#### **Benchmarking and Concepts**



#### 6.11 Benchmarking - Stadium Signage



#### Twickenham Stadium, UK

Refurbished in 2016 with purpose built Southern Stand the identity and wayfinding created by Hat-trick design demonstrates a strong use of colour, scale and legibility to create an iconic and comprehensive wayfinding approach.

#### Parc Olympique Lyonnais

"The new 59,186-capacity Parc Olympique Lyonnais is designed to represent the aspirations of the eponymous local football club, and also of Lyon itself. Populous Activate was commissioned to design the wayfinding strategy and signage for the stadium and surrounding car parks. The goal of the wayfinding and signage program was to give people the freedom to navigate the stadium easily while they enjoy the events there. This included directing nearly 60,000 people to their seats from multiple points of arrival, as well as sending them out the right way after events.



The signs had to work in daylight, low light and artificial light, in outdoor conditions and luxury suites. They also had to heighten the aesthetic of the building and breathe the spirit of Olympique Lyonnais.

Wayfinding seamlessly integrated within the built environment, creating the ideal holistic end-user experience for patrons" (SEGD)

#### 7.1 Overview

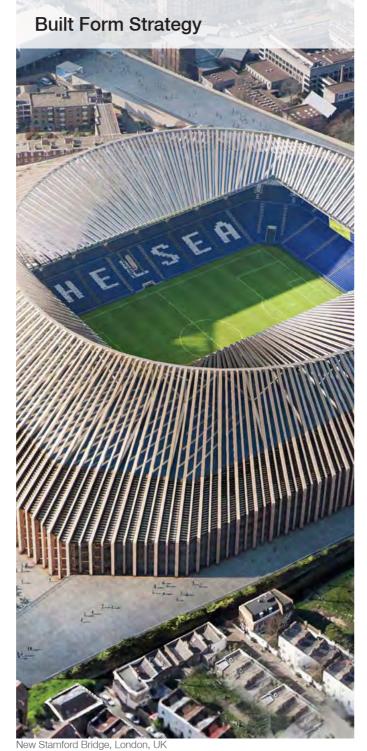
Strategies have been produced to address three key components of the SFS redevelopment:

- ・ Built Form
- Public Domain
- Public Art

Each of these strategies have been formulated with an understanding that no component of the project can be addressed purely in isolation. A hollistic understanding of the site's opportunities and constraints coupled with a consistent design-led approach to the stadium will provide the best design outcome for the community.

The strategies are informed by:

- Better Placed (GANSW)
- Draft Urban Design Guide (GANSW)
- Draft Greener Places (GANSW)
- Public Art Strategy and Policy (City of Sydney)



**Public Domain Strategy** 

Prince Alfred Park, Surry Hills, Sydney





James Angus, Day In, Day Out (2011)

### 7.2 Built Form Strategy

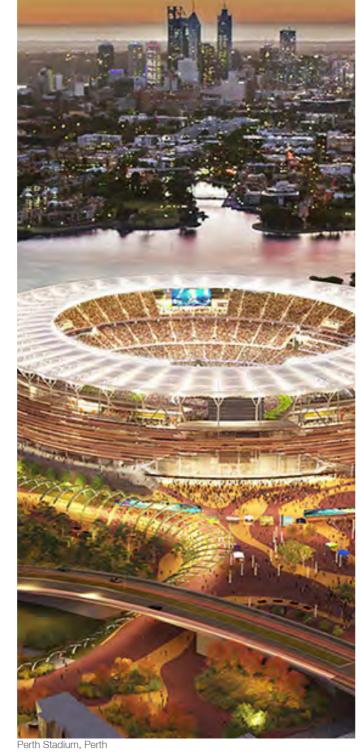
## The Sydney Football Stadium Built Form Strategy outlines the key principles and considerations that inform its location, orientation and interfaces

The SFS built form strategy responds to the SEARs request for the provision of a "detailed justification for the building envelope, supported by an urban design analysis, to justify that the proposed built envelope location and design are based on careful consideration of the benefits and potential impacts in the context of the immediate locality and the broader Sydney CBD area".

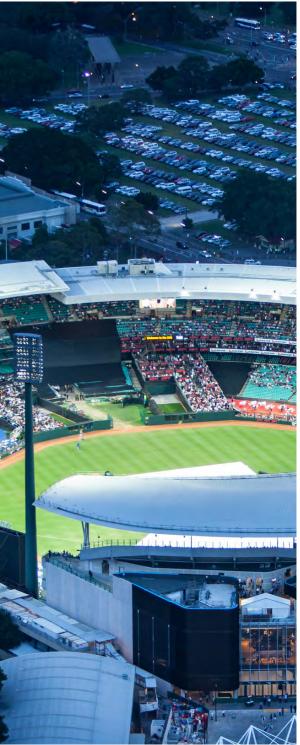
The built form strategy builds on an understanding of the Better Placed Design Objectives for NSW to ensure that the SFS contributes positively to a more "healthy, responsive, integrated, equitable and resilient" built environment.

These objectives include:

- · Better fit: contextual, local and of its place
- · Better performance: sustainable adaptable and durable
- Better for community: inclusive, connected and diverse
- Better for people: safe, comfortable and liveable
- · Better working: functional, efficient and fit for purpose
- Better value: creating and adding value
- Better look and feel: engaging, inviting and attractive.



HELSEA



Sydney Cricket Ground, Sydney

#### **Built Form Strategy**

#### Context

The Sydney Football Stadium is located within 3.5km of Sydney GPO, bordering the suburbs of Paddington, Moore Park, Centennial Park and Surry Hills. It forms part of the Sydney skyline alongside the Sydney Cricket Ground to the stadium's south. The distinctive saddle-shaped roof alongside the SCG Bradman Noble Stand and light posts are visible above the canopy of Moore and Centennial Parks and mark it as a key destination.

There is a visual relationship between Sydney CBD and the stadium, both being visible from each other.

The SFS revelopment is consistent with the historical uses of the site. Since 1811, with the establishment of the Sydney Common, the SFS site has housed a range of military, sporting and recreational uses differentiating it typologically from the development of Paddington and Surry Hills. The fine grain, terrace-style development associated with Paddington was predominantly constructed between 1860 and 1890 following the subdivision large estates.

The site was used through the 1800s and early 1900s as a rifle range and Engineers and Military Depot.

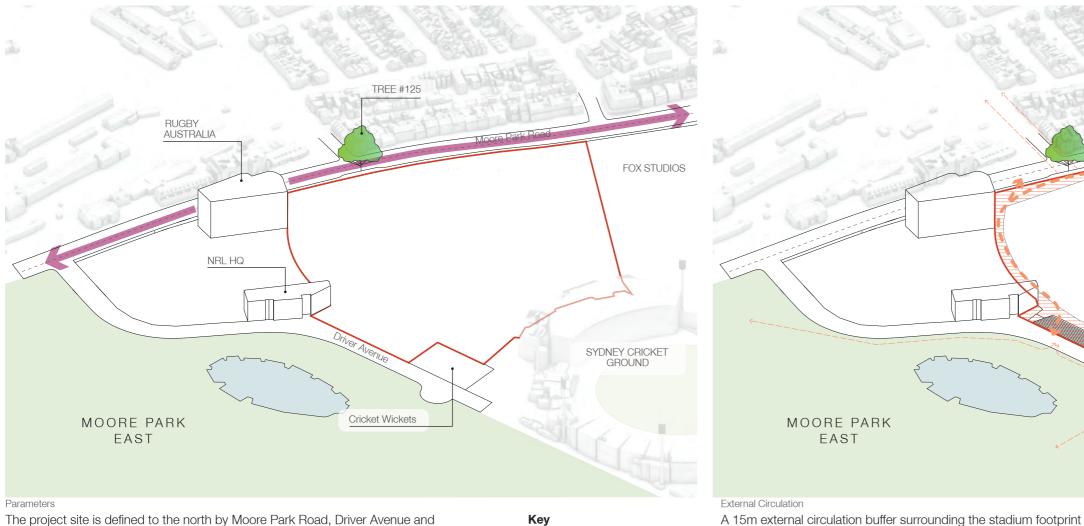
The Sydney Sports Ground (in the location of MP1) was located adjacent to the site from 1899, up until the construction of the Sydney Football Stadium in the 1980s. In its height, the Sydney Sports Ground consisted of two main grandstands, as well as change rooms and lavatory blocks, surrounded by a grass covered hill, with capacity for approximately 35,000 people. The main layout and facilities for the SSG had been formed by the late 1930s and continued in a similar form until its closure.



Aerial Photo

#### **Built Form Strategy**

#### Parameters



The project site is defined to the north by Moore Park Road, Driver Avenue and MP1 to the west, Fox Studios to the east and the Sydney Cricket Ground to the south. Within the immediate vicinity, the Rugby Australia Building and NRL Headquarters and the outdoor cricket wickets and Tree 125, a mature fig tree, will be retained.

The interface to low-rise residential development to the north of the site will be thoroughly considered in order to achieve a better fit into the surrounding environment and create a better outcome for the community.

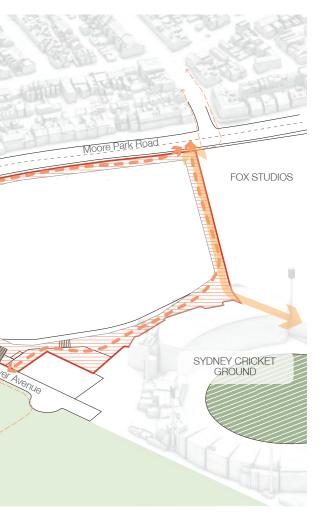


Open Space

A 15m external circulation buffer surrounding the stadium footprint has be targeted to allow for crowds to circulate 360 degrees around the stadium event days. Day-to-day this provides the opportunity for multi-purpose sp the community, activation and legible pedestrian connections between Pa and Moore Park. The provision of this space on the eastern side of the sit supports the delivery of a north south connection between Paddington ar the future as articulated in the *Moore Park Master Plan 2040*.

**External Circulation** 

The 12m level change across the site between Driver Avenue and the eas corner of the site at Moore Park Road will be traversed through this zone. level change between Moore Park and the SFS itself will be created along Avenue to mediate these levels and create a visible front door to the stadie precinct.

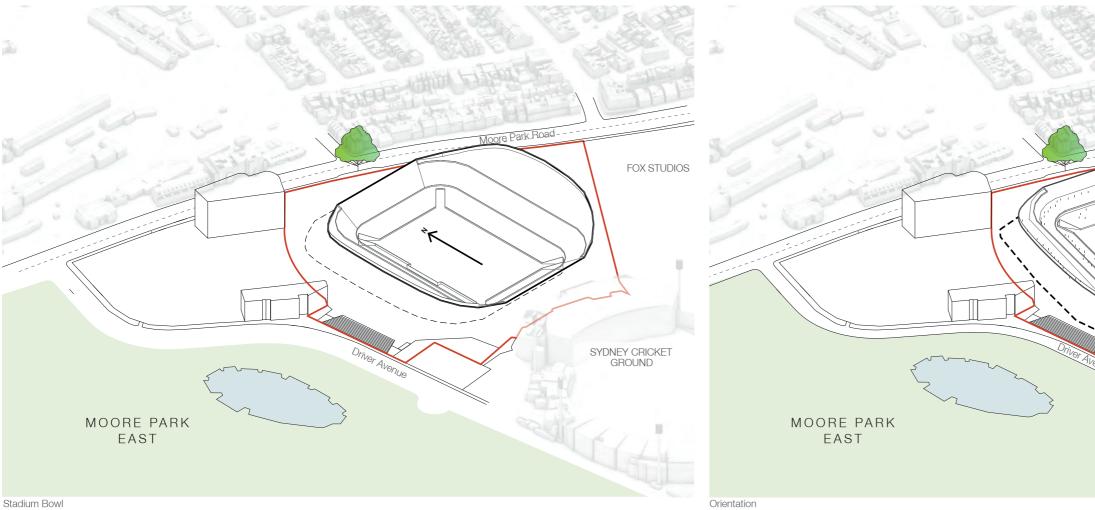


been n on SFS paces for Paddington ite also and EQ in	Кеу		
		Site Boundary	
		Open Space	
	>	Pedestrian Routes within the site	
istern e. A distinct g Driver dium	$\rightarrow$	Pedestrian Routes outside the site	
	$\rightarrow$	Future Connections	

#### **Built Form Strategy**

#### Stadium Bowl

#### Orientation and Shape



The stadium seating configuration, referred to the as the stadium bowl, is the main component of the SFS design which informs the scale and bulk of the stadium. This is formulated in response to a number of functional requirements including the creation of optimal viewlines from each seat, access and egress requirements and the aim to get spectators as close to the action as possible.

As a starting point, the stadium has been oriented north/south and located at the centre of the site to allow for the 15m circulation buffer. This orientation provides the best opportunities for solar access to the pitch, crucial for lawn growth and maintenance. Understanding that supporting functional uses will also need to be inserted underneath and surrounding the bowl, a potential loose fit envelope is created. Although providing the best solar access opportunities for the pitch, this orientation creates limited opportunities for quality interfaces to the surrounding context, creates potential external pinch points at Moore Park Road and reduces opportunities for legible circulation through the site.



Key

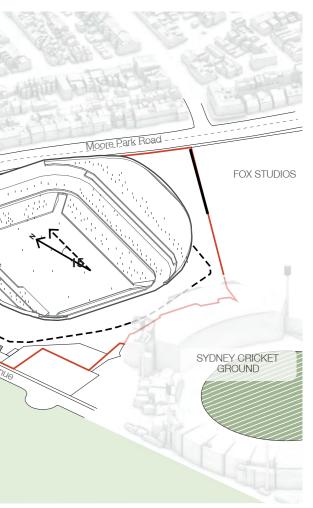
Loose Fit Envelope \_\_\_

In response to the irregular shape of the site, the stadium has been rotate to better fit the site and create:

- a better address to Moore Park Road
- · create more generous and legible public domain spaces especially dow eastern and western portions of the public domain
- · reduce potential circulation pinch points around the site

A 15 degree rotation of the pitch is the maximum potential rotation based on ensuring solar access to the turf and has been agreed upon by sporting codes that will utilise the stadium in future.

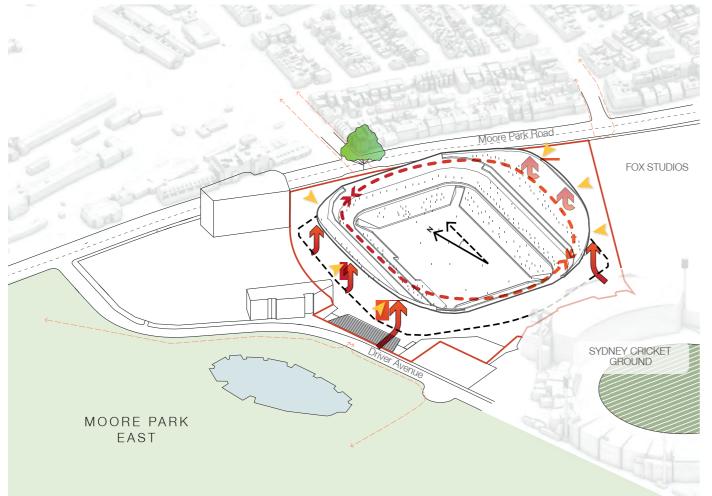
Due to the limited north/south dimensions of the site, seating and supporting uses will be concentrated on the east and west sides of the field of play, preferred position for most rectangular sporting codes.



ed in order	Key	
		Site Boundary
wn the		Open Space
		Loose Fit Envelope

## **Built Form Strategy**

#### Vertical Circulation



#### Vertical Circulation

The stadium bowl and the provision of vertical circulation is key in determining the scale of the loose fit envelope, volume within which the stadium will be located.

Considering the limited space available to north and south external to the stadium bowl, vertical circulation zones have been located to the east and west of the bowl. These circulation zones have been brought as close to the field of play as possible to reduce their impact on the scale and legibility of the public domain.

Spectators will be able to enter the SFS from four main gates at the corners of the bowl and circulate within the stadium to their seats. An additional two entries will be provided for VIP and members.

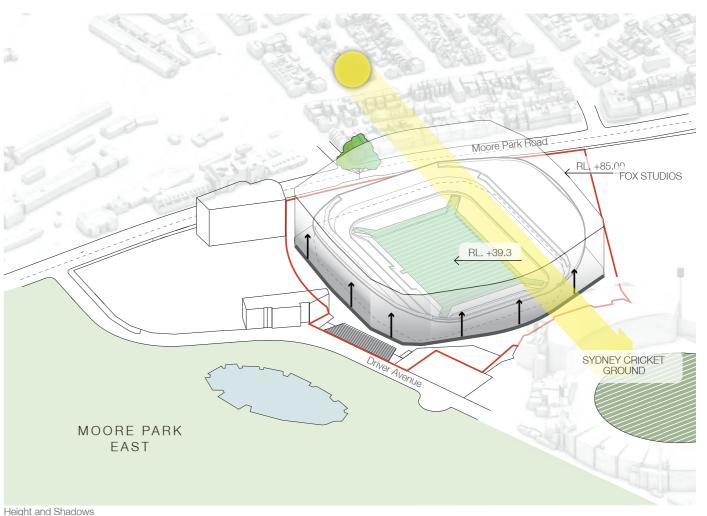
## Key

Site Boundary Open Space Loose Fit Footprint \_\_\_

 $\rightarrow$ Pedestrian Routes outside the SIte

- Vertical Circulation Zones
- Stadium Entries

#### Heights and Shadows



The upper extent of the SFS loose fit envelope is capped at RL+85 to locate the new stadium shadow within that currently created by the SCG Bradman Noble Stand and other SCG stands to avoid additional overshadowing of the SCG field of play.

The SFS field of play has been retained at the existing level of RL+39.



#### Key

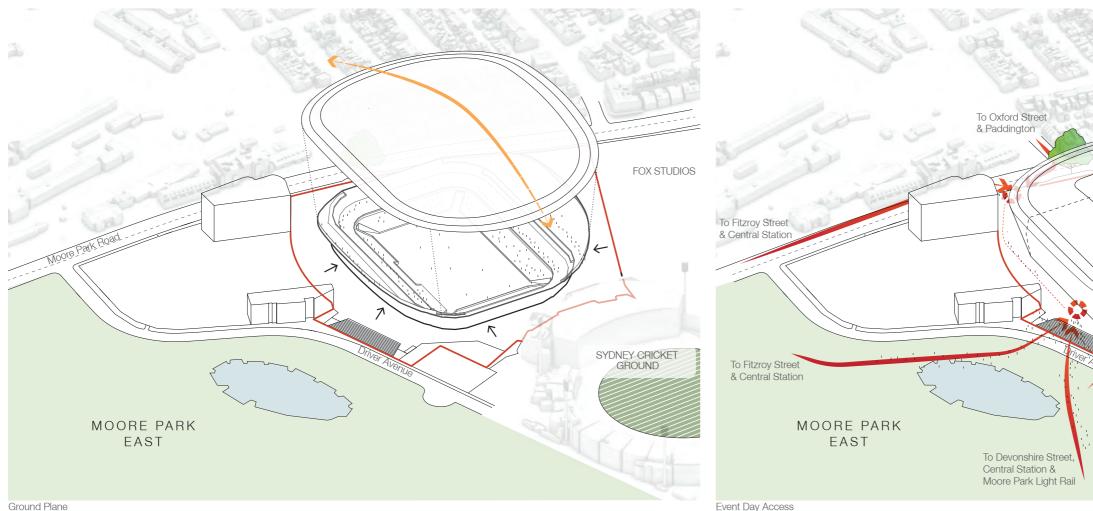
-	

Site Boundary Open Space Loose Fit Envelope Solar Access

#### **Built Form Strategy**

#### Ground Plane and Roof





#### Ground Plane

The stadium footprint at ground has been brought in as close at possible (allowing for circulation spaces and other functional requirements) to the field of play to create more generous and contiguous public domain spaces around the stadium. This will facilitiate greater passive surveillance opportunities and visibility across the site important to encouraging day-to-day use of the precinct. This will also allow for public domain spaces to be shaded by the stadium itself.

The roof will be located within the SFS loose fit envelope and sit above the stadium bowl. Due to limited north/south dimensions of the site, upper seating tiers have been located to the east and west of the field of play. The roof form can therefore be shaped to align with the reduced seating tiers to the north and south. This reduces the visible scale and bulk along Moore Park Road stepping down to lowrise development in Paddington.

#### Key

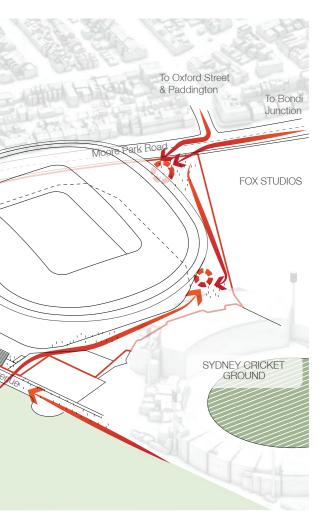


The orientation of the stadum creates plaza spaces adjacent to these entries for gathering and queueing.

Oatley Road and Moore Park Road adjacent to Paddington Lane.

Loose Fit Envelope Roof form

SJB



The public access the stadium through three key entry points: Driver Avenue,

#### Key



Open Space Pedestrian Access

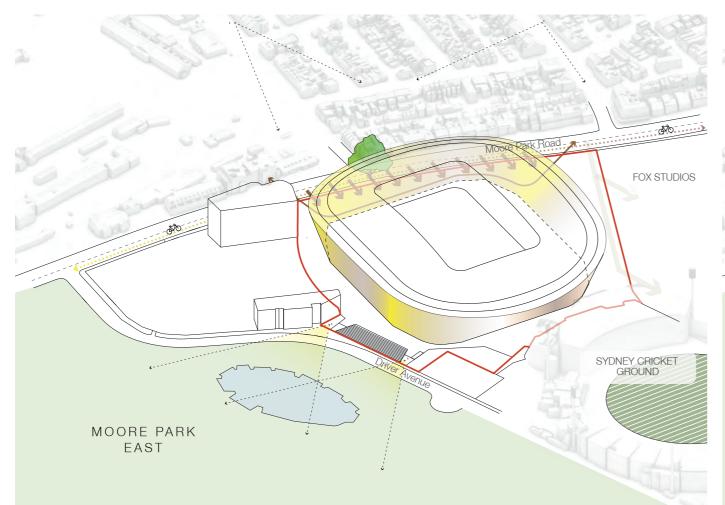
Site Boundary



Routes Stadium Entries

#### **Built Form Strategy**

#### Interfaces



#### Interfaces

The building interfaces to the surrounds will be inviting, engaging and support the use of the SFS on both event days and day-to-day. The design of the stadium form will consider the impact on views from surrounding areas.

#### Moore Park Road Interface

Existing levels along Moore Park Road will be extended into the site creating increased permeability into the site from the north and stitching the SFS public domain into Paddington. The building interface to this road will feature limited responsive facades or large scale event lighting to reduce the impact of additional light spill on residential uses across the street.

#### Driver Avenue Interface

The lack of residential uses to the west coupled with significant pedestrian traffic accessing the site through from Surry Hills and EQ makes this interface an appropriate location for responsive facades and larger lighting elements.

Key	
—	Site Boundary
	Open Space
	Key interfaces
$\rightarrow$	Pedestrian Routes outside the SIte

SIte Vertical Circulation Zones

- Stadium Entries
- 2 Views

#### **Community Spaces and Activation**



#### Activation

The SFS location and orientation creates the opportunity for gathering spaces and activation in four key zones and better circulation around the SFS.

A new space along Driver Avenue will provide the opportunity for active uses, passive recreation leveraging the amenity provided by Moore Park. Along Moore Park Road, two new spaces will be created each with a different character. In the north-east corner of the site will be a large at-grade entry providing a seamless entry to the SFS public domain from external paths. In the north west corner at the bottom of Oatley Road, a new space will be created utilising the amenity created by Tree 125.

The public domain between the SFS and SCG will be utilised on event days for event, food and beverage uses.

More information in regards to activation and community spaces is included as part of the SFS Public Domain Strategy.

#### Key



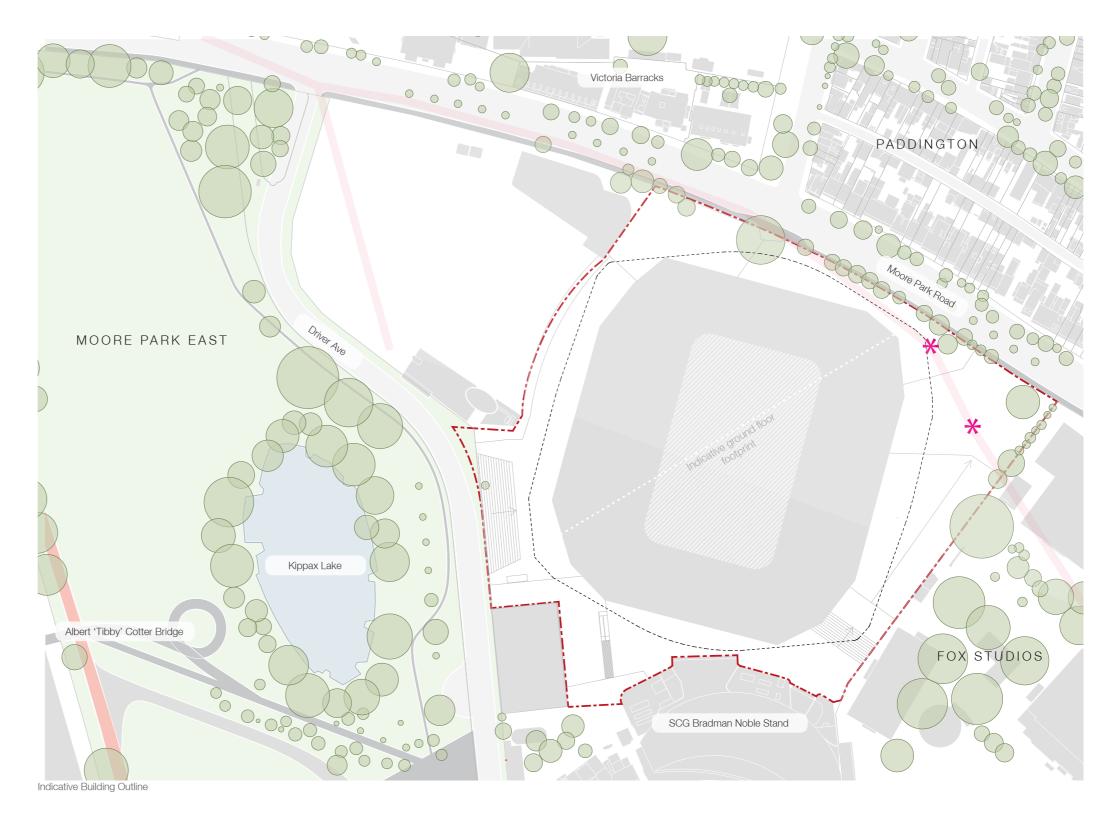
Site Boundary Open Space Activation Zones

### **Built Form Strategy**

#### Indicative Building Outline

The SFS loose fit envelope and an indicative ground floor footprint has been included in the adjacent plan.

The envelope assumes a maximum height of RL+85 and assumes the field of play is retained at the existing level of RL+39



Key

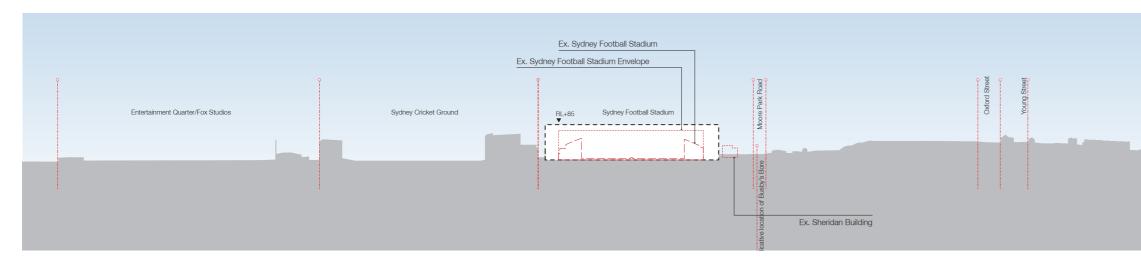


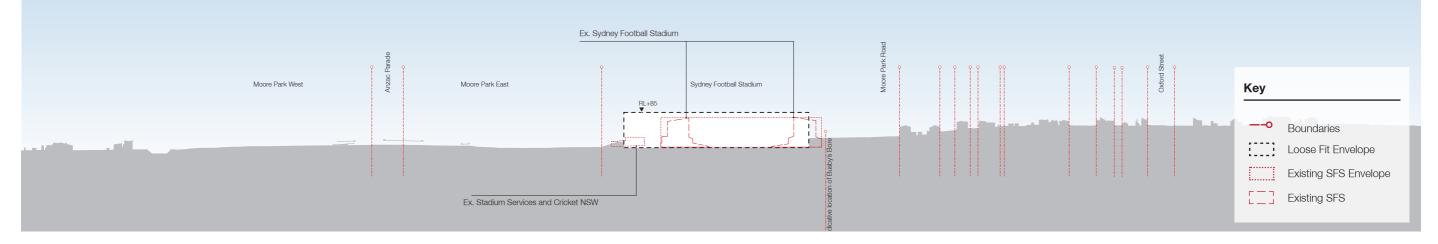
### **Built Form Strategy**

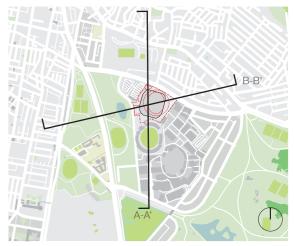
#### Sections

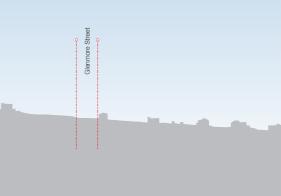
The proposed loose fit envelope is larger both in height and breadth than the existing SFS. This does however only indicate the potential zone for the stadium rather than providing a detailed understanding of the stadium built form and scale.

The location and orientation of the SFS envelope provides the opportunity for better quality public spaces surrounding the spaces than the existing SFS. These new spaces are also created through the demolition of ancillary buildings onsite. This includes providing increased clearance from major roads for crowd movement.









## 7.3 Public Domain Strategy

The Sydney Football Stadium Public Domain Strategy sets out the character, role and quality of new public domain spaces which will support vibrant and diverse event and day-to-day uses.

The SFS public domain strategy responds to the SEARs request for the provision of a "detailed consideration of the benefits and potential impacts in the context of the immediate locality and the broader Sydney CBD area".

The public domain strategy build on an understanding of the Draft Greener Places Principles of Green Infrastructure to ensure that the SFS contributes and integrates into its surrounds in a way that it currently does not.

These principles include:

- Integration: combine green infrastructure with urban development and grey infrastructure
- · Connectivity: create an interconnected network of open space
- · Multifunctionality: deliver multiple ecosystem services simultaneously
- · Participation: involve stakeholders in development implementation



The Goods Line, Sydney



Levteire Square, Bordeaux, France



Prince Alfred Park, Surry Hills, Sydney

#### **Public Domain Strategy**

#### **Transport and Access**

The precinct is well connected by public transport including trains and buses on a day-to-day basis with Anzac Parade forming a key transport corridor between Sydney CBD and the eastern suburbs.

On event days, special event buses are run from Eddy Avenue, outside Central Station into the precinct through Albion Street and back down through Foveaux Street. These take patrons to the bus interchange to the west of the SCG.

The completion of light rail and the Moore Park Light Rail stop in 2019 will enhance access to the precinct. This will bring increased accessibility to the precinct from Sydney CBD and Randwick.

There are two key pedestrian corridors through Surry Hills which connect Central Station through to the SFS/SCG Precinct which extend up Foveaux and Devonshire Street. The delivery of light rail will include the provision of a new pedestrian route across South Dowling Street and the Eastern Distributor which would extend an existing pedestrian route through to Moore Park West which currently terminates on Devonshire Street.

Future cycling and walking infrastructure improvements proposed by City of Sydney along Moore Park Road will increase accessibility to the site and better support the usage of public domain spaces.





#### Public Domain Strategy

#### **Pedestrian Movement**



Pedestrian Movement

The SFS will utilise existing pedestrian movement paths through the adjacent suburbs and High Streets in Surry Hills and Paddington.

The event day journey can be seen in 2-3 phases:

- From transport node to High Street for pre-event food/beverage/entertainment: Patrons 1. spend the most time in this first phase at the numerous pubs, restaurants and cafes in the Surry Hills and Paddington.
- 2. From High Street to Parkland: Patrons generally transition through this space quickly as there is generally limited activation. The experience is heightened by views of the stadium from Oatley Road and Regent Street, Paddington.
- Through Parkland to Stadium: Significant fig trees define the character of the parklands З. and delinate the last phase of journey to the stadium. Views towards the stadium from Moore Park and Tibby Cotter Bridge add to the event day atmosphere

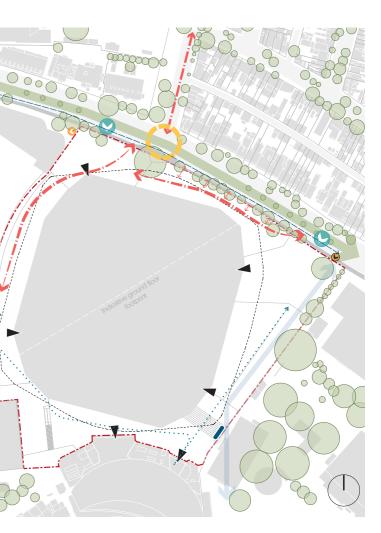
Key

- \_\_\_\_ Project Boundary
- Pedestrian Routes
- Future Pedestrian Route .... Phase 1
- Phase 2
- Phase 3
- //// High Street
- Hospitality
- a. Park
- Pubs

Pedestrian Movement

Increased permeability and the provision of high quality spaces are key components of the SFS redevelopment. Improved spaces off Driver Avenue and Moore Park Road will tap into existing pedestrian routes into the site on event day. A new entry off Oatley Road will allow the site to utilise existing routes of movement not currently leveraged by the existing SFS.

The public domain concept for the stadium includes the provision of generous spaces to the east of the stadium to facilitate the future delivery of north-south connections from Paddington to Entertainment Quarter outlined as part of the Moore Park Master Plan 2040.



#### Key

- \_\_\_\_ Project Boundary
- Pedestrian Routes (Dayto-Day)
- Elevators
- . . . . Pedestrian Movement (Event Day)
- Stadium Entry
- $\bigcirc$ Pedestrian Entry
- Ū, Key Intersections
- Ø Stadium Services

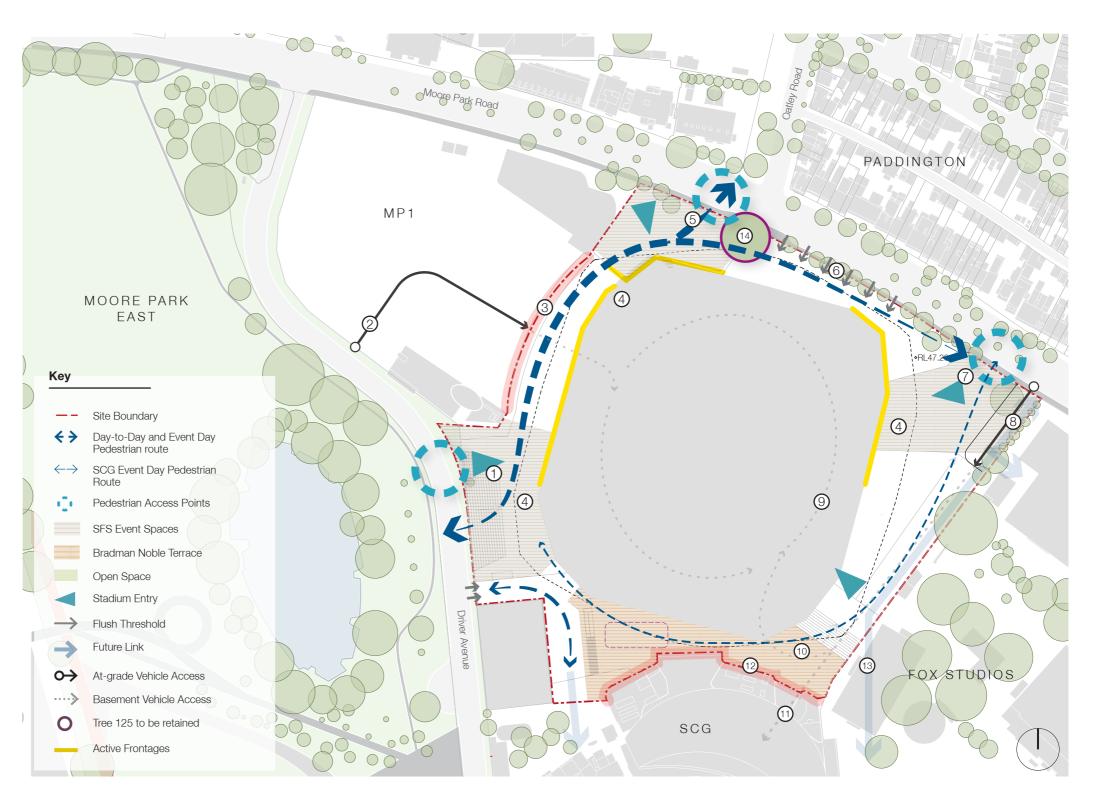
#### **Public Domain Strategy**

#### Key Moves

The Sydney Football Stadium Redevelopment will improve public interaction with the stadium, increase site permeability and provide new access routes connecting Paddington to Moore Park. New high quality public domain will be made accessible to the public and provide opportunities for future integration into the wider the precinct and the creation of north/south and east/west connections stitching both the SFS and SCG into its surrounds.

The redevelopment also provides an opportunity to integrate the SFS into its parkland setting and reinforce the stadium's unique location and proximity to Moore Park and Centennial Park.

- 1. Driver Avenue entry
- 2. Retain existing vehicle access point off Driver Avenue
- 3. Level change between MP1 and external SFS concourse
- 4. Active frontage in areas of high visibility and adjacent to event gathering spaces
- 5. Oatley Road entry
- 6. Level threshold between the SFS and the Moore Park Road pavement
- 7. Moore Park Road entry
- 8. Paddington Lane vehicular entrance with portal down into SFS and SCG basements
- 9. Service ring road around the field of play
- 10. Bradman Noble Terrace, also known by the Trust as Sydney Live Plaza
- 11. Access into the SCG Basement
- 12. Secure frontage to Bradman Noble Stand
- 13. Allow for future link through to Fox Studios and the Entertainment Quarter
- 14. Retain Tree 125



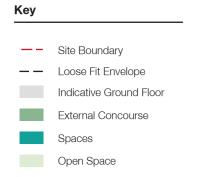
#### **Public Domain Strategy**

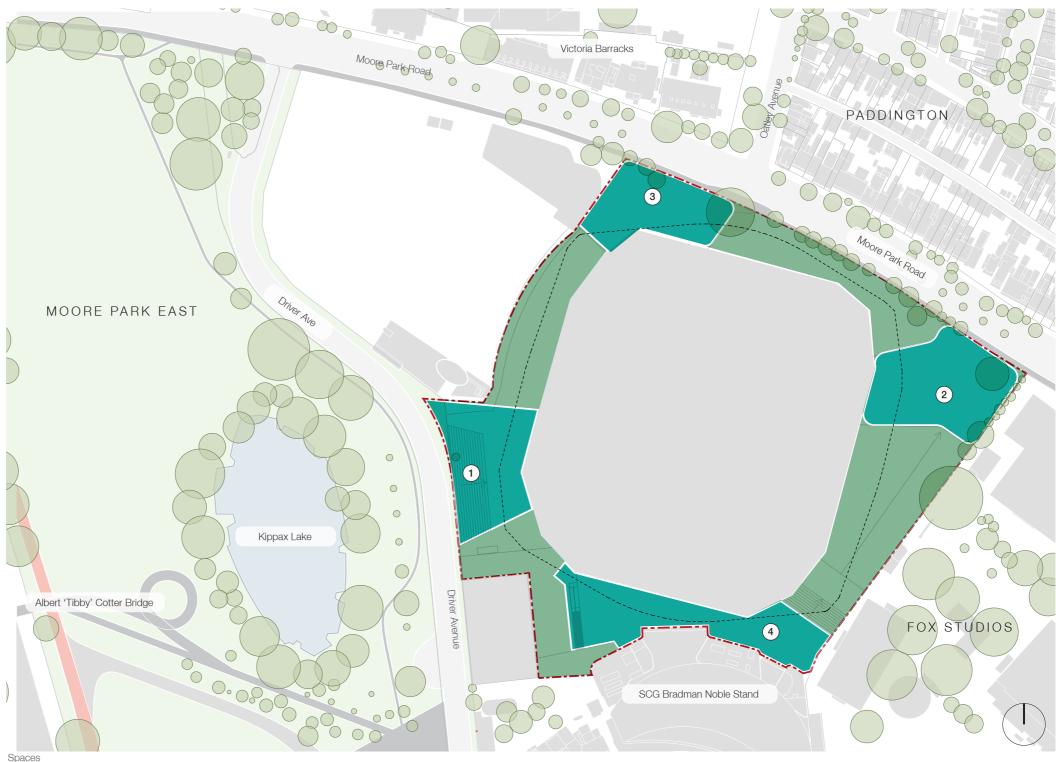
#### Spaces

The SFS public realm should establish a new dynamic suite of spaces that enhance and contribute to the rich fabric of public domain and landscape through Moore Park and Paddington. It should open the previously inaccessible stadium grounds to public use, create an attractive and inviting interface to its surrounds and stitch together Moore Park and Paddington. The public realm of the stadium should be multi-functional, flexible and universally accessible. It should facilitate a range of uses, including opportunities for activation, passive recreation and landscape. It should consist of a series of different public domain zones tailored to create vibrant, inviting and engaging interfaces to the sites surrounds. These spaces. It will include:

- 1. Driver Avenue Terraces
- 2. Moore Park Road Plaza
- 3. Oatley Road Place
- 4. Sydney Live Plaza

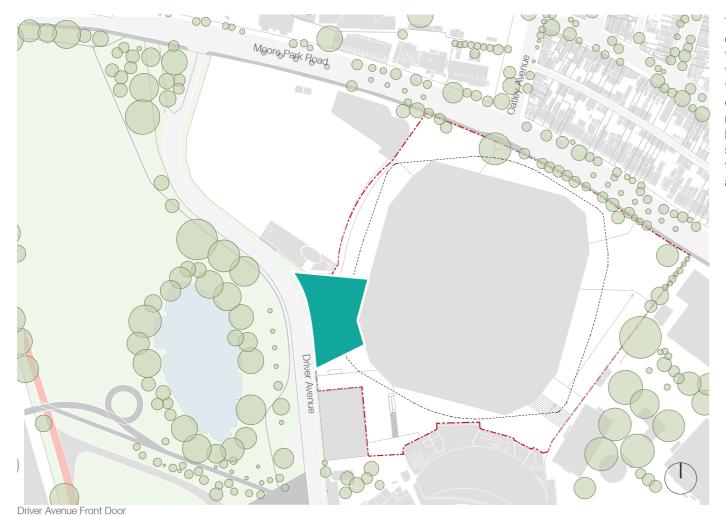
Located between Moore Park and Paddington, the Stadium site forms a conduit to connect and integrate the precinct into its surroundings. The significant existing tree planting located to the north and west of the stadium should be referenced and celebrated within the site. Additionally, the hardscape palette of the surrounding suburbs should be drawn into the stadium site to enhance the concept of a connected and continuous public domain at ground level.





#### Public Domain Strategy

**Driver Avenue Terraces** 



The site entry at Driver Avenue provides the primary front door entry to the site. The stadium itself will be connected to Driver Avenue and Moore Park via a grand stair and terraced landscape to negotiate a significant level chance 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 Driver Avenue Terraces should engage with Driver Ave and Moore Park so to support the utilisation of these spaces during event days for pop up activities.





Precedent - Calligraphy Greenway, Taichung, Taiwan



Precedent - Central Park, Svdnev



Precedent - The Goods Line, Sydney

#### Key distinctive public domain elements that will define the Driver Avenue Terraces

- Grand stair to traverse the level different between Driver Avenue and the external stadium concourse
- Integrated seating to create gathering spaces and views out to Moore Park
- · Landscape and Planting creating shaded comfortable spaces
- Lighting, ensuring the terrace is clearly visible across Moore Park
- High Quality pavements and material palettes
- Wayfinding to adajcent landmarks and key locations including Moore Park Light Rail Stop and Central Station
- Environmentally Sustainable Design
- · Active uses including retail, food and beverage which takes advantage of the landscape setting



Precedent - südliche Iohmühleninsel, Copenhagen, Denmark