

Secretary's Environmental Assessment Requirements

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

Application Number	SSD 9289
Proposal Name	STEM School Stage 1, Sydney Science Park
Location	565-609 Luddenham Road, Luddenham
Applicant	Catholic Education Office Diocese of Paramatta
Date of Issue	24 May 2018
General Requirements	The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed); and - measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. The EIS must be accompanied by a report from a qualified quantity surveyor providing: - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; - an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and - certification that the information provided is accurate at the date of preparation.
Key Issues	The EIS must address the following specific matters: 1. Statutory and Strategic Context – including: Address the statutory provisions contained in all relevant environmental planning instruments, including: <i>Biodiversity Conservation Act 2016</i>; <i>State Environmental Planning Policy (State & Regional Development) 2011</i>; <i>State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017</i>; <i>State Environmental Planning Policy No.55 – Remediation of Land</i>; <i>State Environmental Planning Policy No. 64 – Advertising and Signage</i>; <i>Draft State Environmental Planning Policy (Remediation of Land)</i>; <i>Draft State Environmental Planning Policy (Environment)</i>; and <i>Penrith Local Environmental Plan 2010</i>.

	<i>Permissibility</i> Detail the nature and extent of any prohibitions that apply to the development. <i>Development Standards</i> Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. 2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW State Priorities; • The Greater Sydney Regional Plan, A Metropolis of three cities; • NSW Future Transport Strategy 2056; • State Infrastructure Strategy 2018 – 2038 Building the Momentum • Sydney's Cycling Future 2013; • Sydney's Walking Future 2013; • Sydney's Bus Future 2013; • Crime Prevention Through Environmental Design (CPTED) Principles; • Healthy Urban Development Checklist, NSW Health; • Better Placed – an integrated design policy for the build environment of NSW; • Greater Sydney Commission's Western City District Plan; • Better Placed – An integrated design policy for the built environment of NSW 2017; and • Penrith Development Control Plan 2014. 3. Operation • Provide details of the proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities; and • Provide a detailed justification of suitability of the site to accommodate the proposal. 4. Built Form and Urban Design • Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces; • Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles; • Develop a design report that includes diagrams, illustrations and drawings to clarify the design intent of the proposal that clearly demonstrates how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of <i>State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017</i>; • Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development; • Provide detailed site and context analysis to justify the proposed site planning and design approach; and • Provide a detailed site-wide landscape strategy. 5. Environmental Amenity • Assess amenity impacts on the surrounding locality, including solar access, visual privacy, overshadowing and acoustic impacts;
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	• Identify any proposed use of the school outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures; • Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers; • Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated; and • Detail any proposed use of the school grounds out of school hours (including weekends) and any resultant amenity impacts on the immediate locality and proposed mitigation measures. 6. Staging • Provide details regarding any staging of the proposed development. 7. Transport and Accessibility Include a transport and accessibility impact assessment, which details, but not limited to the following: • Accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development; • Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area; • The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development; • Measures to integrate the development with the existing/future public transport network including any future North South Rail Link; • The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years); • The identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, school bus services along bus capable roads (i.e. minimum 3.5 m wide travel lanes); • Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site; • The proposed walking and cycling access arrangements and connections to public transport services (if any); • The proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones; • Proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance;
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	- Proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site; - An assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development; - Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times); and - The preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: - assessment of cumulative impacts associated with other construction activities (if any); - an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity; - details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process; - details of anticipated peak hour and daily construction vehicle movements to and from the site; - details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle; and - details of temporary cycling and pedestrian access during construction; → Relevant Policies and Guidelines: <i>Guide to Traffic Generating Developments (Roads and Maritime Services)</i> <i>EIS Guidelines – Road and Related Facilities (DoPI)</i> <i>Cycling Aspects of Austroads Guides</i> <i>NSW Planning Guidelines for Walking and Cycling</i> <i>Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development</i> <i>Standards Australia AS2890.3 (Bicycle Parking Facilities)</i> 8. Ecologically Sustainable Development (ESD) - Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>) will be incorporated in the design and ongoing operation phases of the development; - Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice; and - Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy. 9. Heritage - The EIS must include a Heritage Impact Statement (HIS), prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The HIS should identify any State and local heritage items and heritage conservation areas with the SSD site and in the vicinity and provide an assessment of heritage impacts. Where impacts are identified, the HIS should outline the proposed mitigation measures. - The EIS must include a Heritage Archaeological Assessment (HAA), prepared by a suitably qualified historical archaeologist. The HAA should identify what relics, if any, are likely to be present within the SSD site or in the vicinity, assess their significance and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, it is
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	recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations. 10. Social Impacts Include an assessment of the social consequences of the schools' relative location. 11. Aboriginal Heritage • Identify and describe the Aboriginal cultural heritage values that exist across the whole area that would be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)</i>; • Consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i> (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR; and • Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. 12. Noise and Vibration • Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction; and • Identify and assess operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. → Relevant Policies and Guidelines: • <i>NSW Noise Policy for Industry 2017 (EPA)</i> • <i>Interim Construction Noise Guideline (DECC)</i> • <i>Assessing Vibration: A Technical Guideline 2006</i> • <i>Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)</i> 13. Sediment, Erosion and Dust Controls Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. → Relevant Policies and Guidelines: • <i>Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom)</i> • <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</i> • <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i>
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	14. Contamination - Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55; - Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works; and - Include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. → Relevant Policies and Guidelines: <i>Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</i> 15. Utilities - Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure; and - Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design. 16. Contributions Address Council's Section 94 Contribution Plan and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development. 17. Drainage - Detail drainage associated with the proposal, including stormwater and drainage infrastructure; - Detail measures to minimise operational water quality impacts on surface waters and groundwater; and - Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. → Relevant Policies and Guidelines: <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i> 18. Flooding Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. 19. Bush fire Address bush fire hazard and, if relevant, prepare a report that addresses the requirements for Special Fire Protection Purpose Development as detailed in <i>Planning for Bush Fire Protection 2006</i> guidelines. 20. Biodiversity Assess and document the biodiversity impacts related to the proposal, by a suitably qualified person. <i>Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report.</i> 21. Construction Hours Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.
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	22. Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste; and Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: - Architectural drawings (dimensioned and including RLS); - Draft Construction Environmental Management Plan; - Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries; - Site Analysis Plan; - Sediment and Erosion Control Plan; - Shadow Diagrams; - View Analysis / Photomontages, including from public vantage points; - Landscape Plan (identifying any trees to be removed and trees to be retained or transplanted); - Geotechnical and Structural Report; - Accessibility Report; - Arborist Report; - Salinity Investigation Report (if required); - Acid Sulphate Soils Management Plan (if required); and - Schedule of materials and finishes.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups including local Aboriginal land councils and registered Aboriginal stakeholders, and affected landowners. In particular, you must consult with: - Penrith City Council; - Government Architect NSW (through the NSW State Design Review Panel process); - Transport for NSW; - Roads and Maritime Services; and - NSW Rural Fire Service. Consultation with GA, TfNSW, RMS and NSW RFS should commence as soon as practicable to agree the scope of investigation. 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 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must consider relevant guidelines, policies, and plans as identified.