

Project Echidna
17 March 2023

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DPE
Department of Planning and Environment
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Dear Lindsey Blecher,

Project Echidna Data Centre Eastern Creek (SSD-47320208)
Response to DPE's Adequacy Comments

The Project Echidna Data Centre Eastern Creek (SSD-47320208) Environmental Impact Statement (EIS) was submitted for adequacy review on 7 October 2022.

Comments were received from the NSW Department of Planning and Environment (NSW DPE) by email on 17 January 2023. The submission comments and responses to each adequacy comment have been provided in the table below.

Table 1: Comments and responses

No.	NSW DPE Adequacy Review Comments	Formalised Response
1.	<p>Relationship with Other Development Consents</p> <p>The Department notes that the proposal is intended to supersede all prior development consents. Please clarify how DA-18-00196 for Torrens Title subdivision, DA-18-00938 for bulk earthworks and Stage 1 (Buildings 1/1A) of SPP-19-00013 are to be superseded by the subject application (if approved), given that the subdivision and earthworks have been carried out, Building 1 has been built and Building 1A is being built however does not form part of the subject SSD application.</p> <p>The Department notes the substation is subject to a separate development application that is being prepared and would be constructed prior to commissioning of the proposed data centre. Please clarify the following:</p> <ul style="list-style-type: none"> • The reasons for excluding the substation from the proposed data centre. • Capacity of the substation and whether it will service the proposed data centre as well as Buildings 1/1A. • Whether the Applicant seeks deferred commencement of any consent granted for the proposed data centre subject to the substation becoming operational. 	<p>The Proposal relies on previously approved development (DA-18-00196, DA-18-00938 and SPP-19-00013) as noted in Section 1.3 of the EIS. Full consent was given to build the first data centre and it is now under construction (Building 1/1A). Earthworks have also been carried out onsite to facilitate development of the second data centre (Building 2/the Proposal/Project Echidna). The Proposal (SSD-47320208) seeks approval for a second data centre and there are no remaining works to be undertaken from the previous approvals on site.</p> <p>Since securing concept approval for a second data centre, the NSW legislation around the classification of data centres has changed. This means the existing concept approval is no longer valid and a new application is needed. The changes have also affected the Proposal's classification. The Proposal now classifies as State Significant Development (SSD) by virtue of meeting thresholds defined under Schedule 1, Section 25 of the State Environmental Planning Policy (Planning Systems) 2021. Specifically, it is classified as a data storage development that would consume more than 10 megawatts in power. The Proposal comprises a new 35.2-megawatt data centre.</p> <p>The substation is site-wide infrastructure, not singularly associated with the Proposal (i.e., Buildings 1/1A also rely on using the substation). In addition, the substation would be designed, procured, and constructed separately from the data centre. It would have a capacity of 90MVA.</p> <p>Finally, the Applicant does not seek deferred commencement of any consent granted for the proposed data centre subject to the substation becoming operational.</p>

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2.	Capital Investment Value (CIV)	
	The Applicant indicates the cost summary report has been peer reviewed internally however there are no details of this in the cost summary report. Please include details of the person who has peer reviewed the cost summary report including relevant qualifications.	The Cost Summary Report has been peer reviewed by Simon Kearney (Turner & Townsend Director). A copy of his CV outlining his qualifications is appended to this response.
3.	Aboriginal Cultural Heritage	
	The Applicant indicates that an Aboriginal Cultural Heritage Report (ACHAR) has been completed and was approved in 2020 for the precinct planning associated with the project and that the ACHAR provided evidence that Aboriginal cultural heritage is not a matter for consideration for the site and project in accordance with Heritage NSW requirements. Please provide a copy of the ACHAR that was approved in 2020.	The Proposal will not exceed the approved footprint in the Concept Design Approval. Earthworks and construction of Building 1 have commenced on site. In addition, the Proposal does not involve disturbing additional ground surface beyond to what has been approved on site for both DA-18-00938 and SPP-19-00013. This means the site is clear of any physical heritage values. Both approvals have addressed Aboriginal heritage and archaeology, and conditions of consent in relation to those matters were included in Section 2.3 of Determination DA-18-00938 (attached to this response).
4.	Landscaping	
	The landscape plans in Appendix S of the EIS indicate that the perimeter planting within the site of the proposed data centre is 'DA Approved Development Under Construction'. Please clarify which development approval is relied upon for the perimeter landscaping and how the plantings would be maintained in accordance with a previous consent that the Applicant is potentially seeking to surrender.	As noted in Section 1 above, works under the Concept Design Approval have been undertaken and a new application is needed for the Proposal (Building 2). Therefore, the perimeter landscaping would be installed around the proposed data hall as shown in the Architectural Drawings and Section 3.2 of the EIS. The Landscape Plans describe the landscape and planting strategy for the Proposal which focuses on planting mature local trees to improve aesthetics and amenity.

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5.	<p>Car Parking</p> <p>The traffic assessment calculates required parking using a proposed GFA of 16,015 m² for the proposed data centre, however it is unclear if this is consistent with the area schedules in the drawings. Please clarify the proposed GFA for the proposed data centre and any other GFA that has been included in the calculation of onsite parking.</p> <p>The GFA of the proposed building appears to be 62% of the total GFA for the ‘precinct’ including Buildings 1/1A however the proposed parking allocation is proposed to be 54.3% of the total number of car parking spaces. Please demonstrate that the parking allocation of 38 spaces to the proposed data centre is appropriate.</p>	<p>The correct GFA has been included in the updated Traffic and Transport Technical Report (see Section 4.6.3). The parking demand is based on the staff numbers and operational characteristics of the development under its proposed use, provided by the operator rather than GFA. This is because a data centre employs fewer people per square metre than a typical industrial building as set out by the Eastern Creek Precinct Plan, simply because a large area of the Proposal is used for storage and plant.</p> <p>As noted in Section 4.6.3 of the updated Traffic and Transport Technical Report, 50 full-time staff will be required on site on a typical day, with a maximum of 36 staff being present at any one time and requiring a parking space. Additionally, it is expected there will be up to 10 visitors arriving throughout the working day, with two visitors on site at any one time.</p> <p>Therefore, car parking spaces for approximately 38 vehicles are required for the Proposal. A total of 64 car parking spaces for the site are provided for Buildings 1 and 1A as part of the Concept Design Approval. As noted in Section 4.6.3 of the report, 32 of the 64 car parking spaces will be used by staff working in Buildings 1 and 1A. The remaining 32 spaces will be utilised by Building 2 (the Proposal). Six additional car parking spaces will be provided as part of the Proposal to meet the additional need of Building 2.</p>
6.	<p>Ecologically Sustainable Development (ESD)</p> <p>The capacity of the rainwater tank is variously described in the EIS and associated reports as 50 kL, 260 kL, 285 kL and 340 kL. Please clarify the proposed rainwater tank capacity.</p>	<p>The proposed capacity of the rainwater tank is 50 kL. If feasible and beneficial, the size of the rainwater tank will be increased during detailed design as noted in Section 5 of the Ecologically Sustainable Development (ESD) Report.</p> <p>In addition, Section 5.4 of the Stormwater and Flooding Report and Section 5.2 of the Infrastructure Requirements Report (attached to this response) have been updated for consistency.</p>

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	<p>Please show the proposed 32 kW roof-mounted photovoltaic (PV) panels on the roof plan.</p> <p>The SEARs include ‘Demonstrate how the development minimises greenhouse gas emissions (reflecting the Government’s goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources.’ To demonstrate this, the Department recommends that both the EIS and the ESD report be updated to clearly quantify / justify the development’s predicted annual Scope 1, 2 and 3 GHG emissions and water consumption. These documents should also compare the development’s predicted emissions to the State and National GHG emissions inventory (as previously requested).</p>	<p>An area has been nominated for roof-mounted solar PV panels, as shown in drawing SSDA-A-102 (Revision C).</p> <p>An estimate and justification of the Proposal's predicated annual Scope 1, 2 and 3 GHG emissions and water consumption has been undertaken, with the GHG emissions compared to the State GHG emissions inventory. Refer to Sections 6 and 7 in the updated Ecologically Sustainable Development and Greenhouse Gas Report (attached to this response).</p>
7.	<p>Noise and Vibration</p> <p>The Applicant has requested that the Department refer to the report prepared for SPP-19- 00013 DA that contains all noise monitoring information. Please provide a copy of this noise report to the Department. The Department expects all noise measurements to be measured, analysed, and reported in accordance with Australian Standard AS 1055:2018 and the Noise Policy for Industry (NPfI). Noise monitoring data needs to show L_{Amax}, L_{A10}, L_{Aeq} and L_{A90} at a minimum. Please demonstrate and confirm that the unattended noise monitoring and noise measurements contained in</p>	<p>The location of noise monitoring is shown in Section 2, the results of the monitoring are outlined in Section 3 and Appendix A of the SPP-19-00013 DA report (refer to attachments). All monitoring procedures and calculated rating background (RBL), project amenity (ANL) and project intrusiveness noise levels, were conducted in accordance with the requirements of the NSW EPA Noise Policy for Industry and Australian Standard 1055:2018 “Acoustics – Description and measurement of environmental noise”.</p>

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	<p>that report are adequate and relevant for the subject development application.</p> <p>The Department notes that section 6.4 of the noise impact assessment in Appendix H of the EIS regarding modelling methodology has not been updated in response to the Department’s request for information. Further detail is required on what the prevailing weather conditions for the area are, how the conditions were determined, what impacts the conditions may have on the noise levels at the site and at receivers and whether the selected temperature inversion sufficiently addresses any noise enhancing conditions that may be present in this locality. An analysis of meteorological data is required, or noise modelling must be undertaken under worst-case sound propagation conditions in line with Fact Sheet D of the NPfI.</p> <p>Appendix B of the noise assessment includes vibration criteria for continuous, impulsive, and intermittent types of vibrations however the assessment does not clearly show how the proposal has been assessed against the criteria. Please clarify.</p>	<p>Section 6.4 of the Noise and Vibration Assessment has been updated. The assessment has been conducted in accordance with Option 1. In addition, noise modelling has been conducted under standard meteorological conditions and enhanced meteorological conditions as per Fact Sheet D Table D1 of the NPfI.</p> <p>General vibration criteria to be met are listed in Appendix C of the updated Noise and Vibration Assessment Report (attached to this response). Preliminary screening criteria is provided in Table 20 of Section 8.5.4 Vibration - minimum working distances. The criteria to be achieved at the location of monitoring is also included in Appendix C. Section 8.5.4 of the report has been updated to clarify the above.</p>
8.	<p>Water Management and Flooding Risk</p> <p>The Applicant indicates consultation with Council has been undertaken and they will confirm a meeting early October 2022 and that this ‘has been included in the updated stormwater and flooding report’, however it is</p>	<p>Consultation details with Blacktown Council were incomplete in the previous Stormwater and Flooding Report. Section 2.1.6 of the Stormwater and Flooding Report has been updated to include consultation activities with Council. Consultation with Council was undertaken on 3 March 2023</p>

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	<p>unclear where in the report this is located. Please clarify.</p> <p>Please provide updated stormwater drainage plans, given the internal road network and associated landscaping have been amended in the proposed development.</p> <p>Please provide an assessment of flooding impacts related to overland flow paths referred to in section 5.3.4 of the updated stormwater and flooding report in Appendix Q of the EIS and include consideration of climate change in this assessment.</p>	<p>(see attached correspondence). Council advised that the Proposal will be reviewed during assessment stage, and they will provide comments on the proposed stormwater design by then.</p> <p>Updated stormwater plans are appended to this response.</p> <p>The site only experiences minor flood impacts in the form of local overland flows within the development. These overland flows are limited to the carriageways and drain to the in-ground stormwater network before discharging to the Council trunk culvert. The site is not located within an identified flood precinct according to Council flood maps (refer to Figure 6 of the Stormwater and Flooding Report) which means the site is not impacted by more significant mainstream (river) flooding. Refer to updated Section 5.3.4 of the Stormwater and Flooding Report.</p> <p>Hydraulic analysis (DRAINS) has been undertaken to assess the overland flows of the 1% AEP storm and climate change consideration. The hydraulic assessment confirms overland flows do not exceed the Depth x Velocity of 0.4m²/s (as per Blacktown City Council Engineering Guide for Development (2005) Appendix A page A-7 stormwater calculation requirement). Therefore, the overland flows are safe and in accordance with Blacktown City Council engineering guidelines.</p>
9.	<p>Waste Management</p> <p>Please clarify how the proposed dimensions and storage volumes for each waste stream have been determined in accordance with the Blacktown City Council Guidelines for Waste Management. Please also confirm that the waste enclosure is for the exclusive use of the proposed data centre or otherwise demonstrate the adequacy of the storage area for all uses within the 'precinct' including Buildings 1/1A.</p>	<p>Section 3.2.3 of the Waste Technical Report has been updated to provide greater clarity on how the bin numbers, dimensions, and collection frequencies suggested will fit in the waste collection enclosure.</p> <p>Bin number requirements have been determined by the storage space available and the minimum collection frequency stipulated in the Blacktown City Council Guidelines for Waste Management. The waste enclosure provides approximately 14m² of space, while the waste storage requirements plus space for movement of bins, totals just over 12m², therefore the space is adequate. In addition, confirming that the waste enclosure is for the exclusive use of the proposed data centre.</p>

There are no updates required in the Environmental Impact Statement (dated 7 October 2022) as part of this adequacy review. However, some of the supporting technical reports have been updated in response to the received comments. The table below outlines the updated documentation:

EIS Attachment	Name of the Document/Report	Version
Appendix H	Noise and Vibration Assessment	Revision 3 (Final)
Appendix I	Traffic and Transport Impact Assessment	
Appendix O	Ecologically Sustainable Development and Greenhouse Gas Report	
Appendix P	Waste Technical Report	
Appendix Q	Stormwater and Flooding Report	Revision B (Final)
Appendix R	Infrastructure Requirements Report	

If you require any further information, please do not hesitate to contact the undersigned to discuss.

Yours sincerely,



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