



Environmental Impact Statement

**New Primary School,
Edmondson Park**

SSDA-10224

Buchan Avenue, Edmondson Park

Submitted to the Department of Planning, Industry and Environment
On Behalf of NSW Department of Education

June 2021

REPORT REVISION HISTORY

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EIS CERTIFICATION

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Declaration:

I declare that this EIS has been prepared in accordance with Schedule 2 of the EPA Regulation 2000, that the EIS contains all available information that is relevant to the environmental assessment of the proposed development and that the information contained in the EIS is neither false or misleading.

Signature:



Date: 11 June 2021

Disclaimer

This EIS has been prepared by City Plan Strategy & Development Pty Ltd with input from other specialist consultants as recorded herein. The EIS has been prepared using relevant accepted methods and is based on information and facts that were correct at the time of writing. To the best of our knowledge none of the information given in the EIS is either false or misleading. Notwithstanding, City Plan Strategy & Development Pty Ltd accepts no responsibility or liability for any errors, omissions, or resultant consequences for other parties, including any loss or damage that a person or organisation may experience arising from reliance on information in this publication.

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APPENDICES

Appendix	Document	Prepared by
A	Secretary's Environment Assessment Requirements	NSW Department of Planning Industry and Environment
B	Architectural Plans, Architectural Design Report, Visual Impact Assessment Architectural Design Statement	TKD Architects
C	Compliance Table with Childcare Centre Guidelines	TKD Architects
D	Landscape Plans and Design Report	Oculus
E	Survey Plan	Total Surveying Solutions
F	QS and CIV Report	Donald Cant Watts Corke
G	Biodiversity Certification Status	Ecological Australia
H	Bushfire Report	Peterson Bushfire
I	Geotechnical Report	Northrop
J	Civil Report and Plans	Northrop
K	Structural Report	Northrop
L	Environmental Site Assessment including Contamination, Salinity and Acid Sulfate Soils	JBS&G
M	Noise and Vibration Assessment Report	JHA Services
N	Infrastructure Management Plan	JHA Services
O	Aboriginal Heritage Report	Kelleher Nightingale Consulting
P	Accessibility Report	iAccess
Q	BCA Capability Statement	Group DLA
R	Traffic, Parking, Transport and Accessibility Report Infrastructure and Facilities Site Plan	PTC Consultants
S	School Transport Plan	PTC Consultants
T	Social Impact Assessment	EMM Consultants
U	Ecological Sustainable Development Report	JHA Services
V	Construction Waste Management Plan	EcCell Environmental Management
W	Operation Waste Management Plan	EcCell Environmental Management
X	Construction Management Plan	Richard Crookes Construction
Y	Basement Archaeological Assessment	Archaeological Management and Consulting Group
Z	UXO Risk Assessment and UXO Protocol	CSG Demining Consultants
AA	Consultation Meeting Minutes and Briefing Note	City Plan
BB	Section 10.7 Planning Certificates	Liverpool City Council

Appendix	Document	Prepared by
CC	Letter of Notice to Landcom	NSW Department of Education
DD	Lighting Strategy	JHA Services
EE	Electrolysis Testing Report	Corrosion Control Engineering

EXECUTIVE SUMMARY

This Environmental Impact Assessment (EIS) has been prepared on behalf of the NSW Department of Education (DoE) in support of State Significant Development Application SSDA-10224 (SSDA). The application is for a new primary school in Edmondson Park (the school) and will be located on the corner of Buchan Ave and Faulkner Way (the site). The site is located within the "Edmondson Park South" State Significant Precinct, within the South West Growth Area (SW Growth Area).

The development of the school by the DoE reflects the significant need for additional public education infrastructure in Western Sydney and particularly, the SW Growth Area. The area to the north of the South West Rail Line is designated for significant residential growth and will result in a concentration of new student enrolments. To meet the future demand, the DoE is required to provide a school at this location with the modern facilities required for a contemporary teaching and learning environment. The provision of a school in the proposed location is consistent with an overarching approved concept plan (MP10_0118), whereby a school has been identified as the intended future use.

As the proposal is for a new school, pursuant to Schedule 1 Clause 15(1) of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), it comprises State Significant Development (SSD), regardless of the capital investment value (CIV). Notwithstanding this, we note that the CIV for this project is \$60,143,604 million.

This EIS is submitted to the Department of Planning, Industry and Environment (DPIE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for SSD. This EIS has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) for SSDA-10224 issued on 10 December 2020, Part 4 of the EP&A Act and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

This EIS has been prepared by City Plan Strategy and Development Pty Ltd (City Plan) on behalf of the DoE and should be read in conjunction with the SEARs attached at Appendix A, and the supporting technical plans and documents provided at Appendices B- CC.

The DoE is seeking consent for a new core 35 primary school accommodating 1,012 students and a coldshell 40-place pre-school at the site. In summary, the works comprise:

- Bulk earthworks, comprising fill and minor excavation and other site preparation works;
- Land use for the purpose of a new primary school and pre-school;
- Construction of new buildings including:
 - A three-storey building on the western portion of the site primarily addressing Faulkner Way. This building comprises 36 homebases, 4 special support unit teaching spaces (SSU), staff room, administration office at the ground floor and library at the first floor and addressing the corner of Buchan Avenue and Faulkner Way, and student amenities;
 - A single storey coldshell pre-school building for educational programs for children the year before they commence kindergarten, accommodating 40 places. The pre-school building will be connected at the southern end of the abovementioned three storey school building; and
 - A single storey building in the eastern portion of the site comprising a communal hall, out of school hours (OOSH) care facility, 8 homebases and a covered outdoor learning area.
- Landscaping and public domain works including tree planting, a sports court and various assembly, play and learning zones;
- A drop-off and pick-up zone in Buchan Avenue and Faulkner Way, and bus stop on the north of Buchan Avenue;
- An at-grade staff car park in the southern part of the site with ingress and egress provided off Faulkner Way at the south-west corner of the site;

- Primary pedestrian entrance from Buchan Avenue and an additional entrance on Faulkner Way for the ground floor support unit; and
- Other ancillary infrastructure and utilities works and digital signage.

As noted above, consent is being sought for the use and "cold-shell" of the proposed pre-school only. Consent will be sought via a separate DA for the fitout and operation of the pre-school.

We note that due to the "stimulus" and therefore priority nature of this project, an early works DA for bulk earthworks (including importation of fill) will be submitted to Liverpool City Council (Council). The works proposed under that DA in relation to site preparation works are entirely consistent with those included within the subject SSDA.

This EIS is structured as follows:

- Section 1: Introduction
- Section 2: Site Analysis
- Section 3: Description of the Proposed Development
- Section 4: Strategic Planning Context
- Section 5: Statutory Planning Context
- Section 6: Stakeholder Engagement
- Section 7: Environmental Assessment
- Section 8: Mitigation Measures

The DoE and the wider project team have carried out stakeholder and agency consultation, as required by the SEARs, including with Aboriginal stakeholders, Council, Landcom, Energy Environment and Science Group, Sydney Water, Endeavour Energy, NSW Rural Fire Service, Transport Working Group (TWP), the State Design Review Panel (SDRP) and the broader community. The advice received throughout the consultation process has informed the development of the design to-date, noting that engagement will continue through construction and to completion, reflecting a commitment by the DoE to provide a quality, well-considered, and objective driven outcome. The development has also been driven by considerable input from the wider project team in consideration of key environmental issues pertaining to the site, particularly in relation to noise, vibration, drainage, geotechnical, traffic, parking, accessibility, bushfire, contamination, unexploded ordnance (UXO) and Aboriginal cultural heritage. A range of options have also been considered at various stages of the project, to balance appropriate inputs.

The proposal will result in a high quality, well-articulated, flexible, energy efficient and low maintenance development, that has been designed to provide optimal facilities and teaching standards on-site for staff, students and visitors (indoor and outdoor), and that integrates well within the surrounds of the site. The proposed landscaping and public domain improvements further enhance the integrated design of the development, and in terms of the latter, result in improved accessibility of the site within the surrounding environmental context.

The proposal has been assessed in this EIS as achieving acceptable environmental amenity outcomes, including desirable outcomes for acoustic amenity (both internal and external to the site), traffic movements, parking demand, stormwater drainage, waste management, visual impact, geotechnical and bushfire. Furthermore, the proposal will incorporate a wide range of ecologically sustainable development (ESD) initiatives. A series of recommendations drawn from the wider project team and consultant inputs have been developed and included as mitigation measures in this EIS. These mitigation measures primarily relate to geotechnical, contamination, traffic, ESD, Aboriginal heritage, bushfire and UXO. They will ensure that any potential impact, however minor, is satisfactorily ameliorated.

The proposed works have been designed to, and will be carried out in, the interests of the public. The SSDA will meet the project objectives to provide a new primary school and pre-school (the latter subject to a separate detailed DA for the operations of the pre-school) in a high-quality built and landscape environment, which appropriately addresses the wellbeing, safety and accessibility needs of children, staff and visitors.

Accordingly, it is recommended that consent be granted to the proposal, subject to the implementation of suitable conditions of consent reflecting those mitigation measures set out in this EIS.

1. INTRODUCTION

1.1. Project Team

Suitably qualified technical consultants were engaged to assist in the preparation of this SSDA as outlined in the following table.

Table 1: Project team

Appendix	Deliverable	Prepared by
B	Architectural Plans, Architectural Design Report, Visual Impact Assessment Architectural Design Statement	TKD Architects
C	Compliance Table with Childcare Centre Guidelines	TKD Architects
D	Landscape Plans and Design Report	Oculus
E	Survey Plan	Total Surveying Solutions
F	QS and CIV Report	Donald Cant Watts Corke
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L	Environmental Site Assessment including Contamination, Salinity and Acid Sulfate Soils	JBS&G
M	Noise and Vibration Assessment Report	JHA Services
N	Infrastructure Management Plan	JHA Services
O	Aboriginal Heritage Report	Kelleher Nightingale Consulting
P	Accessibility Report	iAccess
Q	BCA Capability Statement	Group DLA
R	Traffic, Parking, Transport and Accessibility Report Infrastructure and Facilities Site Plan	PTC Consultants
S	School Transport Plan	PTC Consultants
T	Social Impact Assessment	EMM Consultants
U	Ecological Sustainable Development Report	JHA Services
V	Construction Waste Management Plan	EcCell Environmental Management
W	Operation Waste Management Plan	EcCell Environmental Management
X	Construction Management Plan	Richard Crookes Construction
Y	Basement Archaeological Assessment	Archaeological Management and Consulting Group

Appendix	Deliverable	Prepared by
Z	UXO Risk Assessment and UXO Protocol	CSG Demining Consultants
AA and Section 6 of this EIS.	Consultation Meeting Minutes and Briefing Note	City Plan
BB	Section 10.7 Planning Certificates	Liverpool City Council
CC	Letter of Notice to Landcom	NSW Department of Education
DD	Lighting Strategy	JHA Services
EE	Electrolysis Testing Report	Corrosion Control Engineering

1.2. The Site

The proposed development is located at Buchan Avenue, Edmondson Park within the Liverpool local government area (LGA), refer to Figure 1 and 2 on the following page. The site is legally described as Lot 1 in DP1257105 and part of Lot 2 in DP1257105 (refer to Figure 2). It is currently vacant and comprises undeveloped greenfield land containing regrowth shrubs and uncontained groundcover. The site has frontages to Buchan Avenue and Faulkner Way to the west and north respectively.

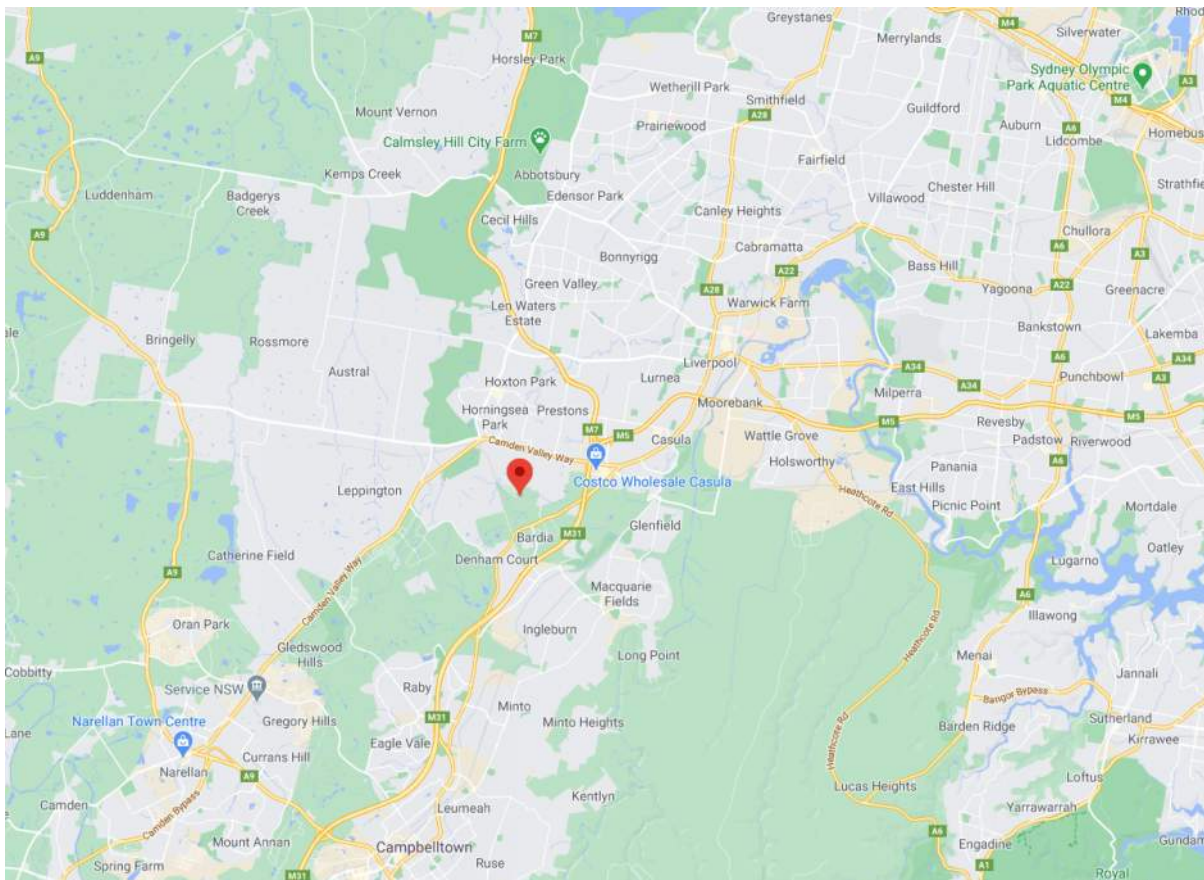


Figure 1: Regional context map, site identified with a red marker (Source: Google Maps)



Figure 2: Aerial photograph, approximate site boundaries outlined in red (Source: Near Maps)

In summary, the site is characterised as follows:

- There are no heritage items located on the site or within the site surrounds;
- The site is biodiversity certified;
- The site is bushfire prone land;
- The site potentially contains moderate salinity soils;
- The site is not affected by acid sulfate soils;
- The site is not flood affected;
- The site is suitable for the proposed land use as a primary school and pre-school with respect to contamination; and
- The site was previously part of Ingleburn Military Area, though the risk of an unexploded ordnance is assessed as *Low as Reasonably Practicable*.

1.3. The Proposal

1.3.1. Background

The DoE is responsible for early childhood, primary education, secondary education, adult, migrant and higher education in New South Wales (NSW). DoE is the largest provider of public education in Australia with the responsibility for delivering high-quality public education to two-thirds of the NSW student population.

NSW is facing unprecedented population growth, particularly in children under 15 years of age. By 2031, an additional 269,000 new students will require access to government and non-government schools, of which over 164,000 are expected to enter the government school system. This growth is significantly above historical trends. By law, all school-age children are eligible to attend a government school.

This means that by 2031, government school enrolments will rise by 21% on 2016 levels. More than 80% of this growth will be in Sydney, which will see more schools at 100% capacity or facing overcrowding unless new ways of asset planning and school's operation are implemented.

Consequently, the NSW Government is investing \$6.7 billion to deliver 190 new and upgraded schools to support communities across NSW.

The Business Case dated 25 August 2020 pertaining to the new primary school sets out the investment case to address the significant shortfalls in capacity across the School Community Group and in response to planning funding allocated in the *NSW Budget Paper (2- Infrastructure) FY2018-19*. The Business Case confirms the new primary school in Edmondson Park is driven mainly by population and specific needs, including:

- Population driven by demand;
- Future proofing; and
- Specific needs - support services and community services.

The number of government primary students living within the catchment is expected to increase due to the growing residential population in the locality.

The DoE identified and developed a list of potential options for the primary school following initial examination of the proposal objectives and consideration of site conditions and constraints. The DoE undertook a structured approach to assessing the options to determine the optimal outcome to meet the needs as outlined in the case for change and the service need, and in accordance with the Education Principles, Education Rationale and the Education Facilities Standards and Guidelines (EFSG).

The vision of the program for school upgrades is:

"Deliver the very best school infrastructure so that the NSW public education system is one of the finest in the world."

This is supported by a series of program objectives:

"Facilitate the improvement of educational outcomes;

Facilitate the successful transition of all students through their educational journey;

Deliver on commitments to provide education for all students; and

Ensure DoE is maximising value from its current and future physical asset base."

1.3.2. Project Need

The Business Case dated 25 August 2020 identified the need for a new primary school in Edmondson Park. This need has been driven by population and specific locality needs as discussed below.

Population driven by demand

Overall, there will be a student shortfall of 1,110 within the Edmondson Park Primary School Community Group (SCG) by 2036. It was considered that boundary changes alone would not be sufficient to address long-term capacity shortfalls and rather additional asset interventions would be required to address

demand for the SCG. The SCG is limited in terms of accessibility resulting from physical barriers such as major roads and the railway, which guide school's catchment boundaries.

Future proofing

The Edmondson Park locality is experiencing rapid growth driven by housing development, particularly in Bardia. Such developments are expected to generate significant student demands. Notwithstanding, given the demand uncertainty in the SCG driven by the timing of new housing developments and the economic environment, interventions in the SCG need flexibility to add capacity to future-proof against any uplifts in demand in the future.

Specific needs - support services and community services

The SCG currently provides 15 support classrooms across four of the six public schools, which is insufficient to meet the current demand. The Edmondson Park Educational Rationale (March 2019) highlighted that low health indicators coupled with varying community needs, such as parental support, health, educational and language differences, are likely to result in a potential new school population across the SCG where there will be a need to provide 1:1, 1:3 or 1:5 teacher to student support, in addition to demand for supporting facilities and services (for example, ancillary services and facilities such as pre-schools).

1.3.3. Alternatives Considered

During the preliminary design phase, DoE undertook an options analysis to ascertain the most suitable design for the new primary school. The criteria for the options analysis included the design objectives with reference to the EFSG, the objectives of the proposal, desired outcomes, site constraints, social and environmental outcomes.

Four options for a new primary school in Edmondson Park were developed, as shown in the table below.

Table 2: Options

Option	Scope
Base Case	No investment and/or intervention is undertaken with the SCG. The 40/40/20 rule will be applied.
Option 1A	Build a new Core 35 school and four support classes in 2022*.
Option 1B(i)	Build a new Core 35 school in stages: - Stage 1: Build a new school with 24 PLS, all Core 35 facilities and four supporting classes by 2022. - Stage 2: Provide additional 20 PLS and pre-school by 2028.
Option 1B (ii)	Build a new Core 35 school in stages: - Stage 1: Build a new school with 32 PLS, all Core 35 facilities and four supporting classes by 2022. - Stage 2: Provide additional 12 PLS and pre-school by 2028.

* Note: The Business Case states that based on Eagle Eye projections, additional capacity within Edmondson Park Primary SCG is required by 2024, however in the interest of timely delivery on the project announcement and increasing demand uncertainty, this has been brought forward to 2022. Noting the new school will comprise a modular design, achieving time efficiencies in the design and construction process.

Option 1B(i) was identified as the preferred option as it will best address service needs. The Business Case (2020) outlines these reasons as follows:

"It provides the minimum capacity required to address the project announcement by providing 24 Permanent Learning Spaces (PLS) in 2022. This better aligns with the demand projections and prevents underutilisation of PLS;

The provision of PLS across the stages provides an optimal balance between building in future proof capacity to mitigate the risks associated with demand being realised earlier than projected, and the risk of providing too much capacity and the school being unsubscribed;

By the time Stage 1 is in delivery, it would provide SINSW with sufficient time and date to monitor the rate of developments occurring in Bardia and determine whether there is a need to bring forward Stage 2. This mitigates the risk that Stage 2 would not be funded and eventuate in the next budget and ensures the maximum benefits are derived from the delivery of the remaining PLS".

The Business Case identifies the funding requirements for the preferred option is \$83.7 million, which includes acquisition costs attributed to the land requirement to deliver the primary school.

1.3.4. 'Do nothing' option

Should the project not be completed, the DoE will not be able to meet the demand of the student catchment. This is not a practical option, for all the reasons set out in the above sections of this EIS.

1.4. The SEARs

A request was made to the Minister for the SEARs pursuant to Clause 3, Schedule 2 of the EP&A Regulation. The SEARs were issued by the DPIE on 10 December 2020.

The following table outlines the SEARs and identifies where the requirement is addressed in this EIS and/or the appendix reference for the specialist consultant report that addresses the item in detail.

Table 3: SEARs

SEAR Item/Description	Document Reference
General Requirements	
The EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 9 -of this EIS.
The EIS must include: ▪ an executive summary. ▪ a complete description of the development, including: ▫ the need for the development. ▫ justification for the development. ▫ suitability of the site. ▫ alternatives considered ▫ likely interactions between the development and existing, approved and proposed operations in the vicinity of the site. ▫ a description of any proposed building works. ▫ a description of existing and proposed operations, including: (i) staff and student numbers, hours of operation, and details of any proposed before/after school care services and/or community use of school facilities.	Refer to Executive Summary. Section 1.5 of this EIS. Section 3 of this EIS.

SEAR Item/Description	Document Reference
(ii) indication of the potential extent of school catchment area to facilitate assessment of associated impact to the transport network. ▫ site survey plan, showing existing levels, location and height of existing and adjacent structures / buildings and site boundaries. ▫ details of ground works with a maximum RL depths (excavation and ground penetration) associated with the proposal which fall within 25m of the Rail Corridor. ▫ consideration for the relevant Transport Asset Standard Authority (ASA) standards, in particular External Developments T HR Cl 12080 ST. ▫ a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development. ▫ plans, elevations and sections of the proposed development. ▫ cladding, window and floor details, including external materials. ▫ a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process). ▫ plans and details of any advertising/business identification signs to be installed, including size, location and finishes. ▫ any staging of the development. ▫ details of construction and decommissioning including timing. ▫ an estimate of the jobs that would be created during the construction and operational phases of the development along with details of the methodology to determine the figures provided. ▪ a detailed assessment of the key issues identified below, and any other significant issues identified in the risk assessment, including: ▫ a description of the existing environment, using sufficient baseline data and methodology to establish baseline conditions. ▫ an assessment of the potential impacts of all stages of the development on all potentially impacted environments, sensitive receivers, stakeholders and future developments. The assessment must consider any relevant legislation, policies and guidelines. ▫ consideration of the cumulative impacts due to all other developments in the vicinity (completed, underway or proposed). ▫ identification of all proposed monitoring or required changes to existing monitoring programs. ▫ measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment and triggers for each action. ▫ details of alternative measures considered. ▪ a consolidated summary of all the proposed environmental management and monitoring measures, identifying all commitments included in the EIS. ▪ the reasons why the development should be approved and a detailed evaluation of the merits of the development, including consequences of not carrying out the development.	Appendix E. Appendix J. Section 5.9.4.1 of this EIS. Appendix R. Appendix B. Appendix B. Not applicable. Section 3.10 of this EIS. Section 3.11 of this EIS. Section 2 of this EIS. Section 7 of this EIS and accompanying consultant documentation. Section 7.23 of this EIS. Section 8 of this EIS.

SEAR Item/Description	Document Reference
	Section 9 and 10 of this EIS.
CIV Report.	Appendix F.
Key Issues	
1. Statutory and Strategic Context	Section 5 of this EIS.
2. Policies	Section 4 of this EIS.
3. Built Form and Urban Design	Appendix B and Section 7.1 of this EIS.
4. Tree Removal and Landscaping	Appendix D and Section 7.2 of this EIS.
5. Environmental Amenity	Appendix B and D, and Section 7.3 of this EIS.
6. Transport and Accessibility	Appendix S and T and Section 7.4 of this EIS.
7. ESD	Appendix U and Section 7.5 of this EIS.
8. Heritage	Appendix Y and Section 7.6 of this EIS.
9. Aboriginal Cultural Heritage	Appendix O and Section 7.7 of this EIS.
10. Social Impacts	Appendix T and Section 7.8 of this EIS.
11. Noise and Vibration	Appendix M and Section 7.9 of this EIS.
12. Biodiversity	Appendix X and Section 7.10 of this EIS.
13. Contributions	Section 7.11 of this EIS.
14. Staging	Appendix G and Section 7.12 of this EIS.
15. Utilities	Appendix N and Section 7.13 of this EIS.
16. Stormwater Drainage	Appendix J and Section 7.14 of this EIS.
17. Flooding	Appendix J and Section 7.15 of this EIS.
18. Soil and Water	Appendix J and L and Section 7.16 of this EIS.
19. Waste	Appendix V and W and Section 7.17 of this EIS.
20. Contamination	Appendix L and Section 7.18 of this EIS.

SEAR Item/Description	Document Reference
21. Bushfire	Appendix H and Section 7.19 of this EIS.
Plans and Documents	
Section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate).	Appendix BB.
Design Report	Appendix B.
Geotechnical and Structural Report.	Appendix I and Appendix K.
Accessibility Report.	Appendix P.
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, relevant special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, you must consult with: - the relevant Council. - Government Architect NSW (through the NSW SDRP process). - Transport for NSW. - Sydney Trains. Consultation should commence as soon as practicable to inform the scope of investigation and progression of the proposed development. The EIS must describe and evidence 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.	Refer to Section 6 of this EIS, the accompanying meeting minutes in Appendix AA and SIA in Appendix T.

1.5. Environmental Assessment Summary

A detailed environmental assessment is undertaken throughout this EIS, followed by an environmental risk assessment. All impacts by way of visual impact, amenity (internal and external), acoustics, vibration, traffic, parking, access, aboriginal cultural heritage, bushfire, drainage, utilities, waste, social, and the like are either negligible or minor and capable of being mitigated through the recommendations contained with the supporting specialist reports and the subject EIS. Subject to adopting those recommendations, the residual environmental "risk" is considered to be minor. In fact, there are many very positive impacts as a result of the development, in terms of improved accessibility to public transport and generally surrounding the site, improved biodiversity integrity of the site noting it is currently devoid of any significant vegetation, a considerable positive social impact by virtue of providing a new school within a high growth catchment and a positive environmental outcome by way of the ESD measures incorporated into the development.

2. SITE ANALYSIS

2.1. Regional Context

The site is situated in the Liverpool LGA, being approximately 38.9km south-west of the Sydney CBD and 25.7km south-west of the Parramatta CBD. The Edmondson Park town centre is 1.5km south-east of the site on the southern side of the railway line.

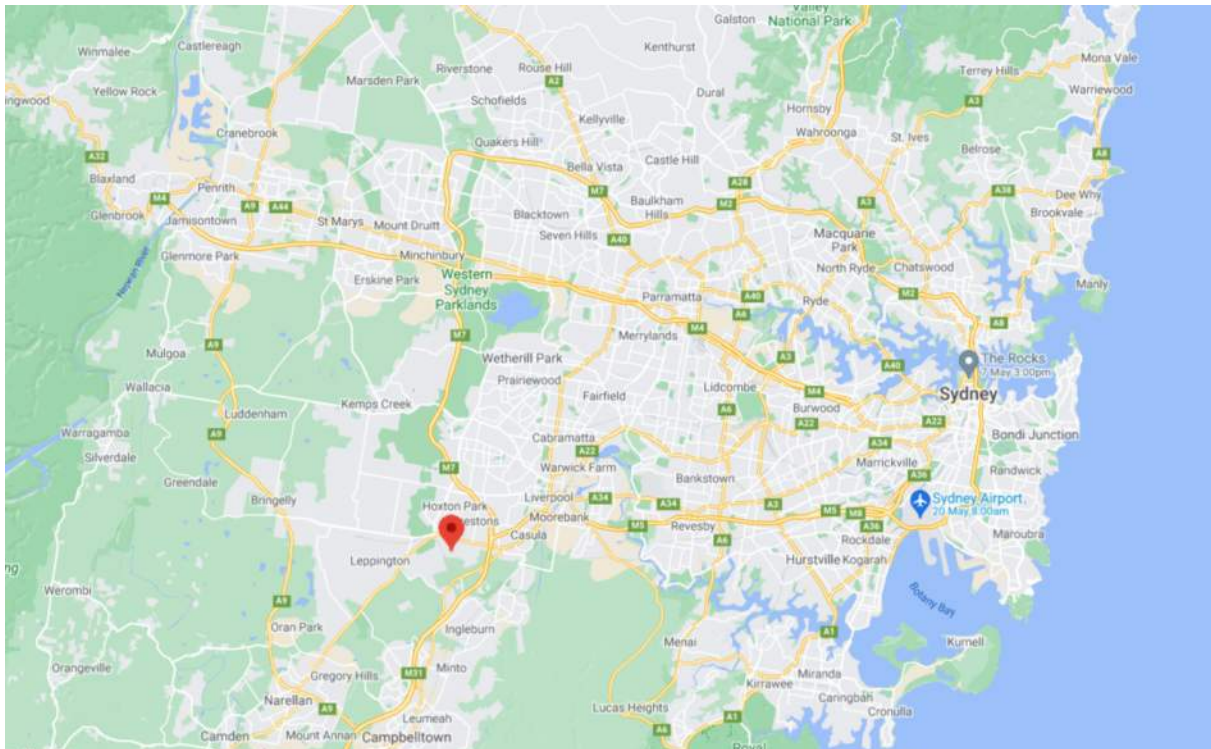


Figure 3: Regional context map, site identified with a red marker (Source: Google Maps)

2.2. Local Context

The site is located on the south-east corner of the intersection of Buchan Avenue and Faulkner Way, Edmondson Park. In the last decade, the immediate surrounding context of the site has experienced significant transformation due to the introduction of the south-west railway line, rapid housing growth in release areas that has seen transformation of greenfield sites to new communities. The Landcom concept plan (as discussed in detail in Section 2.6 of this EIS) contributed to the vision for the State Significant Precinct, within which the site is located. This has guided development. The surrounding context is described as follows:

- The site is bounded by low density residential development to the west comprising one-storey and two-storey dwelling houses, and Clermont Park to the north;
- Clermont Park comprises some of the last existing Cumberland Plain Woodland on the northern side of the railway line. This is representative of the once present vegetation of the immediate locality prior to development and reflects the dense vegetation on the southern side of the railway line in line with the site;
- Further north of Clermont Park is St Francis Catholic College. St Francis is a K- 12 school which commenced operation in 2017;

- The south, the site is bordered by the T2 Inner West & Leppington railway line and the T5 Cumberland railway line in a cutaway some five to six metres below the levels at the southern edge of the school site;
- Other undeveloped vacant Landcom land is situated directly to the east and north of the site;
- The extension of Buchan Avenue to the east of the east is currently under construction by Landcom, and will provide vehicular and pedestrian access directly to Edmondson Park railway station and Soldiers Parade to the east once complete; and
- The Edmondson Park town centre is situated to the south of the railway station, comprising a shopping centre and various residential apartment buildings ranging from six to 10 storeys.

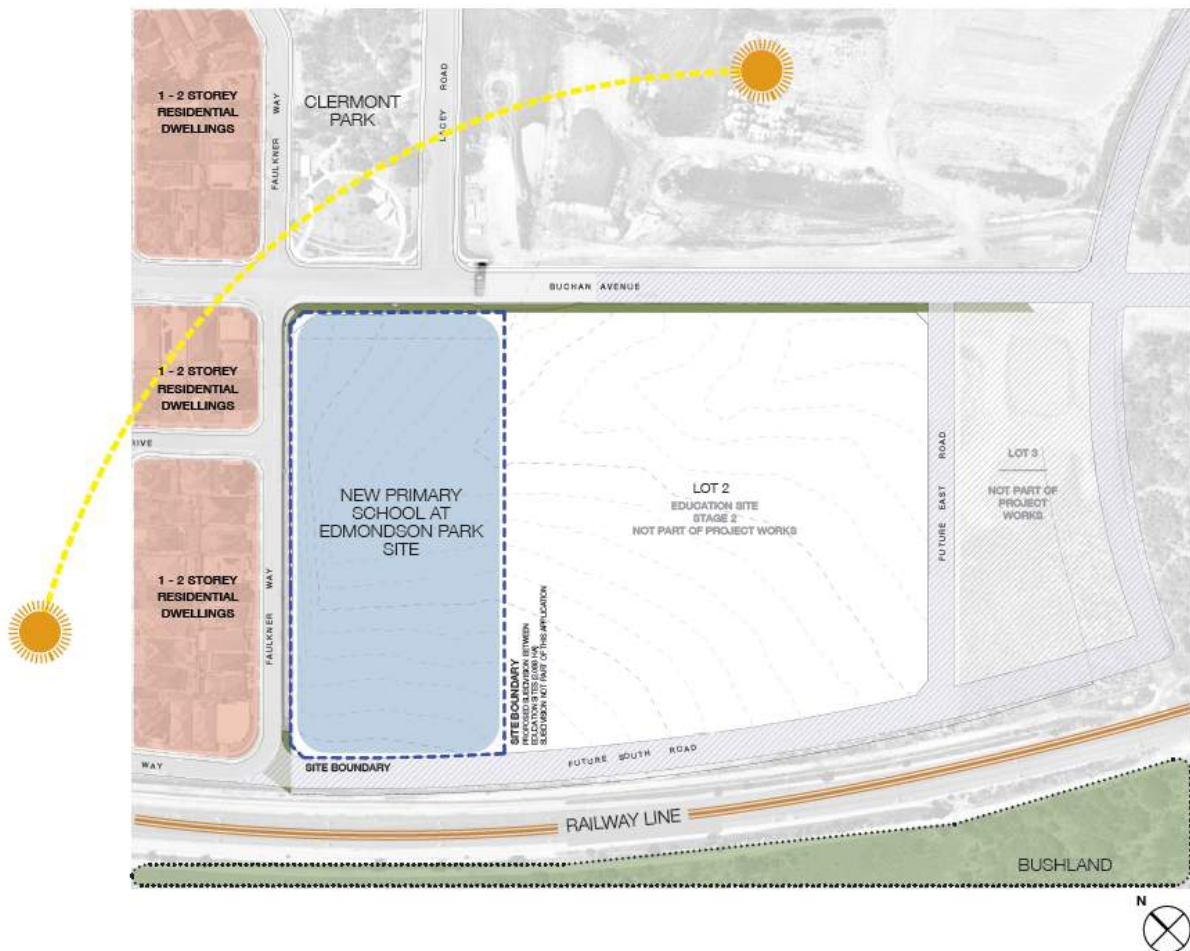


Figure 4: Extract of site analysis plan (Source: TKD)



Figure 5: Residential density to the north-west and west of the site (Source: City Plan)



Figure 6: Clermont Park (Source: City Plan)



Figure 7: Vegetation at Clermont Park (Source: City Plan)



Figure 8: Completed building at St Francis Catholic College (Source: City Plan)



Figure 9: Buildings under construction at St Francis Catholic College (Source: City Plan)



Figure 10: Drop off and pick up zone at St Francis Catholic College (Source: City Plan)



Figure 11: Photo of the railway cutaway (Source: City Plan)



Figure 12: Residential development in the Edmondson Park town centre (Source: City Plan)



Figure 13: Edmondson Park railway station (Source: City Plan)



Figure 14: Commuter car park Edmondson Park railway station (Source: City Plan)



Figure 15: Extension of Buchan Avenue to the east (Source: City Plan)

2.3. Site Address and Legal Description

The site is legally described as Lot 1 in DP1257105 and part of Lot 2 in DP1257105, at Buchan Avenue, Edmondson Park. Refer to the below figures.



Figure 16: Aerial photograph, approximate site boundaries outlined in red (Source: Near Maps)

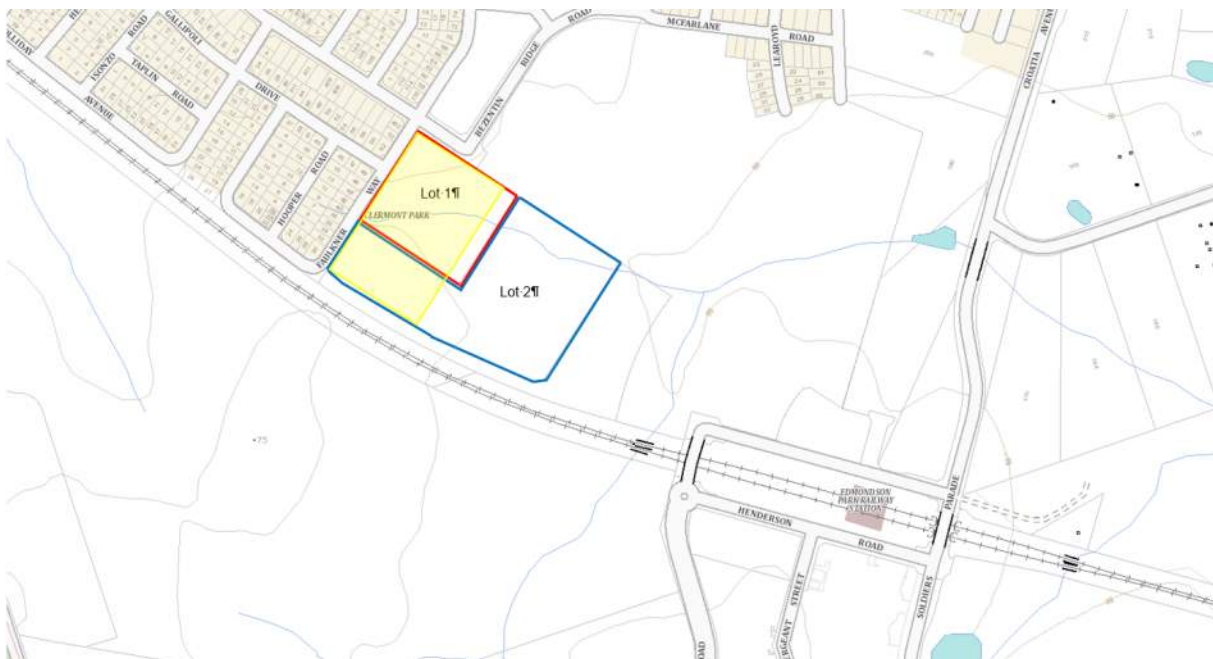


Figure 17: Cadastre map, Lot 1 and 2 outlined in red and blue respectively and the primary school site shaded yellow (Source: City Plan)

2.4. Ownership

Lot 1 in DP1257105 is owned by the DoE. Lot 2 in DP1257105, as at the date of the EIS, is owned by Landcom, though is due to settle to DoE ownership in mid-July 2021. Following the transfer of ownership, DoE will realign boundaries so the primary school is located on a single allotment.

2.5. Existing Site Improvements

The site is currently vacant and undeveloped greenfield land containing regrowth shrubs and uncontained groundcover. The site was previously utilised by Landcom to hold a stockpile for the purposes of constructing Buchan Avenue. This stockpile has since been removed. The following photographs depict the current state of the site. The photographs were taken by City Plan during a site visit on 16 April 2021.



Figure 18: The existing site as viewed from Clermont Park
 (Source: City Plan)



Figure 19: View of the site at the north-west corner, looking south-east
 (Source: City Plan)



Figure 20: View of the site at the north-west corner, looking east
 (Source: City Plan)



Figure 21: View of the site at the north-west corner, looking north-east
 (Source: City Plan)



Figure 22: View of the site at the mid-western boundary, looking north (Source: City Plan)



Figure 23: View of the site at the south of the western boundary, looking east (Source: City Plan)



Figure 24: View of the site at the south-west, looking south (Source: City Plan)



Figure 25: View of the site at the south-west, looking north-east (Source: City Plan)



Figure 26: Eastern footpath on Faulkner Way, looking south (Source: City Plan)

2.6. Relevant Planning History

On 28 August 2011, a concept plan (MP10_0118) was granted for Edmondson Park South, which encompasses the site. The concept plan consent was for a mixed-use residential, commercial and retail development, with a dwelling yield of 3,200 dwelling and up to 45,000m² of retail/commercial floor space with the town centre. The concept plan also established a regional parkland of approximately 150 hectares. This concept plan listed the area as a State Significant Precinct in the Significant Precincts SEPP and approved land uses as shown in the following figure.



Figure 27: Extract of the original approved concept plan, site shaded yellow (Source: Landcom 2010)

As illustrated in the olive green, the indicative land use for the site was a school.

MP10_0118 has been modified on several occasions. Of most relevance to the primary school site is MP10_0118 Mod 5. This modification application is still under assessment with the DPIE. In summary the amendments proposed involve:

- Adjustments to residential yields, building heights, residential mixes;
- Revised road layout;
- Based on discussions with the DoE, creation of a 2 hectare primary school site and a separate 4 hectare high school site;
- Adjustments of the APZs; and
- Increasing the height of the school site to 21 metres.

The following figure illustrates the proposed changes to the concept plan in Mod 5.



Figure 28: Proposed amendments of MP10_0018 in Mod 5, currently under assessment, primary school site shaded yellow (Source: Landcom, 2020)

2.7. Topography

Total Surveying Solutions (TSS) has prepared a Site Survey appended at Appendix E. The levels in the southern portion of the site are approximately RL72.00 at the ridge adjacent to the railway line. This falls to a depression at RL59.10 in the mid-eastern boundary at an approximate grade of 8%, corresponding to the approximate 12.50m difference in elevation. Following this eastern boundary line, the levels increase to RL60.10 in the north-east corner and RL66.55 in the north-west corner.

2.8. Access and Transport Context

Transport and access infrastructure is being delivered concurrently alongside residential development in the locality. PTC Consultants discuss in Appendix R the existing and proposed connections in the immediate surrounding area of the site. The following figure illustrates the bicycle and walking network in the catchment and proposed to be delivered by Council. To note:

- The blue circle has been annotated by PTC Consultants to identify a missing bicycle connectivity along Vinny Road as it was not part of the precinct's planning according to the Liverpool DCP;
- Rynan Avenue comprises an on-street cycle path which PTC Consultants consider is not acceptable for primary school students;
- The orange circles highlight gap in connectivity;
- Yellow highlighted section is yet to be constructed;
- The orange highlighted section in Buchan Avenue was planned to provide a share path, however only a footpath was constructed; and

- Positive upgrades are found on Bernera Road, where a shared path instead of an on-street bicycle path has been constructed (highlighted green).

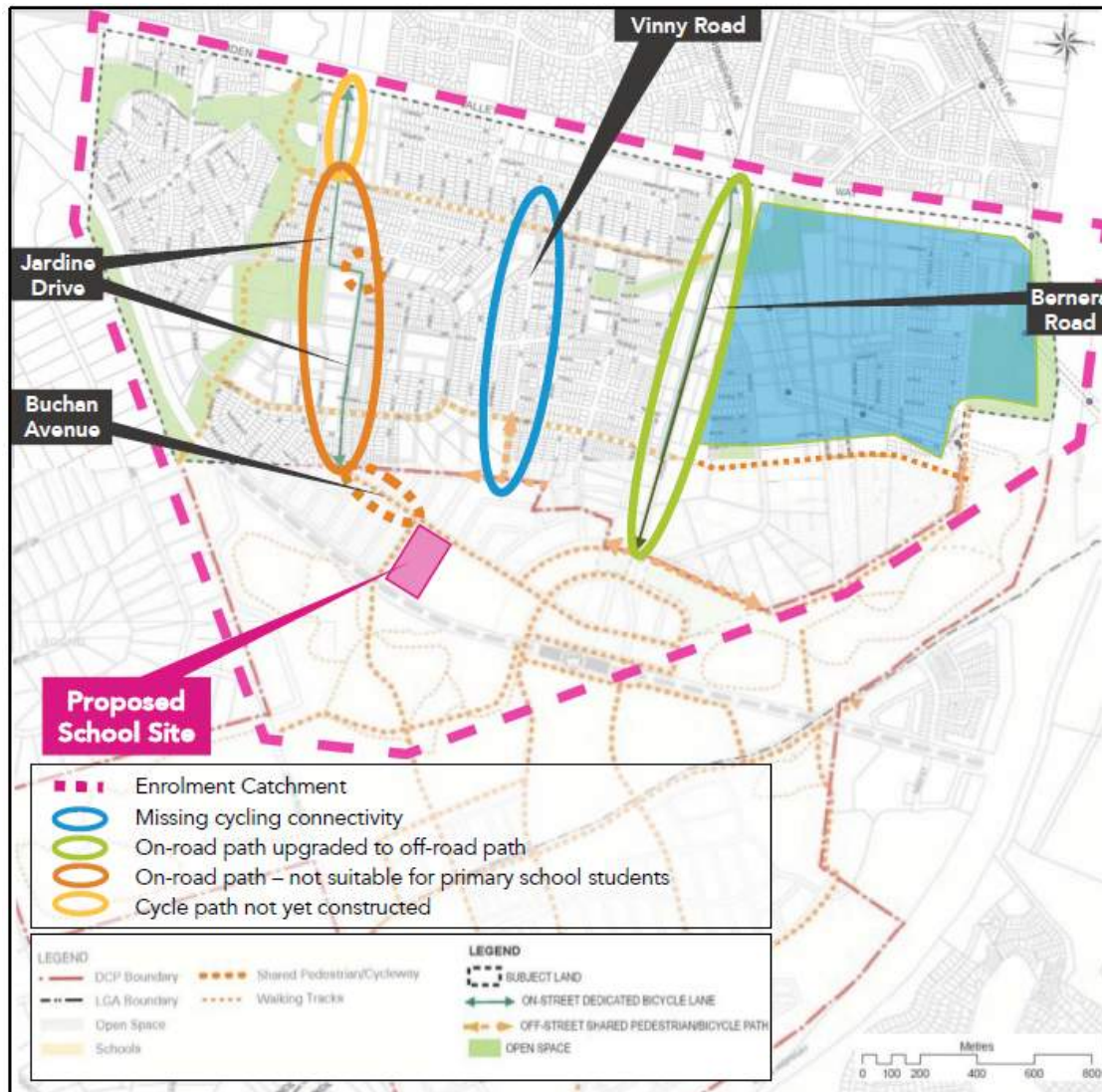


Figure 29: Bicycle network (Source: Liverpool DCP, annotated by PTC Consultants)

Buchan Avenue is planned to accommodate buses providing a connection to Edmondson Park railway station and the town centre.

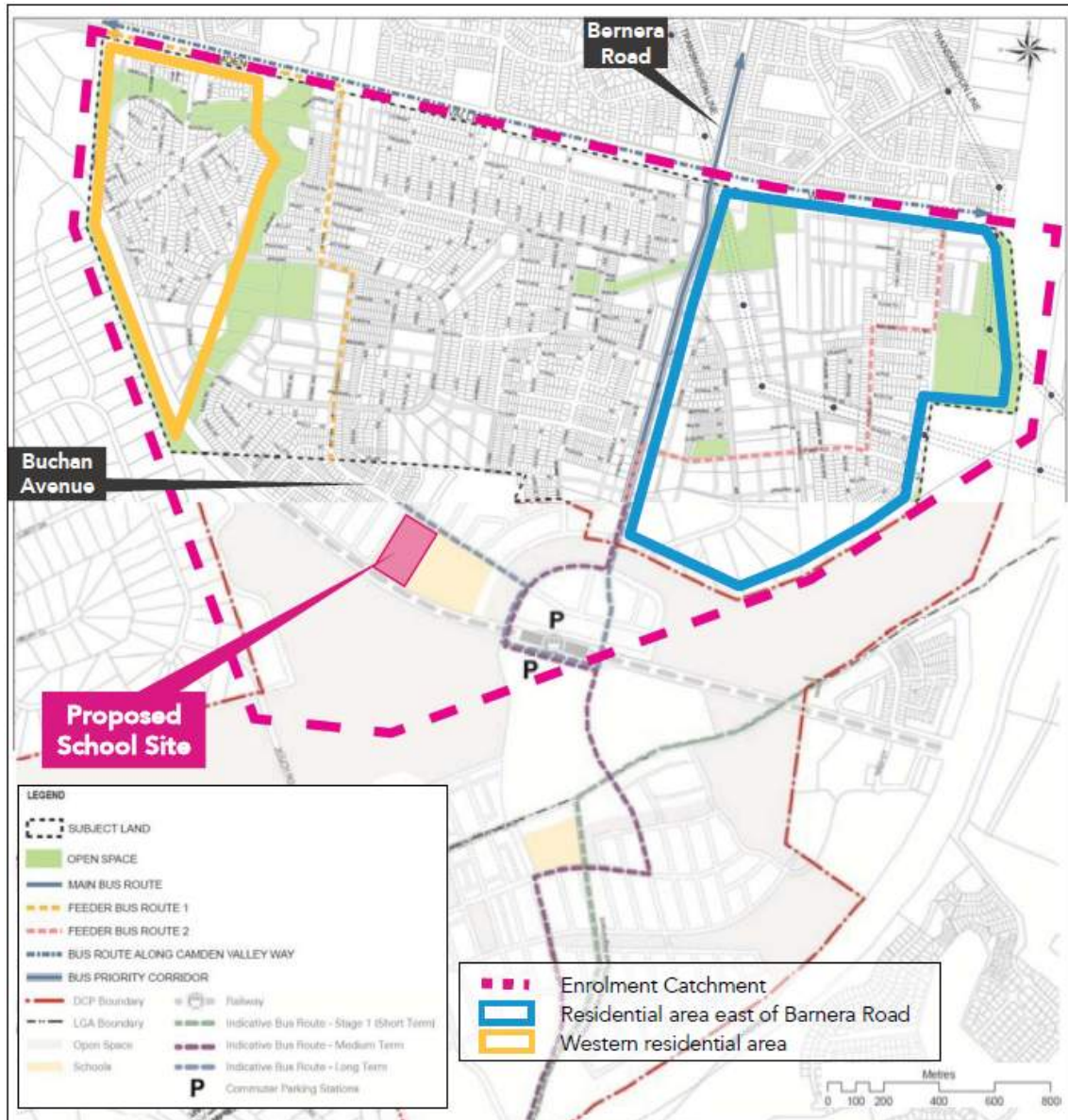


Figure 30: Public transport map (Source: Liverpool DCP, annotated by PTC Consultants)

The road network servicing/ expected to service the site is illustrated in the following figure.

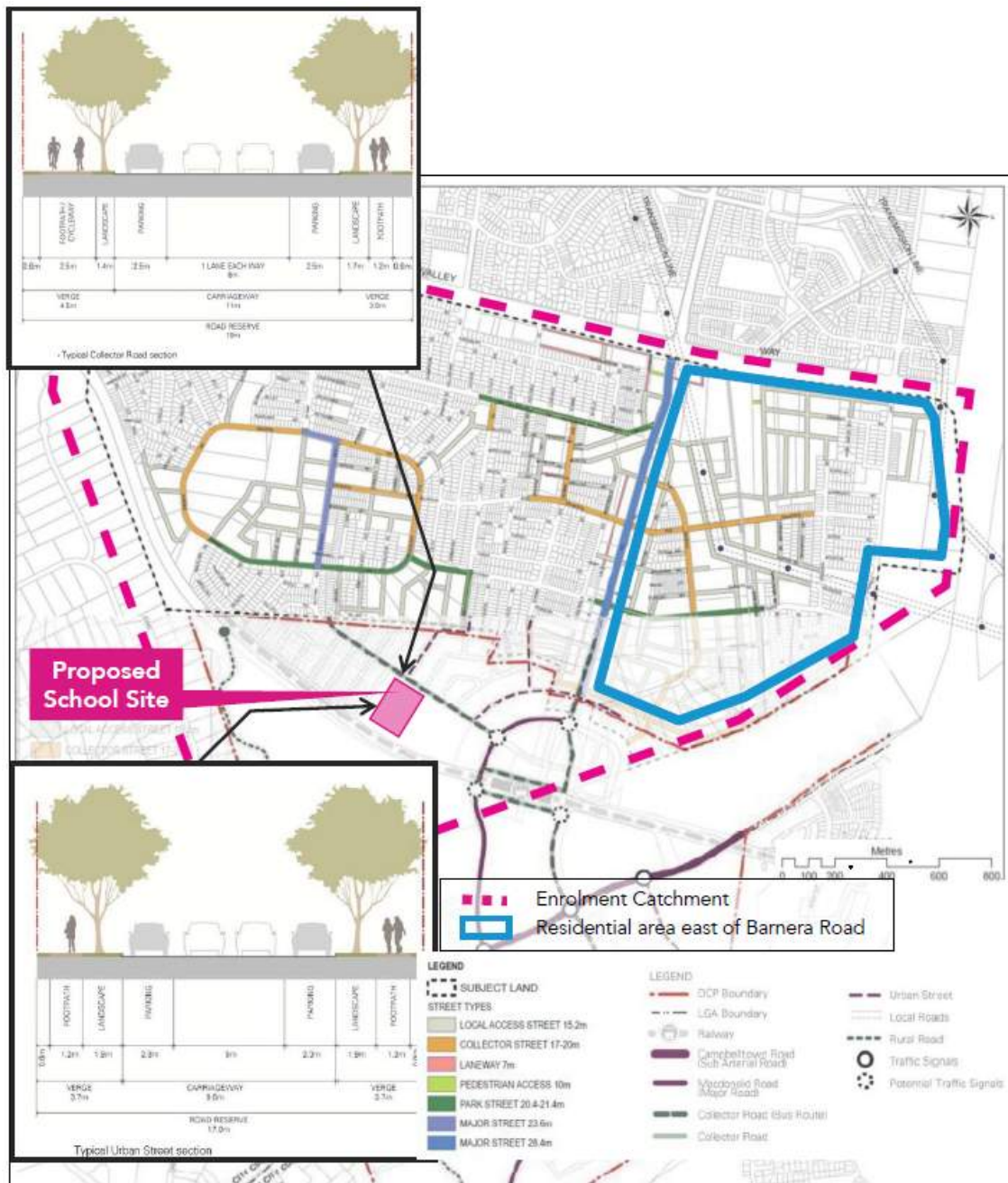


Figure 31: Road network servicing/ to service the site (Source: Liverpool DCP, annotated by PTC Consultants)

2.9. Heritage

2.9.1. Aboriginal Heritage

Kelleher Nightingale Consulting (KNC) previously prepared a comprehensive Aboriginal Archaeological and Cultural Heritage Assessment for the Edmondson Park South concept plan for Landcom. This assessment identified one archaeological site containing Aboriginal objects within the school site. The site has since been destroyed under AHIP number C0001134 and is no longer extant.

KNC undertook a search of the Heritage NSW Aboriginal Heritage Information System (AHIMS) on 11 March 2021 to identify any registered (known) Aboriginal sites within or adjacent to the proposed school and to confirm the status of sites previously assessed. The AHIMS database search identified one Aboriginal archaeological site EPCS 10 (45-5-3911) within the proposed school site. Sites SWRL Site 1 (45-5-3538) and SWRL Site 2 (45-5-3538) were recorded to the west of the proposal area, with sites SWRL 17 (45-5-2455) and EPSC 11 (45-5-3306) recorded to the south. Refer to Appendix O for corresponding images of the sites. However, the results confirmed that sites EPCS10, SWRL Site 1 and SWRL Site 2 (previously assessed as part of the Edmondson Park South concept plan) were destroyed under AHIP C0001134. These findings are consistent with previous assessment undertaken by KNC.

KHC also reviewed statutory and non-statutory heritage registered for Aboriginal items. No aboriginal archaeological sites or Aboriginal heritage items were recorded on the following databases:

- State Heritage Register and State Heritage Inventory
- Liverpool Local Environmental Plan 2008
- Section 170 Heritage and Conservation Registers
- National Heritage List
- Commonwealth Heritage List
- Australian Heritage Database
- Australian Heritage Places Inventory
- Register of the National Estate – Non-statutory archive.

2.9.2. European Heritage

The site is not identified as containing European heritage as confirmed in the Significant Precincts SEPP mapping extracted below.



Figure 32: Extract of the Significant Precincts SEPP heritage map, site marked by the red star (Source: NSW Legislation)

2.9.3. Archaeology

Archaeological Management and Consulting Group has prepared a baseline Archaeological Assessment appended at Appendix Y. Based on historic research, the site was:

- Part of the original Crown Grant given to Henry Kitchen for 840 acres called 'Clermont' in 1819;

- Predominantly used for mixed farming, agricultural activities and grazing livestock during the 19th and 20th centuries;
- Owned by notable individuals such as English surgeon and settler Charles Henry Throsby and his extended family, Robert Jenkins, Annie Shepard and Harold Swane prior to the Commonwealth of Australia purchasing the land in the mid-20th century;
- 680 metres north of the State heritage register listed Ingleburn Defence site; and
- Has remained undeveloped from the 19th century to the present day.

Archaeological Management and Consulting Group notes that based on historic research and overlays, the site was part of a larger area where land was used for farming and agricultural activities in the 19th century. During the 20th century, the land remained vacant but was nearby to the former Ingleburn Defence site, established in 1939. No evidence has been found to suggest the site was ever developed in relation to the defence site and on the unlikely chance features did exist, they would have already been removed by the recent clearing of the ground surface of the site. Therefore, there is no archaeological potential expected for the site.

2.10. Trees

The site is cleared of all trees. This is confirmed in the Site Survey at Appendix E.

2.11. Flora and Fauna

Eco Logical Australia confirms in Appendix G that the site does not contain vegetation mapped in either the existing native vegetation map or the native vegetation retention areas in the Significant Precincts SEPP map.

2.12. Bushfire

The site is identified as bushfire prone land. The bushfire prone vegetation comprises woodland to the south of the railway line and the potential for undeveloped lots to the east, including the site, to present an unmanaged grassland hazard. The vegetation community is 'Grey Box- Forest Red Gum grassy woodland on flats of the Cumberland Plain Sydney Basin Bioregion' and is classified as 'woodland' in accordance with the Planning for Bushfire Protection 2019 (PBP) for the determination of the asset protection zone (APZ) and bushfire attack level (BAL).

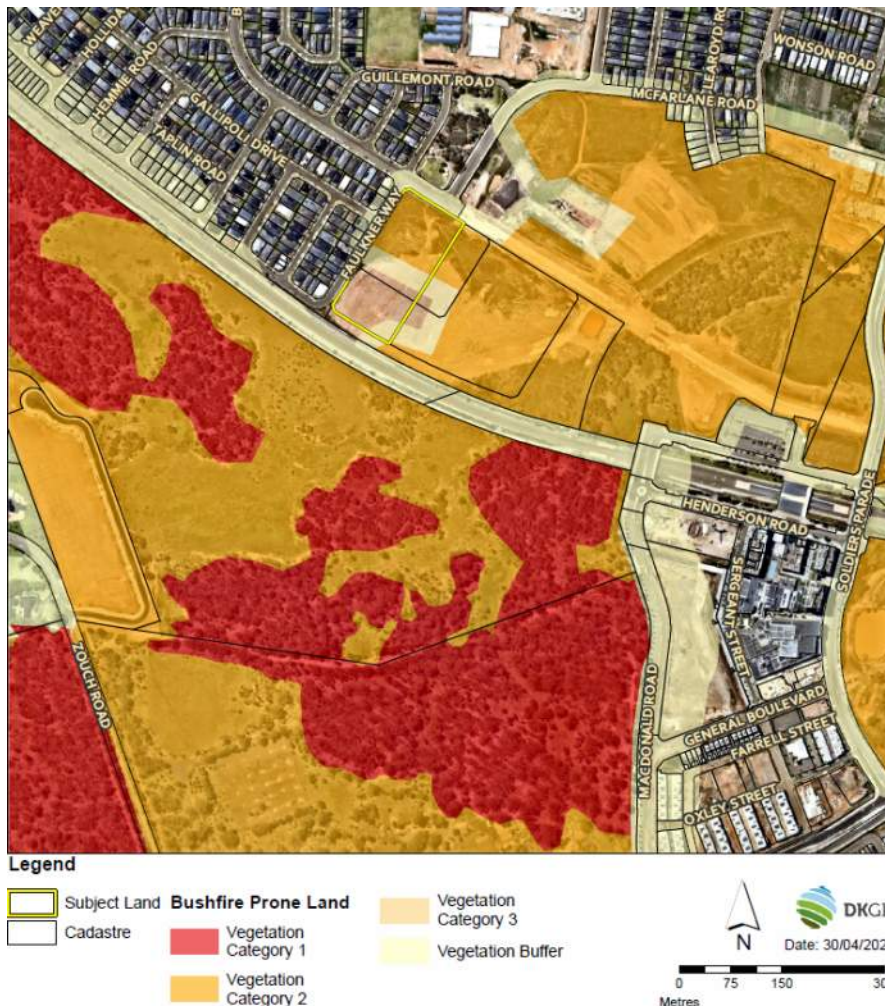


Figure 33: Extract of bushfire prone land map (Source: Peterson Bushfire)

In Clermont Park, a small remnant of the same woodland vegetation community exists. The remnant is less than half a hectare and separated from any other Category 1 or 2 hazards for distances well exceeding 100m. The remnant is 'low threat vegetation - exclusion' and is not considered a bushfire hazard, with no APZ or BAL required as confirmed by Peterson Bushfire.

Lands to the west, north and east do not present a bushfire hazard to the proposal.

2.13. Geotechnical and Soils

The site is underlain by Bringelly Shale which forms part of the Wianamatta Group formation. The geological characteristics of the Bringelly Shale are fine to medium grained shale, carbonaceous claystone and claystone. The soils of the form and surrounding locality are part of the Blacktown landscape characterised by gently undulating rises on the Wianamatta Group Shales.

JK Geotechnics has prepared a geotechnical assessment of the site, considering the proposal (Appendix I). This is assessed in detail in Section 7 of this EIS. The JK Geotechnics Report considers the findings of the Pells Sullivan Meynink investigation prepared for the site at the concept design stage of the project dated 14 February 2019. Two Pells Sullivan Meynink boreholes (BH04 and BH05) are

relevant to the subject site and the results of investigations from those boreholes are reported in the JK Geotechnics Report and Figure 34.

The subsurface conditions of the site are noted in the following table.

Table 4: Subsurface conditions

Subsurface	Conditions
Fill	Silty clay was encountered in each of the current boreholes to depth ranging from 0.3m to 0.4m. Inclusions of igneous, siltstone and ironstone gravel and root fibres were present in the fill.
Residential silty clays	The residual silty clay and clay was assessed to be of high plasticity in the current boreholes and in BH04 and BH05 ranged from low plasticity to medium to high plasticity. The residual soils were predominantly of very stiff and hard strength and often contained ironstone gravel.
Siltstone bedrock	Siltstone bedrock was encountered in all boreholes ranging from 1.0m (BH104) to 3.2 (BH105). BH04 and BH05 were logged as being extremely weathered to the terminal depths of the boreholes. BH101 was similarly weathered siltstone to a depth of 2.4m, but then improved to be distinctly weathered of low strength. The remaining boreholes were generally distinctly weathered and of very low to low strength on first contact, becoming of low, medium and occasionally high strength with depth.
Groundwater	No groundwater seepage was encountered within boreholes during and on completion of drilling.

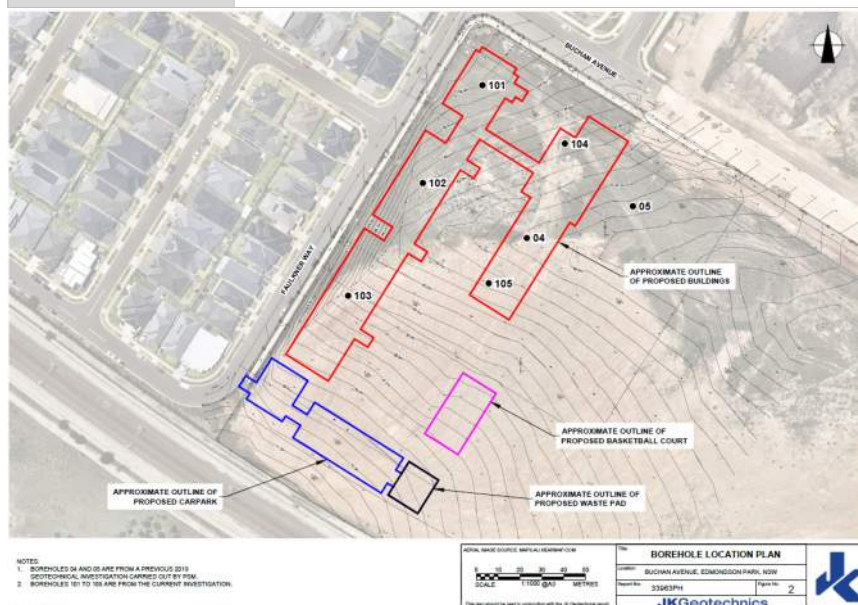


Figure 34: Extract of the borehole location plan (Source: JK Geotechnics)

2.14. Contamination

The site has been subject of various contamination investigations and reports. These investigations deemed the site suitable for the proposed use, subject to compliance with the environmental management plan (EMP) relevant to the proposed open space areas. The EMP does not apply to the primary school site as it is not an open space area.

Remediation has been undertaken on site to remove waste material related to the Ingleburn Military Area activities. Groundwater was assessed prior to and following remediation. Heavy metal concentration in the groundwater exceeded ecological criteria, however, was considered indicative of the geological conditions of the site, comprising the Wianamatta Group.

Since the finalisation of the remediation and validation works, the site has been managed by Landcom or the appointed principal contractor associated with subdivision construction activities in the surrounding locality. The site has recently been used as a temporary stockpiling yard for fill material for construction activities related to Buchan Avenue.

Given the site's history, there have been potential contaminating activities mostly from historical stockpiling of materials of unknown origin, and use of the area as a construction staging yard. These are noted in the below table.

Table 5: Site areas of potential environmental concern (APEC) and constituents of potential concern (COPCs)

APEC	COPC
Soil impacts from historical stockpiling and general site contractor area since issue of the 2013 Site Audit Statement.	Heavy metals, total petroleum hydrocarbons, polycyclic aromatic hydrocarbons, organochlorine pesticides, polychlorinated biphenyl and asbestos

2.15. Salinity and Acid Sulfate Soils

The NSW Office of Environment and Heritage Acid Sulfate Soils database identifies no known occurrence of acid sulfate soils for the site or surrounding area. This has been confirmed by JBS&G in Appendix L.

The Salinity Potential in Western Sydney map indicates the site is located within an area of moderate salinity potential outside of drainage line areas. The areas with this classification exhibit scattered scalding and indicator vegetation, though soil concentrations have not been mapped. Saline areas are identified as potentially existing within these areas. The JBS&G site inspection and intrusive sampling at the site in February 2021, identified no visible indication of saline soils on the ground surface and no evidence of salt scarring at the site. Prior to this, Pells Sullivan Meynink undertook an investigation in 2019. The samples obtained in BH01 were reported as moderately saline in nature. Notwithstanding, the moderately saline material are not within the school site.

2.16. Flooding

The site is not flood affected. As shown in Figure 35 and discussed by Northrop in Appendix J, the probable maximum flood of Maxwell Creek to the east does not extend to the site.

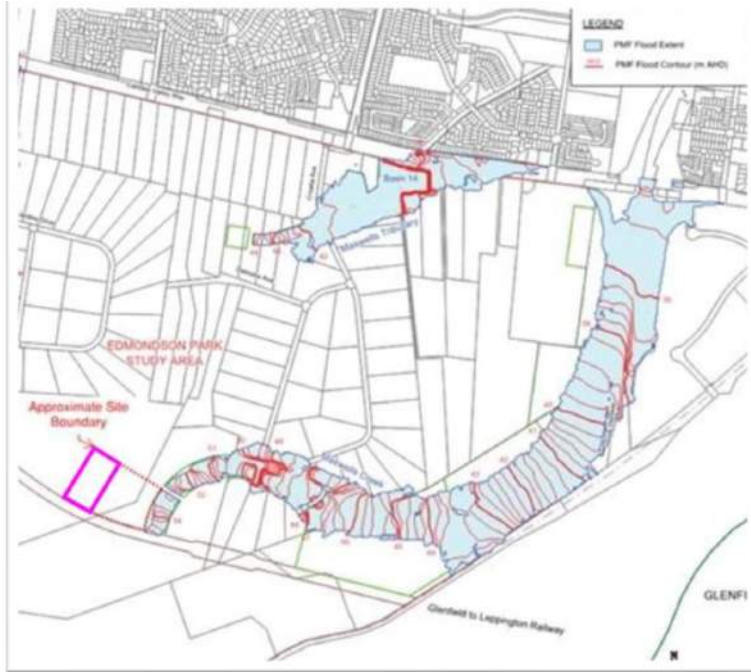


Figure 35: Extract of the PMF flood extents surrounding the site, site outlined in purple (Source: FloodMit 2014, extracted from Appendix J)

Northrop undertook a qualitative review of SMEC's Engineering Design Report for the construction of Buchan Avenue, Edmondson Park, which similarly confirmed the site is unlikely to be flood affected along the north and west boundaries as Faulkner Way and Buchan Avenue convey flows away from the site. This is consistent with the Section 10.7 Planning Certificates obtained for the site which notes the site is not flood affected (Appendix BB).

2.17. Unexploded Ordnances

The proposed primary school site lies within the boundaries of the former Defence Ingleburn Military Area. The Ingleburn Military Area was a key Army training facility from its creation as an embarkation and training camp in 1939 until the last Army unit vacated it at the end of 2000. The activities conducted in the area related primarily to infantry training however other unit-types such as engineers, artillery, transport, signals, medical services, ordnance, and military police units were also located in the area at various times.

Training within the Ingleburn Military Area primarily focused on the use of personal weapons, pyrotechnics and infantry crew-served weapons. In addition, 'Live' Small Arms Ammunition (SAA) were used on the Ingleburn site and there is evidence that the HE hand-grenades and rifle-projected grenades may have also been used. CSG have undertaken an UXO Risk Assessment (Appendix Z) and assessed the risk for the site as being *Low as Reasonably Practicable*.

3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1. Overview

The DoE is seeking consent for a new core 35 primary school accommodating 1,012 students and a coldshell 40-place pre-school at the site. In summary, the works comprise:

- Bulk earthworks comprising fill and minor excavation and other site preparation works;
- Land use for the purpose of a new primary school and pre-school;
- Construction of new buildings including:
 - A three-storey building on the western portion of the site primarily addressing Faulkner Way. This building comprises 36 homebases, 4 SSU teaching spaces, staff room, administration office at the ground floor and library at the first floor and addressing the corner of Buchan Avenue and Faulkner Way, and student amenities;
 - A single storey coldshell pre-school building for educational programs for children the year before they commence kindergarten, accommodating 40 places. The pre-school building will be connected at the southern end of the abovementioned three storey school building; and
 - A single storey building in the eastern portion of the site comprising a communal hall, OOSH care facility, 8 homebases and a covered outdoor learning area.
- Landscaping and public domains works including tree planting, a sports court and various assembly, play and learning zones;
- A drop-off and pick-up zone in Buchan Avenue and Faulkner Way, and bus stop on the north of Buchan Avenue;
- An at-grade staff car park in the southern part of the site with ingress and egress provided off Faulkner Way at the south-west corner of the site;
- Primary pedestrian entrance from Buchan Avenue and an additional entrance on Faulkner Way for the ground floor support unit; and
- Other ancillary infrastructure and utilities works and digital signage.

Refer to the site plan in Figure 36.

Further to the above, we note:

- DoE will soon lodge an early works DA seeking consent for bulk earthworks, services reticulation, and site preparation. The purpose of submitting a concurrent early works DA is to enable works to commence on-site in advance of the main building works under the subject SSDA. This is critical to ensure the key milestones for this stimulus project at met. The scope of the early works does not pre-suppose the proposed primary school use but notwithstanding this, we note that the works directly align with those "early" site preparation works included in the subject SSDA. We note that this approach has been discussed with Council officers who have indicated their support for this approach.
- As noted earlier, this SSDA seeks consent for the land use and coldshell of the pre-school. DoE will lodge a separate local DA seeking consent for the detailed design, fitout and operation of the pre-school. It is anticipated that Council will be the future operator of the pre-school. There is ongoing consultation with the DoE and Council in this regard.



Figure 36: Extract of site plan (Source: TKD)

The following table provides an overview of the key components of the new primary school.

Table 6: Summary of the proposal description

Proposal element	Brief description
Site preparation	Importation of approximately 42,000m ² of clean fill. Fill to a maximum depth of four to five metres. One metre of excavation in the north-west corner of the site.
Built form	Three storey building running parallel to the western site boundary comprising: - Ground floor: administration, staff room, amenities, support unit - Level 1: special programs, library, amenities, homobases and coldshell pre-school - Level 2: special programs, homobases, amenities Single storey building parallel to the eastern site boundary comprising: - Out of hours school facility, hall, canteen and homobases
Site area	20,080m ²
Maximum height	RL78.865 at the roof pitch of the three-storey building adjacent to the western boundary.
Site uses	This SSDA seeks consent for an education establishment including: Primary school, including a SSU;

Proposal element	Brief description
	- Pre-school (coldshell building); and - Out of hours school facility.
Access	Primary pedestrian access will be provided from Buchan Avenue. Separate pedestrian access will be provided from Faulkner Way for the SSU. Vehicular access to the car park at the south of the site is proposed from the south-east corner of Faulkner Way.
Car parking	Car parking is proposed adjacent to the south site boundary. The car park comprises: - Staff car parking accommodating 35 spaces; and - Pre-school parking accommodating 13 spaces.
Public domain and landscaping	The landscape and public domain scheme involves: - Creation of legible entrances, being the main entrance, secondary/SSU entry and ramp access, pre-school entrance, vehicle entrance to car park and pre-school drop off zone, after-hours pedestrian access; - Amphitheatre and assembly area with canopy tree cover; - Covered outdoor learning area (COLA); - Organised play and gathering space with canopy tree over; - SSU outdoor space and sensory garden; - Active open recreational space; - Semi-terraced productive gardens; - Sports court; - Planting embankment; and - Various access paths through the site. It is noted that Landcom is responsible for the delivery of street trees and footpaths.
Jobs	Construction 350 construction jobs are anticipated from the project. Operation Full time equivalent teacher: 46 Executive staff: 7 School administrative and support staff: 6 Total: 59 staff members
Construction hours	Monday to Friday: 7.00am to 6.00pm Saturday: 8.00am to 1.00pm Sunday and Public Holidays: No work permitted
Primary school hours of operation	8.40am to 3.00pm.
Out of hours school facility operating hours	Monday to Friday 7.00am to 9.00am and 3.00pm to 6.00pm. Closed Saturday and Sunday.
Pre-school operating hours	Consent is not sought in this SSDA for the detailed design, and operation of the pre-school.

3.2. Design Intent

TKD has sought to create a new primary school which values the history of the site and provides a strong connection to country. The northern elevation comprises a legible and welcoming entry forecourt presenting to Buchan Avenue. This is accompanied by bicycle parking facilities and provides a place of gathering for social interaction. The placement of buildings parallel to the west and east boundaries creates a central core in the site and enhances the visual link to Clermont Park. This results in positive outcomes with respect to solar access. The materiality and design of the new buildings provide a positive street presence balanced by the introduction of landscaping, notably canopy cover which is currently absent from the site and much of the locality. The articulation of the façade with shading devices and an in-part recessed form breaks up the rectilinear mass as presented to Faulkner Way.

3.3. Built Form and Urban Design

3.3.1. External materials and finishes

The proposed materials and finishes for the new primary school comprise dark earthy tones and are shown in the following figure.

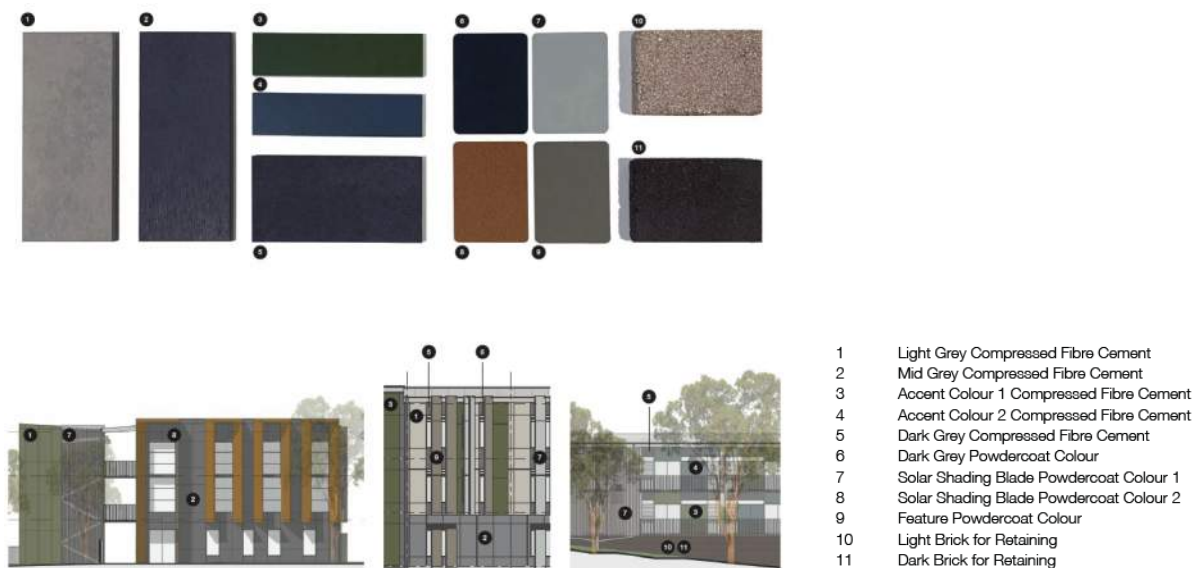


Figure 37: Extract of proposed materials and finishes (Source: TKD)

TKD has chosen the materials and finishes taking cues from the existing landscape surrounding the site, comprising a mix of low density residential development with complementary tones, the dense bushland on the south of the railway line, the Cumberland Plain Woodland in Clermont Park and materiality present within the Edmondson Park town centre. The finishes are compatible with the existing and desired future character of the locality. Other qualities of the materials include:

- Durability;
- Low levels of maintenance; and
- Cost effective and not requiring considerable expenditure on building enclosure at the expense of the core interior educational spaces.

3.3.2. Physical layout and internal design

The layout of building across the site is illustrated in Figure 38 below.

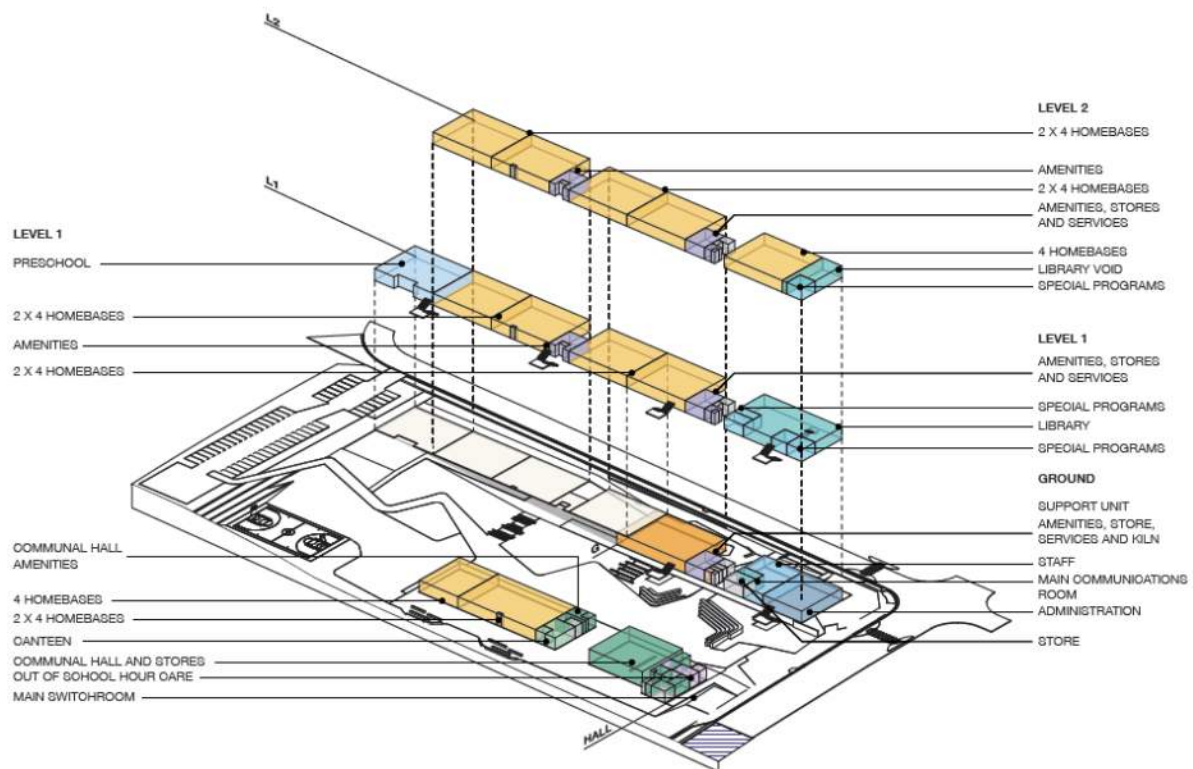


Figure 38: Extract of proposed design concept in 3D (Source: TKD)

TKD has sought to create a double-height library space at the corner of Buchan Avenue and Faulkner Way. The placement of this facility ensures it is visible from the public domain, lending to its potential community use out of school term. The SSU benefits from a secondary access point from Faulkner Way. The layout of buildings on the site has created a central through site link providing a line of sight to Clermont Park to the north and from Faulkner Way toward the COLA. The rear of the site benefits from primarily landscape, play and outdoor learning areas for students. These spaces are safety separated from the staff car park by fencing.

The design seeks to create high-quality Core-35 internal learning spaces. The provision of 2.7 metre floor to ceiling heights maximise solar access and ventilation opportunities. The grouping of homebases is practical in that year groups may be classed within proximity of one another.

3.3.3. Building Code of Australia

Group DLA reviewed the proposal in the context of the NCC Building Code of Australia (BCA) 2019 - Amendment One and the design documentation accompanying this EIS. The assessment is documented in the BCA Report in Appendix Q. The proposed buildings are classified as Class 9b (school) and Office 5. Type of construction is Type A with an effective height of less than 12 metres. The proposal has a BCA importance level of Level 3 as the buildings have more than 250 students. Group GLA confirms the proposed design is capable of complying with the relevant provisions of the BCA subject to:

- Compliance with any condition of development consent; and
- Certification of the installation of nominated fire safety systems.

3.3.4. Signage

TKD has prepared an Indicative Signage Strategy in Appendix B. The strategy comprises:

- Two school identification signs - one on north-west area of Faulkner Way frontage and the other on the south-west area of the Faulkner Way frontage;
- An electronic school sign on the north-west area of the Buchan Avenue frontage; and
- Several wayfinding signs throughout the school grounds providing direction to the administration, library, hall, SSU, OOSH, canteen, amenities and staffroom.

Refer to the following figure. It is to be noted, the pre-school identification sign will be subject of separate approval.

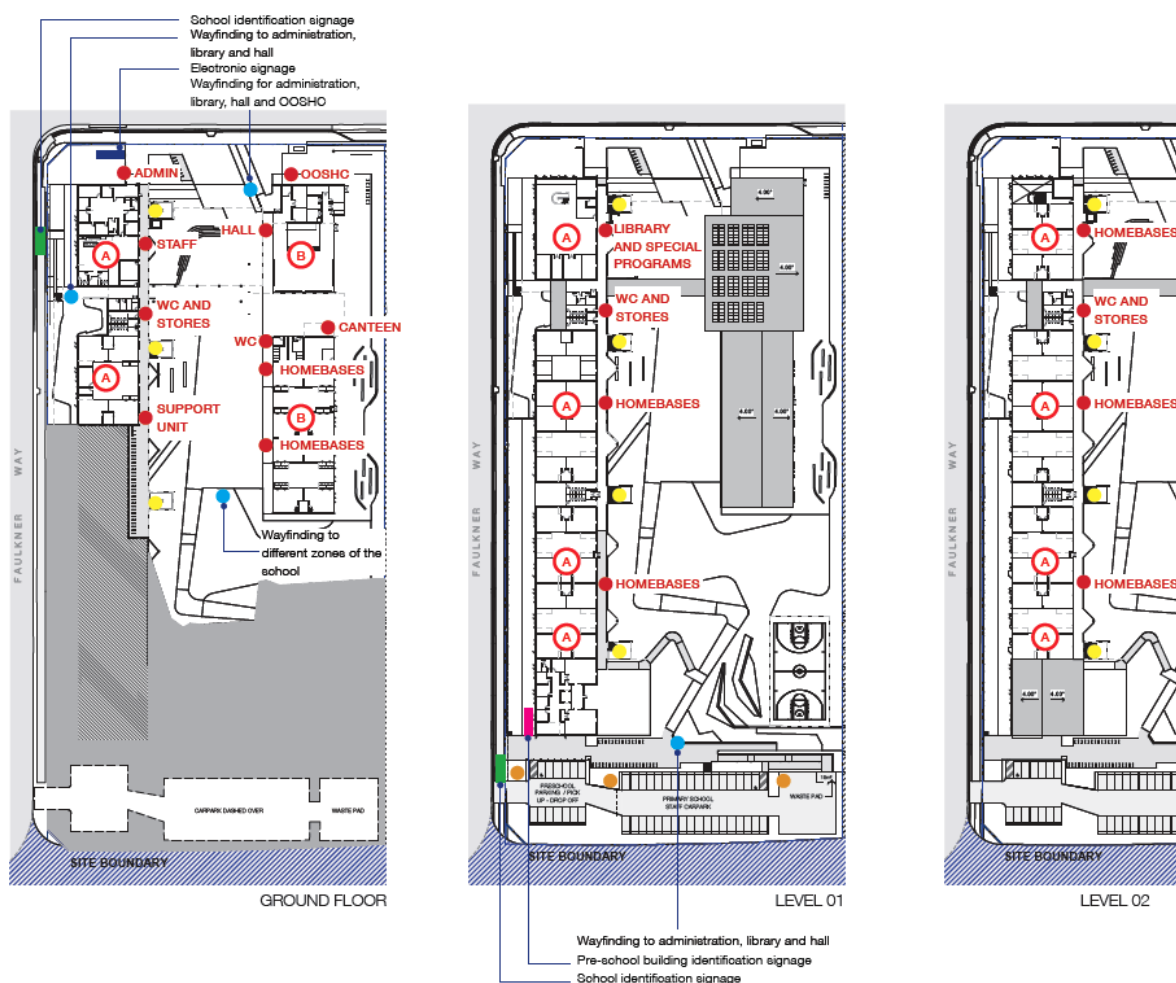


Figure 39: Extract of the indicative signage strategy (Source: TKD)

The electronic school sign on Buchan Avenue is anticipated to comprise:

- The school name (once determined);

- 1.04m wide x 1.68m high digital sign, with non-flashing illumination at lux level; and
- School motto, logo or contact details (subject to technical input).



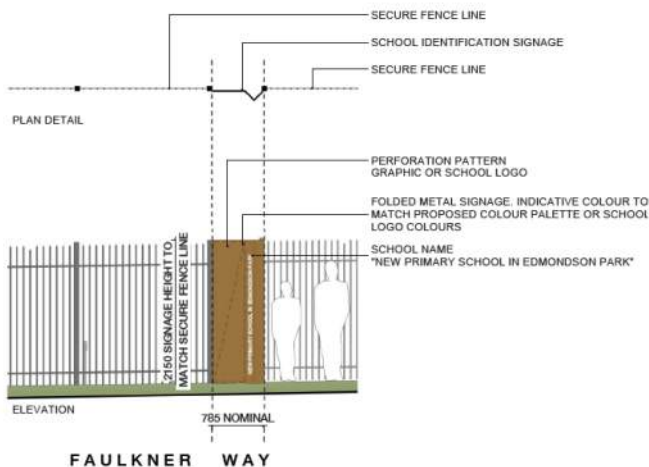
EXAMPLE OF ELECTRONIC SCHOOL SIGNAGE ON BUCHAN AVENUE

Signage is indicatively only and subject to change following final project stakeholder review and endorsement

Figure 40: Indicative signage Buchan Avenue (Source: TKD)

The school identification sign on Faulkner Way is anticipated to comprise:

- The school name (once determined) in folded metal; and
- Perforated graphic or school logo.



EXAMPLE OF SCHOOL IDENTIFICATION SIGNAGE ON FAULKNER WAY

Signage is indicatively only and subject to change following final project stakeholder review and endorsement

Figure 41: Indicative signage Faulkner Way (Source: TKD)

3.3.5. Accessibility

IAccess Consultants has undertaken an access assessment in accordance with the Disability (Access to Premises) Standard 2020 and the relevant Australian Standards. The proposal is generally of a high

level of compliance, though a number of items require further clarification at the Crown Certificate stage of the project. Refer to Appendix P for detail.

3.4. Landscaping and Sports Facilities

3.4.1. Landscape Design Intent

Oculus has prepared the landscape design for the development. The landscape design is underpinned by seven key design principles as outlined in the following table.

Table 7: Landscape design principles

Design Principle	
Context, built form and landscape	- Consider Aboriginal cultural heritage and cultural plantings in design - Respond to the site's topography - Address the interface between community driven spaces and educational focused areas - Respond to surrounding new residential and commercial developments - Integrate transport including active pedestrian and cycling movement corridors - Enhance existing endemic species such as Cumberland Plain Woodland - Create a sense of identity through place-making and a strong community focused design
Sustainable, efficient and durable	- Develop a 'climate ready school' approach as part of a long term resilience strategy - Respond to site aspect and micro-climate particularly solar access, air quality and wind exposure - Integrated WSUD into the proposal - Select sustainable, robust and durable materials - Promote active and public transport access - Enhance biodiversity and reintroduce endemic species such as Cumberland Plain Woodland
Accessible and inclusive	- Provide school entries which are safe, accessible, visible and welcoming - Ensure good accessibility and legibility within the school - Create clear through site links within the school - Ensure pedestrian and cycle movement corridors accommodate and link to surrounding transport networks
Health and safety	- Respond to local access and connections - footpaths, cycleway, bus, pick-up and drop-off - Provide covered areas for protection from sun, rain and wind - Support a better quality of life for students and local community members - Sustain good mental and physical health - Provide secure community accessible areas outside of school hours
Amenity	- Provide adequate outdoor space to accommodate student population, including future growth - Ensure close interfaces between indoor and outdoor uses and spaces - Provide landscape buffers to setback zones - Implement areas for sociable activities which is inclusive of place-making



Figure 42: Extract of the proposed landscape plan (Source: Oculus)

3.4.2. Outdoor areas

The landscape design provides a variety of outdoor play areas which serve recreational, educational and social purposes.

- The amphitheatre will primarily serve as a place of assembly under the tree canopy;
- The outdoor classrooms and COLA at the eastern boundary are educational landscape spaces;
- The semi-terraced productive garden will be used to grow produce and educate students on sustainable habits;
- The active open recreational space will comprise mostly grass to enable free play;
- The SSU benefits from an outdoor space and sensory garden in proximity of the SSU; and
- The above outdoor play areas are connected by access paths and other various gathering spaces.

3.4.3. Sport facilities

The school provides a sport court in the south-east corner of the site. The court will be line marked to enable use for various sports such as basketball, netball, tennis and the like. The court surface will comprise coloured asphalt.

3.5. Site Access and Parking

3.5.1. Vehicular access

Vehicular access to the at-grade staff car park at the south of the site is proposed from the south-east corner of Faulkner Way. There is the opportunity to provide additional access from the south road once constructed by Landcom. This will provide an additional entry point for waste collection and servicing, though does not form part of this application at this stage. As discussed in detail in the Operational Waste Management Plan (OWMP) in Appendix W, the utilisation of the entry from Faulkner Way or the south road once constructed, will be contingent on the waste collection truck sizes.

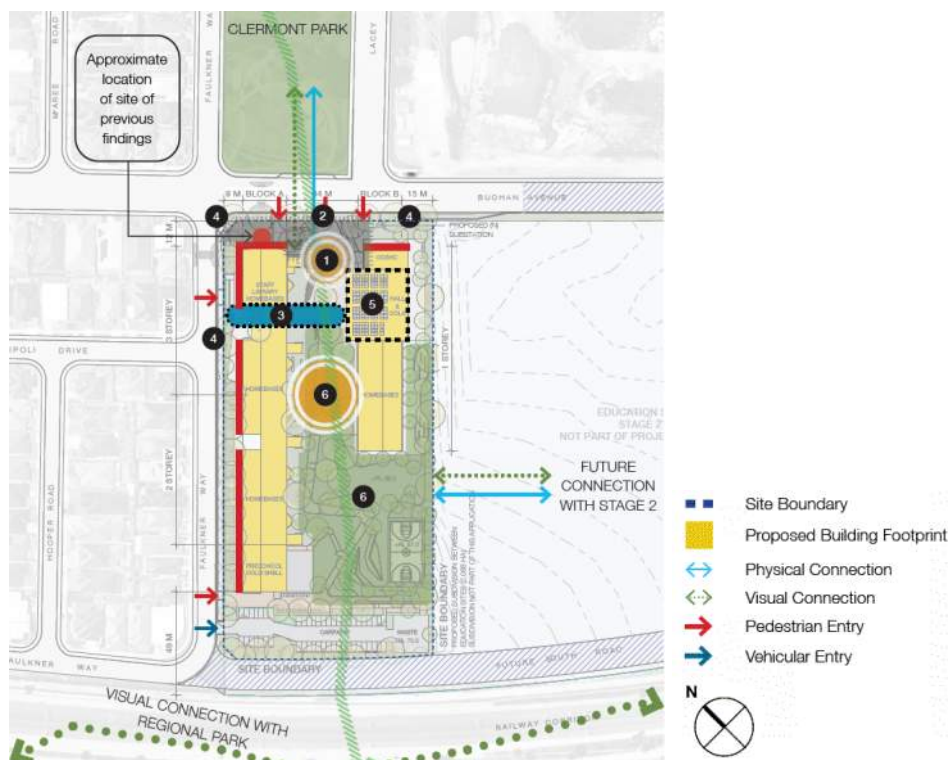


Figure 43: Extract of proposed vehicular and pedestrian access to the school (Source: TKD)

3.5.2. Student drop-off and pick-up arrangements

PTC has calculated that pick-ups and drop-offs represent 46% of travel mode by students. Based on this, a minimum 35 pick-up and drop-off spaces are required at any one time. The proposal provides a total of 39 pick-up and drop-off spaces:

- 10 on Buchan Avenue during pick-up and drop-off times; and
- 29 on Faulkner Way during pick-up and drop-off times.

The location of the pick-up and drop-off zones will be as follows.

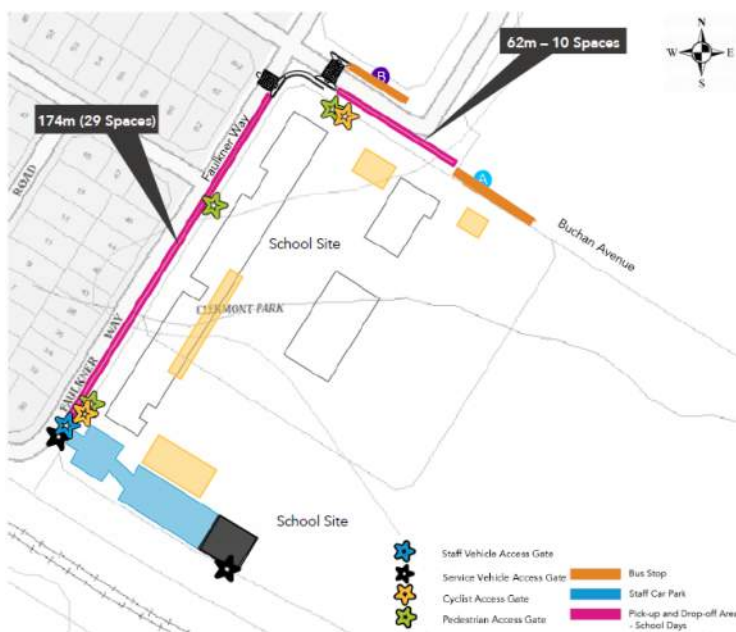


Figure 44: Extract of pick-up and drop-off locations (Source: PTC)

The pick-up and drop-off zones will be supported by appropriate signage to direct drivers to safely pick-up and drop-off students within the zones as demonstrated in Attachment 2 within the Traffic and Transport Assessment prepared by PTC Consultants (Appendix R).

3.5.3. Pedestrian access

Pedestrian access points to the new primary school and associated facilities are illustrated on the Architectural Plans prepared by TKD dated 31 May 2021. The proposed accessibility includes:

- Primary pedestrian access to the new primary school provided from Buchan Avenue;
- Access to the OOSH is provided from this same entry point;
- The SSU benefits from secondary pedestrian access on Faulkner Way; and
- The pre-school access at the south-west portion of the Faulkner Way frontage.

3.5.4. Public transport

Landcom is currently constructing a bus stop on the southern side of Buchan Avenue to the north-east of the site. The DoE will deliver an additional bus stop on the northern side of Buchan Avenue. The proposed location is shown in orange adjacent to Clermont Park in Figure 44. PTC identifies that the

bus stops will be utilised by students residing outside of the walking and cycling catchment and by parents for their onward journey to work.

The public transport mode share target is 17%, representing 170 students. Bus times are being coordinated with the future bus operator to be aligned with pick-up and drop-off times and parents' journey to work time.

To provide safe access to the northern bus stop on Buchan Avenue, the DoE will provide two zebra crossings across Buchan Avenue to the northern bus stop and across Faulkner Way.

3.5.5. Car parking

The proposal provides 35-onsite car parking spaces for staff within the at-grade car park at the south of the site. In addition, 13 on-grade spaces are provided for the coldshell pre-school.

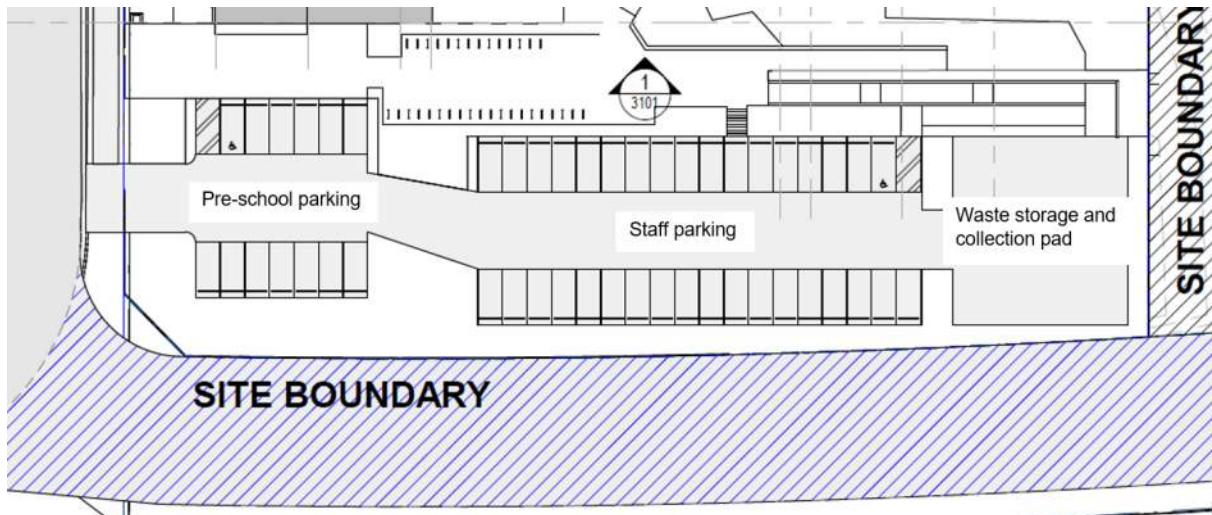


Figure 45: Proposed car parking (Source: TKD, annotated by City Plan)

3.5.6. Bicycle parking

The proposal provides 158 bicycle parking spaces and 24 scooter spaces for students and visitors, and an additional 6 bicycle spaces for staff. These are accommodated in the locations shown in the following image.

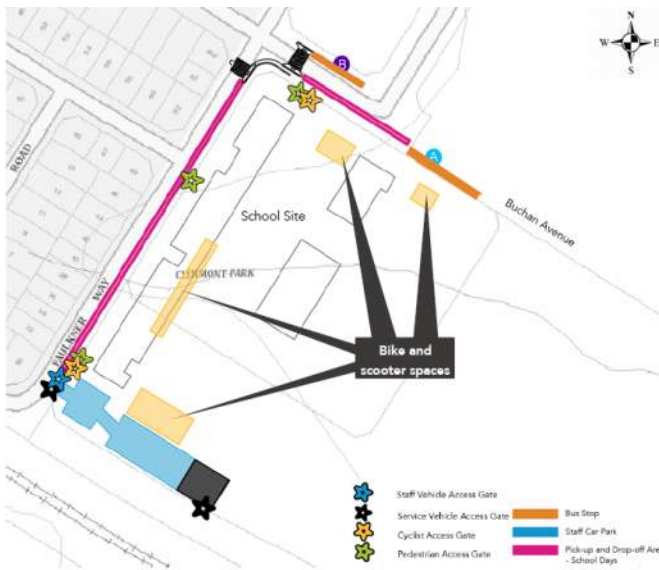


Figure 46: Location of bicycle parking shaded orange (Source: PTC Consultants)

Access to the bicycle and scooter parking at the north of the site is provided via the Buchan Avenue school entrance. Access to parking on the inner façade of the western building is provided from either the secondary entrance on Faulkner Way or the pre-school entrance. Bicycle parking adjacent to the car park at the south of the site is from the carpark and pre-school entrance.

3.5.7. Waste servicing

The proposal comprises a waste storage and collection pad within the south-east corner of the site in the at-grade car park. The total area required is estimated at 17.4m². The proposal provides an 18m² waste pad area. Refer to the Figure 45 above.

3.6. Stormwater

Landcom is responsible for the delivery of the regional stormwater infrastructure in the precinct. It is noted that not all regional stormwater infrastructure has been constructed yet. The proposed primary school relies on the stormwater infrastructure in Buchan Avenue as discussed below. Based on consultation with Landcom, on-site stormwater detention is not required for the proposal, as it is part of the regional stormwater detention strategy downstream of the site.

The construction of Buchan Avenue is underway by Landcom and is programmed for completion August 2021. The plans indicate a new stormwater connection for the school at the north-east corner on Buchan Avenue, which drains into the creek. Landcom has advised that the legal point of discharge is sized to cater for flows generated from the new primary school for the 1 in 100yr ARI storm event in a combination of pit and pipe network. Accordingly, Northrop has prepared a stormwater management plan which directs all flow to the connection point in Buchan Avenue. This involves:

- Site pit and pipe network to discharge to the existing infrastructure in Buchan Avenue;
- Provision of indicative pit and pipe network for the site;
- Portion of the roof catchment from the buildings is to drain directly into the rainwater harvesting tank for the 1:100 year storm event which then overflows to the piped network; and
- Paved areas to be collected within grated pits and drains.

Refer to Appendix J for detailed Stormwater Plans.

Proposed stormwater quality management includes:

- A 20kL rainwater tank;
- Filtration cartridges in the form of Stormfilter as end of line treatment device to treat stormwater runoff; and
- Surface inlet pits and ocean guard pit inserts including oil absorbent media. The pit inserts will sit beneath the stormwater pit grates and collect gross pollutants and larger sediment prior to treatment by Stormfilter cartridges;

3.7. Sediment and Erosion Control

The concept sediment and erosion control plan prepared by Northrop for the proposal is shown below and is included as part of the Civil Report at Appendix J.

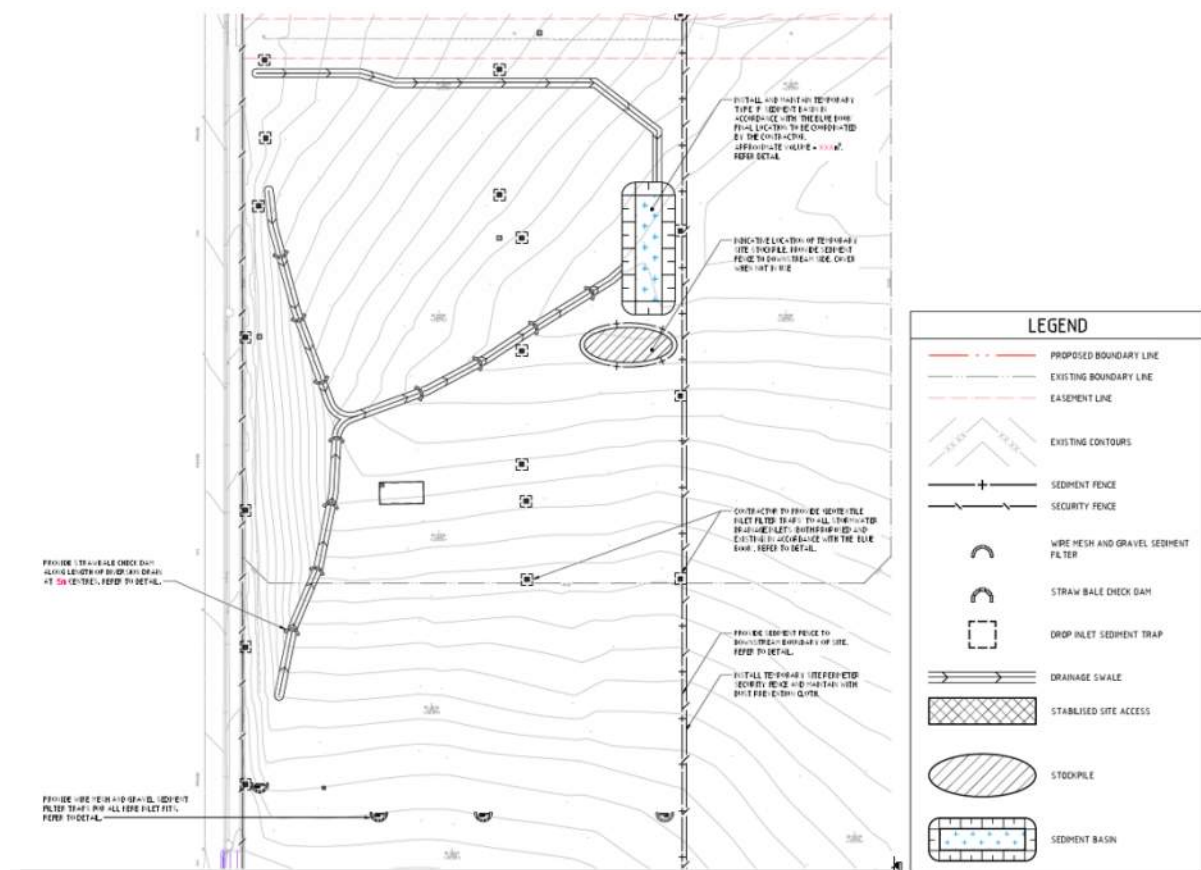


Figure 47: Extract of concept sediment and erosion control plan (Source: Northrop)

3.8. Earthworks

To accommodate the proposed new primary school, 831m³ of cut and 42,865m³ of fill are required. This is a balance of 42,034m³ of imported fill.

Northrop note in Appendix J the construction sequencing to entail:

Provision of site establishment erosion and sediment control measures;

Spread topsoil to a maximum depth of 2000mm and hydroseed and hydro mulch disturbed areas.

Telecommunication Services

The school will be connected to NBN on Faulkner Way. A main communication room is proposed to be located at ground floor of the northern portion of the western building as shown in the below figure.

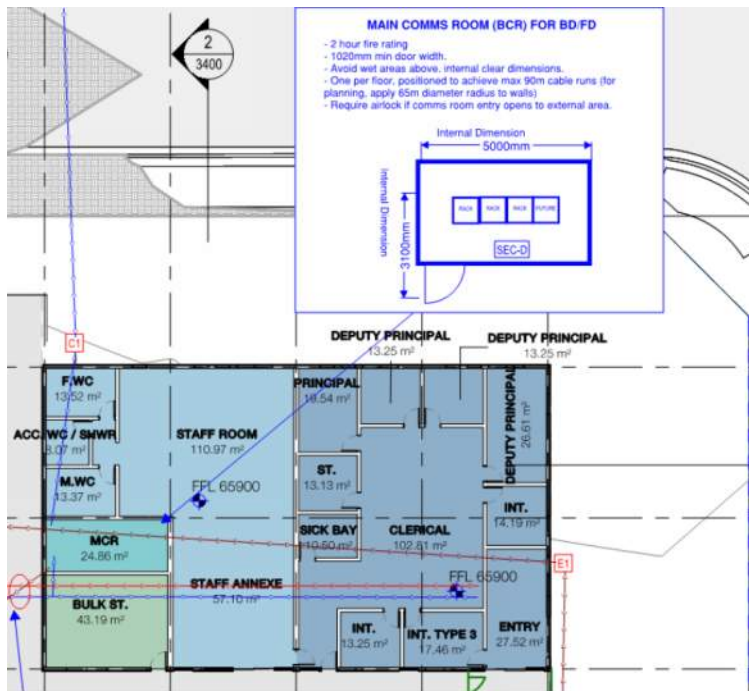


Figure 49: Extract of proposed main communication room (Source: JHA)

Hydraulic Services

The site is surrounded by three existing/proposed sewerage infrastructure points for possible connection as illustrated in Appendix N. The proposal seeks to extend SP3 to the north-east of Lot 2 into the primary school site as shown below. It is anticipated to propose a 225mm sewer. This is subject to approval from Sydney Water.

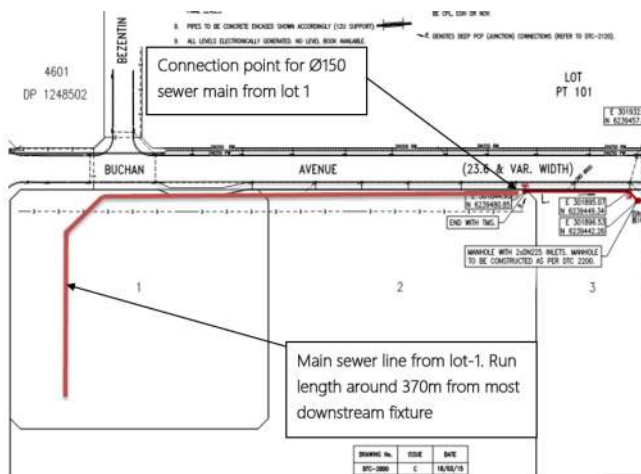


Figure 50: Extract of proposed sewer connection point (Source: JHA)

In relation to portable/recycled water JHA has applied for pressure and flow information for the water services from Sydney Water and is awaiting results, although there are multiple points for connection on Faulkner Way and Buchan Avenue. The proposed domestic cold water connection lines to the proposal are illustrated below and documented in the Infrastructure Management Plan at Appendix N.

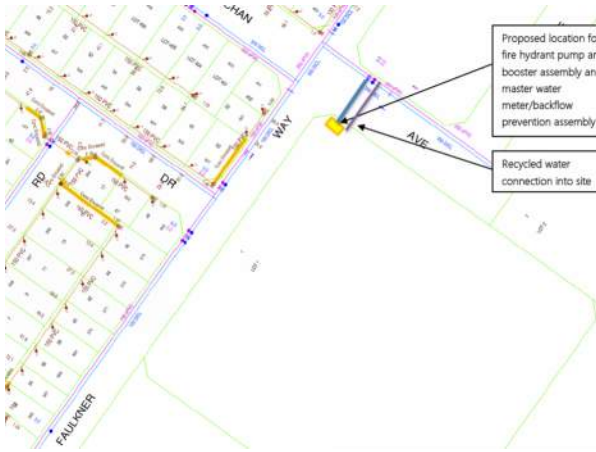


Figure 51: Extract of portable water connection (Source: JHA)

The site has frontage to three natural gas mains. The existing 110mm pipeline located in Buchan Avenue is envisaged to be of sufficient capacity to service the new primary school.

3.10. Construction Program and Hours

Construction is anticipated to commence in late 2021 and to be completed by the end of 2022, with the school operational day 1 term 1 2023. The key milestones of the construction program include:

- Stage 1: Bulk earthworks, retaining walls and footings - 4 months
- Stage 1: Building installation - 5 months
- Stage 3: Landscaping - 3 months

Construction of the proposal will be undertaken during the following standard hours:

- Monday to Friday: 7.00am to 6.00pm
- Saturday: 8.00am to 1.00pm
- Sunday and Public Holidays: No work permitted

350 construction jobs will be generated from the project.

A portion of Lot 2 to the east of the primary school is proposed to accommodate entry and exit of delivery vehicles during construction. The area outside the extent of the primary school in Lot 1 will accommodate amenities, site compound, temporary batter works and materials handling area. Refer to the following figure.

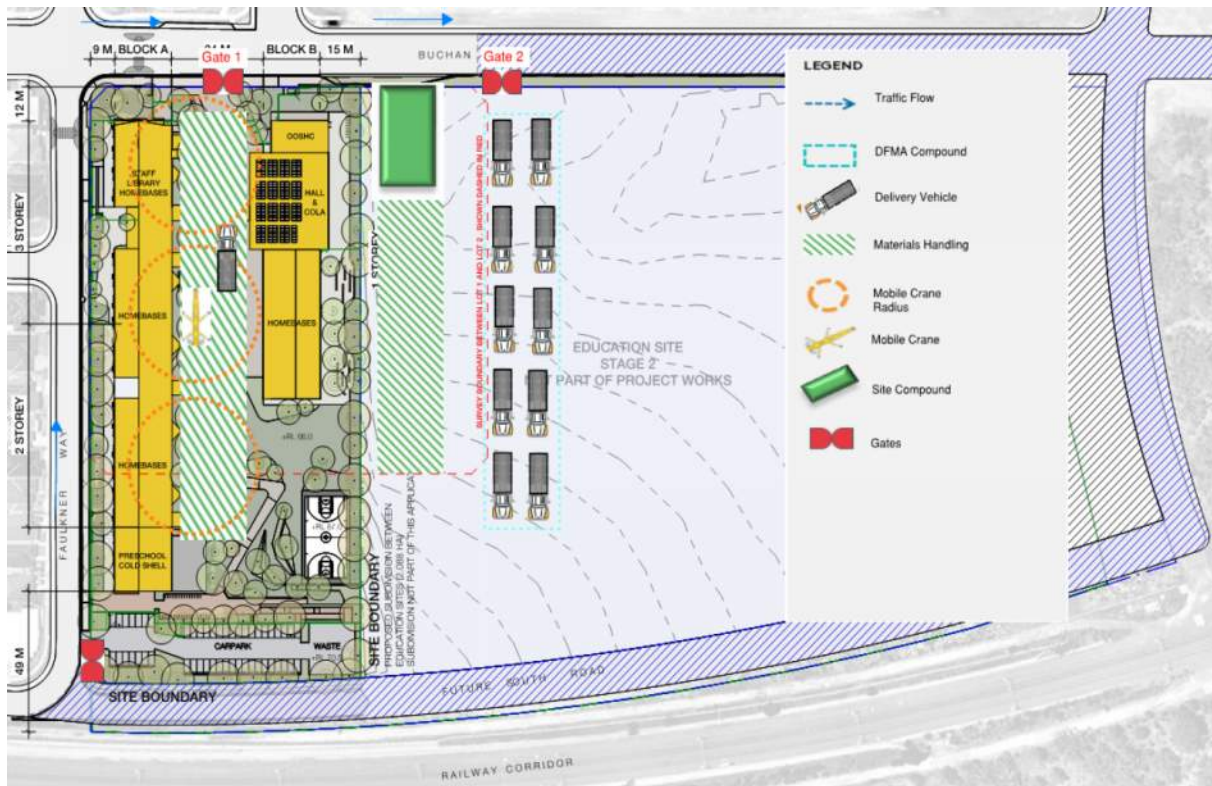


Figure 52: Extract of the construction methodology (Source: RCC)

3.11. Operation

3.11.1. Staff

The proposed staff numbers are as follows.

Table 8: Staff numbers

Staff	
Full time equivalent teacher	46
Executive staff	7
School administrative and support staff	6
Total	59

3.11.2. Students

This SSDA seeks consent for 1,012 student primary school.

3.11.3. Hours of Operation

Operation of the new primary school in Edmondson Park will commence early 2023. The operating hours of the primary school will be 8.40am to 3.00pm

The operating hours of the OOSH are proposed to be:

- Monday to Friday 7.00am to 9.00am and 3.00pm to 6.00pm.
- Closed Saturday and Sunday.

The operating hours of the pre-school will be subject of separate development consent.

The library and hall will be available for community use outside of school term. This will occur 9.00am to 5.00pm.

4. STRATEGIC PLANNING CONTEXT

In accordance with the SEAR's, the following strategic planning policies have been considered in the assessment of the proposal:

- NSW State Priorities
- State Infrastructure Strategy 2018 – 2038 Building the Momentum
- Future Transport Strategy 2056
- Crime Prevention through Environmental Design (CPTED) Principles
- Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GANSW), 2017)
- Healthy Urban Development Checklist (NSW Health, 2009)
- Draft Greener Places Design Guide (GANSW)
- The Greater Sydney Region Plan - A Metropolis of Three Cities
- Sydney's Cycling Future 2013
- Sydney's Walking Future 2013
- Sydney's Bus Future 2013
- Western City District Plan
- Liverpool Development Control Plan 2008
- Connected Liverpool 2040' Local Strategic Planning Statement
- Draft Cumberland Plain Conservation Plan

The relevant strategies, policies and guidelines as set out in the SEARs are addressed in the below table.

Table 9: Strategic plans relevant to the proposed development

Instrument/Strategy		Comments
NSW	State	NSW State Priorities is the State Government's plan to guide policy and decision making across NSW. The new primary school is consistent with the key objectives contained within the plan including: ▪ <i>Lifting Education Standards: Increase the proportion of NSW students in the top two NAPLAN bands by 15% by 2023.</i> The proposal will contain high quality facilities, spaces and equipment for use by students and staff. This will provide students with learning difficulties with greater opportunities to learn and improve their numeracy and literacy skills. ▪ <i>Lifting Education Standards: Increase the number of Aboriginal students attaining year 12 by 50% by 2023, while maintaining their identity.</i> The new primary school will provide new learning facilities in the Edmondson Park community. The school community will encourage the attainment of year 12 and seek to create an environment which respects and shares Aboriginal identity. ▪ <i>Better Environment: Increase the tree canopy and green cover across Greater Sydney by planting one million trees by 2022.</i> The site is currently devoid of trees. As described in Section 2 of this SEE, Clermont Park contains remnant Cumberland Plain Woodland. The SSDA provides 40% tree canopy cover across the site, making a positive contribution to increasing green cover across Greater Sydney. Overall, it is considered that the proposal is consistent with the goal and objectives set out within the NSW State Priorities.
Priorities		

Instrument/Strategy	Comments								
State Infrastructure Strategy 2018 – 2038 Building the Momentum	The proposal is consistent with the State Infrastructure Strategy by: ▪ Delivering school infrastructure to keep pace with catchment demand; ▪ Providing modern, digitally enabled learning spaces; and ▪ Delivering a new stimulus primary school efficiently for the growing community.								
Future Transport Strategy 2056	Future Transport 2056 is an update of NSW's Long-Term Transport Master Plan which seeks to promote use of public transport as an effective travel option. The site benefits from being located: ▪ Near future cycleways and bicycle friendly roads; ▪ Within an area that will shortly be serviced by buses and Edmondson Park Station, following the completion of Buchan Avenue; and ▪ Within a recently established residential neighbourhood containing footpaths; to encourage walking. Therefore, future staff and students will be able to easily cycle, walk or utilise public transport to access the primary school. In turn, reducing reliance on private vehicles, decrease traffic congestion and promote sustainable outcomes. PTC has prepared a School Travel Plan which promotes active transport strategies.								
Crime Prevention Through Environmental Design (CPTED) Principles	The proposal implements the principles of CPTED as identified in the Crime Prevention and Assessment of Development Applications (2001), as demonstrated in the following table. <table border="1"> <thead> <tr> <th>Principle</th><th>Comment</th></tr> </thead> <tbody> <tr> <td>Access control</td><td> ▪ The proposal provides clear circulation paths and creates multiple through site links which are visible from the street frontages; ▪ Physical barriers such as fencing and walls delineate school and public spaces; ▪ The site planning presents a clear hierarchy of public to private space; ▪ Vehicular access to the car park will be limited to staff and pre-school drop-off and pick-up; ▪ External and internal wayfinding signage and after-hours lighting will assist in access legibility and pathways; and ▪ Access to the pre-school will be separated from the primary school play areas. </td></tr> <tr> <td>Surveillance</td><td> ▪ Clear sightlines have been provided to public spaces; ▪ The site planning provides opportunities for passive surveillance of play areas by staff; ▪ The buildings have been designed to minimise hidden spaces; and ▪ Internal and external pathways and circulation areas are wide and open and constrained corridors minimised. </td></tr> <tr> <td>Territorial reinforcement</td><td> ▪ The visible location of the main entrance gate and forecourt provide an informal gathering space for the school community. Wayfinding will be implemented concurrently to guide students, staff and visitors as required; and </td></tr> </tbody> </table>	Principle	Comment	Access control	▪ The proposal provides clear circulation paths and creates multiple through site links which are visible from the street frontages; ▪ Physical barriers such as fencing and walls delineate school and public spaces; ▪ The site planning presents a clear hierarchy of public to private space; ▪ Vehicular access to the car park will be limited to staff and pre-school drop-off and pick-up; ▪ External and internal wayfinding signage and after-hours lighting will assist in access legibility and pathways; and ▪ Access to the pre-school will be separated from the primary school play areas.	Surveillance	▪ Clear sightlines have been provided to public spaces; ▪ The site planning provides opportunities for passive surveillance of play areas by staff; ▪ The buildings have been designed to minimise hidden spaces; and ▪ Internal and external pathways and circulation areas are wide and open and constrained corridors minimised.	Territorial reinforcement	▪ The visible location of the main entrance gate and forecourt provide an informal gathering space for the school community. Wayfinding will be implemented concurrently to guide students, staff and visitors as required; and
Principle	Comment								
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Instrument/Strategy	Comments
	The central courtyard connects the west and east of the school and leads to the outdoor play areas at the rear of the site.
	Space management - Materials, furniture and fittings will have an emphasis on reducing vandalism to assist in space management; - The school will implement operational policies to strongly discourage damage, graffiti and the like; and - Should the grounds be damaged, maintenance staff will attend to the matter promptly.
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	The objectives of Better Placed have been considered and responded to in the proposed design. The Architectural Design Report in Appendix B outlines how each of the following objectives are addressed: - Objective 1: Better fit contextual, local and of its place - Objective 2: Better performance sustainable, adaptable and durable - Objective 3: Better for community inclusive, connected and diverse - Objective 4: Better for people safe, comfortable and liveable - Objective 5: Better working functional, efficient and fit for purpose - Objective 6: Better value creating and adding value - Objective 7: Better look and feel engaging, inviting and attractive
Healthy Urban Development Checklist (NSW Health, 2009)	The Healthy Urban Development Checklist 2009 was updated in 2020 by the NSW Ministry of Health. It seeks to encourage built environments to be created in NSW which are sustainable and promote healthy habits. The proposal satisfies a range of items within the checklist, including: - Encourage incidental physical activity; - Promote opportunities for walking, cycling and other forms of active transport; - Promote access to quality open spaces, including green space and recreational facilities; - Reduce car dependency and encourage active transport; - Improve the location of jobs in terms of housing and community options; - Consider crime prevention and a sense of security; - Promote quality streetscape that encourage activity; - Engender a sense of cultural identity, sense of place and incorporate public art; - Provide access to a range of facilities to attract and support a diverse population; and - Provide environments that will encourage social interaction and connection. The proposal aids in promoting a healthy and sustainable built environment.
Draft Greener Places Design Guide (GANSW)	The Draft Greener Places Design Guide prepared by GANSW establishes a framework to design, plan and implement green infrastructure in urban areas within NSW. The proposal is consistent with the objectives of the guideline, including: Providing high quality open space within the school site in various forms such as the amphitheatre, COLA, outdoor classrooms, productive gardens, active open recreation space, SSU recreation space and other gathering spaces. These spaces serve a variety of purposes including encouraging social

Instrument/Strategy	Comments
	interaction, facilitating learning opportunities in the outdoors, encouraging both purposeful and incidental physical activity; Significantly increasing the tree canopy at the site to provide shade and shelter, improve air quality, absorb carbon and rainfall, contribute to the cooling of the local environment and support wildlife. The landscape proposal seeks to create a visual connection with the vegetation present in Clermont Park and on the south of the railway line. The proposal on a small scale contributes to the creation of greener places.
The Greater Sydney regional Plan; A Metropolis of Three Cities	A Metropolis of Three Cities - the Greater Sydney Region Plan (GSRP) was released in March 2018. The GSRP encompasses a global metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. It is envisioned that people of Greater Sydney will live within 30 minutes of their jobs, education and health facilities, services and great places. The following key directions are relevant to the proposal: 'A city supported by infrastructure' Providing adequate infrastructure to support population growth is essential to creating strong communities. In accordance with the GSRP, this SSDA will ensure that a new public school can be delivered to meet Sydney's growing educational needs, particularly in rapidly growing locality such as Edmondson Park. The proposal will take enrolment pressure off other schools in the locality and provide a new high-quality educational offering to service the future population of the catchment area. 'A city for people' The proposal will deliver a sustainable, well-designed school that promotes the use of public and active transport for students, staff and parents/caretakers. The development makes a valued contribution to the economic growth of Edmondson Park and provides learning opportunities for students and employment opportunities for staff. The architectural and landscape designs seek to embrace the surrounding natural environment and history of the area and create unique and well-considered play spaces and learning environments across the site. Objective 1: Infrastructure supports the three cities Schools are essential local infrastructure. The proposal will deliver a vital piece of educational infrastructure in Western Sydney that will service the emerging community of Edmondson Park. Objective 2: Infrastructure aligns with forecast growth – growth infrastructure compact Edmondson Park is a rapidly growing residential suburb, and the surrounding area is forecast to experience significant residential and employment growth. Accordingly, the new school will provide educational services that seek to accommodate the growing student population. The new school will provide contemporary facilities to meet future educational standards and provide increased jobs and growth for Edmondson Park. Objective 3: Infrastructure adapts to meet future needs The DoE estimates that by 2031, an additional 269,000 new students will require access to government and non-government schools. The proposed new school has been designed to be adaptable to meet the future needs of the community. The new school provides an innovative contemporary design, flexible learning spaces and a more efficient use of land that will be essential in responding to growth and changing demands.

Instrument/Strategy	Comments
	▪ <i>Objective 7 Communities are healthy, resilient and socially connected</i> The new school will facilitate a more socially connected community and help to create and support an inclusive and vibrant neighbourhood. The site is situated in the heart of an emerging walkable neighbourhood and will increase opportunities for students and staff to walk and cycle to school, resulting in a school that is well connected with its surrounding community. The proposal also includes a range of open spaces, playgrounds and sports facilities to encourage active and passive recreation. ▪ <i>Objective 14: A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities</i> The proposal enhances connections to safe walking and cycling links to the new school and encourages young people to be more active. The site is close to bike paths, established residential neighbourhoods and future bus routes. Future employees and students will be encouraged to access the site via public transport, cycling or walking through the implementation of the School Transport Plan. This will reduce reliance on cars, decrease road congestion and generally create a healthy built environment.
Sydney's Cycling Future 2013	Sydney's Cycling Future (2013) seeks to make bicycle riding a feasible transport option within Sydney by encouraging use of bicycle networks. The proposal provides on-site bicycle parking and enhances connectivity to existing bicycle paths.
Sydney's Walking Future 2013	Sydney's Walking Future aims to promote walking as a means of effective transport within Sydney by encouraging investment in safe, permeable walking networks. The school is established within an emerging but effectively established residential neighbourhood. Students, teachers and parents/caretakers may easily access the site by walking. The traffic design attached in Appendix R illustrates the provision of two zebra crossings to facilitate easy and safe pedestrian access to the site.
Sydney's Bus Future 2013	Sydney's Bus Future (2013) outlines the NSW Government's long-term plan to deliver fast and reliable bus services within Sydney to meet current and future customer needs. The DoE will deliver a new bus stop on the north of Buchan Avenue adjacent to Clermont Park. This will operate concurrently with the bus stop being delivered on the south of Buchan Avenue. Buses serving the school will utilise Buchan Avenue.
Western City District Plan	The Western City District Plan supports the objectives of the GSRP and informs local planning. The Western City District Plan provides a series of priorities and actions to guide development and accommodate the expected growth across the district. The District Plan identifies: ▪ There will be a 43% growth in school-aged children to 2036 within the Western City District; ▪ The DoE estimates that an extra 77,978 students will need to be accommodated in both government and non-government schools in the District by 2036; and ▪ The largest growth in school-aged children with the District is expected in Camden (26,403), Liverpool (21,072), Campbelltown (13,541) and Penrith (11,008) LGAs. These figures clearly demonstrate the demand of school places which needs to be supported by planning for new school and innovation with the existing schools.

Instrument/Strategy	Comments
	The proposal achieves the objectives of the District Plan as a stimulus project which has been fast-tracked to meet the supply issue in the locality.
Liverpool Development Control Plan 2008	Section 5.11 of this EIS provides an assessment of the proposal against the applicable EPSDCP which is the applicable DCP for the site.
'Connected Liverpool 2040' Local Strategic Planning Statement	The proposal is consistent with the following priorities and actions of the Liverpool LSPS: ▪ Planning Priority 3: Accessible and connected suburbs ▪ Planning Priority 4: Liverpool is a leader in innovation and collaboration ▪ Planning priority 10: A world-class health, education, research and innovation precinct. We note: ▪ The development improves connectivity from nearby residential areas to the new primary and seeks to encourage use of public transport offerings for staff, students and parents/caretakers; ▪ Prior to lodgement of the SSDA, DoE has undertaken extensive consultation, to understand and duly consider in the design response the needs of the community and relevant agencies and stakeholders. This has been an ongoing collaborative process and will continue during the assessment of the SSDA; and ▪ The proposal will assist in improving Liverpool's standing as an education destination.
Draft Cumberland Plain Conservation Plan	The Draft Cumberland Plain Conservation Plan has been developed by the NSW Government to assist Western Sydney in meeting the future needs of the community while protecting threatened plants and animals in the long term. The draft mapping identifies part of the site as containing native vegetation being the Cumberland Plain Woodland. However, as previously noted in this EIS, the site is devoid of existing vegetation and is biodiversity certified pursuant to the <i>Threatened Species and Conservation Act 1995</i>.

5. STATUTORY PLANNING CONTEXT

5.1. Overview

This section considers all relevant Commonwealth, State and Local legislation which apply to the proposal.

5.2. Relevant Statutory Framework

The statutory framework considered in Section 5 of this EIS includes:

- EP&A Act
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Biodiversity Conservation Act 2016 (BC Act)
- SRD SEPP
- ESEPP
- Draft ESEPP
- State Environmental Planning Policy (Infrastructure 2007) (ISEPP)
- State Environmental Planning Policy No. 55 - Remediation of Land (SEPP55)
- Draft State Environmental Planning Policy (Remediation of Land)
- Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River (No. 2 1997)
- Draft State Environmental Planning Policy (Environment)
- State Environmental Planning Policy No.64 - Advertising and Signage
- Significant Precincts SEPP
- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- Draft State Environmental Planning Policy for Strategic Conservation Planning
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020
- Liverpool Local Environmental Plan 2008 (LLEP)
- Edmondson Park South Development Control Plan 2012 (EPSDCP)

5.3. Planning Approval Pathway

As detailed in Section 5.9.1 of this EIS, the development constitutes SSDA pursuant to Clause 15(1) of Schedule 1 of the SRD SEPP.

5.4. Permissibility

The site is zoned R1 General Residential pursuant to Significant Precincts SEPP 'Edmondson Park South'. The proposed school is defined as an *educational establishment* as follows:

educational establishment means a building or place used for education (including teaching), being—

(a) a school, or

(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.

Educational establishments are not prohibited in the R1 zone under the Significant Precincts SEPP. Therefore, by virtue of not being prohibited, the proposed school is permissible. Furthermore, Part 4 of the ESEPP contains specific development controls for schools. R1 General Residential is a prescribed zone in Clause 33 of the ESEPP. Pursuant to Clause 35(1) of the ESEPP, development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone.

In summary, the proposal is permissible with development consent in the land use zone.

5.5. Additional Approvals Required

Section 4.41 of the EP&A Act identifies multiple approvals that are not required for SSD, including:

- Permit under Section 201, 205 and 2019 of the *Fisheries Management Act* 1994
- Approval under Part 4 or an excavation permit under Section 139 of the *Heritage Act* 1977
- An aboriginal heritage impact permit under Section 90 of the *National Parks and Wildlife Act* 1974
- Bushfire Safety Authority under Section 100B of the *Rural Fires Act* 1997
- Approval under Section 89, 90 or 91 of the *Water Management Act* 2000

Pursuant to Clause 4.42 of the EP&A Act the following legislation must consistently be applied to SSDAs:

- Aquaculture permit under Section 144 of the *Fisheries Management Act* 1994
- Approval under Section 15 of the *Mine Subsidence Compensation Act* 1961
- Mining lease under the *Mining Act* 1992
- Production lease under the *Petroleum (Onshore) Act* 1991
- Environment protection license under Chapter 4 of the *Protection of the Environment Operations Act* 1997
- Consent under Section 138 of the *Roads Act* 1993
- A license under the *Pipelines Act* 1967

The proposal requires consent pursuant to Section 138 of the Roads Act 1993. In accordance with Section 138(3) of the Roads Act, TfNSW must consult with the applicant before deciding whether or not to grant consent or concurrence. TfNSW has been consulted through the Transport Working Group, refer to Section 6.2.4 of this EIS and the Traffic, Parking, Transport and Accessibility Report prepared by PTC in Appendix R.

5.6. EPBC Act

The EPBC Act is federal legislation which provides a legal framework to protect and manage nationally important flora, fauna, ecological communities and heritage places defined as 'matters of national environmental significance' (MNES). A referral must be made to the Australian Government Minister for the Environment for actions that are likely to have a significant impact on MNES. The site does not comprise MNES, therefore causes no impacts.

5.7. EP&A Act

5.7.1. Objects of the Act

The proposal is consistent with the objects of the EP&A Act, in particular:

- Promotes the social welfare of the community;

- Allows for the orderly and economic development of the land;
- Promotes sustainable management of the built and cultural heritage (including Aboriginal heritage);
- Promotes good design and amenity of the built environment; and
- Is development for a public purpose and provide community services.

The new primary school is consistent with Division 4.7 of the EP&A as:

- The proposal promotes education services and stimulates social welfare of the community; and
- The proposal has been evaluated and assessed against the relevant heads of consideration in Section 4.15(1) of the EP&A Act.

5.7.2. Ecologically Sustainable Design

An object of the EP&A Act is to facilitate ecologically sustainable development (ESD). ESD has the same meaning in section 6(2) of the *Protection of Environment Administration Act 1991*. The principles of ESD are required to be considered in the assessment of the proposal are:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms

The four ESD principles stipulated in the EP&A Regulation are incorporated in the proposal and will be implemented during the ongoing operation of the new primary school as follows:

- **The Precautionary Principle:** The proposal seeks to minimise impact on the environment particularly with regard to energy, water and materials. The incorporation of high performing external glazing and shading devices with energy efficient design measures together minimise severe and irreversible environmental damage;
- **Inter-Generational Equity:** The proposal will not cause significant impact on the health, diversity and productivity of the environment. The project will provide a positive community benefit and strengthen learning opportunities in the locality;
- **Conservation of Biological Diversity and Ecological Integrity:** As discussed in this EIS, the site is biodiversity certified, hence the biodiversity and ecological values of the land have been previously considered, assessed and resulted in certification. The proposal will not result in threats to endangered species, communities or their habitat; and
- **Improved Valuation, Pricing and Incentive Mechanisms:** The construction materials will be selected based on relative cost-benefit analysis on the whole life costs rather than capital expenditure only. Where possible, certified recycled and reused materials with low embodied energy will be utilised.

5.7.3. Concept Plan

Division 4.4 of the EP&A Act relates to concept DAs. As discussed in Section 2.6 of this EIS, the site is part of the Edmondson Park South Precinct. The Precinct is captured by concept plan MP10_0118 approved on 28 August 2011. The concept plan was subsequently reflected in the Significant Precincts SEPP.

Clause 4.24(2) of the EP&A Act states:

*(2) While any consent granted on the determination of a concept development application for a site remains in force, the determination of any further development application in respect of the site **cannot be inconsistent with the consent for the concept proposals** for the development of the site.*

The proposal is consistent with the outcomes of the concept plan as originally approved and proposed to the modified, being situated on the western portion of the approved 'school site'.

5.8. Biodiversity Conservation Act 2016

The BC Act is the key piece of legislation that identifies and protects threatened species, populations and ecological communities that are under threat of extinction in NSW. Impacts to threatened species and endangered ecological communities listed under the BC Act are required to be assessed in accordance with Section 7.3 of the BC Act and applicants must also consider whether their proposal will exceed the following Biodiversity Offset Scheme Development Thresholds:

1. Exceeding the clearing threshold on an area of native vegetation;
2. Carrying out development on land included in the Biodiversity Values Land Map; or
3. Having a 'significant effect' on threatened species or ecological communities.

Eco Logical Australia has undertaken a Biodiversity Assessment appended at Appendix G. The assessment confirms the site is 'subject land' according to Part 7 (Biocertification of the Sydney Region Growth Centres SEPP and related EPIs) of Schedule 7 of the *Threatened Species Conservation Act* 1995 (TSCA). The TSCA preceded the BC Act. Eco Logical Australia confirm:

- There is no further assessment of ecological impacts required on certified land;
- The site is not affected by any measures stipulated with the Order of Confer (NSW Government 2007);
- The site does not contain existing or protected vegetation and therefore does not need to be considered;
- An assessment of flora and fauna impact is not required due to the land certification in accordance with Section 8.4(2) of the BC Act.

Due to the biodiversity certification of the site, the development does not trigger the Biodiversity Offset Scheme Thresholds or require assessment of impacts in accordance with Section 7.3 of the BC Act.

5.9. State Environmental Planning Policies

The following section addresses the SEPPs which are applicable to the proposal.

5.9.1. State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP nominates certain types of development as either SSDs, state significant infrastructure or regionally significant developments. Clause 15(1) of Schedule 1 of SRD SEPP states:

(1) Development for the purpose of a new school (regardless of the capital investment value).

(2) Development that has a capital investment value of more than \$20 million for the purpose of alterations or additions to an existing school.

(3) Development for the purpose of a tertiary institution (within the meaning of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017), including associated research facilities, that has a capital investment value of more than \$30 million.

The new primary school in Edmondson Park meets the definition of SSD. The consent authority under Section 4.5 of the EP&A Act is the Minister for Planning and Public Spaces or their delegate.

The EP&A Act establishes the assessment framework for the proposal. Section 4.12(8) requires that a SSDA be accompanied by an EIS prepared by or on behalf of the applicant in the form prescribed by Schedule 2 of the EP&A Regulation.

5.9.2. State Environmental Planning Policy (Educational Establishment and Child Care Facilities) 2017

The aim of the ESEPP is to facilitate the effective delivery of educational establishments and early education and care facilities across the State. The ESEPP balances the need to deliver additional educational infrastructure with a focus on high-quality and sustainable design.

As outlined in Section 5.3 of this EIS, the site is zoned R1 General Residential. R1 is a prescribed zone under Clause 33 of the ESEPP. Clause 35(1) outlines development for a purpose of a school may be carried out by any person with development consent in a prescribed zone.

Pursuant to Clause 35(6) of the ESEPP, the following must be considered for the assessment of a school development permitted with consent:

- (a) the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and*
- (b) whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.*

Schedule 4 - Design Quality Principles

Schedule 4 of the ESEPP outlines the design quality principles that are to be considered for applications relating to schools. The proposal is consistent with these design principles are demonstrated in Table 10 below.

Table 10: Response to Schedule 4 of the ESEPP

Principles	Response
Principle 1—context, built form and landscape	The built form respects the low scale residential development emerging in the catchment. The proposal is considered an appropriate scale and incorporates pitched roof forms and shading devices to minimise visual impacts. The proposal enhances tree canopy provision from 0% to 40% and provides compatible colours and materials.
Principle 2—sustainable, efficient and durable	The proposal seeks to implement a variety of ESD measures, referred to in Appendix U. The development provides 350 construction jobs and 59 new staff. The new primary school will alleviate pressure on other existing schools in the area.
Principle 3—accessible and inclusive	The proposal is capable of complying with the provisions for accessibility as assessed by iAccess in Appendix P.

Principles	Response
Principle 4—health and safety	The new primary school provides a safe, inviting and diverse environment. CPTED principles have informed the design. The various landscaped areas create unique settings to encourage social interaction and physical activity.
Principle 5—amenity	The proposal provides a diversity of learning spaces including a SSU, internal and external spaces are interconnected, and the design creates a high level of amenity. The design is fit for purpose.
Principle 6—whole of life, flexible and adaptive	The new development has carefully considered site-wide strategic and spatial planning to ensure the future development of surrounding sites is not inhibited. The proposed buildings are flexible in design. As mentioned in Section 5.7.2 of this EIS, the construction material will be selected based on relative cost-benefit analysis on the whole life costs rather than capital expenditure only. Where possible, certified recycled and reused materials with low embodied energy will be utilised.
Principle 7—aesthetics	The new school provides a superior built form outcome which creates an engaging ground plane. The design seeks to enhance diverse landscape opportunities.

Traffic Generating Development

Clause 57 of the ESEPP stipulates development for the purposes of an educational establishment with 50 or more students, new premises and direct vehicular or pedestrian access to any road will be referred to TfNSW. TfNSW was consulted during the SEARs stage and in the preparation of the SSDA as part of the TWG. The Traffic, Parking, Transport and Pedestrian Assessment addresses the feedback provided by TfNSW during the TWG meetings. This is also summarised in Section 6 of this EIS and documented in detail in Appendix R. The SSDA will be referred to TfNSW during the assessment process in accordance with Clause 57 of the ESEPP.

5.9.3. Draft State Environmental Planning Policy (Educational Establishments and Childcare Facilities)

The DPIE issued an Explanation of Intended Effects outlining amendments to the ESEPP and the SRD SEPP in November 2020. These amendments have not been finalised and currently have no effect. Notwithstanding, notable amendments which relate to the proposal in the table below.

Table 11: Summary of proposed amendments to the ESEPP

Provision	Comment
Proposed changes to the ESEPP	
A change is proposed to include a requirement to consult with TfNSW.	Despite the proposed change, TfNSW was consulted in the TWG and will be during the SSDA assessment.
Proposed changes to the State and Regional Development SEPP	
Currently all new schools trigger SSD. It is proposed to amend Schedule 1 subclause 15(1) to introduce a CIV for new schools to be \$20 million. This will mean new schools with a CIV less than \$20 million will be assessed as local	The proposal has a CIV greater than \$20 million, therefore maintains the approval pathway of SSD.

Provision	Comment
development by local Council but determined by the relevant regional panel.	

5.9.4. State Environmental Planning Policy (Infrastructure) 2007

The aim of State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) is to facilitate the effective delivery of infrastructure across the State. Clause 87 of the ISEPP applies as the development is for the purpose of an education establishment on land that is adjacent to a rail corridor and may impacted by rail noise and vibration. Appendix M undertakes an assessment of the rail noise and vibration. JHA assess the ISEPP noise level criteria will be achieved with a typical façade and glazing, and the vibration levels from trains are acceptable.

5.9.4.1. Transport Asset Standard External Developments T HR CI 12080 ST

The site is adjacent to the SWRL, though will (in the future) be separated by the southern road being delivered by Landcom. Notwithstanding, the Transport Asset Standard External Development T HR CI 12080 ST is a consideration for this SSDA. The document details the technical requirements for the interface with external development adjacent to a rail corridor and is to be applied to new development. The following table demonstrates consistency with the relevant standards as they apply to the site.

Table 12: Consistency with Transport Asset Standard External Developments T HR CI 12080 ST

Standards	Response
5 General Requirements	
5.1. Specific corridors	Not applicable.
5.2 Temporary components	Not applicable.
5.3 Ground anchors	Not applicable.
6 Design Requirements	
6.1 Boundary definition	The site boundaries are clearly defined in Appendix B.
6.2 Geotechnical and structural stability and integrity	Appendix I confirms the proposal will not affect the stability or integrity of the railway line.
6.3 Foundations within the rail corridor	Not applicable.
6.4 Noise and Vibration	Appendix M considers the effects of noise and vibration from the SWRL onto the site.
6.5 Stray currents and electrolysis from rail operations	Corrosion Control Engineering (CCE) conducted Electrolysis Testing and have documented the results in Appendix EE. CCE note the present stray traction current effects at the site may present a minor corrosion hazard to on-ground and in-ground metallic structures and they will most certainly change with time and could become a higher corrosion hazard. To mitigate long term stray current corrosion the following mitigation measures are recommended: Installation of heavy plastic membrane under (or behind) all reinforced concrete slabs, permanent retaining walls, permanent anchors, pier/piles and metallic posts/bollards to electrically isolate from soil

Standards	Response
	and stray current. Noting a polyethylene membrane is proposed by Northrop (Appendix J); and ▪ The use of plastic, rather than metallic, in-ground pipework and tanks where possible.
6.6 Stormwater drainage and sewerage	Northrop have prepared a Civil Report and Plans in Appendix J and demonstrates stormwater does not discharge onto the rail corridor.
6.7 Electrical clearances	Not applicable as the development is located 49 metres from the rail corridor, exceeding the Australian Standards.
6.8 Environmental conditions	The proposal does not increase environmental risk of the rail corridor.
6.9 Lighting and reflective materials	JHA Services have prepared a Lighting Strategy in Appendix DD. It guides lighting for the new primary and ensures no adverse impacts on the rail corridor.
6.10 Boundary fencing	Not applicable as the development will be separated by the rail corridor by the south road to be delivered by Landcom.
6.11 Building setbacks and design	Not applicable as the development will be separated by the rail corridor by the south road to be delivered by Landcom.
6.12 Derailment protection of structures	Not applicable.
6.13 Maintenance of the development	Future maintenance of the school site will not adversely affect the railway infrastructure or operations.
6.14 Communications and signalling	Not applicable as the proposal is sufficiently separated being 49 metres away.
7 Construction Requirements	
7.1 Demolition and earthworks	The proposed excavation of the primary school site will not impact the railway infrastructure.
7.2 Drainage and pollution control	Northrop have prepared a Civil Report and Plans in Appendix J. This confirms runoff will not discharge onto the rail corridor and sediment and erosion control measures are proposed for the construction process.
7.3 Electrical restrictions	Not applicable.
7.4 Crane and other aerial operations	As shown in Figure 2 of Construction Management Plan (Appendix X) cranes will not intrude the into rail corridor.
7.5 Geotechnical and structural stability and integrity	As demonstrated in Appendix I the proposal will not affect the stability or integrity of the rail infrastructure to the south of the site.
7.6 Environmental conditions	The proposal does not increase environmental risk of the rail corridor.
7.7 Electrical clearances	Not applicable as the development is located 49 metres from the rail corridor, exceeding the Australian Standards.

Standards	Response
8. Heritage	The site is not heritage significant including Aboriginal heritage, archeologically or European heritage, refer Section 2.9 of this EIS.

5.9.5. State Environmental Planning Policy No. 55 Remediation of Land

Clause 7 of the SEPP 55 requires that a consent authority must not grant consent to a development unless it has considered whether a site is contaminated, and it is satisfied that the land is suitable (or will be after undergoing remediation) for the proposed use.

Historically, the site has been subject of multiple contamination investigations and reporting. JBS&G have prepared an Environment Site Assessment (Appendix L). The findings of the assessment are as follows:

- The concentration of COPCs within historical soil samples were below the adopted health based criteria and adopted ecological criteria. This is consistent with the result from Environ in 2013. Therefore, there are no identified impacts to site soils that require management or remediation with respect to making the site suitable for the proposed use;
- A small asbestos containing fibre cement fragment was identified on the ground surface during the site inspection/soil sampling undertaken by JBS&G in February 2021. The source was unknown. Given it was an isolated fragment, an unexpected finds protocol framework will be prepared prior to commencement of works;
- Groundwater concentration for all organic compounds were found to be less than the laboratory LOR and the adopted site assessment criteria. This is consistent with the result by Environ in 2013;
- Human receptors on site will be potentially exposed to soil contaminants by limited oral, dermal and inhalation pathways;
- As fill is generally to be imported, there is considered no direct exposure pathways for ecological receptors to soil; and
- No groundwater seepage was encountered within boreholes during and on completion of drilling

Therefore, there are no potential unacceptable health risks identified with respect to the proposal. It is considered the site is suitable for the land use without the preparation of a RAP. SEPP55 is therefore satisfied. Refer to Section 2.14 and 7.18 of this EIS for further discussion.

5.9.6. Draft State Environmental Planning Policy (Remediation of Land)

As part of the NSW Government's review program for existing SEPPs, the DPIE publicly exhibited the Draft Remediation of Land SEPP and draft planning guidelines between 31 January and 13 April 2018.

The draft Remediation of Land SEPP proposes changes to SEPP 55 and relates to remediation of contaminated land as well as matters to be addressed in a plan of remediation.

The contamination assessments carried out and summarised in Section 5.9.5 of this EIS remain valid and consistent with the objectives of the proposed amendments.

5.9.7. Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River (No. 2 1997)

The Sydney Regional Environmental Plan No 20 – Hawkesbury- Nepean River (No. 2 – 1997) (SREP) aims to protect the environmental of the Hawkesbury-Nepean River system by ensuring that the impacts

of future land uses are considered in the regional context; the SREP applies to the Liverpool LGA, hence the proposal.

The proposal will not have any adverse environmental impacts on an environmentally sensitive area, areas of high scenic quality, wetland areas, areas of high cultural heritage or impact on the water quality of the Hawkesbury Nepean River. The proposal contributes to improved water quality by employing stormwater initiatives as described in the Civil Design Report and Plans appended at Appendix J. The development controls outlined in Part 3 of the SREP have been reviewed and do not relate to this SSDA as there are no controls for educational establishments.

5.9.8. Draft State Environmental Planning Policy (Environment)

The Draft State Environmental Planning Policy (Environment) 2017 (Draft Environment SEPP) aims to consolidate seven existing SEPPs including the Sydney Regional Environmental Plan No 20 – Hawkesbury- Nepean River.

The Explanation of Intended Effect (EIE) for the Draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. The EIE explains that the consolidated SEPP proposes to simplify the planning rules for several water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. The proposal is consistent with the Draft Environment SEPP as it provides a Civil Design Report and Civil Plans contained at Appendix J which address methods to minimise water consumption, reduce stormwater runoff and improve water quality to ensure impacts to the Hawkesbury Nepean River system are minimised.

5.9.9. State Environmental Planning Policy No.64 (Advertising and Signage)

State Environmental Planning Policy No.64 – Advertising and Signage (SEPP64) aims to ensure signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of a high-quality design and finish.

Clause 8 of SEPP64 stipulates that a consent authority must not granted consent for an application to display signage unless the consent authority is satisfied:

- (a) that the signage is consistent with the objectives of this Policy as set out in clause 3 (1) (a), and*
- (b) that the signage the subject of the application satisfies the assessment criteria specified in Schedule 1.*

An assessment of the main school signage against the SEPP64 assessment criteria is detailed in Table 13. This assessment demonstrates the proposed sign satisfies the provisions of SEPP64, including the aims and objectives of the policy.

Table 13: SEPP64 Assessment Criteria

Assessment Criteria	Comment	Complies
Clause 3 - Aims and Objectives		
(a) to ensure that signage (including advertising)— (i) is compatible with the desired amenity and visual character of an area, and (ii) provides effective communication in suitable locations, and (iii) is of high quality design and finish, and	The scale of the indicative signs is compatible having regard to the surrounding context. The signage is also consistent with that of typical signs for schools. The location of the signs on Faulkner Way and Buchan Avenue ensures that they will be clearly visible from the Buchan Avenue frontage of the school,	Yes

Assessment Criteria	Comment	Complies
	allowing for effective legibility of the site. The signs will incorporate quality materials and finishes and will provide a coherent and integrated colour theme consistent with the school development.	
(b) to regulate signage (but not content) under Part 4 of the Act, and	Noted.	-
(c) to provide time-limited consents for the display of certain advertisements, and	The signs are proposed for the life of the development.	Yes
(d) to regulate the display of advertisements in transport corridors, and	Not applicable.	-
(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.	Not applicable.	-
Schedule 1 - Assessment Criteria		
1 Character of the area Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signs are compatible with the existing and future character of the area. It is commensurate to other school signage for new schools in NSW.	Yes
2 Special areas Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The site is not located in a special area. The signs will not detract from the amenity or visual quality of nearby residential land uses. The signs are of a scale and appearance that is compatible with the future built form of the school.	Yes
3 Views and vistas Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas? Does the proposal respect the viewing rights of other advertisers?	The signs will not obscure any views. They have been sited and designed to ensure the signs sit comfortably at the ground plane. The signs are also not of a bulk or scale that would impede any view from the street. The signs are of a scale and height that is broadly consistent with existing signage in the locality and commensurate with the proposed buildings within the site. The signage will not adversely impact on views or vistas from other properties, nor will it impede the visibility of any other existing signage.	Yes

Assessment Criteria	Comment	Complies
4 Streetscape, setting or landscape Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? Does the proposal contribute to the visual interest of the streetscape, setting or landscape? Does the proposal reduce clutter by rationalising and simplifying existing advertising? Does the proposal screen unsightliness? Does the proposal protrude above buildings, structures or tree canopies in the area or locality? Does the proposal require ongoing vegetation management?	The indicative signs are compatible with the scale of surrounding streetscape, setting and character of the nearby residential development and Edmondson Park Town Centre to the east. The signs will therefore complement the existing signage in the wider precinct and will clearly identify the school within the streetscape. No adverse impact to the streetscape is anticipated. The proposal does not screen unsightliness and will not contribute to visual clutter as the signage panels are unified. The signs will not protrude above any structures or tree canopies.	Yes
5 Site and building Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The signs are appropriately sized and sited with consideration to the existing and proposed built form of the school and surrounds. The proposed signs will not protrude above the building line and will utilise modern technology and be built with contemporary materials that are consistent with the current and future context of the site.	Yes
6 Associated devices and logos with advertisements and advertising structures Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	All required safety devices will be concealed within the signage structure.	Yes
7 Illumination Would illumination result in unacceptable glare? Would illumination affect safety for pedestrians, vehicles or aircraft? Would illumination detract from the amenity of any residence or other form of accommodation? Can the intensity of the illumination be adjusted, if necessary? Is the illumination subject to a curfew?	The electronic school sign on Buchan Avenue is a digital sign with non-flashing illumination at lux level. The illumination will not result in unacceptable glare for pedestrians, vehicles or residences. The illumination will be in accordance with relevant Australian Standards.	Yes
8 Safety Would the proposal reduce the safety for any public road? Would the proposal reduce the safety for pedestrians or bicyclists?	The proposed signs will not interfere with pedestrian or vehicular sightlines as it will comply with all relevant Australian Standards and codes. The signs will not distract motorists as will be located well away from the street	Yes

Assessment Criteria	Comment	Complies
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	verge and won't resemble a traffic sign or contain a facsimile of a traffic sign.	

5.9.10. State Environmental Planning Policy (State Significant Precincts) 2005

The Significant Precincts SEPP, and specifically Appendix 16 Edmondson Park South Site, is the primary EPI applying to the site.

5.9.10.1. Zoning and Permissibility

The site is zoned R1 General Residential pursuant to Appendix 16 of the Significant Precincts SEPP.



Figure 53: Extract of the land use zoning map, approximate boundaries of the site outlined in red (Source: NSW Legislation)

The proposed school is defined as an educational establishment as follows:

educational establishment means a building or place used for education (including teaching), being—

(a) a school, or

(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.

Educational establishments are not prohibited in the R1 zone under the Significant Precincts SEPP. Therefore, by virtue of not being prohibited, the proposed school is permissible with development consent.

5.9.10.2. Objectives of the Zone

The proposal is consistent with the objectives of the R1 zone in the Appendix 16 of the Significant Precincts SEPP as follows

Table 14: Consistency with the zone objectives

Objective	Response
(a) to provide for the housing needs of the community,	This objective is irrelevant for the proposed primary school.
(b) to provide for a variety of housing types and densities,	This objective is irrelevant for the proposed primary school.
(c) to enable other land uses that provide facilities or services to meet the day to day needs of residents.	The proposed primary school is an important piece of infrastructure which will serve the local community on a day-to-day basis.

5.9.10.3. Other Provisions

Consideration of the other relevant provisions of the Significant Precincts SEPP are assessed in the below table.

Table 15: Compliance with Significant Precincts SEPP

Clause	Comment
18 Height of Buildings	The site is subject of a maximum height of 15 metres. However, Mod 5 of MP10_0118 seeks to increase this height to 21 metres. The proposal marginally exceeds the height limit at the roof ridge and stairs of the south end of the three-storey western building from 0.5 metres to 1.6 metres (refer to Section 6, 7 and 8 in Appendix B). Pursuant to Clause 42 of the ESEPP, "development consent may be granted for development for the purpose of a school that is SSDA even though the development would contravene a development standard imposed by this or any other EPI under which the consent is granted." Notwithstanding, and for the sake of completeness, the proposed contravention to the height standard is justified in Section 5.9.10.4 of this EIS below.
19 Floor Space Ratio	The site is not subject of a maximum FSR.
26 Flood Planning	The site is not mapped flood prone land.
31 Preservation of Trees and Vegetation	The site is cleared of all trees as outlined in Section 2.9 of this SEE and no vegetation is worthy of preservation, as verified by Eco Logical Australia at Appendix G.
32 Native Vegetation Areas	The site is not mapped a native vegetation protection area. This is consistent with the Biodiversity Assessment prepared by Eco Logical Australia at Appendix G.
33 Heritage Conservation	The site is not identified as a heritage item or located in a heritage conservation area. The site has no archaeological significance (Appendix Y) and does not contain Aboriginal objects (Appendix O).

5.9.10.4. Justification for Proposed Height Variation

The maximum height standard that applies to the site is 15 metres. As discussed above, the proposal exceeds the height standard at the roof ridge and stairs of the south end of the three-storey western building from 0.5 metres to 1.6 metres. This results in a variation to the height standard under Clause 18 of the Significant Precincts SEPP. Clause 28 of the Significant Precincts SEPP allows for exceptions to development standards. Whilst not strictly applicable to this application for the reason described above, the provisions of that clause are nonetheless addressed in relation to this variation.

‘Compliance’ Unreasonable and Unnecessary

Consistency with the Development Standard Objectives

The usual method for compliance being unreasonable or unnecessary is to determine if consistency with the objectives of the standard is achieved notwithstanding the variation. In this case, Clause 18 of the Significant Precincts SEPP does not contain height of buildings objectives. Inferring that the objectives of a height control are generally to achieve compatibility with the scale of buildings in an area and to limit its impacts such as overshadowing, the inferred objectives are satisfied as discussed in Section 7.1 of this EIS.

Consistency with Zone Objectives

Table 14 of this EIS above demonstrates the proposal is consistent with the R1 General Residential zone objectives.

Sufficient Environmental Planning Grounds

The environmental planning grounds to justify the departure of the height of buildings standard are as follows:

- A compliant building would lack articulation provided through the pitched roof form.
- The portions of the building which contravene the standard relate to roof and access stairs, hence not habitable education space and do not significantly contribute to the bulk of the building as viewed from key vantage points in the locality.
- The site is constrained with respect to topography as established in Section 2.7 of this EIS. In order to create appropriate levels across the site, a balance of minor excavation and substantially more fill is required to accommodate the school buildings. This results in a minor contravention of the height standard.
- The variation is isolated to the centreline of southern portion of the western building and the roof materiality is complementary of the existing and desired future character of the area.
- The non-compliant portions of the building do not result in any unacceptable overshadowing impacts on adjoining sites or the school grounds. The proposed shadows are contained wholly on the subject site and do not adversely impact proposed outdoor landscape spaces.

Conclusion

The proposed variation to the height of buildings standard will enable positive articulation of the roof form at the south-west of the site, consistent with other buildings on-site. The contravention occurs in the centreline of the western building (at the south) adjacent to the single-storey pre-school. The proposed design, notwithstanding the height variation, is considered to result in a better planning outcome.

Because the development, as described above, is consistent with the inferred objectives of the standard and the objectives of the zone, the consent authority can be satisfied that the development is in the public interest.

5.9.11. State Environmental Planning Policy (Sydney Region Growth Centres) 2006

The site is located in the south-west growth centre, therefore, State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Growth Centres SEPP) applies. The site forms part of the Edmondson Park Release Area (refer to the following figure).

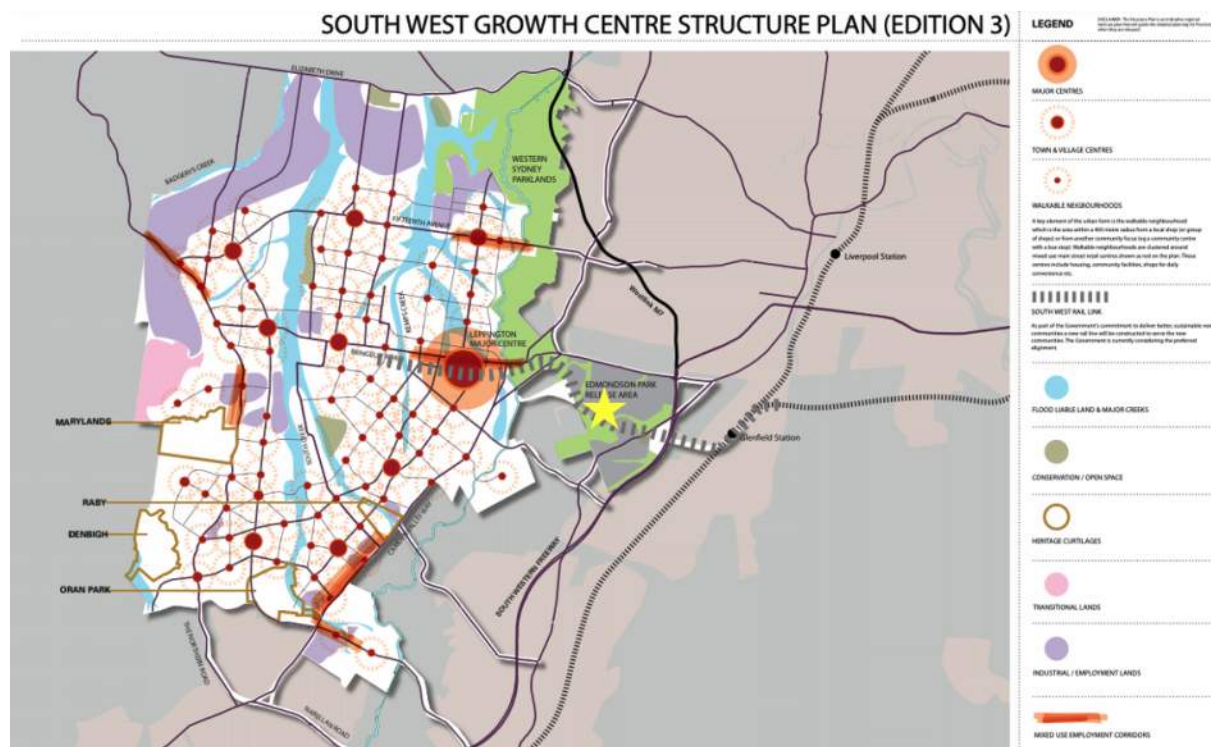


Figure 54: Extract of the structure plan, site identified with a yellow star (Source: NSW Legislation)

Clause 7A of the Growth Centres SEPP states:

7A Controls applying to Colebee, *Edmondson Park*, Bingara Gorge, Menangle Park, Mount Gilead and Glenlee Precincts

For the purposes of this Policy, the provisions applying to the carrying out of development in the following precincts are those specified below for the precincts—

(b) the provisions of Campbelltown (Urban Area) Local Environmental Plan 2002, Liverpool Local Environmental Plan 2008 and Schedule 3 to State Environmental Planning Policy (Major Development) 2005 are specified for the land within Edmondson Park Precinct within the South West Growth Centre to which those instruments, or parts of instruments, apply,

State Environmental Planning Policy (Major Development) 2005 is the now Significant Precincts SEPP. Refer Section 5.9.10 for an assessment against the relevant provisions.

We note the following with respect to the remaining clauses of the Growth Centres SEPP:

- Part 3 of the Growth Centres is not applicable pursuant to Clause 8(3). Clauses 16 and 17 are similarly not applicable.
- The site is not serviced by a water recycling plant or will be serviced by one, hence Clause 18 does not apply.
- As the site is not flood prone land, hence Clauses 19 and 20 are not applicable.
- Part 6 does not apply as the site is not zoned pursuant to Part 3 of the Growth Centres SEPP.
- Part 7 does not apply as the site is not in the vicinity of the Rouse Hill House Estate.

5.9.12. Draft State Environmental Planning Policy for Strategic Conservation Planning

The DPIE have prepared a draft conservation plan for Western Sydney. The Plan has been addressed in Section 4 above.

5.9.13. State Environmental Planning Policy (Western Sydney Aerotropolis)

The site is not located within the Western Sydney Aerotropolis. Notwithstanding, two of the airport safeguard development controls are relevant to the site, being Clause 22 and 24.

Clause 22 relates to wind turbines. The site is mapped within the 30km wind turbine buffer zone, see below.

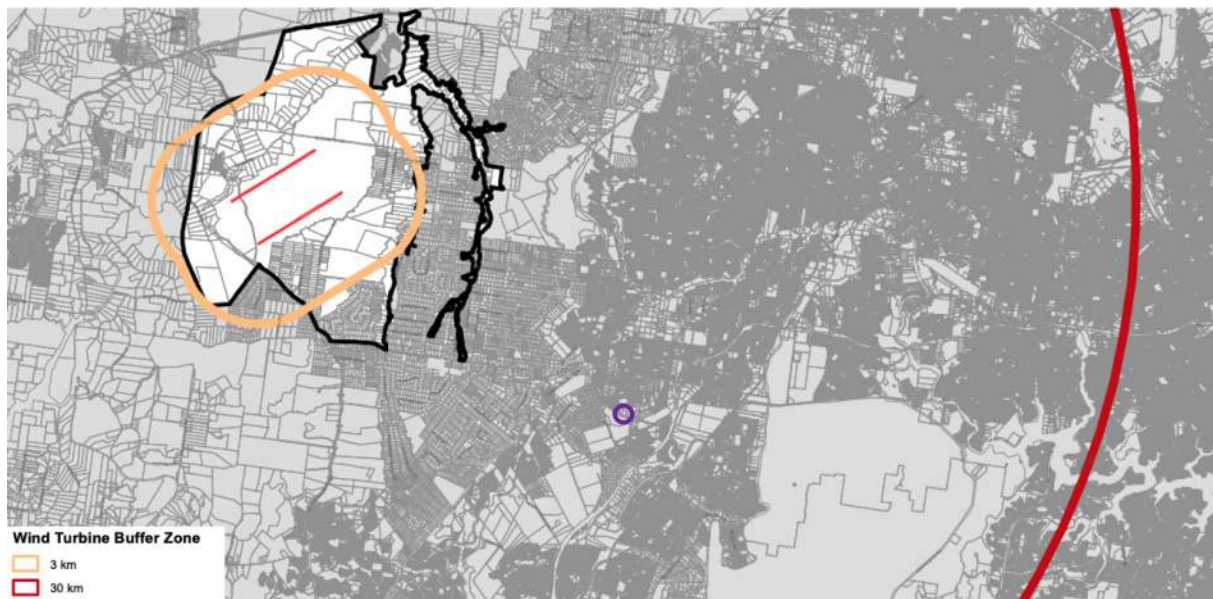


Figure 55: Extract of the Aerotropolis SEPP wind turbine buffer zone map (Source: NSW Legalisation)

The objective of Clause 22 is to regulate the construction of wind turbines and wind monitoring towers on land within 30km of the airport. The proposal does not involve the construction of a wind turbine or monitoring an existing wind turbine. Therefore, Clause 22 is not relevant to the proposal.

Clause 24 relates to airspace operations and applies to development on land shown on the Obstacle Limitation Surface Map. The western portion of the site is identified within the Outer Horizontal Surface of 235.1m AHD as illustrated at Figure 56.

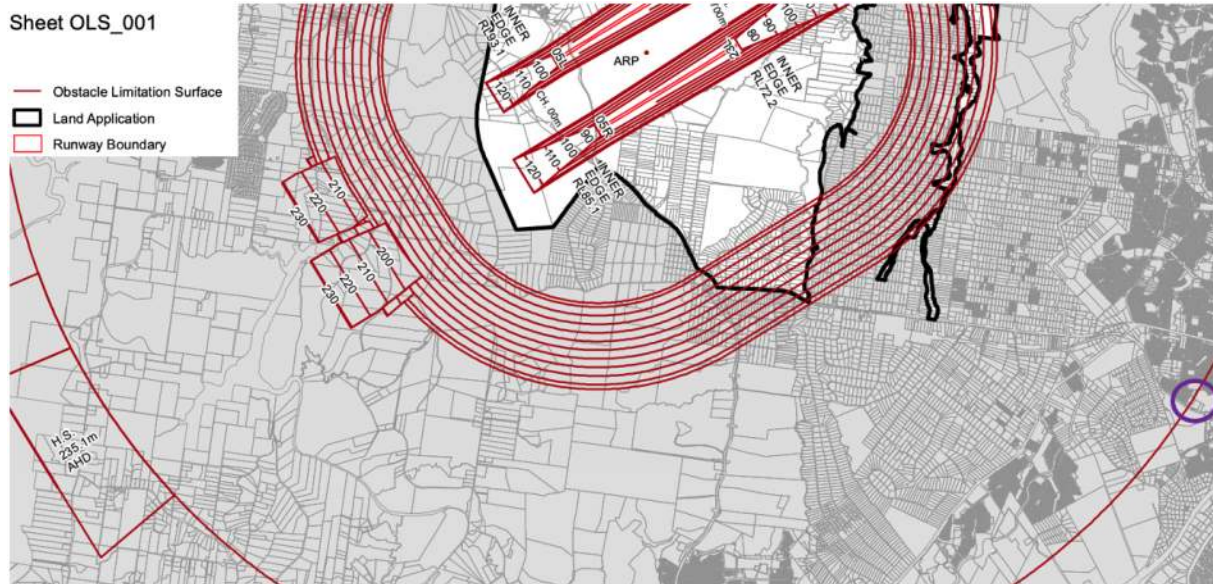


Figure 56: Extract of the OLS map, site circled in purple (Source: NSW Legislation)

The proposal does not penetrate the OLS, meaning the proposal is not a controlled activity and approval is not required pursuant to Part 12, Division 3 of the *Airport Act 1996* of the Commonwealth.

5.9.14. Greater Metropolitan Regional Environmental Plan No.2 - Georges River Catchment 1999 (EPI 52)

The Greater Metropolitan Regional Environment Plan No.2 - Georges River Catchment (EPI 52) aims to enhance the environmental protection, water quality and river flows of the Georges River Catchment and its tributaries. Maxwell Creek is a tributary of the Georges River Catchment and is located approximately 350 metres east of the primary school site. The proposal is consistent with applicable planning principles of EPI 52 in that:

- The SSDA comprises a coordinated ESD and civil approach to minimise adverse impacts on the site and surrounding land from a water quality and groundwater perspective;
- The development does not impact sensitive natural environmental including bushland and Maxwell Creek and results in no adverse cumulative impacts;
- This site is not affected by acid sulfate soils, hence 'specific principle' clause 9(1) of EPI 52 is not applicable;
- Northrop propose sediment and erosion control strategies in Appendix J to minimise impacts during construction and detailed sediment and erosion control plan will be prepared prior to the commencement of works consistent with clause 9(5) of EPI 52;
- The Civil Plans and Report (Appendix J) detail a stormwater management plan for the new primary school to manage stormwater runoff, refer to Section 7.14 of this EIS. The proposal is consistent with clause 9(9) of EPI 52.

The proposed primary school is sufficiently separated from Maxwell Creek and as such stormwater will not be disposed of into the tributary. As discussed above, Northrop have prepared a stormwater management plan in Appendix J. The other development types in the planning control table are irrelevant to the subject proposal.

5.10. Liverpool Local Environmental Plan 2008

The Liverpool Local Environmental Planning 2008 (LLLP) applies to the site pursuant to Clause 1.3 by virtue of being mapped in the land application map. Regardless, the primary EPI applying to the site is the Significant Precincts SEPP. None of the LLLP mapping applies to the site.

5.11. Edmondson Park South Development Control Plan 2012

The applicable EPSDCP provisions relevant to the proposal are considered in Table 16 below. In summary, the proposal is generally compliant with the applicable provisions.

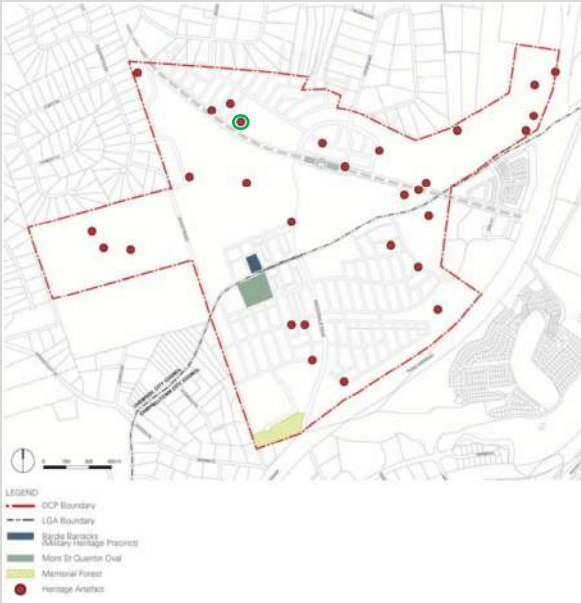
Table 16: EPSDCP Compliance Table

Provision	Proposal
1. Introduction	
1.3 Land to which this Plan applies The site is located in Edmondson Park south. Hence the EDDCP applies.	Noted.
2.0 The Vision for Edmondson Park South Edmondson Park South will be different from most parts of western Sydney. It will become a transit oriented community providing a diverse range of higher density housing and a vibrant, mixed use town centre within a well-connected and walkable urban environment. Edmondson Park South will be characterised by urban streetscapes and environmentally responsible development. High quality pathways, direct connections, attractive and safe streets will encourage walking and cycling. The vision for Edmondson Park South is illustrated in Figure 27.	The proposal is consistent with the vision as established in the Landcom Concept Plan, where a primary school is proposed on the indicative school site. The proposal will make a positive contribution to Edmondson Park South and is consistent with the desired outcomes for the area. The proposal: - Encourages the use of active transport modes; - Provides school facilities which may be available to the community to use during the school holidays; - The architectural design has been informed by the local identity and draws on visual cues from its surrounds, particularly the Cumberland Plain Woodlands.
2.2 Character Area The site is identified in 'Area 2'. The character areas qualities include: - Urban, but predominately residential area surrounding the combined primary and high school and the Maxwells Creek North Riparian Corridor. Physical and visual links to the Town Centre. - A transition between the Town Centre and the medium to lower density residential areas to the north. Housing types reinforce the urban character and proximity to Town Centre, school and public transport. Products include small lot/attached housing.	The proposal achieves characteristic no.4. The new primary school fits comfortably within the urban residential setting. The completion of Buchan Avenue (being delivered by Landcom) will provide a physical connection from the site to the town centre and Edmondson Park Railway Station, which is currently absent. Characteristic no.5 is not applicable. The proposal provides a 9 metre setback to Faulkner Way and 12 metre setback to Buchan Avenue. This enables the presentation from the street of buildings within a landscape setting.

Provision	Proposal
6. Building setbacks will be used to reinforce the urban style and character of areas closer to the school and Town Centre. 7. The public realm becomes a learning experience, provides connectivity for the journey from the Regional Park west to east and a frame for the north edge of the Town Centre. Subtle lessons embedded in the landscape extend learning beyond school walls.	The development enhances the existing public realm and provides various learning opportunities within the site and with the potential community use of the library and hall facilities outside of school term. Oculus' landscape design (Appendix D) is underpinned by strong principles, which seek to create various areas for social interaction, encourage incidental physical activity, create a sense of identity through place-making and strong community focus to inspire students, staff and visitors.
2.4 Indicative Staging	Not applicable to the primary school site.
3.0 Urban Structure and Public Domain	
3.1 Street Network 1. The street network is to be provided generally in accordance with the below.  <i>Figure 57: Extract of street network figure, site marked with a green star (Source: EPSDCP)</i>	The proposal does not preclude the delivery of the identified street network. It is to be noted the extension of Buchan Avenue connecting to Soldiers Parade is currently under construction and will be completed prior to works commencing for the primary school. Landcom is delivering Buchan Avenue.
3.2 Public Transport 4. Bus stops are to be: a) easily accessible and located close to major trip attractors (i.e. parks, schools, Town Centre etc), b) generally at separation distances of approximately 200m within the Town Centre and 400m outside of the Town Centre. Optimal distances between bus stops will be determined by consulting the relevant bus service provider,	As discussed in this EIS, the DoE will deliver a bus stop on the north side of Buchan Avenue. The school will be serviced by bus on the long term route of Buchan Avenue. The location of the bus stop has been discussed with the TWG.

Provision	Proposal
c) well connected with cycling and walking paths and crossing points of major roads, and d) positioned to ensure a high level of personal safety and security. 5. Provide suitable locations for bus stops at appropriate intervals on the collector street in consultation with Transport for NSW and local bus operators to accommodate future services. A long term bus route is identified on Buchan Avenue to the north of the site. 3.3 Pedestrian and Cycle Network 1. The key pedestrian and cycle network is to be provided in generally in accordance with Figure 18. Alternate configurations can be provided subject to consistency with the objectives. The pedestrian and cycle network is to provide linkages between major activity areas and streets within and surrounding the site, such as schools, the Town Centre, and the open space network. 4. Provide shared pedestrian paths and cycle ways to a minimum of 2.5m wide (refer to Figure 18). 11. Pedestrian footpaths along school frontages are to be a minimum of 2.5m wide. 12. Provide safe and accessible public bicycle parking facilities in high pedestrian trafficked areas, particularly near schools, regional parks, commuter parking stations and the town centre. 	As shown in Section 2.5 of this EIS a footpath exists on the east side of Faulkner Way and on the southern side of Buchan Avenue adjoining the school. This is consistent with Section 3.3 of the EPSDCP.

Figure 58: Extract of the indicative bicycle and pedestrian network, site marked with a purple star (Source: EPSDCP)

Provision	Proposal
3.5 Safety and Security 1. Landscape planting should consider pedestrian visibility. 2. Appropriate evening and night-time lighting is to be provided in all streets, public spaces and parks, particularly along pedestrian and cyclist routes. 7. Driveway entry-exits are to provide adequate sight lines to adjacent footpaths, streets and cycle ways.	The landscape scheme considers the human scale experience and seeks to enhance safety and amenity for students, staff and visitors. Adequate lighting will be provided within the school in accordance with the relevant Australian Standards. The single driveway entry-exit at the south-west corner of the site provides adequate sight lines for the footpath on the east of Faulkner Way.
3.6 Heritage Conservation and Interpretation 5. Prior to the issue of a construction certificate for any works in proximity of to an archaeological artefacts (refer to below figure), the relevant recommendations and procedures outlined in the Aboriginal Cultural Heritage Assessment Report prepared by Kelleher Nightingale Consulting Pty Ltd dated November 2010 are to be satisfied  LEGEND - DCP Boundary - LGA Boundary - Sticks Barracks (Military Heritage Precinct) - Mare St Queen Oval - Memorial Forest - Heritage Artefact <i>Figure 59: EPSDCP heritage areas, artefact on site circled green (Source: EPSDCP)</i>	As detailed in Section 2.8.1 of this EIS, KNC previously prepared a comprehensive Aboriginal Archaeological and Cultural Heritage Assessment for the overall Edmondson Park South development as part of the Concept Plan for Landcom. This assessment identified one archaeological site containing Aboriginal objects within the school site. The site has since been destroyed under AHIP number C0001134 and is no longer extant.
3.7 Schools, Childcare Centres and Community Facilities 1. The siting of school buildings is to: a) address the street frontage, c) accommodate any relevant APZ requirements, d) meet the acoustic requirements relevant to rail and road noise, e) retain neighbouring residential amenity.,	The proposal is consistent with Section 3.7 of the EPSDCP as follows: ▪ The development addresses Buchan Avenue and Faulkner Way, with the primary pedestrian entrance from Buchan Avenue; ▪ The new primary school provides well in excess of the minimum APZ; ▪ Acoustic impacts from the adjacent railway line are mitigated (Appendix M);

Provision	Proposal
f) provide appropriate provision of set down and pick up areas. 2. Landscaping on school sites is to respect and retain major natural site vegetation or the theme of the nearest local park and streetscapes where possible. 3. All school developments are to include bicycle parking for students. 4. School set down / pick up zones are to be designed to allow the school to maintain a safe street frontage for the entry and exit of pedestrians and bicycle users. 7. Education, community buildings and places of worship are encouraged to enhance community identity and way-finding through iconic and landmark building design.	▪ The amenity of the adjoining residential development to the west and north-west is preserved through the introduction of screen planting, sufficient setbacks and complementary materials; ▪ The landscape proposal seeks to re-introduce native species including the Cumberland Plain Woodland; ▪ The proposal accommodates bicycle parking at the north and south of the site; ▪ PTC has nominated safe pick-up and drop-off zones for the new school; and ▪ The hall and library may be available as community facilities out of school term.
4.0 Environmental Management	
4.2 Bushfire Management 1. To prevent loss of life and property due to bushfires by providing for development compatible with bushfire hazard. 2. To encourage sound management of bushfire-prone areas. A 40m APZ is mapped to the south of the site.	The proposal provides in exceedance of the 40 metre APZ to the south of the site, with an available APZ of 90 metres. The proposal is consistent with Section 4.2 of the EPSDCP.
4.3 Noise and Vibration 1. Development in proximity to the rail corridor is to demonstrate consistency with the Infrastructure SEPP 2007 and 'Development Near Rail Corridors and Busy Roads - Interim Guideline'.	JHA have demonstrated consistency in Appendix M.
5.0 Detailed Residential Subdivision Design	Not applicable to the primary school site.
6.0 Small Lot and Standard Lot Housing Controls	Not applicable to the primary school site.
7.0 Rural Residential (E4 Environmental Living)	Not applicable to the primary school site.
8.0 Edmondson Park Town Centre	Not applicable to the primary school site.

5.12. Development Contributions

The site is covered by the Liverpool Section 7.11 Contribution Plan 2008 (Edmondson Park) and the Western Sydney Special Infrastructure Contributions Plan 2011 (SIC). The purpose of these Plans is to raise funds from private, commercially driven developments to be put towards the cost of public facilities and infrastructures which are burdened by those developments. The imposition of a levy from either applicable contribution plans on the DoE's proposed public infrastructure would be contrary to the public purpose of the Plan, particularly as the development provides a new piece of public school infrastructure for the growing Edmondson Park community.

Whilst Council's Contribution Plan and the Western Sydney SIC do not expressly exclude Crown Developments or educational established from the payment of the relevant contribution, an exemption is considered appropriate in this case as discussed in further detail below. The DoE is a public authority which relies on government funding to deliver new school infrastructure for the community and public. Levying Council and State Government contributions from the DoE to fund infrastructure (including school infrastructure) is contrary to the purpose of a contribution plan in the first place.

The site is not subject of any Voluntary Planning Agreements (VPAs). Landcom has confirmed they have not entered a VPA which incorporates the primary school site.

Section 4.33 of the EP&A Act sets out specific provisions relating to the determination of Crown DAs. It states:

(1) A consent authority (other than the Minister) must not:

(a) refuse its consent to a Crown development application, except with the approval of the Minister, or

(b) impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.

On this basis, the consent authority has no power to issue a refusal or issue an approval subject to conditions of consent to which the DoE does not agree. The limitation on the power to impose a condition of consent extends to the consent authority's ability to require contributions to be paid, including contributions pursuant to Section 7.11 and 7.12. Contributions occur by way of conditions of consent. Therefore, neither Council nor DPIE can impose conditions relating to contributions without the DoE's consent.

The following planning policies support the best practice of exempting community infrastructure from paying contributions:

Circular D6 – Crown Development Applications and Conditions or Consent

Exemption from contributions is supported by Planning Circular (Circular D6) relating to Crown DAs, issued by the then Department of Urban Affairs and Planning in 1995. Circular D6 sets out the circumstances in which it is appropriate for a consent authority to seek the approval of the applicant or the Minister to impose conditions of consent. Circular D6 notes that where a consent authority intends to levy contributions on Crown Development, they must be justified, and consideration should be given to the Crown's role in providing a community service, the cost of which is accountable to all taxpayers in the State.

The currency of Circular D6 is confirmed in the Draft Development Contributions Practice Note – July 2005, which states "the current limitation on imposition of levies on Crown Developments as outlined in Circulate D6...remain in force."

Draft Local Development Contributions Guidelines

The Guidelines outline the best practice approach to developer contributions on the public sector:

8.3 Public sector development

The current limitations on the imposition of development contributions on public sector developments as outlined in Circular D6 – Crown Development Applications and Conditions of Consent remain in force.

Public sector development generally falls into the following 2 categories:

- *Development that is carried out with an underlying philosophy of community service such as a courthouse, school, hospital or social housing; or*
- *Development that is carried out on a profit-making basis*

Council can, in its contribution plan, identify those types of developments that are exempt from contributions.

Council can, in its contribution plan, identify those types of developments that are exempt from contributions. In this regard it is considered best practice to exempt those developments provided by the Crown with an underlying philosophy of community service, such as a courthouse, school or community centre, should not be levied a contribution as the material public benefit that is derived from the development exceeds any demand that it creates on existing infrastructure.

Where development is carried out by the public sector on a profit-making capacity they should pay a level of contribution equal to that applicable to the private sector.

To impose a contribution on this project, DPIE would need to have the agreement of the Minister. Planning Circular D6 notes that consideration should be given to the Crown's role in providing a community service (not provided for by Council). It is our view that given the public benefits of the proposal, that DPIE not require development contributions to be payable.

This is consistent with approvals for new primary school and alterations and additions to existing schools such as:

- Alexandria Park Community School (SSD 8373)
- Parramatta West Public School (SSD 8790)
- Jordan Springs Public School (SSD 9354)
- Fort Street Public School (SSD 10340)

6. STAKEHOLDER CONSULTATION

Consultation has been undertaken in accordance with the Department's consultation policy (Planning and Delivery School Infrastructure NSW Public Consultation Policy) which provides a framework to actively engage the community and other stakeholders in relation to the planning of major projects. Stakeholders will continue to be engaged during the assessment of the SSDA and post approval.

6.1. Community Engagement

School Infrastructure NSW (SINSW) on behalf of the DoE conducted community engagement for the project and this was complemented by engagement activities led by EMM Consulting. This is documented in detail in Appendix T. In summary, SINSW engaged with the community using several methods:

- A virtual information room including a community survey for public feedback (19- 23 April 2021)
- Information and upgrades on the project design and timeline via communication materials;
- Promotion of consultation activities via:
 - Advertisement in the Liverpool Champion (Wednesday 14 April 2021)
 - SINSW website page;
 - Project update letter box drop to approximately 1,400 houses in Edmondson Park; and
 - Emails to local school network Principals from the Director, Educational Leadership encouraging school communities, to share advice and provide feedback
- Provision of email contact details and a web enquiry form for community members to contact SINSW regarding the project.

The SINSW engagement was complemented with SIA field study activities including in-depth interviews with 12 participants between 26 April and 7 May 2021 and an online community survey from 26 April to 10 May 2021.

The consultation outcomes are discussed in Appendix T. The feedback provided during community consultation has informed the SSDA design.

6.2. Public Authority Engagement

DoE and the project team undertook consultation with multiple government stakeholders during the preparation of the SSDA including:

- Department of Planning, Industry and Environment
- Council including preparing briefing note to Councillors
- Landcom
- Transport for NSW, including Sydney Trains and Council Traffic Engineers
- Rural Fire Service
- Energy, Environment and Science Group
- Sydney Water
- Endeavour Energy
- Aboriginal stakeholders
- NSW Government Architect through NSW State Design Review Panel
- Project Reference Group

The following sections provides a summary of the outcomes of consultation.

6.2.1. DPIE

The DPIE were consulted during the SEARs process. This EIS directly responds to the contents of the SEARs issued on 10 December 2020. Dimitri Gotsis, Senior Planning Officer, DPIE attended the SDRP on 14 April 2021. The DoE will liaise with the DPIE during the assessment of the subject SSDA to respond to submissions, address request(s) for information and review the draft conditions of consent prior to approval.

6.2.2. Council

The following table provides an overview of the consultation undertaken with Council and the response in the SSDA submission.

Table 17: Council Consultation

Consultation	SSDA Response
Date: 23 March 2021 Format: Video Conference via Microsoft Attendees: Colliers, SINSW, Council Summary of Minutes <i>Pre-School Design</i> - Connectivity between the pre-school and primary school is important but needs to be physically separated. - Key design requirements: - Pre-school Classrooms to have access to natural light. - Breakout/withdrawal spaces that can be fully enclosed. - Preference for timber look vinyl flooring in lieu of carpet. - SINSW to arrange site visit with the project team to Casula upon receipt of Council standard requirements and lessons learnt from the Casula Pre-school.	Appendix B demonstrates the separation of the primary school and pre-school. The coldshell seeks to maximise access to natural light and ventilation. The detail of materials will be resolved in the DA for the fit-out and operation of the childcare centre.
Date: 15 April 2021 Format: Video Conference via Microsoft Teams Attendees: City Plan, Colliers, SINSW, Council, RCC Summary of Minutes <i>Early Works</i> - Project is seeking to understand what would be needed to lodge DA to pursue early works options and what council would anticipate approval period be. Council noted that they can deal with DA promptly and Council recognise the project has a high benefit to the community. <i>Further consultation with Council</i> - Council recommended to lodge pre-DA before lodging DA. Once booked, ensure report is submitted for review approximately two weeks prior. <i>Any Other Business</i>	As mentioned earlier in this EIS, the DoE is lodging a separate DA for early works. Council was consulted on the deliverables for the separate DA. Given the time constraints, a pre-DA meeting will not be held.

The meeting minutes are attached in Appendix AA.

The following table provides an overview of the consultation undertaken with Landcom and the response in the SSDA submission.

Table 18: Council Consultation

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Consultation	SSDA Response
- Landcom advised that the Buchan Avenue extension was targeting practical completion by the end of April 2021 (2 months). However, a services clash at Soldiers Parade has caused some delay and, PC will likely be pushed back to June 2021. - Additional roads on the perimeters of lots 1 and 2 will also be constructed, running parallel to the railway from Faulkner Way and then North to meet with Buchan Avenue. Timing for these roads is to be provided in a later meeting. - Redesign of landscaping next to Buchan Avenue is to be investigated by Landcom. - Access to the EPPS staff car park and pre-school is expected to be from the southern end of Faulkner Way. Access to the Primary School will be from Buchan Avenue. - Landcom note that from experience the Council may request beyond what is typically necessary when approving the South and East roads due to the location of the school. Landcom to address this with council, following the DA. - The current license over Lot 1 may be provided back from Landcom soon, as the existing contractor on site is nearing the completion of their works. - If access is required to Lot 1 by the project team, VECI or consultants, this can be organised through Landcom. <i>Lot 2 Settlement</i> - Lot 2 settlement is still anticipated for mid-2021. - Landowners consent for the SSDA submission will be provided as required prior to Lot 2 settlement.	Noted. Noted. Noted. Noted. Noted. Noted. Noted. Noted. Noted. Noted. In accordance with Clause 49(2) of the EP&A Regulation, landowners consent is not required for a DA made by a public authority. Notice has been issued to Landcom as confirmed in Appendix CC.
Date: 24 March 2021 Format: Video Conference via Microsoft Teams Attendees: Colliers, SINSW, Landcom Summary of Meeting Minutes <i>Site Update</i> - Social Impact Consultant to be engaged directly by RCC. - Delay to the Buchan Avenue extension still likely. Working with Jemena/Endeavour/NBN to coordinate works. - Majority of landscaping to be completed by Landcom including permanent path along Buchan Avenue. - Temporary paths for the South and East roads are being investigated and pending endorsement.	EMM was engaged and has prepared the SIA (Appendix T). Noted. Noted.

Consultation	SSDA Response
- Contact details in relation to access to Lot 1 have been passed along to RCC and the surveyor is booked in to attend site the following Thursday. <i>Lot 2 Settlement</i> - Colliers to provide copy of DA package to Landcom when ready. Ensure sufficient time is given for Landcom to provide consent. <i>Other Business</i> - Landcom are to remove powerlines before lot is handed over. Once services are resolved work can commence to relocate overhead powerlines into ground.	Noted. As per above, Landcom has been given notice of this EIS (Appendix CC). Noted. Following this meeting the overhead powerlines were removed, though have not been expunged from the land title. This will be coordinated by Landcom prior to the commencement of works for the new primary school.
Date: 14 April 2021 Format: Video Conference via Microsoft Teams Attendees: Colliers, SINSW, Landcom, RCC, PTC Summary of Minutes <i>Site Update</i> - Buchan Avenue was scheduled for completion in the next 4-6 weeks. There has been inground services clash that is delaying work. Completion now expected mid-late August. - The intersection at Soldiers Parade is not changing above ground. Current drawings will show line marking, curbs etc. Note from Soldiers Parade heading north, will be left turn only into Buchan Avenue and right turn only out of Buchan Avenue. <i>Landcom Planning</i> - The DA for the South and East roads works will be submitted end of April. Pre-DA meeting has been held with Liverpool City Council. - Landcom in conjunction with AECOM are currently completing updated traffic modelling. The updated model includes the current arrangement of the proposed schools, including primary and high school. - It was noted that the school development will trigger an intersection upgrade. When Landcom construct Buchan Avenue across the bridge, council have requested parking on both sides. Potential to fit required right turn lane by removing some car parking from the bridge. <i>Any Other Business</i> - Site Investigation Report still pending with JBS&G. - Underground high voltage work is almost complete. Landcom are planning cutover in May to take all overhead electrical wires down and decommission. Anticipating end of May completion.	Noted. Noted. Noted. Noted. Noted.

Consultation	SSDA Response
- RCC advised site access during construction will most likely be of Buchan Avenue but this is subject to change. Will also consider pedestrian access of Faulkner Way. - Anticipated to commence works on site in November. SSDA to be submitted end of May. - RCC raised that the site will most likely require fill. If Landcom have any excess fill across close sites RCC may negotiate to relocate to school site. For further discussion as project progresses.	

The meeting minutes are attached in Appendix AA.

6.2.4. TfNSW and Sydney Trains

A TWG was formed for the project, as is typical for SINSW projects. TfNSW, Sydney Trains, Council's Traffic Engineers, DoE's Traffic Engineer and PTC formed part of the TWG. The following table provides an overview of the consultation with the TWG and the response in the SSDA submission.

Table 19: TfNSW and Sydney Trains Consultation

Date	Format	Attendees	Feedback	SSDA Response
Date: 29 March 2021 Format: Video Conference via Microsoft Teams Attendees: TWG, SINSW, Council, Colliers, RCC, TKD, City Plan Summary of Minutes <i>Traffic and Transport</i> <u>Railway Line</u> - TKD raised that the end point of the pre-school is approximately 50m from the cutting of railway line. - Sydney Trains confirmed 25m requirement to trigger their involvement relating to below ground services, footing excavations etc. - Considering that school may be impacted by noise and vibration, acoustic and electrolysis reports are required. RCC confirmed these reports are standard as part of design phase and acoustic investigations underway. - Sydney Trains raised that if there are any potential electromagnetic interference issues, consideration should be given to obtaining report. - Sydney Trains raised concern around development of road along south boundary being completed by Landcom. Sydney Trains will need protection measures and detail around how they will complete works and manage drainage. - SINSW/Colliers to raise these comments to Landcom during next meeting. <u>Road Completion and Landcom responsibilities</u> - TfNSW queried timing for completion of South and East Road. Indicative date mid-2022, Landcom are preparing DA submission.				An Acoustic and Vibration Report accompanies this application (Appendix M) and considers such impacts from the nearby railway line. Sydney Trains will be consulted during the SSDA assessment. An Electrolysis Report is attached in Appendix EE. This is a matter for Landcom and will be a consideration of the DA relating to those roadworks.

Date	Format	Attendees	Feedback	SSDA Response
- Buchan Avenue is due to be completed July this year and will be completed before construction commences. - Council asked PTC to consider what road network will support a bus bay and consider lengthening. - PTC confirmed assessment will consider enrolment boundaries and projected travel demand to make recommendation. - It was raised to consider any potential staging issues. Colliers/RCC to work with Landcom to confirm if they have future staging plan e.g. what network would be in place for 200 students, what required for 500 then what the network plus bus services would be in place for capacity at 1000 students. <u>Car park</u> - teachers may take public transport but it is unlikely school kids will use public transport. - Car park will be located on southern end of site. <u>High School</u> - Impact of the proposed high school was raised by TfNSW. SINSW confirmed SSDA will focus solely on primary school. Council confirmed Landcom concept plan considers high school. - SINSW will speak to service planning team to understand indicative intake area for high school. - Meeting to be held between PTC, SINSW and Landcom to discuss critical infrastructure that has been included in concept plan. Colliers to organise. <u>Bus Bay</u> - Buchan Avenue incorporates bus bay design, approximately 20m in length. SINSW confirmed PTC will determine in assessment how much servicing is required. - TfNSW indicated they would be looking for 100m of bus bay to incorporate high school planning. This is in line with St Francis school across the road. Likely bus drop off would be on the opposite side of Buchan Avenue in the morning, same side as school in the afternoon. - PTC will consider transport assessment for St Francis school and retrieve information from DPIE's website. St Francis school planned infrastructure for population increases and agreed with council on staged delivery. <u>Construction vehicle access and traffic flow</u> - PTC queried if any issues with accessing school through Buchan Avenue during construction. Council advised Buchan Avenue will extend to Soldiers Parade, however there is currently no intersection treatment. Landcom wanted to wait for confirmation of land use before finalising. Currently Soldiers Parade is connected to Campbelltown Road and would allow left into site, right out of site would be difficult. - Intersection treatment to be confirmed during Landcom meeting. - After construction need to consider right turn off Soldiers Parade. Currently median strip exists. Two roads intersect Soldiers Parade,				Noted. Considered and addressed in Appendix R. As discussed in Section 3.5.6 of this EIS, a car park is provided at the south of the site. PTC considers the impacts of the primary school in the TTPA (Appendix R). Noting the traffic modelling undertaken by AECOM in the concept plan Mod 5 consider the high school in a separate scenario. PTC has considered the bus bay to be delivered on the southern side of Buchan Avenue by Landcom. SINSW will deliver a bus bay on the northern side of Buchan Avenue to complement the bay being delivered by Landcom. Noted. Noted.

Date	Format	Attendees	Feedback	SSDA Response
Council is determining priority between Buchan Avenue and Croatia Avenue to signalise. <i>Any Other Business</i> - Council to send through integrated transport strategy that was prepared by Landcom for Council. - AECOM regional traffic module is out of date. - School travel plan can be provided by Customer Journey Planning Section. TfNSW can provide template. - Edmondson Park catchment does not cross the train line, Bardia Primary School covers this area. - For next meeting, PTC to come back with indicated considerations, issues to address and group will provide suggestions. Council indicated would like to see draft report for discussion next meeting.				Noted.
Date: 22 April 2021 Format: Video Conference via Microsoft Teams Attendees: TWG, SINSW, Council, Colliers, RCC Summary of Minutes <i>Traffic and Transport</i> <u>Bicycle Network</u> - Inclusion of bicycle tracks have been proposed to ensure primary school kids can safely travel to school by bicycle. - North/South access via bicycle is lacking, with the area East of Soldiers Parade having no bicycle track lanes or infrastructure. - Some parts of existing bicycle route (to the West) would require riding on the street, which is not safe for primary school age children. - Connectivity would be required at crossings across Soldiers Parade and Buchan Avenue for students to the East of the catchment. <u>Bus Routes</u> - TfNSW gave update on current bus routes. Proposal for bus routes to the East and West of the site. Final route is TBC and timing will depend on funding application. - Although there are bus stops on Rynan Ave, the North/South section of the route is proposed to be moved to Talana Hill Dr, which will extend past the existing Christian school and on to EPPS. - Buchan Ave will be left in/left out, which limits the routes that can be used. - A bus route incorporating right turn onto Bernera Rd from Croatia Ave may not be possible. This would also be difficult due to traffic volumes and is therefore not a preferred route. - It was agreed that the proposal to travel through Poziers Rd or Dalmatia Ave is a better option. Council advised both are responsibility of developers and subject to DA. - Council to confirm if there are any approved or pending DA's lodged for these roads.				This has been considered and addressed by PTC in Appendix R. Noted.

Date	Format	Attendees	Feedback	SSDA Response
			- It was noted that there will be a major interchange near the train station, this could affect public bus routes. - SINSW noted that for the purposes of the SSDA the chosen route must support access to the school when it begins operating. The route can be changed when construction on surrounding roads is completed. - Maxwells Crescent is part of Landcom's scope. DA expected to be submitted in the next few months. Completion time currently unknown. - Jardine Ave needs to be flood proofed to allow investigation of bus route. <u>Bus Bay</u> - Options for the bus bay opposite the school were discussed. Preferred option is across from entrance, as this would only require one pedestrian crossing across Buchan Ave. The preferred option would fit one bus. - Council raised the issue that the high school would need multiple bus bays. The preferred bus stop option is sufficient for the primary school which is what the SSDA will cover. <u>Road Hierarchy</u> - Soldiers Parade is a major barrier road to students from the East. Pedestrian friendly signals will be required, otherwise transport by car/bus will be needed. - Landcom have proposed installation of traffic signals, however this has not been approved. SINSW asked for timeframe for traffic signals however TfNSW could not advise. A warrant approval will be required before signal upgrades can take place. - It was noted that the warrant needs to demonstrate how conditions can be met in the next 5 years. - Council to check with Charles Wiafe to determine how council can assist. <u>Walking Access</u> - The majority of enrolment catchment access to the school will be via walking and is major expectation of the project. - Currently there are no safe crossing points or pedestrian access in some areas of major barrier/collector roads such as from the East of Soldiers Parade. - Cycling from areas to the West is an option, however there is currently no connectivity with the shared path. TfNSW noted the western bus route could solve this issue. <u>Any Other Business</u> - There is no existing signage on Faulkner way. - PTC to produce signage sketch, bus plans to be discussed with the road safety officer at next meeting. - Council will want to see vehicle movement studies as Buchan Ave is main access road to Western part of Edmondson Park. - The proposed kiss and drop will be located on Faulkner Way. Proposed length 150m which is approx. 25 spaces.	The bus bay is proposed in this location. SINSW will deliver a zebra crossing to provide safe access from main school entry to the bus bay on the north of Buchan Avenue. The road hierarchy surrounding the site has been considered in Appendix R. PTC anticipate 21% of students will walk to school. To enhance safe access to the proposed school, the DoE will provide a zebra crossing as discussed earlier in this EIS. Appendix R shows a plan of the proposed signage to be provided on Faulkner Way and Buchan Avenue with respect to pick-up and drop-off, zebra crossings, no stopping zones, bus zones and the like.

Date	Format	Attendees	Feedback	SSDA Response
Need to determine the intended status of the intersection between Buchan/Faulkner, and if any treatment will be required.				

The meeting minutes are attached in Appendix AA.

6.2.5. RFS

The following table provides an overview of the consultation undertaken with RFS and the response in the SSDA submission.

Table 20: RFS Consultation

Consultation	SSDA Response
Date: 12 May 2021 Format: Email Correspondence between: Peterson Bushfire and RFS Summary of Consultation Peterson Bushfire issued the Bushfire Assessment Report demonstrating compliance with PBP 2019. David of Peterson Bushfire outlined there are no specific issues for discussion and the proposal achieves compliance. Peter Bushfire queried whether the RFS could review the report and issue a statement regarding compliance.	RFS is yet to provide a response to Peterson Bushfire. Notwithstanding, RFS will be notified during the exhibition period as the proposal is deemed a 'special fire protection purposes'. RFS will be provided with another opportunity to comment on the Bushfire Report in Appendix H.

The email correspondence is attached in Appendix H.

6.2.6. Energy, Environment and Science Group

The following table provides an overview of the consultation undertaken with Energy, Environment and Science Group and the response in the SSDA submission.

Table 21: Energy, Environment and Science Group (EESG) Consultation

Consultation	SSDA Response
Date: 15 April 2021 Format: Email Correspondence between: City Plan and EESG Team DPIE Summary of Consultation EESG's preference is to wait until formally requested by DPIE Planning and Assessments to provide comment during the exhibition period. Therefore, a meeting with EESG was not considered necessary.	No direct response is provided in this EIS, as it is EESG's preference to provide comment during the exhibition period.

The email correspondence is attached in Appendix AA.

6.2.7. Sydney Water

The following table provides an overview of the consultation undertaken with Sydney Water and the response in the SSDA submission.

Table 22: Sydney Water Consultation

Consultation	SSDA Response
Date: 13 April 2021 / 10 May 2021 Format: Email Correspondence between: JHA and Sydney Water Summary of Consultation On 13 April 2021 JHA submitted a request for a statement of available pressure and flow for drinking water. On 10 May 2021 Sydney Water issued the statement.	The available pressure and flows in proximity of the site have informed the IMP in Appendix N and associated water infrastructure to support the new school.

The correspondence is attached in Appendix N.

6.2.8. Endeavour Energy

The SEARs requested Ausgrid be consulted prior to lodgement of the SSDA. JHA has prepared an IMP in Appendix N. This report confirms the service provider for the site is Endeavour Energy. The following table provides an overview of the consultation undertaken with Endeavour Energy and the response in the SSDA submission.

Table 23: Ausgrid Consultation

Consultation	SSDA Response
Date: 11 May 2021 Format: Email Correspondence between: JHA and Endeavour Energy Summary of Consultation JHA submitted an Endeavour Energy supply offer. Endeavour Energy responded on 11 May 2021 with a connection offer (standard connection service) for the site. Endeavour Energy undertook a desktop assessment of the information. The next step is to obtain the services of a Level 3 ASP to prepare and provide an electrical design to Endeavour Energy in the form of a proposed method of supply. The response noted the activity is customer funded contestable work and SINSW will need to pay for it. An estimated fee was attached.	JHA has considered the connection offer in Appendix N. This has informed the proposed infrastructure to be delivered to support the school. JHA will continue to engage with Endeavour Energy as the project progresses.

The correspondence is attached in Appendix N.

6.2.9. NSW Government Architect through State Design Review Panel

The NSW Government Architect was consulted via the State Design Review Panel in a meeting held on Wednesday 14 April. The following table provides an overview of the consultation undertaken and the response in the SSDA submission.

Table 24: NSW Government Architect via the State Design Review Panel Consultation

Consultation	SSDA Response
Date: 14 April 2021 Format: SDRP Meeting Attendees: GANSW, DPIE, SINSW, RCC, TKDA, Oculus, Colliers, City Plan Summary of Minutes <i>Connecting with Country</i> - Consider opportunities to engage with local elder groups, language groups as well as the Local Aboriginal Land Councils (LALC) to seek input into the design and to inform a meaningful approach to Country, acknowledging that story threads and narratives extend beyond specific sites. - There is an opportunity to anchor the connection to Country by restoring the ecology endemic to the region. Explore how a rich connection with place might reinforce the school's strengths and inform its pedagogical approach in how it relates to built and natural form. - Yarning Circles have a specific function and purpose within Indigenous culture. Any further development of this idea should be informed by consultation with traditional custodians and the community to ensure the approach is meaningful and its role can be woven into the school's pedagogy. Consider opportunities to include teachers and students in the conversation. - Consider the integration of learning opportunities within the landscape, given the cultural significance of trees as sites for learning. <i>Masterplan and Landscape</i> - Explore opportunities to restore the site's ecology and the woodland vegetation endemic to the region, which is considered critically endangered, and significant to local indigenous communities. Demonstrate how the specific ecology of the area has been incorporated into the landscape strategy and species selection. - Maximise tree canopy for biodiversity, shade and amenity. - Provide tree canopy to the car park to provide clear definition along the southern street edge, maximise shade, minimise surface temperatures and provide a windbreak. - Demonstrate how the proposal will meet or exceed the 40% tree canopy target. - In developing the COLA, consider the opportunity to create a visual connection and potential future physical link with the high-school site to the east. - Demonstrate how the campus is accessible and inclusive to people with different needs and capabilities. - The access and traffic strategy lacks clarity and is currently unresolved.	TKD has provided a detailed response to the SDRP minutes in Appendix B.

Consultation	SSDA Response
▫ The eastern end of Buchan Avenue is under construction and may remain undeveloped beyond the eastern end of the site for a considerable time. Demonstrate how the interim condition will be managed in relation to drop-off and vehicle movements along Buchan Avenue. ▫ Demonstrate how the alternate entry and drop-off zone for the Support Unit will be managed along Faulkner Way. ▫ Demonstrate how the pre-school drop-off and access will be managed. ▫ In developing the vehicular access strategy, include analysis of the pedestrian experience to demonstrate the prioritisation of pedestrian safety. ▪ The campus has the potential to develop a strong link to Clermont Park to the north of the site. As yet this potential is unrealised and there is a risk that the visual connection created by the extension of the native landscape character may be compromised by the dominance of vehicles at the Buchan Avenue dropoff. Explore how the rich native landscape connection can enhance the arrival experience. <i>Built Form</i> ▪ The north-south orientation of the site results in buildings with large expanses of façade exposed to the east and west. Continue to develop the articulation intended in section and consider how the built form edges including eaves, window reveals and shading devices will support passive design principles by maximising access to daylight and ventilation whilst protecting openings from solar exposure. ▪ Explore opportunities to maximise the penetration of light into the 18m wide floorplate and promote cross-ventilation. ▫ Consider the addition of clerestory windows above the central zones of the DfMA grid between home bases. ▫ Review the glazing proportions of the façade to ensure that internal amenity is maximised. ▪ No shelter was provided to the external areas. Provide shade structures to outdoor areas. These should be viewed as an opportunity to mediate the external climate and gain additional active and passive learning space for students. ▪ The project should return to the SDRP as the design progresses.	

The meeting minutes are attached in Appendix AA. Additionally, the SSDA design will also be presented to the SDRP on the 23 June 2021.

6.2.10. Aboriginal Community Consultation

The following table provides an overview of the Aboriginal community consultation undertaken and the response in the SSDA submission.

Table 25: Aboriginal Community Consultation

Consultation	SSDA Response
Date: 6 April 2021, 7 April 2021, 21 April 2021 Format: Email Correspondence between: KNC and registered Aboriginal stakeholders. Summary of Consultation Aboriginal community consulted was previously undertaken in full for the Edmondson Park South concept plan. To address SEAR 9, KNC issued a copy of the AIACH Report to Aboriginal stakeholder groups including: ▪ Cubbitch Barta Native Title Claimants Aboriginal Corporation ▪ Darug Custodian Aboriginal Corporation ▪ Darug Aboriginal Cultural Heritage Assessment ▪ Darug Land Observations ▪ Kamilaroi Yankuntjatjara Working Group ▪ Kawul Cultural Services ▪ Liverpool City Council - Aboriginal Consultative Committee ▪ Peter Falk Consultancy ▪ Tocomwall ▪ Tharawal Local Aboriginal Land Council ▪ Warragil Cultural Services ▪ Wurrumay Consultancy Darug Custodian Aboriginal Corporation responded on 21 April 2021 commenting they have received the AIACH and the surrounding area comprises many highly significant sites. The Darug Custodian Aboriginal Corporation supported the proposal. The Kamilaroi Yunkuntjatjara Working Group acknowledged receipt of the report.	This EIS and AIACH has undertaken an assessment of the Aboriginal cultural heritage of the site and engaged with Aboriginal stakeholder groups. Positive responses are attached in Appendix O.
Date: 11 May 2021 Format: Site walk over Attendance: TKD, RCC, Aunty Glenda Chalker from Cubbitch Barta Native Title Claimants Aboriginal Corporation	This has been considered in the architectural response in Appendix B. The project team is coordinating additional site walkover with either: ▪ Darug Custodian Aboriginal Corporation ▪ Kamilaroi Yankuntjatjara Working Group

Refer to the Appendix AA for the letters issued by KNC, the two responses and minutes of the site walkover with Aunty Glenda Chalker.

6.2.11. Project Reference Group

The DoE formed a Project Reference Group for the new primary school. The purpose of the meetings was to update various stakeholders on the project progress and SSDA preparation. Refer to Appendix AA for a summary of the meeting dates and attendees.

7. ENVIRONMENTAL ASSESSMENT

This chapter describes and assesses the key environmental risks and impacts of the proposal. The risks and impacts have been assessed with regard to:

- Scope of the proposal
- SEARs
- Outcomes and recommendations from specialist studies
- Consultation outcomes with the community and public authorities
- Relevant legislative requirements
- Additional information and research

7.1. Built Form and Urban Design (SEAR 3)

7.1.1. SEAR

Address:

- the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.
- design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours.
- how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into development.
- how good environmental amenity would be provided, including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.
- how design quality will be achieved in accordance with Schedule 4 Schools – design quality principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools (GANSW, 2018).
- how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.

Provide:

- a detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.
- a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.

7.1.2. Assessment

7.1.2.1. Height, Density, Bulk, Scale, Visual Massing and Suitability Regarding Context

A detailed site and context analysis for the proposal has been prepared by the architects and accompanies this EIS at Appendix B. In terms of context, the site is surrounded by a mix of uses and varying characteristics. As set out earlier in this EIS, the site to the east is vacant and earmarked for potential future educational use. To the south is the existing rail line and a new road will be constructed between the southern boundary of the site and the rail corridor. To the north-west/west and north/north-east are the primary sensitive interfaces, both existing and future. To the north-west/west is low density residential development comprising primarily two (2) storey dwellings, separated from the site by Faulkner Way road reserve. To the north/north-east is an existing park (Clermont Park) and future

residential development. The subject site is also well separated from these uses to the north and north-east by virtue of Buchan Avenue road reserve.

The proposed buildings have been designed to not only respond to the contours of the land, but to the surrounding context. We note the following:

- The proposed built form on the site comprises two (2) main buildings, that run parallel, with a north/east to south/west orientation. The positioning of the two (2) buildings allows them to accommodate the required uses in a flexible layout, whilst allowing for suitable street setbacks to be incorporated and a large central outdoor play space to be reserved for play and assembly.
- The proposed linear building along the Faulkner Way frontage varies in height from three (3) storeys at the corner of Buchan Avenue / Faulkner Way (RL78.865), reducing in height towards the southern end to be a single storey mass (RL74.800). The southern end is where the pre-school will be located.
- As can be seen in the figures below, the north-western corner has been designed to address to the street corner, but does not present as a dominant mass, by virtue of the linear nature of the building and the use of varied materials for a high level of articulation and visual interest. The project architects note that the building in this location has been designed "to give the school a more playful presence on the street facing the park and the public corner of the [school] precinct".



Figure 60: Perspective from the corner of Buchan Avenue and Faulkner Way (image 1) and Buchan Avenue looking south-west (Source: TKD Architects)

- The built form as viewed from Faulkner Way, as noted, comprises a singular, linear form. It presents as a long façade, but the façade has been carefully designed to break down the horizontal mass into clearly separable "modules", which are then further reduced in mass through varied materials, as noted above. The use of vertical blades intermittently along the Faulkner Way elevation has a dual purpose, as it assists in filtering sunlight access for optimisation of thermal comfort, but also, articulation of the built form. The neutral colour scheme with playful "pops" of colour and the variation of height from north to south further assist in

achieving this outcome and provide visual interest to what would typically be a monotonous lengthy façade. Refer to the Faulkner Way elevation below.



Figure 61: Faulkner Way elevation (Source: TKD Architects)

- The Buchan Avenue elevation has been carefully designed to provide variation in height and form and visual interest through design and materiality. As noted by the project architects in the accompanying design report, and as can be seen in the elevation extract below, the strong vertical shading elements to the three (3) storey administration building are more ochre in colour to pick up on highlight colours of the foliage and provide a warm contrast to the alternative neutral grey and green tones of the other façade. This demonstrates how each facade has been designed to respond to its immediate context, but noting there is also a clear design approach/theme that has been developed across the full extent of the site for cohesiveness. The OOSH and hall building in the north-eastern corner of the site and fronting Buchan Avenue is single storey and provides a necessary balance in built form across this frontage. The two (2) buildings "book-end" the internal open space courtyard and combined with hard and soft landscaping, create a clear street address and definition of the main entry to the school.



Figure 62: Buchan Avenue elevation (Source: TKD Architects)

- The proposed eastern elevation fronting the vacant site to the east comprises a similar linear typology, but a more modest built form, and a single storey structure for the full extent of the building. As can be seen in the elevation extract below, the central COLA provides a clear break between the buildings, further reducing the visual massing of that elevation, when viewed from the east and internally within the site. Again, the materiality is varied for further articulation and interest, but less so than for the other more prominent street elevations.



Figure 63: East school building elevation (Source: TKD Architects)

7.1.2.2. Design Quality (generally)

TKD discuss the design quality of the proposal in Appendix B. The proposal is underpinned by six key concepts:

- Creation of communal gathering spaces;
- Identifiable and welcoming entry forecourt;
- Visible and physical link to facilitate easy movement of people throughout the site;
- Define a strong street presence;
- Explore opportunities to dual school and community facilities; and
- Deliver programmed green space.

At the core of the architectural design is the integration of the connection with country. Consultation has informed this design development process and will continue to do so.



Figure 64: Extract of public domain and community facilities diagram (Source: TKD Architects)

The proposal seeks to create a distinct identity for the school, visually connect with Clermont Park and significantly enhance the local streetscape and create a landscape setting of the school.

7.1.2.3. Design Quality (compliance)

The Architectural Design Report demonstrates the proposal's consistency with the ESEPP Design Quality Principles and Better Placed design objectives. Refer to Appendix B for detail.

7.1.2.4. Amenity

There is a range of key considerations in determining whether the proposal will result in any adverse impact on the amenity of the site or surrounds. These are:

- View Impacts
- Privacy
- Daylight access/overshadowing
- Ventilation
- Acoustic attenuation
- Access to landscape and outdoor spaces
- Future flexibility

Each of these matters is addressed below.

7.1.2.4.1. View Impacts

There are no significant or iconic views across the site. Therefore, there will be no view loss from the proposal.

TKD has prepared a view impact assessment in Appendix B. The proposal is considered to sit comfortably within the surrounding context. The perspective imagery illustrates the new primary school will cause minor visual impacts from vantage points in proximity of the site. The articulation of the facades with battens, materials and screening from mature planting assist in ameliorating these impacts. Refer to the following figure.



1| INDICATIVE VIEW FROM FAULKNER WAY



2| INDICATIVE VIEW FROM GALLIPOLI DRIVE

Figure 65: Extract of view analysis (Source: TKD)

7.1.2.4.2. Privacy

There will be no privacy impacts to the east or south given the east comprises vacant land (and the site of a potential future high school) and the south comprises a future road and the existing railway.

To the north-west and west are low density residential dwellings. To the north comprises open space (a park) and to the north-east, future residential development. In responding to these more sensitive interfaces to the site, we note the following:

- The majority of the dwellings to the north-west and west along Faulkner Way are oriented to the street so that their primary open space is located to the rear. The future residential development to the north-east would typically be similarly oriented to Buchan Avenue, with primary open space orientated to the north and away from the school site. Given these orientations, the school would privacy issues are unlikely to arise either for the residents or students.
- Further to and notwithstanding the above, the proposed built form has been generously setback by 9 metres to the north-west/west and 12 metres to the north/north-east. These setbacks are combined with separation distances of between 16 metres and 23 metres to the existing uses to the north-west/west and north/north-east respectively (separated by roads and road reserves). These separation distances are considered sufficient to assist in ameliorating any potential for overlooking from the development.

7.1.2.4.3. Daylight access/overshadowing

The buildings have been sited and designed to maximise daylight access internally within the central outdoor play area. As can be seen in the figure below, in the mid-winter solstice, more than 50% of the central outdoor play area receives solar access from 9am through to well after lunchtime. Self-shading is evident at 3pm, but is less critical given outdoor play will be limited during the late afternoon hours. The images below also demonstrate that there will be no overshadowing to the areas surrounding the site, with the exception of a very small portion of overshadowing to the vacant land to the east from the north-eastern most building. This is not considered to be of any consequence since its considerable land size provides flexibility to design, what is likely to be for a future educational use, around this small area of overshadowing at a very limited period during mid-winter.



Figure 66 Mid-winter shadow diagrams (Source: TKD)

Further to the above, we note that daylight access to the internal areas of the buildings themselves is important, but it is equally important for sunlight to be controlled so as to not cause thermal discomfort or glare. The primary north-western façade is designed to mitigate direct sunlight through a series of vertical blade shading devices, protecting the windows by being angled to deflect sunlight but also allowing daylight into the spaces behind. The blades vary in both size and depth. This provides articulation in the façade and shadow, ensuring the built form is not solid.

7.1.2.4.4. Ventilation

The proposal will be both naturally and mechanically ventilated. JHA has discussed this in further detail in Appendix U. The design of the building seeks to maximise glazing and openings and the central shared learning area to be unencumbered so as to maximise ventilation. The open planning between homobases seeks to promote shared ventilation. The administration building benefits from access to three external facades and openable windows to all office spaces around the perimeter.

7.1.2.4.5. Acoustic (and vibration) amenity

Acoustic amenity is discussed in detail in Section 7.9 of this EIS. In summary, we note that the Noise and Vibration Assessment prepared by JHA Services at Appendix M confirms that the proposal will not result in any adverse noise or vibration impact internally within the site or to the nearest sensitive receivers on Faulkner Way providing the recommendations contained in that report are implemented. They primarily relate to:

- Review and certification of mechanical plant selection by a suitably qualified acoustic consultant through design development and prior to the issue of a Crown Certificate;
- Careful selection and ongoing management of the public address and school bell systems;
- Limiting and management of the use of amplified music events in the communal hall where feasible and restriction in hours of operation of any such events (and notification to neighbours accordingly);
- Acoustic design of relevant building facades including external glazing to the recommendations of JHA Services; and
- Preparation of a detailed Construction Noise Vibration Management Plan (CNVMP) to address potential acoustic and vibration impacts during construction, which should be coordinated with a suitably qualified acoustic consultant.

All of the above measures will ensure that the acoustic (and vibration) comfort internally within the site and to external sensitive receivers will be managed and mitigated to ensure a suitable level of amenity. Additionally, JHA assessed the potential vibration exposure onto the school site from passing trains. Vibration was not perceptible in this assessment. Refer to Section 7.9 of this EIS for further detail.

7.1.2.4.6. Access to landscape and outdoor spaces

As noted earlier, the buildings have been sited to allow for the provision of a very generous central open space courtyard area for students during play and assembly. The accompanying design report notes the following, which outlines the intent behind the location and design of the primary outdoor play space, to ensure optimal usage, a high level of accessibility and various options for student engagement:

- The central landscaped area is designed to meet Buchan Ave at grade and provides a large welcoming forecourt into the school precinct. This is the main formal/communal entry into the school. From the entry forecourt, accessible pathways are integrated into the landscape to provide access to the main administration entry to the northwest and the hall to the south/east. The openness of the forecourt and central landscaped space provides strong visual link to Buchan Ave and to Clermont Park across the road.
- A sensitive transition of levels is incorporated into the design to provide accessible and gentle access throughout the open areas and play space of the school whilst integrating shallow steps and amphitheatre settings that respond to the hall and the COLA outside the hall. There is a covered way that links the COLA over to the north/western building and beyond. From the Faulkner Way side, a secondary school entry is provided. There is a break in the building and an entry gate and accessible ramp down into the site. From this side entry point, the break in the building provides a strong visual connection across to the hall and communal areas in the landscape.
- Further south, the play space rises up in level to meet the higher side of the site at the south western boundary defined by a series of terraced areas of play space of varying character.

7.1.3. Mitigation Measures

The proposed mitigation measures to minimise built form impacts are outlined in Table 26.

Table 26: Built form and urban design mitigation measures

ID	Mitigation measures
Part A - Administration	
A1	The development is to be carried out in accordance with the Architectural Plans prepared by TKD dated 27 May 2021.

7.2. Tree Removal and Landscaping (SEAR 4)

7.2.1. SEAR

Provide:

- a detailed site-wide landscape strategy, that:
 - details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage.
 - considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation.
 - demonstrates how the proposed development would:
 - i) contribute to long term landscape setting in respect of the site and the streetscape.
 - ii) mitigate the urban heat island effect and ensure appropriate comfort levels on-site.
 - iii) contribute to objectives to increase urban tree canopy cover.
- a detailed landscape plan prepared by a suitably qualified person

Relevant Policies and Guidelines:

- Draft Greener Places Design Guide (GANSW)
- Objective 30 of The Greater Sydney Region Plan - A Metropolis of Three Cities
- Technical Guidelines for Urban Green Cover in NSW (Office of Environment and Heritage (OEH), 2015).

7.2.2. Assessment

Oculus has prepared a site-wide landscape strategy for the new primary school appended at Appendix D. The strategy is well considered and underpinned by seven diverse and robust principles as outlined in Section 3.4 of this EIS. The proposed landscaping seeks to increase the tree canopy cover of the site to 40%, which is a vast improvement from the 0% canopy cover currently present on the site. The reintroduction of Cumberland Plain Woodland planting enhances the site's connection to the vegetation to the south of the railway line and Clermont Park. The landscape design considers the varied topography of the site and seeks to create equitable and diverse outdoor learning environments. The planting strategy is illustrated in Figure 67.



Figure 67: Extract of the proposed planting strategy (Source: Oculus)

The above planting strategy is supported by:

- Increased tree canopy cover;
- Robust fencing strategy to delineate spaces which are accessible by students and those which are not, in conjunction with perimeter planting;
- Accessible pedestrian movement corridors;
- Identifiable entrance areas to the school grounds;
- A central outdoor assembly area;
- Servery and COLA areas;
- Various open play spaces, including an active informal open space;
- Outdoor learning facilities on the eastern boundary;
- A games court to facilitate to sport and encourage physical activity;
- Numerous passive landscape environments; and
- Car parking.

The landscape masterplan provides a range of open spaces to facilitate students' learning, physical activity and social well-being. Oculus has considered relationships and adjacencies of uses and circulation patterns with indoor and outdoor spaces to ensure the smooth operation and use of all areas. The approach seeks to reflect the past, existing and emerging local character of Edmondson Park, increase tree canopy cover and vegetation, and create a comfortable and inspiring environment for students, staff and visitors.



Figure 68: Extract of landscape section B (Source : Oculus)

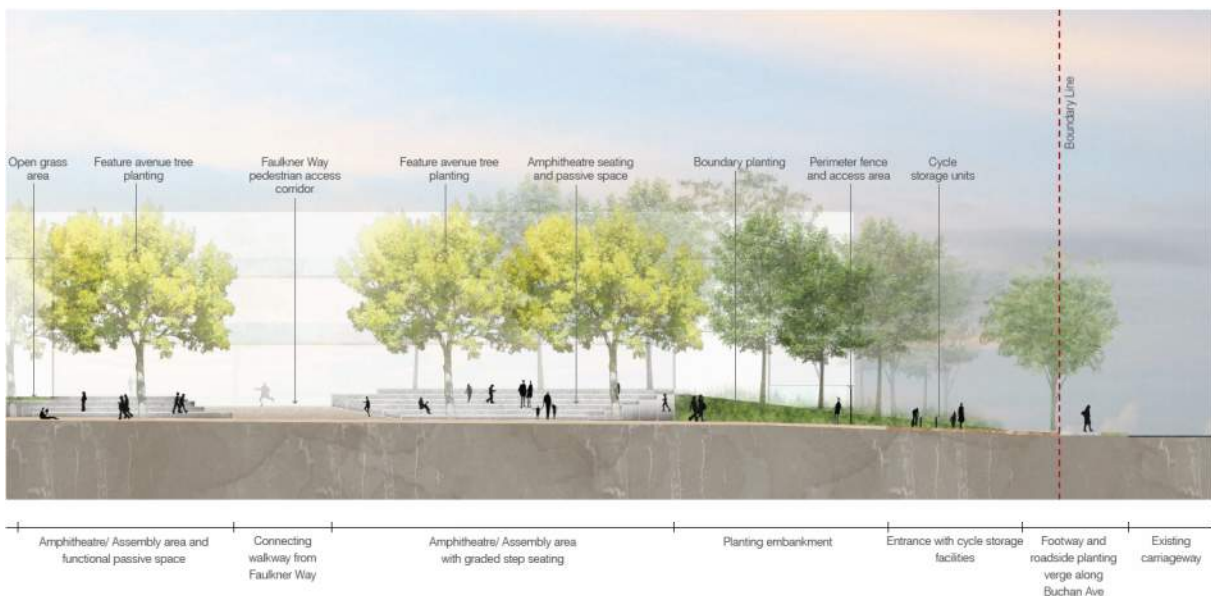


Figure 69: Extract of landscape section A (Source: Oculus)

The planting strategy seeks to create a green and coherent network providing shelter from the sun, reduction in heat and a comfortable microclimate for students, staff and visitors.

The landscape strategy for the new primary school makes a positive contribution to the Buchan Avenue and Faulkner Way streetscapes, noting street tree planting will be delivered by Landcom. The landscape design results in positive environmental impacts and creates meaningful visual connections to the landscape history of the locality.

7.2.3. Mitigation Measures

The proposed mitigation measures to enhance the positive landscape outcomes of the proposal is noted in Table 27.

Table 27: Landscape mitigation measures

ID	Mitigation measures
Part A - Administration	
A2	The development is to be carried out in accordance with the Landscape Plans prepared by Oculus dated 18 May 2021.

7.3. Environmental Amenity (SEAR 5)

7.3.1. SEAR

- Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.

Provide:

- shadow diagrams.
- a view analysis of the site from key vantage points and streetscape locations and public domain including photomontages or perspectives showing the proposed and likely future development.
- an analysis of proposed lighting that identifies measures to reduce spill into the surrounding sensitive receivers.

7.3.2. Assessment

7.3.2.1. Solar access

TKD has sought to maximise solar access to the proposed learning spaces. The design encompasses 2.7 metre ceiling heights to maximise daylight ingress. The unencumbered central shared learning area also seeks to maximise solar access to the building from these internal spaces. The library has external façades on three sides and has large windows that provide ample daylight and ventilation. The design incorporates shading devices on the north-west façade and the covered walkway to provide weather protection.

7.3.2.2. Visual privacy

The proposal incorporates a minimum 12 metre setback to Buchan Avenue and 9 metre setback to Faulkner Way. These setback distances in conjunction with roads and perimeter landscape seek to minimise the visual presentation of the building, particularly the three storey form on the corner of Buchan Avenue and Faulkner Way. The Architectural Plans (Appendix B) illustrate substantial provision of angled louvres on the northern and western façades. These assist with affording visual privacy to the surrounding developments.

7.3.2.3. Visual amenity

Refer to Section 7.2.2.4.1. of this EIS.

7.3.2.4. Overshadowing

Overshadowing is discussed in Section 7.1.2.4.3 of this EIS above. As illustrated in Figure 66, the proposal causes no overshadowing impacts onto adjoining properties and is largely confined within the site boundaries. The buildings have been designed and sited to minimise shadow impacts onto open space.

7.3.2.5. Wind impacts

The maximum height of the western building is three storeys. The proposal is not expected to generate adverse wind impacts onto surrounding properties.

7.3.2.6. Acoustic impacts

Refer to Section 7.9 of this EIS for a detailed assessment. In summary, the impacts are considered acceptable subject to implementing mitigation measures.

7.3.2.7. Light Spill

Given the site is located within close proximity to sensitive receivers to the north and west, consideration of any potential for light spill is required. JHA has prepared a Lighting Strategy in Appendix DD. The quality of lighting levels will be in accordance with the EFSG. The strategy involves:

- Teaching spaces, library and canteen - lighting will be fit for purpose and address functional requirements, provide lighting atmosphere to suit the educational context, provide a lighting control system to fulfil visual tasks and minimise replacement of LED lamps;
- Outdoor circulation areas - luminaire selection and mounting height will be reviewed and refined during the detailed design prior to Crown Certificate though will be in accordance with AS 2560, AS 1158.1, AS 4284 and the EFSG;
- Hall - uniform lighting solution for visual tasks and flexibility through the use of lighting control systems;
- Staff rooms - uniform lighting to task areas and workstations, designed in accordance with EFSG;
- Amenities - controlled via occupancy sensors for on/off control as an energy saving measure;
- Outdoor car park - luminaire selection shall be low glare fittings, external lights will be LED type light sources only and controlled via photoelectric cells and control system with manual override control. Lights are proposed to be low height, low intensity and discreetly positioned to avoid spill lighting and in accordance with AS 1158.1 and AS 4282; and
- Store - provided to suit specific tasks within the storage area without over lighting the space and gradation of light levels between circulation and storage will be considered.

In summary, obtrusive lighting will be carefully considered during the external lighting design to ensure compliance with AS 4284 and minimise spill onto neighbours or to the night sky.

7.3.3. Mitigation Measures

The proposed mitigation measures to minimise the environmental amenity impacts are detailed in Table 28.

Table 28: Environmental amenity mitigation measures

ID	Mitigation measures
Part B - Prior to the Commencement of Construction	
B1	Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifying Authority that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.

7.4. Transport and Accessibility (SEAR 6)

7.4.1. SEAR

Include a transport and accessibility impact assessment, which includes, but is not limited to the following:

- analysis of the existing transport network, including:
 - road hierarchy.
 - pedestrian, cycle and public transport infrastructure.
 - details of current daily and peak hour vehicle movements based on traffic surveys and / or existing traffic studies relevant to the locality.
 - existing performance levels of nearby intersections utilising appropriate traffic modelling methods (such as SIDRA network modelling).
- details of the proposed development, including:
 - a map of the proposed access which identifies public roads, bus routes, footpaths and cycleways.
 - vehicular access arrangements, including for, school buses, service and emergency vehicles and loading/unloading, including swept path analysis demonstrating the largest design vehicle entering and leaving the site and moving in each direction through intersections along the proposed transport routes.
 - car parking, bicycle parking and end-of-trip facilities.
 - drop-off / pick-zone(s) and bus bay(s).
 - pedestrian or road infrastructure improvements or safety measures.
- analysis of the impacts due to the operation of the proposed development, including:
 - proposed modal split for all users of the development including vehicle, pedestrian, cyclist, public transport and other sustainable travel modes.
 - estimated total daily and peak hour vehicular trip generation.
 - a clear explanation and justification of the:
 - i) assumed growth rate applied.
 - ii) volume and distribution of proposed trips to be generated.
 - iii) type and frequency of design vehicles accessing the site.
 - details of performance of nearby intersections with the additional traffic generated by the development both at the commencement of operation and in a 10-year time period (using SIDRA network modelling).
 - consideration of the proposed signalisation of Buchan Avenue/Bernara Road in Edmondson Park South (MOD5 TMAP 2018) and impacts on the local road network and pedestrian safety with and without proposed traffic signals on the local road network. Note that the installation of traffic control signals is dependent on general warrants in accordance with TfNSW requirements for Traffic Signal Design - Section 2 Warrants.
 - cumulative traffic impacts from any surrounding approved development(s) and future planned developments such as the Frasers Town Centre and the proposed additional development within the Landcom Town Centre.
 - adequacy of pedestrian, bicycle and public transport infrastructure to accommodate the development.
 - adequacy of car parking and bicycle parking provisions when assessed against the relevant car / bicycle parking codes and standards.
 - adequacy of the drop-off / pick-up zone(s) and bus bay(s), including assessment of any related queuing during peak-hour access.

- adequacy of the existing / proposed pedestrian infrastructure to enable convenient and safe access to and from the site for all users.
- measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including:
 - travel demand management measures to encourage sustainable transport (such as a School Transport Plan).
 - infrastructure improvements, including details of timing and method of delivery.
- a preliminary operational traffic and access management plan for the site, the drop-off / pick-up zone(s) and bus bay(s).
- analysis of the impacts of the traffic generated during construction of the proposed development, including:
 - construction vehicle routes, types and volumes.
 - construction program (duration and milestones).
 - on-site car parking and access arrangements for construction, emergency and construction worker vehicles.
 - cumulative impacts associated with other construction activities in the locality (if any).
 - road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality.
 - measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction
- a preliminary Construction Traffic and Pedestrian Management Plan.
- plans depicting school zone signage and subsequent pavement marking locations.

Note: Further guidance is provided in the TfNSW advice attached to the SEARs.

Relevant Policies and Guidelines:

- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002)
- EIS Guidelines - Road and Related Facilities (Department of Urban Affairs and Planning (DUAP), 1996)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004)
- Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020)
- Australian Standard 2890.3 Parking facilities, Part 3: Bicycle parking (AS 2890.3).

7.4.2. Assessment

The Transport and Traffic Assessment prepared by PTC Consultants provides a comprehensive response to SEAR 6. The enrolment catchment for the new primary school encompasses land to the north of the railway line and south of Camden Valley Way. Currently, 346 students live within the school's catchment.

The road network in the locality is being developed concurrently with residential development. Notwithstanding, there are opportunities to improve pedestrian and cycling connectivity. Landcom is currently delivering the extension of Buchan Avenue, which will be a typical collector road with a 2.5 metre shared path on one side and 1.2 metre footpath on the other side of the carriageway. Buchan Avenue will provide bus connectivity from the site to the town centre which is currently absent. Faulkner Way is a typical urban street with a 1.2 metre wide footpath on the western side and 2.5 metre footpath on the eastern side.

PTC Consultants highlight in Appendix R that almost the whole school enrolment catchment lies within the SSTS exclusion zone, meaning only 4% of students within the catchment are eligible for the free or subsidised school travel pass (Figure 70).

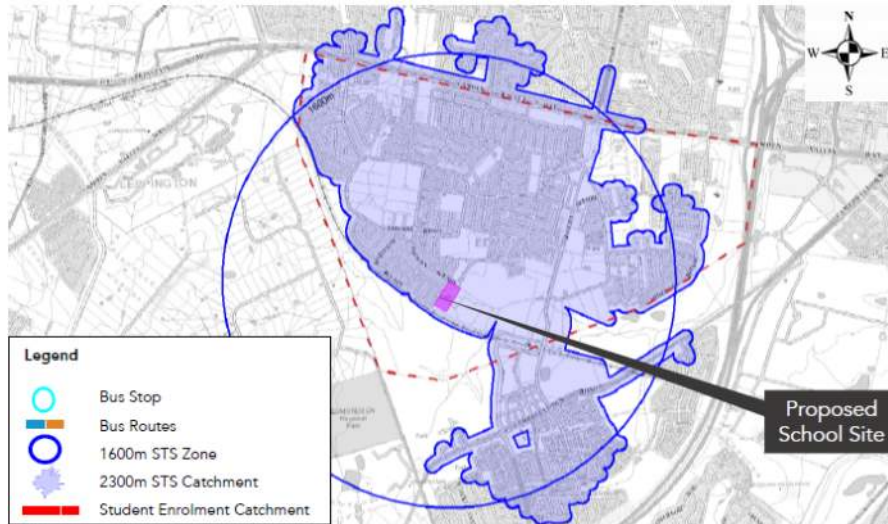


Figure 70: SSTS exclusion zone (Source: PTC Consultants)

PTC Consultants have calculated targets for travel mode within the school catchment as follows:

- 21% walking
- 16% cycling or scooting
- 17% taking public transport
- 46% driving

The proposal provides legible and accessible pedestrian access points to the new school. The pedestrian gates are physically separated from vehicular access points. DoE will deliver two zebra crossings and a bus stop on the north of Buchan Avenue.

The new primary school seeks to encourage cycling and scooting as a means of active transport. The proposal provides more than the minimum bicycle parking requirements stipulated in planning guidelines for walking and cycling, Austroads Guide to Traffic Management and EFSG. This is a positive outcome for students and staff. Lockers, a shower and change cubicle are provided in conjunction with the cycling facilities for staff. The proposal does, however, provide a shortfall of end of trip facilities when measured against the Liverpool DCP and NSW Planning Guidelines for Walking and Cycling 2004.

The proposal provides 35 parking spaces for primary school staff and 13 spaces for pre-school staff. This is a shortfall when compared to the parking rates set out in Liverpool DCP. Notwithstanding, the EFSG does not provide car parking rates and the DoE has a policy that a school is not obliged to provide parking on-site to anyone at any time. If a school has space, it may offer disabled parking spaces, parking for visitors and staff.

PTC has undertaken an assessment of the traffic impact utilising the traffic modelling undertaken by AECOM as part of the Mod 5 of the Edmondson Park South Concept Plan (June 2020). This modelling stipulated a 1,000 student primary school. With the primary school the findings included:

Intersections at Campbelltown Road will operate at LoS D

The intersection of Bernera Road/Buchan Avenue will operate at LoS D in the AM peak.

All other intersections will operate at LoS C or better.

PTC assess that based on the AECOM traffic modelling, the new primary school accommodating 1,012 students will be accommodated in the network. However, we note the modelling did not incorporate the 40-place pre-school. PTC conservatively considered in its report at Appendix R, if all 40 students were driven to and from school, it would result in traffic generation of 40 vehicles in an hour, or 1 vehicle every 1.5 minutes. This is assessed as minor and not having a significant impact on the surrounding network.

AECOM is currently in the process of updating the Edmondson Park South concept plan traffic modelling on behalf of Landcom for Mod 5 MP10_0118. When the updated modelling becomes publicly available, PTC will reassess the traffic impacts of the new primary school with the updated data from the AECOM model. The Transport and Traffic Assessment and School Transport Plan will be adjusted, as required.

PTC has estimated the number of vehicles required per day during the construction process as follows:

- Stage 1 - civil works - earthworks - 50 to 100 per day (truck and dog)
- Stage 2 - main works - construction - 20 to 40 per week (mainly up to 19 metre articulated vehicle, 25 metre prime movers for 4 weeks to deliver DfMA)

The construction traffic activity is anticipated to occur at varying times during the day, hence is not expected to cause a notable impact on the broader road network. As Buchan Avenue will be complete, it will provide construction access to the site. The proposed construction vehicle access is illustrated in the following figure.

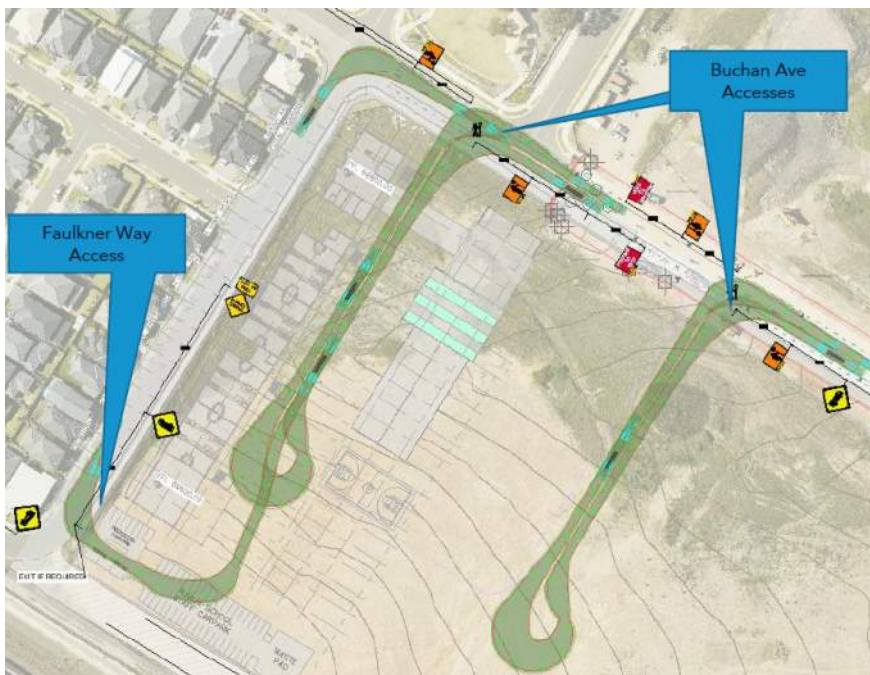


Figure 71: Construction vehicle access (Source: PTC Consultants)

PTC outline in Appendix R that approximately 65 construction staff per day will be on-site. Parking will be provided either on-site or off-site. To minimise car usage during construction, public transport and car-pooling will be strongly encouraged by the contractor. PTC have calculated approximately 56 spaces (marked in green) would be available for construction staff and 42 spaces (marked in pink) would be available temporarily or periodically, refer to the below figure. Utilising of parking in these locations will seek to minimise impacts on other residential streets.

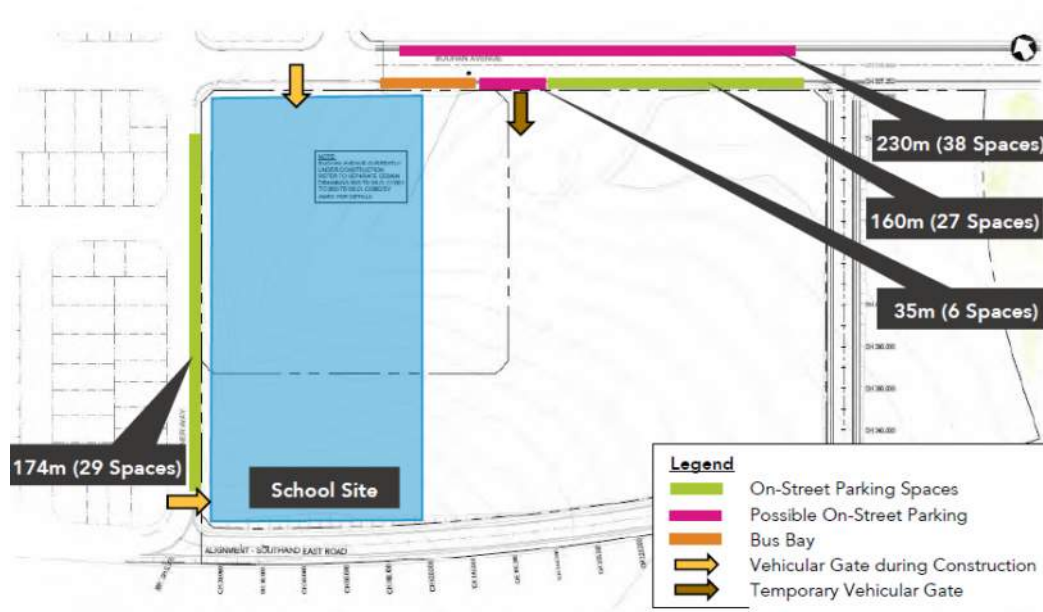


Figure 72: On-street parking in the vicinity of the site during construction (Source: PTC Consultants)

There are potential cumulative traffic/parking impacts which may arise if the construction of the south and east road, being delivered by Landcom, overlap with the primary school construction. This includes higher demand for parking due to increased construction workers in the locality. To mitigate this, PTC propose that the head contractor closely liaise with other developments to coordinate truck movements and prevent combined impacts.

PTC has prepared a School Transport Plan to promote active and sustainable transport modes. We consider the traffic, parking and access impact to be acceptable provided the below mitigation measures are implemented and the School Transport Plan is annually updated.

7.4.3. Mitigation Measures

The proposed mitigation measures to minimise traffic, parking and access impacts are outlined in Table 29.

Table 29: Traffic, parking and access mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B2	Lead contractor is to induct all subcontractor to ensure procedures are followed by vehicles entering and exiting the construction site.
B3	Prior to the commencement of works, a traffic control plan is to be prepared to demonstrate the changed road conditions during construction.

ID	Mitigation measures
B4	Prior to the commencement of works, an emergency management plan is to be prepared to confirm access for emergency vehicles to the site, if required.
Part C - During Construction	
C1	Construction hours are to be limited to: - Monday to Friday: 7.00am to 6.00pm - Saturday: 8.00am to 1.00pm - Sunday and Public Holidays: No excavation or construction works
C2	Public roads are not to be obstructed by vehicles, materials, refuse skips and the like, during construction.
C3	Construction vehicles are limited to a maximum of 25 metre prime mover. Should an oversized vehicle be required, a permit is to be sought from TfNSW prior.
Part D - Prior to Occupation	
D1	Prior to the commencement of operation, the School Transport Plan must be submitted to the satisfaction of the Planning Secretary to promote use of active and sustainable transport mode.
Part E - Post Occupation	
E1	The School Travel Plan must be updated annually and implemented.

7.5. Ecologically Sustainable Development (SEAR 7)

7.5.1. SEAR

Detail:

- how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) would be incorporated in the design and ongoing operation phases of the development.
- proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy.
- how the future development would be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy.
- how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (GANSW, 2018).

Include:

- an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level.
- a statement regarding how the design of the future development is responsive to the NARClIm projected impacts of climate change.
- 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.

Relevant Policies and Guidelines:

- NSW and ACT Government Regional Climate Modelling (NARClIM) climate change projections.

7.5.2. Assessment

JHA has prepared an ESD Report in Appendix U that provides a direct response to SEAR 7. The four ESD principles stipulated in the EP&A Regulation are addressed by the proposal and will be implemented during the ongoing operation of the new primary school as follows:

- **The Precautionary Principle:** The proposal seeks to minimise impact on the environment, particularly with regard to energy, water and materials. The incorporation of high performing external glazing and shading devices with energy efficient design measures, together minimise severe and irreversible environmental damage;
- **Inter-Generational Equity:** The proposal will not cause significant impact on the health, diversity and productivity of the environment. The project will provide a positive community benefit and strengthen learning opportunities in the locality;
- **Conservation of Biological Diversity and Ecological Integrity:** As discussed in this EIS, the site is biodiversity certified, hence the biodiversity has been previously considered, assessed and resulted in certification. The proposal will not pose threats to endangered species, communities or their habitat; and
- **Improved Valuation, Pricing and Incentive Mechanisms:** The construction material will be selected based on relative cost-benefit analysis on the whole life costs rather than capital expenditure only. Where possible, certified recycled and reused materials with low embodied energy will be utilised.

The proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy include:

- Designing the building fabric to meet or exceed the NCC 2019 Section J requirement for building envelope. The preliminary review under the Deemed-to-Satisfy pathway undertaken by JHA demonstrated compliance with the SSDA design;
- High performance glazing systems to reduce heat transmission, particularly given the location in Western Sydney;
- Efficient utilisation of the sun through external high performance horizontal eave shading to prevent the high summer sun from entering the building and allowing the low winter sun to enter the building for passive heating;
- An air conditioning system to the school building will comprise a variable refrigerant volume/flow system to provide simultaneous operation of cooling and heating to each individual space;
- Bathrooms, storage and general exhaust will be naturally ventilated where possible and mechanical ventilated as necessary, with time controls;
- Sensor lighting in learning spaces to reduce light output or turn off when sufficient daylight is available;
- Photovoltaic system comprising a 70 kW solar PV system;
- Incorporating water efficient fixtures and fittings in accordance with the Australian Government's Water Efficiency Labelling Scheme (WELS);
- Target rate of a minimum 3% of project sustainability value over project contract value, subject to monitoring and calculating using Green Star Sustainable Products Calculator;
- Implementation of best practice water sensitive urban design including indigenous low water usage plants to increase stormwater retention, decrease total suspended solids and mitigate urban heat island effect; and
- Targeting a 5 Star Green Star Design and As-Built Rating.

JHA has prepared a Climate Risk Assessment Report in Appendix U. The impacts of climate change were assessed across the two scales, being 2030 and 2070 and two representative concentration pathways, being RCP4.5 and RCP8.5. The climate futures matrix was then used to determine the key climate projections based on variables, informing the risk assessment. The results of the risk assessment identified two high risk items pre-adaption. The high risks were mitigated to medium risks through proposed adaption actions. Refer to the following table.

Table 30: Climate risk and response

Risk	Response
Higher average surface temperature and less rainfall conditions causing an increase in frequency and/or severity of bushfire events causing potential damage to school buildings.	Mitigated through utilisation of non-combustible building fabrics and provision of an APZ well in excess of the minimum 50 metre APZ required. Ongoing good practice to remove potential fuel source during operation to reduce risk.
Higher maximum daily temperature and lower humidity conditions causing higher frequency and/or duration of heatwaves resulting in insufficient capacity of the HVAC system to maintain thermal comfort.	Incorporation of passive thermal principles including external shading, thermal insulation and once the HVAC system has reached its end of life service, upgrade.

In considering, NARClIM climate change projections, JHA confirms there will be no significant temperature change for the proposed site by comparing the temperature of 1990- 2009 to 2020- 2079.

7.5.3. Mitigation Measures

The proposed mitigation measures to minimise climate change and ESD impacts are outlined in Table 31.

Table 31: ESD mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B5	Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Applicant must demonstrate that ESD is being achieved by registering for a minimum 5-star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifying Authority.

7.6. Heritage (SEAR 8)

7.6.1. SEAR

- Address any archaeological potential and significance on the site and the impacts the development may have on this significance.

7.6.2. Assessment

Archaeological Management and Consulting Group have prepared a Baseline Archaeological Assessment of the site to assess any archaeological potential of significant and impact the proposal may have (Appendix Y).

The archaeological significance of the site is assessed in the following table.

Table 32: Archaeological significance assessment

Criteria	Identification of significance
Archaeological research potential (NSW Heritage Criterion E)	Historical research found no evidence of development at the site. Although it is possible that the site was used in association with the 19th century agricultural use of the original 840 acres and in close proximity of the later 20th century wider Ingleburn Defence site, there is no documentary evidence to support this. The site is therefore unlikely to yield archaeological evidence of significant research potential or that is considered significant with respect to this criterion.
Associations with individuals, events or group of historical importance (NSW Heritage Criteria A, B and D)	Henry Kitchen was the original grantee of the site in 1819 and later Charles Henry Throsby, and although they were notable figures in the early historic record of the south west of Sydney, there is no evidence that they ever occupied or developed the site. The site is within Edmondson Park which was named after John Hurst Edmondson. The relationship with Kitchen, Throsby and Edmondson with the site is not represented archeologically. The historic significance of the Ingleburn Defence site, which is approximately 680 metres from the school site, is not expected to be represented in the archaeological record of the site.
Aesthetic of technical significance (NSW Heritage Criterion C)	The site is not considered significant in relation to this criterion.
Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria A, C, F and G)	No archaeological remains are anticipated for the site as there is no evidence of development or use of the site.

On this basis, the site is not considered either local or State significance.

The proposed works including site preparation and excavation are not anticipated to impact on any significant archaeological remains relating to the wider former Ingleburn Defence site. The proposal is considered to have no archaeological heritage impact as the site has no archaeological potential.

7.6.3. Mitigation Measures

No mitigation measures are proposed with respect to archaeological heritage.

7.7. Aboriginal Cultural Heritage (SEAR 9)

7.7.1. SEAR

- Document and describe the Aboriginal cultural heritage values that have existed across the whole area that will be affected by the development. This needs to include outlining the Aboriginal cultural heritage assessments undertaken at the site and surrounding area to date.
- Registered Aboriginal Parties that have been identified as part of the broader Edmondson Park development area should be updated on the current proposal and the results documented in

the EIS in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

- Outline the impacts, including possible impacts, of the project on Aboriginal cultural heritage values and the measures proposed to mitigate impacts.
- Outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.
- Outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

7.7.2. Assessment

The Edmondson Park South area, including the site, has been the subject of comprehensive Aboriginal heritage assessments and is the subject of an existing Aboriginal Heritage Impact Permit (AHIP C0001134). KNC outline in Appendix O that the existing AHIP allows for impact to identified Aboriginal heritage within Edmondson Park South and also includes provision for archaeological salvage excavation at particular sites, noting these works were completed mid-2016. The previous Aboriginal archaeological and cultural heritage assessment was prepared as part of the Landcom Concept Plan and comprised of a consultation process with registered Aboriginal stakeholders. The documents which were a product of the assessment include:

- KNC, 2018. Edmondson Park Concept Plan - Modification 5 (MP10_0118 MOD 5): *Aboriginal Heritage Assessment*. Prepared for Landcom.
- KNC 2015. Edmondson Park South: *Cultural Heritage Assessment Report (CHAR)*. Prepared for UrbanGrowthNSW.
- KNC, 2018. Edmondson Park South, Part 3A Concept Plan Application Environmental Assessment: *Aboriginal Cultural Heritage Assessment Report*. Prepared for J.Wyndham Prince on behalf of Landcom.

As detailed in Section 2.9.1 of this EIS, a single archaeological site comprising Aboriginal objects was identified at the primary school site. This is reflected in the EPSDCP heritage map in Section 5.11 above. Notwithstanding, KNC confirmed the archaeological site has since been destroyed under AHIP C0001134 and is no longer extant.

KNC's AHIMS search identified on Aboriginal archaeological site in the primary school and four others nearby. Refer to the following figure. Notwithstanding, EPCS10 (45-5-3911), SWRL Site 1 (45-5-3538) and SWRL Site 2 (45-5-3538) have since been destroyed under AHIP C0001134. This is consistent with the previous Aboriginal heritage assessments.



Figure 73: Extract of AHIMS search results, site outlined in red (Source: KNC)

Considering the previous removal of EPCS10 (45-5-3911) from the subject site, the proposal is not considered to cause impacts on any Aboriginal artefact. Notwithstanding, in the event that construction activity reveals unexpected Aboriginal objects, other than those listed in the AHIP, the procedure for handling unexpected archaeological sites and objects documented by KNC in Appendix O is to be followed. The same process should be followed should human skeletal material (remains) be revealed during construction activity.

Refer to Section 6.2.10 of this EIS for a summary of the Aboriginal consultation undertaken for the project.

7.7.3. Mitigation Measures

The proposed mitigation measures to minimise the impacts to Aboriginal heritage are outlined in Table 33.

Table 33: Aboriginal heritage mitigation measures

ID	Mitigation measures
B - Prior to Commencement of Construction	
B6	Prior to the commencement of works, prepare an unexpected finds protocol for the handling unexpected Aboriginal objects or human remains as documented by KNC in Appendix O.
C - During Construction	
C4	The procedures documented in Appendix O for handling unexpected Aboriginal objects or human remains are to be followed in the event an object/remain is revealed during construction activity.

7.8. Social Impacts (SEAR 10)

7.8.1. SEAR

- Provide a Social Impact Assessment prepared in accordance with the draft Social Impact Assessment Guideline 2020.

Relevant Policies and Guidelines:

- Draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment)

7.8.2. Assessment

EMM Consulting has prepared an SIA appended at Appendix T. The SIA has been informed by the best practice guidance and standards set out by the International Association for Impact Assessment and International Finance Corporation and developed in accordance with the DPIE's draft Social Impact Assessment Guideline 2020. EMM developed a robust methodology involving:

- Stage 1: Social baseline study
- Stage 2: SIA consultation
- Stage 3: Data analysis and review
- Stage 4: Social impact identification
- Stage 5: Social risk assessment
- Stage 6: Social impact management and monitoring
- Stage 7: SIA reporting

As outlined in Section 6.1 of this EIS, SINSW engagement activities involved a virtual information room, project information via communication materials, promotion in the Liverpool Champion, SINSW project website page, letter box drop to 1,400 dwellings in Edmondson Park and emails to local school network Principals and Educational Leadership group. EMM note that overall, the project interest was positive.

EMM conducted in-depth interviews and a community survey (administered online). 12 in-depth interviews were undertaken, being 22 service providers and one local residential. 32 responses were received on the community survey.

The expected and perceived impacts identified and expanded on in the SIA include:

- School traffic causing public safety and amenity issues;
- Improved access to primary and pre-school education services;
- Social cohesion, capital and resilience relating development of the school as a community hub;
- Residential satisfaction and fulfilment related to placemaking and sense of place;
- Improved health outcomes related to addressing childhood obesity; and
- Public safety related to urban heat island.

EMM has considered in detail mitigation measures that may be implemented to minimise social impacts. The proposal is considered to generally result in positive impacts. Other impacts can be adequately managed and addressed through mitigation strategies.

7.8.3. Mitigation Measures

The proposed mitigation measures to minimise social impacts are outlined in Table 34.

Table 34: Social impact mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B7	Prior to the commencement of construction, prepare a detailed CMP addressing noise, dust and traffic mitigation measures.
Part C - During Construction	
C5	Maintain a complaint register during construction.
C6	Incorporate security arrangements as such security cameras to minimise risk of school grounds being damaged.
C7	To minimise the impact of the urban heat island effect, provide tree canopy cover at 40% of the site area and shading devices to reduce surface temperatures.
Part D - Prior to Occupation	
D2	Develop and implement a local employment/recruitment strategy to increase the number of persons employed from the local and wider study area.
Part E - Post Occupation	
E2	Implement the School Travel Plan prepared by PTC dated May 2021.
E3	Maintain a complaint register post occupation.
E4	Develop a partnership with Council to manage community use of nominated facilities, if required.
E5	Incorporate a 'buddy' program to provide pre-school students the opportunity to interact and engage with primary school students.

7.9. Noise and Vibration (SEAR 11)

7.9.1. SEAR

- Provide a noise and vibration impact assessment that:
 - includes a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation and construction.
 - details the proposed construction hours and provide details of, and justification for, instances where it is expected that works would be carried out outside standard construction hours.
 - includes a quantitative assessment of the main sources of 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.
 - outlines measures to minimise and mitigate the potential noise impacts on nearby sensitive receivers.
 - considers sources of external noise intrusion in proximity to the site (including, road rail and aviation operations) and identifies building performance requirements for the proposed development to achieve appropriate internal amenity standards.
 - demonstrates that the assessment has been prepared in accordance with policies and guidelines relevant to the context of the site and the nature of the proposed development.

Relevant Policies and Guidelines:

- NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA))
- Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009)
- Assessing Vibration: A Technical Guideline 2006 (Department of Environment and Conservation, 2006)
- Development Near Rail Corridors and Busy Roads - Interim Guideline (Department of Planning, 2008)

7.9.2. Assessment

JHA has prepared a Noise and Vibration Impact Assessment in Appendix M. The relevant policies and guidelines have been adequately addressed. Noise from the proposed new primary school with the potential to impact existing noise sensitive receivers includes:

- Mechanical plant;
- Public address and school bell systems;
- Activities and events held in the hall and out of hours community facilities;
- Noise from the pre-school;
- Noise from classrooms; and
- Traffic generation noise.

The mechanical plant has not been resolved at this stage. Recommendations are provided to minimise the impact of external noise emissions in Table 35. The four bi-fold doors on the eastern, southern and western facades of the building provide natural ventilation to the hall, however, when open, represent the weakest elements of the building fabric in terms of noise breakout to the nearest noise sensitive receivers. JHA's assessment demonstrates the hall is expected to meet the noise level criteria for school activities at the nearest residential receivers with all bi-fold doors open. However, during amplified music events in the evening (6pm to 10pm), exceedances will occur even with the eastern and western bifold doors closed. Mitigation measures are proposed to manage noise impacts.

The noise impact of pre-school outdoor play was assessed as meeting the noise level criterion at the nearest noise sensitive receivers in Faulkner Way. Noise generated from the primary school classrooms are anticipated to be low.

The increase in traffic noise levels due to the proposed development is assessed as less than the maximum allowable increase of 2.1dB(A) in 2026. Thus, the new primary school will not result in any noticeable change in traffic noise levels and will meet the NSW Road Noise Policy recommendations.

The noise and vibration levels from the south-west railway line are acceptable for the new primary school.

The noise associated with the proposed (normal) construction works is expected to exceed the noise limits for highly noise affected receivers. Notwithstanding, this is typical noise levels associated with construction sites and use of machinery and can be managed with the preparation of a CNVMP prior to commencement of works.

Provided the below mitigation measures summarised in Section 7.9.3 and in Appendix M are implemented to proposal will have acceptable noise impacts.

7.9.3. Mitigation Measures

The proposed mitigation measures to minimise noise impacts are outlined in Table 35.

Table 35: Acoustic mitigation measures

ID	Mitigation measures
Part B- Prior to Commencement of Construction	
B8	Strategically locate and select mechanical plant to ensure cumulative noise at the receiver boundaries is not adverse.
B9	Acoustically assess the public address and school bell systems once the location, number and type of loudspeakers has been nominated.
B10	Undertake a detailed assessment of the sound insulation performance of the façade.
B11	Prepare a detailed CNVMP to assess noise impacts of construction works and include a protocol to minimise potential noise impacts to sensitive receivers.
Part C- During Construction	
C8	Provide external glazing facing Buchan Avenue and Faulkner Way to provide a minimum sound reduction index of Rw35. A 10.38mm laminated fixed single glazing system achieves the nominated sound reduction index.
C9	If vibration intensive plant is anticipated to be in close proximity of the minimum safe working distances for construction plant, the contractor must engage a qualified engineer to carry out a vibration survey to assess potential risks.
C10	Construction hours are to be limited to: - Monday to Friday: 7.00am to 6.00pm - Saturday: 8.00am to 1.00pm - Sunday and Public Holidays: No excavation or construction works
Part E - Post Occupation	
E6	Operate the school bell system such that the system does not interfere unreasonably with the comfort and repose of the nearby residences.
E7	To minimise noise impacts on residential receivers, minimise frequency of amplified music events during the evening (as feasible).
E8	Inform the community of noisy events and no events to be held between 10pm and 7am.
E9	Provide a contact number of the relevant persons employed to communicate with the community during noisy events.

7.10. Biodiversity (SEAR 12)

7.10.1. SEAR

- Provide a Biodiversity Development Assessment Report (BDAR) that assesses the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017 and Biodiversity Assessment Method, except where a BDAR waiver has been issued in relation to the development or the development is located on biodiversity certified land.
- Where a BDAR is not required because a BDAR waiver has been issued in relation to the development, provide:
 - a copy of the BDAR waiver and demonstrate that the proposed development is consistent with that covered in BDAR waiver.
 - an assessment of flora and fauna impacts where significant vegetation or flora and fauna values would be affected by the proposed development.

- Where a BDAR is not required because the proposed development is located on biodiversity certified land:
 - demonstrate that the proposed development is located on biodiversity certified land and provide details of relevant order(s) conferring biodiversity certification to the land and any associated maps.
 - demonstrate that the proposed development is consistent with any requirements of the biodiversity certified land.
 - identify if the site is affected by, or the proposed development impacts upon, any relevant biodiversity measures set out in an order conferring biodiversity certification to the land and provide details of any relevant consistency reviews considered in the preparation of planning controls affecting the site.
 - identify if the site contains mapped existing or protected native vegetation and demonstrate that the proposed development is consistent with the provisions that apply to the mapped areas.
 - provide an assessment of flora and fauna impacts where significant vegetation or flora and fauna values would be affected by the proposed development.

7.10.2. Assessment

As confirmed in the Biodiversity Certification Status prepared by Eco Logical Australia in Appendix G and Figure 74 the primary school site forms part of biodiversity certified land.



Figure 74: Extract of the biodiversity certified map (Source: Eco Logical Australia)

A BDAR is therefore not required for the proposal because:

- The site is wholly biodiversity certified;
- The proposal is consistent with the requirements of certification, in that it is consistent with Clause 8.4(2) of the BC Act, which states an assessment of biodiversity impact is not required for development (including SSD) under Part 4 of the EP&A Act;
- The site is not affected by biodiversity measures detailed in Order to Confer (NSW Government, 2007);
- The site does not contain mapped existing or protected native vegetation; and
- An assessment of flora and fauna impacts is not required in this circumstance.

On this basis, we consider the proposal to cause no ecological impact to significant flora or fauna.

7.10.3. Mitigation Measures

No mitigation measures are required due to the biodiversity certification of the site.

7.11. Contributions (SEAR 13)

7.11.1. SEAR

Identify:

- any Section 7.11/7.12 Contribution Plans, Voluntary Planning Agreements or Special Infrastructure Contribution Plans that affect land to which the application relates or the proposed development type.
- any contributions applicable to the proposed development under the identified plans and/or agreements. Justification is to be provided where it is considered that the proposed development is exempt from making a contribution.
- any actions required by a Voluntary Planning Agreement or draft Voluntary Planning Agreement affecting the site or amendments required to a Voluntary Planning Agreement affected by the proposed development.

7.11.2. Assessment

As established in Section 5.12 of this EIS, DPIE would require agreement of the public authority, in this case the DoE or the Minister of Planning and Public Spaces, to impose a contribution on this project. Planning Circular D6 notes that consideration should be given to the Crown's role in providing a community service and State infrastructure (not provided for by Council).

It is considered reasonable and consistent with decision making for Crown development in NSW not to impose a condition requiring a contribution. The project in and of itself is a significant and positive contribution as a piece of social infrastructure for the growing community of Edmondson Park.

7.11.3. Mitigation Measures

The proposed mitigation measures to minimise the imposition of a contribution for the project is outlined in Table 36.

Table 36: Mitigation measures contributions

ID	Mitigation measures
Part A - Administrative	
A3	No imposition of a contribution for the project in the Notice of Decision.

7.12. Staging (SEAR 14)

7.12.1. SEAR

- Assess impacts of staging where it is proposed and detail how construction works and operations would be managed to ensure public safety and amenity on and surrounding the site.

7.12.2. Assessment

RCC has prepared a CMP appended at Appendix X. Section 3.5 of the CMP confirms the construction of the proposed new primary school will not be staged, hence there are no staging impacts to consider.

The CMP outlines a portion of Lot 2 to the east of the primary school is proposed to accommodate entry and exit of delivery vehicles during construction. The area outside the extent of the primary school in Lot 1 will accommodate amenities, site compound, temporary batter works and materials handling area. Refer to Section 3.10 of this EIS for an image of the construction methodology. Provided a Construction Environment Management Plan (CEMP) is prepared and implemented prior to commencing works, we consider this acceptable.

7.12.3. Mitigation Measures

The proposed mitigation measures to minimise the impacts to lot 2 during construction in Table 37.

Table 37: Construction mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B12	Prior to commencement of works, prepare and implement a CEMP.

7.13. Utilities (SEAR 15)

7.13.1. SEAR

- In consultation with relevant service providers:
 - assess of the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.
 - identify any infrastructure upgrades required off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained.
 - provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.

7.13.2. Assessment

JHA has prepared an Infrastructure Management Plan, appended at Appendix N. The report undertakes an assessment of the existing/proposed utility infrastructure in proximity of the site and infrastructure required to support the proposal. Section 3.9 of this EIS describes the proposed utilities services.

As the site is currently a greenfield site, it does not currently benefit from electrical power supply, water supply or hydraulic services. JHA has documented the service opportunities to provide the required services in Appendix N. While JHA has provided detail on preferred utility connections, these will be subject to approval from the relevant service provider. As a result, the proposal will not adversely impact on existing utility infrastructure or service provider assets in proximity of the site.

JHA submitted a connector offer to Endeavour Energy. On 11 May 2021 Endeavour Energy responded noting it had carried out a desktop assessment and provided a supply offer. Details are included in Appendix N. Additionally Sydney Water has provided a State of Available Pressure and Flow. This has informed the water supply for the new primary school.

In summary, it is considered that the proposed utilities will be appropriately delivered to meet the requirements of the new primary school. As the detailed design progresses post SSDA, JHA will need

to coordinate the approvals with the respective service provider. The proposed services do not result in impacts to the existing/proposed network.

7.13.3. Mitigation Measures

The proposed mitigation measures to minimise the impacts to existing utilities in Table 38.

Table 38: Utility mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B13	Prior to commencement of works, obtain approvals from relevant service providers to deliver utility infrastructure.

7.14. Stormwater Drainage (SEAR 16)

7.14.1. SEAR

Provide:

- a preliminary stormwater management plan for the development that:
 - is prepared by a suitably qualified person in consultation with Council and any other relevant drainage authority.
 - details the proposed drainage design for the site including on-site detention facilities, water quality measures and the nominated discharge point.
 - demonstrates compliance with Council or other drainage authority requirements.
- stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties.
- Where drainage infrastructure works are required that would be handed over to Council, provide full hydraulic details and detailed plans and specifications of proposed works that have been prepared in consultation with Council and comply with Council's relevant standards.

Relevant Policies and Guidelines:

- Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH, 2013).

7.14.2. Assessment

Northrop has prepared a Civil Report (refer Appendix J) which details the proposed stormwater management plan. The plan has been prepared taking into consideration Council's requirements, consultation with Landcom and the existing/proposed infrastructure in the immediate vicinity of the site. The proposed drainage strategy is documented in Appendix J and identifies water quality measures and proposed discharge points/pipes, which do not result in adverse downstream impacts. MUSIC model results indicate the proposed water quality treatment train, consisting of a 20kL rainwater tank, 14 stormfilter cartridges and 27 ocean guard pit inserts, generally satisfies Council's statutory requirement for target pollutant removal rates. Northrop has confirmed that based on the advice provided by Landcom, the proposed method of stormwater drainage will not impact on downstream properties,

7.14.3. Mitigation Measures

The proposed mitigation measures to minimise stormwater impacts are outlined in Table 39.

Table 39: Stormwater mitigation measure

ID	Mitigation measures
B - Prior to Commencement of Construction	
B14	Prior to the commencement of construction, the applicant must design an operational stormwater management system for the development. The system must: (a) be designed by a suitably qualified and experienced person(s); (b) be generally in accordance with the conceptual design in the EIS; (c) be in accordance with applicable Australian Standards; (d) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines;

7.15. Flooding (SEAR 17)

7.15.1. SEAR

- Identify any flood risk on-site in consultation with Council and having regard to the most recent flood studies for the project area and the potential effects of climate change, sea level rise and an increase in rainfall intensity.
- Assess the impacts of the development, including any changes to flood risk on-site or off-site, and detail design solutions to mitigate flood risk where required.

Relevant Policies and Guidelines:

- NSW Floodplain Development Manual (DIPNR, 2005).

7.15.2. Assessment

As described in Section 2.16 of this EIS, the site is not flood affected. This is detailed in the Civil Design Report prepared by Northrop (refer Appendix J) which considers Council's applicable flood study dated 2014. The proposal is not considered to be at risk of flooding from Maxwell Creek to the east or Maxwell Tributary to the north.

7.15.3. Mitigation Measures

No flood mitigation measures are necessary in the circumstance of the proposal, as the site is not flood affected.

7.16. Soil and Water (SEAR 18)

7.16.1. SEAR

Provide:

- an assessment of potential impacts on surface and groundwater (quality and quantity), soil, related infrastructure and watercourse(s) where relevant.
- details of measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.
- an assessment of salinity and acid sulphate soil impacts, including a Salinity Management Plan (SMP) and/or Acid Sulphate Soils Management Plan (ASSMP), where relevant.

Relevant Policies and Guidelines:

- Managing Urban Stormwater - Soils and Construction Volume 1 (Landcom, 2004)
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016)
- Guidelines for development adjoining land managed by the Office of Environment and Heritage (OEH, 2013).

7.16.2. Assessment

Northrop has undertaken an assessment of the potential surface and soils impacts related to the proposal infrastructure. To manage these impacts, a sediment and erosion control plan will be prepared prior to the commencement of works. Management strategies include:

- A temporary sediment basin in the north-east of the site (at the lowest point) to capture site runoff during construction. It will be constructed in stages to enable maximum runoff capture, assisted by diversion swales and direct runoff to the basin. Refer to the basin sizing in Appendix J;
- Pumped water from the sediment basin can be reused for dust control during construction;
- Overflow weirs are proposed to be provided to control overflows for rainwater events more than the design criteria which caters for a storm event up to and including the 1% AEP storm event;
- Temporary site security/safety fence will be constructed around the site, site office and proposed sediment basin;
- Sediment fencing provided downstream of distributed areas, including topsoil stockpiles;
- Dust control measures, including covering stockpiles, installing fence hessian and watering exposed areas;
- Placement of hay bales or mesh and gravel inlet filters around and along proposed catch drains and around stormwater inlet pits; and
- Stabilise the site access at the construction vehicle entry/exits.

Provided the above measures are incorporated in the sediment and erosion control plan to be prepared prior to the commencement of works, the proposal is assessed as acceptable with respect to soil impacts.

JBS&G found the proposed works are not anticipated to intersect with groundwater underlying the site, given the depth to groundwater below current ground levels.

JBS&G have confirmed in Appendix L that an ASSMP and SMP are not required for the proposal.

SEAR 18 is therefore satisfied.

7.16.3. Mitigation Measures

The proposed mitigation measure to minimise the soil and water impacts outlined in Table 40.

Table 40: Soil and water mitigation measure

ID	Mitigation measures
B - Prior to Commencement of Construction	
B15	Prior to the commencement of any works, prepare and implement a sediment and erosion control plan in accordance with Council's requirements and Managing Urban Stormwater Soil and Construction 2004 (Blue Book).

7.17. Waste (SEAR 19)

7.17.1. SEAR

- Identify, quantify and classify the likely waste streams to be generated during construction and operation.
- Describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
- Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

Relevant Policies and Guidelines:

- Waste Classification Guidelines (EPA, 2014).

7.17.2. Assessment

This EIS is accompanied by a CWMP and OWMP in Appendix V and W, respectively. The reports address SEAR 19 as outlined above.

Construction Waste

The site is vacant of structures; hence demolition is not required. EcCell have prepared a CWMP and attached in Appendix V. Estimated construction waste is illustrated in the below figure.

Material Type on Site	Estimated Volume (m³) or Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Concrete Brick Block-work & Tile		57m³		Co-mingled Bins	TBA	Crushed for road base
Metals		20m³		Co-mingled Bins	TBA	Scrap Metal Dealer for smelting
Timber off-cuts		37m³		Co-mingled Bins	TBA	Recycled for chips and mulch
Cardboard		22m³		Co-mingled Bins	TBA	Recycled into cardboard
Plasterboard		24m³		Co-mingled Bins	TBA	Recycled as soil conditioner
Plastics, plastic packaging, paint drums*, containers		22m³	25m³	Co-mingled Bins	TBA	- Styrene and plastic to landfill * Paint drums nested and recycled
Pallets and Reels	20 units			Separated onsite	TBA	Returned to the supplier
Liquid Waste			27m³	Separated onsite	TBA	Transferred to licenced landfill
General Waste			67m³	Co-mingled Bins	TBA	Transferred to licenced landfill
Sub Total	NB:20 units	182m³	119m³			
TOTAL	301m³			NB: Plus, an additional 20 pallets (single units returned to suppliers for reuse)		
Narrative:						
As the contracts for all contractors have not been let there are still those including the waste contractor to be advised (TBA).						
All waste will be co-mingled and taken for off-site separation and reuse or recycling except pallets and reels.						

Figure 75: Extract of estimated construction waste (Source: EcCell)

The proposed construction waste management processes involve:

- Waste contractors will provide verifiable monthly reports on waste reused, reprocessed or recycled (diverted from landfill) or waste sent to landfill;

- A waste data file is to be maintained on-site and is to include entries of classification of waste, time and date of removal, description and volume, location and name of waste facility waste is transferred to and vehicle registration and name of waste contractor's company;
- Removal of waste by a licensed contractor using 15 metre bins on-site. Once bins are full, they will be emptied/removed within construction site hours to minimise disturbance to nearby sensitive land uses; and
- Provision of a designated waste storage area for disposal and storage of construction waste, generally in accordance with the indicative location below.

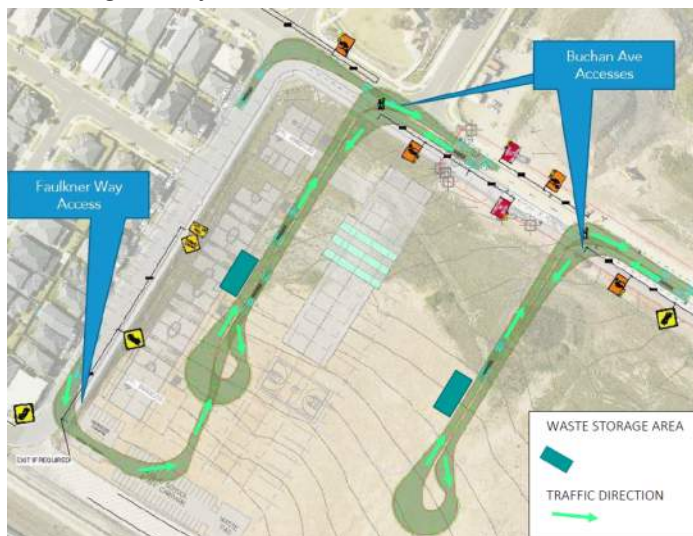


Figure 76: Construction waste plan (Source: EcCell)

Subject to implementation of the construction waste mitigation measures detailed in Section 7.17.3 of this EIS, the proposal is assessed as satisfactory with respect to construction waste management processes.

Operational Waste

EcCell identify and classify the operational waste to be generated from the proposal as noted in the following table.

EPA Classification	Waste Stream	Waste Type	Bin Colour	Waste Management
General solid waste (putrescible)	Organics	Food Organics	Lime Green	Food waste bin
		Garden Organics	N/A	Composted on site or removed as required by greenskeeper/arborist
General solid waste (non-putrescible)	Recycling	Metals (steel, aluminium, stainless)	Yellow	Comingled recycling bins
		Hard Plastics (recyclables)		
		Glass (bottles, containers, jars)		
		Soft Plastic (plastic bags, bread bags, bubble wrap, plastic wrappers, etc.)	Any Colour	Plastic recycling bins
		Return & Earn Plastic Bottles (ONLY containers with the 10c refund label)	White	Container Deposit Scheme
		Paper (excluding paper towels, toilet paper & tissues)	Blue	Paper & Cardboard recycling bins
		Cardboard, excluding waxed cardboard		
	General	Non-recyclable Plastics (Dirty/contaminated plastic)	Red	General waste bins
		General refuse		

EPA Classification	Waste Stream	Waste Type	Bin Colour	Waste Management
Potentially hazardous waste	Other	Potentially toxic liquid waste	N/A	Science department to manage storage, collection and Material Safety Data Sheets (MSDS)
		Nespresso pods and capsules		Collected by Nespresso
		Sanitary waste (including feminine hygiene products, nappy waste)		Collected by an appropriate contractor or sub-contractor as defined in the buy.NSW Contract 9698 agreement
		Lead-acid or nickel-cadmium batteries		
		secure destruction (of sensitive documents)		
		Used printer cartridges		
		e-waste		

Figure 77: Extract of waste types and management processes (Source: EcCell)

As the LDCP does not specify waste generation rates guidance for schools, EcCell undertook a desktop assessment of waste generated from similarly structured schools with a range of student numbers. This informed waste generation estimates for the new primary school in Edmondson Park as follows.

Material Type	Weekly Vol.	Bin Volume	# Bins	Bin Size
Paper Cardboard	1500	3000	1	2.8
Comingled	1680	660	3	3.48
Soft Plastic	1620	660	3	3.48

Material Type	Weekly Vol.	Bin Volume	# Bins	Bin Size
Organics	300	120	3	0.81
Return & Earn*	180	240	1	0.43*
General	2220	3000	1	2.8
Circulation Space				4
Total Area Required				17.4

*Return & Earn Recyclable waste should not be stored in the waste storage area due to the threat of theft and trespass, thus is not included in the waste pad area estimate. This is to be stored in a separate lockable, secure and accessible area within the school grounds.

Figure 78: Waste generation estimates (Source: EcCell)

The proposal comprises a waste storage and collection pad within the south-east corner of the site in the at-grade car park. The total area required is estimated at 17.4m². The proposal provides an 18m² waste pad area.

Operational waste management processes include:

- Provision of mobile garbage bins within the school for various waste streams;
- Provision of separate containers for the safe storage for small quantities of hazardous waste generated (i.e. light bulbs, e-waste, batteries, oil, chemicals or paint);
- Provision of small waste and recycling bins (paper and comingled) located within offices, canteens, classrooms and other spaces.
- The appointed waste contractor will collect each waste stream from the loading bay at nominated times. The collection area is sized to accommodate waste contractor vehicles.
- Waste collection vehicles will enter and exit the site through two access points only, being:
 - Off Faulkner Way shared with the at-grade staff car park; and
 - Off the proposed new south road.

The entry and exit routes are contingent on which waste vehicle is collecting; a heavy rigid vehicle for a front loader or 11 metre long waste truck for a rear loader.
- Educating students, staff, contractors and visitors on segregating waste streams. This may be in learning environments or simply through provision of signage at waste areas.

EcCell has produced swept path analysis to demonstrate the adequate ingress and egress of the two abovementioned waste collection vehicles.

Subject to the implementation of the below mitigation measures, we consider the proposal's ongoing waste processes are acceptable and in line with best practice measures.

7.17.3. Mitigation Measures

The proposed mitigation measures to minimise the waste impacts are outlined in Table 41.

Table 41: Construction and operational waste mitigation measures

ID	Mitigation measures
B - Prior to Commencement of Construction	

ID	Mitigation measures
B16	Ensure routes for movement of waste from work site to the storage area are clear of obstructions. Similarly, between waste storage and collection points.
B17	Ensure collection activities will not be compromised by construction-related activities.
B18	Waste is to be left on-site unless it is part of a valid reuse on site.
B19	Vehicles entering and exiting the site are to have their loads covered.
B20	To avoid tracking material on surrounding roads, vehicles are to be cleaned of dirt, sand or other material.
B21	Following completion of construction works, the work site is to be left clear of waste and debris.
D - Prior to Commencement of Operation	
D3	Arrange for a licensed waste contractor to be responsible for the removal of waste for the new primary school. The contract shall include provisions for collection of potentially hazardous waste including e-waste.
E - Post Occupation	
E10	Waste collection vehicles are not to obstruct access to adjacent premises, roadways, the footpath or primary pedestrian entrances to the school on Buchan Avenue or Faulkner Way.
E11	Ensure waste collection is carried out with due care for public safety, including other road users, cyclists and pedestrians.
E12	Waste collection is to occur outside of school hours, reducing risk associated with truck and bin movements. This includes prior to 8am or after 4pm on school days. Recommended times by EcCell are between 6.00am and 7.30am.
E13	Provision of signage in all waste disposal, storage and collection points to illustrate how to use the waste management system.

7.18. Contamination (SEAR 20)

7.18.1. SEAR

- Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority:
 - Preliminary Site Investigation (PSI).
 - Detailed Site Investigation (DSI) where recommended in the PSI.
 - Remediation Action Plan (RAP) where remediation is required. This must specify the proposed remediation strategy.
 - Preliminary Long-term Environmental Management Plan (LEMP) where containment is proposed on-site.
- Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered.

Relevant Policies and Guidelines:

- Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998)

- Sampling Design Guidelines (EPA, 1995)
- Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011)
- National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013).

7.18.2. Assessment

JBS&G has undertaken an Environmental Site Assessment included at Appendix L. Section 2.14 of this EIS discusses the contamination history of the site. The site and wider Edmondson Park South locality have been subject to various contamination assessments since 2000. Given this, a PSI and a DSI are not required for the proposal. The Environmental Site Assessment considered in detail the previous investigations. On this basis, it is considered:

- The concentrations of COPCs within historical soils samples were below the adopted health based criteria and adopted ecological criteria. This is consistent with the result from Environ in 2013. Therefore, there are no identified impacts to site soils that require management or remediation with respect to making the site suitable for the proposed use;
- A small asbestos containing fibre cement fragment was identified on the ground surface during the site inspection/soil sampling undertaken by JBS&G in February 2021. The source was unknown. Given it was an isolated fragment, an unexpected finds protocol framework will be prepared prior to commencement of works;
- Groundwater concentration for all organic compounds were found to be less than the laboratory LOR and the adopted site assessment criteria. This is consistent with the result by Environ in 2013;
- Human receptors on site will be potentially exposed to soil contaminants by limited oral, dermal and inhalation pathways;
- As fill is generally to be imported, there is considered no direct exposure pathways for ecological receptors to soil; and
- Groundwater is addressed in Section 7.16 of this EIS above.

Therefore, there are no potential unacceptable health risks identified with the respect to the proposal. It is considered the site is suitable for the land use without the preparation of a RAP.

A hazardous materials survey is not required as the site is greenfield.

7.18.3. Mitigation Measures

The proposed mitigation measure should an unexpected contamination be found during construction activities is outlined in Table 42.

Table 42: Contamination mitigation measures

ID	Mitigation measures
B - Prior to Commencement of Construction	
B22	Prior to commencement of works, prepare an unexpected finds protocol to establish a framework for management should any isolated unexpected contamination occurrences be identified and accordingly will be disposed of appropriately.

7.19. Bushfire (SEAR 21)

7.19.1. SEAR

- Provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with Planning for Bush Fire Protection (NSW RFS, 2019).

7.19.2. Assessment

Peterson Bushfire has prepared a Bushfire Assessment appended at Appendix H. As described in Section 2.12 of this EIS, the site is bushfire prone land comprising vegetation category 2 at the northern portions, and vegetation category 3 and vegetation buffer in the southern portion of the site.

PBP measures include:

- APZ
- Building construction standards (BALs)
- Access
- Water supply and other utilities
- Emergency and evacuation management

APZ

The following table has been extracted from the Bushfire Report and identifies that the proposal exceeds the minimum APZ.

Table 43: APZ and BAL for the proposal

Direction	Vegetation	Slope	PBP APZ	Available APZ	BAL
North	Low threat - exclusion	N/A	N/A	> 70 metres	BAL-LOW
South	Woodland	Downslope 0-5 degrees	50 metres	90 metres	BAL-12.5
Remaining	Managed	N/A	N/A	> 100 metres	BAL-LOW

The existing railway line and the future south road provides well in excess of 50 metre PBP APZ to the edge of the car park at the south boundary of the primary school.

The buildings affected by BAL-12.5 as illustrated in faded yellow below.

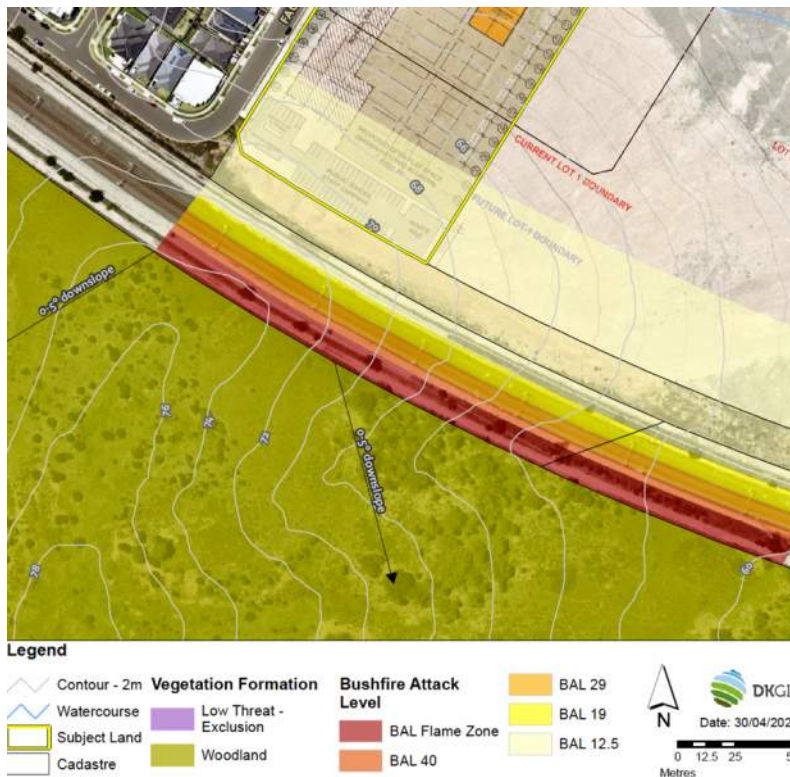


Figure 79: Extract of BAL map (Source: Peterson Bushfire)

The roads surrounding the site provide alternate access for safe evacuation and simultaneous emergency response.

Provided the mitigation measures below are implemented during construction, prior to occupation and the ongoing operation, the proposal complies with PBP and ameliorates bushfire risk for future students, staff and visitors.

7.19.3. Mitigation Measures

The proposed mitigation measures to minimise the bushfire impacts is detailed in Table 44.

Table 44: Bushfire mitigation measures

ID	Mitigation measures
B - Prior to Commencement of Construction	
B23	Materials and landscaping to comply with the performance objectives of an inner protection area as outlined in Appendix 4 of PBP.
B24	Building located wholly or partially within BAL-12.5 being the southern 10 metres of the school buildings fronting Faulkner Way are to be designed and construction to comply with BAL-12.5 in accordance with AS3959-2019 <i>Construction of buildings in bushfire-prone areas</i> .
B25	Install fire hydrants complying PBP and AS2419.1-2005 <i>Fire Hydrant Installations - System Design, Installation and Commissioning</i> . Install and maintain gas services in accordance with AS/NS1596-2014 <i>The storage and handling of LP gas</i> .

ID	Mitigation measures
D - Prior to Commence of Operation	
D4	Prepare a Bushfire Emergency Management and Evacuation Plan prior to occupation.
E - Post Occupation	
E14	As required, the DoE/Principal to update the Bushfire Emergency Management and Evacuation Plan.

7.20. Geotechnical and Structural (Plans and Documents)

7.20.1. SEAR - Plans and Documents

In addition to the plans and documents required in the General Requirements and Key Issues sections above, the EIS must include the following:

- Geotechnical and Structural Report.

7.20.2. Geotechnical Assessment

JK Geotechnics has prepared a Geotechnical Report in Appendix I. As outlined in Section 2.13, JK Geotechnics has prepared the assessment taking into considered the results of BH4 and BH5 of the Pells Sullivan Meynink Geotechnical Report dated 14 February 2019.

In assessing the proposal, JK Geotechnical considers the primary geotechnical issues which are to be considered during design and construction, as follows:

- Potential uncontrolled fill which is not suitable to support footings, movement of sensitive floor slabs and pavements. If this is the case, it will need to be excavated and replaced as part of the earthworks;
- Residual silty clays having a high potential for shrink-swell movements with changes in moisture content;
- Adequate consideration be given to the type of fill given the maximum depth of 4- 5 metres, noting clayey soils are susceptible to shrink-swell movements, compared to granular materials such as crushed sandstone;
- Based on supplied working column loads, footings are expected to be founded within siltstone bedrock and similarly piles, due to the depth of fill to be placed;
- California Bearing Information (CBR) tests measured low CBR values of 1% and 2.5%, which may require thicker pavement and some form of subgrade treatment; and
- Sydney Trains consultation due to the proximity of the railway line.

JK Geotechnical's recommendations include:

- All existing fill be stripped and replaced with engineered fill. Within pavement areas, the fill may remain place, provided all root affected soils are removed and fill performs satisfactory during proof rolling;
- Undertake earthworks in accordance with AS3798-2007;
- Undertake the proposed 1 metre excavation in accordance with NSW Government's Code of Practice of Excavation Work;
- Strip glass, root affected soils and deleterious fill from the building footprint area;

- Follow the site specific engineered fill and compaction control measures in Section 4.3.3 of Appendix I. Noting pour of on-grade floor slabs are only to be permitted once the Level 1 earthworks report has been complete and approved;
- Ensure effective drainage during construction and long-term to minimise impacts with loss of strength for clay subgrade when wet;
- Ensure batters and retaining wall address Section 4.4 and footings Section 4.5 of Appendix I;
- Design concrete and steel piles for 'mild' and 'non-aggressive' exposure classifications, respectively, in accordance with AS2159-2009 Piling - Design and Installation;
- Floor slabs to be supported on engineered fill or residual silty clay are to be constructed independently of building footings and walls to permit relative movement and slab joints designed to resist shear forces but not bending moments providing dowelled or keyed joints.

Provided the above recommendations are implemented during the construction phase of the project and the mitigation measures undertaken, the proposal is considered accepted with respect to geotechnics.

7.20.3. Geotechnical Mitigation Measures

The proposed mitigation measures to minimise geotechnical impacts are outlined in Table 45.

Table 45: Geotechnical mitigation measures

ID	Mitigation measures
Part C - During Construction	
C11	If required, engage a suitably qualified expert to undertake a geotechnical assessment of the upper subsurface profile which has topsoil properties to assess its suitability for reuse/blending.
C12	If permanent batter slope in excess of 4 metres is required, undertake global stability analysis to confirm the geometric design
C13	Undertake CBR testing of proposed pavement areas.
C14	Undertake proof roll inspections.
C15	Inspect and test engineered fill to Level 1 control by a GITA.
C16	Review of Level 1 report by a geotechnical engineer.
C17	Undertake footing and pile inspections.
C18	Undertake density testing of all unbound granular pavement material to at least Level 2 control by a GTA.

7.20.4. Structural Assessment

Northrop has prepared a Structural Report appended at Appendix K. The proposed primary school is to be predominantly constructed as DFMA with a small portion conventional construction (Figure 80). DfMA is a product enabling manufactured and on-site assembly response to construction of new schools.



Figure 80: Extract of key plan showing DfMA and conventional construction of the school ((Source: Northrop)

The structural system is as illustrated in the following figure.

Element	Description
Admin/Library/Homebases	Combination of site build (Admin/Library) and volumetric offsite construction (Homebases) to be reviewed as architectural design is developed. The volumetric solution will be an adaption of the module utilised at Catherine Field Public School. Foundations: pad and strip footing or screw piles
Hall/COLA/OSHC	Site build using offsite prefabricated steel frames. Foundations: pad and strip footings. Ground floor slab: reinforced concrete raft. Wall & Roof: Structural steel framed
Walkways	Investigate the volumetric or conventional construction methodology. To be reviewed as architectural design is developed. Foundations: Pad footings.
Lift	RC concrete shaft Foundations: Concrete base on screw piles or pad footings.
Stairs	Investigate the volumetric of conventional construction methodology. To be reviewed as architectural design is developed. Foundations: pad footings.

Figure 81: Extract of proposed structural system for the DfMA school (Source: Northrop)

The proposal is considered acceptable from a structural perspective.

7.20.5. Structural Mitigation Measures

No structural mitigations are required at the SSDA stage.

7.21. Accessibility (Plans and Documents)

7.21.1. SEAR - Plans and Documents

In addition to the plans and documents required in the General Requirements and Key Issues sections above, the EIS must include the following:

- Accessibility Report

7.21.2. Assessment

Access Consultants have prepared an Access Report appended at Appendix P. Access Consultants have undertaken a preliminary assessment of the proposal against the *Disability (Access to Premises) Standards 2010* and the relevant Australian Standards. The proposal is generally capable of complying subject detailed documentation addressing specific details and requirements of access legislation, codes and standards during the Crown Certificate stage of the project, following the SSDA approval.

7.21.3. Mitigation Measures

The proposed accessibility mitigation measures are outlined in Table 46.

Table 46: Access mitigation measures

ID	Mitigation measures
Part B - Prior to Commencement of Construction	
B26	Prior to the commencement of construction, evidence of compliance with this condition from an appropriately qualified person is to be provided and that the requirements are referenced on any certified plans.

7.22. Unexploded Ordnances

7.22.1. Overview

As established in Section 2.17 of this EIS, the primary school site lies within the boundaries of the former Defence Ingleburn Military Area. The SEARs did not specifically state a UXO Risk Assessment was required for the SSDA. However, given the history of the site, CSG Demining Consultants were engaged to undertake a UXO Risk Assessment and prepare a UXO Protocol. This follows previous UXO investigation work by CSG in the Edmondson Park area since 2000.

7.22.2. Assessment

CSG has reviewed, analysed, and assessed the military history of the area, including the subject site, and documented UXO works and achieved outcomes. This is documented in detail in Appendix Z. In assessing the potential UXO contamination of the primary school site, CSG considered:

- The previous UXO Survey and Clearance works conducted at the site by Defence-accredited UXO Clearance Contractors; and
- The fact that, even though the general area north of the railway alignment has been reasonably heavily developed over the past few years, there have been no reports of UXO being found in the area.

In considering the above points, CSG assessed the potential for UXO contamination to be minimal. Furthermore, the UXO Risk is *As Low as Reasonably Practicable* (ALARP), in other words:

"Is at 'A level of risk that is tolerable and from which it cannot be further reduced without incurring cost in time, effort or money that is grossly disproportionate to the benefit to be gained or for which it is impractical to implement any future measures."

CSG has also prepared a UXO Management Protocol in the event of discovery of an explosive ordnance (EO), UXO or explosive ordnance waste (EOW). The protocol described the procedure.

In summary, the UXO contamination of the site is assessed as being negligible and requires no further physical works at the primary school site. Notwithstanding the negligible potential for UXO contamination, the mitigation measures in Section 7.22.3 are to be adhered to as described in by CSG in Appendix Z.

7.22.3. Mitigation Measures

The proposed mitigation measures given the site's history as a military area is outlined in Table 47.

Table 47: UXO mitigation measures

ID	Mitigation measures
B - Prior to Commencement of Construction	
B27	Prior to commencing works on-site, all construction personnel are to be advised that the site is a former military area and accordingly there is a very remote possibility that UXO may be unexpectedly encountered.
B28	Prior to commencing works on-site the primary contractor is to induct all site personnel that there is a UXO Management Protocol in place and to follow the procedure in the unlikely event a EO, UXO and EOW is discovered at the primary school site.

7.23. Cumulative impacts

DA383/2018 was approved by Council on 11 May 2018 for site preparation, bulk excavation and earthworks for the extension of Buchan Avenue to Soldiers Parade in Edmondson Park. The construction of Buchan Avenue to the north-east of the school is underway and anticipated to be completed in August 2021, well before the construction works commence for the new primary school. The extension of Buchan Avenue is vital in providing construction access to the subject site. As Buchan Avenue will be complete, it is not expected to cause any cumulative impacts to neighbouring properties.

During consultation with Landcom, it was advised that a DA will shortly be lodged for site preparation, excavation and construction the future south road, separating the school from the railway line, and the east road adjoining the east boundary of Lot 2 of the potential future high school site. The construction timeframe of these works is currently unknown, although will result in cumulative traffic and construction management impacts should the timeframes overlap. The TMP to be prepared for the primary school prior to the commencement of construction will consider these works and be updated by the head contractor as required. In accordance with Section 9 of the Traffic and Transport Assessment prepared by PTC Consultants (Appendix R), the contractor will prior to commencing works erect signage for changing traffic conditions and liaise with personnel to safely coordinate truck movements.

8. MITIGATION MEASURES

Schedule 2 of the EP&A Regulation requires a full description of the measures proposed to mitigate any adverse effects of the development on the environment. The following measures have been compiled based on the provisions of the SEARs, the discussion undertaken in the previous sections of this EIS and following the review and consideration of issues raised in consultation with government agencies. They comprise a consolidated summary of all the proposed environmental management and monitoring measures. They provide a commitment by the DoE to prevent potential environmental impacts that have been identified through the assessment. This will ensure that the project is environmentally, socially and economically sustainable. Refer to the following table.

Table 48: Project mitigation measures

ID	Mitigation Measures
Part A - Administration	
A1	The development is to be carried out in accordance with the Architectural Plans prepared by TKD dated 27 May 2021.
A2	The development is to be carried out in accordance with the Landscape Plans prepared by Oculus dated 18 May 2021.
A3	No imposition of a contribution for the project in the Notice of Decision.
Part B - Prior to Commencement of Construction	
B1	Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifying Authority that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.
B2	Lead contractor is to induct all subcontractor to ensure procedures are followed by vehicles entering and exiting the construction site.
B3	Prior to the commencement of works, a traffic control plan is to be prepared to demonstrate the changed road conditions during construction.
B4	Prior to the commencement of works, an emergency management plan is to be prepared to confirm access for emergency vehicles to the site, if required.
B5	Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Applicant must demonstrate that ESD is being achieved by registering for a minimum 5-star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifying Authority.
B6	Prior to the commencement of works, prepare an unexpected finds protocol for the handling unexpected Aboriginal objects or human remains as documented by KNC in Appendix O.
B7	Prior to the commencement of construction, prepare a detailed CMP addressing noise, dust and traffic mitigation measures.
B8	Strategically locate and select mechanical plant to ensure cumulative noise at the receiver boundaries is not adverse..
B9	Acoustically assess the public address and school bell systems once the location, number and type of loudspeakers has been nominated.
B10	Undertake a detailed assessment of the sound insulation performance of the façade.

ID	Mitigation Measures
B11	Prepare a detailed CNVMP to assess noise impacts of construction works and include a protocol to minimise potential noise impacts to sensitive receivers.
B12	Prior to commencement of works, prepare and implement a CEMP.
B13	Prior to commencement of works, obtain approvals from relevant service providers to deliver utility infrastructure.
B14	Prior to the commencement of construction, the applicant must design an operational stormwater management system for the development. The system must: (a) be designed by a suitably qualified and experienced person(s); (b) be generally in accordance with the conceptual design in the EIS; (c) be in accordance with applicable Australian Standards; (d) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines;
B15	Prior to the commencement of any works, prepare and implement a sediment and erosion control plan in accordance with Council's requirements and Managing Urban Stormwater Soil and Construction 2004 (Blue Book).
B16	Ensure routes for movement of waste from work site to the storage area are clear of obstructions. Similarly, between waste storage and collection points.
B17	Ensure collection activities will not be compromised by construction-related activities.
B18	Waste is to be left on-site unless it is part of a valid reuse on site.
B19	Vehicles entering and exiting the site are to have their loads covered.
B20	To avoid tracking material on surrounding roads, vehicles are to be cleaned of direct, sand or other material.
B21	Following completion of construction works, the work site is to be left clear of waste and debris.
B22	Prior to commencement of works, prepare an unexpected finds protocol to establish a framework for management should any isolated unexpected contamination occurrences be identified and accordingly will be disposed of appropriately.
B23	Materials and landscaping to comply with the performance objectives of an inner protection area as outlined in Appendix 4 of PBP.
B24	Building located wholly or partially within BAL-12.5 being the southern 10 metres of the school buildings fronting Faulkner Way are to be designed and construction to comply with BAL-12.5 in accordance with AS3959-2019 <i>Construction of buildings in bushfire-prone areas</i> .
B25	Install fire hydrants complying PBP and AS2419.1-2005 <i>Fire Hydrant Installations - System Design, Installation and Commissioning</i> . Install and maintain gas services in accordance with AS/NS1596-2014 <i>The storage and handling of LP gas</i> .
B26	Prior to the commencement of construction, evidence of compliance with this condition from an appropriately qualified person is to be provided and that the requirements are referenced on any certified plans.
B27	Prior to commencing works on-site, all construction personnel are to be advised that the site is a former military area and accordingly there is a very remote possibility that UXO may be unexpectedly encountered.

ID	Mitigation Measures
B28	Prior to commencing works on-site the primary contractor is to induct all site personnel that there is a UXO Management Protocol in place and to follow the procedure in the unlikely event a EO, UXO and EOW is discovered at the primary school site.
Part C - During Construction	
C1	Construction hours are to be limited to: - Monday to Friday: 7.00am to 6.00pm - Saturday: 8.00am to 1.00pm Sunday and Public Holidays: No excavation or construction works
C2	Public roads are not to be obstructed by vehicles, materials, refuse skips and the like, during construction.
C3	Construction vehicles are limited to a maximum of 25 metre prime mover. Should an oversized vehicle be required, a permit is to be sought from TfNSW prior.
C4	The procedures documented in Appendix O for handling unexpected Aboriginal objects or human remains are to be followed in the event an object/remain is revealed during construction activity.
C5	Maintain a complaint register during construction.
C6	Incorporate security arrangements as such security cameras to minimise risk of school grounds being damaged.
C7	To minimise the impact of the urban heat island effect, provide tree canopy cover at 40% of the site area and shading devices to reduce surface temperatures.
C8	Provide external glazing facing Buchan Avenue and Faulkner Way to provide a minimum sound reduction index of Rw35. A 10.38mm laminated fixed single glazing system achieves the nominated sound reduction index.
C9	If vibration intensive plant is anticipated to be in close proximity of the minimum safe working distances for construction plant, the contractor must engage a qualified engineer to carry out a vibration survey to assess potential risks.
C10	Construction hours are to be limited to: - Monday to Friday: 7.00am to 6.00pm - Saturday: 8.00am to 1.00pm Sunday and Public Holidays: No excavation or construction works
C11	If required, engage a suitably qualified expert to undertake a geotechnical assessment of the upper subsurface profile which has topsoil properties to assess its suitability for reuse/blending.
C12	If permanent batter slope in excess of 4 metres is required, undertake global stability analysis to confirm the geometric design
C13	Undertake CBR testing of proposed pavement areas.
C14	Undertake proof roll inspections.
C15	Inspect and test engineered fill to Level 1 control by a GITA.
C16	Review of Level 1 report by a geotechnical engineer.
C17	Undertake footing and pile inspections.

ID	Mitigation Measures
C18	Undertake density testing of all unbound granular pavement material to at least Level 2 control by a GTA.
Part D - Prior to Occupation	
D1	Prior to the commencement of operation, the School Transport Plan must be submitted to the satisfaction of the Planning Secretary to promote use of active and sustainable transport mode.
D2	Develop and implement a local employment/recruitment strategy to increase the number of persons employed from the local and wider study area.
D3	Arrange for a licensed waste contractor to be responsible for the removal of waste for the new primary school. The contract shall include provisions for collection of potentially hazardous waste including e-waste.
D4	Prepare a Bushfire Emergency Management and Evacuation Plan prior to occupation.
Part E - Post Occupation	
E1	The School Travel Plan must be updated annually and implemented.
E2	Implement the School Travel Plan prepared by PTC dated May 2021.
E3	Maintain a complaint register post occupation.
E4	Develop a partnership with Council to manage community use of nominated facilities, if required.
E5	Incorporate a 'buddy' program to provide pre-school students the opportunity to interact and engage with primary school students.
E6	Operate the school bell system such that the system does not interfere unreasonably with the comfort and repose of the nearby residences.
E7	To minimise noise impacts on residential receivers, minimise frequency of amplified music events during the evening (as feasible).
E8	Inform the community of noisy events and no events to be held between 10pm and 7am.
E9	Provide a contact number of the relevant persons employed to communicate with the community during noisy events.
E10	Waste collection vehicles are not to obstruct access to adjacent premises, roadways, the footpath or primary pedestrian entrances to the school on Buchan Avenue or Faulkner Way.
E11	Ensure waste collection is carried out with due care for public safety, including other road users, cyclists and pedestrians.
E12	Waste collection is to occur outside of school hours, reducing risk associated with truck and bin movements. This includes prior to 8am or after 4pm on school days. Recommended times by EcCell are between 6.00am and 7.30am.
E13	Provision of signage in all waste disposal, storage and collection points to illustrate how to use the waste management system.
E14	As required, the DoE/Principal to update the Bushfire Emergency Management and Evacuation Plan.

9. ENVIRONMENTAL RISK ASSESSMENT

This section provides an environmental risk assessment (ERA) of the development proposed under this SSDA. The ERA addresses the following significant environmental risk issues:

- Adequate baseline data;
- Consideration of potential cumulative impacts due to other development in the vicinity; 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 following table sets out the anticipated impacts, the level of respective impact in terms of severity (low, medium, high and positive), identifies mitigation measures, and once these measures are applied, identifies residual risks (low, medium, high or nil (where there is a positive impact)).

A full list of the mitigation measures is presented in the section above.

Table 49 Risk Assessment Matrix

Matter for Consideration	Phase	Potential Impact	Level of Impact	Manageability of Impact/Mitigation Measures	Residual Risk
Built Form/Visual Impact	Construction	Visual impact from the construction activities.	Medium	Provision of site fencing to screen construction works.	Low
	Operation	Visual impact from the proposed built form, particularly the three storey portion of the western building.	Medium	Provide perimeter planting in accordance with Appendix D and deliver the built form which is high quality and articulated in accordance with the plans prepared by TKD (Appendix B).	Low
Amenity (internal)	Operation (construction addressed in traffic, noise, vibration, parking, air quality)	Maintaining the high quality learning spaces.	Low	Maintenance matters to be attended to promptly.	Low
Amenity (external)	Operation (construction addressed in traffic, noise, vibration, parking, air quality)	Maintaining the high quality outdoor learning and active spaces.	Low	Maintenance matters to be attended to promptly.	Low
Biodiversity	Construction	Removal of grassland and shrub regrowth.	Low	None required given lack of significant vegetation on-site	Low

Matter for Consideration	Phase	Potential Impact	Level of Impact	Manageability of Impact/Mitigation Measures	Residual Risk
	Operation	Generous landscaping including 40% tree canopy.	Positive	None, biodiversity integrity of the site enhanced considerably.	Nil
Geotechnical	Construction	Presence of existing uncontrolled fill on-site which is not suitable for new building footings.	High	Strip and replace existing fill with engineering fill to support footings and slab.	Low
Contamination	Construction	Identification of contamination materials including asbestos during construction activities.	Low	Prior to the commencement of works, an expected finds protocol will be prepared and implemented during construction.	Low
Flooding	Construction Operation	N/A – site not flood prone.	Nil	N/A	Nil
Acoustic Impact	Construction	Noise generated from construction activities expected to exceed noise limits for noise affected receivers.	High	Prior to the commencement of construction, a CNVMP will be prepared to manage construction noise and vibration.	Low
	Operation	Noise generated from plant equipment, school bells, events in the hall, pre-school noise, classroom and traffic generation.	Medium	Strategically locate plant and equipment to minimise cumulative noise impacts. Prior to construction, acoustically assess bell system, prepare a detailed CNVMP for construction noise, limit construction hours, provide school contact for during events and minimise frequency of amplified music during events.	Low
Vibration Impact	Construction	Vibration generated from construction activities.	Medium	Prior to the commencement of construction, a CNVMP will be prepared to manage construction noise and vibration.	Low

Matter for Consideration	Phase	Potential Impact	Level of Impact	Manageability of Impact/Mitigation Measures	Residual Risk
Traffic	Construction	Increased number of vehicles accessing the site during construction specifically civil works and the main works.	Medium	A detailed CTMP will be prepared by the lead contractor prior to the commencement of works. Construction vehicles and routes will be limited in accordance with the preliminary construction management plan in Appendix R. No works zones are proposed during the construction period. A trained and accredited RMS traffic controller will be provided during the construction period.	Low
	Operation	Traffic congestion during peak drop-off and pick-up times.	Medium	Post occupation, the STP is to be implemented and updated annually to manage drop-off and pick-up activities.	Low
Parking	Construction	Overflow of parking onto residential streets during construction.	Medium	In accordance with the preliminary TCMP in Appendix R, construction staff will park on-site or on-street, subject to the site compound. The contractor will be encouraged to use public transport and all site personnel will be made aware of the options available. Car-pooling will also be strongly encouraged.	Low
	Operation	Overflow of staff and pre-school parking onto residential streets.	Low	The proposal provides well in excess of the minimum parking spaces required. Staff and the pre-school will have access to adequate on-site parking.	Low

Matter for Consideration	Phase	Potential Impact	Level of Impact	Manageability of Impact/Mitigation Measures	Residual Risk
ESD	Construction	N/A – primary consideration during operation.	N/A	N/A	N/A
	Operation	A range of measures are proposed as outlined in Section 7.5 of this EIS to provide for a development that is consistent with principles of ESD.	Positive	N/A	Nil
Archaeology	Construction Operation	The proposal is assessed as having nil archaeological potential.	Nil	N/A	N/A
European Heritage	Construction Operation	The proposal is not affected by European heritage.	Nil	N/A	N/A
Aboriginal Cultural Heritage	Construction	The very unlikely event an Aboriginal object or human skeleton material (remains) are found during construction.	Low	Prior to the commencement of works, an unexpected finds protocol will be prepared and implemented during construction.	Low
Bushfire	Construction	The site is bushfire prone.	Low	Materials and landscaping are to comply with performance objective for an inner protection area in the PBP, the southern 10 metres of the south is to be designed to BAL-12.5 in accordance with AS3959-2019 and install fire hydrants in accordance with AS2419.1-2005.	Low
	Operation		Low	Prior to occupation prepare a Bushfire Emergency Management and Excavation Plan and update as required.	Low
UXOs	Construction	CSG have assessed the UXO	Very low	Prior to the commencement of	Very low

Matter for Consideration	Phase	Potential Impact	Level of Impact	Manageability of Impact/Mitigation Measures	Residual Risk
		contamination of the site as nil and requiring no further physical works. Though given the site's history as part of the Ingleburn Military Area an UXO Management Protocol has been prepared by CSG.		works, site personnel are to be informed of the UXO protocol in Appendix Z. In the unlikely event a UXO is found on-site, the protocol is to be carefully followed.	

10. CONCLUSION

This EIS provides a comprehensive assessment of the environmental, social and economic impacts of the subject SSDA for the new primary school in Edmondson Park. This EIS has addressed the requirements of the SEARs, as well as the relevant requirements contained at Schedule 1 and 2 of the EP&A Regulation.

The proposal builds upon previous strategic and statutory planning undertaken by Council, Landcom and DPIE, where the proposal provides a land use which is consistent with that envisaged by MP10_0018 Edmondson Park South concept plan.

The proposal has been assessed against all items contained to the SEARs and we conclude that:

- The proposal satisfies the applicable local and state planning policies;
- The design positively responds to the site conditions and envisaged urban morphology for the locality;
- The proposal is highly suitable for the site;
- The proposal is in the public's best interest;
- The proposal addresses the shortfall of educational facilities in the area; and
- The proposal appropriately satisfies each item in the SEARs.

The site is considered highly suitable for the proposal for the following reasons:

- The Edmondson Park South concept plan stipulates a 'school' at the site and is permissible with development consent in the R1 General Residential zone;
- The proposal is consistent with the objectives of all relevant planning controls and achieves a high level of planning policy compliance;
- There are no significant environmental constraints limiting development on the site; and
- The proposal will not generate unreasonable impacts on the surrounding locality, subject to the implementation of mitigation measures detailed in this EIS.

The proposal is in the public interest because:

- The proposed works are permissible with development consent and have been prepared having regard to ESEPP, SRD SEPP and Significant Precincts SEPP;
- The proposal has been prepared having regard to the Edmondson Park South concept plan, the EPSDCP and Significant Precincts SEPP aims and objectives as they apply to the site;
- The proposal is suitable for the site as evidenced by the site analysis and various site investigations, including geotechnical, contamination, soil and water, bushfire, biodiversity, archaeology, Aboriginal heritage, UXO and flooding;
- Subject to the various mitigation measures recommended by specialist consultants and detailed in this EIS, the proposal does not result in unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, social and environmental impacts;
- The site will be serviced by the emerging transport network, the new school will encourage the use active transport modes and will deliver infrastructure to support this;
- The proposal will deliver a high-quality education environment for staff, students and visitors and provide a SSU as needed in the area. The development:
 - Provides efficient and environmentally sustainable facilities;
 - Delivers 40% tree canopy cover to assist with ameliorating the urban heat island effect and provide a high-quality landscape focused environment;
 - Provides a diverse array of indoor and outdoor learning spaces;

- Seeks to enhance the connection to country; and
- Delivers an inclusive, supportive and safe environment for all students including pre-school students.
- The proposal makes a positive contribution to the built form and general streetscape of Buchan Avenue and Faulkner Way ; and
- Consultation with stakeholders has positively informed the SSDA design.

Considering the above and the content contained to this EIS, it is recommended that this SSDA be approved, subject to appropriate conditions.