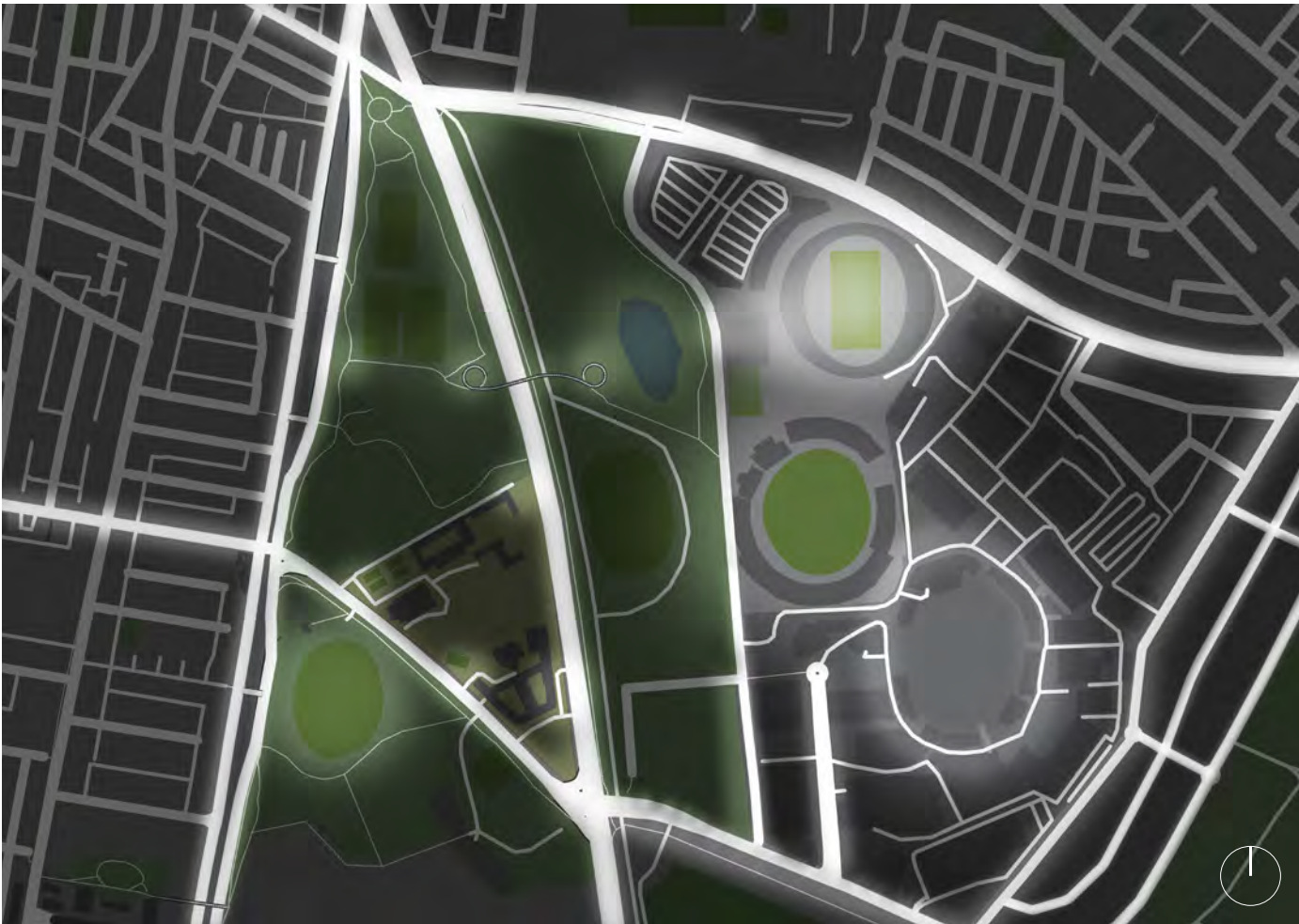


4.10 Lighting and Safety



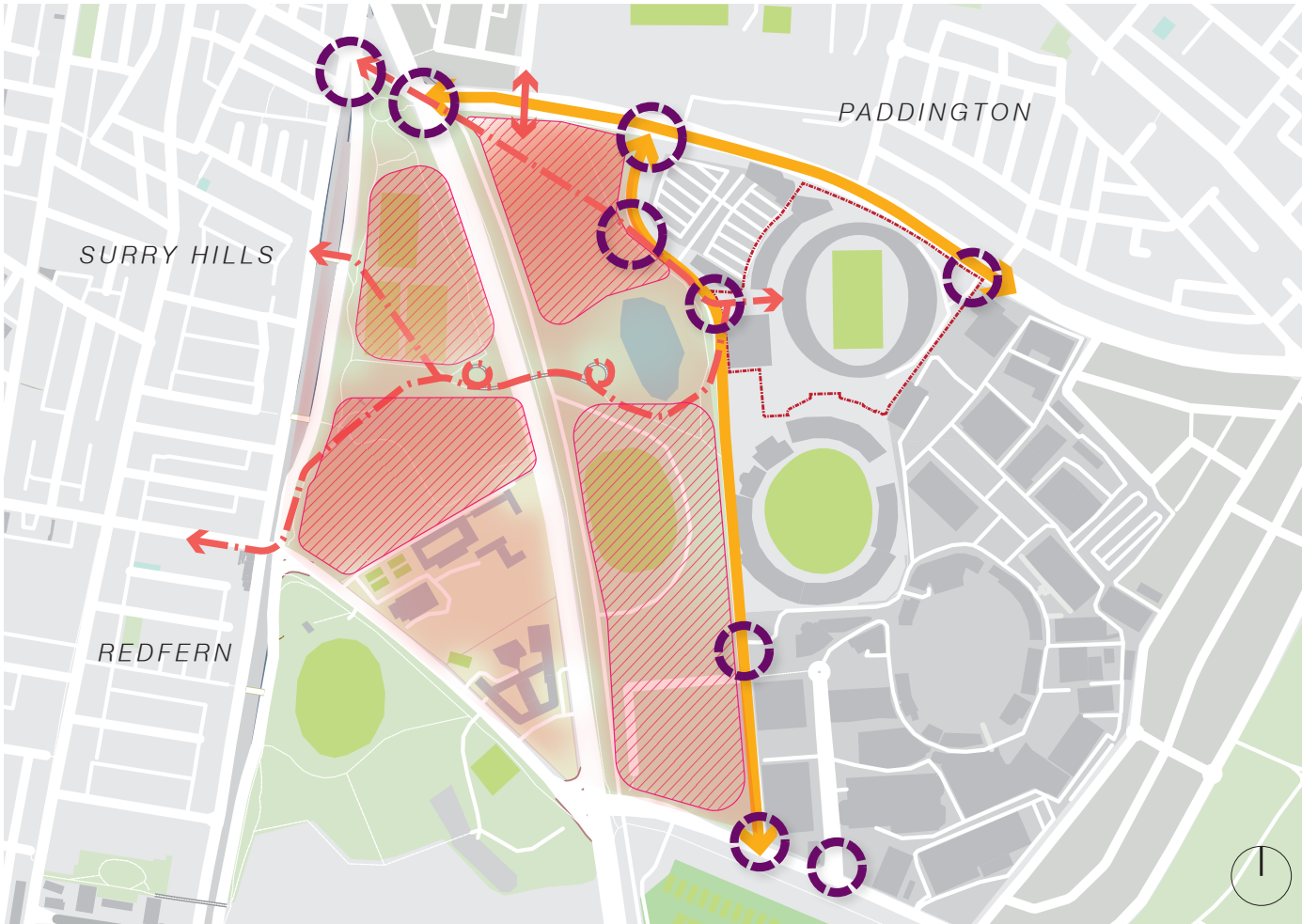
Lighting - Local

Lighting lacks consistency across Moore Park creates poor visibility, reduced passive surveillance, hampers wayfinding across the park and impacts active transport use to and from the site. The *Moore Park Master Plan 2040* highlights the need for improved lighting across the Park to create safe and attractive connections across the park and through to the surrounding suburbs.

Key pedestrian routes out from the SFS and SCG across to Foveaux Street, Tibby Cotter Bridge and Moore Park East and West are poorly lit leading to patron safety issues.

Key

- Site Boundary
- Areas with Light



Safety - Local

Pedestrian/vehicle conflict, poor lighting, and a lack of passive surveillance contribute to safety issues in Moore Park and surrounding the SFS.

There are multiple pedestrian/vehicle conflict points exacerbated by large event crowds. Pedestrian access from the east to the SFS typically follows Fitzroy Street into Moore Park. As noted in the *Moore Park Master Plan 2040*: “This route has a steep gradient and inadequate crossing capacity at Drivers Triangle creating safety concerns during large events.”

Driver Avenue itself is a significant hazard. Not classed as a road under the NSW Roads Act 1993, the road material is inconsistent and features no formal pedestrian crossings. Moore Park Road also features no pedestrian crossing points especially in between Anzac Parade and Oatley Road. On event days, patrons can be seen running across the road due to the lack of formal crossing point.

Key

- Pedestrian Routes
- ▨ Areas with safety issues
- Night Light Intensity
- Vehicular Pedestrian Conflicts
- ↔ Road Hazards

Site Analysis

4.11 Wayfinding, Signage and Interpretation

The surrounds feature signage and wayfinding from a range of different stakeholders including:

- Legible Sydney (City of Sydney)
- Centennial Parklands
- University of Technology, Sydney (UTS)
- Entertainment Quarter
- Fox Studios

The most prominent of these is Legible Sydney, utilised within the City of Sydney LGA and which is visible from all key pedestrian approaches to the SFS. A range of different pieces of signage including pylons, flags and fingers exist through the surrounding suburbs.



Legible Sydney Pylon



Legible Sydney Flag



Legible Sydney Finger



Legible Sydney Signage Map (Source: ASPECT Studios)

Site Analysis

4.12 Opportunities

A new state of the art stadium with increased capacity

The redevelopment of SFS and demolition of ancillary buildings provides the opportunity for a new stadium with up to 45,000 seats with a range of seating and facilities which will improve the fan experience.

Day-to-day public site access

Universal access to the spaces surrounding the stadium will promote better utilisation of the public domain and provide the potential for multi-use spaces, complementing the recreational offering in Moore Park and Centennial Parklands.

Connecting Paddington to Moore Park and Light Rail

New connections between Paddington, Moore Park and the new Moore Park Light Rail stop should be facilitated through the site.

New pedestrian entry off Moore Park Road

The demolition of the Sheridan building provides the opportunity for a new pedestrian entry between the Rugby Australia Building and Tree 125. The existing levels provide the potential for direct access with limited grade change to an external SFS concourse. The execution of this entry will be important to promoting public use of the precinct day-to-day and promoting connections through to Moore Park and Light Rail.

Improved Driver Avenue Entrance and increased presence to Moore Park

The demolition of the indoor cricket wickets and stadium services provide the opportunity for a larger threshold with event and gathering spaces to welcome the public to the SFS and increases the visibility of the stadium and entry to patrons coming from the west.

Improved Moore Park Road/Paddington Lane Entrance

The SFS Redevelopment provides the opportunity to revise the entry sequence from Paddington and the mediation of level differences. The redesign of this space could provide event and gathering spaces as well as aid in the mitigation of pedestrian/vehicle conflict.

Establish better interfaces between the SFS and SCG Bradman Noble Stand

The current SFS provides a blank facade to the Bradman Noble Stand. There is an opportunity for complimentary uses to be provided at the base of the SFS to heighten the event day experience and better utilise spaces surrounding the stadium.

Foreshadow the delivery of future local connections

The *Moore Park Master Plan 2040* highlights the opportunity for a north/south link connecting Moore Park Road through to the Entertainment Quarter and Cleveland Street. There is an opportunity on-site to design spaces which may support and not hinder the delivery of this connection in the future.

Upgrades to Driver Avenue

Outlined in the *Moore Park Master Plan 2040*, new trees, surface improvements and the pedestrianisation of the avenue will greatly improve the SFS's western interface and support a better transition from Moore Park to the SFS for the public.

Bondi Junction to City Walking and Cycling Improvements

The upgrade of active transport infrastructure along Moore Park Road is an opportunity to provide increased access to the SFS and new public domain spaces

Moore Park Light Rail

The construction of the new Light Rail stop in Moore Park along Anzac Parade (scheduled for completion 2019) will provide opportunities for diversification of transport modes to the SFS and encourage use of Moore Park West and the SFS public domain.



Key	
	Site Boundary
	Pedestrian Connection
	Extended pedestrian route around stadium
	Cycleway
	Service Road
	Potential development on Driver Avenue
	Interfaces
	Improve Entrances
	Vehicular Access

Project Vision and Principles

5.1 Overview

The Sydney Football Stadium Vision and Principles distil the aspirations for the project and set up a lens through which the project should be viewed. The vision and principles are high level and inform the strategies and guidelines within this document.

They take into consideration the key findings of the strategic and site analysis, discussions with stakeholders and projects a future for the stadium and how it might contribute to the surrounding precinct.



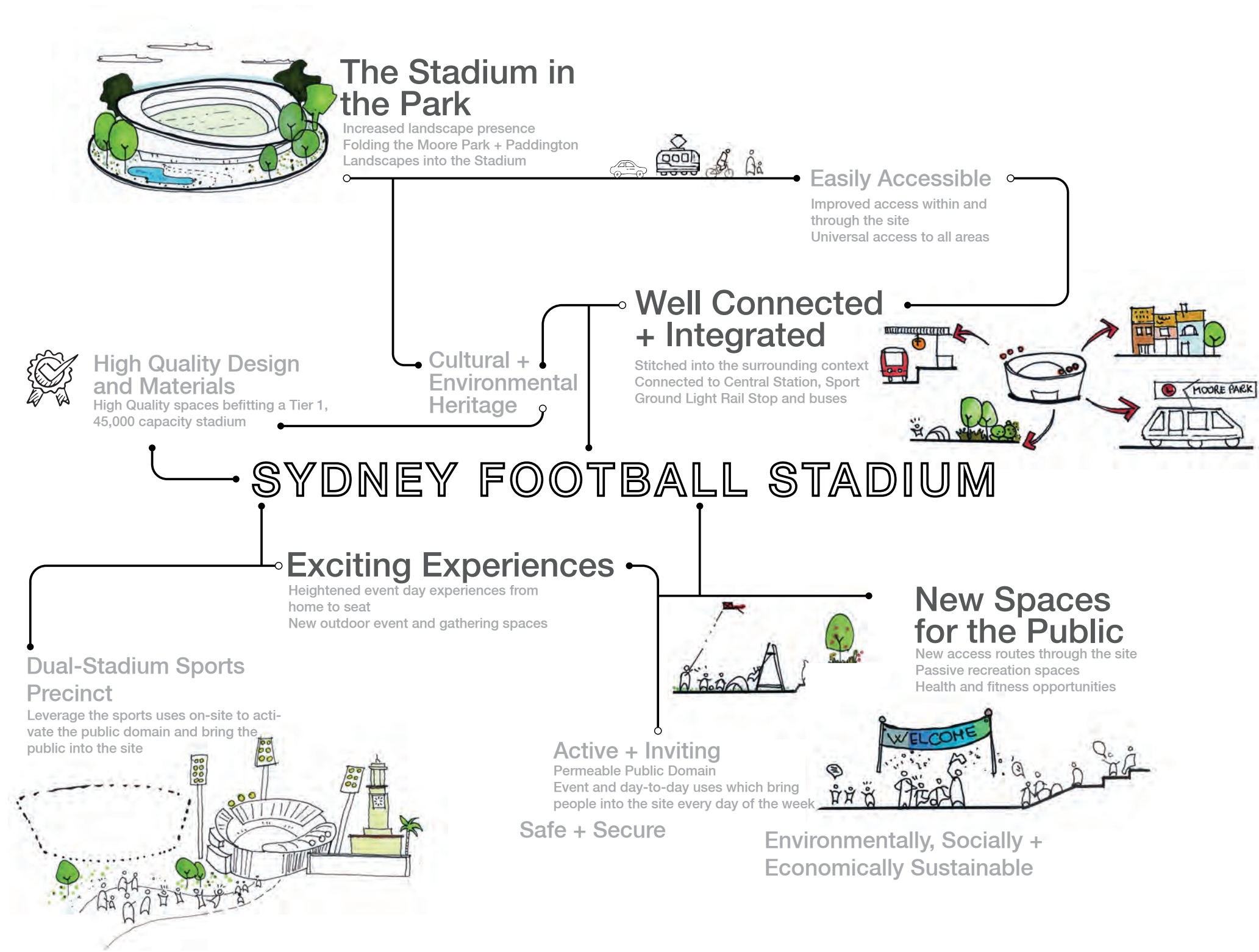
1. Artist's Impression of a new community destination at Kippax Lake including new picnic and barbeque facilities, a children's playground, and new tree planting (excerpt from *Moore Park Master Plan 2040*)
2. Barclays Center, NY, USA
3. Artists Impression of the potential look and feel of the view from Mt Steel overlooking an upgraded bat and ball field (excerpt from *Moore Park Master Plan 2040*)
4. New Stamford Bridge, London, UK

5.2 Vision

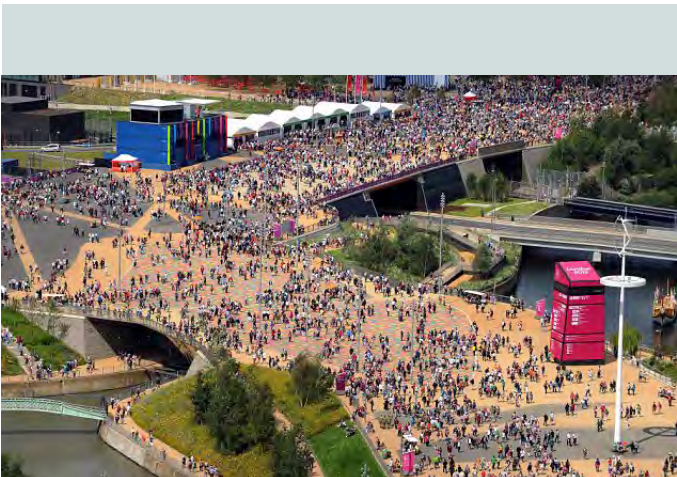
The Project Vision captures key themes from discussions with stakeholders and review of documents for surrounding sites.

The Vision includes the provision of high quality spaces and experiences for the public supported by a new Sydney Football Stadium.

At an urban scale, the Stadium redevelopment affords the opportunity to provide open space back to the public, enhance permeability through inner eastern Sydney and supporting better utilisation of open space, recreational and leisure infrastructure.



5.3 Design Principles

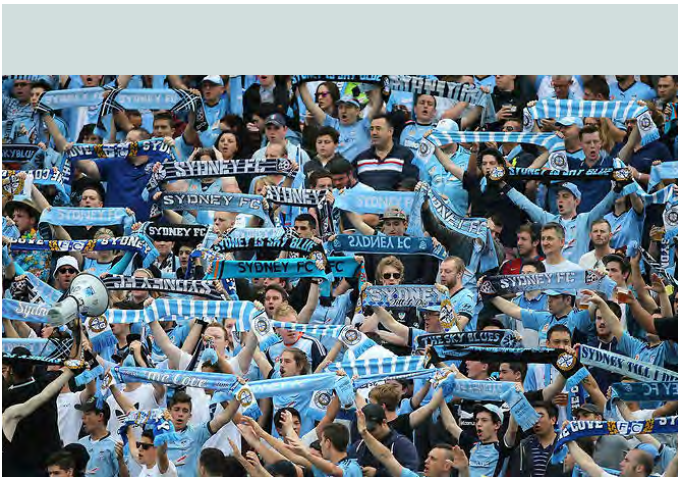


Queen Elizabeth Olympic Park, London

Movement and Circulation

The site will be open to the public and provide safe and equitable access during both event days and day-to-day. Day-to-day access provides the opportunity for activation, passive surveillance and new connections between Paddington through to Moore Park, Surry Hills and Light Rail.

The design of movement and circulation systems, and consideration of active site uses will help stitch the stadium into its surround and allow it to more thoroughly contribute to the street activation and life of the surrounding suburbs.



Sydney FC fans at Allianz Stadium

Character and Atmosphere

The establishment of a strong event day atmosphere is important to the function of the stadium and success of the precinct. Increased stadium visibility from key vistas, secondary event spaces, equitable access and clear wayfinding will support this atmosphere.

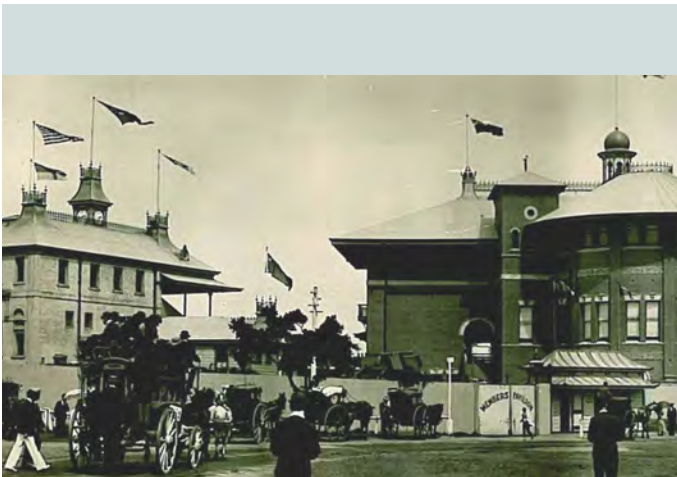
Day-to-day, the site will need to be safe and inviting with uses that will attract the public. These should align with the precinct's sports, health and entertainment focus.



Box Hill Gardens, ASPECT Studios

Amenity

Spaces surrounding the stadium will provide new publicly accessible spaces, event spaces and access routes connecting the surrounding suburbs such as Paddington and Surry Hills to Moore Park. Increased amenity within the spaces adjacent to the stadium will better support the day-to-day use of the precinct by on-site users and the wider public.



SCG, Sydney Cricket and Sportsground Trust

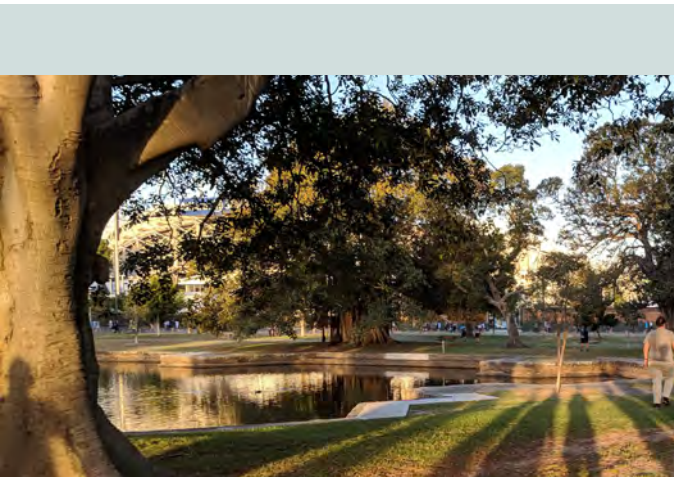
Heritage

The precinct forms part of a wide indigenous landscape which allows for meaningful interpretation of Aboriginal Cultural Heritage matters.

The site has a rich convict (Busby's Bore) and military history which also has the opportunity to be reinterpreted within a varied and engaging interpretation throughout the site, especially within the public domain.

The opportunity exists to enhance and respect the view lines to and from significant surrounding heritage precincts (SCG, Victoria Barracks, Moore/Centennial Parks, Paddington).

5.4 Design Principles



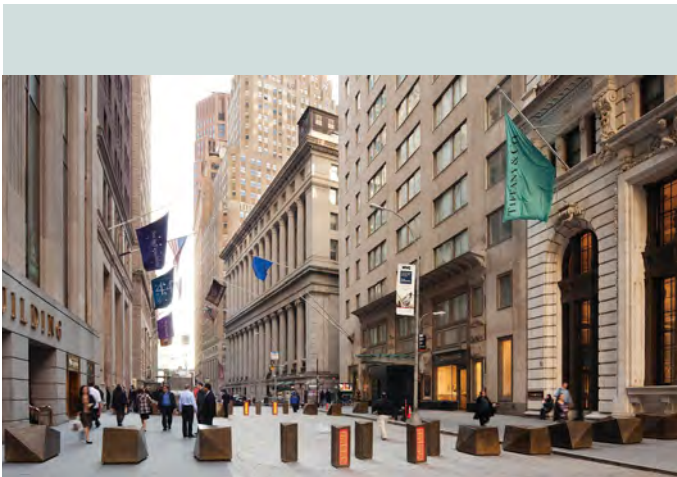
Moore Park, Sydney

Landscape and Open Space

The stadium’s landscape and open space design and character will draw on its setting and interface with Moore Park and the surrounding built context.

The soft, green quality of Moore Park will be enhanced with thoughtful, high quality public domain provision to the areas surrounding the stadium. The concourse level will allow separation between the new stadium and the Park. The considered design of the level change interface with Driver Avenue and the treatment of the street itself will allow the park character to influence the design of the stadium site.

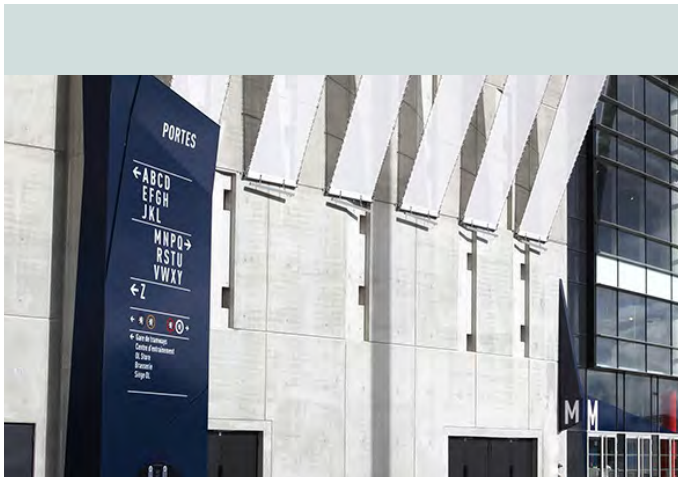
The landscape of the stadium will minimise impact on the park addressing issues such as stormwater management in an integrated manner within the site.



New York Stock Exchange Streetscape and Security, NY

Safety and Security

With significantly different environments created by event and non-event days, the integration of passive security measures and security zoning will reduce the operational costs of the stadium while also minimising obvious security items which detract from the setting of the stadium and its surrounds. Retractable bollards, hidden gates to allow the site to be closed on event days and public art which also serve as barriers to hostile vehicles.

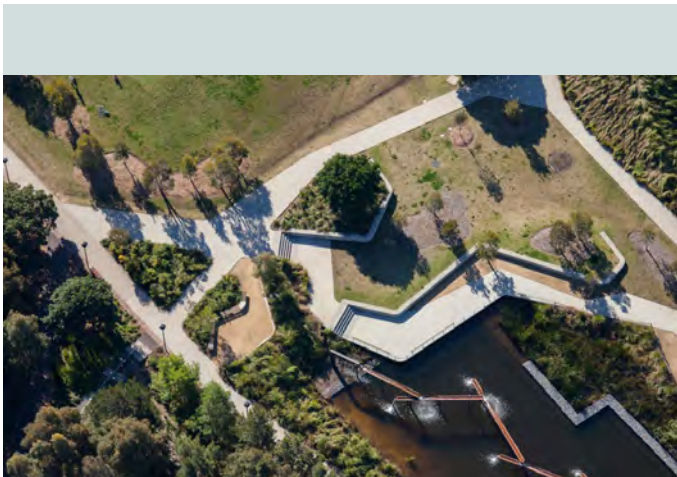


Parc Olympique Lyonnais, Lyon, France

Wayfinding and Signage

The site is surrounded by a series of different stakeholders and land owners with varying signage style guides which create difficulties in supporting simple and legible access to the stadium.

Opportunities will be sought to provide some consistency in wayfinding and signage to assist patrons in accessing the site and surrounding SCG/Moore Park/ EQ precinct.



Sydney Park, Sydney

Sustainability

The precinct and stadium will be designed to match and exceed best practice sustainability guidelines to achieve a suitable rating.

Within the public domain, opportunities will be sought to integrate on-site energy production, grey water reuse and water sensitive urban design. Where appropriate, tree planting will be utilised to minimise the urban heat island effect and to promote biodiversity and canopy cover. Use of durable materials from sustainable sources will be sought. The design of the public domain will encourage sustainable practices such as active transport use and opportunities for social interaction and gathering.

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Benchmarking and Concepts

6.1 Overview

This chapter includes benchmarking and concepts across five categories:

- Access and Movement
- Stadium Design
- Public Domain and Open Space
- Environment (Sustainability and Heritage)
- Wayfinding, Signage and Interpretation

Benchmarking

The purpose of benchmarking is to highlight “best practice” examples of stadiums and venues (both nationally and internationally) and international standards to establish a qualitative and quantitative framework for the design of the stadium, public domain and open space, access and movement and treatment of environmental factors including heritage, flooding and ESD considerations.

These will underpin the guidelines in the following chapter and establish a robust basis for future tendering and design processes.

Concept

Concepts in each category are outlined in response to learnings from the strategic review, site analysis, benchmarking and aim to reinforce the vision and principles key to SFS redevelopment.

These concepts will form the basis for the Urban Design Guidelines in Chapter 7.



Access and Movement



Stadium Design



Public Domain and Open Space



Environment



Wayfinding, Signage and Interpretation

Benchmarking and Concepts



6.2 Benchmarking - Access and Movement

Access and Movement is important to integrating the site into its context, leveraging existing movement paths and heightening the event day experience.

Access and Experience

Precedents

McLane Stadium, Texas

McLane Stadium is the home of Baylor University Football and located across Brazos River from their main campus. Access routes to the stadium are curated to intensify the game day experience. Two pedestrian bridges connect the campus and Touchdown Alley, a pre-game event space and purpose built tailgating area to the stadium. These over-water bridges establish clear thresholds which become part of the event-day progression from home to seat. This is well demonstrated by the tradition of “The Bear Walk” where fans create a path for the home team to walk from Touchdown Alley to the stadium itself.

Wembley Stadium, London

Wembley Stadium can be accessed from multiple transport modes including bus, rail and underground and promotes access to the stadium by public transport. The key pedestrian access route towards the stadium, Wembley Way, extends from Wembely Park Station in the north and orients the patron so that the iconic Wembley Stadium arch can be viewed straight on. This pedestrianised passage also features short-stay accommodation, food, beverage and entertainment uses which form part of the public’s progression towards the stadium.

Allianz Arena, Munich

Allianz Arena employs an innovative approach to integrating public transport, carparking, servicing and landscape to create a seamless event day experience from transport through to seat. The stadium itself is built above an above-ground servicing and parking zone. As visitors leave the U-Bahn station to the site’s south-west, they follow a series of meandering paths across a wide grassed area. This landscape slowly ramps up towards the stadium facilitating the concealment of a 4 storey public car park of which 130 spaces are reserved as disabled parking.



McLane Stadium, Texas



Wembley Stadium, London



Allianz Arena, Munich

Centurylink Field, Seattle

Home of the MLS team Seattle Sounders, the stadium is located within a sports and entertainment precinct which includes WaMu Theatre and Safeco Field (Baseball). While the stadium itself has limited public domain space for events, the Sounders utilise its proximity to downtown Seattle, to create a game day experience which starts at Occidental Square and includes a march down to the stadium.

Safety and Security

With millions of people visiting the precinct every year, safety and security are important components in the design of access, movement and public domain. Although some safety and security measures can be executed within the site boundary, the mitigation of risk to the public should extend past the site boundary.

Emirates Stadium

Presented with the increased risk of hostile vehicle attack, Emirates Stadium utilises a large concrete Arsenal sculpture which serves as a vehicle barrier while also reinforcing home-team ownership of the stadium and surrounds. The stadium itself is located upon a raised podium surrounded by landscape and rail corridors on two sides. This separation from the horizontal and vertical planes allow for security to be more carefully managed.

New York Streetscape and Security

This precedent delivers both functional and aesthetic qualities to the public domain. Designed by Rogers Marvel Architects, the sculptural elements double as both barriers, provide seating and replace conventional bollards. A shallow turntable allows the central items to be relocated and allow vehicles to pass through. Opportunities for security items to integrate with the public domain and serve multiple purposes should be explored.

Guides

The Guide to Safety at Sports Ground (Green Guide), compiled by the UK Department for Culture, Media and Sport serves as an advisory guide for best practice for safety management and design of sports grounds



Occidental Avenue South, Seattle



Emirates Stadium Hostile Vehicle Mitigation



New York Stock Exchange Streetscape and Security

Benchmarking and Concepts



6.3 Concept - Access and Movement

Access Points

Existing pedestrian entries off Driver Avenue and Moore Park Road should be retained and enhanced to improve the stadium interface to key pedestrian access routes and surrounding suburbs. A new access point to the north of the stadium should be created adjacent to the intersection between Moore Park Road and Oatley Road to increase the permeability of the site.

The design and articulation of these entries are key to presenting a welcoming and inviting face to the public and encouraging day-to-day use. They should be designed to clearly visible, set up good sight lines across the stadium surrounds from outside the stadium site and be universally accessible

Circulation and Connections

The site will facilitate new day-to-day and event access points and routes, integrating SFS into its surroundings and connecting Paddington to the north with Moore Park and light rail to the south-west. Areas between the SFS Bradman Noble Stand and Dally Messenger Stand will only be accessible on SFS-only event days.

Spaces should be designed to provide universal access to the full range of outdoor spaces and minimise mechanical movement solutions (e.g. lifts) which might segment the physical and visual experience of the SFS. Consideration should be given to the materiality and legibility of these new access routes to create seamless transitions for the public from surrounding areas through the stadium grounds. The approximately 12 metre level difference from the current entrance on Moore Park Road to the Driver Avenue entrance, is a key challenge in designing for the site.

Configuration of access down Paddington Lane should consider potential future connection of Moore Park Road through to Fox Studios and the Entertainment Quarter as noted in the *Moore Park Master Plan 2040*.

Security and Safety

Specific event requirements across the precinct will impact available access routes across the site on event days. Security lines (areas which to complete bag checks and security searches) should be able to be established in three

- potential locations in response to event requirements:
- Major International Event Mode (up to 45,000 capacity): at the line of the site entries at Driver Avenue, Moore Park Road and Oatley Road prior to any grade change required to the external stadium concourse
 - Championship Mode (up to 45,000 capacity) and Club Mode (up to 30,000 capacity): at the line of the stadium alongside entry points to internal ticketed areas

Both Championship and Club will allow the SFS grounds to be accessed by the general public during events.

Vehicle Access and Servicing

Existing access should be maintained off Moore Park Road down Paddington Lane to service the SCG and future SFS basements. These should facilitate access for larger multi-axle vehicles which service the stadia. The provision of a loading dock on the north-western edge of the site will allow for potential servicing for the stadium from MP1 and utilisation of the existing vehicle access point off Driver Avenue. A rejection lane should be added to access points allow vehicles to be turned around prior to entering the precinct.

Active Transport

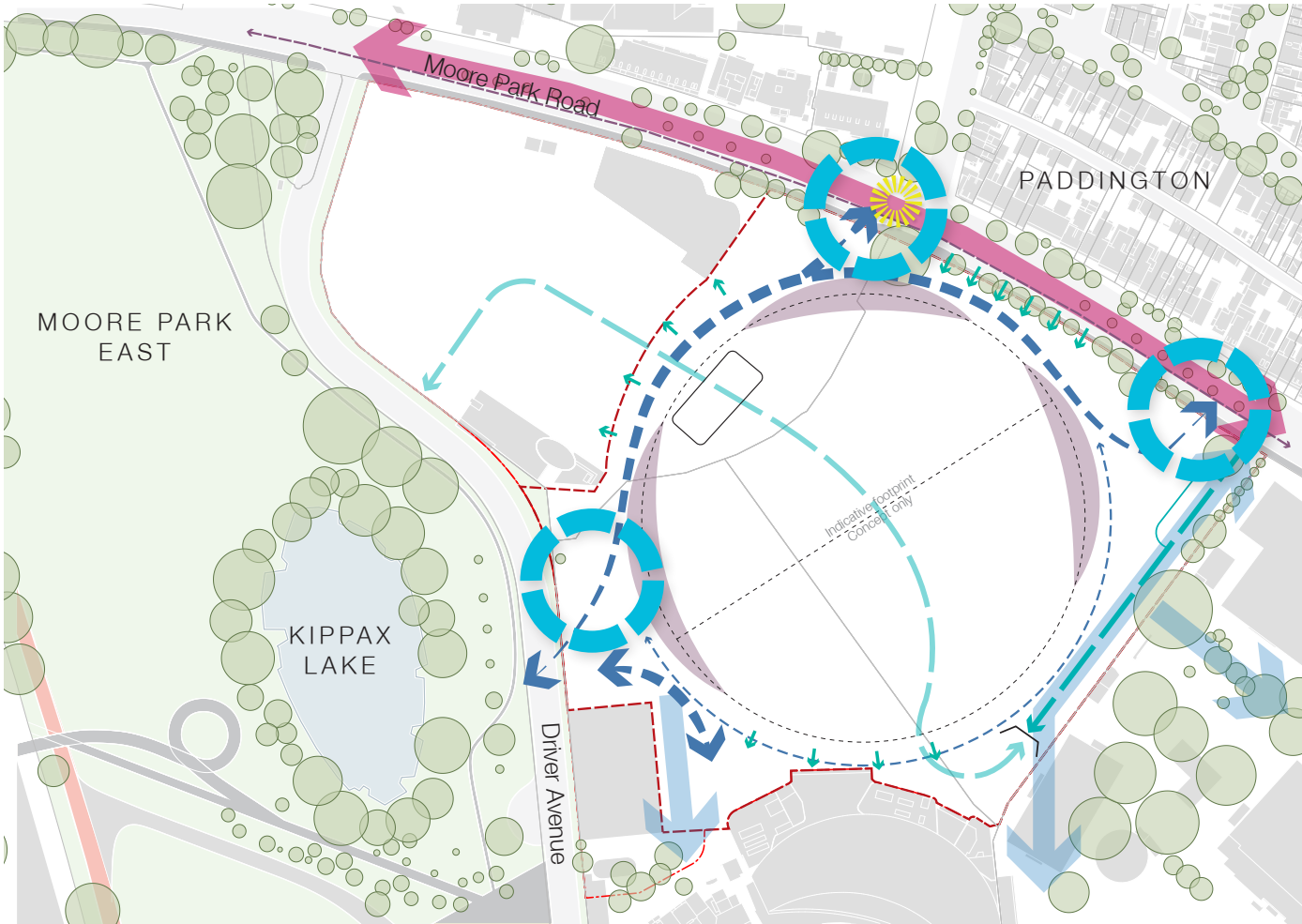
Active transport including pedestrian and cycle access to the stadium should be promoted to reduce reliance on private vehicles and congestion around the site. Opportunities to integrate on-site movement with the *Bondi Junction to City Walking and Cycling Improvements* along Moore Park Road should be considered.

Emergency Vehicle Access

The design of the public domain should allow for emergency vehicle access around the stadium and areas directly adjacent to the Bradmam Noble Stand.

Emergency Egress

Emergency egress for both the SFS and select parts of the SCG should be facilitated through the site to ensure adequate means of escape in the case of fire or other emergency. Considering the large capacity of both stadiums, the provision of these spaces should be informed by rigorous modelling of emergency scenarios.



Access and Movement Considerations

Peripheral Works

- Items not located within the site that are planned to be delivered which would support and enhance the use of the stadium and surrounds
- Bondi Junction to City, Cycling and Walking Improvements, CoS*
- Improvement of pedestrian and the construction of dedicated cycleways along Moore Park Road and Fitzroy Street
- Moore Park Master Plan 2040, CPMPT*
- Removal of at-grade carparking on Moore Park East
 - Pedestrianisation/improvement of Driver Avenue
 - Lighting, wayfinding and pathway upgrades between Tibby Cotter Bridge, Moore Park Light Rail Stop and the SFS

Key

- Site Boundary
- Key pedestrian circulation route
- Extended pedestrian route around stadium
- Major Vehicular Route
- Service Road
- XX
- Public Domain Interface
- Pedestrian Access Points
- Emergency Access

Benchmarking and Concepts



6.4 Benchmarking - Stadium Design

The SFS will need to perform dual functions both as a piece of distinctive, visible design as well as a building appropriately situated, design and scale in response to its site. The design itself will need to cater for a diverse suite of uses both during events and day-to-day.

Shape and Form

Precedents
New Stamford Bridge, London

Designed in response to the irregular site and low-medium rise context, the New Stamford Bridge extends out to its surrounds to create an iconic design which shifts as the public move towards and around the stadium.

Adelaide Oval, Adelaide

The non-monolithic design of Adelaide oval reduces its visible bulk and allows it to better integrate with its landscaped surrounds and the river foreshore whilst still being highly visible and acting as a city landmark.

Architectural Expression

Precedents
AAMI Park, Melbourne
Surrounded by a myriad of other sports venues AAMI Park’s distinctive bubble roof form is visible from Batman Avenue, the approach from Melbourne CBD and the MCG/Melbourne Park Train stop. This form extends through to the inside of the stadium uniquely framing views out of the stadium and of Melbourne’s skyline.

Moses Mabhia Stadium, Dhurban

Initially constructed for the 2010 FIFA World Cup, the venue includes a 350m long, 105m high arch which extends over the field of play. This alongside the sweeping shape of the stadium roof creates architectural expression distinct from its surrounds.

Materiality

Precedents
Optus Stadium, Perth
The stadium utilises a facade which performs differently from day to night and articulates an understanding of place. In the day, a permeable anodised aluminium cladding is visible which speaks to Western Australia’s unique geology, while at night the permeable facade fully customisable lighting allows the stadium to be tailored to specific event requirements.



New Stamford Bridge, London



Adelaide Oval, Adelaide



AAMI Park, Melbourne

New Stamford Bridge, London

Chelsea’s reconstructed homeground will feature 246 brick columns which surround the structure responding to the brick architecture endemic to the surrounding context. When viewed from a distance, the repetitive columns create an angular sculptural form which is both distinct from its surrounds as well as consistent in material.

Brasilia Stadium, Brasilia

Originally constructed in 1974, it received major renovations in preparation for large scale events in 2013 and 2014. The design features a light weight fabric roof lifted up from the stadium seating. This roof design allow for some ambient light to pass through into the stadium bowl while its separation from seating assists in providing adequate air circulation for growth of the pitch.

Responsive Facades

Precedents
Barclays Center, New York
Located on an irregularly shaped site surrounded by major roads, the site’s responsive facade is inward looking and centres on a large plaza at the venues “front door”. The screen activates this area on event days providing a wash of light across the plaza and day-to-day general branding and advertising opportunities

Allianz Arena, Munich

Allianz Arena in encased with 2,874 inflated ETFE-foil air panels each individually lit by LED lights. The stadium surface is fully customisable to reflect the event colours. This larger and less intricate responsive facade (in comparison to the Barclays Centre) responds to the stadium’s setting in a large flat landscape, the flat and clear approach of patrons from the U-Bahn station and its location adjacent to a large motorways.



Optus Stadium, Perth



Brasilia Stadium, Brasilia



Barclays Center, New York

Benchmarking and Concepts



6.5 Concept - Stadium Design

Architectural Expression

The stadium should be distinctive, unique and be easily read as a destination point for visitors from key travel routes towards the stadium.

Stadium Access

The stadium design should respond to the three key site access points from Driver Avenue, Moore Park and Oatley Road. New SFS building entries should be clear, easily legible and form part of a seamless journey from adjacent areas through to the seating area.

External Events

It should reinforce the new stadium “front door” on Driver Avenue and support pre-event activation as well as other non-stadium events through the provision of technology or physical infrastructure.

Activation

Opportunities for outward facing activation integrated into the stadium envelope should be included to support both events and day-to-day uses. Day-to-day activation zones may be complimented with movable furniture and planting to create a more intimate atmosphere. During events these could be removed to allow for event day crowds. Good sightlines should be established to any active day-to-day uses from outside the SFS grounds to promote better utilisation of the SFS.

Key views

The stadium design and any unique design features should take advantage of key views from access routes towards the stadium from Surry Hills and Paddington, specifically from Tibby Cotter Bridge, Fitzroy Street, Oatley Road and Regent Street. This will heighten the event day experience and serve as an integrated wayfinding feature.

The visibility and legibility of the stadium from vehicular, cycle and pedestrian movement down Moore Park Road should also be considered. Visibility into the precinct and uses within the stadium could support public permeability.

Materiality

Choice of materials should respond to the stadium’s context, fulfil sustainability goals for the stadium unique character of the stadium. Opportunities for the use of recycled, light or reflective materials, and materials of low embodied energy should be considered for use.

The choice of materials is also presents the opportunity for incorporation of heritage interpretation into the building itself.

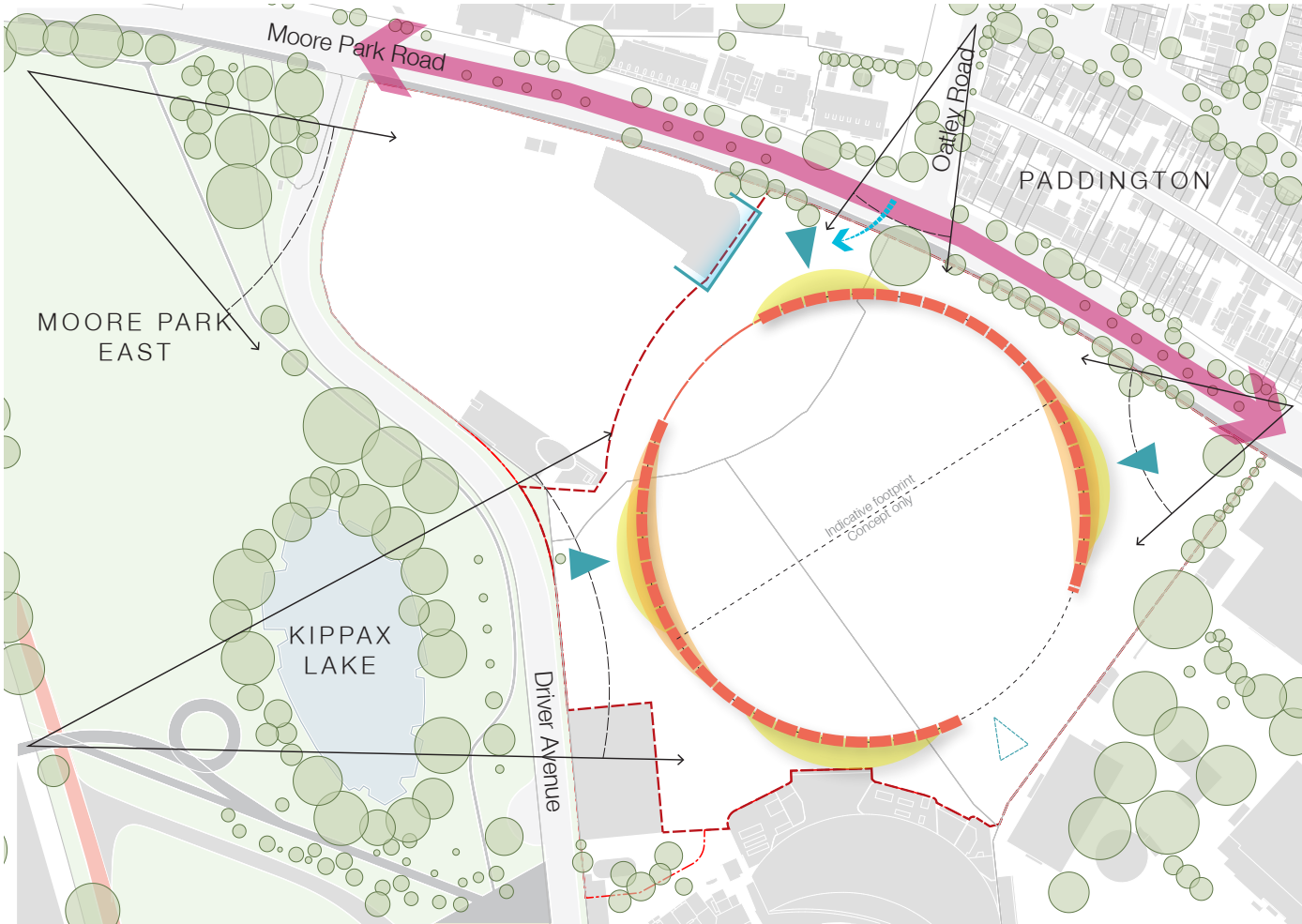
Responsive Facades

Where possible, responsive facades should be utilised to provide flexible branding, advertising, precinct activation and wayfinding opportunities. The visibility of club branding and colours are important to establishing a home ground atmosphere and intensifying the event day experience.

These facades should be focussed towards the new stadium “front door” to Driver Avenue, Oatley Road and Moore Park Road entrances. Consideration should be given to the impact of any responsive facades to residential uses and vehicular traffic travelling down Moore Park Road.

Form and Scale

The stadium should respond to its unique setting and explore the opportunity for a non-monolithic form which reduces the visible bulk of the stadium from the surrounding areas. The deconstruction of the stadium into smaller portions will also allow the design to perform different wayfinding and visual functions to its multiple public interfaces.



Stadium Design Considerations

Peripheral Works

Items not located within the site that are planned to be delivered which would support and enhance the use of the stadium and surrounds

Moore Park Master Plan 2040, CPMPT

- Moore Park Commons
- Upgrades and Landscaping to Kippax Lake

Key

- | | |
|---|----------------|
| --- Site Boundary | ↗ Key Vistas |
| ↔ Major Vehicular Route | ▶ Entry Points |
| ⋯ Diagrammatic stadium form | |
| --- Key Frontages | |
| --- Future Frontage Consideration | |
| Yellow Possible Public Activation Areas | |
| Orange Key Entries | |

Benchmarking and Concepts



6.6 Benchmarking - Public Domain and Open Space

The public domain and open space surrounding key sporting venues have the potential to shape the event day experience and extend the relevance and use of the precinct day-to-day. Successful public domain and open spaces provide large scale gathering and supporting event spaces for event day while also providing finer grain spaces to support the daytime uses and respond to the scale of an individual moving through the space.

Landscape

Precedents

Queen Elizabeth Olympic Park, London

Constructed for the 2012 Olympic Games, multiple sporting venues are set within 110 hectares of landscape. This open space supports continued events within the park and residential and commercial uses which have come online after the completion of the games. Key characteristics of the Park design include:

- The setting up of vistas and views towards the multiple venues
- design supports wayfinding through the site
- multiple paths with and routes of different through the park disperse large crowds
- a range of gathering spaces for events and day-to-day with hard and soft landscaped surfaces

New National Stadium, Tokyo (Kengo Kuma)

Currently in construction for the 2020 Tokyo Olympics and Paralympics, the National Stadium will be surrounded by a heavily planted landscape allowing the public domain to blend into the surrounding forest. This will also contribute to a network of large planted areas at centre of Tokyo which includes Yoyogi Park, Meiji Shrine, Shinjuku Gyoen National Garden, Meiki Kingu Gaien and the two large scale Imperial compounds.

New Tottenham Stadium, London

Currently in construction, the 61,500 seat stadium proposes a public square for large scale for fan events on the southern end of the stadium.

Olympiapark, Munich

Constructed for the 1972 Munich Olympics, it remains an active sports and event precinct. The precinct is structured around a large lake which provides definition between the sporting venues and the secondary landscaped gathering



Queen Elizabeth Olympic Park, London



New National Stadium, Tokyo



Queen Elizabeth Olympic Park, London

and event spaces. Similar to Queen Elizabeth Olympic Park, the design incorporates meandering paths to slow down pedestrians and create multiple vistas through the park.

All England Tennis and Croquet Club

The All England Tennis and Croquet Club is the home of The Championships, Wimbledon one of the four tennis grand slams. During Wimbledon, Aorangi Terrace (otherwise known as Henman Hill) becomes an active and exciting event space and an integral part of the Wimbledon experience. Patrons watch games on a large screen mounted against Centre Court. This area is also well serviced by food and beverage outlets.

Furniture and Objects

Precedent

City of Sydney Public Domain Furniture

Designed by Tzannes, the furniture is present throughout the City of Sydney Local Government Area. The suite is proposed for use in significant new urban projects as well as within the public domain of the City and its Villages. The furniture suite is a means of creating a unified and distinct identity for the City, while providing high levels of amenity within the public domain.



Olympiapark, Munich



Aorangi Terrace (Henman Hill), All England Tennis and Croquet Club



City of Sydney Public Domain Furniture

Benchmarking and Concepts



6.7 Concept - Public Domain and Open Space

The Driver Avenue Front Door

The site entry at Driver Avenue provides the primary front door entry to the site. The stadium itself is connected to Driver Avenue and Moore Park via a grand stair and terraced landscape to negotiate a significant level change to the Stadium and public concourse. Where possible, opportunities for activation should be explored and at a minimum, integrated, amphitheatre style seating and soft landscape should be provided. The Diver Avenue Terraces should engage with Driver Ave and Moore Park so to support the utilisation of these spaces during even days for pop up activities.

The Moore Park Road Front Door

A secondary site entry point is located to the north east of the stadium on Moore Park Road. This entry, flush with adjacent footpath level, will provide a seamless entry into SFS public domain. The Moore Park Road entry will accommodate pedestrians arriving at the site from the east as well as providing some limited vehicular access from the stadium basement. The plaza and concourse along the northern boundary should feel as though it is an extension of the public footpath, emphasising the public quality of the space. This should be further supported by the paving selection, tree planting and amenity provision in this area.

Oatley Road Entry

A third site access point is provided adjacent to the Oatley Road Intersection where a flush access point is achieved in to the site. The site entry at this location is defined and framed by significant, existing fig tree (no.125) and the existing Rugby Australia building. Due to its prominent location, where possible, opportunities for activation should be provided at Oatley Road Place. Pedestrians should enter the site to a plaza space that is an extension of the stadium concourse, providing heightened connectivity around the site.

Bradman Noble Terrace

Due to its constrained nature, access to the Bradman Noble Terrace will be restricted day-to-day with access provided for members as required. The Bradman Noble Terraces is accessed via a new connection at Driver Avenue Entry adjacent to the cricket practice wickets. The space will be able to function independently of the concourse with allowances for enclosure of the space for security purposes. The space should feel as though it is a continuation of the concourse by its material and finishes selections while

maintaining its character as a unique and private space for members.

Landscaping and Planting

Where possible, tree and low level soft landscaping should be utilised within the public domain to provide physical buffers, shading and to assist in integrating the stadium ground plane into its context. The Stadium's public domain should function as an extension of both the stadium, park and streets with hard landscape sensitive to its park setting and soft landscape and planting mindful of the function requirements of a stadium. All public domain elements including trees should not obstruct pedestrian desire lines, allow clear sight lines and contribute to a pleasant and comfortable place to be.

Interface between SFS and SCG

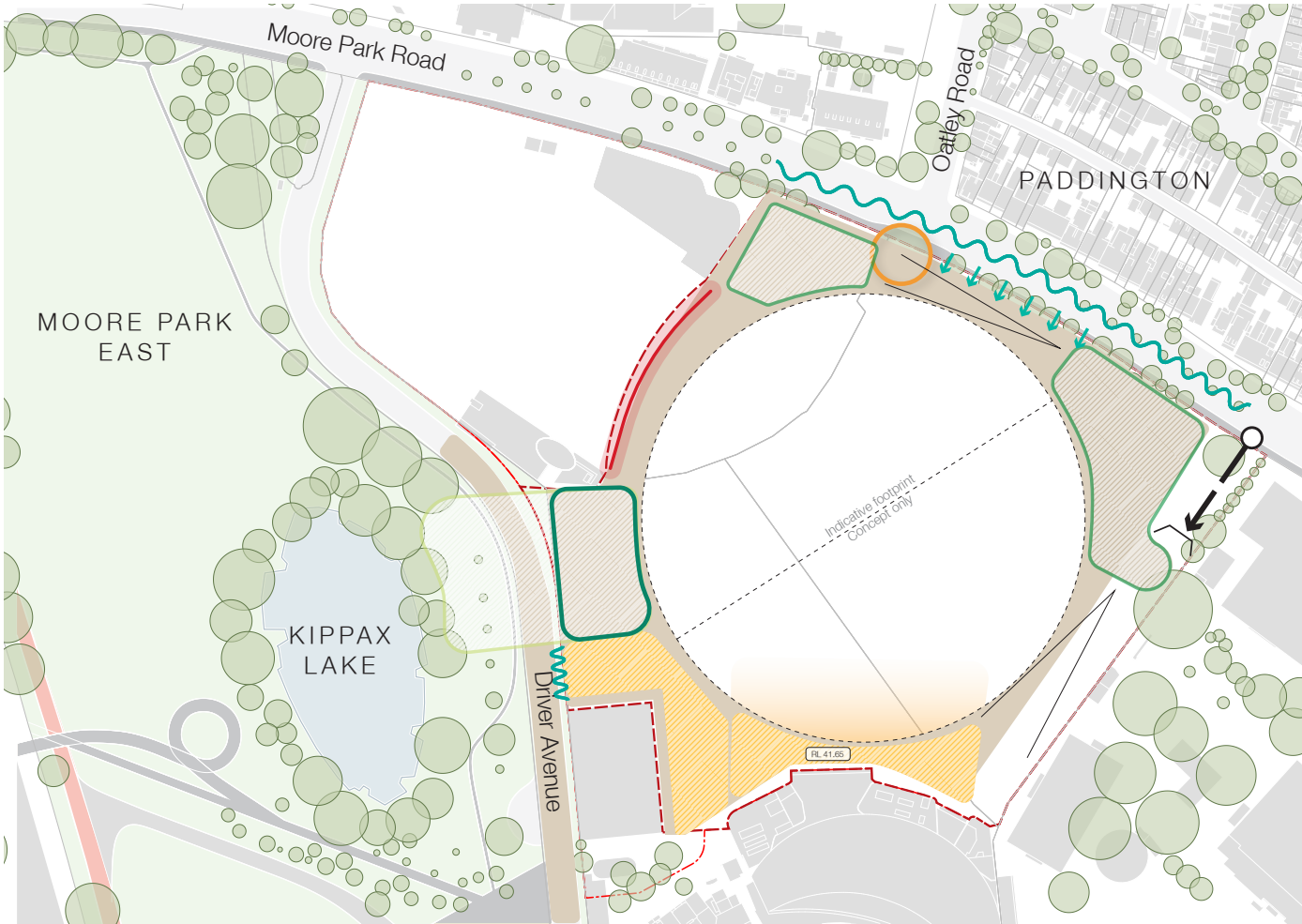
Existing levels around the Bradman Noble stand must be retained to facilitate entry into the SCG. Public domain vs private use in this area should be negotiated through the design of the Stadium's circulation network. Ensure equitable access is provided to all publicly accessible places within the precinct. This zone between the SFS and SCG should have the ability to be completely secured to restrict public movement at predetermined times of the day and during certain event modes.

Heritage Vegetation and Trees of Significance

Tree iQ acknowledges tree No. 125, a Moreton Bay Fig adjacent to Moore Park Road as a priority for retention on-site. This tree is iconic to the precinct and provides significant amenity for the stadium site and Moore Park Road. Located approximately at the junction of Oatley Road and Moore Park Road, Tree No. 125 should be utilised as a feature of the public domain design, marking a key entry into the precinct. The group of trees, no. 231-238, should also be retained and protected on site. As the trees sit on sloping terrain grading towards the existing stadium, the design of the surrounding landscape should coherently integrate functional landscape spaces, with the level changes needed to sustain these trees.

Passive Security Design

Passive surveillance opportunities will be critical to achieve pedestrian safety on the site outside of event times. This may include the physical activation of the site (through retail, café, restaurants etc), active uses within the building looking out to the public domain (eyes on the street), and by encouraging direct and convenient access through movement across the site.



Public Domain Considerations

Peripheral Works

Items not located within the site that should be delivered to support and enhance the use of the stadium and surrounds. This may include the pedestrian connections to light rail and other public transport, design of Driver Avenue and the integration of Moore Park Road footpath.

- Pedestrianisation of Driver Avenue (Moore Park Master Plan 2040, CPMPT)
- Moore Park Commons (Moore Park Master Plan 2040, CPMPT)

Key

- Site Boundary
- Upper Concourse
- Lower Concourse
- Corresponding Levels
- Vehicular Access
- Level Change
- Heritage Significant Tree #125

Benchmarking and Concepts



6.8 Benchmarking - Environment

Sustainability

Environmental and social sustainability should be embedded within the design to support the SFS Redevelopment’s targeted 50 year lifespan. The achievement of sustainability goals in these categories can also create financial sustainability

Certification

The project will be targeting a LEED Gold Certification.

Precedents
Sydney Park, Sydney

The design of Sydney Park features revitalised wetlands and an extensive water reuse system which captures stormwater, cleans it through a pollutant trap and series of bio-retention beds for release downstream or potential reuse. Integrated into the design of the park and made clearly visible to the public, it contributes to the environmental, social and economic sustainability credentials of the project.

Box Hill Multi Purpose Area. Melbourne
Designed by ASPECT Studios for a diverse array of recreation activities and events, the project supports environmental and social sustainability goals. The diverse range of uses facilitated by the space appeals to a range of different people and prompts continued use. The former tennis court club building was retained and reused as seating platforms overlooking the playing surfaces.

Ballast Point Park, Sydney
Ballast Point Park is located on former industrial lands and was informed by a strong environmental agenda which permeates through its design and operation. The project widely uses recycled materials, on-site power generation through wind turbines and an integrated stormwater management and recycling system. The park was designed by McGregor Coxall.



Sydney Park, Sydney



Box Hill Multi Purpose Area, Melbourne



Ballast Point Park

Heritage

Given the multi-layered cultural heritage significance of the precinct, including Aboriginal, non-Aboriginal, archaeological, social and recreational, there is the opportunity to celebrate the site’s rich history and evolution, through the creation of unique, beautifully integrated interpretation. The built design, public domain enhancements and interpretative products can be informed by site’s multi-faceted heritage.

Precedents
200 George Street Heritage Interpretation
Integrated into the design of surrounding urban spaces, 200 George Street, designed by FJMT utilises a range of different elements to communicate the history of the site. Integrated plaques or designs which have both aesthetic and educational uses are well used and embedded into the surfaces of the project.

200 George Street Artwork
Taking pride of place in the building lobby, the artwork ‘ngarunga nangama: calm water down’ by Aboriginal Artist Judy Watson was completed in 2016.

“Watson consulted with Local Gadigal Elder Undle Allan Madden on the development of the text and imagery that plays throughout the design. Made of sandstone quarried from below the building, the work shows imagery of early maps, water, artefacts and text that engage deeply with the history of the site. The theme of water continues throughout the space and into the night, with light moving across the surface of the sandstone symbolising the water that lies beneath the ground.” (Urban Art Projects)

Westhaven Promenade, Auckland
The project links the city to the marina with a range of spaces, parks, pedestrian and cycle infrastructure “set amongst interpretive elements which reveal the narratives of place and occupation.” (ASPECT Studios) These interpretive elements have been integrated into the design of furniture and finishes.



200 George Street Heritage Interpretation



200 George Street, Sydney



Westhaven Promenade, Auckland

Benchmarking and Concepts



6.9 Concept - Environment

Environmental Sustainability

Sustainability in the public domain should be connected to the overall sustainability goals for the stadium and achieve a LEED Gold Certification.

Materiality

Re-used, recycled materials and materials of low-embodied energy should be utilised to fulfil the overall sustainability goals of the project. The narrative surrounding the use of these materials will also contribute to the social sustainability of the project providing educational opportunities for the public.

Light colour surface finishes, vegetation, shading, water bodies and open grid paving systems should be considered for use to reduce the heat island effect.

Social Sustainability

The SFS should become an integrated public space which supports day-to-day and community uses and provides new landscape which improves the public experience of the site and surrounds. Multi-purpose spaces including health, fitness and recreational uses should be incorporated into the public realm. The stadium grounds should be universally accessible and inclusive to encourage better utilisation.

Stormwater

Stormwater should be managed in a way as to not increase the impact of flooding downstream. Opportunities for the integration of water sensitive urban design, stormwater management and reuse should be explored. The existing OSD tank between the SFS and SCG should be retained if possible

Noise

Noise impacts upon adjacent residential development should not exceed existing levels experienced.

Heritage

The heritage values of the site should be managed through clever design and proactive predictive modelling (testing of the presence of archaeological resources) so as to reduce the physical impacts on potential and known archaeological resources, such as Busby's Bore and Aboriginal archaeological, where possible and to enhance views

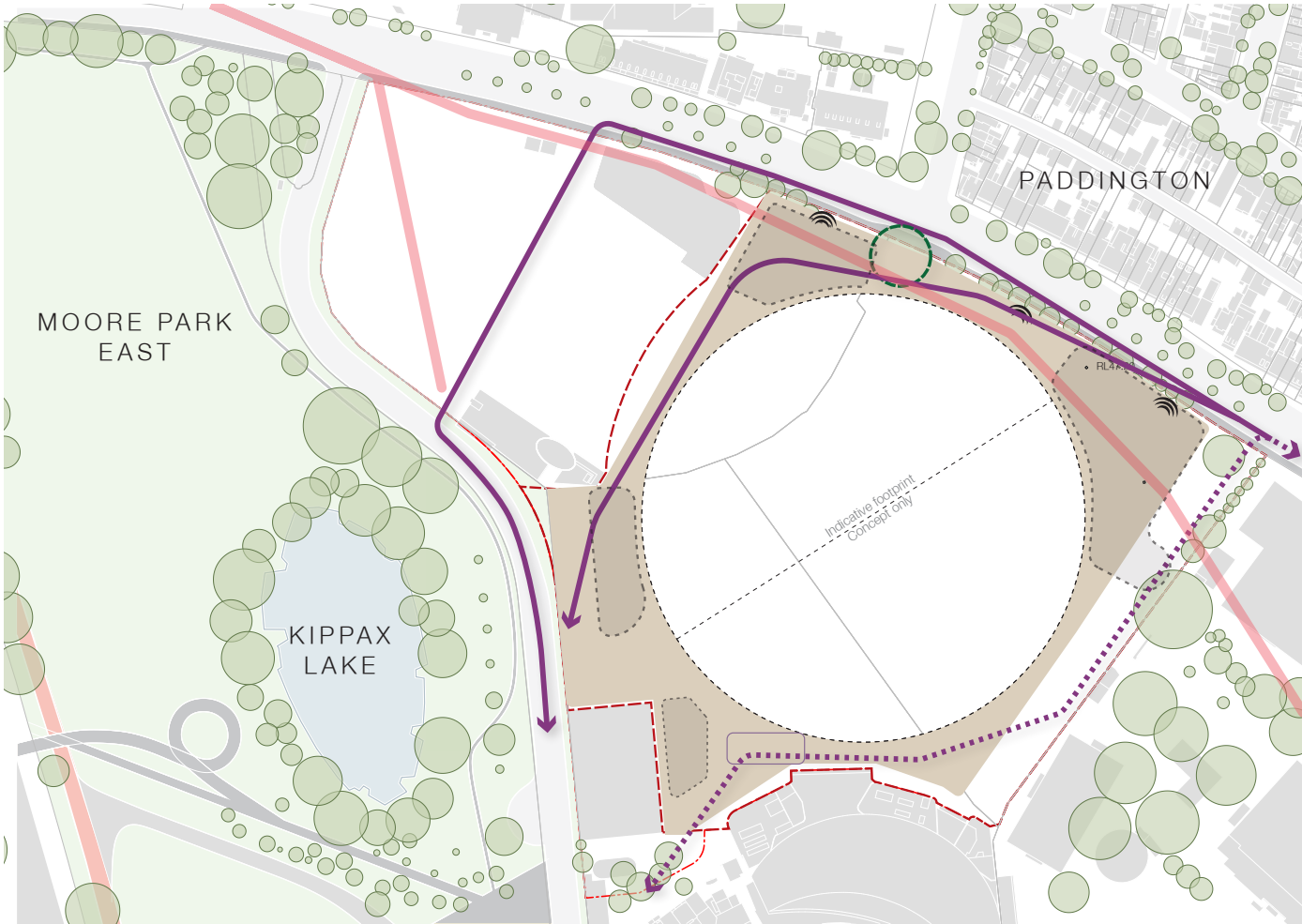
to and from heritage items and conservation areas within the vicinity of the development.

Heritage Interpretation

Interpretation of the site's history should be fully integrated into the design of the public domain and any new built items on site, so that it presents as a cohesive component of the overall site design. The stadium materiality, public domain surfaces, signage and furniture can all contribute understanding by the wider public of the heritage value of the site. Existing statues and plaques should be retained on-site as part of the SFS Redevelopment.

Tree 125

Tree 125 will be retained in the SFS Redevelopment as it is of high heritage significance and provides significant amenity to the SFS and Moore Park.



Environmental Considerations

Peripheral Works

- Items not located within the site that should be delivered to support and enhance the use of the stadium and surrounds
Moore Park Master Plan 2040, CPMPT
- Potential Water Sensitive Urban Design along Driver Avenue
 - New feature planting along Driver Avenue
 - Transform Driver Avenue into an entertainment boulevard

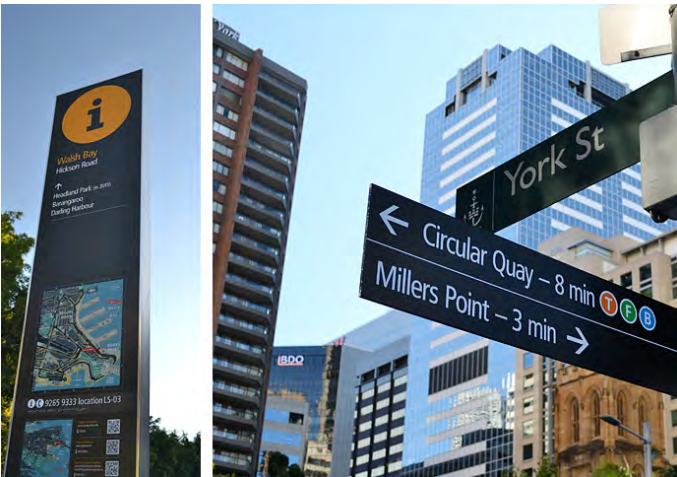
Key

- Site Boundary
- ↔ Current Stormwater Overland Flow Path
- Busby's Bore (approx.)
- Possible locations for existing states and plaques
- OSD Tank
- Heritage Significant Tree #125

Benchmarking and Concepts



6.10 Benchmarking - Wayfinding, Signage and Interpretation



Legible Sydney



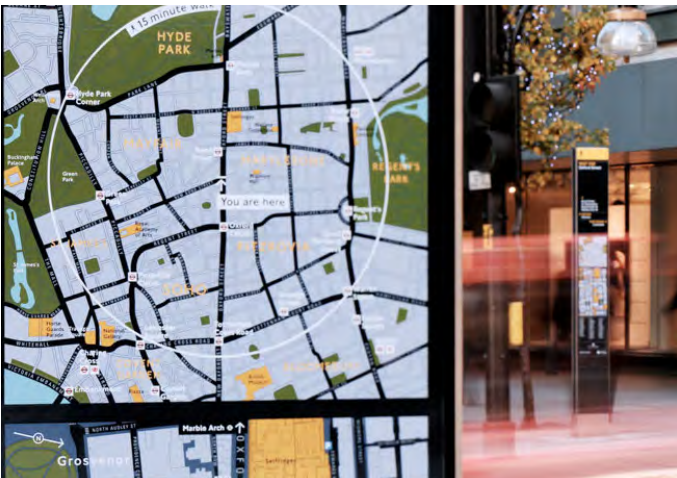
Sydney Ferries Signage



Centennial Parklands Signage



UTS Wayfinding Totem



Legible Sydney - Totem

Legible Sydney

The Legible Sydney wayfinding system is being implemented across the whole municipality village by village. Since its inception in 2013 and through to its ongoing implementation ,the system is based on international best practice born of sound and tested conventions that have established an international benchmark for wayfinding.The signage system is utilised to the northern boundary of the site through Paddington, Moore Park and Surry Hills. As the preeminent public realm wayfinding system in Sydney — with over 700 signs across the city — attempts to integrate with the system will engender a more coherent and consistent experience of the city and it's precinct for visitors.



Light Rail Signage

Transport for NSW Wayfinding

Transport NSW is in the process of delivering new wayfinding and signage with new icons and mode colours originally introduced in 2013. This will allow for infrastructure to align with a range of paraphernalia including maps, timetables, the transport NSW website, real-time apps, electronic signage and social media accounts.

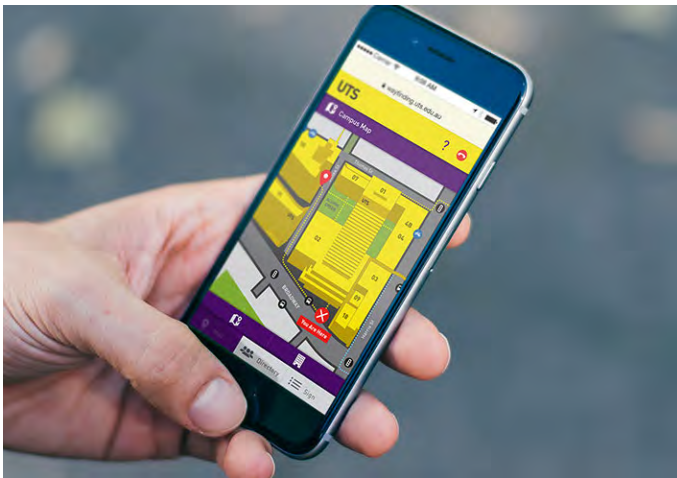
As public transport access to the stadium is important, efforts to provide a more coherent and connected system of navigation from public transport nodes to the stadium will be explored.



Centennial Parklands Signage

Centennial Parklands Wayfinding and Signage

Centennial Parklands wayfinding and signage was completed in 2002 by Dot Dash and is the oldest of the wayfinding that interfaces with the site. It can be found throughout Centennial Park and Moore Park. It is generally located at major park entry points and includes street name signs and directional finger pointers, maps panels and park regulations. This is not a overly prevalent system but may inform the stadium signage due to its contemporary look and feel and locational relationship to the stadium. Centennial Park also use a finger pointer system in limited locations.



UTS Campus Map

UTS Signage

The Rugby Australia Building was built in partnership between UTS, Rugby Australia and the SCG Trust. Acknowledging the site as part of the UTS Campus, a signage totem is currently located at the southern point of the Driver Avenue entry.

Benchmarking and Concepts



Entertainment Quarter Wayfinding



Fox Studios Moore Park Signage



Entertainment Quarter Signage

Entertainment Quarter (EQ)

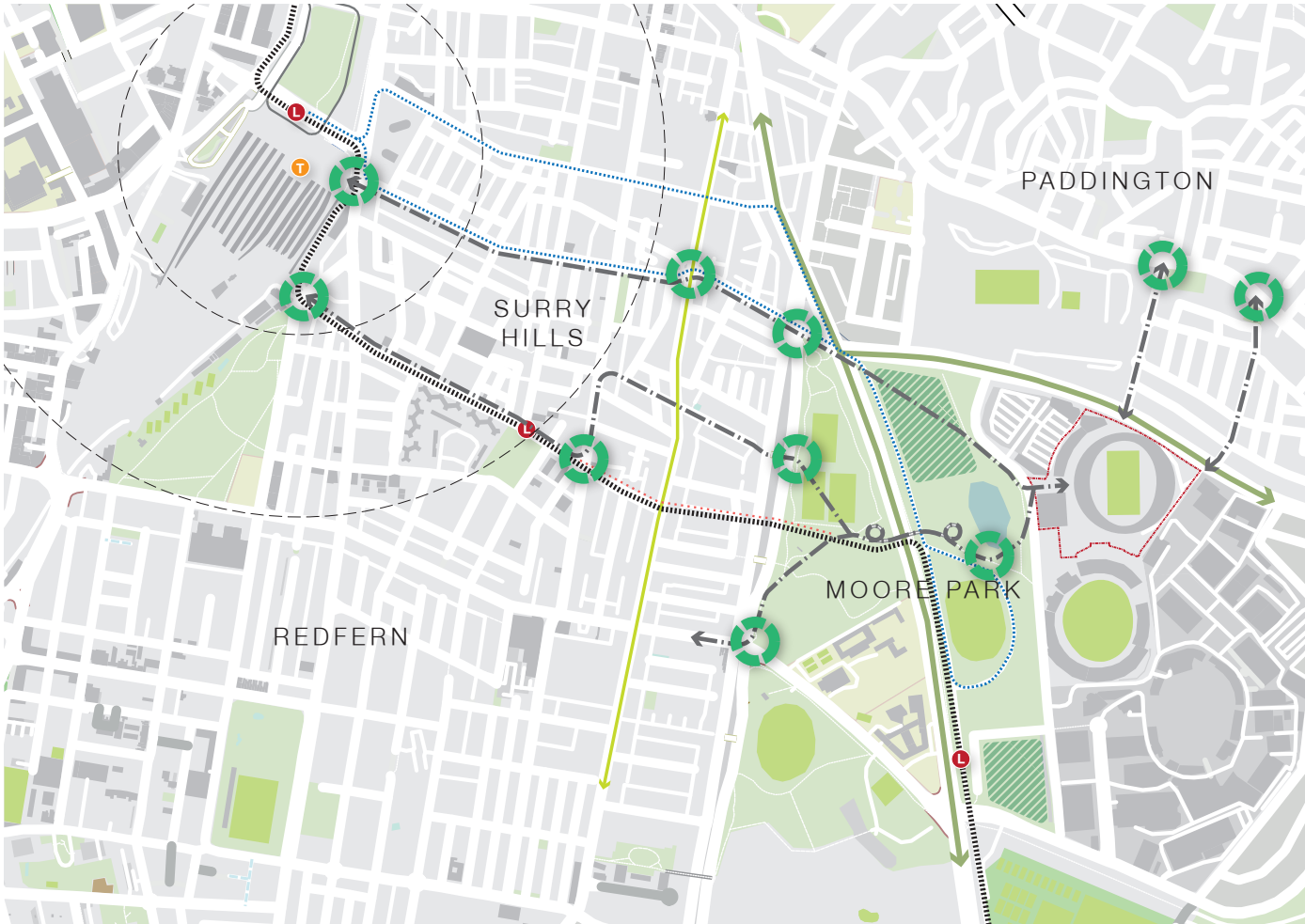
Located south of the site along Driver Avenue, EQ signage is prominent for those accessing the site from the EQ car park and from the southern end of the precinct. Although there is signage within the precinct which points to the stadiums, it is neither prominent or consistent with any other wayfinding once the public leaves EQ grounds.



Fos Studios Moore Park Logo

Fox Studios

Located directly south of the SCG, there is limited visible branding for the studio. A future integrated precinct should consider the opportunities for an update of Fox Studios branding and qayfinding as part of precinct wide wayfinding system.



Wayfinding Considerations

Integration and Consistency

Although it is not likely possible to completely unify wayfinding throughout the surrounding context, opportunities for consistent signage for the stadium precinct should be sought at key pedestrian movement decision points highlighted above. This could be a similar logo or graphic for the stadium integrated into the wayfinding applied to that area.

Consistent use of naming conventions for venues, interchanges and stations are to be added to the Legible Sydney wayfinding signage and use of Transport for NSW wayfinding pictograms across all signage systems will assist in journey planning and recognition of transport modes.

Key

- Site Boundary
- Pedestrian Routes
- Future Pedestrian Route
- Event Bus Route
- Event Parking
- Open Space
- Sporting Fields
- Decision Points