# ETHOS URBAN

# Response to Submissions and Amended Concept Proposal and Stage 1 Application

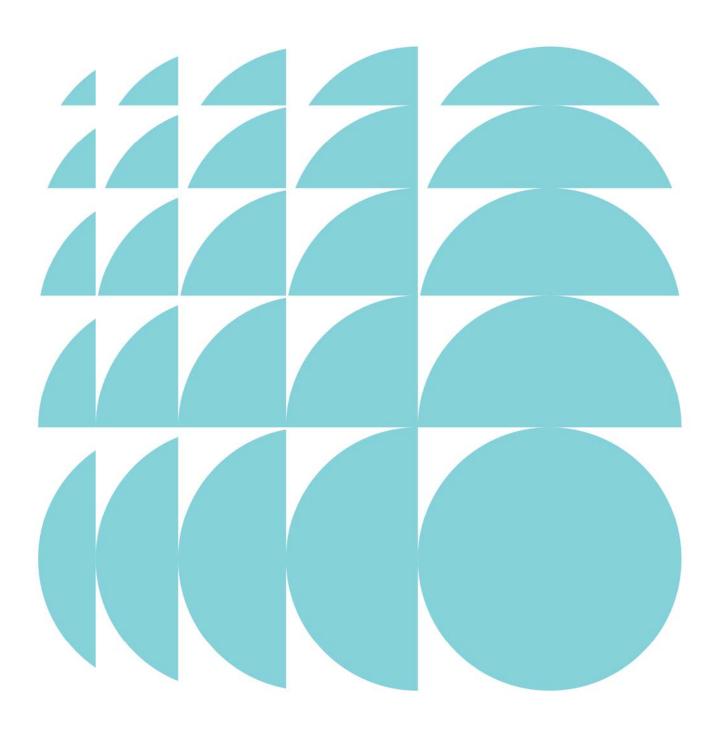
Loreto Normanhurst, 91-93 Pennant Hills Road, Normanhurst

Concept Plan and Stage 1 Application

Submitted to Department of Planning, Industry and Environment

On behalf of Loreto Normanhurst

08 February 2021 | 17074



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LTS Lockley

#### 1.0 Introduction

A State Significant Development Application (SSDA 8896) and accompanying Environmental Impact Statement (EIS) in support of a Concept Proposal and Stage 1 application for the redevelopment of Loreto Normanhurst school in Normanhurst (the site) was lodged in June 2019 with the Department of Planning, Industry and Environment (the Department).

The development application pathway for the Project will consist of a staged SSD Application pursuant to section 4.22 of the EPA Act, which will consist of:

- Concept proposal for establishment of ten (10) envelopes across the school for education and ancillary uses, including:
  - Site Layout.
  - Maximum building envelopes.
  - GFA distribution across the site.
  - On-site parking provision and distribution.
  - Approval for a school population of 2,000 students (noting Stage 1 seeks approval of a population of 1,650 students).
- Detailed consent for Stage 1 DA works including:
  - Staged approval for a school population of 1,650 students linked to the delivery of road and parking infrastructure.
  - Construction of a new 5 storey boarding house to accommodate up to 216 boarders.
  - Kerb upgrades along the Mount Pleasant Avenue and construction of two vehicular driveways.
  - Link road between Osborn Road to Mt Pleasant Avenue, including drop off and pick up arrangements, pedestrian shelter and associated landscaping and pedestrian access improvements.
  - Construction of an additional 133 car parking spaces, as follows:
  - Amendments to the Osborn Road car park including additional parking and pedestrian shelter.
  - Sports courts and underground carparking.
  - Tennis courts and underground carparking.
  - Demolition and Site preparation.
  - Landscape works.
  - Tree removal.
  - Augmentation of services and utilities infrastructure as required.

Stage 1 DA is proposed to be constructed in substages (Stage 1 - 4), as set out at Section 4.3.

The SSDA was publicly exhibited for a period of 28 day ending on 25 July 2019. During this time, 11 applications were received from government agencies, organisations and public authorities, and 66 submissions were received from the public.

The key issues raised in the submissions can be broadly grouped into the following categories:

- Built form:
- · Traffic and parking;
- Heritage; and
- · Landscaping and tree impacts.

Since the exhibition of the proposal, and given the nature and range of submissions made from agencies and the public, the proponent, Loreto Normanhurst has extensively reviewed the overall approach and elements of the original Concept Proposal and Stage 1 application. This process was undertaken with close engagement with key stakeholders, including the Department, and has accordingly led to developing an amended Concept Proposal and Stage 1 design.

The following key amendments have been made to the proposal:

- Overall refinement of all building envelopes including deletion of the tallest building (Building 3) from the Concept Proposal to address the concerns relating to built form, heritage and landscaping; and
- Inclusion of a new through site road link between Mount Pleasant Avenue and Osborn Road to allow for school
  drop offs to occur within the site and evenly distribute traffic, provision of additional on-site parking (a 72%
  increase) across Stage 1, and adoption of a range of Green Travel Plan measures that collectively will alleviate
  concerns around traffic and parking impacts.

This report, prepared by Ethos Urban on behalf of the applicant, sets out the responses to the issues raised and includes design amendments made in accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) for which approval is now sought.

This report should be read in conjunction with the original Environmental Impact Statement (EIS) prepared by Ethos Urban (including appendices and dated 18 June 2019), the Design Package prepared by Allen Jack and Cottier (at Appendix C) and the supporting documents contained within the Appendices.

Where individual responses to the issues raised by agencies are not discussed in this report, a detailed response can be found in the Response to Submissions table at **Appendix A**.

# 1.1 Numeric Overview

A numeric overview of key details is provided at **Table 1** below.

Table 1 Numeric Overview

| Component   | Existing         | As exhibited   | As amended                     |
|---|------------------|--|--------------------------------|
| Concept Proposal  |                  |  |                                |
| Site Area   | 13.02ha          | 13.02ha  | 13.02ha                        |
| Current student enrolments                              | 1,100            | -  | -                              |
| Student cap   | 1,150            | 2,000  | 2,000                          |
| Maximum building height                                 | -                | -  | -                              |
| Envelope 1 – Boarding House                             | -                | RL 203.8 (22.0 m)  | RL 199.5 (17.7m)               |
| Envelope 2 – Secondary School                           | RL 200 - 206     | RL 211.5 (20m)   | RL 211.5 (20m)                 |
| Envelope 3 – Pennant Hills Road Facility                | -                | 21.4 metres  | Deleted                        |
| Envelope 4 – Primary School                             | RL 195.5         | RL 201.5 (13.6m)   | RL 201.5 (13.6m)               |
| Envelope 5 – Mary Ward Building Envelope                | RL 202.5         | RL 209.5 (20.6m)   | RL 209.5 (20.6m)               |
| Envelope 6 – New Gymnasium                              | RL 192.4         | RL 195 (13.1m)   | RL 195 (13.1m)                 |
| Envelope 7 – Gonzaga Barry – Performing<br>Arts Centre  | RP192.5 – RL 200 | RL 200 (18.2m)   | RL 200 (18.2m)                 |
| Envelope 8 – All weather field with underground carpark | -                | 3.0 metres   | Varies with ground line (0m)   |
| Envelope 9 – Mt Pleasant Avenue Pavilion                | -                | 11.2 metres  | Deleted                        |
| Envelope 10 – Bush Chapel                               | -                | No structures proposed   | Deleted                        |
| Envelope 12 – Pedestrian Link Bridge                    | -                | RL 201.5 (13m)   | RL 201.5 (13m)                 |
| Envelope 13 – Multi-sport (P4A) Car Park                | -                | -  | RL 190.3 (3m)                  |
| Envelope 14 – Tennis Court (P1A) Car Park               | -                | -  | RL 195 (3m)                    |
| Proposed car spaces                                     | 187              | Car parking is to be provided in accordance with the Hornsby DCP controls. | 433 (+ 246)                    |
| Stage 1 Detailed Design                                 |                  |  |                                |
| Student Cap   | 1,150            | Not identified   | 1,650                          |
| Student beds  | -                | 216  | 216                            |
| Boarding House Maximum height – top of building RL      | -                | RL 203.8m  | RL199.5                        |
| Maximum height – storeys                                | -                | 6 storeys (southern elevation)   | 5 storeys (southern elevation) |
| Setbacks  | -                | Minimum of 6 metres  | Minimum of 6 metres            |
| Car spaces  | 187              | 229 (+42)  | 320 (+133)                     |

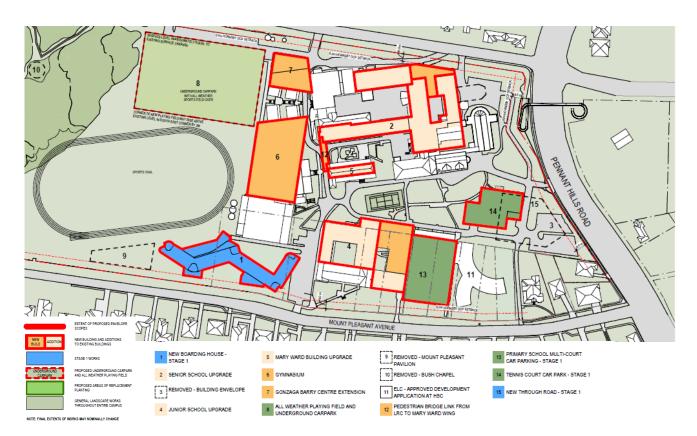


Figure 1 Concept layout plan and envelope/building identification

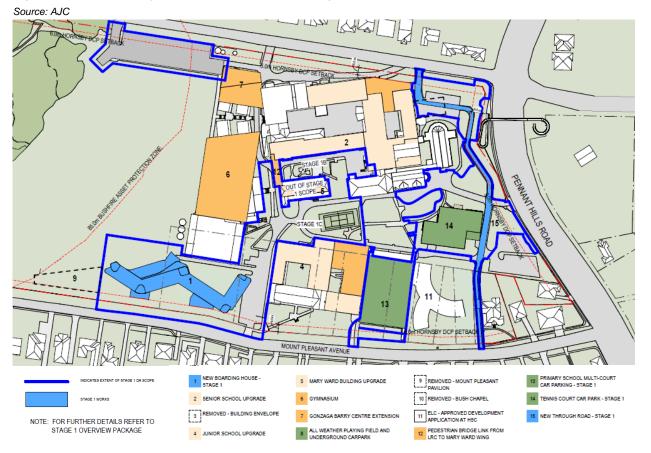


Figure 2 Stage 1 layout plan

Source: AJC

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# A diagram identifying the key changes is provided at Figure 4.



Figure 3 Original Proposal Diagram

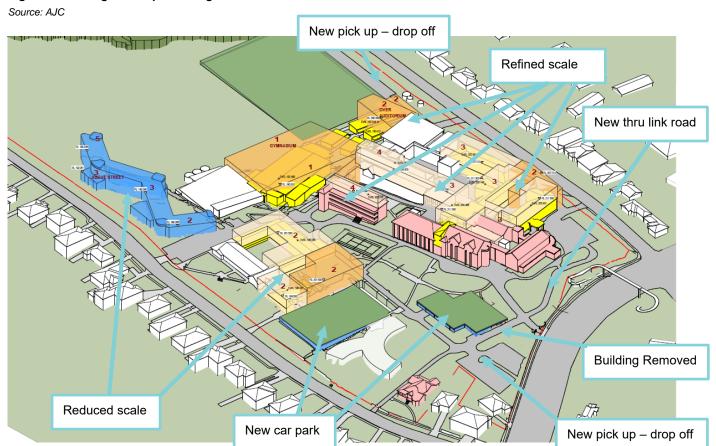


Figure 4 Key Changes Diagram

Source: AJC

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This report, prepared by Ethos Urban on behalf of the proponent, sets out the responses to the issues raised in accordance with Clause 85A of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and details the key amendments to the Concept and Stage 1 design and provides an updated environmental assessment of the amended Concept Proposal (as relevant) and final mitigation measures for which approval is now sought.

The final Concept Proposal and Stage 1 DA includes amendments made by the proponent pursuant to Clause 55 of the EP&A Regulation, including changes to address matters raised in the submissions. Where individual issues are not discussed in this report, a detailed response can be found in the response tables attached at **Appendix A** and **B**.

#### 2.0 Consultation

Since the exhibition of the EIS, the project has met with representatives from the Department of Planning, Industry and Environment (the Department) on 15 September 2020 to discuss the feedback raised in their submission, as well as undertake a site visit. Responses to the feedback and amendments to the proposal where appropriate, are included in this report and the supporting documentation.

Meetings were also held with Council on 20 July 2020 and TfNSW on 30 September 2020 to discuss traffic and parking.

Further community consultation with residential neighbours to provide an update on the design evolution and planning process was also undertaken between August – November 2020. A consultation summary report is provided at **Appendix F**.

# 3.0 Key Issues and Responses

This section of the report provides a response to the following key issues raised by the Department, other government agencies and organisations and by the public during the exhibition of the SSDA:

- Built form;
- · Traffic; and
- · Heritage; and
- · Landscaping and tree impacts.

A response to each of the individual issues raised by the Department and other submissions is provided in the response table at **Appendix A** and **Appendix B**.

#### 3.1 Built Form

#### 3.1.1 Issue

The Department, Hornsby Council, and a number of public submissions identified issues regarding the large building envelopes in the concept proposal, and that the application did not have adequate level of details to demonstrate that the envelopes fit in the context of the low-density environment and the heritage items on the site. The Department suggested that envelopes be refined to express how these buildings will fit in the surrounding environment and the relationship with surrounding heritage items.

Envelope 2 and 3 of the Concept Proposal were of significant concern, particularly in relation to the existing heritage elements and items and the general bulk and scale of these envelopes.

### **Proponent Response**

A number of significant changes to the Concept Proposal envelopes and resulting built form are proposed. A detailed response to the concerns raised by the Department, government authorities and agencies and the public are attached at **Appendix A**. An overview of the key changes that have been proposed to the Concept Envelopes are outlined in **Table 2**.

The amended Concept Proposal envelopes have been refined to respond to key issues raised from stakeholders in the exhibition period, and to respond to the current and desired future needs of the school. The design by AJC has significantly refined the proposal envelopes, including the removal of Envelope 3. The previously proposed and amended proposed envelopes is shown at **Figure 3** and **Figure 4**.

Table 2 Summary of built form revisions

| Envelope  | Changes   |
|---|---|
| Envelope 1 – Boarding House                             | The envelope is reduced with reduction in height and increased setback to Mt Pleasant Avenue.   |
| Envelope 2 – Secondary School                           | This envelope extent has been refined and the upper levels have been adjusted with form that is reflective of indicative built form more in keeping with the scale of the campus. |
| Envelope 3 – Pennant Hills Road Facility                | This envelope has been deleted to reduce impact on heritage items and to maintain the overall scale of the campus.  |
| Envelope 4 – Primary School                             | The envelope has been significantly refined.  |
| Envelope 5 – Mary Ward Building Envelope                | This envelope has been significantly refined.   |
| Envelope 6 – New Gymnasium                              | Unchanged.  |
| Envelope 7 – Gonzaga Barry – Performing Arts<br>Centre  | This envelope has upper levels have been adjusted to realign with the adjoining buildings so that it is receded from Osborn Road.   |
| Envelope 8 – All weather field with underground carpark | Representation of this envelope has been revised to better demonstrate that the field level is lower than Osborn Road.  |
| Envelope 9 – Mt Pleasant Avenue Pavilion                | This envelope has been deleted to reduce the loss of tree canopy coverage and impact on Mt Pleasant Avenue.   |
| Envelope 10 – Bush Chapel                               | This envelope has been deleted, and now refers to landscape works only.   |
| Envelope 12 – Pedestrian Link Bridge                    | Unchanged   |
| Envelope 13 – Multi-sport (P4A) Car Park                | New – to increase parking supply  |
| Envelope 14 – Tennis Court (P1A) Car Park               | New – to increase parking supply  |

As seen above, significant changes have been made to reduce the bulk and scale of the various envelopes located on site. Through this revision, the relationship with surrounding low-density development and heritage items on the site is significantly improved.

## 3.1.2 Demolition

The department requested clarification on the buildings proposed to be demolished. The Design Report at **Appendix C** outlines the strategy for demolition under the Concept and Stage 1 DA, and is shown at **Figure 5** and **Figure 6** below.

It is noted the Concept DA identifies those buildings that would be subject to investigations to determine if internal demolition or demolition in part or full demolition would be required as part of a detailed DA. No approval for demolition under the Concept is sought and a separate detailed application is required for those works.

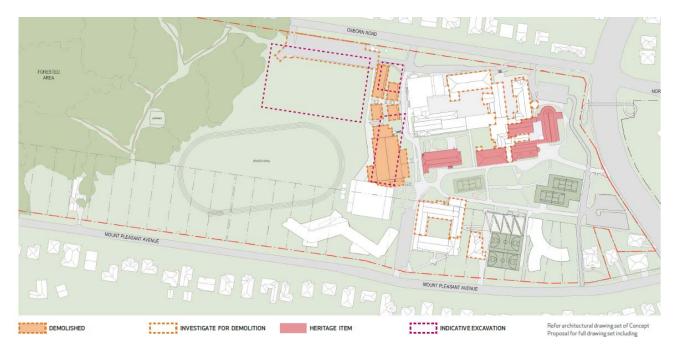


Figure 5 Concept DA demolition plan

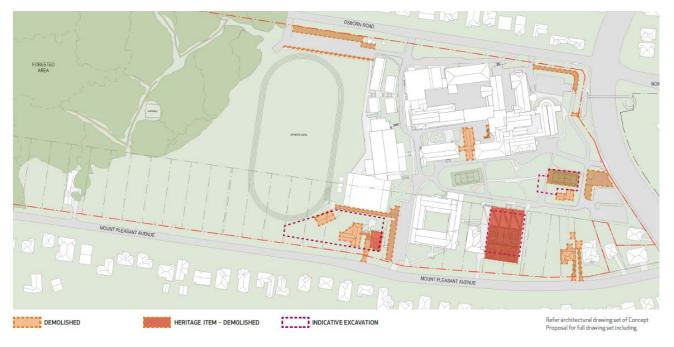


Figure 6 Stage 1 Demolition Plan

#### 3.1.3 Excavation

The Department requested clarification of the excavation proposed under the Concept Plan. It is confirmed that Envelope 8 will require excavation of 3m depth to facilitate an underground car park (as outlined at **Section 3.4.2**), Envelope 6 and Envelope 7 propose minor excavation to establish the building foundation. These are shown at Architectural Plan A0007 at **Appendix C**.

# 3.1.4 Student Amenity

# Issue

Some submissions raised concerns over the ability of the school to accommodate the proposed growth.

#### Response

Loreto Normanhurst is located on over 13ha of grounds that comfortably provide all recommended requirements for open play area. Excluding the blue gum high forest located at the southern end of the site, the current play area per student is over  $39m^2$ . On completion of the Concept Masterplan the area will be in excess of  $24m^2$ , which is more than twice the  $10m^2$  recommended by the EFSG. Over  $13m^2$  of internal teaching space per student is currently providing the student community with comfortable and efficient facilities. A minimum of  $13m^2$  will be sustained through all stages of the Masterplan.

Loreto Normanhurst is in need of redevelopment to upgrade and provide quality boarding facilities, to improve access arrangements to bring them into line with current accessibility standards, and to improve movement and spatial relationships whilst focusing on the future growth of the school ensuring that it remains appropriate into the future. The staged redevelopment will increase the student population from 1150 to 2000 students by 2047, with additional students in Kindergarten to Year 4. It is anticipated that the development will be delivered in separate stages, over a period of up to 30 years.

The masterplan will provide a new 30 year framework that will guide future renewal and upgrades across the campus. The masterplan will essentially improve connectivity and access within the campus, provide additional education floor space in line with the School's growth strategy and protect the heritage, ecology and aesthetically significant qualities of the campus. The proposal is consistent with the strategic planning directions of the Greater Sydney Region Plan and the North District Plan which identify a 20% increase in school enrolments by 2036 within the North District area of Sydney, particularly in early education and childcare.

This proposal also seeks to expand the primary school offering to expand the current primary school to include Kindergarten to Year 4 classes. The overall proposal aims to increase the student capacity by 850 students by 2047.

## 3.2 Traffic

#### 3.2.1 Issue

A majority of submissions raised concerns regarding existing and proposed drop off and pick up arrangements, provision of car parking on the site and the increasing number of students over the life of the masterplan and the car parking required to service this. Public submissions also noted that a significant number of cars related to the school park in the streets surrounding the school, causing traffic and access problems for residents.

#### 3.2.2 Proponent Response

In order to respond to the traffic issues identified in relation to the proposal, a number of amendments have been made to the Stage 1 scope (refer to **Section 4.0**) to incorporate better traffic and parking outcomes, including additional parking and a new through site road connection between Osborn Road and Mt Pleasant Avenue that will internalise school pick up and drop off.

Separate to the physical building works that are proposed under the revised Stage 1 application, a detailed Green Travel Plan and Operational Traffic Management Plan have been provided as part of this Response to Submissions. The Green Travel Plan encourages the reduction of private vehicle trips to the site by proposing a number of travel initiatives and actions that Loreto has committed to undertake. The Operational Traffic Management Plan provides clear direction on the management of traffic and parking around the School's campus.

Overall, the Concept Proposal and Stage 1 DA have been modified to respond to submissions received that raise concerns regarding traffic engineering matters. A revised Traffic and parking assessment have been carried out by TTW at **Appendix G** and an assessment of the proposed traffic solution is provided at **Section 5.4** that demonstrates the amended proposal will significantly address traffic and parking issues with the school

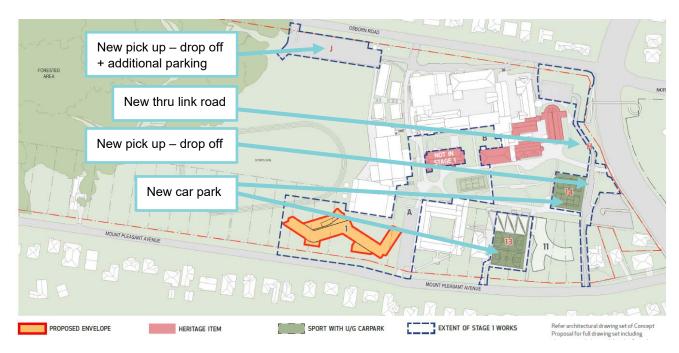


Figure 7 Amended Stage 1 scope of works

Figure 8 shows the proposed improvement to manage traffic flow around and through the school.

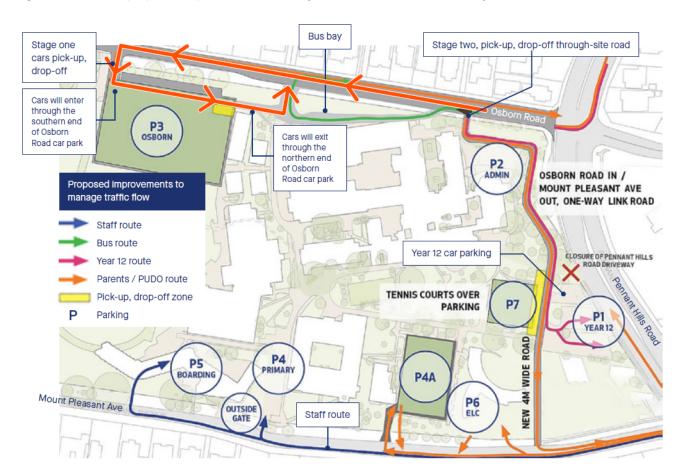


Figure 8 Traffic flow diagram

Source: Urbis

# 3.3 Heritage

#### 3.3.1 Issue

Concerns were raised regarding the potential impact of the Concept proposal bulk and scale on the site's existing heritage and contributory items.

# 3.3.2 Response

The original Concept Proposal sought approval of generous 'loose fit' envelopes to provide the school with flexibility for the built form arrangements that could be accommodated within. In acknowledgement of the concerns raised during exhibition the Concept Proposal has been significantly revised with envelopes 3, 9 and 10 being deleted from the proposal. Further, significant amendments have been made to other envelopes including proposed bulk and scale that reflects an indicative building form that better relates to its context, including the relationship to the school's heritage and contributory items.

A further assessment of the amended Concept Proposal and amended Stage 1 DA has been carried out by Weir Phillips at **Appendix H**.

# 3.4 Landscape and Tree Removal

#### 3.4.1 Issue

The Department raised questions in The Concept Proposal over the use and form of Envelope 8 – all weather open field with underground car park. The Department also raised concerns over tree removal and replacement planting proposed as part of the Stage 1 DA boarding house works.

#### 3.4.2 Response

Under the Concept Proposal Envelope 8 is proposed to be an all-weather playing field above an underground car park (see **Figure 9** and **Figure 10**). The car park would support up to 200 car parking spaces on a single level and would replace the existing Osborn Road car park. The playing field is generally level with Osborn Road (to the west) and the school (to the north) and the structure would not be visible from the public domain (see **Figure 11**). The topography falls to the south-east and would result in the envelope being 2 metres above existing ground at that location in a lower part of the playing field.

The future playing field will reduce the at-grade car park facing Osborne Road and will replace it with an additional 710m<sup>2</sup> playing field compared to the pre-development scenario (**Figure 9**).

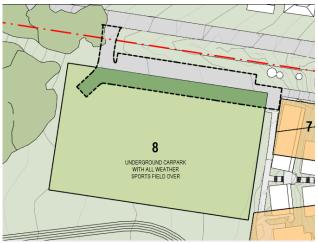


Figure 9 Envelope 8 Plan view

Source: AJ+C:



Figure 10 Envelope 8 landscape proposal Source: Oculus

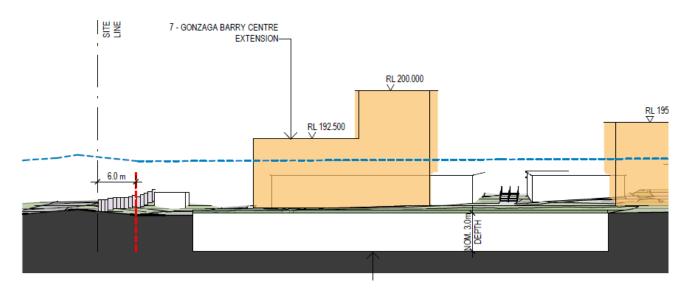


Figure 11 Section view of Envelope 8

Source: AJ+C

# 3.4.3 Tree Removal and Replacement

The Concept Plan (excluding Stage 1 buildings) may impact up to 13 trees which are within the proposed envelope footprints. None of these trees are considered significant with special ecological or heritage significance. At this stage no trees are proposed for removal and a further detailed assessment of tree impacts would be required by the detailed building design, which may result in less impact that identified by the Concept Plan. Any future tree impacts are proposed to be offset by a 1:1 tree replacement as proposed by the Stage 1 works below. An Arborist Report identifying all trees in a consolidated register is provided at **Appendix 11**.

The Boarding House design has been amended along with the planting strategy, allowing more trees to be retained and additional planting proposed, including within the street setback. The Stage 1 DA is generally seeking to avoid tree impacts where possible. The Sports court car parks and through site link design has been adjusted iteratively to ensure the retention of high retention trees, as much as possible. Further the project is targeting a nett 1:1 replacement of trees that require removal.

The Stage 1 development footprint will impact on 105 trees, which will require removal, while the project will plant 67 trees. Accordingly, 38 trees are proposed to be planted elsewhere on the campus. Every effort has been made to reduce this number including changes to the shape and extent of car parks and the through site link navigates tree impacts with minor encroachment. Notwithstanding, some tree removal is unavoidable, however it is noted the school has >50,000m<sup>2</sup> of natural bushland. To mitigate this impact the school has committed to the replacement of all trees, to be planted in appropriate locations within the campus. A condition is proposed requiring 38 replacement trees to be planted within the campus in accordance with the staging of works (See **Section 5.4.2**).

Table 3 Tree replacement strategy

| <u> </u>                          | •                                  |                               |   |                 |
|-----------------------------------|------------------------------------|-------------------------------|---|-----------------|
| Stage                             | Existing Trees<br>Impacted/Removed | Proposed New Trees<br>Planted | Additional Tree Planting Required                             | Nett Result     |
| Concept                           | 13 – within envelope footprint     | 0                             | Up to 13 – subject to further assessment at detailed DA stage | 1:1 replacement |
| Stage 1 (Boarding<br>House)       | 70                                 | 58                            | 12  | 1:1 replacement |
| Stage 1 (Car Parks and Thru link) | 35                                 | 9                             | 26  | 1:1 replacement |

# 3.5 Canopy Cover

The site has an existing canopy of 57,130m2 (43%). The proposal will result on a tree canopy being largely maintained, being 55,865m2 (42%). This will exceed the 40% target set outlined the Draft Greener Places Design Guide. It is noted that additional planting is proposed (by condition) that will replace canopy with a nett 1:1 replacement of trees.

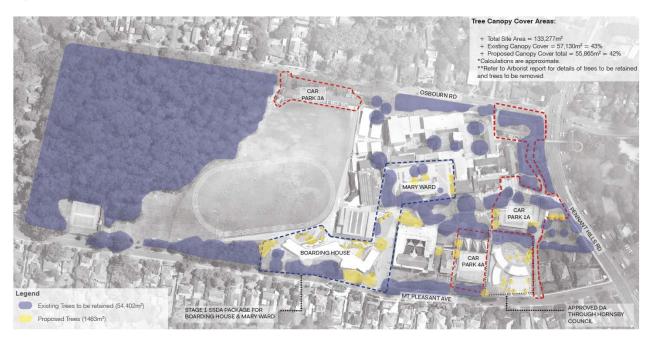


Figure 12 Tree canopy diagram

Source: AJC

# 4.0 Amendments to the Proposed Development

To reflect the design changes that have been made to the proposed development following public exhibition of the proposal and for which approval is now sought, and to address issues raised in the submissions, a range of updated plans and documentation have been prepared in accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) for which approval is now sought.

The revised plans include Architectural Drawings by Allen Jack and Cottier (AJC) with the drawings included at **Appendix C**.

A number of consultant reports and supporting information has been updated or further supplements the material originally submitted in support of the EIS, refer to Table of Contents.

The revised supporting documentation enables the Department to undertake an informed assessment of the amended Concept and Stage 1 proposal. The findings of the revised supporting consultant documentation are summarised at **Section 5.0** of this report as relevant. A final schedule of the mitigation measures proposed to mitigate the impacts associated with the proposed works is provided at **Section 6.0**. This report should be read in conjunction with the EIS prepared by Ethos Urban, dated June 2019, as relevant.

The following amendments are proposed to the Concept Proposal and Stage 1 works to respond to issues raised and ongoing design development:

# **Concept Plan**

- Aligning the staging of infrastructure works with student population growth.
- Significant reduction and refinement of the building envelopes to better reflect the indicative built form the Concept may enable.
- Removal of Envelope 3, 9 and 10, as well as the Theology Centre adjacent to the heritage item.
- · Removal of envelope at the bush chapel.
- Revision of the representation of 'Envelope 8 All weather field with underground carpark' to clarify that the field is lower than Osborn Road.

#### Stage 1

- Clarification to the school population sought for approval under the Stage 1 DA.
- Revision to Boarding House, including a reduction in height, increased setback and other design changes to improve the scale of the building when viewed from Mount Pleasant Avenue.
- Amendments to the Garden Plaza in line with the changes made to the Boarding House.
- Introduction of a link road between Osborn Road and Mt Pleasant Avenue, as a one way, cross-site connection with revised pick-up and drop-off arrangements and undercover pedestrian shelter.
- Increased parking at the Osborn Road car park to support the Stage 1 parking strategy. This will later become the site of Envelope 8 under the Concept DA.
- Removal of two existing sports courts and replacement with part underground carpark buildings, two new sports court located on the roof the carpark at the existing level of the sports court.

# 4.1 Amended DA Description

The DA description for SSDA 10388 has been amended as seeks approval for the following:

#### **Concept Plan**

- Site Layout.
- Maximum building envelopes.
- GFA distribution across the site.

- · On-site parking provision and distribution.
- Approval for a school population of 2,000 students (noting Stage 1 seeks approval of a population of 1,650 students).

#### Stage 1

- Staged approval for a school population of 1,650 students linked to the delivery of road and parking
  infrastructure
- Construction of a new 5 storey boarding house to accommodate up to 216 boarders.
- Kerb upgrades along the Mount Pleasant Avenue and construction of two vehicular driveways.
- Link road between Osborn Road to Mt Pleasant Avenue, including drop off and pick up arrangements, pedestrian shelter and associated landscaping and pedestrian access improvements.
- Construction of an additional 133 car parking spaces, as follows:
  - Amendments to the Osborn Road car park including additional parking and pedestrian shelter.
  - Sports courts and underground carparking.
  - Tennis courts and underground carparking.
- · Demolition and Site preparation.
- Landscape works.
- Tree removal.
- · Augmentation of services and utilities infrastructure as required.

An artist's impression of the amended Boarding House is provided at Figure 13.



Figure 13 Boarding House (view from Mt Pleasant Avenue)

Source: AJ+C

The key numeric development information is summarised at Table 4.

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Table 4 Key development information

| Component   | Existing         | As exhibited   | As amended                     |
|---|------------------|--|--------------------------------|
| Concept Proposal  |                  |  |                                |
| Site Area   | 13.02ha          | 13.02ha  | 13.02ha                        |
| Current student enrolments                              | 1,100            | -  | -                              |
| Student cap   | 1,150            | 2,000  | 2,000                          |
| Maximum building height                                 | -                | -  | -                              |
| Envelope 1 – Boarding House                             | -                | RL 203.8 (22.0 m)  | RL 199.5 (17.7m)               |
| Envelope 2 – Secondary School                           | RL 200 - 206     | RL 211.5 (20m)   | RL 211.5 (20m)                 |
| Envelope 3 – Pennant Hills Road Facility                | -                | 21.4 metres  | Deleted                        |
| Envelope 4 – Primary School                             | RL 195.5         | RL 201.5 (13.6m)   | RL 201.5 (13.6m)               |
| Envelope 5 – Mary Ward Building Envelope                | RL 202.5         | RL 209.5 (20.6m)   | RL 209.5 (20.6m)               |
| Envelope 6 – New Gymnasium                              | RL 192.4         | RL 195 (13.1m)   | RL 195 (13.1m)                 |
| Envelope 7 – Gonzaga Barry – Performing<br>Arts Centre  | RP192.5 – RL 200 | RL 200 (18.2m)   | RL 200 (18.2m)                 |
| Envelope 8 – All weather field with underground carpark | -                | 3.0 metres   | Varies with ground line (0m)   |
| Envelope 9 – Mt Pleasant Avenue Pavilion                | -                | 11.2 metres  | Deleted                        |
| Envelope 10 – Bush Chapel                               | -                | No structures proposed   | Deleted                        |
| Envelope 12 – Pedestrian Link Bridge                    | -                | RL 201.5 (13m)   | RL 201.5 (13m)                 |
| Envelope 13 – Multi-sport (P4A) Car Park                | -                | -  | RL 190.3 (3m)                  |
| Envelope 14 – Tennis Court (P1A) Car Park               | -                | -  | RL 195 (3m)                    |
| Proposed car spaces                                     | 187              | Car parking is to be provided in accordance with the Hornsby DCP controls. | 433 (+ 246)                    |
| Stage 1 Detailed Design                                 |                  |  |                                |
| Student Cap   | 1,150            | Not identified   | 1,650                          |
| Student beds  | -                | 216  | 216                            |
| Boarding House Maximum height – top of building RL      | -                | RL 203.8m  | RL199.5                        |
| Maximum height – storeys                                | -                | 6 storeys (southern elevation)   | 5 storeys (southern elevation) |
| Setbacks  | -                | Minimum of 6 metres  | Minimum of 6 metres            |
| Car spaces  | 187              | 229 (+42)  | 320 (+133)                     |

# 4.2 Student Population and Infrastructure Strategy

The Stage 1 DA seeks approval to increase the school population cap from 1,150 to 1,650 and staff from 254 to 290. It is noted that population increase is subject to further resolution by the school and some growth may involve changes to streams or classroom sizes which does not require any building work. Accordingly, population growth does not rely on the envelopes under the Concept Proposal. The Stage 1 DA seeks approval for staged population increases in line with the delivery of parking and traffic infrastructure that has been identified to support that growth as part of the Traffic and Parking Assessment.

Further growth under the Concept Proposal and Stage 1 DA is also identified. See **Table 5** below.

Table 5 Student Population and Infrastructure Strategy

| Application      | Required Infrastructure Works   | Maximum Students |
|------------------|---|------------------|
| Stage 1 DA       | <ul> <li>Additional car parking to P3A car park</li> <li>Relocated pick up and drop off to P3A car park</li> <li>New through site link including pick up and drop off</li> <li>Additional P1A car park</li> </ul> | 1,250            |
|                  | Additional P4A car park   | 1,650            |
| Concept Proposal | Envelope 8 car park   | 2,000            |

# 4.3 Staging of Construction

The Stage 1 DA is proposed to be constructed across 4 stages (see **Table 6**). Stage 5 relates to the Concept Proposal and is shown below for completeness.

Table 6 Project staging

| Application                                      | Stage   | Infrastructure Works   |  |
|--|---------|--|--|
| Stage 1 DA<br>(Detailed development<br>approval) | Stage 1 | <ul> <li>Additional car parking to P3A car park</li> <li>Relocated pick up and drop off to P3A car park</li> </ul> |  |
|  | Stage 2 | <ul><li>New through site link including pick up and drop off</li><li>Additional P1A car park</li></ul>             |  |
|  | Stage 3 | Additional P4A car park  |  |
|  | Stage 4 | Nil  |  |
| Concept Proposal                                 | Stage 5 | Envelope 8 car park  |  |

Additional statements and technical studies have been undertaken to support the amended proposal and provide additional information and responses to the issues raised by relevant agencies.

# 5.0 Clarification, additional information, and further assessment

The following section should be read in conjunction with **Appendix A** and **B** and the relevant appendices of this report, which provide more detailed responses to matters raised by the general public, public agencies and the Department in response to the information and assessment provided in the EIS. The following sections address key aspects of those responses where additional information and/or assessment has been provided in support of that lodged with the EIS, including of the proposed design changes.

# 5.1 Built Form and Amenity

# 5.1.1 Height

The amended Concept Plan and amended Stage 1 DA continues to propose built form that will exceed the 8.5 metres height control under Hornsby Local Environmental Plan. An amended Clause 4.6 Variation request is provided to reflect the amended development.

Clause 42 of the Education SEPP permits that development consent may be granted for the purpose of a school that is SSD despite the contravention of a development standard imposed by an Environmental Planning Instrument (EPI), in this case being the height of buildings standard imposed under the Hornsby LEP.

The amended Concept Proposal and Stage 1 DA has been significantly revised with removal of envelopes, refined envelopes and increased envelope setbacks to ensure the bulk and scale is in keeping with the school context and relationship to its residential neighbours and heritage considerations. An assessment of environmental impacts of the building height including overshadowing and view and visual impacts is provided below that confirms the environmental impacts are acceptable.

# 5.1.2 Floor Space

The amended Concept Proposal and Stage 1 DA has identified the maximum Gross Floor Area as it applies to the proposal, as follows:

| Component   | Maximum Gross Floor Area (m²)  |
|---|--|
| Stage 1 DA  |  |
| Envelope 1 – Boarding House                             | Stage 1 Approval for 4,845m <sup>2</sup>   |
| Concept Proposal  |  |
| Envelope 2 – Secondary School                           | 5,200 m <sup>2</sup>   |
| Envelope 4 – Primary School                             | 9,000 m <sup>2</sup>   |
| Envelope 5 – Mary Ward Building Envelope                | 400 m <sup>2</sup>   |
| Envelope 6 – New Gymnasium                              | 3,800 m <sup>2</sup>   |
| Envelope 7 – Gonzaga Barry – Performing Arts Centre     | 2,200 m <sup>2</sup>   |
| Envelope 8 – All weather field with underground carpark | 0m <sup>2</sup> (a car park would not contain floor space that would meet the definition of GFA under the LEP) |
| Envelope 12 – Pedestrian Link Bridge                    | 450 m <sup>2</sup>   |
| Envelope 13 – Multi-sport (P4A) Car Park                | 0m <sup>2</sup>  |
| Envelope 14 – Tennis Court (P1A) Car Park               | (a car park would not contain floor space that would meet the definition of GFA under the LEP)                 |

# 5.1.3 Overshadowing

Amended shadow diagrams have been prepared by AJ+C and are provided at **Appendix C**. The amendments to the Concept Proposal have refined the bulk and scale of all envelopes across the campus, which has in turn reduced the resultant shadows. In summary:

· Concept Proposal in mid-winter:

- Shadows do not fall on neighbouring development opposite Osborn Road at 9am and these properties will
  enjoy sun the remainder of the day.
- Shadows are largely contained within the campus across the day and shade some internal courtyard areas, however due to the large campus there are a variety of outdoor spaces that will ensure students and staff will have a choice.
- Shadows do not fall on any residential development opposite the school on Mt Pleasant Avenue mid-winter and these properties enjoy solar access throughout the day.

#### Stage 1 DA in mid-winter:

- The boarding house has reduced in height from 6 to 5 storeys and the resultant shadows fall within the campus across the day to 2pm. The campus has a variety of open spaces available ensuring students and staff have a choice of open spaces.
- Shadows do not fall on any residential development opposite the school on Mt Pleasant Avenue mid-winter and these properties enjoy solar access throughout the day

# 5.2 View and Visual Impacts

Amended and additional view and visual impact diagrams have been prepared by AJ+C and are provided at **Appendix C**. The amended design seeks to mitigate concerns over bulk and scale and visual impacts of the proposal. In summary:

# · Concept Proposal

- The Concept Proposal has refined the bulk and scale of envelopes across the campus, particularly those on Osborn Road and Mt Pleasant Avenue.
- Envelope 2 has a two to three storey envelope facing Osborn Road that responds to the adjoining reception and senior school buildings.
- Envelope 6 has a stepped form with a two-storey element facing Osborn Road and a further two storey element that is visually recessive to reduce the sense of bulk and scale from the street.
- Envelope 4 has a two-storey envelope that reflects the existing building arrangement. The height and scale
  is consistent with the northern façade of the adjoining Boarding House.
- Taller envelopes reflective of existing building arrangements (3-4 storeys) are in the centre of the campus and are not dissimilar to the height and scale of existing buildings. The distance of these buildings from the school boundary mitigates view and visual impact concerns.

# Stage 1 DA

- Five additional views of the Boarding House along Mt Pleasant Avenue (**Appendix C**) show that the amended Boarding House will have an appropriate scale and visual relationship to the streetscape.
- Due to the topography (in which Mt Pleasant Avenue is generally higher than the school) the boarding
  house is only two to three storeys in height above the street, making the building visually appropriate in its
  context.
- The new multi-sports court and underground car park (P4A car park) facing Mt Pleasant Avenue is low scale being part above and part below ground. It is 3 metres in height and open to Mt Pleasant Avenue being setback 6m from the boundary. The existing vegetation in the setback is proposed to be retained and upgraded as part of the landscape plan, mitigating the visual impact of the structure.
- The new tennis court and underground car park (P1A car park) is set within the campus and will not be visible from the public domain. The structure features cables for climbing plants that will screen the car park.

### 5.3 Heritage

It is confirmed that the various project descriptions outlined by AJ+C in the Design Report at **Appendix H** (for example Project C or Project D) are indicative only to provide the Department with an indication of the potential works that may occur in the location of an envelope that is sought for approval under the Concept Proposal. At this early stage, the school in not seeking approval for any detailed works and the Concept Proposal seeks approval for

maximum envelopes and GFA distribution only. A detailed DA would be required to undertake works within the Concept Proposal envelopes at the appropriate time that would need to justify and assess any relevant impacts.

Further assessment of the amended Concept Proposal and amended Stage 1 DA has been carried out by Weir Phillips against the CMP and the relevant policies, and concludes that the proposal is consistent with the CMP and the works will have an acceptable heritage impact. A summary of the HIS key findings in relation to the concept proposal and the Stage 1 works are provided below.

# Concept Proposal

- The general reduction of the proposed building envelopes in the north western corner of the site will have a positive impact. The proposed new envelopes demonstrate a better relationship to the heritage significant buildings, maintaining their prominence of the site and within significant view corridors. The envelopes closest to the heritage significant buildings have been refined in massing and scale, the proposed upper level setbacks increased and variation in heights provided. Envelope 2 lies to the west (or rear) of the significant buildings, away from their garden setting to the east and north. The setting of these buildings to the west is already one of two three storey buildings. When standing to the east of the significant buildings, their massing and scale is such that the viewing angle is acute.
- Envelope 5 is amended to propose to raise the existing attic ceiling and roof to achieve a minimum 2700mm clearance at the lowest levels. The HIS confirms the envelope as amended retains a better understanding of the overall form of the building than the initial proposal. The proposed works will have an acceptable impact on the Givendale Wing and the 1897 Convent Building because it is separated from these buildings and located on land falling away to the south. Maintaining the overall form and architectural character of this building maintains the strong visual relationships that existing between these buildings and the lawns and gardens to the east and north east.

#### Stage 1 DA

- A new accessway through the site will have no impact on the significance of the site.
- Removing the garage attached to the side of the 4 Mt Pleasant Ave dwelling will have no impact on the significance of this dwelling, given that the garage is a later addition that does not further understanding of the dwelling as a Federation period and style dwelling.
- The new sports and tennis courts are constructed in areas traditionally associated with these facilities. The structures have been carefully designed to retain existing significant trees. Existing trees and new landscaping will ensure that they do not have undue prominence in the setting of significant elements and do not disrupt significant view corridors.

# 5.4 Traffic and Car Parking

Changes are proposed to the Stage 1 DA including a new internal road layout and the revised parking strategy. The RTS also seeks to clarify the population growth and staging of works which supports the school's growth under the Stage 1 DA and under the Concept Proposal. A revised Traffic and Parking Assessment is provided at **Appendix G**.

# 5.4.1 Parking Demand

The parking supply is proposed to be increased in stages in response to the staged increase in enrolment and staffing. The increase in parking required under the DCP will be met during each stage, either by works within that stage or works that occur prior to that stage. The Stage 1 DA proposes an increase in parking of 108 spaces which meets the required increase in parking stipulated in the DCP rates (108 spaces).

# 5.4.2 Staging of Development

Stage 1 DA infrastructure delivery (construction of through site link and car parks) is proposed to be constructed in stages, as set out at **Table 7**. Infrastructure delivery will support population growth at the school.

# 5.4.3 Enrolment and Staffing

The Stage 1 DA seeks approval to increase the school population cap from 1,150 to 1,650 and staff from 254 to 290 (it is noted that the current enrolment is 1,100 students). It is noted that population increase is subject to further resolution by the school and some growth may involve changes to streams or classroom sizes which does not require any building work. Accordingly, population growth does not rely on the envelopes under the Concept Proposal. The Stage 1 DA seeks approval for staged population increases in line with the delivery of parking and traffic infrastructure that has been identified to support that growth as part of the Traffic and Parking Assessment.

Table 7 below outlines the staged infrastructure and population growth sought for approval.

Table 7 Infrastructure Delivery and Population Growth Staging

| Application         | Stage   | Infrastructure Works  | Students | Staff | <b>DCP</b> requirement | Parking<br>Supply |
|---------------------|---------|---|----------|-------|------------------------|-------------------|
| Existing Cap        |         |   | 1,150    | 254   |                        | 187               |
| Stage 1 DA          | Stage 1 | Additional car parking to P3A car park     Relocated pick up and drop off to P3A car park | 1,250    | 254   | 24                     | 236*<br>(+49)     |
|                     | Stage 2 | New through site link including pick up and drop off     Additional P1A car park          | 1,250    | 254   | 0                      | 256*<br>(+20)     |
|                     | Stage 3 | Additional P4A car park   | 1,400    | 266   | 0                      | 320*<br>(+64)     |
|                     | Stage 4 | Nil   | 1,650    | 290   | 84                     | 320*              |
| Concept<br>Proposal | Stage 5 | Envelope 8 car park   | 2,000    | 325   | 75                     | 433*<br>(+113)    |

<sup>\*</sup> Includes 25 parking spaces required for Early Learning Centre (subject of a separate DA Approval)

#### **Recommended Mitigation Measure**

It is noted that additional parking supply is brought online at Stage 3 (P4A Car Park) in advance of student growth at Stage 4. As student growth is linked to infrastructure provision completion of P4A will support 1,650 students.

To ensure the school delivers the relevant infrastructure in line with student population growth the following condition of consent is proposed:

## Recommended condition

A maximum total of 2,000 students is approved. The school cannot increase its student population above the number set out in the table below until an occupation certificate is issued for the corresponding infrastructure in the table:

| Application      | Required Infrastructure Works   | Maximum Students |
|------------------|---|------------------|
| Stage 1 DA       | <ul> <li>Additional car parking to P3A car park</li> <li>Relocated pick up and drop off to P3A car park</li> <li>New through site link including pick up and drop off</li> <li>Additional P1A car park</li> </ul> | 1,250            |
|                  | Additional P4A car park   | 1,650            |
| Concept Proposal | Envelope 8 car park   | 2,000            |

# 5.4.4 Mode Share Targets

Given the constrained access of the site, and general sentiment from the public that there needs to be a reduction in vehicle traffic in the area, Loreto is committed to implementing a Green Travel Plan to modify the current travel patterns. Loreto intends to implement some measures starting in Term 1 2021. Some key measures include:

- Provide a Transport Access Guide
- Induction Information for New Users
- · Periodic Reminders
- · Additional Staff Bicycle Storage
- End-of-Trip Facilities
- 'Ride2School Day' and Health Events
- Opal Top-up Facilities
- · School Shuttle Bus
- Staff Pairings
- · Priority Parking
- · Regular Reviews of Travel Plan
- · Staff Responsibility

As the Concept Plan is intended to be completed over 25 to 30 years, two sets of travel mode share targets have been proposed. The short-term travel mode share targets are intended to be achieved on completion of Stages 1 to 4, with longer term targets provided as an aim for completion of the Concept Plan.

A Green Travel Plan is provided by TTW at Appendix G.

## 5.4.5 Concept Proposal Parking

The aim of the parking provided within the Concept Plan is to remove the existing shortfall of parking on site through a combination of reducing the existing private vehicle driving rate and providing additional parking.

Provision has been made within the concept plan for a future car park providing up to 200 spaces located at the P3A car park. As the staged development occurs within the School, new travel mode surveys will be conducted, and adjustments made to parking demand projections. During future detailed development applications for the Stage 5 works, the total parking demand calculated (based on the travel mode split at the time of application) will dictate the number of car parking spaces to be provided within the P3 car park. Should the mode shift be successful there would not be a need to construct the full Envelope 8 car park, which would avoid increasing traffic flows on Osborn Road.

Notwithstanding, the proposed parking under the Stage 1 DA and Concept Proposal will satisfy parking demands under the short- and long-term travel mode shifts (see **Table 8**).

Table 8 Comparison of Parking Demands at Completion of Mode Shift Implementation

|   | Parking Demand |                  |
|---|----------------|------------------|
|   | Stage 1 DA     | Concept Proposal |
| With Short Term Travel Mode Targets         | 287 Spaces     | 327 Spaces       |
| With Long Term Travel Mode Targets          | 257 Spaces     | 291 Spaces       |
| Total parking Provision sought for approval | 320 spaces     | 433 Spaces       |

#### 5.5 Operational Traffic Performance

TTW has undertaken SIDRA modelling of post development intersection performance under the Stage 1 and Concept Proposal scenarios at Section 5.6.1 and Section 5.6.2 of the Traffic Report at **Appendix G**. A summary of the results concludes:

• The Osborn Road/Pennant Hills Road/Normanhurst Road intersection is shown to perform at an acceptable Level of Service in the Concept Plan post development model.

- Changes to traffic flows on Pennant Hills Road as a result of NorthConnex <sup>1</sup>may result in changes to signal
  phasing as Pennant Hills Road experiences reduced traffic. This may result in better performance for the minor
  legs of the intersection including Osborn Road and Normanhurst Road.
- The poor performance of Pennant Hills Road/Mount Pleasant Avenue is due to the right turn movement out of
  Mount Pleasant Avenue. There is an existing consent condition related to SSD 07\_166 (Wahroonga Estate) that
  requires installation of No Right Turn signage at Mount Pleasant Avenue. This is likely to result in better
  performance of this intersection, however there is no timeframe for the completion of these works and therefore
  the intersection has been modelled in its normal operation with right turns permitted.
- Loreto supports signalisation of the intersection of Mount Pleasant Avenue/Pennant Hills Road and has
  consulted with Council and TfNSW (RMS) about the potential of this being approved. While Council is
  supportive, RMS will not permit the installation of signals in this location due to its proximity to the Osborn
  Road/Pennant Hills Road/Normanhurst Road intersection. With the changes to vehicle flow expected on
  Pennant Hills Road as a result of NorthConnex, Loreto will continue to consult with RMS on the potential
  signalisation.
- Due to the significant changes expected to traffic flow on Pennant Hills Road over the duration of the Concept Proposal, it is recommended that future detailed development applications review both intersections for consistency with the projected traffic modelling and undertake further consultation with both Council and RMS to determine whether any intersection improvements can be undertaken (if required).

#### 5.5.1 Operational Traffic Management Plan

An Operational Traffic Management Plan (OTMP) has been prepared by TTW (**Appendix G**) to formalise the movement of pedestrians, cyclists, private vehicles (pick-up/drop-off and parking), and buses across the campus. The OTMP should be read in conjunction with the Green Travel Plan (**Appendix G**). The OTMP seeks to:

- Decongest local roads.
- Increase safety in travel to School and for the general public.
- Encourage healthy travel to School.

# 5.6 Tree Removal

The Concept Plan (excluding Stage 1 buildings) may impact up to 13 trees which are within the proposed envelope footprints. None of these trees are considered significant with special ecological or heritage significance. At this stage no trees are proposed for removal and a further detailed assessment of tree impacts would be required by the detailed building design, which may result in less impact that identified by the Concept Plan. Any future tree impacts are proposed to be offset by a 1:1 tree replacement as proposed by the Stage 1 works below. An Arborist Report identifying all trees in a consolidated register is provided at **Appendix I1**.

The Stage 1 DA is generally seeking to avoid tree impacts where possible (see **Appendix I2** and **Appendix I3**). The Sports court car parks and through site link design has been adjusted iteratively to ensure the retention of high retention trees, as much as possible. Further the project is targeting a nett 1:1 replacement of trees.

The Stage 1 development footprint will impact on 105 trees, which will require removal, while the project will plant 67 trees. Accordingly, 38 trees are proposed to be planted elsewhere on the campus. Every effort has been made to reduce this number including changes to the shape and extent of car parks and the through site link navigates tree impacts with minor encroachment. Notwithstanding, some tree removal is unavoidable, however it is noted the school has >55,000m² of natural bushland. To mitigate this impact the school has committed to the replacement of all trees, to be planted in appropriate locations within the campus. A condition is proposed requiring 38 replacement trees to be planted within the campus in accordance with the staging of works (See **Section 5.4.2**).

<sup>1</sup> It is noted that whilst NorthConnex has opened, the traffic conditions created by COVID-19 mean that it would not provide accurate data for the purposes of modelling

Table 9 Tree replacement strategy

| Stage                             | Existing Trees<br>Impacted/Removed | Proposed New Trees<br>Planted | Additional Tree Planting Required                             | Nett Result     |
|-----------------------------------|------------------------------------|-------------------------------|---|-----------------|
| Concept                           | 13 – within envelope footprint     | 0                             | Up to 13 – subject to further assessment at detailed DA stage | 1:1 replacement |
| Stage 1 (Boarding<br>House)       | 70                                 | 58                            | 12  | 1:1 replacement |
| Stage 1 (Car Parks and Thru link) | 35                                 | 9                             | 26  | 1:1 replacement |

# 5.7 Canopy Cover

The site has an existing canopy of 57,130m2 (43%). The proposal will result on a tree canopy being largely maintained, being 55,865m2 (42%). This will exceed the 40% target set outlined the Draft Greener Places Design Guide. It is noted that additional planting is proposed (by condition) that will improve the canopy further with a nett 1:1 replacement of trees.

#### 5.8 Noise

An amended Construction and Operational Noise Assessment has been carried out by RWDI at **Appendix J**. The assessment addresses the amended scope and responds to queries raised during exhibition. In summary:

#### · Concept Proposal

- It should be noted there is no details of the buildings design, layout or facade available at this stage of development. Potential noise impacts may be suitably managed at a later design stage with consideration to operational noise emissions. Detailed assessment of noise emissions with respect to future site-specific noise criteria, based on future noise monitoring will be conducted to establish appropriate noise control measures to protect the acoustic amenity of residences.
- Indicative noise assessment shows that noise levels may exceed for outdoor play at Envelope 8 (all weather playing field) at 32 and 34 Osborn Road. The exceedance is very minor and likely inaudible (1-2 dBa). All exceedances can be addressed at the relevant detailed application stage.
- Indicative assessment of Envelope 7 shows that noise mitigation can be carried out by a future application to ensure compliance with the noise criteria.

#### Stage 1 DA

- The re-built 2 x sports courts and Osborn Road car park expansion will comply with project noise criteria.
- During standard construction hours, exceedances of the NMLs (up to 13 dB) are predicted at the residential receivers in close proximity to the development. These exceedances typically occur during site clearing, demolition, and excavation construction phases. No exceedances are predicted during standard construction hours for the other construction activities modelled. There are no noise sensitive receivers that are considered to be Highly Noise Affected, i.e. with predicted noise levels exceeding 7dB LAeq.
- Where construction noise levels are predicted to exceed the NMLs construction noise mitigation measures will be implemented, with recommended measures outlined at **Appendix J**.

#### 5.9 Other Matters

Where relevant, an updated assessment of the other impacts of the development has been undertaken by the relevant specialist consultants and are appended to this RTS. A brief description of each other assessment issue is provided in **Table 10**.

Table 10 Other Assessment Issues

| Issue       | Consultant | Summary   | Reference  |
|-------------|------------|---|------------|
| Landscaping | Oculus     | The Landscape Concept and Detailed Design has been prepared by Oculus that identifies the landscape solution to the revised internal access and car | Appendix D |

| Issue                                    | Consultant                           | Summary  | Reference  |
|--|--------------------------------------|--|------------|
|  |                                      | parking solutions. New shade shelters are proposed to support the new pick up and drop off arrangements and are identified at Section 3.8 of the Car Parks and Site Through Link Landscape Report.   |            |
| Civil Plans and<br>Engineering<br>Report | TTW                                  | TTW has provided additional assessment of the new Stage 1 works that confirms the proposal is designed to maintain pre-development flows outside the site. No additional water quality treatment measures are required due to minimal changes to impervious area. Minor cut and fill are required as part of the new Stage 1 works. The Boarding House will require more significant cut and fill. An erosion and sediment control plan has been prepared for the site detailing the management of stormwater during construction. | Appendix E |
|  |                                      | The detailed design of the Osborn Road car park, including landscaping is contained in the Civil Plans.  |            |
| Historical<br>Archaeology                | Eco Logical                          | Am amended Historic Archaeology assessment which concluded there is low potential for archaeological resources of significance.  | Appendix K |
| Aboriginal Cultural<br>Heritage          | Eco Logical                          | An Aboriginal Cultural Heritage Assessment has been undertaken to identify any potential Aboriginal objects and other cultural heritage values within the study area.  | Appendix L |
| Bushfire                                 | Eco Logical                          | An addendum Bushfire assessment has been prepared by Eco Logical to assess the amended proposal, which will continue to comply with relevant requirements of <i>Planning for Bushfire Protection 2019</i> .  | Appendix M |
| BDAR                                     | Eco Logical                          | An amended BDAR has been prepared by Eco Logical. A total of seven (7) ecosystem credits are required for impacts to PCT 1237 and one (1) ecosystem credits for PCT 1281. No candidate species credit species or likely habitat was recorded within the subject site; hence no species credits are required to offset the development  | Appendix N |
| Accessibility                            | Funktion                             | The proposed design has been assessed as being generally in accordance with and capable of complying with the following the relevant requirements of the National Construction Code (NCC/BCA), Volume 1 – 2019 inclusive of Parts D, E and F as it relates to accessibility, Disability (Access to Premises - Buildings) Standards 2010 (Amendment No. 1) and Applicable Australian Standards for access and mobility (i.e. AS 1428 series) as referenced in the NCC and the Premises Standards.                                   |            |
| BCA                                      | Blackett<br>Maguire and<br>Goldsmith | The proposed development will be capable of achieving compliance with the Building Code of Australia 2019, subject to normal design development and re assessment required at the next stage of documentation (between the SSDA and the issue of the relevant Crown Certificate).  | Appendix P |
| Geotechnical                             | JK<br>Environments                   | Geotechnical conditions have been reviewed by JK Environments to inform the amended proposal.  | Appendix Q |
| Contamination Remediation Action Plan    | JK<br>Environments                   | An updated Detailed Site Investigation that addresses the new Stage 1 DA works has been prepared by JK Environments. The site can be made suitable for the proposed development via remediation. A Remediation Action Plan is provided.  | Appendix S |
| Hazardous<br>Materials                   | Trinitas<br>Group                    | A pre-demolition hazardous materials inspection has been carried out in relation to 4 Mt Pleasant Avenue. The amended Stage 1 design proposes the demolition of the garage of this dwelling (which is owned by the School) to enable the through site connection to Mt pleasant Avenue. The report confirm these are no items of risk.   | Appendix T |
| Construction<br>Management Plan          | CTPG                                 | An updated Construction Management Plan has been prepared by CTPG that outlines the construction methodology and key construction management principles that will ensure the program will be delivered in a safe manner that has regard to mitigation of adverse environmental impacts.  | Appendix U |
| Infrastructure<br>Management             | Harris Page<br>and<br>Associates     | A review of the requirements of the Stage 1 works has been carried out in consultation with relevant service providers. The site is capable for servicing the proposal subject to amplification of pressure or pumps where required for water and sewer. Gas can be connected to existing gas mains on Mt Pleasant Avenue. These works are required to be undertaken in accordance with the relevant Australian Standards  | Appendix V |

# 6.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 11** below. These measures have been derived from the previous assessment in Section 5.0 and those detailed in appended consultants' reports.

#### Table 11 Mitigation Measures

#### **Mitigation Measures**

#### **School Population**

A maximum total of 2,000 students is approved. The school cannot increase its student population above the number set
out in the table below until an occupation certificate is issued for the corresponding infrastructure in the table:

| Application      | Required Infrastructure Works   | Maximum Students |
|------------------|---|------------------|
| Stage 1 DA       | <ul> <li>Additional car parking to P3A car park</li> <li>Relocated pick up and drop off to P3A car park</li> <li>New through site link including pick up and drop off</li> <li>Additional P1A car park</li> </ul> | 1,250            |
|                  | Additional P4A car park   | 1,650            |
| Concept Proposal | Envelope 8 car park   | 2,000            |

#### **Construction Hours**

- Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:
  - between 7am and 6pm, Mondays to Fridays inclusive; and
  - between 8am and 1pm, Saturdays.
  - No work may be carried out on Sundays or public holidays.

#### Contamination

- Detailed site investigation is to be carried out for any future subsequent detailed design development applications. In this instance, the proposal does not relate to a change of use. On this basis, it is recommended that contamination matters be managed by way of a suitable condition of consent.
- For the Stage 1 works area, following competition of demolition works on site, further investigation is to be undertaken within
  the building footprint of those structures to fully characterise the site. Remediation works, if necessary, will be undertaken in
  accordance with the Remediation Action Plan. Following remediation, a Validation Report will be prepared by a suitably
  qualified Environmental Consultant, which will detail the methodology, results and conclusion of the assessment, provide
  waste classification and disposal information, and make a clear statement regarding the suitability of the site for the proposed
  land use.

# **Traffic and Pedestrian Management**

- Construction traffic and pedestrian interaction is to be managed in accordance with the management measures outlined under the CTPM
- Operational traffic and pedestrian interaction is to be managed in accordance with the management measures outlined under the OTMP.

#### **Building Code of Australia**

 Alternative solutions that address non-compliances with the deemed to satisfy provisions of the BCA should be considered during detailed design stage. The alternate solutions should be assessed against the relevant Performance Requirements of the BCA by suitably qualified persons.

#### **Tree Removal**

- Trees identified for retention will be protected in accordance with the recommendations of the Arboricultural Impact Appraisal and Method Statement prepared by Earthscape Horticultural Services.
- A total of 38 replacement tree planting is to be planted within the campus prior to the issue of the relevant occupation certificate.

#### **Biodiversity**

A list of mitigation measures is proposed to manage impacts prior to and during construction, as well as the operation phase
of Stage 1 development, Stage 2 development and all subsequent future buildings. Where residual unavoidable impacts are
observed, biodiversity offset credits need to be purchased. As identified under the BDAR report, 8 ecosystem credits are

# **Mitigation Measures**

required to offset impact to the planted BGHF vegetation community and 2 ecosystem credits are necessary for removal of the STIF vegetation community.

#### Heritage

- Future detailed application for the Mary Ward Building under the Concept Plan will require the preparation of a interpretation strategy to ensure that an understanding of this part of the site's history is preserved. This may include, for example, retaining a group of the original rooms on one level.
- Future detailed applications related to the link section between the 1897 Convent Building and the Givendale Wing building will require detailed plans and analysis of the fabric that it is proposed to remove and justification for its removal.

#### **Bushfire**

An Emergency and Evacuation Management Plan is to be updated (if existing) or a new plan be prepared, in accordance
with the RFS Guidelines for the preparation of the Emergency / Evacuation Plan, prior to the completion of the proposed
development.

#### **Construction Noise and Vibration**

 Preparation of a Construction Noise and Vibration Management Plan that sets out specific management measures to reduce and manage construction noise exceedances prior to commencing construction activities.

#### 7.0 Conclusion

Loreto Normanhurst and its project team has considered all submissions made in relation to the public exhibition of the proposal. This feedback has resulted in the School making a number of significant modifications to the proposed development, in consultation with stakeholders, including:

- Overall reduction of all building envelopes including deletion of the tallest building (Building 3) from the Concept Proposal to address the concerns relating to built form, heritage and landscaping; and
- Inclusion of a new through site road link between Mount Pleasant Avenue and Osborn Road to allow for school
  drop offs to occur within the site and evenly distribute traffic, provision of additional on-site parking (a 72%
  increase) across Stage 1, and adoption of a range of Green Travel Plan measures that collectively will alleviate
  concerns around traffic and parking impacts.

The Loreto Normanhurst Concept DA and associated Stage 1 works provides a new 30 year framework to guide the future renewal and upgrades across the campus. The amended proposal balances the School's growth strategy whilst protecting the heritage, ecology and aesthetically significant qualities of the campus and managing the traffic and parking impacts of its operations. The proposal responds to the strategic planning directions of the Greater Sydney Region Plan and the North District Plan which identify the need to accommodate a 20% increase in school enrolments by 2036 within the North District area of Sydney.

We trust that the responses provided above will enable the Department to finalise their assessment of the SSDA. Given the environmental planning merits (and the ability to suitably manage and mitigate any potential impacts) and significant public benefits proposed, it is requested that the application be approved.