

Sydney Olympic Park Master Plan 2030 (Interim Metro Review)

Urban Design Report

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COX

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Introduction

Purpose of the Report

The New South Wales (NSW) Government has nominated a location for a Sydney Olympic Park metro station on the Sydney Metro West (SMW) alignment.

This nomination has afforded a whole-of-government opportunity to explore a potential revision to the Central Precinct that achieves the best solution for the broader Sydney Olympic Park Precinct and responds to the significant, catalytic opportunity afforded by SMW and the enhanced levels of accessibility and amenity that it provides.

In addition, engagement with Sydney Metro has provided the Sydney Olympic Park Authority (SOPA) an opportunity to inform the location and configuration of the Sydney Olympic Park station to deliver the precinct-specific transport integration and operation outcomes that Sydney Olympic Park requires for both event mode and everyday mode.

The report is the culmination of the initial stages of the engagement process between SMW and SOPA and the preliminary assessment of the impacts that the preferred station location may have on the Master Plan 2030 (2018 Review).

The purpose of this report is to provide the urban design assessment and recommendations to support the Master Plan 2030 (Interim Metro Review) amendments for only those areas within the Central Precinct that are directly impacted by the location and integrated station development.

This Urban Design Report seeks to:

- Outline urban design principles that will underpin the proposed development including how Country has been embedded;
- Provide a site and context analysis that identifies strategic context, opportunities and constraints to be considered;
- Demonstrate that the proposed Gross Floor Area (GFA) can achieve high quality place outcomes;
- Propose maximum building heights, building envelopes, floor space ratio controls, shadow studies and draft development controls;
- Propose an indicative staging strategy that identifies how staging may occur; and
- Assess impacts on views to significant spaces and landmark structures.

Starting with Country

SOPA engaged Bangawarra to work with the team to provide designing with Country themes for the Master Plan (Interim Metro Review). The following text has been referenced from the Bangawarra Report, *Bangawarra Connecting with Country Master Plan Themes 2021*.

Connecting with Country Vision

Sydney Olympic Park holds cultural significance for all of the Aboriginal peoples of the region as a place to come together to care for Country and culture. The contemporary Park nurtures the thriving mangrove and threatened ecological systems of Country amongst the emerging built environment.

The future of this place celebrates an ecologically-rich centre, unique to Sydney, that draws knowledges of Country and viable, connected ecosystems through the Master Plan.

A ceremonial heart of the precinct echoes the enduring spirit of Country, as the place people come together peacefully to enact culture and share the benefits of caring for all aspects of Country.

- Bangawarra Connecting with Country Master Plan Themes 2021



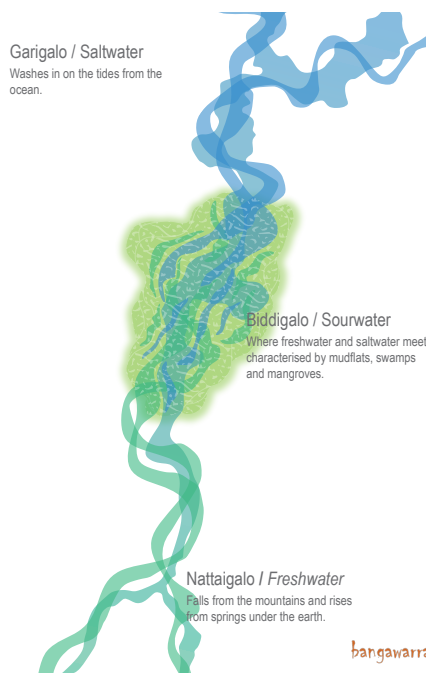
Mangroves

Source: Bangawarra Connecting with Country Master Plan Themes 2021

The Spirit of Water Country

Sydney Olympic Park has been known for millennia as a place where two waters and many different ecologies meet. Garigalo (saltwater) washes in on the tides from the ocean and meets Nattaigalo (freshwater) that falls from the mountains. Where these two waters meet, Biddigalo (sourwater) is created which is characterised by mudflats, swamps and mangroves, where all life begins, nurtured within the nutrient rich mud and protected by the complex structures and shallow estuaries of the mangrove environment.

The overarching themes arise from understanding this kind of Country and how it thrives. Reflecting on the central ideas and concepts that surround an area's past and present can thereby enable us to continue the story into the future.



The Spirit of Water Country diagram

Source: Bangawarra Connecting with Country Master Plan Themes 2021

Themes

Bangawarra have identified a number of themes that are significant to Sydney Olympic Park. These themes are noted below and are to be reflected in the Master Plan and future vision for Sydney Olympic Park:

Bulima (Connect to Country)

Bulima is Spirit Country and the stories of local Lore that explain the importance of connecting to and respecting the spirit of Country.

Tucoerah (Gather)

Tucoerah describes many diverse elements gathering and coming together to create a cohesive and productive environment that nurtures new life and ideas.

Walama (Adapt)

Walama is a change in direction and the sophisticated and reflexive adaptations that are required for survival in constantly changing and evolving environments.

Madutji (Interconnectedness)

Madutji explains connections, unions and the concept that all things are interrelated, no one thing exists on its own but instead, all things rely on each other for survival and protection.

These themes are incorporated into the urban design principles that will underpin the Master Plan (interim Metro review). The above themes will act as the starting points that will guide the development of these principles. The urban design principles will represent a set of values that are to be expressed in the built environment and set a direction for the Metro Study Area and wider Central Precinct.

Key Strategic Documents

The following key documents act as the overarching guidance for the recommended amendments to the Central Precinct Master Plan:

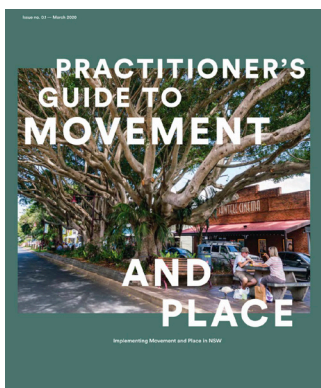
Better Placed

Better Placed is an integrated design policy for the built environment of NSW. This Urban Design Report considers the principles of Better Placed by; ensuring that through the delivery of a diverse range of activities and uses, that the future Central Precinct is safe; is active day and night, weekday and weekend, winter and summer; and is an equitable and universally accessible precinct and is resilient to environmental conditions.



Practitioner's Guide to Movement and Place

The role of the guide is to provide a common structure for place-based transport and city and town planning across NSW. The Urban Design Report seeks to ensure the Movement and Place Guide principles are carried through to the master plan revision by; providing for dedicated pedestrian and cycling paths around the station; prioritising interchange, kiss'n'ride and taxi/rideshare; providing for amenity, surveillance and weather protection along interchange routes; providing for a car free core and shareways within the Central Precinct wherever possible.



Greener Places

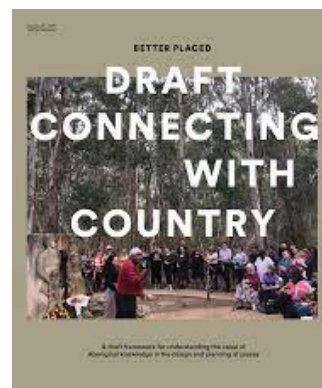
Greener Places is a design framework for urban green infrastructure. It seeks to capture our collective aspiration and expectations in planning, designing and delivering green infrastructure in urban areas across NSW. Well-designed green infrastructure responds to 4 key principles: integration, connectivity, multifunctionality, and participation.

In conjunction with the public domain and landscape report, this report seeks to ensure that the principles of Greener Places are achieved by; ensuring minimum quantum of public open space and publicly accessible open space are delivered; and providing minimum solar access requirements to public spaces.



Connection with Country (Draft) Framework

The ambition of Connecting with Country is that everyone who is involved in delivering government projects will *support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country – it will care for us*. The Urban Design Report seeks to draw from Connecting with Country by facilitating the delivery of Miluni Plaza as an active and accessible celebration of culture including welcome to country wayfinding, urban forest, revealing country landscape, artworks by local Aboriginal artists, surface creek and water features and a gathering place at the heart of the Central Precinct.



Context

Sydney Olympic Park

Prior to hosting the Sydney Olympic Games, the Precinct and its surrounds have performed many functions.

Sydney Olympic Park has been known by Aboriginal people for millennia as a place where two waters and many different ecologies meet and holds cultural significance for all of the Aboriginal peoples of the region as a place to come together to care for Country and culture.

Following European settlement the precinct was used for agriculture, including an abattoir, of which some of the heritage listed buildings remain today. The precinct was also used for industrial uses such as quarries, transport and logistics and chemical manufacturing.

Sydney Olympic Park (SOP) has evolved from the site of the Sydney Olympic Games in the year 2000 to Sydney's premier sports and leisure destination.

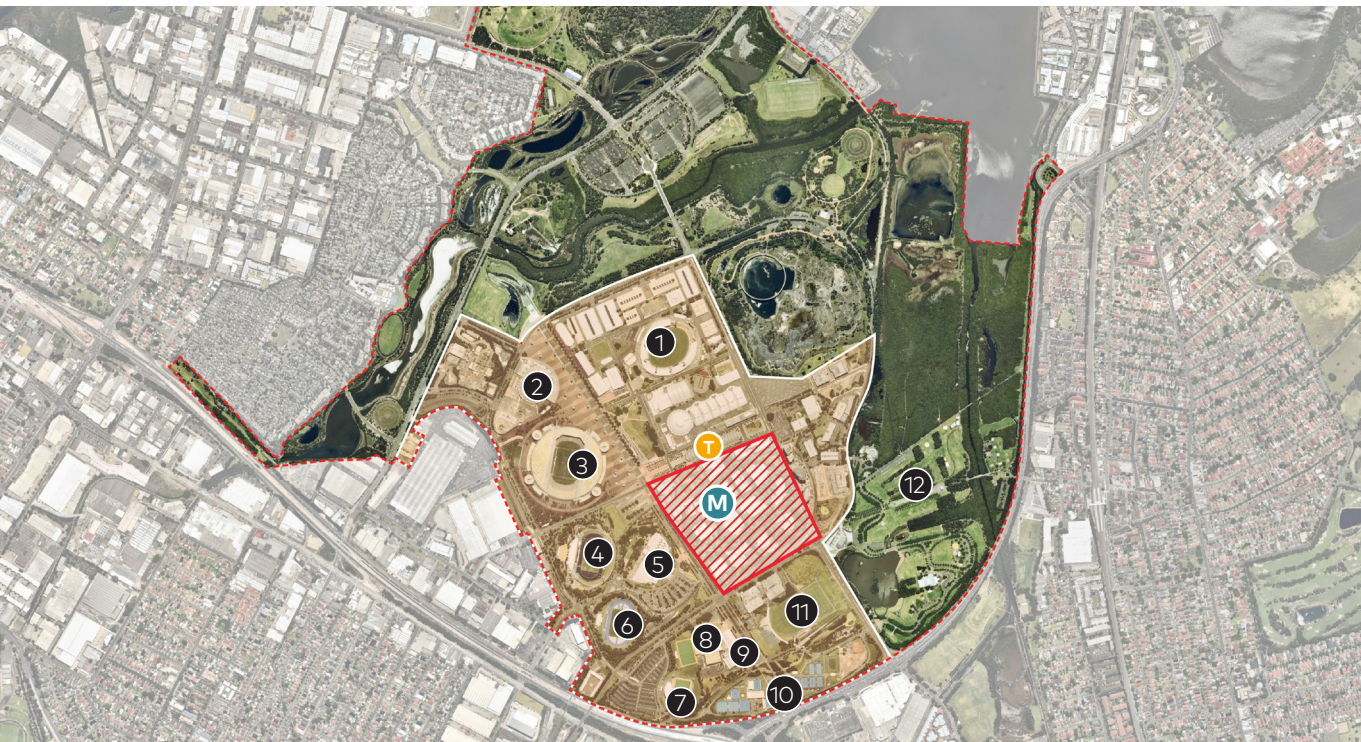
In the Greater Sydney Commission's (GSC) 2018 Greater Sydney Region Plan –A Metropolis of Three Cities, SOP was identified as a Strategic Centre within the Central City District. It has also been identified as a Key Strategic Centre within the Greater Sydney Regional Plan and is well placed between the River City and the Harbour City.

The Central City District Plan identifies that SOP will develop into a successful lifestyle super precinct with "the potential to attract anchor tenants specialising in sports, health and physical education". This will likely focus sporting excellence infrastructure around the existing venues within SOP. The region has also been identified to support over

10,000 dwellings (23,000 residents), 34,000 workers and 5,000 students over future years.

This increased growth will form the basis of a 'vibrant mixed-use town centre' which is surrounded by natural assets and lifestyle opportunities.

Rapid change is expected within the Central Precinct, with the proposed introduction of SMW. Additionally, Parramatta Light Rail (PLR) has also been identified as a policy direction for SOP despite not being confirmed. The provision of this future public infrastructure will act as a catalyst for growth, whilst increasing connection from the Central Precinct to surrounding strategic centres. This infrastructure will work to establish the 30-minute city vision as envisaged by the GSC in the Greater Sydney Region Plan.



Sydney Olympic Park Context

----- Sydney Olympic Park Boundary

Central Precinct

M Proposed Metro stop

T Existing Train Station

① Sydney Showground

② Qudos Bank Arena

③ ANZ Stadium

④ Athletic Centre

⑤ Aquatic Centre

⑥ Warm Up Arena

⑦ Hockey Centre

⑧ Sports Centre

⑨ Netball Centre

⑩ Tennis Centre

⑪ Tom Wills Oval & Community Field

⑫ Bicentennial Park

Master Plan 2030 (2018 Review)

The Sydney Olympic Park Master Plan 2030 (2018 review) sets out the vision for the revitalisation of Sydney Olympic Park with a vibrant new town centre, educational facilities, shopping precinct, new homes, more jobs and increased open space and community facilities while enhancing the SOP's role as a destination for cultural, entertainment, recreation and sporting events.

Under Master Plan 2030 (2018 Review), Central Precinct is envisioned to transform into a vibrant, high density mixed use Town Centre with a strong commercial

office and retail presence supported by residential uses. The precinct will become the key central core for Sydney Olympic Park, providing future residents with the opportunity to live close to transport, jobs, events and services.

Following the commitment to the delivery of a Sydney Metro West Station within the Central Precinct an amendment to Master Plan 2030 (2018 Review) is required to facilitate the delivery of the station and ensure equitable access, vibrancy, activity, safety and security within the station and its surrounds.

This interim review will become the Master Plan 2030 (Interim Metro Review).

The report identifies the required changes to planning and urban design controls to facilitate the delivery of Sydney Metro West on the existing Master Plan 2030 (2018 Review) and makes recommendations as to suitable amendments to the land uses, built form, public domain and amenity based controls to inform the Master Plan 2030 (Interim Metro Review).



Master Plan 2030 (2018 Review) - Illustrative Master Plan



Central Precinct

Central Precinct is bounded by Murray Rose Avenue to the north, Australia Avenue to the east, Sarah Durack Avenue to the south and Olympic Boulevard to the west.

The northern extents of the Central Precinct has established urban characters comprising of office buildings with continuous

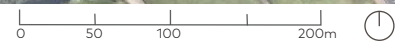
shopfronts, centred around the Train Station. Whilst the remainder of the precinct, comprises low rise, large floorplate commercial and industrial buildings, hotels and residential buildings.

Central Precinct presents the unique opportunity to access high density with natural amenity,

provided by Bicentennial Park and the surrounding sporting and recreational facilities.



Existing Central Precinct



Sydney Metro West

The Introduction of Sydney Metro West

Sydney Metro West (SMW) is a new 24-kilometre metro line with stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street in the Sydney CBD.

A proposed metro station at Sydney Olympic Park will provide connections to Parramatta CBD

and Sydney CBD in 5 minutes and 15 minutes respectively.

Located in the heart of the growing town centre, the Metro Study Area comprises of several parcels of land, totalling 3.3ha. The underground station will sit to the east of Olympic Boulevard. Station entrances are proposed between Herb Elliot Avenue and Figtree Drive.

The station will provide for easy connections with the existing T7 Olympic Park Train Line and buses.

A metro station at Sydney Olympic Park will reinforce its status as Australia's premier events, sporting and entertainment precinct - supporting the transit of more than 10 million people who visit or stay each year.



Existing Central Precinct with Metro Overlay

Train Station Proposed Metro Station Box Metro Study Area

Ownership Considerations

With the Master Plan 2030 (Interim Metro Review) focusing on the amendment of the Central Precinct in response to Sydney Metro, sites 40, 47 and 48 become the primary focus area. The combination of these sites is known as the Metro Study Area.

It is noted that SOPA has deferred that portion of Site 46 within the Metro Study Area from this current review to be coherently developed as part of Master Plan 2050.

While the review will predominantly focus on the Metro Study Area sites, the overall configuration and fragmentation of surrounding lease holdings within the Central Precinct also requires significant consideration before any revisions are made. Consideration is required into how changes to the built form, public domain and planning controls within the Metro Study Area will integrate with the remaining master plan sites.

It is essential to note that despite the precinct's division into separate and distinct leaseholders there is a need to understand and recognise the important relationship between these land holdings as a whole.

The diagram below identifies the Metro Study Area in the context of the lease holdings in the remainder of the Central Precinct.



Existing Central Precinct Leaseholder Boundary and Sites

Train Station Site Number Metro Study Area Surrounding Leaseholder Boundaries Site 46 - Deferred

Vision

The Central Precinct

The Central Precinct is proposed to be the active heart to the Sydney Olympic Park precinct. A vibrant, diverse Centre that is active day and night, weekday and weekend, summer and winter.

SOPA's vision for the Central Precinct is that

"The precinct will continue to transform into a vibrant, high density mixed use Town Centre with a strong commercial office and retail area to the north and a residential character along Figtree Drive.

The northern part of the Central Precinct on Herb Elliott Avenue, will provide a wide range of complementary civic, retail, commercial, educational, community and entertainment uses.

This diverse mix of uses will ensure high levels of amenity for residents, workers and visitors during the day and into the evening. The southern part of the Central Precinct on Figtree Drive, will be a high density residential area focused along a green corridor created by the wide landscaped setbacks along Figtree Drive, and the linear park along the railway line." - Master Plan 2030 (2018 Review).

A new metro station at Sydney Olympic Park Sydney as part of the Sydney Metro West network will facilitate SOPA's vision for the Central Precinct.

The proposed Metro station within the Central Precinct fundamentally changes the potential accessibility, amenity and commercial appeal of Sydney Olympic Park, and necessitates a revision of the current Master Plan to respond to the catalytic opportunities created by SMW.

It is noted that Master Plan 2030 (2018 Review) included substantial GFA uplift in anticipation of the future core transport improvement. Accordingly, the Master Plan 2030 (Interim Metro Review) does not include substantial GFA increases, although the split of uses is proposed to be updated.

For the Central Precinct, opportunities to respond to the metro station include:

- reconfiguring the Town Centre and the broader public realm within the precinct to address the new desire lines for access to and from the station
- activating the Abattoir Heritage Precinct by improving the interface with surrounding sites
- integrating public transport interchanges, including making provision for the possible future Parramatta Light Rail Stage 2 (PLR2).

Guiding Urban Design Principles

Identity and context

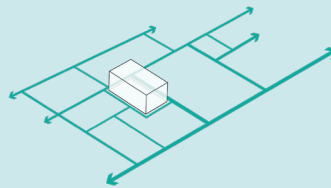
The Central Precinct should reflect, enhance and build upon SOP's identity as a place of significance for Aboriginal Peoples, unique ecological communities, sporting success and future growth. The Precinct should allow for the provision of a true identity that showcases the unique characteristics of Sydney Olympic Park and celebrates the importance of water and topography for the site.

Taller buildings should be located on the southern edge of the primary public space to maximise the views and amenity from the space and allow natural light into the public domain. The allocation of height across the precinct will also create a distinctive skyline identity for Sydney Olympic Park.

Identity



Connectivity



Connectivity

Connectivity will be a key principle to ensure pedestrian accessibility, permeability and legibility within the Central Precinct and wider area.

The theme, Madutji explores the notion of connectiveness which is reflected through the Central Precinct street network and transport system. These systems work as a web to connect those living, working, studying and visiting the precinct to places, events and natural spaces.

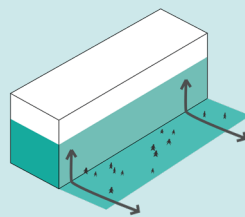
The realignment of existing streets, new shared streets and pedestrian paths will create a highly pedestrianised street network within Central Precinct that will safely link people to places of activity.

Diversity of Places

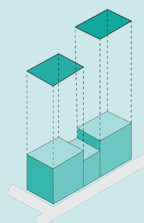
Sydney Olympic Park encompasses a unique and diverse range of places, facilities and spaces. The Central Precinct will work to create places that remain respectful of their current uses and users, whilst evolving the history and local character of the area. Following the theme of Tucoerah the Central Precinct will seek to ensure that diverse elements come together to create a cohesive and productive environment.

The Central Precinct will need to respond to the changing needs of the community through a range of spaces that suit a variety of activities. These diverse places should also consider the requirements needed to support regional and local growth, whilst providing high quality, active and safe public and private places for both event mode and every day mode.

Diversity of Place



A Responsive Built Form



A responsive built form

Guided by the theme Walama, the Central Precinct will encompass an adaptive and responsive built form that will ensure a suitable mixture of uses to meet the changing future needs. The Central Precinct review has considered the connection to Sky Country in the development of its form through appropriate and varied setbacks, building separation and tower heights. The design of the built form will ensure that the orientation and design of buildings maximise and encourage solar access, sunlight and ventilation to liveable spaces as well as existing and future open spaces.

Controls for sustainability, materials, the distribution of density and the requirement for green star ratings and site specific design excellence will work to establish a desired quality and character for the area.

Central Precinct

Structure Plan

The proposed structure of the Central Precinct presents a town centre heart that is anchored around the Metro site.

The Central Urban Park and adjacent sites act as a core active green space for the whole of Sydney Olympic Park community.

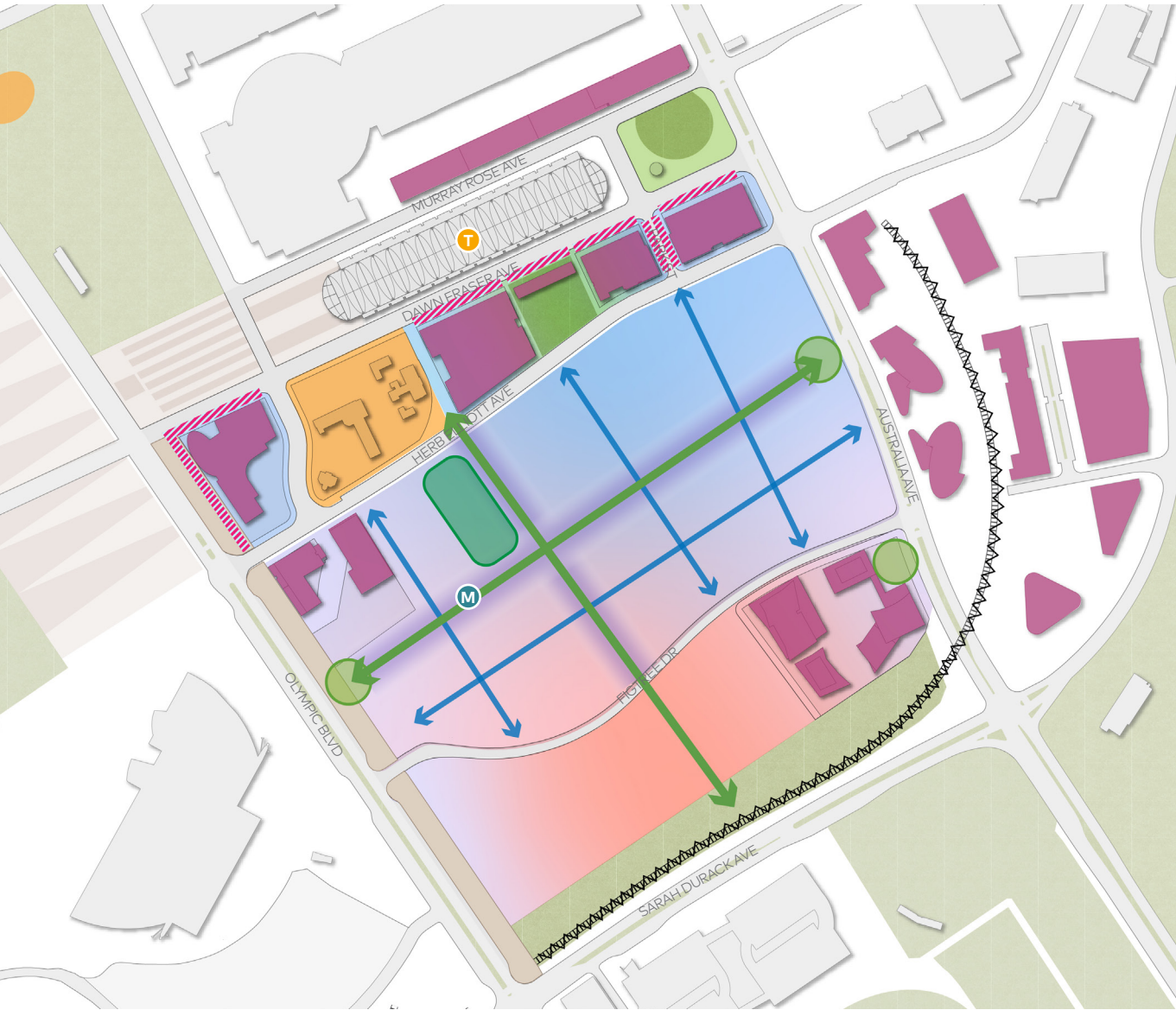
Major east-west and north-south green links, comprised of pedestrian-

only areas, shareways and calmed streets originate from the Central Urban Park and connect to the periphery of the precinct.

A finer grain of streets and pedestrian thoroughfares provides for local connections between Herb Elliott Ave and Figtree Drive and between Australia Ave and Olympic Boulevard.

The structure remains consistent with the previous Master Plan 2030 and minimises new streets that cross leaseholder boundaries, which creates greater flexibility in staging options for the precinct.

The structure plan provides an indication of land uses across the Precinct with commercial uses and mixed-use broadly to the north and residential uses to the south.



Proposed Structure

- | | | | | |
|--------------------|--------------------------|---------------------------|-------------------------------|----------------------|
| Train Station | Proposed Metro Station | Central Precinct Boundary | Railway Line | Open Space |
| Heritage | Recent Development | Proposed Shared Streets | Proposed Primary Active Edges | Non-Residential Uses |
| Pedestrian Path | Existing Active Frontage | Proposed Connections | Proposed Green Space | Residential Uses |
| Central Urban Park | | | | |

Indicative Built Form Plan

The intention of the Indicative Built Form Plan is to represent just one of the many permutations of transformation which may occur within the Central Precinct as a response to the Metro station aligned with the vision and structure for the Precinct.

The concept attempts to locate density and intensity in the areas of

highest amenity and activity, around the station precinct and adjoining Australia Avenue and Olympic Boulevard.

The Concept facilitates a diversity of both built form and uses from, retail, food and beverage framing dedicated pedestrian spaces, shareways and active streets, commercial buildings and

non-residential podiums, courtyard apartments on a podium, and tower apartments.

In response to a finer grain of streets and pedestrian connections, the built form also takes a finer grain approach, allowing for a reduced site coverage of buildings and a more permeable Precinct.



Concept

- T Train Station M Proposed Metro Station Entry/Exit Pedestrian Only Zone Shared Way
- Open Space Existing Buildings Indicative Building footprint

Street Hierarchy

The street hierarchy has been carefully considered. The proposed layout aims to deliver a certain amount of through-street traffic to activate the spaces, while considering pedestrian routes and event mode circulation needs.

The design provides the opportunity to create a series of traffic-calmed, local streets with a strong focus

on the pedestrian experience and safety.

There is opportunity for on-street parking with spaces for carshare vehicles, electric vehicles and disabled parking through the Central Precinct. The streets will also have allocated space for bus stops and taxi zones.

Pedestrian movement towards the Metro Station, especially during event mode will be directed along a newly created east-west public plaza referred to as Miluni Plaza. Miluni Plaza will act as the main pedestrian corridor for the Central Precinct, providing primary activity and space for movement around the station entry.



Public Transport

A network of buses, heavy rail and the introduction of a Metro station presents Sydney Olympic Park with a unique opportunity to provide integrated public transport access to sporting facilities, events, work, homes and parklands.

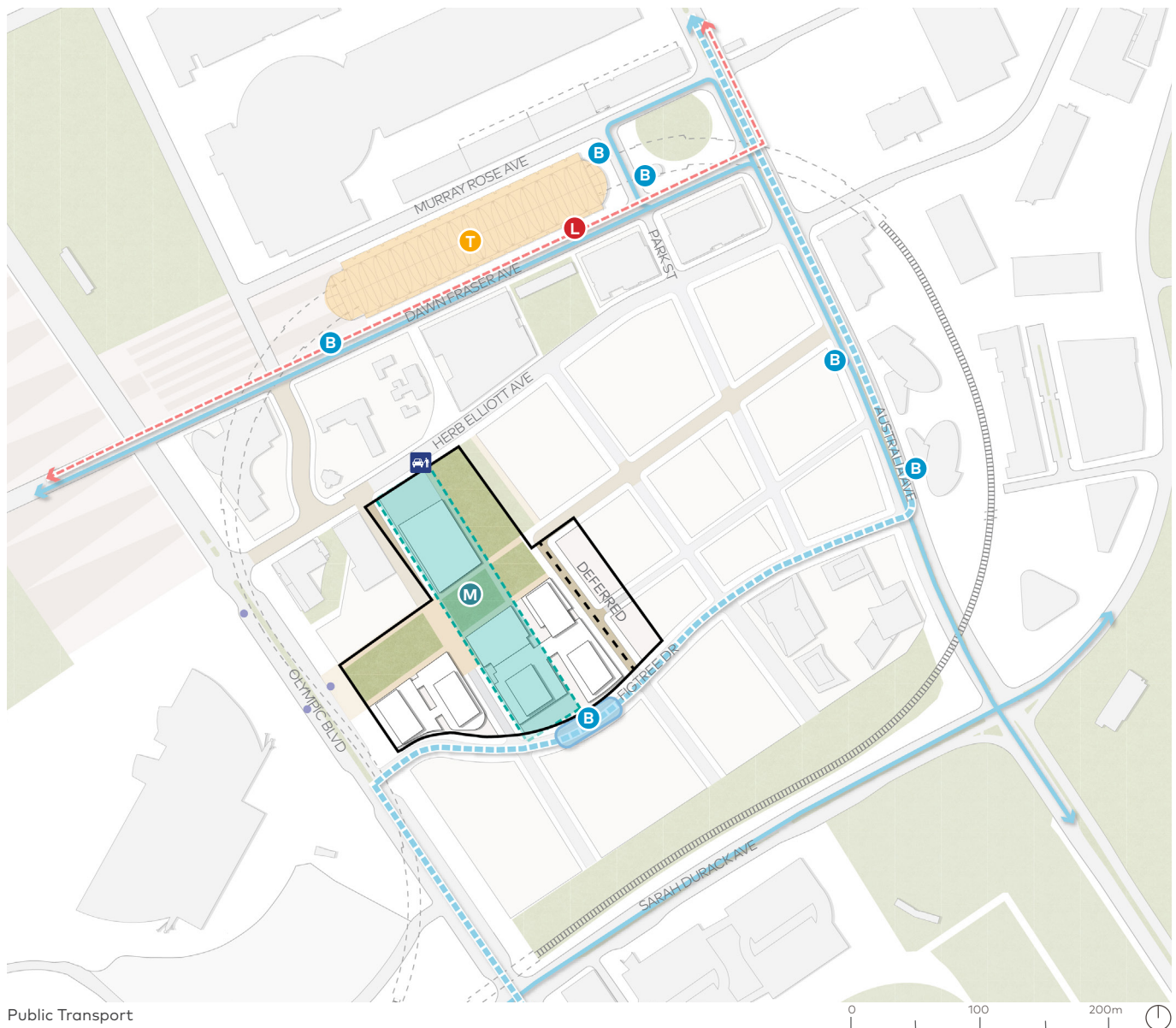
The provision of alternative, efficient and attractive modes of public and active transport such as walking, cycling, buses and the Metro will encourage a healthy and active population, reduce car

dependency and create a safer pedestrian environment. The Central Precinct will work towards building a sustainable, mixed use, transit oriented development, in which those visiting and living within the area can rely on efficient public transport.

The Metro station will provide additional support to the existing heavy rail, by increasing access to the major destinations and attractions at Sydney Olympic Park

while catering for the everyday users and residents.

The proposed bus interchange along Figtree Drive and potential future PLR route along Dawn Fraser Avenue will also provide further public transport support for those within Sydney Olympic Park and providing important connections to surrounding suburbs and neighbourhoods.



Public Transport

- T Train Station
- M Proposed Metro Station
- B Existing Bus routes and stops
- B Proposed Bus route and stops
- B Bus Interchange
- B Kiss & Ride Zone
- Site 46 - Deferred
- Metro Study Area
- Proposed Light Rail

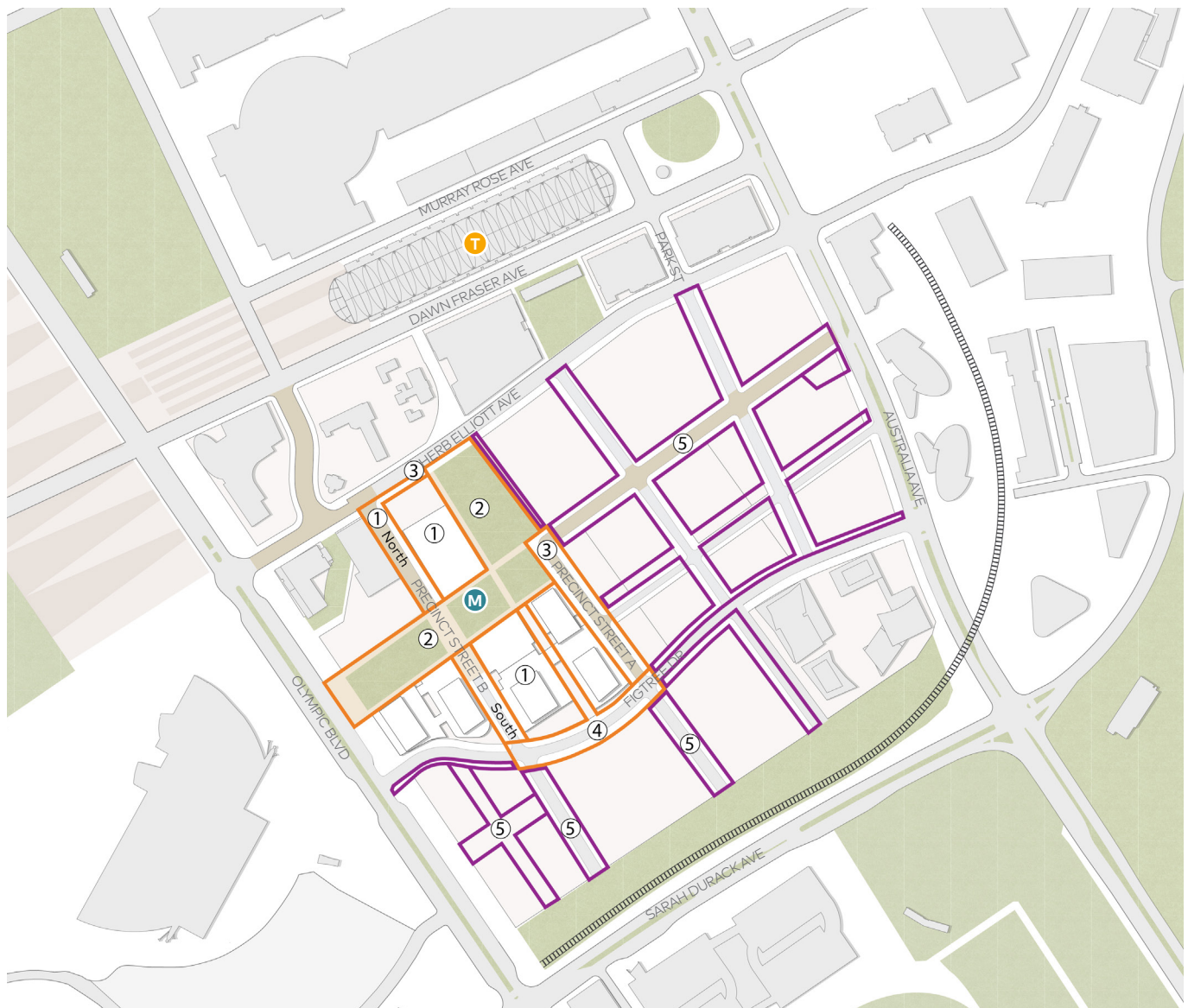
Staging

The diagram below outlines the anticipated staging and implementation of the Central Precinct.

The diagram identifies an anticipated delivery method for streets and the public domain under the following timeframes.

Delivered by Sydney Metro West in line with day one of operations:

1. Station buildings north and south including publicly accessible open space on the roof of the northern station building and end of trip bike facilities within the northern station building as well as Precinct Street B north and south
2. 40m wide event marshalling plaza, Miluni Plaza and Central Urban Park
3. Precinct Street A and kiss'n'ride on Herb Elliott Ave
4. Figtree Drive transport interchange and associated upgrades for indented bus bays, bus stops and shelters on both sides of the street
5. Other precinct elements that are outside of the scope of the Sydney Metro West project are to be delivered through private redevelopment and contributions to SOPA. These include new streets, upgraded footpaths and interfaces and public open spaces



Staging

- T Train Station
- M Proposed Metro Station
- Delivered by Sydney Metro West
- Delivered by Others Through Precinct Redevelopment

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Sydney Metro Study Area Guidelines

Proposed Uses

The proposed uses within the Master Plan 2030 (Interim Metro Review) are broadly consistent with the 2018 Review, permitting commercial and mixed uses that are reflective of the Study Area’s role within the Central Precinct.

It is intended that the station entries contribute to the activation of the streets by elevating any associated station infrastructure above the ground plane. The northern station entry and infrastructure is a standalone building, whilst

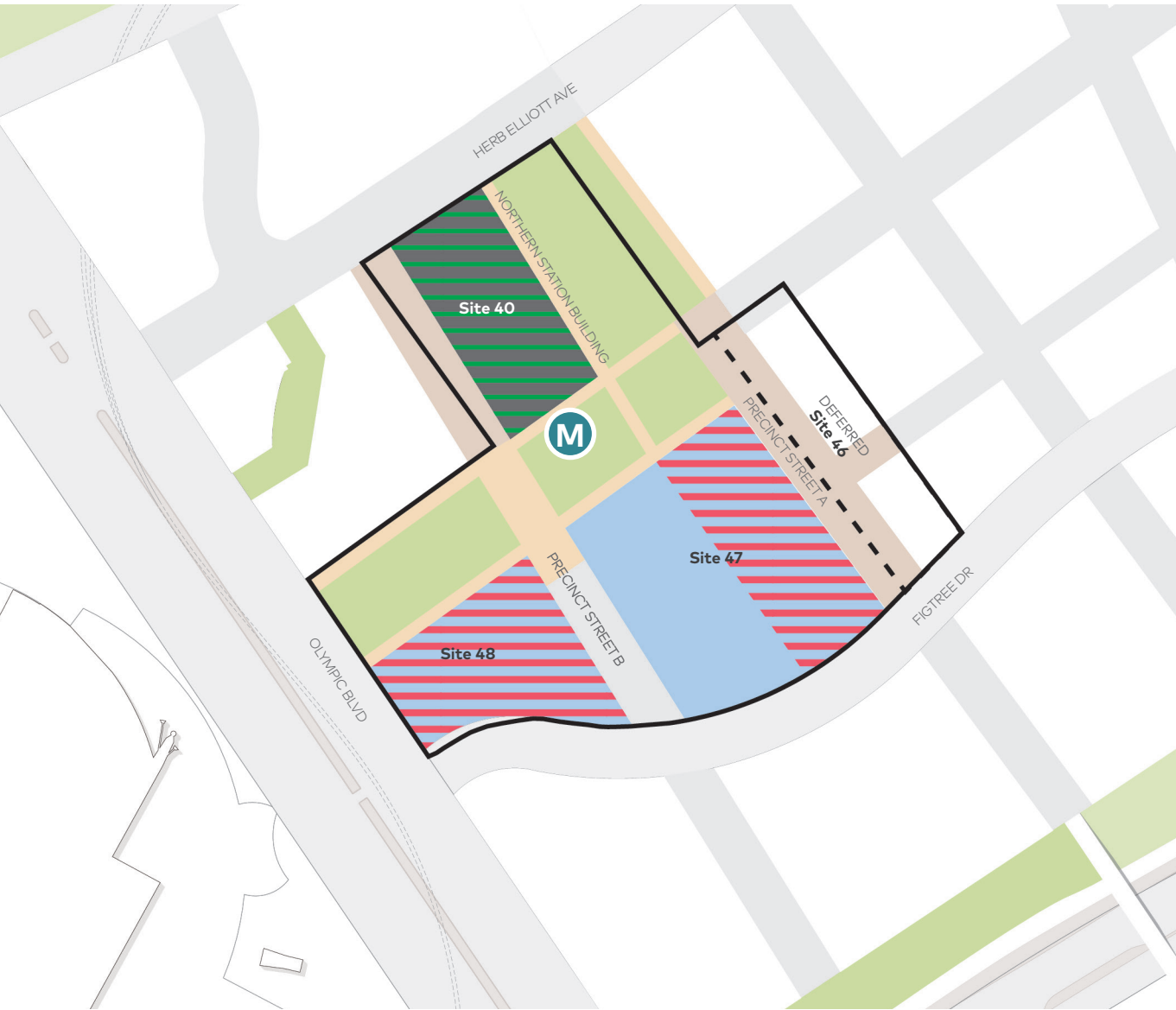
the southern station entry and infrastructure are integrated in to buildings above.

Retail will be integrated throughout the development sites and the Metro station entrances to active the ground plane.

The northern station building (Site 40) is comprised of the northern station entry, retail and publicly accessible rooftop open space.

The western part of Site 47, which comprises the southern station entry and building directly above, is proposed to comprise of commercial uses only within the podium and any towers above.

The remainder of Site 47 and the entirety of Site 48 sites are proposed as mixed use sites which provide for non-residential uses, including community uses, within building podiums of 4 storeys, with residential permitted above the podium.



Proposed Uses

- | | | |
|----------------------|------------------------|---|
| — Metro Study Area | — Pedestrian Only Zone | — Station/Retail/Publicly Accessible Open Space |
| — Public Open Space | — Share Way | — Mixed Use No Residential in Podium |
| — Site 46 - Deferred | — Commercial | |

Block Structure

The intent of the block structure largely remains the same as proposed in Master Plan 2030 (2018 review).

The Block Structure allows for the delivery of smaller blocks that will encourage and promote movement and permeability within the Central Precinct.

The Master Plan 2030 (Interim Metro Review) proposes amendments to the 2018 Review to accommodate the revised public domain around the station, realigned streets and desired through site links to provide greater permeability within the immediate station surrounds.



Build to Line

The build to line guidelines are proposed to reinforce the urban design principles of the 2018 Review.

These principles seeks to define and frame primary public spaces and active streets with built form that contributes to a sense of place and pedestrian-scaled experiences.

The Master Plan (Interim Metro Review) proposes that buildings within the Sites 40, 47 and 48 largely define the public open spaces and

Precinct Street A and are subject to the Build to Line guidelines as prescribed in the diagram below.

The northern station building and Precinct Street B interfaces are not subject to the same Build to Line guideline.



Active Frontages

The Master Plan (Interim Metro Review) proposes that active frontages comprise of shops, businesses, food and beverage, community or civic uses, and/or station entries.

The intention of the active frontages guidelines is: to provide a highly amenable pedestrian experience; to ensure active uses are located in areas of high pedestrian activity and amenity; and to ensure ground floor uses activate the public domain

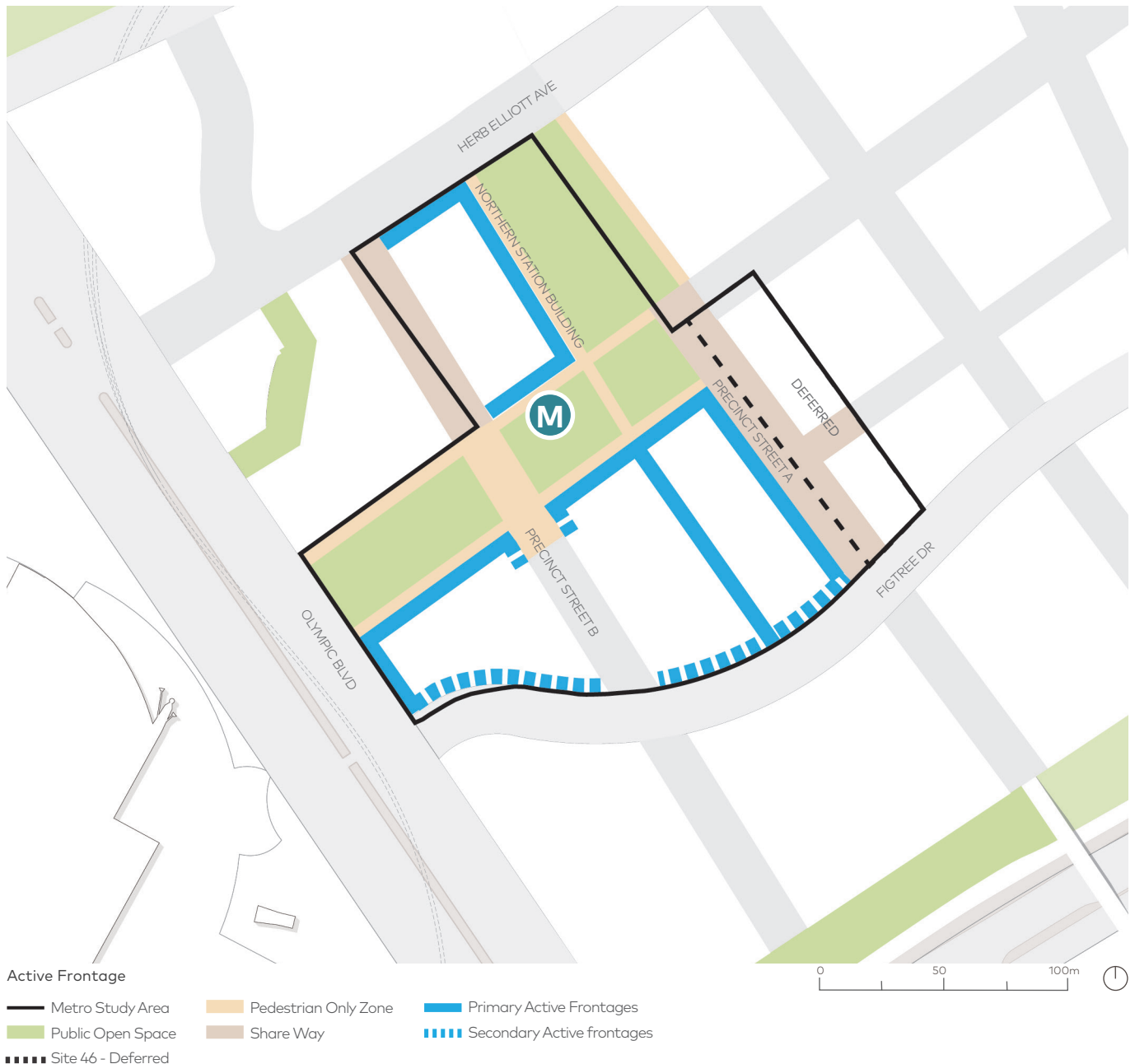
and streets and provide passive surveillance.

The primary active frontages guideline is applicable to:

- buildings within the mixed use sites that address the Central Urban Park and Olympic Boulevard
- building interfaces to Precinct Street A and the mid-block connection to the bus interchange

- northern station building interfaces to Central Urban Park and Herb Elliott Ave

Interfaces to Precinct Street B and Figtree Drive are secondary active frontages and in addition to the uses listed above may also comprise services, garage entries and larger tenancies.



Setbacks

The setbacks are proposed to reinforce the principles of the 2018 Review.

A primary setback relates to the ground plane and podium. A secondary setback relates to the setback of the tower/building component above the podium level.

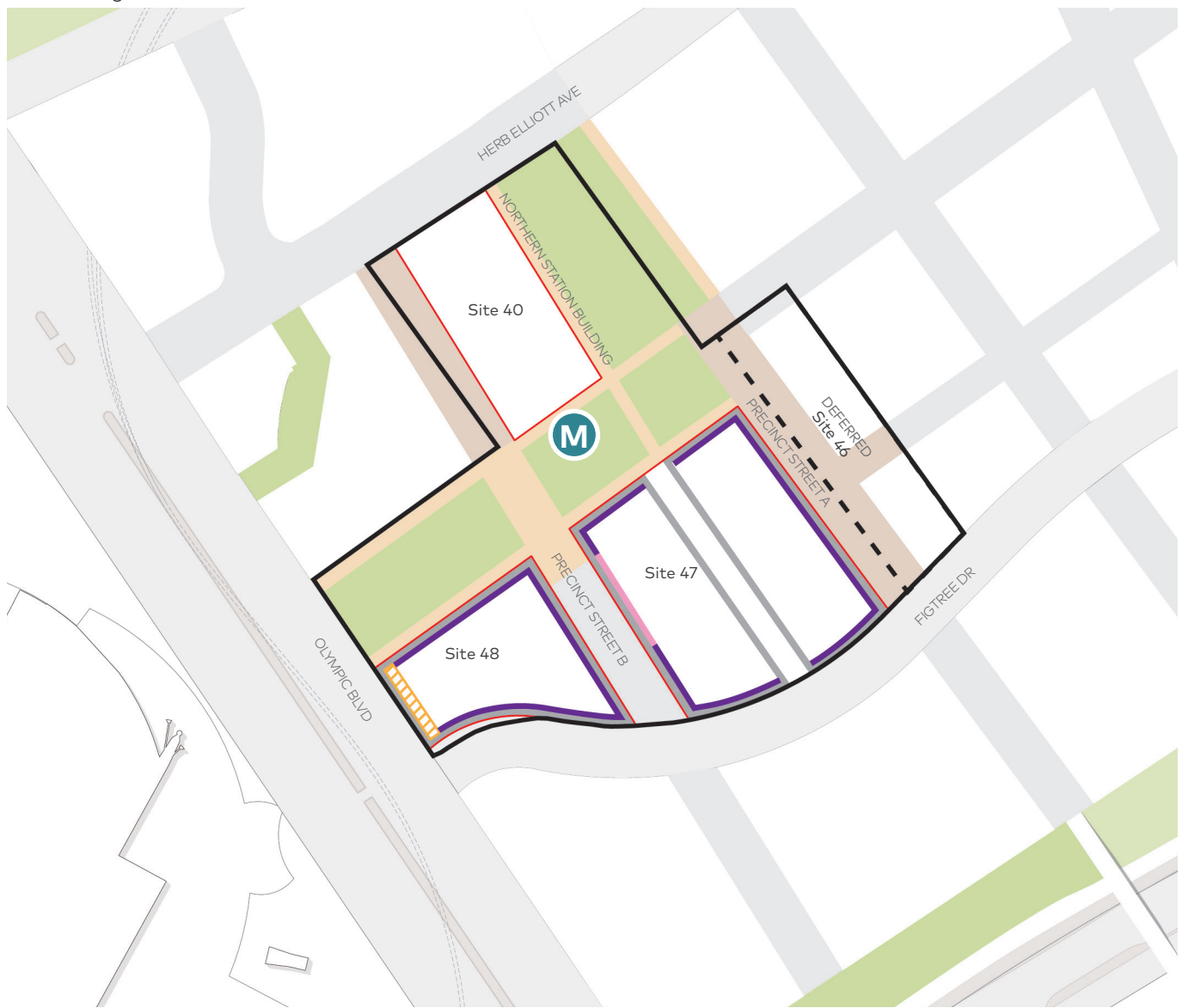
0m primary setbacks to the ground floor are proposed on all mixed use buildings with an interface to

the Central Urban Park, Olympic Boulevard, Figtree Drive, Precinct Street A, Precinct Street B, mid-block link on Site 47 and the shareway.

A minimum 2.5m secondary setback above the podium is applicable to all mixed use buildings with an interface to the Central Urban Park, Figtree Drive, Precinct Street A, Precinct Street B and the shareway.

On the western side of Site 47, a 2.5m protrusion into secondary setback is permissible only for tower core, bracing and structural requirements.

A minimum 5m and maximum 10m secondary setback is applicable to any buildings above the podium on the Olympic Boulevard interface.



Setbacks

- | | | | |
|----------------------|------------------------|---|--|
| — Metro Study Area | — Pedestrian Only Zone | — 0m Primary Setback | — 5m minimum & 10m maximum Secondary Setback |
| — Public Open Space | — Share Way | — 2.5m Secondary Setback | |
| — Site 46 - Deferred | — Site Boundary | — Protrude 2.5m into Setback for services | |

Street Wall and Podium Heights

The street wall and podium heights guideline are to ensure that the height of the street walls make a significant contribution to the experience of place and add uniformity of character on streetscapes and within the public domain.

To achieve this, the Master Plan (Interim Metro Review) proposes that all mixed use buildings are comprised of a 4 storey and 18m high street wall podium.

The northern station building is subject to a maximum 2 storey and 16m height limit. This height limit excludes the station plant, while

accommodating for an appropriate station ground floor height.

Site 47 will be subject to a 4 storeys (18m) podium height. However 5 storeys (24m) will be allowed for station services within the podium. The podium must step down to 4 storeys (18m) where it faces Miluni Plaza and Fig Tree Drive.



Building Heights

The following height plan controls are recommended amendments to the Master Plan (Interim Metro Review).

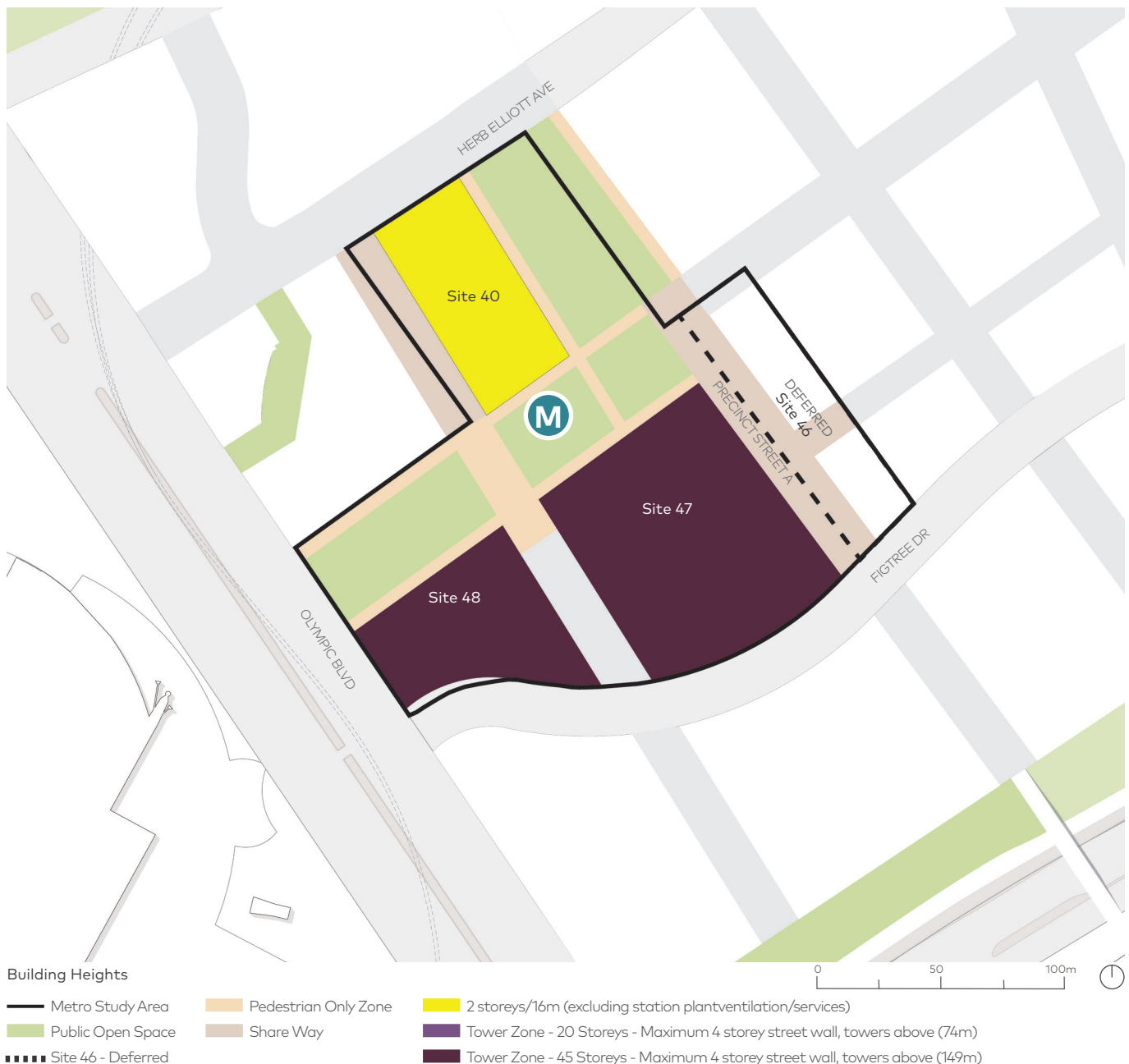
The height controls aim to provide a varied and distinctive skyline for the Central Precinct and to protect solar access to the public domain and residential units.

The building height plan suggests an amendment to the 2018 Review in

applying:

- a 45 storey, 149m height limit to Site 47 to reinforce the metro station location and the associated activity and amenity of the site.
- a 2 storey, 16m height limit for Site 40, which excludes station ventilation and services.

Site 48 also remains as per the 2018 Review and is subject to a 45 storey, 149m height limit.



Floor Space Ratios and Yields

The Master Plan (Interim Metro Review) needs to consider the impacts that delivering a station on a SMW network at Sydney Olympic Park, has on the resultant lot layouts, building footprints, envelopes and subsequent yields.

The FSR boundaries are proposed to be realigned on Site 47 and 48 to better reflect the lot layouts as a result of Metro freehold boundaries and the configuration of the public domain.

The recommended amendments to the Floor Space Ratios (FSR) and site yields are contained in the table below.

Site	FSR Site Area	Non-residential	Residential GFA	Total GFA	FSR (n:1)
Site 40	9,070	2,500	0	2,500	0.3
Site 47	11,428	32,860	47,336	80,196	7.0
Site 48	8,447	10,219	45,201	55,420	6.6
TOTAL	28,945	45,579	92,537	138,116	4.8



Public Domain and Open Space

The diagram below identifies a number of public open spaces that vary in both scale and function from the 2018 Review in response to a new metro station.

The proposed Metro station in the Central Precinct will be anchored by the adjacent Central Urban Park which will act as a core open space for the area, providing a central

meeting and gathering space for residents and visitors.

This will be supported by a pedestrian-only, multi-purpose space, known as Miluni Plaza to the south. Miluni Plaza will also serve as a gathering and movement corridor for the everyday users and as a crowd management space during events.

Shared streets are provided on Precinct Street A and B.



Public Domain and Open Space

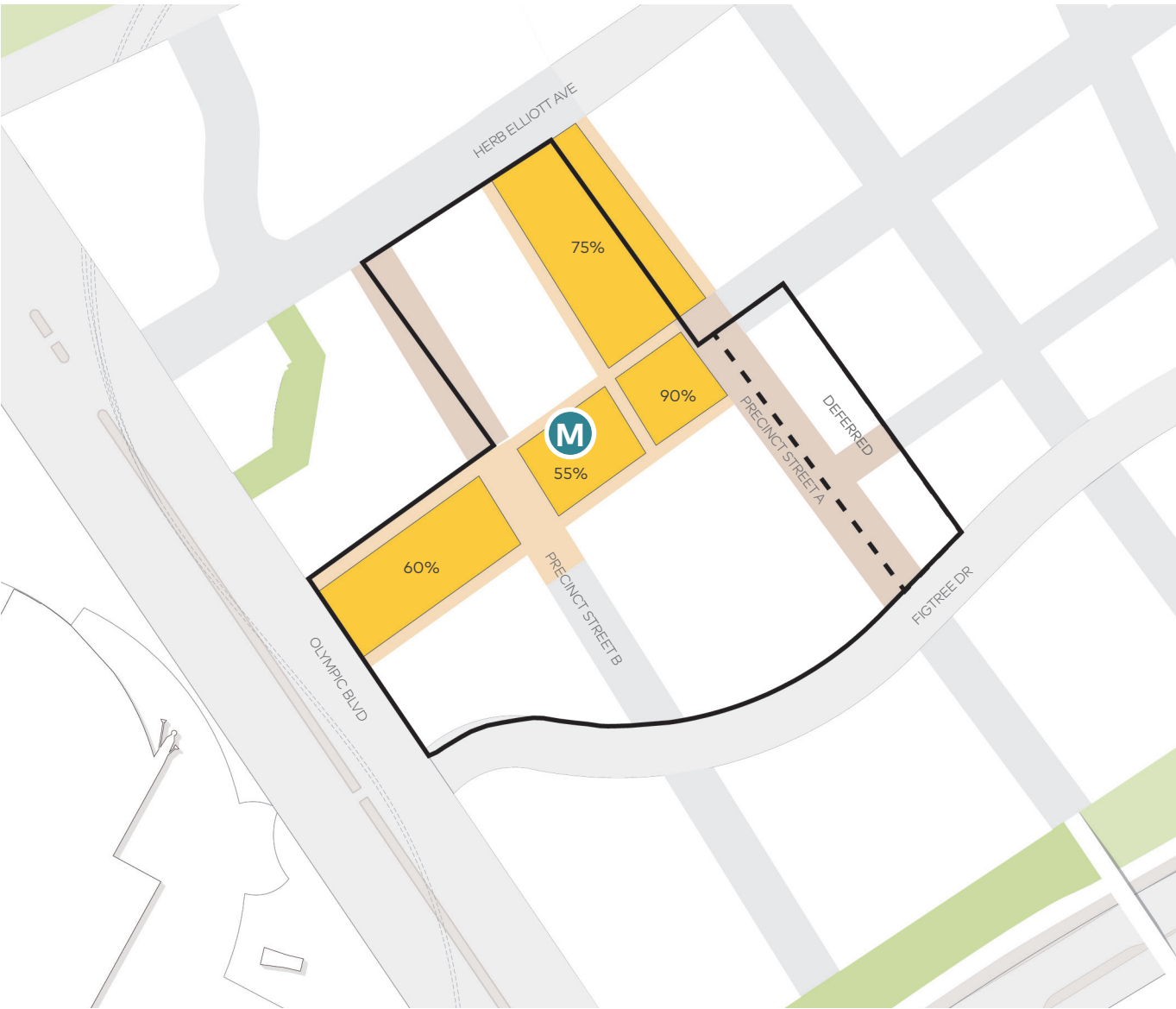
- Metro Study Area
- Primary Open Space
- Publicly Accessible Open Space
- Pedestrian Only Zone
- Shared Streets
- Site 46 - Deferred

Solar Access

The following guidelines are a new proposition from the 2018 Review and seek to ensure high levels amenity for those using the primary public open spaces within the Metro Study Area.

The diagram below prescribes the minimum proportions of the public spaces that are to achieve a minimum 2 hours of sunlight

between 9am and 3pm at the winter solstice (June 21).



- Solar Access
- Metro Study Area
 - Public Open Space
 - Site 46 - Deferred
 - Pedestrian Only Zone
 - Share Way

Proof of Concept

Building Heights

The intention of the Proof of Concept is to test the recommended planning controls and represent just one of the many permutations of transformation which may occur within the Central Precinct as a response.

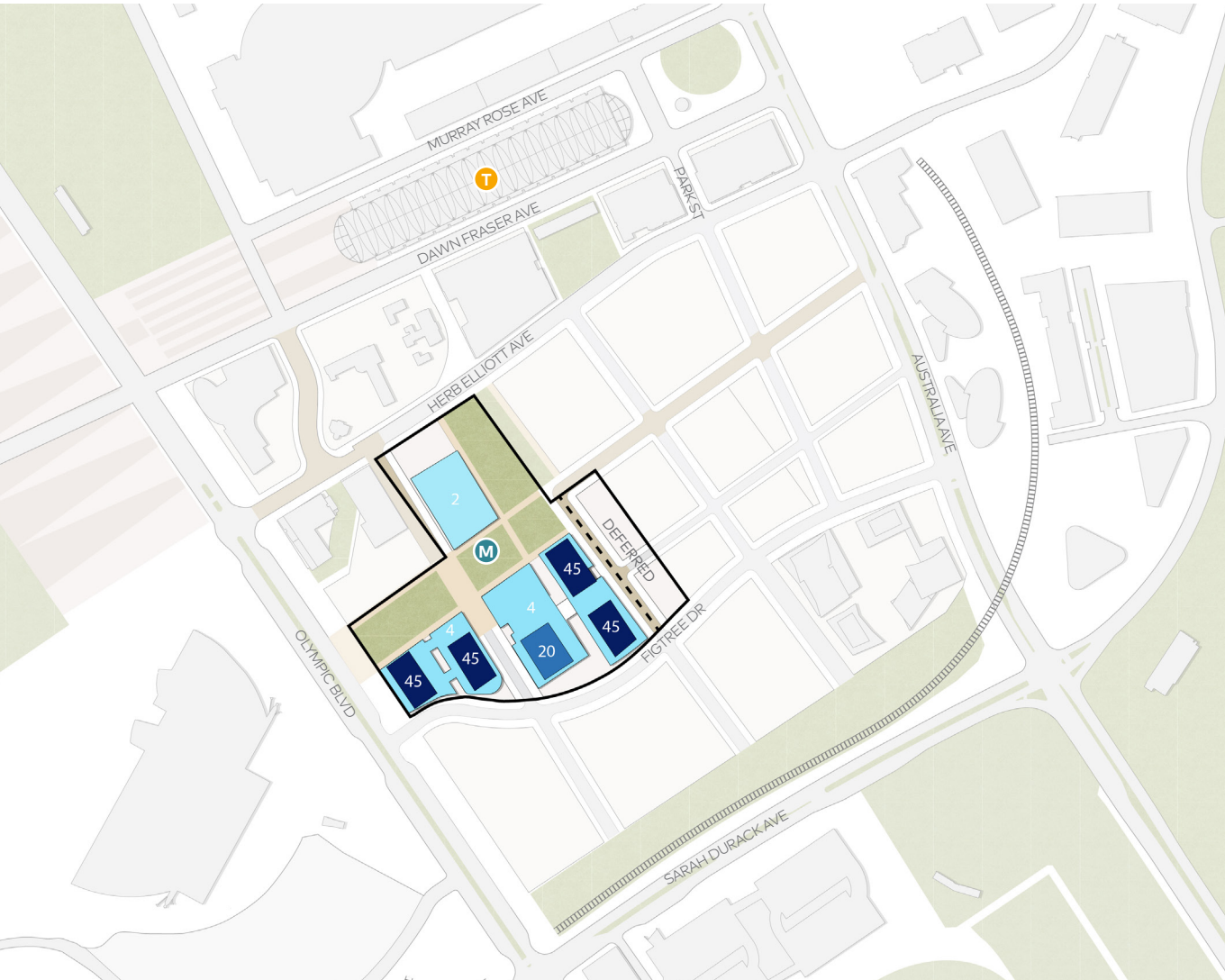
The height strategy aims to deliver a diverse built form that sympathetically responds to adjoining areas and existing developments and reinforces the high levels of amenity and solar

access to the Central Urban Park and Miluni Plaza.

The towers surrounding the Metro aim to consolidate height around the town centre, making it a focal point in the Sydney Olympic Park skyline.

The revised height provides the chance to vary and lower street wall heights to create a better pedestrian environment around the Central Urban Park and Miluni Plaza. The modulation and variation of building

heights through the precinct is intended to create a more organic town centre rather than a structured and uniform height plan and solar access to the ground plane.



Height Strategy

- Train Station
- Proposed Metro Station
- Metro Study Area
- Site 46 - Deferred
- 2 Storeys
- 4 Storeys
- 20 Storeys
- 45 Storeys

Open Space and Solar Access

The Proof of Concept tests the impacts of buildings within the broader Central Precinct and the Metro Study Area on the solar access to the primary open spaces.

Overshadowing from neighbouring built form can impact the ability for sunlight to access open space for good periods of time and for that space to be beneficial to the Precinct.

All spaces meet or exceed the minimum requirements within the proposed Metro Study Area guidelines and the existing controls for surrounding sites.



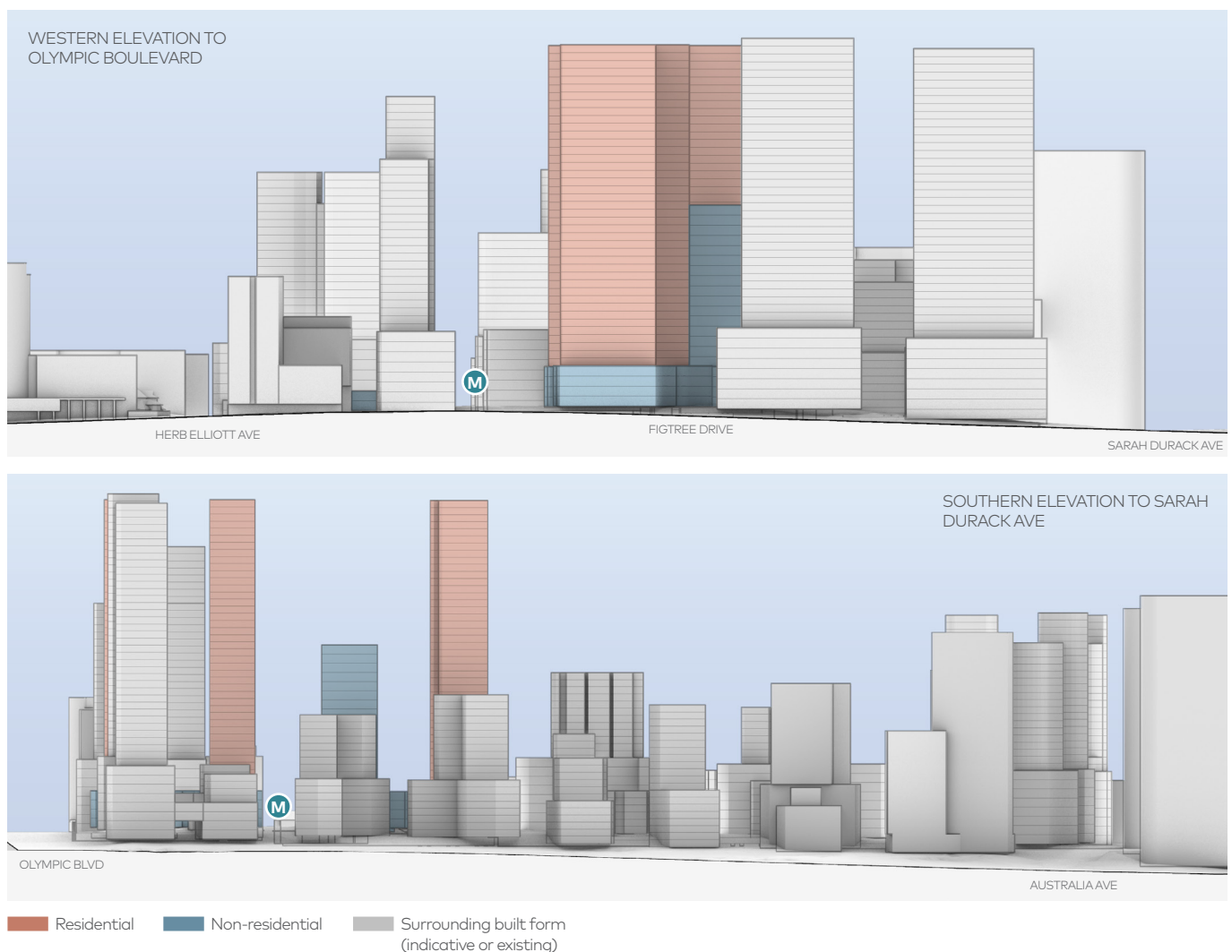
Open space solar hours

Residential Non-residential Surrounding built form 0 hours of sun 2 hours of sun

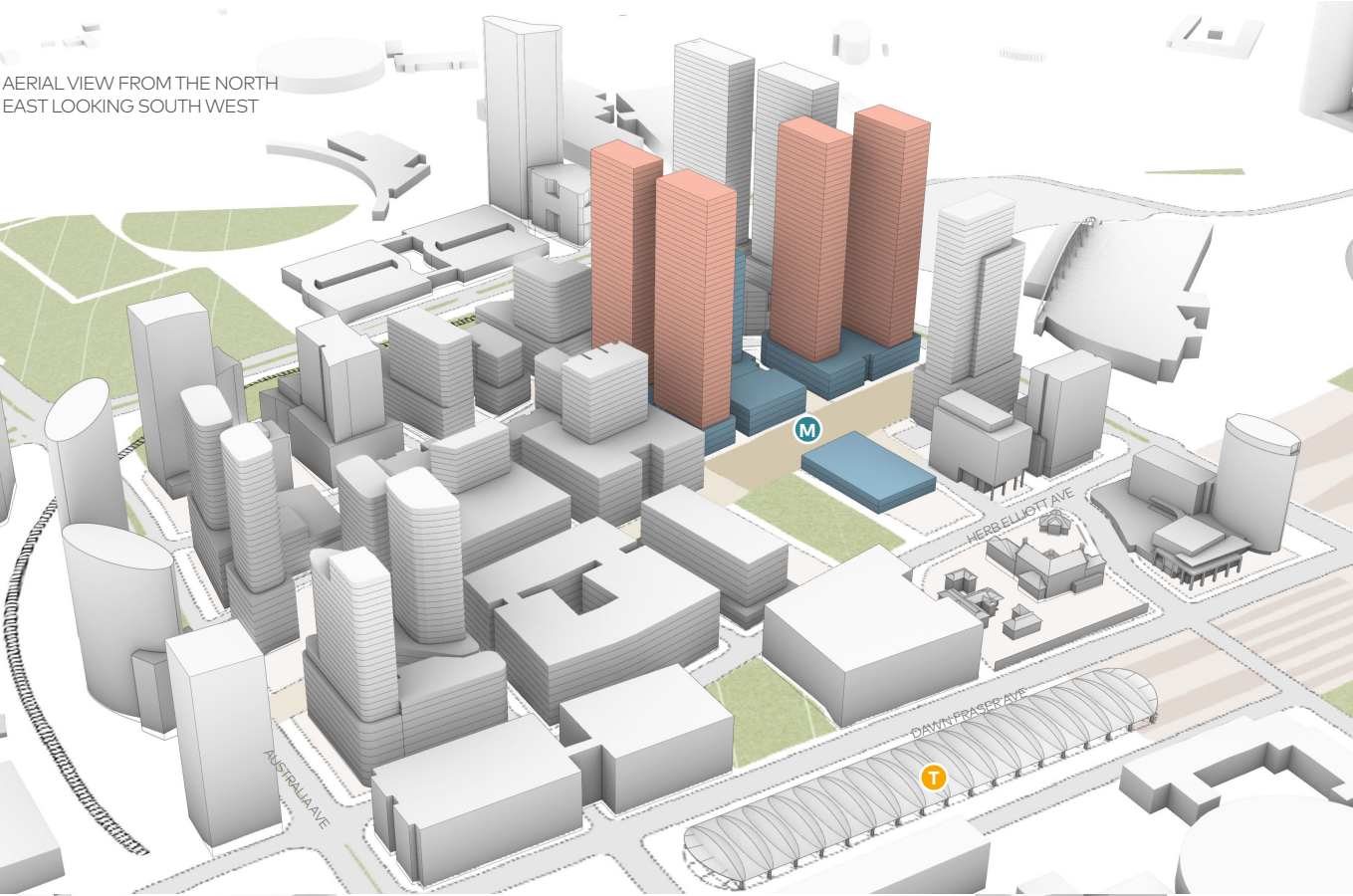
Built Form

The proposed built form within the Proof of Concept satisfies all requirements within the guidelines and:

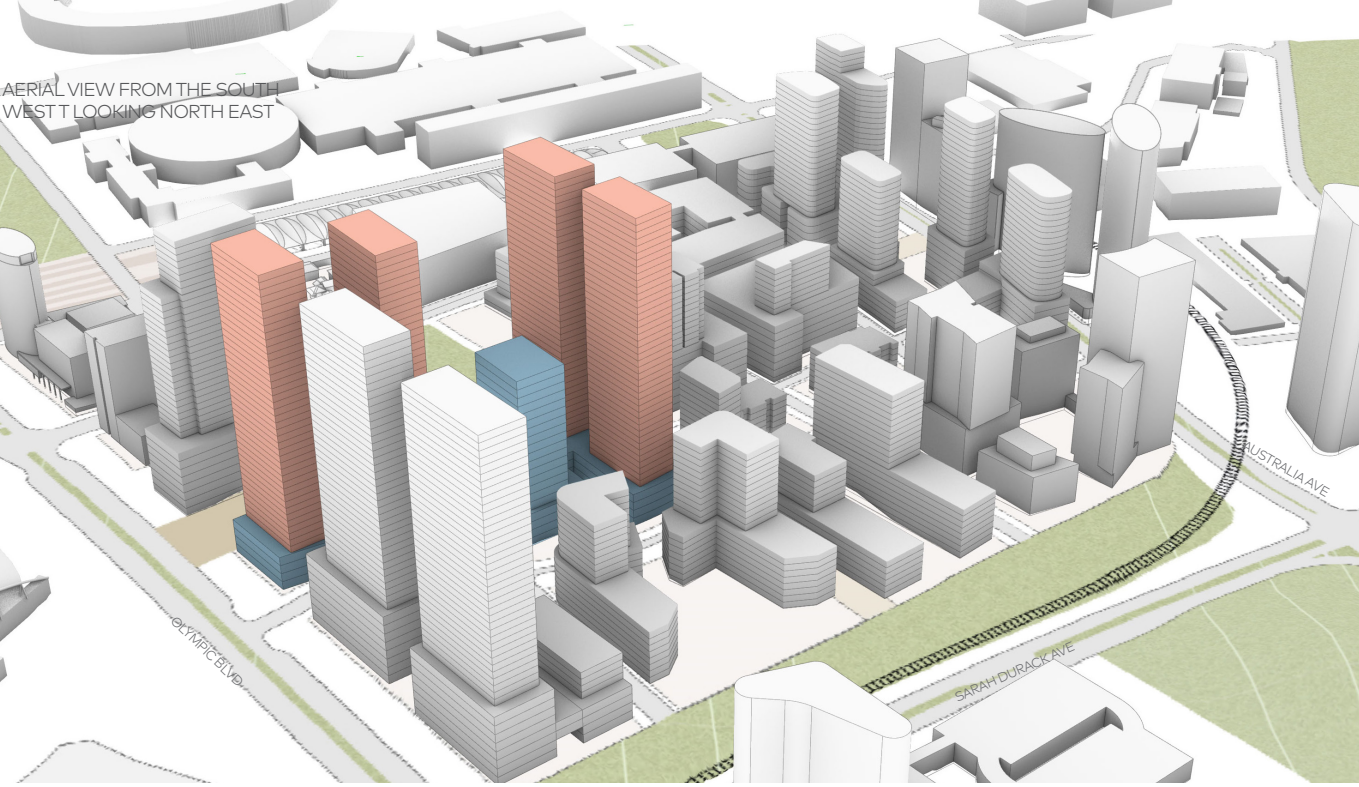
- Responds to the scale of surrounding buildings and definition of the street networks and public spaces
- Arranges building forms (including heights and massing) to reinforce the future desired structure and character of the area
- Ensures that buildings address the street, laneway, new through-site links or open space
- Defines street edges with appropriately scale street walls to provide to the pedestrian scale
- Provides appropriate building separation to protect privacy and solar access
- Emphasises key intersections and enhance public domain legibility



AERIAL VIEW FROM THE NORTH
EAST LOOKING SOUTH WEST



AERIAL VIEW FROM THE SOUTH
WEST LOOKING NORTH EAST



■ Residential
 ■ Non-residential
 ■ Surrounding built form
(indicative or existing)

Metro Study Area Apartment Design Guide Analysis

Receiving sunlight hours is essential for a building's solar performance. It reduces reliance on artificial lighting, heating and creates enjoyable living spaces. Beams of sunlight can be quantified and measured to ensure apartments in a building reach an optimal standard of living. The Apartment Design Guide (ADG) requires living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.

Additionally, only a maximum of 15% of apartments in a building can receive no direct sunlight between 9 am and 3 pm at mid winter. The measurement of these sunlight rays must also be measured 1m above floor level, 1m² in area, and receive sunlight for at least 15 minutes.

The diagrams below and opposite demonstrates the proportion of apartments that meet the minimum solar access requirement based on the Proof of Concept and indicative building envelopes on adjoining sites.

All buildings meet or exceed the requirements. With detailed design and considered floor plans and apartment mix, the requirement will be even further exceeded.



Cumulative Proportions of Building Facades that Achieve Solar Access

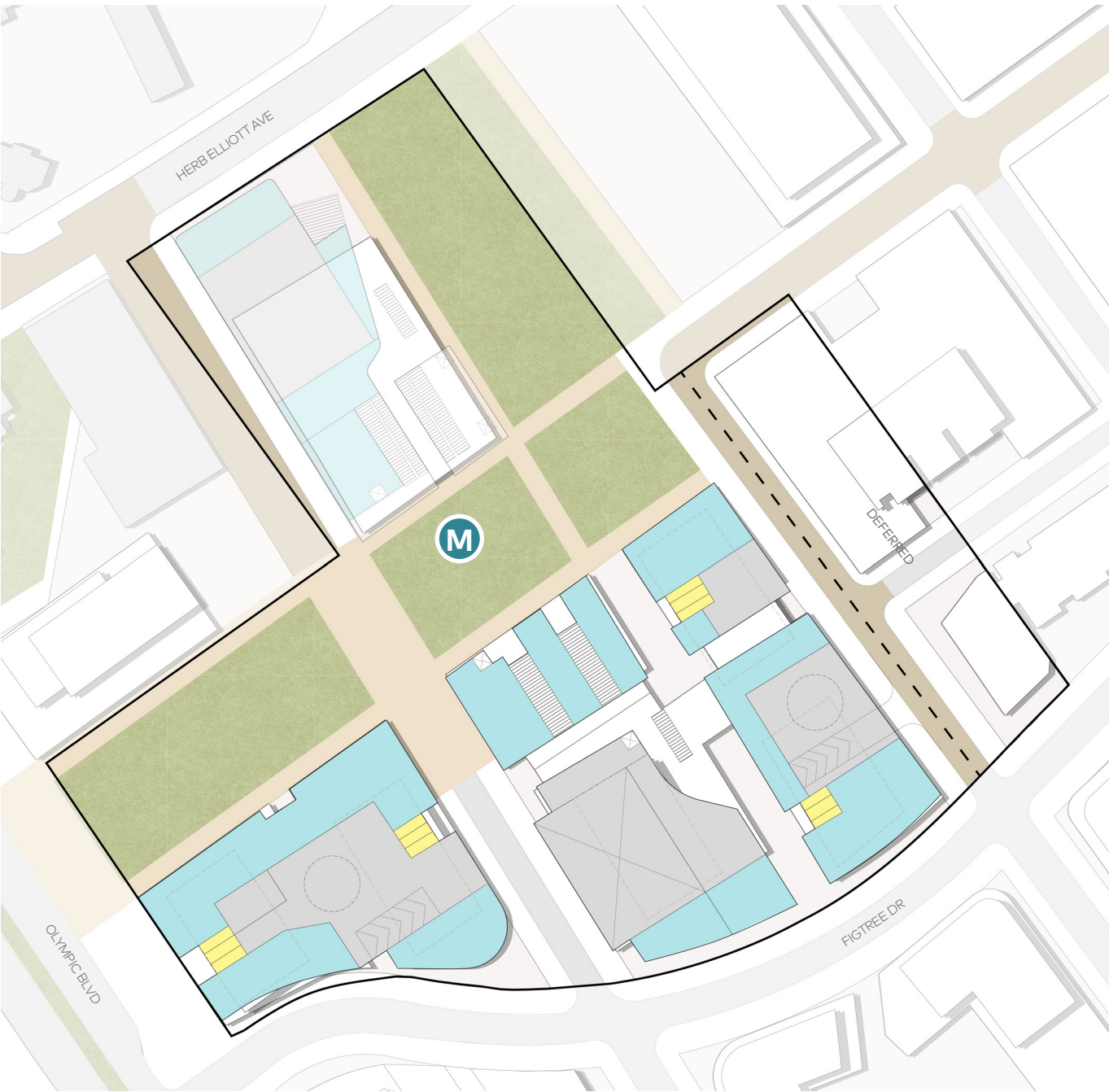




- Surrounding built form
- Residential
- Non-residential
- Apartment daylight hours achieved (Above 2 hours)
- Apartment daylight hours not achieved (Below 2 hours)

Ground Typical Floor Plan

The plan below is a typical floor plan for the ground floor that has been prepared as part of the proof of concept.



Ground typical floor plan

Scale: NTS

Open Space Indicative Building Core Indicative Non-residential Floor Plate Site 46 - Deferred

Podium Typical Floor Plan

The plan below is a typical floor plan for the podium level that has been prepared as part of the proof of concept.



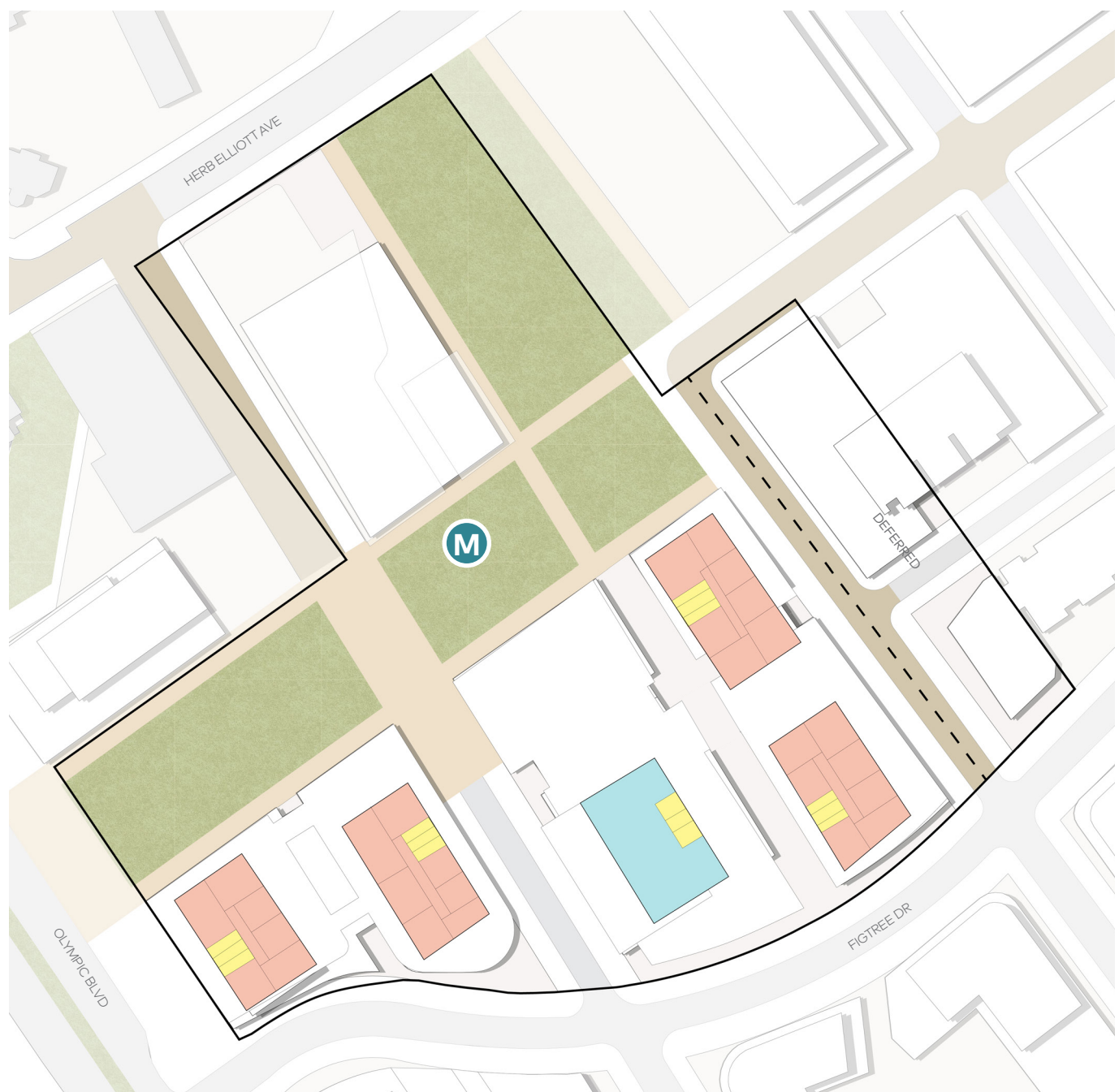
Podium typical floor plan

Scale: NTS

- Open Space
- Indicative Building Core
- Indicative Non-residential Floor Plate
- Site 46 - Deferred

Tower Typical Floor Plan

The plan below is a typical floor plan for the tower levels that has been prepared as part of the proof of concept.



Tower typical floor plan

Scale: NTS 

- Open Space
- Indicative Building Core
- Indicative Residential Floor Plate
- Indicative Non-residential Floor Plate
- Site 46 - Deferred

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Visual Analysis

The Interim Review has amended controls and guidelines that govern the building envelopes within the Metro Study Area.

The following is an analysis of the visual impact of these amendments upon significant views to/from the Metro Study Area.

The views are taken from the junction of the Central Urban Park and Precinct Street A as one of the highest footfall locations within the Study Area.

The analysis reveals that for the significant views that aid in wayfinding towards the north west and the Abattoir Precinct, Stadium Australia and the Qudos Bank Arena, the result is that of greater visibility and legibility through the reduction of built form within the northern station building and its respective building envelope from the 2018 Review.

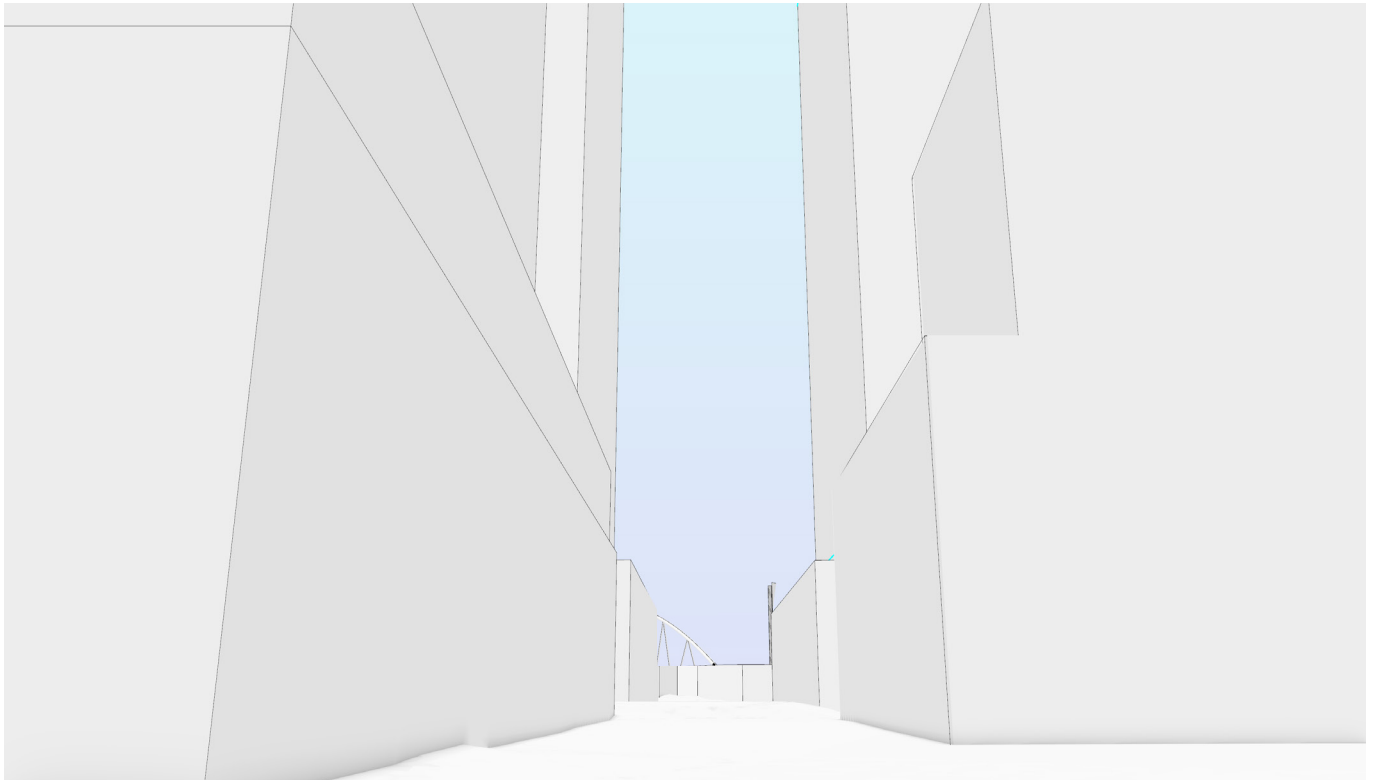
A view from the same location looking west towards the Sydney Olympic Park Aquatic Centre, that there is less impact on the views to the Aquatic Centre as a result of the Interim Metro Review and the widening of the east-west link compared to the 2018 Review.



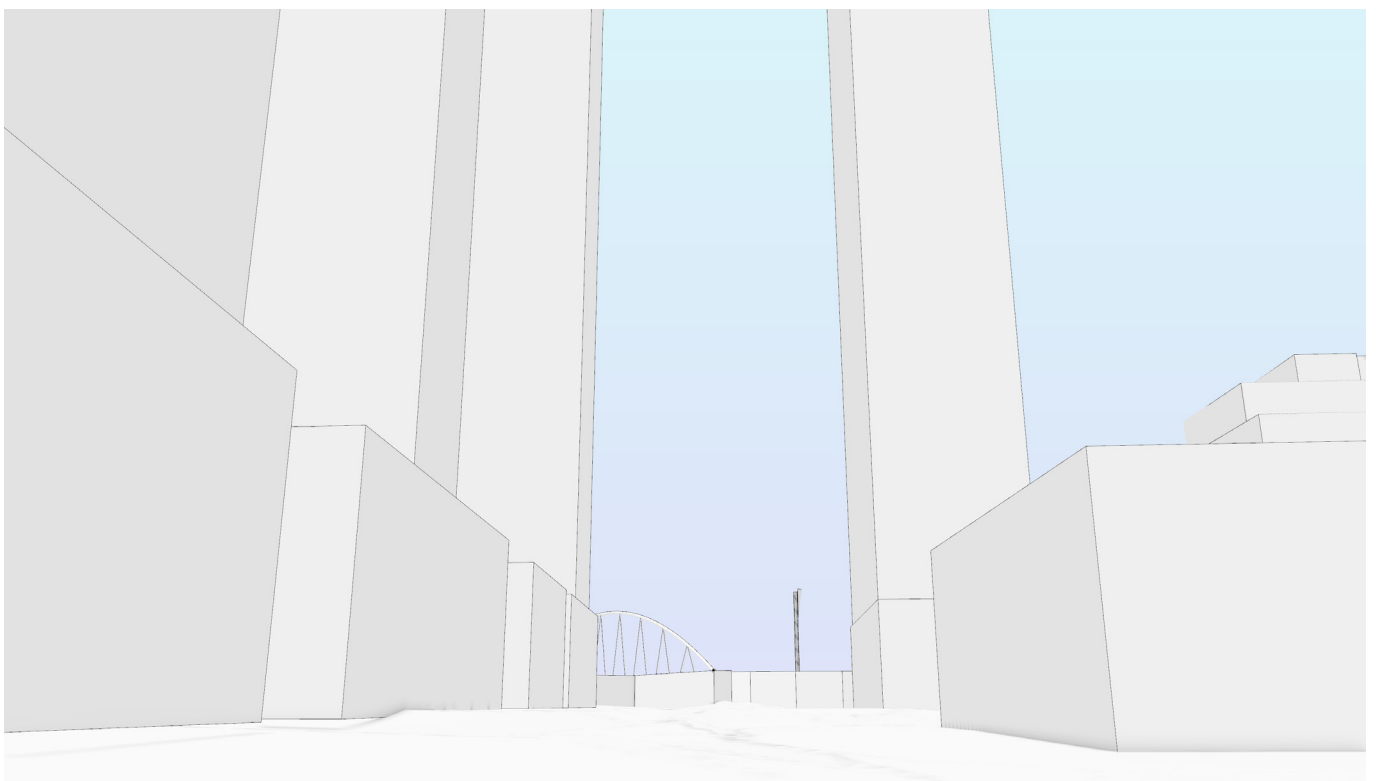
2018 Review View towards the north west - abattoir precinct, Stadium Australia and Qudos Bank Arena



Metro Interim Review View towards the north west - abattoir precinct, Stadium Australia and Qudos Bank Arena



2018 Review View towards the south west - Olympic Boulevard and Sydney Olympic Park Aquatic Centre



Metro Interim Review View towards the south west - Olympic Boulevard and Sydney Olympic Park Aquatic Centre

Summary and Conclusion

A new metro station at Sydney Olympic Park as part of the Sydney Metro West network will facilitate SOPA's vision for the Central Precinct of becoming a vibrant, diverse Centre that is active day and night, weekday and weekend, summer and winter.

The proposed Metro station within the Central Precinct fundamentally changes the potential accessibility, amenity and commercial appeal of Sydney Olympic Park, and necessitates a revision of the current Master Plan to respond to the catalytic opportunities created by SMW.

It is noted that Master Plan 2030 (2018 Review) included substantial GFA uplift in anticipation of the future core transport improvement. Accordingly, the Master Plan 2030 (Interim Metro Review) does not include substantial GFA increases, although the split of uses is proposed to be updated.

For the Central Precinct, opportunities to respond to the metro station include:

- reconfiguring the Town Centre and the broader public realm within the precinct to address the new desire lines for access to and from the station
- activating the Abattoir Heritage Precinct by improving the interface with surrounding sites
- integrating public transport interchanges, including making provision for the possible future PLR2.

To realise these opportunities and achieve the desired outcomes for the Central Precinct and the Metro Study Area, the Urban Design Report makes the following recommendations as part of the Master Plan 2030 (Interim Metro Review);

- Proposed uses for Site 47 are split to facilitate commercial uses only on top of the station box
- Prescribing mid-block connections on Site 47 to facilitate better permeability within the vicinity of the southern station entry and transport interchange
- Build to lines are amended to define the new public domain
- Active frontage controls are amended to respond to the Metro Study Area configuration, pedestrian desire lines and the activation of the public domain
- Setbacks are amended to ensure cohesion of built form across the precinct and providing for wind protection to the public domain
- Street wall heights are amended to reflect a more pedestrian-scaled environment within the new streetscapes and public spaces
- Building heights are increased for Site 47 from 30 storeys to 45 storeys to respond to the opportunity that the metro station presents to locate density and activity within the area of highest accessibility and amenity
- That the FSR boundaries are realigned to better reflect the lot layouts as a result of Metro freehold boundaries and the configuration of the public domain
- That a minimum proportion of solar access to public open spaces is enshrined within a guideline

AERIAL VIEW FROM THE NORTH
EAST LOOKING SOUTH WEST

