

---

# **Competitive Design Alternatives Report**

INSW

Infrastructure NSW

Sydney Football Stadium

Stage 2 Development Application (SSD9835)

Competitive Design Alternatives Report

**Author:** Infrastructure NSW  
**Revision:** 3

# Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Background to the Competitive Design Alternatives process</b>	<b>5</b>
<b>3</b>	<b>Design Alternatives Considered</b>	<b>6</b>
3.1	Cox Architecture and Aspect Studios	6
3.2	Sydney Architecture Studio, Snohetta and Inhabit	8
3.3	Fitzpatrick Partners and McGregor Coxall	10
<b>4</b>	<b>Assessment of Design Merits</b>	<b>12</b>
<b>5</b>	<b>Design Excellence and the Sydney Local Environmental Plan</b>	<b>13</b>
<b>6</b>	<b>Better Placed</b>	<b>16</b>
<b>7</b>	<b>Urban Design Guidelines</b>	<b>17</b>
<b>8</b>	<b>Requirements of the Design Excellence Strategy</b>	<b>18</b>
<b>9</b>	<b>Conclusion</b>	<b>19</b>
<b>10</b>	<b>Endorsement by the Panel</b>	<b>20</b>
	<b>Appendix A- Brief to Entrants</b>	<b>21</b>
	<b>Appendix B- DP&amp;E Endorsement of CDAR</b>	<b>22</b>

# 1 Introduction

This Competitive Design Alternatives Report details the outcome of the process of preparation of design alternatives on a competitive basis for the Sydney Football Stadium Redevelopment project.

The Competitive Design Alternatives Report details the assessment of the competitive design alternatives process entries against the design excellence requirements of the Sydney Local Environmental Plan 2012 (clause 6.21(4)), the principles of Better Placed- an integrated design policy for the built environment in NSW and the Sydney Football Stadium Urban Design Guidelines in accordance with the Design Excellence Strategy contained at Appendix D of the Environmental Impact Statement for SSD9249.

The Report addresses condition of consent B4 of SSD9249, being:

*Prior to the lodgement of the future development application a Competitive Design Alternatives Report must be prepared, as described by the SFS Design Excellence Strategy at Appendix D of the EIS including the following:*

- a) each of the design alternatives considered;*
- b) an assessment of the design merits of each alternative;*
- c) the rationale for the choice of preferred design and clearly demonstrate how this best exhibits design excellence in accordance with the provisions of Clause 6.21(4) of the Sydney Local Environmental Plan 2012 and the approved SFS Design Excellence Strategy at Appendix D of the EIS;*
- d) demonstrate how this design and the overall site layout is consistent with the Sydney Football Stadium Urban Design Guidelines; and*
- e) a copy of the brief issued to the architectural firms.*

Table 1 provides an overview of how this Report addresses the requirements of condition B4:

**Table 1: Condition of Consent B4 of Schedule 2- SSD9249**

Condition Requirement	Where addressed
<i>Prior to the lodgement of the future development application a Competitive Design Alternatives Report must be prepared, as described by the SFS Design Excellence Strategy at Appendix D of the EIS including the following:</i>	Section 2 provides background to the competitive design alternatives process.
<i>a) each of the design alternatives considered;</i>	Section 3 of this Competitive Design Alternatives Report details each of the design alternatives considered.
<i>b) an assessment of the design merits of each alternative;</i>	Sections 4-7 of this Competitive Design Alternatives Report details the Panel's

	assessment of the design merits of each alternative.
<i>c) the rationale for the choice of preferred design and clearly demonstrate how this best exhibits design excellence in accordance with the provisions of Clause 6.21(4) of the Sydney Local Environmental Plan 2012 and the approved SFS Design Excellence Strategy at Appendix D of the EIS;</i>	<p>Sections 5-7 and 9 details the Panel's rationale for the preferred design.</p> <ul style="list-style-type: none"> <li>a) Section 5 addresses the provisions of clause 6.21(4) of the Sydney Local Environmental Plan;</li> <li>b) Section 6 addresses the objectives of Better Placed; and</li> <li>c) Section 7 addresses the Urban Design Guidelines.</li> </ul> <p>The assessment in (a) to (c) above is a requirement of the Design Excellence Strategy.</p>
<i>d) demonstrate how this design and the overall site layout is consistent with the Sydney Football Stadium Urban Design Guidelines;</i>	Section 7 addresses the Urban Design Guidelines.
<i>e) a copy of the brief issued to the architectural firms.</i>	Appendix A contains a copy of the brief issued to architectural firms.

In addressing the requirements of condition B4 of the consent to SSD9249, this Report also addresses the requirements of section 4.3 of the City of Sydney Competitive Design Policy for a Competitive Design Alternatives Report.

This Report also addresses the Secretary's Environmental Assessment Requirements (SEARs) for the project. The SEARs replicate the requirements of condition B4 of the consent to SSD9249 except that it requires the Competitive Design Alternatives Report to include details of "*how the winning scheme is capable of achieving design excellence in accordance with Clause 6.21(4) the design excellence provisions of the Sydney LEP 2012 and the City of Sydney Competitive Design Policy*". This additional requirement is outlined in section 5.

## 2 Background to the Competitive Design Alternatives process

Infrastructure NSW undertook the competitive design alternatives process in 2018. A brief was developed (refer to Appendix A) and four architectural firms were invited to participate. Three consortia of firms chose to participate in the competitive design alternatives process as follows:

- Cox Architecture and Aspect Studios
- Fitzpatrick Partners and McGregor Coxall
- Sydney Architecture Studio, Snohetta and Inhabit

An assessment panel to judge the entries (**Panel**) was comprised of:

- Peter Poulet- NSW Government Architect (Chair)
- Kim Crestani- Independent Panel Member
- John Perry- Independent Panel Member
- David Riches- Infrastructure NSW (Proponent Representative)

The Design Excellence Strategy included with the Stage 1 Development Application nominated a representative of City of Sydney as a member of the Panel. On 29 June 2018 the City of Sydney advised that participation as a member of the assessment Panel would not be possible.

The Panel undertook a review of the entries between August and September 2018. A presentation day was held on 3 September 2018 where all participants provided an overview of their entry to the Panel.

The Panel made its decision on 11 September 2018.

### 3 Design Alternatives Considered

The Sydney Football Stadium Redevelopment Design Competition considered three (3) design alternatives from the following entrants:

#### 3.1 Cox Architecture and Aspect Studios



**Figure 1: Entry by Cox Architecture and Aspect Studios**



**Figure 2: Entry by Cox Architecture and Aspect Studios**

**This submission focused on creating a stadium that found the balance between the old and the new.**

The design was intended to be an evolution of the original Sydney Football Stadium; with the guiding principle of needing to fit in while still standing out.

The façade was designed to be highly sculptural so that it blended into the surrounding context and featured a solid stone-like base and bronze aluminium bands that wrapped around the stadium to reflect Sydney's unique sandstone geology. The façade also included a number of terraces to bring the outdoors in.

The roof design was a combination of steel and a lightweight fabric, building on the latest developments in environmental and structural technology, designed to keep noise and light within the seating bowl. To respect the scale of the neighbourhood, the roof was designed to sweep down to the north and south.

The public domain design focused on opening up the precinct and reconnecting the stadium with its neighbourhood, and creating a new connection between Paddington and Moore Park. To enhance the existing sporting and cultural precinct as an everyday destination, the design featured facilities for informal sports and locations for community events.



### 3.2 Sydney Architecture Studio, Snohetta and Inhabit



**Figure 3: Entry by Sydney Architecture Studio, Snohetta and Inhabit**



**Figure 4: Entry by Sydney Architecture Studio, Snohetta and Inhabit**

**The theme of this submission was “flow” and the stadium was designed to pay homage to the past and present eras of use, and the importance of water for all people inhabiting the area through time.**

The façade design featured layers made of recycled aluminium balustrades and a timber halo that wrapped around the stadium, with steel columns to provide support. The scheme deliberately used a simple palette of sustainable materials to help integrate the building with its parkland setting, and create a sense of openness providing views into the stadium, and through the stadium to the SCG.

The roof design continued the theme of flow, featuring a lightweight roof held up through a tension and compression system, similar to a bicycle wheel. The roof was designed to ‘sweep’ around the stadium, with a gentle change in elevation, lowering at Busby’s Bore and reducing the scale of the stadium toward Paddington.

One of the key features of the design was open downpipes that fed rainwater into a public realm water feature, paying respect to Busby’s Bore as well as the era of indigenous habitation. Other features of the public domain included a mix of soft and hard landscaping to create flexible community spaces that could be used throughout the year.



### 3.3 Fitzpatrick Partners and McGregor Coxall



Figure 5: Entry by Fitzpatrick Partners and McGregor Coxall

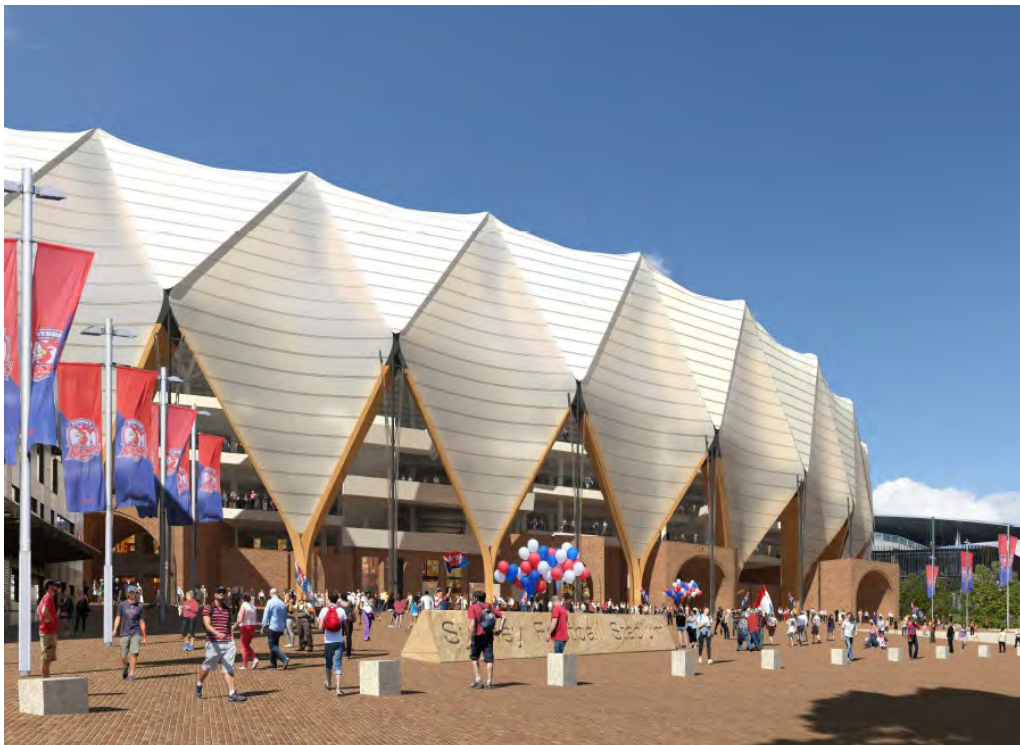


Figure 6: Entry by Fitzpatrick Partners and McGregor Coxall

**The theme of this submission centred around ‘place’. It focused on creating a place for Sydney, made of Sydney.**

It also focused on extending the existing neighbourhoods by creating a place where people could meet, day and night, regardless of events at the stadium. This theme was carried throughout the design.

The façade design featured two key materials, brick and timber. The bricks were chosen to blend the stadium into its context – between the Sydney Cricket Ground, historic buildings in the Entertainment Quarter, Victoria Barracks and the suburbs of Paddington and Surry Hills. It featured arched entryways and openings, reflective of historic buildings nearby.

An innovative timber structure supported a lightweight material that stretched over the timber to create the roof. From a distance, the design hoped to be emblematic of the waratah, a quintessential Sydney flower.

The public realm design featured a number of green spaces, lanes and walkways that could be activated not only on game day for tickets sales, merchandising and entries, but with food and beverage outlets, cafes, restaurants, food vans and convenience retailing that would create a network of lanes and spaces that become a destination of their own – day and night, week and weekend.

## 4 Assessment of Design Merits

An assessment of the design merits of each alternative design has been undertaken in accordance with the Design Excellence Strategy, specifically the:

- Design Excellence requirements of the Sydney Local Environmental Plan- refer to section 5 of this report.
- Better Placed, an integrated design policy for the built environment in NSW- refer to section 6 of this report.
- Sydney Football Stadium Urban Design Guidelines- refer to section 7 of this report.

A summary of the assessment of the design merits of each alternative design and the rationale for the choice of preferred design is contained in each relevant section of this report.

## 5 Design Excellence and the Sydney Local Environmental Plan

This section addresses the assessment of the design merits of each alternative under the requirements of clause 6.21(4) of the Sydney Local Environmental Plan 2012 in respect of design excellence. The rationale for the choice of the preferred design and how it exhibits design excellence in accordance with clause 6.21(4) of the Sydney Local Environmental Plan 2012 is also set out below.

**Table 2: Assessment of design merits and rationale for preferred design under the Design Excellence provisions of the Sydney LEP 2012**

LEP requirement	Cox Architecture and Aspect Studios Response	Fitzpatrick Partners and McGregor Coxall Response	Sydney Architecture Studio, Snohetta and Inhabit Response
6.21(4a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	A high standard of architectural design was achieved due to a sensitive form in its urban setting and appropriate materials and detailing for a stadium building in this location	Polarising architectural design with materials considered to be less relevant to the setting. The proposal could achieve a high standard of architectural design, however further refinement of material choice and composition would be required.	The architectural design was considered to be of a high level and was commended in this scheme, however its impact on its context and neighbourhood was less compelling.
6.21(4b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain	Form and appearance minimised amenity impacts of a large structure to the best extent possible and was considered to improve the amenity and quality of the public domain.	The impact of the form and mass of materials was considered to detract from amenity of the public domain and was not considered to improve these aspects.	The structural solution required the roof to be maintained at a higher level than necessary creating a greater impact on public domain and amenity, thus not improving these aspects.
6.21(4c) whether the proposed development detrimentally impacts on view corridors	View corridors were not considered to be impacted by the proposal.	The form of the building was considered to unnecessarily detract from views from surrounding locations due to the bulk of the form.	The form of the building was considered to unnecessarily detract from views from surrounding locations due to the bulk of the form.
<b>6.21(4d) how the proposed development addresses the following matters</b>			
6.21(4d)(i) the suitability of the land for development	The land has been developed for sporting and stadia uses for many years- the land is considered suitable for the development.	The land has been developed for sporting and stadia uses for many years- the land is considered suitable for the development.	The land has been developed for sporting and stadia uses for many years- the land is considered suitable for the development.
6.21(4d)(ii) the existing and proposed uses and use mix	The land has been developed for sporting and stadia uses for many years- the land zoning is for sport and recreational uses. The proposed use as a stadium is suitable for the site.	The land has been developed for sporting and stadia uses for many years- the land zoning is for sport and recreational uses.	The land has been developed for sporting and stadia uses for many years- the land zoning is for sport and recreational uses.
6.21(4d)(iii) any heritage issues and streetscape constraints	The proposal retained the heritage significant fig tree on Moore Park Road and provided an appropriate response to the Moore Park Road frontage. No impacts were considered to be made to Busby's Bore as a result of the scheme.	The proposal retained the heritage significant fig tree on Moore Park Road however the height of the building along Moore Park Road was not considered to be the most sympathetic response. No impacts were considered to be made to Busby's Bore as a result of the scheme.	The proposal retained the heritage significant fig tree on Moore Park Road however the height of the building along Moore Park Road was not considered to be the most sympathetic response. No impacts were considered to be made to Busby's Bore as a result of the scheme.
6.21(4d)(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form	This criterion is not applicable to the development	This criterion is not applicable to the development	This criterion is not applicable to the development
6.21(4d)(v) the bulk, massing and modulation of buildings	The scheme presented the best solution for the bulk, massing and modulation of the building, which was considered to be sympathetic to the surrounding areas and appropriate for a building of this typology.	The Panel considered that the bulk and massing of the building was too great for the site.	The Panel considered that the bulk and massing of the building was exacerbated by the height of the roof and did not form the most appropriate response for the site.



6.21(4d)(vi) street frontage heights	This proposal due to its sweeping roof form provided the most sophisticated response to mitigating height to the only street frontage for the building.	Due to the nature of the materials and structure chosen this scheme resulted in a larger and more significant impact on the street frontage.	The structural system chosen retained the roof at a higher level which was considered to be out of scale with the Moore Park Road character.
6.21(4d)(vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity	This proposal demonstrated minimal overshadowing and maximised solar access to the surrounding public domain compared to other proposals. The proposal was considered to address: <ul style="list-style-type: none"> <li>sustainable design through the use of outdoor terraces,</li> <li>visual and acoustic privacy through the design of the roof materials and structure,</li> <li>noise through recognition of the need for a solid facade on the northern side, and</li> <li>reflectivity requirements through the use of the louvred veil.</li> </ul>	Whilst within the proposed planning envelope for height, this proposal did not minimise overshadowing to surrounding locations. The proposal was considered to address: <ul style="list-style-type: none"> <li>sustainable design through the use of timber within the structure,</li> <li>visual and acoustic privacy through the design of the roof materials and structure,</li> <li>noise through recognition of the need for a solid facade on the northern side, and</li> <li>reflectivity requirements through the extension of the roof material over the facade.</li> </ul>	Whilst within the proposed planning envelope this proposal did not minimise overshadowing to surrounding locations. The proposal was considered to address: <ul style="list-style-type: none"> <li>sustainable design through the use of recycled aluminium and timber and water reuse,</li> <li>visual and acoustic privacy through the design of the roof materials and structure,</li> </ul> reflectivity requirements through the use of low sheen materials on the facade. The noise requirements were questioned in relation to the gap between the roof and top tier of the stadium.
6.21(4d)(viii) the achievement of the principles of ecologically sustainable development	The proposal would achieve the principles of ecologically sustainable development through use of low embodied energy materials, native planting and LED sports lighting and photovoltaic panels.	The proposal would achieve the principles of ecologically sustainable development through use of Laminated Veneer Lumber (LVL) within the structure and recycling of water.	The proposal would achieve the principles of ecologically sustainable development through use of low carbon materials, energy and water efficient design, use of recycled aluminium and timber and water reuse.
6.21(4d)(ix) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network	The proposal achieved the project aims in terms of accessibility and circulation requirements by: <ul style="list-style-type: none"> <li>pedestrians and cyclists-creating seamless connections between Moore Park Road and Driver Avenue,</li> <li>separating service access from either Driver Avenue or Moore Park Road reducing conflict with pedestrians,</li> <li>creating levels that will create pedestrian permeability.</li> </ul>	The proposal achieved the project aims in terms of accessibility and circulation requirements by: <ul style="list-style-type: none"> <li>pedestrians and cyclists-creating seamless connections between Moore Park Road and Driver Avenue,</li> <li>separating service access from either Driver Avenue or Moore Park Road reducing conflict with pedestrians,</li> <li>creating levels that will create pedestrian permeability.</li> </ul>	The proposal achieved the project aims in terms of accessibility and circulation requirements by: <ul style="list-style-type: none"> <li>pedestrians and cyclists-creating seamless connections between Moore Park Road and Driver Avenue,</li> <li>separating service access from either Driver Avenue or Moore Park Road reducing conflict with pedestrians,</li> <li>creating levels that will create pedestrian permeability.</li> </ul>
6.21(4d)(x) the impact on, and any proposed improvements to, the public domain	This public domain response was considered to be the best proposal. The addition of a community play space for the public domain was considered a worthy addition and would improve the public domain through activation outside of event times. The landscape design was sympathetic to both the residential and parking setting with sensitive use of materials, uniting building with its setting.	The addition of a community play space for the public domain was considered a worthy addition and would improve the public domain through activation outside of event times. The focus on retail activation and lack of landscape areas was not considered to improve the public domain outcome and could lead to detrimental impacts.	The addition of a fitness facilities within the public domain was considered a worthy addition and would improve the public domain through activation outside of event times. The permeability of the public domain in terms of legible paths of travel was considered an additional improvement.
6.21(4d)(xi) the impact on any special character area	This proposal presented the least impacts to the Heritage Conservation Area of Paddington in terms of visual prominence by sloping the roof form to the north.	The height and bulk of this proposal would have a detrimental impact to the Heritage Conservation Area of Paddington as its height would make it visually prominent from many areas surrounding the stadium.	The height of this proposal would have a detrimental impact to the Heritage Conservation Area of Paddington as its height would make it visually prominent from many areas surrounding the stadium.
6.21(4d)(xii) achieving appropriate interfaces at ground level between the building and the public	The design of clear and legible entry points and seamless materials ensured appropriate interface	The interface between the public domain and the building was considered to be less legible	The design of clear and legible entry points and seamless materials ensured appropriate interface

domain	between public domain and building.	detracting from the interface between public domain and building.	between public domain and building.
6.21(4d)(xiii) excellence and integration of landscape design	Soft landscaping was maximised, particularly tree canopy for shading during hot weather.	It was considered that soft landscaping was lacking within the site boundary.	Soft landscaping was maximised, particularly tree canopy for shading during hot weather.

The Panel considered that the entry by Cox Architecture and Aspect Studios provided an overall concept that best met the design excellence requirements of clause 6.21(4) of the Sydney Local Environmental Plan 2012. The Cox Architecture and Aspect Studios proposal was either better than or equal to the remaining entries in relation to all criteria. The entries by Fitzpatrick Partners and McGregor Coxall and Sydney Architecture Studio, Snohetta and Inhabit were considered to meet most of the criteria, however not to the standard exhibited by Cox Architecture and Aspect Studios. The entry by Cox and Aspect presented a superior solution and exhibited design excellence particularly through its:

- high level of architectural design with materials appropriate to the building typology and location.
- enhancement of the amenity of the public domain through the façade design and landscape concept.
- sympathetic built form in terms of street frontage height and moderating the bulk and massing of what is essentially a large building.
- minimisation of potential environmental impacts in relation to overshadowing, solar access and retention and minimisation of view impacts.
- public domain that was active, welcoming and inclusive of all users both on event and non-event days.

The Panel considered the rank of the entries as follows:

1. Cox Architecture and Aspect Studios
2. Sydney Architecture Studio, Snohetta and Inhabit
3. Fitzpatrick Partners and McGregor Coxall

Whilst the Panel considered there was design merit within all proposals, the Panel was of the view that the height of the roof within the entry from Sydney Architecture Studio, Snohetta and Inhabit detracted from the design. The Panel further considered that the lack of landscaping and bulk of the form detracted from the entry by Fitzpatrick Partners and McGregor Coxall.

For the reasons above, the preferred design best exhibited the design excellence requirements of clause 6.21(4) of the Sydney Local Environmental Plan 2012. The Panel therefore concluded that the preferred design was not only capable of achieving design excellence, it demonstrated design excellence in accordance with clause 6.21(4) of the Sydney Local Environmental Plan 2012.



## 6 Better Placed

This section addresses the assessment of the design merits of each alternative and the Panel's rationale for the preferred design under the objectives of Better Placed- Good Design Objectives, Government Architect NSW, 2017.

**Table 3: Assessment of design merits and rationale for preferred design under the objectives of Better Placed**

Better Placed Objective	Cox Architecture and Aspect Studios Response	Fitzpatrick Partners and McGregor Coxall Response	Sydney Architecture Studio, Snohetta and Inhabit Response
Better Fit- contextual local and of its place	This proposal exemplified the best contextual response with a lowered roof line to maximise district views and vistas. Materials chosen reference a diverse local context yet is appropriate to a significant public building.	The proposal at the ground scale offered a diverse and rich public experience. However, the mass of the proposal would have a dominating and overpowering impact locally and district wide.	An elegant form, however would have a significant impact on local context, views and vistas due to the height of the roof and the subsequent need to control and ameliorate weather ingress.
Better Performance- sustainable, adaptable and durable	Excellent patron access and amenity. Materials and planning reflecting and exceeding current good practice.	Creative response to public domain activation. Over emphasis on activation of public spaces conflicting with easy access. Materials not commonly utilised in similar public venues.	Very good access and patron amenity. Materials and planning appropriate to current venue experience.
Better for Community- inclusive, connected and diverse	Generous public domain improves district connectivity by maximising site permeability. Opportunities for a variety of community activities in the public domain.	Large public domain and significant commercial offering intended to activate public spaces, could potentially conflict with event days. Opportunities for community activities to coexist with commercial operations.	Good easy to navigate public domain with potential for community activities.
Better for People- safe, comfortable and liveable	Excellent people movement and safety at current best practice.	Adequate people movement and safety.	Very good people movement and safety at current best practice.
Better Working- functional, efficient and fit for purpose	Achieves best practice for patron experience on event days. Works efficiently and safely for patrons and provides community benefit in the public domain.	Event experience is very good however commercial activities in the public domain may impede functionality of event day experience.	Achieves best practice for patron experience on event days. Works efficiently and safely for patrons
Better Value- creating and adding value	Strikes appropriate balance between event day experience and the benefits of an improved public domain creating wider community benefit.	A good patron game experience is achieved however the public domain focuses on commercial activities potentially less inclusive to all.	Very good event day functioning which could be augmented by allied activities in the public domain.
Better Look and Feel- engaging, inviting and attractive	An architectural expression appropriate for the site acknowledging district wide impacts. Excellent site permeability with the appropriate level of site activation. Sensitive material choices with reference to the diverse nature of the site context and uses.	A dominant built form with associated district impact. Intense site activation strategy. Materials reference local context however would require moderation.	An elegant architectural solution however with district wide impact due to height. Good site permeability with some additional activation required to invite local participation.

The entry by Cox Architecture and Aspect Studios was considered to best meet the objectives of Better Placed as set out in Table 3. The design was the most sympathetic to the context of the stadium whilst also allowing for the most functional solution. It was considered to enhance the amenity of the area in both event and non-event mode, providing a design that suited both stadium patrons and local communities.

## 7 Urban Design Guidelines

This section addresses the assessment of the design merits of each alternative and the Panel's rationale for the preferred design under the Sydney Football Stadium Urban Design Guidelines.

**Table 4: Assessment of design merits and rationale for preferred design under the Urban Design Guidelines**

Guideline	Cox Architecture and Aspect Studios Response	Fitzpatrick Partners and McGregor Coxall Response	Sydney Architecture Studio, Snohetta and Inhabit Response
Key Moves	Achieved all key moves outlined in the Urban Design Guidelines.	Achieved all key moves outlined in the Urban Design Guidelines.	Achieved all key moves outlined in the Urban Design Guidelines.
Access and Movement	Clear patron wayfinding minimising grade changes. Very good gameday experience for visitors on arrival during matches and easy egress paths for large numbers of people. Good balance of site permeability for local community with the right balance of activation.	Adjustments to patron access on game days would be required. Potential conflict on gamedays with the site activation commercial offering and patron wayfinding and access. However, good non-game day site utilisation and accessibility. Seen as a destination opportunity.	Good access and directional wayfinding for gameday patrons. Appropriate level of activation not to conflict with game day utilisation. Site is permeable on nongame days however intuitive movement patterns could be enhanced.
Building Height and Massing	Compliant with planning controls and minimised to reduce visual impact on the local environment	Compliant with planning controls. Roof form, structure and materials would have a visual impact on the local environment.	Compliant with planning controls, however chosen structural system elevates roof to have a visual impact on the local environment.
Public Realm and Open Space	Good site access and permeability with appropriate landscaping and hard-form to allow for a variety of groups and numbers of people. Appropriately scaled detailing and materials chosen.	Good site access however due to the activation strategy less clear capacity for through links and volumes of pedestrian traffic on game days. Material chosen dominate public space and additional landscape would benefit the public spaces.	Site access and permeability is good. Focus of public realm is for clear intuitive wayfinding with less opportunities to dwell. Materials and landscaping consistent with context however could be enhanced.
Safety and Security	Compliant with brief. Good access and egress.	Compliant with brief. Fair access and egress.	Compliant with brief. Good access and egress.
Activation	Appropriately scaled and located activation and spaces for people to casually congregate.	Over reliance on commercial offering to activate the site. Opportunities for informal gathering were evident but less clear.	Appropriately scaled and located activation and spaces for people to informally meet.
Wayfinding, Signage and Interpretation	Good clear intuitive wayfinding for patrons and for through site pedestrians. Both Signage and interpretation would require development in further stages.	Some conflict with wayfinding for patrons, visitors and through site pedestrians. Both Signage and interpretation would require development in further stages.	Good intuitive wayfinding for patrons and for through site pedestrians. Both Signage and interpretation would require development in further stages.
Architectural Expression	A form of contemporary architectural expression appropriate to the new facility. A significant contribution to the local environment recognising previous building and the need to refer to local conditions.	Interesting building form mass and materials with a dominating impact on the local context impeding some views and vistas.	A form of contemporary architectural expression appropriate to such a facility. However, the higher roof would have a greater visual impact on the local environment and its construction would potentially add complexity.
Sustainability	All schemes have the potential to not only comply with the briefed requirements but exceed them.	All schemes have the potential to not only comply with the briefed requirements but exceed them.	All schemes have the potential to not only comply with the briefed requirements but exceed them.
Cultural and Heritage Significance	Previous site usage is maintained and enhanced to contemporary patron expectations. The correct balance is achieved between game day public utilisation and a fine grain neighbourhood. Building form minimises negative local environmental impacts whilst celebrating broader community sporting activity.	Previous site usage is maintained and enhanced to contemporary patron expectations. The form of the building is exuberant and appropriate to the celebration of large sporting events. However, the dominance of this building in its local context was questioned. The building celebrates sports yet creates some tensions with other activities proposed.	Previous site usage is maintained and enhanced to contemporary patron expectations. A good game day public experience is achieved. However, a higher than necessary roof form impacts the fine grain neighbourhood of Paddington. Appropriately the building is a celebration of sporting activities.

The preferred design and overall site layout is consistent with the Urban Design Guidelines. As demonstrated by Table 4, the entry by Cox Architecture and Aspect Studios provides the most appropriate public domain solution, contemporary architectural expression and will add to the local setting in both event and non-event times.

## 8 Requirements of the Design Excellence Strategy

The Design Excellence Strategy for the Sydney Football Stadium Redevelopment project was included as Appendix D to the Environmental Impact Statement for SSD9249. The Strategy was endorsed by the NSW Government Architect on 18 May 2018 and forms part of the approval to SSD9249 by the Consent Authority on 6 December 2018.

Section 3 of the Design Excellence Strategy detailed the commitments in relation to the Competitive Design Alternatives Report. Table 6 details how these commitments have been met:

**Table 5: Commitments from the Design Excellence Strategy**

<b>Commitment</b>	<b>How the commitment has been met</b>
The Competitive Design Alternatives Report will be signed by the members of the assessment panel (Jury).	See section 10 of this Report.
The Competitive Design Alternatives Report will be submitted to the Consent Authority for endorsement.	Infrastructure NSW will seek the endorsement of the Planning Secretary as required by the conditions of consent (SSD9249) and append this approval to the Report prior to its exhibition of SSD9835.
The report will provide assessment of the competition entries against the design excellence requirements of the Sydney LEP 2012 (section 6.21).	See section 5 of this Report.
The report will provide assessment of the competition entries against the principles of Better Placed.	See section 6 of this Report.
The report will provide assessment of the competition entries against the Urban Design Guidelines.	See section 7 of this Report.

## 9 Conclusion

The Panel were unanimous in its conclusion that the proposal by Cox Architecture and Aspect Studios was the winning entry. The Panel considered the rank of the entries as follows:

1. Cox Architecture and Aspect Studios
2. Sydney Architecture Studio, Snohetta and Inhabit
3. Fitzpatrick Partners and McGregor Coxall

In regard to the proposal by Cox Architecture and Aspect Studios demonstrated, the Panel concluded:

*The design was of outstanding merit and demonstrated compliance with both planning and design competition objectives, excellent urban design and public domain concepts.*

The Panel considered that the winning entry was consistent with the site layout proposed as part of the Stage 1 development application and exhibited design excellence for the following reasons:

- A high level of architectural design with materials appropriate to the building typology and location.
- A proposal that would enhance the amenity of the public domain through the façade design and landscape concept.
- A sympathetic built form in terms of street frontage height and moderating the bulk and massing of what is essentially a large building.
- Minimisation of potential environmental impacts in relation to overshadowing, solar access and retention and minimisation of view impacts.
- A public domain that was active, welcoming and inclusive of all users both on event and non-event days.
- It was considered to enhance the amenity of the area in both event and non-event mode, providing a design that suited both stadium patrons and local communities.

The Panel also considered that the winning entry best met the design objectives of Better Placed and the Sydney Football Stadium Urban Design Guidelines.

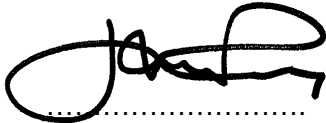
## 10 Endorsement by the Panel



.....  
**Peter Poulet (Chair)**



.....  
**Kim Crestani**



.....  
**John Perry**



.....  
**David Riches**

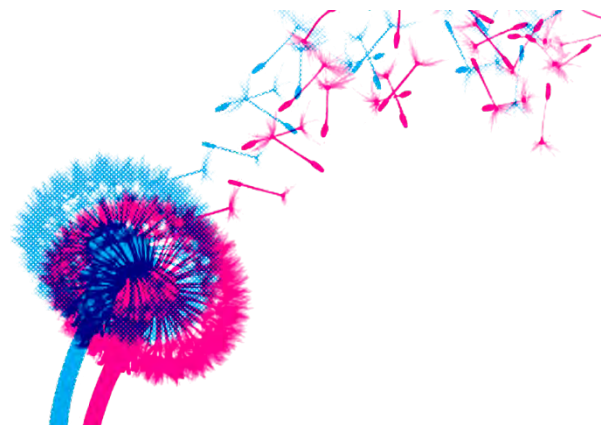
## Appendix A- Brief to Entrants

# Design Competition

## Sydney Football Stadium Redevelopment

July 2018

INFRASTRUCTURE NSW



<b>1.0</b>	<b>Glossary .....</b>	<b>4</b>
<b>2.0</b>	<b>General Information.....</b>	<b>5</b>
<b>3.0</b>	<b>Site Description .....</b>	<b>6</b>
3.1	Sydney Cricket and Sports Ground .....	6
3.2	The Site .....	7
<b>4.0</b>	<b>Site History.....</b>	<b>8</b>
<b>5.0</b>	<b>Project Description.....</b>	<b>8</b>
5.1	Project Background.....	8
5.2	Project Vision .....	8
5.3	Project Procurement.....	9
5.4	Design Team .....	9
5.5	Design Phases.....	9
5.6	Project Program.....	10
<b>6.0</b>	<b>Statutory Planning.....</b>	<b>11</b>
6.1	Existing Approvals .....	11
6.2	SFSR Planning Process.....	11
6.3	Design Competition and Planning .....	11
<b>7.0</b>	<b>Competition Scope .....</b>	<b>12</b>
7.1	Roof.....	12
7.2	Facade .....	12
7.3	Public Realm .....	12
7.4	Public Art.....	13
<b>8.0</b>	<b>Project Brief and Reference Design.....</b>	<b>14</b>
<b>9.0</b>	<b>Commercial .....</b>	<b>14</b>
9.1	Cost Plan .....	14
9.2	Commercial Offer .....	14
<b>10.0</b>	<b>Competition Procedures .....</b>	<b>15</b>
10.1	Design Competition Participants.....	15
10.2	Communications.....	15
10.3	Probity.....	15
10.4	Briefing.....	15
10.5	Lodgement of Submissions .....	16
10.6	Submission Documents.....	16
10.7	Disqualification.....	16
10.8	Assessment and Decision .....	16
10.9	Appointment of the design team of the preferred proposal .....	17



10.10	Care of material and insurance.....	17
10.11	Copyright .....	17
10.12	Competition fee .....	17
10.13	Return of documents .....	17
10.14	Specialist Advisors .....	17
<b>11.0</b>	<b>Submission Deliverables .....</b>	<b>18</b>
11.1	Public Realm .....	18
11.2	Facade .....	18
11.3	Roof.....	18
11.4	Renders .....	18
11.5	Reports.....	19
<b>12.0</b>	<b>Background Documents .....</b>	<b>20</b>
12.1	Reference Design Reports .....	20
12.2	Stage 1 SSDA Reports.....	22
<b>13.0</b>	<b>Assessment Criteria .....</b>	<b>23</b>
13.1	Compliance with Planning Objectives .....	23
13.2	Design and Competition Objectives .....	23
13.3	Commercial Scope .....	23
<b>Appendix 1- Stage 1 SSDA Documents .....</b>		<b>24</b>
<b>Appendix 2- Competition Scope Drawings .....</b>		<b>25</b>
<b>Appendix 3- Project Brief and Reference Design .....</b>		<b>26</b>

## 1.0 Glossary

Term	Definition
Competition Jury	The panel coordinated by Infrastructure NSW to assess the Design Competition Submissions. The Competition Jury consists of: <ul style="list-style-type: none"> <li>• Peter Poulet- Government Architect NSW (Chair)</li> <li>• David Riches- Infrastructure NSW</li> <li>• John Perry- Independent</li> <li>• Kim Crestani- Independent</li> </ul>
Competition Scope Drawings	Drawings which delineate the competition geometric scope for Roof, Façade and Public Realm as described in this document.
Consent Authority	Department of Planning and Environment
Design Competition	The process by which a competitive assessment of design alternatives will be sought, assessed and awarded for the Sydney Football Stadium Redevelopment project. This process is largely based on the City of Sydney Competitive Design Policy 2012.
Executive Architect	The architectural and landscape team that has developed the Reference Design, who will retain responsibility for the functional design of the stadium. The Executive Architect consists of Cox Architects and Aspect.
Lead Designer	The successful Participant in this Design Competition.
Participant	One of four teams invited to enter a Submission for this Design Competition. The teams include: <ul style="list-style-type: none"> <li>• Architectus</li> <li>• Cox Architecture and Aspect Studios</li> <li>• Fitzpatrick + Partners</li> <li>• Sydney Architecture Studio, Snohetta and Inhabit</li> </ul> <p>Note that Cox Architecture and Aspect Studios have prepared the reference design for INSW. Barrier arrangements are in place which have been reviewed and endorsed by the Probity advisor as sufficient to manage the associated probity risk.</p> <p>INSW also confirms that any information which has been provided to Cox Architecture and Aspect Studios as part of the Reference Design has been included in this Design Brief to the extent that it is relevant to the Design Competition (as identified in section 12 below).</p>
Principal	Infrastructure NSW
Project Brief	This document outlines the Principals Requirements for the Project, including the competition elements.
Public Realm	The area surrounding the stadium that is accessible without entry into the stadium building.
Reference Design	The Executive Architect's concept design for the Project.
Request for Tender (RFT)	The tender process (and documents) that will be undertaken to source a construction contractor to undertake detailed design and construction of the stadium.

Secretary's Assessment (SEARs)	Environmental Requirements	The requirements that are made by the Secretary of the Department of Planning and Environment to be addressed in the Stage 1 and Stage 2 SSDA
Stage 1 SSDA		The first state significant development application for the project that includes demolition of the existing stadium and surrounding buildings and a creation of a concept envelope for the design of the stadium.
Stage 2 SSDA		The second state significant development application for the project that will seek approval for the final stadium design and operation of the stadium.
Submission		Responses by Participants to this brief.
Sydney Football Stadium Redevelopment (SFSR)		The project.

## 2.0 General Information

The purpose of this Design Competition is to support the achievement of design excellence through selection by a Competition Jury of a Submission deemed to provide the highest quality architectural and urban design solution for the redevelopment of Sydney Football Stadium. Infrastructure NSW is the 'developer' for the purpose of this Design Competition, which will be undertaken in accordance with the requirements of the *Sydney Local Environmental Plan 2012*. Infrastructure NSW has invited 4 architectural firms to prepare design proposals.

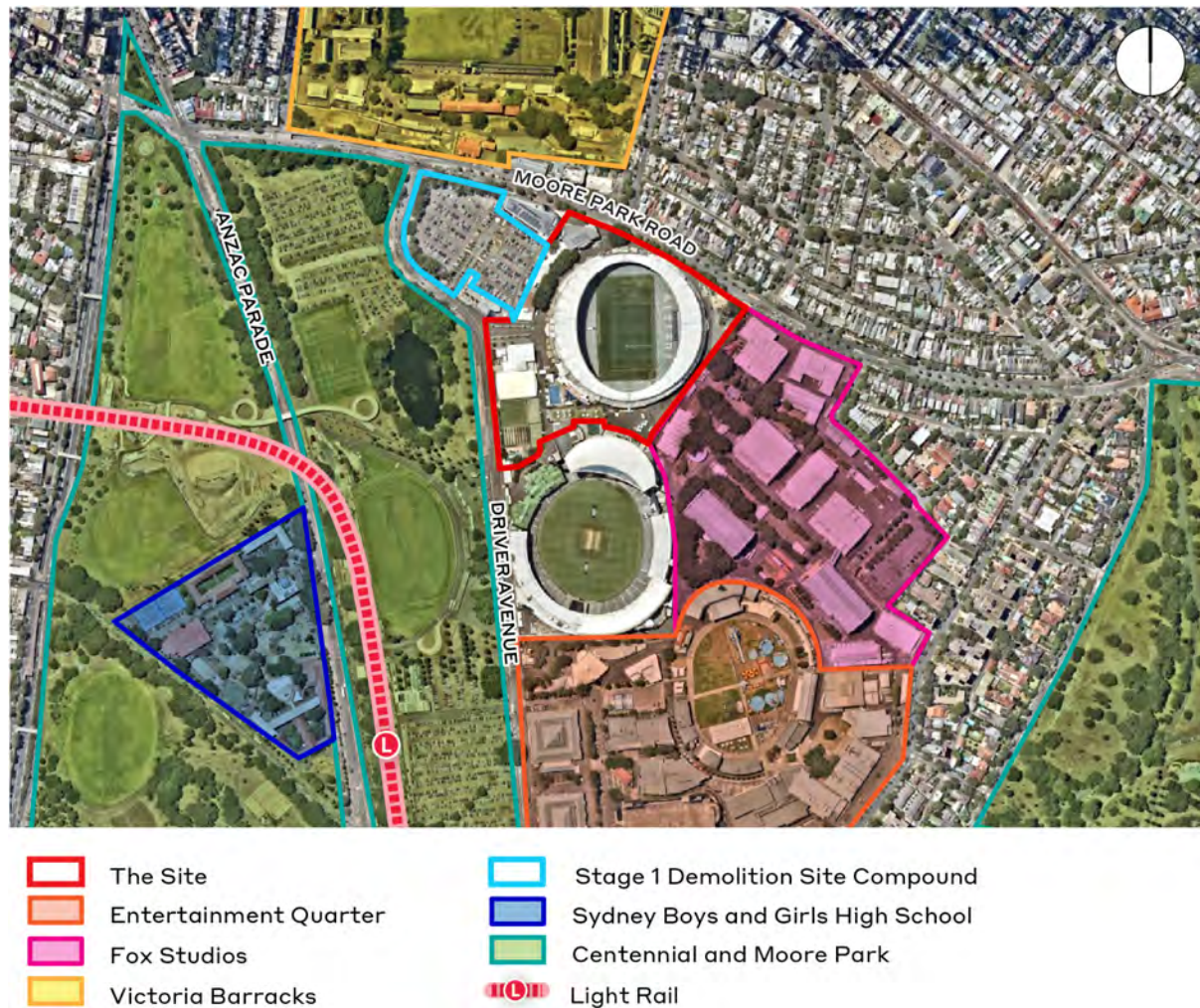
Government Architect NSW has reviewed this brief and has recommended this *Design Competition* on 17 July 2018.

The competitive design process will not fetter the discretion of the Consent Authority since the Consent Authority will not form part of the judging process.

### 3.0 Site Description

#### 3.1 Sydney Cricket and Sports Ground

The Sydney Cricket and Sports Ground is located in Moore Park and comprises the Sydney Cricket Ground, the existing Sydney Football Stadium (including members facilities and pool), NRL Headquarters, Australian Rugby Union Headquarters, Sheridan Building, Roosters Building, Waratahs Building, Cricket NSW Headquarters and Venues Services building and the Indoor Cricket Centre.



**Figure 1: Sydney Football Stadium site and surrounds**

The Sydney Football Stadium (SFS) is a significant component of the sports facilities that comprise the Sydney Cricket and Sports Ground. Completed in 1988, the SFS has hosted numerous sporting events in its 30 years of operation for a number of sporting codes including football (soccer), rugby league and rugby union as well as occasional music concerts.



### 3.2 The Site

The project site is located at 40-44 Driver Avenue Moore Park within the Sydney Cricket and Sports Ground. It is bound by Moore Park Road to the north, Fox Studios to the east, the existing Sydney Cricket Ground to the south and Driver Avenue to the west.

The site is located within the City of Sydney local government area. A location plan is depicted below.



**Figure 2: Sydney Football Stadium location plan**

The site is largely surrounded by Centennial and Moore Parks, the Fox Studios and Entertainment Quarter precincts and the residential suburb of Paddington. Located approximately 3km from the Sydney CBD and approximately 2km from Central Station, the site is connected to Sydney's transport network through existing bus routes and will benefit from a dedicated stop on the soon to be completed Sydney CBD and South East Light Rail. Further details regarding the site context are contained within the Urban Design Guidelines at Appendix 1.

## **4.0 Site History**

The site has a long history of association with sport. Over the years many sporting infrastructure developments have been undertaken on the Sydney Cricket and Sports Ground Trust lands. It is envisaged that the Sydney Football Stadium Redevelopment continue this legacy of creating regionally significant sporting facilities on this land. Further details regarding the site history are outlined in the Heritage Impact Statement at Appendix 1.

## **5.0 Project Description**

### **5.1 Project Background**

The NSW Stadia Strategy 2012 provides a vision for the future of stadia within NSW, prioritising investment to achieve the optimal mix of venues to meet community needs and to ensure a vibrant sports and event environment in NSW. A key action of the strategy included development of master plans for Tier 1 stadia and their precincts covering transport, integrated ticketing, spectator experience, facilities for players, media, restaurant and entertainment provision. The Sydney Football Stadium (SFS) is one of three Tier 1 stadia within NSW.

In a nationally competitive rectangular stadium landscape, the existing SFS is facing increasing commercial and operational challenges to remain competitive for existing and future hirers and patrons.

On 24 November 2017, the NSW Premier announced the SFS Redevelopment. The redevelopment will include demolition of the existing facility and replacement with a modern, globally competitive stadium that satisfies the requirements of a contemporary sporting stadium benchmarked against current best practice.

### **5.2 Project Vision**

The project vision is for the project to contribute to developing the SC&SGT Precinct into an exceptional sporting, entertainment and cultural destination that makes a significant contribution to the NSW economy. The development provides an opportunity to deliver an improved urban design outcome better integrating with its immediate neighbours and the wider urban context. Given the prominence of the project a high quality architectural design is essential. The architectural ambition is to:

- Create an exemplar of innovative architecture;
- Create an integrated architectural response
- Deliver a venue that is architecturally sympathetic to its urban and parkland setting;
- Support and enhance adjacent civic spaces and access to transport infrastructure;
- Establish a recognisable identity, with a focus on creating attractive and usable spaces within the Public Realm;
- Produce a Public Realm which promotes public activity on both event and non-event days;
- Adopt contemporary technology to enhance the precinct; and
- Utilise materials that promote and enhance the achievement of a minimum LEED Gold environmental rating.

### **5.3 Project Procurement**

A project contracting strategy has been adopted whereby the Lead Designer and Executive Architect will be novated to a design documentation and construct contractor following completion of the Stage 2 SSDA. The preparation of the Stage 2 SSDA will be managed by Infrastructure NSW.

### **5.4 Design Team**

The successful Participant will be nominated as the Lead Designer for the components defined in the competition scope (Section 7) and be responsible for the complete construction documentation of those components in collaboration with the Executive Architect, contractor and the contractor's engineering design and trade suppliers. The Executive Architect retains responsibility for the fit for purpose requirements of the stadium as defined in the Project Brief.

Infrastructure NSW requires an integrated and singular design outcome. It is expected that a collaborative design approach is adopted for both the Lead Designer and Executive Architect. All deliverables are expected to be integrated and submitted as cohesive designs. Whilst the Lead Designer retains responsibility for façade, roof and public domain elements, it is expected that collaboration will result in an overall aesthetic that is cohesive and allows the entire design to be read as an integrated whole.

It is proposed that a Project Office will be established to co-locate all key members of the design team including the Lead Designer, Executive Architect and the contractor's engineering team.

### **5.5 Design Phases**

The design process will be undertaken on a phased basis as follows:

Phase 1: Reference Design Development (completed by the Executive Architect under direction of the Principal):

- Review of the Project Brief;
- Prepare a reference design to a high level of functional design resolution;
- Review the reference design with key stakeholders to check compliance with the Project Brief;
- Preparation of a cost plan based upon the reference design and Project Brief; and
- This phase to be completed prior to lodgement of the Stage 1 SSDA.

Phase 2: Design Development and Documentation (to be completed by the Executive Architect and Lead Designer under direction of the Principal):

- Occurs between Phase 1 and lodgement of the Stage 2 SSDA;
- Develop holistic and integrated detailed architectural and engineering documentation of the external architecture, Public Realm and internal functional spaces. The design architect will lead design decisions for all elements, without compromising stadium performance. The executive architect will ensure technical compliance; and
- Preparation and submission of the Stage 2 SSDA.

Phase 3: Construction Documentation (to be completed by the Executive Architect and Lead Designer under direction of the Principal Contractor)

- Finalise construction documentation and trade packages under the management of the contractor; and
- Provide construction services during project delivery.

The Design Competition will be conducted at the completion of Phase 1.

As defined in Section 9.7, novation of the Lead Designer and the Executive Architect to the Principal Contractor will occur at the time of submission of the Stage 2 SSDA.

## 5.6 Project Program

Key project milestones for SFSR are as follows:

Date	Description
May 2018	Stage 1 SEARS issued
June 2018	Stage 1 SSDA submitted and publicly exhibited
July 2018	Design Competition
September 2018	Design Competition winner nominated
August – November 2018	Stage 1 SSDA Assessment
November 2018	Stage 1 SSDA Determination
October/ November 2018	Establish design team and commence preparation of Stage 2 SSDA
December – July 2019	Stage 2 SSDA documentation, submission, exhibition and assessment
August 2019	Stage 2 SSDA Determination
September 2019	Commence piling



## 6.0 Statutory Planning

### 6.1 Existing Approvals

Section 16A(1) of the *Sydney Cricket and Sports Ground Act 1978* (SCSG Act) provides that the Minister for Sport may approve the carrying out of improvements on designated land, including demolition and erection of a new building. A number of the existing buildings on the site (NRL Headquarters, Sheridan Building, ARU Headquarters) have been subject to approval under the SCSG Act.

Where the Minister for Sport grants approval under Section 16A of the SCSG Act, the *Environmental Planning and Assessment Act 1979* (EP&A Act) does not apply. In this instance, the Minister for Sport has determined that the SFS Redevelopment should be subject to assessment and approval by the Minister for Planning under the EP&A Act.

### 6.2 SFSR Planning Process

The Sydney Football Stadium Redevelopment is State Significant Development (SSD) under the *Environmental Planning and Assessment Act 1979* (EP&A Act) due to the provisions of State Environmental Planning Policy (State and Regional Development) 2011 as it is development for the purpose of a 'recreation facility (major)' with a capital investment value (CIV) of more than \$30 million (Schedule 1) and is also development at the Sydney Sports Stadiums Site with a CIV of more than \$10 million (Schedule 2). The estimated CIV for the project is \$674,000,000 (subject to tendering processes).

A staged application is proposed which includes:

**Stage 1** – Concept Proposal for the stadium envelope and supporting ancillary uses as well as consent for early works comprising demolition of the existing facility and other buildings impacted by the development.

**Stage 2** – detailed design, construction and operation of the stadium and supporting business, and ancillary uses.

The Stage 1 SSDA has been lodged and the EIS and associated reports are included at Appendix 1.

The Stage 2 SSDA will be lodged in early 2019. The outcome of the Design Competition will inform the architectural and public domain components of the Stage 2 application.

### 6.3 Design Competition and Planning

The Design Competition is being undertaken to ensure design excellence in the design of the SFSR. The Design Excellence Strategy included within Appendix 1 outlines the requirements for Submissions in terms of statutory planning. Broadly these requirements are to meet the design excellence requirements outlined in:

- Section 6.21 of the Sydney Local Environment Plan
- The Principles included in *Better Placed- An integrated design policy for the built environment of NSW*
- Section 8 of the Urban Design Guidelines

## 7.0 Competition Scope

Stadium functional design is a highly specialised task, the Design Competition focusses on the external architectural design (façade, roof) and the public domain.

The competition components are defined as:

### 7.1 Roof

The roof component consists of:

- The Roof envelope is from the top of the upper tier to the top of the Stage 1 SSDA Envelope;
- The extended parapet which is integrated with the back of the upper tier to provide weather protection may or may not be part of the roof or façade;
- The roof is supported on 4 major load bearing points located on the Reference Design Drawings;
- PV array of 5,000m<sup>2</sup>;
- Sports lighting system;
- House lighting system;
- Weather protection to all seats and to the back of the bowl;
- Roof drainage system;
- Structural system transferring the loads to the load bearing points;
- Operational and maintenance access (including catwalks); and
- Feature lighting
- Unimpeded solar access to the field of play during the winter solstice<sup>1</sup>

### 7.2 Facade

The facade component consists of:

- Façade elements to the Stadium (North, South, East and West) as defined in the scope drawings and its attachment to the primary structure;
- Feature lighting;
- External digital displays and signage; and
- Shading or other methods to achieve the required environmental rating.

### 7.3 Public Realm

The Public Realm scope and extent is limited to the surface treatments above the structural slab or natural ground level and consists of the following:

#### ***Suspended slabs:***

- Hard and soft landscaping and public furniture elements above the structural slab level as defined in the scope drawings;
- The reference design determines the structural slab levels;
- Tree planting in suspended slabs is limited to planter boxes on top of the slab; and

---

<sup>1</sup> For the purposes of the Design Competition, Participants may assume a 12m transparent zone to the leading edge of the roof (set back from the 100% drip line position).

***Slab on ground:***

- The Executive Architect will set levels and document construction below the finishes (e.g. retaining walls co-ordination to achieve levels);
- The circulation zone around the stadium is restricted to hard landscaping only for servicing and security reasons as defined in the Project Brief; and
- Deep Tree root zones may only occur in designated deep soil areas.

***All areas:***

- Wayfinding and public signage locations should be intuitive and part of the architecture. Locations should be nominated as part of the competition; however, the design of wayfinding elements is not included as part of the competition scope and will be developed during Phase 2.
- Nominated locations and opportunities for potential public artworks (See section 7.4).

#### **7.4 Public Art**

Infrastructure NSW will engage a public art curator to assist with commissioning public artwork for the project. The Curator will work with the Lead Designer to locate artwork within the Public Realm surrounding the stadium, based on the nominated locations and Public Realm design. The location, detailing and curation of artworks will occur during Phase 2.

The artwork curation process is outlined at section 7.4 of the Urban Design Guidelines.

## **8.0 Project Brief and Reference Design**

The Project Brief outlines the Principals Project Requirements including the competition elements. The Reference Design developed by the Executive Architect complies with these requirements. The Reference Design has been prepared as a response to the functional requirements as defined in the Project Brief and determines critical dimensional and relationship constraints with which the competition components must comply.

Relevant extracts from the Brief and Reference design are provided in Appendix 3. The Submissions must comply with the Project Brief.

## **9.0 Commercial**

### **9.1 Cost Plan**

The competition design Submissions must comply with the cost plan for the competition elements. The cost plan has been prepared by RLB and benchmarked against appropriate stadiums completed recently within Australia. The overall capital investment value of all aspects of the project is in the order of \$674,000,000.

A copy of the cost plans for the competition elements will be provided to the Participants for reference.

### **9.2 Commercial Offer**

Participants will be required to submit fee proposals for the scope of services defined in this Brief. Refer to separate document- *Sydney Football Stadium Redevelopment-Commercial Offer* for requirements and a copy of the proposed professional consultancy services contract.

An indicative fee range is provided to assist Participants in developing their fees. A final fee will be negotiated with the Successful Participant based on the fees provided.

This element does not form part of the assessment criteria outlined at section 12 of this brief.

## 10.0 Competition Procedures

### 10.1 Design Competition Participants

Infrastructure NSW is managing the Design Competition as an invited competition. Four Participants have been nominated to participate. Participants will have 28 days in which to prepare Submissions.

### 10.2 Communications

Participants should not communicate verbally regarding clarification of the Competitive Design Alternatives Process, with:

- Infrastructure NSW;
- Reference Design consultants;
- The Consent Authority (NSW Department of Planning and Environment); or
- Competition Jury members.

Participants should submit any questions or requests for a briefing on the scope of service or Reference Design in writing to the Principal.

Questions should be sent to Infrastructure NSW no later than 7 days before the close date.

Questions should be addressed to

[sfsrdesigncompetition@infrastructure.nsw.gov.au](mailto:sfsrdesigncompetition@infrastructure.nsw.gov.au)

Answers to these questions will be compiled and sent to all Participants without revealing the source of the questions.

### 10.3 Probity

Infrastructure NSW has appointed O'Connor Marsden as probity advisers to oversee the competition. The probity adviser is responsible for oversight of the processes employed to select a Lead Designer. Participants may contact the probity adviser at any time during the process:

Sarah Mullins

O'Connor Marsden

SMullins@ocm.net.au

### 10.4 Briefing

A briefing will be held for all Participants following release of the Competition Brief. This briefing will be undertaken at the State Library of NSW on 2 August 2018 at 10:30am. Details of the briefing will be emailed to all participants.

An individual briefing/interactive session will be arranged for each Participant who has not been involved with the Reference Design, to assist in developing a greater project appreciation.

Participants should contact Infrastructure NSW at

[sfsrdesigncompetition@infrastructure.nsw.gov.au](mailto:sfsrdesigncompetition@infrastructure.nsw.gov.au) to arrange this briefing.

In addition, all participants will have the opportunity for further interactive sessions. It is recommended that Participants undertake at least one interactive session on cost and structure midway through the competition period. Refer to section 10.14 for further details.

### 10.5 Lodgement of Submissions

Submissions must be lodged in both hard copy and electronic format with Infrastructure NSW by 5pm, 10 August 2018

Participants shall lodge their Submissions at:

Level 15, 167 Macquarie Street  
SYDNEY NSW 2000

Submissions should be labelled 'Sydney Football Stadium Redevelopment- Design Competition Entry' and clearly identify the name of the Participant.

Submissions **must not** include Participant branding.

It is the sole responsibility of the Participant to ensure actual delivery to Infrastructure NSW by the deadline.

### 10.6 Submission Documents

Section 10 of this brief outlines the deliverables required in response to this call document including design deliverables and commercial proposal.

Submissions **must not** include Participant branding.

### 10.7 Disqualification

Submissions must satisfy the competition requirements including;

- received prior to the lodgement time and date;
- the Submission meets the objectives of the competition;
- the Submission satisfies the deliverable requirements

It is at the sole discretion of the Competition Jury and Infrastructure NSW to determine if a Submission is compliant.

### 10.8 Assessment and Decision

Infrastructure NSW will consider one Submission from each Participant.

Participants will present their Submission to the Competition Jury on a date to be confirmed. Presentations will be for a maximum of 30 minutes with an additional 10 minutes provided for questions by the Competition Jury. Only materials that comprise the Submission are permitted to be presented to the Competition Jury.

Each Participants Submission will be graded by the Competition Jury according to the criteria in section 12 of this brief. The Competition Jury's decision in relation to the successful Submission will be documented in a report that will support the Stage 2 development application for the project.

The decision of Infrastructure NSW will not fetter the discretion of the Consent Authority in the determination of the Stage 2 SSDA for the project.

#### **10.9 Appointment of the design team of the preferred proposal**

Infrastructure NSW will appoint the successful Participant nominated by the Competition Jury. The Lead Architect will be novated to the successful Contractor at Phase 3 of the design works as outlined in section 5.5 of this brief.

#### **10.10 Care of material and insurance**

It is each Participant's responsibility to wrap, ship, mail or deliver by other means, their Submission, ensuring timely and intact arrival. Infrastructure NSW disclaims any responsibility for any loss or damage during transit.

Responsibility for insuring Submissions rests solely with Participants.

#### **10.11 Copyright**

Copyright of Submissions will remain with Participants.

#### **10.12 Competition fee**

A competition fee of \$60,000.00 shall be paid to each unsuccessful Participant for participating in this Design Competition. Payment will be made following announcement of the successful Participant.

#### **10.13 Return of documents**

Infrastructure NSW will retain all Submissions upon conclusion of the Design Competition.

#### **10.14 Specialist Advisors**

Infrastructure NSW has engaged specialist advisers to assist in the development of Submissions for all Participants. Participants have the opportunity to undertake interactive sessions with these advisers during development of their designs to ensure confidence in the achievement of the design in terms of cost, constructability and implications on the Reference Design structure. Participants should contact Infrastructure NSW at [sfsrdesigncompetition@infrastructure.nsw.gov.au](mailto:sfsrdesigncompetition@infrastructure.nsw.gov.au) to arrange interactive sessions. The advisers include:

##### **Quantity surveyor**

RLB - Mark Sims

##### **Structural engineer**

Richard Green

##### **Urban Design**

SJB

##### **Planner**

Tom Kennedy

## **11.0 Submission Deliverables**

Participants are required to include the following in their Submissions:

### **11.1 Public Realm**

- Landscape plan and 2x sections (1x north-south and 1x east-west)
- Indicative Precinct Finishes (other than the stadium) including:
  - Soft and Hard landscaping
  - Landscape species
  - Tree species

### **11.2 Facade**

- Building Elevations x4
- Written system description
- Typical façade details (sketches) for each nominated cladding type
- Indicative exterior finishes including:
  - Walls-finishes
  - Glazing
  - Awnings

### **11.3 Roof**

- Roof Plan
- Roof Sections (1x north-south and 1 east-west)
- Written system description
- Structural and roofing system sketch
- Indicative materials selection

### **11.4 Renders**

Five (5) computer or hand generated images of the Stadium and Precinct taken from the north, south, east, west and above or within the stadium. At least one of the images is to be a night time shot.



### 11.5 Reports

**Statement of intent-** a design statement addressing the Submission's approach, the response to the Project Brief, alignment with the Reference Design and the manner in which design excellence is achieved. This statement is to be a maximum of 10 pages.

**Statement of compliance-** indicating the Submission's compliance with the objectives embodied within the planning framework 10 pages, primarily:

- Section 6.21 of the *Sydney Local Environmental Plan 2012*;
- The Principles included in *Better Placed*; and
- Section 8 of the Urban Design Guidelines.
- It may also include a discussion on how the design achieves ESD outcomes.

**Construction Costs-** each Submission must include the estimated construction cost (prepared by the nominated adviser at section 4.4).

## 12.0 Background Documents

The following background documents are provided to assist with the development of Submissions. Documents developed for the Reference Design must be followed in developing Submissions. Documents developed for the Stage 1 SSDA are provided to inform the development of Submissions.

### 12.1 Reference Design Reports

Document	Sections relevant to Design Competition	Comments
Roof, Façade and Domain Brief	<ul style="list-style-type: none"> <li>Whole Report</li> </ul>	Relevant to the Roof, Façade and Public Realm design.
Wind Report	<ul style="list-style-type: none"> <li>Whole Report</li> </ul>	Relevant to the Roof, Façade and Public Realm design.
Security Report	<ul style="list-style-type: none"> <li>Whole Report</li> </ul>	Relevant to the Public Realm design.
Pitch Report	<ul style="list-style-type: none"> <li>Section 4 Shade/Light analysis of Three Reference Stadium Roof Design Options</li> </ul>	<p>Relevant to the Roof design.</p> <p>For the purposes of the Design Competition, Participants may assume a 12m transparent zone to the leading edge of the roof (set back from the 100% drip line position).</p>
Pedestrian and Life Safety Planning Study	<ul style="list-style-type: none"> <li>Whole Report</li> </ul>	<p>Relevant to the Public Realm design.</p> <p>The general requirement is for a clear circulation and security width of 15m to be maintained to all sides of the stadium.</p>
Acoustic Report	<ul style="list-style-type: none"> <li>SFSR Stadium Envelope Specifications</li> <li>Whole Report</li> </ul>	<p>Relevant to the Roof and Façade design.</p> <p>Definition of the model that has been used for the Acoustic analysis for Planning. In particular, the north façade needs to be used as a barrier to concert and event noise from the stadium to sensitive receivers in Paddington.</p>
Civil, Stormwater and flooding Report	<ul style="list-style-type: none"> <li>Sections 1 to 4</li> </ul>	<p>Relevant to the Public Realm design.</p> <p>The levels proposed in the Reference Design limit overland flow impacts on the site and neighboring land. Moore Park road frontage requires a wall for part of the length to limit overland flow from Moore Park Road entering the site.</p>
Public Realm Reference Design Report	<ul style="list-style-type: none"> <li>Whole Report</li> </ul>	Relevant to the Public Realm design.
Reference	<ul style="list-style-type: none"> <li>Precinct plans</li> </ul>	Relevant to the Roof, Façade and

Design Architectural Documentation	<ul style="list-style-type: none"> <li>• Stadium plans</li> <li>• Sections</li> <li>• Elevations</li> <li>• Extracts from the architectural design report</li> <li>• Competition scope sketches</li> </ul>	Public Realm design.
Structural report	<ul style="list-style-type: none"> <li>• Section 6.5 Façade</li> <li>• Section 7 Roof Structure</li> <li>• Section 8 Concourse Perimeter</li> </ul>	Relevant to the Roof, Façade and Public Realm design.
3D Model	All	<p>Relevant to the Roof, Façade and Public Realm design.</p> <p>3D combined model of the reference design and precinct (topography, context and planning envelope).</p> <p>The key parent layers are:</p> <ul style="list-style-type: none"> <li>• Structure – internal structure excluding façade and roof.</li> <li>• Bowl – seating bowl and vomitories.</li> <li>• Façade – façade and associated structure.</li> <li>• Programme – internal program excluding circulation.</li> <li>• Roof – roof structure including 4 supporting columns</li> <li>• SFS Exhibition Model – planning model including the Loose Fit Envelope.</li> <li>• Site – reference design site.</li> <li>• VT – internal vertical transport.</li> </ul> <p>Note the reference design has assumed that that lifts are contained in the 4 roof supporting columns. Participants can remove these lifts as part of their design.</p>

## 12.2 Stage 1 SSDA Reports

Note the below reports are extracts only. The full Stage 1 SSDA reports are included in Appendix 1.

Report	Sections relevant to Design Competition	Comments
Urban Design Guidelines	<ul style="list-style-type: none"> <li>Section 7.2 Built Form Strategy</li> <li>Section 7.3 Public domain strategy</li> <li>Section 8 Guidelines</li> </ul>	Relevant to the Public Realm design.
Transport Report	<ul style="list-style-type: none"> <li>Section 4 Operational Transport Assessment</li> <li>Section 5 Travel Demand Management</li> <li>Section 7 Summary of Key Findings</li> </ul>	Relevant to the Public Realm design.
ESD Report	Whole report	Relevant to the Roof, Façade and Public Realm design.
Heritage Impact Statement	Section 9 Assessment of Heritage Impacts Section 10 Conclusions and Recommendations	Primary impact is Busby's bore which is below the site.
Arborist Report	Section 5- New Tree Plantings	Relevant to the Public Realm design.

### **13.0 Assessment Criteria**

Infrastructure NSW And the Competition Jury will utilise the following criteria to assess Submissions:

#### **13.1 Compliance with Planning Objectives**

- Section 6.21 of the Sydney Local Environmental Plan 2012;

#### **13.2 Design and Competition Objectives**

Requirements outlined in Section 7 and 8 of this brief in relation to:

- Public Realm
- Roof
- Façade
- The Project Brief and Reference Design
- The Principles included in *Better Placed*; and
- Section 8 of the Urban Design Guidelines.

#### **13.3 Commercial Scope**

- Cost
- Constructability

Note: Submissions that fail to meet a 5/10 score for commercial scope may not be considered at the discretion of the Competition Jury.

## **Appendix 1- Stage 1 SSDA Documents**

### **Sydney Football Stadium- Environmental Impact Statement**

- Appendix A- Secretary's Environmental Assessment Requirements
- Appendix B- Site Survey
- Appendix C- Urban Design Guidelines
- Appendix D- Design Excellence Strategy
- Appendix E- Construction (Demolition) Management Plan
- Appendix F- Arboricultural Impact Assessment
- Appendix G- Consultation Outcomes Report
- Appendix H- Visual Impact Assessment
- Appendix I- Wind Considerations for Stadium Design
- Appendix J- Transport Impact Assessment
- Appendix K- Noise and Vibration Impact Assessment
- Appendix L- Heritage Impact Assessment
- Appendix M- Archaeological Assessment
- Appendix N- ESD Strategy and Statement
- Appendix O- Social and Economic Impact Assessment
- Appendix P- Stormwater and Flooding Report
- Appendix Q- Biodiversity Development Assessment Report
- Appendix R- Security Principles Report
- Appendix S- Phase 1 Contamination Assessment
- Appendix T- Groundwater Assessment Report
- Appendix U- Infrastructure Management Strategy

## **Appendix B- DP&E Endorsement of CDAR**



David Riches  
Head, Projects NSW  
Infrastructure NSW  
PO Box R220  
Royal Exchange NSW 1225

Our ref: SSD 9249

-via email  
Micmoliver@ethosurban.com

Dear Mr *David* Riches,

**Sydney Football Stadium Redevelopment Concept Proposal and Stage 1 (SSD 9249)  
Conditions B4, B5, B6 and clause 4.3 of the City of Sydney Competitive Design Policy**

I refer to the Competitive Design Alternatives Report (CDAR) submitted to the Department on 21 May 2019 to address the requirements of conditions B4, B5, B6 and clause 4.3 of the City of Sydney Competitive Design Policy.

**Condition B4 of Schedule 2 – Submission of the CDAR**

The Government Architect NSW (GANSW) and the Department have reviewed the CDAR and considers that it satisfies conditions B4(a) – B4(e).

**Condition B5 of Schedule 2 – Signature of Panel Members**

The Department notes that the CDAR is signed by the members of the panel responsible for selecting the winning design through the Competitive Design Alternatives Process. This satisfies the requirement of condition B5.

**Condition B6 of Schedule 2 – Submission of the document and endorsement**

The CDAR was presented to the CCC and the comments have been included. This complies with the requirements of conditions B6a) and B6c).

You have requested that the requirement for lodgement of the CDAR to the Department six weeks prior to the lodgement of a future development application (B6b), be waived. The Department agrees to this request as sufficient time has been provided to the Department to review the CDAR.

The Department also notes that the CDAR includes an overview of the Competitive Design Alternatives Process and the assessment by the panel of the design merits of each alternative design. In accordance with clause 4.3(3), the Department endorses the competitive design alternatives process and the outcome as it is generally in accordance with clause 4.1 of the City of Sydney Competitive Design Policy.

Your contact officer for this proposal is Aditi Coomar who can be contacted on (02) 82172097 or via email at [aditi.coomar@planning.nsw.gov.au](mailto:aditi.coomar@planning.nsw.gov.au). Please mark all correspondence regarding the proposal to the attention of the contact officer.

Yours sincerely,

David Gainsford  
**Executive Director**  
**Priority Projects**  
**As nominee of the Secretary**

*12/6/19.*