

June 2025

Mac Point Multipurpose Stadium

Design overview

PoSS Hearings



COX

CUMU
LUS

AECOM

sbp
schlaich
bergmann partner

AGENDA

1. Conceptual Approach
2. Building Overview
3. Goods Shed Integration
4. Building Scale
5. Bowl Overview
6. Roof Overview
7. Hospitality Summary
8. Precinct Movement



1. CONCEPTUAL APPROACH

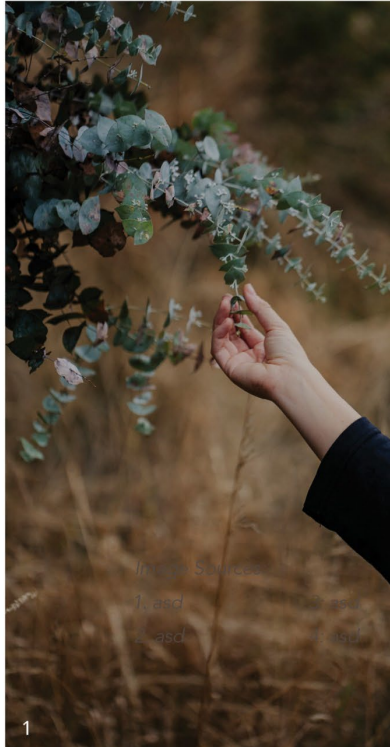
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TASMANIA'S MULTIPURPOSE STADIUM



Culturally Informed

- › Working with Palawa community members to support the development of Culturally Informed designs.



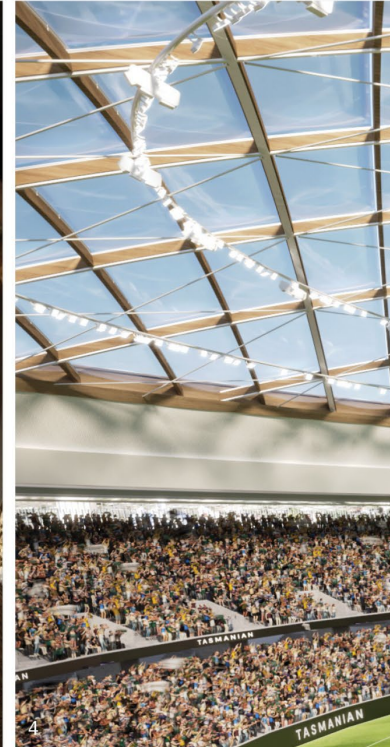
Grounded in Place

- › Belongs to this Place
- › Form and Materiality
- › Tasmanian Identity and Values
- › Visual Connections to Place (kunanyi, Cenotaph, Derwent River)



Experience and Discovery

- › Aspirational and Inviting
- › Authentic Fan Experience
- › Accessible and Adaptable for a Range of Experiences



A Tasmanian Timber Story

- › Local Expertise
- › Tasmanian Ingenuity
- › Raw Materials
- › Showcasing Uniquely Tasmanian Timber



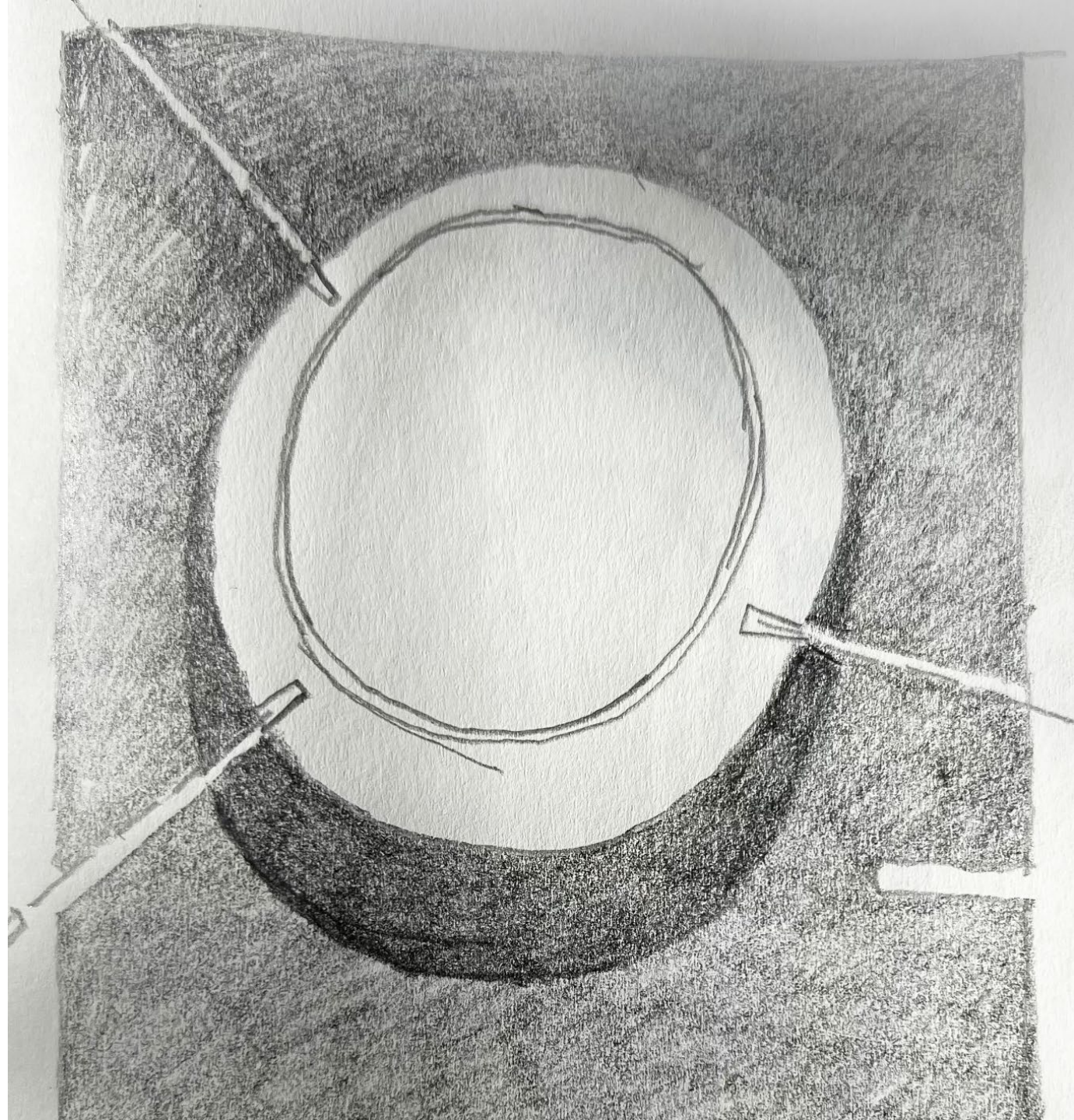
A Welcoming Design

- › Raw, Honest, Timeless, Quiet and Humble
- › Creative and Unassuming
- › Could only be of this Place

The architectural response has drawn upon a series of pillars to guide the development of the design.

These pillars articulate the ***qualities of place*** that will characterise the Project, beyond the requirements of the Brief.

The intent is to drive a design response that is
Unmistakably Tasmanian



Architectural Composition

The approach to the architectural composition can be understood *from ground up, and sky down*. The new Stadium is composed in three distinct strata; one ground based, one sky bound, and a central layer in the middle. Each layer is distinguished by its own materiality.

Folded Ground Plane

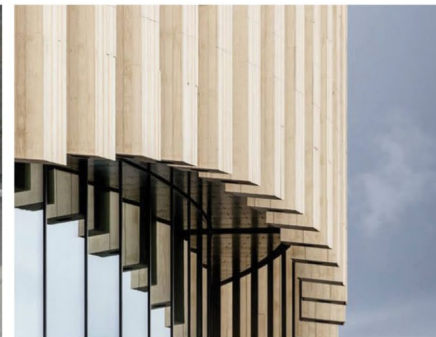
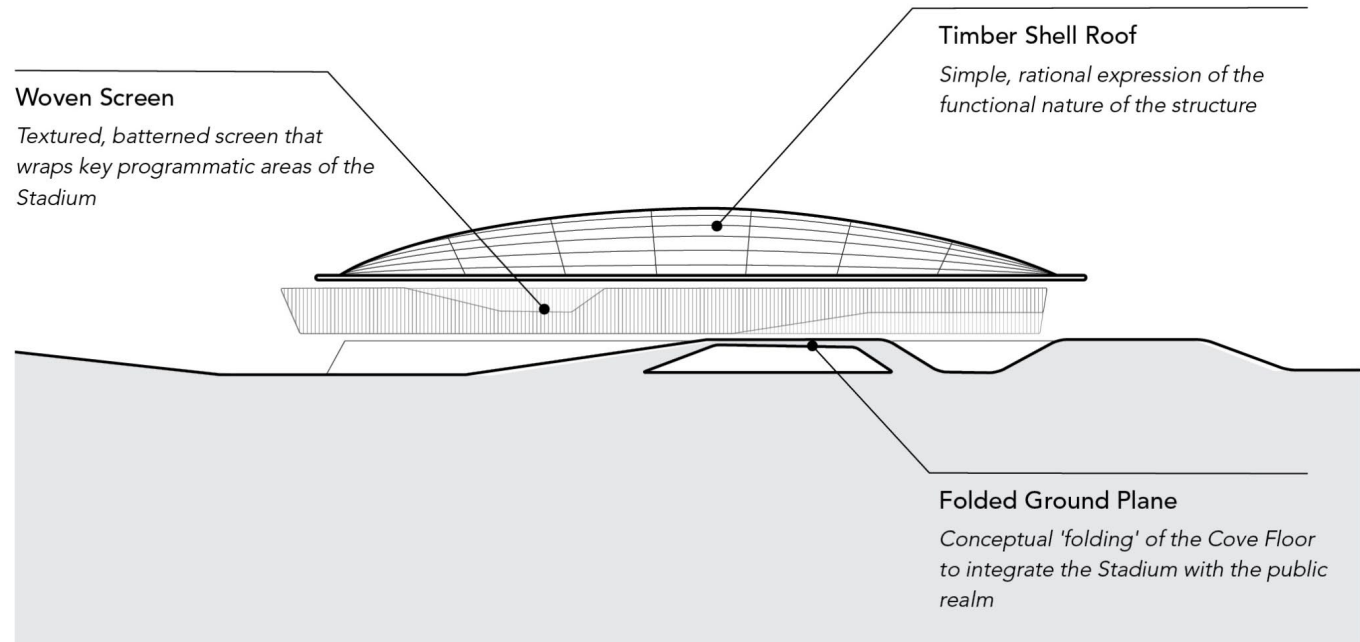
The folded ground plane is an expression of the base of the building at ground level and incorporates all elements of the development beneath the internal concourse at Level 1, as well as the lower seating terraces inside the Stadium. The Cove Floor will fold-up into a podium structure on which the Stadium sits. This maintains the pedestrian scale along Evans Street, and allows a consistent expression of materiality at ground level, in keeping with the Cove.

Woven Screen

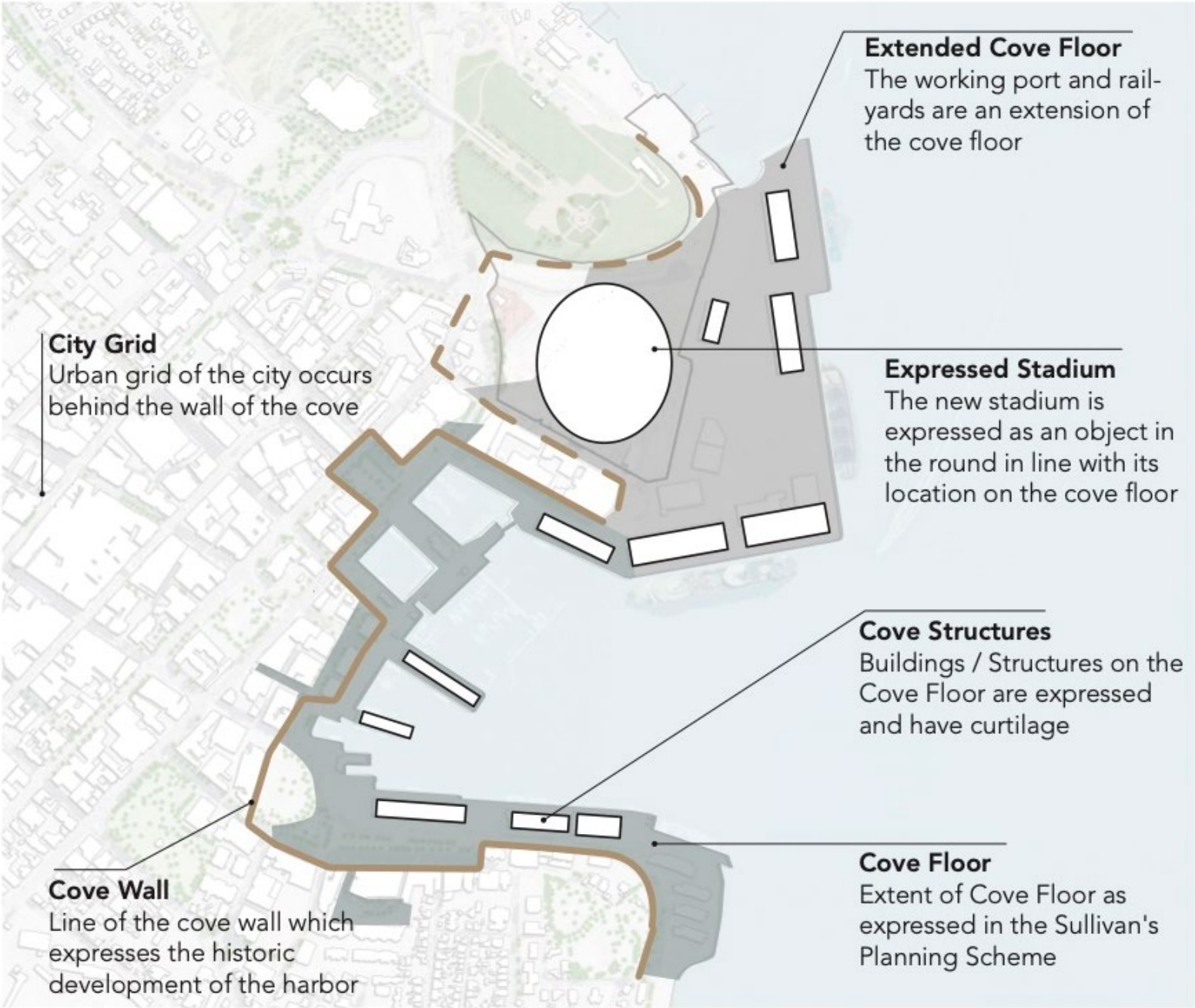
The 'woven screen' layer is home to the hospitality spaces that support the Stadium, including food and beverage offerings that service the concourse, as well as the Function Room at Level 2 and associated bars. This central layer is a distinctive element of the building and cantilevers over the external concourse on the western side. The primary façade treatment for the 'weave' will be a battened screen with variable openings to allow views from glazing behind.

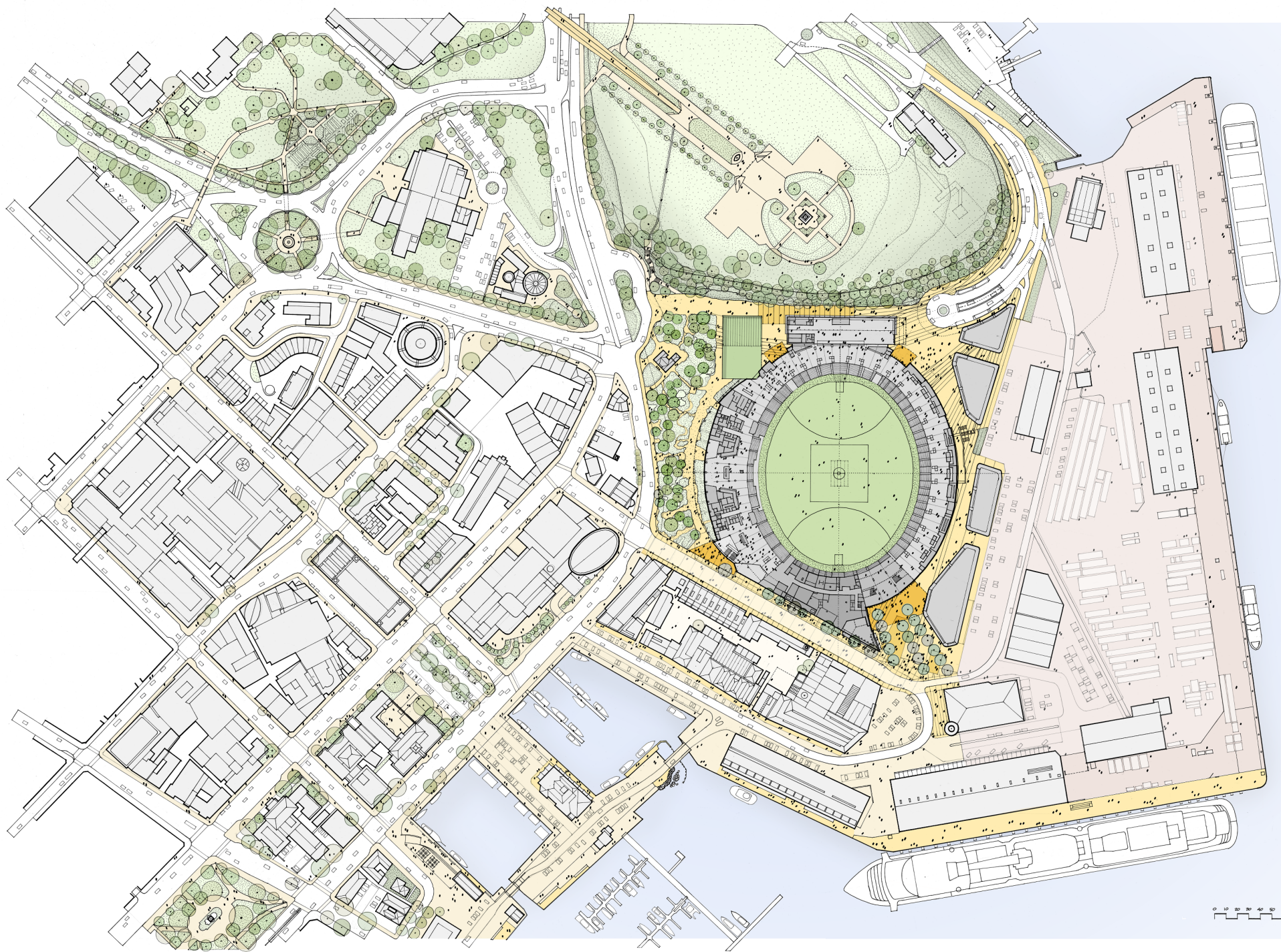
Timber Shell Roof

The expansive roof shell over the field is conceived as belonging to the sky. It is intended to be read as cloud-like with a translucent skin that admits light, views, and a sense of connection to the city, mountain, and waterfront beyond. Its timber structure is expressed on the underside, and the volume created underneath will inspire a moment of awe - an appreciation of the extraordinary - as you arrive inside.



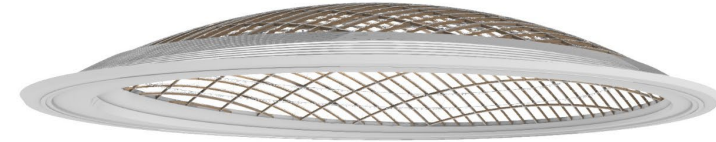
Expression of Form





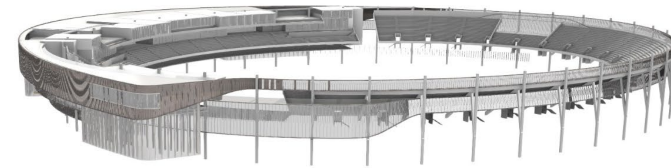
3. TIMBER SHELL ROOF

- Steel & Timber Hybrid Structure
- Optimised engineering – *more with less*
- ETFE Transparent Pillows
- Speaks to all of Tasmania



2. 'WOVEN' VEIL

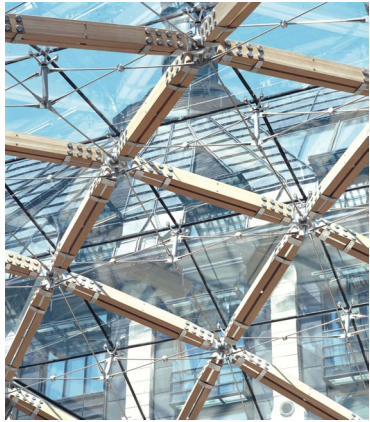
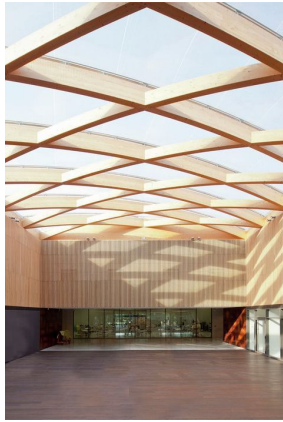
- Function Room with views to Kunanyi
- Weather Protection to concourse
- Shading & Aspect
- Spatially Responsive to Hobart



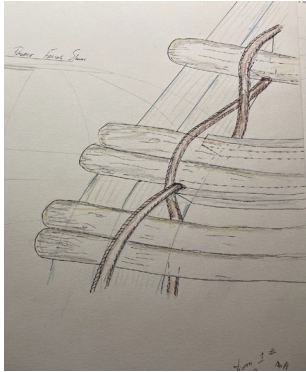
1. FOLDED GROUND PLANE

- Revealing of the Cove Floor
- Rediscovering original shoreline
- Scale and Character of Locality





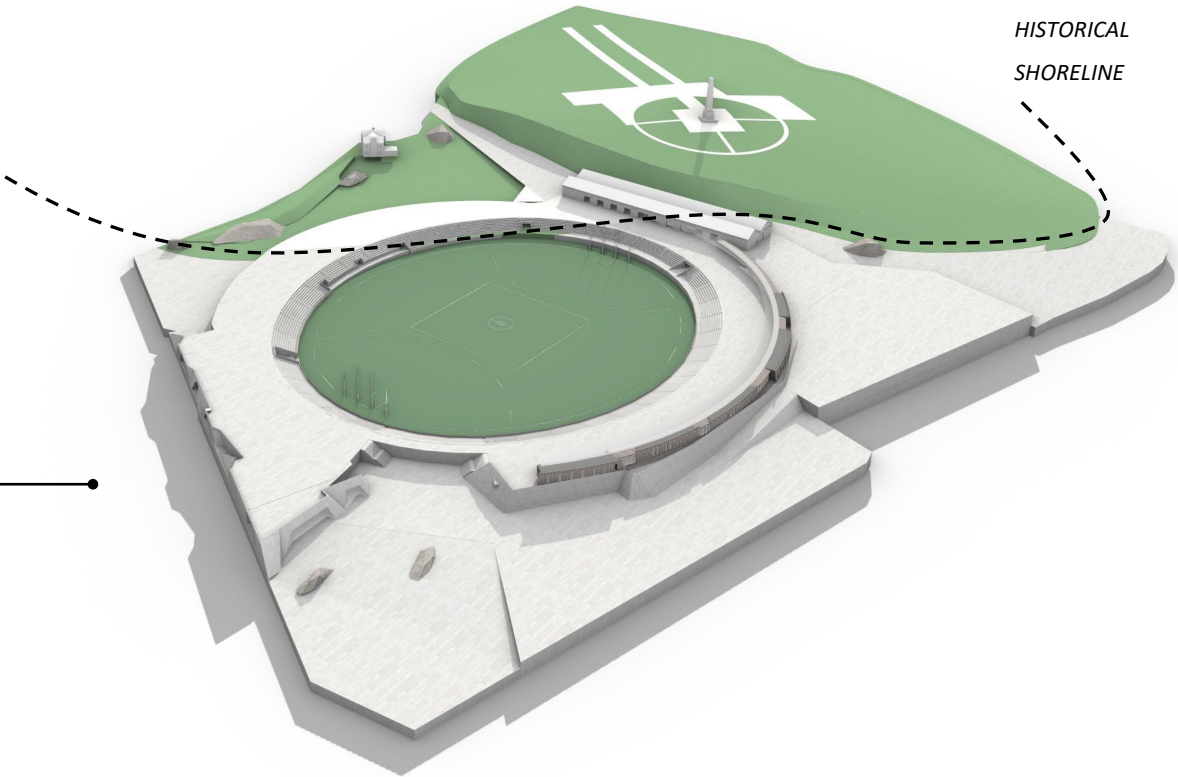
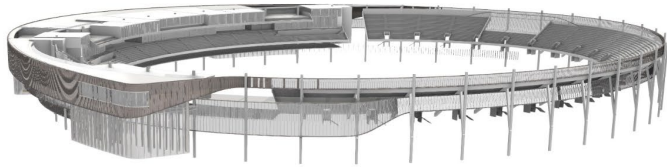
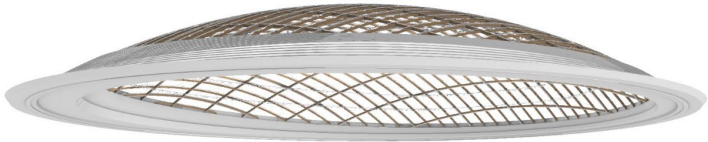
TIMBER SHELL ROOF



'WOVEN' VEIL



FOLDED GROUND PLANE



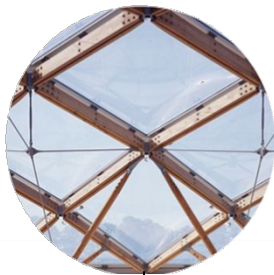
HISTORICAL
SHORELINE

Materials

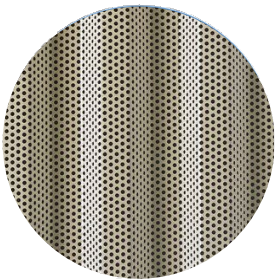
RT02
METAL DECK ROOF WITH
INTEGRATED GUTTER AND METAL
SOFFIT TO MATCH



RT01
STEEL AND GLULAM HYBRID
ROOF STRUCTURE WITH
ETFE PILLOWS



BAL01
BALUSTRADE TO
BACK OF BOWL



FT01
BATTEN SCREEN FIXED
TO METAL CLADDING



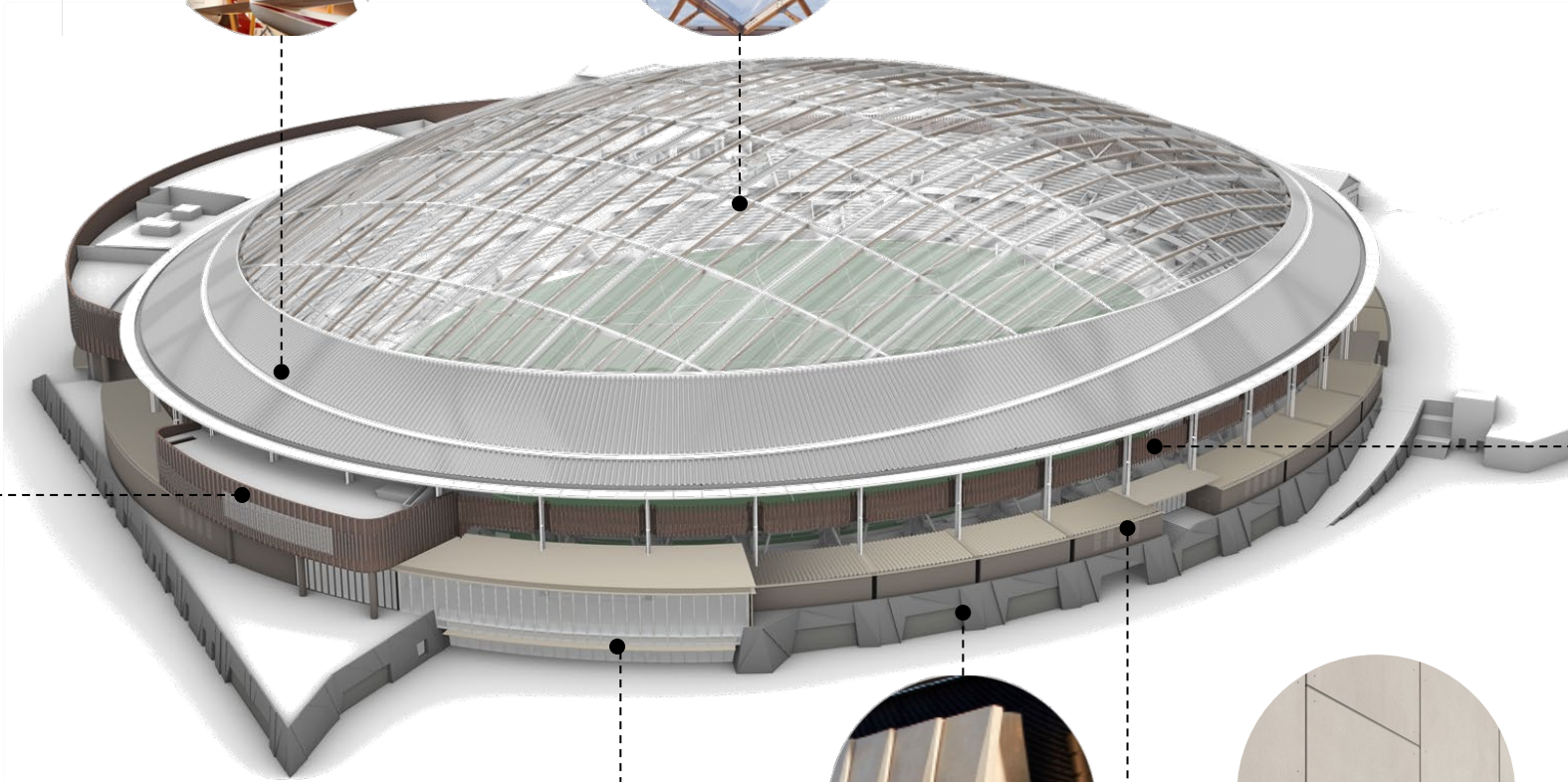
FT05
GLAZED ENTRIES



FT06
CONCRETE WALLS



FT06B
FIBRE CEMENT SHEET





2. BUILDING OVERVIEW

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KEY DESIGN FEATURES

Capacity

23,000 seats plus
standing room for 1,500
patrons at major sports events

31,500 patron capacity
for major concert events

Hospitality

1,500 person Function Room
with views toward kunanyi and
the Wellington Range

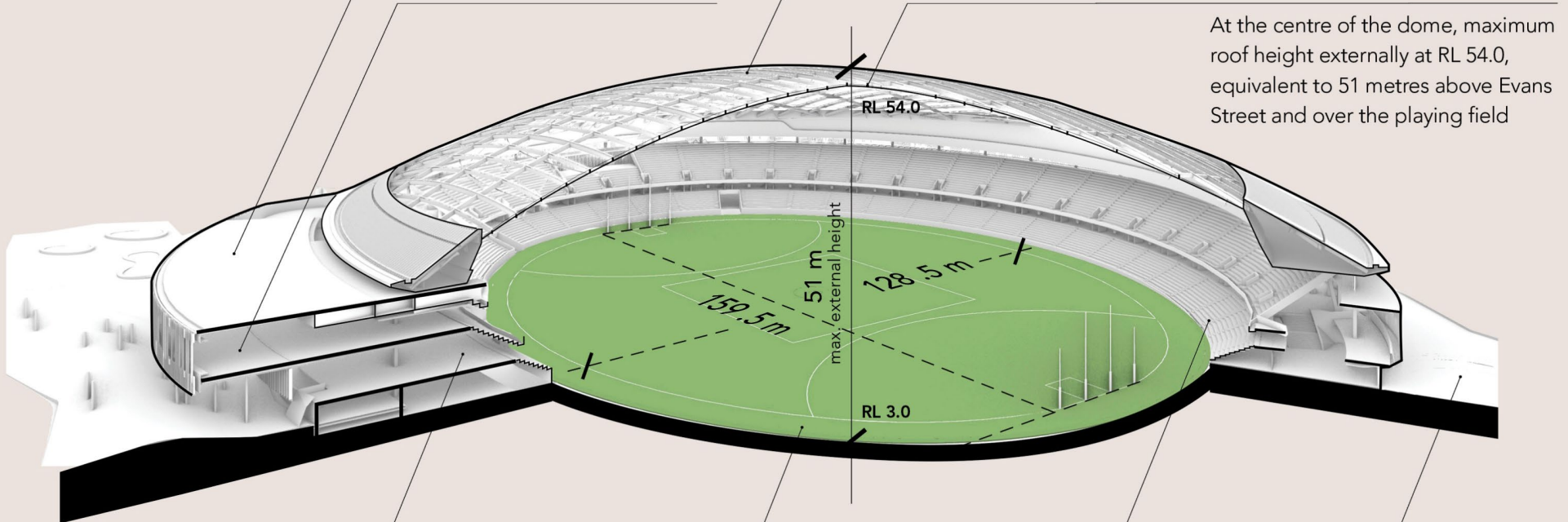
A serviced grandstand with
four levels of public, hospitality,
media and back-of-house space

World First Timber Roof

Fixed dome-shaped roof that provides
full oval coverage to safeguard events
in all-weather

Translucent ETFE pillows over a hybrid
steel and Tasmanian timber frame

At the centre of the dome, maximum
roof height externally at RL 54.0,
equivalent to 51 metres above Evans
Street and over the playing field



360° Circulation

Elevated internal concourse with
views over the field and
service zones beneath

Multi-Sport Field

159.5m x 128.5m
Field boundary for AFL

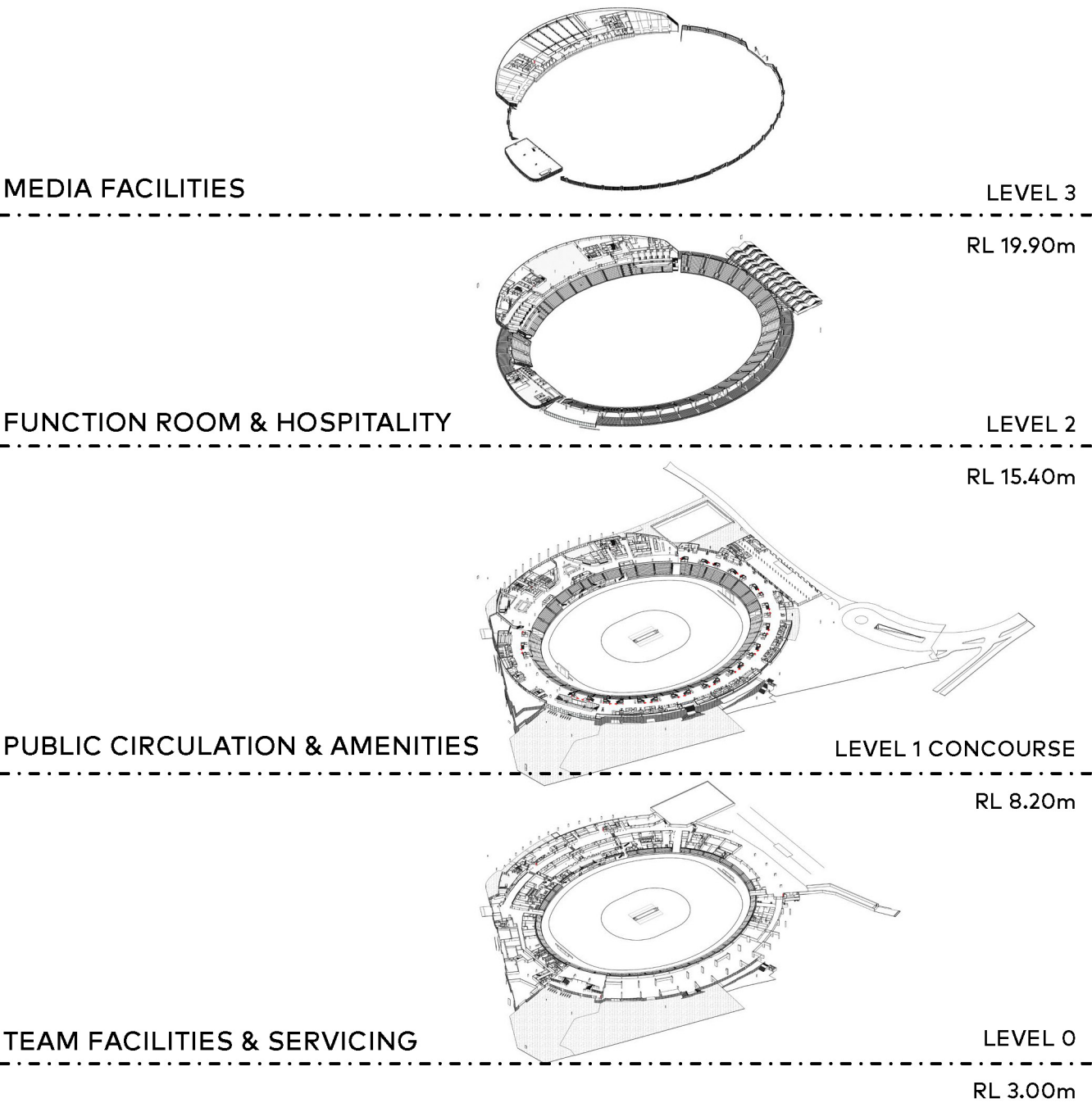
Intimate Seating Bowl

Fans are **closer to the action**

All Access Concourse

Fully accessible external
concourse with landscape
treatments at entries

Building Overview



Level 0 – Team Facilities and Servicing

FOH Offering

- Gate 1 & 2
- Field Club

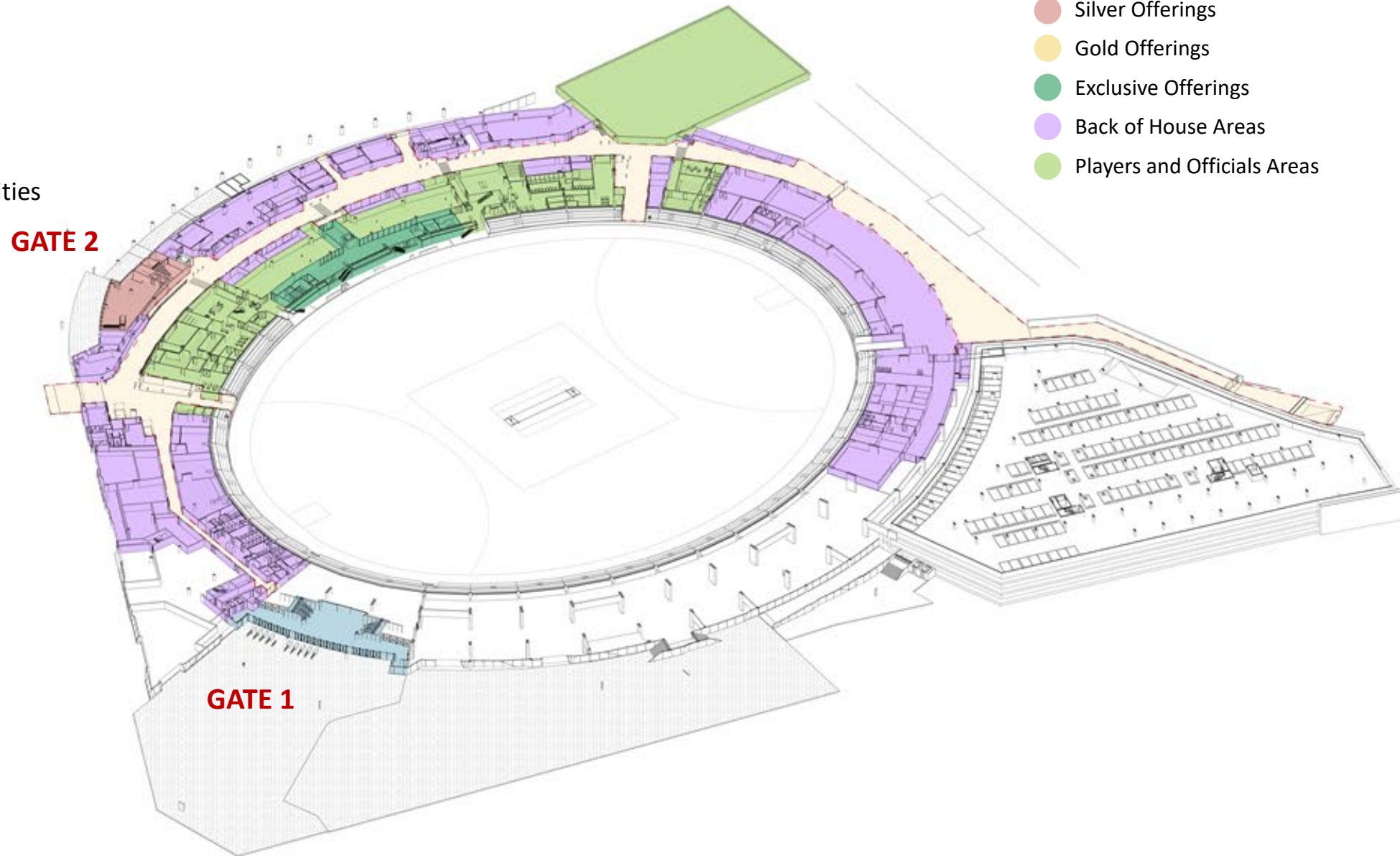
BOH Areas

- Ambulance & Medical Facilities
- OB Compound
- Police & Security
- Press Interview & Photo
- Service Road
- Staff Check-in & Briefing

Players & Officials

- Player Facilities
- Officials Facilities

- General Admission
- Silver Offerings
- Gold Offerings
- Exclusive Offerings
- Back of House Areas
- Players and Officials Areas



Level 1 – Public Circulation and Amenities

General Admission

- 360° Concourse
- General Admission F&B
- Goods Shed
- Public Amenities & First Aid

Silver Offerings

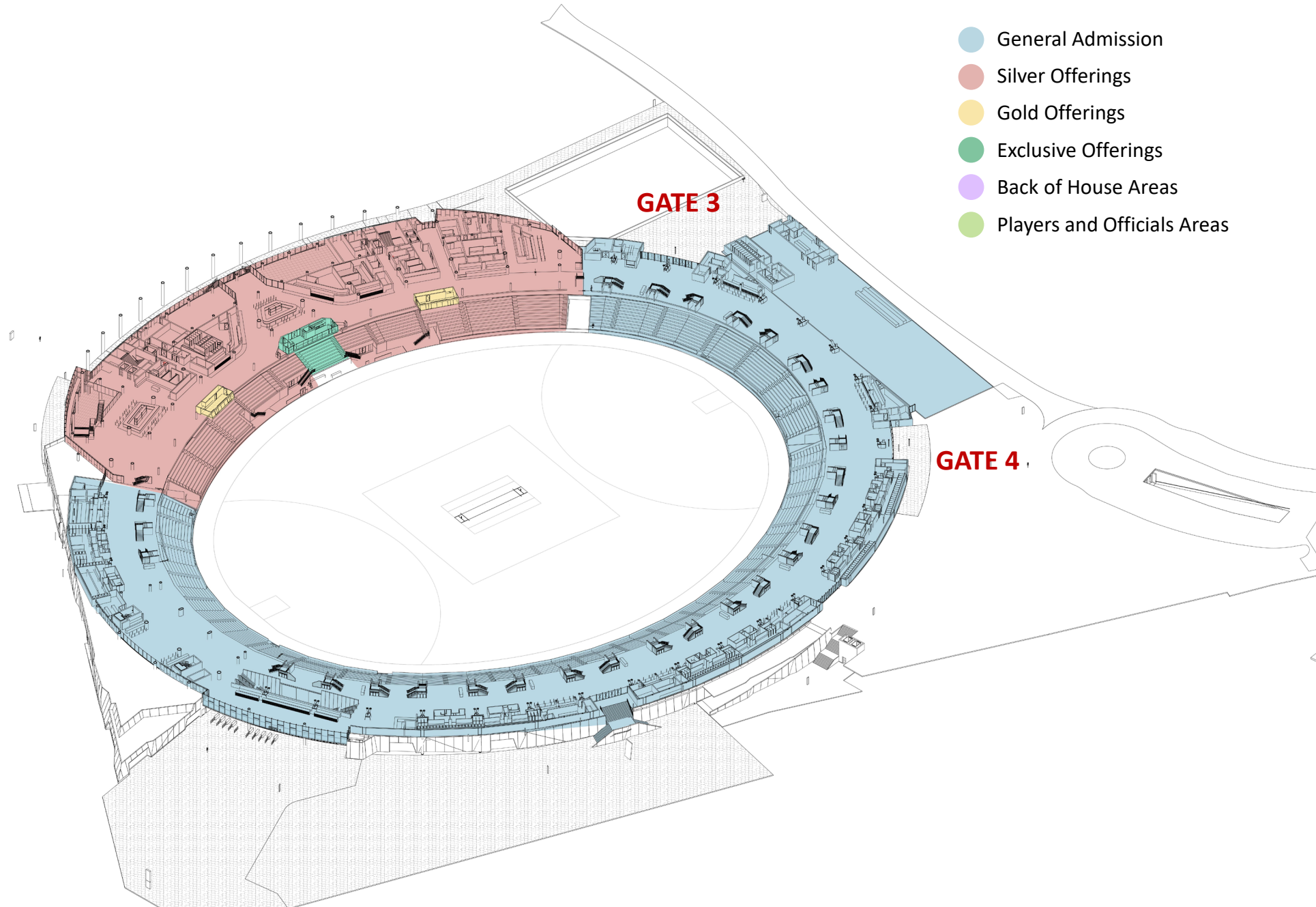
- Silver Members F&B

Gold Offerings

- Player Viewing Areas

Exclusive Offerings

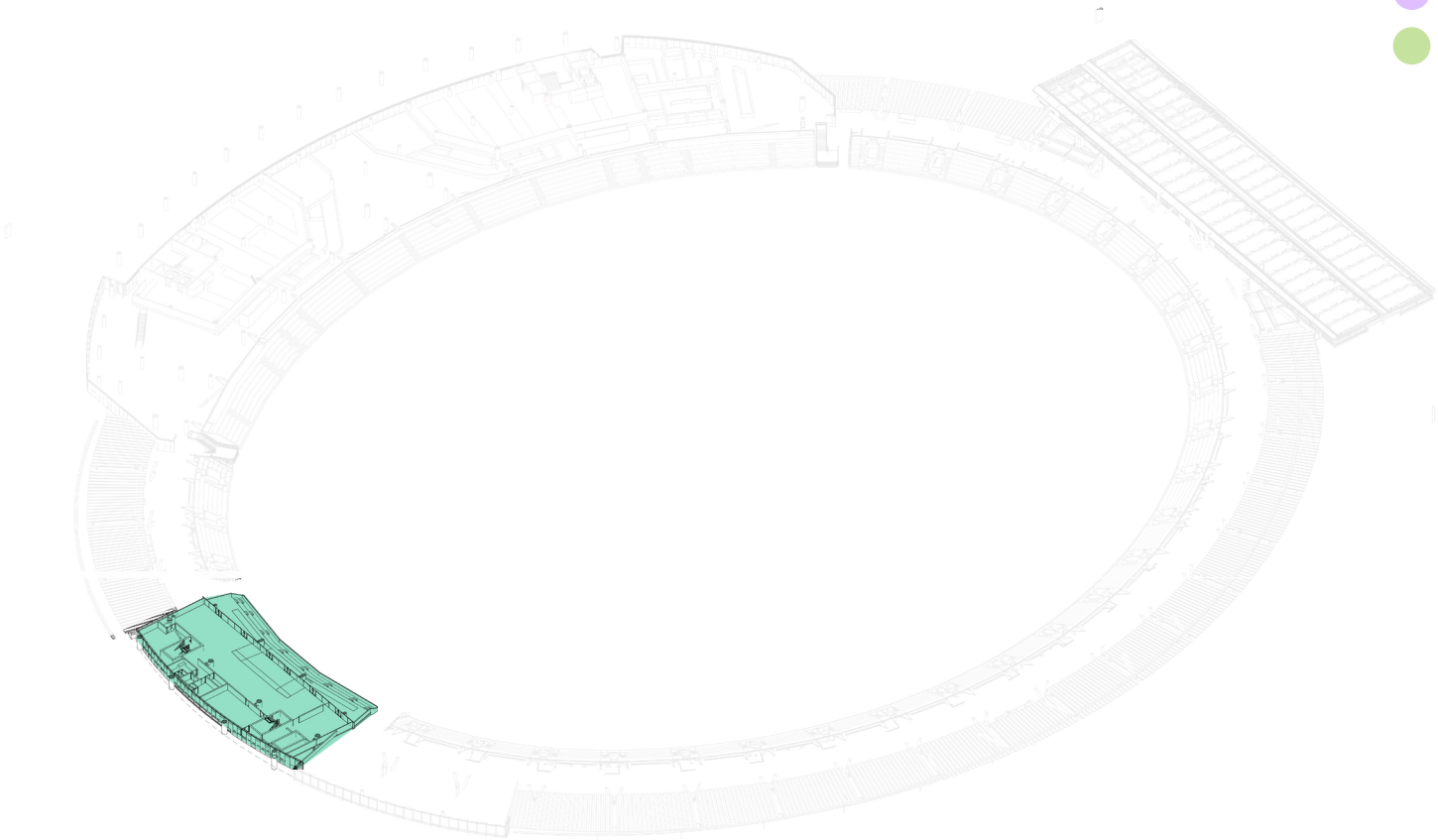
- Field Club Foyer



Level 1M – Function Rooms

- Exclusive Offerings
- Chair’s Club

- General Admission
- Silver Offerings
- Gold Offerings
- Exclusive Offerings
- Back of House Areas
- Players and Officials Areas



Level 2 – Function Rooms and Hospitality

General Admission

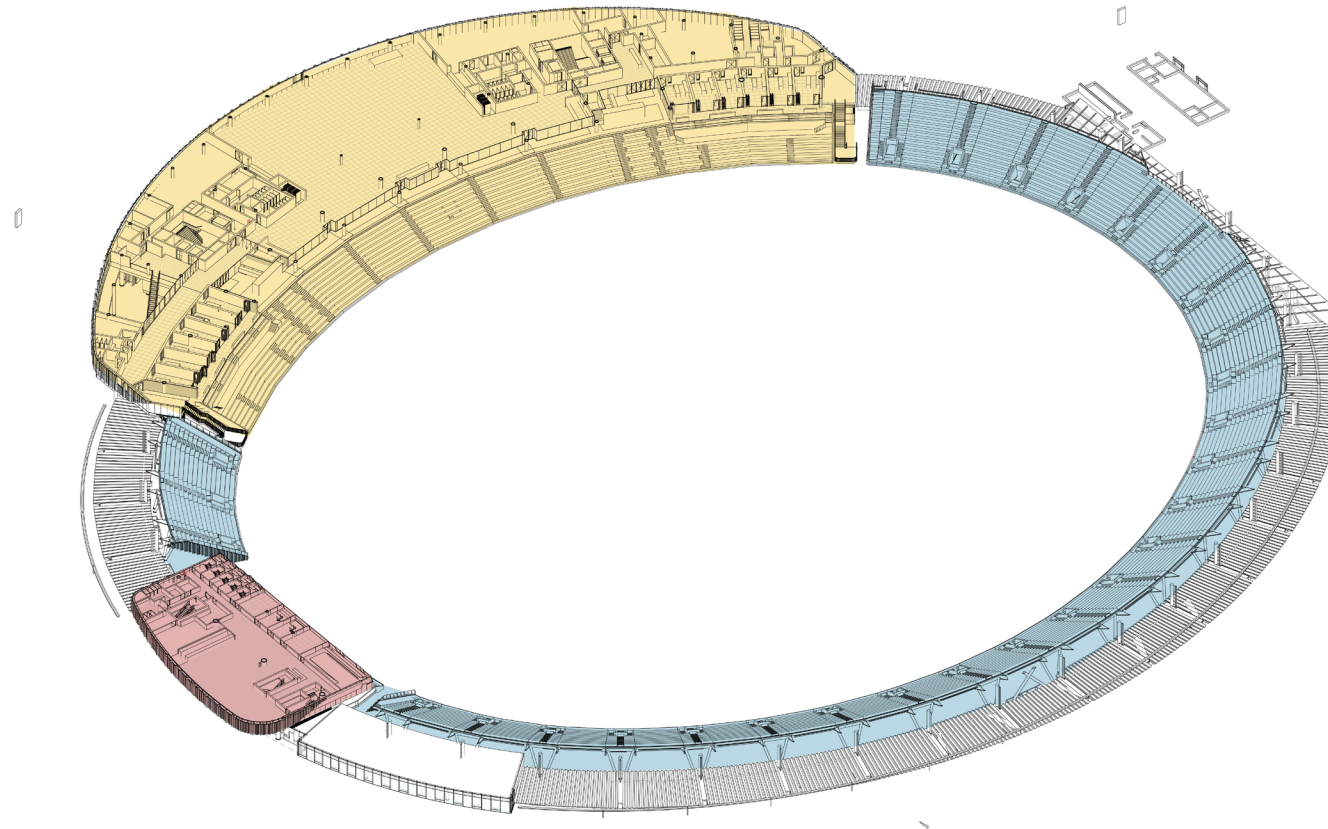
- Seating Bowl

Silver Offerings

- Silver Members Lounge

Gold Offerings

- Premium F&B and Lounge
- Premium Suites

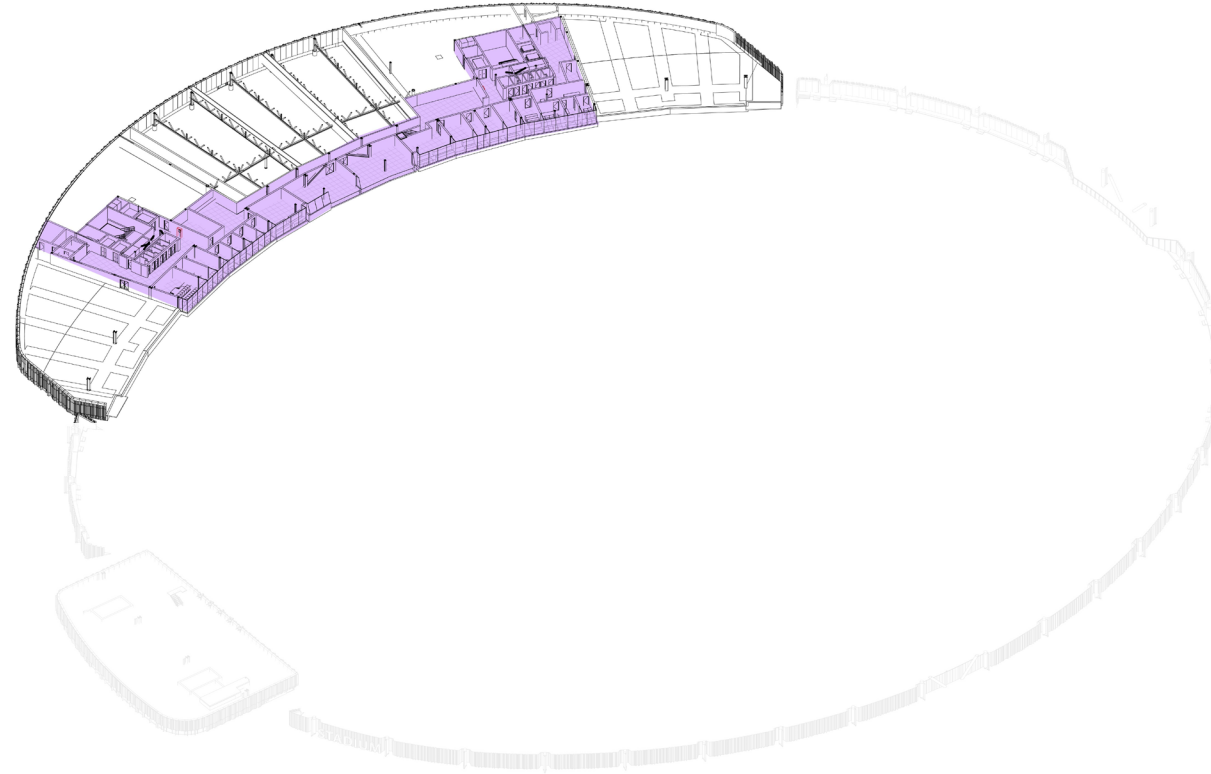


- General Admission
- Silver Offerings
- Gold Offerings
- Exclusive Offerings
- Back of House Areas
- Players and Officials Areas

Level 3 – Media Facilities

BOH Spaces

- Coaches Boxes
- Event & Forward Control
- TV & Radio Suites
- Written Press



- General Admission
- Silver Offerings
- Gold Offerings
- Exclusive Offerings
- Back of House Areas
- Players and Officials Areas

3. GOODS SHED INTEGRATION

COX

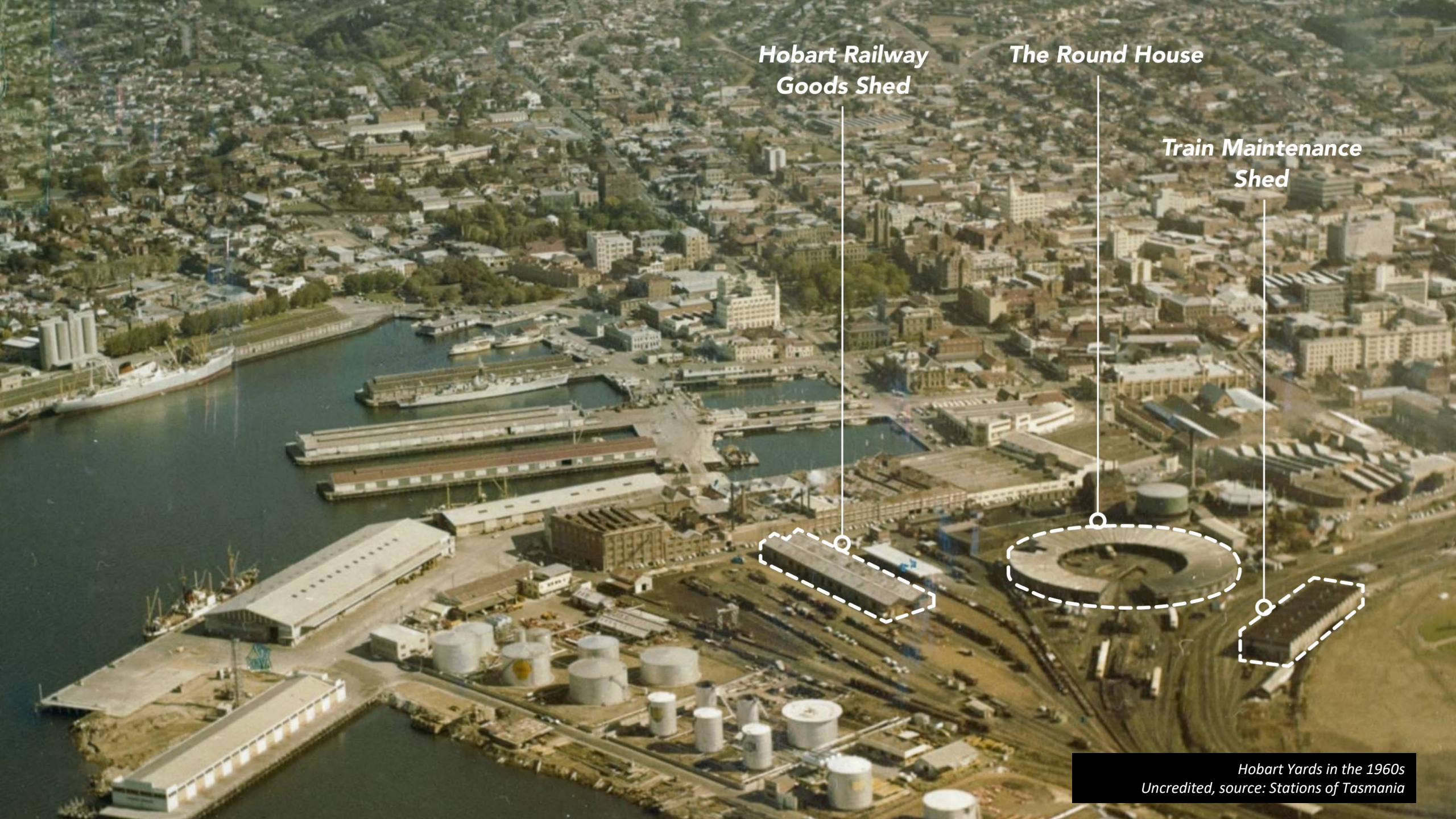
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*Hobart Yards in the 1960s
Uncredited, source: Stations of Tasmania*



**Hobart Railway
Goods Shed**

The Round House

**Train Maintenance
Shed**

The Goods Shed Relocation



Figure 10: The Goods Shed Relocation

Principals of the Goods Shed Relocation

- › stand alone and legible
- › retains relationship to former rail track
- › use allows for original facade openings to be reinstated
- › evolution of purpose
- › continuity of use



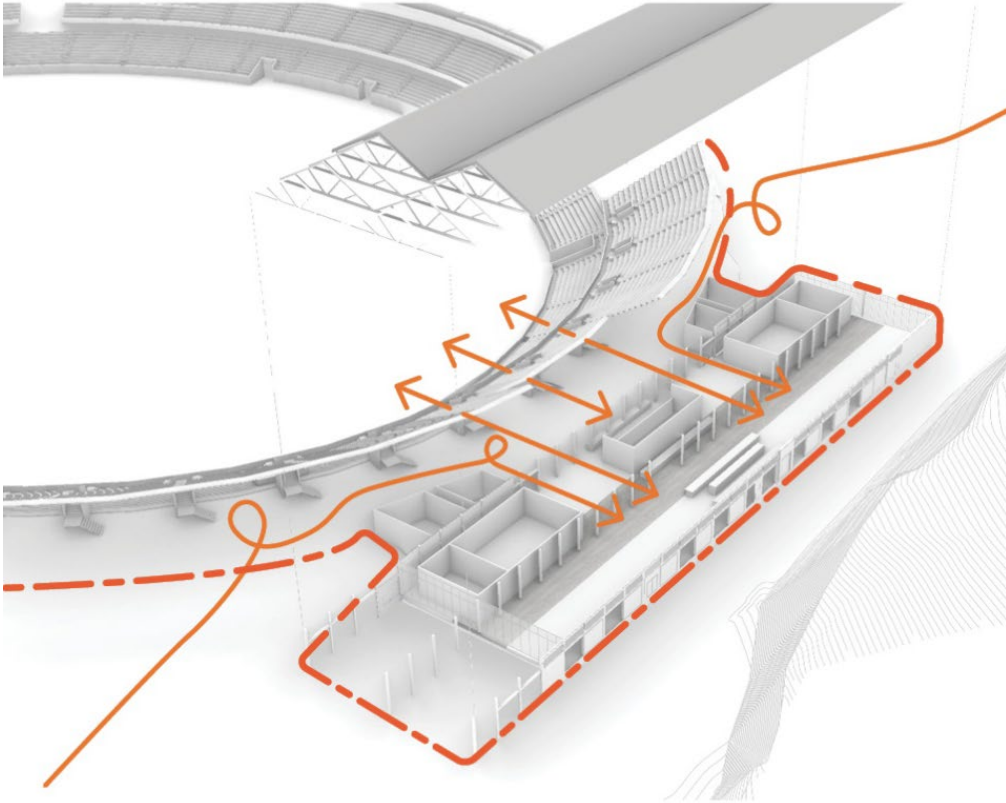
STADIUM

THE GOODS SHED

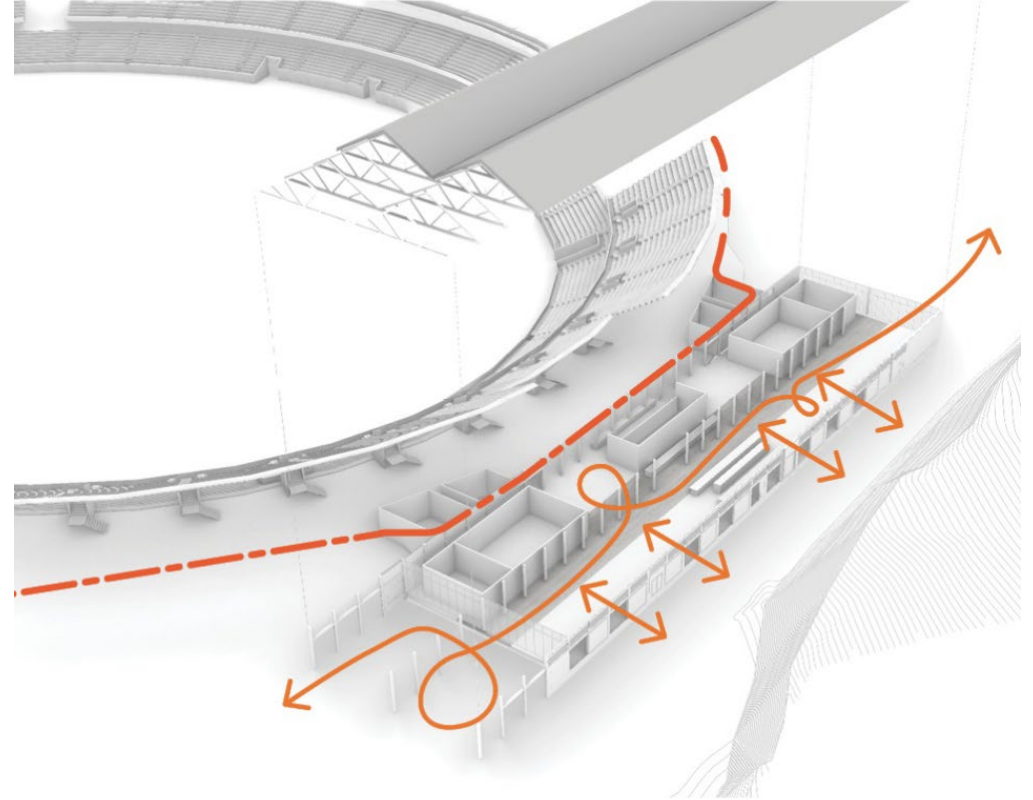
GATE 3



The Goods Shed In Operation

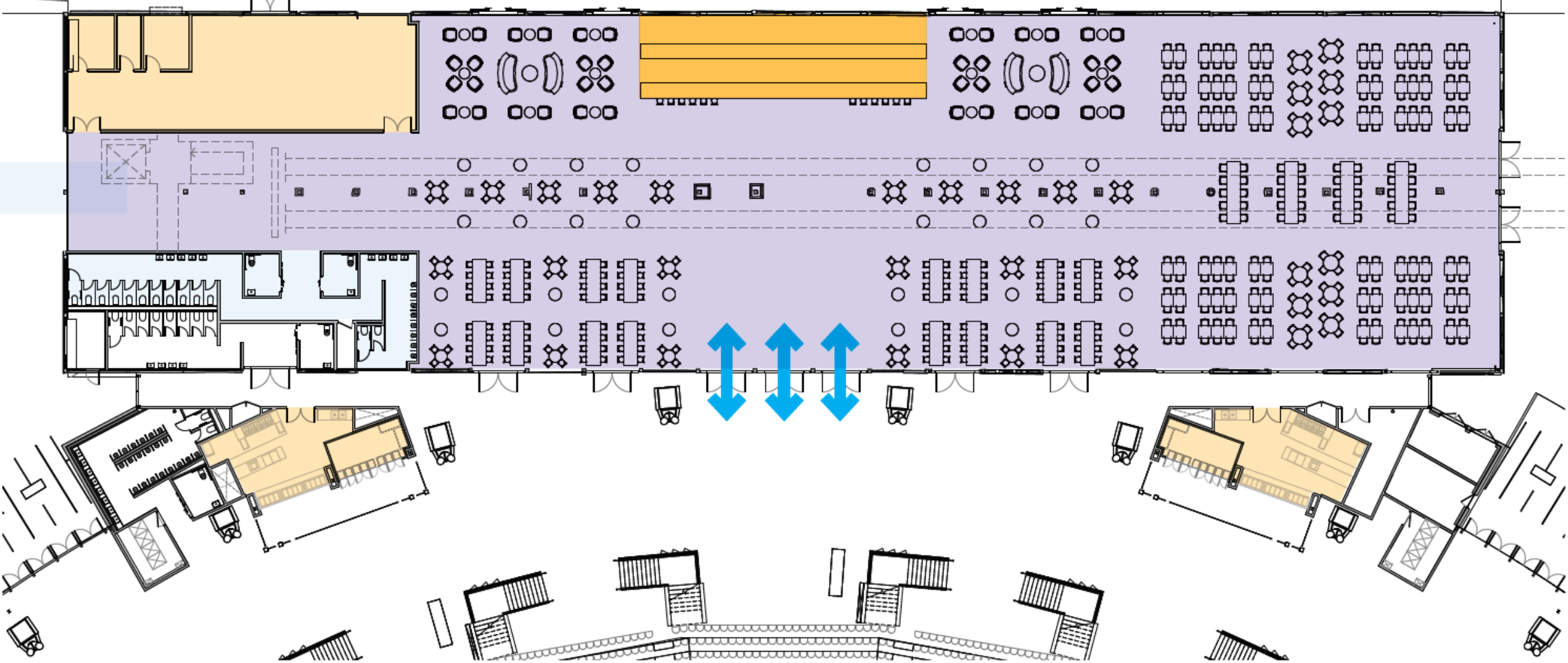


THE GOODS SHED ACCESS ON EVENT DAY



THE GOODS SHED ACCESS ON NON- EVENT DAY

The Goods Shed Planning





4. BUILDING SCALE

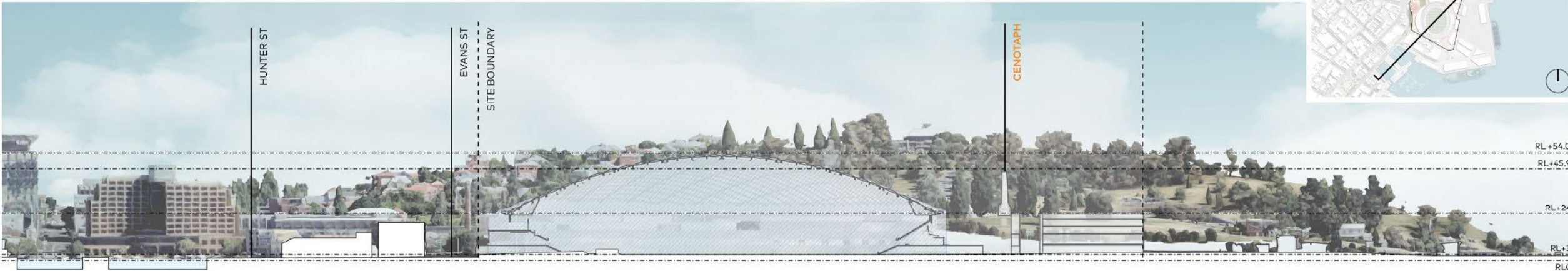
COX

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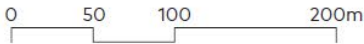
sbp
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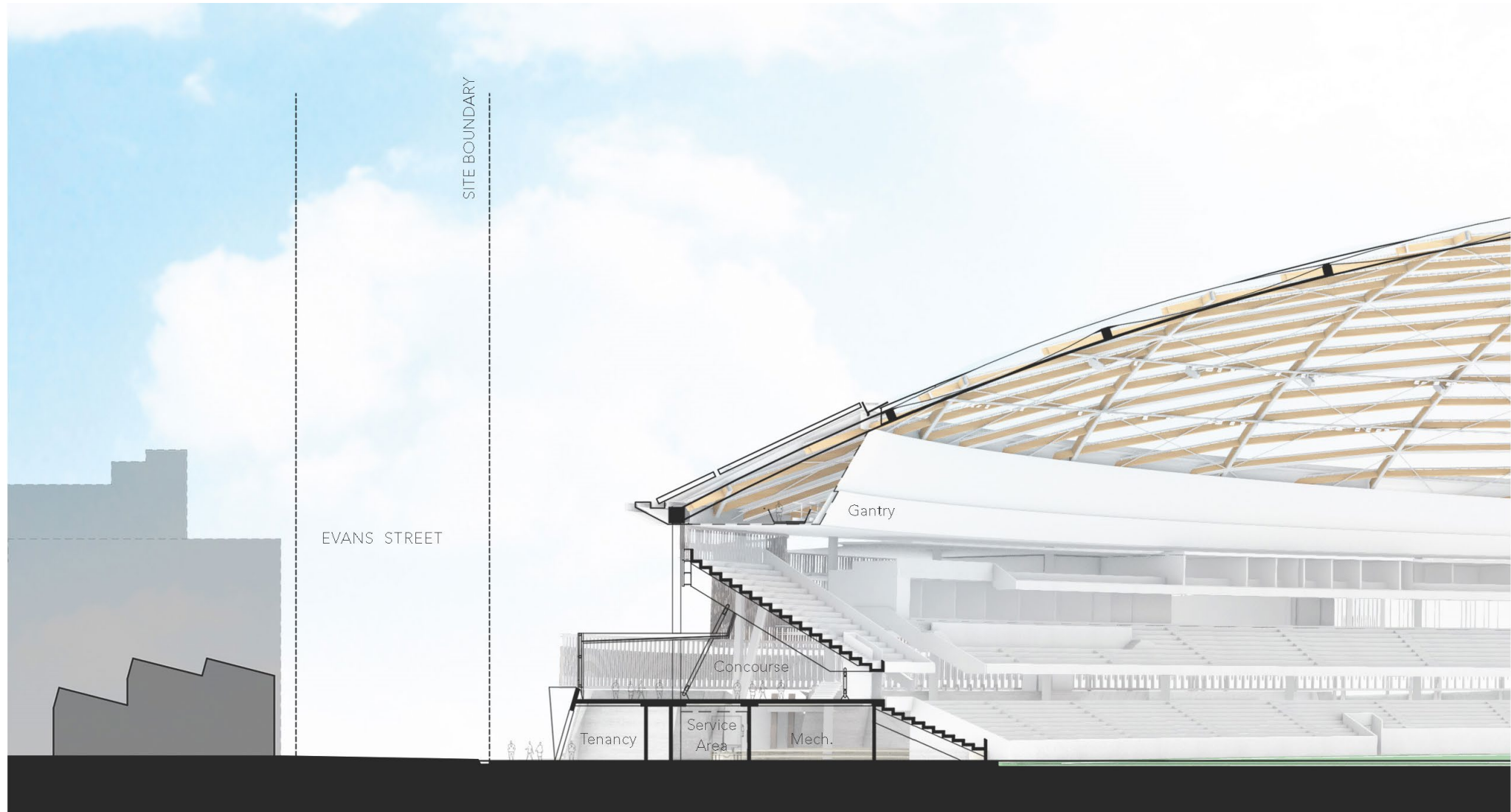


North east-south west section through Site and Constitution Dock

1:2000 @ A3



Building Sections



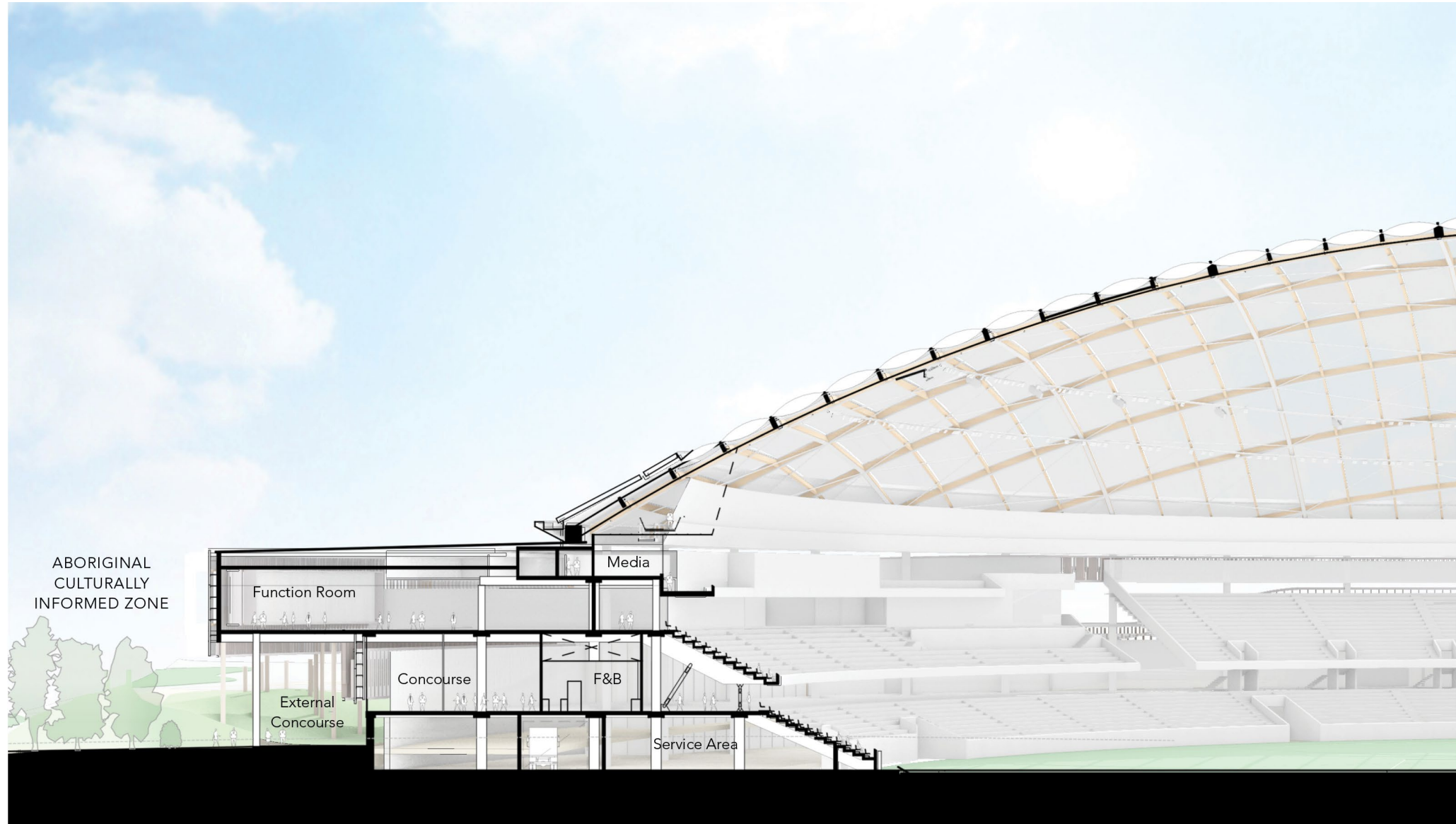
Section through Southern Stand and Evans Street

Building Sections



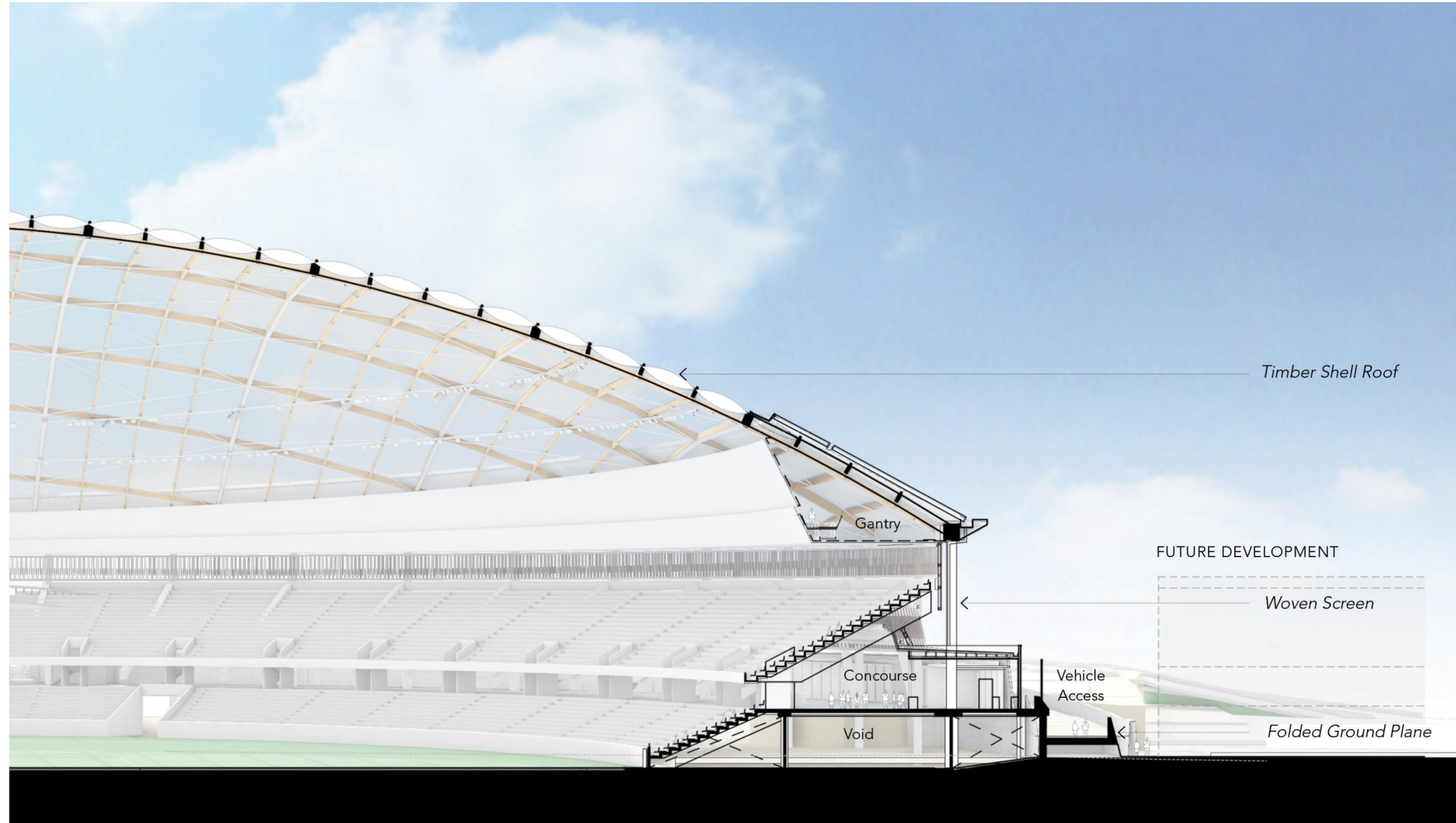
Section through Northern Stand and the Goods Shed

Building Sections



Section through Western Stand

Building Sections



Section through Eastern Stand

5. BOWL OVERVIEW

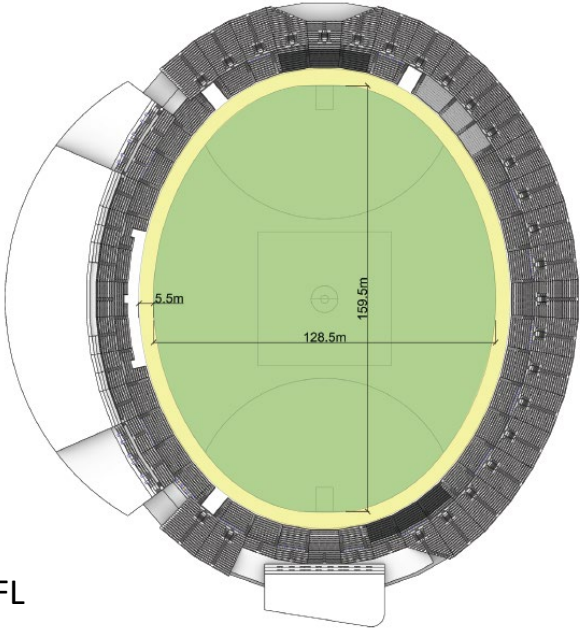
COX

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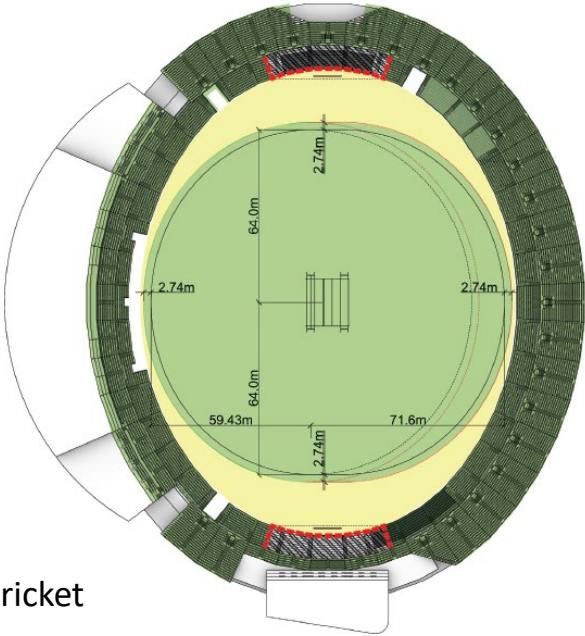
AECOM

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bergmann partner

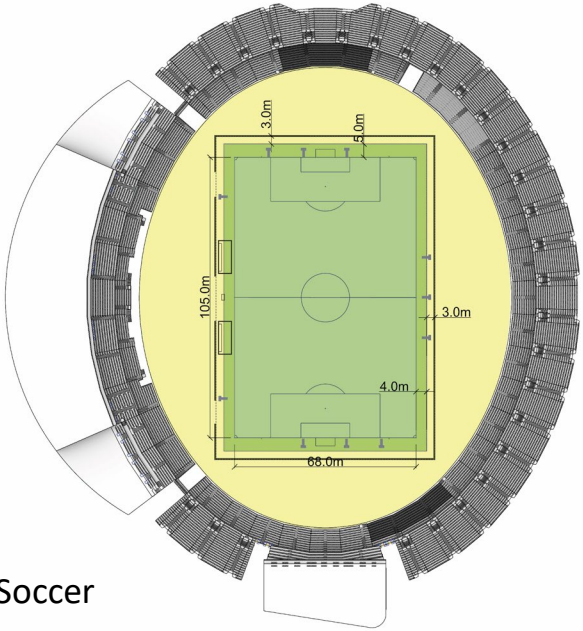
Multi-purpose Field Modes



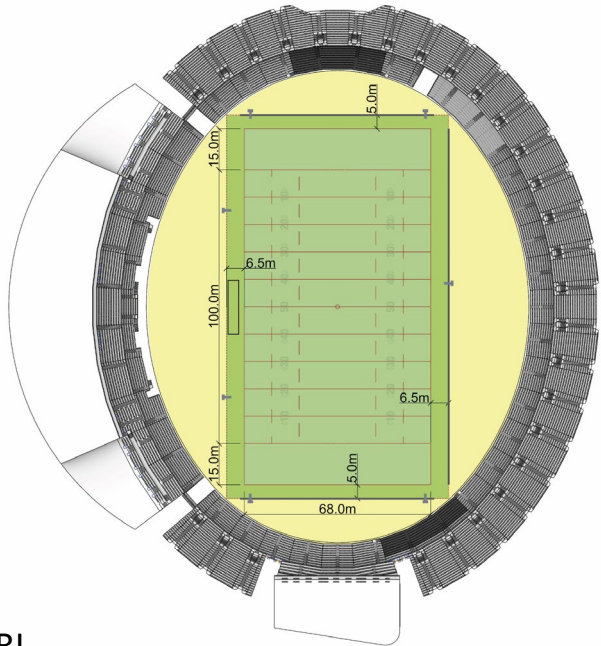
AFL



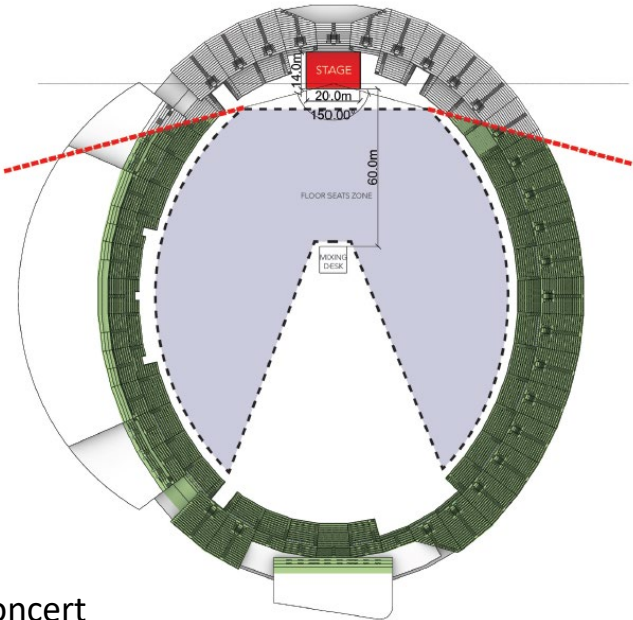
Cricket



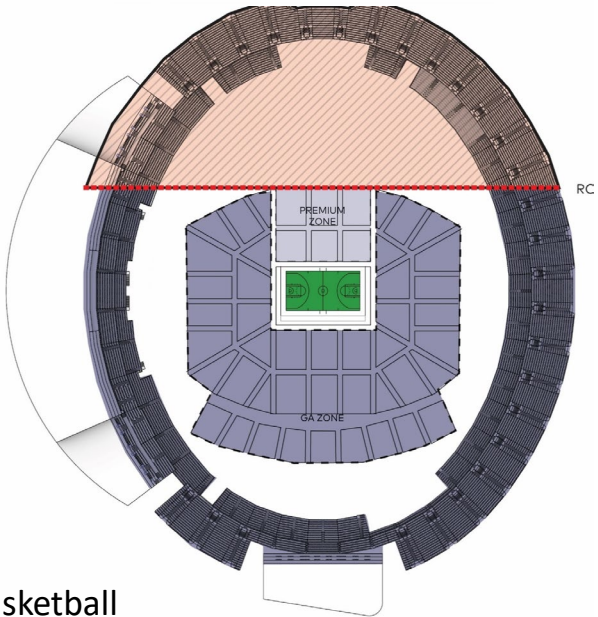
Soccer



NRL



Concert



Basketball

AFL Mode



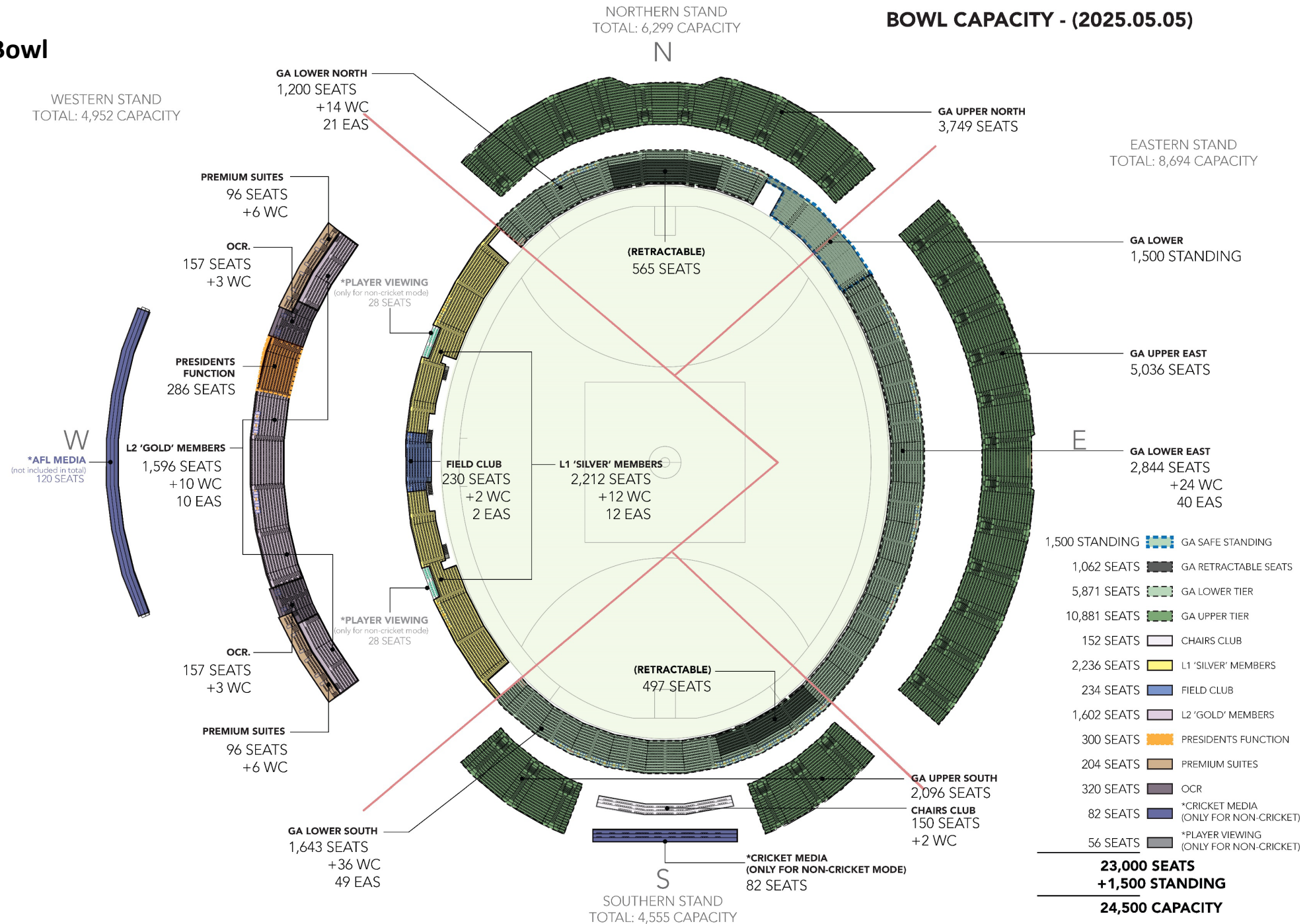
Cricket Mode



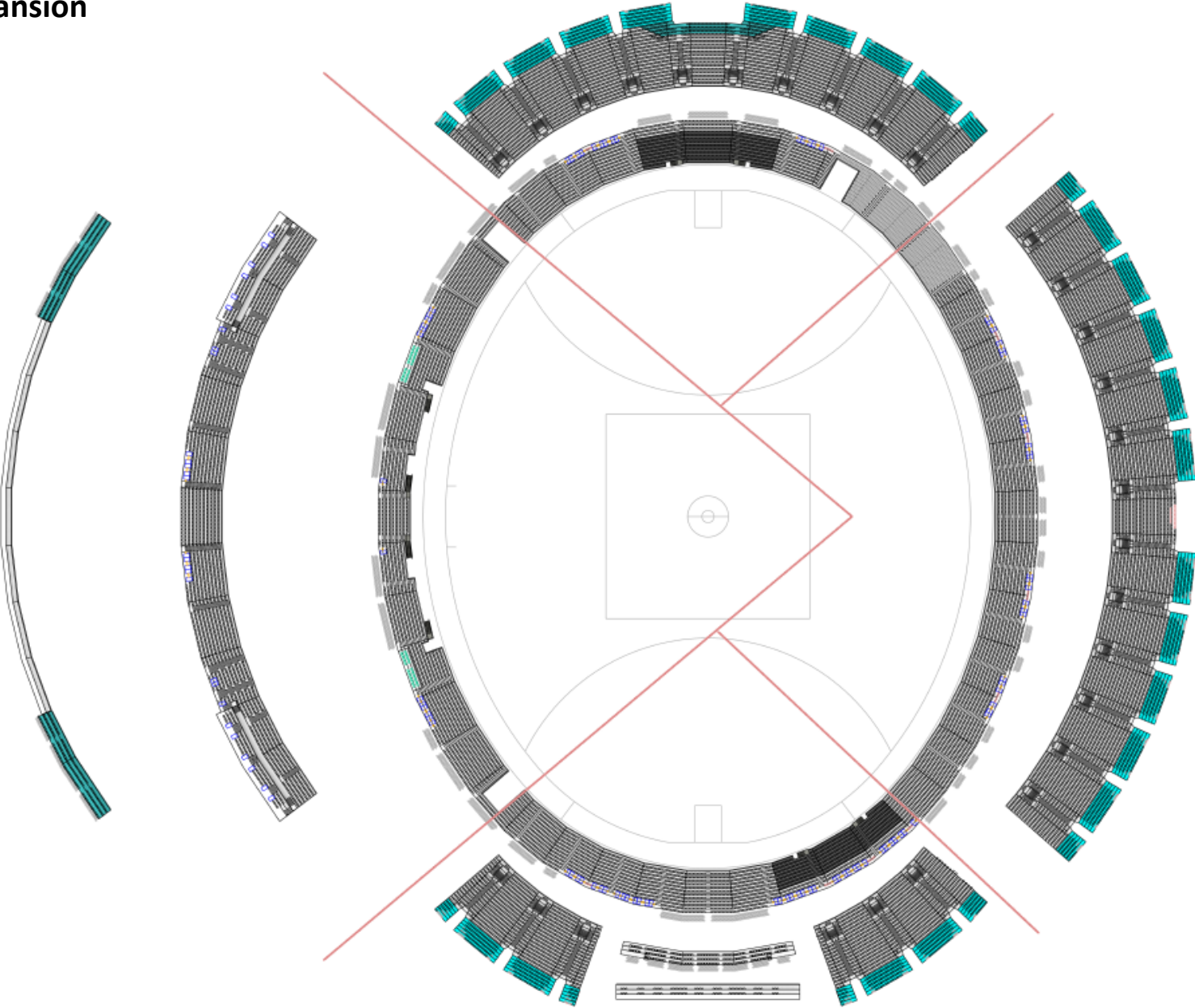
Concert Mode



Seating Bowl

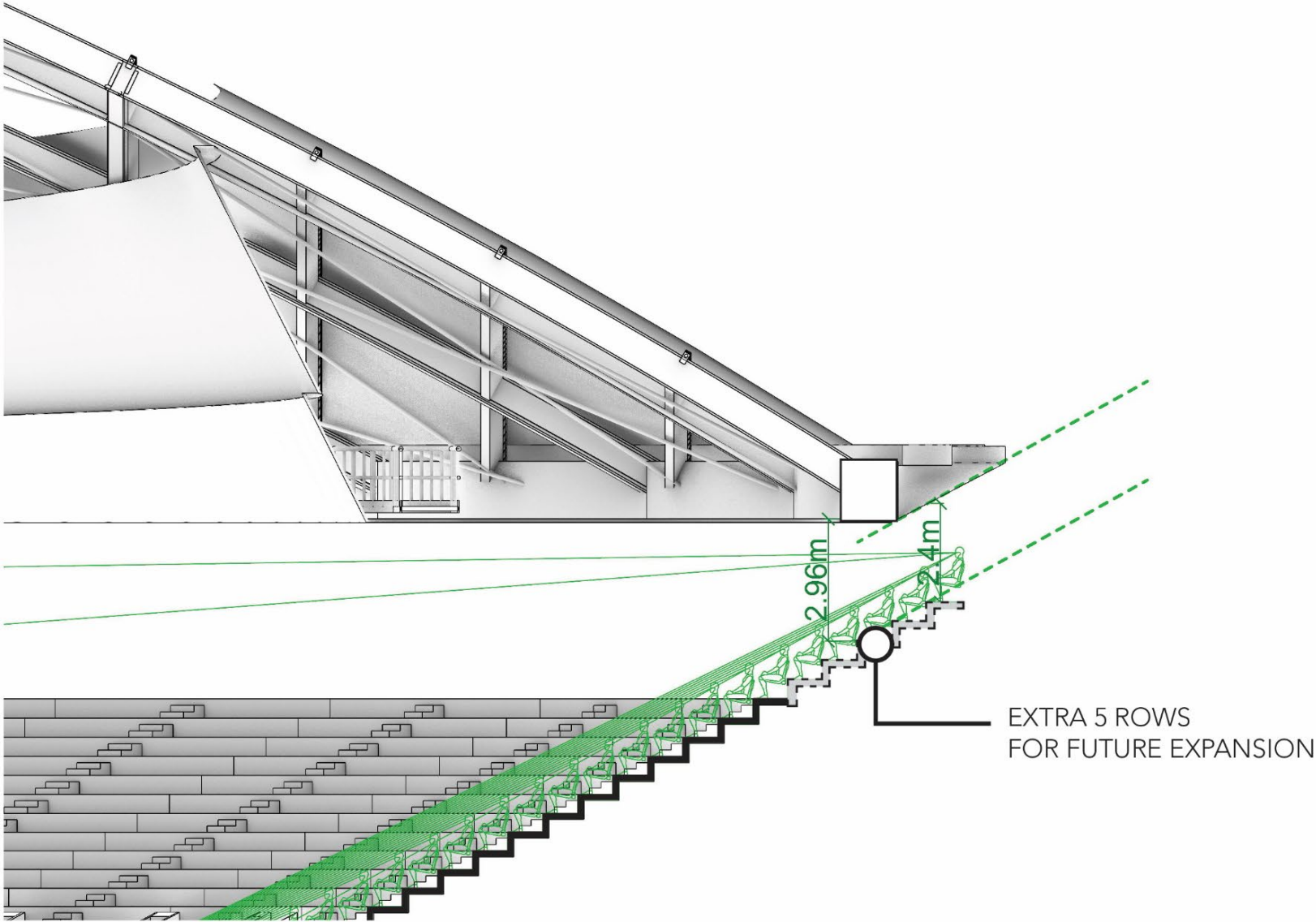


Seating Bowl Expansion



30,000 TOTAL
Future
Capacity

Seating Bowl Expansion



Sightlines – West Stand

MEDIA TIER:

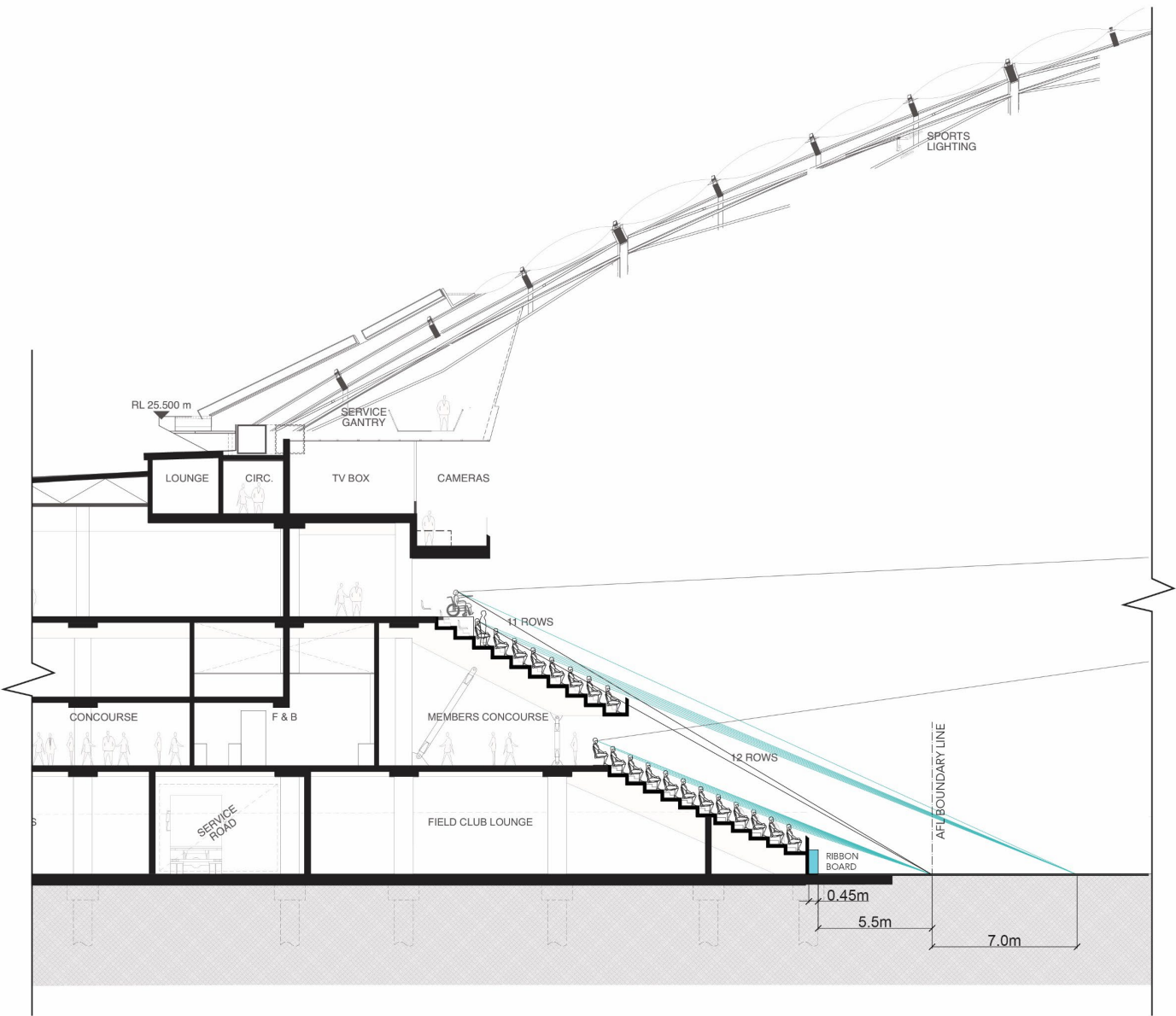
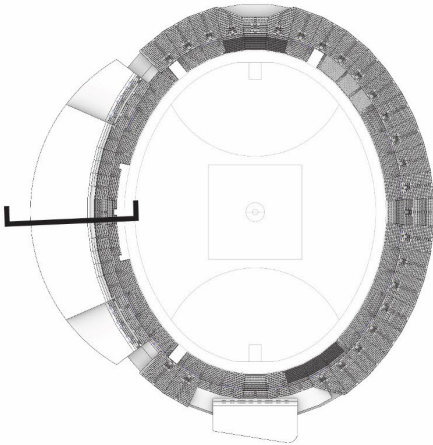
No. of Rows: 2
Row Depth: 1200
Rake Angle: -
C90 Focal Point (from Boundary) -

L02 MEMBER TIER:

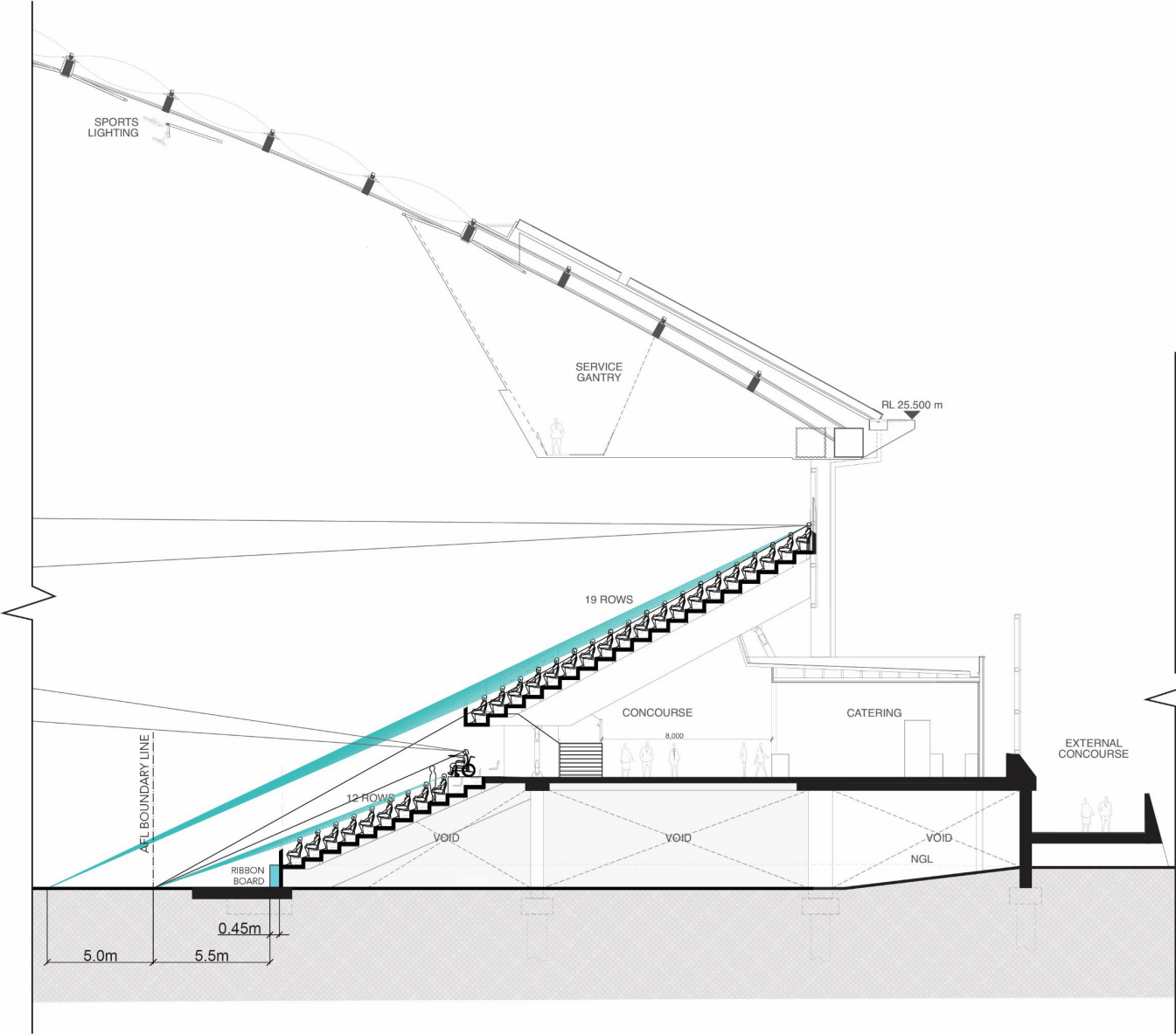
No. of Rows: 11
Row Depth: 900mm
Rake Angle: 27.90
C90 Focal Point (from Boundary): 7m

L01 MEMBER TIER:

No. of Rows: 12
Row Depth: 850mm
Rake Angle: 23.9
C60 Focal Point (from Boundary): 0m

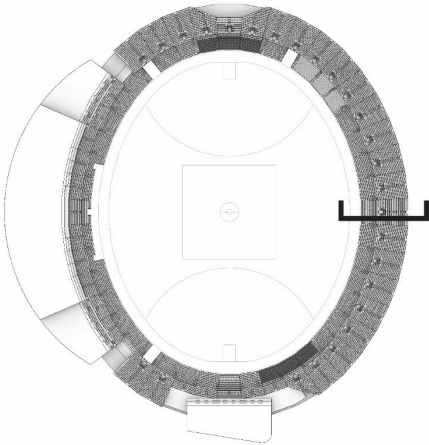


Sightlines – East Stand

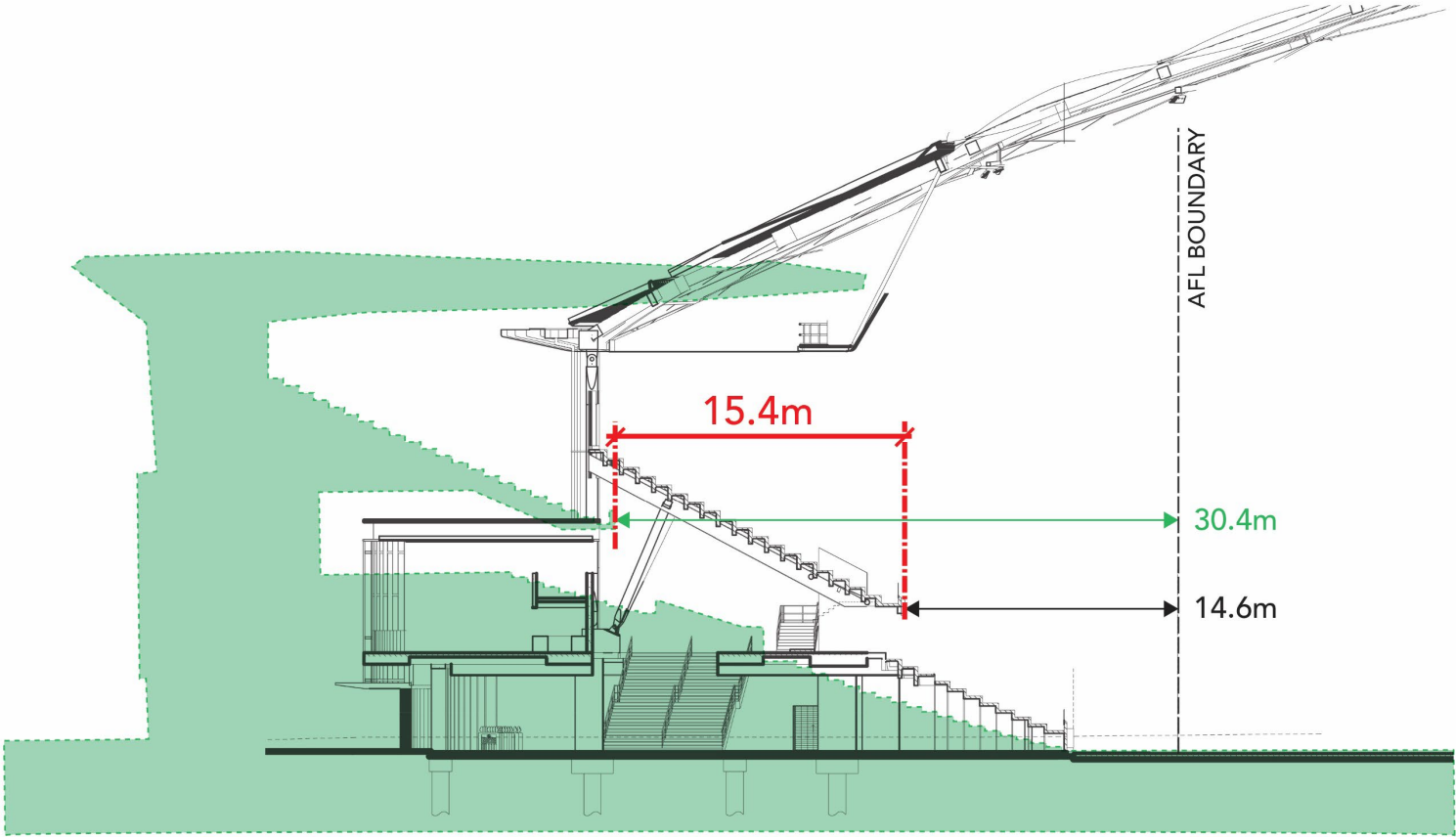


GA UPPER TIER:	
No. of Rows:	19
Row Depth:	850mm
Rake Angle:	28.67
C60 Focal Point (from Boundary):	5m

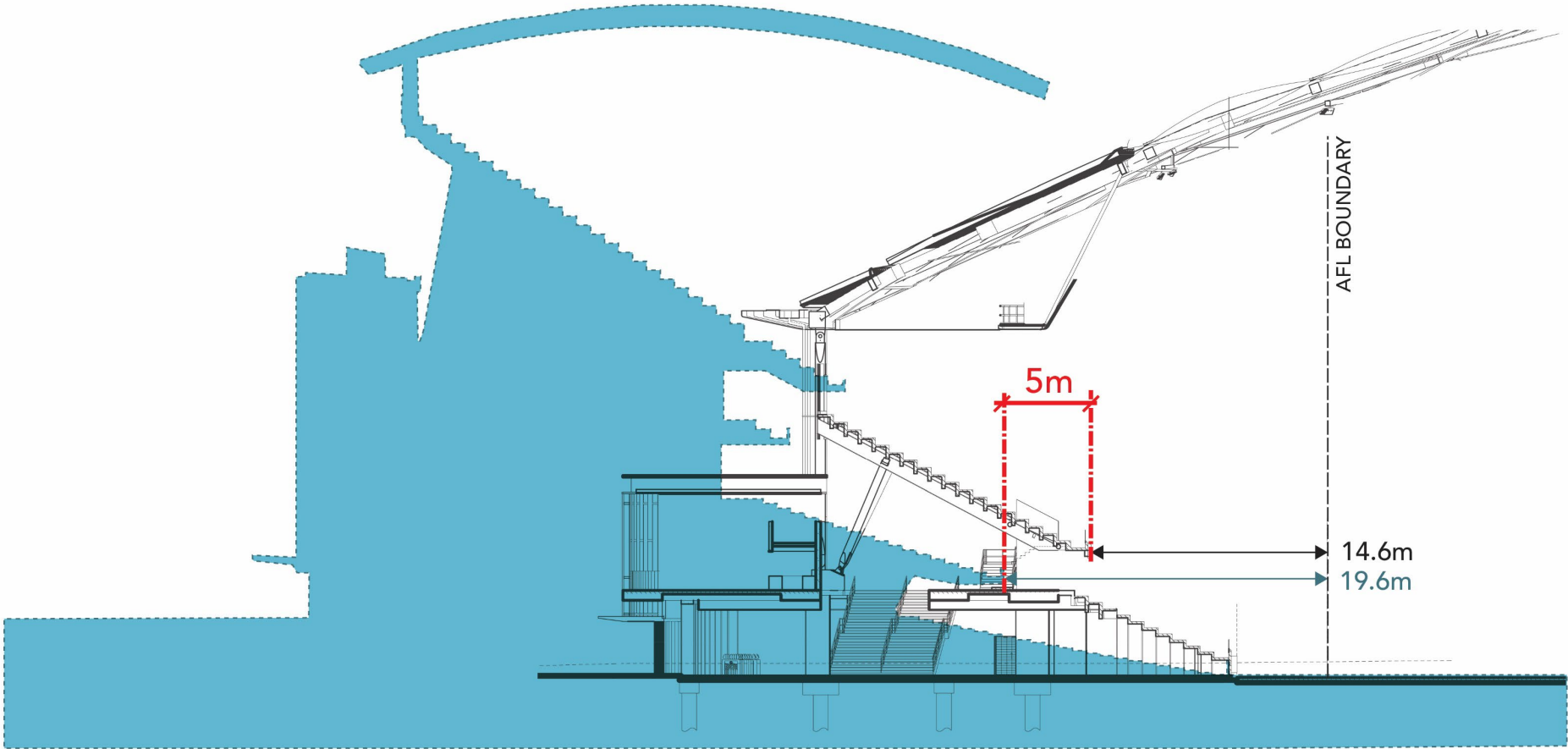
GA LOWER TIER:	
No. of Rows:	12
Row Depth:	850mm
Rake Angle:	23.9
C60 Focal Point (from Boundary):	0m



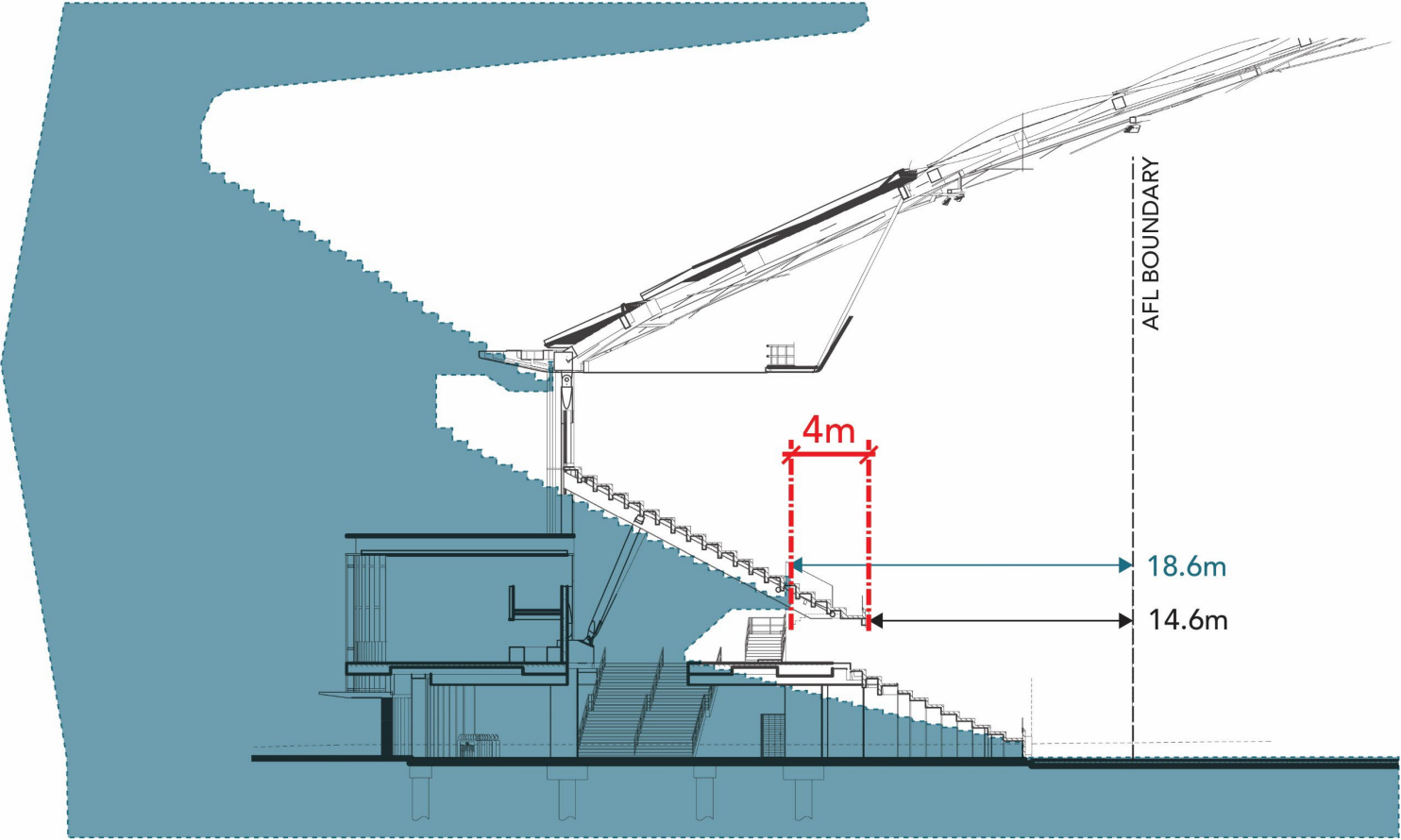
Stadium Comparisons: Bowl to Boundary Distance – GMHBA Stadium, Geelong



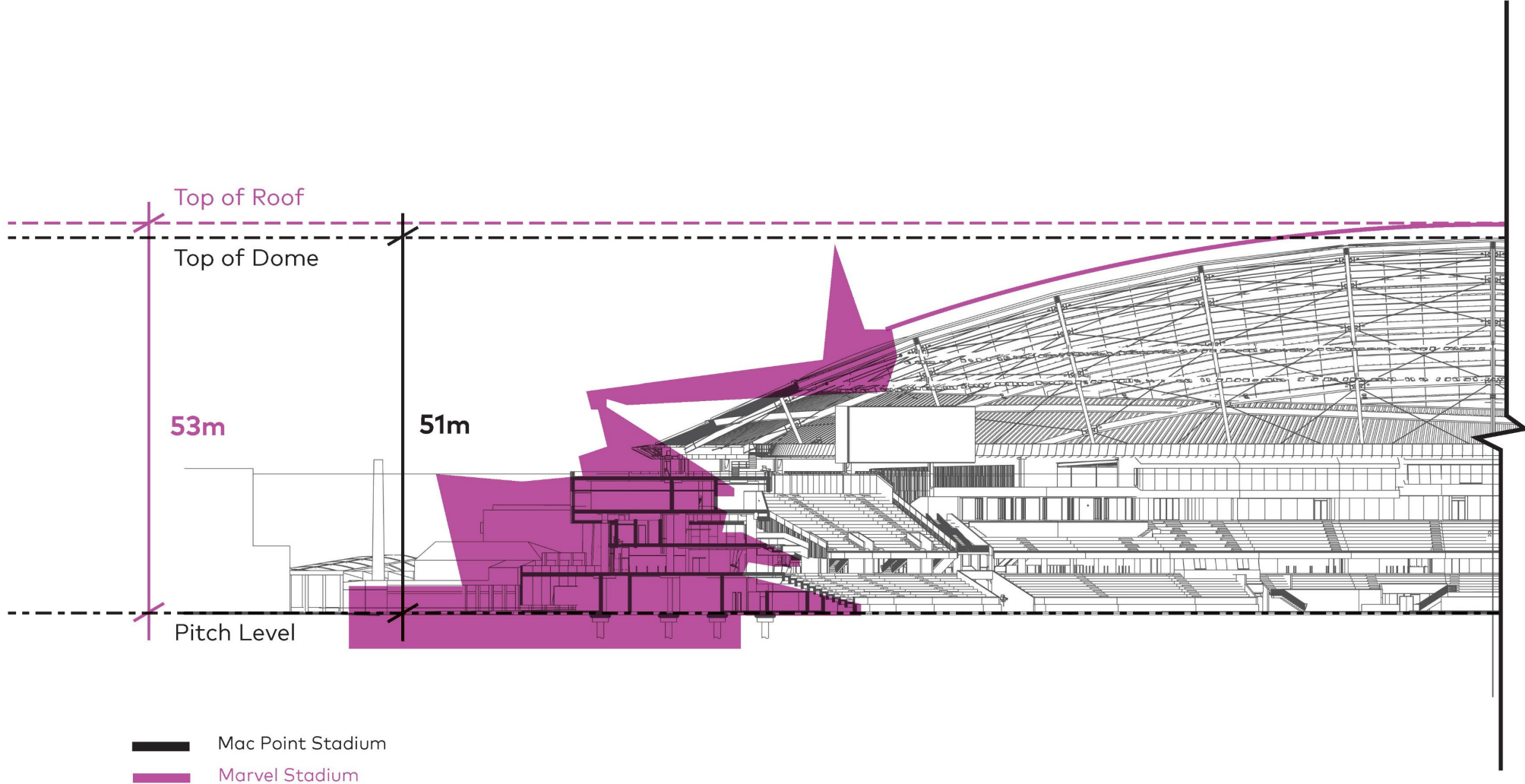
Stadium Comparisons: Bowl to Boundary Distance – Adelaide Oval



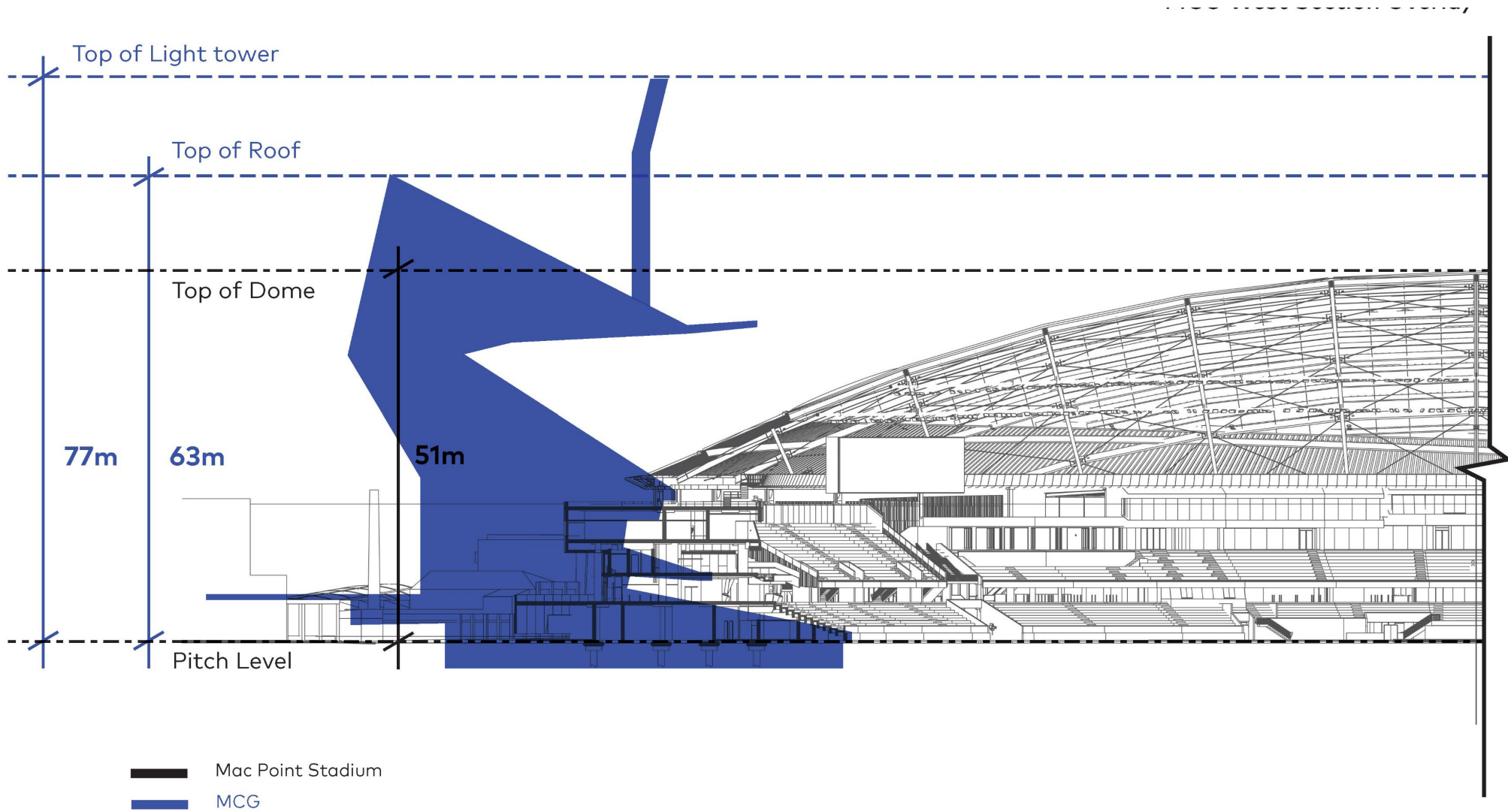
Stadium Comparisons: Bowl to Boundary Distance – Optus Stadium



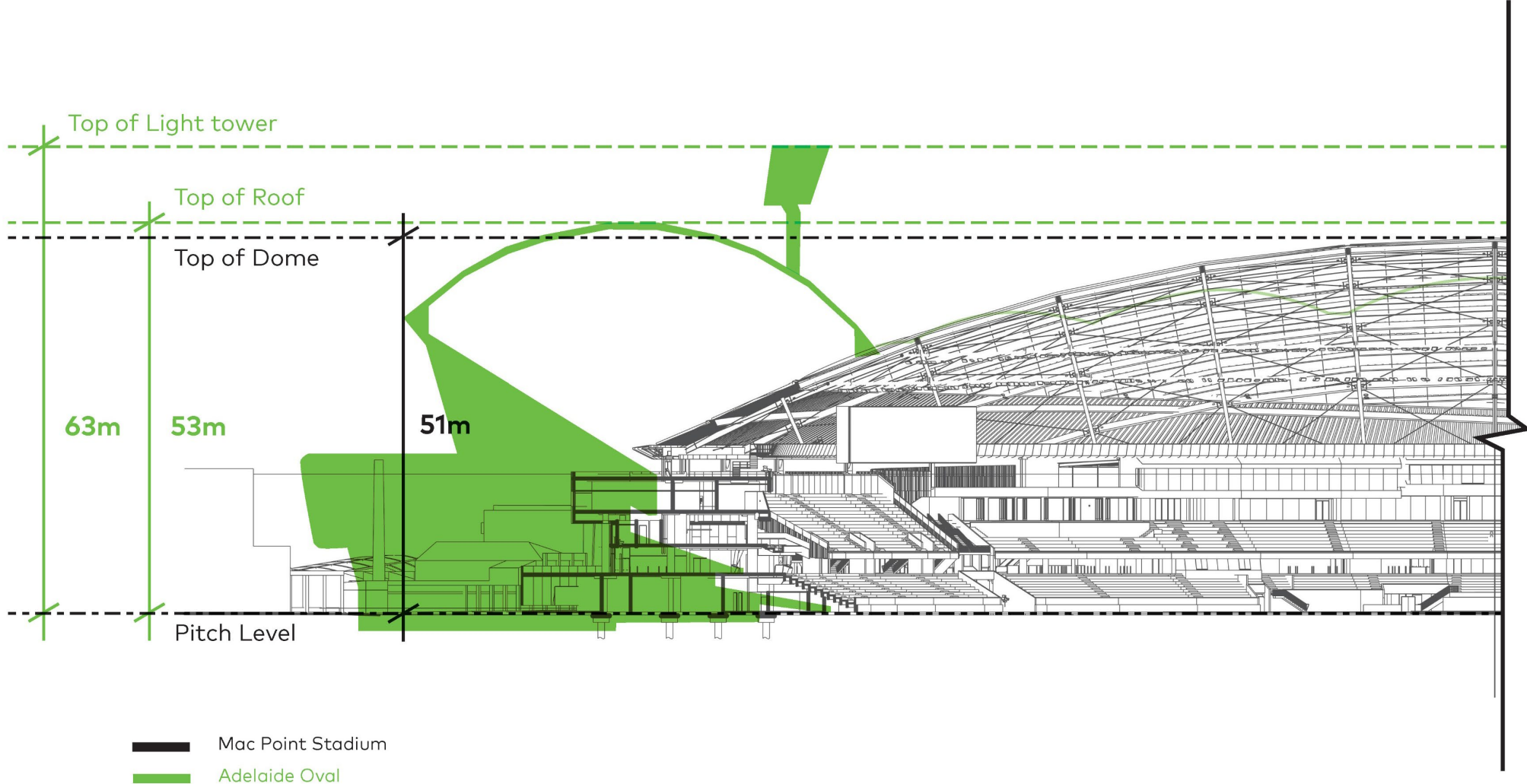
Stadium Comparisons: Height – Marvel Stadium



Stadium Comparisons: Height – MCG



Stadium Comparisons: Height – Adelaide Oval



6. ROOF OVERVIEW

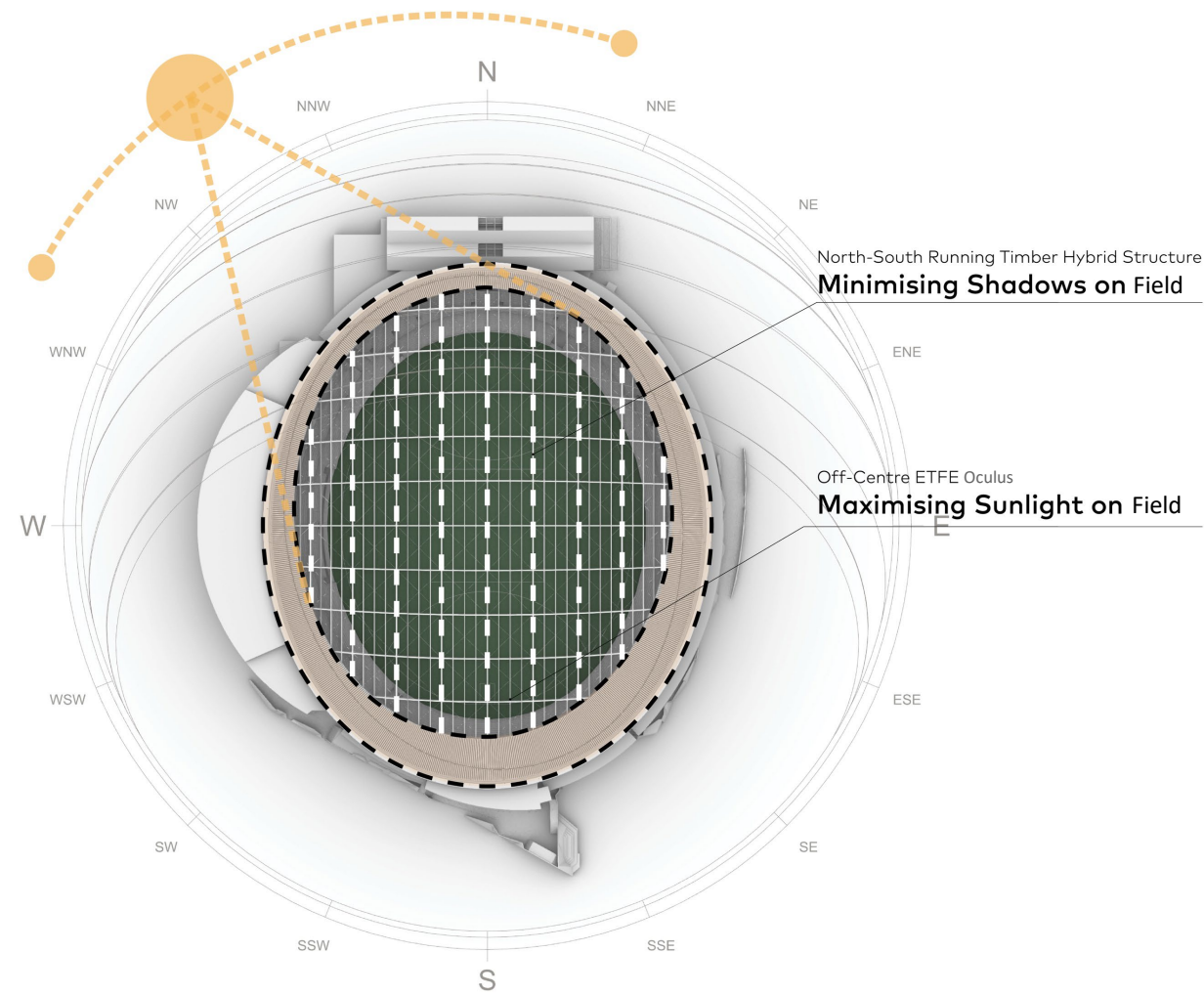
COX

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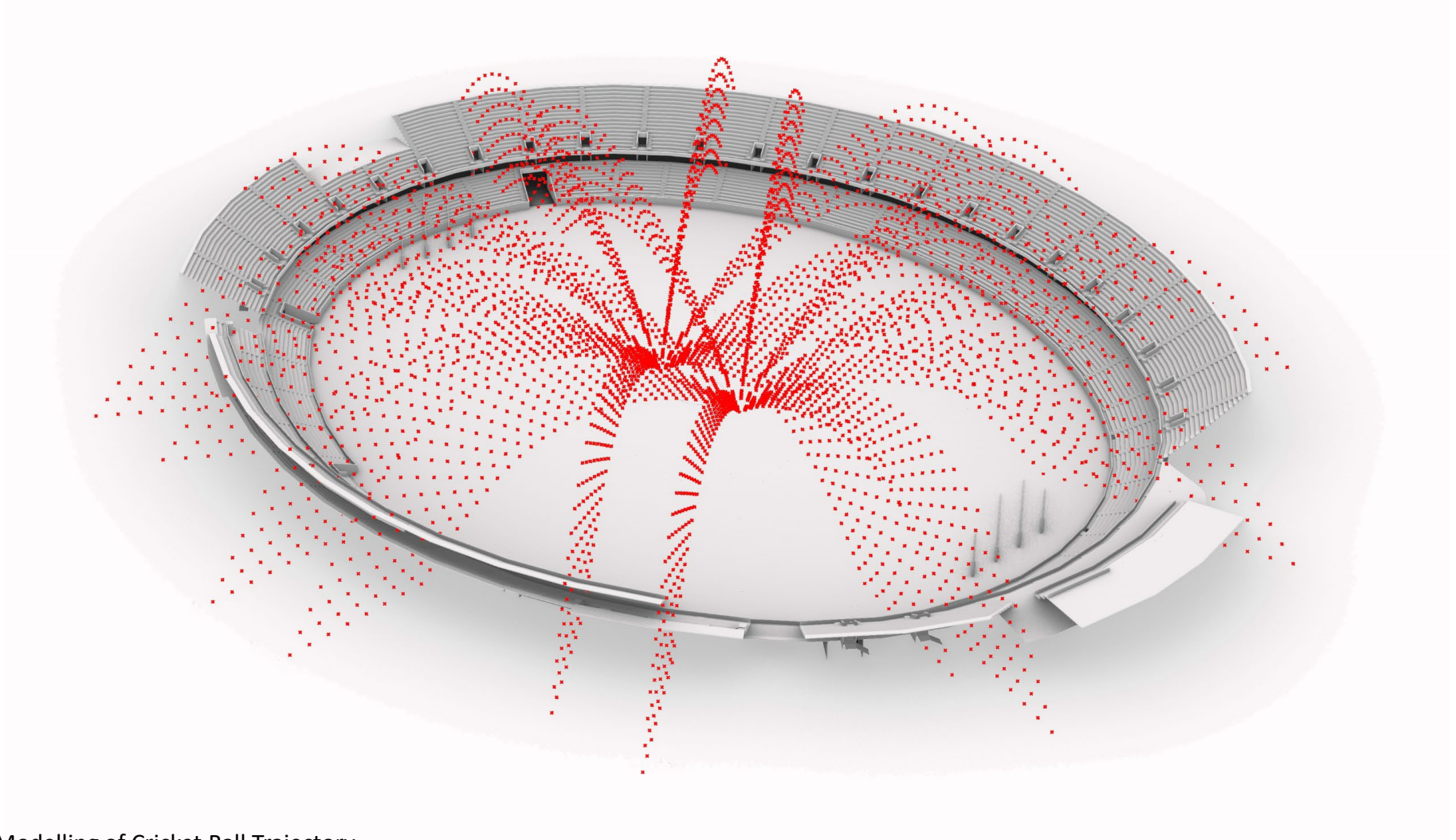
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Alignment of Roof Components



Ball Trajectory Study



Hawk-Eye Modelling of Cricket Ball Trajectory

BALL TRAJECTORY STUDY

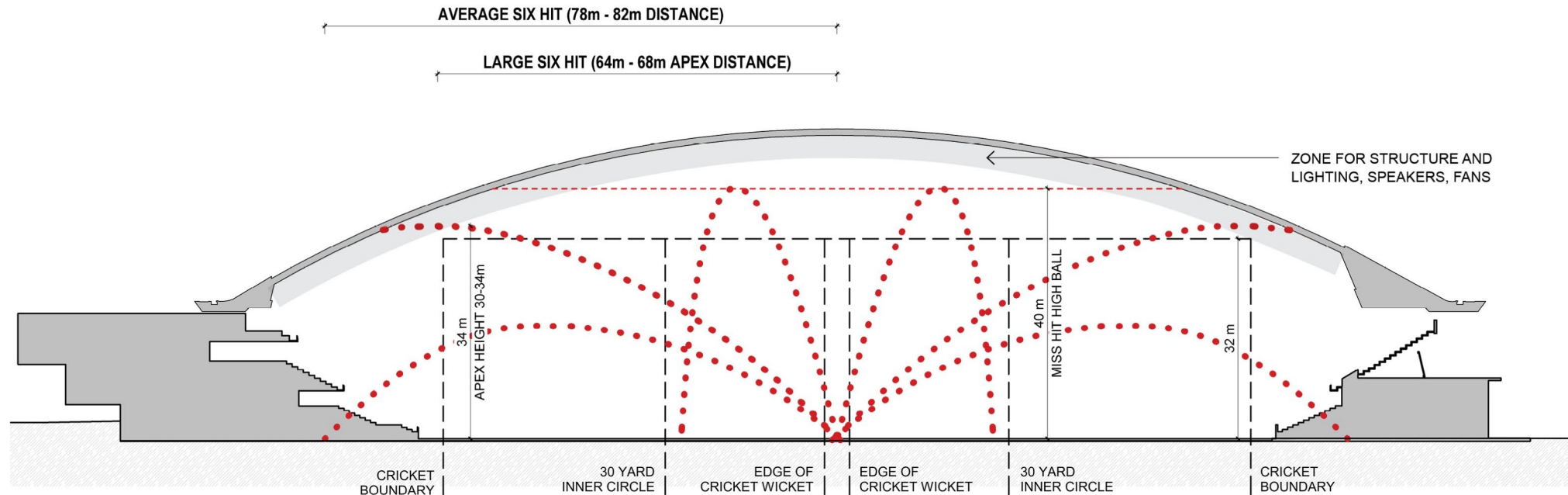
Cricket Ball Trajectory Study

The cricket ball trajectory is a key consideration in establishing the clear height required under the roof. The Project Brief stipulates minimum clear heights to support football, and exceed existing benchmarks for indoor cricket. This would suggest a relatively flat profile to the roof which would require deeper structural members to support the span.

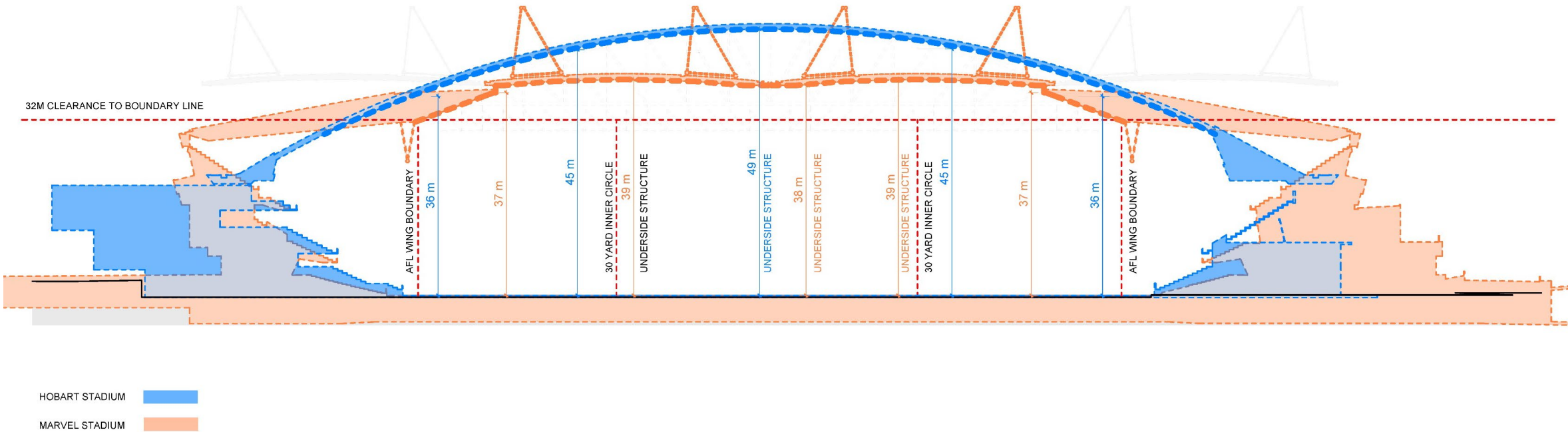
To refine the design development, we have reviewed data available from Hawk-Eye camera systems that visually track and map the trajectory of a ball. This reveals typical patterns of play in a cricket match, and indicates the likelihood of a ball coming into contact with adjacent structures.

The section below illustrates the cricket ball trajectory informed by Hawk-Eye data, and how it is accommodated under the proposed roof form.

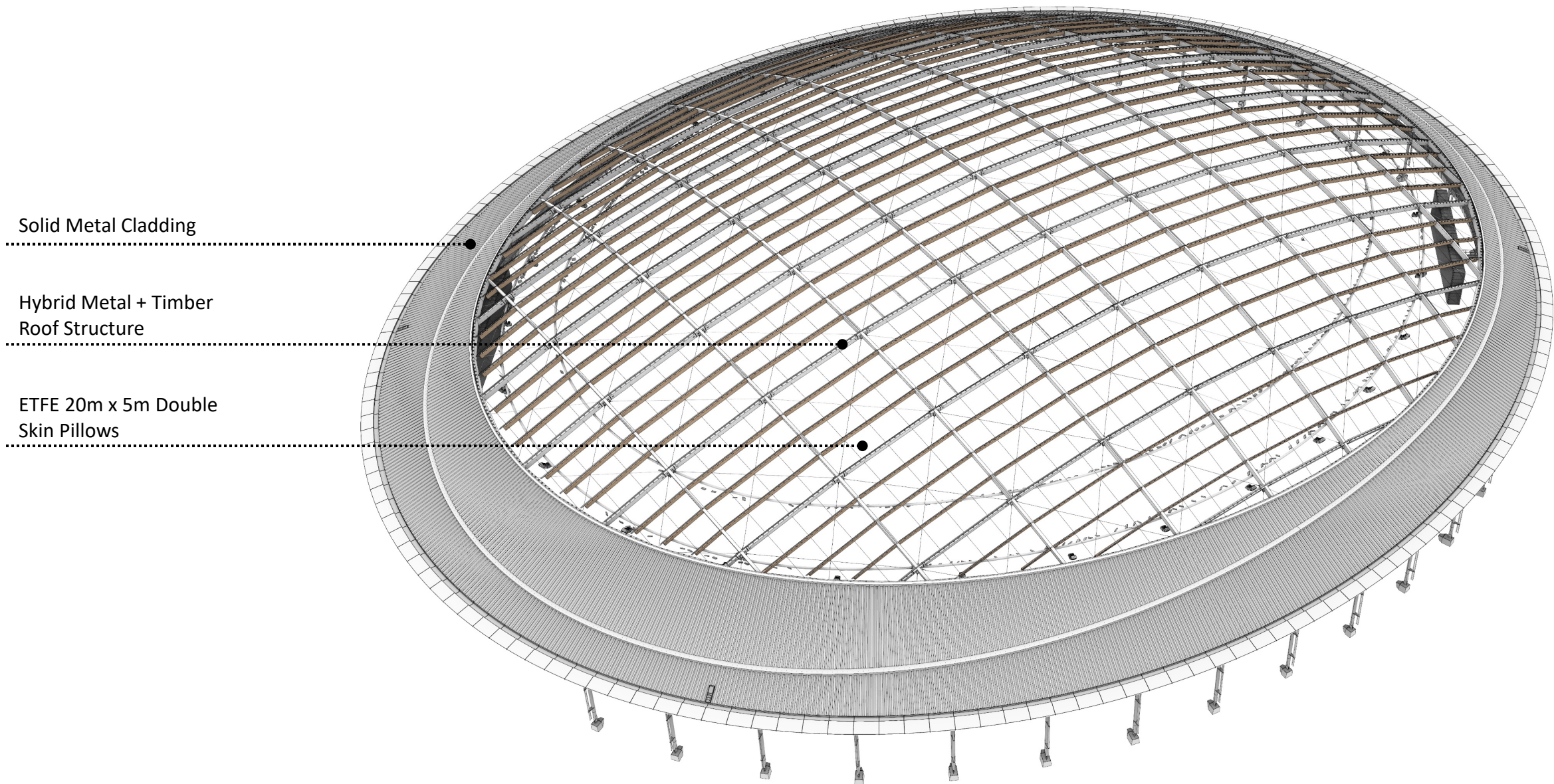
In addition to responding to ball movements, the underside of the roof needs to make allowance for structural elements as well as suspended lighting, speakers, and fans to support the patron experience within the Stadium.



Roof Section – Comparison to Marvel Stadium



Roof 3D

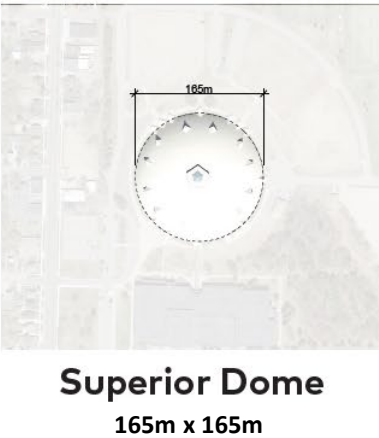
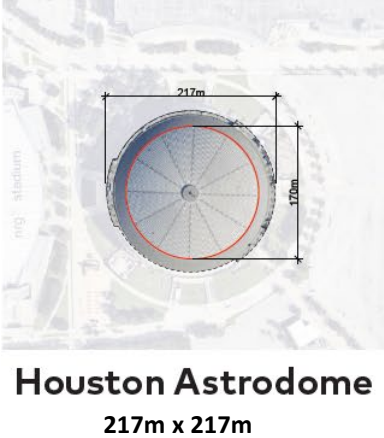
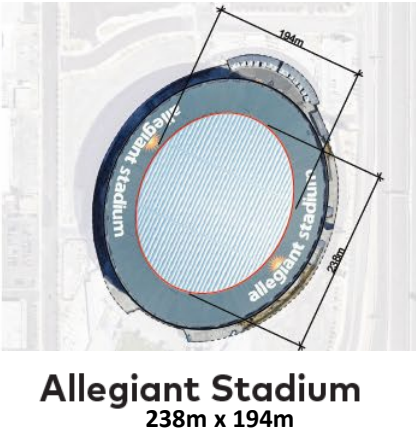
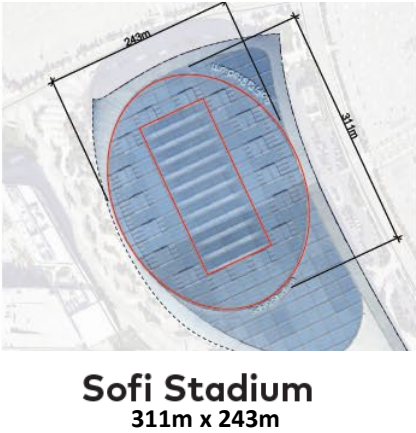
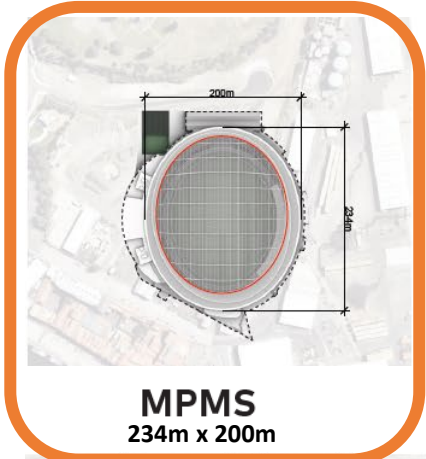


Solid Metal Cladding

Hybrid Metal + Timber
Roof Structure

ETFE 20m x 5m Double
Skin Pillows

Stadium Comparison Studies



ETFE Roof Benchmarks

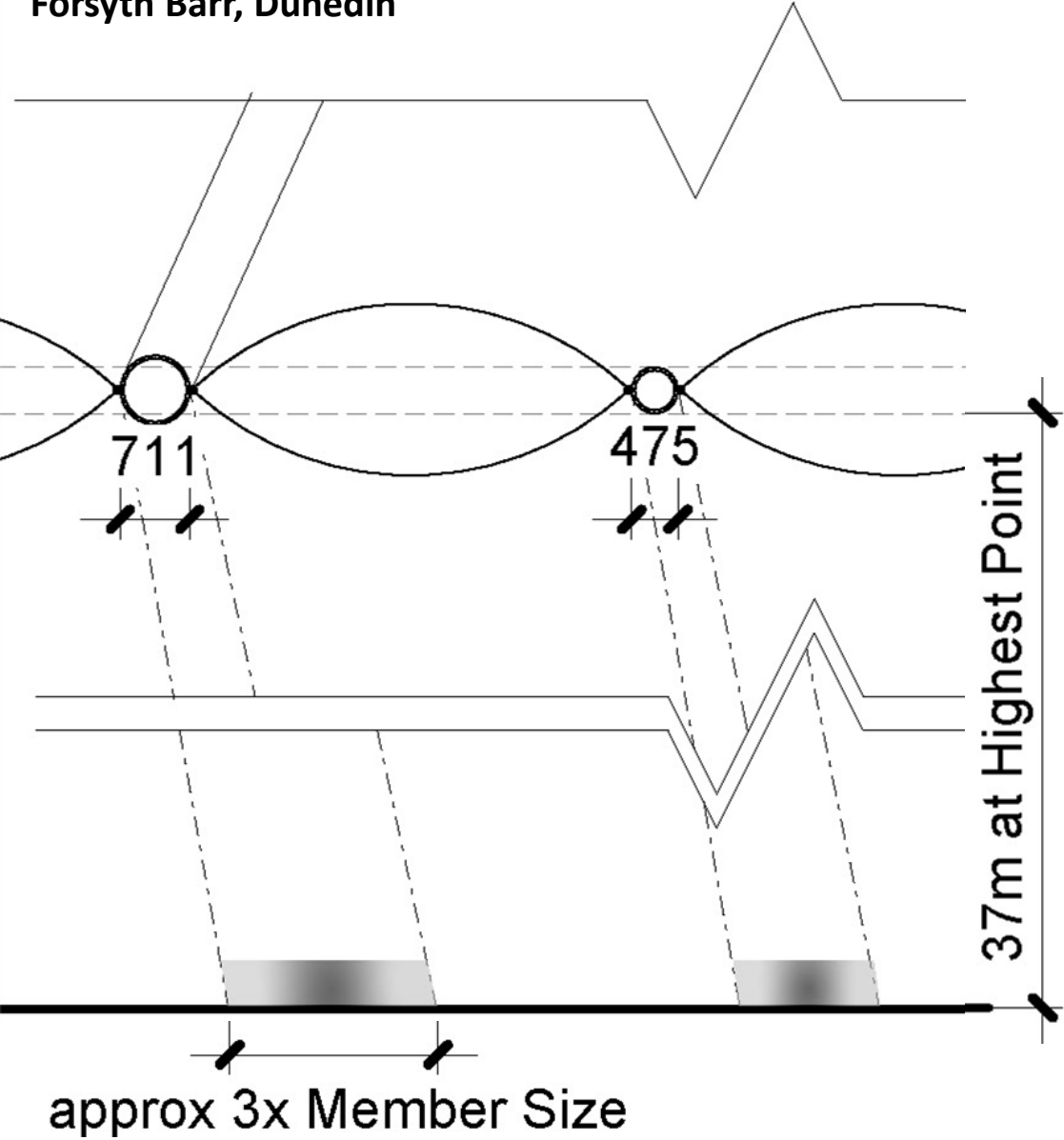


Forsyth Barr Stadium – Dunedin NZ



Eden Project, Cornwall UK

Forsyth Barr, Dunedin

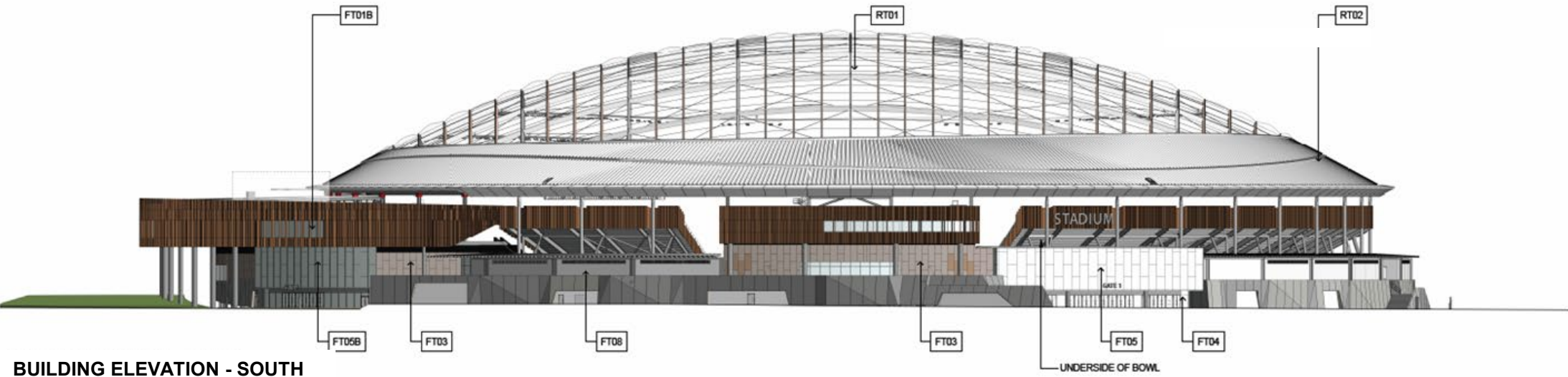
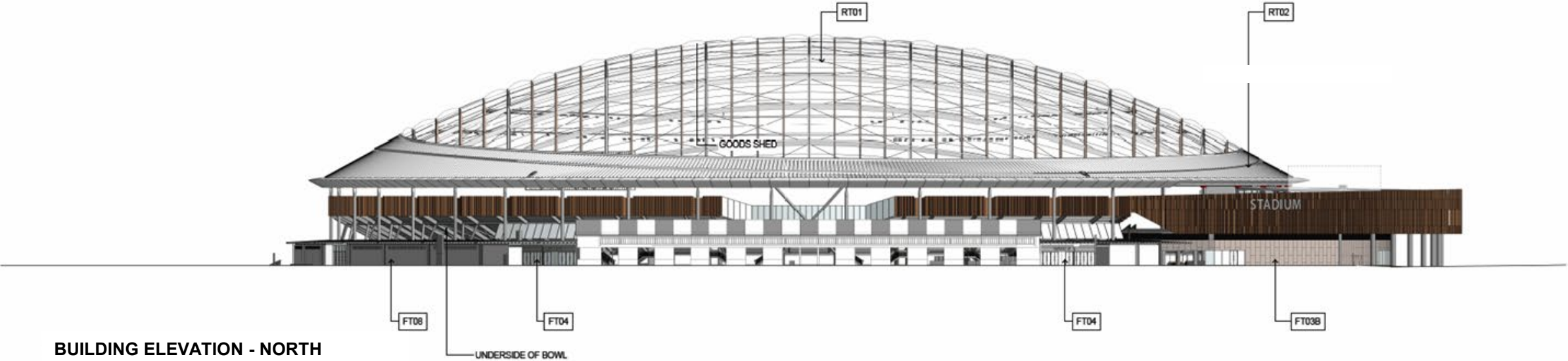


Shadow "hardness" diagram

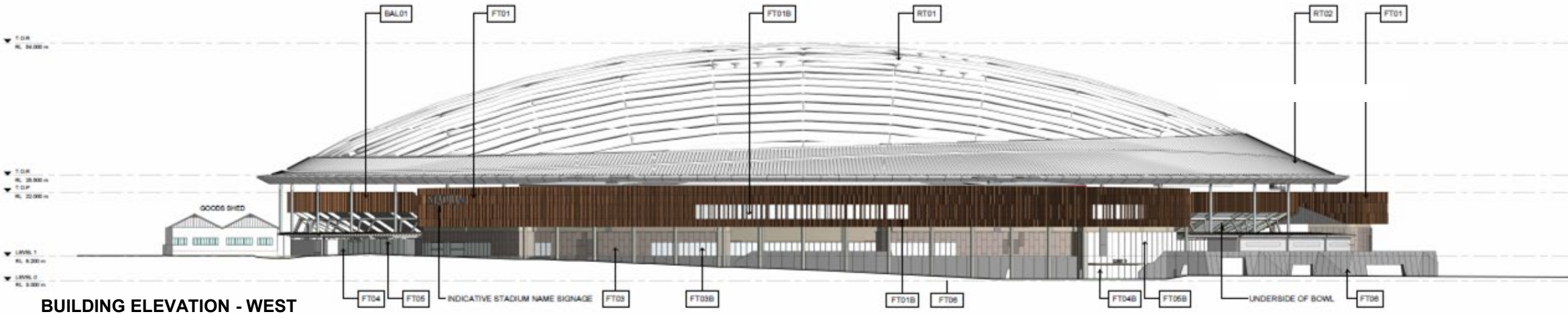


Video of shadow condition – Midday 15th May 2025

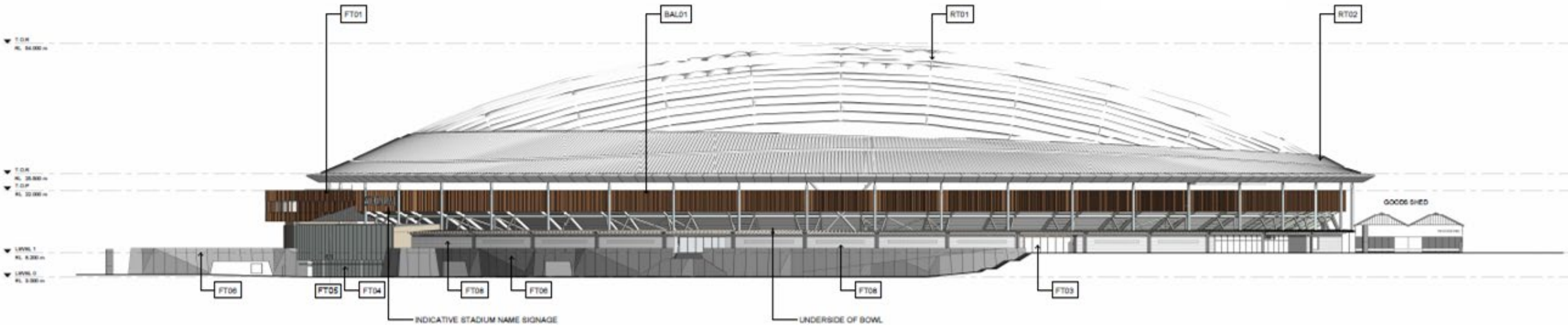
Elevations



Elevations

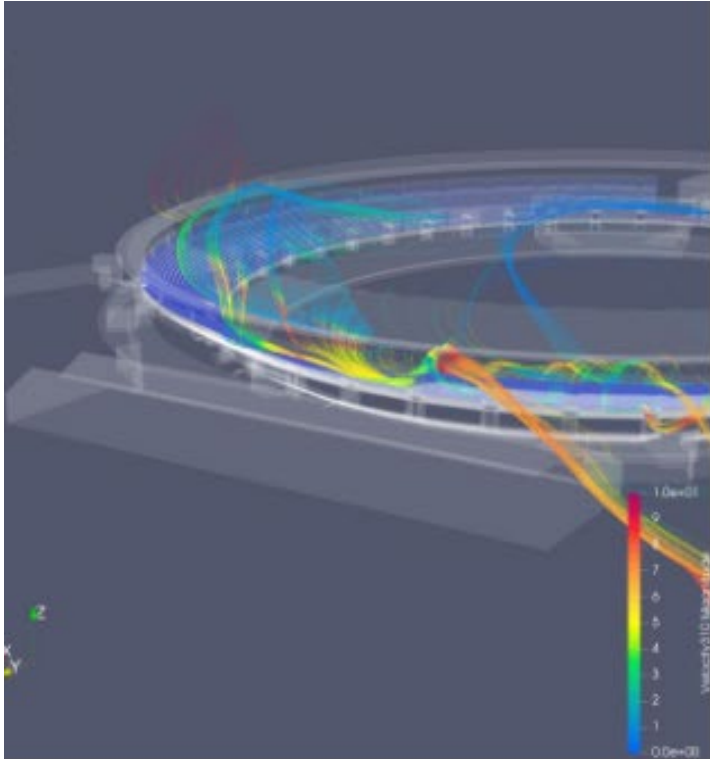


BUILDING ELEVATION - WEST

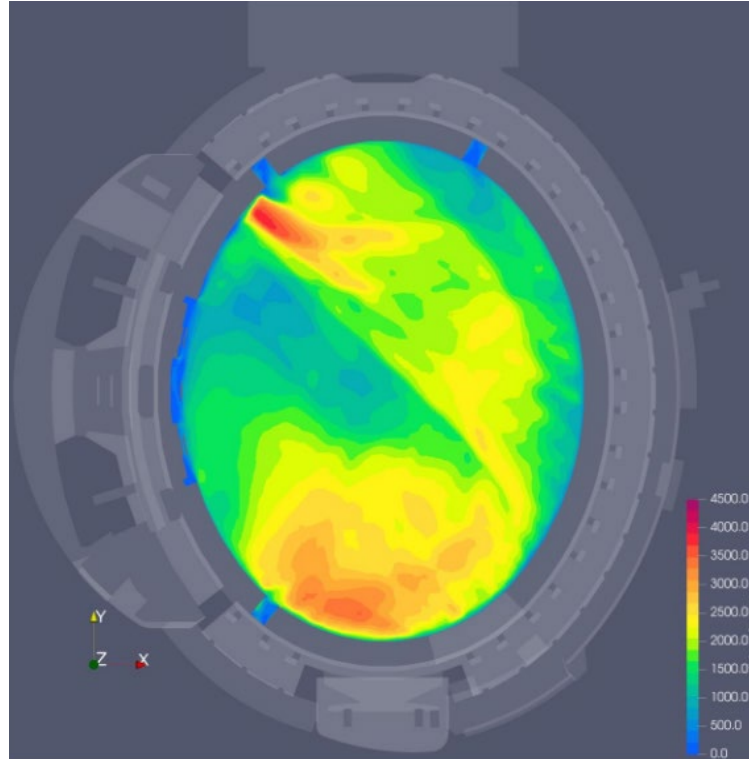


BUILDING ELEVATION - EAST

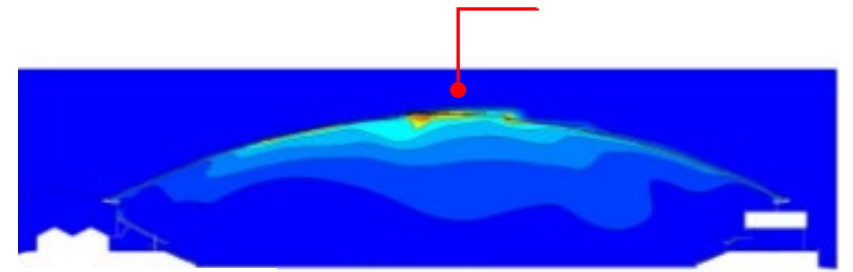
Ventilation + Thermal Comfort Modelling Studies



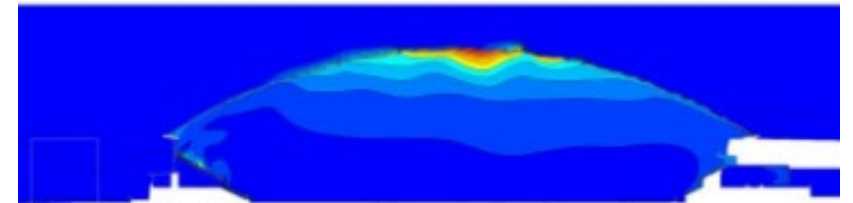
Bowl Ventilation



Pitch Ventilation



View From West



View From North

Thermal Comfort

7. HOSPITALITY SUMMARY

COX

CUMU
LUS

AECOM

sbp
schlaich
bergmann partner

General Admission Offerings – GA Concourse



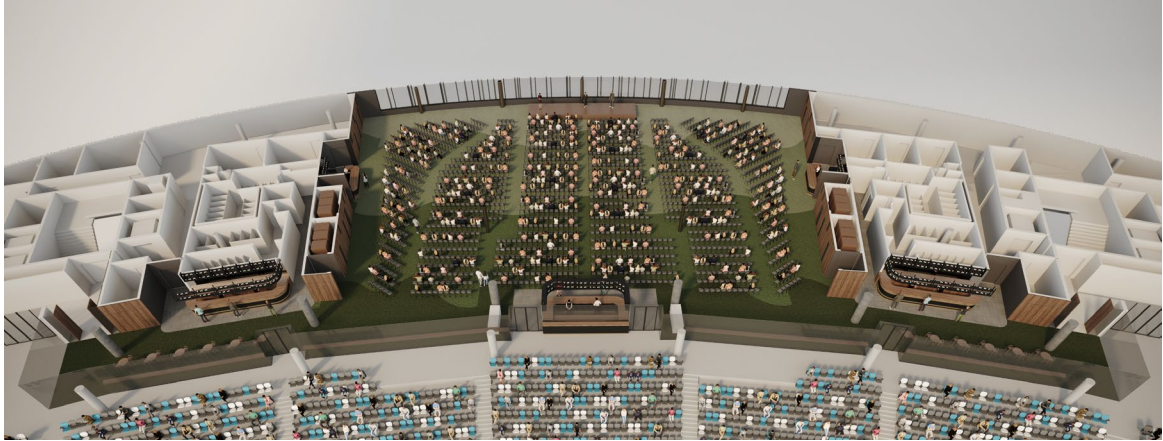
Function Rooms



Function Room – Flexible Layouts



Banquet Mode – 1,500 pax



Lecture Mode – 1,700 pax



Open Lounge



3 x Separate Spaces

Field Club





STADIUM

GATE 1

WELCOME TO MACQUARIE POINT

MACQUARIE POINT STADIUM

FOOD TRUCK

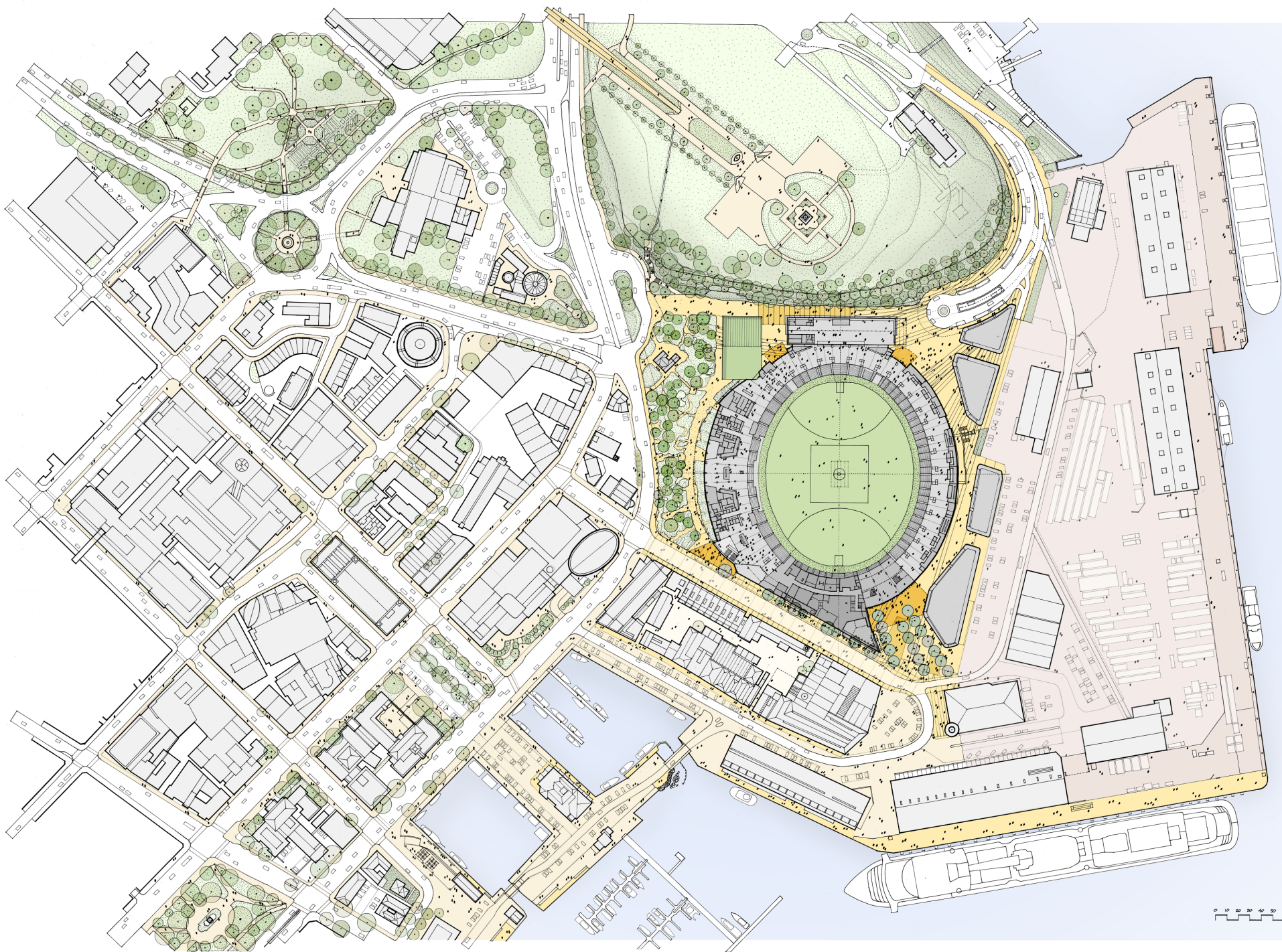
8. PRECINCT MOVEMENT

COX

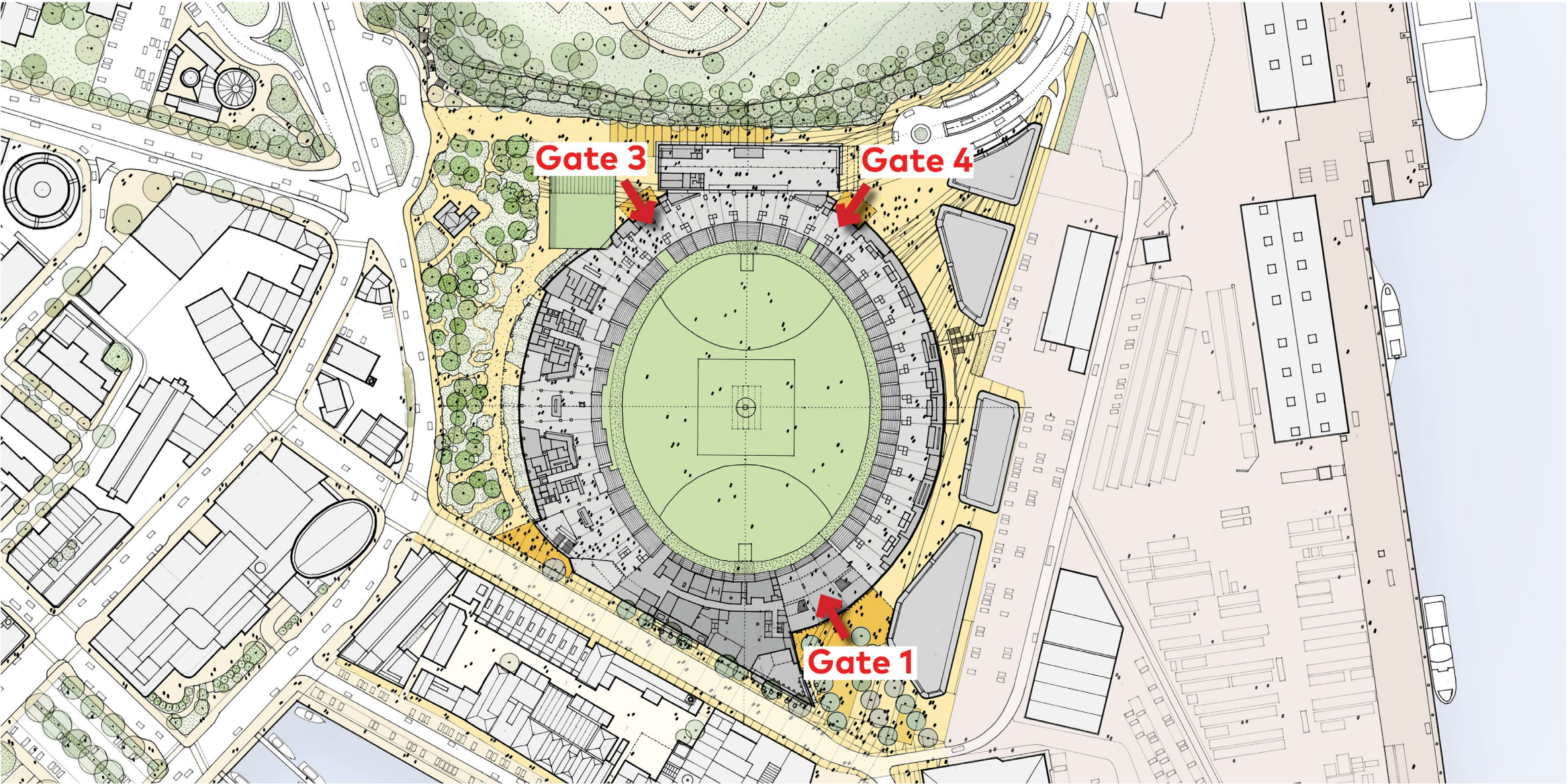
CUMU
LUS

AECOM

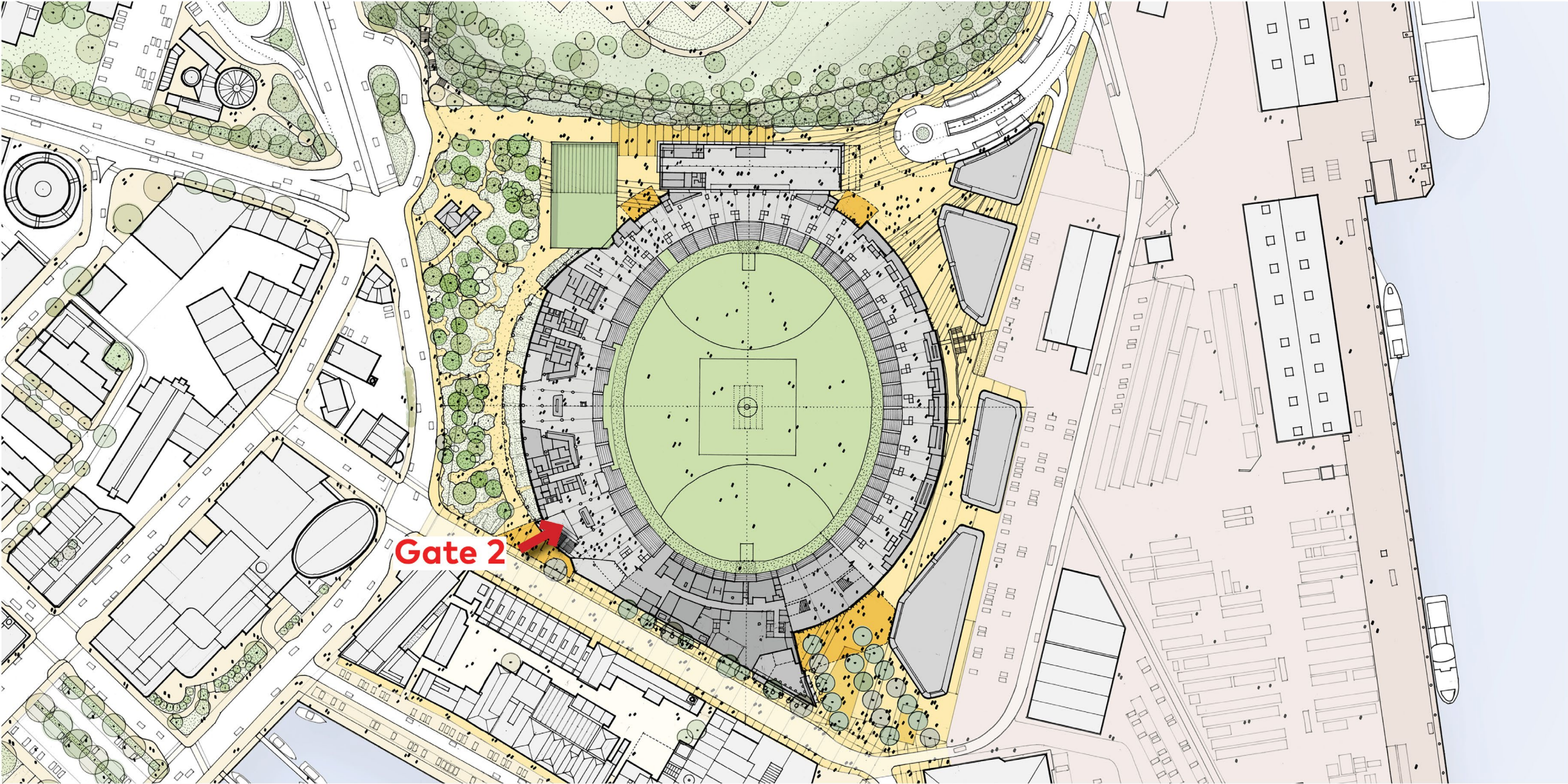
sbp
schlaich
bergmann partner



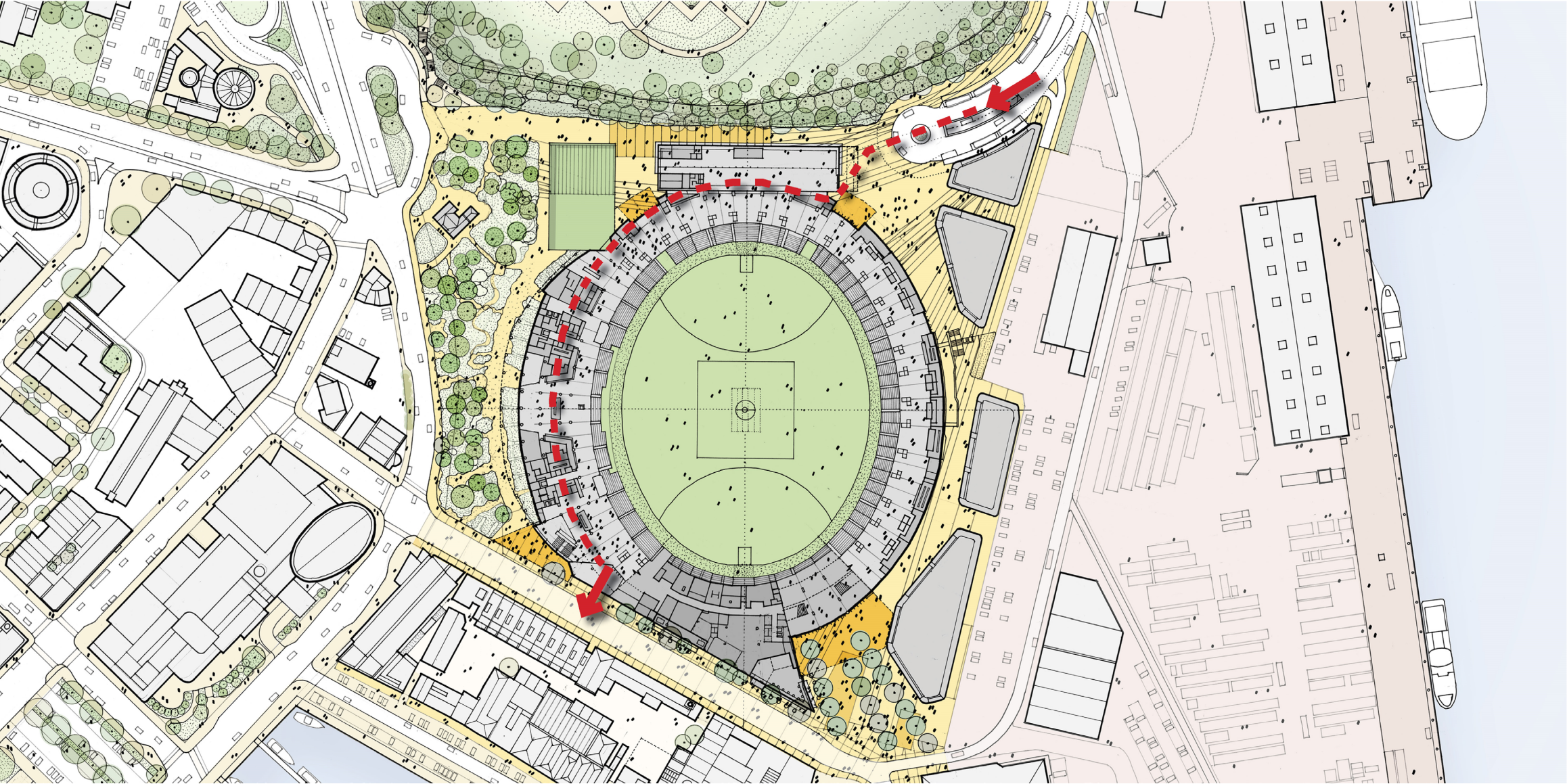
General Admission Gate Entries



Premium Gate Entry

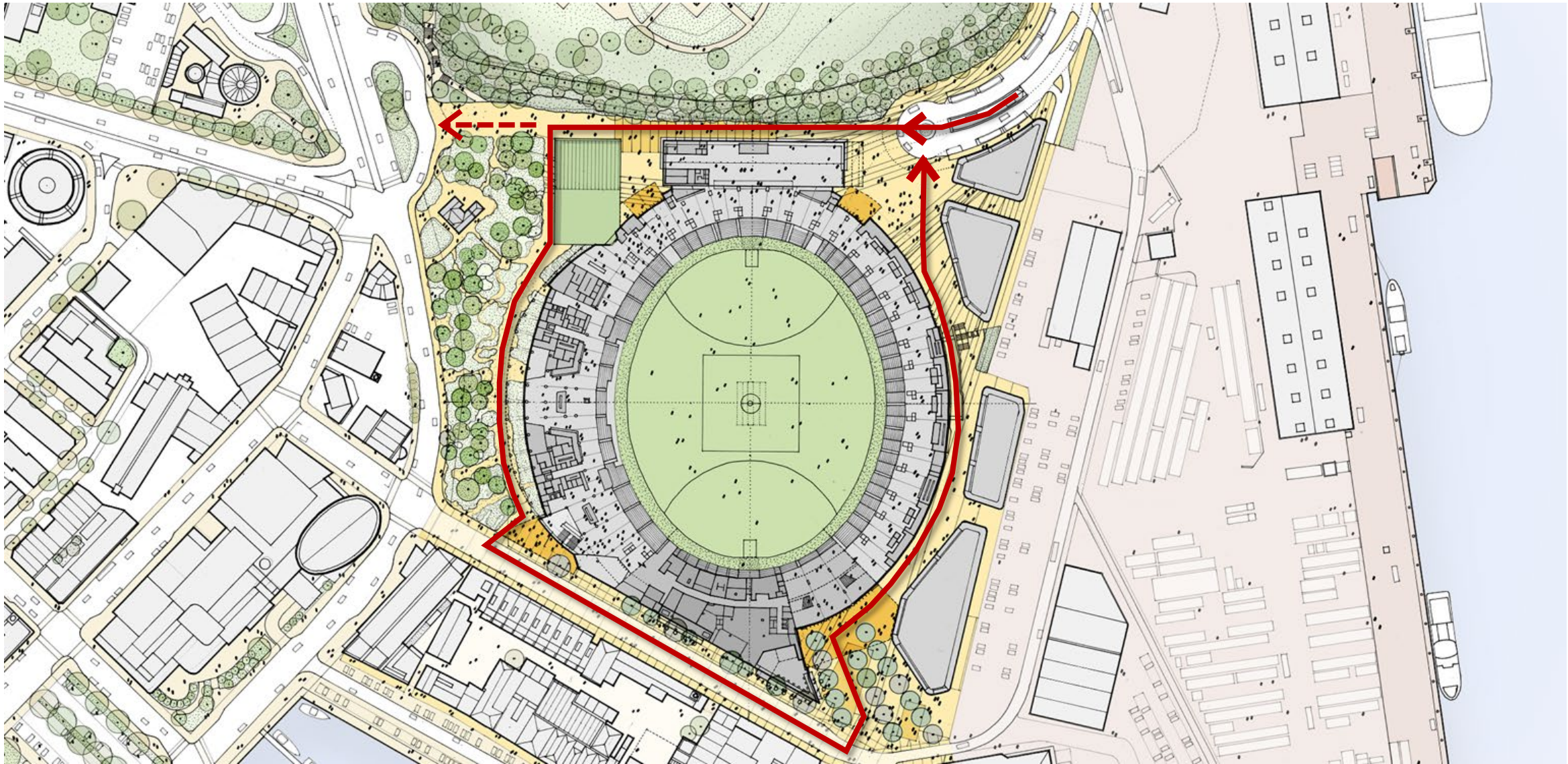


Service Vehicle Entry

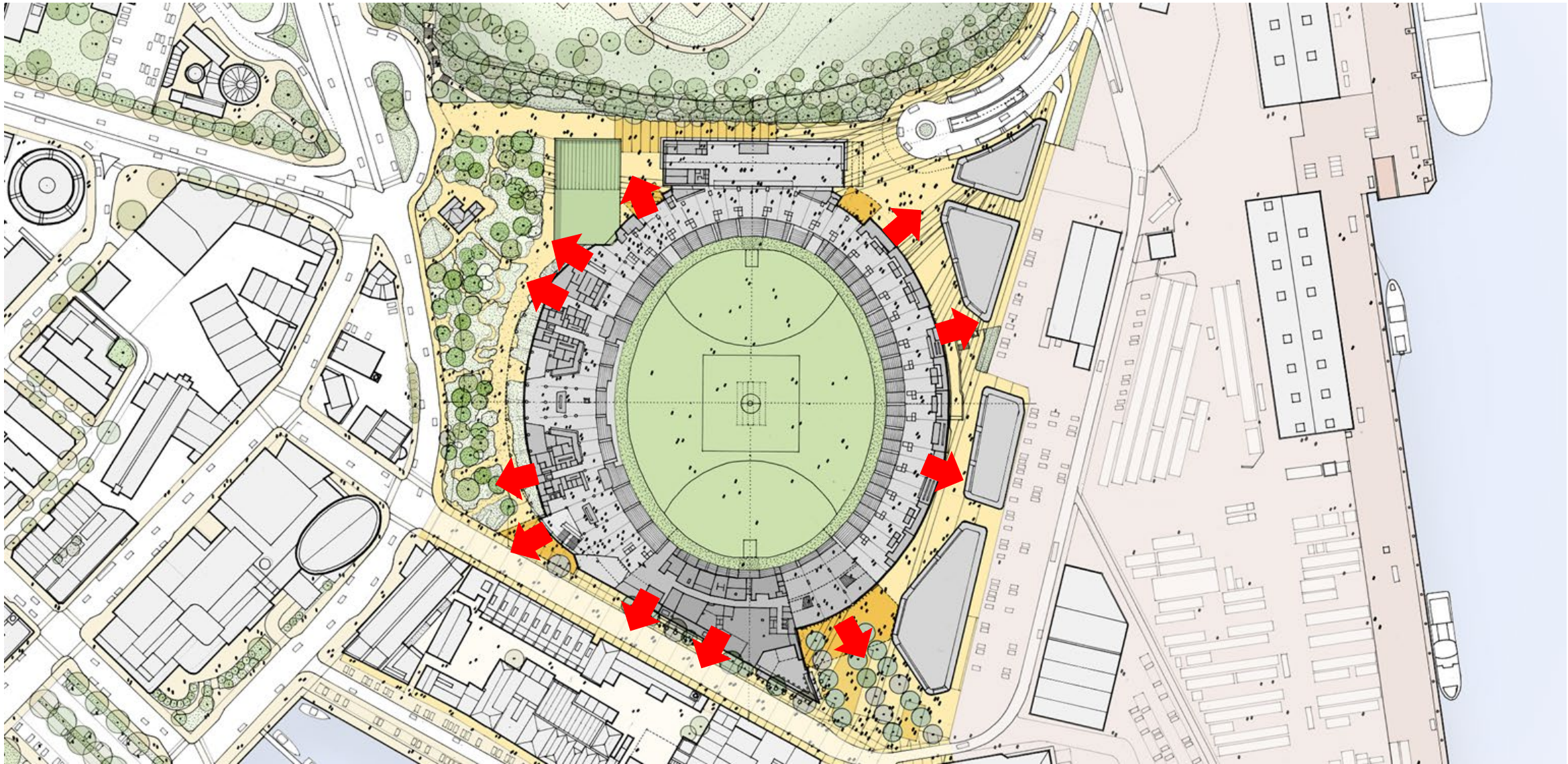


INTERNAL ACCESS RD

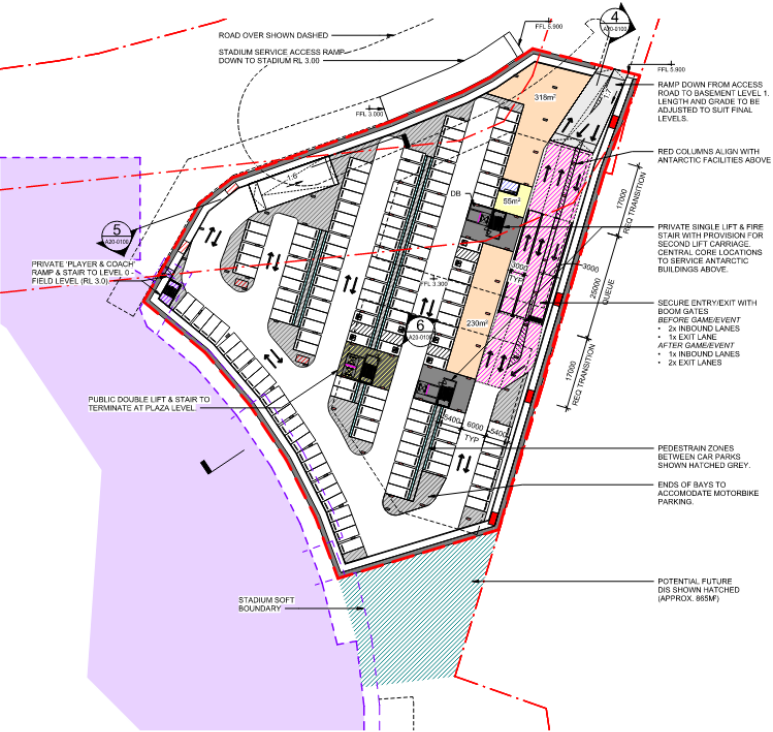
Emergency Vehicle Access



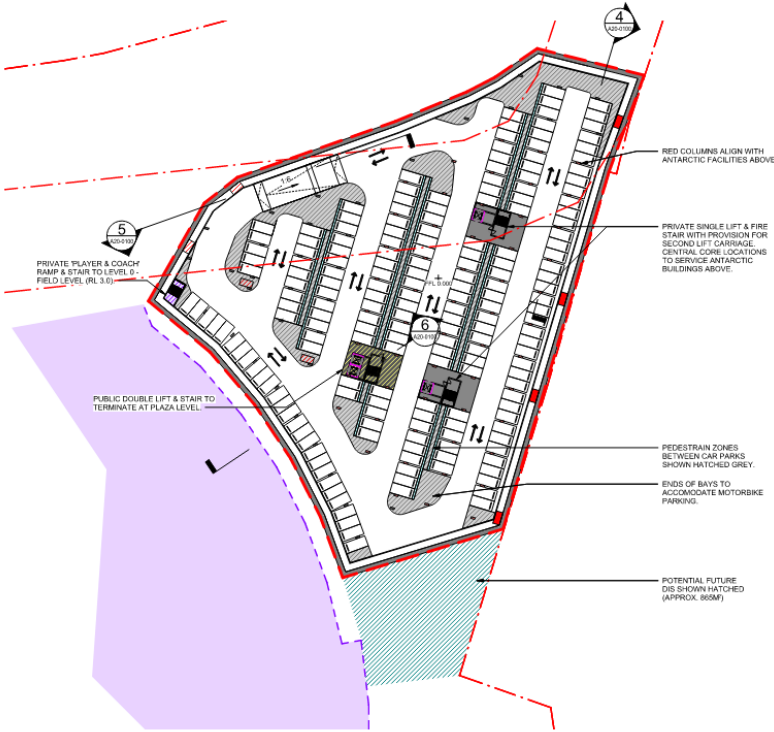
Egress Gates



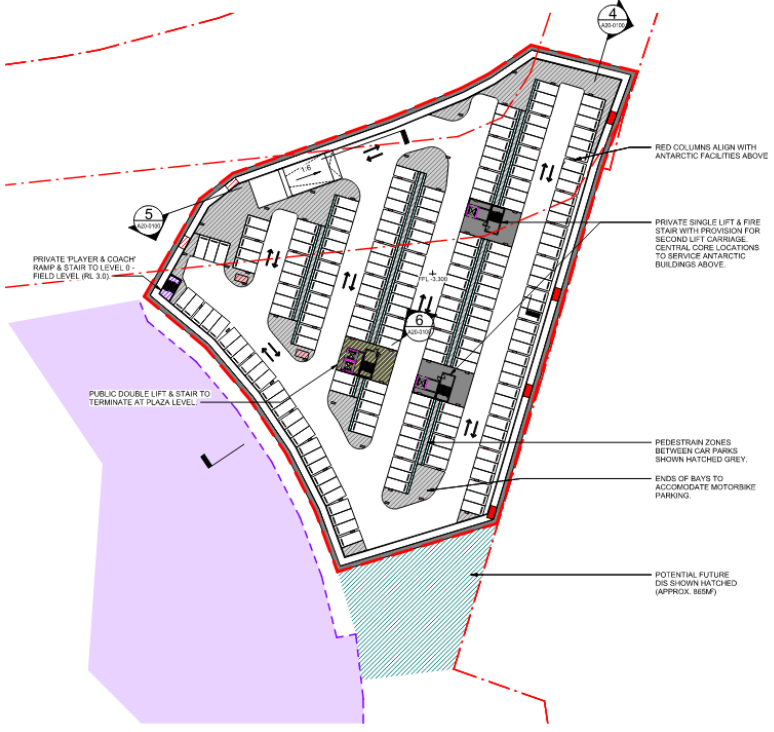
Carpark – at PoSS Submission



1 BASEMENT 1 - CAR PARK
SCALE 1:500



2 BASEMENT 2 - CAR PARK
SCALE 1:500

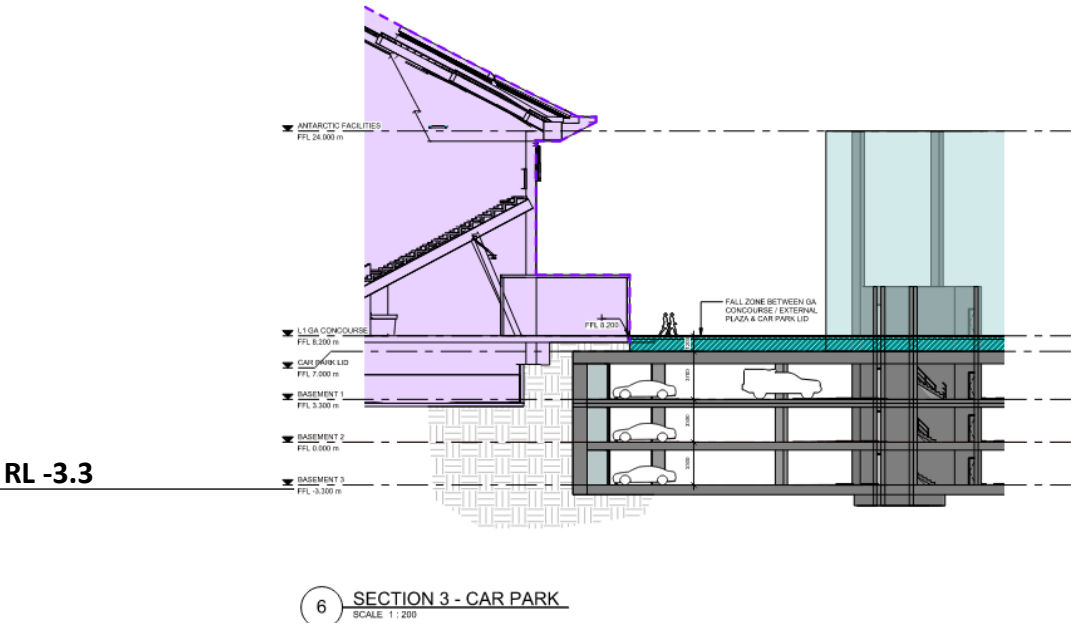
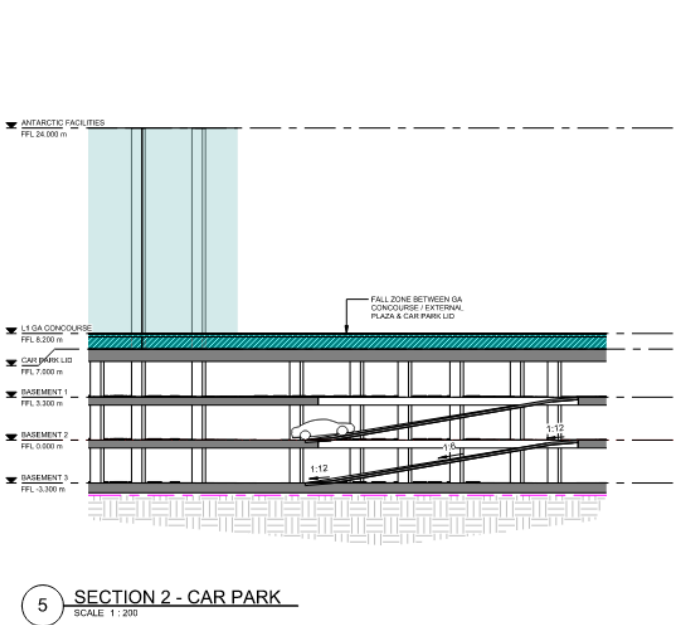
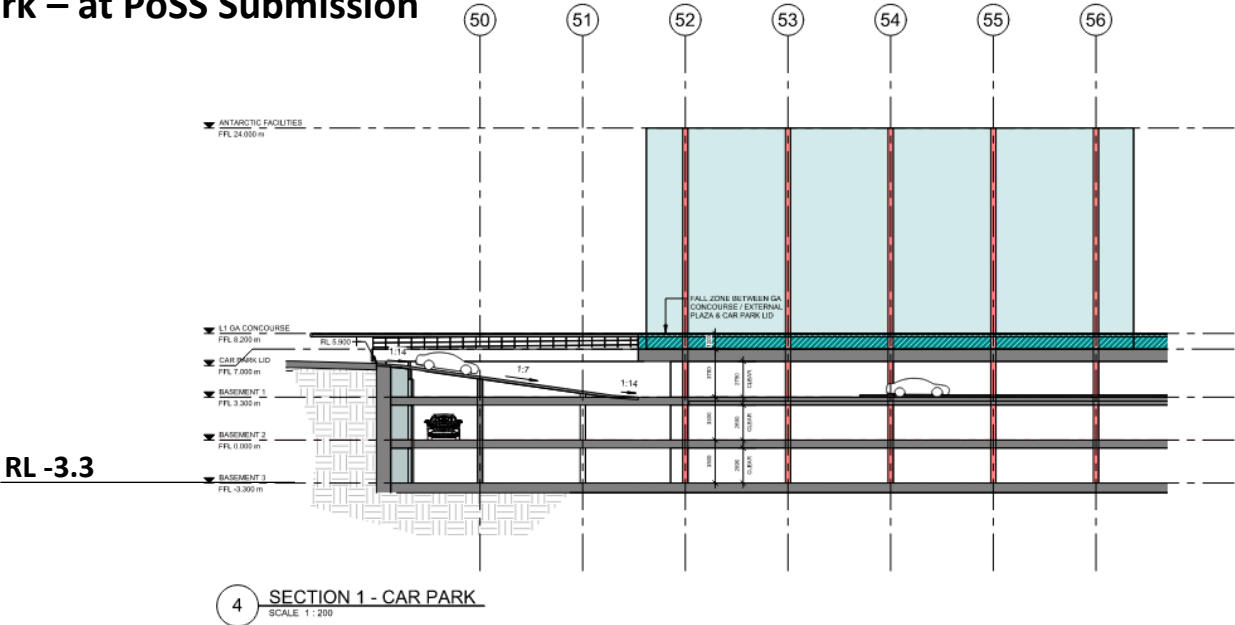


3 BASEMENT 3 - CAR PARK
SCALE 1:500

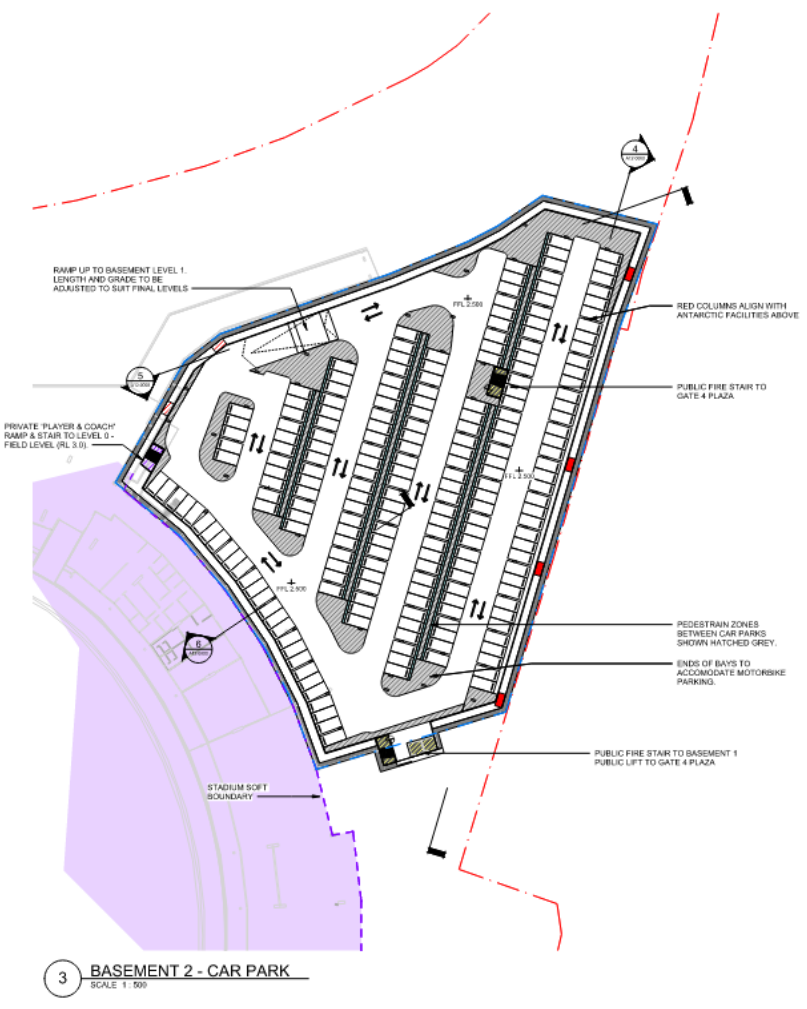
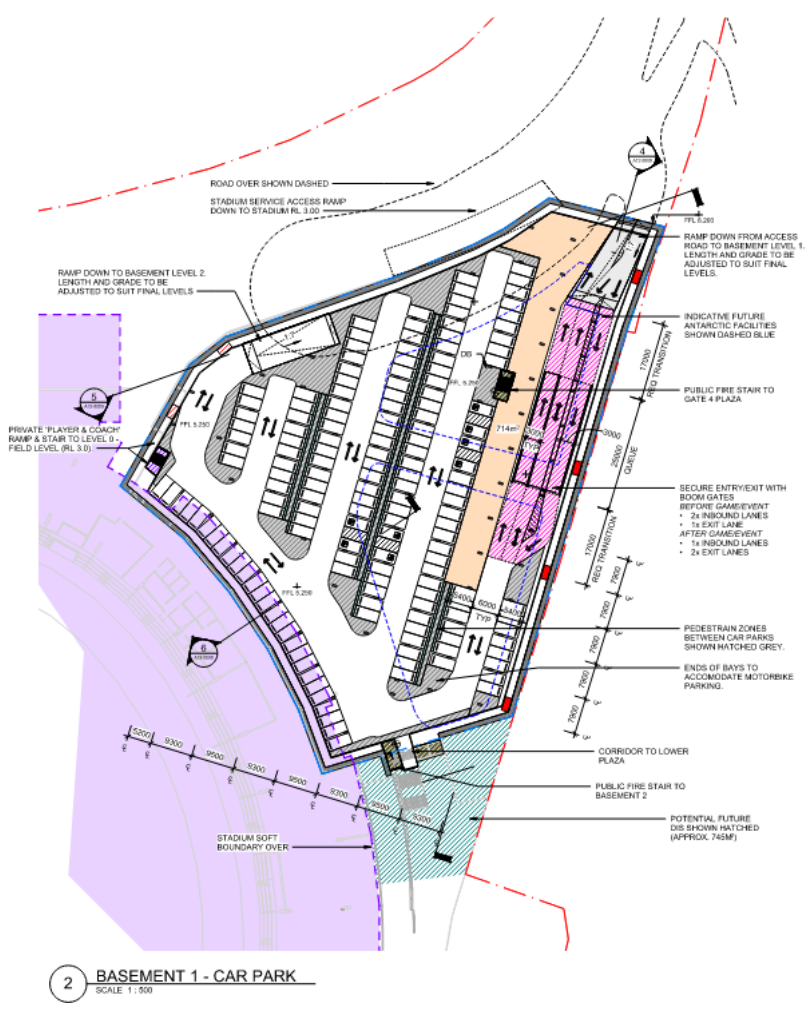
NUMBER OF PARKING BAYS

532

Carpark – at PoSS Submission



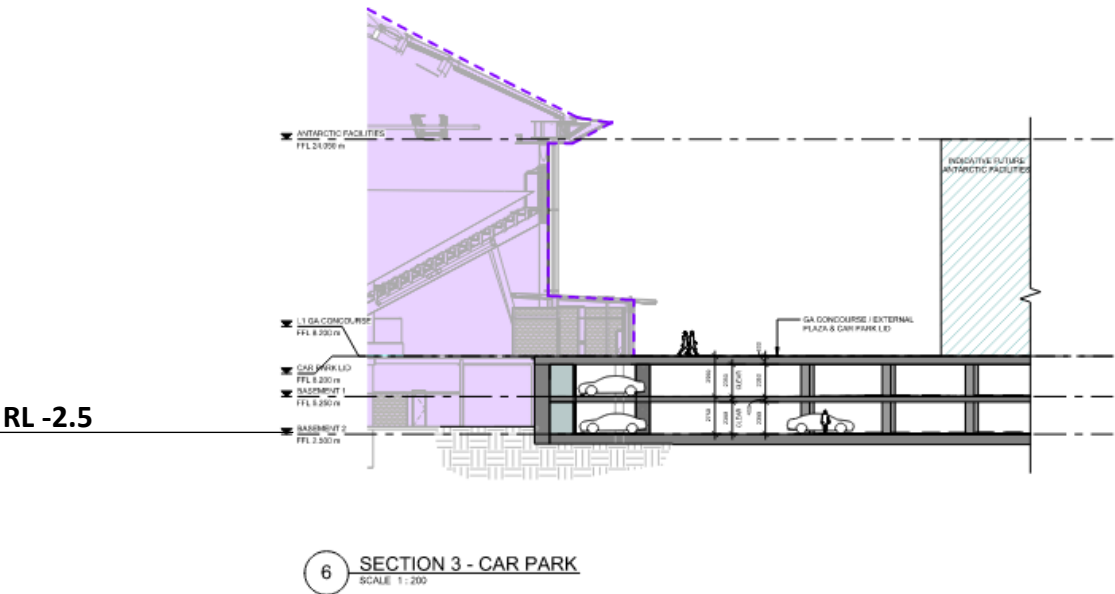
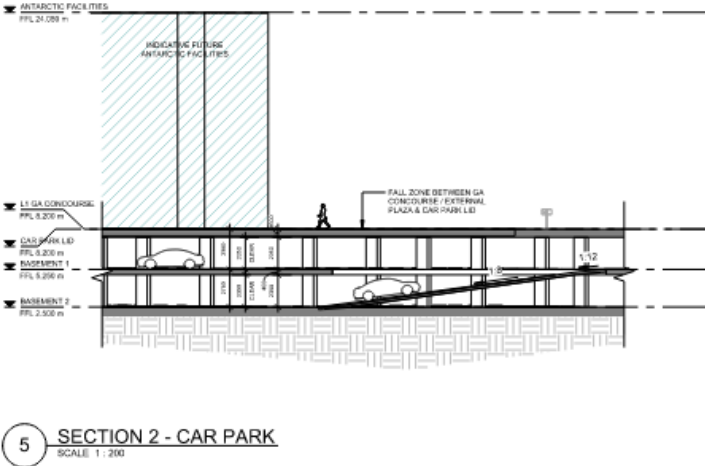
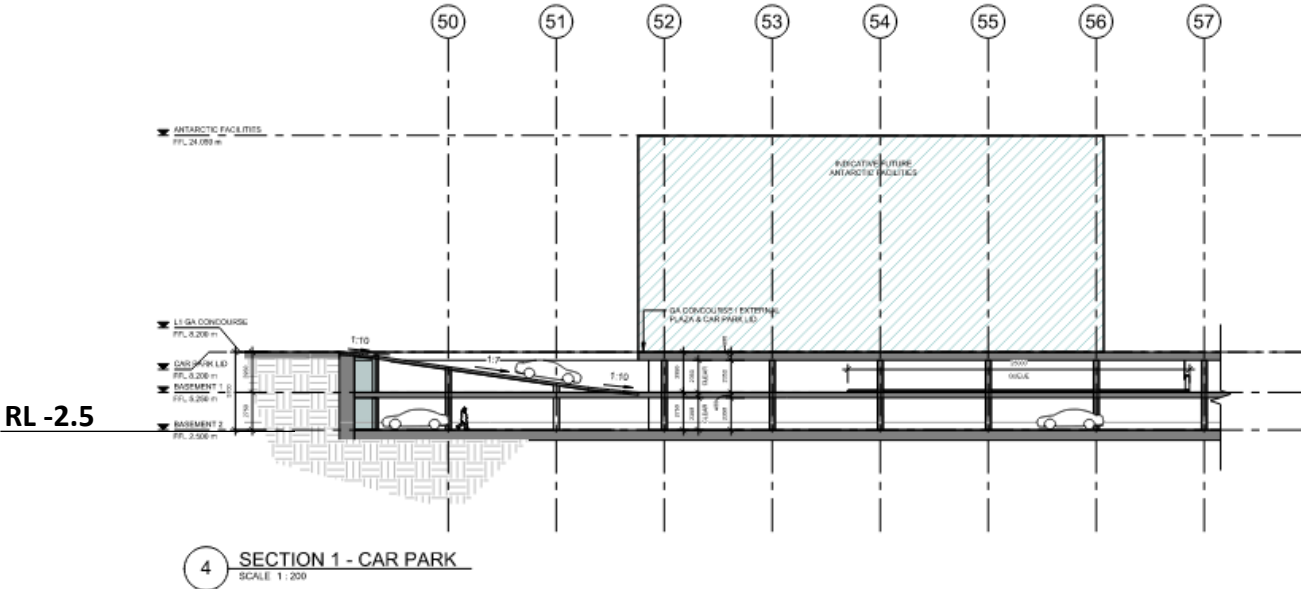
Carpark – Updated



NUMBER OF PARKING BAYS

374

Carpark – revised





Prepared for the Macquarie Point Development Corporation

C O X

CUMU
LUS

AECOM

sbp
schlaich
bergmann partner