

Sydney Grammar School Weigall Sports Complex (SSD-10421)

Neild Avenue, Rushcutters Bay



ENVIRONMENTAL RISK ASSESSMENT

Prepared on behalf of SYDNEY GRAMMAR SCHOOL

October 2020 | 19049

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1.0 Introduction

1.1 The site and proposal

The site comprises part of Sydney Grammar School's (SGS) Weigall Sports Ground on Neild Avenue at Rushcutters Bay (**the site**).

The proposal comprises:

1. **Demolition** of the following existing structures and buildings (which are not heritage significant) at the southern edge of the SGS Weigall Sports Ground:
 - (a) Multipurpose/tennis courts and associated fencing
 - (b) Barry Pavilion
 - (c) The existing cricket nets off Alma Street
 - (d) Paved car park near Neild Avenue.
2. **Construction** of the SGS Weigall Sports Complex comprising the following:
 - (a) Building 1 - Sports Facilities Building accommodating the following facilities:
 - (i) Ground floor: Main pool, programme pool, terrace/assembly facing Weigall, entry foyer, offices, change rooms, back of house, services and external car parking (5 spaces) and loading
 - (ii) Mezzanine floor: Spectator terrace and services
 - (iii) First floor: Multipurpose sports hall 01 – basketball and volleyball, Multipurpose sports hall 02 –cardio, weights, taekwondo, fencing, PDHPE, change rooms, storage and services
 - (iv) Level 2: Multipurpose room 04; Multipurpose sports hall 03 –cardio, weights, taekwondo, fencing, PDHPE, storage and services
 - (v) Driveway entry from Neild Avenue (comprising relocation of the existing driveway southwards with the existing driveway potentially retained for maintenance access)
 - (b) Building 2 – Car Park comprising an ancillary car park of one/two split levels accommodating 93 spaces with an additional 4 spaces on grade, accessed from an existing entry from Alma Street (located on the existing cricket nets site). The lower ground level includes the flexibility to be used as an extension of the existing playing fields
 - (c) Parking for a total of 102 cars comprising:
 - (i) Building 1: 5 spaces
 - (ii) Building 2: 97 car spaces (93 within the building and four at grade)
 - (d) Landscaping of the site including tree removal/retention/replacement, paths, fencing and lighting
 - (e) Building identification signage
 - (f) New kiosk substation.
3. **Use** of the completed building as an educational establishment with external/community use of the proposed facilities that coordinates with the programming of the SGS.

The proposal does not include any of the following:

- General learning areas (GLA)
- An increase in the existing student staff population.

This Environmental Risk Assessment (ERA) has been prepared by Robinson Urban Planning Pty Ltd (RUP) on behalf of SGS (the applicant and landowner).

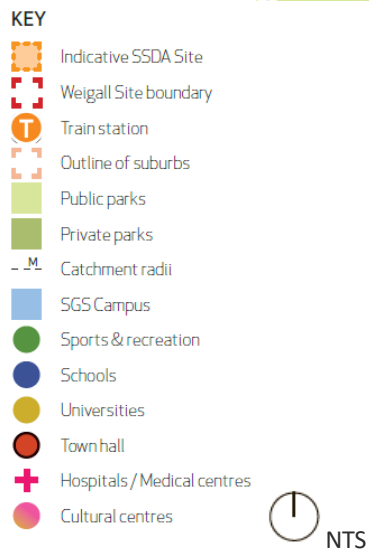
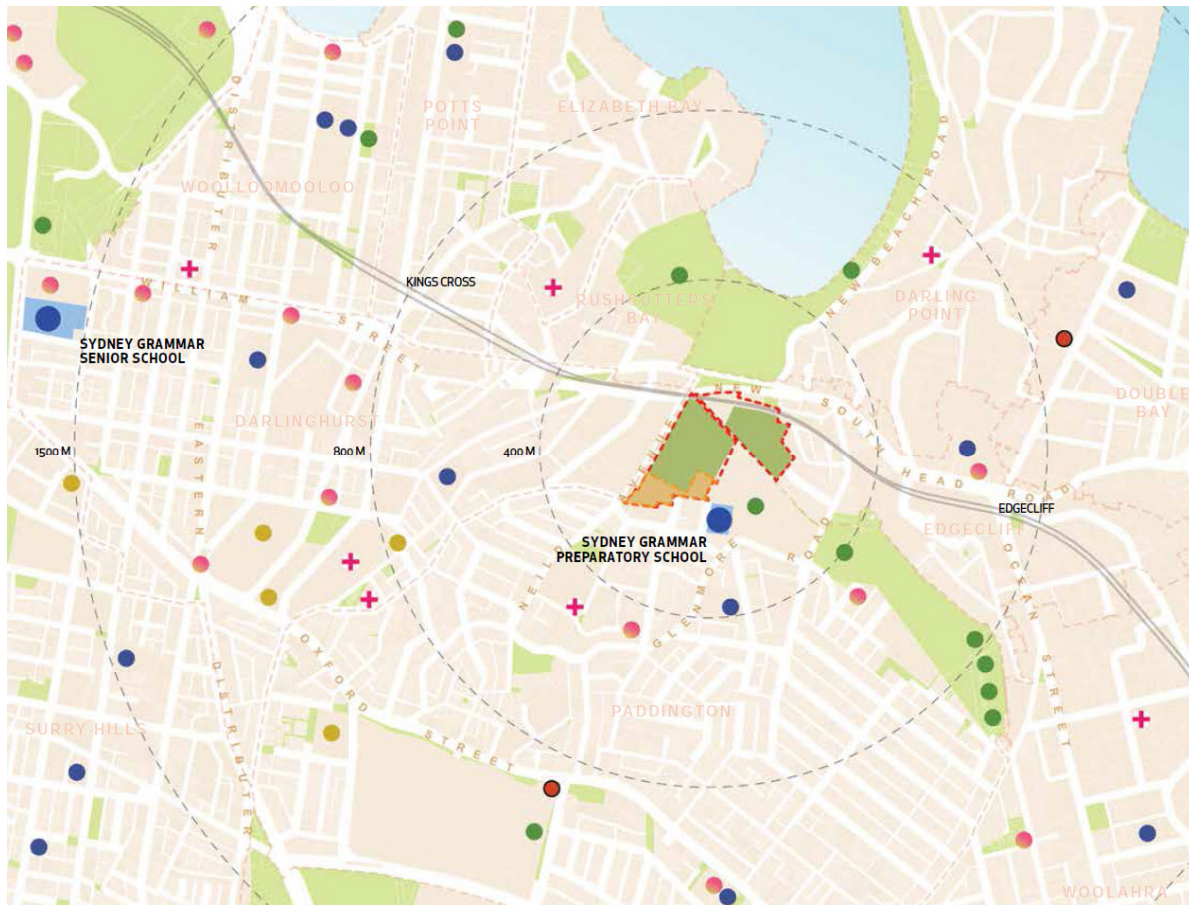


Figure 1 – Site location (Source: AJ+C)

1.2 Secretary's Environmental Assessment Requirements

A State Significant Development Application (SSD 10421) has been prepared for the proposal. The General Requirements listed in the Secretary's Environmental Assessment Requirements (SEARs) state that the Environmental Impact Statement (EIS) must include an ERA as shown in the following SEARs extract:

...the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.

Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include:

- adequate baseline data*
- consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed) and*
- measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment.*

This ERA addresses this requirement.

2.0 2. Risk Management Process

2.1 Overview

The term risk relates to an “effect of uncertainty on objectives” (Standards Australia, 2009, pg. 1). The risk management process, as defined in AS/NZS ISO 31000:2009, is a “systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analysing, evaluating, treating, monitoring and reviewing risk”.

Figure 2 provides a visual representation of the steps involved in the risk management process and the importance of communication, consultation and constant monitoring throughout all phases of this process.

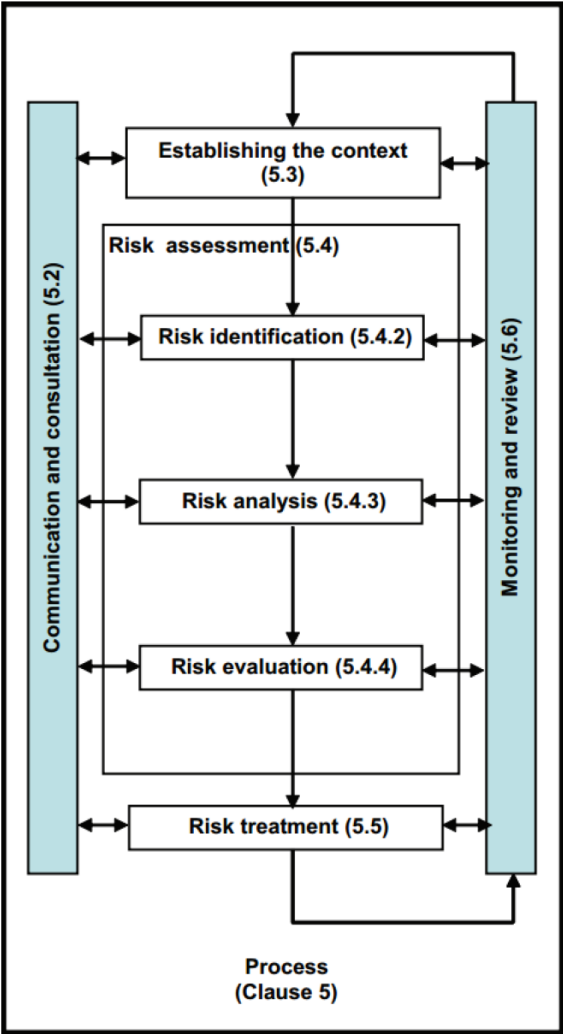


Figure 2 – Risk Management Process (Standards Australia)

2.2 Communication and Consultation

As **Figure 2** notes that communication and consultation with relevant stakeholders should be an ongoing event throughout the risk management process at a variety of different levels depending on the audience and at what stage of the project lifecycle the project is in.

Effective external and internal communication and consultation should take place to ensure that those accountable for implementing the risk management process and stakeholders understand the basis on which decisions are made, and the reasons why particular actions are required. (Standards Australia, 2009, pg. 14).

The SEARs outlines the following requirements for community 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:

- Woollahra Council
- City of Sydney
- GA NSW
- Sydney Trains
- Transport for NSW (TfNSW) and
- Transport for NSW (Roads and Maritime Services) (TfNSW RMS).

Consultation 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.

Chikarovski & Associates (C&A) has coordinated a thorough community and stakehold engagement process prior to lodging SSD 10421. C&A has prepared a Community Engagement report which documents the pre-lodgement consultation process (EIS, **Appendix FF**).

2.3 Establish the Context of the Risk Management Process

The objectives, strategies, scope and parameters of the activities of the organisation, or those parts of the organisation where the risk management process is being applied, should be established. (Standards Australia, 2009, pg. 16).

SGS's Senior School cannot accommodate its sport program on SGS properties and relies on external facilities which are limited and logistically difficult to manage. SGS is finding it increasingly difficult to accommodate sport programs and popular and dominant sports have limited offerings due to student demand and limited or no facilities.

The SGS Weigall Sports Complex would meet the sport and Personal Development, Health and Physical Education (PDHPE) needs of the SGS community and reduce reliance on external facilities enabling greater supervision and protection of students. It would update the SGS sporting facilities, provide all-weather sporting facilities for Edgecliff Preparatory School and accommodate an increased swimming and basketball sport program. The SGS tennis program would be relocated away from Weigall.

2.4 Defining the Risk Criteria

This ERA aims to identify and assess the environmental risks associated with the proposal during both construction and operation. The following key areas of potential impact form the basis of this assessment:

- Visual impacts, loss of views
- Amenity impacts for adjoining residential properties (in particular overshadowing, overlooking and noise)
- Traffic and parking
- Impacts from construction.
- Archaeology and aboriginal cultural heritage

A qualitative risk assessment has been prepared in accordance with AS/NZS ISO 31000:2009 *Risk management - Principles and guidelines*. The level of risk is assessed based on the likelihood of an event occurring and the consequence of that event. A treatment to mitigate the likelihood or consequence is proposed and the residual risk assessed. A description of the levels of 'likelihood' and 'consequence' is provided below.

Table 1 – Risk assessment likelihood and consequence description

Likelihood	Description	Consequence	Description
1. Rare	May occur only in exceptional circumstances	1. Insignificant	Short term negligible impact.
2. Unlikely	Could occur at some time	2. Minor	Short term reversible impact.
3. Possible	Should occur at some time	3. Moderate	Medium term reversible impact.
4. Likely	Will probably occur in most circumstances.	4. Major	Medium term potentially irreversible impact.
5. Certain	Expected to occur in most circumstances.	5. Critical	Long term irreversible impact.

Table 2 – Risk matrix

		Consequence				
		1 Insignificant	2. Minor	3. Moderate	4. Major	5. Critical
Likelihood	1. Rare	2 Low	3 Low	4 Moderate	5 Moderate	6 High
	2. Unlikely	3 Low	4 Moderate	5 Moderate	6 High	7 High
	3. Possible	4 Moderate	5 Moderate	6 High	7 High	8 Extreme
	4. Likely	5 Moderate	6 High	7 High	8 Extreme	9 Extreme
	5. Certain	6 High	7 High	8 Extreme	9 Extreme	10 Extreme

2.5 Risk Analysis

The results of the ERA are presented in **Table 3**. This provides a risk rating prior to any mitigation and the residual risk after mitigation. It shows that the proposed mitigation measures significantly reduce the potential impacts associated with the proposal.

Table 3 – Environmental risk assessment

Item	Phase of impact C Construction O Operational	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
			L	C	R		L	C	L
Visual impacts/loss of views	O	Visual impact of the Building 1 when viewed from Neild and Vialoux Avenue	4	3	7	<ul style="list-style-type: none"> Retention of existing trees in the front setback and street trees on Neild Avenue High quality landscaping (including 2 advanced replacement trees for every tree to be removed) High quality materials and façade articulation. 	2	2	4
		Visual/view impact of Building 1 when viewed from 8 Vialoux Avenue, 25-27 Lawson Street and 29-33 Lawson Street	4	3	7	<ul style="list-style-type: none"> Boundary setback of 8.5-20.7 Height steps down to the south (generally in accordance with Woollahra LEP 2014 height standard (10.5m for land in Zone R3) High quality landscaping (including 2 advanced replacement trees for every tree to be removed) 	2	2	4
		Visual impact of Building 2 when viewed from Alma Street	4	3	7	<ul style="list-style-type: none"> Height limited to one storey (4.8m) Landscaping in plan and elevation (arbour). 	2	2	4
Noise, vibration	C	Noise and vibration from demolition, excavation and construction activities	4	3	7	Implementation of Construction Noise and Vibration Measures set out in the Noise Report by White Noise.	4	2	6
	O	Noise from operation of the Weigall Sports Complex	4	4	8	Implement the design and operational noise recommendations in the Noise Impact Assessment by White Noise including an acoustic screen to the southern boundary adjoining 29-33 Lawson Street, enclosure of the southern elevation of Building 1 - Car park, materials glazing selections, plant selections and closing of windows during at sensitive times.	2	2	4

Item	Phase of impact C Construction O Operational	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
			L	C	R		L	C	L
Overshadowing	O	Overshadowing (from Building 1) of 8 Vialoux Avenue and 29-33 Lawson Street	4	4	8	<ul style="list-style-type: none"> Boundary setback of 10.1-12.3 m Height steps down to the south Proposal designed to comply with relevant solar access control in Woollahra DCP 2015 – Chapter F2 Educational establishments <p><i>C2 Non-street fronting rear and side setbacks of the building are setback so that sunlight is provided to adjoining residential properties:</i></p> <p><i>a) to 50% or 35m² (with minimum dimension 2.5m), whichever is smaller of the main ground level private open space of adjacent properties; and</i></p> <p><i>b) for a minimum of two hours between 9am and 3pm on June 21.</i></p>	2	1	3
Overlooking	O	Overlooking of 8 Vialoux Avenue and, -33 Lawson Street and Neild Avenue apartments	4	4	8	<p>Building 1 – Sports Facilities Building:</p> <ul style="list-style-type: none"> No windows are proposed to the southern elevation directly adjacent to 8 Vialoux Avenue Where windows are located in the south elevation, they are minimised and are either high or low level or fitted with obscure glazing It is internally orientated, except for the northern elevation which overlooks Weigall Sports Ground and not adjoining residential uses All elevated trafficable areas and windows are orientated to the north towards Weigall and do not face east, south or west Neild Avenue separates Building 1 from dwellings to the west Setback 8.5m to 20.7m from southern side boundary providing separation distances 	2	1	3

Item	Phase of impact C Construction O Operational	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
			L	C	R		L	C	L
						and a generous space for screen planting (see Figure 80) <ul style="list-style-type: none"> • Solid fencing with a height of 2.2m and landscaping along pedestrian paths is proposed within the southern setback area, providing an effective visual and acoustic privacy screen for residents at 25-33 Lawson Street and 8 Vialoux Avenue (the design of fencing to 8 Vialoux is to be resolved in consultation with the neighbouring residents) • Pedestrian pathways are setback from the site boundaries and screened with dense planting and new fences. Building 2 – Car Park: <ul style="list-style-type: none"> • Interface with properties owned by SGS (24 Alma Street and 9 Vialoux Avenue) • Setback an average of 10m from the southern side boundary 			
Traffic and parking	C	Increased traffic and on-street parking demand from construction traffic	5	3	8	<ul style="list-style-type: none"> • Prior to construction, a construction traffic management plan will be prepared by the chosen builder. This will address truck routes, access around the site for the public including pedestrians and cyclists. Ptc has prepared a preliminary construction traffic management plan. 	4	3	7
	O	Increased traffic and on-street parking demand from operation of the Weigall Sports Complex.	4	4	8	<ul style="list-style-type: none"> • 102 car parking spaces are provided (including two accessible spaces) to meet the peak parking demand generated by the Weigall Sports Complex (Saturdays in summer) • 22 bicycling parking spaces are provided (2 staff + 20 visitor racks on Neild Avenue) • 6 motorcycle spaces are provided • 6 pick-up/drop-off spaces are provided on the SSDA site to 	2	2	4

Item	Phase of impact C Construction O Operational	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
			L	C	R		L	C	L
					5	accommodate peak demand from the Weigall Sports Complex <ul style="list-style-type: none"> • Building 2 – Car park is to be used for vehicle queuing during the morning drop-off and afternoon pick-up at Edgecliff Preparatory School on Alma Street to reduce existing traffic congestion (this mitigation measure addresses existing traffic congestion and does not relate to an impact generated by the proposed Weigall Sports Complex) • Continue to use SGS coaches to transport students between Weigall and College Street • Implement the Green Travel Plan prepared by ptc to encourage public transport usage to the school and active travel modes. 			4
Archaeology and aboriginal cultural heritage	C	Discovery of Unanticipated Aboriginal objects or remains.	1	4	5	Implement the recommendations of Ecological in relation to the Discovery of Unanticipated Aboriginal Objects and the Discovery of Aboriginal Ancestral Remains.	1	1	2
Air and water quality	C	Air and water quality impacts during the demolition and construction phase.	3	3	6	Demolition and construction will be carried out in accordance with the following reports appended to the EIS: <ul style="list-style-type: none"> • Construction Management Plan, by ADCO • Construction Traffic Management Plan, by ptc • Noise Impact Assessment, by White Noise • Construction Waste Management Plan, by Waste Audit • Erosion, sediment and dust control plans, by WSP • Arboricultural Assessment Report, by TreeIQ • Aboriginal Cultural Heritage Assessment, by EcoLogical. 	2	2	4

