ENVIRONMENTAL IMPACT STATEMENT

St Patrick's College Strathfield

Prepared for
ST PATRICK'S COLLEGE STRATHFIELD
May 2020

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0014032
Report Number	EIS

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Appendix DD Planning Certificates 10.7(2) & (5)

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GLOSSARY AND ABBREVIATIONS

Abbreviation	Meaning
ACHA	Aboriginal Cultural Heritage Assessment
AHIMS	Aboriginal Heritage Information Management System
AS	Australian Standard
ASS	Acid Sulfate Soils
BC Act	*Biodiversity Conservation Act*
BCA	Building Code of Australia
BDAR	Biodiversity Assessment Report
CMD	Centre of Music and Drama
CMP	Construction Management Plan
Council	Strathfield Council
CPTED	Crime Prevention Through Environmental Design
SPTMP	Construction Parking and Traffic Management Plan
District Plan	*Eastern City District Plan*
DPIE/Department	NSW Department of Planning, Industry and Environment
DP	Deposited Plan
DSI	Detailed Site Investigation
EIS	Environmental Impact Statement
EPA	*NSW Environmental Protection Authority*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ESD	Ecologically Sustainable Development
ESEPP	*State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
GANSW	NSW Government Architect's Office
HIS	Heritage Impact Statement
HMS	Hazardous Materials Survey
IMP	Infrastructure Management Plan
Infrastructure Strategy	*State Infrastructure Strategy 2018-2038*

Abbreviation	Meaning
LGA	Local Government Area
M	Metre
NIA	Noise Impact Assessment
OEH	Office of Environment and Heritage
OWMP	Operational Waste Management Plan
PSI	Preliminary Site Investigation
Region Plan	*A Metropolis of Three Cities – Greater Sydney Region Plan*
RAP	Remediation Action Plan
RAPs	Registered Aboriginal Parties
RMS	Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 55	*State Environmental Planning Policy No.55 – Remediation of Land*
SEPP 64	*State Environmental Planning Policy No. 64 – Advertising and Signage*
sqm	Square Metres
SSD	State Significant Development
SEPP SRD	*State Environmental Planning Policy (State and Regional Development) 2011*
SLEP 2012	*Strathfield Local Environmental Plan 2012*
SDCP 2005	Strathfield Development Control Plan 2005
TfNSW	Transport for New South Wales
The Minister	the Minister for Planning, Industry and Environment
The Regulation	*Environmental Planning and Assessment Regulation 2000*
The School	St Patrick’s College
TPZ	Tree Protection Zone
Transport Strategy	*Future Transport Strategy 2056*
Urbis	Urbis Pty Ltd
WSUD	Water Sensitive Urban Design

SIGNED DECLARATION

This Environmental Impact Statement (**EIS**) has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*.

Environmental Assessment Prepared by:	
Names:	Peter Strudwick (Director) *Bachelor of Planning, University of New South Wales* Dayle Bennett (Senior Consultant) *Bachelor of Design Studies (Architecture), University of Adelaide, Master of Urban and Regional Planning, University of Sydney* Liz Jones (Consultant) *Bachelor of Arts (Geography and Planning), University of Sydney, Master of Urban and Regional Planning, University of Sydney*
Address:	Urbis Pty Ltd Angel Place, Level 8, 123 Pitt Street Sydney, NSW 2000, Australia
In respect of:	St Patrick's College, Strathfield

Applicant and Land Details:	
Applicant:	St Patrick's College C/- Urbis Pty Ltd
Applicant Address:	Urbis Pty Ltd Angel Place, Level 8, 123 Pitt Street, Sydney, NSW 2000, Australia
Land to be developed:	Lot 10 DP 1061230, Lot 12 DP 1095571 and Lot 20 DP 1203221, 1 and 2 Edgar Street, Strathfield
Project	The proposed works comprise: ▪ Demolition of the existing tennis courts located at the centre of the campus; ▪ Construction of a new four storey science & learning building consisting of: – Food tech classrooms; – Canteen and café; – College dining area, including outdoor dining area; – Science learning spaces, including labs; – Flexible community and learning spaces; – Flexible general learning areas; – Two (2) x rooftop tennis courts; and – Re-instatement of two (2) x Ground level tennis courts.

Applicant and Land Details:	▪ Associated basement car park (with an additional 59 spaces), accessed via Fraser Street; and ▪ New civic space associated with the College, located to the east of the new building. ▪ Minor alterations to the adjoining forecourt and internal space within the adjoining Coghlan building to the east in order to provide an appropriate interface and connection with this newly created space and building. ▪ Staged increase in student population cap to a maximum of 1,790 by 2030.

I certify that the contents of the Environmental Impact Statement, to the best of my knowledge, has been prepared as follows:

- In accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*;
- In accordance with the requirements of the *Environmental Planning and Assessment Regulations 2000*; and *State Environmental Planning Policy (State and Regional Development) 2011*;
- The statement contains all available information that is relevant to the environmental assessment of the proposed development; and
- The information contained in this report is neither false nor misleading.

Name:	**Peter Strudwick, Director**	**Dayle Bennett, Senior Consultant**	**Liz Jones, Consultant**
Signature			
Date:	20/05/2020	20/05/2020	20/05/2020

EXECUTIVE SUMMARY

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Pty Ltd on behalf of St Patrick's College Strathfield (**the Applican**t) in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 200*0. This EIS supports the State Significant Development (**SSD**) Development Application (**DA**) SSD 10400 to guide the future development at St Patrick's College, Strathfield (**the site**).

This EIS responds to the Secretary's Environmental Assessment Requirements (**SEARs**) attached at **Appendix A**. This document should be read in conjunction with the supporting documents provided from **Appendix A** to **Appendix Z**.

The Site

The site, the subject of building works associated with this SSDA, is specifically located within the geographic centre of the St Patricks College (**SPC**) Campus. The school campus is located at 1 and 2 Edgar Street, Strathfield and legally described as Lot 20 DP 1203221, Lot 10 DP 1061230 and Lot 12 DP 1095571.

The Proposal

The proposed SSDA is for the development of a new Science and Learning Building at the centre of the College. The primary objective of the proposal is to improve the current school facilities to cater for the increased demand for high quality science and learning spaces for existing and future students and staff.

As part of this SSDA, SPC is seeking to progressively increase the student population of the College to a maximum of 1,790 over the next 8 years (representing an increase of 354 students from its current cap of 1,436). This is based on a long-term forecast for the College, which seeks to add an extra stream (30 students) per year until there are 7 streams in each year group by 2030. The 1,790 number also incorporates a buffer allowing for increased retention into Year 11 with the addition of Food Courses (e.g. Hospitality) as VET options in the senior school, as well as increased demand for places in Year 7.

The proposal seeks consent for the following:

- Demolition of the existing tennis courts located at the centre of the campus;
- Construction of a new four storey Science & Learning building consisting of:
  - Food tech classrooms;
  - Canteen and café;
  - College dining area, including outdoor dining area;
  - Science learning spaces, including labs;
  - Flexible community and learning spaces;
  - Flexible general learning areas;
  - Two (2) x rooftop tennis courts; and
  - Re-instatement of two (2) x Ground level tennis courts.
- Associated basement car park (with an additional 59 spaces), accessed via Fraser Street;
- New civic space associated with the College, located to the east of the new building;
- Minor alterations to the adjoining forecourt and internal space within the adjoining Coghlan building to the east in order to provide an appropriate interface and connection with this newly created space and proposed building; and
- Staged increase in student population cap to a maximum of 1,790 by 2030.

Planning Framework

Pursuant to Schedule 15 of *State Environmental Planning Policy (State and Regional Development) 2011*, alterations and additions to an existing 'educational establishment' with a capital investment value (**CIV**) of more than $20 million is identified as 'SSD'.

The CIV for the proposal is calculated at approximately $22,330,000, exceeding the threshold and making it SSD. The CIV is detailed in the Quantity Surveyors Cost Assessment at **Appendix B**.

Consultation

Consultation was undertaken with a range of State authorities, service providers and members of the community during the preparation of the EIS. The following agencies and groups have also been consulted in the preparation of this SSDA as required by the SEARs:

- Strathfield Municipal Council;
- Government Architect of NSW (GANSW);
- Transport for NSW (TfNSW);
- Transport for NSW (Roads and Maritime Services) (TfNSW RMS);
- Local Aboriginal land councils and registered Aboriginal stakeholders; and
- Surrounding local residents.

All matters raised during consultation are considered to have been adequately addressed within the EIS or in the accompanying consultant reports and plans within the Appendices.

Assessment

The proposal has been assessed against all items contained within the SEARS issued for the project on 7 January 2020. In summary:

- **The proposal satisfies the applicable local and state planning policies –** The proposal is consistent with all relevant strategic policies and satisfies the objective of all relevant planning controls.
- **The proposal is suitable for the site –** The proposal continues the educational use of the site, which is consistent with the zone objectives. Further, there are no significant environmental constraints that would limit the proposal from being developed at the site.
- **The proposal is in the public's interest –** The proposal will relieve pressure off existing public schools in the surrounding locality and ensure more children have access to new state of the art school facilities, learning spaces and equipment.

  The proposal will create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works (approximately 110 jobs), and increased job opportunities in teaching and administration at the project's completion (resulting in 18 additional full-time teaching jobs).

  The proposal will provide additional on-site parking on the Campus together with the proposed extension of the 'Kiss and Ride' zone adjacent to the School and its staggered start and finish times, will collectively improve safety and operation of the local street network as well as on-street parking availability for residents.
- **The proposal will not have any unacceptable impacts on neighbouring residential properties or the public domain –** Subject to the various mitigation measures recommended by the specialist consultants, the proposal will not generate any unreasonable or significant traffic, heritage, social and environmental impacts on adjoining or surrounding properties or the public domain.
- **The proposal satisfies the SEARs as demonstrated in this EIS and accompanying specialist reports.**

Considering the above and the content contained in this EIS, it is recommended that the Department of Planning, Industry and Environment approve this SSDA, subject to appropriate conditions.

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

A request was made to the Minister for the Secretary's Environmental Assessment Requirements (**SEARs**), pursuant to Clause 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and the SEARs was reissued on the 7th of January 2020. The SEARs are addressed within this report and included in full at **Appendix A.**

Table 1 below provides a summary of the SEARs and identifies the section of the report where the relevant requirement is addressed and/or the appendix reference for the technical consultant's report associated with that requirement.

Table 1 SEARs Compliance Table

Item/Description	**Document/Reference**
General Requirements	
The environmental impact statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: – adequate baseline data; – consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and – measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	The EIS has been prepared in accordance with the Secretary's Requirements and meets the minimum form and content requirements of specified in Schedule 2 the *Environmental Planning and Assessment Regulation 2000.* **Section 6 of t**he EIS includes a comprehensive assessment of the environmental risks and impacts associated with the development.
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: – a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV; – an estimate of jobs that will be created during the construction and operational phases of the proposed development; and – certification that the information provided is accurate at the date of preparation.	**Appendix B**
Key Issues	
1. Statutory and Strategic Context	
The EIS must address the following specific matters: ▪ *Biodiversity Conservation Act 2016*	Statutory and Strategic Context is addressed in **Section 5** of the EIS, which includes assessment

Item/Description	Document/Reference
▪ *State Environmental Planning Policy (State & Regional Development) 2011* ▪ *State Environmental Planning Policy (Infrastructure 2007)* ▪ *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* ▪ *State Environmental Planning Policy No. 64 – Advertising and Signage* ▪ *State Environmental Planning Policy No.55 – Remediation of Land* ▪ *Draft State Environmental Planning Policy (Remediation of Land)* ▪ *State Environmental Planning Policy (Environment) and* ▪ *Strathfield Local Environmental Plan 2012.* ***Permissibility*** Detail the nature and extent of any prohibitions that apply to the development. ***Development Standards*** Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. ***Provisions*** Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	of Permissibility and development standards.
2. Policies	
Address the relevant planning provisions, goals and strategic planning objectives in the following: ▪ *NSW State Priorities* ▪ *The Greater Sydney Regional Plan, A Metropolis of three cities* ▪ *Future Transport Strategy 2056* ▪ *State Infrastructure Strategy 2018 – 2038 Building the Momentum* ▪ *Sydney's Cycling Future 2013* ▪ *Sydney's Walking Future 2013* ▪ *Sydney's Bus Future 2013* ▪ *Crime Prevention Through Environmental Design (CPTED) Principles* ▪ *Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)* ▪ *Health Urban Development Checklist (NSW Health)* ▪ *Draft Greener Places Policy* ▪ *Eastern City District Plan*	Planning provisions, goals and strategic planning objectives in the identified policies have been addressed in **Section 4** of the EIS.

Item/Description	Document/Reference
▪ *Strathfield Consolidated Development Control Plan 2005* ▪ *Strathfield 2040 Draft Local Strategic Planning Statement (October 2019)*	
3. Operations	
▪ Provide details of the existing and proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities. ▪ Provide a detailed justification of suitability of the site to accommodate the proposal. ▪ Provide details of how the school will continue to operate during construction activities, including proposed mitigation measures.	**Section 3**
4. Built Form and Urban Design	
▪ 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. ▪ Address 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. ▪ Provide details of any digital signage boards, including size, location and finishes. ▪ Clearly demonstrate 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) 201 and the GANSW Design Guide for Schools. ▪ Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. ▪ Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. ▪ Provide a detailed landscape strategy, including: – consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation. – details of the number of trees to be removed and the number of trees to be planted on the site. ▪ Provide 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. ▪ Address CPTED Principles.	**Section 3.4, Section 6.1, Appendix D** and **Appendix E**

Item/Description	Document/Reference
▪ Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility. ▪ Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	
5. Environmental Amenity	
▪ Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts ▪ Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building and likely future development). ▪ Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers. ▪ Identify any proposed use of the proposed facility outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. ▪ Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	**Section 6**
6. Staging	
Provide details regarding the staging of the proposed development (if any).	N/A
7. Transport and Accessibility	
Include a transport and accessibility impact assessment, which details, but not limited to the following: ▪ accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development. ▪ details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area. ▪ the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development. ▪ measures to integrate the development with the existing/future public transport network. ▪ the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved	**Section 6.3, Appendix I** and **Appendix J**

Item/Description	Document/Reference
developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years). ▪ the identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5 m wide travel lanes), additional bus stops or bus bays. ▪ details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan) and the provision of facilities to increase the non-car mode share for travel to and from the site. ▪ the proposed walking and cycling access arrangements and connections to public transport services. ▪ the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones. ▪ proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance. ▪ proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site. ▪ an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development. ▪ an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED. ▪ an assessment of the accessibility of the development by public and active transport ▪ emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).\ ▪ the preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: – assessment of cumulative impacts associated with other construction activities (if any).	

Item/Description	Document/Reference
– An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity – details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. – details of anticipated peak hour and daily construction vehicle movements to and from the site. – details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle. – details of temporary cycling and pedestrian access during construction. – demonstrate how pedestrian and cycle rider movements along footways and cycleways are maintained at all times during construction activities. Should the development require closure to either facility, detail the adequate safety and diversion measures out in place to limit time delay and detour distances. – details of any crane locations and road closures. – details of any potential impact to the bus network and bus services. *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) ▪ Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development ▪ Standards Australia AS2890.3 (Bicycle Parking Facilities).	
8. Ecologically Sustainable Development (ESD)	
▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development. ▪ Include a framework for how the future development will 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.	**Section 6.4** and **Appendix H**

Item/Description	Document/Reference
▪ Demonstrate how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual ▪ Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance. ▪ 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 ▪ Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: – hotter days and more frequent heatwave events – extended drought periods – more extreme rainfall events – gustier wind conditions – how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). *Relevant Policies and Guidelines:* ▪ NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections	
9. Heritage	
▪ Provide a statement of significance and an assessment of the impact on the heritage significance of the heritage items on or adjacent to the site in accordance with the guidelines in the NSW Heritage Manual (Heritage Office and DUAP, 1996). ▪ Address any archaeological potential and significance on the site and the impacts the development may have on this significance.	**Section 6.5** and **Appendix K**
10. Social Impacts	
▪ Prepare a social impact assessment, which: – identifies and analyses the potential social impacts of the development, from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project – considers how potential environmental changes in the locality may affect people's: way of life; community; access to and use of infrastructure, services, and facilities; culture; health and wellbeing; surroundings; personal and property rights; decision-making systems; and fears and aspirations, as relevant and considering how different groups may be disproportionately affected – assesses the significance of positive, negative and cumulative social impacts considering likelihood, extent, duration, severity/scale, sensitivity/importance, and level of concern/interest	**Section 6.7** and **Appendix T**

Item/Description	Document/Reference
– includes mitigation measures for likely negative social impacts, and any proposed enhancement measures – details how social impacts will be adaptively monitored and managed over time	
11. Aboriginal Heritage	
▪ Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. ▪ Identify and address the Aboriginal cultural heritage values in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (Office of Environment and Heritage (OEH), 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010). ▪ Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (Department of Environment, Climate Change and Water). The significance of cultural heritage values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR. ▪ Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR. ▪ The EIS and the supporting ACHAR must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to the Environment, Energy and Science Group of the Department of Planning, Industry and Environment.	**Section 6.6** and **Appendix L**
12. Noise and Vibration	
▪ Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. ▪ Identify and assess operational noise, including consideration of any public address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. *Relevant Policies and guidelines:* ▪ NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority EPA)	**Section 6.8** and **Appendix G**

Item/Description	Document/Reference
▪ Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) ▪ Assessing Vibration: A Technical Guidelines 2006 (Department of Environment and Conservation, 2006) ▪ Development Near Rail Corridors and Busy Roads – Interim Guidelines (Department of Planning, 2008)	
13. Contamination	
▪ Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. ▪ Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works. *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)	**Section 5.5** and **Appendix AA**
14. Utilities	
▪ Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure, and assesses the impacts of the proposal on existing utility infrastructure and service provider assets and describe how any potential impacts would be managed. ▪ Prepare an Integrated Water Management Plan detailing any propose alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	**Section 3.9, Appendix M, Appendix N** and **Appendix O**
15. Contributions	
▪ Address Council's 'Section 7.11/7.12 Contribution Plan' and/or details of and Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	**Section 5.8.6**
16. Drainage	
▪ Detail measures to minimise operational water quality impacts on surface waters and groundwater.	**Section 3.10, Section 6.10** and **Appendix P**

Item/Description	Document/Reference
▪ Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. ▪ Detail measures to collect and manage any seepage waters from the basement/underground car parking areas to prevent pollution of waters, including consideration of the need for waterproofing or “Tanking” of basement levels likely to interfere with an aquifer to prevent the need for treatment and discharge of groundwater. *Relevant Policies and Guidelines:* ▪ Guidelines for development adjoining land managed by the Office of Environment and Heritage (OEG, 2013)	
17. Flooding	
▪ Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (DIPNR, 2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation.	**Section 6.10** and **Appendix P**
18. Biodiversity Assessment	
▪ Biodiversity impacts related to the proposed development (SSD-10385) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. ▪ The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. ▪ The BDAR must include details of the measures proposed to address the offset obligation as follows: – the total number and classes of biodiversity credits required to be retired for the development/project – the number and classes of like-for-like biodiversity credits proposed to be retired – the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules – any proposal to fund a biodiversity conservation action – any proposal to make a payment to the Biodiversity Conservation Fund. ▪ If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.	N/A – Refer to **Section 5.1** and **Appendix Q**

Item/Description	Document/Reference
▪ The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM. ▪ The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016. ▪ Where a Biodiversity Assessment Report because a waiver has been issued engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal. ▪ Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.	
19. Sediment, Erosion and Dust Controls	
▪ Detail measures and procedures to minimise and manage the generation and offsite transmission of sediment, dust and fine particles. *Relevant Policies and Guidelines:* ▪ Managing Urban Stormwater - Soils & Construction Volume 1 2004 (Landcom) ▪ Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) ▪ Guidelines for development adjoining land managed by the Office of Environment and Heritage (OEH, 2013)	**Section 6.11** and **Appendix P**
20. Waste	
▪ Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. 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)	**Section 3.8, Appendix R** and **Appendix S**
21. Construction Hours	
▪ Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	**Section 3.11** and **Appendix I**
Plans and Documents	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.	**Appendices B - DD**

Item/Description	Document/Reference
In addition, the EIS must include the following: ▪ A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate) ▪ Architectural drawings showing key dimensions, RLs, scale bar and north point, including: – plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program of illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes – details of proposed signage, including size, location and finishes – detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality – site plans and operations statement demonstrating the afterhours and community use strategy ▪ Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and site boundaries ▪ Site Analysis and Context Plans, including: – any future development and expansion zones – open space network – active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links ▪ Sediment and Erosion Control Plan ▪ Shadow Diagrams ▪ View analysis, photomontages and architectural renders, including from those public vantage points ▪ Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: – integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed, including articulation of playground spaces – plan identifying significant trees, trees to be removed and trees to be retained or transplanted ▪ Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: – architectural design statement – diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal – detailed site and context analysis	

Item/Description	Document/Reference
– analysis of options considered to justify the proposed site planning and design approach – visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items – summary of feedback provided by GANSW and responses to this advice – summary report of consultation with the community and response to any feedback provided ▪ Geotechnical and Structural Report ▪ Accessibility Report ▪ Arborist Report ▪ Salinity Investigation Report (where required) ▪ Acid Sulphate Soils Management Plan (where required) and ▪ Schedule of materials and finishes.	
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders, and affected landowners. In particular, you must consult with: ▪ Strathfield Municipal Council ▪ GANSW ▪ Transport for NSW (TfNSW) ▪ Transport for NSW (Roads and Maritime Services) (TfNSW RMS). Consultation with should commence as soon as practicable to agree the scope of investigation. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	**Section 8** and **Appendix U**

1. INTRODUCTION

1.1. OVERVIEW

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Pty Ltd on behalf of St Patrick's College, Strathfield (**the Applicant**) in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*. This EIS supports the State Significant Development (**SSD**) Development Application (**DA**) SSD_10400 to guide future development at St Patrick's College Strathfield (hereafter referred to as SPC) at 1 and 2 Edgar Street, Strathfield.

The SSD DA seeks development consent for the construction of a new Science and Learning Building at the centre of the college campus involving the following:

- Demolition of the existing tennis courts located at the centre of the campus;
- Construction of a new four storey science & learning building consisting of:
  - Food tech classrooms;
  - Canteen and café;
  - College dining area, including outdoor dining area;
  - Science learning spaces, including labs;
  - Flexible community and learning spaces;
  - Flexible general learning areas;
  - Two (2) x rooftop tennis courts; and
  - Re-instatement of two (2) x Ground level tennis courts.
- Associated basement car park (with an additional 59 spaces), accessed via Fraser Street;
- New civic space associated with the College, located to the east of the new building;
- Minor alterations to the adjoining forecourt and internal space within the adjoining Coghlan building to the east in order to provide an appropriate interface and connection with this newly created space and proposed building; and
- Staged increase in student population cap to a maximum of 1,790 by 2030.

As part of this SSDA, SPC is seeking to progressively increase the student population of the College to a maximum of 1,790 by 2030. This represents an increase of 354 students from its current cap of 1,436 and is based on a long-term forecast for the College, which seeks to add an extra stream (30 students) per year until there are 7 streams in each year group by 2030.

The proposed works are illustrated in the architectural drawings prepared by BVN Architects attached at **Appendix D**.

1.2. PROJECT CONTEXT AND BACKGROUND

1.2.1. St Patrick's College

St Patrick's College, Strathfield (**SPC**) was founded in 1928 by the Christian Brothers with 39 students enrolled into three grades. The original school consisted of six large classrooms, and four other rooms designed for Physics, Chemistry, Art and technical training such as woodwork. Since its inception, the School has grown substantially with many building developments and refurbishments such as the sporting oval, College Chapel Swimming Pool, Music Centre and Gymnasium. In 2007 a section of Edgar Street which divided the campus was acquired which enabled the development of landscaped gardens and pathways visible at present.

The Catholic College is a comprehensive boys' Independent school in the Edmund Rice Tradition for students in Years 5 to 12. SPC is built on the legacy of the Christian Brothers, and is committed to imbuing in their students the four Touchstones of the Edmund Rice education:

- Liberating Education;
- Gospel Spirituality;
- Inclusive Community; and
- Justice and Solidarity.

The College seeks to educate men who are socially critical and spiritually aware, and who stand with the poor with empathy, compassion and empowerment.

1.2.2. Project History

Planning History

The site has previously been subject to a number of development applications (**DA**). The extent of approvals over the site are detailed in **Table 2**.

Table 2 Site DA History

DA Number	Date of Approval	Description of Development
DA9900/240	2 March 2000	Extensions to the gymnasium approved under delegated authority.
DA0304/0066	4 November 2003	Landscaping of Edgar Street (closed road) and adjoining land for school use approved by Council.
DA0506/180	7 August 2006	Redevelopment of the western end of the Junior School courtyard approved under delegated authority.
DA0506/043/01	10 April 2007	Modify approved landscaping to remove two (2) Eucalypt trees approved under delegated authority.
DA0506/043/02	25 May 2007	Replacement of 2 panels of metal picket fence with brick walls at main entry gates to school at junction of Edgar and Francis Streets approved under delegated authority.
DA0506/271	8 June 2007	Demolition of existing toilet/change building, new change & toilets building, seating and shade structures and associated site works approved under delegated authority.
DA2007/001	13 June 2007	Replace existing boundary fence with new low brick fence with metal infills to match works currently under construction in Francis/Edgar Street and minor landscape works approved under delegated authority.
DA 2007/144	27 September 2007	Provide a new brick pier fence with gate and infill panels for separate access to the Brothers Monastery was approved under delegated authority.
IPA No. 09/083	14 September 2009	Removal of 15 trees, construction of a new library, classrooms and pedestrian lift and associated landscaping works was approved by the NSW Nation Building and Jobs Taskforce.
DA2013/085	26 November 2013	Demolition of existing buildings, and construction of a new Technology and Applied Sciences (TAS) building new Arts wing to the existing Crighton building and associated site alterations.

Student Cap

The above table offers an overview of the approval history for St Patrick's College. The most recent approval on the site (DA2013/085) approved by Strathfield Municipal Council (**Council**) on 26 November 2013, included a 'Special Condition' of consent capping the school's maximum student population at 1436 students. The condition of development consent was applied to the Technology and Applied Sciences TAS) Building. An extract of the special condition is provided below:

> *5. The number of students onsite shall not exceed more than 1,436 students. Evidence of student numbers shall be provided to Council at the conclusion of each school year to ensure continued compliance with this condition.*

The cap was imposed by Council based on the projected numbers of students supplied by SPC as part of the then proposed development (being the TAS Building). It was not imposed on the basis of any traffic analysis or constraints. This SSDA will seek to provide a renewed student cap for SPC to accommodate its long term growth plan, this is detailed further in **Section 3.2** and **Section 6.3**.

Project Background

In 2017, SPC undertook some early master planning work for the campus. This was to assist with understanding and evaluating the school's facilities and set a long-term vision for the future growth and development of the campus. This led the school to identify the opportunity to provide a new teaching and learning facility located at the centre of the campus.

In order to find a suitable architect to design the future Science and Learning building, SPC ran a selected design competition. BVN was selected as the winner to prepare the detailed design of the project.

The proposal designed by BVN reflects St Patrick's College overall vision to provide a strong sense of place reflective of the Edmund Rice and College philosophies and vision. SPC is committed to its vision, in which current and future educational needs are met.

1.3. PROJECT OBJECTIVES

The Project's primary objective is to improve the current school facilities to cater for the increased demand for high quality science and learning spaces for existing and future students and staff. Project objectives are listed below:

- To provide a new state of the art science, food and learning centre to accommodate the current and projected population of the school;
- To meet contemporary learning standards and provide a high-quality teaching facility beyond what is currently provided by the School;
- To provide for certainty for the ongoing long-term growth of the School;
- Enhance the permeability and connectivity of the school by provided an additional civic space and flexible teaching and learning spaces;
- Create additional opportunities to share resources and facilities between the school and school community, through potential community and learning spaces in the new building.

1.4. ANALYSIS OF FEASIBLE ALTERNATIVES

The proposed design responds strongly to the site constraints and opportunities and is considered the best response to both the site and surrounding context.

A 'do nothing' approach

Alternatives to the proposed concept plan include the 'do nothing' scenario which would not achieve the project objectives. The consequences of not carrying out the project are far reaching and include:

- Failure to provide suitable learning facilities for pupils;
- Failure to accommodate the growing demand for improved science and technology facilities;
- Failure to provide additional recreation and sporting facilities for pupils;

- Failure to provide suitable working conditions for teaching and administrative staff;
- Failure to utilise existing and provide new civic spaces across the school;
- Failure to accommodate existing and projected parking demand for students and teachers;
- Failure to better utilise the existing school site and buildings; and
- Increased maintenance costs of degraded sub-standard tennis facilities.

Alternative design approach

The design of the new four-storey building and associated car parking and civic spaces have undergone envelope option testing, to explore the different built form and articulation possibilities, through the choice of built form arrangement, material, colour and architectural variations. The relative merits of the options are discussed and shown in **Section 6.1** of the EIS. To summarise:

The final design of the building is based on the following considerations:

- The scale of the building is relative to the existing campus building surrounding the site;
- The building will be constructed of high-quality materials; and
- The design of the building is unique and will contribute to the overall visual amenity of the campus.

The configuration and design of the wider campus including the car park, new civic spaces and alternatives to recreational facilities has been chosen based on the following considerations:

- Suitability of the site's location, being at the centre of the campus;
- Relationship to the surrounding context. Specifically, with respect to the surrounding heritage items including St Patricks College (I132), ACU Strathfield Campus (I92) and Sirona Federation Queen Style House (I182); and
- Access to the building being at the heart of the school and its orientation to both Breen Oval and Edgar Street.

The design options have been the subject of discussions and suggestions from the NSW Government Architect's Office, which have been implemented to progressively improve the overall built form and urban design outcome of the new buildings and playground.

1.5. PROJECT TEAM

Specialist consultants were engaged to assist in the preparation of this SSD, as outlined in **Table 3.**

Table 3 Project Team

Discipline/Input	Consultant	Appendix
SEARs	The Department of Planning, Industry and Environment	Appendix A
QS Report	Muller Partnerships	Appendix B
Survey Plan	RPS	Appendix C
Architectural Plans	BVN Architects	Appendix D
Architectural Design Report & Schedule of Materials & Finishes	BVN Architects	Appendix E
Landscape Plans & Strategy	Landscape 360	Appendix F
Acoustic Report	Reverb Acoustics	Appendix G

Discipline/Input	Consultant	Appendix
Ecologically Sustainable Design Report (ESD)	JHA Consulting Engineers	Appendix H
Transport Impact Assessment (TIA) and Construction Traffic and Pedestrian Management Plan (CTPMP)	The Transport Planning Partnership (TTPP)	Appendix I
Green Travel Plan (GTP)	The Transport Planning Partnership (TTPP)	Appendix J
Heritage Impact Statement (HIS)	Urbis	Appendix K
Aboriginal Cultural Heritage Assessment Report (ACHAR)	Navin Officer	Appendix K
Infrastructure Management Plan - Hydraulics	McCallum PFCA	Appendix L
Infrastructure Management Plan - Electrical	Electrical Projects Australia	Appendix M
Infrastructure Management Plan - Mechanical	JHA Consulting Engineers	Appendix N
Drainage, Utilities, Flooding and Sediment & Erosion Control Report	Northrop	Appendix O
Biodiversity Development Assessment Report Waiver	Department of Planning, Industry & Environment	Appendix P
Operational Waste Management Plan	EcCell Environmental Management	Appendix Q
Construction Waste Management Plan	EcCell Environmental Management	Appendix R
Social Impact Assessment	St Patrick’s College	Appendix S
Community Engagement Outcomes Report	Urbis	Appendix T
BCA Report	Dix Gardner	Appendix U
Geotechnical Report	Douglas Partners	Appendix V
Structural Design Report	SDA Structures	Appendix W
Accessibility Report	Arina	Appendix X
Arboricultural Assessment Report	Truth About Trees	Appendix Y
Contamination Assessment	Banksia ES	Appendix Z
Fire Engineering Report	MCD Fire Engineering	Appendix AA
Strathfield Council Active Travel Plan	Strathfield Council	Appendix CC

1.6. REPORT STRUCTURE

The purpose of this report is to provide an assessment of the proposal as described above, within the EIS and the attached supporting documents. This EIS provides the following:

- **Section 2:** A description of the site and surrounding context; including identification of the site, existing development on the site, and surrounding development.
- **Section 3:** A detailed description of the proposed development;
- **Section 4:** Provides the strategic planning policy context and how the proposal responds to this;
- **Section 5:** An assessment of the proposed development against the relevant statutory planning controls;
- **Section 6:** An assessment of the key issues and impacts generated by the proposed development;
- **Section 7:** An assessment in accordance with section 4.15 of the EP&A Act;
- **Section 8:** A detailed description of the consultation undertaken with respect to the proposal;
- **Section 9 :** An overview of the recommendations and mitigation measures to address key issues and impacts; and
- **Section 10**: A conclusion.

This EIS responds to the Secretary's Environmental Assessment Requirements (**SEARs**) attached at **Appendix A**. This document should be read in conjunction with the supporting documents provided from **Appendix B** to Appendix CC**.**

2. THE SITE AND SURROUNDING CONTEXT

2.1. THE SCHOOL CAMPUS

The St Patricks College, Strathfield campus is located at 1 and 2 Edgar Street, Strathfield and legally described as:

- Lot 20 DP 1203221;
- Lot 10 DP 1061230; and
- Lot 12 DP 1095571.

SPC is located in the Strathfield local government area (**LGA**), which is located approximately 15km west of the Sydney CBD. The school campus is generally bound by Australian Catholic University (ACU) Campus to the south, Fraser Street to the west, Shortland Avenue to the North and Frances Street to the east. The location of the SPC and its relationship with surrounding development is illustrated in **Figure 1.** The area of the subject site, where the proposed building will be constructed is shown in yellow.

Figure 1 Aerial Photograph of the Site

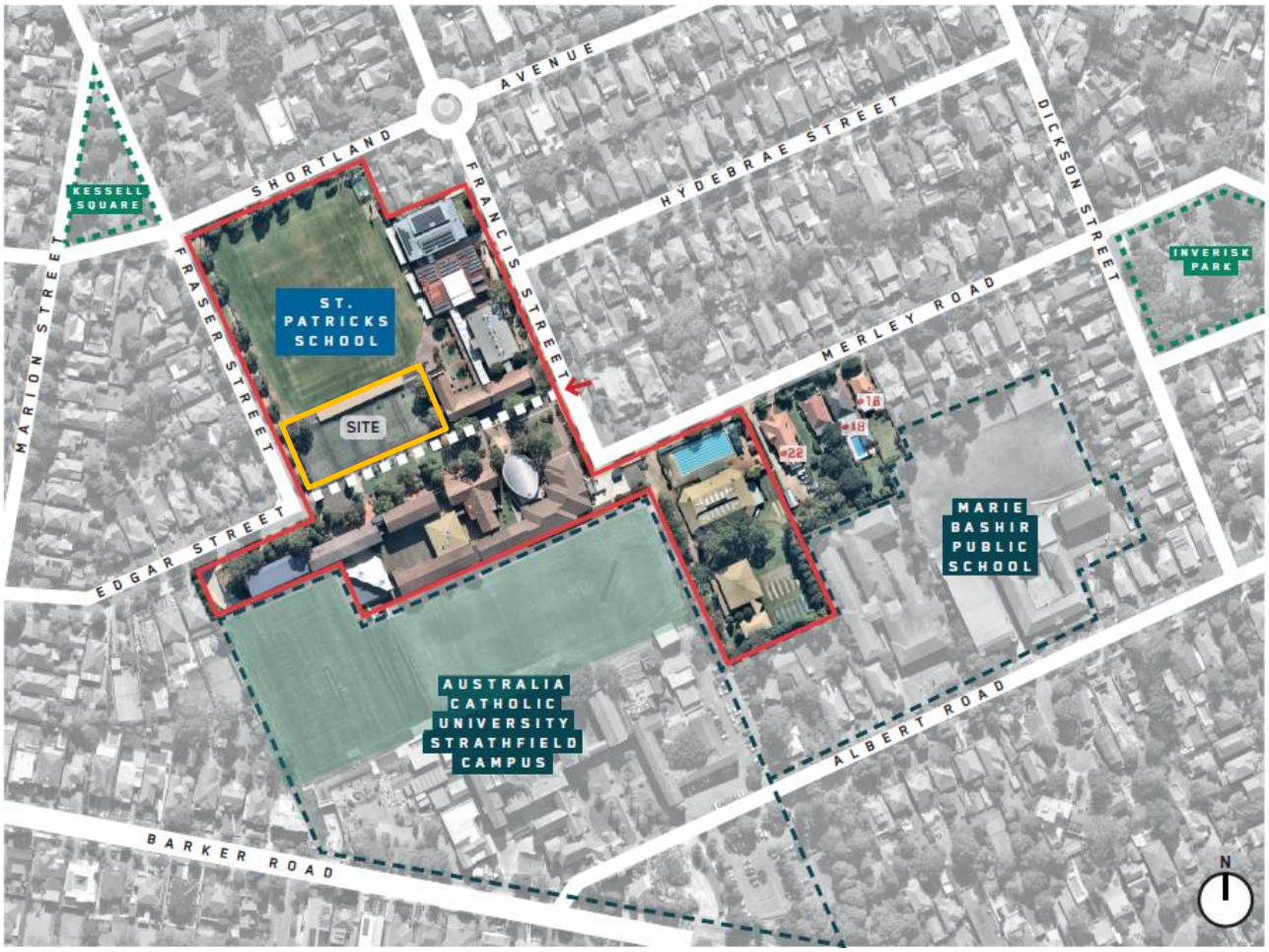
Source: Urbis

2.2. THE SUBJECT SITE

The subject site is located within the geographic centre of the campus, where the five existing outdoor tennis courts are located. It is specifically located on Lot 20 DP 1203221, which has a total site area of 22,965sqm. The subject site contains a number of existing school buildings and grounds, with Breen Oval directly to the north, Coghlan building to the east and Edgar Street running parallel to the southern edge. Edgar Street is a

pedestrian thoroughfare that remains open to the public, despite being owned by SPC. The subject site is outlined in yellow in both **Figure 1** and **Figure 2. Figure 2** illustrates the extent of the school campus in red, the subject site in yellow and the surrounding development.

Figure 2 Site Plan



Source: BVN Architects

2.3. SURROUNDING DEVELOPMENT

The school campus is currently surrounded by multiple low-density residential dwellings, a school, university campus and public open spaces. Table 4 summarises the surrounding site context.

Table 4 Surrounding Context

Direction	Surrounding Context
North	Immediately north of the site is Shortland Avenue which includes a number of low-density residential frontages.
South	The site directly adjoins the ACU Campus to the south, including its buildings and grounds. Barker Road to the south accommodates a number of key bus routes.
East	The site is bound by Francis Street to the east with a frontage to the main entrance of the College and houses on the eastern side of the street. The Marie Bashir Primary school and OSH Care Centre also adjoin the College to the south-east.
West	The site is bound by Fraser Street to the west, containing a number of low-density residential houses.

2.4. EXISTING DEVELOPMENT

Currently, the subject site contains five at grade tennis courts with a western frontage to Fraser Street, and southern frontage to Edgar Street. Photographs of the existing development are provided in **Figure 3**

Figure 3 Existing Development

Picture 1 View of Subject Site from Edgar Street (looking North)

Picture 2 View of Subject Site from Breen Oval (looking South)

Picture 3 View of Subject Site from Fraser Street (looking East)

2.4.1. Car and Bike Parking

The school is currently serviced by five separate car parking areas which provide off-street parking. In addition, the school is allocated 31 staff car parking spaces in the neighbouring Australian Catholic University (**ACU**) car park. Access to ACU's car park is provided off Edgar Street. A total of 102 off-street parking spaces are provided across the campus and are distributed as summarised in **Table 5**. The location of the existing car park is illustrated in **Figure 4**. In addition, there is an undercover bike rack located on the grounds for up to parking 10 bicycles.

Table 5 Existing Car Park Provisions

ID	Type of Car Park	Number of Spaces
A	Below-ground	31 (ACU car park)
B	At-grade	21 (including 2 accessible spaces)
C	Below-ground	23 (including 2 accessible spaces)
D	At-grade	6
E	At-grade	17 (including 1 visitor space)
F	At-grade	4

Figure 4 Location of existing Car Parking Areas

Source: TTPP

2.5. DROP-OFF AND PICK UP FACILITIES

The school's drop-off and pick-up activities currently take place on Fraser Street and Edgar Street along the site boundary. This area is signposted as 'Kiss & Ride' with 'No Parking 8:00am-9:30am and 2:30pm-4:00pm

on School Days'. Fraser Street and Edgar Street currently accommodate a total of 20 vehicles within the Kiss & Ride Zone.

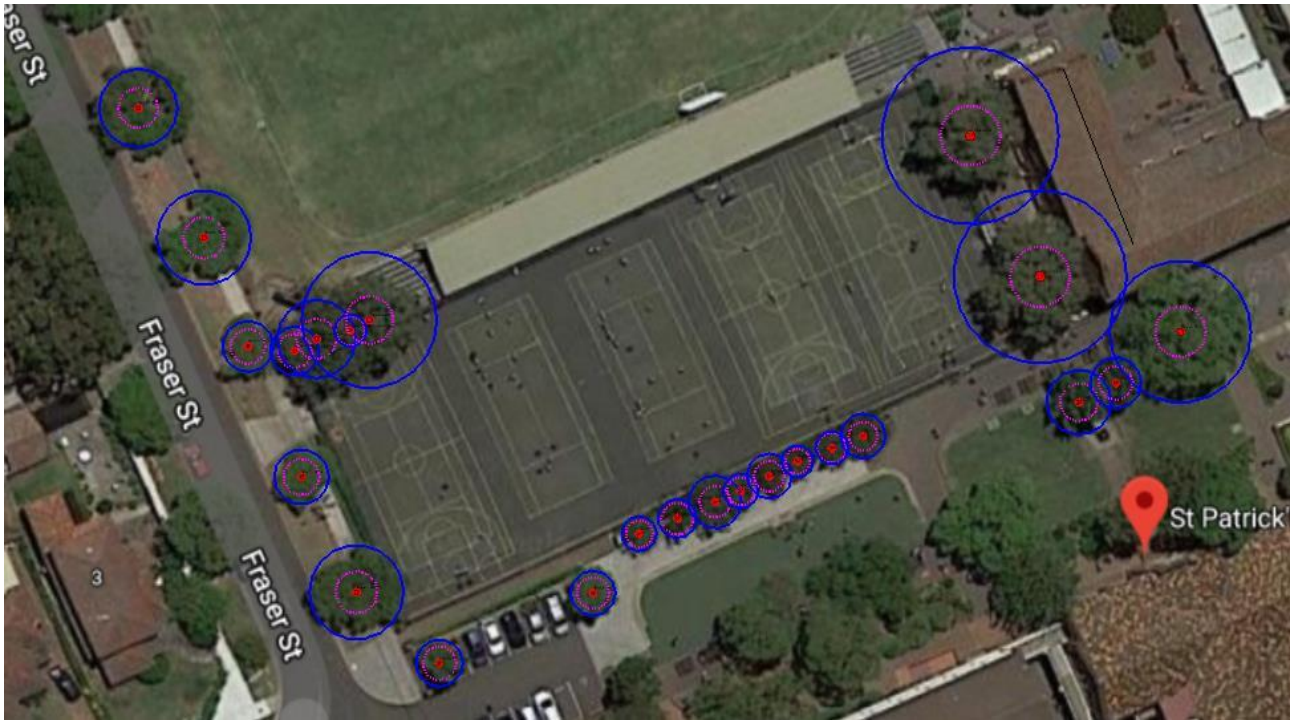
The access driveway to the proposed basement car park would result in the loss of two bays on Fraser Street, therefore reducing the total number of bays to 18 vehicles. Based on an average dwell time of three minutes per vehicle in the Kiss & Ride zone, the 18 bays could accommodate approximately 90 cars in a 15-minute period. Therefore, in the staggered school time scenario, Fraser Street and Edgar Street could not sufficiently accommodate the 105 vehicles expected at 3:15pm.

In order to accommodate the 105 vehicles at the peak, a total of 21 bays in the Kiss & Ride zone would be required.

2.6. VEGETATION

The subject site contains several trees on the perimeter of the existing tennis courts shown in **Figure 5**. The Arboricultural Impact Assessment (Appendix X) identified that there are 24 trees located within or near the subject site. Most of the trees are located around the edges of the site, including two established trees along the eastern edge, a row of smaller trees along the southern edge and a cluster of trees at the north western corner.

Figure 5 Existing Trees



2.7. SITE ACCESS & EXISTING ROAD NETWORK

The site is surrounded by a network of local roads including Edgar Street, Fraser Street, Shortland Avenue, Francis Street and Merley Road along the west, north and east boundaries of the sire respectively. A summary of the surrounding network is outlined in **Table 6**. The speed limit of the surrounding road network as outlined in **Table 6** is 50km/h with 40km/h school zone restrictions during school hours, except for Shortland Avenue which is not affected by the school zone restrictions.

Table 6 Surrounding Road Network

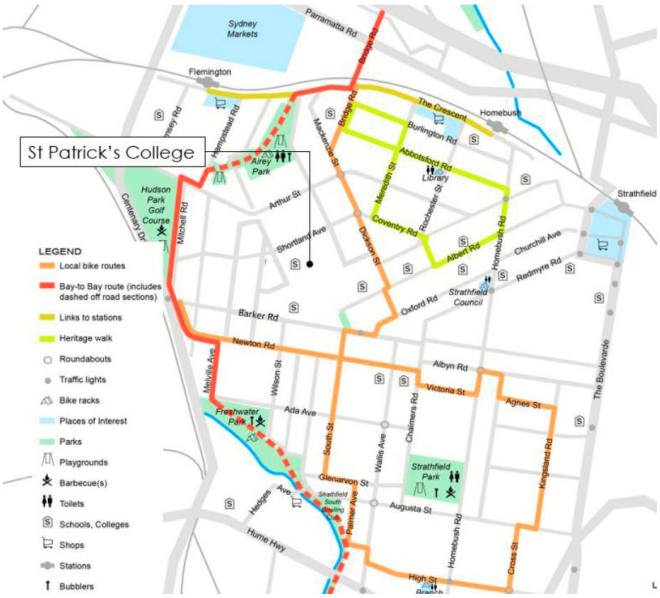
Road	Location	Description
Merley Road	East	Merley Road is a two-way local road, generally aligned in an east-west direction, across a 10.5m wide road carriageway and forms a partial frontage to the school at the south-eastern corner of the site. Unrestricted kerbside car parking is provided on both sides of the road.

Road	Location	Description
		The street continues northbound forming Francis Street along the eastern frontage to the school.
Francis	East	Francis Street is a two-way local road aligned in a north-south direction and forms the eastern frontage to the school. Unrestricted kerbside parking is provided on the eastern side of Francis Street while a bus zone occupies the west side.
Shortland Avenue	North	Shortland Avenue is a two-way local road having an east-west configuration along the northern site boundary. It has a 9.5m wide carriageway and unrestricted kerbside parkin on both sides of the street.
Fraser Street	West	Fraser Street is a two-way local road aligned in a north-south direction along the western boundary of the site. The carriageway is approximately 7.5m in width and provides unrestricted kerbside parking on the west side. On the east side of the street is restricted parking with a Kiss & Ride zone operational between 8:00am-9:30am and 2:30pm-4:00pm on school days. Fraser street in the south continues to form Edgar Street.
Edgar Street	West	Edgar Street is a two-way local road generally aligned in an east-west direction supported by a 7.5m wide carriageway. Unrestricted car parking is provided on either side of the road.

2.8. PEDESTRIAN NETWORK AND CYCLIST FACILITIES

Paved pedestrian footpaths are generally provided on all surrounding streets in the immediate vicinity of the school site. A pedestrian crossing is provided on Francis Street adjacent to the School entrance. **Figure 6** demonstrates that there are a number of local bike routes located on Dickson Street and Newtown Road which provide connection to the wider cycle network. Council intends to improve cycling connections in the future as detailed in Council's Active Travel Plan attached at **Appendix Z**.

Figure 6 Existing Local Cycleway Map



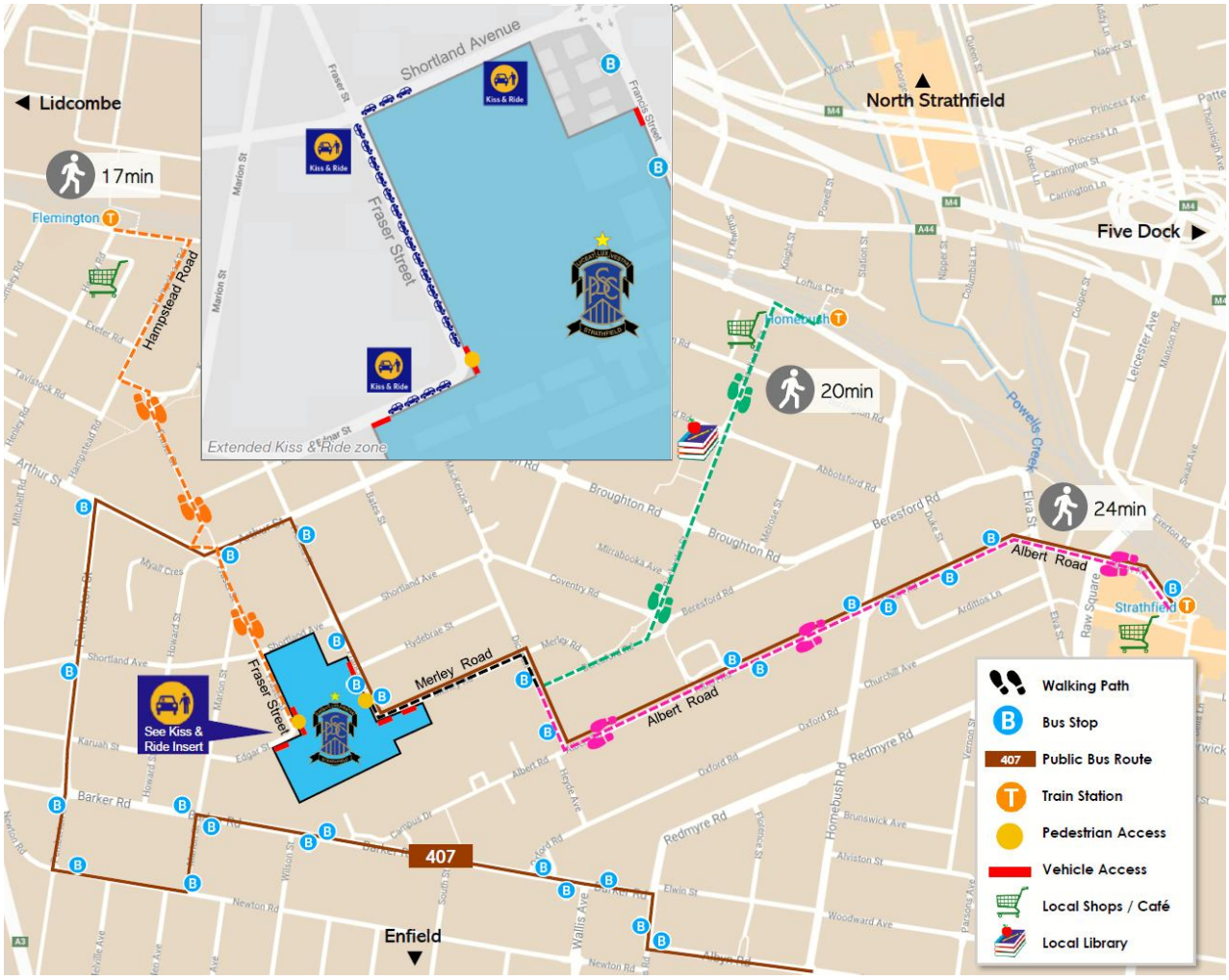
Source: Strathfield Council Bay to Bay Cycle path Map

2.9. PUBLIC TRANSPORT

The site is well serviced by various forms of public transport, **Figure 7** provides a summary of the transport options surrounding the site.

- **Trains** – The school is in proximity to Flemington Station, Homebush Station and Strathfield Station. These stations are located between approximately 1.5km and 2km walking distance from the school. The stations provide access to the T1 0 North Shore & Western Line, T2 – Inner West & Leppington and T9 – Northern Railway lines.
- **Buses** – Currently, the school is serviced by one public bus which provides connectivity between Strathfield Station and Burwood Station. The 407 bus service arrives and departs along the Merley Road and Francis Street site frontages with services running every 30 minutes during AM and PM peak periods and every hour through non-peak periods.
- Strathfield Council operates a free commuter bus called the 'Strathfield Connector' which connects local residents to the local shops, restaurants and businesses. The bus operates seven days and runs every 30 minutes between 7am and 7pm.
- School bus services are provided by NSW Transit System for St Patrick's College during peak periods. Morning school bus routes generally provide one or two services per day with the exception of bus route 579 which provides eight services between 7:52am-8:37am. Afternoon bus routes are serviced by one bus with the exception of bus route 579 which provides a direct bus service to Strathfield Station every 5 minutes from 3:20pm-3:35pm.

Figure 7 Existing Public Transport Network



Source: St Patrick's Travel Access Guide

3. PROPOSED DEVELOPMENT

3.1. OVERVIEW

The proposal comprises a new Science and Learning Building located at the centre of the campus, and adjacent to the pedestrianised publicly accessible pedestrianised Edgar Street. The works proposed as part of this SSDA application are:

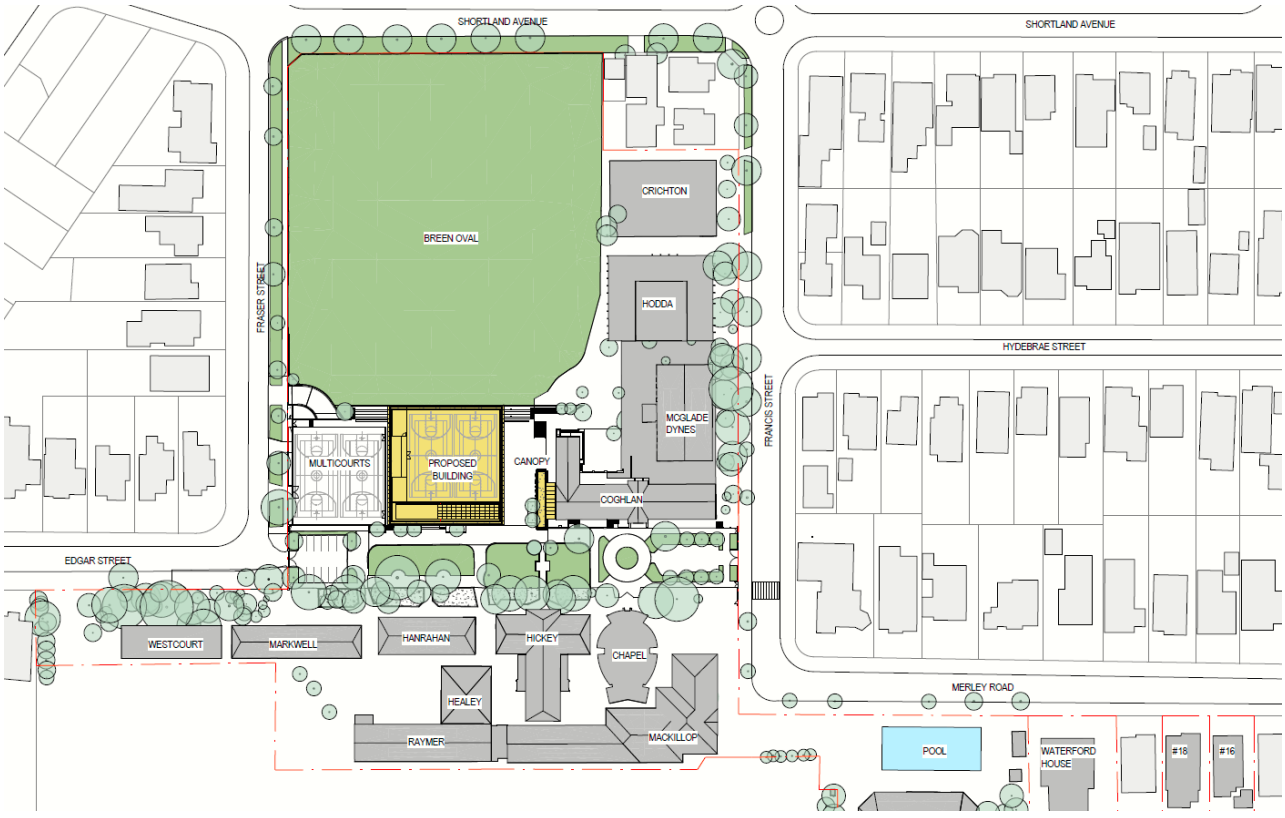
- Demolition of the existing tennis courts located at the centre of the campus;
- Construction of a new four storey science & learning building consisting of:
  - **Food technology and learning spaces**: 2 x food technology classrooms.
  - **New school canteen, café space and associated indoor and outdoor dining area:** Food services are designed to support the learning, a healthy food canteen service with café function during school hours as well as community functions outside of normal school hours.
  - **Science Learning Spaces:** A range of practical and creative spaces have been designed that support experimental and practical investigation around all science and food technology subjects. These include 6 x wet labs with separate write-up space, 2 x experimental labs, and associated science prep areas.
  - **Flexible General Learning Spaces:** Flexible and multifunctional spaces are designed to support developing and changing mode of learning.
  - **Breakout spaces:** internal amphitheatre stair for informal performances, presentation, open days and teacher training.
  - **Meeting rooms:** Shared meeting spaces distributed throughout the building to be used by staff and students and support diverse stages of learning.
  - **Sports Courts:** 2 x 2 x roof top multi-sports courts and 2 x podium/ground level multi-sports courts
  - **Amenity:** Generous storerooms, lift and improved accessibility.
  - **Tiered seating and Landscape:** Overlooking the College's Breen Oval. The northern side of the facility will provide terrace amenity, covered and open tiered seating for spectators during sporting events on the oval. Landscape features are integrated into the building facade and rooftop.
  - **Basement Carpark:** Providing 59 additional secure off-street parking spaces for staff and events.
- New landscaped civic space associated with the College, to the east of the new building.
- Staged increase in student population cap to a maximum of 1,790 by 2030.

Further details of the proposal are provided in the subsections below and within **Appendices C – AA.** The proposal is shown in **Figure 8** and **Figure 9.**

Figure 8 New Science & Learning Building

Source: BVN

Figure 9 Proposed Site Plan



Source: BVN

3.2. STUDENT CAP INCREASE AND ASSOCIATED TRAFFIC MANAGEMENT MEASURES

SPC is seeking to progressively increase the student population of the College to a maximum of 1,790 over by 2030. This is based on an 8-year forecast for the College, which seeks to add an extra stream (30 students) per year until there are 7 streams in each year group. The 1,790 number also incorporates a buffer allowing for future variances to this forecast. The buffer considers increased retention into Year 11 with the addition of food technology courses (e.g. Hospitality) as VET option in the senior school, as well as increased demand for places in Year 7.

As previously stated, SPC has an existing student cap of 1,436 student which was imposed via a condition of consent by Strathfield Council for DA2013/085 on 26 November 2013. The student cap was set via Special Condition No. 5, an extract of the Notice of Determination is provided below:

> ***Special Conditions***
>
> *5. The number of students onsite shall not exceed more than 1,436 students. Evidence of student numbers shall be provided to Council at the conclusion of each school year to ensure continued compliance with this condition.*

To account for this staged growth, SPC has undertaken comprehensive traffic generation modelling and analysis to determine the potential impacts of the long term growth of the school population. In addition, SPC has worked with TTPP to prepare a Green Travel Plan (**Appendix J**) that will support the increase to the current student population. This includes a series of works, strategies and operational protocols which will support the staged increase in student population. Refer to **Section 3.2.1 (**below), **Section 6.3** and **Appendix I** for detailed information on the measures proposed to address any impacts caused by the school on the local network. Section 3.2.1 details the operational

This SSDA will seek a renewed student cap in accordance with clause 4.17(1)(b) of the *Environmental Planning and Assessment Act 1979*. The relevant clause is described below:

> ***4.17 Imposition of conditions*** *(cf previous s 80A)*
>
> *(1) Conditions—generally a condition of development consent may be imposed if—*
>
> *(a) it relates to any matter referred to in section 4.15(1) of relevance to the development the subject of the consent, or*
>
> *(b) it requires the modification or surrender of a consent granted under this Act or a right conferred by Division 4.11 in relation to the land to which the development application relates, or*

The proposal seeks an amendment to the previous Development Consent DA2013/085 by deleting Condition 5 of this consent. Accordingly, it is anticipated that the consent associated with the subject SSDA would include a condition that establishes the revised maximum student cap of 1,790 students for St Patrick's College.

3.2.1. Operational Details

St Patrick's College will maintain its standard operation of the school. However, as part of the proposal SPC is proposing to stagger drop off and pick up times during AM and PM peaks as follows:

Table 7 Proposed staggered drop-off and pick-up scheme

Year Groups	Start Time	Finish Time
Year 5 & 6	8:30am	3:00pm
Year 7-12	8:45am	3:15pm

For more information on the proposed staggered drop off and pick up times, refer to **Section 6.3.4.**

The proposed building includes two at grade and two rooftop sports courts, which will only be used by students during daylight hours. As the at grade and rooftop courts do not have lights, access and use of these facilities will be restricted to daylight hours.

3.3. DESIGN PRINCIPLES

The Architectural Design Statement prepared by BVN identifies the following principles that have informed the design:

- Contemporary teaching and learning facilities that are agile and flexible.
- Improved connections and circulation encouraging student flow and movement as well as offering opportunities for extension of learning and socialisation.
- Improved hospitality/canteen/food services offer.
- Informal teaching and learning and socialisation spaces blurring the lines between classrooms, formal/informal learning, socialisation and recreation.
- Science and learning opportunities integrating potential for cross disciplinary uses, clean and dirty, maker and collaborative spaces.
- The overall massing, bulk and scale relative to the existing school buildings.
- Maintaining visual connections and view corridors throughout the campus, specifically across Edgar Street and to Breen Oval.
- Retaining and integrating recreational facilities as these are highly valued by the school.
- Creating a central heart to the school that is sheltered, communal and connected.

3.4. BUILT FORM AND URBAN DESIGN

The proposal has a maximum height of 15.46m, a gross floor area of 4,280qm. Key elements of the built form and scale are:

- The building is designed as a simple box form to enable flexibility for future teaching methods.
- The ground level has been stepped back to enable the creation of external covered areas that interface with the proposed civic space, Edgar Street, canteen area and tiered seating.
- 'Pop outs' protrude from the main façade of the building house the science labs and have been designed to activate the colonnade and civic space.
- Enlargement of the existing void around the adjacent Coghlan building to activate the lower area and allow for increased natural light,
- The built form and urban design are detailed in the Architectural Design Statement at **Appendix E**.

3.5. EXTERNAL MATERIALS & FINISHES

The external materials and finishes have been selected to be responsive to climate, provide solar protection, maximise natural ventilation and daylight, enable visibility and maximise views and articulate the scale of the building. The proposal includes the following materials:

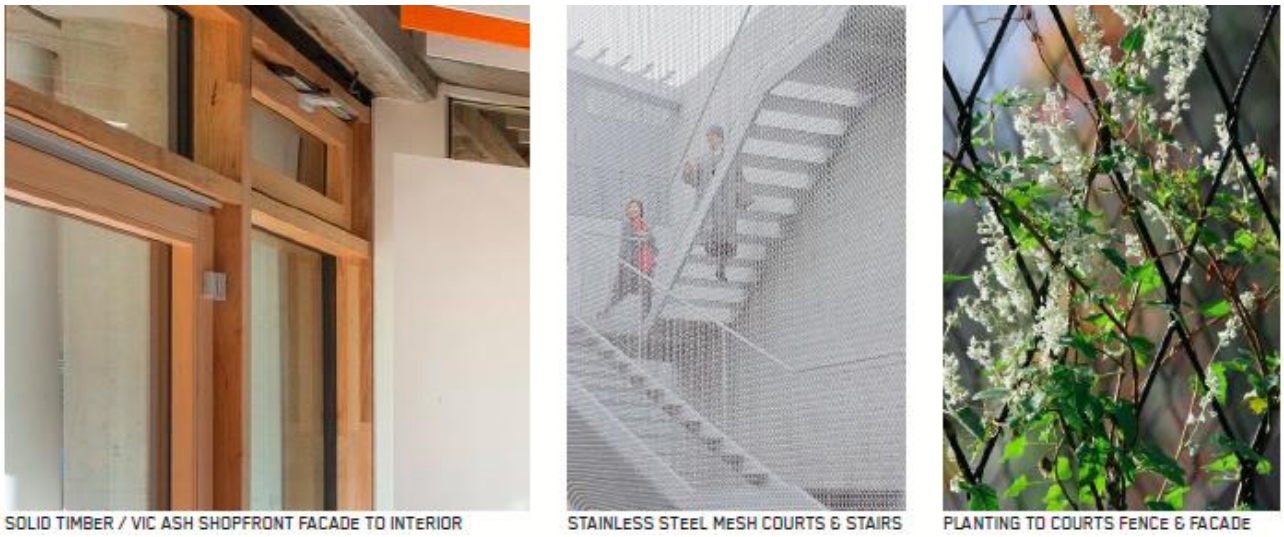
- Smoked brick.
- Concrete.
- Powder coated aluminium screens.
- Solid timber.
- Stainless Steel Mesh.

The façade treatments have been selected to enable simplicity, flexibility and durability. **Figure 10, Figure 11** and **Figure 12** illustrate the proposed external materials and finishes to be used for the new building.

Figure 10 Material Examples - Smoked brick, concrete columns, aluminium shopfront

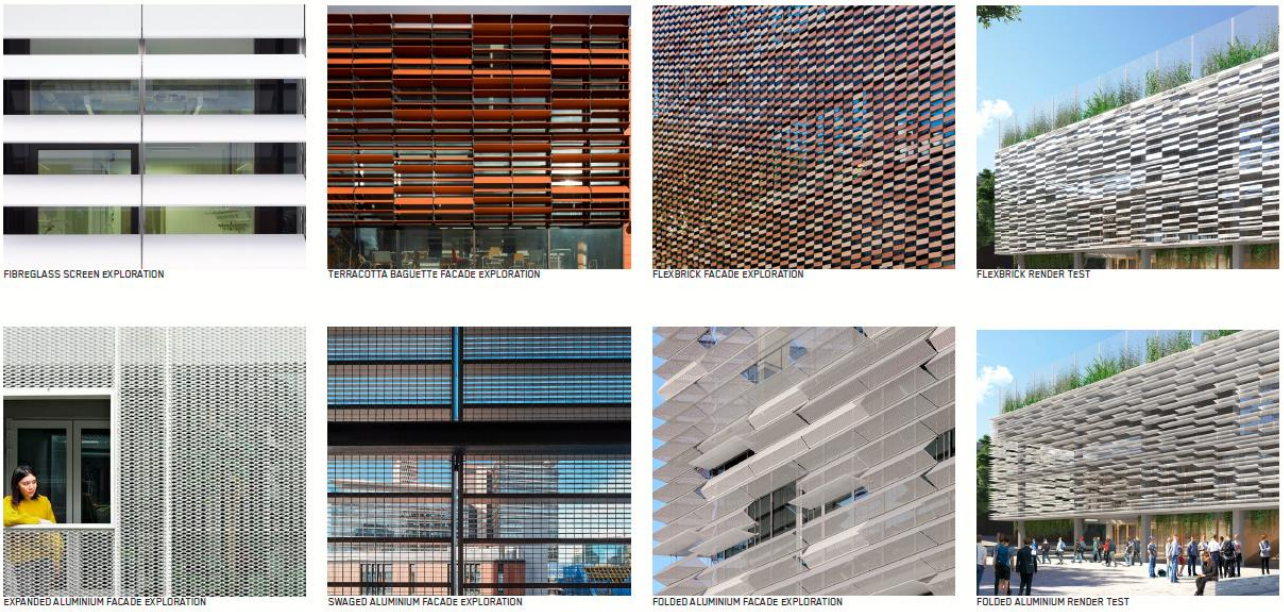
Source: BVN

Figure 11 Material Examples – timber, stainless steel mech, fence planting



Source: BVN

Figure 12 Façade Materials



Source: BVN

3.6. LANDSCAPING

3.6.1. Landscape Concept & Principles

A Landscape Design Strategy has been prepared by BVN and is attached at **Appendix F**. The landscape design of the school is based on the following key strategies:

- Establish a school identity with strong links to ecology & place;
- Create a playful and fun school environment which entices interaction and learning through the landscape
- Promote social inclusiveness, and equity across all abilities, ages and personalities
- Ensure school landscape directly responds to staff and student needs
- Provide amenity which supports learning and student development
- Provide flexibility and versatility to allow for a variety of users and enable people to enjoy different activities in the same place and adaptability for the school's future needs.

The new building provides an opportunity to establish an active centre for the College, consolidating sports courts and establishing a flexible civic area on the eastern side of the new building. This area will become the heart of the campus defined by the nexus of the Edgar Street drop-off, the sports field and the through-site link to the Fraser Street Campus entry.

Figure 13 Aerial View of Campus

Source: BVN

Figure 14 Ground Floor Landscape Plan

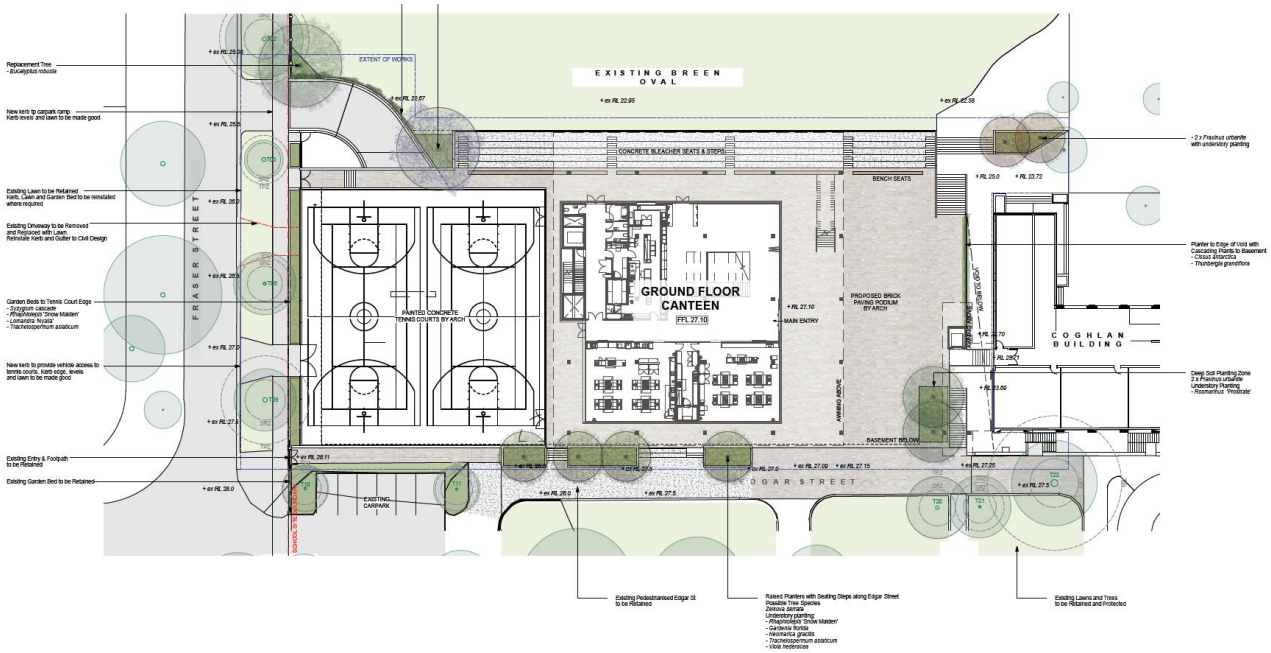


Figure 15 Edgar Street Landscape Section

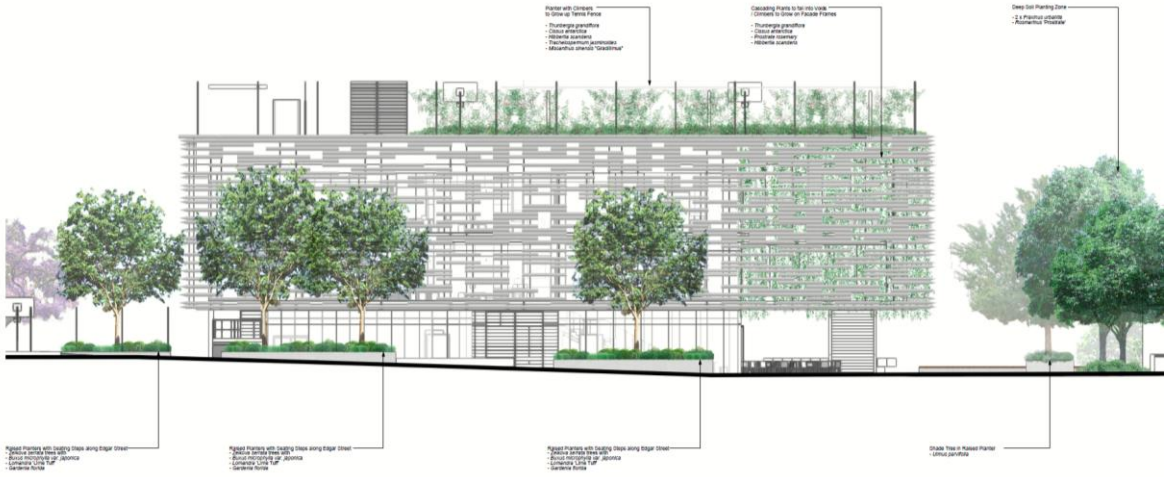


Figure 16 Landscape Podium

Source: BVN

3.6.2. Landscape Design

The landscape design is intended to compliment the civic spaces created by the new building and this new central podium area will become the 'heart' of the school. It will be a focus for outdoor learning opportunities, general circulation of students, assemblies, performances and other informal school community gatherings.

The new civic area adjacent to the building will be complemented with playful seating opportunities beneath an avenue of native tree plantings. This seating will provide a central congregation point with direct connections to the building.

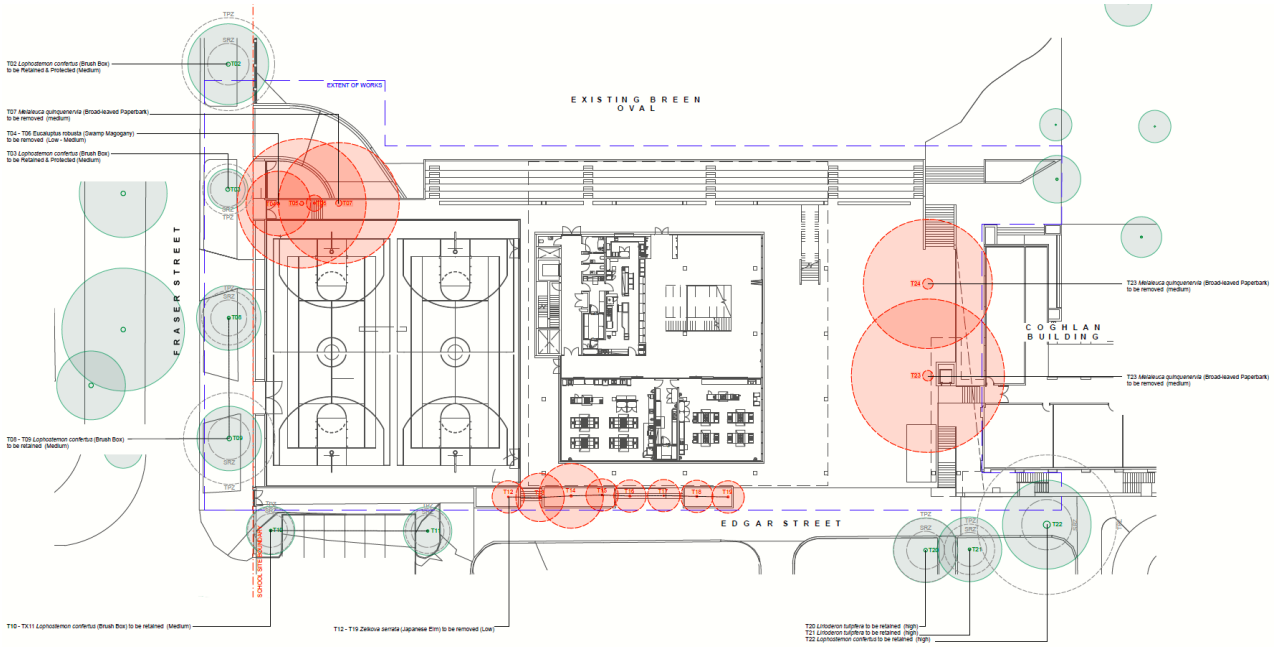
Figure 17 Overall Campus landscaping context and character

Source: BVN

3.6.3. Tree Removal

The development of the new building will require the removal of ten trees of low retention value and four trees with medium retention value. **Figure 18** illustrates the trees to be removed and maintained as part of the development.

Figure 18 Tree Removal Plan



Source: BVN

3.7. SITE ACCESS

3.7.1. Pedestrian and Cyclist Access

Pedestrian and cyclist access in and out of the school campus will remain. There are no changes proposed to the pedestrian and bicycle access arrangements as part of this proposal.

3.7.2. Vehicular Access and Car Parking

New Basement Car Park

The new building includes a single basement level car park which will accommodate an additional 59 car parking spaces. The new basement car park is located underneath the building and will accommodate staff and visitor parking. A new vehicle access to the basement car park will be provided off Fraser Street. The new 6m wide access driveway would facilitate two-way traffic flow to the proposed building.

In addition, the proposal seeks to remove the existing six spaces within Car Park D (accessed via Francis Street) to provide additional green open space for students. This provides a nett increase of 53 on-site spaces and an overall parking provision of 155 on-site spaces.

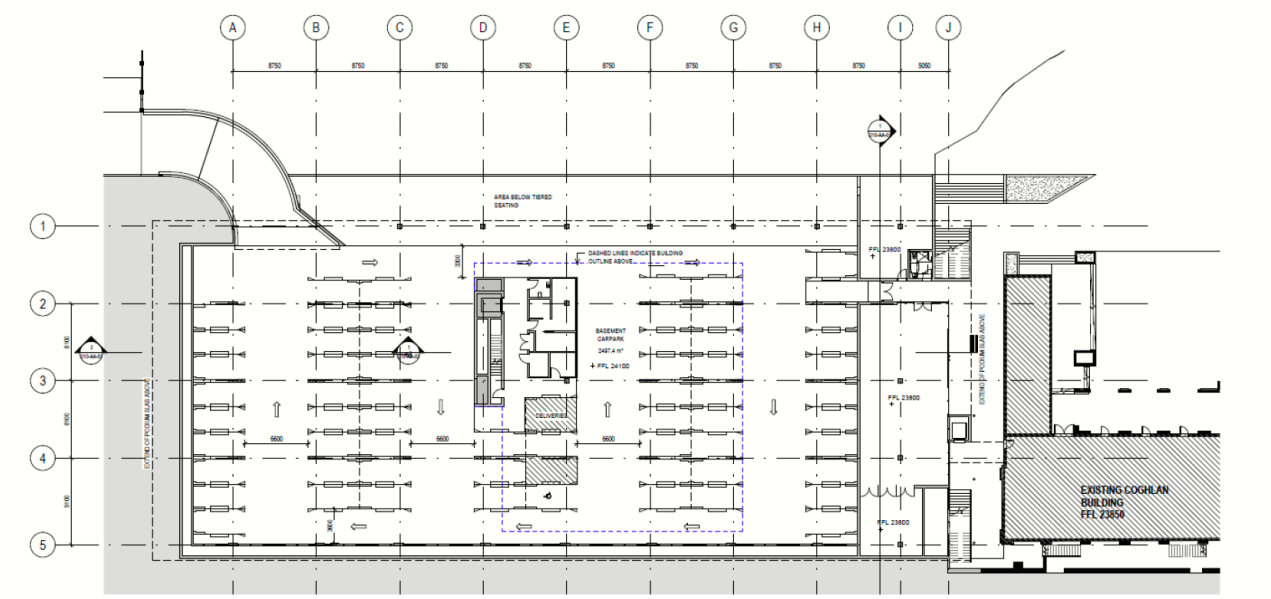
As previously mentioned, the school is also seeking to increase the student cap to 1,790 students by 2030. This would require an increase of staff from the current 140 to 158 staff by 2030.

Council's DCP 2005 requires a parking rate of 1 space per 1.5 staff, and accordingly the School (with 158 staff) is required to provide 105 on-site car spaces (including 3 disabled car spaces). The proposal provides an additional 53 on-site car parking spaces, contributing to a total of 155 car spaces available on Day 1 of opening the new building. This means the school can sufficiently accommodate the existing and projected staff population throughout the proposed growth period.

Delivery, Service and Emergency Vehicle Access

The new basement car park will include one loading space to accommodate a service/delivery vehicle for small deliveries. The loading space will be located adjacent to the elevator and dry/clod freezer rooms. Emergency vehicles can also access the site via the at-grade car parks located near the front office.

Figure 19 Proposed Basement Car Parking



Source: BVN

3.7.3. Kiss & Ride Facilities

The proposal seeks to continue the operation of the existing Kiss & Ride (pick up and drop off zones) along Fraser Street and Edgar Streets. However, it is acknowledged that the new access driveway to the proposed basement car park will result in a loss of two waiting bays on the Fraser Street zone. Therefore, the proposal seeks to extend the Kiss & Ride facility to Shortland Avenue (east approach) on the south side of the road. The design of which will result in an additional three car bays, equating to approximately 21m in length.

It is intended that the proposed extension would require converting the current unrestricted kerbside parking to No Parking between the hours of 8.00am – 9.30am and 2.30pm – 4.00pm on school days. For more information refer to **Section 6.3.5** and **Appendix I**.

3.8. WASTE

3.8.1. Construction Waste

A Demolition and Construction Waste Management Plan (CWMP) has been prepared by EcCell and is attached at **Appendix S.**

It is in accordance with NSW legislation the generator of the waste, in this case the building contractor is responsible for transporting waste on and off the site. As such, the contractors will be required to provide verifiable monthly reports on waste collected and transported across the weighbridge of licences facilities, if it is reused, reprocessed, recycled or sent to landfill.

This will minimise potential contact with the waste and reduce environmental risk from an accidental release. Where appropriate, waste will be reused or recycled.

3.8.2. Ongoing Operational Waste

An Operational Waste Management Plan (OWMP) has been prepared by EcCell and is attached at **Appendix R**. The OWMP has been prepared in accordance with the relevant state and local legislation and guidelines.

New Building Waste

The primary waste streams expected to be generated by the additional new building are outlined in **Table 8.**

Table 8 Potential Waste Types and Classifications

Waste Type	EPA Classification	Waste Management
Paper (excludes paper towels, toilet paper & tissues)	General solid waste (non-putrescible)	Co-mingled recycling. Container Deposit System
Cardboard (excludes waxed cardboard)	General solid waste (non-putrescible)	
Metals (aluminium cans, foil, steel cans etc)	General solid waste (non-putrescible)	
Glass (bottles and containers)	General solid waste (non-putrescible)	
Plastics (recyclables)	General solid waste (non-putrescible)	
Non-recyclable Plastics (Dirty/contamination plastic, plastic bags & film, clingwrap)	General solid waste (non-putrescible)	General Waste Onsite Compost
General refuse dry waste	General solid waste (non-putrescible)	
Food scraps/organise material	General solid waste (non-putrescible)	
Lead-acid or nickel cadmium batteries, e-waste, hazardous chemical used in the science lab	Potentially hazardous waste	Specific recycling

The waste from the building will be separated into three streams as follows:

- **Co-mingled recyclables** – A mixture or bl blend of recyclable materials including paper, cardboard, glass bottles and jars, steel cans and aerosols, aluminium packaging and plastic containers.
- **Garbage Waste** - All non-recyclable non-hazardous and non-problem waste that fits inside the nominated bin, commonly termed ‘garbage’ and includes food waste.
- **Problem Waste** - Materials that cannot easily be managed by regular waste and recycling services and is often hazardous in nature. Includes paints, chemicals, batteries, e-waste, light bulbs, gas bottles and cooking oils.
- There will be multiple waste collection points available on each level for students and staff to use. Once the bins are full, they will be removed and taken to Waterford House for Collection. The transfer to the collection point will occur with an automated bin remover where required.

Canteen Waste

Similarly, waste from the canteen and food technology area will be segregated into two separate streams as follows:

- Co-mingled Recycling – 240L Recycling Bins
- General Waste – 240L General Waste Bins

Tertiary School:

- Co-mingled Recycling – 60L Recycling Bins
- General Waste – 69L General Waste Bins

The 60 and 240 Litre bins will be placed in dedicated areas in the canteen, dining room and food technology rooms. The canteen facilities will dispose of their waste I the 240 litre bins provided. Cleaners will remove materials from separate bins at the end of the school day and will transport the material to Waterford House. The bins will be collected from Waterford House and transported to a licensed facility.

Waste Collection

All generated waste and recycling will be collected by Doyle Brothers (a private waste contractor) to an agreed schedule for collection. Waste Bins will be collected at a nominated loading area accessed off the ground level entry from the Waterford House (location) an adjoining property which is located at 22 Merley Road Strathfield, NSW.

Waste collection vehicles will collect in such a manner as to minimize risk of damage to the roadway, building or other services. Waste collection vehicles will not obstruct access to adjacent premises, roadways or parking bays. In addition, waste collection will be carried out with due care for public safety including other vehicles and passers-by.

3.9. SITE SERVICES

The following infrastructure management plans have been prepared to accompany the application:

- Hydraulics - **Appendix M**
- Electrical - **Appendix N**
- Mechanical - **Appendix O**

The various infrastructure management plans have identified that sufficient service capacity exists on the site to accommodate the proposed development.

3.10. STORMWATER AND DRAINAGE

A Stormwater Management Plan has been prepared by Northrop and is included in the Drainage, Utilities, Flooding and Sediment & Erosions Control Report attached at **Appendix P.**

The proposed strategy will result in less ground level hardstand areas than the previous development and additionally, runoff from the rooftop tennis courts will be directed to a reuse tank, which effectively takes rainwater out of the stormwater system. The development is deemed to result in a "cleaner" catchment when compared to the existing scenario.

3.11. CONSTRUCTION MANAGEMENT

The proposed development is proposed to be constructed in one phase across approximately 18 months, with works anticipated to commence in January 2021. Refer to **Table 9** for the planned construction staging, indicative dates and duration of works.

Table 9 Indicative Construction Staging and Duration

Stage	Start	End	Duration
Site establishment	January 2021	January 2021	2 weeks
Demolition	January 2021	February 2021	1 month
Excavation	February 2021	March 2021	1 month
Construction	March 2021	August 2022	16 months
Fit-out	August 2022	August 2022	1 month

Once a construction contractor has been engaged, the construction staging, management of school operations and timing will be refined and further detail of activities will be provided. A detailed Construction Management Plan will be prepared prior to the commencement of construction activities.

The extent of the work site shall generally be contained within the site boundary, with minimal impact on the surrounding road network. For further details refer to **Appendix I**.

3.11.1. Work Hours

The proposed construction works will be undertaken during the following hours:

- Monday to Friday – 7.00am to 5.00pm
- Saturdays – 8.00am to 1.00pm
- Sundays/Public Holidays – No work to be undertaken.

Any works outside the above work hours (as amended by the relevant consent conditions) will be subject to separate approval.

4. STRATEGIC PLANNING CONTEXT

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

- *NSW State Priorities*
- *The Greater Sydney Regional Plan, A Metropolis of three cities*
- *Future Transport Strategy 2056*
- *State Infrastructure Strategy 2018 – 2038 Building the Momentum*
- *Sydney's Cycling Future 2013*
- *Sydney's Walking Future 2013*
- *Sydney's Bus Future 2013*
- *Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)*
- *Draft Greener Places Policy*
- *Health Urban Development Checklist (NSW Health)*
- *Eastern City District Plan*
- *Strathfield Local Strategic Planning Statement*

Consistency with the relevant goals contained to the above strategic policies is discussed in **Table 10** below.

Table 10 Consistency with Strategic Planning Policies

Strategic Planning Document	Comment
NSW State Priorities	NSW State Priorities is the State Government's plan to guide policy and decision making across the State. The proposed redevelopment of the site is consistent with key objectives contained within the plan, including: ▪ Creating Jobs: Create 150,000 new jobs by 2019 The proposal will create 110 temporary job opportunities in construction, and construction management during the project's construction phase of works. It is anticipated that an additional 18 staff will be employed to support the needs of the additional 354 students. The proposal will contain high quality facilities, learning spaces and equipment for use by students and teaching staff. This will provide students with greater opportunities to learn and improve their science and technology skills. Overall, it is considered that the proposal is consistent with the goals and objectives set out within the NSW State Priorities.
A Metropolis of Three Cities – Greater Sydney Region Plan	A Metropolis of Three Cities is a bold vision for three, integrated and connected cities that will rebalance Greater Sydney – placing housing, jobs, infrastructure and services within easier reach of more residents, no matter where they live. The Plan sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for

Strategic Planning Document	Comment
	Greater Sydney in the context of social, economic and environmental matters. It is anchored on the strategies of infrastructure and collaboration, liveability, productivity, sustainability and implementation. Education facilities are considered as vital infrastructure in the city. The proposal seeks to update the facilities of an existing school within an established neighbourhood. By doing so, it will help to maintain the vibrant mix of people and activities within Strathfield. As mentioned in other parts of the EIS, temporary jobs will be provided in construction phase and new permanent jobs will be provided in education and service related sector. Sustainability is also a key consideration, particularly in the proposed design, construction, and operation of the buildings. The design of the school incorporates sustainable design principles and is further discussed in **Section 6.4** of the report.
Future Transport Strategy 2056	Future Transport Strategy 2056 is the NSW Government's update of the 2012 NSW Long Term Transport Master Plan and was finalised on 18 March 2018. The focus of the plan is to enable people and goods to move safely, efficiently and reliably around Greater Sydney, including having access to their nearest centre within 30 minutes by public transport, 7 days a week. The transport system will also support the liveability, productivity and sustainability of places on our transport networks. The subject site benefits from being near three train stations, including Strathfield station, which provides interchange opportunities. The stations are located approximately 20 minutes away by foot, however there are local buses that can transport students to and from the station to school. The site also benefits from local bus services which connect the school to the wider community. Students coming from suburbs such as Haberfield, Drummoyne, Rodd Point, Cabarita and Burwood have direct access to the school via bus. From the school, students can reach the Sydney CBD and Parramatta CBD within 15 minutes via express services from Strathfield Station. Therefore, the site is located within a highly accessible location and is well serviced by public transport. This is reflected in the fact students to the school come from all over Sydney.
State Infrastructure Strategy 2018-2038	State Infrastructure Strategy 2018-2038 sets out Infrastructure NSW's independent advice on the current state of NSW's infrastructure and the needs and priorities over the next 20 years. It looks beyond the current projects and identifies policies and strategies needed to provide infrastructure that meets the needs of a growing population and a growing economy. The Strategic objective for the Education sector is to 'Deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students.'

Strategic Planning Document	Comment
	The proposed development will help meet this objective by improving the School's facilities and outdoor areas, enabling the school to provide a better learning environment for its pupils.
Sydney's Cycling Future 2013	Sydney's Cycling Future seeks to make bicycle riding a feasible transport option within Sydney through the three pillars of safe, connected cycle networks, better use of existing infrastructure, and policy and partnerships. There are currently limited dedicated cycling facilities and routes that directly connect with the School. The existing Strathfield Council Cycling Map (**Figure 6**) details local bike routes which surround the site on all fronts. The Bay-to-Bay route, located to the north, west and south of the site, includes off road sections along Cooks River, which runs generally in a north-south direction. There are also a number of local bike routes on nearby roads including Newton Road to the south and Dickson Street to the east. Strathfield Council intends to improve the cycling facilities and routes in the future as detailed in their Active Travel Plan Report. The proposed bicycle network identifies Redmyre Road as part of the local network (on road).
Sydney's Walking Future 2013	Sydney's Walking Future (2013) aims to promote walking as a means of effective transport within Sydney by encouraging investment in safe, permeable walking networks. The actions set out in Sydney's Walking Future will make walking the transport choice for quick trips under two kilometres and will help people access public transport. The document draws from research and consultation of stakeholders by the NSW Government. It found that more than 50 per cent of children live less than two kilometres from School. However, 70% of 5-9 year old children and 46% of 10-14 year old children are driven to school in Greater Sydney. Connectivity and reduced delays, pedestrian safety and security, health and wellbeing benefits, and supporting facilities will encourage Sydneysiders to walk more. St Patrick's College is located within an established residential neighbourhood, located approximately 20 minutes' walk (**Figure 7**) from the Homebush and Strathfield town centres where people live, work, shop, dine, rest and play. The School is very accessible by walking for students, parents, staff and visitors from the local community as well as from key transport nodes, such as the Strathfield Train Interchange for the broader school community.
Sydney's Bus Future 2013	Sydney Bus Future (2013) outlines the NSW Government's long-term plan to deliver simpler, faster, and better bus services within Sydney to meet current and future customer needs. There are numerous bus stops within walking distance to St Patrick's College, which are serviced by several bus routes outlined in **Section 2.9** of this EIS.

Strategic Planning Document	Comment
Better Placed: An integrated design policy for the built environment of New South Wales	Better Placed – An integrated design policy for the built environment of NSW 2017 is the NSW Government Architect's Office policy to guide design. Better Placed provides clarity on what the NSW Government means by good design and outlines processes for achieving this. It has been created to assist everyone involved in design projects or the development assessment process and advocates that everyone has a role in ensuring our cities and towns are better places. The policy is based on seven objectives that define the key considerations in the design of the built environment: *1. Better fit: contextual, local and of its place* *2. Better performance: sustainable, adaptable and durable* *3. Better for community: inclusive, connected and diverse* *4. Better for people: safe, comfortable and liveable* *5. Better working: functional, efficient and fit for purpose* *6. Better value: creating and adding value* *7. Better look and feel: engaging, inviting and attractive* The Architectural Design Statement attached at **Appendix E** discusses how the proposal has adopted these seven objectives into the design process.
Draft Greener Places Policy	The Draft Greener Places Policy has been prepared by the NSW Government Architect to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. It aims to create a healthier, more liveable and sustainable urban environment by improving community access to recreation and exercise, supporting walking and cycling connections, and improving the resilience or urban areas. The proposal has been developed with consideration for the Draft Greener Places Policy through the implementation of four key design principles: - *Integration* - *Connectivity* - *Multifunctionality* - *Participation* The Architectural Design Statement attached at **Appendix E** discusses how the proposal has adopted the four principles into the design process.
Health Urban Development Checklist	The Healthy Urban Development Checklist by NSW Department of Health seeks to ensure that communities in the State are created to promote healthy habits and active mobility. The proposal for St

Strategic Planning Document	Comment
	Patrick's College satisfies a range of items contained to the checklist, including: ▪ Encourage incidental physical activity; ▪ Promote opportunities for walking, cycling and other forms of active transport; ▪ Promote access to usable and quality public open spaces and recreational facilities; ▪ Reduce car dependency and encourage active transport; ▪ Consider crime prevention and sense of security ▪ Promote quality streetscapes that encourage activity ▪ Provide access to a range of facilities to attract and support a diverse population; and ▪ Promote a sense of community and attachment to place The proposal therefore aids in promoting a healthy and sustainable built environment.
Eastern City District Plan	The Eastern City District is at the centre of the Eastern Harbour City, recognised as Australia's global gateway and financial capital. The district is highly accessible to the Harbour CBD, which has half a million jobs and the largest office market in the region. The Eastern City District covers the Bayside, Burwood, City of Canada Bay, City of Sydney, Inner West, Randwick, Strathfield, Waverley and Woollahra local government areas. This District Plan responds to major transport, health and education investments in the District, either committed or planned, such as Sydney Metro and the CBD and South East Light Rail, which aligns with Future Transport 2056. Planning priorities that directly relate to the proposed development at Meriden include: ▪ Planning for a city supported by infrastructure The School benefits from good access to public transport, specifically through bus links and train services at Strathfield station. The students, staff and visitors benefit from the close proximity to public transport and the well-connected and established walkways around the School. ▪ Providing services and social infrastructure to meet people's changing needs With the proposed development, St Patrick's College is adapting to changing requirements of students and trends in learning methods. SPC has focused on providing for additional high-quality facilities for collaborative learning, recreation and fostering school spirit. – Food technology classrooms;

Strategic Planning Document	Comment
	– Canteen and café, student dining area (including outdoor dining area); – Science learning spaces, including labs; – Flexible community and learning spaces; – Flexible general learning areas; – Two x rooftop tennis courts and re-instatement of two x Ground level tennis courts. The new Building will consist of Food Technology classrooms and a VET hospitality kitchen, a canteen and café, an indoor and outdoor college dining area, science labs and learning spaces, flexible community and learning spaces and the construction of two new roof-top tennis courts and reinstatement of two existing tennis courts. New and improved civic spaces will be provided across the campus to accommodate the staged increase in student numbers. The final outcome will provide modern, state-of-the art learning, communal and recreational spaces for the students, which will still preserve the heritage and character of the School and environment.
Strathfield Local Strategic Planning Statement	The Strathfield Local Strategic Planning Statement (LSPS) outlines the long-term vision for land use and infrastructure provisions within the LGA. The proposed development is consistent with the goals and actions outlined in the Draft LSPS. Of particular relevance to the proposal are the following actions: ▪ ***A11*** *Actively encourage kiss and ride drop off/pick up zones at railway stations, major bus interchanges and schools as they are renewed*. The proposal will improve the existing kiss & ride facilities at the school by extending the current facilities and staggering the pick-up and drop-off times. The proposed upgrade will improve efficiency of the kiss & ride operations and will encourage greater use of the zone therefore reducing congestion on the surrounding street network. ▪ ***A84*** *Establish and Education Cluster Collaboration Interagency to:* – *Consider common uses* – *Identify opportunities for ongoing collaboration to strengthen the cluster's role in supporting the LGA, District and Greater Sydney's education, infrastructure and economic needs* – *Identify opportunities for local schools in connecting the community* – *Identify opportunities for the joint/shared use of facilities and after hours and holiday periods site activation* – *Develop innovative transport solutions to reduce congestion around school start and finish times on local streets and parking by working together to develop a shared transport plan, including active transport and shared services such as buses*

Strategic Planning Document	Comment
	– *Identify the role that Council and State Government can ply to achieve positive outcomes for the LGA and cluster including active transport solutions* – *Understand the Australian Catholic University's (ACU) future needs and/or plans particularly for expansion and student accommodation and work collaboratively to minimise the impact on local residents* St Patrick's College is identified in the draft LSPS as being located within an Education Cluster. The proposal will contribute to the development of the Education Cluster by improving the existing facilities on campus and expanding upon the existing learning and teaching opportunities for students and staff in the LGA. The proposal includes an innovative transport solution being the proposed staggered start and finish times for students. This transport solution will reduce congestion on local student during peak afternoon and morning pick up times. The proposal also includes a Green Travel Plan which proposes a number of measures to promote and increase the use of active transport such as walking and cycling.

5. STATUTORY PLANNING ASSESSMENT

As outlined in the SEARs, the statutory provisions contained in the following planning instruments were considered:

- *Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure 2007)*
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- *State Environmental Planning Policy No. 64 –Advertising and Signage*
- *State Environmental Planning Policy No.55 –Remediation of Land*
- *Draft State Environmental Planning Policy (Remediation of Land)*
- *Draft State Environmental Planning Policy (Environment)*
- *Strathfield Local Environmental Plan 2012*

5.1. BIODIVERSITY CONSERVATION ACT 2016

The purpose of the Biodiversity Conservation Act 2016 (BC Act) is 'to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.'

An Arboricultural Impact Assessment has been prepared by Truth About Trees and is attached at **Appendix Z**. The development of the new science and learning building will require the removal of ten trees of low retention value and four trees with medium retention value. The assessment indicates a number for trees which are to be protected during the construction of the development. To ensure these trees are protected it recommends a Tree Protection Plan be prepared prior to construction.

Based on the minor amount of tree removal, a BDAR Waiver Request was prepared by Eco Logical Australia (ELA) following the issuance of the SEARs. The request was in relation to the removal of the following vegetation:

- *A group of trees in a pine bark mulch garden bed on the north-west corner of the multi-purpose courts, consisting of three Eucalyptus robusta (Swamp Mahogany) trees and a Melaleuca quinquenervia (Broad-leaved Paperbark) tree;*
- *A line of eight small Zelkova serrata (Japanese Elm) trees in a narrow garden bed with a Murraya paniculata (Orange Jasmine) hedge and a very sparse ground layer of Hemerocallis sp. (Daylilies), Liriope sp. (Liriopes) and a small patch of native Dianella caerulea (Blue Flax Lily) along the southern edge of the multi-purpose courts;*
- *Two large Melaleuca quinquenervia (Broad-leaved Paperbark) trees in a bark mulch garden bed with a Photinia robusta hedge on the eastern edge of the multi-purpose courts.*

The request was prepared in accordance with the Department of Planning and Environment Fact Sheet (2018) and included an assessment of the impacts of the proposed development on biodiversity values. The assessment concluded that the proposal will not have a significant impact on biodiversity values and as such a BDAR Waiver Request should be sought. Following the completion of the assessment the request was submitted to DPIE on 26 February 2020.

On 9 April 2020, DPIE confirmed in a letter (refer **Appendix Q**) that the development is not considered to have any significant impact on biodiversity values, and therefore the SSDA is not required to be accompanied by a Biodiversity Development Assessment Report. The letter detailed that DPIE had reviewed the application of the test of significance in accordance with section 1.5 and 7.3 of the BC Act and values 1.4 of the Biodiversity Conservation Regulation 2017 prior to lodgement. It also stated that the delegated Environment Agency Head in the Environment, Energy and Science Group (EESG) has also granted a waiver in a letter dated 13 March 2020. Therefore, the Biodiversity requirement of the SEARs has been waived and a BDAR does not need to be submitted.

5.2. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

The proposal is classified as State Significant Development on the basis that it falls within the requirements of clause 15 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), being '*development that has a capital investment value of more than $20 million for the purpose of alterations or additions to an existing school*'. The capital investment value of the project is anticipated to be $22,330,000 (Incl. GST) as outlined within the Cost Report provided in **Appendix B**. Part 2 of the SEPP further states that development control plans do not apply to State-significant developments.

5.3. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE 2007)

State Environmental Planning Policy (Infrastructure) 2007 (**ISEPP**) provides the legislative planning framework for infrastructure and the provision of services across NSW. Since gazettal of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 201*7 on 1 September 2017, each of the provisions that related to educational establishments within ISEPP have been repealed. Accordingly, ISEPP no longer applies to the proposal.

5.4. STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2007

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (**Education SEPP**), provides the legislative planning framework for the effective delivery of educational establishments and early education and care facilities across the State.

The Education SEPP establishes consistent State-wide assessment requirements and controls, that override development standards contained within other environmental planning instruments. Part 4 of the Education SEPP identifies school specific development controls, with clause 35 Schools—development permitted with consent containing the relevant controls. The proposal has been assessed against the relevant provisions of Part 4 within the following table.

Table 11 Educations SEPP Compliance Table

Clause	Proposal	Compliance
Clause 35 Schools—development permitted with consent		
(1) Development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone.	The proposed development is in the R2 Low Density zone, which is a prescribed zone for the purposes of the Education SEPP.	Yes
(2) Development for a purpose specified in clause 39 (1) or 40 (2) (e) may be carried out by any person with development consent on land within the boundaries of an existing school.	Development consent is sought for the proposed works.	Yes
(3) Development for the purpose of a school may be carried out by any person with development consent on land that is not in a prescribed zone if it is carried out on land within the boundaries of an existing school.	The proposed development is in the R2 Low Density zone, which is a prescribed zone for the purposes of the Education SEPP.	Yes
(4) Subclause (3) does not require development consent to carry out development on land if that development could, but for this Policy, be	The proposed new building and staged increase to the student cap cannot be undertaken as development without consent as per	N/A

Clause	Proposal	Compliance
carried out on that land without development consent.	clause 36 of the Education SEPP as it involves alterations to traffic arrangements and an increase to the number of staff and students.	
(5) A school (including any part of its site and any of its facilities) may be used, with development consent, for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment.	The community does not use the school facilities outside of school hours. However, there may be an opportunity for community use of tennis courts and other recreational facilities from time to time. Potentially during term breaks and by appointment.	N/A
(6) Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration: (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.	The EIS addresses the design quality of the development. A formal response to the Schedule 4 School Design Principles is included in the Design Report prepared by BVN (refer to **Appendix E**). As stated, the community does not use any of the school facilities out of school hours, but there is potential for this to change in the future. Specifically, community use of the podium tennis courts during term breaks by appointment.	Yes
(7) Subject to subclause (8), the requirement in subclause (6) (a) applies to the exclusion of any provision in another environmental planning instrument that requires, or that relates to a requirement for, excellence (or like standard) in design as a prerequisite to the granting of development consent for development of that kind.	The *Strathfield Local Environmental Plan 2012* requires a competitive design process to be completed for land within Strathfield Town Centre and identified as 'Area 2' on the floor space ratio map. The subject site is not located within the Strathfield Town Centre or Area 2. and a competitive design process is not required for the site under the LEP.	Yes
(8) A provision in another environmental planning instrument that requires a competitive design process to be held as a prerequisite to the granting of development consent does not apply to development to which subclause (6) (a) applies that has a capital investment value of less than $50 million.	The CIV of the proposal is less than $50 million and a competitive design process is not required.	Yes
(9) A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in	Noted.	N/A

Clause	Proposal	Compliance
subclause (1), (2), (3) or (5) is of no effect, regardless of when the development control plan was made.		
(10) Development for the purpose of a centre-based child care facility may be carried out by any person with development consent on land within the boundaries of an existing school.	The proposal does not include any centre based child care.	N/A
(11) Development for the purpose of residential accommodation for students that is associated with a school may be carried out by any person with development consent on land within the boundaries of an existing school.	The proposal does not include any residential accommodation.	N/A

Clause 42 of the Education SEPP allows the proposal to contravene a development standard imposed by the Education SEPP or any other environmental planning instrument under which the consent is granted:

> ***'State significant development for the purpose of schools—application of development standards in environmental planning instruments***
>
> *Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.'*

The proposed building exceeds the height of buildings development standard of 9.5m by 5.96m. However, as per clause 42 of the Education SEPP, development consent may still be granted without the need for a formal clause 4.5 variation as this is considered SSD.

Clause 57 stipulates that development for the purposes of an 'educational establishment' that will result in the educational establishment being able to accommodate 50 of more additional students and with direct access to any road must be referred to the Roads and Maritime Services (**RMS**). The RMS were consulted during the SEARs stage and in the preparation of this EIS. The Traffic Impact Statement prepared by TTPP, submitted at Appendix I, addresses the matters raised by the RMS in the SEARs. A referral to the RMS will be made during the assessment of the SSDA.

5.5. STATE ENVIRONMENTAL PLANNING POLICY NO.55 – REMEDIATION OF LAND

State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) provides a state-wide planning approach for the remediation of land and aims to promote in the remediation of contaminated land to reduce the risk of harm to human health or the environment. Clause 7(1) requires the consent authority to consider whether land is contaminated prior to consent of a development application, and if the land is contaminated consider whether the site is suitable for its intended purpose either in a contaminated state or whether it needs to be remediated.

A Preliminary Phase 1 Environmental Site Assessment (PSI) has been undertaken by Banksia EnviroSciences and is attached at **Appendix AA**. The PSI consists of a review of the current and historical activities that occur on the site, and an assessment of the potential risk of soil/groundwater contamination existing on the land. The PSI confirmed the following details:

- No significant development has occurred since the original construction of the tennis courts, currently located on the section of land within the college (i.e. the Site).
- The site was in a well-maintained condition with no obvious indicators of potential contamination.

However, the following areas of potential concern were identified (all located outside the site of the proposed development):

- Potentially hazardous building materials within existing adjacent site buildings;
- Vegetated/landscaped areas subject to potential pesticide/herbicide use (inc. CCA) and historical flaking of asbestos, lead based paints;
- Fill used to Edgar St and bituminous road surface material;
- Fill used to fill and level courts and oval areas.

Table 12 provides a summary of the contamination likelihood of the identified areas near the site.

Table 12 Areas of Environmental Concern (AEC) and Contaminants of Potential Concern

AEC	Potential for Contamination	COPC	Contamination Likelihood
A-Levelling Fill	Fill of unknown origin and quality	HM, TRH, BTEX, PAH, OCP/OPP and asbestos	Low-Medium
B-Surrounding Buildings	Pesticides and heavy metals may have been utilised underneath structures (pest control). Building construction may include ACM, PCBs and/or lead based paints	HM, OCP/OPP, PCBs and asbestos	Low-Medium
C-Surrounding Garden Beds & Landscaping	Application of herbicide/pesticides and heavy metals for pest control	HM, CCA and OCP/OPP	Low-Medium
D-Adjacent Roadway (Former; Edgar St.)	Run off from bituminous layers and fill material	HM, TRH, BTEX, PAH, OCP/OPP and asbestos	Medium

Based on the abovementioned results, the PSI concludes that a Phase 2 Investigation should be undertaken to establish the presence, depth and extent of potential land contamination surrounding the subject site.

The PSI concludes that the site is well situated in a controlled environment and the risk of contaminant migration is considered low.

5.6. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (REMEDIATION OF LAND)

The *Draft State Environmental Planning Policy (Remediation of Land)* is the proposed new land remediation SEPP set to replace SEPP 55. Public exhibition of the 'explanation of intended effect' for the Draft Remediation SEPP and draft planning guidelines was completed in April 2018.

The Draft Remediation SEPP will retain the objectives of SEPP 55 and reinforce the successful aspects of the framework. In terms of relevant changes applicable to development applications, clause 7 of SEPP 55 is proposed to be incorporated into the Draft Remediation SEPP. In addition, the list of potentially contaminating activities and the purpose of a 'preliminary site investigation' (PSI) and 'detailed site investigation' (DSI) will be integrated into clause 7 of the Draft Remediation SEPP.

As requested in the SEARs a contamination assessment has been submitted with this application, refer to **Appendix AA.**

5.7. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (ENVIRONMENT)

The *Draft State Environmental Planning Policy (Environment)* (Draft Environment SEPP) is the new SEPP seeking to consolidate, repeal and replace the following seven existing SEPPs:

- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas*

- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*
- *State Environmental Planning Policy No. 50 – Canal Estate Development*
- *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment*
- *Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.*

Public exhibition of the Draft Environment SEPP was completed in January 2018. The Draft Environment SEPP will deliver a policy instrument that contains a single set of planning provisions for catchments, waterways, bushland and protected areas.

The land the site is located on is currently not subject to any of the abovementioned SEPPs, nor is it identified as being attributed to any catchments, waterways, bushland or protected areas.

5.8. STRATHFIELD LOCAL ENVIRONMENTAL PLAN 2012

The *Strathfield Local Environmental Plan 2012* (SLEP 2012) is the principal environmental planning instrument governing development at the site. An assessment against the relevant controls of SLEP 2012 has been undertaken in the subsections below.

5.8.1. Zoning and Permissibility

The site is zoned R2 Low Density under the SLEP. '*Educational establishments'* are not permitted within the R2 zone.

However, the R2 Low Density zone is identified as a 'prescribed zone' under Clause 33 Part 4 of the Education SEPP. Clause 35(1) of the Education SEPP permits development for the purpose of a school to be development with consent within a prescribed zone.

> *"35 Schools—development permitted with consent*
>
> *(1) Development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone."*

Accordingly, by way of Clause 35(1) of the Education SEPP, the proposed development is permitted as 'development with consent' on the site.

5.8.2. Zone Objectives

The relevant objectives of the R2 – Low Density zone are:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To ensure that development of housing does not adversely impact the heritage significance of adjacent heritage items and conservation areas*

The proposal is consistent with the second objective as it will meet the growing demand from students and the day to day needs of the existing school and local community. The proposed new facilities enable high-quality teaching beyond what can currently be provided for the existing and future students that lives in the Strathfield LGA.

5.8.3. LEP Provisions and Development Standards

Other relevant provisions contained to the SLEP 2014 are addressed in **Table 13** below.

Table 13 SLEP Compliance Table

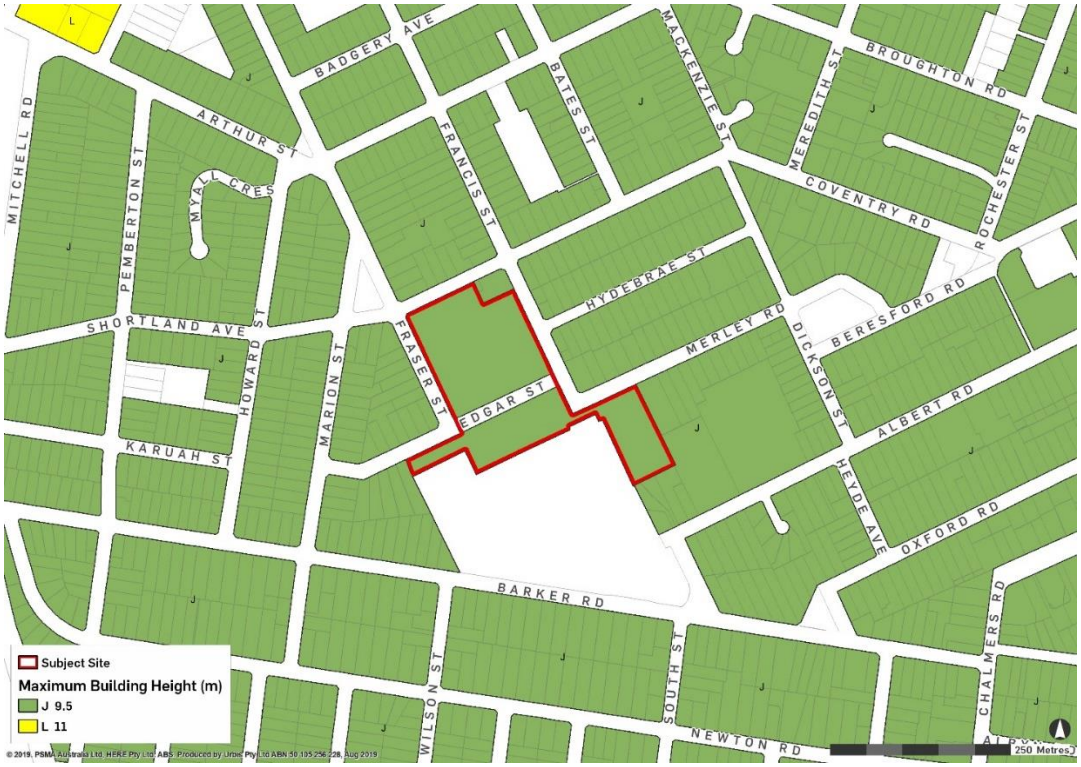
Consideration	Control	Proposal	Compliance
Clause 4.3 – Building Height	The site is subject to a maximum building height of 9.5 metres.	The proposed building will be 4 storeys in height (measuring at 15.46m at the highest point) and accordingly exceeds the maximum building height. Pursuant to clause 42 of the Education SEPP, the development consent may be granted for development for a school that is State Significant Development even though the development would contravene a development standard imposed by this LEP.	The building will exceed the height control by 6m. See justification in **Section 5.8.4.**
Clause 4.4 – Floor Space Ratio (FSR)	N/A	The site is not subject to a maximum FSR Standard for the site under SLEP 2012.	N/A
Clause 5.10 – Heritage Conservation	There are a number of locally listed heritage items on and in proximity to the site, including the following: – Item I132: St Patrick's College – Brother Hickey Building – Item I92: Australian Catholic University, Strathfield Campus (includes former "Mount Royal") – various buildings and landscape – Item I182: Sirona - Federation Queen Anne style house – C13: Merley Road Conservation Area, Inter-war bungalow style group.	A Heritage Impact Statement and Aboriginal Cultural Heritage Report are attached at **Appendix K** and **Appendix L** respectively. The proposal does not unreasonably impact the heritage significance of the items on or near the site Aboriginal Heritage and European Built Heritage matters are discussed in more detail at **Section 6.6** and **Section 6.5** of this report.	YES
6.1 Acid Sulfate soils	Development consent is required for the carrying out of works described below on land shown on the Acid Sulfate Soils Map as being of the class of specified for those works Class of Land: 5	The school campus is located wholly within land identified as Class 5 Acid Sulfate soil. No works are proposed within 500m of the adjacent Class 1, 2, 3 or 4 land, with the	YES

Consideration	Control	Proposal	Compliance
	Works within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m AHD and by which the watertable is likely to be lowered below 1m AHD on adjacent Class 1, 2, 3 or 4 land.		
Clause 6.2 – Earthworks	Earthworks must not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	The proposed earthworks will be generally limited to the footprint of the proposed building. The earthworks are not anticipated to have an adverse environmental impact. A Geotechnical Report has been prepared by Douglas Partners attached at Appendix S.	YES

5.8.4. Height of Building

The maximum height limit on the site is 9.5m (refer to **Figure 20**). The proposed building has a maximum height of 15.46m measured from the lowest point of the existing ground line to the top of the building, which exceeds the height development standard.

Figure 20 Building Height Map



Source: Urbis

Typically, a Clause 4.6 Variation would be required to vary this height of buildings standard, however Clause 42 of the Education SEPP states that:

> *"Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development*

standard imposed by this or any other environmental planning instrument under which the consent is granted."

As such, no Clause 4.6 Variation is required. Notwithstanding this, the proposed building height is acceptable for the following reasons:

- The scale of the building is of a contemporary institutional scale. It proposed on an expansive site and is compatible amongst the setting of various other School buildings within its immediate vicinity and also within this broader education precinct.
- The building height exceedance will not impact privacy to any neighbouring residential dwellings as the siting of the proposed building is at the centre of the campus. The nearest residential dwelling is approximately 60m away from the proposed building, which provides a significant acoustic and privacy buffer. In addition, two tennis courts, landscaping and trees will assist in providing screening and ensuring protection of privacy.
- Shadow diagrams provided in the Architectural Design Statement at **Appendix E** demonstrate that no overshadowing will occur to any neighbouring properties. The additional shadows occur within the school and to Edgar Street (owned by SPC).
- There are no iconic views across the site that will be impacted by the proposed building. In addition, the proposed building has been sited to specifically frame and enhance a view corridor between Breen Oval and the Hickey Building. In addition, the proposed building has been sited to enable view corridor directly between Breen Oval and Hickey Building.
- The additional height will facilitate the delivery of a high-quality science and learning centre to meet the increasing demand for high quality flexible learning spaces. Compliance in this circumstance would not improve the outcome. Rather, it would unreasonably impact on the ability to deliver this much needed education infrastructure, which also exhibits design excellence.

. The variation is therefore considered to be acceptable.

5.8.5. Strathfield Consolidated Development Control Plan 2005

Part M of the Strathfield Development Control Plan 2005 (SDCP) provides detailed controls for school developments. However, under Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011*, the application of local development control plans is excluded when assessing DAs for SSD projects. Notwithstanding this, the proposal has been assessed against the key relevant controls of the SDCP in the table below.

Table 14 Strathfield DCP Compliance Table

Control	Objective/Provision	Proposal	Complies
PART M – EDUCATIONAL ESTABLISHMENTS			
1.4 Zones where educational establishment are permissible	Permissible in Residential Zones	Complies - as whilst the proposal is not permissible in the R2 Zone under the SLEP 2012, the R2 zone is within a prescribed zone under Clause 33 of the Education SEPP and is permissible with consent.	Yes
4.1 Design Principles	Development should satisfy all relevant design principles listed in the DCP.	Design principles have been addressed in the Design Report attached at **Appendix E**.	Yes
4.2 Site Analysis	All applications shall include a Site Analysis Drawing.	A Site Analysis Drawing has been prepared (see **Appendix D**).	Yes

Control	Objective/Provision	Proposal	Complies
4.3 Site Requirements	1. To ensure that the relationship between an educational establishment and adjoining land uses is favourable and the amenity of surrounding development is not adversely affected; and 2. To ensure that an educational establishment is located where it can operate satisfactorily in terms of pedestrian and vehicular safety and traffic impact on the surrounding road network and other land uses in the vicinity.	Impact on surrounding residential amenity is addressed in **Section 6.2**. The proposal will have minimal amenity impact to adjoining land uses. Pedestrian and vehicular safety and traffic impact is addressed in the Traffic Impact Assessment Report in **Appendix I.**	Yes
4.4 Building Design and Envelope	Development should be compatible with height, bulk, scale, siting and character of adjoining and nearby residential zone Ensure protection of neighbouring properties from excessive noise generated by an educational establishment	The proposal is sited wholly within the centre of the school campus. The building's height, bulk and scale are compatible with the surrounding existing school buildings. This is discussed in **Section 6.1** of the report. Acoustic impact and mitigation measures are addressed in **Section 6.8** of the report.	Yes
4.5 Bulk, Scale and Site Coverage	1. Façade treatments must integrate the visual components of the building into and enhance streetscape. 2. Where sites are within or adjoining Residential 2A or 2B zoned areas maximum site coverage is 60%.	The façade treatment is integrated into the design of the building and is a key component which visually contributes to the campus. The façade and how the building contribute to the campus is addressed in the Design Report attached at **Appendix E**. The proposal is located wholly within the existing school campus. Therefore, the maximum site coverage control is not relevant or applicable to the proposal.	Yes
4.6 Height	1. The maximum height for an educational establishment in or adjoining a residential land use zone is:	As per clause 42 of the Education SEPP, development consent may still be granted, without the need for a formal clause 4.6 Variation	Acceptable on Merit

Control	Objective/Provision	Proposal	Complies
	a) 2 storeys, and b) 9.5 metres above natural ground level. 2. On large sites in or adjoining a residential land use zone, applications seeking a variation of maximum height will be considered on merit.	to the building height development standard. The proposed building has a maximum height of 15.46m, which exceeds the height development standard by 5.96m. Height non-compliance is addressed in **Section 5.8.4** of the report.	
4.7 Setbacks	**Minimum Front Setbacks in or adjoining residential zones** Minimum front wall setbacks in or adjoining residential zones apply as follows: Main Frontage – 9m Secondary Frontage – 5m Where existing front setbacks in nearby residential properties are greater than the minimum setbacks, greater setbacks consistent with adjoining residential properties shall be provided. **Minimum Side and Rear Boundary Setbacks** Side and rear boundary wall setbacks in or adjoining residential zones should be consistent with the side and rear setbacks in the nearby vicinity. However, the following minimums apply: Single Storey – 3m Two Storey – 4m **Minimum Setbacks for Occupiable Open Space** Setbacks to people gathering areas of open space such as playgrounds and active sports courts and the like that are potential sources of noise in or adjoining residential zones must include a landscape buffer area a	Whilst the proposal is located within a residential zone, it is located within the centre of an expansive School campus. The position of the building has no relationship with the pattern of residential development within the nearby area, and whilst having a street frontage, this street was acquired and consolidated within the Campus and acts as a pedestrian and landscaped link through the centre of the Campus. In this context, setback controls are not relevant or applicable to the proposed development.	N/A

Control	Objective/Provision	Proposal	Complies
	minimum of 3m wide to facilitate dense landscaping.		
4.7 Visual Privacy and Views	1. Educational establishment windows, doors, balconies, terraces, external elevated areas shall not overlook into internal rooms and external living areas within adjoining properties and properties in the vicinity. 2. Educational Establishments shall have minimal impact on the existing outlook and views of adjoining properties and properties in the vicinity.	Visual privacy and view impacts are addressed in **Section 6.2** of the report.	Yes
4.9 Acoustic Privacy	All Applications must be supported by a Noise Impact Assessment	A Noise Impact Assessment is attached at **Appendix G** and addressed in **Section 6.8** of the EIS.	Yes
4.10 Overshadowing and Solar Access	Development must not overshadow adjoining and nearby existing dwellings so that less than 4 hours of solar access is received to the windows of habitable rooms and to the majority of private open space, and solar collectors a between the hours of 9am and 3pm at the winter solstice.	Analysis on the potential additional overshadowing impacts resulting from the proposal have been included in the Architectural Set at **Appendix E**. The proposed building will result in no additional overshadowing to any nearby dwelling houses. All the overshadowing will occur within the school site.	Yes
4.11 Environmentally Sustainable Development	Development should incorporate principles of passive solar design, the use of energy efficient materials and technology and utilization as far as possible of renewable energy.	An Ecologically Sustainable Development (ESD) report is attached at **Appendix H.** The proposal incorporates a number of ESD initiatives.	Yes
4.14 Safer by Design	Educational establishments shall satisfactorily incorporate principles of safety by design set out in the Guidelines	CPTED principles have been considered and incorporated into the overall design of the proposal and the landscape design. Refer to **Section 6.14** for further details.	Yes
4.15 Traffic, Parking and Access	A Traffic and Parking Impact Assessment Report is recommended	Traffic and Parking Impact Assessment is attached at **Appendix I.**	Yes
4.16 External Impacts	Prepare an External Impacts Management Plan that details	Operation measures are addressed in **Section 3.11** of the	Yes

Control	Objective/Provision	Proposal	Complies
Management Plan	operational processes to fully address the objectives above.	report. The proposal does not seek to alter the existing school operation procedures.	
4.20 Stormwater Drainage and Re-use	A Stormwater Management Plan should be submitted.	The required stormwater and detention tank has been addressed and shown in the Drainage, Utilities, Flooding and Sediment & Erosion Control Report at **Appendix P.**	Yes

5.8.6. Contributions

The relevant contributions plan for the site is the Strathfield Indirect Development Contributions Plan 2010 Section 7.12 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* states:

> *A consent authority may impose, as a condition of development consent, a requirement that the applicant pay a levy of the percentage, authorised by a contributions plan, of the proposed cost of carrying out the development.*

The applicant requests that the Department of Planning, Infrastructure and Environment and the Minister for Planning use its discretion afforded by Section 7.12(1) of the EP&A Act and waive the requirement to pay the levy contribution.

St Patrick's College will provide essential social infrastructure, potential community services and employment opportunities, which results in economic and social benefits to the local Council and its community.

Part B of the Contribution Plan lists the types of development expected within the LGA which will create demand for additional public amenities and services. The following list, taken from the contributions plan does not include new education facilities:

- Residential development (includes all dwelling types).
- Employment Lands (commercial development, retail development and industrial development)

The College is a not for profit organisation and the requirement to pay a contributions levy is considered an unfair burden on the school. The College provides infrastructure that the Council would otherwise have to fund to meet the demands of its residents.

Council's Section 7.12 Plan seeks to ensure that adequate public amenities, facilities and services are provided to meet the expected increase in demand resulting from new development. Other development in the surrounding Town Centres (Strathfield Town Centre, Homebush Village Shopping Centre, Homebush West Town Centre and the Strathfield South Shopping Centre) will generate demand and will be levied in accordance with the plan to pay for infrastructure and services.

The proposal provides a facility for the community with teaching and learning spaces to benefit students and teachers. It also provides community type facilities that may be used by the community after school hours.

Therefore, no condition of consent should be imposed requiring payment of a Section 7.12 contribution.

6. KEY ASSESSMENT ISSUES

The Key Issues as per the SEARs have been assessed in additional to other issues deemed relevant, with impacts noted and mitigation measures proposed where necessary in this report:

- Built Form and Urban Design
- Environmental Amenity
- Transport and Accessibility
- Ecologically Sustainable Development (ESD)
- Heritage
- Social Impacts
- Aboriginal Heritage
- Noise and Vibration
- Contamination
- Drainage and Flooding
- Sediment, Erosion and Dust Controls
- Accessibility
- BCA Compliance

6.1. BUILT FORM AND URBAN DESIGN

The building has been designed as a simple rectangular form to allow for future changes in the model of teaching. The internal space within the building can be easily reconfigured as required due to the regular structural grid and lightweight infills. The building has been designed from the basement up, with a concrete frame structure to allow for flexible floor plates.

The ground floor level of the building has been stepped back to create a series of external covered areas that address the civic space to the east, the pedestrianised Edgar Street to the south and creates a large covered area to the canteen spill space and propose tiered seating to the north.

The rectangular form is veiled by a consistent screen which provides solar protection and visual privacy. The height, bulk, and scale of each built form and public domain element of the proposal has been considered and detailed in the Architectural Design Statement at **Appendix E.**

Methodology

The design of the new building has undergone envelope option testing to explore the different articulation possibilities through the choice of material, arrangement of the built form, colour and architectural variations. The massing studies were concerned with the following considerations:

- The scale of the building relative to the existing adjacent buildings. Specifically, the Coghlan building to the east and to the heritage Hickey building to the south.
- Maintaining connections and views from the south of the campus across Edgar Street to the Breen Oval and lower section of the campus to the north;
- The school's requirement to keep 4 of the 5 existing sports courts;
- Maximising shelter and connected community space at the heart of the school;
- Display the learning, visible and engaging teaching spaces.

Assessment

Three options were investigated as the most appropriate response to the physical heritage context and scale, connections and sightlines through the campus, setbacks from neighbouring properties, future

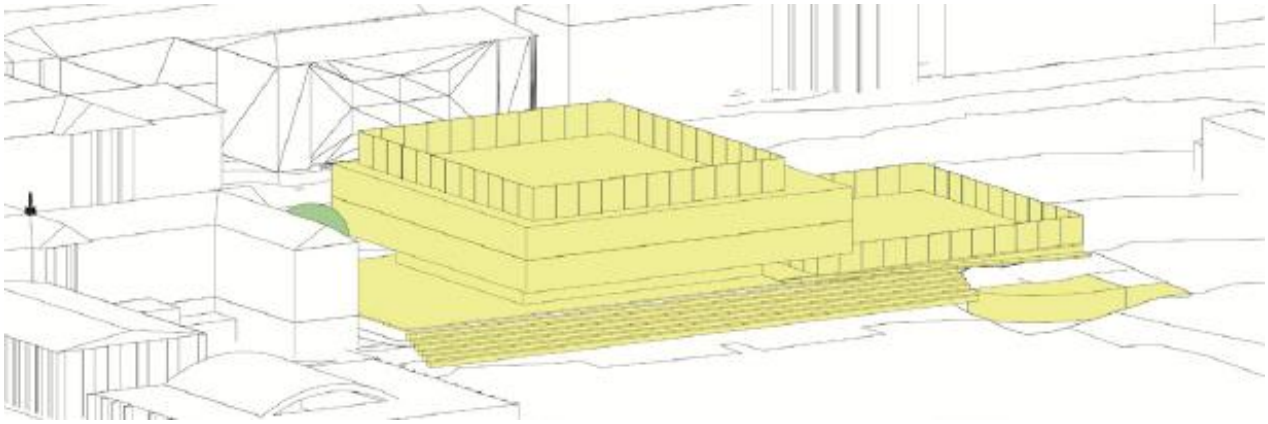
development potential and the surrounding landscape and street setting. Of the three options, the hybrid massing option (3) was selected for the following reasons:

- Prioritisation of ground plane connectively and community open space;
- Maximisation of ground plane shade and amenity for the school through the integration of an external triple height colonnade; and
- Maximisation of available rooftop space for play areas and sports courts.

The massing of the proposed building is deliberately set-back from the boundary to limit any acoustic, wind or overshadowing impact from the new building on any neighbouring sites. The closest residential property is approximately 60m from the building and is therefore impacted very little, visually or otherwise, by the building.

Option 1 – Larger Massing

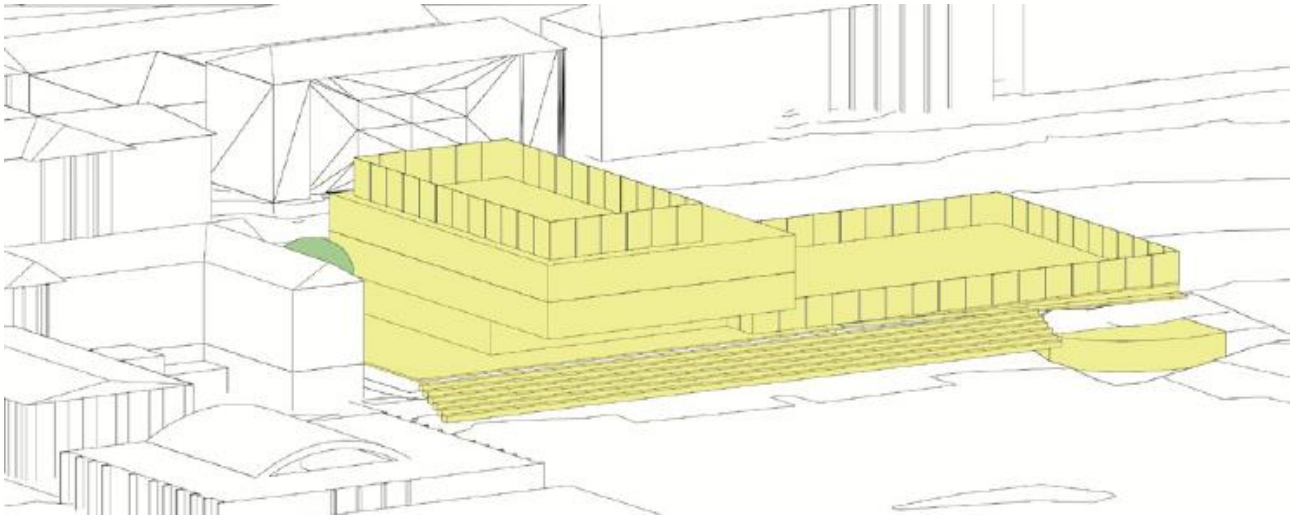
Figure 21 Larger Massing Option



Source: BVN

Option 2 – Reduced Massing

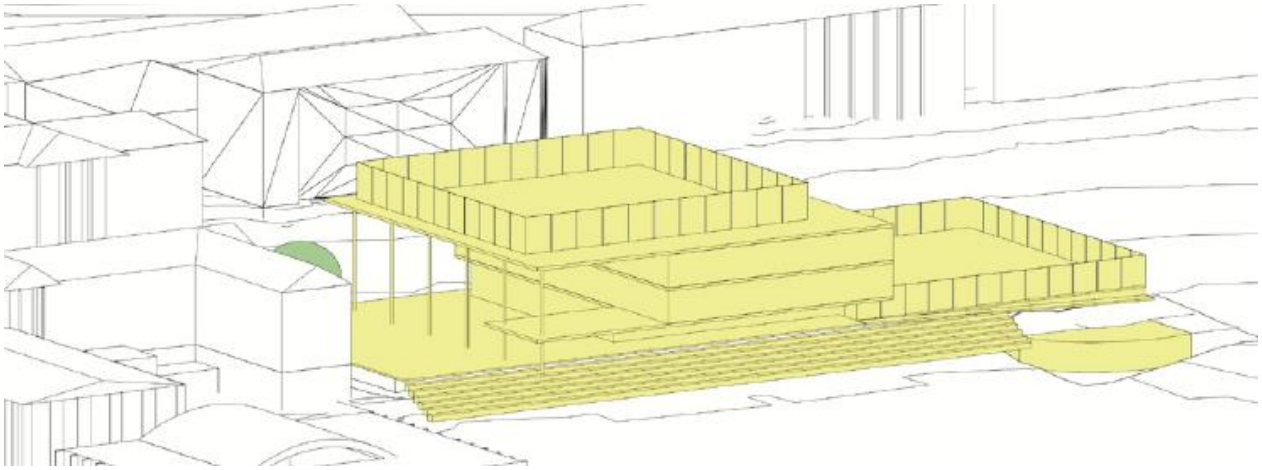
Figure 22 Reduced Massing Option



Source: BVN

Option 3 – Hybrid Massing

Figure 23 Hybrid Massing Option



Source: BVN

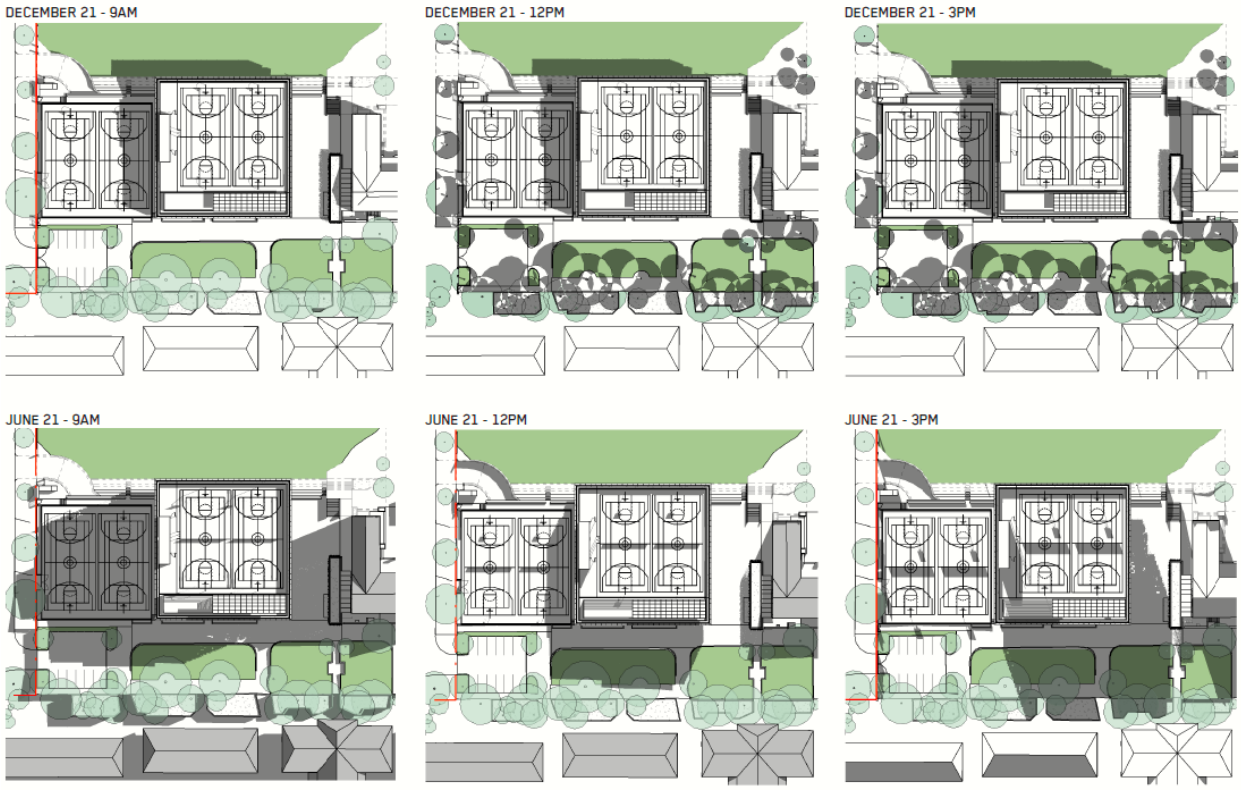
6.2. ENVIRONMENTAL AMENITY

6.2.1. Solar Access and Overshadowing

An analysis of the potential overshadowing associated with the proposed built form of the new building has been undertaken by BVN Architects and is included in the Architectural Design Statement attached at **Appendix E.**

Shadow diagrams have been provided at 3-hour intervals between 9AM and 3PM during summer and winter solstices.

Figure 24 Shadow Diagrams



Source: BVN

Potential Impacts

The proposed building envelope is anticipated to result in the following additional shadow impacts in winter:

- At 9am, additional shadow is cast over the sporting fields to the west of the building and onto the civic space and landscaping located to the south west of the building.
- At 12pm, additional shadow is cast on the civic space located to the south of the building.
- At 3pm, additional shadow is cast on the civic space located south east of the building.

Overall, no additional shadow impacts the closest residential property which is located approximately 60 metres away from the site. As illustrated in **Figure 24** the two sports courts located to the west of the new building will receive adequate solar access throughout the day. The shadow cast by the new building fall entirely within the campus and does not impact any surrounding or neighbouring properties.

The overshadowing caused by the proposal is due to the orientation of the building. However, as illustrated in **Figure 24,** the extent of the overshadowing is only onto Edgar Street and the school communal space. The existing school buildings along the southern edge of Edgar Street will not be overshadowed from 12pm. The proposal creates a new school civic space along the eastern edge of the building, expanding the potential for communal areas to receive sunlight. The shadow diagrams demonstrate that when Edgar Street is overshadowed the new eastern civic space will receive sunlight.

6.2.2. Views and Visual Impact

A view and impact analysis is included within the Architectural Design Statement prepared by BVN and attached at **Appendix E.**

The proposal has been sited well away from the school boundary to further increase the setback from neighbouring residential properties. The building is located at the centre of the campus, with the nearest residential property being approximately 60m from the building. **Figure 25** depicts the building and shows how it has been deliberately set back from the site boundary and integrates with the overall look of the campus.

The bulk and scale of the new building has been carefully considered to protect and frame the visual link to Breen Oval from the Heritage listed Hickey Building and vice versa. The building height is compatible with the other campus buildings and the materials to be used will provide contrast to the existing brick buildings. The white and glazed facade will reflect the material palette of the existing campus and showcase the teaching and learning taking place within the building.

Figure 25 View Analysis from Fraser Street Entrance

6.2.3. Visual Privacy

The proposed building, civic spaces and surrounding landscaped areas have been designed to maintain privacy of the campus. The following design interventions have been implemented to ensure maximum privacy is maintained:

- The building is veiled by a consistent screen which is peeled back in selected places to allow teaching and learning to be read from the outside and to maximise critical views from within the building.
- A green planted edge runs along the outside face of the colonnade to the east at levels 1 and 2. This planting will veil the façade and hand down into the colonnade space.
- Perimeter planting surrounds the rooftop fencing to soften the crown of the building whilst providing transpirational cooling benefits and shading.

6.3. TRAFFIC GENERATION

6.3.1. Existing Traffic Generation

A Traffic Impact Assessment (TIA) was prepared by TTPP and is attached at **Appendix I.** In order to assess the potential impact of the proposed development on the existing road network and traffic conditions a traffic survey was carried out on Thursday the 14th of November 2019. The purpose of the survey was to capture typical weekday traffic turning movement at key nearby intersections during the AM and PM school peak periods. The following junctions were surveyed:

- Shortland Avenue – Fraser Street (priority controlled)
- Shortland Avenue – Francis Street (roundabout)
- Francis Street – Hydebrae Street (priority controlled)
- Marion Street – Edgar Street (Priority controlled)
- Dickson Street – Merley Road (Priority controlled)

The intersections outlined above are illustrated in **Figure 26**

The SIDRA network modelling system was used to determine the performance of the key surrounding intersections under existing and future scenarios. The SIDRA modelling results indicate that the key nearby intersections operate at an acceptable level of service A with minimal delays and queue lengths. The longest delay has been modelled as 12 seconds and the longest queue being 7m (i.e. one car length). As such, the operational performance of the surrounding intersection network is satisfactory.

6.3.2. Projected Traffic Generation

As outlined in **Section 3.2**, the development proposes to increase the student population from 1,441 to a maximum of 1,790 by 2030. To ensure the road network can accommodate this additional population, a SIDRA modelling analysis was conducted based on the following five scenarios:

- Scenario 1 (S0) – Existing conditions (Base Case) which is based on 2019 traffic data
- Scenario 1 (S1) – Future case without development traffic, which considered an annual background traffic growth of 0.85% up to year 2028
- Scenario 2 (S2) – Future case with development traffic, which considers scenario 1 plus traffic generation associated with the proposed development.
- Scenario 3 (S3) – Future case + 10 years without development traffic, which considered an annual background traffic growth of 0.85% up to year 2038
- Scenario 4 (S4) – Future Case + 10 years with development traffic, considers scenario 3 plus traffic generation associated with the proposed development

Results – Scenario 00

- As discussed above in Section 6.3.1, currently the intersections surveyed above operate at a good level of service (LoS A) with minimal average delays.

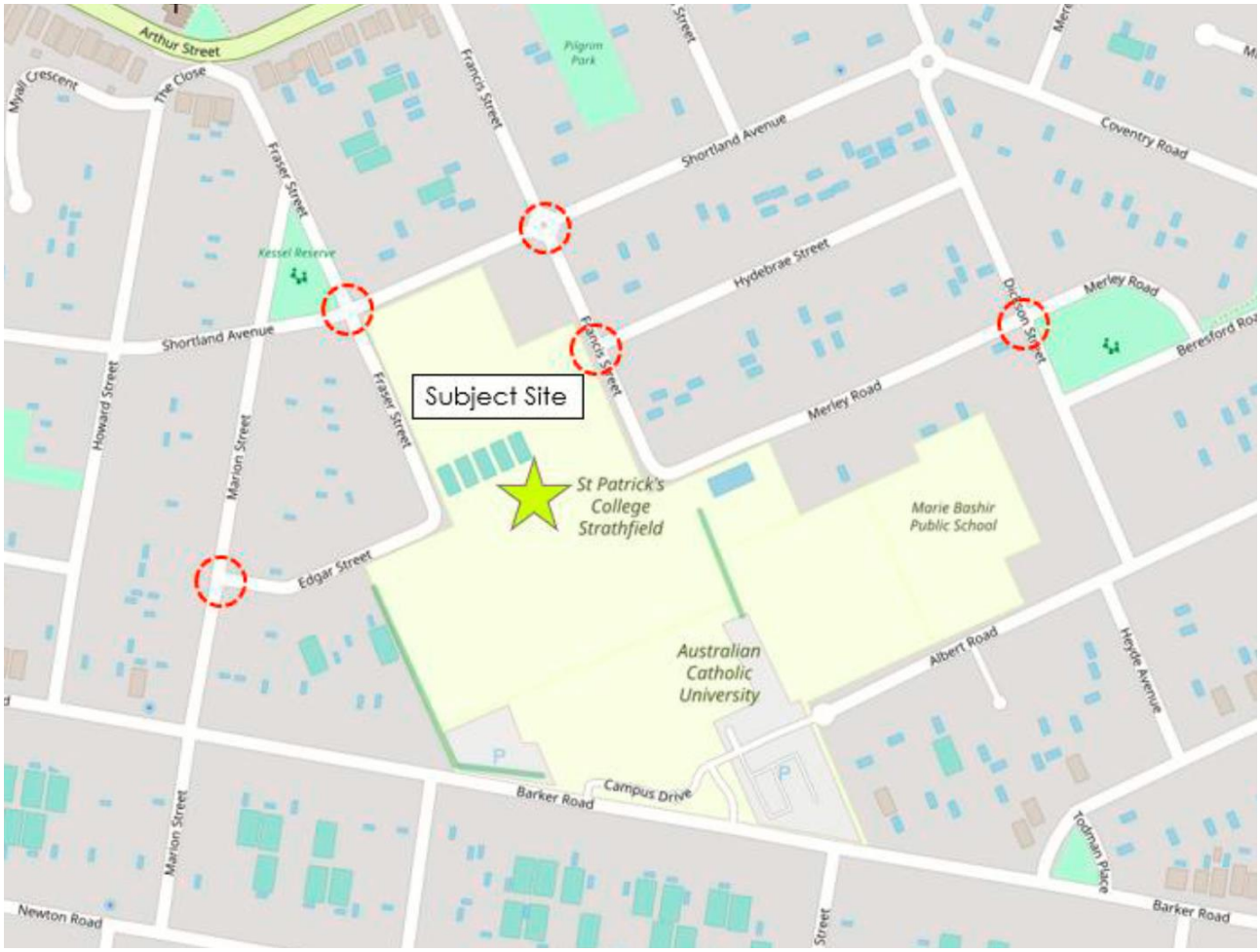
Results – Scenario 01 & 02

- Modelling results indicate that the proposed development is not expected to adversely impact the future performance of the local road network. The surrounding intersection are expected to continue to operate at an acceptable level of service during AM and PM peak school periods. Additional trips generated by the proposal would result in a marginal increase for average delays per vehicle at some intersections. For the worst-performing traffic movement the average delay would increase by one second between Scenario 1 and Scenario 2 which is a negligible impact.
- Overall all modelled intersections would continue to operate at a good level of service.

Results – Scenario 03 & 04

- The 10-year future scenario modelling results indicate that the proposed development is expected to have a minimal impact on the future performance of the local road network. It is forecasted that following ten years of growth the nearby intersections would continue to operate at a good level of service.

Figure 26 Surveyed Intersections



Source: TTPP

6.3.3. Kiss & Ride Operations

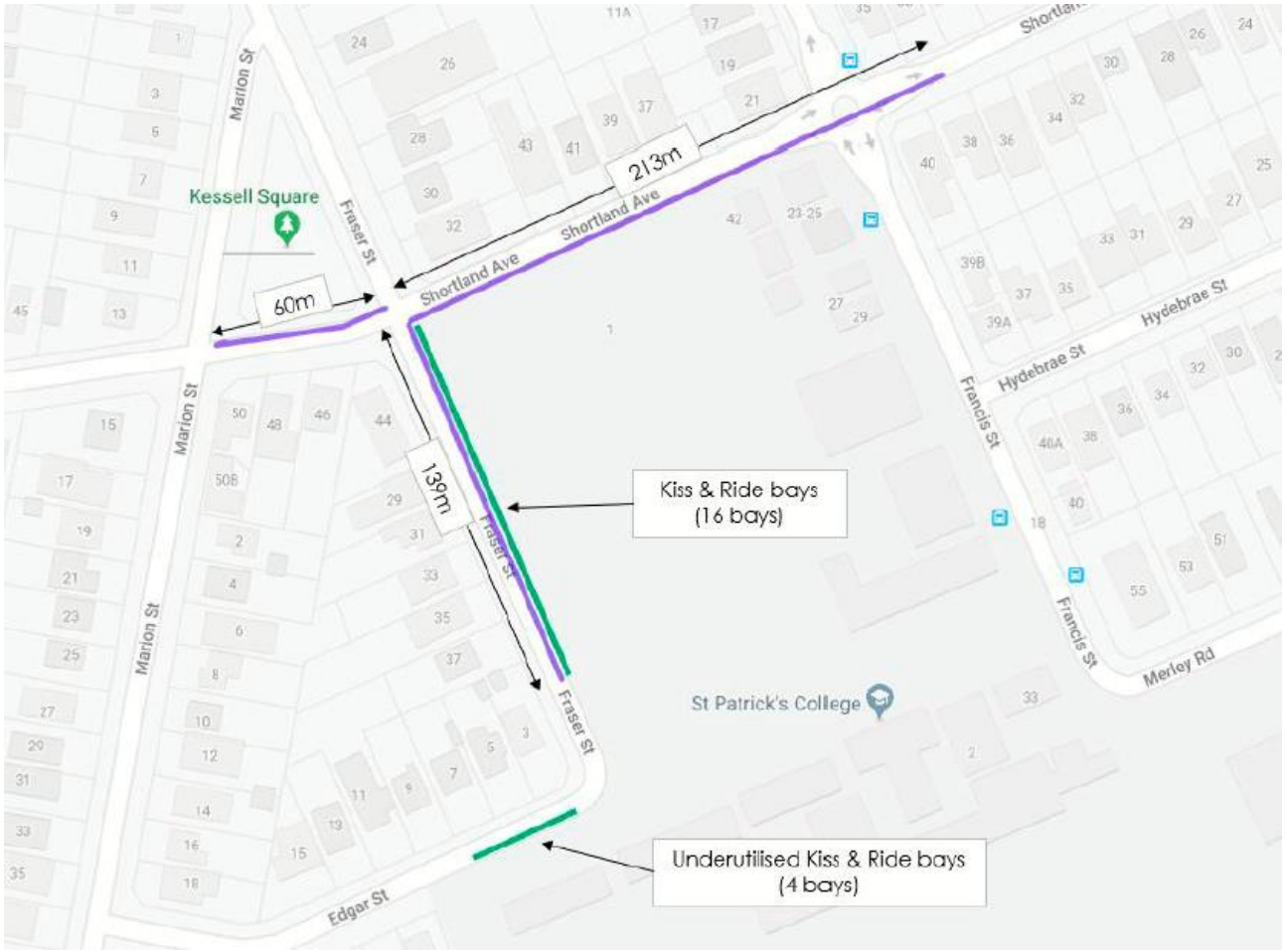
In addition to the observation of key intersections the Kiss & Ride facilities were observed during peak school periods. Whilst the SIDRA modelling indicates that the surrounding intersections would continue to operate at a good level of service in the future scenarios, the school will implement mitigation measures to reduce the traffic impacts caused by queuing at the Kiss & Ride facilities during peak periods.

6.3.3.1. Existing Kiss & Ride Facilities

The school's drop-off and pick-up activities currently take place on Fraser Street and Edgar Street along the site boundary. This area is signposted as 'Kiss & Ride' with 'No Parking 8:00am-9:30am and 2:30pm-4:00pm on School Days'. The Kiss & Ride zone on Fraser and Edgar Street can accommodate approximately 16 vehicles and 4 vehicles, respectively. However, the four latter spaces have been observed to be underutilised by parents in the pick-up peak period as the first vehicle typically waits by the pedestrian access gate on Fraser Street.

Generally, vehicle queues occur for 15 minutes in the afternoon peak period as a result of parents picking up students. Although short-term, queuing extends beyond the signposted Kiss & Ride onto Shortland Avenue east approach and west approach. The observed queue lengths are show in **Figure 27** below.

Figure 27 Existing Kiss & Ride Queuing



Source: TTPP

6.3.4. Mitigation Measures

Whilst the above studies and analysis indicate that the surrounding intersections would continue to operate at a satisfactory level, the implementation of the following mitigation measures will reduce the potential traffic impacts due to queuing at the Kiss & Ride facility during peak periods.

Staggering Arrival and Departure Times

At present, there is an influx of vehicle trips associated with student pick-up which are concentrated to a 15-minute period as all cohort's finish school at the same time. To alleviate traffic congestion during this time the school is proposing a strategy which staggers start and finish times for students. The strategy can be easily communicated with parents through the school's news Bulletin which can provide guidelines for preferred pick-up and drop-off times for children according to their cohort. There is the possibility that this might raise concerns for parents with children in more than one cohort. As such, further detailed consultation with staff, students and parents is required to be conducted. The proposed staggered start and finish times are outlined in **Table 15**.

Table 15 Proposed staggered drop-off and pick-up scheme

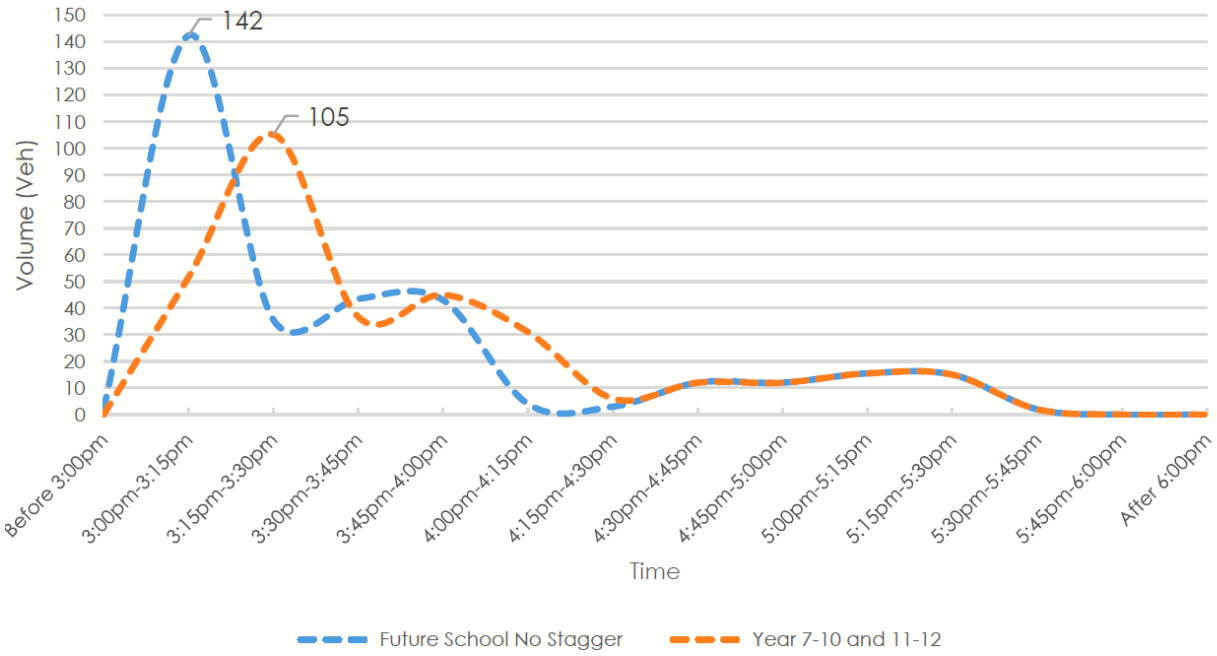
Year Groups	Start Time	Finish Time
Year 5 & 6	8:30am	3:00pm
Year 7-12	8:45am	3:15pm

6.3.5. Kiss & Ride Facility Extension

The existing Kiss & Ride facilities can accommodate a total of 20 vehicles. However, the installation of the new access driveway would result in a loss of 2 of these spaces, therefore, reduces the total number of bays to 18.

Based on an average dwell time of three minutes per vehicle in the Kiss & Ride zone, the 18 bays could accommodate approximately 90 cars in a 15-minute period. Therefore, in the staggered school time scenario, Fraser Street and Edgar Street could not sufficiently accommodate the 105 vehicles expected at 3:15pm. **Figure 28** illustrates that by implementing the staggered start and finish times during peak times, the scenario could generate up to a 26% reduction in vehicles arriving during the peak PM (afternoon) time. This means that the number of vehicles arriving to the Kiss & Ride facility in the future PM peak would be reduced from 142 vehicles to 105 vehicles.

Figure 28 Staggered start and Finish time scenario – Peak AM & PM



Source: TTPP

In order to accommodate the 105 vehicles at the peak, a total of 21 bays in the Kiss & Ride zone would be required. This would require extension of the Kiss & Ride on Shortland Avenue east approach on the south side of the carriageway to accommodate an additional 3 car bays.

The extension of the Kiss & Ride zone would result in 21m of unrestricted kerbside parking being converted to No Parking between 8.00am-9.30am and 2.30pm-4.00pm on school days only (being the equivalent of 3 car bays). In the vicinity of the site, there is ample unrestricted on-street parking which will further improve with the proposed development as all staff and visitor car parking will be accommodated on-site from Day 1 of the building opening. As such, the local road network and surrounding residents would experience immediate benefits from the off-street parking provisions provided by the school.

Therefore, the Kiss & Ride zone extension onto Shortland Avenue east approach would have a minor impact for local residents and on-street parking yet would greatly benefit the local road network safety and operation.

6.3.6. Construction Traffic Generation

The anticipated construction vehicle movements associated with each stage of construction are summarised in **Table 16**. The construction activities are anticipated to generate up to 20 two-way construction vehicle movements per day. Based on a 10-hour working day, this would equate to an average of two vehicle movements in an hour. Peak two-way construction vehicle movement is anticipated to be up to eight two-way vehicle movements per hour. However, peak construction vehicle movements will occur outside the school and commuter peak periods to minimise the traffic impact and delay to the road network.

Table 16 Indicative Construction Traffic Generation

Construction Stage	Construction Activities	Two-way vehicle movements per day	Peak two-way vehicle movement per hour
1	Site establishment	6	4
2	Demolition	6	4
3	Excavation	16	4
4	Construction	20	8
5	Fit-out	16	6

6.3.7. Construction Mitigation Measures

A site-specific Traffic Management Plan (TMP) will likely need to be prepared and submitted to TfNSW and Strathfield Council to appropriately manage the use of the designated construction routes.

Temporary traffic controls will be regularly inspected by the contractor to identify potential safety hazards to enable implementation of corrective solutions. Daily inspections and maintenance of controls will be undertaken by the contractor and maintenance will be recorded. The site supervisor will check all relevant traffic control management measures on-site prior to commencement of works each day.

All construction vehicles will enter and exit the site off Fraser Street in a forward movement. Vehicles must not be permitted to reverse into the construction site from the road. Construction vehicles shall radio/call the site office on approach to the site to ensure access to the work site is available. All loading and unloading shall be undertaken within the work site during the approved work hours. The queuing or marshalling of construction vehicles shall not be permitted on public roads. Construction vehicles are to egress out of the site when there is a suitable gap in traffic.

6.3.8. Green Travel Plan

A Green Travel Plan **(GTP)** has been prepared by TTPP and is attached at **Appendix J**. The GTP encapsulates a strategy for managing travel demand that embraces sustainable transport methods. The GTP identified the following goals for the school in relation to transport and travel behaviour:

- Improve access, safety, amenity and convenience of sustainable transport modes for travel to/from the campus
- Establish a culture of active and public transport use by incentivising sustainable transport modes
- Achieve modal shift away from car usage by limiting convenience of car access and parking within the campus
- Maximise use of proposed bus infrastructure (e.g. bus bays) to support modal shift away from car usage, specifically:
  - Reduce staff car use from 93% to 88%
  - Reduce student car use from 49% to 44%

To achieve the above goals the GTP recommends the implementation of the following measures:

- Students and staff should be discouraged to drive to school, particularly if they live within a 2-5km distance from the school;
- Promote the use of the existing car-share program and potentially invest in additional vehicles to promote use;

- Provide additional bicycle parking spaces and end of trip facilities such as lockers, change cubicles and showers;
- Implement programs which promote walking and cycling such as a “10,000-step initiative” and “National Ride to School Day”
- Promote use of the free Strathfield Connector bus and public buses in the school newsletter;
- Create a carpooling forum for staff and students on the school portal to encourage students and staff to travel in groups;
- Provide regular presentations on road safety and distribute the site-specific travel access guide (TAG) to students and staff

A positive shift away from personal vehicle use can be achieved at the school through the implementation of the above measures and the regular monitoring and adaptation of the GTP.

6.4. ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

An Ecologically Sustainable Development (ESD) report has been prepared by JHA Services and is attached at **Appendix H.** The proposal will include the following ESD initiative (amongst others):

- **Sufficient exposure to daylight:** The proposed building has been designed to make the best use of the sun by using external high performance horizontal shading screen devices to prevent the high summer sun from entering the building whilst allowing the low winter sun to enter the building for passive heating. The large portion of windows are also shaded by roof eaves and balconies/access paths to the floor above that will reduce the amount of incident summer solar radiation.
- **Well-designed openings to promote cross-ventilation (night purge):** Automatic windows have been integrated into the design of the building to enable night purge capabilities.
- **Energy-efficient air condition systems with control strategy and thermal comfort tuning:** The air condition systems have been designed to comply with or exceed the minimum requirements of the NCC 2016 Section J5.
- **Sustainable materials:** Adhesives, sealants, flooring and paint products will be selected to contain low or no Volatile Organic Compounds (VOCs) and all engineered timber products used in exposed or concealed applications are specified to contain low or no formaldehyde to avoid harmful emissions that can cause illness and discomfort for occupants.

The proposed development is not seeking a formal Green Star rating through the certification procedures of the Green Building Council Australia (GBCA), however it has been benchmarked against a 4 Star Green Design & As Built v1.3 rating.

The proposed development has been designed in accordance with a wide range of ESD goals that pertain to the design, construction and operational stages of the development. The design of the development will ensure that the building has minimal impact on the environment in the areas of energy, waste and materials.

The building will incorporate external high-performance shading devices and energy efficient passive design features to minimise severe or irreversible environmental damage.

6.5. HERITAGE

A Heritage Impact Statement has been prepared by Urbis and is attached at **Appendix K.** The study has identified a number of locally listed heritage items located on site and in the immediate vicinity of the site. These heritage items and conservation areas are summarised in **Table 17**.

Table 17 Heritage Items and Conservation Areas in vicinity of the site

Heritage Type	Item Name	Address	Significance	Item no.
Heritage Item	St Patrick’s College – Brother Hickey Building	1 Edgar Avenue	Local	I132

Heritage Type	Item Name	Address	Significance	Item no.
	Australian Catholic University Strathfield Campus, including former “Mount Royal” – various buildings and landscapes	25A Barker Road	Local	192
	“Siorona” – Federation Queen Anne style house	55 Merley Road	Local	182
Heritage Conservation Area	Merley Road Conservation Area, Inter-war Bungalow style group	-	Local	C13
Heritage Conservation Area	Marion Street Conservation Area, Inter-war Bungalow style group	-	Local	C12

It has been ascertained that the heritage items and conservation areas do not share any views with the proposed location of the new building on site. As such, the assessment of impacts will only consider the potential impacts on the heritage significance of the listed Brother Hickey Building and not that of the surrounding heritage items and conservations areas.

The locally listed Brother Hickey building was constructed in 1928 and is significant as the earliest building on the St Patrick’s College site at Strathfield. The Brother Hickey Building is of the Inter-War Ecclesiastical style and features strong gabled elements in the façade design which incorporates parapet forms and ecclesiastical details including three arched windows with Corinthian columns. The gable incorporates a stepped brickwork frieze and tiled capping detail. The front street facing façade comprises a two-storey veranda supported by an arched base. The building currently houses administration facilities.

The Brother Hickey Building is largely obscured from the public domain, particularly from the Merley Road HCA and the Marion Street HCA. Primary views of the Hickey building are from within the school grounds, predominantly in the formal gardens south of Breen Oval. Secondary views to the Hickey building from Breen Oval and Shortland Avenue are largely obscured by existing trees located between the eastern boundary of the existing tennis courts and the western façade of the Coghlan Building. The Brother Hickey Building and indeed the wider St Patrick’s College Campus does not share any view lines with the adjoining heritage item, *Australian Catholic University Strathfield Campus* (Item 192) or *Sirona* (item 182).

Following a detailed assessment of the Brother Hickey Building and the proposed development, the HIS summarises the proposed impacts as follows:

- The proposed works are in accordance with the heritage objectives set out in the Strathfield LEP 2012;
- The proposed development would not have an unreasonable impact on the heritage significance of the locally listed Brother Hickey Building and would not deter from significant views to the building from within the school grounds;
- The proposed development is of a similar bulk and scale to existing buildings on site, in particular the Coghlan Building and the Hickey Building, and its height would not exceed the ridge line of several of the existing buildings on campus. It would not therefore generate any adverse visual impacts on the existing built form and character of the site
- Within the context of the school comprising multiple buildings of different architectural styles and era, the proposed development would be an appropriate addition to the campus;
- The proposed building is located to the north-west of the Hickey Building. The diagonal arrangement of the buildings would reduce any overshadowing or masking of the Hickey Building as well as increase existing primary view corridors to the Hickey Building; and

- The proposed new building would mostly exhibit glazing and metal cladding to the exterior. Whilst the proposed finished are in high contrast to the face-brick facades of the Hickey Building, the new development would remain subservient through its use of lightweight, largely transparent materials which would contact against the heavy, opaque masonry found elsewhere.

The HIS concludes that overall the proposed development would have minimal visual impact on the surrounding heritage context of Patrick's College. Additionally, it would retain existing significant primary view corridors from within the school grounds to the Hickey Building as well as enhance secondary views from Breen Oval and Shortland Avenue. The proposed development generally respects the bulk, scale and siting of the existing buildings. The proposed materiality of the new building is modern and will provide an architecturally interesting counterpoint to the older buildings on the campus. The proposed development complies with all relevant statutory and non-statutory heritage policies and controls applicable to the site. As such the proposed works are found to be considerate to the existing heritage context of the site and it is recommended that the proposal be viewed favourable on heritage grounds.

6.6. ABORIGINAL HERITAGE

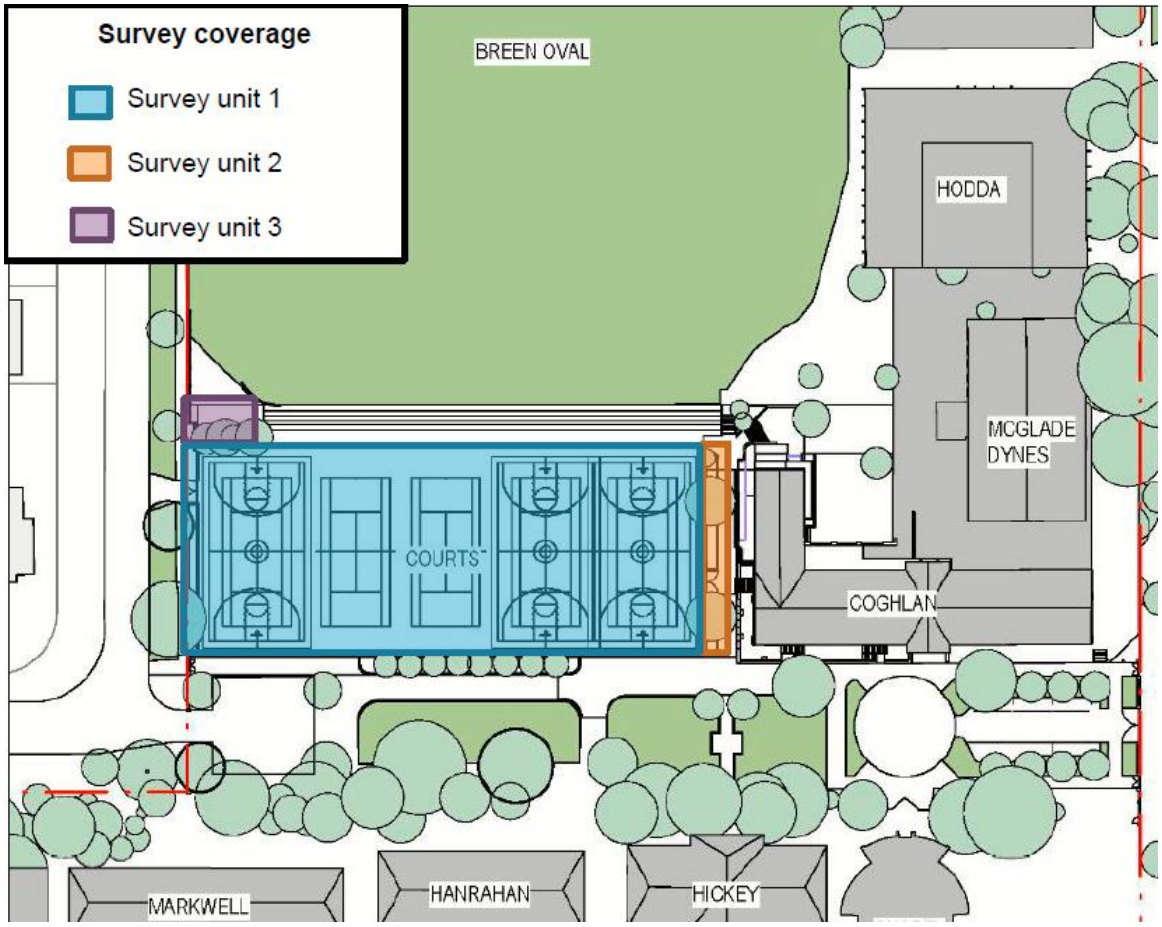
An Aboriginal Cultural Heritage Assessment was prepared by *Navin Officer Heritage Consultants* and is attached at **Appendix L**. The assessment involved an archaeological survey and data collection in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). The purpose of the field investigation was to:

- Verify the nature, location and extent of any know Aboriginal sites within the subject area;
- Identify and record any new Aboriginal sites or landforms with archaeological potential observed; and
- Document the conditions encountered to assess the effectiveness of the survey.

6.6.1. Methodology

As illustrated in **Figure 29**, the field investigation involved three survey units.

Figure 29 Archaeological Survey Location



Source: Navin

6.6.2. Findings

The findings of the survey are summarised as follows:

- No aboriginal objects or areas of archaeological potential were identified during the survey;
- Observations made during the survey suggest the subject area has been subject to high levels of disturbance form vegetation clearing and earthworks;
- The subject area does not retain any natural landscape features; and
- The cut and fill of the slope, and construction of tiered garden beds, is considered likely to have truncated the natural A- and B- soil horizons, removing the potential for any subsurface deposits.

Based on the environmental context and a review of the material evidence of Aboriginal land use in the region, it was considered there was low potential for open artefact sites to occur. No Aboriginal sites (objects or place) or landforms with archaeological potential have been identified during this assessment. For these reasons, the archaeological potential of the subject area is considered to by nil-low, and the proposed development is considered to have low risk of harming Aboriginal objects.

6.7. SOCIAL & ECONOMIC IMPACTS

The proposal will generate numerous beneficial social and economic impacts for Strathfield and the wider Strathfield LGA. The anticipated social and economic impacts include:

- The proposed development includes a basement car park accommodating 59 car spaces that will result in a total of 155 spaces being available to the School (representing a nett increase of 53 spaces). This will enable all school staff to park on-site from Day 1 of opening the new building, and thereby increasing the availability of on-street parking in the surrounding residential streets.
- In addition, the extension of the Kiss & Drop zone will enhance the safety of the local street network and alleviate traffic congestion during peak times.

- The creation of approximately 110 temporary job opportunities in the demolition and construction phase of the development.
- The creation of permanent job opportunities for support and teaching roles upon completion of the project. It is anticipated that an additional 18 staff will need to be employed to support the needs of an additional 354 students.
- An increase in student numbers that will help to alleviate pressures on the Government to provide places for an increasing school-aged population which was almost 750,000 in 2017 and expected to grow by 36% or 273,000 students by 2036. The built form will help to support the increase in staff and student numbers.
- The improvement of indoor and outdoor spaces for play and recreation leading to positive health and wellbeing outcomes for staff, students and external users alike.
- The creation of formal and informal areas of learning that are designed to promote social interactions between teachers and students, improve educational outcomes and provide spaces adaptable to changes to educational pedagogy in future.
- The design of the built form that has been considered to ensure amenity will be maintained for nearby residents and users of the right-of-way along Edgar Street. External materials and finishes will be selected to complement the surrounding built and natural environment.
- The is designed with Crime Prevention Through Environmental Design (CPTED) in mind, improving the current environment to create safer spaces and improve passive surveillance.
- The proposal also has the potential to foster a greater connection with the wider school and local community. This may include the opportunity to explore the possibility of community use of the tennis courts and other suitable recreational facilities from time to time. Potentially, the podium level courts could be available for use during term breaks via appointment.

In addition, the school has undertaken community consultation and has received limited feedback in relation to the proposal. This confirms that there is a low level of perceived social impact arising from the proposal.

6.8. ACOUSTIC IMPACTS

A Noise Impact Assessment (NIA) has been prepared by Reverb Acoustics and is attached at **Appendix G**. The assessment considered the potential noise impact for the new buildings and the potential noise and vibration impacts at the nearest receivers during the construction phase of development.

As future noise sources cannot be measured prior to construction and operation, a modelling system was used to predict future noise levels and potential impacts of construction associated with the proposed development. The modelling and assessment are based on a worst-case scenario where all fixed plant items are operating simultaneously and noise generating activities occurring in a location most exposed to surrounding residence.

6.8.1. Construction

Noise modelling has been conducted for each of construction scenarios outlined below:

- Tower crane
- Excavator
- Excavator with J’hammer
- Positrack
- Hammering
- Angle grinder
- Air Wrench (silenced)
- Compactor
- Road Truck

- Grader
- Air compressor
- Framing gun
- Concrete Agitator
- Concrete Pump
- Circular saw
- Pile boring rig

Results

The assessment indicated that the following construction activities will generate noise above the criteria of 75dB(A), for residential receivers:

- Compactor
- Concrete Agitator
- Concrete Pump
- Pile Boring Rig

In addition to noise caused by construction activities, occupants of nearby buildings may also have concerns regarding vibration levels from machinery.

Mitigation & Recommendations

To minimise noise impacts during construction, early work should concentrate on grading and levelling unshielded areas and locations. If complaints arise due to noise levels, the following strategies should be implemented:

- Installation of acoustic enclosures or screen directly adjacent to stationary noises such and compressors, generators, drills, rigs etc.
- Provide infills to classroom windows and entries

In addition, the following noise and vibration mitigation measures should be considered:

- Operator Instruction – Operators should be trained in order to raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission.
- Equipment Selection – All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with silencers, acoustical enclosures, and other noise attenuation measures in order to ensure that the total noise emission from each work site complies with EPA guidelines.

The site is deemed suitable for the intended purpose, providing the recommendations outlined above are incorporated into the design of the building and construction activities.

6.8.2. Operational

Assessment

The following operational activities/situations were assessed:

- Vehicles entering, existing and negotiating the carpark ramp (based on 60 spaces)
- School Bell/Siren located on the west side of the building
- PA systems located on the west side of the building
- Students seated in outdoor area, continuous over duration of assessment period
- Air Conditioning Plant on roof
- Kitchen Exhaust outlets located 1 metre above roof level

- Carpark exhaust outlets located 1 metre above roof level
- Tennis activities (both courts used)

Results

The modelling and analysis indicated that the cumulative noise impact from all activities and equipment associated with operation of the new building is predicted to exceed the criteria by up to 2dB(A) during the day and 5dB(A) during the evening at nearest residential boundaries located to the west of the building (R1). Further investigation indicated that the main source of this noise is the roof-top mechanical plant. Noise produced by the school bell and PA system, while compliant with the criteria, create maximum noise levels that maybe be disruptive to neighbours.

Mitigation & Recommendations

The following measures are recommended to be incorporated into the operation of the school to mitigate excessive noise:

- Limit noise output of school bell and PA system or relocate to the east or north side of the building a location shielded from residences.
- Select a mechanical plant with limiting SPL output or provide acoustic barriers.
- Select exhausts with limited SPL output or provide attenuator at discharge side of fan.
- With the implementation of the acoustic mitigation measures above, the development is capable of compliance with the relevant criteria at all time periods at all nearby residential receivers.

6.9. GEOTECHNICAL

A Geotechnical Investigation has been conducted by Douglas Partners and is attached at **Appendix W**.

6.9.1. Methodology

The investigation involved the following works:

- The drilling of seven auger drilled boreholes (BH1 to BH7) to depths of between 1.4 m and 4.4 m using a bobcat mounted drilling rig;
- Standard penetration tests (SPTs) were carried out at regular intervals and soil samples were collected for laboratory testing in the auger drilled section of each borehole;
- Boreholes BH1, BH3 and BH5 were then extended by NMLC diamond core drilling techniques to depths of between 5.5 m and 7.2 m to obtain continuous core samples of the bedrock; and
- One borehole (BH5) was converted into a groundwater monitoring well by installing Class 18 uPVC screen and casing.

6.9.2. Results

The borehole investigation uncovered the following:

- **Fill** – clay, gravel and sand in varying proportions to depths of between 0.2 m and 2.8 m. A concrete slab with a thickness of 120 mm was encountered in all boreholes drilled in the existing tennis/basketball courts (BH1 to BH6);
- **Residual Soil** – generally stiff to hard clay/sandy clay with varying proportions of ironstone gravel to depths of between 1.1 m and 4.4 m in all boreholes; and
- **Bedrock** – generally very low to low strength siltstone from depths of between 1.1 m and 4.4 m in boreholes BH1 to BH7, becoming medium and high strength with depth. In borehole BH1 rock was not encountered until a depth of 4.4 m and was of medium to high strength.

6.9.3. Recommendations

The following recommendations are proposed to mitigate the geotechnical impacts:

- Pavements - a design subgrade CBR of 3% be adopted for the clayey residual soils.
- Excavation - vibrations should be limited to a peak component particle velocity (PPVi) of 8 mm/s at the foundation level of any adjacent modern buildings and 5 mm/s for heritage or sensitive structures.

6.10. STORMWATER MANAGEMENT AND FLOODING

6.10.1. Flood Management

A Drainage, Utilities, Flooding and Sediment & Erosions Control Report has been prepared by Northrop and is attached at **Appendix P**. This report assessed the flood risk on site, and a summary of the proposed concept civil engineering and stormwater management measure for the campus.

The site is located within the 1 in 100-year flood event and thus existing flood behaviour across the site has been obtained from the Powell's Creek and Sales Yards Creek (PCSC) Revised Flood Study (2016). The site is affected by local catchment flooding only rather than ocean flooding or sea-level rise due to its distance from the ocean and elevation above sea level.

The findings of the flood assessment are as follows:

- Flood water depths across the site range from 0.0m to 0.3m – these flood depths are expected considering the close proximity of the site to the top of the catchment.
- The flood elevation across the site varies by location, with the maximum 1% AEP flood level onsite being 0.26mAHD on the south western boundary.
- Flood velocities are generally between 0-0.5m/s across the site – this is considered relatively low and is expected as the site is only 50m downstream of the top of the catchment and grades are generally around 1% across this section of the site.
- The site is classified as low hydraulic hazard, therefore the risk that floodwater pose to people, vehicles or building is low.
- Flood waters across the site are define as flood fringe which is "the remaining area of flood prone lane after floodway and flood storage areas have been define" – Flood fringe areas can usually be developed without reference to how the development will affect the flood behaviour either upstream or downstream on the site.
- The most likely climate change scenario of relevant to the proposal is the likely impact on the Arthur Street catchment located approximately 370m downstream from the site. The worst-case climate change scenario occurs when increasing rainfall by 30%, resulting in a 0.8m higher flood level. Therefore, this scenario would result in an increase of less than 0.8m at the site.
- The existing ground level finished floor level onsite of 27.1m AHD is 0.6m higher than the flood level of 26.5AHD. As such a minor increase in flood level of up to 0.08mm during the climate change scenario would allow sufficient freeboard from the 1% AEP to finished floor level.

Flood Mitigation Measures

The following measures have been implemented as recommended:

- All habitable floor levels have been designed with a minimum on 500mm freeboard to the 1% AEP design event
- The entry ramp from Fraser Street into the basement carpark has been designed to rise to a localised level which site 300mm above the adjacent pavement level to prevent floodwater entering;
- A grated trench drain is proposed at the bottom of the Fraser Street ramp to collect stormwater;
- A series of grated trench drains have been designed on the north western corner to collect rainwater around eh tennis courts

The proposed development has been designed with flood mitigation measures in mind, ensuring the effects of the flooding are minimised to a practical level.

6.10.2. Stormwater Management

A Stormwater Management Plan has been prepared by Northrop and is included in the Drainage, Utilities, Flooding and Sediment & Erosions Control Report attached at **Appendix P**.

- The on-site Stormwater Management Strategy is summarised as follows:
- Runoff from the roof-top tennis courts will be captured via charged or gravity downpipes and directed to a proposed rainwater reuse tank in the basement. Reuse water will be treated using a bag filter and UV disinfection unit as detailed on the Hydraulic Engineer's drawings.
- Reuse water will be internally reticulated to all toilet cisterns within the new building and all outdoor taps for external irrigation and maintenance washdown.
- All surface runoff from the podium will be collected via a series of grated trench drains and pits before being conveyed downstream to the existing stormwater network which discharges across the school field via a 600mm diameter stormwater pipe.
- A series of pits and floor wastes will collect any surface water that reaches the basement and convey this water to the existing stormwater network.
- An existing 600mm stormwater pipe currently runs underneath the tennis courts at an elevation which would sit suspended within the proposed basement. This pipe conveys stormwater from the walkway above the tennis courts and will be removed and replaced with new 600mm stormwater pipe that runs underneath the proposed basement.

The proposed strategy will result in less ground level hardstand areas than the previous development and additionally, runoff from the roof -top tennis courts will be directed to a reuse tank, which effectively takes rainwater out of the stormwater system. The development is deemed to result in a "cleaner" catchment when compared to the existing scenario.

6.11. EROSION AND SITE SEDIMENT CONTROL

A concept erosion and sediment control plan has been prepared by Northrop and is including in the Drainage, Utilities, Flooding and Sediment & Erosions Control Report attached at **Appendix P**.

The sediment and erosion control strategy has been prepared in accordance with the requirements of Landcom's 'Managing Urban Stormwater: Soils and Construction' (The Blue Book).

The contractor/s will be responsible for adequately managing site stormwater runoff with the aims of preventing erosions and deposition. The general principles for management are to eliminate, isolate, minimise or control erosion.

Additionally, a dust management strategy will be implemented during construction in line with the avoid, minimise, control methodology outlined int eh Sediment & Erosion control strategy.

6.12. ACCESSIBILITY

An Accessibility Report has been prepared by ARINA and is attached at **Appendix W.** The accessibility assessment indicates that the proposed development is capable of compliance with the relevant requirements of the Disability Discrimination Act (DDA) 1992 and the Disability Standards for Education made under the DDA.

The assessment indicates that the proposed development incorporates an exemplary level of accessibility into its design and should therefore be deemed favourable in terms of accessibility.

6.13. BCA COMPLIANCE

A Building Code of Australia (BCA) Report has been prepared by DixGardner and is attached at **Appendix V.** The report identifies that subject to detailed design, the proposal is capable of compliance with the BCA.

Additionally, a Fire Engineering Report has been prepared by MCD Fire Engineering and is attached at **Appendix AA.** The strategy includes a number of required fire safety features to be incorporated into the design of the new building. The Fire Engineering Report indicates that with the implementation of the

recommended fire safety measures the proposed development is compliance with the current DtS provisions of the BCA.

6.14. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposed building will be located at the centre of the campus and will not be visible from the surrounding streetscape of neighbouring buildings. The proposed development does not include any external buildings changes or alterations to the approved building envelope. As such, the School will continue to satisfy the Crime Prevention Through Environmental Design (CPTED) principles.

As the new building is located within the heart of the campus and does not create a new entrance point for staff, students or visitors it is at low risk of crime. As such, a detailed assessment of the proposed building against the CPTED design principles is not required. However, a brief assessment of the proposed development against the key CPTED principled is contained in **Table 18** below.

Table 18 CPTED Compliance.

Principle	Response
Surveillance – maximising opportunities for passer-by or residents to observe what happens in an area (the 'safety in numbers' concept). This may be achieved through, for instance, the placement of physical features, activities and people.	The new building will be well-lit and incorporate operable mechanical windows which will enhance visibility to and from the new building allowing visibility to enhance passive surveillance. Passive surveillance will be enhanced through large areas of glazing on all faces of the new building.
Access Control – control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences and grills.	The proposed development will include well-lit and open paths, with large protected outdoor areas. However, as the proposed development is located within the campus building, no additional fences or barriers will be built around the new building.
Territorial reinforcement/ownership – people are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, good maintenance and landscaping.	The proposed development includes landscaping and public domain works to encourage and facilitate social gatherings, outdoor learning, assemblies and performances. The building and quadrangle will be the heart of the Campus and will include shaded seating opportunities and congregation options. The new state of the art building will provide new and exciting learning and teaching opportunities for staff and students. In addition to the landscaping and public domain upgrades, the proposed development will enhance the day-to-day experiences of staff and students. As such, it is anticipated that the new building will increase the sense of pride and ownership among the school community.
Space management – ensures that space is appropriately utilised and cared for. Space management strategies include, activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned-	The building facilities will be regularly checked and cleaned.

Principle	Response
out lighting and the removal or refurbishment of decayed physical elements.	Due to its central location within the campus and high-quality modern aesthetic, the proposed will discourage vandalism.

7. SECTION 4.15 ASSESSMENT SUMMARY

The following assessment has been structured in accordance with section 4.15 of the EP&A Act.

Table 19 Section 4.15 Assessment

Consideration	Comment
Environmental Planning Instrument	State and Local Environmental Planning Instruments have been assessed in **Section 5** of this EIS.
Draft Environmental Planning Instruments	Draft Environmental Planning Instruments are addressed in **Section 5** of this EIS.
Development Control Plans	The proposed development has been assessed against the Strathfield Consolidated Development Control Plan 2005 in **Section 5.8.5**. Although it is noted that Clause 11 of the *State Environmental Planning Policy (State and Regional Development) 2011* excludes the application of DCPs to SSD.
Any matters prescribed by the regulations	This EIS has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000.*
Likely Impacts of the development	This EIS has been prepared in accordance with Sections 6 and 7, Part 3 in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. The likely impacts and issues have been assessed in **Section 6** of this EIS.
Suitability of the site	The site is entirely suitable for the development of the proposal as it continues the use of St Patrick's College Strathfield as an educational establishment as identified within Schedule 1 of the SRD SEPP. St Patrick's College has a historical association with the site having been located on the site since 1928. The proposal is therefore highly suitable for the site to maintain the ongoing presence of the School in the area. As outlined throughout the EIS, the new building is entirely suitable for the campus for the following reasons: ▪ The bulk, scale and siting of the new building has been designed to complement the existing campus building and provide a contrast to the existing brick wall palette commonly used throughout the school; ▪ The proposed building has been designed to incorporate key ESD principles to ensure the sustainability and longevity of the building; ▪ The new building will maintain visual privacy both for the school and surrounding residential properties as it is located at the heart of the school, a significant distance from the closest residential property;

Consideration	Comment
	▪ The provision of additional on-site parking on the Campus together with the proposed extension of the 'Kiss and Ride' zone adjacent to the School and its staggered start and finish times, collectively improves safety and operation of the local street network as well as on-street parking availability for residents; and ▪ The school is currently well serviced by public transport. In addition to this the new facility and improvement to the traffic network will enable the school to increase the student population in line with the growing demand for educational establishments in the LGA and surrounding communities.
Any Submissions made in accordance with the Acts of Regulations	Submissions will be considered following exhibition of the application.
The Public Interest	The proposal is in the public interest in that: ▪ The development is permissible with consent and has been prepared having regard to the objectives of the Education SEPP; ▪ The design of the proposed development has had regard to relevant applicable statutory and strategic planning policies and generally complies with the objectives of the development controls for the site; ▪ Subject to the various mitigation measures recommended by the specialist consultants, the proposal will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, social and environmental impacts; ▪ The proposal will result in a high-quality educational environment for staff and students; – The proposal will contribute positively to energy efficiency and environmental sustainability. The design has incorporated many ESD features to reduce energy consumption during the life of the proposed development; – The proposal will result in a modern state-of-art Science, Technology, VET Hospitality and General Learning Building for staff and students; and – Will enhance the permeability and connectivity of the school by provided an additional civic space and flexible teaching and learning spaces.

8. COMMUNITY AND STAKEHOLDER CONSULTATION

Consultation has commenced on the project and will continue as the assessment of the application progresses and through the entire development of the project. The purpose of the consultation process to date has been to inform and seek feedback from key stakeholders. The Applicant and BVN Architects have worked to ensure relevant issues have been considered during the development of the proposal.

8.1. COMMUNITY CONSULTATION

The objectives of the stakeholder and community engagement process for the proposed development are as follows:

- Provide accurate information about the project;
- Deliver a transparent and accountable consultation process;
- Document key feedback to inform ongoing design and planning; and
- Collate feedback to inform the SSDA.

8.1.1. Engagement Activities

The following engagement activities were undertaken to inform the inform and seek feedback from the local community:

- **Fact Sheet Distribution** – Two fact sheets were prepared to outlined the key features of the proposal and invite member of the community to provide feedback;
- **Door Knock** – Urbis Engagement and a senior College staff member conducted door knock of approximately 21 neighbouring residential properties on Shortland Avenue, Fraser Street and Edgar Street on the 24th of February 2020 to supply information about the proposal and inform residents of the opportunities to provide feedback.
- **Website Notification** – Information about the proposal was provided on the School's website
- **Newsletter Notification** – A notification was places in the St Patrick's newsletter on the 26th of February 2020 to advise staff and parents of the proposed development.
- **A dedicated Project Email and 1800 Number** – Members of the public were invited to contact the Urbis Engagement team through a dedicated 1800 number and/or email address throughout the duration of the engagement period.

8.1.2. Feedback Summary

- Feedback from nearby neighbours, particularly residents living on Fraser Street were focused primarily on traffic and parking as well as how the design will impact view lines, privacy and shadows for residents.
- Strathfield Council planning team has received approximately 12 calls seeking clarification on details and communication for the application.

8.1.3. Key Outcomes

The consultation has resulted in the following outcomes:

- A traffic and parking Management plan was developed to support the proposal;
- The proposal will provide 59 car spaces in the basement (on overall net increase of 55 on-site spaces, representing a total of 155 spaces available to the School);
- A Green Travel Plan has been prepared and will be implemented into the operation of the school;
- The college is proposing the adoption of a staggered start and finish time to manage peak traffic concerns;

- In conjunction with the proposed staggered start and finish times, the 'Kiss and Ride' zone will be extended into Shortland Avenue by approximately 21m to ease congestion and provide greater safety on the local road network during peak periods;
- The proposal is committed to design excellence and delivering a new state of the art facility for staff and students. Specific details of the proposed design have been incorporated within the SSDA package; and
- Specific details describing and assessing impacts on view-lines, privacy and solar access have been prepared and included within the SSDA package.

As outlined above, the proposal has thoroughly considered the key concerns of the local community and have implemented them into the design and proposed operations of the school.

8.2. DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT (DPIE)

Correspondence and liaison have occurred with the Department of Planning, Industry and Environment throughout the preparation of this EIS and SSD documentation.

8.3. STRATHFIELD COUNCIL

On-going briefings and consultation with Strathfield Council have occurred since the beginning of the project. The applicant and project team consulted with Stephen Clements – Deputy CEO/General Manager Planning, Environment and Urban Services on two occasions (20 November 2019 and 2 March 2020).

The first meeting was prior to the lodgement of the Request for SEARs, and the second meeting was to discuss mainly traffic and parking matters. The following key matters were discussed:

- The SSDA process and timing of the project;
- Communication with the local community;
- The evolution of the design of the proposed building and its mitigating circumstances given its location in the central part of the School Campus.
- Provision of additional on-site parking within the new basement car park, to improve availability of on-street parking;
- The staged approach to progressively increase the student population;
- Consideration of staggered start and finish times to reduce traffic congestion during peak periods;
- SPC's goal to shift away from car use and increase active travel and public transport use;
- The proposed extension of Kiss and Drop zones; and
- The potential for shared use of school grounds and recreational facilities by the community.

8.4. NSW GOVERNMENT ARCHITECT'S OFFICE (GANSW)

Design excellence of the proposal was discussed at the Pre-Briefing presentation to the SDRP held on 25 October 2019. Following the briefing, the SDRP provided formalised feedback via an email stating the following:

"Following up from our October meeting where BVN presented this project, we have advised the DPIE assessments team that your team can submit their EIS without further consultation with GANSW and, further, that we would provide comment during the assessment stage directly to the DPIE planners only if requested."

The thinking behind this advice is as follows:

- *The design team are considered highly capable with a track record for delivering design excellence,*
- *The school aspires to producing a high quality project and,*
- *Being a private school, there is very low public interest or risk associated with the proposal."*

This advice was issued by Rory Toomey – Principal Design Excellence on 28 November 2019 and confirmed that no further SDRP presentations were required.

8.5. TRANSPORT FOR NSW (TFNSW) & ROAD AND MARITIME SERVICES (RMS)

Transport for NSW (TfNSW) was contacted by TTPP, requesting input on the Draft Traffic Impact Assessment and Green Travel Plan. On 1 April 2020, TfNSW responded via email stating the following:

"Transport for NSW (TfNSW) has reviewed the submitted TIA and are satisfied with the contents in addressing the SEARs. A more thorough assessment of the TIA will again be conducted at the exhibition of the EIS stage of the SSD."

8.6. SERVICE PROVIDERS

The Hydraulic, Electrical and Mechanical Infrastructure Management Plans have been prepared in consultation with the relevant agencies such as Sydney Water and Ausgrid detailing information on the existing capacity and augmentation requirements of the development for the provision of utilities. The consultation correspondence has been documented and attached within each report.

8.7. ABORIGINAL STAKEHOLDERS

As required by the SEARs, consultation is required in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (Department of Environment, Climate Change and Water). Consultation has occurred with Aboriginal stakeholders. This consultation has covered the following:

- Interest in site history and cultural significance of Aboriginal objects and places.
- Aboriginal Cultural Heritage Assessment Report.

Ongoing consultation with Aboriginal stakeholders is to occur to keep all relevant stakeholders informed of the proposal and timeframes.

9. RECOMMENDATIONS AND MITIGATION MEASURES

The potential impacts of the proposed development have been assessed in **Section 6** of this report. The following matters have been assessed and do not require mitigation measures as the proposal will have minimal or no impact on:

- **Overshadowing** – The shadow cast by the new building falls entirely within the campus, due to it's location at the centre of the campus and does not impact any surrounding or neighbouring properties. The proposed building is not anticipated to have any adverse shadow impacts compared to the existing built form.
- **Visual Impact** – The new building protects and improves existing views of the significant Breen Oval from the Heritage listed Hickey Building and vice versa. The bulk and scale of the building does not interfere with other significant views. The impacts of the new building on views to and from the campus is considered negligible.
- **Privacy** – The design of the proposed development prevents adverse acoustic and visual impacts on surrounding developments through the implementation of veiled screens and planted built-up green fences. The use of the at grade and rooftop tennis courts will only be until 5pm.
- **Biodiversity** – The proposal will have no impact on flora and fauna on the site and in the surrounding vicinity. As such a BDAR waiver has been issued and is attached at **Appendix Q.**
- **Crime & Safety** - As the new building is located within the heart of the campus and is not an entrance point for staff, students or visitors it is considered to be at low risk of crime. As such no mitigation measures are required or proposed.
- **Aboriginal Heritage** - No Aboriginal sites (objects or place) or landforms with archaeological potential have been identified during this assessment. As such no mitigation measures are required or proposed.

A range of mitigation measures are proposed to reduce any potential environmental and social impact of the proposal. **Table 20** below provides a summary of the environmental management measures proposed.

Table 20 Mitigation Measures

Matter	Potential Impact	Mitigation Measure
Transport & Accessibility	Impacts on road network during the operation phase	To alleviate traffic congestion during peak school periods the school will implement the following mitigation measures: ▪ Staggered start and finish times for different cohorts; ▪ Extension of Kiss & Ride facilities; and ▪ Implementation of the Green Travel Plan.
Construction	Impacts on road network from construction phase	A site-specific Traffic Management Plan (TMP) will likely need to be prepared and submitted to TfNSW and Strathfield Council to appropriately manage the use of the designated construction routes. Temporary traffic controls will be regularly inspected by the contractor to identify potential safety hazards to enable implementation of corrective solutions. Daily inspections and maintenance of controls will be undertaken by the contractor and maintenance will be recorded. The site supervisor will check all relevant traffic control management measures on-site prior to commencement of works each day.
Acoustic and Vibration	Noise generation during the	To minimise noise impacts during construction, early work should concentrate on grading and levelling unshielded areas and

Matter	Potential Impact	Mitigation Measure
	construction and operation of the school	locations. If complaints arise due to noise levels, the following strategies should be implemented: ▪ Installation of acoustic enclosures or screen directly adjacent to stationary noises such ad compressors, generators, drills, rigs etc. ▪ Provide infills to classroom windows and entries ▪ In addition, the following noise and vibration mitigation measures should be considered: ▪ Operator Instruction – Operators should be trained in order to raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission. ▪ Equipment Selection – All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with silencers, acoustical enclosures, and other noise attenuation measures in order to ensure that the total noise emission from each work site complies with EPA guidelines. The site is deemed suitable for the intended purpose, providing the recommendations outlined above are incorporated into the design of the building and construction activities.
Stormwater Management	Impacts from Stormwater on the site and surrounding environment	To mitigate potential stormwater runoff and erosion and sediment control, a stormwater management strategy will be implemented. The strategy will include the following: ▪ Gravity downpipes to capture runoff; ▪ Treatment of stormwater with a bag filter and UV disinfection Unit; ▪ Re-use of water for irrigation purposes; ▪ Installation of grated trenches and bits to collect runoff; and ▪ Replacement of 600mm stormwater pipe.
Contamination	Site Contamination	TBC.
Geotech	Vibration impacts on surrounding buildings.	The following recommendations are proposed to mitigate the geotechnical impacts: ▪ Pavements - a design subgrade CBR of 3% be adopted for the clayey residual soils. ▪ Excavation - vibrations should be limited to a peak component particle velocity (PPVi) of 8 mm/s at the foundation level of any adjacent modern buildings and 5 mm/s for heritage or sensitive structures.

Matter	Potential Impact	Mitigation Measure
Operation Waste	Disposal of waste generated during the use and operation of the building	The waste from the building will be separated into streams including co-mingles recyclables, garbage waste and problem waste. There will be multiple collection points for rubbish to ensure the proper removal and treatment of waste. All generated waste and recycling will be collected by Doyle Brothers a private waste contractor to an agreed schedule for collection. Waste collection vehicles will collect in such a manner as to minimize risk of damage to the roadway, building or other services. Waste collection vehicles will not obstruct access to adjacent premises, roadways or parking bays. In addition, waste collection will be carried out with due care for public safety including other vehicles and passers-by.
Construction Waste	Disposal of waste generated during demolition and construction	The building contractor will be responsible for transporting waste on and off the site and will be required to provide verifiable monthly reports on waste collected and transported. This will minimise potential contact with the waste and reduce environmental risk from an accidental release. Where appropriate, waste will be reused or recycled.

10. CONCLUSION

This EIS has been prepared by Urbis on behalf of St Patrick's College, Strathfield (located at 1 and 2 Edgar Street, Strathfield). It relates to SSD-10400 for the construction of the proposed Science and Learning Building as well as the staged increase of the College's student population cap from its current limit of 1436 to a maximum of 1,790 students and the associated traffic management measures to support this. The impacts associated with the proposal are acceptable and the site is suitable in accommodating the proposed development for the following reasons:

- The proposal appropriately satisfies each item within the SEARs.
- The site is zoned R2 - Low Density Residential which is identified as a 'prescribed zone' under Clause 33 Part 4 of the Education SEPP. Clause 35(1) of the Education SEPP permits development for the purpose of a school to be development with consent within a prescribed zone.
- The proposal is consistent with the objectives of relevant planning controls and achieves a high level of planning policy compliance and design excellence.
- The proposed development is located within the central portion of the existing and expansive School Campus. It is far removed from neighbouring development and is compatible in terms of scale and use to those immediate buildings within the School's campus and within the broader education precinct in which the College is situated.
- There are no significant environmental constraints limiting development.
- The proposal will relieve pressure off existing schools in the surrounding locality and ensure more children have access to new state of the art school facilities, learning spaces and equipment.
- The proposal will create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works (approximately 110 jobs), and increased job opportunities in teaching and administration at the project's completion (resulting in 18 additional full-time teaching jobs).
- The proposal will provide additional on-site parking on the Campus together with the proposed extension of the 'Kiss and Ride' zone adjacent to the School and its staggered start and finish times, will reduce traffic congestion during peak times, collectively improve safety and operation of the local street network as well as on-street parking availability for residents.
- The proposal will result in the development of a high-quality educational facility for staff and students.
- Subject to the various mitigation measures recommended by the specialist consultants, the proposal does not have any unreasonable impacts on adjoining properties or the public domain in terms of traffic, social and environmental impacts.

Considering the above and the content contained in this EIS, it is recommended that the Department approve this SSD Application, subject to appropriate conditions.

DISCLAIMER

This report is dated 20 March 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of St Patrick's College Strathfield **(Instructing Party)** for the purpose of Draft V.1 **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A SEARS

APPENDIX B QS REPORT

APPENDIX C SURVEY PLAN

APPENDIX D ARCHITECTURAL PLANS

APPENDIX E ARCHITECTURAL DESIGN REPORT & SCHEDULE OF MATERIALS & FINISHES

APPENDIX F LANDSCAPE PLANS & STRATEGY

APPENDIX G ACOUSTIC REPORT

APPENDIX H ECOLOGICALLY SUSTAINABLE DESIGN REPORT

APPENDIX I TRANSPORT IMPACT ASSESSMENT

APPENDIX J GREEN TRAVEL PLAN

APPENDIX K HERITAGE IMPACT STATEMENT

APPENDIX L ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

APPENDIX M INFRASTRUCTURE MANAGEMENT PLAN - HYDRAULICS

APPENDIX N INFRASTRUCTURE MANAGEMENT PLAN - ELECTRICAL

APPENDIX O INFRASTRUCTURE MANAGEMENT PLAN - MECHANICAL

APPENDIX P

DRAINAGE, UTILITIES, FLOODING AND SEDIMENT & EROSION CONTROL REPORT

APPENDIX Q BDAR WAIVER

APPENDIX R OPERATIONAL WASTE MANAGEMENT PLAN

APPENDIX S CONSTRUCTION WASTE MANAGEMENT PLAN

APPENDIX T SOCIAL IMPACT COMMENT

APPENDIX U COMMUNITY ENGAGEMENT OUTCOMES REPORT

APPENDIX V BCA REPORT

APPENDIX W GEOTECHNICAL REPORT

APPENDIX X STRUCTURAL DESIGN REPORT

APPENDIX Y ACCESSIBILITY REPORT

APPENDIX Z ARBORICULTURAL IMPACT ASSESSMENT

APPENDIX AA CONTAMINATION ASSESSMENT

APPENDIX BB FIRE ENGINEERING REPORT

APPENDIX CC STRATHFIELD COUNCIL ACTIVE TRAVEL PLAN

APPENDIX DD PLANNING CERTIFICATES 10.7(2) & (5)

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