Appendix A

SEARs

Appendix A – SEARs compliance table

Table 1 and **Table 2** provide a cross reference to where the Secretary's Environmental Assessment Requirements (SEARs) have been addressed in this EIS (relating to general SEARS and key issue SEARs respectively). These table below outline where in this EIS the requirements of Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* have been addressed.

Table 1 General SEARs Compliance Table

General SEARs		
Item	Requirement	Where addressed in this EIS?
General	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). In addition, the EIS must include: • A detailed description of the development, including: - an accurate history of the site, including the relationship between the proposed development and the Concept Development (LDA 2017/0547) and any other consent or complying development certificate that apply to the land - the need for and 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- infrastructure upgrades or items required to facilitate the development, including measures to ensure these upgrades are appropriately maintained.	 Detail of the history of the site, including general information about historical land uses and recent development approval history is provided in Sections 2.2.4 and 2.2.5 of Chapter 2 (Location and strategic context). Section 2.2.5 provides an overview of the relationship of this proposed development with LDA 2017/0547. Justification for the project and suitability is provided in Chapter 1 (Introduction) The proposed land use and its permissibility is outlined in Sections 4.3.2.1 and 4.3.5.1 Infrastructure upgrades/requirements are detailed in Sections 1.3.2, 1.3.3 and 1.3.4. Each of those sections outline the existing infrastructure components and

General SEARs		
Item	Requirement	Where addressed in this EIS?
		how the Proposal integrates with those.
		Likely staging is provided in Section 1.4.1. This provides the name of each stage of the development and a brief description of works to be undertaken in that stage.
		Plans of the proposed building works and high quality figures are provided in Appendix B, Figure 1 1 and Figure 1 2 which show an overview of the works and the proposed design in the existing setting respectively.
	Consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments consideration of the issues identified by the relevant public authorities (see Attachment 2)	Relevant environmental planning instruments have been considered in Section 4.3.4 and Section 4.3.5. These sections outline the environmental planning instruments and provide information about how they apply to the development.
	A risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment	A comprehensive risk assessment was completed using DPIE's scoping spreadsheet as part of the scoping assessment.

General SEARs		
Item	Requirement	Where addressed in this EIS?
		Chapters 6 to 21 provide an in depth environmental assessment of all key issues identified for the Proposal
	 A detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: 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 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 manage significant risks to the environment. a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. 	Chapters 6 to 21 of the EIS provides an in depth environmental assessment of all key issues identified for the Proposal, each of these chapters includes: a description of the existing environment a summary of all relevant guidelines, policies, plans and statutes considered an assessment of the potential impacts of all stages of the development, including any cumulative impacts a description of safeguards, management measures and monitoring required Chapter 22 (Environment management) provides a consolidated summary of all the proposed environmental management and monitoring measures, highlighting

General SEARs		
Item	Requirement	Where addressed in this EIS?
		commitments included in the EIS.
	 The EIS must also be accompanied by: High quality files of maps and figures of the subject site and proposal A report from a qualified quantity surveyor providing a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) 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 jobs that will be created during the construction and operational phases of the proposed development Certification that the information provided is accurate at the date of preparation. 	Detailed figures of the subject site, including its regional setting, local setting and land zoning is provided specifically within Chapter 2.0 (Location and strategic context) of the EIS. Figures of the subject site are also provided within other chapters of the EIS where relevant to the technical assessment. A report from a qualified quantity surveyor providing a detailed calculation of the capital investment value is provided in Appendix L

Table 2 Key Issue SEARs Compliance Table

Key issue		
Desired Performance Outcome	Requirement	Response
Statutory and strategic context	Statutory and strategic context:	Justification for the project and
	Detailed justification for the proposal and the suitability of the site	suitability is provided in Chapter 1 (Introduction)
	Detailed justification the proposed land use is permissible with consent	The proposed land use and its permissibility is outlined in Sections
	Details of any proposed consolidation or subdivision of land	4.3.2.1 and 4.3.5.1

Key issue		
Desired Performance Outcome	Requirement	Response
	 Detailed description of the history of the site, including the relationship between the proposed development and the Concept Development (LDA 2017/0547) Demonstration that the proposal is consistent with the Concept Development (LDA 2017/0547) 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 justifications for any inconsistencies. This includes, but is not limited to: State Environmental Planning Policy (Infrastructure) 2007 State Environmental Planning Policy (State and Regional Development) 2011 Greater Sydney Region Plan: A Metropolis of Three Cities Our Greater Sydney 2056: North District Plan Future Transport Strategy 2056. 	 No consolidation or subdivision of land is proposed. Detail of the history of the site, including general information about historical land uses and recent development approval history is provided in Sections 2.2.4 and 2.2.5 of Chapter 2 (Location and strategic context). In addition, Section 2.2.5 of Chapter 2 (Location and strategic context) provides an overview of the relationship of this proposed development with LDA 2017/0547. The Proposal is identified as 'Building B' on the amended concept DA for the broader site. The type and operation of the Proposal has been considered when preparing the concept DA, providing for consistency in both directions. All relevant planning strategies, environmental planning instruments, adopted precinct plans, draft precinct plans and management plans have been investigated and their relevance/applicability detailed throughout Chapter 4 (Strategic and statutory context)

Key issue		
Desired Performance Outcome	Requirement	Response
Community and stakeholder engagement	 A detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of consultation, including a justification for this approach A report on the results of the implementation of the strategy including issues raised by the community and surrounding land owners and occupiers that may be impacted by the proposal Details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal Details of the proposed approach to future community and stakeholder engagement based on the results of consultation. 	 A report on the results of the implementation of the strategy is provided in Appendix Q Details of how issues raised during community and stakeholder consultation have also been provided in Section 5.5 Details of the proposed approach to future community and stakeholder engagement based on the results of consultation is provided in Section 5.7
Urban design and visual	 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: nearby public and private receivers significant vantage points in the broader public domain 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. 	 An assessment of the visual impact is provided in Section 1.4 of the EIS as well as Sections 4.1 and 4.4 of the VIA (Appendix H). Consideration of the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks is provided in Section 1.2 of the EIS and Section 1.5 of the VIA (Appendix H). Detailed plans showing suitable landscaping which incorporates endemic species is addressed within Chapter 3 (Proposal description) of the EIS, and

Key issue		
Desired Performance Outcome	Requirement	Response
		Section 1.5 of the VIA (Appendix H).
Noise and vibration	 A quantitative noise and vibration impact assessment (NVIA) of the development During construction and operation (including testing of the back-up generators). The NVIA must be undertaken by a suitably qualified person in accordance with the relevant Environment Protection Authority guidelines, and include an assessment of potential impacts to nearby sensitive receivers and cumulative impacts of surrounding developments Proposed mitigation, management and/or monitoring measures. 	 A NVIA was prepared to by suitably qualified acoustic engineers in accordance with the relevant Environment Protection Authority Guidelines. The NVIA assesses potential noise and vibration impacts of the Proposal during the construction and operational phases, as well as cumulative impacts as a result of this Proposal and surrounding developments. The NVIA is appended to this EIS as Appendix J. Chapter 9 (Noise and Vibration) of the EIS summarises the findings of the NVIA. The impacts of the Proposal are outlined in Section 9.4. Mitigation, management and/ or monitoring measures are discussed in Section 9.5
Air quality	 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: scenarios which assess construction works, realistic operations, back-up generator testing and a justified worst-case scenario 	An air quality impact assessment (AQIA) (Appendix I) was prepared to assess the affects upon air quality that have the potential to arise during the construction and operational phases of the Proposal. The AQIA was prepared in accordance with and in regard to: National Environment Protection

Key issue		
Desired Performance Outcome	Requirement	Response
	 justification for the proposed back-up power source and any alternatives considered 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) 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 <i>Protection of the Environment Operations Act 1997</i>. 	 (Ambient Air Quality) Measure (Cth) as amended (2003); Protection of the Environment Operations Act 1997 (NSW); Protection of the Environment (Clean Air) Regulation 2010; and NSW EPA Approved Methods for both dispersion modelling and air pollutant sampling methods An assessment of air quality impacts (both construction and operation) is provided in Section Section 10.4 of the EIS and Section 10 of the AQIA (Appendix I) scenarios which assess construction works, realistic operations, back-up generator testing and a justified worst-case scenario is provided in Section 6.0 of the AQIA (Appendix I) justification for the proposed back-up power source and any alternatives considered is provided in 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

Key issue		
Desired Performance Outcome	Requirement	Response
		aromatic hydrocarbons (PAHs) and oxides of nitrogen (NO _X) impacts) is provided in
		 an assessment of criteria pollutants in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016) is provided in
		Management and mitigation measures are outlined in Section 10.5 of the EIS and Section 10.1.4 of the AQIA (Appendix I)
Traffic and access	 Details of all traffic types and volumes likely to be generated during construction and operation (light and heavy vehicles, public transport, pedestrian and cycle trips), including a description of key access routes for each transport mode An assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar modelling. SIDRA files and a discussion of the calibration/validation process should be provided as part of this assessment Details of the largest vehicle anticipated to access and move within the site, including swept path analysis Details of the number of car parking spaces, including justification regarding the level of car parking to be provided on 	 Section 8.4.1 details the effects that the Proposal would have on traffic related issues during construction. This section also details the number of light and heavy vehicles that would be generated and outlines their potential effects on the existing road network. This section also outlines potential impacts on public transport and active transport. Access routes are detailed in Figure 8 4. Section 8.4.2 details the affect that that the Proposal would have on traffic related matters during its operational phase.
	 the site Detailed plans of the internal road network, parking arrangements and proposed pedestrian and cyclist facilities 	Section 8.1.1 details the reasons for traffic modelling such as SIDRA

Key issue		
Desired Performance Outcome	Requirement	Response
	(including end of trip facilities), in accordance with the relevant Australian Standards	not being carried out for the Proposal.
	Details of any new roads or access points required for the development.	Section 8.4.2.3 details the size of the largest vehicle that would access the Proposal Site, while Appendix P contains the swept- path analysis.
		 Details of operational parking spaces is provided in Section 8.4.2.4.
		 Plans for the internal road network, parking arrangements and proposed pedestrian and cyclist facilities are shown on Figure 8 5.
		 Details of Road 22 and access points are available in Chapter 3 (Proposal description) and Section 8.4.2.3.
Infrastructure requirements	 A detailed written and graphical description of infrastructure required on the site (including any associated testing procedures), including a description of any arrangements to avoid locating infrastructure within public domain areas Identification of any infrastructure upgrades required off-site to facilitate the development, including a description of any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained 	A detailed written and graphical description of infrastructure required on the site including a description of any arrangements to avoid locating infrastructure within public domain areas is provided in Chapter 17 (Infrastructure), and Appendix D (Combined Services Plan)
	An infrastructure delivery and staging plan, including a description of how infrastructure on and off-site will be	Road 22, while within the extent of the defined Proposal Site during construction, may be considered as

Key issue		
Desired Performance Outcome	Requirement	Response
	 coordinated 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. 	offsite development during the operation of the Proposal. The delivery of Road 22 is discussed in Chapter 3 (Proposal description) and in Section 17.4.5. The provision of an infrastructure delivery and staging plan is discussed in Section 17.6
		The provision of an infrastructure delivery and staging plan is discussed in Section 17.6 and Section 17.7
		Chapter 17 (Infrastructure), provides an assessment of the potential impacts of the Proposal on existing utility infrastructure and service provider assets surrounding the Site, and a description of how any potential impacts would be avoided and minimised. Management measures are provided in Section 17.7.
Hazards and risk	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	 Preliminary risk screening has been provided in Section 15.2.3. The preliminary risk screening indicates that the Proposal is not potentially hazardous and therefore a PHA is not required. Details of the location and number of back-up generators, diesel fuel storage tanks and lithium ion

Key issue		
Desired Performance Outcome	Requirement	Response
	 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. 	batteries are outlined in Chapter 3 (Proposal description).
Ecologically sustainable development	 A quantitative assessment of the potential Scope 1 and 2 greenhouse gas emissions generated by the development, prepared in accordance with the relevant guidelines A description of how the proposal will incorporate the principles of ecologically sustainable development into the design, construction and ongoing operation of the data centre 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. 	 A quantitative assessment of Scope 1 and 2 GHG emissions is discussed in Section 14.2.3. This has been drawn from the Sustainability and Greenhouse Gas Emissions technical report (AECOM 2020) (Appendix M). How the proposal will incorporate the principles of ecologically sustainable development into the design, construction and ongoing operation of the data centre is discussed in Chapter 3 (Project description) and affirmed through the proposed sustainability measures discussed in Section 14.3. Consideration of the use of green walls, green roofs and/or cool roofs in the design of the data centre is provided in in Chapter 6 (landscape and visual) and Appendix M

Key issue		
Desired Performance Outcome	Requirement	Response
		Mitigation, management and/ or monitoring measures are discussed in Section 1.3.
Contamination	 A detailed assessment of the extent and nature of any contamination of the soil, groundwater and soil vapour, in accordance with State Environmental Planning Policy No. 55 – Remediation of Land An assessment of potential risks to human health and the environmental receptors in the vicinity of the site A description and appraisal of any required mitigation and monitoring measures Consideration of whether the site is suitable for the proposed development. 	 Assessment of contamination of soil and groundwater is provided in Section 7.3. Chapter 7 (Geology soils and contamination) provides an assessment of soil contamination Chapter 15 (Hazards and risk) assesses and provides management measures in relation to the potential for risks to human health and environmental receptors Detail concerning groundwater is available in Chapter 19 (Groundwater, surface water, flooding and water use). Assessment of risks to human health and the environment is provided in Section 7.3. Mitigation measures are outlined in Section 7.4. Proposed erosion and sediment controls are outlined in Section 7. Detail of the historical uses of the site and existing contamination potential is provided in Section 7.2.

Key issue		
Desired Performance Outcome	Requirement	Response
		Chapter 2 (Location and strategic context) provides consideration of whether the site is suitable for the proposed development.
Soils and water	 An assessment of potential surface and groundwater impacts associated with the development A detailed site water balance, including a description of the development's water demands and associated servicing requirements (including any water licensing requirements) A description of the surface, stormwater and wastewater management systems, including on site detention, and measures to treat or reuse water An indicative stormwater management plan prepared by a qualified engineer in accordance with relevant City of Ryde Council guidelines Description of the measures to minimise water use and promote water sensitive urban design (WSUD) A description of the proposed erosion and sediment controls during construction. 	 Detail concerning groundwater is available in Chapter 19 (Groundwater, surface water, flooding and water use). An assessment of potential surface water impacts associated with the Proposal is provided in Sections 19.3.2 and 19.4.2 An assessment of potential groundwater impacts associated with the Proposal is provided in Sections 19.3.1 and 19.4.1 A description of the surface, stormwater and wastewater management systems, including on site detention, and measures to treat or reuse water is provided in Section 19.3.2 and Section 19.4.2 An indicative stormwater management plan prepared by a qualified engineer in accordance with relevant City of Ryde Council guidelines is provided in Appendix S Management measures, including requirements for a stormwater management plan, measures to minimise water use and promote

Key issue		
Desired Performance Outcome	Requirement	Response
		water sensitive urban design (WSUD) and erosion and sediment controls during are provided in Section 19.5.
Aboriginal and non-Aboriginal cultural heritage	 Identification and assessment of potential impacts on Aboriginal cultural heritage values, including a description of any measures to avoid, mitigate and/or manage any impacts. Justification for reliance on any previous Aboriginal Cultural Heritage Assessment Report or other heritage assessment for the site must be provided An assessment of potential impacts on State and local heritage items in the surrounding area. 	 An assessment of potential impacts on Aboriginal cultural heritage values has been carried out through an Aboriginal Heritage Due Diligence Assessment (Appendix K) which is summarised in Chapter 12 (Aboriginal heritage) The assessment concluded that the overall archaeological sensitivity of land within the Proposal Site is considered to be low. The potential for impacts to Aboriginal objects to occur during works is likewise assessed as low in Section 12.4 The EIS did not rely upon previous Aboriginal Cultural Heritage Assessment Reports or other heritage assessments.

Key issue		
Desired Performance Outcome	Requirement	Response
Waste	 Details of the quantities and classification of all waste streams to be generated on site during the construction and operation of the development Details of waste storage, handling and disposal during the construction and operation of the development, including plans of waste storage and collection areas 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. 	 Quantities and classification of waste streams during construction is provided in Chapter 20 (Waste), Section 20.3 Quantities and classification of waste streams during operation is provided in Section 20.5 Details of waste storage, handling and disposal, storage and collection during the construction is provided in Section 20.3.2 Details of waste storage, handling and disposal, storage and collection during the operation is provided in Section 20.5. Waste management measures are provided in Section 20.7.
Biodiversity	An assessment of the proposal's biodiversity impacts in accordance with the <i>Biodiversity Conservation Act 2016</i> , 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.	 A BDAR waiver has been prepared for the Proposal, seeking an exemption from the requirement to prepare a BDAR for the Proposal. The BDAR waiver is provided in Appendix L and is discussed in more detail in Section 13.1.1 An assessment of potential biodiversity impacts during the construction of the Proposal is provided in Section 13.3.

Key issue		
Desired Performance Outcome	Requirement	Response
		An assessment of potential biodiversity impacts during the operation of the Proposal is provided in Section 13.3.2.
Planning agreement/development contributions	Demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local infrastructure required to support the development.	Chapter 3 (Proposal description) and Chapter 17 (Infrastructure) provide evidence that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local infrastructure required to support the development.
Consultation	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. In particular you must consult with:	Chapter 5 (Engagement), discusses the consultation activities conducted throughout the preparation of this EIS, specifically: • State agencies and relevant stakeholders is contained in Section 5.4 and 5.6
	City of Ryde Council;Transport for NSW;	
	- Fire and Rescue NSW;	 Copies of letters are provided in Appendix H Details regarding the consultation, including issues raised is provided in Section 5.5.
	- Sydney Water;	
	- Ausgrid;	
	 Environment, Energy and Science Group; 	
	- Environment Protection Authority.	

Key issue		
Desired Performance Outcome	Requirement	Response
	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.	
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within two (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.	The Development Application and EIS for the Proposal has been submitted within two (2) years of the issue date of these SEARs
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.	The body of the EIS takes into account relevant guidelines, policies, per each chapter (as required), where this is the case, an assessment of the legislative and policy context is provided in each chapter.
		A full list of references used in the development of this EIS is provided in Chapter 23 (References).