Sydney Football Stadium Precinct Village and Carpark Redevelopment 07/09/2021

SSD 9835 Sydney Football Stadium Redevelopment Section 4.55 Modification

Prepared for

Infrastructure NSW

Melbourne
L2, 616 St Kilda Road
Melbourne, VIC 3000
P (03) 9230 5600

Sydney
L4, 73 Walker Street
North Sydney, NSW 2060
P (02) 8404 4210

Brisbane
L10/490 Upper Edward Street
Spring Hill, QLD 4000
P (07) 3831 3300

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Prepared By	Bronte Bishop

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Contents

1 Introduction

On 6 December 2018, the then Minister for Planning approved a concept development application and concurrent early works package (SSD 9249) to facilitate redevelopment of the Sydney Football Stadium.

The concept approval established the maximum building envelope, design and operational parameters for a new stadium with up to 45,000 seats for patrons and allowing for 55,000 patrons in concert mode. The concurrent Stage 1 works, which were completed on 28 February 2020, facilitated the demolition of the former SFS and associated buildings.

Stage 2 of the Sydney Football Stadium (SFS) Redevelopment (SSD 9835) was approved by the Minister for Planning and Public Spaces on 6 December 2019. Stage 2 provides for:

- construction of the stadium, including:
  - 45,000 seats (additional 10,000 - person capacity in the playing field in concert mode) in four tiers including general admission areas, members seating and corporate / premium seating;
  - roof cover over all permanent seats and a rectangular playing pitch;
  - a mezzanine level with staff and operational areas;
  - internal pedestrian circulation zones, media facilities and other administration areas on the seating levels;
  - a basement level (at the level of the playing pitch) accommodating pedestrian and vehicular circulation zones, 50 car parking spaces, facilities for teams and officials, media and broadcasting areas, storage and internal loading areas;
  - food and drink kiosks, corporate and media facilities; and
  - four signage zones.
- construction and establishment of the public domain within the site, including:
  - hard and soft landscaping works;
  - publicly accessible event and operational areas;
  - public art; and
  - provision of pedestrian and cycling facilities.
- wayfinding signage and lighting design within the site;
- reinstatement of the existing Moore Park Carpark 1 (MP1) upon completion of construction works with 540 at-grade car parking spaces and vehicular connection to the new stadium basement level;
- operation and use of the new stadium and the public domain areas within the site for a range of sporting and entertainment events; and
- extension and augmentation of utilities and infrastructure.

SSD 9835 has been modified on five previous occasions:

- MOD 1 amended Conditions B14 and B15 to satisfy the regulatory requirements of the Contaminated Land Management Act 1997;
- MOD 2 approved the design, construction and operation of the Stadium Fitness Facilities;
- MOD 3 approved design refinements to the western mezzanine and introduced a new condition to facilitate approval of signage details within the approved signage zones;
- MOD 4 relocated the approved photovoltaic array from the SFS roof to the Level 5 plant room roofs and revised the approved sustainability strategy; and

- MOD 5 updated plan references and dates in the Instrument of Consent.

A sixth modification which seeks approval for the fit out and operation of the SFS' eastern mezzanine for the Sydney Roosters Centre of Excellence (MOD 6) is anticipated to be exhibited shortly.

2 Precinct Village and Car Park

2.1 Vision

Venues NSW (VNSW) is proposing to introduce a village community space, event plaza and multi level car park to complement the SFS and adjoining Moore Park and Centennial Parklands. The proposed development will facilitate the permanent closure of the EP2 on-grass parking areas within Moore Park opposite the MP1 car park and enable its use for open space purposes consistent with the Moore Park Masterplan.

The vision for the Precinct Village and Car Park is set out below:

> *The Precinct Village and Car Park provides a platform and canvas for an exceptional community asset and iconic design, that visually and physically connects to the adjacent Moore Park East and Kippax Lake. It provides patrons with quality café and dining experiences in an idyllic parkland setting and well-being play and relaxation nodes which engage with all ages. An event plaza, connected to the Stadium plaza provides a seamless opportunity for greater patron and community engagement through non-event and event day functions* (Architectural Design Statement, Cox August 2021).

2.2 Location

The Precinct Village and Car Park is proposed to be located on the land west of the SFS, currently approved under SSD 9835 as the MP1 Car Park. It will extend to Moore Park and Driver Avenue and will adjoin the existing UTS, Rugby Australia and NRL Central buildings, all of which are to be retained and do not form part of the project site. A Location Plan is provided at Figure 1.

Figure 1- Precinct Village and Carpark Location

2.3 Development Description

The Precinct Village and Car Park has been designed to align with the conditions and commitment established within SSD 9835, particularly relating to delivering a LEED Gold rated sustainable precinct, and will include:

- Up to a maximum of 1,500 space multilevel carpark below ground level with the following access arrangements:
  - 1 x egress point onto Moore Park Road to be used on event days only;
  - 1 x two-lane access point from Driver Ave to be used on event and non-event days; and
  - dedicated area within the car park for operation/servicing vehicles.
- Reconfiguration of the currently approved drop off requirements for the elderly and mobility impaired.
- Free flow level pedestrian access to and from the SFS concourse from Driver Ave and Moore Park Road.
- Electric car charging provision.
- A versatile and community public domain, comprising:
  - provision for 4 x north-south orientated tennis courts on non-event days with the potential to become an event platform on event days;
  - children's playground;
  - 1,500m^2 cafe / retail / restaurants with associated amenities in a single storey pavilion (6 metre) low level;
  - customer service office and ticket window; and
  - vertical transport provisions.
- Utilities provision augmentation.

Figure 2 illustrates the proposed Precinct Village and Car Park concept. Refer to the architectural within the Architectural Design Statement (Cox, August 2021) and landscape plans (Aspect, August 2021) for further details.

Figure 2 - Precinct Village and Car Park Development

2.4 Event and Activity Types

The Precinct Village is proposed to be curated as a series of distinct, flexible and purpose specific settings for event day patrons and the general public. These inviting public places will offer rich, engaging and shared experiences.

Condition A17 of the SSD 9835 already permits the use of the public domain areas outside the stadium footprint for use by the public for a range of events and activities. These include gathering spaces, organised temporary activities or event days, amenities, circulation purposes and active and passive outdoor recreational activities. The activities and events proposed within the Precinct Village are consistent with those approved under Condition A17.

For the purposes of this Section 4.55(2) modification, the following provides an ***indication*** of how the Precinct Village may be activated on event and non-event days. Consistent with Condition A18, the use of the public domain areas within the Precinct Village on event days will be documented in the Event Management Plan currently under preparation and required to be approved by the Planning Secretary.

Consent for any stand-alone events (particularly on non-event days) that are not captured by Conditions A17 and the Event Management Plan will be subject of a separate future approval.

	Event Days	Non-Event Days
Gathering spaces	• Live site for sold out events to encourage general public to enjoy the atmosphere • Merchandise vans and marquees selling event and team merchandise	• Informal gatherings/picnics by families and small groups • Garden style chairs and umbrellas

Organised temporary activities/events	• Pop up bars/tents/marquees • Mobile vans, ball kicking/hitting zone, etc • Marquees including stand up cash bar, cocktail style functions, or more formal sit down style functions involving internal AV and big screens • Accreditation/Media/Volunteer Centre and Ticket Collection facilities	• Markets and stalls (e.g.: farmers market, book fair, etc)
Amenities and circulation purposes	• Cloaking area for concert and event patrons • Queuing/holding area for concerts allowing patrons who wish to arrive early to secure premium positions (e.g.: front of the stage) to enjoy the Precinct • Potential for public announcements/music	• Potential for public announcements/music
Active and passive outdoor recreational activities	• Tennis court use (organised events)	• Tennis court use (general public and personal training sessions for use by Stadium Fitness Facilities members) • Children play, sitting & eating, recreation (kicking footy, etc)

2.5 Hours of Operation

The Precinct Village is proposed to be accessible from 8am to 11pm to align with the approved operating hours for the SFS.

The tennis court operating hours are proposed to be the same as the approved operating hours for the Stadium Fitness Facilities.

The car park will be automated, replicating the existing arrangements at the nearby Entertainment Quarter and will be accessible 24 hours a day, 7 days a week.

2.6 Delivery

The Precinct Village and Car Park is proposed to be delivered in two stages:

> Stage 1, herein referred to as the East Car Park, consists of the area between the Rugby Australia and NRL Central buildings, immediately adjacent to the SFS concourse.

> Stage 2, herein referred to as the West Car Park, consists of the residual area immediately adjacent to the proposed East Car Park, bounded by Driver Ave and Moore Park Road.

The East Car Park is proposed to be delivered ahead of the opening of the SFS in 2022. The West Car Park is proposed to be delivered after the SFS opening, sometime in 2023.

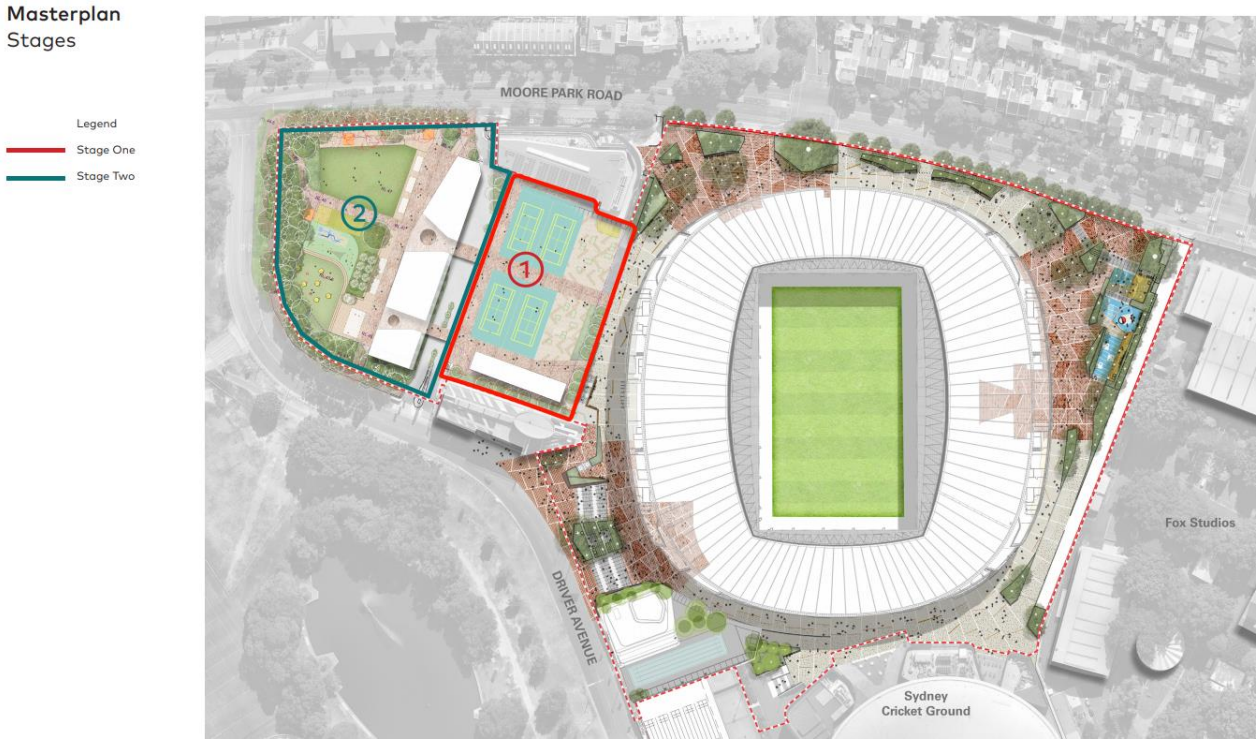


Figure 3 - Precinct Village and Car Park Stages

3 Proposed Modifications

To facilitate the Precinct Village and Car Park, SSD 9249 and SSD 9835 are required to be modified. The proposed modification to SSD 9249 (concept development application) has been submitted under separate cover. SSD 9835 is proposed to be modified to facilitate construction, fit-out and operation of Precinct Village and Car Park as described above.

4 Purpose of this Report

This ESD Report has been prepared to support the Precinct Village and Car Park modification This Report specifically addresses the following Secretary's Environmental Assessment Requirements (SEARs) issued in respect of SSD 9825 and as relevant to the Precinct Village and Car Park project:

Secretary's Environmental Assessment Requirements	Report Section
SEAR 2 Policies	Section 6
SEAR 14 Ecologically Sustainable Development	Section 7
SEAR 15 Environmental Risk	Section 8
SEAR 16 Design for Resilience to Climate Change	Section 9

This ESD Report is to be read in conjunction with the following reports and documents:

- Planning Statement prepared by Ethos Urban (August, 2021);
- Architectural plans/elevations/sections and Architectural Design Statement, prepared by Cox Architecture (August, 2021);
- Design Integrity Assessment Report prepared by Cox Architecture (August, 2021);
- Landscape plans and Landscape Design Report prepared by Aspect (August, 2021);
- Transport Assessment prepared by JMT (August, 2021);
- Noise and Vibration Assessment prepared by Arup (August, 2021);
- Stormwater and Flooding Assessment prepared by Arup (August, 2021);
- Visual Impact Assessment prepared by Ethos Urban (August, 2021);
- Social/Economic Statement prepared by Ethos Urban (August, 2021);
- Heritage Impact Statement prepared by Artefact (August, 2021);
- Sustainability Assessment prepared by LCI (August, 2021);
- Security Statement/CPTED prepared by Intelligent Risks (August, 2021);
- Contamination Assessment prepared by Douglas Partners (August, 2021);
- Arboricultural Assessment prepared by Tree IQ (August, 2021);
- Wind Assessment prepared by Arup (August, 2021);
- Infrastructure Services Strategy prepared by Arup (August, 2021);
- Geotechnical Assessment prepared by Arup (August, 2021);
- Public Domain Lighting Assessment prepared by Arup (August, 2021);
- Accessibility Statement prepared by Before Compliance (August, 2021); and
- BCA Assessment prepared by Blackett Maguire Goldsmith (August 2021).

5 Assessment Requirements

The following SEARs and Conditions of Consent were the requirements for Stage 2 of the Sydney Football Stadium (SFS) Redevelopment (SSD 9835). These requirements have been applied to the Precinct Village and Carpark modifications.

5.1 SEARs

The Department of Planning, Industry and Environment issued Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for SFS when the SSD DA was first being prepared. This report has been prepared having regard to the SEARs as follows:

- **SEAR 2 | Policies**

  Address the relevant planning provisions, goals and strategic planning objectives in the following:

  - NSW Energy Efficiency Action Plan
  - NSW Resources Efficiency Policy (GREP)
  - Sustainable Sydney 2030

- **SEAR 14 | Ecologically Sustainable Development (ESD)**

  - Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development.
  - Demonstrate how the future development will be designed to achieve LEED rating using the previous stadium as the "reference building" for the assessment or any other equivalent sustainability rating tool as listed in section 5.3 of the Sydney Football Stadium Redevelopment Environmentally Sustainable Design Strategy prepared by Aurecon dated 11 May 2018 (SSD 9249).
  - Undertake an analysis of the likely service demands for drinking water, wastewater and recycled water services and outline the Integrated Water Management principles detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design. This should include preliminary details of sustainability initiatives that will minimise/reduce the demand on supplies.
  - Address the implementation of water sensitive urban design and energy conservation and efficiency measures, including sizing of key elements. Measures could include (but not be limited to):
    - Rainwater harvesting and re-use;
    - Water efficient fixtures;
    - Installation of rooftop solar photovoltaic arrays for on-site electricity generation;
    - Storage of surplus energy generated by rooftop solar photovoltaic arrays; use of electric vehicles for dedicated on site transport tasks (where possible); and energy efficient electrical equipment, fittings and fixtures.

- **SEAR 15 | Environmental Risk**

  Include preliminary consideration of the management of environmental risks to all persons utilising the future facility, including but not limited to:

  - Extreme heat
  - Storms and flooding
  - Terror attacks (not relevant to this report)
  - Building performance and mitigation of climate change, including consideration of Green Star performance

- **SEAR 16 | Design of Resilience to Climate Change**

  Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impact of climate change. Specifically:

  - Hotter days and more frequent heatwave events
  - Extended drought periods
  - More extreme rainfall events
  - Gustier wind conditions
  - How these will material selection and social equity aspects (respite/ shelter areas)

5.2 Conditions of Consent

In addition, this report addresses the future assessment requirements set out in Schedule 2 Part B of the State Significant Development Consent SSD 9249 and SSD 9835 in Table 1.

Table 1: Conditions of Consent for SFSR

Condition for SSD 9249	Section in Report
C1c(v) The future development application must demonstrate design excellence having regard to the following matters: v) the achievement of the principles of ecologically sustainable development	**Section 10**
C27 The future development application must include a detailed report which address the key principles and recommendations identified in the Sydney Football Stadium Redevelopment Environmentally Sustainable Design Strategy prepared by Aurecon dated 2018 have been incorporated in principle into the design, construction and on-going operation of the new buildings.	**Section 10**
C28 The future development application must include the results of a whole of life assessment (Life Cycle Assessment) undertaken to identify material impacts and opportunities for improvement, in accordance with the Response to Submissions. The report must identify, the extent to which sustainability measures have been incorporated to address any identified hotspots informed by the whole of life assessment.	**Section 10**
C29 The future development application must include a report identifying the extent to which the proposal can comply with the greenhouse gas, energy and carbon targets identified in Sustainable Sydney 2030.	**Section 10**
C30 The future development application must include a report which addresses how the proposed development is capable of achieving Gold Leadership in Energy and Environmental Design (LEED) rating using the existing stadium as the “reference building” for the assessment or any other equivalent sustainability rating tool as listed in section 5.3 of the Sydney Football Stadium Redevelopment Environmentally Sustainable Design Strategy prepared by Aurecon dated 2018.	**Section 10**

C31 The future development application is required to address the implementation of water sensitive urban design and energy conservation and efficiency measures, including but not limited to: a) rainwater harvesting and re-use; b) water efficient fixtures; c) installation of rooftop solar photovoltaic arrays for on-site electricity generation; d) storage of surplus energy generated by rooftop solar photovoltaic arrays; e) use of electric vehicles for dedicated on site transport tasks (where possible); and f) energy efficient electrical equipment, fittings and fixtures.	**Section 10**
Condition for SSD 9835	**Section in Report**
B20 Prior to the commencement of construction of the stadium structure above the concourse level, the Applicant must: a) prepare a revised ESD report and associated design plans in consultation with the Planning Secretary including: (i) details of the proposed ESD measures that would be incorporated into the final design and how these would achieve the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate; (ii) details to demonstrate that the chosen ESD measures are consistent with the those identified in the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019; (iii) details to demonstrate that a 350kWp Photovoltaic system will be installed on the roof of the stadium and any provisions for storage of the energy from the solar panels to offset the night time / peak usage; (iv) a detailed Whole-of-Life Assessment to identify opportunities to reduce the carbon emissions across the life of the project including the materiality recommendations in accordance with Appendix B of the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019; (v) a Life Cycle Analysis that shows how climate, energy and water risks and opportunities have been identified and how the design of the stadium has incorporated these opportunities and / or mitigated risks; (vi) details of opportunities to use alternatives to standard concrete mixes that reduce carbon emissions associated with Portland cement, including opportunities for replacement of Portland cement with Geopolymer concrete for roadways and paths, or where the Portland cement content in concrete used is reduced by replacing it with supplementary cementitious materials; (vii) details to identify how the construction and operation of the project will incorporate the opportunities in condition B20e(viii); and b) include a review of the proposed ESD measures by a suitably qualified consultant and a statement certifying that the design is capable of	**Section 10**

	incorporating the identified ESD measures and achieving the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate.	
c)	c) submit the revised ESD report, the design plans, the Planning Secretary's comments / advice and the review of the proposed ESD measures to the Certifying Authority for approval, prior to the construction of the stadium structure above the concourse level.	

6 SEAR 2 | Policies

6.1 NSW Energy Efficiency Action Plan

The NSW Energy Efficiency Action Plan (EEAP) was developed in 2013 as means to contend with current and future increases in energy costs in NSW. The plan includes targets and actions to:

- Realise annual energy savings of 16,000GWh by 2020
- Support 220,000 low income households to reduce energy use by up to 20% by 2014 (not applicable as the project is not a residential development)
- Deliver high standard building retrofit programs so 50% of NSW commercial floor space achieves a 4-Star NABERS energy and water rating by 2020 (not applicable as the project is not a commercial office development)

6.1.1 Contribution to the EEAP by SFSR and Precinct Village and Carpark

The Sydney Football Stadium Redevelopment including the Precinct Village and Carpark development provides energy savings strategies to help achieve the 16,000GWh reduction target and contributes to the overall outcome of the EEAP. This will be done by reducing energy consumption and improving energy efficiency through:

- Incorporating energy efficiency measures through building fabric and services to meet and exceed National Construction Code (NCC) Section J requirements;
- Committing to achieving a 16% reduction in energy, as per the LEED v4 Gold targets for the SFSR

6.2 NSW Government Resources Efficiency Policy (GREP)

The NSW Government Resources Efficiency Policy (GREP) outlines specific requirements for the EEAP.

The GREP aims to reduce the operating costs of the NSW government through efficient use of resources; particularly energy consumption, water consumption and waste management.

The measures and targets within the GREP that are relevant to the Sydney Football Stadium are provided in Table 2. How these measures are achieved by the SFSR and Precinct Village and Carpark are also included.

Table 2: GREP Measures met by the SFSR design

GREP Measure	Description	Contribution from Precinct Village and Carpark
Energy		
E1: Targets to undertake energy efficiency projects	All clusters will undertake energy efficiency projects at sites representing 90% of their billed energy use by the end of 2023–24, with an interim target of 55% for Health and 40% for other clusters by the end of 2017–18.	As the Precinct Village and Carpark is a 'new building' this measure will be met by addressing measure E4: Minimum standards for new buildings. The stadium is targeting a LEED Gold rating which includes the Precinct Village and Carpark.
E3: Minimum standards for new electrical appliances and equipment	All new electrical equipment purchased by the government must meet minimum energy efficiency ratings.	Selection of electrical equipment will meet minimum energy efficiency ratings to comply with NCC and/or LEED. Final equipment selection will be addressed during detailed design.

E4: Minimum standards for new buildings	New buildings must be designed and built so that energy consumption is predicted to be at least 10% lower than if built to minimum compliance with National Construction Code requirements.	The Precinct Village and Carpark is committed to achieving a high level of energy efficiency and is committed to exceeding this target. This measure will be addressed during detailed design.
E6: Minimum fuel efficiency standards for new light vehicles	Improve minimum fuel efficiency standards for new light vehicles	Required to provide 5% of parking spaces for green vehicles and 2% for electric vehicle charging; as per LEED Appendix A.
E7: Purchase 6% GreenPower	Purchase a minimum of 6% GreenPower.	Purchase of GreenPower is part of the Stadium and Precinct Village and Carpark's LEED strategy as shown in Appendix A.
Water		
W1: Report on water use	All agencies will report on water use.	Extensive water meter and monitoring system is proposed for the Precinct Village and Carpark including and major end uses of energy in the carpark. The monitoring system will have the capability to report on water uses.
W3: Minimum standards for new water-using appliances	All new water-using appliances, shower heads, taps and toilets purchased by agencies must achieve specified levels of water efficiency.	The Precinct Village and Carpark is committed to achieving a high level of water efficiency with a minimum 4 star WELS requirement for all amenity fixtures and fittings. This measure is addressed in the Stadium and Precinct Village and Carpark's LEED strategy as shown in Appendix A.
Waste		
P1: Report on top three waste streams	All agencies will report on their top three waste streams by total volume and by total cost.	The Precinct Village and Carpark will have dedicated waste facilities that will be designed to facilitate effective waste management during operation.
Clean Air		
A2: Low-VOC surface coatings	All surface coatings will comply with the Australian Paint Approval Scheme (APAS) where fit for purpose	The Precinct Village and Carpark is committed to achieving excellent indoor environmental quality. This measure is addressed in the Stadium's LEED Strategy as shown in Appendix A.

6.3 Sustainable Sydney 2030

In 2008, in response to extensive community consultation, the Council of the City of Sydney adopted the Sustainable Sydney 2030 plan that would express sustainable development for Sydney in 2030 and beyond.

The vision set by the plan is for Sydney in 2030 to be green, global and connected. The city will reduce greenhouse gas emissions; attract global talent and investment; provide ease of access between communities; and encourage diversity and inclusiveness.

The ten targets for 2030 from the Sustainable Sydney 2030 plan are:

1. 70% reduction in greenhouse gas emissions based on 2006 levels by 2030 and by 2050, achieve a net zero emissions city.
2. 50% of electricity demand met by renewable sources; zero increase in potable water use from 2006 baseline, achieved through water efficiency and recycled water; total canopy cover increased by 50% from 2008 baseline
3. There will be at least 138,000 dwellings in the city (including 48,000 additional dwellings compared to the 2006 baseline) for increased diversity of household types, including greater share of families.
4. 7.5% of all city housing will be social housing, and 7.5% will be affordable housing, delivered by not-for-profit or other providers.
5. The city will contain at least 465,000 jobs (including 97,000 additional jobs) compared to the 2006 baseline) with an increased share in finance, advanced business services, education, creative industries and tourism sectors.
6. Trips to work using public transport will increase to 80%, for both residents of the city and those travelling to the city from elsewhere.
7. At least 10% of total trips made in the city are by bicycle and 50% by pedestrian movement.
8. Every resident will be within reasonable walking distance to most local services, including fresh food, childcare, health services and leisure, social, learning and cultural infrastructure.
9. Every resident will be within a 3-minute walk (250 m) of continuous green links that connect to the harbour foreshore, harbour parklands, Moore or Centennial or Sydney parks.
10. The level of community cohesion and social interaction will have increased based on at least 65% of people believing most people can be trusted.

6.3.1 Precinct Village and Carpark's Contribution to the Sustainable Sydney 2030

The Precinct Village and Carpark will help realise the Sustainable Sydney 2030 plan as outlined in Table 3.

Table 3: Sustainable Sydney 2030 goals met through Precinct Village and Carpark

Sustainable Sydney 2030 Goals	Contribution from the Precinct Village and Carpark
70% reduction in greenhouse gas emissions based on 2006 levels by 2030 and by 2050, achieve a net zero emissions city	The Precinct Village and Carpark will contribute to the LEED Gold energy requirements, as per Appendix A by reduced peak electricity demand measures, potential purchasing GreenPower or carbon offsets, high energy efficiency HVAC plant equipment and electrical equipment.
50% of electricity demand met by renewable sources; zero increase in potable water use from 2006 baseline, achieved through water efficiency and recycled water; total canopy cover increased by 50% from 2008 baseline	Potential purchasing GreenPower or carbon offsets. High efficiency water fixtures and provision of a rainwater capture and reuse system where applicable.

At least 10% of total trips made in the city are by bicycle and 50% by pedestrian movement	Provision of pathways to interconnect with surrounding pedestrian and cyclist networks. Cycling to and from the Precinct Village and Carpark is encouraged through cyclist parking and end-of-trip facilities for staff.

7 SEAR 14 | Ecologically Sustainable Development (ESD)

7.1 Clause 7(4) of Schedule 2

The ESD principles that are to be incorporated into the proposed development must be aligned with Clause 7(4) – Schedule 2 – Environmental Planning & Assessment Regulation (2000).

7.1.1 The Precautionary Principle

The proposed development will be constructed on a previously developed site. This will not have an adverse environmental impact and therefore alleviates concern of serious or irreversible environmental damage. Proactive measures to prevent environmental degradation have been included within the design, construction and operational phases of the proposed development. During the design and construction phases the main contractor will implement an Environmental Management System that follows NSW Environmental Management System Guidelines. Throughout the building's operation adherence to procedures that account for environmental risk and mitigation measures will be met.

7.1.2 Inter-Generational Equity

To uphold inter-generational equity, the proposed development minimises the consumption of energy and water resources while reducing waste.

The ESD principles incorporated into the proposed development facilitates the conservation of energy and water resources through energy and water efficiency measures. Energy consumption will be less than a similar building as proven through a minimum 5% improvement above ASHRAE 90.1-2010 standards and a minimum 10% improvement above NCC 2019 requirements. The reduction in water use has been established through high WELS equivalent water fixtures and fittings.

Waste generated during the construction and operational phases will be diverted from landfill to be recycled. An Environmental Management System (EMS) will be established and adhered to throughout construction. Operational waste streams will be separated to maximise recycled waste.

Reducing energy, water and waste ensures that the health, diversity and productivity of the environment is maintained for the benefit of future generations.

7.1.3 Conservation of Biological Diversity and Ecological Integrity

The surrounding area of the Precinct Village and Carpark is a mixture of existing buildings, parklands and roads. However, the project will be constructed on a previously developed site without disturbing surrounding areas. As a result, the project will have negligible impact to the surrounding biodiversity and ecological integrity.

The project's ESD principles to reduce energy, water and waste consumption have an indirect impact to conserve biodiversity and ecological integrity to the surrounding area. By minimising demand on energy and water resources, the need for land-clearing and the pollution generated from new utility infrastructure to support the surrounding area will be minimised.

7.1.4 Improved Valuation

The valuation of the project's assets and services consider environmental factors through the implementation of various ESD initiatives. An Environmental Management System will be adhered to during construction to ensure

that contractors are responsible for costs associated with generating excessive pollution and waste. The project team will bear the extra cost of providing recycling and landfill waste streams during construction and operational phases. This creates a system where the polluter pays and creates and incentive to reduce pollution and waste.

The establishment of NCC and LEED requirements provides environmental goals for the project. Project requirements stipulate design teams are contractually required to deliver energy efficient building services which provide a minimum 5% improvement above ASHRAE 90.1-2010 standards. A LEED v4 certified Gold rating target provides a goal for environmentally sustainable building design which is comparable with other LEED certified stadiums across the world. As a part of the broader Sydney Football Stadium Redevelopment Project, the Precinct Village and Carpark will include relevant LEED initiatives that will support achieving the targeted Gold rating for the overall precinct.

7.2 Framework to Reflect Best Practice Sustainable Design Principles

7.2.1 Leadership in Energy and Environmental Design (LEED)

The Sydney Football Stadium Redevelopment (SFSR) has committed to achieving a LEED v4 certified Gold rating. The Leadership in Energy and Environmental Design (LEED) rating system provides a framework to assess how a building reduces its impact on the environment while meeting the economic and social needs for its occupants and surrounding communities. The Village precinct and Carpark will target a LEED Gold v4 rating, either as part of the Stadium LEED rating or as an independent review as per overall project timeframes. The targeted credits established by the Stadium and Fitness Facility will be adhered to for the Precinct Village and Carpark, as per Appendix A.

The LEED rating system assessing buildings through the following categories:

- Integrative Process
- Location and Transport
- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environment Quality
- Innovation
- Regional Priority

Points are awarded for a building project's ability to secure as many credits from each category. Each credit targets the environmental impact of a specific design feature. The total number of points awarded determines if the project earns a LEED Certified, Silver, Gold or Platinum rating as shown in Figure 4.

Figure 4: Available LEED Certification ratings

7.2.2 Sustainable Design Principles at SFSR, Stadium Club and Precinct Village and Carpark

The following sustainable design principles have been proposed for the SFSR, including the Precinct Village and Carpark and can be addressed through the categories outlined within the LEED v4 rating system.

- **Location and Transport**
    - Commitment to the provision of cyclist parking and end-of-trip (EOT) facilities for staff
    - Commitment to the provision of cyclist parking and EOT for staff
    - Commitment to allocating spatial capacity for electric vehicle supply equipment for 2% of all parking by the project
    - Commitment to allocating spatial capacity for green vehicle preference for 5% of all parking by the project

  LEED v4 captures these requirements through the following credits:

    - Bicycle Facilities
    - Green Vehicles

- **Sustainable Sites**
    - Commitment to ensuring 95% of new vegetation to be native to the Australian bioregion
    - Heat Island Effect to be minimised through a light-coloured roof and paving, landscaping and shaded areas
    - Commitment to ensuring stormwater peak event discharge to not exceed predevelopment levels
    - Commitment to ensuring stormwater pollution targets are in accordance with the Construction Best Practice standards for urban stormwater quality published by the CSIRO/ Victoria Stormwater Committee
    - Testing of contamination in soil and ground water. Remediation to take place if required

  LEED v4 captures these requirements through the following credits:

    - Heat Island Effect
    - Rainwater Management
    - Site Development- Protect or Restore Habitat
    - Open Space

- **Water Efficiency**
    - In general, maximise operational water efficiency
    - Commitment to providing non-potable water supply through rainwater harvesting and/or bore water supply
    - Commitment to 100% reduction in irrigation demand
    - Commitment to 50% reduction in indoor water demand
    - Where possible, additional non-potable water supply for the purposes of toilet flushing, maintenance wash-down and general cleaning purposes
    - Temporary storage for 80% of the routine fire protection system test water and maintenance drain-downs for reuse on site.

  LEED v4 captures these requirements through the following credits:

    - Outdoor Water Reduction
    - Indoor Water Reduction
    - Water Metering

- Cooling Tower Water Use

- **Materials and Resources**

  - In general minimising the impact on the environment during both construction and operational phases
  - In general minimising construction and demolition waste
  - Commitment to 90% of all demolition and construction waste will be diverted from landfill for recycling

LEED v4 captures these requirements through the following credits:

  - Building Life-cycle Impact Reduction
  - Storage and Collection of Recyclables
  - Construction and Demolition Waste Management

- **Energy**

  - In general, maximise operational energy efficiency and limiting overall greenhouse gas emissions.
  - High efficiency HVAC plant and light fittings
  - On-site photovoltaic system

LEED v4 captures these requirements through the following credits:

  - Optimise Energy Performance
  - Enhanced Commissioning
  - Advanced Energy Metering
  - Demand Response
  - Renewable Energy Production
  - Enhanced Refrigerant Management
  - GreenPower and Carbon Offsets

- **Social Sustainability**

  - An ESD Management Plan will be developed and implemented which address the following issues:
    - Promotion of diversity within the Stadium
    - Modern slavery within the supply chain
    - Community engagement

LEED v4 captures these requirements through the following credits:

  - Pilot Credit: Social Equity within the Supply Chain
  - Pilot Credit: Community Outreach and Involvement

7.2.3 Whole of Life Assessment

The Whole of Life Assessment (WOL) for the Stadium and Fitness Facility is under review with INSW and has been developed in accordance with the LEED Credit: *Building Life-cycle Impact Reduction*. The current WOL report will be updated to include the Roosters Mezzanine and Village Precinct and Carpark, when approved. The final WOL report will include all relevant developments within the SFSR site boundary.

7.3 Water and Energy Management

7.3.1 Water Demand

The likely service demands for drinking water, wastewater and recycled water services will be outlined during Detailed Design by the Hydraulic consultant. Integrated Water Management principles will be included detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design. Preliminary sustainability initiatives for minimises water demand are identified below.

7.3.2 Water Management

- **Efficient Use of Water through Selection of Fittings and Fixtures**

  The flow rates of the proposed fixtures are encouraged but not required to meet minimum flow rates outlined in the LEED Credit: Indoor Water Use Reduction. In addition to the minimum fixture flow rates, LEED stipulates that any Australian project must also have fixtures that meet a minimum 4-star WELS rating; overriding the flow rate minimum requirement. The final fixtures and flow rates will be confirmed during detailed design.

Table 4: Comparison of Flow Rates between Proposed and 'Reference Building' Water Fixtures

Fixture	Minimum Fixture Flow Rate	Proposed Fixture Flow Rate
Dual Flush WC	6.00 lpf	3.50 lpf
Urinals	3.80 lpf	0.80 lpf
Showerheads	9.50 lpm	7.50 lpm

Note: lpf = litres per flush, lpm = litres per minute

- **Native Vegetation**

  New vegetation should be native to the local Australian bioregion where applicable; minimising irrigation demand.

7.3.3 Energy Management

- **Use of electric vehicles for dedicated on site transport tasks**

  The project will provide electric car charging provisions for 2% of public parking capacity, in alignment with the LEED credits targeted in the SFSR submission. On-site transport requirements are not expected to be significant but will likely include the exclusive use of electric ‘golf cart’ style vehicles.

- **Energy Efficient Electrical Equipment, Fitting and Fixtures**

  The project will meet the energy efficiency requirements as stipulated by the NCC 2019 Section J. Lighting to general lighting, stadium lighting and pitch grow lighting will be LED to reduce energy use for lighting.

7.4 Stormwater Assessment

Refer to the Stormwater and Flooding Assessment prepared by Arup (August, 2021).

8 SEAR 15 | Environmental Risk

The occurrence of extreme climate events presents environmental risks to the safety of those who will occupy and use the proposed facility in the future. These risks and corresponding impacts to occupants will be explored in detail during the design phase but some preliminary issues are listed in Table 5.

Table 5: Environmental Risks for Occupants of Precinct Village and Carpark

Environmental Risk	Mitigation Strategies
Extreme Heat	- Shading through landscaping and high thermal performance building fabric will be utilised to mitigate heat discomfort and heat stress in conditioned spaces. A high ratio of replacement planting will contribute to the urban tree canopy - Mechanical system will be designed to provide adequate thermal comfort to occupants and ensure safe operation of equipment during extreme heat
Storms and Flooding	- Refer to Stormwater and Flooding Assessment prepared by Arup (August, 2021);
Building Performance and Mitigation of Climate Change	- The design will incorporate shading and high thermal performance building fabric to mitigate climate change risks (extreme heat) - Energy efficient plant and equipment will be selected to reduce greenhouse gas emissions - A revised Whole-of-Life Assessment will be undertaken for the Precinct Village and Carpark during the detailed design phase to identify opportunities to reduce the carbon emissions across the life of the project.

9 SEAR 16 | Design for Resilience to Climate Change

The project requires design features that will future-proof itself from the anticipated impacts of climate change. NSW and ACT Government Regional Climate Modelling (NARCLiM) has identified the following climate change projections:

1. More hot days and fewer cold nights
2. Increase the number of heatwave events
3. More hot days above 35°C; particularly in Spring and Summer
4. Rainfall will increase in Summer and Autumn and decrease in Winter and Spring
5. Change in rainfall patterns will affect drought and flooding events

These projections will have an impact on operational costs and occupancy comfort and safety. Hotter days with more heatwaves will particularly affect patients and the operation of building services equipment. This will also require higher capacity and operational costs for mechanical services to maintain occupancy comfort. Increased drought events will require provisions to supplement shortages in potable water. Stronger and reinforced façade components will be required to withstand increased rainfall and wind gust events.

The design initiatives in the following table aim to mitigate the effect of future climate change while maximising efficiency in energy, water and material use. These measures should allow the project to meet the difficulties predicted by the CSIRO's climate change projections while maintaining occupancy comfort and operational efficiency.

Table 6: Climate change projections and response initiatives for the Precinct Village and Carpark

Climate Change Projections	Climate Change Design Initiatives
Hotter days and more frequent heatwave events	- Minimise solar heat gain into habitable spaces by utilising low-E glazing - Improve efficiency of mechanical services - Optimise shading devices across façade to reduce summer heat gain from direct sunlight
Extended drought periods	- Investigate use of rainwater capture and storage for reuse similar to the Stadium and Stadium Fitness Facility - Investigate utilise on-site bore water supply to reduce potable water demand for irrigation - Landscaping with native low-water plant species
More extreme rainfall events	- Increase peak stormwater discharge capability - Increase over-flow drainage from site - Maximise the planting of mature trees to prevent soil erosion
Gustier wind conditions	- Reinforced façade and drainage of the building, respite and shelter areas - Improved air filters for mechanical services

10 Compliance with Conditions of Consent

The Mitigation Measures that address the above Conditions of Consent are shown in Table 7.

Table 7: Response to Conditions of Consent for Precinct Village and Carpark

Conditions of Consent for SSD 9249
C1.c.v The future development application must demonstrate design excellence having regard to the following matters: v) the achievement of the principles of ecologically sustainable development **Response** See Section 7.
Condition C27 The future development application must include a detailed report which address the key principles and recommendations identified in the Sydney Football Stadium Redevelopment Environmentally Sustainable Design Strategy prepared by Aurecon dated 2018 have been incorporated in principle into the design, construction and on-going operation of the new buildings. **Response** The key ESD principles outlined in the Aurecon report have been addressed as follows: <u>Energy</u> - <u>High Levels of Efficiency</u> The project including the Precinct Village and Carpark will meet the energy efficiency requirements as stipulated by the NCC 2019 Section J. The LEED pathway for the project is targeting at least 5 points under the Optimize Energy Performance LEED credit. The final number of points will be confirmed during detailed design. - <u>LED Lighting</u> General lighting will be LED to reduce energy use for lighting and will comply with the Indoor Lighting credit and Outdoor Lighting in LEED. <u>Water</u> - <u>Efficient Use of Water through Selection of Fittings and Fixtures</u> The flow rates of the proposed fixtures are encouraged but not required to meet minimum flow rates outlined in the LEED Credit: Indoor Water Use Reduction. In addition to the minimum fixture flow rates, LEED stipulates that any Australian project must also have fixtures that meet a minimum 4-star WELS rating; overriding the flow rate minimum requirement. The final fixtures and flow rates will be confirmed during detailed design.

Fixture	Minimum Fixture Flow Rate	Proposed Fixture Flow Rate
Dual Flush WC	6.00 lpf	3.50 lpf
Urinals	3.80 lpf	0.80 lpf
Showerheads	9.50 lpm	7.50 lpm

Note: lpf = litres per flush, lpm = litres per minute

Conditions of Consent for SSD 9249

- Rainwater Collection and Reuse

  The Stadium has proposed a rainwater tank to utilise rainwater harvested from the stadium roof for irrigation. Precinct Village and Carpark will investigate a similar possibility of a rainwater harvest and reuse system for irrigation to help meet the LEED Outdoor Water use credit. The size and location of the proposed rainwater tank will be investigated during detailed design.

Materials

- Life Cycle Assessment to Inform Material Selection

  The Main Contractor will be responsible for undertaking a Life Cycle Assessment for the project taking into account material use as well as operational energy demands. This is capable of providing three points under the LEED Credit: Building Life-cycle Impact Reduction. The Precinct Village and Carpark is to be included in the LCA assessment.

- Demolition and Construction Waste Management

  The project will aim to divert 90% of construction waste from landfill.

  Reuse of Existing Materials

  ICT equipment and LED screens may be repurposed to the Sydney Cricket Ground.

- Operational Waste Management

  Waste storage facilities will separate waste streams between general waste, recyclables and paper and cardboard will be provided.

Transport

- Provision of Bicycle Parking and Associated Facilities

  The project will provide cyclist parking and end-of-trip (EOT) facilities for staff.

- Improved Pedestrian Access

  The space surrounding the new development will include pedestrian-orientated paving allowing access around the stadium perimeter and connects Moore Park road to the facilities throughout the SCSGT precinct.

- Electric Vehicle Infrastructure

  The project will commit to allocating spatial capacity for electric vehicle supply equipment for 2% of all parking by the project.

- Promotion of Green Vehicles

  The project will commit to allocating spatial capacity for fuel efficient vehicles for 5% of all parking by the project.

Sustainable Sites

- Native Vegetation

  95% of new vegetation will be native to the local Australian bioregion where applicable

- Reduction of Urban Heat Island Effect

  Heat Island Effect to be minimised through a light-coloured roof and paving, landscaping and shaded areas.

- Stormwater Quantity and Quality

Conditions of Consent for SSD 9249
Stormwater peak event discharge will to not exceed predevelopment levels. The Works must meet stormwater pollutant reduction targets in accordance with the Construction Best Practice standards for urban stormwater quality published by the CSIRO/ Victoria Stormwater Committee. Social Sustainability - Community Engagement The Precinct Village and Carpark will provide an open space around the site and create a communal setting that connects the community with the site. The development is also targeting the LEED Innovation Credit: Community Outreach and Involvement. This will involve the development team engaging with community stakeholders for input during Predesign and Preliminary Design phases. Communication with community stakeholders will be ongoing throughout design, construction and post-construction phases. - Design for Diversity Adequate toilet facilities will be provided for males, females and people with physical disabilities. Access throughout the site will accommodate people with all physical abilities. - Modern Slavery The new development is targeting the LEED Innovation Credit: Social Equity within the Supply Chain. The credit requires an assessment of suppliers to ensure: o No-child/ force bonded labour o Health and safety procedures and training o Right of freedom of association o Non-discrimination o Discipline/ harassment and grievance procedures o Fair working hours and compensation o Anti-corruption and bribery A LEED v4 pathway has been developed and has targeted a LEED Gold rating. This pathway is available in Appendix A.
Condition C28 The future development application must include the results of a whole of life assessment (Life Cycle Assessment) undertaken to identify material impacts and opportunities for improvement, in accordance with the Response to Submissions. The report must identify, the extent to which sustainability measures have been incorporated to address any identified hotspots informed by the whole of life assessment. **Response** A preliminary whole of life assessment is under review with INSW, an updated revision of this report will include the Precinct Village and Carpark.
Condition C29 The future development application must include a report identifying the extent to which the proposal can comply with the greenhouse gas, energy and carbon targets identified in Sustainable Sydney 2030. **Response** Refer to Section 6.3.1

Conditions of Consent for SSD 9249
Condition C30 The future development application must include a report which addresses how the proposed development is capable of achieving Gold Leadership in Energy and Environmental Design (LEED) rating using the existing stadium as the "reference building" for the assessment or any other equivalent sustainability rating tool as listed in section 5.3 of the Sydney Football Stadium Redevelopment Environmentally Sustainable Design Strategy prepared by Aurecon dated 2018. **Response** This report details a LEED v4 pathway in order to achieve a LEED Gold rating. This pathway is available in Appendix A.
Condition C31 The future development application is required to address the implementation of water sensitive urban design and energy conservation and efficiency measures, including but not limited to: a) rainwater harvesting and re-use; b) water efficient fixtures; c) installation of rooftop solar photovoltaic arrays for on-site electricity generation; d) storage of surplus energy generated by rooftop solar photovoltaic arrays; e) use of electric vehicles for dedicated on site transport tasks (where possible); and f) energy efficient electrical equipment, fittings and fixtures. **Response** a) Rainwater Harvesting and Re-Use See Condition 27 for Response to *Rainwater Collection and Reuse* b) Water efficient fixtures See Condition 27 for Response to *Efficient Use of Water through Selection of Fittings and Fixtures* c) Installation of rooftop solar photovoltaic arrays for on-site electricity generation See Condition 27 for Response to *Onsite Renewable Energy Generation* d) Storage of surplus energy generated by rooftop solar photovoltaic arrays See Condition 27 for Response to *Onsite Renewable Energy Generation* e) Use of electric vehicles for dedicated on site transport tasks See condition 27 for response to *Electric Vehicle Infrastructure* f) Energy Efficient Electrical Equipment, Fitting and Fixtures See Condition 27 for Response to *High Levels of Efficiency* and *LED Lighting* A LEED v4 pathway has been developed and has targeted a LEED Gold rating. This pathway is available in Appendix A.

Conditions of Consent for SSD 9835

Condition B20

Prior to the commencement of construction of the stadium structure above the concourse level, the Applicant must:

a) prepare a revised ESD report and associated design plans in consultation with the Planning Secretary including:

(i) details of the proposed ESD measures that would be incorporated into the final design and how these would achieve the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate;

(ii) details to demonstrate that the chosen ESD measures are consistent with the those identified in the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019;

(iii) details to demonstrate that a 350kWp Photovoltaic system will be installed on the roof of the stadium and any provisions for storage of the energy from the solar panels to offset the night time / peak usage;

(iv) a detailed Whole-of-Life Assessment to identify opportunities to reduce the carbon emissions across the life of the project including the materiality recommendations in accordance with Appendix B of the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019;

(v) a Life Cycle Analysis that shows how climate, energy and water risks and opportunities have been identified and how the design of the stadium has incorporated these opportunities and / or mitigated risks;

(vi) details of opportunities to use alternatives to standard concrete mixes that reduce carbon emissions associated with Portland cement, including opportunities for replacement of Portland cement with Geopolymer concrete for roadways and paths, or where the Portland cement content in concrete used is reduced by replacing it with supplementary cementitious materials;

(vii) details to identify how the construction and operation of the project will incorporate the opportunities in condition B20e(viii); and

b) include a review of the proposed ESD measures by a suitably qualified consultant and a statement certifying that the design is capable of incorporating the identified ESD measures and achieving the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate.

c) submit the revised ESD report, the design plans, the Planning Secretary's comments / advice and the review of the proposed ESD measures to the Certifying Authority for approval, prior to the construction of the stadium structure above the concourse level.

Response

An ESD report will be completed for the Precinct Village and Carpark, in alignment with the consent conditions as per the Stadium and Fitness Facility ESD Report.

(i) <u>details of the proposed ESD measures that would be incorporated into the final design and how these would achieve the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate;</u>

The Precinct Village and Carpark will target a LEED Gold v4 Rating; either as part of the Stadium LEED rating or as an independent review as per overall project timeframes, refer to Appendix A.

(ii) <u>details to demonstrate that the chosen ESD measures are consistent with the those identified in the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019;</u>

The ESD measures will be reviewed for alignment with the ESD Strategy prepared by LCI and the LEED v4 requirements as per Appendix A.

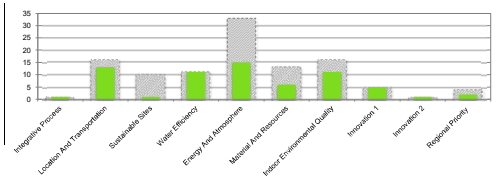
(iii) <u>details to demonstrate that a 350kWp Photovoltaic system will be installed on the roof of the stadium and any provisions for storage of the energy from the solar panels to offset the night time / peak usage</u>

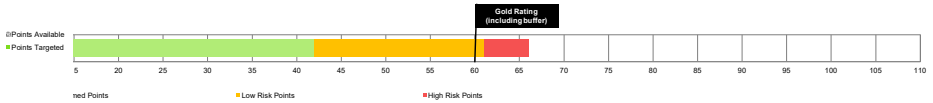
See Condition 27 for Response to *Onsite Renewable Energy Generation*

Conditions of Consent for SSD 9835
(iv) a detailed Whole-of-Life Assessment to identify opportunities to reduce the carbon emissions across the life of the project including the materiality recommendations in accordance with Appendix B of the Environmentally Sustainable Design Strategy prepared by LCI dated 01/05/2019 Refer to Section 7.2.3 for a response to Whole-of-Life Assessment. (v) a Life Cycle Analysis that shows how climate, energy and water risks and opportunities have been identified and how the design of the stadium has incorporated these opportunities and / or mitigated risks A preliminary LCA has been completed for the Stadium. The Precinct Village and Carpark will be included either in the final LCA for the Stadium and Fitness Facility or shall have its own separate LCA. (vi) details to identify how the construction and operation of the project will incorporate the opportunities in condition B20e(viii); ESD construction and operational opportunities for the site are in alignment with the LEED requirements, as per Appendix A. b) include a review of the proposed ESD measures by a suitably qualified consultant and a statement certifying that the design is capable of incorporating the identified ESD measures and achieving the targeted Leadership in Energy and Environmental Design (LEED) v4 Gold Certificate. The Precinct Village and Carpark will target a LEED Gold v4 Rating; either as part of the Stadium LEED rating or as an independent review as per overall project timeframes, refer to Appendix A. c) submit the revised ESD report, the design plans, the Planning Secretary's comments / advice and the review of the proposed ESD measures to the Certifying Authority for approval, prior to the construction of the stadium structure above the concourse level. The revised ESD Report shall include all relevant information outlined in the SSDA 9835 consent conditions prior to construction of the Precinct Village and Carpark.

Appendix A: LEED v4 Gold Rating Pathway

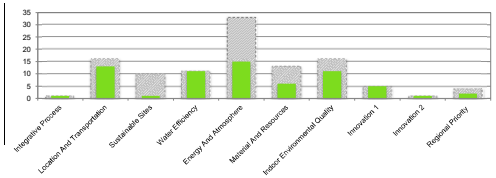
Sydney Football Stadium Redevelopment - LEED v4 BD+C: NC Pathway Rev.08

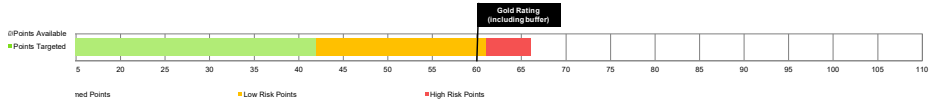




Credit	Available Points	Targeted Points	Confirmed	Low Risk	High Risk	Not targeted	Design ~ Construction	V4 ~ V4.1	WSS	Stadium Comments	Fitness Facility Comments	Roosters Mez Comments	Precinct Village and Carpark Comments
INTEGRATIVE PROCESS													
IP102: Integrative Process	1	1	1	0	0		Design	v4.1	1	LCI is currently drafting the Project Team Letter outlining the team's integrative process approach. This will be distributed as a draft and will need to be signed by JHA, Cox, Fredon, AGC and Axis.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium. Will require additional works if a different project team is chosen.
Category Total	**1**	**1**	**1**	**0**	**0**								
LOCATION AND TRANSPORTATION													
Credit LT101 Not Targeted	12	12	0	0	0	0	Design	v4					
LT102: Sensitive Land Protection	1	1	1	0	0	0	Design	v4	1	Completed; Uploaded to LEED Online	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
LT103: High Priority Site	2	0	0	0	0	2	Design	v4	2				
LT104: Surrounding Density and Diverse Uses	5	5	5	0	0	0	Design	v4	5	Completed; Uploaded to LEED Online	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
LT107: Access To Quality Transit	5	5	5	0	0	0	Design	v4	5	Completed; Uploaded to LEED Online	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
LT108: Bicycle Facilities	1	0	0	0	0	1	Design	v4	1	LEED Bicycle Facilities not targeted however will need to comply with Brief requirements.			
LT110: Reduced Parking Footprint	1	1	1	0	0	0	Design	v4.1	1	Parking space numbers to be at least 30% less than base ratios. Base ratio for Arena = 0.33 space/seat. Closer to the time of the LEED submission, and RFI will be issued to COX for the final site and basement plans showing all parking space included in the project (MP1 and Basement). Preferred parking for carpool spaces removed in v4.1	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Parking space numbers to be at least 30% less than base ratios. Base ratio for Arena = 0.33 space/seat. Carpark must meet this for the full site.
LT111: Green Vehicles	1	1	0	0	1	0	Design	v4.1	0	v4.1 Option 2. Electric Vehicle Charging Infrastructure (1 point) Make 6% of parking spaces or at least 6 spaces EV Ready. Lehr-GCOR-000564 issued to Fredon on 13 October outlining requirement and requesting input. LCI to provide Back-brief memo for all options.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	v4.1 Option 2. Electric Vehicle Charging Infrastructure (1 point) Make 6% of parking spaces or at least 6 spaces EV Ready. Carpark must meet this for the full site.
Category Total	**16**	**13**	**12**	**0**	**1**	**3**			**15**				
SUSTAINABLE SITES													
SS101: Construction Activity Pollution Prevention	Prerequisite						Construction			Submission of the erosion and sedimentation control plans for all construction actitivies. JHG plans to be provided at PC along Stage plans from LL. See JH-RFI-000078	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Submission of the erosion and sedimentation control plans for all construction actitivies.
SS104: Site Assessment	1	1	1	0	0	0	Design		1	The worksheet and site plans are complete with the exception of the description of foundations. This has been requested of the Aurecon structural team 4 times over Aconex with no response as yet. Lehr-GCOR-000682 issued to Aurecon awaiting response	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
SS105: Site Development - Protect or Restore Habitat	2	0	0	0	0	2	Design		0				
SS107: Open Space	1	0	0	0	0	1	Design		0				
SS108: Rainwater Management	3	0	0	0	0	3	Design	v4.1	0	Xit Bullas from Aspect has confirmed that the site does not include any natural rainwater management features. This credi is not achievable. Aspct-RTRFI-000103	Not targeted.		
SS110: Heat Island Reduction	2	0	0	0	0	2	Design		0				
SS112: Light Pollution Reduction	1	0	0	0	0	1	Design		1				
Category Total	**10**	**1**	**1**	**0**	**0**	**9**			**2**				
WATER EFFICIENCY													
WE101: Outdoor Water Use Reduction	Prerequisite						Design			Extensive water collection and reuse on site - Aspect to document compliance. LCI to request landscape drawings.	- AXIS to provide AFC hydraulic schematics - Aspect StudiosAFC landscape drawings and plant schedule provided - LCI to confirm minimum 30% reduction in potable water from baseline	Covered under Stadium	- Hydraluic consultant to provide hydraulic schematics - Landscaper to provide As-Built landscape drawings and plant schedule
WE901: Outdoor Water Use Reduction	2	2	0	2	0	0	Design		2	Extensive water collection and reuse on site - Axis to document compliance. Begin requesting IFCs from AXIS	- As per WE101	Covered under Stadium	- Hydraluic consultant to provide hydraulic schematics
WE102: Indoor Water Use Reduction	Prerequisite						Design			LCI to provide aconex to AXIS/ COX regarding 4 Star WELS minimum requirement. AXIS to advise.	- AXIS to provide As-Built sanitary fixtures and fitting schedule with corresponding WELS certificates	Extensive water collection and reuse on site - Axis to document compliance.	- Hydraluic consultant to provide As-Built sanitary fixtures and fitting schedule with corresponding WELS certificates
WE902: Indoor Water Use Reduction	6	6	0	6	0	0	Design		6	LCI to provide aconex to AXIS/ COX regarding 4 Star WELS minimum requirement.	- AXIS to provide As-Built sanitary fixtures and fitting schedule with corresponding WELS certificates	Extensive water collection and reuse on site - Axis to document compliance.	- Hydraluic consultant to provide As-Built sanitary fixtures and fitting schedule with corresponding WELS certificates
WE104: Building-level Water Metering	Prerequisite						Design			Utility meters satisfy this requirement.	AXIS to provide AFC CW schematic showing water metering	Utility meters satisfy this requirement.	Utility meters satisfy this requirement.
WE110: Cooling Tower Water Use	2	2	2	0	0	0	Design	v4.1	0	V4.1 Option 2. No Cooling Tower (2 points) Request drawings and data sheets confirming only Air-cooled Chillers on site.	- AGC to provide As-Built Chiller Schedules and layout drawings with data sheets	Covered under Stadium	- Mechanical consultant to provide drawings and datasheets confirming only Air-cooled chillers on site.
WE112: Water Metering	1	1	0	1	0	0	Design		1	AXIS confirms provision of separate water meters for irrigation, indoor plumbing fixtures and fittings, DHW, HHW and reclaimed water. LCI to review and reply to AGC correspondance.	AXIS to provide AFC CW schematic showing water metering	Provision of separate water meters for indoor plumbing fixtures and fittings, DHW, HHW and reclaimed water.	Provision of separate water meters for indoor plumbing fixtures and fittings, DHW, HHW and reclaimed water.
Category Total	**11**	**11**	**2**	**9**	**0**	**0**			**9**				
ENERGY AND ATMOSPHERE													
EA101: Fundamental Commissioning and Verification	Prerequisite						Construction			LCI RFI to Eecmec to confirm progress on credit requirements	JHG to confirm ICA scope for Stadium extends to Club	Covered under Stadium	NOT covered under current ICA scope, Will require separate document if not engaged.
EA103: Minimum Energy Performance	Prerequisite						Design			LCI currently undertaking energy modelling	LCI currently finalising energy modelling. Report to be produced	LCI currently undertaking energy modelling	LCI to include Carpark in energy modelling
EA903: Optimize Energy Performance	18	6	5	1	0	12	Design		5	LCI currently undertaking energy modelling	LCI currently finalising energy modelling. Report to be produced	LCI currently undertaking energy modelling	LCI to include Carpark in energy modelling
EA106: Building-level Energy Metering	Prerequisite						Design			Utility meters satisfy this requirement.	For Information' SLD provided. AFC to be provided	LCI currently undertaking energy modelling	Utility meters satisfy this requirement.
EA108: Fundementals Refrigerant Management	Prerequisite						Construction			No CFCs will be used.	No CFCs will be used.	No CFCs will be used.	No CFCs will be used.
EA110: Enhanced Commissioning	6	4	4	0	0	2	Design		4	Enhanced commissioning and monitored based commissioning to be targeted (4 points) - ICA has been engaged meet requirements. LCI RFI to Eecmec to confirm progress on credit requirements Façade Commissioning is not targeted.	JHG to confirm ICA scope for Stadium extends to Club	Covered under Stadium	NOT covered under current ICA scope, Will require separate document if not engaged.

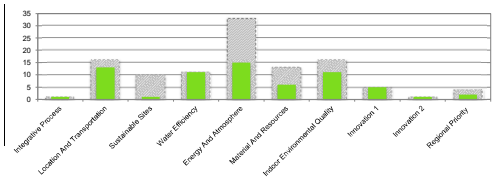
Sydney Football Stadium Redevelopment - LEED v4 BD+C: NC Pathway Rev.08

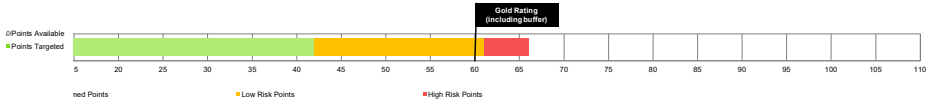




Credit	Available Points	Targeted Points	Confirmed	Low Risk	High Risk	Not targeted	Design ~ Construction	V4 ~ V4.1	WSS	Stadium Comments	Fitness Facility Comments	Roosters Mez Comments	Precinct Village and Carpark Comments
EA118: Advanced Energy Metering	1	1	0	1	0	0	Deisgn		1	Initial review of Metering and Monitoring Report shows extensive metering. Now looking for confirmation of the following: - Type of meter to be used (to confirm it meets LEED requirements) - Separate metering of IT/Server loads (could not be identified on SLD) - Metering arrangement for sport lighting (again, could not be identified on SLD) LCI to confirm with AGC.	Initial review of Metering and Monitoring Report shows extensive metering. Now looking for confirmation of the following: - Type of meter to be used (to confirm it meets LEED requirements) - Separate metering of IT/Server loads (could not be identified on SLD) - Metering arrangement for sport lighting (again, could not be identified on SLD) Communication with AGC ongoing. - AGC to provide As-Builtg metering schematics - Fredon to provide As-Built SLD showing energy metering	Confirm Metering and Monitoring Report covers Mez.	Separate Metering and Monitoring Report is required, in alignment with previous report.
EA121: Demand Response	2	0	0	0	0	2	Construction		1	Electricity provider does not currently have Demand Response program. Not targeting this point. WSS is unlikely to achieve this point.			
EA123: Renewable Energy Production	3	1	0	0	1	2	Design		1	Based on preliminary calculation, a minimum of 150kWp PV array is required to achieve this point. Proposed PV System has been approved. To be included in final Energy Modelling report.	30kW PV System confirmed to offset Club energy consumption - AGC to provide As-Built mechanical drawings, schematics, schedules and data sheets - PV sub-contractor to provide As-Built schematics of PV array and data sheets - Fredon to provide As-Built drawings, schematics, schedules and data sheets - Facade contractor to provide verification of glazed system thermal performances	Covered under Stadium	Carpark must provide 1% of its total annual energy cost as PV.
EA126: Enhanced Refrigerant Management	1	1	0	1	0	0	Design		1	Resolving refrigerants for Food Services. See Lehr-GCOR-000666	Must select zero ODP and low GWP refrigerants for all HVAC and refrigeration uses. Refer to Aconex Lehr-GCOR-000632	Must select zero ODP and low GWP refrigerants for all HVAC and refrigeration uses. Refer to Aconex Lehr-GCOR-000632	Must select zero ODP and low GWP refrigerants for all HVAC and refrigeration uses. Refer to Aconex Lehr-GCOR-000632
EA128: Green Power and Carbon Offsets	2	2	0	0	2	0	Construction		2	Will explore purchasing GreenPower / Carbon Offsets closer to PC.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Category Total	**33**	**15**	**9**	**3**	**3**	**18**			**15**				
MATERIAL AND RESOURCES													
MR101: Storage and Collection of Recyclables	Prerequisite						Design			Closed. Waste Management Brief submitted and reviewed (Lehr-GCOR-000390).	Confirm that OWMP will cover Club. Separate OWMP for SFF.	Confirm that OWMP will cover Mez	Require a separate OWMP, or updates to the current plan
MR103: Construction and Demolition Waste Management Planning	Prerequisite						Construction			LCI to send requirments to Cameron (JHG)	Confirm WMP incorporates Club	Confirm that OWMP will cover Mez	Require a separate WMP, or updates to the current plan
MR108: Building Life-cycle Impact Reduction	5	3	3	0	0	2	Construction		3	LCA conducted for Stadium. Need to consider SFF inclusion.	LCA to incorporate Club	LCA to incorporate Mez	
MR112: Building Product Disclosure and Optimisation - Environmental Product Declarations	2	1	1	0	0	1	Construction		0	Examples of EPDs have been circulated to contractors. Awaiting EPD submissions from contractors.	Examples of EPDs have been circulated to contractors. Awaiting EPD submissions from contractors.	Covered under Stadium	Covered under Stadium
MR113: Building Product Disclosure and Optimisation - Sourcing of Raw Materials	2	0	0	0	0	2	Construction		0	Hard to achieve, need to investigate possible material selection once arch FFE schedule received.			
MR114: Building Product Disclosure and Optimisation - Material Ingredients	2	0	0	0	0	2	Construction		0	Hard to achieve, need to investigate possible material selection once arch FFE schedule received.			
MR123: Construction and Demolition Waste Management	2	2	2	0	0	0	Construction	v4	2	LCI to send requirments to Cameron (JHG)	- JHG to track monthly construction and waste reports and ensure at least 90% diversion to landfill rate.	Covered under Stadium	Builder must track monthly construction and waste reports and ensure at least 90% diversion to landfill rate.
Category Total	**13**	**6**	**6**	**0**	**0**	**7**			**5**				
INDOOR ENVIRONMENTAL QUALITY													
EQ101: Minimum Indoor Air Quality Performance	Prerequisite						Design	v4		To comply with AS1668.1 outdoor air provision requirements. LCI to confirm compliance.	To comply with AS1668.1 outdoor air provision requirements.	To comply with AS1668.1 outdoor air provision requirements.	To comply with AS1668.1 outdoor air provision requirements.
EQ104: Environmental Tobacco Smoke Control	Prerequisite						Design	v4		No smoking allowed inside building. Prohibit smoking outside the building except in designated smoking areas. Include signage communicating no smoking policy.	No smoking allowed inside building. Prohibit smoking outside the building except in designated smoking areas. Include signage communicating no smoking policy.	No smoking allowed inside building. Prohibit smoking outside the building except in designated smoking areas. Include signage communicating no smoking policy.	No smoking allowed inside building. Prohibit smoking outside the building except in designated smoking areas. Include signage communicating no smoking policy.
EQ110: Enhanced Indoor Air Quality Strategies	2	2	1	1	0	0	Design	v4	1	Option 1. Installation of permanent entry way system to caputre dirt and particulates entering the building. Separate exhaust systems for certain space types. Provision of F7 filters. Option 2. CO2 monitoring in all densely occupied spaces. CO2 monitors to generate alarm if sensed CO2 concentration exceeds setpoint. (Low Risk item)	Option 1. Installation of permanent entry way system to caputre dirt and particulates entering the building. Separate exhaust systems for certain space types. Provision of F7 filters. Option 2. CO2 monitoring in all densely occupied spaces. CO2 monitors to generate alarm if sensed CO2 concentration exceeds setpoint. (Low Risk item)	Covered under Stadium	Option 1. Installation of permanent entry way system to caputre dirt and particulates entering the building. Separate exhaust systems for certain space types. Provision of F7 filters. Option 2. CO2 monitoring in all densely occupied spaces. CO2 monitors to generate alarm if sensed CO2 concentration exceeds setpoint. (Low Risk item)
EQ112: Low-emitting Materials	3	3	0	2	1	0	Construction	V4.1	3	Target of interior paint, interior adhesive, flooring, composite food & insulation. (4 categories for 2 points, and 5 categories for 3 points). VOC content emissions rate will need to comply with US/International standards. Check if local equivalency can be used via CIR. v4.1 - 1 point for 2 categories, 2 points for 3 categories, 3 points for 4 categories.	- COX and JHG to co-ordinate with LCI to review and approve all paints and coatings, adhesives and sealants and flooring to ensure items meet required VOC limits.	Target of interior paints and coatings, interior adhesive and sealants, flooring and composite wood. (4 categories for 3 points, and 5 categories for 4 points). VOC content emissions rate will need to comply with US/International standards.	Target of interior paints and coatings, interior adhesive and sealants, flooring and composite wood. (4 categories for 3 points, and 5 categories for 4 points). VOC content emissions rate will need to comply with US/International standards.
EQ113: Construction Indoor Air Quality Management Plan	1	1	1	0	0	0	Construction	v4	1	Provided by AGC. JH-GCOR-027152 awaiting review from LCI	- JHG to confirm air quality management plan for the main stadium covers Club	Confirm air quality management plan covers Mez	Mech consultant to provide CIAQMP for carpark
EQ114: Indoor Air Quality Assessment	2	1	1	0	0	1	Construction	v4	1	Air flush out to be conducted. Allow adequate time at end of project for flush out. Ensure flush out included in mechanical spec.	- JHG to allow adequate time at end of project for flush out. Ensure flush out included in mechanical spec.	Covered under Stadium	TBD if separate flushout is required
EQ115: Thermal Comfort	1	1	1	0	0	0	Design		0	Thermal comfort to be achieved for mechanically conditioned spaces as per Brief requirement. Thermal comfort control is also required for 50% of occupied space (i.e. temperature control panel). This can be achieved in the suites/ meeting rooms / function space etc.	Thermal comfort to be achieved for mechanically conditioned spaces as per Brief requirement. Thermal comfort control is also required for 50% of occupied space (i.e. temperature control panel). This can be achieved in the suites/ meeting rooms / function space etc.	Covered under Stadium	Thermal comfort to be achieved for mechanically conditioned spaces as per Brief requirement. Thermal comfort control is also required for 50% of occupied space (i.e. temperature control panel). This can be achieved in the suites/ meeting rooms / function space etc.
EQ117: Interior Lighting	2	2	2	0	0	0	Design		2	Ensure lighting control and lighting quality criteria specifed in lighting specs. Requirements communicated to Fredon for confirmation see Aconex Lehr-GCOR-000633	- Fredon to confirm requirements of Interior Lighting credit will be achieved (Lehr-RTRFI-000143)	Ensure lighting control and lighting quality criteria specifed in lighting specs. Requirements communicated to Fredon for confirmation see Aconex Lehr-GCOR-000633	Ensure lighting control and lighting quality criteria specifed in lighting specs. Requirements communicated to Fredon for confirmation see Aconex Lehr-GCOR-000633
EQ121: Daylight	3	0	0	0	0	0	Design		0	Simulation: Illumination Calculations pathway - Will aim to achieve illuminance levels for >75% of regularly occupied floor space. Analysis from energy model outputs shows that only 70% of occupied spaces include an external window. Based on this an estimated 35% of regularly occupied spaces will have good quality daylight. As such this point is not achievable.	Simulation: Illumination Calculations pathway - Will aim to achieve illuminance levels for >75% of regularly occupied floor space. Analysis from energy model outputs shows that only 70% of occupied spaces include an external window. Based on this an estimated 35% of regularly occupied spaces will have good quality daylight. As such this point is not achievable.		
EQ123: Quality Views	1	0	0	0	0	0	Design		0	Views for >75% of all regularly occupied space. Analysis from energy model outputs shows that only 70% of occupied spaces include an external window. Based on this an estimated 35% of regularly occupied spaces will have access to quality views. As such this point is not achievable.	Views for >75% of all regularly occupied space. Analysis from energy model outputs shows that only 70% of occupied spaces include an external window. Based on this an estimated 35% of regularly occupied spaces will have access to quality views. As such this point is not achievable.		
EQ124: Acoustic Performance	1	1	0	1	0	0	Design	V4.1	1	Acoustic Logic's specification accepted. LCI to confirm As-Built requirements. v4.1 One point awarded where 2 out of 3 criteria are achieved (v4 requires 3 out of 3)	Currently reviewing Acoustic Specification by Acoustic Logic (Lehr-GCOR-000391) Sound reinforcement by another consultant (TBC) (Lehr-GCOR-000392)	Currently reviewing Acoustic Specification by Acoustic Logic (Lehr-GCOR-000391) Sound reinforcement by another consultant (TBC) (Lehr-GCOR-000392)	Carpark to abide by Acoustic Logic's specification around LEED requirements (Lehr-GCOR-000391)

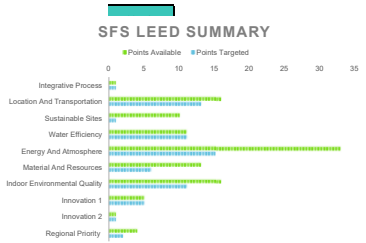
Sydney Football Stadium Redevelopment - LEED v4 BD+C: NC Pathway Rev.08





Credit	Available Points	Targeted Points	Confirmed	Low Risk	High Risk	Not targeted	Design ~ Construction	V4 ~ V4.1	WSS	Stadium Comments	Fitness Facility Comments	Roosters Mez Comments	Precinct Village and Carpark Comments
Category Total	**16**	**11**	**6**	**4**	**1**	**1**			**9**				
INNOVATION 1													
Exemplary Performance - LT110: Reduced Parking Footprint	2	2	2	0	0	0	Design		1	Case 1. Achieve a 60% parking reduction from the base ratios. Case 2. Achieve a 80% parking reduction from the base ratios.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Must achieve the same ratios as originally targeted
Exemplary Performance - MR123: Construction and Demolition Waste Management	1	1	0	0	1	0	Construction		1	>75% waste diverted from landfill from four material streams AND do not generate over 12.2kg of construction waste per m2 of building floor area.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	>75% waste diverted from landfill from four material streams AND do not generate over 12.2kg of construction waste per m2 of building floor area.
Exemplary Performance - EQ124 Acoustic Performance	1	1	0	1	0	0	Design	V4.1		Meet HVAC Background, Sound Transmission and Reverberation Time requirements from EQ124.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Meet HVAC Background, Sound Transmission and Reverberation Time requirements from EQ124.
Exemplary Performance - Integrative Process	1	1	1	0	0	0	Design			Complete the LEED Project Team Checklist for Social Impact https://www.usgbc.org/resources/leed-project-team-checklist-social-impact-integrative-process	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Complete the LEED Project Team Checklist for Social Impact https://www.usgbc.org/resources/leed-project-team-checklist-social-impact-integrative-process
Pilot Credit - Prevention through Design	1	1	0	1	0	0			0	SPARE Identify and use opportunities to achieve safety and health synergies across disciplines. Similar to the Safety in Design workshops. https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-healthc-219	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Pilot Credit - Social Equity within the Supply Chain	1	1	0	1	0	0			0	SPARE Must be addressed as part of the ESD Management Plan. Supplier assessment on Tier 1 suppliers on their social responsibility elements. https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-healthc-236	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Pilot Credit - Social Equity within the project team	1	1	0	1	0	0		V4.1	0	SPARE Must be addressed as part of the ESD Management Plan. Corporate social sustainability within the project team. https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-healthc-235	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Innovation - Community Outreach and Involvement	1	1	0	1	0	0			0	SPARE Must be addresses as part of the ESD Management Plan. Option 1. Community outreach. Involving the people who live/work in the community in project design and planning and in decisions about how it should be improved or how it should change over time.	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Category Total	**Max 5**	**5**	**2**	**3**	**0**	**0**			**3**				
INNOVATION 2													
LEED Accredited Professional	1	1	1	0	0	0	Construction		1	LEED AP on project	Site-wide LEED Requirement to be met by the Stadium	Covered under Stadium	Covered under Stadium
Category Total	**1**	**1**	**1**	**0**	**0**				**1**				
REGIONAL PRIORITY													
RP Credit 1.1: Regional Priority - Renewable Energy Production	1	0	0	0	0	0	Design		1	Project will be targeting EA123: Renewable Energy Production [Note: min 2 points must be achieved in EA123]	Combined with Stadium		
RP Credit 1.2: Regional Priority - Green Power and Carbon Offset	1	0	0	0	0	0	Construction		1	Refer to EA128: Green Power and Carbon Offsets	Combined with Stadium		
RP Credit 1.3: Building product disclosure and optimization - material ingredients	1	0	0	0	0	1	Construction		0	Credit not targeted.			
RP Credit 1.4: Open Space	1	0	0	0	0	1	Design		0	Open space credit unlikely to be achieved.			
RP Credit 1.5: Regional Priority - Outdoor water use reduction	1	1	1	0	0	0	Design		1	Refer to WE901: Outdoor Water Use Reduction [Note: Min 2 point must be achieved in WE901]	Site-wide LEED Requirement to be met by the Stadium	Combined with Stadium	Combined with Stadium
RP Credit 1.6: Regional Priority - Indoor water use reduction	1	1	1	0	0	0	Design		1	Refer to WE902: Indoor Water Use Reduction [Note: Min 4 points must be achieved in WE902]	Site-wide LEED Requirement to be met by the Stadium	Combined with Stadium	Combined with Stadium
Category Total	**Max 4**	**2**	**2**	**0**	**0**	**2**			**4**				

LEED Credit Category	Points Available	Points Targeted	Confirmed Points	Low Risk Points	High Risk Points	Not Targeted
Integrative Process	1	1	1	0	0	0
Location And Transportation	16	13	12	0	1	3
Sustainable Sites	10	1	1	0	0	9
Water Efficiency	11	11	2	9	0	0
Energy And Atmosphere	33	15	9	3	3	18
Material And Resources	13	6	6	0	0	7
Indoor Environmental Quality	16	11	6	4	1	1
Innovation 1	5	5	2	3	0	0
Innovation 2	1	1	1	0	0	0
Regional Priority	4	2	2	0	0	2
TOTAL POINTS	**110**	**66**	**42**	**19**	**5**	**40**
			66			



Appendix B: Green Travel Plan