

ALL SAINTS' COLLEGE

YEAR 5 AND 6 CENTRE







EXECUTIVE SUMMARY

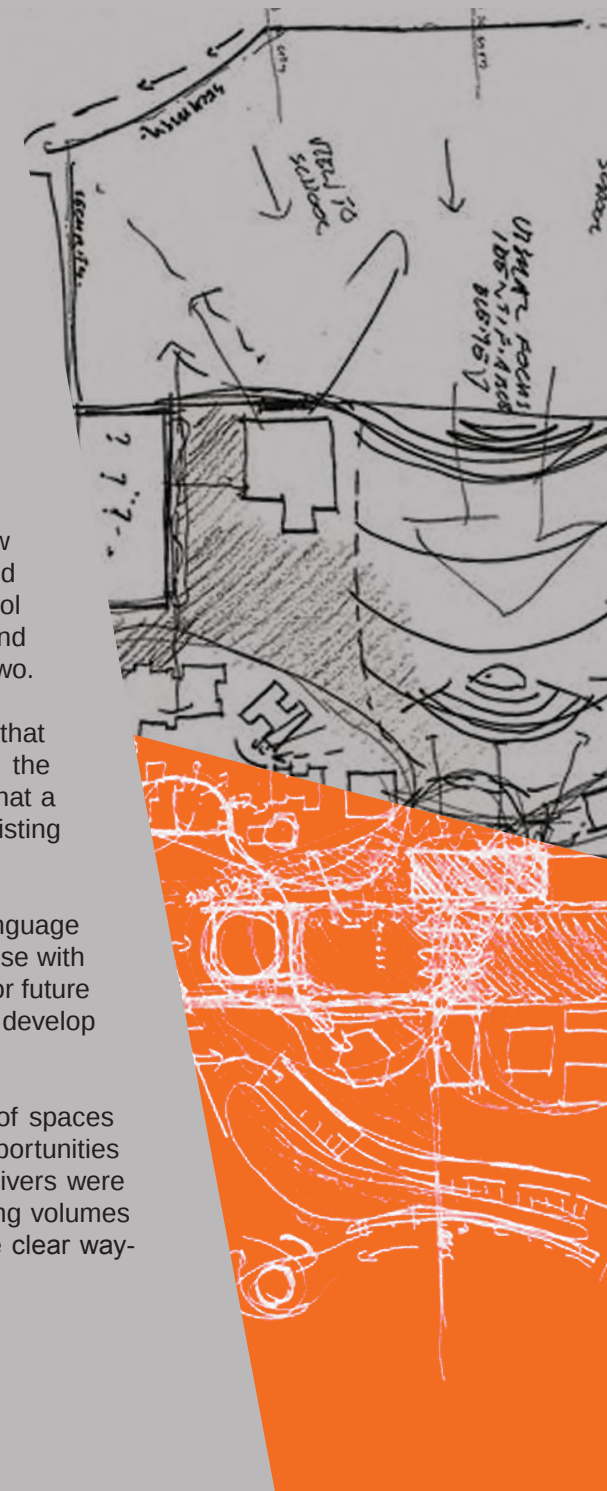
All Saints' College engaged the architect in 2005 to prepare a site master plan for the College's Bull Creek site. Following completion of the master plan a new central courtyard, library and gymnasium were constructed. Six years after preparing the original master plan, All Saints' College engaged the architect to undertake a master plan review. The review identified a range of options that would assist with the development of the College campus and reflect the changing needs of the school including a new performing arts centre, which was completed in 2012 and a year 5 and 6 transitional building which is the focus of this dossier.

In 2014 the architect embarked on the design of a new three-level learning and innovation centre for year 5 and 6 students. The brief was to link the existing junior school physically to the upper levels of the senior campus and to generate an aspirational progression between the two.

During concept design, care was taken to ensure that the form and location of the new building supported the aims and ambitions of the campus master plan and that a comfortable relationship of the new building to the existing junior school building was achieved.

It was considered important that the architectural language developed for the new facility should not only harmonise with the existing school buildings but also be appropriate for future senior school buildings. This will enable the campus to develop seamlessly over time.

The new building was designed to provide a range of spaces outside of classrooms to foster informal learning opportunities that were comfortable and welcoming. Key design drivers were safety and comfort, openness, transparency of building volumes and legibility of the floor-plate configuration to enable clear way-finding and direction.

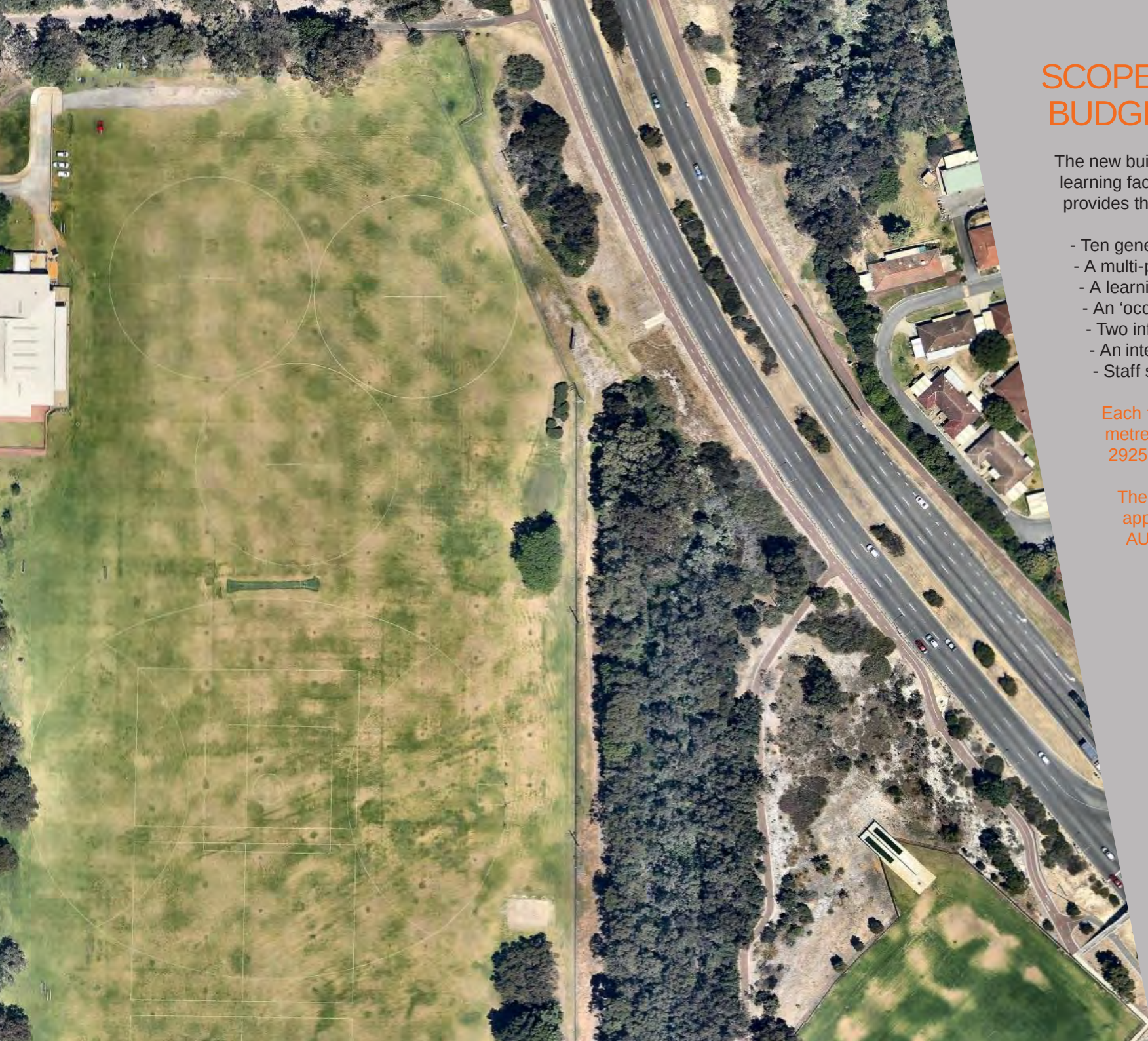




JUNIOR SCHOOL

SENIOR SCHOOL

TRANSITION
BUILDING



SCOPE OF WORK AND BUDGET

The new building is a three level teaching and learning facility for year 5 and 6 students and provides the following:

- Ten general learning areas
- A multi-purpose learning area
- A learning innovation centre
- An 'occupied stair' linking two levels
- Two informal 'learning lounges' per level
- An internal 'learning street' at each level
- Staff study and meeting room

Each floor is approximately 975 square metres in area giving a total area of 2925 square metres.

The project was delivered within the approved construction budget of AUD 10.85 million.



SCHOOL AND COMMUNITY ENGAGEMENT

All Saints' College Community

All Saints' College is one of Perth's seven independent Anglican schools – the only one which is coeducational – and was founded in 1981. Beginning with approximately 100 students in Years 7 and 8, junior and senior years were steadily added and the College now enjoys a student population of nearly 1,350 from Pre-Kindergarten to Year 12.

Although Anglican, All Saints' College is also a multi-faith community – it welcomes families from all cultures, backgrounds and religions. The College Chapel on campus is also the Parish Church of Bull Creek-Leeming, which is attended by many College families. All Saints' is proud of its history and recognises with gratitude the contribution of previous generations of students, families and staff who have shaped the College and helped to position it as one of the nation's finest.

At All Saints', opportunities abound for all students, within and beyond the classroom. A dynamic and innovative Pre-K to 12 College, All Saints' enjoys a national reputation for providing a holistic education and, specifically, for achieving outstanding academic results in a friendly, caring and supportive environment. Recognising the African proverb that it takes a village to raise a child, All Saints' College enjoys a strong sense of community: its dedicated staff and diverse student population celebrate parent, family and community involvement. As part of this, and in keeping with its motto – to serve with wisdom and courage – its students recognise and embrace their responsibilities to society, being active contributors to their community in many practical ways during their school years and beyond.

Stakeholder consultation

In early 2014 the architect met with the College Principal, the Chief Financial Officer and the Facilities

Manager to discuss All Saints' plan to undertake the design and construction of the proposed new facility. Following the initial meeting discussions were held with the Head of Junior School to gain an insight into the specific requirements of year 5 and 6 students and the proposed methods of curriculum delivery.

Design proposals were initially made to the College Principal and the Head of Junior School following which formal presentations were made to the College Building and Grounds Committee and then to the College Board. Regular presentations were made to these groups for feedback and ultimately for sign-off at critical junctures.

Once the broad design concept had been approved, a number of workshops were held with the Junior School teaching staff to flesh out specific requirements for the design of the general learning areas and the specialist spaces including the multi-purpose room and the learning innovation centre.

When the project entered the design development phase meetings were held with the College's technical staff including the facilities manager, IT manager and the grounds manager to ensure that building services met the College's requirements and standards and that in ground services were carefully coordinated. The development of an appropriate AV/IT package was critical to the success of the building and included discussions with specialist AV/IT contractors to ensure that current technology was provided at competitive prices.





Project challenges

All building projects are challenging, particularly those involving multiple stakeholders. The usual challenges of time and cost required careful management to ensure that the College's budget was adhered to and that the agreed design and construction program was maintained.

The requirements for planning approval and building permits meant that external agency processes may delay the project. To counter this, an experienced town planner was engaged to liaise with the local authority and manage the approval process to minimise risks in this area.

By working closely with all College stakeholders to clearly define the project and by having an executive group within the College providing regular feedback and timely approvals, the design team was able to maintain the momentum required to deliver the project by the required date.

An experienced team of sub-consultants was assembled for the project and regular coordination meetings held to ensure that everyone was on the same page. By working closely with the specialist cost planner and specialist technical consultants the architect was able to deliver the project on time, within budget and to the high standard required by All Saints' College.

All Saints' College assets

All Saints' College is set on a beautifully treed and landscaped campus of 19 hectares, approximately 10 minutes' drive from the Perth CBD.

All Saints' is renowned for its world-class facilities, including its state-of-the-art technologies, indoor aquatics and sports centres and its award-winning Centre for Performing Arts, to name but a few. Further, All Saints' students enjoy the fact that all facilities are on-site and thus readily accessible, not only during school hours but also beyond the school day via extensive co-curricular program of activity and learning.





EDUCATIONAL ENVIRONMENT

All Saints' College vision and goals

All Saints' is proudly a co-educational environment committed to meeting the needs of all students. The junior school student cohort consists of 500 boys and girls with classes double streamed from Pre-Kindergarten to Year 4, with a triple stream in Year 5 and Year 6.

The College believes that children should feel safe at all times and be treated with respect and kindness while gaining resilience and developing responsibility. Students are encouraged to be thoughtful in their actions, be active learners and enthusiastic participators and contributors in the life of the College and wider community.

All Saints' takes seriously its commitment to encouraging students to have a positive attitude to learning, including when they are challenged, to gain deeper understanding and appreciation of the complexity of any given body of knowledge or set of skills. The College seeks to celebrate the uniqueness of each child and encourage self-reflection to gain self-knowledge, as well as an appreciation of how each one best learns, what they most value and how they can most effectively contribute and achieve success.

All Saints' encourages students to continue to be curious, ask questions and develop strategies for research and enquiry, while giving necessary attention to skill development. The College aims to deliver programmes that inspire children while meeting the needs of each gender and their different

interests and abilities. All Saints' team of enthusiastic teachers are at the centre of this, dedicated to optimise learning and promote student wellbeing, encouraging the growth of confident, capable and resilient young people.

Supporting the curriculum

To support All Saints' educational vision the new learning and innovation centre was designed to provide informal spaces outside of classrooms to foster collegiality and collaboration between students and teachers. The building was designed to be comfortable and welcoming. Safety and comfort were key design drivers with openness and transparency of building volumes and legibility of floor-plate configuration to enable clear way-finding and direction. Easy access to external breakout spaces was also a key component of design.

A staff study, tea preparation area and meeting room are located on the uppermost level of the building. The walls to this area are fully glazed allowing students to see in and staff to see out. The meeting room is located immediately adjacent to the internal street. Students are able to see the reassuring presence of teachers in the meeting room and teachers working in the staff room beyond. This arrangement allows for passive surveillance of students from these areas.

Teaching and learning styles

The new learning and innovation centre was designed to provide a wide range of co-located learning settings. These range from traditional classrooms to multi-purpose spaces, learning innovation spaces, informal learning lounges and an 'occupied stair' providing opportunities for teaching, presentations and performance.

EDUCATIONAL ENVIRONMENT

These varied settings enable students to work in a range of modalities, either independently or in teams, formally or informally, collaborating in a social environment. They also allow teachers to use a variety of settings for curriculum delivery enabling them to engage with and motivate students in many ways.

The central breakout space or 'learning street' at each level features built-in seating nooks, specialised seating and bag storage units which double as seating or display boards. At the eastern and western ends of the learning street 'learning lounges' are located adjacent to open stairs which provide access to all levels of the building.

Beginning at the middle floor of the building an 'occupied stair' leads to the upper level of the building providing a dramatic double-height volume. The occupied stair has a variety of uses including performance, presentation, teaching and socialising. The southern wall of the occupied stair is fully glazed providing views to the terraced gardens outside.

The upper-most floor of the building features a glazed 'roof lantern' which provides natural light and natural ventilation to the centre of the building. The roof lantern can be illuminated at night acting as a beacon which can be seen from the nearby freeway.

Flexible and adaptable

The building's floor plates were developed to maximise the potential of the site and to provide optimum levels of natural light and ventilation. The number of internal columns was minimised as was the number of load bearing walls, to provide long term flexibility, enabling internal partitions to be moved at will as demands change over time.

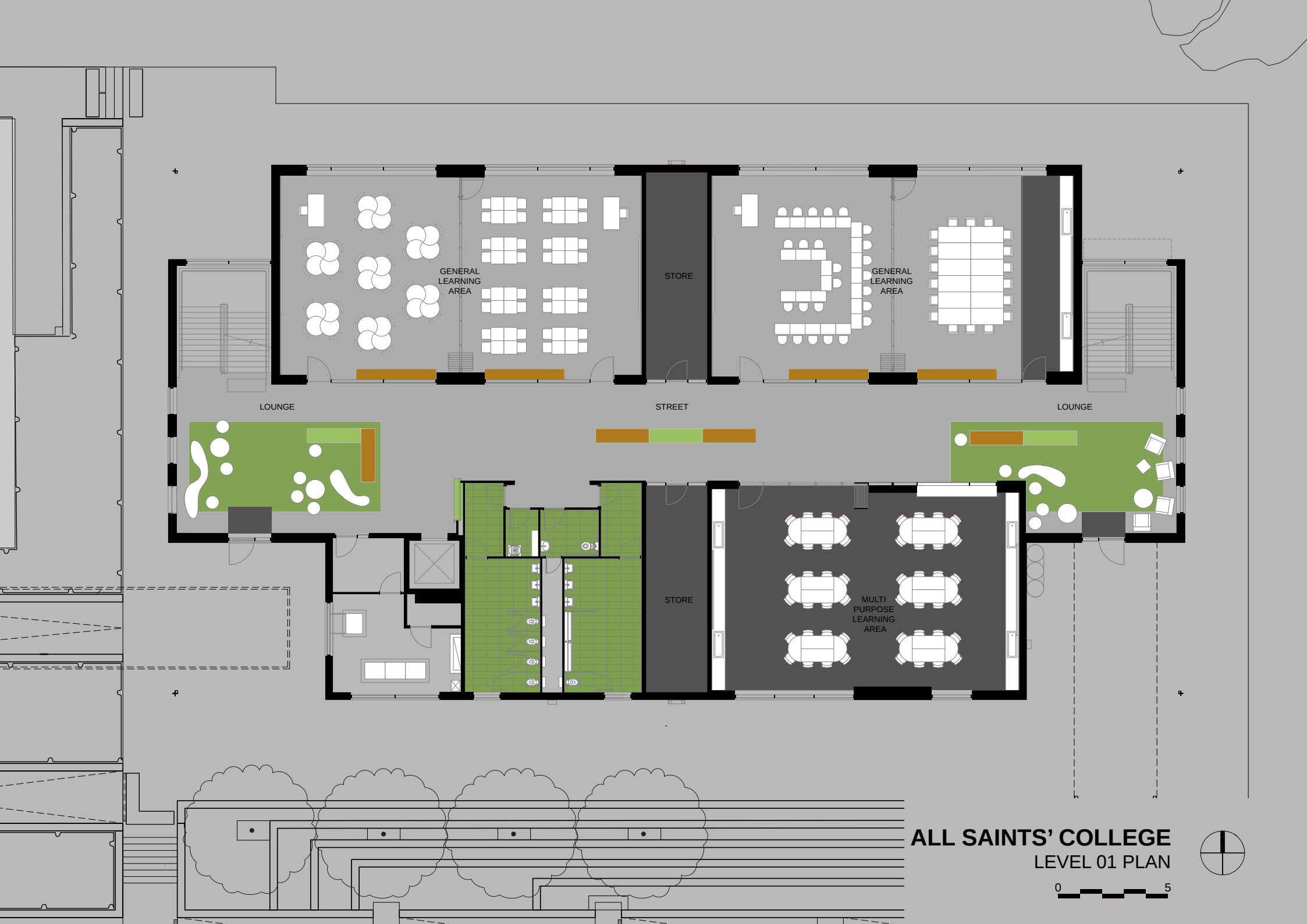
To support preparing students for a changing world the new building is technology enabled and designed to

have a high level of flexibility both in building fabric and building services. This will enable the building to be re-configured in the future to respond to changing needs and imperatives.

Safe and secure

Former All Saints' College Board Member Dr Donna Cross of the Telethon Institute of Child Health was recently involved in a Swedish program focused on the design of schools to avoid bullying. The architect assisted Dr Cross by providing examples of lessons learnt in school projects delivered by the office over a ten year period. The outcomes of the study had a direct impact on the new learning and innovation centre by ensuring that openness, transparency and legibility were key drivers of design.





LOUNGE

STREET

LOUNGE

GENERAL
LEARNING
AREA

GENERAL
LEARNING
AREA

STORE

STORE

MULTI
PURPOSE
LEARNING
AREA

ALL SAINTS' COLLEGE
LEVEL 01 PLAN

0 5



PHYSICAL ENVIRONMENT

Physical characteristics

The new learning and innovation centre was designed using simple but strong forms based on the proportion, scale and rhythm of their component parts. The contrast of solid to glazed walls and clear articulation at ground and roof level provides a dynamic image which will constantly change when viewed from different angles.

The building's elevations have been expressed by a contrast between solid masonry walls and glazed walls comprising solar tinted vision panels overlayed by horizontal sun-shades and opaque coloured spandrel glazing. East and west facing glazing is protected by vertical glass fins angled to prevent the intrusion of summer sun but allowing sunlight to enter during winter months.

Internally the use of a double-height volume connected by an 'occupied stair' links the middle and upper floors of the building and provides a common social gathering space. The upper floor breakout area features a 'roof lantern' allowing natural light to enter the building as well as allowing hot, stale air to escape during summer.

A simple palette of robust materials was selected for external cladding elements including diamond cut limestone blockwork, galvanised steel structural members, powder-coated aluminium window frames, tinted glazing and orange coloured terracotta roof tiles. These materials harmonise with the existing school buildings while at the same time providing a strong identity for the new facility.

Internally a compatible palette of materials and finishes was assembled to harmonise with the external envelope whilst providing a suitable ambience for the function of the spaces they contribute to. Colours were selected to achieve a general level of lightness and brightness throughout, whilst finishes were selected for durability and ease of maintenance.

A welcoming, informal theme for the building interior was developed using fresh colours, natural timber finishes and a range of furniture types. Care was taken to achieve a balance between comfort and robustness in the selection of loose furniture. Similarly hard-wearing durable finishes were selected for surfaces which are vulnerable to wear-and-tear.

Broader context

The new building was design to physically and metaphorically link the existing junior school to the upper levels of the senior campus and to generate an aspirational progression between the two.

The new building is located on the northern edge of the campus where it overlooks playing fields and natural bushland beyond.

The design took advantage of the level difference between the junior school and the senior campus by setting the lowest floor at the level of the junior school and the middle floor at the level of the senior campus where it is connected by a wide pedestrian bridge.

To provide universal access, a pedestrian ramp with a gentle gradient links the upper and lower levels of the site and connects to a series of landscaped terraces which provide additional opportunities for learning and recreation.

A reassuring space

The new learning and innovation centre has a strong presence on the northern edge of the built campus. Its bold form, natural materials and articulated façade





ALL SAINTS' COLLEGE
LEVEL 02 PLAN

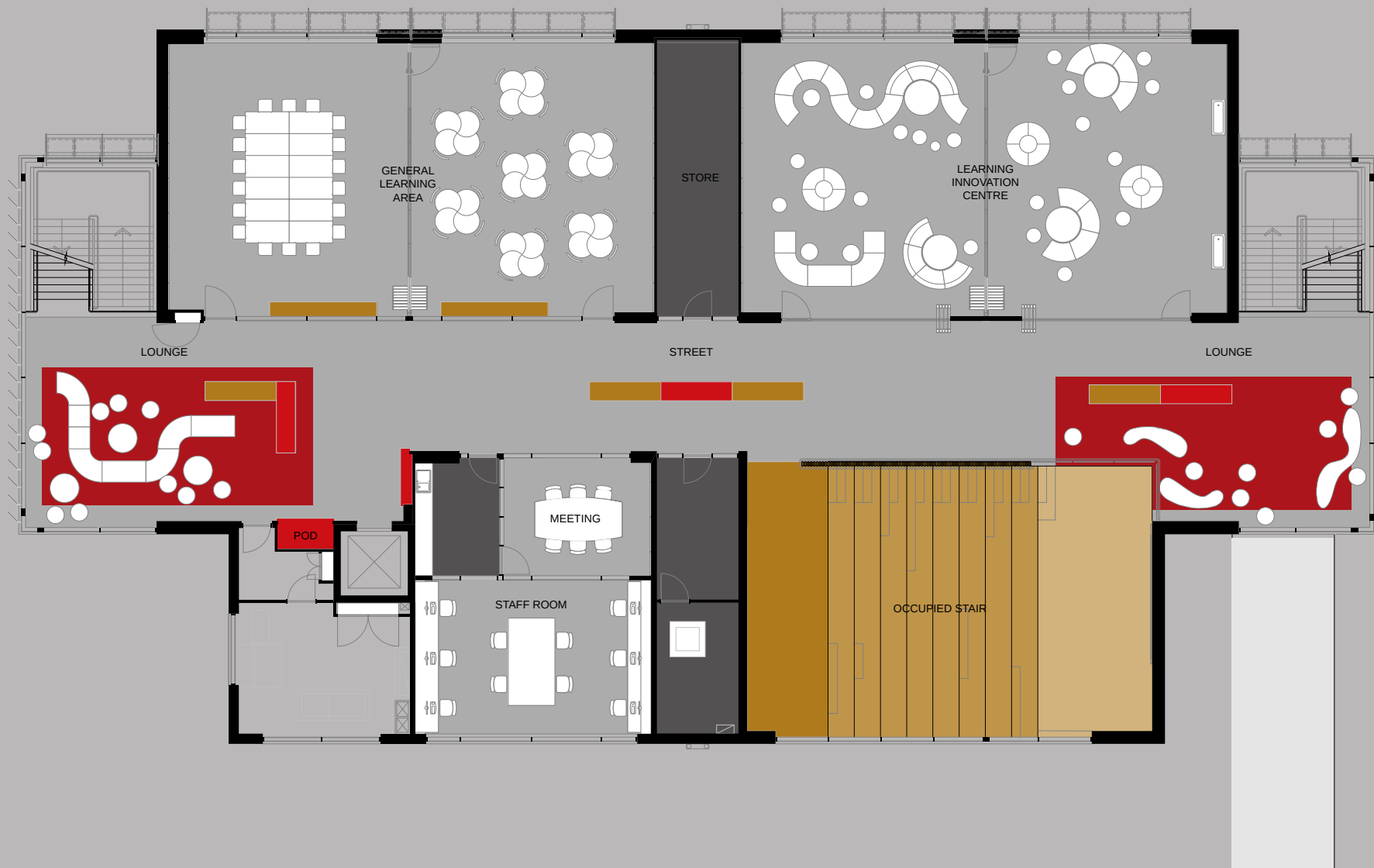
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At each level of the building school bags are seen stacked in purpose built pigeon holes or mobile storage units which double as seats. Students have re-configured these to provide personal spaces. They appear to feel safe, comfortable and happy in this environment. There is serenity to this space – but also an underlying sense of excitement.





ALL SAINTS' COLLEGE
LEVEL 03 PLAN







RESULTS OF THE PROCESS AND PROJECT

Goals and objectives

All Saints' College has a very strong belief in the appropriateness of coeducation for both boys and girls.

At the heart of its outlook is the fact that the College celebrates the diversity of modern society and proclaims the desirability of learning to respect all the diverse members of the community and to interact effectively with them.

In the context of valuing diversity, respecting and interacting with the other gender is an absolutely essential first step. If we cannot manage that fundamental level of diversity, present in all aspects of our life, there is little hope that we can do so in more complex areas.

It is sometimes said that boys and girls should be educated separately so that they can learn their lessons in isolation from the other gender and then subsequently employ their knowledge in the real, mixed-gender world.

It is difficult to understand how learning gained under such circumstances in this day and age could be easily re-applied to the real world. Surely an adult who has learnt leadership in a coeducational school is better equipped to lead either men or women than one whose leadership experience is solely amongst their own gender. Girls or boys schooled coeducationally need make no adjustment when they enter the mixed environment of a university or workplace. They understand and respect both genders.

To support this belief the new learning and innovation centre was designed without the constraints of catering for 'girls' or 'boys'. Instead the design focused on the creation of welcoming, safe, comfortable and legible spaces for all year 5 and 6 children, their teachers and visiting parents.

Each floor was given its own colour theme; the lowest floor is green, the middle floor orange and the top floor red. Pinks and blues were avoided for obvious reasons.

RESULTS OF THE PROCESS AND PROJECT

The community

Although Anglican, All Saints' College is also a multi-faith community – it welcomes families from all cultures, backgrounds and religions. The College Chapel on campus is also the Parish Church of Bull Creek-Leeming, which is attended by many College families.

Students are encouraged to be thoughtful in their actions, be active learners and enthusiastic participators and contributors in the life of the College and the wider community.

The College encourages the use of its grounds by residential neighbours for recreation and relaxation. Accordingly there are no fences or barriers to the College perimeter giving it an open and welcoming appearance.

In addition to its generous school grounds the College shares the following facilities with the local community:

- Chapel (Collegiate Church)
- Centre for Performing Arts
- Senior School Theatre
- Junior School Theatre
- Assembly Hall
- Indoor Sports Centre

Discovering the building

The College community has taken great delight in the way students have engaged with the building and discovered different ways of using its facilities. For example students use the purpose designed mobile storage units to create their own environments within the learning street.

The recessed spaces designed as reading nooks are popular with students as social spaces and chill-out spaces. They are always occupied during breaks

with students sitting, sprawling, chatting or sharing laptops.

The occupied stair has been used in many ways; as an auditorium for the official opening of the building, as a performance space, a teaching space, a movie theatre, a relaxation space or simply as a short cut between floors.

Seating in the learning lounges at the ends of each floor can also be re-configured as teaching / learning areas, for collaborative learning or socialising and relaxation.











SUSTAINABILITY INITIATIVES

The new learning and innovation centre was designed using the following passive solar design principles:

Orientation

The building was sited and oriented to utilise natural solar order. The majority of glazing faces north or south, whilst east and west facing glazing has been limited to circulation and break-out areas. Glazed areas typically are protected by sun-shading elements designed to suit the orientation of the glazing they protect. Angled vertical sun-breaks to east and west elevations allow sun-light to enter the building during winter months whilst excluding direct sun-light during summer months.

Natural ventilation

Operable high level windows to occupied spaces, together with operable glazed louvres to the roof-light enable fresh air to be drawn through the building by venturi effect. This enables the building to be purged of heat at night during summer months. All windows are automatically controlled to ensure optimum use of natural ventilation whenever possible, thereby reducing the need for artificial heating and cooling when ambient conditions are suitable.

Daylight

Adequate glazing has been provided at the right locations to reduce the use of artificial lighting during daylight hours. The floor plates were designed to ensure that building occupants are located within an appropriate distance from an external window. Sun-shades protect vision panels from direct sun-light and help to reduce









SUSTAINABILITY INITIATIVES

glare to internal spaces. The use of high performance glass to windows enables a high level of thermal control without the loss of natural light.

Sustainable materials

Natural materials with low embodied energy were utilised for the building envelope including natural limestone cladding, clay brickwork and terracotta roof tiles. Low volatile organic compound (VOC) products were specified. Timber products were specified as fully certified from sustainable sources. Innovative and re-cycled flooring and walling materials have been used. The carpet supplier has advised that at least 60,000 plastic bottles were recycled for the production of the carpet tiles.

Building fabric

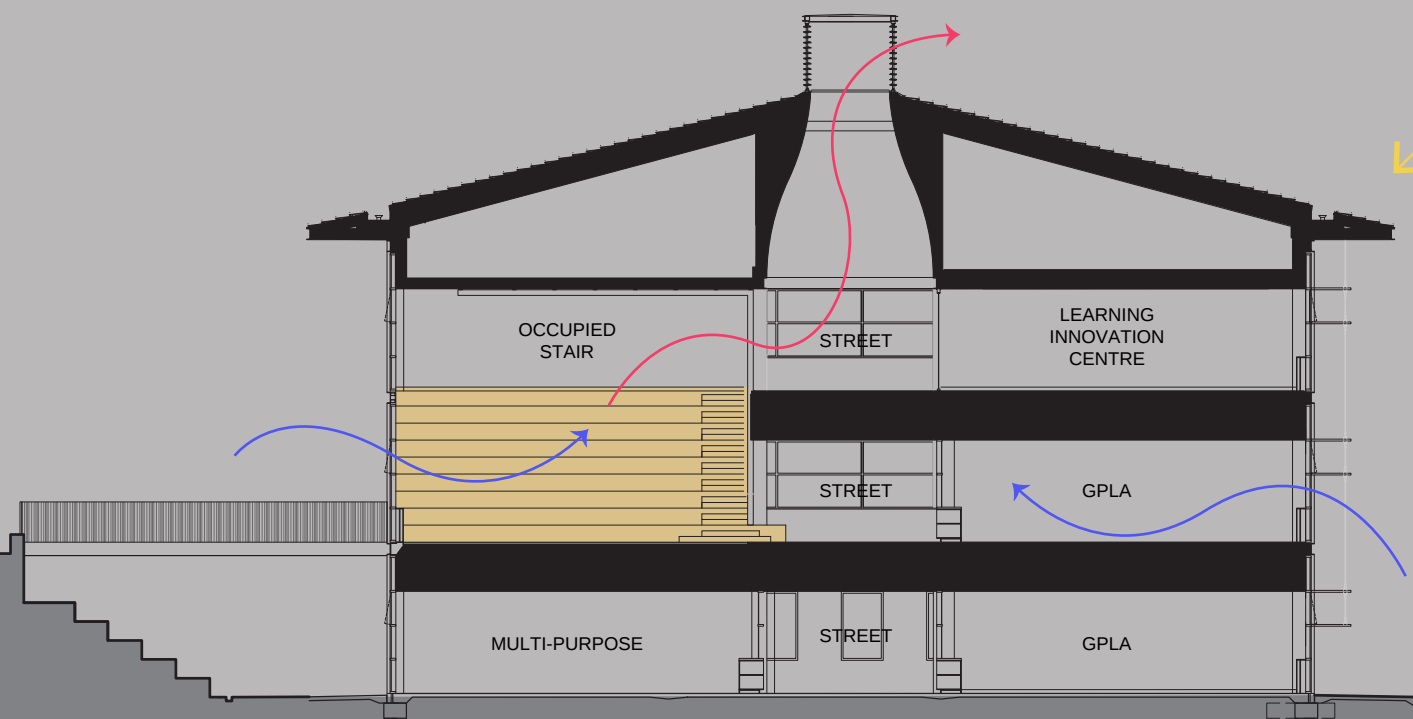
The building fabric throughout is very well insulated to ensure a high level of thermal and acoustic performance thus reducing energy use. The building façade was developed in collaboration with the mechanical services engineer, the environmental consultant and the building surveyor to ensure compliance with Section J of the Building Code of Australia.

Indoor environment quality

This includes the provision of optimum levels of natural light; views to the outside; high levels of fresh air; appropriate levels of acoustic separation and attenuation; the use of low VOC paints, sealants, adhesives and carpets; and the use of high frequency ballasts on all light fittings. All these elements have contributed to a healthy building environment.







ALL SAINTS' COLLEGE
CROSS SECTION

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