

Appendix A – Secretary’s Environmental Assessment Requirements Compliance Table

Table 1 below provides a summarized response to the individual matters as listed in the Project-specific Secretary’s Environmental Assessment Requirements (SEARs) dated 26 September 2025, the SEARs Cover Letter and agency advice. It identifies where each requirement has been addressed in this EIS and the appended technical studies.

Table 1 Secretary’s Environmental Assessment Requirements (SEARs)

Agency	Requirements	Relevant Report Section	Relevant Appendix
General Requirements			
Project SEARs	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Part 8 of the <i>Environmental Planning and Assessment Regulation 2021</i> (the EP&A Regulation) and must have regard to the Department’s: • <i>State Significant Development Guidelines</i> (SSD Guidelines); and • <i>Renewable Energy Planning Framework</i> (most recent version as updated from time to time). In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: - details of construction, operation and decommissioning, including any staging of the development; - a description of the physical elements of the development including the form, maximum height and materials (including ancillary infrastructure); - a high quality site plan at an adequate scale showing all infrastructure and facilities (including any infrastructure, and accommodation camps, that would be required for the development, but the subject of a separate approvals process); - the Project Area (as per Table 1 of the <i>SSD guidelines – preparing an environmental impact statement</i>) and Development Footprint (disturbance area including but not limited to areas for infrastructure, road works, access tracks, defensible space, fencing and temporary laydown); - a high quality detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development; and	Section 2.3 Executive Summary Section 3.0 Section 6.1 Sections 7.0 – 17.0 Section 18.0	Appendix E

Agency	Requirements	Relevant Report Section	Relevant Appendix
	- confirmation if the project is designated development in accordance with the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) and the EP&A Regulation; • consistency in information presented in the EIS and all technical reports, including distances, development footprint, project design and infrastructure proposed, construction timeframes and receiver numbers; • a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including existing land use, other proposed or approved energy facilities, major projects, rural/residential development, Crown lands within and adjacent to the project site and subdivision potential); • a risk assessment of the potential impacts of the development, identifying the key issues for further assessment; • an assessment of the likely impacts of the development on the environment, and any other significant issues identified in the above risk assessment, focusing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development using sufficient baseline data; - an assessment of the likely impacts of all stages of the development (which is commensurate with the level of impact), including any cumulative impacts of the site and existing, approved or proposed developments in the region and impacts on the site and any road upgrades, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice including the Cumulative Impact Assessment Guideline (DPIE, 2022); - a description and assessment if staging of the project is proposed including any site mobilisation or pre-construction works; - a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development; and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development; • a model for community benefit-sharing, prepared in accordance with the Benefit-Sharing Guideline, including the terms of any proposed voluntary planning agreement with the relevant local council; • a consolidated summary table of all the proposed environmental mitigation, management and monitoring measures, identifying all the commitments in the EIS; and • a detailed evaluation of the merits of the project as a whole, having regard to: - the requirements in Section 4.15 of the EP&A Act, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development and its key components, including siting and project design alternatives to avoid areas of biodiversity value and high archaeological sensitivity, opportunities for shared infrastructure with proposed developments in the region, and the consequences of not carrying out the development;		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter.		
Agency Advice – NPWS and CPHR	This State significant development application (SSDA) is in proximity to the proposed Kurnell Energy and Industry Precinct (SSD-86799993) (KEIP) which relates to the future use of portions of the Kurnell Refinery Conversion site (SSD-5544). CPHR provided its SEARs advice on KEIP on 28 July 2025.	N/A	N/A
Agency Advice – EPA	- The description should include the following for both the construction and operation of the project: - Details of the premises covered by the project including any relationship with any existing Environment Protection Licences - the layout of all the physical elements of the project within the project area, including all buildings, structures, works, haulage activities, pollution controls, stockpile and material handling areas, sealed and unsealed areas, landscaping and open space. - all mitigation measures that will be built into the physical layout and design of the project (such as noise walls) - any ancillary infrastructure for which approval is being sought (such as upgrades to utilities or surrounding roads) - identify those components of the physical layout and design that may change during the detailed design of the project, and set clear limits within which this change may occur without requiring amendments to the DA or modifications to the development consent if the project is approved - plans showing the layout and design in plan-view and cross section. - Identify any likely interactions between the development and any existing/approved developments and land uses in the area. - Identify all sensitive receivers likely to be affected by the development using clear maps/plans, including key landform areas, such as conservation areas and waterways - Identify all potential environmental emissions, assess the likely environmental impacts, and describe the proposed mitigation measures to minimise environmental pollution to achieve compliance with relevant environmental legislation, policies, and guidelines. - The EIS must accurately summarise the key findings of the detailed technical studies in the appendices of the EIS and use suitable cross-referencing to reduce repetition between the two parts of the EIS.	Section 3.0	N/A
Estimated Development Cost and Employment			
Project SEARs	Provide the estimated development cost (EDC) of the development prepared in accordance with the relevant planning circular using the Standard Form of EDC Report; and	Section 3.0	Appendix F
Project SEARs	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.		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Project SEARs	The consent of the owner/s of the land (as required in Section 23(1) of the EP&A Regulation); and		
Project SEARs	A declaration from a Registered Environmental Assessment Practitioner that the EIS includes the information specified in the <i>Department’s Registered Environmental Assessment Practitioner Guidelines</i> .		
Biodiversity			
Project SEARs	An assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (NSW) (BC Act), having regard to the <i>Biodiversity Assessment Method</i> (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must: • Be prepared using the approved BDAR template; • Document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM; • Assess the impacts associated with all ancillary infrastructure, including the transport route road upgrades; • Include an assessment for serious and irreversible impacts (SAII) in accordance with Section 9.1 of the BAM; • Include a strategy to offset any residual impacts of the development in accordance with the BC Act; and • Be finalised by an accredited assessor as BAM-compliant within 14 days of submission; Unless Conservation Programs, Heritage and Regulation Group (CPHR) and the Department of Planning, Housing and Infrastructure (DPHI) determine the proposed development is not likely to have any significant impacts on biodiversity values;	Section 7.0	Appendix H
Project SEARs	Consideration of potential lighting impacts on key migratory shorebird habitats noting the <i>National Light Pollution Guidelines for Wildlife</i> (DCCEEW, 2023);		
Project SEARs	An assessment of impacts on the biophysical, hydrological and ecological integrity of coastal wetlands and an assessment of impacts on plants, animals and their habitats within marine parks or aquatic reserves;		
Project SEARs	An assessment of the likely impacts on listed aquatic threatened species, populations, ecological communities and aquatic reserves, scheduled under the <i>Fisheries Management Act 1994</i> , and a description of the measures to minimise and rehabilitate impacts;		
Project SEARs	A cumulative impact assessment of biodiversity values in the region from nearby developments; and		
Project SEARs	If an offset is required, details of the measures proposed to address the offset obligations.		
SEARs cover letter	Any development application that is required to be submitted with a Biodiversity Development Assessment Report must use the template available at: https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-bio-diversity-development-assessment-report-template		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – NPWS and CPHR	The Giant Dragonfly (<i>Petalura gigantea</i>) species was observed during biodiversity surveys for Modification 7 to the Kurnell Refinery Conversion (SSD-5544-Mod-7). The species may utilise habitats in proximity to the subject site and this SSDA may result in direct or indirect impacts on these habitats. In relation to point 7 of the recommended biodiversity environmental assessment requirements, the minimum information and spatial data requirements are in Tables 24 and 25 of the Biodiversity Assessment Method 2020 (BAM). Other requirements, such as those relating to the BAM Calculator and Biodiversity Offset Assessment Management System, are detailed in the guides, tools and databases webpage		
Agency Advice – NPWS and CPHR Attachment A	- The biodiversity values and impacts of the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 (BC Act), the Biodiversity Assessment Method 2020 (BAM) and documented in a biodiversity development assessment report (BDAR). The BDAR must be prepared using the approved BDAR template and include information in the form detailed in the BC Act (s.6.12), Biodiversity Conservation Regulation 2017 (s.6.8) and the BAM, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations). - The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM. - The BDAR must assess the impacts associated with all ancillary infrastructure, including the transport route road upgrades where applicable. - The BDAR must include an assessment of potential direct and indirect impacts on the Giant Dragonfly (<i>Petalura gigantea</i>). Note that the recording of the species may be too recent for the BAM to automatically include this species as a candidate species credit species. - The BDAR must include an assessment for serious and irreversible impacts (SAIL) in accordance with Section 9.1 of the BAM. - The BDAR must include details of the measures proposed to address the offset obligation in accordance with the BC Act as follows: - The total number and classes of biodiversity credits required to be retired for the development/project. - Any proposal to make a payment to the Biodiversity Conservation Fund. - The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s.6.10 of the BC Act and be BAM-compliant within 14 days of submission.		
Agency Advice – DPIRD Fisheries	- site address and contact details - property description (e.g. Lot and DP numbers) - a clear description of the proposal including details of construction methods and materials - map(s) of the development area and adjacent areas - this should include nearby waterways, adjacent infrastructure (such as jetties) and land use		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	• clear photographs of the site (at low and high tide in estuaries), including photographs of any riparian and aquatic vegetation present (including pest species such as <i>Caulerpa taxifolia</i>) • location of any oyster leases or other aquaculture facilities and recreational and commercial fishing areas within the subject waterway • a description of the potential direct and indirect impacts on aquaculture, commercial and recreational fishing from the development • a clear description of the physical and hydrological features of the development area (which may extend upstream and downstream of the development site in the case of flowing rivers or tidal waterways) • approximate depth contours within 20 metres of the proposal • a clear description of aquatic environments including: - fish in the locality, including threatened and protected species, populations, ecological communities, pest species or presence of 'critical habitat' under the FM Act or EPBC Act - an aquatic and riparian vegetation survey map of the area which shows the location and/or coverage of saltmarsh, mangrove, seagrass, macroalgae, macrophytes, riparian vegetation and snags - description of aquatic habitat TYPE on site (see Table 1 in the P&GLs) - description of the waterway CLASS (see Table 2 in the P&GLs) • details of the nature, timing, magnitude and duration of the proposed disturbance to the aquatic environment • assessments of predicted impacts upon any threatened species (fish and marine vegetation) (i.e. completion of a 7 part test and/or species impact statement(s)) and other aquatic flora and fauna • details of any mitigation measures to limit environmental impacts • details of the general regional context, any protected areas, other developments in the area, and/or cumulative impacts • a copy of the land owner's consent where relevant • notification of any other matters relevant to the proposal and of interest to NSW DPIRD		
Coastal Management			
Agency Advice - NPWS and CPHR	• The SSDA is located adjacent to mapped areas 'proximity area for coastal wetlands,' 'coastal wetlands,' 'coastal use area' and 'coastal environmental area' under the State Environmental Planning Policy (Resilience and Hazards) 2021. The SSDA must demonstrate it is consistent with the objectives of the relevant coastal management area and avoids increasing the risk of coastal hazards.	Section 4.2 Section 7.0	Appendix H
Agency Advice – NPWS and CPHR Attachment A	• The EIS must address potential impacts on 'proximity area for coastal wetlands,' and 'coastal wetlands' mapped under the State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) and Towra Point Nature Reserve (Ramsar Wetland) and include proposed management measures. • The EIS must demonstrate in accordance with the Resilience and Hazards SEPP that the proposed development: - Is consistent with the objectives of the relevant coastal management area - Avoids increasing the risk of coastal hazards (for example, erosion and inundation)		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	Aligns with the Coastal Design Guidelines (Department of Planning, Housing and Infrastructure, 2023) and relevant local planning instruments.		
Towra Point Aquatic Reserve			
Agency Advice – Sutherland Shire Council	The surrounding environment is of high ecological significance, as it makes up the sanctuary zone of the Towra Point Aquatic Reserve. The Aquatic reserve’s objectives are; - conserve the biodiversity of fish and marine vegetation - protect fish habitat In addition to the matters specified within the SEARs ‘Key Issues’, the proposal is to give consideration to: - National Light Pollution Guidelines for Wildlife - DCCEEW - Given the proximity to key migratory shorebird habitat, all lighting associated with the development will need to demonstrate how it meets the recommendations of the National Light pollution guidelines.	Section 7.0	Appendix H
Agency Advice – Sutherland Shire Council	Water Quality - Given the sensitive nature of the surrounding environment, environmental pollution from run-off of firefighting medium is a genuine concern and should be considered in any emergency response procedures. If large amounts of fire-fighting medium are to be applied during a fire-fighting operation, then the containment of such fire-fighting medium must be included in the design of the BESS, and should include: - A surface water discharge assessment in accordance with relevant EPA guidelines, including an assessment of potential impacts on watercourses, groundwater, nearby groundwater-dependent communities, and riparian areas (including Quibray Bay, Towra Point Aquatic Reserve and Towra Point Nature Reserve). - Details of proposed stormwater drainage design including the capacity of onsite detention system(s), integration with existing stormwater system and measures to treat, reuse or dispose of water and firefighting medium. This should include details of how the increase in stormwater from additional hardstand and impervious areas such as battery container will be incorporated. - Emergency containment systems and spill response protocols, such as bunds, retention basins, or impermeable surfaces to prevent runoff from entering waterways.		
Agency Advice – Sutherland Shire Council	It is recommended that a Flora and Fauna Assessment be undertaken and submitted to demonstrate the satisfaction of the above matters.		
Agency Advice - NPWS and CPHR	The SSDA also adjoins Towra Point Nature Reserve which is a declared Ramsar wetland under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. It is important to manage the potential impacts of the development on the ecological and hydrological integrity of the adjacent Nature Reserve and wetlands. Potential impacts on these sensitive areas and proposed management measures must be addressed in the Environmental Impact Statement (EIS).		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Fisheries			
Agency Advice – DPIRD Fisheries	DPIRD Fisheries has reviewed the Kamay BESS SEARs Draft and provides the following advice. Towra Point Aquatic Reserve lies adjacent to the proposed development site. Under the Marine Estate Management Act 2014 (MEM Act), the primary objective of aquatic reserves is to safeguard biological diversity – this includes entire ecosystems, specific communities, and individual species. The MEM Act stipulates that any secondary purposes must align with this core objective. Therefore, any development proposals near an aquatic reserve must uphold the reserve’s primary conservation goals. Additionally, the reserve is adjacent to the Towra Point Nature Reserve which is a Wetland of International Importance and a declared Ramsar Site. It is an important nursery area for fish and invertebrates, provides important habitat for migratory seabirds and is rich in marine biodiversity. The proposal borders Woollooware Bay, designated as a Refuge Zone within Towra Point Aquatic Reserve. This zone encompasses and adjoins habitats that support a wide array of sensitive, threatened, and protected species and ecological communities. It also contains critical fish habitats, including nurseries, which are vital not only for environmental sustainability but also for their social and economic value – particularly in supporting local fisheries. Many species within this zone are highly sensitive to disturbance and require careful protection. Additionally, the nearby Georges River contains key fish habitats that are essential for maintaining recreational fishing opportunities. The site is adjacent to mangrove areas that serve as shelter for both juvenile and adult fish species. These include commercially and recreationally significant species such as mullet, whiting, luderick, flathead, and shellfish like prawns and crabs.	Section 7.0	Appendix H
Agency Advice – DPIRD Fisheries	Dredging and reclamation activities • purpose of works • type(s) and distribution of marine vegetation in the vicinity of the proposed works • method of dredging to be used • timing and duration of works • dimension of area of works including levels and volume of material to be extracted or placed as fill • nature of sediment to be dredged, including Acid Sulphate Soil, contaminated soils etc • method of marking area subject to works • environmental safeguards to be used during and after works • measures for minimising harm to fish habitat under the proposal • spoil type and source location for reclamation activities • method of disposal of dredge material • location and duration of spoil stockpiling, if planned		
Agency Advice – DPIRD Fisheries	Activities that damage marine vegetation • type of marine vegetation to be harmed		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	- map and density distribution of marine vegetation - reasons for harming marine vegetation - methods of harming marine vegetation - construction details - duration of works/activities - measures for minimising harm to marine vegetation under the proposal and details of compensatory habitat development to replace lost vegetation. - method and location of transplanting activities or disposal of marine vegetation.		
Agency Advice – DPIRD Fisheries	Activities that block fish passage - type of activity eg works in a stream that change flow or morphological characteristics - length of time fish passage is to be restricted - timing of proposed restriction • remediation works		
Agency Advice – DPIRD Fisheries	Aquatic habitat assessment The aim of the aquatic assessment should be to define the presence of ‘key fish habitat’ within the study site, adjacent areas (upstream and downstream), and the broader regional area. There may be a range of potential fish habitats that could be impacted by a particular activity. Some points to consider include: - geomorphic characteristics of the waterway (i.e. what characteristics of a CLASS 1-4 waterway does it have (see Table 2 in P&GLs)? Is it a gully, intermittent stream or major river? Does it have deep pools or in-stream gravel beds? Is it a wetland? Does the watercourse connect with other watercourses upstream or downstream? What is the slope/gradient?) - is it mapped as key fish habitat? (see www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats#KFH for maps of key fish habitat per Local Government Area) - flow regime of the watercourse (e.g. is it an intermittent or permanently flowing stream? What is the range of water velocity of the flow? What are the maximum and minimum or percentile flows (in megalitres/day) for the watercourse?) - description of local wave and current regimes (in tidal areas) - description of the water quality (e.g. discolouration, sedimentation, turbidity, pH, dissolved oxygen, nutrients) - types of surrounding land use (e.g. agricultural, urban, aquaculture) - condition of riparian vegetation (i.e. present or absent. Are the species native or exotic? Is the density of vegetation thick or sparse?) - condition of freshwater aquatic vegetation (i.e. present or absent. Are the species native or exotic? Is the density of vegetation thick or sparse? Is it continuous or sparse in coverage? What is the aerial extent of major vegetation types? Is the vegetation healthy or degraded?) - condition of marine vegetation (i.e. information on type, species, shoot density and/or percentage cover. Is the vegetation continuous or sparse in coverage? What is the aerial extent? Is the vegetation healthy or degraded? Is wrack (dead seagrass or macroalgae) present?)		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	• presence of wetlands nearby (including freshwater wetlands and saltmarsh) (i.e. are wetlands protected under any legislation (e.g. SEPP 14 coastal wetlands, Ramsar wetlands)? Are the wetlands in a healthy or degraded condition?) • substrate type (e.g. rock, sand, gravel, silt) • presence of refuge areas (e.g. adjacent wetlands, upstream pools) • presence of spawning areas (e.g. gravel beds, snags, reed beds, saltmarshes) • presence of natural or artificial barriers to fish passage upstream and downstream (e.g. waterfalls, cascades, weirs, dams, floodgates, road crossings) • types of migratory fish or other aquatic species likely to inhabit the areas (based on known distribution range within the scientific literature) • timing of construction in relation to any fish migration seasons • timing of construction in relation to flow conditions relative to expected wet seasons presence of any listed threatened or protected aquatic species or 'critical habitat' under the FM Act and EPBC Act		
Agency Advice – DPIRD Fisheries	Aquatic fauna assessment For aquatic fauna studies, sites where fish and/or other aquatic fauna are well documented, and no threatened species are recorded, a site inspection and desktop review of the study site and regional area may be the required level of assessment. During the completion of the planning phase for a new project, it may be determined that a detailed aquatic survey is required. Detailed surveys are to be undertaken only after direct consultation with NSW DPIRD as permits are required for sampling aquatic fauna under the FM Act. The Department of Planning and Infrastructure has developed a document entitled Aquatic Ecology in Environmental Impact Assessment (Lincoln-Smith 2003) which may also assist in the survey design. Note that a detailed survey may be required: • where the project is on a CLASS 1 or 2 watercourse (see Table 2 in P&GLs) or where it has been identified that there may be a significant impact on a threatened aquatic species; and/or • where the project crosses through, over or within a 'critical habitat' and a Species Impact Statement is required.		
Agency Advice – DPIRD Fisheries	Assessment of likely impacts • indicate the location, nature and extent of habitat removal or modification (both direct and indirect) which may result from the proposed action; • discuss the potential impact of the modification or removal of habitat (potential direct and indirect sources of impact are stated in the letter with this attachment). Note: In defining the proposal area, discussion must be provided regarding possible indirect effects of the proposal on species/habitats in the area surrounding the subject site: for example, through altered hydrological regimes, soil erosion or pollution		
Agency Advice – DPIRD Fisheries	Ameliorative measures The environmental assessment should consider and provide detail on how the proposal has been or may be modified and managed to minimise impacts and conserve aquatic habitat on the subject site and in the study area		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – DPIRD Fisheries	The Department advises that in addition to the standard EIS requirements, the proposed development should consider and provide information on the following specific issues: • Description of aquatic and riparian environments in the vicinity of the development particularly extent and condition of any marine vegetation (saltmarsh, seagrass and mangroves) and coastal wetland. • Analysis of any interactions of the proposal with the coastal wetland environment, including construction impacts. • Any proposals to mitigate rehabilitate or offset impacts. • Assessment of how this proposal complies with objective 2.7 and 2.8 of the R&H SEPP. • Assessment of how the proposal aims to minimise impacts to native riparian vegetation, including maintaining riparian buffers as outlined in Section 3.2.4.2 (2) of DPI Fisheries Policy and Guidelines • Assessment of how this proposal complies with DPI Fisheries Policy and Guidelines • Assessment of how this proposal complies with s.56 of the MEM Act for development affecting / in the locality of an aquatic reserve. • Assessment of the potential impacts of site stormwater to Towra Point Aquatic Reserve		
National Parks and Wildlife Estate			
Agency Advice - NPWS and CPHR	The applicant or its consultants must seek consent from the NPWS Sydney South Area Manager via npws.sydneysouth@environment.nsw.gov.au prior to accessing land reserved under the National Parks and Wildlife Act 1974 (NPW Act) to undertake any survey or environmental investigation to inform the preparation of the EIS.	Section 7.0	Appendix H
Agency Advice – NPWS and CPHR Attachment A	The EIS must: • include an assessment of the nature, extent and duration of any potential direct or indirect and cumulative impacts on the nearby parks, namely Towra Point Nature Reserve, addressing all matters outlined in the Developments adjacent to National Parks and Wildlife Service lands - Guidelines for consent and planning authorities (DPIE 2020) including: - recognition of the natural, cultural and social values attached to that land - recognition of the impacts, including direct, indirect and cumulative impacts as they relate to the environmental values of that land, its location, and greater landscape connectivity - extent of the direct, indirect and cumulative impacts on that land - duration of the direct, indirect and cumulative impacts on the interface, the greater environmental values and the reserves connectivity in the landscape to other reserved land. • identify measures proposed to prevent, control, abate, minimise and manage any potential direct and indirect impacts on the nature reserve, including an evaluation of the effectiveness and reliability of the proposed measures • quantify any residual impacts to the nature reserve be prepared in consultation with NPWS with initial contact via npws.envplanningadvice@environment.nsw.gov.au	Section 7.0	Appendix H

Agency	Requirements	Relevant Report Section	Relevant Appendix
Aboriginal Heritage			
Project SEARs	An Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH, 2011) and the <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW, 2010), identifying, describing, and assessing any impacts to any Aboriginal cultural heritage sites or values associated with the site (including impacts from any proposed earth works, construction works and road upgrades), including results of archaeological test excavations (where required), undertaken in accordance with the relevant standards and requirements;	Section 10.0 and Section 5.0	Appendix K
Project SEARs	Evidence of adequate consultation with Aboriginal communities in determining and assessing impacts, identifying and selecting options for avoidance of Aboriginal cultural heritage and identifying appropriate mitigation measures (including the final proposed measures), having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW, 2010); and		
Agency Advice – Sutherland Shire Council	The findings detailed within Table 4-2 are noted. Council mapping software indicates an AHIMS site 52-3-0212 (midden) is situated within the north-western portion of the site. It may be the case that this site has been incorrectly positioned, however it expected that the Aboriginal Cultural Heritage Assessment Report accurately locate this item and ensure that it is not harmed during the development process.		
Agency Advice – Heritage NSW ACH	Heritage NSW has reviewed the scoping report and draft Secretary's Environmental Assessment Requirements included in your referral and has no further comments at this time. Please note that the above comments relate only to Aboriginal cultural heritage regulation matters.		
Heritage			
Project SEARs	Assess the impact to historic heritage having regard to the <i>Guidelines for Preparing a Statement of Heritage Impact</i>	Section 17.1	Appendix Q
Agency Advice – Heritage NSW EH	A suitably qualified heritage consultant is to: Identify all heritage items within the site and its vicinity including built heritage, landscapes and archaeology, map these items, and assess why the items and site(s) are of heritage significance.		
Agency Advice – Heritage NSW EH	Assess the impacts of the proposal on any identified heritage items in accordance with the Guidelines for Preparing Statement of Heritage Impact. Discuss the attempts tot avoid and/or mitigate the impact on the heritage significance of the site and the surrounding heritage items including any options analysis		
Agency Advice – Heritage NSW EH	Assess the visual impacts of the proposal on any heritage item(s) within the view attachment of the proposal		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – Heritage NSW EH	If impacts on potential archaeology are identified, an historical archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines Archaeological Assessment and Assessing Significance for Historical Archaeological Sites and Relics		
Agency Advice – Heritage NSW EH	As the site is in the vicinity of a local heritage item, advice should be sought from the relevant local council		
Land			
Project SEARs	A detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, land contamination, permissibility, strategic context and existing site constraints;	Sections 2.0 and 18.6	N/A
Project SEARs	An assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: - Agricultural land, flood prone land, nearby drinking water catchments, Crown lands, mining, quarries, mineral or petroleum rights (if relevant); - A soil survey to determine the soil characteristics and consider the potential for salinity, acid sulfate soils, and erosion to occur; and - A cumulative impact assessment of nearby developments;	Section 8.0	Appendix J
Project SEARs	An assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including:	Section 2.0	N/A
Project SEARs	Consideration of the zoning provisions applying to the land, including subdivision (if required);	Section 4.5	N/A
Project SEARs	Completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industries <i>Land Use Conflict Risk Assessment Guide</i> (if required);	Section 15.0	N/A
Project SEARs	An assessment of impact on agricultural resources and agricultural production on the site and region; and	N/A	N/A
Project SEARs	A preliminary investigation into potential contamination across the site, in accordance with the relevant guidelines for contaminated land made or approved by the NSW EPA.	Section 13.0	Appendix I
Project SEARs	An assessment of acid sulfate soil risk in accordance with the <i>Acid Sulfate Soils Manual (1998)</i> and consideration of <i>Sutherland Shire Local Environmental Plan 2015</i> , and details of any management measures.	Section 13.0	Appendix I
Visual			
Project SEARs	A detailed assessment of the likely visual impacts of all components of the project on surrounding residences (including approved developments, lodged development applications and dwelling entitlements), and key locations, scenic of significant vistas and road corridors in the public domain; and	Section 17.2	Appendix P

Agency	Requirements	Relevant Report Section	Relevant Appendix
Project SEARs	Details of measures to mitigate and/or manage potential impacts (including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners).		
Noise			
Project SEARs	An assessment of the construction noise impacts (including impacts from proposed road upgrades) of the development in accordance with the <i>Interim Construction Noise Guideline</i> (ICNG), operational noise impacts in accordance with the <i>NSW Noise Policy for Industry</i> (2017), assess traffic noise having regard to the <i>NSW Road Noise Policy</i> (DECCW, 2011) and cumulative noise impacts (considering other developments in the area), including (where appropriate):	Section 11.0	Appendix L
Project SEARs	Identification of impacts associated with construction, site emission and traffic generation at noise affected sensitive receivers, including the provision of operational noise contours;		
Project SEARs	Details of noise monitoring survey, background noise levels and amenity noise levels at the most-affected residential receivers;		
Project SEARs	Details of likely daily charging/discharging load profile, manufacturer specifications for plant and equipment and noise source inventory (including intensity, quantity, location, directivity and frequency information);		
Project SEARs	An assessment of 'worst case' noise emission scenarios during periods of discharging and charging;		
Project SEARs	Consideration of annoying characteristics of noise and prevailing meteorological conditions in the study area; and		
Project SEARs	Details and analysis of the effectiveness of proposed management and mitigation measures to adequately manage identified impacts, including a clear identification of residual noise and vibration impacts following application of these mitigation measures and details of any proposed compliance monitoring programs.		
Agency Advice - EPA	A comprehensive noise assessment should be carried out that considers all on-site activities from the BESS and associated operations such as diesel generators. The noise assessment should be carried out in accordance with the Noise Policy for Industry (NPfI) (EPA, 2017), including determination of background noise levels in accordance with Fact Sheets A and B of the NPfI and assessment of annoying characteristics according to Fact Sheet C.		
Agency Advice - EPA	The EIS must assess the following noise and vibration aspects of the proposed development: - Operational and construction activities on the premises that maybe considered vibration intensive should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DEC, 2006). These are available at: https://www.epa.nsw.gov.au/yourenvironment/noise/industrial-noise/assessing-vibration - If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	overpressure and ground vibration (ANZEC, 1990). These are available at: https://www.epa.nsw.gov.au/yourenvironment/noise/industrial-noise/construction-noise - Operational noise from noise intensive activities to be undertaken on the premises should be assessed using the guidelines contained in the NSW Noise Policy for Industry (EPA, 2017). Available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noisepolicy-for-industry-(2017) - If applicable, noise on public roads from increased road traffic generated by land use developments other than road projects should be assessed using the guidelines contained in the NSW Road Noise Policy (EPA, 2011) and associated application notes. Available at: https://www.epa.nsw.gov.au/your-environment/noise/transport-noise.		
Transport			
Project SEARs	An assessment of the peak and average traffic generation, including light vehicles (including shuttle buses), heavy vehicles, heavy vehicles requiring escort, high risk heavy vehicles requiring escort (noting Table 1 in TfNSW Fact Sheet - <i>Transport Management Plans for Over Size and/or Overmass Movements in NSW</i>) and construction worker transportation;	Section 12.0	Appendix M
Project SEARs	An assessment of the likely transport impacts of the project, particularly in relation to the capacity and condition of the public roads (including site access(es)), road safety and, intersection performance and impacts to rail infrastructure (with consideration of rail safety);		
Project SEARs	A concept Level Route Analysis required for heavy vehicles requiring escort and high risk heavy vehicles requiring escort;		
Project SEARs	A cumulative impact assessment of traffic from nearby developments; and		
Project SEARs	Provide details of measures to mitigate and / or manage potential impacts and consultation with the relevant road authorities including: - A schedule of all required road upgrades (including resulting from heavy vehicle and heavy vehicles requiring escort and high-risk heavy vehicles requiring escort haulage routes where relevant), - strategic concept designs of proposed road upgrades (including the site access point), prepared in accordance with <i>TfNSW's Strategic-Design-requirements-for-DA-Factsheet.pdf</i> (where relevant); and - Road maintenance, and any other traffic control measures.		
Agency Advice – Transport for NSW	TfNSW has reviewed the Scoping Report and advises that the Agency has no additional requirements beyond the standard Secretary Environmental Assessment Requirements.		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Water and Soils			
Project SEARs	An assessment of the likely impacts of the development (including flooding and flood modelling) on surrounding watercourses (including their Strahler Stream Order) and riparian areas, Quibray Bay, Towra Point Aquatic Reserve, Towra Point Nature Reserve, groundwater resources and surface water movements, water quality and measures proposed to monitor, reduce and mitigate these impacts including water management and details of the proposed stormwater drainage design;	Sections 8.0 and 9.0	Appendix J
Project SEARs	A site water balance for the development;		
Project SEARs	Details of water requirements and supply arrangements for construction and operation (including consultation with suppliers);		
Project SEARs	A description of the erosion and sediment control measures that would be implemented to mitigate any impacts in accordance with <i>Managing Urban Stormwater: Soils & Construction</i> (Landcom, 2004) and <i>Managing Urban Stormwater: Soils and construction – Volume 2A manual</i> (Landcom, 2008);		
Project SEARs	An assessment of the likely impacts of the development on hydrology and groundwater (if extraction or interference is proposed), including any changes to overland flows and groundwater levels on-site or off-site, including consideration of the containment and disposal of water in the event of a fire incident (or similar) and the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland, and detail design solutions and operational procedures to manage impacts;		
Project SEARs	Where the project involves works within 40 metres of any river, lake or wetlands (collectively waterfront land), identify likely impacts to the waterfront land, and how the activities are to be designed and implemented in accordance with the <i>DPI Guidelines for Controlled Activities on Waterfront Land</i> (2018) and (if necessary) <i>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</i> (DPI 2003), and <i>Policy & Guidelines for Fish Habitat Conservation & Management</i> (DPE, 2013); and		
Project SEARs	Identification of any flood risk on site having regard to the effect of flooding on batteries or other components of the BESS, adopted flood studies, the potential effects of climate change and any relevant provisions of the <i>NSW Flood Risk Management Manual</i> ;		
Project SEARs	Where the development could alter flood behaviour, affect flood risk to the existing community or expose its users to flood risk, provide a flood impact and risk assessment (FIRA) prepared in accordance with the <i>Flood Impact and Risk Assessment – Flood Risk Management Guide LU01</i> ;		
Project SEARs	Detailed design solutions and operational procedures to mitigate flood risk where required.		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – NPWS and CPHR	The EIS must map the following features relevant to water and soils including • Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). • Rivers, streams, wetlands, estuaries (as described in s.4.2 of the BAM). • Wetlands as described in s.4.2 of the BAM. • Groundwater. • Groundwater dependent ecosystems. Proposed intake and discharge locations.		
Agency Advice – NPWS and CPHR	The EIS must describe background conditions for any water resource likely to be affected by the development, including: • Existing surface and groundwater. • Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. • Water Quality Objectives (as endorsed by the NSW Government) including groundwater as appropriate that represent the community's uses and values for the receiving waters. • Indicators and trigger values/criteria for the environmental values identified above in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions		
Agency Advice – NPWS and CPHR	The EIS must assess the impact of the development on hydrology, including: • Water balance including quantity, quality and source. • Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. • Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. • Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). • Changes to environmental water availability, both regulated/licensed and unregulated/rules based sources of such water. • Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options. Identification of proposed monitoring of hydrological attributes.		
Agency advice – EPA	Stormwater management – The proponent should address the proposal's impact on the stormwater management system. Details should be provided on how the development manages containment and disposal in the event of a fire incident or similar for any potentially contaminated runoffs, noting that large volume of water is required to extinguish lithium iron batteries.		
Agency advice – EPA	The EIS surface water quality assessment must:		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	• Demonstrate that all practical measures to prevent, control, abate or mitigate water pollution have been implemented, including a description of options that were explored (such as reuse to avoid a discharge or treatment). • Provide details of the proposal that are essential for predicting and assessing potential impacts to receiving waters. This could include (but is not limited to): - Site layout, including details of the existing and proposed water management system. - Drainage map for the entire site identifying sub-catchments, flow paths, drainage infrastructure, design sizing of structures, water storages, discharge points, and any potential flow paths to receiving waters. - How stormwater will be managed in all phases of the project. Information should include, where appropriate, measures to avoid or minimise erosion, leachate generation, and sediment mobilisation at the site. • Include water balance(s) for ground and surface water, including any intake and discharge locations, volumes, frequency and duration. • Identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point, including residual discharges after mitigation measures are implemented. This should be undertaken for construction and operational phases. The EIS must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EIS should consider the guidelines Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).		
Agency advice – EPA	Groundwater Provide details of the project that are essential for predicting and assessing impacts to groundwater with a description of the existing environment, including: • Geological, topographical, and hydrogeological resource descriptions, maps, and cross sections. • Assessment of groundwater quality, users of groundwater, existing bores including depths and construction, assessment of local land use. • A hydrogeological interpretation of water-bearing geological units, depth to water table, groundwater gradient, Conceptual hydrogeological model, assessment of groundwater dependent ecosystems. • Site map and cross-sections showing and characterising any proposed excavations and spoil emplacement (relative to water table) with topography. • Proposed groundwater monitoring program. Assessment should be in accordance with Groundwater assessment toolbox for major projects in NSW - Overview document (DPE, 2022) - https://water.nsw.gov.au/_data/assets/pdf_file/0004/507613/Groundwaterassessment-toolbox-for-major-projects-in-NSW.pdf		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency advice – EPA	Soils - The EIS should include an assessment of the potential impacts on soil and land resources should be undertaken, being guided by the Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to: - Soil erosion and sediment transport- in accordance with Managing urban stormwater: Soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C Unsealed Roads; D Main Roles) (DECC2008). - Mass movement (landslides) – in accordance with Landslide risk management guidelines presented in the Australian Geomechanics Society (2007). - Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes Site Investigation for Urban Salinity (DLWC, 2002). A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Where required, add any specific assessment requirements relevant to the project.		
Water Take and Licensing			
Agency Advice – DCCEEW Water Group	A detailed and consolidated site water balance.	Section 9.0	Appendix J
Agency Advice – DCCEEW Water Group	Description of all works/activities that may intercept, extract, use, divert or receive surface water and/or groundwater. This includes the description of any development, activities or structures that will intercept, interfere with or remove groundwater, both temporary and permanent.		
Agency Advice – DCCEEW Water Group	Details of all water take for the life f the project and post closure where applicable. This is to include water taken directly and indirectly and the relevant water source where water entitlements are required to account for the water take. If the water is to be taken from an alternative source, confirmation should be provided by the supplier that the appropriate volumes can be obtained.		
Agency Advice – DCCEEW Water Group	Details of Water Access Licences (WALs) held to account for any take of water where required, or demonstration that WALs can be obtained prior to take of water occurring. This should include an assessment of the current market depth where water entitlement is required to be purchased. Any exemptions or exclusions to requiring approvals under the Water Management Act 2000 should be detailed by the proponent.		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Water Impacts			
Agency Advice – DCCEEW Water Group	A description of groundwater conditions that provides an understanding of groundwater level across the site under a range of wet and dry conditions.	Section 9.0	Appendix J
Agency Advice – DCCEEW Water Group	Assessment of impact on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licenced water users, basic landholder rights, watercourses, riparian land, groundwater dependent ecosystems and ground water levels; including measures proposed to reduce and mitigate these impacts.		
Agency Advice – DCCEEW Water Group	Proposed surface and groundwater monitoring activities and methodologies.		
Dam Safety			
Agency Advice – DCCEEW Water Group	Identify the proposed construction and/or use of a declared dam under Dam Safety Regulations. This is to include existing declared dams with or without physical modifications, new declared dams, modifications to existing dam/s that would require the dam to be declared or the decommissioning of a declared dam.	N/A – No declared dam	N/A – No declared dam
Agency Advice – DCCEEW Water Group	Describe the consequence category of existing declared dam/s and provide an overview of compliance with the requirements of the Dam Safety Regulation, including (but not limited to) requirements for a dam safety management system, operations and maintenance plans, and emergency plans.		
Agency Advice – DCCEEW Water Group	Include a consequence category assessment for new declared dams, proposed modifications to existing declared dam/s, modifications to existing dam/s that would require the dam to be declared or declared dams to be decommissioned.		
Agency Advice – DCCEEW Water Group	Describe the decommissioning process of any existing declared dam.		
Agency Advice – DCCEEW Water Group	Describe all mining an mining related activities proposed within a Mining Notification Area and assess the impacts of the proposed activities on any declared dam. This is to include proposed mitigating measures and monitoring programs.		
Assessment Against Policy and Guidelines			
Agency Advice – DCCEEW Water Group	Identification and impact assessment of all works/activities located on waterfront land including an assessment against Guidelines for Controlled Activities on Waterfront Land (DPE 2022).	Section 9.0	Appendix J

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – DCCEEW Water Group	Assessment of project against relevant policy and guidelines	Section 4.0 Section 9.0	Appendix J
Flooding Affection			
Agency Advice – Sutherland Shire Council	The site is subject to a high risk flood affection (1% AEP and PMF). A suitable flood impact assessment report should be requested. The applicant may apply for a Flood Information Certificate, which is available on Council's website: https://www.sutherlandshire.nsw.gov.au/_data/assets/pdf_file/0014/24026/application-for-flood-information.pdf	Section 9.0	Appendix J
Agency Advice – Sutherland Shire Council	In this regard, it is noted that the proposed arrangement of placing the battery storage containers directly upon a concrete or compacted gravel base is likely to give rise to inundation during a flood event. This may result in premature failure of the unit(s), and/ or potential for environmental hazard and harm.		
Agency Advice – Sutherland Shire Council	Consideration should be given to whether the proposed use is suitable on this land given the above high flood risk and if this can be demonstrated, that suitable and effective measures can be implemented to mitigate the impact. Site fill is not considered a reasonable mitigation response as this will likely result in environmental harm and offsite flood related impacts.		
Agency Advice- NPWS and CPHR	In reference to the Flood Risk Management SEARs in Attachment A, future use of the site for a battery energy storage system (BESS) would be classified as hazardous industry in the Flood prone land package (2021). Sutherland Shire Council has adopted special flood consideration clause 5.22 which would require the proposed BESS, including battery pads and battery arrays, to be located outside of the probable maximum flood (PMF) extent. CPHR requests the preliminary hazard assessment also assess the flood impact to ensure protection to the PMF is achieved Captain Cook Drive is the only access route to the Kurnell Peninsula. CPHR requires this road's level of service not be impacted up to and including the PMF event.		
Acid Sulphate Soils			
Agency Advice – Sutherland Shire Council	The findings detailed within Table 4-2 are noted however Council's records indicate that the site is mapped as Class 2 and Class 3 Acid Sulfate Soil. As per the Sutherland Shire LEP 2015, works within Class 3 acid sulfate soils require an acid sulfate soil assessment if the maximum excavation will reach a depth greater than 1.0 metres below ground level (mBGL) or is likely to lower the local water table by greater than 1.0 metres and the total amount of excavation will exceed 1 tonne of material. Additionally, all works within Class 2 acid sulfate soils require an assessment if there is to be any excavation. The development is likely to meet these criteria and, if so, an acid sulfate soils assessment is required to inform on required acid sulfate soils management. The applicant must either prepare an acid sulfate soils assessment or demonstrate that the development will not involve any excavation within the class 2 acid sulfate soils and no excavation beyond 1 metre below ground level within the class 3 acid sulfate soils.	Section 8.0	Appendix I

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – Sutherland Shire Council	If the findings of the acid sulfate soils assessment indicate the need for an acid sulfate soils management plan (ASSMP), this must also be submitted to council prior to development consent being granted.		
Agency Advice – Sutherland Shire Council	The acid sulfate soils assessment and (if required) ASSMP must be undertaken in accordance with the following: • Acid Sulfate Soils Management Advisory Committee (ASSMAC) Acid Sulfate Soil Manual (1998); • Sutherland Shire Local Environmental Plan 2015; And with reference to: • National Acid Sulfate Soils Guidance: National acid sulfate soils sampling and identification methods manual (2018) (Sullivan et al. 2018). The acid sulfate soil assessment and (if required) ASSMP must be prepared by a consultant certified by either of the following schemes: • EIANZ ‘Certified Environmental Practitioner’ (CEnvP); or, • Soil Science Australia ‘Certified Professional Soil Scientist’ (SSA CPSS).		
Hazards			
Project SEARs	Health - an assessment of potential hazards and risks including but not limited to fires, spontaneous ignition, electromagnetic fields for the proposed grid connection infrastructure against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields;	Section 13.0	Appendix N
Project SEARs	Bushfire – a bushfire hazard assessment completed by a suitably qualified consultant and identify potential hazards and risks associated with bushfires / use of bushfire prone land including the risks that a BESS would cause a bushfire and demonstrate compliance with Planning for Bush Fire Protection 2019;	Section 14.0	Appendix O
Project SEARs	Dangerous Goods - a preliminary risk screening completed in accordance with the State Environmental Planning Policy (Resilience and Hazards) 2021;	Section 13.0	Appendix N
Project SEARs	Battery Energy Storage System - a Preliminary Hazard Analysis (PHA) prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guideline for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011). The PHA must consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation. The PHA must also consider release of toxic gases or toxic combustion byproducts from a full-scale battery fire. The PHA must demonstrate compliance with Hazardous Industry Advisory Paper No. 4, Risk Criteria for Land Use Safety Planning (DoP, 2011). Evaluate the cumulative risks to the surrounding land uses, including those associated with the existing fuel terminal, the proposed BESS installations at the existing fuel terminal, and this proposal; and	Section 13.0	Appendix N
Project SEARs	The PHA must consider the effect of bushfires on batteries or other components of the BESS.	Section 13.0	Appendix N

Agency	Requirements	Relevant Report Section	Relevant Appendix
Project SEARS	Flooding – an assessment of safe operation and evacuation (maintaining passage along Captain Cook Drive) in the event of a flood, including consideration of potential impacts to the environment and measures to manage risks to life and property.	Section 9.0	Appendix J
Agency Advice – DPHI Hazards	High Pressure Dangerous Goods Pipeline We have checked the location, 171-189 Captain Cook Drive, Kurnell, New South Wales, 2231 and found it is not affected by any high-pressure dangerous goods pipelines.	N/A	N/A
Agency Advice – DPHI Hazards	Dangerous Goods The proposal may involve the storage of dangerous goods. It is recommended that the EIS includes a preliminary risk screening in accordance with the Department's Hazardous and Offensive Development Application Guidelines 'Applying SEPP 33'. If the preliminary risk screening exceeds the threshold quantities in 'Applying SEPP 33' a preliminary hazard analysis (PHA) must be undertaken as required by SEPP (Resilience and Hazards) 2021.	Section 13.0	Appendix N
Agency Advice – DPHI Hazards	Battery Energy Storage System The proposal includes a BESS, and the total BESS peak delivery capacity exceeds 30 MW, the Applicant must prepare a Preliminary Hazard Analysis (PHA) for the batteries. The proposal is for lithium-ion batteries	Section 13.0	Appendix N
Agency Advice – DPHI Hazards	Cumulative Impacts The proposal is located near the proposed the Kurnell fuel terminal, noting that the terminal is proposing a BESS of 800 MW/3,800 MWh . Given the strong community interest in the BESS proposal at the terminal, the cumulative risk impacts associated with multiple BESS projects is highly relevant. Therefore, the Applicant must consider the combined risks arising from the existing fuel terminal, the proposed BESS project at that terminal, and the proposal	Section 13.0	Appendix N
Agency Advice – DPHI Hazards	Bushfire The proposal is not on, or near identified bushfire prone land	Section 14.0	Appendix O
Agency Advice – DPHI Hazards	- Battery Energy Storage System - a Preliminary Hazard Analysis (PHA) prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guideline for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011). The PHA must: - consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation. - Consider release of toxic gases or toxic combustion byproducts from a full-scale battery fire. - evaluate the cumulative risks to the surrounding land uses, including those associated with the existing fuel terminal, the proposed BESS installations at the existing fuel terminal, and this proposal. demonstrate compliance with Hazardous Industry Advisory Paper No. 4, Risk Criteria for Land Use Safety Planning (DoP, 2011). The PHA must consider the effect of bushfires on batteries or other components of the BESS.	Section 13.0	Appendix N
Agency Advice – DPHI Hazards	Demonstrate that the separation distances between the BESS to on-site or offsite receptors and the separation distances between battery enclosures will reduce the risk of fire propagation.	Section 13.0	Appendix N

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – DPHI Hazards	For information, Fire and Rescue NSW has released a technical information on the requirements of a Fire Safety Study, and this guideline should be considered. See Fire Safety Guideline, Technical Information, D22/107002, Large-scale external lithium-ion battery energy storage system- Fire Safety Study Guidelines, Version 01, 26 July 2023. Verify that the areas designated for BESS are sufficient considering separation distances between battery enclosures; and Demonstrate that the fire risks from BESS can comply with the Department’s Hazardous Industry Advisory Paper No. 4, ‘Risk Criteria for Land Use Safety Planning.’	Section 13.0	Appendix N
Agency Advice – DPHI Hazards	In undertaking the hazard analysis, the following should be included: Consideration of the most recent standards and codes such as and not limited to FM Global DS 5-33, NFPA 855, AS 5139, IEC 62897, UL 9540, and UL 9540A test reports when establishing separation distances; and Consideration of the scenarios and findings from the reports on the 2021 Victorian Big Battery fire, including fire propagation to the topside of the adjacent batteries.	Section 13.0	Appendix N
Agency advice – EPA	Battery Management System – Information should be provided for monitoring voltage, temperature and current, and to alert for any risks over the operating limits. A safety system should also be explained, including but not limited to fire detection and suppression. Further, details should be provided for the design separating the battery and transformer oil.	Section 13.0	Appendix N
Contaminated Land			
Agency Advice – Sutherland Shire Council	The site is listed on Council’s contaminated land register as ‘potentially contaminated’ due to the use of the site as an electrical substation. While contamination is likely, it is unlikely to result in the site being unsuitable for the proposed development. This must be confirmed with a contamination investigation, in the form of a preliminary and detailed site investigation (PSI and DSI). This must be prepared in accordance with the following: - NSW Contaminated Land Management Act (1997); - NSW Contaminated Land Management Regulation (2022); • NSW State Environmental Planning Policy (Resilience and Hazards) 2021 – Ch. 4 – Remediation of Land; - NSW Planning Guidelines SEPP 55 – Remediation of Land (1998); - National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure Schedule B1 – Guideline on Investigation Levels for Soil and Groundwater (2011); - National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure Schedule B2 – Guideline on Site Characterisation (2011); - ANZECC and ARMCANZ Guidelines for Fresh and Marine Water Quality (2000); - NSW EPA Contaminated Land Guidelines: Consultants Reporting on Contaminated Land (2020); - NSW EPA Contaminated Land Guidelines: Sampling Design Part 1 – Application (2022); and, - NSW EPA Contaminated Land Guidelines: Sampling Design Part 2 – Interpretation (2022). The report(s) must be prepared by a consultant certified by either of the following schemes:	Section 8.0	Appendix I

Agency	Requirements	Relevant Report Section	Relevant Appendix
	• EIANZ 'Certified Environmental Practitioner – Site Contamination' (CEnvP – SC); or, Soil Science Australia 'Certified Professional Soil Scientist – Contaminated Site Assessment & Management' or 'Soil Survey' (SSA CPSS CSAM or SS).		
Agency Advice – Sutherland Shire Council	If the findings of the PSI and DSI indicate the need for remediation of the land prior to use, a remediation action plan (RAP) must also be prepared and enacted prior to the construction of the BESS. The requirement for the PSI and DSI has been given in the scoping report (Section 6.3.3).		
Agency Advice – Sutherland Shire Council	The potential for future contamination as a result of the proposed development has also been addressed by the scoping report. The environmental impact statement to be prepared for the BESS must address the potential for a future contamination incident resulting from: • Fire • Leaking of liquid components • Construction works Controls for these potential contamination events must account for the proximity of the site to protected wetlands		
Agency Advice – EPA	• Identify the likelihood of contamination at the site and surrounding land (on different media such as soils, groundwater, ground gas, surface water and sediments, where applicable) by considering the context of past, current, and proposed land uses. The EIS must document how the assessment of contaminated land has been undertaken with regard to the relevant guidelines for contaminated land made or approved by the NSW EPA. • All reports on contamination must be prepared by a suitably qualified contaminated land consultant who is also certified. - A suitably qualified and experienced contaminated land consultant is a contaminated land consultant who meets the competencies outlined in the Guideline on the Competencies and Acceptance of Environmental Auditors and Related Professionals (Schedule B9) as provided in the ASC National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended in 2013)." - A certified consultant is a consultant certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme; Note: If an auditor is being engaged for the project, the requirement for a certified consultant to prepare the contaminated land reports is still recommended as it will help ensure all assessment work is done as efficiently as possible, but it is optional. However, it must still be required for all reports to be prepared by a suitably qualified contaminated land consultant. • Where contamination is considered likely based on past or current land uses or other factors (such as offsite contamination migrating onto the site), undertake detailed site investigation/s to determine the nature and extent of the contamination. • Where contamination exists, assess if remediation of the land is required, having regard to current and future land uses; and the ecological and human health risks posed by the contamination to both onsite and offsite receptors		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	- Where a detailed site investigation is prepared and/or remediation is considered necessary, a NSW EPA accredited Site Auditor must be engaged to undertake an audit. The EIS must include copies of any Interim Audit Advice provided by the auditor and a Site Audit Statement and Site Audit Reports issued by the auditor which certifies the site can be made suitable for the proposed use - The following references should be included as relevant guidelines that must be followed when assessing contaminated land: - Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA, 1998) - https://www.epa.nsw.gov.au/sites/default/files/managingcontaminated-land-guidelines-remediation.pdf - Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015) - Contaminated land sampling design guidelines - Part 1 and 2 (EPA, 2022) - Consultants reporting on contaminated land: contaminated land guidelines (EPA, 2020) - Guidelines for the NSW Site Auditor scheme 3rd edition (EPA, 2017) Any other relevant guidelines made or approved by the EPA under s105 of the Contaminated Land Management Act 1997 - https://www.epa.nsw.gov.au/yourenvironment/contaminated-land/statutory-guideline		
Agency Advice – Sutherland Shire Council	The site is listed on Council's contaminated land register as 'potentially contaminated' due to the use of the site as an electrical substation. While contamination is likely, it is unlikely to result in the site being unsuitable for the proposed development. This must be confirmed with a contamination investigation, in the form of a preliminary and detailed site investigation (PSI and DSI). This must be prepared in accordance with the following: - NSW Contaminated Land Management Act (1997); - NSW Contaminated Land Management Regulation (2022); • NSW State Environmental Planning Policy (Resilience and Hazards) 2021 – Ch. 4 – Remediation of Land; - NSW Planning Guidelines SEPP 55 – Remediation of Land (1998); - National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure Schedule B1 – Guideline on Investigation Levels for Soil and Groundwater (2011); - National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure Schedule B2 – Guideline on Site Characterisation (2011); - ANZECC and ARMCANZ Guidelines for Fresh and Marine Water Quality (2000); - NSW EPA Contaminated Land Guidelines: Consultants Reporting on Contaminated Land (2020); - NSW EPA Contaminated Land Guidelines: Sampling Design Part 1 – Application (2022); and, - NSW EPA Contaminated Land Guidelines: Sampling Design Part 2 – Interpretation (2022). The report(s) must be prepared by a consultant certified by either of the following schemes: - EIANZ 'Certified Environmental Practitioner – Site Contamination' (CEnvP – SC); or, - Soil Science Australia 'Certified Professional Soil Scientist – Contaminated Site Assessment & Management' or 'Soil Survey' (SSA CPSS CSAM or SS).		

Agency	Requirements	Relevant Report Section	Relevant Appendix
Fire			
Agency Advice – Fire and Rescue NSW	The Scoping Report details a 150MW/300MWH Battery Energy Storage System (BESS). It has been the experience of FRNSW that BESS Facilities present special problems of fighting fire and suitable additional provisions are likely to be required in accordance with E1D17 and E2D21 of the National Construction Code 2022. FRNSW will likely recommend a Fire Safety Study (FSS) be developed in accordance with the Hazardous Industry Planning Advisory Paper No 2 as a condition of consent. The FSS should be used to inform the design and as such it is FRNSW Position that the FSS be developed to the satisfaction of FRNSW prior to any further submission being made to FRNSW; this includes: an Initial Fire Safety Report (IFSR) and / or Performance-Based Design Brief / Fire Engineering Brief Questionnaire (FEBQ). The FSS should be prepared consistent with the relevant FRNSW Fire Safety Guidelines and FRNSW Technical Information Sheets with particular focus to Large-scale external lithium-ion battery energy storage systems – Fire safety study considerations . Project proponents undertaking the FSS are to engage directly with FRNSW by submitting all correspondence electronically to FireSafety@fire.nsw.gov.au and reference FRNSW file number FRN25/2716. Further information regarding FRNSW Meetings and FRNSW Written Reports⁷ can be found at the FRNSW Building Fire Safety Industry Portal.	Section 14.0	Appendix O
Social			
Projects SEARs	Including an assessment of the social impacts or benefits of the project for the region and the State as a whole in accordance with the <i>Social Impact Assessment Guideline</i> (DPHI, 2025), including consideration of any increase in demand for community infrastructure services, and consideration of construction workforce accommodation.	Section 16.0	Appendix R
Economic and Benefit-Sharing			
Project SEARs	including an assessment of the economic impacts or benefits of the project for the region and the State as a whole and provide details of any proposed voluntary benefit sharing, having regard for the <i>Benefit-Sharing Guideline 2024</i> and <i>Private Agreement Guideline 2024</i> .	Section 16.0	Appendix R
Waste			
Project SEARs	identify, quantify and classify the likely waste stream to be generated during construction, operation, and decommissioning, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of	Section 17.3	N/A

Agency	Requirements	Relevant Report Section	Relevant Appendix
Agency Advice – Sutherland Shire Council	this waste (in consultation with waste facilities, including Council) including consideration of NSW EPA Waste Classification Guidelines. Given that the proposed development would involve excavation, a waste classification must be undertaken on all soil to be removed from the site. The scope of the waste classification must encapsulate the full extent of the required excavation. The waste classification can be included with the PSI/DSI or be a separate document at the discretion of the consultant or applicant. The waste classification must be undertaken in accordance with: • NSW EPA Waste Classification Guidelines – Part 1: Classifying Waste (2014) • NSW EPA Contaminated Land Guidelines: Consultants Reporting on Contaminated Land (2020). Waste classification reports must be undertaken by a suitably qualified and experienced environmental consultant, certified by one of the following schemes • EIANZ ‘Certified Environmental Practitioner’ (CEnvP); or, • Soil Science Australia ‘Certified Professional Soil Scientist’ (SSA CPSS)		
Agency Advice – EPA	The proponent should consider the classification, safe storage and lawful disposal of the waste generated by the development such as used battery components and transformer oil.		
Agency Advice – EPA	The EIS must assess the following waste, chemical and hazardous materials related aspects of the proposed development: • Assess and describe all aspects of waste generation, management and disposal associated with the proposed development. • Demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations. • Outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site. • Demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with all relevant Australian Standards, and/or NSW EPA’s Storing and Handling of Liquids: Environment Protection Participants Manual (DECC, 2007). • Demonstrate compliance with Part 9.3E of the POEO Act for the use of any industrial chemicals, including details of activities involving Schedule 6 or Schedule 7 chemicals listed on the IChEMS register. Additionally, demonstrate a system for periodic review to ensure that any new IChEMS Register requirements are incorporated. • Assess and describe any potential risks relating to all known and potential contaminants of concern (CoC) including per- and polyfluoroalkyl substances (PFAS) that may be associated with the proposed development and if applicable, how they will be mitigated. Consideration should be given to potential health and environment related impacts caused by the CoC. The assessment should consider various sources, receptors and exposure pathways including but not limited to ingestion (drinking water and food consumption), inhalation, and dermal contact Identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste and Sustainable Materials Strategy 2041 Stage 1: 2021-2027. Available		

Agency	Requirements	Relevant Report Section	Relevant Appendix
	at: https://www.epa.nsw.gov.au/Yourenvironment/Recycling-and-reuse/Strategic-direction-for-waste-in-NSW/Waste-andSustainable-Materials-Strategy .		
Consultation			
Project SEARs	During the preparation of the EIS, you should consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landowners and any exploration licence and/or mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the development, the owners of all exploration licences across the proposed development site, the operator of any pipelines on or adjacent to the site, and all relevant government agencies, including the relevant local Council. The EIS must: - detail how engagement undertaken was consistent with the Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024); and - 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, an explanation should be provided.	Section 5.0	Appendix G
Matters of National Environmental Significance			
SEARs Cover Letter	Any development likely to have a significant impact on matters of National Environmental Significance will require approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This approval is in addition to approvals required under NSW legislation. It is your responsibility to contact the Australian Government Department of Climate Change, Energy, the Environment and Water to determine if you need approval under the EPBC Act (https://www.dcceew.gov.au/ or 6274 1111).	Section 4.0	Appendix H
End of Life Considerations			
Agency Advice – Sutherland Shire Council	Council officers are supportive of the end of life considerations detailed within section 3.1.1 of the scoping report and would encourage submission of a detailed rehabilitation plan with the future application.	Section 3.9	N/A
Construction			
Agency Advice – EPA	The EIS must include detail of the construction works including: - any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site). - Identify, characterise and classify the following in accordance with the EPA's Waste Classification Guidelines (2014):	Section 3.5 Section 17.3 Section 11.0	Appendix L Appendix M

Agency	Requirements	Relevant Report Section	Relevant Appendix
	- all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste; - all waste that is to be removed to an offsite location, including proposed quantities. Include the commitment to ensure this waste is taken to a facility that can lawfully receive it. - Note: The EPA's Waste Classification Guidelines (2014) are available at: https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste • construction timetable and staging; hours of construction; proposed construction methods. • environment protection measures, including noise mitigation measures - in accordance with the Interim Construction Noise Guideline (DECC, 2009), dust control measures and erosion, and sediment control measures- in accordance with Managing urban stormwater: Soils and construction, vol. 1 (Landcom 2004). Include a site diagram showing the site layout and location of environmental controls. Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009). These are available at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/construction-noise		
Air			
Agency Advice – EPA	• The EIS must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the POEO Act and the Protection of the Environment Operations (Clean Air) Regulation 2022. This consideration should include section 129 of the POEO Act concerning control of “offensive odour”. • The EIS must include an air quality impact assessment (AQIA). The AQIA must be carried out in accordance with the document, Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2022). These are available at: https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants The EIS must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, POEO (Clean Air) Regulation (2022) and criteria within Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2022).	Section 4.0 Section 8.0	Appendix I
Other			
Agency Advice – DPRID NSW Resources	NSW Resources has no additional requirements to those in the draft SEARs and advises the Proponent to actively monitor the MinView map viewer at https://minview.geoscience.nsw.gov.au for mining title changes that may interact with this Project.	N/A	N/A
Agency Advice – Crown Lands	No Crown land, roads, or waterways are contained within the project footprint. Furthermore, no Crown land, roads, or waterways are adjacent to the project site in this instance. Accordingly, Crown Lands has no further comments on this project.	N/A	N/A
Agency Advice – CASA	The site is approximately 5.2km south of runway 16L/34R at Sydney Mascot Airport and essentially in line with the runway. I estimate that the Take Off surface would be very approximately 6m + 2% x 5200 = approximately 110m	N/A	N/A

Agency	Requirements	Relevant Report Section	Relevant Appendix
	above AHD. The site ground level is approximately 3m above AHD and there is vertical infrastructure on or near the site. There are no implications for Aviation Safety. There is no requirement to cover Aviation Safety in the EIS. There is no requirement for an Aviation Impact Assessment. The risk of a battery fire is low and the risk of a battery fire affecting aviation is even lower. There would be EMF radiation at the site already (although effects of EMF on aviation navigation and communications is a more a matter for Airservices Australia than CASA).		