SYDNEY FOOTBALL STADIUM REDEVELOPMENT

STATE SIGNIFICANT DEVELOPMENT APPLICATION Concept Proposal and Stage 1 Demolition SSDA 9249

APPENDIX A: Secretary's Environmental Assessment Requirements



Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act* Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 9249
Development	 Staged development application for the redevelopment of Sydney Football Stadium including: a concept proposal for the envelope of the new stadium and a maximum capacity of 45,000 seats, new retail and functional facilities, new playing pitch and ancillary entertainment facilities; and concurrent Stage 1 works comprising demolition of the existing stadium to ground level <u>only</u>.
Location	Sydney Football Stadium, 40-44 Drivers Avenue, Moore Park
Applicant	Infrastructure New South Wales
Date of Issue	3 May 2018
General Requirements	 The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental and social impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: adequate baseline data, including the estimated energy, water and material use in construction and operation; consideration of potential cumulative impacts due to other development in the vicinity (completed, underway, approved or proposed); and measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. The EIS must be accompanied by a report from a qualified quantity surveyor providing: a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; an estimate of the jobs that will be created by the future development during
	 the demolition, construction and operational phases of the development; and certification that the information provided is accurate at the date of preparation.
Key Issues	 <u>Concept Proposal</u> The EIS must address the following specific matters: 1. Statutory and Strategic Context – including: Address the statutory provisions contained in all relevant environmental planning instruments, including: State Environmental Planning Policy (State & Regional Development) 2011;

	State Environmental	Planning	Policy	(Infrastructure) 2007,	;
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- State Environmental Planning Policy No.55 Remediation of Land;
- Draft State Environmental Planning Policy No.55 Remediation of Land;
 - Draft State Environmental Planning Policy (Environment) 2017;
 - State Environmental Planning Policy No. 64 Advertising and Signage;
 - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
 - Sydney Local Environmental Plan 2012; and
 - Centennial Park and Moore Park Trust Act 1983.

Permissibility

Detail the nature and extent of any prohibitions that apply to the development.

Development Standards

Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.

2. Policies

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

- NSW State Priorities;
- The Greater Sydney Regional Plan A Metropolis of Three Cities;
- NSW Future Transport Strategy 2056;
- NSW Energy Efficiency Action Plan 2013;
- NSW Resource Efficiency Policy (GREP);
- Greener Places (NSW Government Architect Green Infrastructure Policy);
- Eastern City District Plan;
- Better Placed: An integrated design policy for built environment of NSW;
- Crime Prevention Through Environmental Design (CPTED) Principles;
- Sustainable Sydney 2030;
- Sydney's Cycling Future 2013;
- Sydney's Walking Future 2013;
- Sydney's Bus Future 2013;
- Sydney City Centre Access Strategy 2013;
- City of Sydney Policy for Waste Minimisation in New Development;
- City of Sydney Tourism Action Plan 2015;
- City Art-Public Art Strategy City of Sydney;
- Sydney Development Control Plan 2012;
- Centennial Parklands Plan of Management 2006 2016;
- Centennial Park Master Plan 2040;
- Moore Park Master Plan;
- Centennial Parklands Conservation Management Plan; and
- Centennial Parklands Tree Master Plan.

3. Staging

- Provide a detailed overall staging plan, including demolition, remediation, construction, public domain works and operation phases.
- Provide preliminary information as applicable to each stage of works as follows:
 - a preliminary Construction Traffic and Pedestrian Management Strategy demonstrating principles for consideration of the management of the impact in relation to traffic generated as a result of all stages of the development;
 - description of how future design will manage impacts on the interception and management of groundwater;
 - detail regarding waste management: identification, quantification and classification of potential waste streams and measures to be implemented to manage, reuse, recycle and safely dispose of this waste.

- detail regarding consultation and collaboration with relevant agencies, including Centennial Park and Moore Park Trust; and
- o detail regarding potential contamination management.

4. Design Excellence

- Describe the design process leading to the Concept Proposal.
- Provide design quality guidelines for the future built form and integration of landscape design.
- Provide a Design Excellence Strategy, developed in consultation with, and to the satisfaction of, the Government Architect NSW, for the future stages of the development which demonstrates how design excellence will be achieved. This strategy should set out:
 - the design process leading to the Concept Proposal;
 - the type and details of the competitive design excellence processes proposed to be undertaken, in accordance with clause 6.21 of the Sydney LEP, and clear rationale for this process having regard to established design excellence policy context and best practice;
 - a method setting out how the proposed design excellence, public domain and landscape excellence process will be implemented as part of the planning process; and
 - \circ details of the method for the incorporation of sustainability into design.

5. Built Form and Urban Design

- Outline consultation with the Government Architect NSW and how the feedback has been incorporated into the Concept Proposal;
- Provide a detailed justification for the building envelope, supported by an urban design analysis, to justify that the proposed built envelope location and design are based on careful consideration of the benefits and potential impacts in the context of the immediate locality and the broader Sydney CBD area;
- Provide appropriate design guidelines and development parameters within the context of the locality, including but not limited to:
 - o site analysis;
 - o site layout;
 - o gross floor area;
 - building footprints;
 - height and massing of the building envelopes; and
 - open spaces, landscaping, green infrastructure and tree planting to improve amenity and reduce urban heat island effect;
- Demonstrate how the design of the development will be integrated into the City of Sydney and fit within the context of the site and the existing and future desired character of Moore Park area, including the adjacent Sydney Cricket Ground; and
- Provide an in indicative building and landscape design showing a possible built form within the proposed building envelope.

6. Transport and Accessibility

Include a preliminary traffic and transport accessibility impact assessment, which includes details of, but is not limited to, the following:

 accurate details of the current daily and peak hour vehicle, existing and future public transport networks, special event bus network and pedestrian and cycle movement provided on the road network surrounding the stadium on a typical weekday and weekend (event day) with consideration of simultaneous events within the Moore Park Precinct and parking occupancy on a typical weekday and weekend (event day);

- indicate likely activities at the stadium, including type of events, number of events and capacity of the various type of events;
- details of estimated total daily and peak hour trips generated by the completed stadium including vehicle (including point-to-point transport), public transport, coaches, special event buses, pedestrian and bicycle trips based on surveys of comparable stadiums for concerts (including field and seated capacity), major events (full capacity), minor events (half capacity) and no event scenarios and the impact upon the surrounding road network with consideration of simultaneous events within the Moore Park Precinct;
- the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site including the Sydney Light Rail, pedestrian and bicycle networks and associated infrastructure, including future enhancements, to meet the likely demand for the future development;
- the estimated future daily and peak hour trips and movements for each event scenario in the surrounding road network, including cumulative impact from nearby development, within and outside of the Moore Park Precinct, including from point to point transport and continued operation of special event buses;
- the impact of trips generated (pedestrians, bicycle, public transport and motor vehicles) by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity and simultaneous events within the Moore Park Precinct, and the need/associated funding for, and details of, upgrades or road improvement works, if required, supported by appropriate modelling and analysis to the satisfaction of RMS and TfNSW;
- the identification of infrastructure required to ameliorate any impacts on transport efficiency and public transport operation (including the Sydney Light Rail and special event buses) and road safety impacts associated with the future development, including details on improvements required to affected intersections;
- the impact of increased demand generated by operations of the stadium on the existing and future public transport network, pedestrian and bicycle networks and the adequacy of the network to cater for the development;
- integration of the development with the existing/future public transport network including the Sydney Light Rail;
- proposed future design measures to encourage worker and travel by public transport, walking, cycling and car sharing, including minimal onsite parking for spectator use and provision of adequate bicycle parking and end of trip facilities and improved connections between the stadium and public transport and pedestrian and bicycle networks, and, consideration of a Green Travel Plan;
- the proposed wayfinding strategy and associated infrastructure to support the movement of large crowds to and from public transport servicing the Moore Park Precinct (including from the CBD), special event buses, coach and point to point transport pick-up and drop-off locations, including consideration of signage height and illumination and decision points;
- the proposed operational access arrangements, including internal circulation network (for motor vehicles, pedestrians and cyclists), and measures to mitigate any associated traffic and road safety impacts and impacts on the road network, public transport and pedestrian and cycle networks;
- the impact of any proposed roads or driveways;
- access arrangements for emergency vehicles, including protocol procedures for emergency vehicle access to protected areas during emergencies;

- provisions of set-down/pick-up facilities for buses, coaches, taxis and rideshare vehicles for each event scenario;
- compliance with the relevant and Australian Standards for vehicle parking with accessible areas close to main entries incorporating lighting and passive surveillance; and
- service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type, routes and the likely arrival and departure times) including the potential for latent capacity in the development's loading and servicing facilities to be made available to third party logistics operators.
- \rightarrow Relevant Policies and Guidelines:
- Guide to Traffic Generating Developments (Roads and Maritime Services)
- EIS Guidelines Road and Related Facilities (DoPI)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- Standards Australia AS2890.3 (Bicycle Parking Facilities)
- Development near Rail Corridors and Busy Roads Interim Guideline.

7. Noise and Vibration

- Identify and provide a qualitative assessment of the main noise and vibration generating sources including demolition, site preparation, piling, earthworks, construction, concrete crushing and operation of the stadium (including pre, during, and post- events where amplification will be used).
- Outline key noise mitigation and management measures that would inform the final design of the stadium to minimise potential noise impacts on the surrounding sensitive receivers.
- → Relevant Policies and Guidelines:
- NSW Noise Policy for Industry 2017 (EPA)
- Interim Construction Noise Guideline (DECC)
- Assessing Vibration: A Technical Guideline 2006
- Development Near Rail Corridors and Busy Roads Interim Guideline (Department of Planning 2008)

8. Environmental Amenity

Include a preliminary assessment demonstrating how the concept proposal and future design requirements will achieve a high level of environmental amenity for the locality including:

- solar access and overshadowing analysis outlining the impacts on adjoining developments and the public domain, including design options to minimise impacts;
- view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development);
- lighting strategy and measures to reduce spill into the surrounding sensitive receivers;
- consideration of a shading strategy for both ticket holders and other users of the future proposed public domain areas;
- strategy for pedestrian access routes throughout the public domain;
- preliminary wind strategy outlining the process to identify and manage wind impacts of the future design of the development on the comfort and safety of workers and visitors to the future development;

- impacts of the proposal on the amenity of surrounding developments including measures to minimise potential overshadowing, privacy and view impacts; and
- public domain guidelines including any proposals for Driver Avenue.

9. Ecologically Sustainable Development (ESD) Strategy

- 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.
- Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design and technology and use of renewable energy.
- Undertake a preliminary analysis of the likely service demands for drinking water, wastewater and recycled water services and outline the preliminary 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.

10. 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; and
- building performance and mitigation of climate change, including consideration of Green Star Performance.

11. Design of Resilience to Climate Change

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

- hotter days and more frequent heatwave events;
- extended drought periods;
- more extreme rainfall events;
- gustier wind conditions; and
- how these will inform material selection and social equity aspects (respite/shelter areas).

12. Heritage

- Provide a heritage impact statement addressing the extent of impact on the heritage significance of the heritage items/heritage conservation areas, landscape items and settings within the site and in the vicinity, in accordance with the guidelines in the NSW Heritage Manual. In particular, the impact of the proposal on the following heritage items should be assessed:
 - o Busby's Bore including tunnels, shafts and wells; and
 - Sydney Cricket Ground;
 - Moore Park Showgrounds;
 - Paddington South Conservation Area;
 - Moore Park Conservation Area; and
 - Sydney Cricket Ground Conservation Area.

Address any archaeological potential and significance of the site and the potential impacts the development may have on this significance and include a preliminary mitigation strategy.

13. Aboriginal Heritage

- Demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes.
- Outline the approach to be undertaken for future stage/s of the development in relation to Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR), including details of activities undertaken to date. This may identify the need for surface survey and test excavation in addition to the following:
 - consultation with Aboriginal people must be undertaken and documented in accordance with the guidelines. The significance of cultural heritage values for Aboriginal people who have a cultural association with the lands must be documented in the ACHAR; and
 - impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
- \rightarrow Relevant Policies and Guidelines:
- Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010)
- Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)
- Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).

14. Flora and Fauna Assessment

Assess and document the flora and fauna impacts related to the concept proposal envelope, including basement, by a suitably qualified person. *Note:* Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report.

15. Drainage

Provide preliminary detail of drainage associated with the proposal, including stormwater and drainage infrastructure and rainwater harvesting and storage for on-site reuse.

- \rightarrow Relevant Policies and Guidelines:
- Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)

16. Flooding

Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation.

17. Social and Economic Impacts

Assess the social and economic impacts of the development, including the benefits the stadium will generate for Sydney CBD and the local region, including tourism, retail, entertainment and night-time economies.

 18. Utilities In consultation with relevant agencies, identify the existing capacity of utilities to service the future development and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure upgrades. → Relevant Policies and Guidelines: Water Sharing Plans for the Greater Metropolitan Region Groundwater Sources and Unregulated River Water Sources.
 19. Community Engagement Strategy Identify and detail the communication and community engagement activities undertaken and to be undertaken to inform and refine the Concept Proposal. Identify all future community engagement strategies in relation to the future stages of the proposal.
20. Prescribed Airspace for Sydney Airport Identify any short term and long-term impacts of the future proposal on the prescribed airspace for Sydney Airport.
Stage 1 Works
The EIS for the Stage 1 works including demolition of the existing stadium to ground level must address the following specific matters:
 Transport and Accessibility A Transport Impact Assessment must be prepared that assesses the transport impacts of Stage 1 works. Detail access arrangements for Stage 1 works and measures to mitigate any associated pedestrian, cyclist or traffic impacts, including the preparation of a draft Construction Traffic and Pedestrian Management Plan (CTPMP) for Stage 1 works addressing but not limited to, the following:

2. Noise and Vibration
 Identify and provide a quantitative assessment of the main noise and vibration generating sources and activities during Stage 1 including, where applicable, demolition, site preparation, piling, earthworks, construction, concrete crushing. This should include an assessment of: background noise at the most affected sensitive receivers within the site, adjacent to the site and in close proximity to the site in accordance with the guidance material provided in EPA's <i>Noise Policy for Industry (NPI) 2017</i>; detailed noise modelling of noise generated as part of the Stage 1 works at sensitive receivers; intra-day respite periods for continuous, noisy works; and the locations and hours of all noisy equipment, including the concrete batching plant, if relevant; Outline measures to minimise and mitigate the potential noise impacts on all surrounding sensitive receivers. Relevant Policies and Guidelines: <i>Interim Construction Noise Guideline (DECC)</i> Assessing Vibration: A Technical Guideline 2006.
3. Stormwater, Sediment and Erosion Controls
 Detail the management of stormwater flows during Stage 1 works, including detail of stormwater and drainage infrastructure to mitigate impacts of flows to and from the site as well as rainwater harvesting and storage on-site for reuse during Stage 1. Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. → Relevant Policies and Guidelines: Guidelines for development adjoining land and water managed by
DECCW (OEH, 2013)
 Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)
4. Waste, Recycling and Resource Recovery
 Identify, quantify and classify the likely waste streams to be generated during the Stage 1 works, including any hazardous materials, and describe the measures to be implemented to reduce, reuse, recycle, where possible and then manage and safely dispose of this waste. Identify useable spoil management initiatives. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.
5. Ecologically Sustainable Development (ESD)
 Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>) will be incorporated into the demolition stage of the development. Address how the proposed demolition will reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction measures, use of sustainable and low carbon materials, energy and water efficient design and technology and use of renewable energy.

	 6. Flora and Fauna Assess and document the flora and fauna impacts related to the Stage 1 works, by a suitably qualified person. Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report. 7. Prescribed Airspace for Sydney Airport Identify any short-term impacts of the demolition works on the prescribed airspace for Sydney Airport. 8. Construction Hours Identify proposed hours for the Stage 1 works and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours. 9. Construction Traffic and Pedestrian Management Plans Prepare a Construction Traffic and Pedestrian Management Plan, including: details of vehicle routes, numbers of trucks by type, hours of operation, access management and traffic control measures for all phases of Stage 1; assessment of cumulative impacts associated with other construction activities (Light rail construction, Alexandria to Moore Park project, etc.) an assessment of road safety at key intersections; details of anticipated peak hour and daily truck movements to and from the site during normal weekday and during scheduled special events during Stage 1; details of anticipated peak hour and daily truck movements to and from the site during normal weekday and during scheduled special events during Stage 1; details of temporary cycling and pedestrian access during Stage 1; an assessment of traffic and transport impacts during Stage 1; an assessment of traffic and transport impacts during Stage 1; an assessment of traffic and transport impacts during Stage 1; an assessment of traffic and transport impacts during Stage 1; an assessment of traffic and transport impacts during Stage 1; an assessment of traffic and tr
	 a plan for timely repair to damaged infrastructure and how these will be managed throughout the construction period.
Plans and	The EIS must include all relevant plans, architectural drawings, diagrams
Documents	and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.
	 In addition, the EIS must include the following: Architectural drawings (dimensioned and including RLs, scale and north point); Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries; Site Analysis Plan; Sediment and Erosion Control Plan; Shadow Diagrams including public domain shadow diagrams; View Analysis / Photomontages, including from public vantage points; 3D Digital model (generally in accordance with the City of Sydney Council's requirements); Flood Assessment and Drainage Plan; Flora and Fauna Assessment; Arborist Report; ESD Strategy for Future Development;

	 Heritage Impact Statement; Acoustic Impact Assessment Report; Traffic and Transport Accessibility Impact Assessment Report; Public Domain Strategy; Preliminary Construction Management Plan for the Future Stage inclusive of a Preliminary Construction Pedestrian and Traffic Management Plan; Construction Management Plan for Stage 1 Works inclusive of a draft Construction Pedestrian and Traffic Management Plan; and Pre-Submission Community Consultation Report. Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report.
Consultation	 During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups and affected landowners (if required). In particular, you must consult with: City of Sydney Council; Office of Environment and Heritage; Government Architect NSW; Sydney Airport Corporation Limited and Civil Aviation Safety Authority; Transport for NSW (TfNSW); Sydney Coordination Office within TfNSW; Environmental Protection Authority; Sydney Water; Department of Primary Industries; and Roads and Maritime Services. Consultation with Council and agencies should commence as soon as practicable to agree to the scope of assessment. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

	a short explanation should be provided.	
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	
References	The assessment of the key issues listed above must consider relevant guidelines, policies, and plans as identified.	