

Appendix A – Secretary’s Environmental Assessment Requirements

Industry–Specific SEARs

Issue and Assessment Requirements	EIS Reference	Appendix Reference
1. Statutory Context		
Address all relevant legislation, environmental planning instruments (EPIs) (including drafts), plans, policies, guidelines and planning circulars.	Section 4	Appendix B
Identify compliance with applicable development standards and provide a detailed justification for any non-compliances.	Section 6	Appendix B
Provide an explanation of how the development as described in the EIS is consistent with the development as was described in the request for SEARs (including any components that were not SSD) and provide a justification for any differences.	Section 3	
Address the requirements of any approvals applying to the site, including any concept approval, any endorsed or draft master plan, precinct plan or any recommendation from a Gateway determination.	Section 1.3	
Provide an accurate summary of the detailed assessment of the impacts of the project and integrate the findings and recommendations of technical reports into the justification and evaluation of the project as a whole.	Section 6	

Issue and Assessment Requirements	EIS Reference	Appendix Reference
2. Estimated Development Cost and Employment		
Provide the estimated development cost (EDC) of the development prepared in accordance with the relevant planning circular using the Standard Form of EDC Report.	Section 3	Appendix G
Provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided.	Section 3	Appendix G
3. Design Quality		
Demonstrate how the development will achieve: ▪ design excellence in accordance with any applicable EPI provisions. ▪ good design in accordance with the seven objectives for good design in <i>Better Placed</i>.	Section 2	Appendix E
Where required by an EPI or concept approval, demonstrate that the development has been subject to a competitive design process, or reviewed by the State Design Review Panel (SDRP) where required under the <i>NSW SDRP: Guidelines for Project Teams</i> . Recommendations are to be addressed prior to lodgement.	N/A	
4. Built Form and Urban Design		
Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach.	Section 3 and 6.1	Appendix E and Appendix F
Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality.	Section 3 and 6.1	Appendix E and Appendix F

Issue and Assessment Requirements	EIS Reference	Appendix Reference
Demonstrate how the building design will deliver a high-quality development, including consideration of façade design, articulation, materials, finishes, colours, any signage and integration of services.	Section 3 and 6.1	Appendix E and Appendix F
Assess how the development complies with the relevant accessibility requirements.	Section 6.14	Appendix J
5. Visual Impact		
Provide a visual analysis of the development from key viewpoints, including photomontages or perspectives showing the proposed and likely future development.	Section 6.2	Appendix ZH
Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the development on the existing catchment.	Section 6.2	Appendix ZH
6. Traffic, Transport and Accessibility		
Provide a transport and accessibility impact assessment, which includes:	Section 6.3	Appendix U
▪ details of all traffic types and volumes likely to be generated during construction and operation, including a description of key access and haul routes. ▪ 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 on existing performance levels of nearby intersections (using industry standard modelling). ▪ plans demonstrating how all vehicles likely to be generated during construction and operation and awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network.		

Issue and Assessment Requirements	EIS Reference	Appendix Reference
▪ details and plans of any proposed internal road network, loading dock provision and servicing, on-site parking provisions, and sufficient pedestrian and cyclist facilities, in accordance with the relevant Australian Standards. ▪ swept path analysis for the largest vehicle requiring access to the development. ▪ details of road upgrades, infrastructure works, or new roads or access points required for the development if necessary.		
Provide a Construction Traffic Management Plan detailing predicted construction vehicle routes, access and parking arrangements, coordination with other construction occurring in the area, and how impacts on existing traffic, pedestrian and bicycle networks would be managed and mitigated.	Section 6.3	Appendix V
7. Trees and Landscaping		
Provide a detailed site-wide landscape plan, that: ▪ identifies the number and location of trees to be removed and retained, and how opportunities to retain significant trees have been explored and/or informs the plan. ▪ details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage (as a percentage of the site area). ▪ demonstrates how the proposed development would: – contribute to long term landscape setting in respect of the site and streetscape. – mitigate the urban heat island effect and ensure appropriate comfort levels on-site. – contribute to the objective of increased urban tree canopy cover.	Section 6.4	Appendix K

Issue and Assessment Requirements	EIS Reference	Appendix Reference
– maximise opportunities for green infrastructure, consistent with <i>Greener Places</i> and having regard to any bush fire risk.		
8. Ecologically Sustainable Development (ESD)		
Identify how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated in the design and ongoing operation of the development.	Section 7	Appendix ZE
Demonstrate how the development will meet or exceed the relevant industry recognised building sustainability and environmental performance standards.	Section 6.5	Appendix ZE
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.	Section 6.14	Appendix ZI
If Chapter 3 of SEPP (Sustainable Buildings) 2022 applies: ▪ demonstrate how the development has been designed to enable the general sustainability provisions, as defined in Chapter 3.2(1). ▪ provide a NABERS Embodied Emissions Material Form to disclose the amount of embodied emissions attributable to the development in accordance with section 35BA of the EP&A Regulation.	Section 6.5	Appendix ZL
9. Biodiversity		
Assess any biodiversity impacts associated with the development in accordance with the <i>Biodiversity Conservation Act 2016</i> and the <i>Biodiversity Assessment Method 2020</i> , including the preparation of a Biodiversity Development Assessment Report (BDAR), unless a waiver is granted, or the site is on biodiversity certified land.	Section 6.14	Appendix ZB

Issue and Assessment Requirements	EIS Reference	Appendix Reference
If the development is on biodiversity certified land, provide information to identify the site (using associated mapping) and demonstrate the proposed development is consistent with the relevant biodiversity measure conferred by the biodiversity certification.	N/A	
10. Back-up Power System		
Provide a detailed overview of any proposed back-up power system, including the scale and capacity of the system, and any associated testing procedures (frequency and duration).	Section 3	Appendix O
Provide a detailed justification for the proposed back-up power system, including alternatives considered.	Section 3	Appendix O
11. Air Quality		
Provide an assessment of air quality impacts, prepared in accordance with the relevant NSW Environment Protection Authority (EPA) guidelines. The assessment must address construction works and include modelling of emissions and air pollutants from predicted operations (including testing of the back-up power system) and a peak emission and air pollutant scenario, and outline the proposed mitigation, management and monitoring measures that would be implemented.	Section 6.6.	Appendix L
12. Noise and Vibration		
Provide a noise and vibration assessment prepared in accordance with the relevant EPA guidelines and Australian/International Standards. The assessment must detail construction and operational noise and vibration impacts (including testing of any back-up power system) on nearby sensitive receivers and structures, and outline the proposed mitigation, management and monitoring measures that would be implemented.	Section 6.7	Appendix M

Issue and Assessment Requirements	EIS Reference	Appendix Reference
13. Ground and Water Conditions		
Assess potential impacts on soil resources and related infrastructure and riparian lands on and near the site, including soil erosion, salinity and acid sulfate soils.	Section 6.12	Appendix S and Appendix T
Provide a Surface and Groundwater Impact Assessment that assesses potential impacts on: - surface water resources (quality and quantity) including related infrastructure, hydrology, dependent ecosystems, drainage lines, downstream assets and watercourses. - groundwater resources in accordance with the Groundwater Guidelines.	Section 6.12	Appendix R
14. Water Management		
Provide an Integrated Water Management Plan for the development that: - is prepared in consultation with the local council and any other relevant drainage or water authority. - outlines the water-related servicing infrastructure required by the development (informed by the anticipated annual and ultimate increase in servicing demand) and evaluates opportunities to reduce water demand (such as recycled water provision). - details the proposed drainage design (stormwater and wastewater) for the site including any on-site detention facilities, water quality management measures and nominated discharge points, on-site sewage management, and measures to treat, reuse or dispose of water. - demonstrates compliance with the local council or other drainage or water authority requirements and avoids adverse downstream impacts.	Section 6.8	Appendix ZJ and Appendix ZK

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Where water and drainage infrastructure works are required that would be handed over to the local council, or other drainage or water authority, provide full hydraulic details and detailed plans and specification of proposed works that have been prepared in consultation with, and comply with the relevant standards of, the local council or other drainage or water authority.	N/A	
15. Flood Risk		
Identify the flood planning level as set out in the relevant council LEP or SEPP and identify any: - flood risks on site having regard to adopted flood studies - the potential effects of climate change, and - any relevant provisions of the <i>NSW Flood Risk Management Manual</i>.	Section 6.14	Appendix ZD
Where the development is occurring on flood prone land a flood impact and risk assessment (FIRA) must be prepared having regard to the <i>Flood Impact and Risk Assessment Guideline – LU01</i> (FIRA guide). When determining the scope and category of the FIRA the requirements outlined in the FIRA guide must be considered.	Section 6.14	Appendix ZD
Detail any flood risk management measures that are to be incorporated as part of the development having regard to relevant guidelines (including any design solutions, flood modification measures, property modification measures, operational procedures or Flood Emergency Response Plan).	Section 6.14	Appendix ZD
16. Hazards and Risks		

Issue and Assessment Requirements	EIS Reference	Appendix Reference
Where there are dangerous goods and hazardous materials associated with the development provide a preliminary risk screening in accordance with Chapter 3 of SEPP (Resilience and Hazards) 2021.	Section 6.9	Appendix ZF and Appendix ZG
Where required by SEPP (Resilience and Hazards) 2021, provide a Preliminary Hazard Analysis prepared in accordance with <i>Hazardous Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis and Multi-Level Risk Assessment</i> .	N/A	
If the development is adjacent to or on land in a pipeline corridor, report on consultation outcomes with the operator of the pipeline, and prepare a hazard analysis.	N/A	
17. Contamination and Remediation		
In accordance with Chapter 4 of SEPP (Resilience and Hazards) 2021, assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable (or will be suitable, after remediation) for the development.	Section 6.13	Appendix Q
18. Waste Management		
Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Section 6.14	Appendix X and Appendix Y
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of waste in accordance with any council waste management requirements.	Section 6.14	Appendix X and Appendix Y
Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site.	Section 6.14	Appendix X and Appendix Y
If buildings are proposed to be demolished or altered, provide a hazardous materials survey.	N/A	

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19. Aboriginal Cultural Heritage		
Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts to any Aboriginal cultural heritage sites or values associated with the site.	Section 6.10	Appendix ZA
20. Environmental Heritage		
Where there is potential for direct or indirect impacts on the heritage significance of environmental heritage, provide a Statement of Heritage Impact and Archaeological Assessment (if potential impacts to archaeological resources are identified), prepared in accordance with the relevant guidelines, which assesses any impacts and outlines measures to ensure they are minimised and mitigated.	N/A	
21. Social Impact		
Provide a Social Impact Assessment that: - is prepared in accordance with the <i>Social Impact Assessment Guidelines for State Significant Projects</i>. - is targeted and proportionate to the project's context and likely impacts.	Section 6.11	Appendix P
22. Infrastructure Requirements and Utilities		
In consultation with relevant service providers: assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.	Section 3 and 6.14	Appendix N

Issue and Assessment Requirements	EIS Reference	Appendix Reference
- identify any infrastructure required on-site and off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained. - provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.		
23. Bush Fire Risk		
If the development is on mapped bush fire prone land, or a bush fire threat is identified on or adjoining the site, provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with <i>Planning for Bush Fire Protection</i>.	Section 6.14	Appendix Z
24. Construction, Operation and Staging		
If staging is proposed, provide details of how construction and operation would be managed and any impacts mitigated.	Section 3.3	
25. Contributions and Public Benefit		
Address the requirements of any relevant contribution plan(s), planning agreement or EPI requiring a monetary contribution, dedication of land and/or works-in-kind and include details of any proposal for further material public benefit.	Section 4	Appendix B
Where the development proposes alternative public benefits or a departure from an existing contributions framework, the local council, the Department and relevant State agencies are to be consulted prior to lodgement and details, including how comments have been addressed, are to be provided.	N/A	

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26. Engagement		
Detail engagement undertaken and demonstrate how it was consistent with the <i>Undertaking Engagement Guidelines for State Significant Projects</i>. Detail how issues raised and feedback provided have been considered and responded to in the project. In particular, applicants must consult with: - the relevant Department assessment team. - any relevant local councils. - any relevant agencies. - the community. - if the development would have required an approval or authorisation under another Act but for the application of s 4.41 of the EP&A Act or requires an approval or authorisation under another Act to be applied consistently by s 4.42 of the EP&A Act, the agency relevant to that approval or authorisation.	Section 5	Appendix D and Appendix ZC

Additional assessment requirements

Issue and Assessment Requirements	EIS Reference	Appendix Reference
Hazards and risk		
The EIS must demonstrate the relevant aspects of the <i>FM Global Property Loss Prevention Data Sheet 5-32 – Data Centres and Related Facilities</i> have been considered and could be implemented as part of the development. It must also demonstrate the development would comply with the relevant aspects of the following standards: - AS/NSS 4681 – Storage and handling of Class 9 (miscellaneous) dangerous goods and articles - AS IEC 62619 – Storage cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications - AS 1940 – Storage and handling of flammable and combustible liquids	Section 6.9	Appendix ZG
Plant and equipment systems		
The EIS must: - include a comprehensive options analysis of all commercially available cooling and back-up power systems - provide a detailed overview of the proposed data hall cooling system including number and details of associated plant and equipment, and the energy and water demands of the proposed data hall cooling system	Section 3.2, 6.5 and 6.14	Appendix N, Appendix O and Appendix ZE

Issue and Assessment Requirements	EIS Reference	Appendix Reference
provide demonstration the development can achieve a NABERS 3 stars energy rating or higher including the Power Usage Effectiveness (PUE) calculations of plant and equipment required for the operation of a data centre.		
Operational noise		
The EIS must include details of manufacturer specifications for plant and equipment and noise source inventory (demonstrating worst-case modelling of plant and equipment for each assessment period, including testing of any back-up power system and critical power failure scenario)	Section 6.7	Appendix M
Water treatment		
The EIS must include details on all plant and equipment and the relevant processes involved in any on-site water treatment for the re-use of water for the data centre operations such as cooling systems. The EIS must include an assessment of the impact of any treatment plant.	Section 3.2	Appendix N
Urban heat island effect		
The EIS must evaluate the impact of heat rejection on habitable rooms and communal open spaces, including those of neighbouring properties.	Section 6.5	
Consultation		
The EIS must be informed by direct consultation with Penrith City Council regarding the design of the development and potential visual impacts.	Section 5, 6.1 and 6.2	