- Landmark design response to major intersection.
- Align tower height and mass with Barry Marshall Parade, Fiona Wood Road and/or Yubarl Lane.



||||| Secondary frontages

||||| Tertiary frontages

●●● Vehicle access

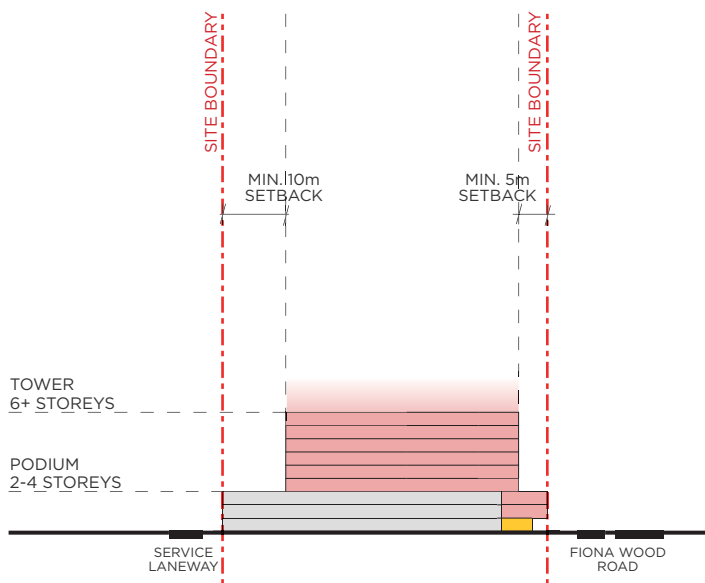
--- Site boundary

PREFERRED USES

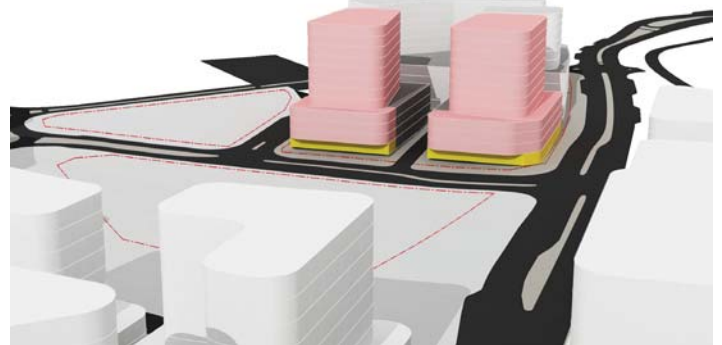
Residential

Shop, Convenience Store, Corner Store, Restaurant

Carpark



SECTION THROUGH SITE 7B



Site Area (subject to survey)	Site 7A: 3,059 m ² Site 7B: 2,965 m ² Delivery as 1 or 2 separate sites, or a Site 7 superlot
Preferred Land Uses, Ground Level	Shops, supermarket, food & beverage, small office, health services, foyers, residential
Preferred Land Uses, Podium Levels	Residential, serviced apartments, hotel, office, health services
Preferred Land Uses, Tower Levels	Residential, serviced apartments, hotel, office, health services
Vehicle and Service Access	Laneway to south
Building Heights, Podium	Minimum 2 storeys Maximum 4 storeys
Building Heights, Tower (including Podium)	Minimum 6 storeys
Setbacks, Ground Level	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0-4m setback to all other boundaries Note that Site 7C is permitted to develop up to shared boundary with 7A
Setbacks, Podium Levels	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0m setback to all other boundaries Note that Site 7C is permitted to develop up to shared boundary with 7A
Setbacks, Tower Levels	Minimum 10m setback to shared boundary Minimum 10m setback to Barry Marshall Parade boundary Minimum 5m setback to all other boundaries
Minimum Residential Dwellings, Hotel Rooms or Serviced Apartments	Site 7A: 63 Site 7B: 63
Minimum Sustainability Rating	'Australian Excellence' Green Star

SITE SPECIFIC REQUIREMENTS

Site 7C

Development Intent

Site 7C is located in the Health Precinct, at the south-western corner of MHKP. The sites have frontages to Barry Marshall Parade to the west, Bedbrook Row to the south, and Yubarl Lane to the south-east. Service vehicles access via Yubarl Lane, while all other vehicles access via Bedbrook Row. There is a 5.5m difference in the topography between Bedbrook Row and Yubarl Lane, requiring ramping from the Bedbrook Row entrance to a basement carpark to Site 7C.

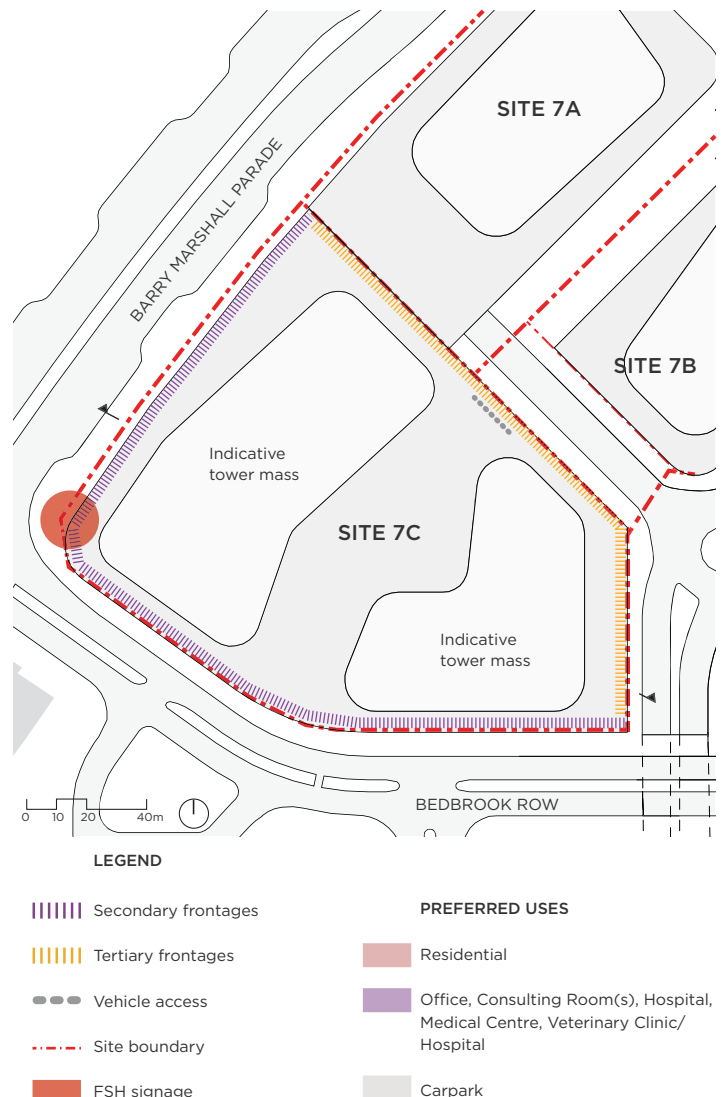
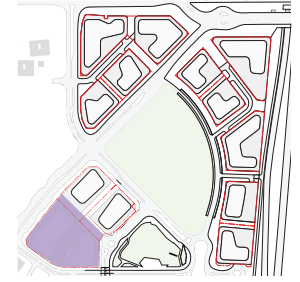
Site 7C is located at the intersection of two major view corridors into the MKHP. The developments will act as landmarks for people entering the precinct from Barry Marshall Parade or Bedbrook Row. It is crucial that the design of this development responds appropriately to the importance of these view corridors.

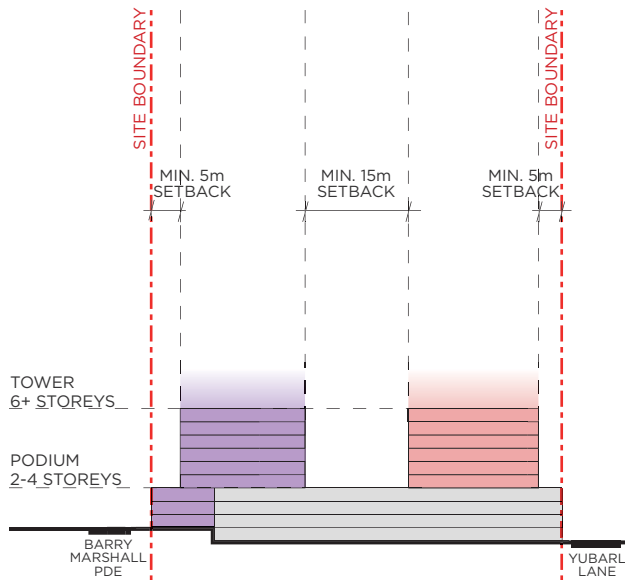
The site is adjacent to the main entry of Fiona Stanley Hospital (across Bedbrook Row), and the newest wing of St John of God Hospital (across Barry Marshall Parade). The design of the developments must reinforce the identity of MHKP as distinct from the buildings of the hospital precincts.

The adjacency to the two hospitals makes Site 7C an ideal location for health-support services. In addition, they are prime locations for retail, food & beverage, or a small supermarket to attract pedestrians travelling to or from Murdoch Station via Barry Marshall Parade, or cyclists accessing the main entry to Fiona Stanley Hospital bicycle store and end-of-trip facilities off Yubarl Lane.

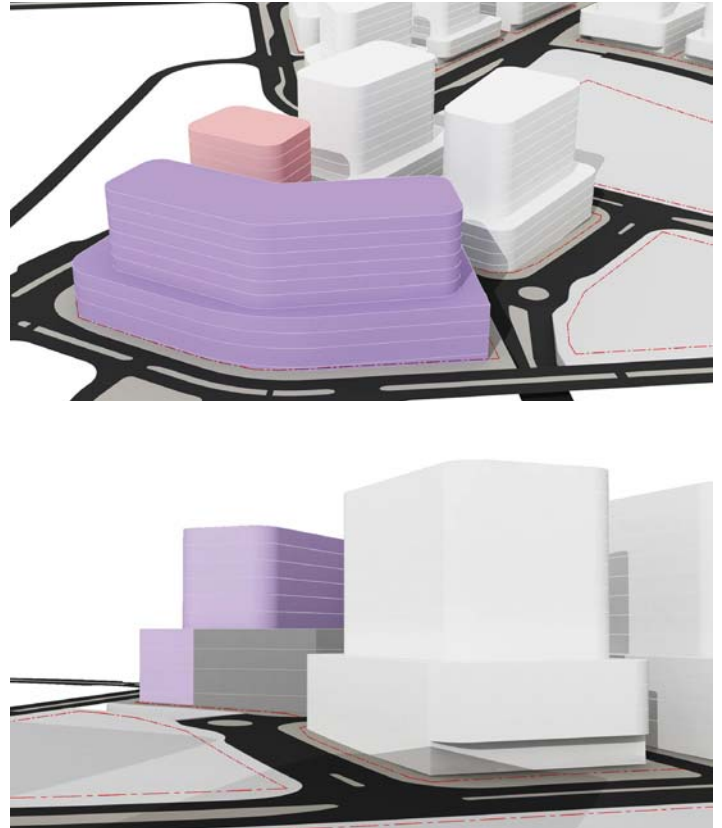
Specific Building Requirements

- Landmark design response to view corridors.
- Align tower height and mass with Barry Marshall Parade and/or Bedbrook Row.
- Relocate or incorporate FSH signage into Site 7C. Refer to 1.6 Signage for more detail.





SECTION THROUGH SITE 7C



Site Area (subject to survey)	Site 7C: 5,956 m ² Delivery as 1 site, or a Site 7 superlot
Preferred Land Uses, Ground Level	Shops, supermarket, food & beverage, small office, health services, foyers, residential
Preferred Land Uses, Podium Levels	Residential, serviced apartments, hotel, office, health services
Preferred Land Uses, Tower Levels	Residential, serviced apartments, hotel, office, health services
Vehicle/Service Access	Bedbrook Row/Yubarl Lane
Building Heights, Podium	Minimum 2 storeys Maximum 4 storeys
Building Heights, Tower (inc. Podium)	Minimum 6 storeys
Setbacks, Ground Level	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0-4m setback to all other boundaries
Setbacks, Podium Levels	Mandatory 5m setback each side of shared boundary, unless amalgamated Mandatory 0m setback to all other boundaries
Setbacks, Tower Levels	Minimum 10m setback to shared boundaries Minimum 10m setback to Barry Marshall Parade boundary Minimum 5m setback to all other boundaries
Minimum Residential Dwellings, Hotel Rooms or Serviced Apartments	79
Minimum Sustainability Rating	'Australian Excellence' Green Star