

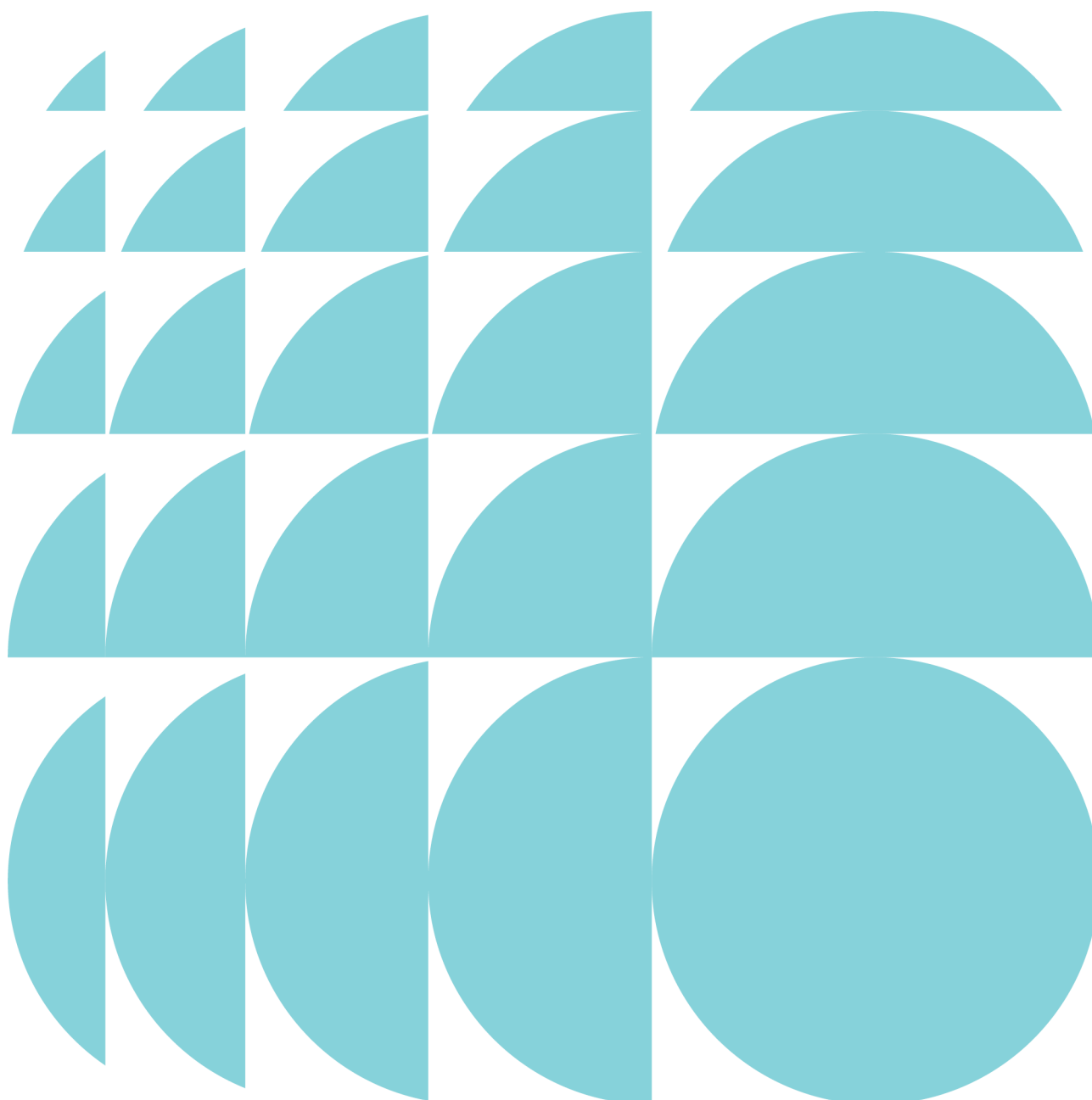
ETHOS URBAN

Response to Submissions Report

270 Miller Street, North Sydney
Marist Catholic College North Shore
SSD 10473

Submitted to Department of Planning and
Environment
On behalf of Sydney Catholic Schools

17 June 2022 | 218786



CONTACT

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VERSION	DATE OF ISSUE	REVISION BY	APPROVED BY
For lodgement	17 June 2022	KV	KT

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Executive Summary

This Submissions Report has been prepared by Ethos Urban on behalf of Sydney Catholic Schools in support of the State Significant Development (SSD) for alterations and additions to Marist Catholic College North Shore (MCCNS) at 270 Miller Street North Sydney (SSD 10473).

The Amended Development Application, including the first Submissions Report, was publicly exhibited in late 2021, ending on 13 December 2021. On 20 December 2021, the Department of Planning and Environment (DPE) wrote to Sydney Catholic Schools requesting a response to the submissions received from the public and government agencies during exhibition of the amended application.

This report addresses the queries and issues raised in those submissions and provides an updated proposal description.

1.1 Proposal Description

The SSDA seeks approval for the following development:

- Site preparation work including remediation, demolition, excavation and tree removal.
- Retention of key buildings including St Mary's Church and Parish Centre, the former Presbytery and Monastery, St Mary's Primary School, the Ron Dyer Centre and some existing buildings on the western boundary.
- Demolition works, including demolition of existing buildings along Miller Street and Carlow Street.
- Construction of a mixed-use education precinct comprising a high school and Early Learning Centre, including:
 - Adaptive reuse of the existing Presbytery, and alterations and additions to retained educational buildings;
 - Minor alterations to St Mary's Church to improve access from the north of the building;
 - Construction of a 5 storey (including basement) education building on the corner of Carlow Street and Miller Street;
 - Construction of 4 storey (including basement) building along Miller Street, accommodating teaching facilities, an Early Learning Centre (catering for children aged 0-5 years), and an auditorium;
 - Construction of a new basement car park below the Carlow Street building, accessed off Carlow Street;
 - Provision of separated pick-up/drop-off areas for Kindergarten-1 and Years 2-12; and
 - Provision of ancillary canteen/café uses.
- Landscaping and public domain works, including creation of a new public piazza fronting Miller Street, adjoining St Mary's Church.
- Services and utilities augmentation.

The proposal for which consent is sought is intended to deliver much-improved education facilities which will provide better operational, design and education outcomes for the school's pupils, staff, and community.

1.1.1 Proposed Amendments Since Exhibition

The following minor amendments have been made to the proposal since the exhibition of the Design Amendments Report and first Submissions Report:

- Refinements to the building at the corner of Miller and Carlow Street to better respond to the surrounding built form.
- Minor amendments to the landscape design to reflect ongoing design development and to accommodate additional tree canopy coverage.
- Provision of additional detail around works to the site's heritage buildings.
- Clarification of proposed pick-up and drop-off arrangements.

- Inclusion of a strategy to address Connecting with Country.
- Removal of the scope approved under the early works DA to North Sydney Council and the Stage 2A Complying Development Certificate.

It is noted that these amendments are in addition to the changes that were made as part of the Design Amendments and first Submissions Report, which included a significant reduction in the scale of the Miller Street building from a 5-storey building (including basement) to a 4-storey building (including basement), introduction of the detailed childcare fit-out into the scope of works and various minor design and landscaping amendments.

Overview of Submissions

A total of five (5) submissions were received during the public exhibition period. Comprising submissions from:

- North Sydney Council.
- The Owners Corporation Committee of 7-21 Carlow Street and 2-10 Cassins Avenue, North Sydney.
- Three (3) members of the public.

Additional Environmental Assessment

The amendments made to the proposed development have been the subject of revised impact assessments, which have also responded to issues raised in the submissions. The amendments result in improved environmental impacts associated with the proposed development.

Conclusion and Justification

The proposed SSD has been subject to an EIS, an Amendments Report and two Submissions Reports. The potential environmental, social and economic impacts, both direct and cumulative, have been identified and thoroughly assessed as part of the EIS, and also as part of this Submissions Report. No significant adverse environmental, social or economic impacts have been identified by the proposal in preparing the EIS or the Submissions Report.

Any potential environmental and cultural impacts identified during the public exhibition of the EIS have been addressed through design refinements and with additional assessment as set out in this Submissions Report. Any residual impacts will be mitigated through the implementation of measures for the construction and operational phases of the proposal.

The potential impacts of the development are acceptable and are able to be managed, as outlined within the safeguards and mitigation measures contained within the EIS and its appended technical reports, and this Submissions Report.

2.0 Introduction

This Submissions Report has been prepared by Ethos Urban on behalf of Sydney Catholic Schools in support of the State Significant Development (SSD) for alterations and additions to MCCNS at 270 Miller Street North Sydney (SSD 10473).

The SSD and accompanying EIS was originally lodged in February 2021 and was publicly exhibited for a period of 28 days, ending on 22 March 2021. A number of issues were raised during the first public exhibition, primarily relating to built form, heritage, traffic and access. In response, an Amended Development Application was prepared as part of the first Response to Submissions.

The Amended Development Application, including the first Response to Submissions, was publicly exhibited in late 2021, ending on 13 December 2021. On 20 December 2021, the Department of Planning and Environment (DPE) wrote to Sydney Catholic Schools requesting a response to the submissions received from the public and government agencies during exhibition of the amended application.

This report addresses the queries and issues raised in those submissions and provides an updated proposal description.

2.1 Proposal Description

The SSDA seeks approval for the following development:

- Site preparation work including remediation, demolition, excavation and tree removal.
- Retention of key buildings including St Mary's Church and Parish Centre, the former Presbytery and Monastery, St Mary's Primary School, the Ron Dyer Centre and some existing buildings on the western boundary.
- Demolition works, including demolition of existing buildings along Miller Street and Carlow Street.
- Construction of a mixed-use education precinct comprising a high school and Early Learning Centre, including:
 - Adaptive reuse of the existing Presbytery, and alterations and additions to retained educational buildings;
 - Minor alterations to St Mary's Church to improve access from the north of the building;
 - Construction of a 5 storey (including basement) education building on the corner of Carlow Street and Miller Street;
 - Construction of 4 storey (including basement) building along Miller Street, accommodating teaching facilities, an Early Learning Centre (catering for children aged 0-5 years), and an auditorium;
 - Construction of a new basement car park below the Carlow Street building, accessed off Carlow Street;
 - Provision of separated pick-up/drop-off areas for Kindergarten-1 and Years 2-12; and
 - Provision of ancillary canteen/café uses.
- Landscaping and public domain works, including creation of a new public piazza fronting Miller Street, adjoining St Mary's Church.
- Services and utilities augmentation.

The proposal for which consent is sought is intended to deliver much-improved education facilities which will provide better operational, design and education outcomes for the school's pupils, staff, and community.

2.2 Proposed Amendments Since Exhibition

The following minor amendments have been made to the proposal since the exhibition of the Design Amendments Report and first Submissions Report:

- Refinements to the building at the corner of Miller and Carlow Street to better respond to the surrounding built form.
- Minor amendments to the landscape design to reflect ongoing design development and to accommodate additional tree canopy coverage.

- Provision of additional detail around works to the site's heritage buildings.
- Clarification of proposed pick-up and drop-off arrangements.
- Inclusion of a strategy to address Connecting with Country.
- Removal of the scope approved under the early works DA to North Sydney Council and the Stage 2A Complying Development Certificate.

It is noted that these amendments are in addition to the changes that were made as part of the Design Amendments and first Submissions Report, which included a substantial reduction in the scale of the Miller Street building from a 5-storey building (including basement) to a 4-storey building (including basement), introduction of the detailed childcare fit-out into the scope of works and various minor design and landscaping amendments.

The proposed amendments are discussed in further detail below.

Refinements to the Miller and Carlow Street Corner

DPE has engaged an independent heritage consultant to review the proposal. Concern was raised around the scale of the building at the corner of Miller and Carlow Street, and the building's relationship to the surrounding heritage context. In response to this feedback, a series of refinements have been made to ensure that the building responds to the surrounding built form and heritage context.

The height of the building remains unchanged, and the proposal continues to use brick as the dominant façade material to reference the sandstone materiality of St Mary's Church. However, a series of refinements have been made to respond to the issues raised. These include:

- Further articulation of the façade through the use of brick blade walls to break down the scale of the building and reduce visual bulk. These blade walls also establish a façade pattern which alludes to significant structures such as the North Sydney Oval stand and the North Sydney Hotel.
- The continued use of planting to soften the façade edges.
- Changes to the top floor including the introduction of glazing, and recessing the façade line by 500mm to reduce the apparent scale and height of the building. These changes also reduce the prominence of the top floor when viewed from the public domain.
- The glazed top floor incorporates an extruded canopy to 'cap' the building. This fine edge minimises the visual impact and overall bulk of the top floor, which is further softened by the use of curved glazing.
- The blade walls have been softened with the use of curved brick to respond to the curvature of the Church and North Sydney Hotel.

These measures have been continued to the Carlow Street façade, however the rhythm of the blade walls shifts to create irregularity and playfulness in the façade to respond to the adjacent residential terraces. The western façade of the Carlow Street building has also been redesigned with a more sensitive approach to the adjacent residential buildings, including recessing of the uppermost floor (refer to further discussion at **Section 4.1**).

The current (November 2021) and proposed built form are shown at **Figure 1** and **Figure 2** respectively.



Figure 1 – Current (November 2021) response to the corner of Miller and Carlow Street

Source: WMK



Figure 2 – Proposed response to the corner of Miller and Carlow Street (signage shown for illustrative purposes)

Source: WMK

Changes to Landscape Design

Through ongoing design development and in response to feedback received from DPE and GA NSW, several minor amendments have been made to the landscape design. These include:

- Minor changes to tree plantings to increase tree canopy cover to 26%, compared to the existing tree canopy coverage of approximately 22%.
- Simplification of the line markings and colours on the multi-purpose sports court.
- Replacement of the street trees on Carlow Street with a deciduous species (*Fraxinus pennsylvanica*) to maximise winter sun to the adjacent undercroft COLA.
- Minor changes to the Church Garden including removal of intrusive pebblecrete pathways and replacement with a granite paver that is more in keeping with the heritage significance of the Church.
- Relocation and rationalisation of the pedestrian ramp on the eastern side of St Mary's Church (refer to **Figures 3 and 4**).

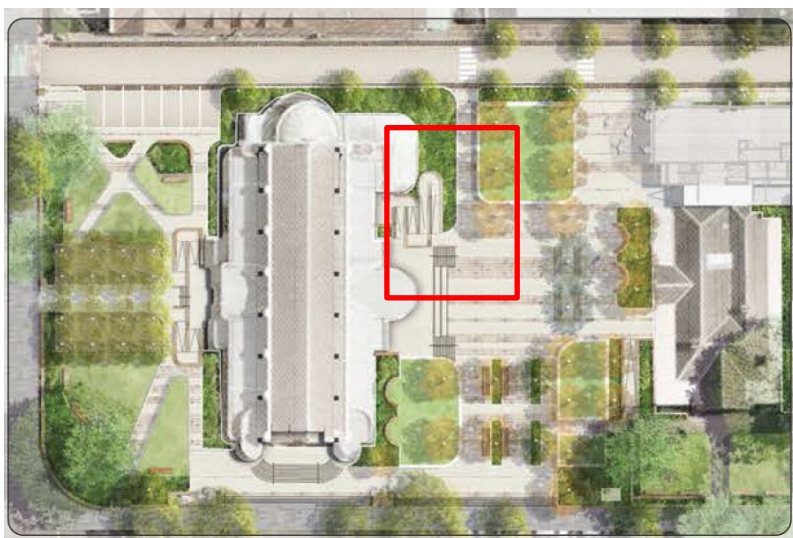


Figure 3 – Current (November 2021) Church Precinct landscape design

Source: Oculus

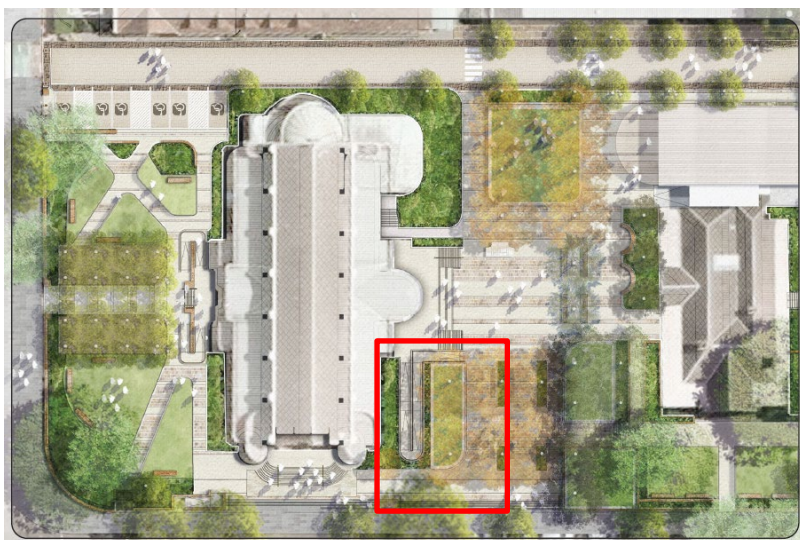


Figure 4 – Proposed Church Precinct landscape design

Source: Oculus

Works to Heritage Buildings

Broadly, the proposed works to the heritage buildings remain unchanged, however additional detail has been provided at the request of DPE. This includes drawings detailing the works to St Mary's Church and the Parish Centre (former Presbytery) which form part of the revised Architectural Drawings at **Appendix A**.

Additional heritage assessment has also been undertaken to respond to the additional information and DPE's peer review (refer to **Section 4.1** and **Appendices F and G**).

Pick-up and Drop-off Arrangements

The pick-up and drop-off (PUDO) arrangements remain largely unchanged since exhibition. However, additional information has been provided at the request of DPE and in response to the submissions received. The matters relating to PUDO were peer reviewed by Bitzios Consulting, which resulted in further analysis of the queuing capacity of 28 vehicles and an additional survey of the students was carried out, which yielded an 86% response rate.

Clarification has since been provided by TTPP of the existing PUDO arrangements compared to the proposed PUDO arrangements. The proposed development will reduce vehicle queue lengths to the existing PUDO zone, by splitting the primary school traffic into two PUDO zones. The existing zone is to be extended in length from 20m to 40m (capacity for around 6 vehicles) and retained for Kindergarten to Year 1 students only.

The increased vehicle queuing capacity on exit would assist with ensuring exiting queues are contained on-site. Notwithstanding, delays to exiting vehicles is anticipated to reduce with Ridge Street containing lower traffic volumes and vehicle speeds than Miller Street, where the current site egress is located. The remaining primary school students arriving by car are to be relocated to the Carlow Street car park. The new Carlow Street PUDO facility would also be accessed by high school students.

The PUDO facility at the Carlow Street car park provides a 30m long PUDO area for Years 2 to 12, which enables around 4 vehicles to stop and pick up/drop off students. The adjoining 13 car spaces are to be used as a pedestrian area during PUDO, with vehicles stopping within the aisle to pick up/drop off.

Connecting with Country

The draft Connecting with Country Framework was released in 2021 with the aim of helping project teams support a strong and vibrant Aboriginal culture in the built environment.

Sydney Catholic Schools is committed to engaging with appropriate local Indigenous groups and incorporating opportunities for elements such as Indigenous totems, artwork and bush tucker plants into the detailed design of the development. The process would follow the framework outlined in GA NSW's Connecting with Country Framework.

Whilst this process would ordinarily commence during the early design stages, the MCCNS proposal was first presented to GA NSW in mid-2020 before the draft Connecting with Country Framework was released. It was also lodged and first exhibited before the Framework was published.

Through consultation with GA NSW and DPE, it has been agreed that Sydney Catholic Schools will provide evidence that a consultant has been engaged, with an agreed scope to undertake works regarding Connecting with Country. Conditions of consent will then be imposed regarding the final strategy.

Sydney Catholic Schools is currently in the process of engaging a Connecting with Country consultant. Details of the engagement will be issued to DPE, when available.

Removal of Scope Subject to Separate Approvals

The amended proposal excludes works that have been approved under separate planning pathways, comprising:

- Development consent DA 100/21, granted by North Sydney Council for the demolition of two terraces and Jacaranda Cottage at the corner of Miller and Carlow Streets, as well as removal of a Frangipani tree and fencing works. These works are now complete.
- The Complying Development Certificate for the Stage 2A works, comprising demolition, construction of a new 4-storey teaching building and a canteen. These works are currently underway.

2.3 Proposal Overview

A summary of the key components of the Proposal, including the amendments made since exhibition of the Design Amendments Report and first Submissions Report, are provided in **Table 1**.

Table 1 – Summary of proposed development

Proposal Element	Brief Description
Site preparation	Demolition of existing structures at the corner of Miller and Carlow Street, as well as the existing Block C annex, has been approved under separate approvals. Site preparation work including remediation, demolition of other structures, excavation and tree removal forms part of the SSD.
Built form	Construction of a mixed-use education precinct comprising a high school and Early Learning Centre, including the adaptive reuse of existing heritage buildings.
Heritage	Three buildings on the site (St Mary's Primary School, St Mary's Catholic Church and St Mary's Catholic Presbytery) are locally listed heritage items under NSLEP. The site is not located in a heritage conservation area.
Site area	22,420m ²
Gross floor area	19,771.87m ²
Maximum height	21.365m
Site uses	<ul style="list-style-type: none"> • Educational establishment and ancillary school uses • Childcare/Early Learning Centre • Community use of certain facilities outside of school hours (to be confirmed at the operational stage).
Access	<ul style="list-style-type: none"> • Vehicular access off Ridge Street and Carlow Street. Existing access points on Miller Street will be removed • Pedestrian access off Miller Street, Carlow Street and Ridge Street
Parking	<ul style="list-style-type: none"> • Car spaces: 114 (including childcare) • DDA spaces: 9 (6 existing to remain + 3 additional proposed) • Bicycle spaces: 109
Pick Up and Drop Off	<ul style="list-style-type: none"> • Ridge Street PUDO zone: 6 vehicle capacity • Carlow Street PUDO zone: 4 vehicle capacity
Public domain and landscaping	<ul style="list-style-type: none"> • Publicly accessible piazza adjacent to St Mary's Church • Sports courts and undercroft open space/COLA • Rooftop gardens and open space • Tree canopy coverage of 26% (increased from existing canopy coverage of 22%)
Jobs	<ul style="list-style-type: none"> • Construction: 396 jobs • Operation: 61 jobs
Construction hours	<ul style="list-style-type: none"> • Monday to Saturday: 7:00am – 5:00pm • No works on Sunday or public holidays.
Hours of operation	<ul style="list-style-type: none"> • Primary: 7:00am – 6:00pm • Secondary: 7:00am – 6:00pm • Childcare and after hours care: 7:00am – 6:00pm <p>There are some activities that occur outside of these core hours of operation including:</p> <ul style="list-style-type: none"> • Use of the Gym (from 6:00am) • The library is proposed to open until 10:00pm for student study • Other cocurricular activities such as cadets use the school facilities until 9:00pm <p>Community use of school facilities, including use of the auditorium, is expected to be within the hours of 6:00am – 10:00pm.</p>

3.0 Analysis of Submissions

The Amended Development Application and first Response to Submissions was placed on public exhibition, ending on 13 December 2021. Soft copies of the documents were available on the DPE's Major Projects Website. During the exhibition period, government agencies and members of the community were able to make submissions on the application.

A total of five (5) submissions were received in response to the public exhibition of the amended application, including submissions made by North Sydney Council and the public, as set out in the following sections.

A response to each of these submissions has been prepared. The key matters raised in the submissions can be grouped into seven (7) main themes. An overview of the submissions and a summary of the process undertaken to ensure the submissions have been accurately responded to is provided below.

3.1 Government Agency Submissions

Only one (1) agency submission was received, being from North Sydney Council. In addition, DPE provided a set of summary comments with the request for a Submissions Report.

Issues raised by Council and DPE broadly related to built form and residential amenity, heritage, traffic and transport, drop off and pick up arrangements, construction management and various minor questions and clarifications on the Architectural Drawings.

The submissions were then provided to the relevant technical specialists on the project team for consideration and preparation of updated or supplementary assessment reports. Where additional information was required to respond to the submission issue raised, it has been provided within this Submissions Report.

A detailed summary of the issues raised by Council and DPE, and a response to each of those issues is provided in **Section 5.0**.

3.2 Public Submissions

A total of four (4) public submissions were received from individuals, landowners and an Owners Corporation.

The community submissions were reviewed and summarised into key issues. The main issues identified within these submissions were:

- Built form, bulk and scale.
- Residential amenity.
- Public domain character.
- Traffic and access, including construction traffic management.
- Open space and tree removal.
- Construction impacts.

4.0 Actions Taken Since Exhibition

The additional environmental assessment and stakeholder engagement undertaken since submitting the Design Amendments Report and first Submissions Report is outlined in this section.

4.1 Additional Environmental Assessment

Additional environmental assessment has been undertaken in response to the submissions received. The revised environmental assessments are provided as appendices to this report and are described below.

Built Form and Urban Design

In response to comments around built form and urban design, WMK has prepared revised Architectural Drawings and a revised Architectural Design Report (refer to **Appendix A** and **Appendix B**).

As part of the Design Amendments Report and first Submissions Report, the scale of the Miller Street building was reduced by a full floor (from 5 storeys to 4 storeys) to address concerns around built form and scale. In response to the most recent submission received from DPE and the heritage peer review, further refinements have been made to the scheme to reduce the perceived massing of the development, and to better respond to the surrounding built form and public domain. These refinements have focussed on the building at the corner of Miller and Carlow Street, and include:

- Further articulation of the façade through the use of brick blade walls to break down the scale of the building and reduce visual bulk. These blade walls also establish a façade pattern which alludes to significant structures such as the North Sydney Oval stand and the North Sydney Hotel.
- The continued use of planting to soften the façade edges.
- Changes to the top floor including the introduction of glazing, and recessing the façade line by 500mm to reduce the apparent scale and height of the building. These changes also reduce the prominence of the top floor when viewed from the public domain.
- The glazed top floor incorporates an extruded canopy to 'cap' the building. This fine edge minimises the visual impact and overall bulk of the top floor, which is further softened by the use of curved glazing.
- The blade walls have been softened with the use of curved brick to respond to the curvature of the Church and North Sydney Hotel.

As demonstrated in the comparison images at **Figures 5** and **6**, these refinements have reduced the perception of scale and will provide a more appropriate response to the North Sydney Hotel. The proposed amendments are supported by additional heritage assessment, as summarised below and at **Appendices F** and **G**.

Despite these changes, the height of the development and the guiding principles which have underpinned the massing strategy for the proposal remain unchanged. The overarching strategy, which is summarised below, has been supported by GA NSW over the duration of the project, and is considered to provide an appropriate balance between increased density to meet the School's requirements and public benefit:

- *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP) enables new school buildings, including classrooms, halls and offices, of up to 22m in height to be approved as Complying Development. The proposal, including the height variation, is within this 22m Complying Development height limit.
- Focussing built form in the northern part of the site will enable the creation of a new, publicly accessible piazza, and the retention of the site's heritage significant buildings and their curtilage.
- The built form has been positioned to reduce impacts on nearby residential properties, with existing school buildings along the site's western boundary being retained.
- The proposal will improve and enhance access to open space. This includes the creation of a publicly accessible piazza adjacent to St Mary's Church, and the undercroft play space at the corner of Miller and Carlow Streets which requires a greater floor to ceiling height at ground level.
- The proposed development will have an appropriate relationship with adjoining development, and the proposed building setbacks have been designed to attenuate the perceived bulk and scale of the development.
- Buffer landscaping has been implemented into the design to soften the appearance of buildings along the street frontages.
- A contemporary palette of materials will be utilised to contribute to the modulation of the building façade.

- The bulk and scale of the proposal is compatible with the existing and expected future development on adjoining sites.



Figure 5 – Current (November 2021) view from the corner of Miller and Carlow Streets

Source: WMK



Figure 6 – Proposed view from the corner of Miller and Carlow Streets

Source: WMK

Child Care Centre Design

In response to comments from the NSW State Design Review Panel (SDRP), WMK has provided further assessment of the proposed child care centre, including an assessment against the NSW Child Care Planning Guidelines (refer to **Appendix B**).

The child care centre is located at Level 1 of the Miller Street building. WMK has confirmed that 40% of the outdoor space is open directly to the sky, with the remaining 60% of the outdoor space covered by the floor above. The outdoor play area is a large verandah space that has been designed in accordance with the NSW Child Care Planning Guidelines. The proposed open space design provides children with additional experiential environmental learning, and opportunities to have both covered and uncovered outdoor play. Perspectives of the outdoor space are provided at **Figure 7**.

The outdoor play area has been consolidated on the western side of the child care centre to maximise access to direct uninterrupted sunlight between 11am and 3pm, including at mid-Winter. WMK has confirmed that at least 30% of the outdoor area will receive solar access on the Winter Solstice during the hours of active outdoor play (see **Figure 7** below). In addition, the glazed eastern facade allows the centre to receive ambient daylight throughout the day, providing natural light into the play spaces.

It is noted that the Regulatory Authority (Department of Education) has already granted concurrence with respect to the provision of unencumbered outdoor space under section 3.22 of the TI SEPP (formerly clause 22 of the Education SEPP).

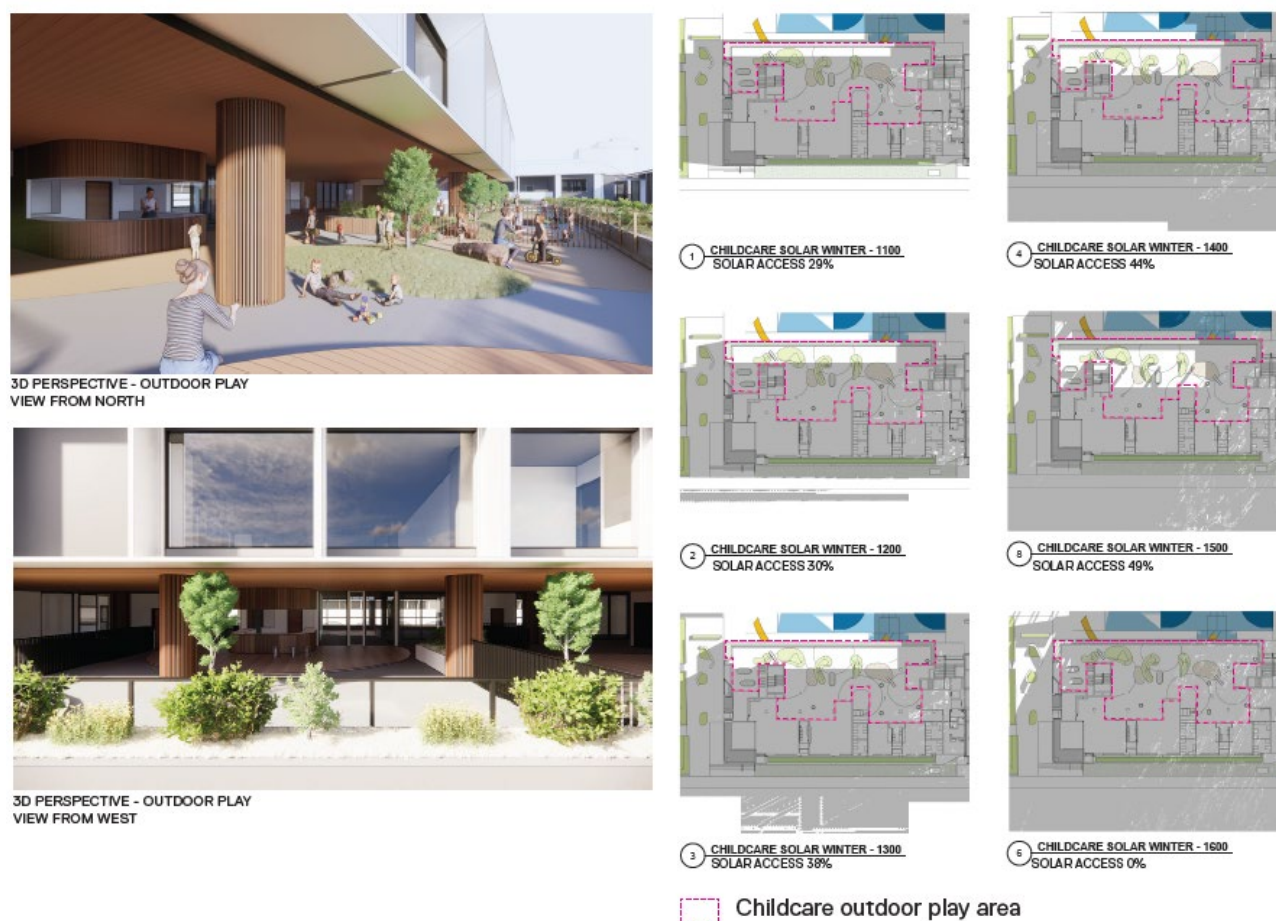


Figure 7 – Child care centre open space perspectives and solar access

Source: WMK

Traffic, Parking and Access

In response to the matters raised during exhibition, a revised TIA has been prepared by TTPP (see **Appendix I**) and a response letter prepared with specific reference to each matter raised by DPE (see **Appendix J**). DPE engaged an independent peer review, undertaken by Bitzios Consulting, which resulted in further analysis of the queuing capacity and an additional survey of the students was carried out, which yielded an 86% response rate.

The concerns raised during exhibition related to the following key issues:

- Traffic congestion.
- Adequacy of parking provision.
- Safety and efficiency of the proposed PUDO arrangements.

The SIDRA and AIMSUN modelling was revised and further detailed to demonstrate that any future traffic growth is highly likely to be a result of the Western Harbour Tunnel infrastructure project, rather than the subject development. This includes analysis of key intersections and access for emergency vehicles. Furthermore, the

proposed increase in student capacity formed part of the assessment carried out by TTPP which confirmed that despite the proposed school population increase, the traffic impacts to the local road network are negligible.

With regard to parking adequacy, the proposed Carlow Street car park will provide 48 spaces for staff. With the inclusion of the existing six (6) accessible spaces on Ridge Lane that will be retained (plus 3 additional spaces proposed), this gives the proposed development a total parking provision of 54 spaces. This compares to an existing provision of 63 unreserved spaces available to school staff, including 44 formal spaces and 19 informal spaces. With the addition of spaces provided in the Ron Dyer Centre and those spaces available for the childcare drop-off, senior drop-off, and visitor parking, this results in a total proposed provision of 114 car parking spaces. Notwithstanding that an SSDA is not required to be assessed against the provisions of a development control plan, the proposed parking provision exceeds the parking requirements set out in North Sydney DCP.

Clarification has been provided by TTPP around the existing and proposed PUDO arrangements. The proposed development will reduce vehicle queue lengths to the existing PUDO zone, by splitting the primary school traffic into two PUDO zones. The existing zone outside the Ron Dyer Centre is to be extended in length from 20m to 40m (capacity for around 6 vehicles) and retained for Kindergarten to Year 1 students only. The increased vehicle queuing capacity on exit would assist in ensuring that exiting queues are contained on-site. Notwithstanding, delays to exiting vehicles is anticipated to reduce with Ridge Street containing lower traffic volumes and vehicle speeds than Miller Street, where the current site egress is located. The remaining primary school students arriving by car are to be relocated to the Carlow Street car park. The new Carlow Street PUDO facility would also be accessed by high school students. The PUDO facility at the Carlow Street car park provides a 30m long PUDO area for Years 2 to 12, which enables around 4 vehicles to stop and pick up/drop off students. The adjoining 13 car spaces are to be used as a pedestrian area during PUDO, with vehicles stopping within the aisle to pick up/ drop off. At the time of the revised TIA being prepared, on-street P10 parking spaces were available on Carlow Street and were to be displaced by the new PUDO area. These P10 spaces no longer exist. The traffic, parking, and PUDO strategy prepared by TTPP is unaffected by this minor change.

Heritage

A revised Heritage Impact Statement (HIS) has been prepared by Weir Phillips to address the comments received from DPE following the heritage peer review (**Appendix F**). The HIS is supported by a letter prepared by Weir Phillips, which responds to each of DPE's comments (**Appendix G**). The key findings of the supplementary assessment are summarised below.

Weir Phillips has provided a description of the Church Group and an assessment of the proposed works on the significance of the Church Group. In summary:

- The existing setting is generally dominated by hard paved surfaces including the existing at-grade car park, courtyards and main play space in the northern part of the site.
- The proposed works will improve the setting of the Church Group by providing:
 - A piazza - which enhances the setting and connectivity of the existing buildings, and provides a welcoming and embracing public entrance to the precinct. It also increases and improves the visual curtilage of the Church and connects the three buildings within the Church precinct through a unifying landscape/pedestrian element.
 - A pre-function courtyard - which removes an existing asphalt driveway and improves the visual curtilage of the Presbytery, and enhances the setting and understanding of the Presbytery within the Church Group.
 - A sharedway - which removes the existing asphalt driveway and replaces it with a more pedestrian style finish and landscaping, more in keeping with the heritage significance of the Church Group and setting. The proposed sharedway increases and improves the visual curtilage of the Church and Primary School which enhances the setting and understanding of the Presbytery within the Church Precinct.
 - Works to the St Mary's Church Garden - which removes the existing intrusive pebblecrete pathways and replaces them with a granite paver more in keeping with the heritage significance of the Church. The proposal retains and reuses all significant sandstone fabric and plantings. The proposed works improve the visual curtilage of the Church and Primary School.
 - The proposed canteen – which will have an acceptable impact in the Church Group as it is lower in height, bulk and scale than the Presbytery and is physically and visually removed from the Church and Primary School. The canteen building is of a contemporary architectural style, materials and muted tones, and has been designed to be recessive and to compliment the Federation style of the Presbytery building.

Further assessment has also been carried out with respect to the relationship between the proposed building at the corner of Miller and Carlow Street and its relationship to the North Sydney Hotel. Weir Philips notes that the building has been carefully designed and considered so that the proposed form, scale and materiality are sympathetic to the North Sydney Hotel. In summary:

- The upper level of the proposed structure has been revised to be well setback from Miller and Carlow Street so that the four-storey podium height sits comfortably with the height of the two - three storey height of the North Sydney Hotel. The podium reflects a similar parapet form to emulate the two - three storey parapet height of the tall decorative parapet of the Hotel.
- The proposed solid masonry architectural style is in keeping with the architectural form and massing of the Hotel.
- The proposed materials of face brick and glass are in keeping with the materiality of the face brick, render and glass of the Hotel.
- The proposed fenestration is deeply set back from the face brickwork frame, and reflects the deep glazing reveals of the Hotel fenestration and recesses of the arched balcony colonnades to the first floor elevations to Miller and Carlow Streets.
- The fenestration within the proposed masonry frame is vertically proportioned and in keeping with the vertical double hung windows and tall arched colonnades of the North Sydney Hotel.

Finally, Weir Philips has provided a description of the Holtermann Estate D Heritage Conservation Area (HCA) and an assessment of the potential impacts on the HCA. In summary:

- The section of the HCA in the vicinity of the site adjoins a small section of the site on the opposite side of Carlow Street. There are direct view corridors across Carlow Street between the HCA and the proposed works.
- The proposed works adjacent to the HCA includes removal of the existing structures on the school site opposite the HCA and construction of a new, four-storey (above ground) building.
- The proposed works will have an acceptable impact on the HCA for the following reasons:
 - The school buildings currently opposite the HCA on Carlow Street present as a diverse mix of buildings with little or no architectural merit. The existing structures poorly address the HCA and provide little or no consideration to the significance of the HCA opposite.
 - The proposed scheme provides a considered, coordinated and more sympathetic architectural resolution, and will enable an enhanced understanding and appreciation of the HCA.
 - The proposed design is a highly considered, articulated and contemporary architectural scheme that is clearly stylistically separate to the HCA but incorporates a palette of materials, finishes and a third storey setback that provides a height, form and scale that is in keeping with the HCA.
 - The proposed school buildings are behind the main northern view corridors to the HCA and do not block or obscure this view corridor.
 - Carlow Street is planted with mature London Plane Trees that provide a visual buffer to the proposed works and the HCA.

Finally, historical photographs have shown that prior to the current building fronting Carlow Street, there was a substantial three-storey building opposite the HCA. This building had a similar form, bulk and scale as the proposed building (refer to **Figure 8**).

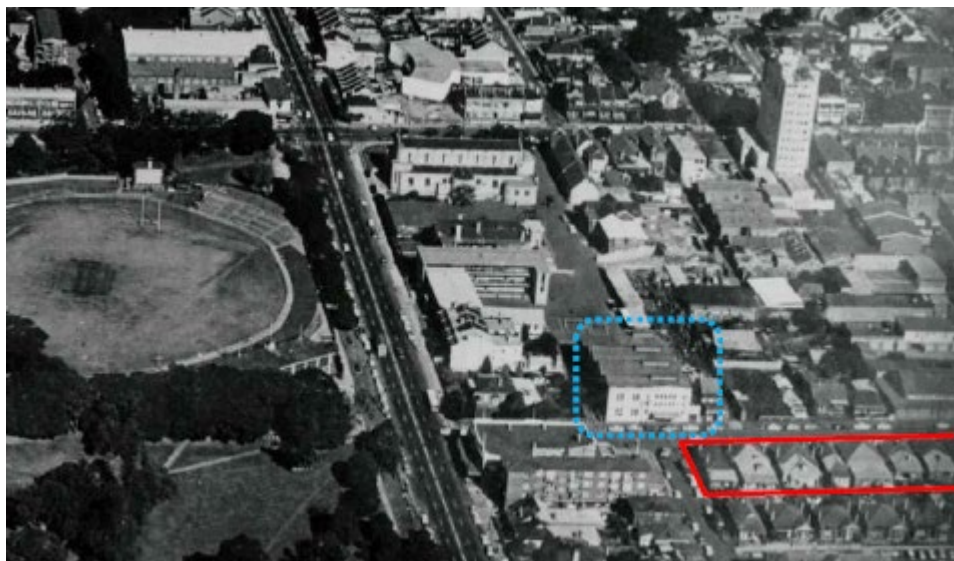


Figure 8 – Early aerial photograph over the site with the HCA outlined in red and the former school building outlined in blue

Source: Weir Philips

Overall, Weir Philips concludes that the heritage items on the site will be retained and restored - no significant buildings are to be demolished. The proposed new buildings do not encroach on the existing setting or principal view corridors of the heritage items on the site, or heritage items in the vicinity of the school.

Finally, Weir Philips notes that the proposed new buildings replace buildings on the site with forms of a similar bulk and scale. The proposed works, materials and finishes are contemporary in style and approach, and will read as well designed, new built forms in contrast to the ornate and decorative architecture of the heritage items.

Visual Impacts

A revised Visual Impact Assessment (VIA) has been prepared by Ethos Urban to address the comments received from DPE following the exhibition period (**Appendix K**). The key findings of the supplementary assessment prepared in response to the matters raised are summarised below.

With regard to bulk and scale of the corner building, the arrangement of built form now more clearly reads as a distinct base, middle and top as a result of the proposed design changes. Within this composition, the setback of the top from the middle part, and the dominance of transparent glazing, significantly reduces its visual prominence in the streetscape. Colour is proposed to primarily include natural greys and browns, which are visually neutral and will enable the proposal to blend well with its surrounds. Similarly, simple concrete, glass and timber materiality is proposed which will also facilitate integration with surrounds. Recessing of floorspace behind the main structural framing of the building and the generous use of transparent glazing further works to reduce the appearance of building bulk and scale. The resulting proposal sits comfortably in the Miller Street streetscape (see **Figure 9**).



Figure 9 – The proposal seen from a northly aspect on Miller Street

Source: WMK

With regard to visual impact on internal heritage items, the proposed Miller Street and Carlow Street buildings are deliberately sited to the north-east of the site away from the most sensitive heritage items within the site. A publicly accessible plaza is proposed to be landscaped in a manner that is responsive to the heritage values of the Church. As a consequence, the proposal has acceptable visual impact on St Mary's Church.

The proposal is sited closer to the St Marys Presbytery (the Presbytery). The proposed height of the Miller Street building is considered to be compatible with the Presbytery, and will not result in an inappropriate, overbearing form.

While the proposed pavilion is of a similar height to the Presbytery when viewed from the piazza to the south, a number of measures have been incorporated to ensure that it is viewed as a compatible and ancillary element. These measures include:

- Its physical proximity to the Presbytery.
- Its long, linear siting perpendicular to the Presbytery presenting its narrow face to the viewer.
- Its single storey design.
- Its contemporary design.
- Its lightweight design, with extensive use of transparent glazing to its southern elevation.

These design measures mean that it will not detract from the overall composition of the school or the setting of the heritage items, and will not introduce a large, discordant element.



Figure 10 – The proposal's relationship with the Presbytery

Source: WMK

Residential Amenity – Marist Brothers Residences

In response to concerns raised by DPE about the amenity of the Marist Brothers residences fronting Carlow Street (which forms part of the site), WMK has undertaken additional assessment and has given further consideration to the amenity of this property.

In summary, WMK has noted that the existing school building and rooftop outdoor recreation space already overlooks and overshadows the Marist Brothers residences. The primary outlook from the residences is to the north over Carlow Street, and to the south over the rear yards of the residences.

An additional site survey was undertaken to locate the existing windows on the western faced facing the new Carlow Street building. There are three ground floor windows and one upper floor window, which were all covered to mitigate existing overlooking.

Following receipt of the additional survey, the western façade of the Carlow Street building has been amended to mitigate views from the first floor staff outdoor area towards the residences. The upper level courtyard has also been removed. The current and revised relationship between the Carlow Street building and the existing Marist Brothers residences is shown at **Figures 11 and 12**.



Figure 11 – Current (November 2021) view looking east on Carlow Street

Source: WMK



Figure 12 – Proposed view looking east on Carlow Street

Source: WMK

Student Amenity – Solar Access and Noise within Carlow Street Undercroft

In response to concerns raised by the NSW SDRP, additional consideration has been given to the amenity of the Carlow Street undercroft, particularly with respect to solar access on the Winter Solstice and the acoustic amenity of the space.

The solar studies are shown in the Architectural Design Report at **Appendix B** and are replicated below at **Figure 13**. The undercroft play space has been designed to provide comfort in both the summer and winter months by balancing the need for shade in the summer and warmth in winter.

During winter, the sun penetrates through the northern façade to allow for warmth and sunlight into the space. Solar access is available to parts of the COLA throughout the day, as follows:

- 9am - 26%.
- 12pm – 13.3%.
- 3pm – 11.8%.

The space will receive a combination of direct and ambient/indirect sunlight, allowing for flexibility and a range of uses.

Direct sunlight will provide warmth to the space for relaxation, and respite for staff and students who will generally spend most of their time indoors with indirect sunlight. As shown at **Figure 13**, there are other areas within the site which will receive direct solar access on the Winter Solstice, providing opportunities for students to access direct sunlight when the undercroft is shaded.

The ambient/indirect light will provide:

- Even lighting, reducing glare and dark spots.
- Preferred comfort levels for working and holding classes and/or flexible learning workshops.
- Outdoor recreation spaces outside of direct sunlight.
- Increased indirectly lit and shaded areas in the summer months, responding to and balancing the differing cooling and heating requirements in the undercroft area from winter to summer.
- A non-air conditioned, shaded outdoor area in summer for informal learning as part of the proposal's ESD strategy.

In response to feedback from the SDRP:

- The street trees on Carlow Street are now a deciduous species (*Fraxinus pennsylvanica*) to maximise winter sun to the adjacent undercroft space.
- A solar study has been performed reviewing the scenario of relocating the student services at the northern end of the building. Although additional direct daylight is provided, it is relatively minor and represents no substantial solar benefit to the undercroft and quadrangle area in terms of the solar access benefits outlined above.

With respect to the acoustic amenity of the undercroft space, WMK has taken precedent from the Northern Beaches Christian School where an acoustic solution has been implemented and adopted for a similar undercroft play space. Acoustic design solutions that have been implemented include:

- Acoustic lining to the underside of the soffits diminishes the noise and reverberation within the space.
- Soft planting is used to create a barrier between the differing areas, and to assist in dampening noise/sound.
- Textured finishes and soft surfaces are used on the loose furniture to absorb sound.

Based on the above, it is considered that the amenity of the COLA is adequate with respect to solar access and noise, and the undercroft will provide a high quality open space for learning and recreation during both the winter and summer months.

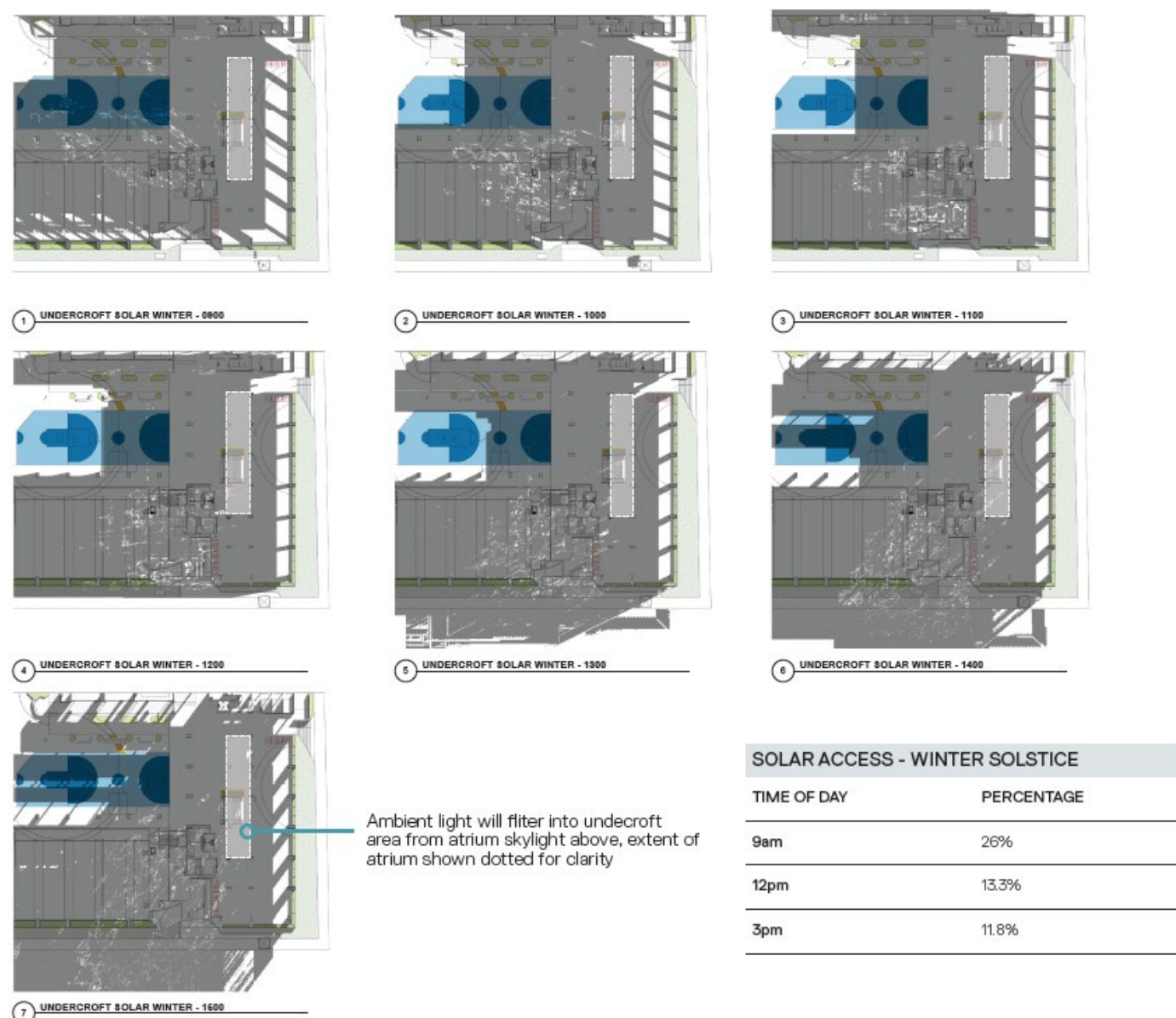


Figure 13 – Solar access to the Carlow Street undercroft (Winter Solstice)

Source: WMK

4.2 Engagement Activities


There has been no further agency or community engagement since the Amended Development Application and first Response to Submissions were exhibited.

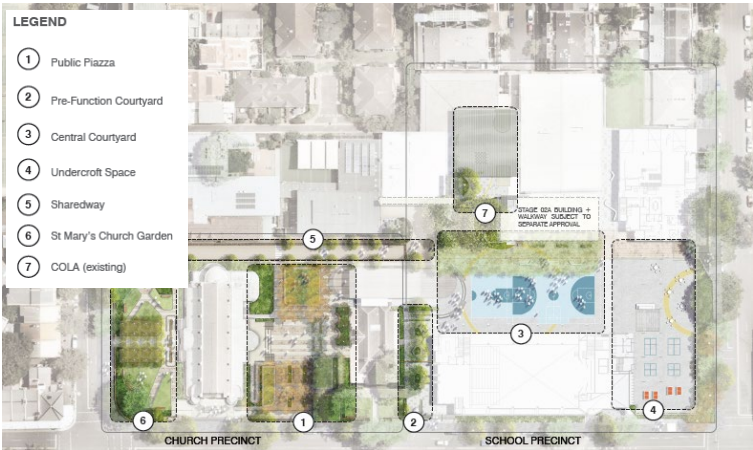
Further engagement has been undertaken with the NSW SDRP, with the third review sessions being held on 13 April 2021 to discuss the revised proposal. This follows two previous reviews in July and September 2020.

Written feedback was provided on 20 April 2022. A summary of the comments raised, and the proposed response is provided in **Table 2**.

Table 2 – Response to comments from NSW SDRP

Comment	Response
The project is delivering significant public benefit through the introduction of the public piazza off Miller Street.	Noted.

Comment	Response
The design development that has occurred since the previous SDRP, including the reduction in height of the Miller Street building and the articulation of the Carlow Street and Miller Street facades, is supported.	
Further design development is required to significantly improve the amenity of the covered outdoor learning spaces for the comfort and enjoyment of staff and students.	Noted. Refer to discussion at Section 4 and the Architectural Design Report at Appendix B .
Connecting with Country	
An understanding of Country offers the potential to inform richer and more place-responsive design solutions. Although engagement with Traditional Custodians is occurring late in the design process, Connection with Country has the potential to inform the design development in a meaningful way and consultation should commence immediately.	Refer to response at Section 2.2 . The draft Connecting with Country Framework was released in 2021 with the aim of helping project teams support a strong and vibrant Aboriginal culture in the built environment. SCS is committed to engaging with appropriate local Indigenous groups and incorporating opportunities for elements such as Indigenous totems, artwork and bush tucker plants into the detailed design of the development. The process would follow the framework outlined in GA NSW's Connecting with Country Framework.
Illustrate how engagement with Traditional Custodians is informing the design approach.	Whilst this process would ordinarily commence during the early design stages, the MCCNS proposal was first presented to GA NSW in mid-2020 before the draft Connecting with Country Framework was released. It was also lodged and first exhibited before the Framework was published.
Consider engaging an Aboriginal designer on the design team to facilitate this process	Through consultation with GA NSW and DPE, it has been agreed that SCS will provide evidence that a consultant has been engaged, with an agreed scope to undertake works regarding Connecting with Country. Conditions of consent will then be imposed regarding the final strategy.
Ensure that those with the appropriate cultural authority have the opportunity to review and comment on the design before it is finalised.	Sydney Catholic Schools is currently in the process of engaging a Connecting with Country consultant. Details of the engagement will be issued to DPE, when available.
Site Strategy and Landscape	
Consider the modes of use at different times of the day and year and during special events. Provide an analysis illustrating how the space will be used.	The various uses of the outdoor spaces within the site, particularly during event modes, are explained in the Landscape Design Report (Appendix D). The different spaces will provide for a range of school, parish and community events as shown in Figure 14 . 
Consider reducing the number of trees, and specifying larger, more	The proposed tree planting strategy is considered appropriate for the site. It seeks to balance the need to provide more than 25% tree canopy cover,

Comment	Response
significant species for increased canopy cover with lower density of trunks at ground level.	<p>with the need to provide functional and usable open spaces that are appropriate for a variety of different functions.</p> <p>In this regard, tree plantings are focussed in more passive recreation spaces (such as the piazza and Church Garden) and are minimised in active recreation spaces such as the Central Courtyard.</p>
Further develop the concept of interconnected outdoor 'rooms', rather than a large, singular space.	<p>The concept of interconnected spaces is described further in the Landscape Design Report (Appendix D).</p> <p>The ground plane comprises a network of open spaces as described below, and as shown in Figure 15:</p> <ol style="list-style-type: none"> 1. The new public piazza; 2. The new pre-function courtyard; 3. The new central courtyard for the school; 4. The undercroft space at the bottom of the new Carlow Street building; 5. The shared way forming part of the main north-south axis through the site; 6. The upgraded garden immediately south of St Mary's Church; and 7. The existing COLA space which links with the new central courtyard.  <p>Figure 15 – Proposed network of open spaces Source: <i>Oculus</i></p>
Specify deciduous street trees on Carlow Street that lose their leaves early to maximise the amount of winter sun entering the covered outdoor learning area adjacent.	The previous tree species has been replaced with <i>Fraxinus pennsylvanica</i> .
Increase the canopy target to a minimum of 25% canopy cover. Anything under this figure is not supported.	Tree canopy cover has been increased to 26%.
Further develop the ground plane graphics in consultation with Traditional Custodians, and reconsider the use of bold graphics on the games court that may interfere with the legibility of the court markings.	The ground plane graphics have been simplified to reflect standard sports court line markings. The design of any supergraphics will be further developed in detailed design in consultation with Sydney Catholic School's Indigenous Unit and appropriate local Indigenous groups.
Architecture	

Comment	Response
<p>The large undercroft areas require further design development to ensure that a high level of amenity is achieved, attracting year-round use. Address the issues of solar access and acoustic comfort in the Carlow Street building Covered Outdoor Learning Area (COLA) and Early Learning Centre outdoor play area.</p>	<p>Refer to response at Section 4.</p> <p>The solar studies are shown in the Architectural Design Report at Appendix B and are replicated above at Figure 13. The undercroft play space has been designed to provide comfort in both the summer and winter months by balancing the need for shade in the summer and warmth in winter.</p> <p>During winter, the sun penetrates through the northern façade to allow for warmth and sunlight into the space. Solar access is available to parts of the COLA throughout the day, as follows:</p>
<p>Reorganise the planning and built form to provide a greater sense of height, increase solar access to the covered outdoor spaces in winter and provide outlook to the sky from the COLA; For example, the Student Support Area at the northern end of the campus could be relocated to enable a double-height termination to the north/south axis, improving solar access to the COLA.</p>	<ul style="list-style-type: none"> • 9am - 26% • 12pm – 13.3% • 3pm – 11.8% <p>The space will receive a combination of direct and ambient/indirect sunlight, allowing for flexibility and a range of uses.</p> <p>Direct sunlight will provide warmth to the space for relaxation, and respite for staff and students who will generally spend most of their time indoors with indirect sunlight. As shown at Figure 13 above, there are other areas within the site which will receive direct solar access on the Winter Solstice, providing opportunities for students to access direct sunlight when the undercroft is shaded.</p>
<p>Provide sun studies illustrating the area of solar access to the ground plane (as a percentage of the total covered area) from 9am to 3pm in mid-winter.</p>	<p>The ambient/indirect light will provide:</p> <ul style="list-style-type: none"> • Even lighting, reducing glare and dark spots. • Preferred comfort levels for working and holding classes and/or flexible learning workshops. • Outdoor recreation spaces outside of direct sunlight. • Increased indirectly lit and shaded areas in the summer months, responding to and balancing the differing cooling and heating requirements in the undercroft area from winter to summer. • A non-air conditioned, shaded outdoor area in summer for informal learning as part of the proposal's ESD strategy.
	<p>In response to feedback from the SDRP:</p> <ul style="list-style-type: none"> • The street trees on Carlow Street are now a deciduous species (<i>Fraxinus pennsylvanica</i>) to maximise winter sun to the adjacent undercroft space. • A solar study has been performed reviewing the scenario of relocating the student services at the northern end of the building. Although additional direct daylight is provided, it is relatively minor and represents no substantial solar benefit to the undercroft and quadrangle area in terms of the solar access benefits outlined above. <p>With respect to the acoustic amenity of the undercroft space, WMK has taken precedent from the Northern Beaches Christian School where an acoustic solution has been implemented and adopted for a similar undercroft play space. Acoustic design solutions that have been implemented include:</p> <ul style="list-style-type: none"> • Acoustic lining to the underside of the soffits diminishes the noise and reverberation within the space. • Soft planting is used to create a barrier between the differing areas, and to assist in dampening noise/sound. • Textured finishes and soft surfaces are used on the loose furniture to absorb sound. <p>Based on the above, it is considered that the amenity of the COLA is adequate with respect to solar access and noise, and the undercroft will provide a high quality open space for learning and recreation during both the winter and summer months.</p>
<p>Demonstrate that the Early Learning Centre outdoor area will perform in accordance with the NSW Child Care</p>	<p>Refer to response at Section 4.</p>

Comment	Response
Planning Guideline which states that outdoor play areas should have year-round solar access to at least 30% of the ground area, with no more than 60% of the outdoor space covered.	<p>The child care centre is located at Level 1 of the Miller Street building. WMK has confirmed that 40% of the outdoor space is open directly to the sky, with the remaining 60% of the outdoor space covered by the floor above.</p> <p>The outdoor play area has been consolidated on the western side of the child care centre to maximise access to direct uninterrupted sunlight between 11am and 3pm, including at mid-Winter. WMK has confirmed that at least 30% (see Figure 7) of the outdoor area will receive solar access on the Winter Solstice. In addition, the glazed eastern facade allows the centre to receive ambient daylight throughout the day, providing natural light into the play spaces.</p> <p>It is noted that the Regulatory Authority (Department of Education) has already granted concurrence with respect to the provision of unencumbered outdoor space under section 3.22 of the TI SEPP (formerly clause 22 of the Education SEPP).</p>
<p>Implement acoustic design solutions and provide an acoustic report that demonstrates acoustic comfort in the undercroft areas during times of high activity. Consider acoustic absorption and attenuation through:</p> <ol style="list-style-type: none"> The introduction of soft planting The geometry of the walls and columns The floor and ceiling surfaces The surface treatment of walls and columns, such as: <ol style="list-style-type: none"> Textured or perforated surfaces Recessed graphics and artwork Surface depth 	<p>Acoustic design solutions that have been implemented successfully on other projects, include:</p> <ul style="list-style-type: none"> Acoustic lining to the underside of the soffits will dampen the noise and reverberation within the space. Soft planting has been proposed as a barrier between the undercroft area and the traffic noise from Carlow Street. Textured finishes and soft surfaces are proposed on the loose furniture to absorb sound. <p>Successful precedents of similar undercroft areas have been studied and the acoustic solutions implemented have been adopted for this project.</p>
Provide a secure lobby space between the lifts and the entrance to the child care centre in order to enable controlled access.	<p>The front child care entry has been established with the separated child care lobby and lift within the Miller Street lobby. Direct access is available either from public transport along Miller Street, or the dedicated child care drop-off/pick-up and car park adjacent. This separated lobby provides an additional level of safety and security for young children as they access or exit the child care lobby. There is little overlap of pedestrian movement between the child care facility and the rest of the school - therefore pickup and drop-off for the child care facility can occur independently from that of the rest of the school. A dedicated pram-storage room is located next to the child care parking for parents who require it - access will be secure.</p>
Deliver a safe and effective pedestrian and vehicular traffic strategy and demonstrate how the shared zone will be used at drop-off/pick-up times and during school hours. There is a conflict between students using the proposed shared zone and vehicles entering and exiting the Ron Dyer Centre basement carpark.	<p>In association with the redevelopment of the school, a pedestrian shared zone will be developed along the central internal access road within the school. Safe and convenient pedestrian access for students and staff will be provided onto the surrounding road network and access to student set-down/pick-up areas within the school.</p> <p>The design solution minimises the use of the existing pick up and drop off on the driveway from Ridge Street by splitting in to 2 areas. This therefore reduces the risk.</p> <p>MCCNS take the safety of student extremely seriously and as such have an existing traffic management process where traffic is directed by staff for the pick-up and drop off. This is proposed to continue with the new proposed pick up and drop of areas.</p>

5.0 Response to Submissions

Each issue raised in the submissions received are addressed in this section. As the response has resulted in changes to some of the mitigation measures, an updated table of all proposed mitigation measures is provided at **Section 7**.

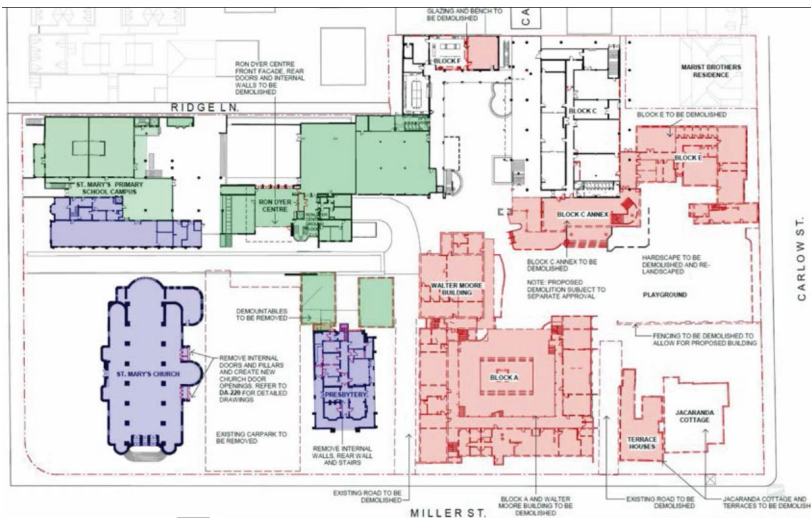
5.1 Built Form and Residential Amenity

Issue Raised	Submitter	Response
<p>Did not provide an assessment of impact from Carlow Street building on residential amenity of adjoining Marist Brothers residences fronting Carlow Street. DPE want the assessment to include:</p> <ol style="list-style-type: none"> 1. Confirmation of internal layout of existing residential habitable rooms and location of windows. 2. Consideration of Apartment Design Guide (ADG) standards and predicted amenity impacts of overshadowing of habitable rooms, windows and garden spaces, the impacts on the outlook from existing windows as well as any reduction of privacy (proposed windows, first-floor staff outdoor area and science courtyard) 	DPE	<p>Refer to response at Section 4.</p> <p>WMK has undertaken additional assessment and has given further consideration to the amenity of this property.</p> <p>In summary, WMK has noted that the existing school building and rooftop outdoor recreation space already overlooks and overshadows the Marist Brothers residences. The primary outlook from the residences is to the north over Carlow Street, and to the south over the rear yards of the residences.</p> <p>An additional site survey was undertaken to locate the existing windows on the western faced facing the new Carlow Street building. There are three ground floor windows and one upper floor window, which were all covered to mitigate existing overlooking.</p> <p>Following receipt of the additional survey, the western façade of the Carlow Street building has been amended to mitigate views from the first floor staff outdoor area towards the residence. The upper level courtyard has also been removed.</p>
<ul style="list-style-type: none"> • Concerns regarding the building height of the frontage to Carlow Street exceeding the maximum building height of LEP2013 (12m) • The bulk of the building will not meet locality character • Visual and heritage impact of reduced setback. 	Residents 1 Carlow Street	<p>Refer to discussion above. The proposed height of the Miller Street building has been reduced significantly since the initial SSD submission. The height is considered acceptable for the following reasons:</p> <ul style="list-style-type: none"> • The built form has been positioned to reduce impacts on nearby residential properties, with existing school buildings along the site's western boundary being retained. • <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (TI SEPP) enables new school buildings, including classrooms, halls and offices, of up to 22m in height to be approved as Complying Development. The proposal, including the height variation, is within this 22m Complying Development height limit. • Focussing built form in the northern part of the site will enable the creation of a new, publicly accessible piazza, and the retention of the site's heritage significant buildings and their curtilage. • The proposal will improve and enhance access to open space. This includes the creation of a publicly accessible piazza adjacent to St Mary's Church, and the undercroft play space at the corner of Miller and Carlow Streets which requires a greater floor to ceiling height at ground level. • The proposed development will have an appropriate relationship with adjoining development, and the proposed building setbacks have been designed to attenuate the perceived bulk and scale of the development. • Buffer landscaping has been implemented into the design to soften the appearance of buildings along the street frontages. • A contemporary palette of materials will be utilised to contribute to the modulation of the building façade. • The bulk and scale of the proposal is compatible with the existing and expected future development on adjoining sites.
Disruption to character of Carlow Street through building height disparity.	Resident 2 Carlow Street	Refer to discussion above. The proposal has been refined to better respond to the character of Carlow Street.
Height of building unsympathetic to surrounds as all other buildings are max 12m in height and 6m setback	Residents 3 Carlow Street	Refer to discussion above. The proposed height has been reduced significantly since the initial SSD submission and is considered appropriate given the benefits afforded by the proposed massing strategy and the absence of adverse overshadowing, visual or public domain impacts.

5.2 Heritage

Weir Phillips Heritage and Planning has provided a detailed response to the heritage issues raised at **Appendix G**. The responses are summarised below.

Issue Raised	Submitter	Response
The bulk scale of the building at the corner of Miller and Carlow Street has not been assessed. DPE considers that the scale of the proposal at this corner should be reduced and the design of the proposed corner building can better respond to heritage aspects of surrounding context.	DPE	<p>The proposed building at the corner of Miller and Carlow Street has been reduced in scale since the original SSD submission and has been further refined as part of this Submissions Report. The following amendments have been undertaken:</p> <ul style="list-style-type: none"> • The expressed solid blade forms to Level 3 of the building that originally came out to the lower podium perimeter have been removed, the elevation is now set in to create a reduced visual envelope at this level and provides an appropriate scale relative to the North Sydney Hotel. This is combined with a more streamline glass framing and finely detailed awning that makes the form and scale of the building more recessive. • The proposed scheme is clearly contemporary in style, being finely articulated and considered, utilising a range of quality material and finishes in keeping with and sympathetic to the heritage items in the vicinity and Heritage Conservation Area. • The photo-voltaic panels have been amended to reduce the height of the roof and visual bulk at this level. <p>The proposed building at the corner of Miller and Carlow Street is located within a diverse urban setting which exhibits various architectural styles, setbacks, building heights, form, scale, landscape and signage including:</p> <ul style="list-style-type: none"> • The four/five storey Grandstand and entry to the North Shore Oval with open paved and landscaped forecourt. • The contemporary six storey viewing media tower and single storey entry booths and fencing to the North Sydney Oval. • The wider setting of the St Leonard's Park with mature tree curtilage to Miller Street. • The five-lane carriageway of Miller Street including street signage, traffic lights, large scale overhead cantilevered digital signage and electrical cables. • The contemporary three and four storey rear elevation of the North Sydney Oval Grandstand and colonnade to Miller Street. • The Federation Free Style two and two/three storey North Sydney Hotel. <p>The proposed, revised building form sits comfortably and sympathetically within this diverse urban context of Heritage items and contemporary urban structures.</p>
The current proposal does not appear to support the conservation of the heritage items on the site or fully assess potential heritage impacts on the site and surrounding HCA. The HIS does not fully analyse the new buildings height, form, materiality, architectural character and relationship to nearby heritage items.	DPE	<p>Weir Philips has updated the HIS to include the requested information (refer to Appendix F). A high-level summary of the findings is provided below:</p> <ul style="list-style-type: none"> • The proposed works to the St. Mary's Church and Garden will have an acceptable impact on the Church. • The proposed works will have a minimal and acceptable impact of the St. Mary's Presbytery. • The proposed works have a minimal and acceptable impact on the St. Mary's Primary School. <p>With respect to heritage items surrounding the site:</p> <ul style="list-style-type: none"> • The proposed works will have a minimal and acceptable impact on the row of terraces at 45-51 Ridge Street, North Sydney. • There are no direct view corridors between the heritage row of terraces at 240-248 Miller Street, North Sydney and the section of the site where the proposed works are being undertaken. • The proposed works will have a minimal and acceptable impact on St. Leonards Park.
Inadequate submitted images of the proposed plaza to the north of St Mary's Church and to the north and west of the Presbytery Building. Need to amended images to provide a	DPE	<p>WMK has prepared a series of images to show the proposed works in the context of the Church Group. These are included in the Heritage Response Letter (Appendix G).</p>

Issue Raised	Submitter	Response
clear description of existing situation, setting, curtilage and landscape character.		
Visual Impact Analysis (VIA) addresses views from the public domain only. Update to demonstrate the relationship between heritage items and new development, particularly in relation to the Presbytery as it currently shows only the public domain.	DPE	An updated VIA is provided in Appendix K . It confirms that the proposal has acceptable visual impact on the St Mary's Church and Presbytery and incorporates measures that make the pavilion building to the west of the Presbytery appear as a compatible and ancillary building.
The HIS does not provide a detailed description of St Mary's Church and Presbytery and St Mary's Catholic Primary School. The HIS needs to be updated to include a photographic and written description of each building, including identification of its architectural character, any notable features alongside the condition and integrity of the building.	DPE	Weir Philips has updated the HIS to include the requested information (refer to Appendix F).
Did not submit a diagram identifying original fabric and later changes to each building to assist in understanding the degree of alteration to original fabric.	DPE	<p>The requested diagram is provided at Appendix G and is replicated below at Figure 16.</p>  <p>Grading of Fabric</p> <ul style="list-style-type: none"> Original Fabric Additions To be demolished. <p>Figure 16 – Grading of fabric diagram Source: Weir Philips</p>
The HIS did not make clear the significance of the fabric of the heritage items on site or what is original and may be later altered. If all is original, the HIS did not discuss whether proposed action has a positive or an adverse heritage impact in section 6 (Effect of Work) as well as what decisions or recommendations may be	DPE	<ul style="list-style-type: none"> St. Marys Catholic Primary School: There are no proposed works to the significant heritage fabric of the St. Mary's Primary School Building. St. Marys Catholic Church: There are proposed works to the significant heritage fabric of the St. Mary's Catholic. Refer to comments above and Appendix F for an assessment of the heritage impact of the proposed works to the Church. St. Marys Presbytery: There are proposed works to the significant heritage fabric of the St. Mary's Presbytery. Refer to comments above and Appendix F for an assessment of the heritage impact of the proposed works to the Presbytery.

Issue Raised	Submitter	Response
considered a mitigation measure.		
No reference is made to CA18 - Holterman Estate D, needing the HIS to include a description of the relevant portion of this HCA, statement of significance and discussion of potential impacts of proposal on HCA.	DPE	<p>Weir Philips has provided a description of the Holterman Estate D HCA and an assessment of the potential impacts on the HCA. In summary:</p> <ul style="list-style-type: none"> • The section of the HCA in the vicinity of the site adjoins a small section of the site on the opposite side of Carlow Street. There are direct view corridors across Carlow Street between the HCA and the proposed works. • The proposed works adjacent to the HCA includes removal of the existing structures on the school site opposite the HCA and construction of a new, four-storey (above ground) building. • The proposed works will have an acceptable impact on the HCA for the following reasons: <ul style="list-style-type: none"> - The school buildings currently opposite the HCA on Carlow Street present as a diverse mix of buildings with little or no architectural merit. The existing structures poorly address the HCA and provide little or no consideration to the significance of the HCA opposite. - The proposed scheme provides a considered, coordinated and more sympathetic architectural resolution, and will enable an enhanced understanding and appreciation of the HCA. - The proposed design is a highly considered, articulated and contemporary architectural scheme that is clearly stylistically separate to the HCA but incorporates a palette of materials, finishes and a third storey setback that provides a height, form and scale that is in keeping with the HCA. - The proposed school buildings are behind the main northern view corridors to the HCA and do not block or obscure this view corridor. - Carlow Street is planted with mature London Plane Trees that provide a visual buffer to the proposed works and the HCA. - Finally, historical photographs have shown that prior to the current building fronting Carlow Street, there was a substantial three-storey building opposite the HCA. This building had a similar form, bulk and scale as the proposed building.
Architectural plans (demolition and proposed) need to be updated to include scale of drawings to maintain legibility of original layout.	DPE	The Architectural Drawings (Appendix A) have been revised in line with DPE's comments.
HIS did not identify or describe the setting and curtilage of the church group or include adequate analysis of the proposed impact of landscaping on the setting and relationship of group. Further, detail needs to be added for the heritage impact of the proposed café/canteen on the appreciation of the Presbytery and setting of church group.	DPE	<p>Weir Phillips has provided a description of the Church Group, and an assessment of the proposed works on the significance of the Church Group. In summary:</p> <ul style="list-style-type: none"> • The existing setting is generally dominated by hard paved surfaces including the existing at-grade car park, courtyards and main play space in the north part of the site. • The proposed works will improve the setting of the Church Group by providing: <ul style="list-style-type: none"> - A piazza - which enhances the setting and connectivity of the existing buildings, and provides a welcoming and embracing public entrance to the precinct. It also increases and improves the visual curtilage of the Church and connects the three buildings within the Church precinct through a unifying landscape/pedestrian element. - A pre-function courtyard - which removes an existing asphalt driveway and improves the visual curtilage of the Presbytery, and enhances the setting and understanding of the Presbytery within the Church Group. - A sharedway - which removes the existing asphalt driveway and replaces it with a more pedestrian style finish and landscaping, more in keeping with the heritage significance of the Church Group and setting. The proposed sharedway increases and improves the visual curtilage of the Church and Primary School which enhances the setting and understanding of the Presbytery within the Church Precinct. - Works to the St Mary's Church Garden - which removes the existing intrusive pebblecrete pathways and replaces them with a granite paver more in keeping with the heritage significance of the Church. The proposal retains and reuses all significant sandstone fabric and plantings. The proposed works improve the visual curtilage of the Church and Primary School. - The proposed canteen - which will have an acceptable impact in the Church Group as it is lower in height, bulk and scale than the Presbytery and is physically and visually removed from the Church and Primary

Issue Raised	Submitter	Response
		School. The canteen building is of a contemporary architectural style, materials and muted tones, and has been designed to be recessive and to compliment the Federation style of the Presbytery building.
No provided assessment of the impact on North Sydney Hotel, requiring detailed analysis of form, scale, materiality and fenestration detail of new building as well as analysis of view impacts.	DPE	<p>The proposed building at the corner of Miller and Carlow Street has been carefully designed and considered so that the proposed form, scale and materiality are sympathetic to the North Sydney Hotel. In summary:</p> <ul style="list-style-type: none"> • The upper level of the proposed structure has been revised to be well setback from Miller and Carlow Street so that the four-storey podium height sits comfortably with the height of the two - three storey height of the North Sydney Hotel. The podium reflects a similar parapet form to emulate the two - three storey parapet height of the tall decorative parapet of the Hotel. • The proposed solid masonry architectural style is in keeping with the architectural form and massing of the Hotel. • The proposed materials of face brick and glass are in keeping with the materiality of the face brick, render and glass of the Hotel. • The proposed fenestration is deeply set back from the face brickwork frame, and reflects the deep glazing reveals of the Hotel fenestration and recesses of the arched balcony colonnades to the first floor elevations to Miller and Carlow Streets. • The fenestration within the proposed masonry frame is vertically proportioned and in keeping with the vertical double hung windows and tall arched colonnades of the North Sydney Hotel.

5.3 Traffic and Transport and Drop Off and Pick Up

Issue Raised	Submitter	Response
Insufficient analysis of existing queueing, safety and congestion issues at drop-off/pick-up entry and exits on surrounding roads to indicate future impacts.	DPE	The observations of the existing pick-up/drop-off (PUDO) arrangement have been provided in greater detail in Section 6.5.1 of the revised Traffic Impact Assessment (TIA). The existing PUDO zone is located adjacent to the Ron Dyer Centre with entry from Ridge Street and exit onto Miller Street. This existing PUDO zone is approximately 20m long and accommodates three vehicles. To manage vehicle movement and queueing, staff are present to direct the vehicles through the car park aisles, rather than proceeding straight into the PUDO zone. This circulation arrangement allows for an onsite queue of 189m from the entry at Ridge Street to the PUDO zone, and a queue of 70m to the exit at Miller Street. Queues are generally contained on-site, however queues occasionally overflow onto Ridge Street.
Did not justify travel mode splits and proposed targets through survey of minimum half Marist College North Shore Students.	DPE	A second questionnaire survey of the students was undertaken by TTPP which yielded a response rate of 86%. The survey results are detailed in Section 3 of the revised TIA which have lead to modified travel mode splits and targets. The results indicate a high dependency on car usage for staff (90%) and primary students (66%-72%), despite the site's proximity to bus services. The majority of high school students travel to/from the school by public transport (66%-77%), mostly using public buses.
Did not include brief details on potential impacts of car park vehicles spilling onto surrounding roads and queues stopping circulation of roads/parking aisles/local roads from pick up drop off within the operational management plan	DPE	<p>The proposed development substantially improves the existing PUDO arrangements. The proposed PUDO arrangements are detailed in Sections 6.5.2 – 6.5.3 of the revised TIA.</p> <p>As part of the redevelopment, it is proposed to reduce vehicle queue lengths to the existing PUDO zone, by splitting the primary school traffic into two PUDO zones. The existing zone is to be extended in length from 20m to 40m (capacity for around 6 vehicles) and retained for Kindergarten to Year 1 students only.</p> <p>The increased vehicle queueing capacity on exit would assist with ensuring exiting queues are contained on-site. Notwithstanding, delays to exiting vehicles are anticipated to reduce with Ridge Street containing lower traffic volumes and vehicle speeds than Miller Street, where the current site egress is located. The remaining primary school students arriving by car are to be relocated to the Carlow Street car park. The new</p>

Issue Raised	Submitter	Response
		<p>Carlow Street PUDO facility would also be accessed by high school students.</p> <p>The PUDO facility at the Carlow Street car park provides a 30m long PUDO area for Years 2 to 12, which enables around 4 vehicles to stop and pick up/drop off students. The adjoining 13 car spaces are to be used as a pedestrian area during PUDO, with vehicles stopping within the aisle to pick up/drop off.</p> <p>The proposed site's traffic management plan will, at the minimum, include personnel to manage traffic at the access point from the road and at the PUDO zone itself. The objective of the traffic management personnel would be to ensure that the PUDO traffic is continuously flowing, that parents/guardians are not parking along the roadway/undesignated zones (e.g. ensuring that the aisle at the Year 2-12 zone is split into two lanes), are not undertaking manoeuvres that disrupt traffic and are assisting students in and out of vehicle where required, to reduce potential delays at the PUDO zone.</p> <p>At the time of the revised TIA being prepared, on-street P10 parking spaces were available on Carlow Street and were to be displaced by the new PUDO area. These P10 spaces no longer exist. The traffic, parking, and PUDO strategy prepared by TTPP is unaffected by this minor change.</p>
<p>AIMSUN model does not include:</p> <ol style="list-style-type: none"> 1. Evidence of using single offset times from the relevant LX file 2. Modelling of intersections as Actuated rather than Fixed signals 3. Consider delays associated with pedestrian crossings in coding the traffic lights, including approaches where there is no pedestrian protection arrow 4. Correct and realistic coding of southbound bus movements/merging at the Pacific Highway/Miller Street 5. Redundancy of the Static Assignment and Departure OD adjustment given the linear nature of the network (with no alternative routes) and presence of traffic count data 6. Amend bus dwell times and schedules on Miller Street during AM and PM to show realistic queues Consider increase in AM peak travel times of the 2036 northbound after Ridge Street 7. Number of unreleased vehicles in all scenario years 	DPE	<p>An updated model development report is provided in Section 3.11 of the revised TIA.</p> <ol style="list-style-type: none"> 1. LX files were obtained from Transport for NSW and used to set the offsets in the models. 2. All traffic signals in the model have been converted to Actuated signal logic. 3. Pedestrian protection and pedestrian crossings have been added to all signalised intersections. 4. Lane turn movements have been corrected. Bus operations were observed on site. It was found that the number of buses in the timetable exceeded the number of buses observed. Therefore, some school buses were removed from the timetable and bus turning movements calibrated to the volumes from the counts. After doing this, the buses appeared to replicate what was observed on site. 5. The static assignment and the departure adjustment are not redundant and were used appropriately in the development of the model. Correspondence with Aimsun confirms that the use of departure adjustment in corridor models is appropriate for corridor models. 6. Bus dwell times were observed on-site and found to be reasonable for the location. 7. Models have been further refined and re-run. Further commentary has been added to the report.
<p>SIDRA does not address:</p> <ol style="list-style-type: none"> 1. Minor deficiencies with Lane Geometries, Lane Movements, Priorities and Signal Phasing 2. Use of incorrect Pedestrian Walking Speed (Average) 3. Consider pedestrian protection delays in all turning movements 4. Evidence of using signal offset times from the relevant LX file 5. In network queue outputs, show Percentile value and not Average value 	DPE	<p>Revised modelling details are provided in Sections 8.2 and 8.3 of the TIA.</p> <ol style="list-style-type: none"> 1. Lanes and priorities have been corrected in the model. 2. Walk speed has been changed to 1.2 m/s 3. LX files have been obtained from Transport for NSW and used to adjust the offsets. 4. Average queues were used to calibrate the models as per Sidra recommendations. Setting have been set back to 95th percentile for the model results.

Issue Raised	Submitter	Response
<p>Did not make clear the design and use of PUDO zone for K-1 students on north-south access. DPE want:</p> <ol style="list-style-type: none"> 1. Updated architectural/landscape plans showing surface PUDO zone 2. Confirmed number of PUDO capacity and ability for vehicles to pass in event no available PUDO spaces 	DPE	<p>The proposed PUDO arrangements for K-1 students on the north-south access are described in further detail in Section 6.5 of the revised TIA.</p> <p>The existing zone is to be extended in length from 20m to 40m (capacity for around 6 vehicles) and retained for kindergarten to year 1 students only. Kindergarten to Year 1 students encompasses the year groups with the longest delays and associated queueing during pick up and drop off periods.</p>
<p>Did not make clear the adequacy of PUDO facilities:</p> <ol style="list-style-type: none"> 1. If existing PUDO is capable of managing existing peak demand and extent of queueing onto Ridge Street if queueing. 2. Provide assessment of proposed PUDO spaces to demonstrate that sufficient provided to meet demands during peak periods 3. Confirmation of the predicted max vehicle queue length for each proposed PUDO during peak periods 4. Confirmation if PUDO times for Yrs2-12 and childcare overlap and if increased demand will have adverse queueing impacts 	DPE	<p>The proposed PUDO arrangements are considered adequate, the details of which are provided in Section 6.5 of the revised TIA.</p> <p>The increase in student numbers is much lower than the increase in PUDO capacity. The revised TIA indicates an increase of 56 vehicles per hour which is largely related to high school students, who are more efficient in PUDO activities, and are likely to be dropped off in the surrounding streets and car parks, out of convenience for parents and guardians which is similar to existing conditions.</p> <p>The childcare and school PUDO periods do overlap to some extent, however the childcare is over a more extended period of time which results in minimal impact on the Year 2 – 12 PUDO. In addition, the design of the basement allows for the childcare spaces to be disaggregated from the school PUDO to allow for continued traffic flow and avoid interference from childcare car parking. In addition, the school currently has a robust management plan to control the PUDO system. This will be amended to suit the new arrangement to allow continuous flow and minimal congestion.</p> <p>At the time of the revised TIA being prepared, on-street P10 parking spaces were available on Carlow Street and were to be displaced by the new PUDO area. These P10 spaces no longer exist. The traffic, parking, and PUDO strategy prepared by TTPP is unaffected by this minor change.</p>
<p>Did not make clear the proposed allocation of parking spaces at:</p> <ol style="list-style-type: none"> 1. Basement level of Carlow Street building as RtS states differently to architectural drawings 2. Use and allocation of Ron Dyer spaces 3. Use of Carlow Street building PUDO and childcare spaces outside of PUDO times 	DPE	<p>The parking provision calculation has been modified to be consistent with WMK's architectural design (including childcare drop off parking), as described in Section 5.1.6 of the revised TIA.</p> <ol style="list-style-type: none"> 1. The Carlow Street car park provides 54 parking spaces. 2. The Ron Dyer Centre has an existing provision of 40 parking spaces, and proposed provision of 37 parking spaces. 3. The Carlow Street car park is available to Parish visitors outside of school hours (e.g. weekend services), and the 13 senior drop off / visitor parking spaces will only be available for use outside of the PUDO periods, when they are blocked off for Year – 12 PUDO activities.
<p>No confirmation of location and comparison of the amount of existing bicycle parking spaces on site and their designation (staff and students) to proposed</p>	DPE	<p>There is no existing bicycle parking provided on the site. 99 bicycle parking spaces are proposed for students, and 10 spaces are provided for staff. The total provision of 109 bicycle parking spaces are provided in multiple locations around the school (see p. 68 of the WMK design statement in Appendix B).</p>
<p>Ensure the local traffic committee have approved the use of the roadway at Miller Street and Carlow Street as well as the use of local roads for drop off and pick up areas.</p>	Council	<p>The proposed PUDO arrangements will be located largely on campus and will not significantly impede on the surrounding road network. Furthermore, any on-street construction zones to be established will require the approval of North Sydney Council. A condition of consent is invited in this regard.</p> <p>At the time of the revised TIA being prepared, on-street P10 parking spaces were available on Carlow Street and were to be displaced by the new PUDO area. These P10 spaces no longer exist. The traffic, parking, and PUDO strategy prepared by TTPP is unaffected by this minor change.</p>
<p>Miller Street use needs to be considered due to impacts from the Warringah Fwy Upgrades and Western Harbour Tunnel SSDs.</p>	Council	<p>Both the Warringah Freeway upgrades and the Western Harbour Tunnel SSDs have been considered in the SIDRA and AIMSUN traffic modelling of Miller Street.</p>

Issue Raised	Submitter	Response
		<p>The traffic generated by the proposed school development would have a minor impact to the surrounding road network, including that of Miller Street.</p> <p>An upgrade to the Miller/Falcon Street intersection is proposed as part of the infrastructure works (being carried out by others) to accommodate the forecasted traffic growth.</p>
<ul style="list-style-type: none"> Heavy Rigid Vehicles in reduced lane space will impact traffic flow during construction, impacting both vehicles and pedestrians Risk to student pedestrians both during and after construction phase with increased traffic <p>Documentations did not make reference to:</p> <ul style="list-style-type: none"> assessment of vehicular movements at intersection of Carlow and West Streets and ease of Heavy/Medium trucks to make right-hand turns into West Street impact on Tucker Street and Carlow Street intersection whether directional restrictions will be placed on Carlow Street carpark egress assessment of exiting vehicles on functionality of Carlow/Miller Street traffic signals assessment of traffic in future years when school student capacity increases Needs to consider chance students will cross at areas other than designated pedestrian lights. Too great a reliance on the success of the Green Traffic Plan. 	Residents 1 Carlow Street	<p>Swept path analysis has been conducted by TTPP and a Construction Traffic Management Plan (CTMP) has been prepared in anticipation of potential construction traffic. These both confirm that the construction traffic will be mitigated and the impacts to traffic movement and pedestrians will be minimal.</p> <p>During construction, the safety measures set out in the CTMP will be implemented to minimise impacts to student pedestrians. Following the completion of construction works, the school staff will monitor the grounds during PUDO periods and the design of the proposed development is such that there will be less car movement around the ground floor of the school campus. Furthermore, Section 9 of the revised TIA sets out the recommended road and personal safety CPTED principles to be implemented into the proposed development prior to the completion of construction.</p> <p>The revised TIA confirms that the proposed development will have a minimal impact on the surrounding road network, including the intersections of Carlow/West Street and Tucker/Carlow Street. The AIMSUN and SIDRA modelling have indicated that any future traffic growth is highly likely to be a result of the Western Harbour Tunnel infrastructure project, rather than the subject development. Furthermore, the proposed increase in student capacity formed part of the assessment carried out by TTPP which confirmed that despite this school population increase, the traffic impacts to the local road network are negligible.</p>
Needs to be a commitment that the 7 car spaces lost during construction will be returned.	Residents 1 Carlow Street	The provision of 114 parking spaces is appropriate to meet the demand from both staff and childcare/student PUDO. Furthermore, the PUDO arrangements are now located off the street and within the school campus, which is an overall improvement. Justification relating to the adequacy of parking provision is provided in Section 5.1.6 of the revised TIA prepared by TTPP.
Claimed perpetuation of current congestion through inclusion of a driveway with a loading dock on a narrow street.	Resident 2 Carlow Street	The location of the driveway and loading dock is appropriately justified by swept path analysis and extensive modelling. This will not give rise to any adverse impacts on traffic congestion or site access.
No notice of previous concerns expressed regarding inadequacy of traffic studies undertaken	Owners Corporation Committee for Beauchamp Square	The TIA prepared by TTPP dated 22 December 2021 has been reviewed by DPE and has also been subject to a peer review by Bitzios Consulting. The TTPP report has been updated to address the concerns raised by DPE and the peer review. It is considered that the traffic studies that have been undertaken are adequate to demonstrate that the proposed development will not have any adverse impact on the operation of the road network.
Increase in traffic flow and impact on emergency vehicles due to overdevelopment of site in an already congested area from 1469 to 2261 students and staff (53% increase).	Residents 3 Carlow Street	The modelling undertaken by TTPP has confirmed that the subject development will give rise to very minor impacts on future traffic growth in the North Sydney locality, including access by emergency vehicles.

Issue Raised	Submitter	Response
Relocation of existing main traffic flow entry and exit, including garbage collection. Suggesting using present entrance/exits on Miller and Ridge Streets.	Residents 3 Carlow Street	<p>The proposal continues to use the existing vehicular access point off Ridge Street.</p> <p>Removal of the existing vehicular access point on Miller Street has been a conscious decision. Miller Street is a classified road, and so Transport for NSW does not support vehicular access to/from this street.</p>
Insufficient parking spaces in proposed development.	Residents 3 Carlow Street	<p>The proposed Carlow Street car park will provide 48 spaces proposed for staff. With the inclusion of the existing accessible spaces on Ridge Lane that will be retained, this gives the proposed development a total parking provision of 54 spaces. This compares to an existing provision of 63 unreserved spaces available to school staff, including 44 formal spaces and 19 informal spaces.</p> <p>With the addition of spaces provided in the Ron Dyer Centre and those spaces available for the childcare drop-off, senior drop-off, and visitor parking, this results in a total proposed provision of 114 car parking spaces. Notwithstanding that an SSDA is not required to be assessed against the provisions of a development control plan, the proposed parking provision exceeds the parking requirements set out in North Sydney DCP.</p>

5.4 Landscaping and Tree Removal

Issue Raised	Submitter	Response
Need to confirm the 'as existing' and 'as proposed' tree canopy coverage in sqm and as a percentage of the site to confirm the difference between existing and proposed canopy coverage	DPE	<p>The existing and proposed canopy cover is confirmed below:</p> <ul style="list-style-type: none"> Existing Canopy Cover = 4,932m² or 22%. Proposed Canopy Cover = 5,984m² or 26% <p>The proposal provides over 1,000m² of additional tree canopy cover, and exceeds the 25% target established by GA NSW.</p> <p>The proposed tree canopy cover comprises 2,546m² of existing retained canopy and 3,438m² of new canopy.</p> <p>Further detail is provided on Drawing L-005 and page 53 of Landscape Design Report (Appendix B).</p>
Need to clarify the total number of trees for removal and retention - whether trees for proposed retention are included within calculation of total number of "trees for removal" (59) or "trees for retention" (17).	DPE	<p>The number of trees proposed for removal and retention is summarised below:</p> <p>Tree removal:</p> <ul style="list-style-type: none"> Total removal = 63 High value = 3 Moderate value = 7 2 trees (Trees tQ49 & tQ51) located on Miller Street road reserve. <p>Tree retention:</p> <ul style="list-style-type: none"> Total retention: 39 trees High value = 2 Moderate value = 7 21 trees are located outside of the site boundaries. <p>Further detail is provided in the landscape documentation in Appendices C, D, and E. A revised arboricultural impact assessment is provided with the landscape response letter at Appendix E.</p>
Need to update Arboricultural Impact Assessment to confirm total number of proposed replacement trees	DPE	There are 114 replacement trees proposed in the updated Landscape Plans. A revised arboricultural impact assessment is provided with the landscape response letter at Appendix E .
Street trees need to be approved by Council.	Council	Noted. This can be addressed as a condition of consent. Sydney Catholic Schools is happy to work with Council to select appropriate street tree species.

Issue Raised	Submitter	Response
Public piazza needs to remain unfenced and accessible by community at all times	Council	Noted. The piazza will be unfenced and will be open to the public at all times.
Request for landscaping to minimise removal of mature Indigenous trees within site along the south eastern section of Carlow Street	Residents 1 Carlow Street	The proposal has been designed to maximise tree retention, and minimise tree removal where possible. As noted above, there will be extensive replacement tree planting (114 replacement trees are proposed). The proposal also provides over 1,000m ² of additional tree canopy cover, and exceeds the 25% target established by GA NSW.
Loss of existing open space at ground level along Carlow Street frontage.	Residents 3 Carlow Street	The existing Carlow Street frontage contains a combination of buildings and hard stand open space. Under the proposal, there will continue to be an undercroft play area in this location, and a significant landscaped setback to provide a buffer to the public domain. As a general principle, the proposed built form has been concentrated in the north of the site, at the corner of Miller and Carlow Streets, to enable the creation of the piazza adjacent to the Church. This design principle has been supported by the GA NSW and SDRP throughout the consultation process.

5.5 Other Issues Raised

Community Use

Issue Raised	Submitter	Response
Confirm what existing buildings/spaces are currently available for use by community and if any proposed changes to existing arrangements	DPE	<p>There are currently no community uses of the existing school buildings. It is proposed selected facilities, including but not necessarily limited to the Auditorium, library and outside areas, may be operated outside of standard school hours on a "user pays" basis. Hours of operation are anticipated to be between 6:00pm – 10:00pm on weekdays and during weekend periods. Weekend usage times are to be determined but could be expected to be within 6:00am – 10:00pm. The Auditorium is on the east of the site with direct Miller Street frontage, so it is ideally suited to use by 3rd parties.</p> <p>The Auditorium is intended to be predominantly a school facility, however outside of the school hours this could be utilised by the neighbouring church for large gatherings and to the general public on a 'user pays' basis for productions, hospitality or similar.</p> <p>Any impact on the amenity of the local area would be limited to the operating hours (up to 10:00pm and in similar keeping with the operation of the North Sydney Oval events. As part of the EIS a Traffic Impact Assessment has been undertaken that takes into account of any traffic impact due to such use of the Auditorium. The proximity to North Sydney Station, future Sydney Metro and Busses to multiple locations would alleviate adverse traffic impacts.</p>

Construction Management

Issue Raised	Submitter	Response
Inaccurate staging schedule in the CMP in reflecting what is or is not proposed as part of this application. Also does not include the predicted timeframe for construction of each stage.	DPE	Table 2 in Section 6.1 of the revised operations statement prepared by CTPG (see Appendix L) provides an accurate staging schedule to clarify what works will form part of each stage and how long each stage will last for.
Did not clarify what colour coding purple and brown refers to on page 13 onwards of CMP. The table is also	DPE	The diagrams in the CMP have been redrafted and labelled to clarify the meaning behind each image (see Appendix K).

Issue Raised	Submitter	Response
inconsistent with the Phasing Diagrams at Appendix 1.		
<p>The construction staging plan/table needs to be updated to include:</p> <ol style="list-style-type: none"> 1. Predicted construction start and finish dates 2. Which stage(s) car parking spaces and PUDO facilities are removed and provided 3. Which stage(s) student and staff numbers are increased 4. Which stages Miller Street vehicle entrances and existing through-site vehicle route is removed 5. Review of consistency between CMP and Design Report at Stage 03B and clarification in which stage(s) the demolition of Block A and portables and construction of pavilion is proposed to occur 	DPE	These requirements have been provided in Section 6 of the revised operations statement prepared by CTPG (see Appendix L).

Architectural Plans

Issue Raised	Submitter	Response
Architectural plans do not correctly show the 6 parking spaces adjacent to St Mary's Church as accessible spaces as they are currently shown as 7	DPE	The updated Architectural and Landscape Plans show the parking spaces adjacent to St Mary's Church as 6 accessible spaces (refer to Appendices A and C).
Does not include elevation/sectional drawings showing amendments to Ron Dyer Centre and Presbytery as well as the proposed 2 storey pavilion building	DPE	The requested plans, elevations and sections have been provided as part of the revised Architectural Drawings at Appendix A .
<p>Does not include new/upgraded computer generated imagery (CGIs), specifically:</p> <ol style="list-style-type: none"> 1. Taken within site to show proposed changes (new Courtyard north of Church, changes to extension of Presbytery, revised Ron Dyer Centre and Carlow/Miller Street buildings from the northern quadrangle) 2. Update DA-802 (CGI) to show RtS amended Miller Street building. 	DPE	Additional images from within the site, as well as revised CGIs, are provided with the revised Architectural Drawings and in the Architectural Design Statement at Appendices A and B .
Does not include temporary building plan and elevation(s) for proposed temporary classrooms etc during construction as well as predicted life-span of temporary structures and trigger/timing for their removal	DPE	<p>The temporary buildings are shown on DA-112 (refer to Appendix A).</p> <p>The temporary buildings are expected to be in place for up to 48 months.</p>
Include entire site in updated drawings. Currently do not show school buildings/structures at western extent of site adjacent to Cassini Avenue or proposed internal changes to Block F	DPE	The requested details are provided as part of the revised Architectural Drawings at Appendix A .
Does not provide a roof plan for buildings shown on drawing DA-104	DPE	A Roof Plan for these buildings has been provided at Drawing DA-106 (refer to Appendix A).
Need to replace details of potential future buildings from drawings and replace with proposed or retained arrangement, remaining consistent with statement that "Stage 02A Building +	DPE	The requested details are provided as part of the revised Architectural Drawings at Appendix A .

Issue Raised	Submitter	Response
Walkway" is "Subject to Separate Approval".		
Delete Ron Dyer Centre connection from future walkway and include it with Stage 02A future application	DPE	This has been removed from the revised Architectural Drawings at Appendix A .

Demolition Plans

Issue Raised	Submitter	Response
Demolition drawings of the two terraces Jacaranda Cottage and other site preparation demolition works have been granted and no longer need to form part of this application. Either remove or annotate with colour change confirming separate approval has been granted.	DPE	The buildings at the corner of Miller and Carlow Streets have been removed from the demolition plans and are now shown as 'Existing Open Space'.

Air Quality

Issue Raised	Submitter	Response
<ul style="list-style-type: none"> Assessment of ability of Class A Hoardings to contain site dust Measures such as wetting dry ground were suggested to be considered 	Residents 1 Carlow Street	Measures to ensure that air quality will be maintained are provided in the preliminary CMP. The preliminary CMP, which has been updated to respond to DPE's comments, is provided at Appendix K . At this stage, the CMP is preliminary only. The level of detail provided is consistent with a preliminary CMP. When a contractor is engaged, a more detailed CMP and CEMP will be prepared. The measures noted in the submission are standard practice, and will be imposed as part of the any future CMP and CEMP.

Noise

Issue Raised	Submitter	Response
Imposition of specific and quantifiable measures to maintain acoustic impact levels to POEO noise impact standards in relation to use of rooftop play area, undecroft area and openable windows in auditorium.	Council	The submitted Noise and Vibration Impact Assessment has found that the proposed development is compliant with the relevant noise and vibration criteria controls for this type of development, and it is expected to comply with the applicable regulations with regards to noise and vibration impacts on noise-sensitive receivers.
<ul style="list-style-type: none"> Works timetabling is requested to be changed, either removing Saturday or changing time to 7am-12pm. Need incorporation of noise barriers into building design for open roof space/balconies to minimise noise impact. 	Residents 1 Carlow Street	<p>The proposed construction hours are in accordance with the NSW EPA Interim Construction Guideline, being between 7am - 5pm Monday to Saturday and no work on Sundays or public holidays. It is not proposed to change these hours.</p> <p>The Noise and Vibration Impact Assessment submitted with the first Submissions Report found that the predicted noise level of students playing on the outdoor rooftop terrace area at surrounding residential receivers are expected to comply with the project noise trigger levels without the need for noise barriers or the like.</p>

Signage

Issue Raised	Submitter	Response
Illuminated or variable message signing need to be considered with relevant planning controls - SEPP 65, NS LEP 2013 and NS DCP 2013.	Council	Signage is shown indicatively on the revised photomontages, however this is for illustrative purposes only and approval is not sought for the signage at this stage. Signage will form part of a separate development application at a later date, if required.

6.0 Updated Project Justification

This proposal for alterations and additions and the development of a mixed-use education precinct comprising a high school and Early Learning Centre has been amended and now seeks approval for the following:

- Site preparation work including remediation, demolition, excavation and tree removal.
- Retention of key buildings including St Mary's Church and Parish Centre, the former Presbytery and Monastery, St Mary's Primary School, the Ron Dyer Centre and some existing buildings on the western boundary.
- Demolition works, including demolition of existing buildings along Miller Street and Carlow Street.
- Construction of a mixed-use education precinct comprising a high school and Early Learning Centre, including:
 - Adaptive reuse of the existing Presbytery, and alterations and additions to retained educational buildings;
 - Minor alterations to St Mary's Church to improve access from the north of the building;
 - Construction of a 5 storey (including basement) education building on the corner of Carlow Street and Miller Street;
 - Construction of 4 storey (including basement) building along Miller Street, accommodating teaching facilities, an Early Learning Centre (catering for children aged 0-5 years), and an auditorium;
 - Construction of a new basement car park below the Carlow Street building, accessed off Carlow Street;
 - Provision of separated pick-up/drop-off areas for Kindergarten-1 and Years 2-12; and
 - Provision of ancillary canteen/café uses.
- Landscaping and public domain works, including creation of a new public piazza fronting Miller Street, adjoining St Mary's Church.
- Services and utilities augmentation.

This Submissions Report has been prepared to satisfy the provisions of Section 4.39 of the EP&A. Each of the submissions received during the public exhibition period has been collated, analysed and addressed.

In responding to and addressing the range of matters raised, the proposal has been refined. This Submissions Report has described and assessed changes that include a reduction in the scale and size of the proposed Miller Street building to deliver a more appropriate built form. The amendments made to the proposal result in a reduction in the environmental impact of the proposed development, compared to the original proposal described in the EIS.

No residual adverse environmental, social or economic impacts have been identified. Residual environmental impacts identified will be mitigated through the implementation of management measures for the construction and operational phases of the proposal.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is considered to be justified for the following reasons:

- The proposal will provide a significant new piece of education infrastructure to meet growing demand on Sydney's North Shore.
- The area and shape of the site allows for the provision of a significant piece of education infrastructure that meets the special design requirements for the proposed uses, whilst not resulting in any significant adverse impacts on surrounding uses.
- The proposal relocates existing at-grade parking underground to create an improved pedestrian environment. This includes the creation of a new, publicly accessible piazza adjacent to St Mary's Church, which will make a significant contribution to the public domain of Miller Street and North Sydney.
- The proposal exhibits a high standard of architectural, urban and landscape design, and provides a recognisable and high-quality contribution to the North Sydney area.
- The proposal provides sustainability initiatives of the highest level, supporting the improved environmental performance of the school.

- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the EP&A Regulation.
- The proposal is anticipated to generate a total 369 construction jobs and 61 additional operational jobs which will have broader social and economic benefits to the region.
- Traffic and parking impacts associated with the proposed development can be appropriately managed and active transport will be promoted and encouraged.

Given the merits described above it is requested that the application be approved.

7.0 Revised Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 3** below.

Table 3 – Mitigation Measures

Mitigation Measures
<p>Construction Pedestrian Traffic Mitigation Measures</p> <ul style="list-style-type: none"> • Manage and control construction traffic movements on the adjacent road network and vehicle movements to and from the site; • Trucks to enter and exit the site in a forward direction; • No provision of vehicle parking for construction workers; • Restrict construction vehicle activity to designated truck routes; • Pedestrian movements adjacent to demolition activity will be managed and controlled by site personnel where required; • Pedestrian warning signs and construction safety signs/devices to be utilised in the vicinity of the site and to be provided in accordance with WorkCover requirements; • Construction activity to be carried out in accordance with the approved hours of work; • Truck loads would be covered during transportation off-site; • Activities related to the construction works would not impede traffic flow along local roads; • Materials would be delivered, and spoil removed during standard construction hours; • Construction vehicles not to queue on adjacent roads and be wholly accommodated within the site or the nominated on-street works zone; and • Minimal construction traffic movements to/from the site will be made during peak hours where practical to minimise the impact on the wider road network.
<p>Geotechnics</p> <ul style="list-style-type: none"> • Following construction, groundwater seepage should be controlled by a properly designed drainage system including a sub-floor drainage system to create a free-draining layer below the base of the basement slab. • Excavation support: To assess the feasibility of using batter slopes, the footing level of the adjoining structures and infrastructure, and also surrounding services 'invert level should be assessed by the designer. • The anchoring systems should be designed to provide temporary support with long-term lateral support being later transformed onto the permanent structure. • Earth retaining structures should be designed to withstand the applied lateral pressures of the subsurface soil layers, hydrostatic pressure and live/surcharge loads within the zone of influence of the structure. • The bulk excavation level in the proposed Carlow Street building and Miller Street building is anticipated to be founded within residual clay. Given the anticipated loads applied by a five-storey buildings, it is not recommended to adopt shallow pad or raft footings at the basement level. Differential foundation settlement would be expected if the building is founded on a raft footing at the basement level. It is recommended that all structural loads would be taken to the bedrock
<p>Sediment and Erosion Control</p> <ul style="list-style-type: none"> • Existing stormwater infrastructure is also to be protected from incoming sediment using <ul style="list-style-type: none"> – Any Council owned road kerb entry and/or gully pits will be protected by Filter Bales and EcoSocks; and – Internal site drainage pits protected by Sediment Traps consisting of hay bales. • Site runoff within the zones of the excavation will be drained into a central holding well within the excavation. Runoff will be allowed to settle out suspended particles and debris, and an acceptable water of 50mg per litre of Non Filterable Residues (NFR) is required to be achieved prior to discharge. • Dust control, including: <ul style="list-style-type: none"> – Loose loads entering or leaving the site will be securely covered by a tarpaulin or like material in accordance with RMS and local Council Guidelines. – Soil transport vehicles will use the single main access to the site. – There will be no burning of any materials on site. – Water sprays will be used across the site to suppress dust. The water will be applied either by water sprinklers or water carts across ground surfaces whenever the surface has dried out and has the potential to generate visible levels of dust either by the operation of equipment over the surface or by wind. The watercraft will be equipped with a pump and sprays. – During excavation all trucks/machinery leaving the site will have their wheels washed and/or agitated prior to travelling on Council Roads. – Fences will have shade cloth or similar fabric fixed to the inside of the fence.

Mitigation Measures

- General construction maintenance measures, including:
 - Prior to the closing of the site each day, the road shall be swept, and materials deposited back onto the site.
 - Gutters and roadways will be kept clean regularly to maintain them free of sediment.
 - Appropriate covering techniques, such as the use of plastic sheeting will be used to cover excavation faces, stockpiles and any unsealed surfaces;
 - If dust is being generated from a given surface, and water sprays fail;
 - If fugitive emissions have the potential to cause the ambient air quality to foul the ambient air quality;
 - The area of soils exposed at any one time will be minimised wherever possible by excavating in a localised progressive manner over the site; and
 - Materials processing equipment suitably comply with regulatory requirements. The protection will include the covering of feed openings with rubber curtains or socks.

Visual Impact

- Careful consideration of line, shape and form, colour and texture in the expression of elevations.
- Integration of services such as waste management, loading zones and mechanical plant.

Construction hours

- Monday to Saturday: 7:00am – 5:00pm
- No works on Sunday or public holidays.
- A detailed Construction Management Plan is to be prepared by the contractor prior to the commencement of works.

Contamination

- Proper implementation of the remediation procedures, unexpected finds protocol and completion of the validation assessment detailed in the Remediation Action Plan.

HAZMAT

- Removal of Hazardous Materials will be carried out in accordance with the recommendations of the pre-demolition Hazardous Building Materials Survey prepared by Alliance Geotechnical at **Appendix HH**.

Light spill

- All external and landscape lighting to be designed to AS4282 “Control of the obtrusive effect of outdoor lighting”.
- Implementation of lighting techniques such as use of low glare luminaires, avoiding up-lighting luminaires, and controlling lighting on timers where required to optimise usage to meet compliance.

Flooding

- Ensure floor levels comply with the requirements of the Flood Risk Assessment and are above the 1% AEP,

Noise and Vibration

Implementation of the following mitigation measures will be required (where relevant) to manage construction related noise and vibration to surrounding sensitive receivers.

- Conduct a closed windows/open windows assessment to improve road noise mitigation.
- If necessary, reduce the amount of noise reaching the relevant receivers through the following actions:
 - Increasing the distance between noise sources and sensitive receivers;
 - Reducing the line-of-sight noise transmission to residences or other sensitive;
 - Constructing barriers that are part of the project design early in the project to introduce the mitigation of site noise; and
 - Installing purpose-built noise barriers, acoustic sheds and enclosures;
- Screening of noise transmission to residences or other sensitive land uses using temporary barriers (stockpiles, shipping containers and site office transportable can be effective barriers).
- Installation of acoustic barriers to the Level 4 AHU plantroom. Acoustic barriers can be solid or can be an acoustic louvre.
- Installation of acoustic barriers to the Level 4 condenser plantroom. Acoustic barriers can be solid or can be an acoustic louvre.
- Regarding loading dock noise and waste collection:
 - No operation before 7am or after 10pm (7 days per week);
 - Maintain rubbish trucks and braking materials to minimise or eliminate noise such as squeaky brakes; and
 - Educating drivers and collectors to be careful and to implement quiet work practices.

Mitigation Measures

- Use an appropriate silencer on the muffler and/or acoustic screen on any diesel cranes.
 - Employ alternatives to noise alarms which will cause community nuisance.
-

Green Travel

Implementation of the recommendations outlined in the GTP, including:

- Site-specific measures (such as limited on-site car parking provision, designated carpool only spaces in centrally manage car parks, walking groups/ walking school bus, bicycle user groups);
 - Offsite measures (such as improved cycling and pedestrian facilities to the future Metro Station and provision of additional car share facilities within the site surrounds);
 - Provide a transport access guide (TAG) for users;
 - Providing adequate information and communication (such as TfNSW information, cycleway finder, and the SkoolBag mobile app); and
 - Implementation of a key strategy framework action table which can be updated as and when required.
-

Waste Management

- Construction waste will be undertaken in accordance with the site-specific operational measures detailed in the Construction and Demolition Waste Management Plan prepared by Waste Audit at **Appendix AA**.
 - Operational waste management will be undertaken in accordance with the methodology detailed in the Operational Management Plan prepared by Waste Audit at **Appendix BB**.
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Structural Engineering

The detailed design for MCCNS will be designed to comply with the National Construction Code (NCC 2019) and the relevant Australian loading and design standards, including:

- AS/NZS 1170.0/2002 – Part 0: Structural design actions;
 - AS/NZS 1170.1/2002 – Part 1: Permanent, imposed and other actions;
 - AS/NZS 1170.2/2011 – Part 2: Wind actions
 - AS/NZS 1170.4/2007– Part 4: Earthquake actions;
 - AS3600: 2001 Concrete structures;
 - AS3700: 2001 Masonry structures; and
 - AS4100: 1998 Steel structures.
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