

29 November 2021

Our Ref: R/2019/2/1  
File No: 2021/479227  
Your Ref: SSD-9429-Mod-6  
SSD-9835-Mod-7

Ferdinando Macri  
Department of Planning, Industry and Environment  
via Planning Portal

Dear Ferdinando,

**Sydney Football Stadium - New Precinct Village and Carpark  
Stage 1 - SSD-9429 - Modification 6; and  
Stage 2 - SSD 9835 - Modification 7**

Thank you for your correspondence dated 26 October 2021 inviting the City of Sydney Council (the City) to comment on the abovementioned modification applications to SSD-9429 (Stage 1 Concept) and SSD-9835 (Stage 2 Detailed Design).

The modifications seek approval to repurpose the approved 540 space at-grade car park (MP1) at the western side of the SFS for a Precinct Village and Car Park, which will include a 1,500 space multi-level carpark below the proposed ground level and a community public domain comprising tennis courts, children's playground and 1,500sqm café/ retail/ restaurants in a single storey pavilion.

### Summary

**The City objects to the proposal.** The proposal relies on evidence that has gaps and flaws. It fails to recognize the significant investment in light rail and active transport which connects to the east and Central Railway and all the rail lines that serve greater Sydney, which reduces reliance on private vehicles to travel to the precinct.

The City would support 460 additional structured car parking spaces (total 1,000) within the new car park, subject to the permanent and immediate removal of 2,100 existing on-grass car parking spaces across the precinct.

### Detail

The City has reviewed the submitted documentation and the following significant matters are raised for your consideration:

#### 1. Transport and traffic impacts

The City has reviewed the 'Transport Assessment' prepared by JMT Consulting, dated 14 October 2021 and has undertaken a detailed assessment of the potential transport and traffic impacts resulting from the proposed modification.

The key consideration from a transport perspective is the proposed 1,500 space multi-level carpark and the impacts that this will have on the surrounding street network and transport system, which is a 960-space increase to the 540 existing approved spaces.

The proposed 1,500 space carpark is justified by the applicant on the basis it will facilitate the removal of on-grass car parking in the precinct. The on-grass carparking areas are currently used for events only, with EP2 available when attendance is over 25,000 patrons and EP3 available when attendance is over 10,000 patrons.

In contrast, the proposed carpark would operate 24/7. The City is therefore seriously concerned that this would generate increased traffic and congestion on local roads around the stadia more frequently than on major events days and at times where on-grass event parking does not often operate (e.g. weekday PM peak).

There is also concern about the lack of certainty and enforceability surrounding the removal of on-grass car parking at the Precinct within the terms of any consent applying to the applications made.

The City has outlined **gaps and flaws in the applicant's transport assessment** that must be addressed and puts forward a **case for less car parking** as follows:

### 1.1 Gaps and flaws in the applicant's transport assessment

The following significant concerns and issues are raised with the submitted transport assessment that must be addressed:

- The traffic assessments for both the original stadium SSD (prepared by ARUP) and Mod 7 (prepared by JMT Consulting) place a large reliance on the absolute largest, most infrequent events as having the biggest impact on the surrounding street and transport system. The assessments fail to take into consideration the impact of smaller, more regular events which may occur during peak traffic periods, both on weekends and Saturdays. The traffic report provides no assessment of the proposed carpark at full occupation during these peak periods.
- The modelling for the Mod 7 assessment only includes the Moore Park Road/ Driver Avenue intersection. The modelling does not include the wider network that was included in the original stadium SSD traffic assessment.
- The lack of clarity of future estimated event schedules, frequency and attendances has resulted in the assessment putting a greater emphasis on infrequent larger events, which does not reflect the frequency or attendances seen in the recent past.
- There is a lack of certainty and enforceability surrounding removal of on-grass carparking at EP2 (1,000 spaces) proposed. There is also no clear commitment for the removal of EP3 (1,100 spaces) in this application. It is critical that there is certainty around the permanent and immediate removal of all on-grass car parking across Moore Park Precinct. This is discussed separately in further detail below.
- The proposed future mode share for the stadium is unambitious and not fitting of a world class stadium in this location and given recent major investment in both public and active transport. The proposed mode share is lower than many other state capital stadiums around Australia and is unconvincing.
- The Mod 7 modelling of the Moore Park Road/ Driver Avenue intersection appears to have been incorrectly modelled and may significantly underestimate the impact that the proposal has on the road network and vice versa.

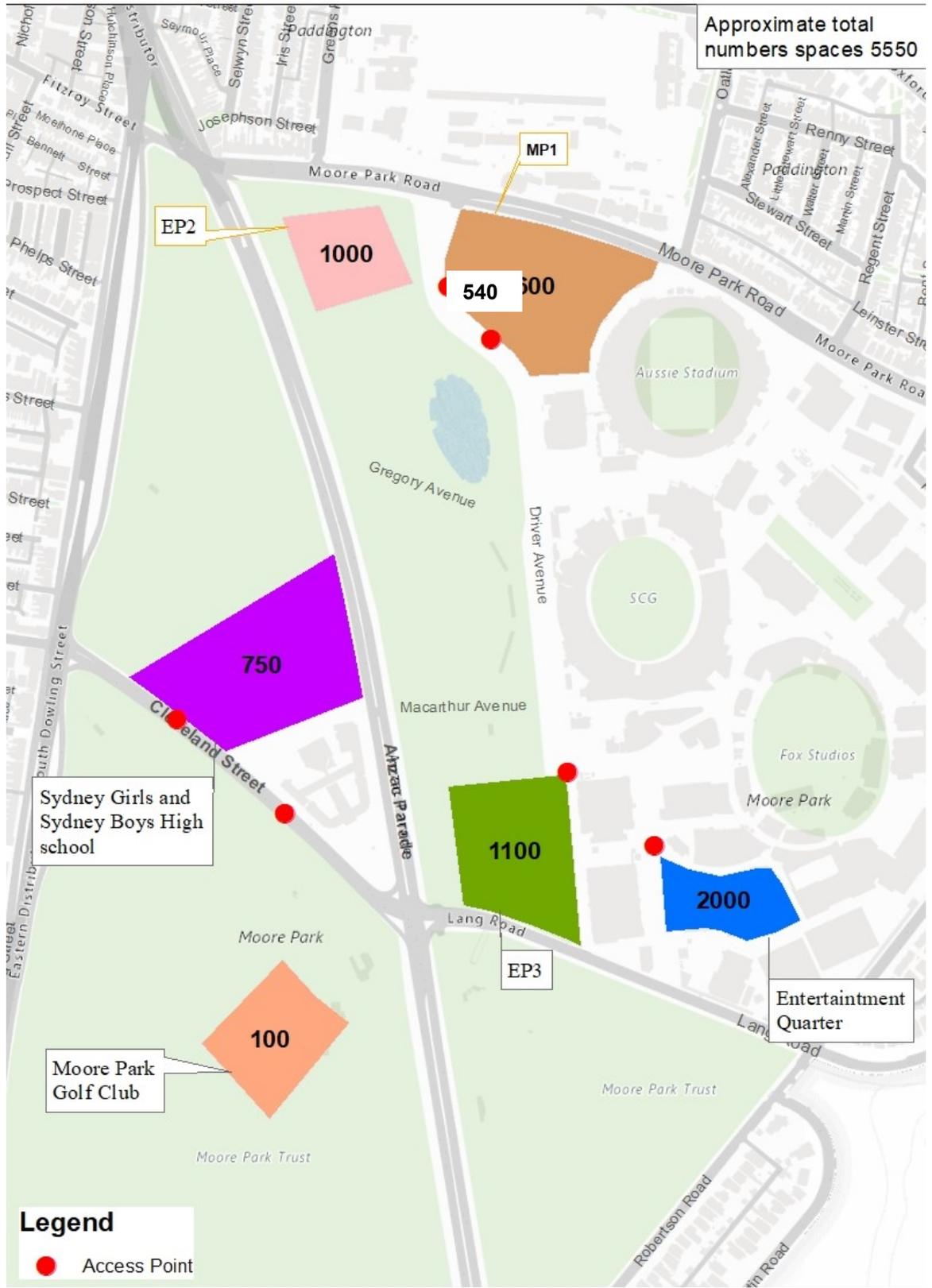


Figure 1: Existing parking sites

- It appears the signalised intersection has been modelled in isolation rather than modelling two sites including the traffic signals and the merge of the right turn into general traffic eastbound on Moore Park Road and connected as a network. If this

modelling is incorrect, and it appears to be, consideration must be made to limiting the number of spaces available outside of stadium events.

- New and accurate modelling needs to be provided to show the true impact of the stadium, carpark and new land uses. This should include as a minimum a scenario where the car park is either filled or emptied (e.g. 50% of the capacity per hour) during a peak weekday pm peak, and a Saturday lunchtime peak.

## 1.2 Removal of on grass car parking

The removal of on-grass parking has been a long-term community expectation and its ongoing operation prevents restoration of this critical community public space asset.

The submitted documents outline that the proposal will facilitate removal of 2,100 existing on-grass car parking spaces in total, as follows:

- The modification will facilitate the immediate removal of the northern portion of the EP2 (Upper Kippax) on-grass parking area.
- The modification will also facilitate the removal of the southern portion of the EP2 (Lower Kippax) on-grass parking area prior to the commencement of operation of Stage 2 of the Precinct Village and Car Park.
- Parking on EP3 (1,100 spaces) will be progressively removed by Greater Sydney Parklands in consultation with the proponent and various other stakeholders, with the view of removing all on-grass car parking in Moore Park once the Precinct Village and Car Park is operational.

The applicant proposes the inclusion of an additional condition of consent (condition A57) as a mechanism to secure removal of on-grass car parking. This proposed condition is outlined below:

### **Condition A57**

- (a) *On-grass event car parking associated with the use of the stadium within Event Parking 2 (EP2) Upper Kippax must cease immediately.*
- (b) *On-grass event car parking associated with the use of the stadium within EP2 Lower Kippax must cease prior to the commencement of operation of Stage 2 of the Precinct Village and Car Park.*

The City supports the overall objective of removing all existing on-grass car parking in the Moore Park precinct (2,100 total spaces) as soon as possible. However, there is a general lack of certainty around whether this will actually be implemented and if it will be enforceable without additional legislated means. The following issues are raised:

- It is unclear whether a condition can be imposed that relates to land that is outside of the site subject to the SSD. This means that whilst the condition may be imposed, it may not be enforceable.
- **The proposed condition of consent does not make any reference to EP3,** which currently contains 1,100 on-grass car parking spaces on event days. Therefore, there is a lack of strong intent or timeframe on the removal of on-grass parking in this location. The application puts the responsibility on the Greater

Sydney Parklands, in agreement with other stakeholders, to remove this parking, pending the implementation of the overall Moore Park Master Plan 2040. The lack of certainty or timing around this is a major concern and unacceptable to the City.

- It is noted, that there is no proposal to remove access to the other off-site car parking in the precinct that is currently available on event days including at Sydney Girls and Sydney Boys High Schools, Moore Park Golf Club and in the EQ car park.

### 1.3 The City's case for less car parking

The City has assessed the information submitted and concludes that the **permanent and immediate removal of all on-grass parking** and the construction of an additional **460 spaces** (total 1,000 as opposed to the 1,500 proposed) would adequately meet the requirements of the stadium operation, without undue impacts on the surrounding street network and transport system, but only with the permanent and immediate removal of all on-grass parking (2,100 spaces).

Events at the stadium are broken down in the application into 4 categories, with the following maximum capacity:

- **Half full events** (22,500 people)
- **Full events** (45,000 people)
- **Concerts** (55,000 people)
- **Double headers** (95,000 people)

During 2018, the last year the stadium was in full operation before demolition commenced in early 2019, there were 2 double header events. The stadium approval also limits concerts to an average of 4 a year over 5 years, and a maximum of 6 in any one year.

The *City and South East Light Rail EIS* summarised the frequency and attendance of events in 2011 and showed the majority of events at the stadium operate in a half full event mode. The ARUP modelling for the original stadium SSD assumed a modal share of drivers/passengers of 46% for half full events.

This would require approximately 3,850 car parking spaces. This can be achieved by use of the EQ car park, Sydney Boys and Girls high school parking, the Golf Club parking and a new **1000 space basement car park**, and **no on-grass parking**.

The applicant's target mode share of driver/passenger is similar to 2018 levels. The City is of the view that it should be lower to reflect current TfNSW policies and to better reflect the large investment in both active and public transport (light rail) connecting people to the stadium.

**The City requests the opportunity to discuss this case for less parking further with DPIE and the applicant.**

## 2. Heritage

A spur of Busby's Bore, listed on the State Heritage Register, Sydney Water s170 Heritage Register and the Sydney LEP 2012, traverses part of the site. Historical plans indicate that there may also be one or two shafts to the bore on the site.

The proposed carpark entails bulk excavation of large quantities of soil from the study area and has the potential to impact archaeological remains. Such excavation is proposed within the 3m curtilage of the bore.

The Heritage Impact Statement prepared by Artefact, dated September 2021, provides recommendations to avoid direct and vibrational impacts to Busby's Bore and its shafts. It is important that these recommendations (in Section 8.2(4) of the report) relating to the preparation of a Construction Heritage Management Plan and Construction Noise and Vibration Management Sub-Plan are imposed as conditions of consent. The views of Heritage NSW should also be sought in relation to this matter.

### **3. Urban Design**

The proposed public domain aspects result in a positive contribution to the urban fabric. However, the quantum of proposed additional parking is contributing to the following impacts:

- The park is on a slope, elevated up to 2 storeys above Driver Avenue and approximately one storey above Moore Park Road. The elevation of the park is due to the parking structure being located under the park. The slope of the park reduces the area of useable and level public space and creates the need for stairs and a long ramp.
- Limited equitable access, with the ramp being located at the corner of Moore Park Road and Driver Avenue which is the furthest corner from the light rail station.
- Loss of existing trees.

Reducing the number of proposed car parking spaces would minimise the above impacts and provide public open space that is more contiguous with the levels of the surrounding public domain and therefore more accessible to everyone.

### **4. Public Domain**

The City's public domain on Moore Park Road and the public footpath on Driver Avenue have not been addressed in the application. Given the design focuses on leading pedestrians through the site from the public domain on all street frontages to the stadium, terraces and decks facing out to the public domain, these areas should be considered as part of the works.

The finishes of the public domain and public footpaths should complement the treatments proposed inside the site boundary and ensure safe and equitable access to the site.

The current consent has conditions relating to the public domain that must be addressed as part of this modification.

### **5. Tree Management**

The Arboricultural Impact Assessment (AIA) prepared by TreeIQ dated 6 September 2021 (Rev A) has been reviewed.

A total of 39 trees are proposed for removal. This includes the following retention value rated trees:

Priority for Retention	Consider for Retention	Consider for Removal	Priority for Removal
1 x tree	7 x trees	29 x trees	2 x trees

The City supports the following tree removals:

- The 29 'consider for removal' trees are predominantly located along the eastern carpark driveway. These trees have a low landscape significance rating and will require removal for the basement footprint.
- 2 'priority for removal' trees are of poor health and structural condition. The removal of these trees is supported.
- With sufficient replacement planting, the City supports the removal of these 31 trees.

However, the following issues are raised:

- The removal of trees with a 'priority/consider for retention' value rating is not supported.
- The new pedestrian entry on the corner of Moore Park Road and Driver Avenue must be redesigned using tree sensitive methods to retain trees 137 and 138, i.e., the pathway being on or above existing grade and utilising the current pedestrian entrance on Driver Avenue (approximately 10 metres from the new entrance).
- The proposed basement and stairs must be setback to retain trees 137, 138, 147, 151, 195 and 303. Amendments to the internal carpark layout may allow for a reduction of the basement footprint. The amended basement footprint must be based on non-destructive root investigations by an AQF Level 5 Arborist.
- Proposed pilling rigging will require the removal of tree 187 and pruning of tree 184. It is recommended that the layout for the pilling rig be amended to limit impacts to existing trees to be retained. The crane should be relocated further east where the current carpark drive is.
- The AIA has not provided a tree protection plan that shows the Tree Protection Zones (TPZ), Structural Root Zone (SRZ) and incursions within these zones.
- According to the AIA, a total of 89 replacement trees are proposed within the site. The Landscape Plans prepared by Aspect dated 2 September 2021 'Rev 1' are generally concept at 30% completion. Details of the proposed replacement planting e.g. number of tree species, planting conditions etc have not been provided.
- A detailed landscape plan, drawn to scale, by a qualified landscape architect or landscape designer should include:
  - Details of earthworks and soil depths including mounding and retaining walls and planter boxes (if applicable).

- Location, numbers, type and supply of plant species, with reference to the relevant Australian Standard;
- Details of planting procedure and maintenance;
- Details of drainage, waterproofing and watering systems.

In addition to the above, the City makes the following recommendations:

- All tree pruning must be undertaken in accordance with AS 4373 2007 Pruning of Amenity Trees by an AQF Level 3 Arborist.
- All street trees surrounding the site on Council owned land must be retained and protected in accordance with AS4970-2009 Protection of Trees on Development Sites. The protection and retention of all existing street is a priority for the City and the trees are long term assets that the community highly values. The proposed development and associated landscaping in the vicinity of trees including street trees has a high potential to impact in their health and structure. The City of Sydney Street Tree Master Plan includes general street tree protection measures and conditions that must be followed. See Section 8 of the below document: [http://www.cityofsydney.nsw.gov.au/\\_data/assets/pdf\\_file/0010/130240/STMP2011\\_150501-PartD.PDF](http://www.cityofsydney.nsw.gov.au/_data/assets/pdf_file/0010/130240/STMP2011_150501-PartD.PDF)
- All trees to be retained within the site must be protected in accordance with AS4970-2009 Protection of Trees on Development Sites, and as specified in the *Arboricultural Impact Assessment (AIA) prepared by TreeIQ dated 6 September 2021 'Revision A'*. A Project Arborist must be engaged to assist with tree management advice during the various stages of the design and construction process. The Project Arborist should be qualified in arboriculture to Australian Qualifications Framework (AQF) level 5 or above and have at least 5 years demonstrated experience in managing trees within complex development sites.
- Tree sensitive methods as outlined within Section 3.4 of the AIA must be used within TPZ areas to minimise adverse impacts. Existing ground levels must be maintained, and all new structures must be designed to accommodate the trees to be retained.
- Newly planted trees must meet Australian Standard 2303: Tree Stock for Landscape Use (2015).
- Loss of existing tree canopy should be offset by replacement tree plantings that will attain a comparable size at maturity e.g. a large tree should be replaced with a tree species that will grow to a similar size.

## 6. Landscape

### 6.1 Western carpark design and excavation impacts on existing trees

Unlike the eastern carpark, which is naturally ventilated, design of the western carpark is 5 basement levels that relies on mechanical ventilation.

The plans indicate a number of engineer plant rooms at the edge of the western carpark that impact on existing trees and deep soil. It is requested that the applicant:

- Confirm the design and purpose of each mechanical plant room; and

- Demonstrate options to locate mechanical plant and stairs clear of existing trees of significance T147, 148, T187, T308.

## 6.2 Stormwater

Overland flow and localised flooding in 1 in 100 year storms are an issue on the northern edge of western car park basement. Storm water is to be channelled around the site.

Architect section L (dwg A42.00.20 [B]) shows a stormwater culvert at the edge of the carpark located over the top of carpark plenums. It is queried whether stormwater and air intake can be mingled and clarification on this is requested.

## 6.3 Wind

The Eastern edge of the Rugby Australia building shows a wind screen to mitigate wind gusts (see Figure 2 below). The location will impact on new trees previously approved in SSD 9835 (See Figure 3).

Clarification is requested as to whether a wind study has been prepared and the rationale behind providing this screen. It is requested that the applicant submit design details to confirm impacts and wind screen design.

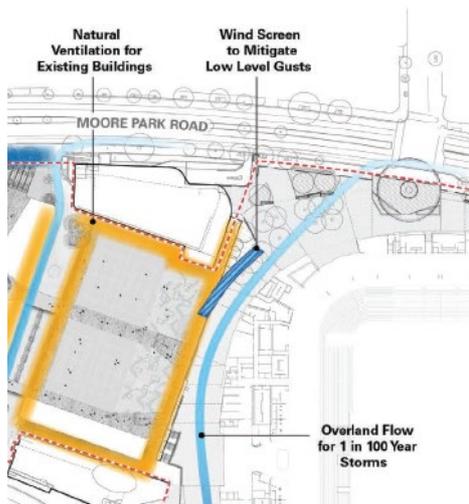


Figure 2



Figure 3: Approved SSD

## 6.4 Issues with architectural plans and sections

The following issues need to be addressed in the plans:

- Confirm the change in the existing approval for the stadium, which had trees at the edge of the concourse between Carpark MP1. Clarification is required around how many trees are retained and removed.
- Sections E-F and H-J (dwg A42.200.25 [B]) are not shown in plan (dwg 13.L.1.03 [F]). An updated plan confirming the location is required. These sections show level 0 carpark with new trees over 8m tall growing out of concrete between pedestrian bridges above on plaza level. The section is incomplete and does not demonstrate a slab set down with integral tree pits or use of upturned waffle slab with sufficient depth and soil volume to support the healthy growth of trees.

- Confirm that the design of tree planters within the 'gully' allows for minimum 1m soil depth and soil volume compliant with Sydney Landscape Code 2.
- The photomontages indicate trees in planters east of the tennis courts in the flexible spectating zone. No trees are shown on the landscape plans.

## 6.5 Landscape design

The submitted Landscape Plans are 30% tender and are an incomplete package. They include levels and grading, select sections, materials and finishes, tree retention and removal plan only. The package must be updated to include the following:

- Staging of east and west carparks
- Details of the children's nature play and water play area
- Planting plans and details
- Plant schedule, including new tree species (size, mature height, spread) and quantities
- Soil depth and volume for all new trees located on slab
- Details for walls, and edges, furniture, play equipment, structures, ramps, stairs, steps, planters, carpark planters, lighting coded on Legend
- Photomontage indicates trees in planters east of the tennis courts in the flexible spectating zone. Confirm the design of moveable planters allows for soil depth and volume with small shade trees.
- Confirm lighting design does not contribute to light pollution and impact on fauna.
- Clarification is requested around the proposed change in the number of existing trees for removal and new trees proposed, in line with the previously approved tree replacement ratio of 3:1.

## 6.6 Green roofs

The submitted photomontages indicate inaccessible green roofs to new buildings including the Precinct Village Retail Pavilions and Tennis Club Pavilion, which could be supported. However, green roofs are not part of the landscape package.

It is noted that the City does not support the use of synthetic turf surface on roofs. This is due to the artificial nature, heat gain, lack of biophilic and biodiversity outcomes and likelihood of ending up in landfill in the future.

It is requested that the applicant:

- Confirm green roof design (intensive or extensive), overall soil depth, drainage design, and plant species with rate/sqm.
- Submit an outline strategy of how the inaccessible green roofs will be safely accessed and maintained.

## 7. Sustainability

The ESD Report has been reviewed, and the following comments are made:

### 7.1 Proposed parking spaces and sustainability

Currently, on-grass parking is only used for events, whereas the proposed car park will be used 24/7. It is unclear why the proposed intensification of carparking is deemed a feasible and sustainable outcome if the project seeks to obtain LEED v4 certified Gold rated sustainable precinct targets. The design report notes:

*“LEED v4 certified Gold rating which is deemed ‘Australian Best Practice’. Sustainable design principles have been established in the Environmentally Sustainable Design Strategy by LCI Consultants under categories outlined within the LEED v4 rating system. These categories include: Location and Transport, Sustainable Sites, Water Efficiency, Materials and Resource, Energy, Social Sustainability.”*

It is requested that the following points be addressed by the applicant from a sustainability perspective:

- Car parking numbers should be reduced (as per the City’s recommendations under Point 1.2 of this letter) to allow the western carpark to be naturally ventilated like the eastern carpark and limit excavation extent and plant rooms required for mechanical ventilation that impact existing trees.
- Consideration should be made as to whether there is space in the western carpark design of aisles and spaces that could be minimised to make a more compact footprint and pull the basement back from Moore Park and Driver Avenue existing trees.

### 7.2 Facilitating electric vehicles

The ESD report includes a commitment to allocating spatial capacity for electric vehicle supply equipment for 2% of all parking, which is a poor commitment and inconsistent with NSW government directions.

The National Construction Code (NCC) is soon to introduce a requirement that new commercial development provide the basic infrastructure (cable stray space and meter board space for future upgrade) in new carparks for electric vehicle charging for 20% of spaces. By 2030, electric vehicles will represent a significantly greater proportion of the Australian car fleet. Any new parking facilities constructed for government managed or controlled facilities should have a much higher allocation of electric vehicle charging infrastructure. 50% or greater would be an appropriate target given this is a Government project.

### 7.3 Green vehicle preference

The ESD report specifies *“commitment to allocating spatial capacity for **green vehicle preference** for 5% of all parking by the project.”* Clarification is requested as to what is meant by ‘green vehicles’ and how this is to be defined and controlled in practice.

## **7.4 Construction materials**

Page 14 and 31 of the ESD report reference the original stadium SSD. Clause (vi) of Condition B20 requires details of alternative construction materials to be submitted.

There should be unequivocal commitment to use low embodied carbon concrete for all concrete construction elements for the carpark and public domain. The NSW Government is championing innovation in this space and should lead by example. Commercial products are available from largescale suppliers at no significant cost to the proponent. This may not need to be a commitment to geopolymer product but must be demonstrable 30-40% lower embodied carbon and there are commercial products on the market that meet this.

## **7.5 Lighting strategy**

The Lighting Strategy has only brief reference to energy efficiency. While it is anticipated that all outdoor and carpark lighting will be LED technology, the light strategy should include a clear statement from the proponent about commitment to the most efficient lighting technologies, given that for carparking facilities lighting is usually a significant contributor to total energy use alongside fans/ ventilation.

## **8. Environmental Health**

### **8.1 Operational noise and vibration**

The Noise and Vibration Impact Assessment prepared by ARUP has been reviewed and the following points are made:

- The location, type and size of building services plant that may emit noise to the surrounding environment will be the subject of further design development and indicative advice provided at this stage will be revised once the mechanical services design package is finalised.
- A preliminary mechanical design has been developed which indicates that noise emissions will be well below the operational noise criteria at the nearest sensitive receivers and can be treated with acoustic attenuators to further mitigate noise. It is recommended that a condition be imposed to assess the potential mechanical plant noise impact prior to the issue of any Construction Certificate, in the form of a mechanical plant noise verification report.
- Event noise will need to comply with noise levels set out in condition D48 of the original stadium consent, while non-event days need to comply with noise levels set out in condition E2.
- Any music in relation to retail background music, live music or performances will require assessment as part of future retail fitout Development Applications. Cumulative noise assessments will need to be completed to ensure compliance with the approved precinct noise levels.
- Consent for any stand-alone events on non-event days that are not captured by Conditions A17 and the Event Management Plan of the original stadium consent will be subject to a separate future approval. This should be clearly conditioned.

## 8.2 Construction noise and vibration

It is recommended that the Construction Management Plan conditioned in the Stage 2 SSDA be updated or an addendum prepared to minimise potential impacts during construction. Any respite periods mandated in the Stage 2 consent should continue to be implemented in the construction of the Precinct Village and carpark.

## 8.3 Waste

It is recommended that a vermin proofing condition be included in relation to the main waste storage area.

## 9. Waste Management

No Waste Management Plan (WMP) or Construction and Demolition Waste Management Plan (C&DWMP) have been submitted with the modification documents.

Without reviewing the WMP and C&DWMP, the City cannot make comments on the development at this stage. These documents are requested for further review and comment.

## 10. Social Impacts

The Social Impact Assessment has been reviewed and the following comments are made:

- Detail is required as to whether the proposed children's playground will be an inclusive playground, using the NSW 'Everyone Can Play' guidelines for the design.
- Detail is required regarding who will manage the public facilities on the site, such as the tennis court and playground. Affordable access to facilities and services is a key focus for the City.

Should you wish to speak with a Council officer about these comments, please contact Samantha Kruize, Planner, on 9246 7263 or at [skruize@cityofsydney.nsw.gov.au](mailto:skruize@cityofsydney.nsw.gov.au)

Yours sincerely,



**Graham Jahn** AM LFRAIA Hon FPIA  
**Director**  
City Planning | Development | Transport