

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD-10101987
Project Name	Kemps Creek Data Centre
Development	<p>Construction and operation of a data centre comprising:</p> <ul style="list-style-type: none"> - two data hall buildings - high voltage electrical switchyard - one substation - 61 generators - 32 fuel storage tanks - ancillary office - associated infrastructure, carparking, loading areas and landscaping.
Location	706-769 Mamre Road, Kemps Creek within Penrith
Applicant	ARUP PTY LIMITED
Date of Issue	01/03/2021
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).</p> <p>In addition, the EIS must include:</p> <ul style="list-style-type: none"> · a detailed description of the development, including: <ul style="list-style-type: none"> - an accurate history of the site, including development consents - the need for the proposed development - justification for the proposed development - likely staging of the development - likely interactions between the development and existing, approved and proposed operations in the vicinity of the site - plans of any proposed building works - contributions required to offset the proposal and - infrastructure upgrades or items required to facilitate the development, including measures to ensure these upgrades are appropriately maintained. · consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments · consideration of issues discussed in Attachment 2 (public authority responses to key issues) · a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment · a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: <ul style="list-style-type: none"> - a description of the existing environment, using sufficient baseline data - an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes and - a description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to

	<p>manage significant risks to the environment.</p> <ul style="list-style-type: none"> · a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. <p>The EIS must also be accompanied by:</p> <ul style="list-style-type: none"> · high quality files of maps and figures of the subject site and proposal · a report from a qualified quantity surveyor providing: <ul style="list-style-type: none"> - a detailed calculation of the capital investment value (CIV) of the proposal (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. The report shall be prepared on company letterhead and indicate the applicable GST component of the CIV - an estimate of the jobs that will be created by the development during the construction and operational phases of the proposed development and - certification that the information provided is accurate at the date of preparation.
<p>Key issues</p>	<p>The EIS must include an assessment of the potential impacts of the proposal (including cumulative impacts) and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts.</p> <p>The EIS must address the following specific matters:</p> <ol style="list-style-type: none"> 1. Statutory and strategic context – including: <ul style="list-style-type: none"> - detailed justification for the proposal and the suitability of the site - detailed justification that the proposed land use is permissible with consent - details of any proposed consolidation or subdivision of land - a detailed description of the history of the site, including the relationship between the proposed development and all development consents and approved plans previously and/or currently applicable to the site - demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. This includes, but is not limited to: <ul style="list-style-type: none"> o State Environmental Planning Policy (Infrastructure) 2007 o State Environmental Planning Policy (Western Sydney Employment Area) 2009 o State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 o State Environmental Planning Policy (State and Regional Development) 2011 o State Environmental Planning Policy No. 33 – Hazardous and Offensive Development o Penrith Local Environmental Plan 2010 o Greater Sydney Region Plan: A Metropolis of Three Cities o Mamre Road Precinct Structure Plan o Western Sydney Aerotropolis Plan o Western Sydney Aerotropolis Draft Precinct Plans o Proposed Aerotropolis Special Infrastructure Contribution o Draft Mamre Road Precinct Development Control Plan (DCP). · Suitability of the Site – including: <ul style="list-style-type: none"> - a detailed justification that the site can accommodate the proposed development, having regard to the scope of the operations of the existing facility and its environmental impacts and relevant mitigation measures. - an analysis of site constraints. 2. Community and Stakeholder Engagement – including: <ul style="list-style-type: none"> - a community and stakeholder participation strategy identifying key

- community members and other stakeholders;
- details and justification for the proposed consultation approach(s);
- clear evidence of how each stakeholder identified in the community and stakeholder participation strategy has been consulted;
- discussion on the issues raised by the community and surrounding landowners and occupiers;
- clear details of how issues raised during consultation have been addressed and whether they have resulted in changes to the development; and
- details of the proposed approach to future community and stakeholder engagement based on the results of consultation.
- **Noise and Vibration** – including:
 - a quantitative noise and vibration impact assessment (NVIA) of the development during construction and operation (including testing of the back-up generators). The NVIA is to be undertaken by a suitably qualified person in accordance with the relevant Environmental Protection Authority guidelines and include an assessment of nearby sensitive receivers.
 - cumulative impacts of other development
 - details of proposed mitigation, management and monitoring measures.
- **Urban design and visual** – including:
 - a detailed design and options analysis of the development including diagrams, illustrations and drawings with reference to built form, height, setbacks, bulk and scale in the context of the immediate locality, the wider area and desired future character of the area.
 - a visual impact assessment (including photomontages and perspectives) of the development layout and design (buildings and storage areas), including staging, site coverage, setbacks, open space, landscaping, height, colour, scale, building materials and finishes, façade design, signage and lighting, particularly in terms of potential impacts on:
 - o nearby public and private receivers
 - o significant vantage points in the broader public domain
 - o the RE1 Public Recreation Zone to the south.
 - consideration of the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks
 - detailed plans showing suitable landscaping which incorporates endemic species.
- **Air Quality and Odour** – including:
 - an assessment of the air quality impacts of the development during construction and operation, prepared in accordance with the relevant Environment Protection Authority guidelines. The assessment must include:
 - o scenarios which assess construction works, realistic operations, back-up generator testing and a justified worst-case scenario
 - o justification for the proposed back-up power source and any alternatives considered
 - o an assessment of emissions from the back-up generators against the standards of concentration outlined in the Protection of the Environment Operations (Clean Air) Regulation 2010 (including, but not limited to, polycyclic aromatic hydrocarbons (PAHs) and oxides of nitrogen (NO_x) impacts)
 - o an assessment of criteria pollutants in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016)
 - details of any mitigation, management and monitoring measures (including for back-up generators) required to ensure compliance with section 128 of the *Protection of the Environment Operations Act 1997*.
- **Infrastructure requirements** – including:

- a detailed written and/or graphical description of infrastructure required on the site, including any electrical substation/s and on-site switch yard/s
- detailed justification for the chosen back-up power system, including:
 - o a comprehensive assessment of alternative, commercially available technologies (solar power/large-scale batteries, hydrogen cells, etc)
 - o demonstration of a commitment to continual improvement with respect to the design of the back-up power system and its associated emissions
- a detailed overview of the proposed back-up generator system (if chosen), including:
 - o number of generators
 - o individual capacity of each generator (in terms of megawatts and megajoules per second)
 - o maximum operating time during a power outage event
 - o testing procedure, frequency and duration
 - o confirmation regarding whether testing will be carried out individually or in clusters
 - o confirmation and, if necessary, justification of the need to test during the evening or night-time period
- identification of any infrastructure upgrades required off-site to facilitate the development, and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained
- an infrastructure delivery and staging plan, including a description of how infrastructure on and off-site will be co-ordinated and funded to ensure it is in place prior to the commencement of construction
- an assessment of the impacts of the development on existing utility infrastructure and service provider assets surrounding the site, and a description of how any potential impacts would be avoided and minimised.
- **Traffic and access** – including:
 - details of all traffic types and volumes likely to be generated during construction and operation, including a description of key access routes and any road upgrades or new road alignments proposed under SSD-9522
 - an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar modelling. This is to include the identification and consideration of approved, proposed and future developments/road upgrades in the vicinity
 - an options analysis for different site access points with consideration of access restrictions from potential distributor roads
 - details and plans of any proposed the internal road network, loading dock servicing and provisions, on-site parking provisions, and sufficient pedestrian and cyclist facilities, in accordance with the relevant Australian Standards
 - details of the largest vehicle anticipated to access and move within the site, including swept path analysis
 - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site
- **Hazards and Risk** – including:
 - a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is “potentially hazardous” a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011).
 - details regarding the location and number of back-up generators, diesel fuel

storage tanks and lithium-ion batteries to be installed to service the development.

- **Soils and Water** – including:
 - a topographic assessment and justification demonstrating the proposed earthworks are responsive and contextually appropriate
 - an assessment of potential surface and groundwater impacts associated with the development, including potential impacts on watercourses, riparian areas, groundwater, and groundwater-dependent communities nearby
 - a detailed site water balance including a description of the water demands and breakdown of water supplies, and any water licensing requirements
 - details of stormwater/wastewater management system including the capacity of onsite detention system(s), onsite sewage management and measures to treat, reuse or dispose of water
 - demonstration satisfactory arrangements for drinking water, wastewater and if required recycled water services have been made
 - description of the measures to minimise water use
 - a detailed flood impact assessment
 - description of the proposed erosion and sediment controls during construction
 - characterisation of the nature and extent of any contamination on the site and surrounding area
- **Waste** – including:
 - details of the quantities and classification of all waste streams to be generated on site during the development
 - details of waste storage, handling and disposal during the development
 - details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014-2021.
- **Ecologically sustainable development** – including:
 - a description of how the proposal will incorporate the principles of ecologically sustainable development in the design, construction and ongoing operation of the development
 - consideration of the use of green walls, green roofs and/or cool roofs in the design of the data centre
 - a description of the measures to be implemented to minimise consumption of resources, especially energy and water.
- **Cultural Heritage and Aboriginal Cultural Heritage** – including:
 - an assessment of non-Aboriginal cultural heritage items and values of the site and surrounding area
 - evidence that Aboriginal cultural heritage values that exist across the development site have been identified and document in an Aboriginal Cultural Heritage Assessment Report (ACHAR)
 - a description of the impacts on Aboriginal cultural heritage values.
- **Biodiversity** – including an assessment of the proposal's biodiversity impacts in accordance with the *Biodiversity Conservation Act 2016*, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted.
- **Greenhouse gas and energy efficiency** – including an assessment of the energy use of the proposal and all reasonable and feasible measures that would be implemented on site to minimise the proposal's greenhouse gas emissions.
- **Airport Safeguarding** – including a risk assessment of the proposed development on Western Sydney Airport operations and addressing related matters in State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.
- **Bushfire** – including a bushfire assessment against the requirements of

	<p>Planning for Bush Fire Protection (NSW Rural Fire Service, 2019)</p> <ul style="list-style-type: none"> • Planning agreement/development contributions – demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local and regional infrastructure required to support the development, including evidence of a Satisfactory Arrangements Certificate under the WSEA SEPP and consideration of the Proposed Aerotropolis Special Infrastructure Contribution.
Plans and Documents	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.</p>
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> - Penrith City Council - Greater Sydney Commission - Transport for NSW - Environment Protection Authority - DPIE Environment, Energy and Science Group - DPIE Central (Western) team - Endeavour Energy - NSW Fire and Rescue - Sydney Water - WaterNSW - Western Sydney Airport Corporation - Western Sydney Planning Partnership - Surrounding local landowners and stakeholders - any other public transport, utilities or community service providers. <p>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.</p>
Further consultation after 2 years	<p>If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS.</p>

References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.
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ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.shop.nsw.gov.au/index.jsp>

<http://www.australia.gov.au/publications>

<http://www.epa.nsw.gov.au/>

<http://www.environment.nsw.gov.au/>

<http://www.dpi.nsw.gov.au/>

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams 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:

1. An existing site survey plan drawn at an appropriate scale illustrating:
 - the location of the land, boundary measurements, area (sqm) and north point
 - the existing levels of the land in relation to buildings and roads
 - location and height of existing structures on the site
 - location and height of adjacent buildings and private open space
 - all levels to be to Australian Height Datum (AHD).
2. Locality/context plan drawn at an appropriate scale should be submitted indicating:
 - significant local features such as heritage items
 - the location and uses of existing buildings, shopping and employment areas
 - traffic and road patterns, pedestrian routes and public transport nodes.
3. Drawings at an appropriate scale illustrating:
 - detailed plans, sections and elevations of the existing building, which clearly show all proposed buildings
 - detailed plans of proposed access driveways, internal roads, carparking and external alterations services infrastructure.
4. Schedule of materials, colours and additions. finishes.

Documents to be Submitted

Documents to submit include:

- one (1) hard copy and one (1) electronic copy of all the documents and plans for review prior to exhibition
- other copies as determined by the Department once the development application is lodged.

Policies, Guidelines & Plans

Aspect	Policy / Methodology
Traffic, Transport and Access	
	Roads Act 1993
	State Environmental Planning Policy (Infrastructure) 2007
	Guide to Traffic Generating Development (RTA, 2002 as updated)
	Road Design Guide (RMS, 2015-2017)
	Guide to Traffic Management – Pt 12: Traffic Impacts of Development (Austroads, 2016)
	Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas (Austroads, 2014)
	Bicycle Parking Facilities: Guidelines for Design and Installation (AS 2890.3:2015)
	Integrated Public Transport Service Planning Guidelines: Sydney Metropolitan Area (TfNSW, 2013)
	Future Transport Strategy 2056 (TfNSW, 2018)
	Greater Sydney Services and Infrastructure Plan (TfNSW, 2018)
	NSW Freight & Ports Plan 2018-2023 (TfNSW, 2018)
Soils and Water	
	Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
<i>Erosion and Sediment</i>	Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
	Wind Erosion – 2nd Edition (DIPNR, 2003)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 2000)
<i>Groundwater</i>	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW Aquifer Interference Policy (NOW, 2012)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW, 2011)
	Storing and Handling Liquids: Environmental Protection (DECC, 2007)
	Managing Urban Stormwater: Strategic Framework. Draft (EPA, 1996)
<i>Stormwater</i>	Managing Urban Stormwater: Council Handbook. Draft (EPA, 1997)
	Managing Urban Stormwater: Treatment Techniques (DEC, 2006)
	Managing Urban Stormwater: Source Control. Draft (EPA, 1998)
	Managing Urban Stormwater: Harvesting and Reuse (DEC, 2006)
<i>Wastewater</i>	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC, 1997)

	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC, 2000)
	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (EPHC, NRMMC & AHMC, 2006)
	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) (EPHC, NRMMC & AHMC, 2009)
<i>Contamination</i>	State Environmental Planning Policy No. 55 – Remediation of Land
Hazards and Risk	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DoP, 2011)
Biodiversity	
	Biodiversity Conservation Act 2016
	Biodiversity Assessment Method (OEH, 2017)
Heritage	
	Heritage Act 1977
	NSW Heritage Manual (HO and DUAP, 1996)
	The Burra Charter (ICOMOS Australia, 2013)
	Statements of Heritage Impact (HO and DUAP, 2002)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)
Noise and Vibration	
	Assessing Vibration: A Technical Guide (DEC, 2006)
	Acoustics - Description and measurement of environmental noise (AS1055:2018)
	Noise Policy for Industry (EPA, 2017)
	NSW Road Noise Policy (DECCW, 2011)
	Noise Guide for Local Government (EPA, 2013)
	Interim Construction Noise Guideline (DECC, 2009)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
<i>Air Quality</i>	Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007)
	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2016)

<i>Odour</i>	Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)
<i>Greenhouse Gas</i>	AGO Factors and Methods Workbook (AGO, 2018) Guidelines for Energy Savings Action Plans (DEUS, 2005)
Bushfire	
	Planning for Bushfire Protection (RFS, 2019)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2014-2021 (EPA)
	The National Waste Policy: Less Waste More Resources 2009
	Waste Classification Guidelines (EPA, 2014)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC, 2004)
	Environmental guidelines: Use and Disposal of Biosolid Products (EPA, 1997)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
	NSW Energy from Waste Policy Statement (EPA, 2015)
	Standards for Managing Construction Waste in NSW (EPA, 2018)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (AS 2482)
Social	
	Social Impact Assessment Guideline (DPE, 2017)

ATTACHMENT 2

Government Authority Responses to Request for Key Issues