

22 July 2019

16205

Jim Betts
Secretary
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Betts,

**SECTION 4.55(1A) MODIFICATION APPLICATION TO SSD 16_7919
85 CARABELLA STREET, KIRIBILLI**

This application has been prepared by Ethos Urban on behalf of Loreto Kirribilli, pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to modify the Concept Proposal and Stage 1 Development Consent (SSD 16_7919) relating to 85 Carabella Street, Kirribilli (the site).

The modification relates to a range of minor internal and external modifications resulting from ongoing design development and the need to comply with the acoustic requirements of the Conditions of Consent. Specifically, the application seeks approval for the reconfiguration of internal layouts, minor changes to the building façade and building envelope (and an associated reduction in excavation) and amendments to the approved landscape design. The proposed changes to the Stage 1 development are reflected in the revised plans for the Concept Proposal.

It is noted that the proposed changes will not increase student or staff numbers, nor will they result in any changes to the approved access, pick-up and drop-off arrangements. Further, the building remains within the maximum height of the approved development. As a whole, this modification seeks to improve the functionality of the building while reducing impacts of the development on surrounding properties.

This application identifies the consent, describes the proposed modifications and provides an assessment of the relevant matters contained in section 4.55(1A) of the EP&A Act. This application is accompanied by:

- Revised Architectural Drawings and Shadow Diagrams prepared by FJMT (**Appendix A**)
- Revised SSD Modification Design Report prepared by FJMT (**Appendix B**)
- Revised View Analysis prepared by FJMT (**Appendix C**)
- Revised Landscape Plans prepared by Site Image Landscape Architects (**Appendix D**)
- Revised Landscape Masterplan Report prepared by Site Image Landscape Architects (**Appendix E**)
- Heritage Impact Statements prepared by GML Heritage (**Appendix F**)
- Acoustic Statement prepared by Acoustic Logic (**Appendix G**)
- Civil Drawings and Stormwater Management Statement prepared by Northrop (**Appendix H**)
- Hydraulic Statement prepared by Wood & Grieve Engineers (**Appendix I**)
- Ecological Sustainable Development Statement (ESD) prepared by Northrop (**Appendix J**)
- Electrical Services Statement prepared by JHA Consulting Engineers (**Appendix K**)
- Mechanical Engineering Statement prepared by Northrop (**Appendix L**)

1.0 Consent Proposed to be Modified

Development consent (SSD 16_7919) was granted by the NSW Independent Planning Commission for the staged redevelopment of Loreto Kirribilli. The approved Concept Proposal was structured in three stages. Detailed Stage 1 works were approved as were building envelopes across the campus. Stage 1 comprises works to the existing Loreto Kirribilli campus at 85 Carabella Street, Kirribilli including the demolition of existing buildings, site excavation, construction of a seven storey Learning Hub (now referred to as the Innovation Centre), construction of a two storey extension to the existing Gymnasium, new landscaping, connector pods, walkways, remediation works and refurbishments to the Chapel and Elamang buildings.

Since the consent was issued, Loreto Kirribilli has identified a number of design modifications that are needed to ensure compliance with acoustic requirements under Condition B6, as well as modifications to improve the appearance and functionality of the building and reduce the extent of excavation. Accordingly, this application seeks consent for these modifications. The proposed changes to the Stage 1 development are reflected in the revised plans for the Concept Proposal.

2.0 Description of Proposed Modifications

The proposed modifications to SSD 16_7919 are illustrated in the Architectural Drawings included at **Appendix A** and include the following;

Concept Proposal

The Concept Proposal is proposed to be amended to reflect the changes to the Stage 1 development, as outlined below.

Innovation Centre

- Reorientation of the eastern building envelope from an angled form to a straight orientation.
- Design development of the northern staircase from an angled structure to a softer, rounded form.
- Removal of floor space on lower ground levels 3 and 4, resulting in a significant reduction in excavation.
- Relocation of the plant from the western boundary at lower ground level 4 to the roof top and lower ground 1 undercroft space. Extent of the roof top plant room slightly reduced to improve views from neighbouring properties.
- Inclusion of additional plant on the south-eastern edge of the roof terrace to accommodate a kitchen exhaust duct and make-up air duct from the food technology kitchen on lower ground 2.
- Design development of the building's curved external walkway to remove in-built planter boxes on the edge of the walkway to improve maintenance and ensure the safety of students, staff and visitors.
- Minor reconfiguration of internal layouts across all floors including redistribution of amenities and minor changes to meeting room and classroom layouts.
- Enclosure of outdoor learning areas between lower ground level 2 and lower ground level 4 to ensure compliance with acoustic requirements, and associated façade amendments.

Chapel Building

- Minor reduction in the extent of demolition at level 1.
- Replacement of existing ceilings in the level 1 classrooms.
- Installation of a new floor finish on the eastern veranda at level 1.
- Widening of the existing path and proposed new pedestrian paths between the Chapel building and the School's main entrance drive.

- Introduction of air conditioning including intake air louvres at high level on the east façade.

Gymnasium

- Conversion of the store area (underneath the Centenary Hall stage) to feature relocated amenities including end of trip facilities, service rooms, storage and a dressing room.
- Retention of existing stairs and removal of the new stair access.
- Reduction and retention of existing stairs and bleachers to eastern end of Gymnasium, providing additional storage to the south.

The proposed modifications are described in more detail below.

2.1 Modifications to the Development

Table 1 below provides a detailed floor by floor account of the proposed modifications at each level of the building. The key changes to the Innovation Centre are described in more detail in the following sections.

Table 1 Schedule of Changes

Changes
Innovation Centre
Lower Ground Level 4.
Line of excavation reduced.
External plant located adjacent to western boundary removed and relocated to western roof top plant and undercroft on lower ground level 1.
Weights room and movement studio relocated to western side of the development and PDHPE learning area removed and open collaboration space reduced in size.
Amenities to east of site relocated to underside of Centenary Hall stage and egress stair to south of site removed.
External outdoor learning removed, and facade of weights room extended to align with rear of gymnasium.
Access stairs slightly reconfigured to meet code requirements.
Existing stairs and bleachers to eastern end of Gymnasium retained and reduced to provide additional storage to the south.
Previous new bleachers to the south of the Gymnasium reduced in extent.
New access stair to north/east of Gymnasium removed and existing egress stairs reconfigured to meet code.
Store area (underside of Centenary Hall stage) converted to new amenities including end of trip facilities, storage, service rooms and dressing room.
Evacuation egress stair added to connect to Elamang Avenue.
Lift added to provide equitable access to Centenary Hall.
Storeroom added to gym extension.
External egress stair north of Centenary Hall to be reconfigured to meet code.
Lower Ground Level 3
Void above previous PDHPE learning area removed and replace with learning space. Roof garden added above proposed weights and movement studio (previous outdoor learning space). Roof garden only accessible by maintenance personnel. Two skylights add to provide additional day lighting to this area.
Store removed and open collaboration area reduced and replaced with learning studio and media room.
Southern egress stair removed and northern egress stair slightly reconfigured to meet code. Void to lower ground level 4 adjacent to stair reconfigured.
Existing stairs and bleachers to eastern end of Gymnasium to be reconfigured to meet code.
Change rooms and amenities relocated to lower ground level 4.

Changes

Amenities (accessible shower/WC) and meeting room added to gymnasium extension staff work area. No change to the external profile of this area.

Lift added to provide equitable access to Centenary Hall.

Lower Ground Level 2

Outdoor learning balcony to the west of the Innovation Centre converted to internal learning to address the requirements of Condition B6. Extent of envelope to the north (of the western wing) marginally reduced to improve sight lines from neighbouring properties

Extent of northern stair marginally reduced to improve sight lines from neighbouring properties

Eastern wing of Innovation Centre reorientated to reduce overall excavation. Internal function of this level is unchanged

New stair to east of tennis court removed and existing stairs to be reconfigured to meet code

Stair to access tennis court relocated to the east of the court to improve circulation.

Landscaping to terrace adjacent to east of tennis court developed to provide garden beds with tree planting and seating area.

Existing GBC undercroft to be retained.

Lower Ground Level 1

Outdoor Learning Balcony to west of Innovation Centre converted to internal learning to address the requirements of Condition B6. Extent of envelope to the north (of the western wing) marginally reduced to improve sight lines from neighbouring properties.

Extent of northern stair marginally reduced to improve sight lines from neighbouring properties.

Eastern wing of the Innovation Centre reorientated to reduce overall excavation. Internal function of this level is unchanged.

Amenities area to east of Innovation Centre developed to include a new access stair to connect lower ground to ground (to replace an existing curved stair) and main comms and MDB cupboard added to area.

Curved external walkway developed to provide a safer and more durable response. Planters moved inboard to address Safety in Design.

Partial existing landscape to east of GBC Hall retained.

New stair to replace non-compliant stair.

Plant and water tank areas added in undercroft.

Ground Level 1

Outdoor learning balcony to the west of the Innovation Centre converted to internal learning to address the requirements of Condition B6. Extent of envelope to the north (of the western wing) marginally reduced to improve sight lines from neighbouring properties.

Extent of northern stair marginally reduced to improve sight lines from neighbouring properties. End of stair curved.

Eastern wing of Innovation Centre reorientated to reduce overall excavation. Internal function of this level is unchanged.

Large void removed from ground level to provide a more functional collaboration area.

Amenities added to southern zone of the new Innovation Centre.

Curved external walkway developed to provide a safer and more durable response. Planters moved inboard to address Safety in Design. Locations provided for trees.

Area west of lift increased to include internally access risers for services distribution.

A new access stair to connect lower ground to ground (to replace an existing curved stair) located adjacent to GBC Hall.

New stair to replace non-compliant stair.

Narrow awning added to provide weather protection.

Trellis added to improve privacy from adjacent neighbouring properties.

Changes
Level 1
Outdoor learning balcony to the west of the Innovation Centre converted to internal learning to address the requirements of Condition B6. Extent of envelope to the north (of the western wing) marginally reduced to improve sight lines from neighbouring properties.
Extent of northern stair marginally reduced to improve sight lines from neighbouring properties. End of stair curved.
Size of staff workroom increased.
Eastern wing of the Innovation Centre reorientated to reduce overall excavation.
Area west of lift increased to include internal access risers for services distribution. Entrance door location unchanged.
Outdoor Roof Terrace
Extent of envelope to the north (of the western wing) marginally reduced to improve sight lines from neighbouring properties.
Extent of northern stair marginally reduced to improve sight lines from neighbouring properties. End of stair curved.
Eastern wing of the Innovation Centre reorientated to reduce overall excavation and planter reconfigured to align with new geometry.
Extent of plant enclosure on the western wing marginally reduced to improve sight lines from neighbouring properties.
Low height plant enclosure added on the south of the eastern wing.
Under Chapel
Reduce demolition extent.
Reduce new works.
Remove existing air conditioner condensers on top of Aloysius Verandah.
Air conditioner condensers added to low level areas.
Reconfigure landscape entry.
Increase demolition of load bearing wall.
Replace sliding doors with operable walls.
Add internal walls.
Elamang Learning Area
Retain existing external envelope.

2.1.1 Building Envelope

As a result of ongoing design development, the massing and scale of the Innovation Centre has been further considered to reduce the scale of the northern elevation and the northern staircase. The western wing of the new building is aligned with both the Carabella Street and Marian Centre grid. To improve the amenity and the functionality of the learning spaces, the eastern wing has now been realigned from an angled form to a straight orientation to be on the same grid. A comparison between the approved and proposed building layout (at ground level) is shown at **Figure 1**.

These changes have resulted in an overall reduction in the building mass, as well as the extent of excavation required. Whilst the RL of lower ground level 3 has changed to RL17.4m to provide additional head height to the PDHPE movement and weights studio on the floor below (lower ground level 4), the RL on lower ground level 2 has not changed. Therefore, the height from lower ground level 4 to lower ground level 2 has not changed since the SSD approval and the overall building height remains consistent with the RLs approved under Condition B4 of SSD 16_7919, as outlined in **Table 2**. Additionally, in order to resolve the revised orientation of the eastern wing, the location of the southern access stairs has been marginally revised resulting in a minor change to the structures at roof level. Finally, whilst the western plant enclosure has been marginally reduced, additional low-height plant has been added to the south-eastern edge of the roof terrace to accommodate a kitchen exhaust duct and make-up air duct. An assessment of view impacts is provided at **Section 3.3.2**.

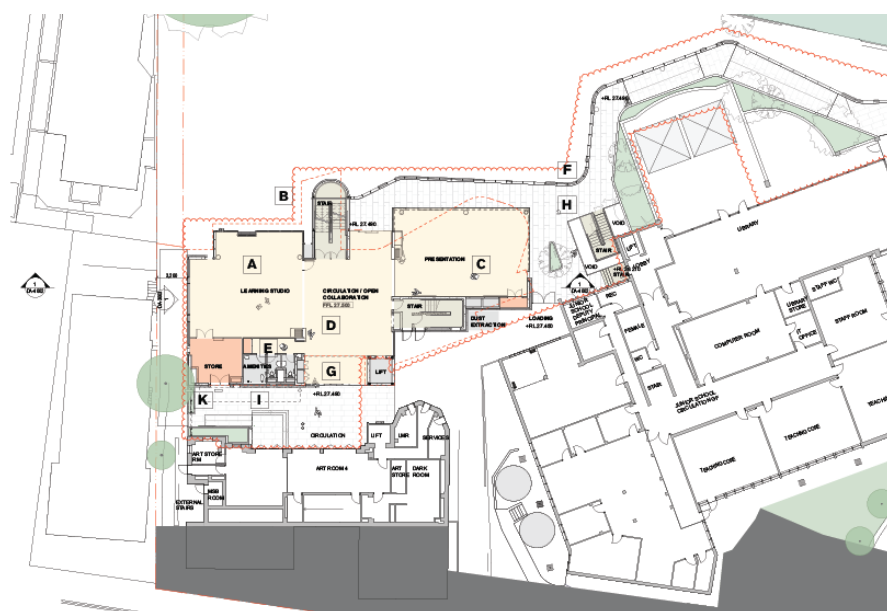


Figure 1 Comparison of approved (red) and proposed building outline (ground level)
Source: FJMT

Table 2 Comparison of roof top RLs

Approved under Condition B4	Proposed RL
Floor level of the roof - RL34.5	RL34.5
Lift overrun – RL39.0	RL39.0
Stairwell – RL37.5	RL37.5

2.1.2 External Amendments and Façade / Material Refinements

External Amendments

In addition to the changes to the building envelope, the Innovation Centre has been amended to provide for a design which better responds to the functional requirements of the use and reduces impacts on neighbouring properties. The proposed external amendments include:

- Design development of the northern staircase from an angled structure to a rounded form, resulting in a reduction in the extent of the stair.
- Enclosure of the external outdoor learning area at lower ground level 4. The void that the previous outdoor space created at lower ground level 3 will be replaced with a roof garden that will only be accessible by maintenance personnel.
- Relocation of the plant from the western boundary at lower ground level 4 to the roof top and lower ground 1 undercroft space. Extent of the roof top plant room slightly reduced to improve views from neighbouring properties.
- Inclusion of additional plant on the south-eastern edge of the roof terrace to accommodate a kitchen exhaust duct and make-up air duct from the food technology kitchen on lower ground 2.
- Enclosure of outdoor learning areas between lower ground level 2 and lower ground level 4 to ensure compliance with acoustic requirements, and associated façade amendments.
- Design development of the building's curved external walkway to remove in-built planter boxes on the edge of the walkway to improve maintenance and ensure the safety of students, staff and visitors.

- Modifications to the high-level windows on the building's western façade.

Façade / Material Refinements

In response to the enclosure of the outdoor learning areas, the façade design has been reconsidered and developed. A comparison between the approved and proposed façade materials is provided at **Appendix B**.

The main facade of the Innovation Centre on ground and level 1 is either face brickwork, clear glazing, shaded glazed screens or tinted glazing with external louvres to address thermal performance. Further, in response to feedback received during preparation of the original application, the dark bricks have been substituted with a lighter coloured brick to ensure consistency with the existing Marian Centre to the south and the adjacent apartment buildings. Therefore, the revised materials maintain and improve the intent of the approved materiality by better aligning with existing buildings on and surrounding the campus.

2.1.3 Internal Amendments

The proposed internal amendments mainly relate to reducing the floor space on lower ground levels 3 and 4 and the reconfiguration of floor space within the Innovation Centre as detailed in the Architectural Plans at **Appendix A**. The proposed reconfiguration will widen the space to the east of the stairs between lower ground 2 and level 1, allowing for additional sunlight to penetrate through the open collaboration areas. Other minor internal reconfigurations include:

- Relocation of the weights room to western side of the building and reconfiguration of the learning space and collaboration area.
- Relocation of the amenities in the east of the site to the underside of the Centenary Hall stage.
- Reduction of the open collaboration area and replacement of learning studio and media room on lower ground level 3.
- Removal of the large void from ground level to provide a more functional collaboration area.

Changes which relate to the gymnasium include the conversion of the store area (underneath the Centenary Hall stage) to feature relocated amenities including end of trip facilities, service rooms, storage and a dressing room.

2.1.4 Landscaping

The proposed landscape modifications relate to minor design development changes across the site and changes to the curved external walkway at lower ground level 1 and ground level as detailed in the Landscape Drawings at **Appendix D**.

Specifically, the modifications to the external walkway include the relocation of planter boxes away from the perimeter of the space and a change to a more linear design (refer to **Figure 1**). A review of the edge conditions concluded that planter beds located away from the balustrade resulted in a more functional outcome for the following reasons:

- Reduced fall risks from planter beds if used as a seat or traversed by students, staff or visitors.
- Operational issues in carrying out maintenance using safety lines in areas with high foot traffic.
- Greater opportunities for larger volumes of soil and greater varieties of planting.
- Re-positioned planter beds may present sitting opportunities which previously would not be achievable due to fall risks.



Figure 2 Comparison of approved (red) and proposed walkway (lower ground level 1)
Source: FJMT

2.1.5 Utilities and Infrastructure

Minor modifications are proposed to the mechanical services as described in the statement provided by Northrop at **Appendix L**. Modifications includes changes to the kitchen make-up air, air handling units and mixed-mode ventilation. However, the changes will not have any significant impact on the mechanical systems approved as part of the SSD application.

The kitchen exhaust and make-up air ducts are proposed to be located on the south-eastern edge of the roof terrace. Discharging at lower levels would not comply with the NCC due to proximity to building occupants. The proposed rooftop location has been chosen to minimise impacts on the neighbours to the west of the site.

The Electrical Services Statement prepared by JHA (see **Appendix K**) notes that the electrical servicing strategies remain unchanged. The Statement outlines that the proposed Innovation Centre will be connected to the existing main switchboard and confirms that the existing incoming services have the capacity to accommodate future expansion.

With respect to hydraulic services, the Hydraulics Statement provided by Wood and Grieve Engineers (see **Appendix I**) states that there are no significant changes to the proposed design when compared to the approved SSD application.

2.2 Modifications to Conditions

The proposed modifications described above necessitate amendments to the consent conditions which are identified below. Words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in ***bold italics***.

2.2.1 Conditions of consent for concept development application

Terms of consent

- A4. The development may only be carried out:
- (a) in compliance with the conditions of this consent;
 - (b) in accordance with all written directions of the Planning Secretary;
 - (c) in accordance with the EIS as amended by the RtS and Supplementary RtS Information; and
 - (d) in accordance with the approved plans in the table below:

Architectural Drawings prepared by <i>FJMT</i>			
Dwg No.	Rev.	Name of Plan	Date
MP-1000	4 5	Cover Sheet	9/01/2018 15/07/2019
MP-1001	2	Location Plan - Existing	21/07/2017
MP-1002	2	Site Plan - Existing	21/07/2017
MP-1003	2	Site Analysis	21/07/2017
MP-1004	2	Site Plan - Precincts	21/07/2017
MP-1101	2 3	Site Plan - Proposed Envelopes Stage 1.1	21/07/2017 15/07/2019
MP-1102	2 3	Site Plan - Proposed Envelopes Stage 1.2	21/07/2017 15/07/2019
MP-1103	3 4	Site Plan - Proposed Envelopes Stage 2	9/01/2018 15/07/2019
MP-1104	3 4	Site Plan - Proposed Envelopes Stage 2 3	9/01/2018 15/07/2019
MP-1105	2	Western Precinct Development Site	21/07/2017
MP-1106	2 3	Western Precinct Envelope	21/07/2017 15/07/2019
MP-1107	2	Northern Precinct Development Site	21/07/2017
MP-1108	2	Northern Precinct Envelope	21/07/2017
MP-1109	3	Eastern Precinct Development Site	9/01/2018
MP-1110	3	Eastern Precinct Envelope	9/01/2018
MP-1111	2	Southern Precinct Development Site	21/07/2017
MP-1112	2 3	Southern Precinct Envelope 1	21/07/2017 15/07/2019
MP-1113	2	Southern Precinct Envelope 2	21/07/2017
MP-2001	2 3	Masterplan Proposed Plan - LG4 LG3	21/07/2017 15/07/2019
MP-2002	2 3	Masterplan Proposed Plan - LG2 LG1	21/07/2017 15/07/2019
MP-2003	3 4	Masterplan Proposed Plan - G L1	9/01/2018 15/07/2019
MP-2004	3 4	Masterplan Proposed Plan - L2 L3	9/01/2018 15/07/2019
MP-2005	2 3	Masterplan Proposed Plan - L4 L5	21/07/2017 15/07/2019
MP-3001	3 4	Elevation - Elamang Avenue	9/01/2018 15/07/2019
MP-3002	2 3	Elevation - Carabella Street	21/07/2017 15/07/2019
MP-4001	3	Sections - Eastern and Southern precincts	9/01/2018
MP-4002	2	Sections - Northern and Southern precincts	21/07/2017
MP-4003	2 3	Sections - Western precincts	21/07/2017 15/07/2019

MP-5001	3	Shadow Diagrams - Existing	25/07/2017
MP-5002	3	Shadow Diagrams - Existing	25/07/2017
MP-5003	3	Shadow Diagrams - Existing	25/07/2017
MP-5004	3	Shadow Diagrams - Existing	25/07/2017
MP-5005	3	Shadow Diagrams - Existing	25/07/2017
MP-5006	3	Shadow Diagrams - Existing	25/07/2017
MP-5007	3	Shadow Diagrams - Existing	25/07/2017
MP-5008	3	Shadow Diagrams - Existing	25/07/2017
MP-5009	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 June 9am-12pm</i>	25/07/2017 15/07/2019
MP-5010	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 June 1pm-3pm</i>	25/07/2017 15/07/2019
MP-5011	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 Dec 9am-12pm</i>	25/07/2017 15/07/2019
MP-5012	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 Dec 1pm-3pm</i>	25/07/2017 15/07/2019
MP-5013	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 March 9am-12pm</i>	25/07/2017 15/07/2019
MP-5014	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 21 March 1pm-3pm</i>	25/07/2017 15/07/2019
MP-5015	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 23 Sept 9am-12pm</i>	25/07/2017 15/07/2019
MP-5016	3 4	Shadow Diagrams - Concept Proposal <i>Envelopes Shadow Diagrams 23 Sept 1pm-3pm</i>	25/07/2017 15/07/2019
Landscape Drawings prepared by <i>Site Image, Landscape Architects</i>			
Dwg No.	Rev.	Name of Plan	Date
003	D	Tree Masterplan	21/02/2018
005	D	Landscape Masterplan	21/02/2018
Stormwater Plans (16652) prepared by <i>Henry and Hymas</i>			
DA_C000	03	Cover Sheet, Drawing Schedule and Locality Sketch	17/07/2017
DA_C050	02	Demolition Plan	17/07/2017
DA_C250	03	Stormwater Pre - Catchment Plan	17/07/2017
DA_C251	03	Stormwater Post - Catchment Plan	17/07/2017
C10.01	01	Masterplan Cover Sheet, Drawing Schedule and Locality Plan	19/07/2019
C11.01	01	Masterplan Site Imperviousness Existing	19/07/2019
C12.01	01	Masterplan Site Imperviousness Proposed	19/07/2019

2.2.2 Conditions of consent for stage 1 works

Terms of consent

A2. The development may only be carried out:

- (a) in compliance with the conditions of this consent;
- (b) in accordance with all written directions of the Planning Secretary;
- (c) in accordance with the EIS as amended by the RtS and Supplementary RtS Information: and
- (d) in accordance with the approved plans in the table below:

(e) Architectural Drawings prepared by FJMT			
Dwg No.	Rev.	Name of Plan	Date
DA-1001	3 4	Cover Sheet	25/07/2017 15/07/2019
DA-1002	2	Site Plan - Precincts	21/07/2017
DA-1003	2 3	Site Plan - Proposed Stage 1 Works	21/07/2017 15/07/2019
DA-1004	2 3	Site Plan - Western Precinct	21/07/2017 15/07/2019
DA-1005	2 3	Site Plan - Northern Precinct	21/07/2017 15/07/2019
DA-1006	2 3	Site Plan - Eastern Precinct	21/07/2017 15/07/2019
DA-1007	2 3	Site Plan - Southern Precinct	21/07/2017 15/07/2019
DA-2001	2 3	Masterplan Demolition Plan - LG4 LG3	21/07/2017 15/07/2019
DA-2002	2 3	Masterplan Demolition Plan - LG2 LG1	21/07/2017 15/07/2019
DA-2003	2 3	Masterplan Demolition Plan - G L1	21/07/2017 15/07/2019
DA-2004	2 3	Masterplan Demolition Plan - L2 L3	21/07/2017 15/07/2019
DA-2005	2 3	Masterplan Demolition Plan - L4 L5	21/07/2017 15/07/2019
DA-2101	2 3	Masterplan Proposed Plan - LG4 LG3	21/07/2017 15/07/2019
DA-2102	2 3	Masterplan Proposed Plan - LG2 LG1	21/07/2017 15/07/2019
DA-2103	2 3	Masterplan Proposed Plan - G L1	21/07/2017 15/07/2019
DA-2104	2 3	Masterplan Proposed Plan - L2 L3	21/07/2017 15/07/2019
DA-2105	2 3	Masterplan Proposed Plan - L4 L5	21/07/2017 15/07/2019
DA-2201	2 3	Western Precinct Learning Hub - Lower Ground 4	21/07/2017 15/07/2019
DA-2202	2 3	Western Precinct Learning Hub - Lower Ground 3	21/07/2017 15/07/2019
DA-2203	2 3	Western Precinct Learning Hub - Lower Ground 2	21/07/2017 15/07/2019
DA-2204	2 3	Western Precinct Learning Hub – Lower Ground 1	21/07/2017 15/07/2019
DA-2205	2 3	Western Precinct Learning Hub - Ground Level 4	21/07/2017 15/07/2019
DA-2206	2 3	Western Precinct Learning Hub - Level 1	21/07/2017 15/07/2019
DA-2207	2 4	Western Precinct Learning Hub - Roof- Outdoor Terrace	16/03/2018 15/07/2019
DA-2301	2	Northern Precinct - Lower Ground 4	21/07/2017
DA-2302	3	Northern Precinct - Lower Ground 3	13/09/2018
DA-2303	2	Northern Precinct - Lower Ground 2	21/07/2017

DA-2304	2	Northern Precinct - Lower Ground 1	21/07/2017
DA-2305	2	Northern Precinct - Ground Level	21/07/2017
DA-2306	2	Northern Precinct - Level 1 (Roof)	21/07/2017
DA-2401	2	Eastern Precinct - Lower Ground 2 – Stage 1	21/07/2017
DA-2501	2 3	Southern Precinct - Lower Ground 1	21/07/2017 18/07/2019
DA-2502	2	Southern Precinct - Ground level	21/07/2017
DA-2503	2 3	Southern Precinct - Level 1	21/07/2017 15/07/2019
DA-2504	2	Southern Precinct - Level 2	21/07/2017
DA-2505	2	Southern Precinct - Level 3	21/07/2017
DA-2506	2	Southern Precinct - Level 4	21/07/2017
DA-2507	2	Southern Precinct Roof	21/07/2017
DA-3001	2 3	Elevations - Site	21/07/2017 15/07/2019
DA-3002	2 1	Elevations 1 - Western Precinct Learning Hub	21/07/2017 28/06/2019
DA-3003	2 1	Elevations 2 - Western Precinct Learning Hub	21/07/2017 28/06/2019
DA-3004	2	Elevations - Northern Precinct Connector	21/07/2017
DA-3005	2	Elevations - Southern Precinct Connector	21/07/2017
DA-4001	2 3	Sections 1 - Western Precinct Learning Hub	21/07/2017 15/07/2019
DA-4002	2 3	Sections 2 - Western Precinct Learning Hub	21/07/2017 15/07/2019
DA-4003	2	Sections - Western and Eastern Precinct connector	21/07/2017
DA-4004	2	Sections - Southern Precinct Connector	21/07/2017
DA-5001	3 4	Stage 1 - Shadow Diagrams 21 June 9am-12pm	25/07/2017 15/07/2019
DA-5002	3 4	Stage 1 - Shadow Diagrams 21 June 1pm-3pm	25/07/2017 15/07/2019
DA-5003	3 4	Stage 1 - Shadow Diagrams 21 Dec 9am-12pm	25/07/2017 15/07/2019
DA-5004	3 4	Stage 1 - Shadow Diagrams 21 Dec 1pm-3pm	25/07/2017 15/07/2019
DA-5005	3 4	Stage 1 - Shadow Diagrams 21 March 9am-12pm	25/07/2017 15/07/2019
DA-5006	3 4	Stage 1 - Shadow Diagrams 21 March 1pm-3pm	25/07/2017 15/07/2019
DA-5007	3 4	Stage 1 - Shadow Diagrams 23 Sept 9am-12pm	25/07/2017 15/07/2019
DA-5008	3 4	Stage 1 - Shadow Diagrams 23 Sept 1pm-3pm	25/07/2017 15/07/2019

DA-5009	3 5	111 Carabella Street Façade Shadow Studies Carrabella St Façade Shadow Studies	25/07/2017 15/07/2019
DA-5010	1	June 21st Marian Centre – Shadow study 3D	08/07/2019
DA-5011	1	Dec 21st Marian Centre – Shadow study 3D	08/07/2019
DA-5012	1	March 21st Marian Centre – Shadow study 3D	08/07/2019
DA-5013	1	September 23rd Marian Centre – Shadow study 3D	08/07/2019
Landscape Drawings prepared by Site Image, Landscape Architects			
Dwg No.	Rev.	Name of Plan	Date
003	D	Tree Masterplan	21/02/2018
004	D	Landscape Stage 1	21/02/2018
006	D	Learning Hub	21/02/2018
007	D	Southern Connector	21/02/2018
008	D	Materials Palette	21/02/2018
009	D	Planting Palette	21/02/2018
LH-000 S4.55-000	E B	Landscape Coversheet	25/01/2018
LH-101 S4.55-101	F C	Landscape Lower Ground 4	25/01/2018 12/07/2019
S4.55-111	C	Landscape Lower Ground 3	26/06/2019 12/07/2019
LH-102 S4.55-121	E C	Landscape Lower Ground 2	25/01/2018 12/07/2019
LH-103 S4.55-131	E C	Landscape Lower Ground 1	25/01/2018 12/07/2019
S4.55-132	C	Landscape Lower Ground 1	12/07/2019
LH-104 S4.55-141	E C	Landscape Ground Level	25/01/2018 12/07/2019
S4.55-142	C	Landscape Ground Level	12/07/2019
LH105 S4.55-151	F C	Landscape Plan Level 1 and Rooftop	25/01/2018 12/07/2019
S4.55-161	C	Landscape Plan Rooftop	12/07/2019
LH-106	E	Landscape Plan Northern Connector	25/01/2018
LH-107	E	Landscape Plan Eastern Ramp Connector	25/01/2018
LH-108 S4.55-108	A C	Landscape Plan Southern Connector	25/01/2018 12/07/2019
LH-501 S4.55-501	E B	Landscape Softscape Details	25/01/2018 26/06/2019
LH-601 S4.55-601	E B	Landscape Sections	25/01/2018 26/06/2019
Stormwater Plans (16652) prepared by Henry and Hymas			
C01.01	03	Cover Sheet, Drawing Schedule and Locality Plan	12/07/2019
C01.11	02	Specification Notes	12/07/2019
C02.01	02	Concept Sediment and Erosion Control Plan	12/07/2019
C02.11	02	Sediment and Soil Erosion Control Details	12/07/2019

C05.01	02	Stormwater Drainage Plan	12/07/2019
C05.011	02	Stormwater Longitudinal Sections – Sheet 01	12/07/2019
C05.012	02	Stormwater Longitudinal Sections – Sheet 02	12/07/2019
C05.013	02	Stormwater Longitudinal Sections – Sheet 03	12/07/2019
C05.91	02	Stormwater Calculations Sheet - Minor	12/07/2019
C05.92	02	Stormwater Calculations Sheet - Major	12/07/2019
C06.01	02	Catchment Plan	12/07/2019
C07.01	03	Site Imperviousness	12/07/2019
C09.01	02	Details	12/07/2019
DA_C100	03	General Arrangement Plan	17/07/2017
DA_C101	03	Stormwater Concept Plan Stage B, Western Precinct	17/07/2017
DA_C102	03	Stormwater Concept Plan Stage B	17/07/2017
DA_C200	03	Post-Catchment Plan	17/07/2017
DA_SE01	03	Sediment Erosion Control Plan Sheet 1 of 3	17/07/2017
DA_SE02	03	Sediment Erosion Control Plan Sheet 2 of 3	17/07/2017
DA_SE03	03	Sediment Erosion Control Plan Sheet 3 of 3	17/07/2017

Substantially the Same Development

Section 4.55(1A) of the EP&A Act states that a consent authority may modify a development consent if “it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all)”.

The development, as proposed to be modified, is substantially the same development as that originally approved in that it:

- It retains the same use as the approved development in that it provides an educational establishment.
- The proposed modifications do not seek to modify the type of educational facilities provided by the development.
- The proposed modifications are generally consistent with the approved building envelope and will slightly reduce the bulk, mass and scale of the development.
- The visual presentation of the building remains generally the same as the approved development.
- The fundamental benefits delivered by the development, including the high level of disabled access and the proposal's relationship to the existing built form, will continue to be provided.
- The environmental impacts are generally consistent with, or less than, the approved development.

3.0 Environmental Assessment

Section 4.55(1A) of the EP&A Act states that a consent authority may modify a development consent if “*it is satisfied that the proposed modification is of minimal environmental impact*”. Under section 4.55(3) the consent Authority must also take into consideration the relevant matters to the application referred to in section 4.15(1) of the EP&A Act and the reasons given by the consent authority for the grant of the original consent.

The following assessment considers the relevant matters under section 4.15(1) and demonstrates that the development, as proposed to be modified, will be of minimal environmental impact.

3.1 Compliance with Statutory Plans

- *Environmental Planning and Assessment Act 1979* (EP&A Act);
- *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP);
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP);
- *State Environmental Planning Policy (Infrastructure) 2007* (SEPP Infrastructure);
- *State Environmental Planning Policy 55 – Remediation* (SEPP 55);
- *North Sydney Local Environmental Plan 2013* (North Sydney LEP 2013);
- North Sydney Development Control Plan 2013 (North Sydney LEP 2013);
- North Sydney Section 94 Contributions Plan 2013;
- NSW State Priorities;
- A Plan for Growing Sydney;
- NSW Long Term Transport Masterplan 2012;
- Sydney’s Cycling Future 2013;
- Sydney’s Walking Future 2013; and
- Healthy Urban Development Checklist, NSW Health.

The proposed modifications do not substantially alter the development and are proposed to improve the efficiency of the layout, facilitate the construction process, reduce impacts on neighbouring properties and enhance the design of the building. As a result, the proposal remains consistent with the relevant statutory plans and policies.

It is noted that the building is within the maximum approved building height, and so the proposal remains consistent with the original assessment that was provided under clause 42 of the Education SEPP.

3.2 Consistency with Approved Concept Proposal

The development, as proposed to be modified, remains generally consistent with the approved Concept Proposal. In particular, the modified development does not seek to change the approved number of students or staff, nor will it result in any changes to the approved access, pick-up and drop-off arrangements. Further, the building remains within the maximum height of the approved development. As a whole, the proposed modifications seek to improve the functionality of the building while reducing impacts of the development on surrounding properties as outlined in **Section 4.3**.

3.3 S.4.15(1)(b) Impact on the Environment

The EIS submitted with the original application addressed the likely environmental impacts of the development, including:

- Consistency with Relevant EPIs, Policies and Guidelines
- Urban Design and Built Form
- Parking, Traffic and Servicing
- Heritage
- Solar Access and Overshadowing
- View Impacts
- Operational Noise Impacts
- Tree Removal and Ecological Impacts
- Stormwater Management
- Construction Impacts – Stage 1 Works
- Construction Impacts – Concept Proposal
- BCA, Access and Fire Safety
- Structural Adequacy
- Soils, Geotechnical and Groundwater
- Ecologically Sustainable Development
- Crime Prevention Through Environmental Design
- Development Contributions
- Site Suitability
- Public Interest

Compliance with relevant strategic and statutory plans and policies has been considered above. The planning assessment of the proposed modified development remains generally unchanged with respect to the above matters. However, the following matters warrant further assessment.

3.3.1 Urban Design and Built Form

The proposal remains consistent with the urban design principles established as part of the SSD application. In particular, the development continues to:

- Respect the contours and topography of the site.
- Respond to the contextual grids and alignments.
- Create a bookend at the western end of the campus.

As noted above, the massing and scale of the building has been refined during design development. The northern elevation and the northern staircase have been reduced and the building's eastern wing has been realigned to a straight orientation so that it is on the same grid as the western part of the building.

Notwithstanding, the proposed building envelope is generally consistent with the approved development and remains consistent with the height and setbacks approved under the SSD application. However, in order to resolve the revised orientation of the eastern wing, the location of the southern access stair has been marginally revised resulting in a minor change to the structures at roof level.

The building continues to sit well below the height of the existing Marian Centre fronting Carabella Street, thereby reducing any streetscape impacts. Further, the building continues to be broken down into a series of smaller forms to maintain a consistent scale with the surrounding built fabric of the campus. Splitting the envelope into two wings continues to assist in reducing the scale of the building.

Consistent with the approved building, the modified development (including changes to the windows on the building's western façade) carefully considers privacy from the adjacent residential buildings. Views to and from all windows in close proximity to the boundary are either high-level, screened or use opaque glazing.

Figure 3 and **Figure 4** provide a comparison between the approved building and the development, as proposed to be modified.



Figure 3 Photomontage of development, as approved
Source: FJMT

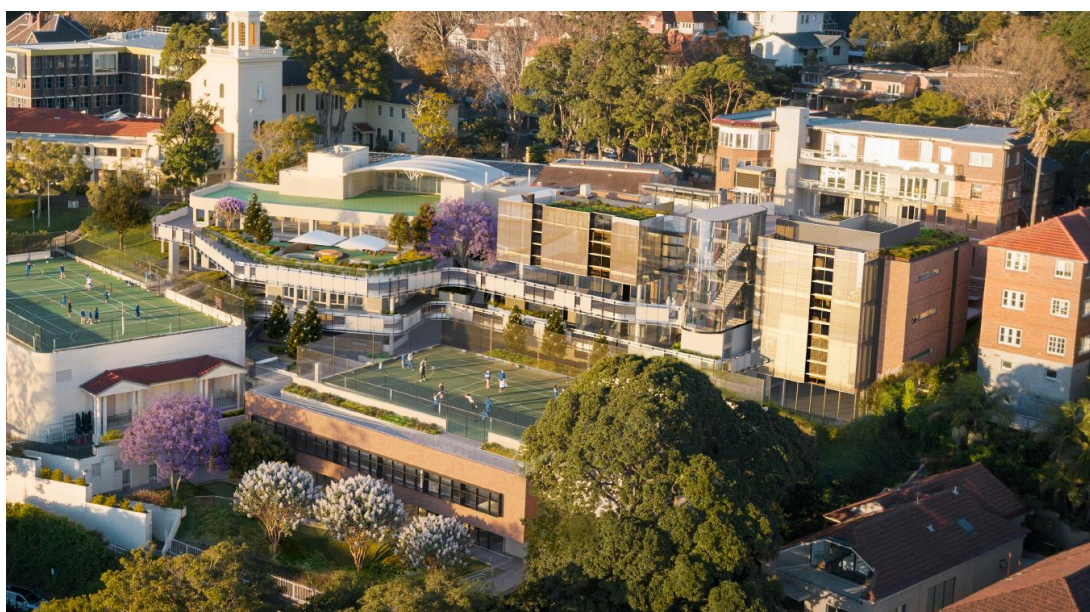


Figure 4 Photomontage of development, as proposed to be modified
Source: FJMT

3.3.2 View Impacts

A detailed assessment of the proposed development against the principles of view sharing established by Senior Commissioner Roseth in the Judgement of Tenacity *Consulting v Warringah [2004] NSWLEC 140* was submitted as part of the original EIS and is applicable to this modification. The assessment below considers view impacts to the most affected apartments at 111 Carabella Street and should be read in conjunction with FJMT's view analysis at **Appendix C**. With respect to other key properties:

- 22 Elamang – the bulk of the gymnasium extension has been reduced, therefore view lines are improved.
- 58 and 60 Carabella Street – the footprint of the lift overrun, realignment of the eastern wing, reduction in the northern stair and reduction of the southern stair rooftop footprint has resulted in an improvement to view lines.

View Impacts on East Facing Apartments

The reorientation of the building form, associated changes to the southern access stair and introduction of additional plant on the south-eastern edge of the roof terrace has resulted in minor changes to the structures at roof level, and alterations to the views from east facing apartments in the adjacent building at 111 Carabella Street.

Table 3 provides a comparison of the approved and proposed views from apartment 9/111 Carabella Street. The views show that there has been a minor reduction in footprint of the lift, southern stair and western plant enclosure. However, due to the reorientation of the eastern wing, their location is slightly altered. As a result, there are minor changes to views, and there is an overall gain in access to sky views when compared to the approved development.

It is noted that the lift overrun and stair continue to be within the maximum 12m height limit which applies to this part of the site under North Sydney LEP 2013. The use of glass for the lift and stair overrun will ensure a more transparent built form and less obstruction of sky views from the neighbouring property.

As detailed in **Section 2.1.5**, the kitchen exhaust and make-up air ducts are proposed to be located on the south-eastern edge of the roof terrace. Discharging at lower levels would not comply with the NCC due to proximity to building occupants. Whilst there will be a minor change to views from apartment 9/111 Carabella Street, the proposed rooftop location has been chosen to minimise impacts on this property. Ultimately, climbing plants from the adjacent garden will be able to grow onto the low plant enclosure to improve the outlook from east facing apartments in 111 Carabella Street.

Table 3 Eastern Visual Impact (approved building outlined in red)

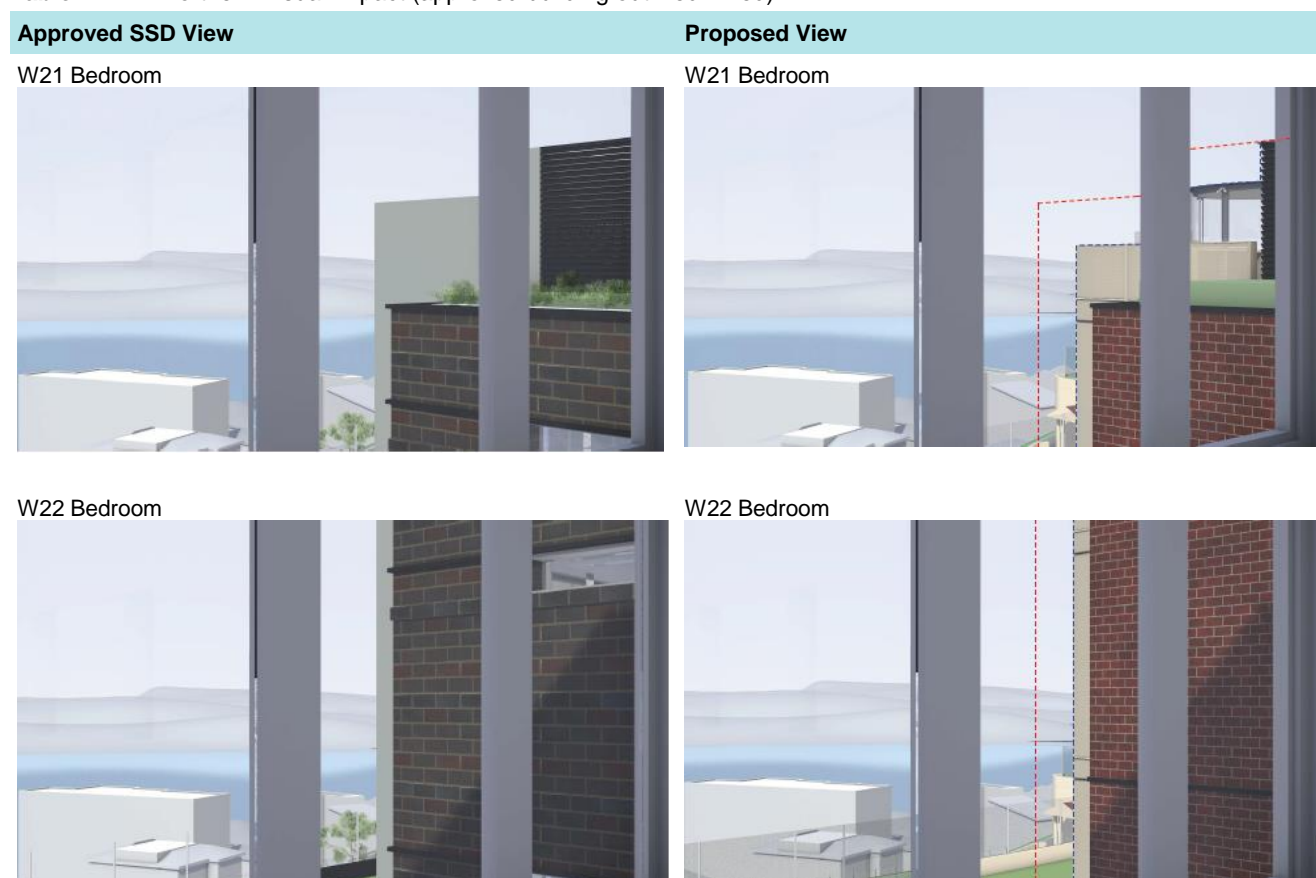
Approved SSD View	Proposed View
W7 Living Room	W7 Living Room
	



View Impacts on North Facing Apartments

Table 4 compares the views from W21 and W22 (bedrooms), taken from a worst-case viewpoint looking obliquely across the school site. The comparison shows that the proposed amendments to the building mass will improve view impacts from the northern apartments in 111 Carabella Street when compared to the approved development.

Table 4 Northern Visual Impact (approved building outlined in red)



3.3.3 Overshadowing and Solar Access

FJMT has prepared revised Shadow Diagrams which compare the approved and proposed shadow impacts (see **Appendix A**). The diagrams show that the modifications will result in some changes to the extent of shadows cast by the development, with some parts of the school campus experiencing more overshadowing and other areas experiencing less overshadowing. Overall, the modifications generally result in an improved overshadowing

outcome within the campus. Elevational shadow diagrams have been prepared to show the impact of the revised Innovation Centre on the existing Marian Centre (refer to **Appendix B**). Shadows on the Marian Centre have generally reduced to the learning space windows on the east, however have slightly increased around the new bridge connection from the Innovation Centre to the existing Marian Centre. The reduction in shadows is a result of the reorientation of the east wing of the Innovation Centre and the slight shadow increase results from the material change of the lift from glass to concrete at lower levels.

With respect to impacts on properties to the west of the campus, the property which is most significantly affected by overshadowing is 111 Carabella Street. The realignment of the north-west corner of the building and the revision of the northern façade will marginally improve the overshadowing impacts when compared to the approved development.

3.3.4 Privacy

Privacy of adjoining properties has been a key consideration in the design development process. No additional windows are proposed on the western elevation, however horizontal windows have been reconfigured slightly to adjust to structural requirements. Similarly, vertical glazed windows have been changed to solid operable windows / louvres to reduce impacts to the adjoining neighbour. It is noted that the window panel in the level 1 staff room is solid, and therefore staff will not be able to view out of the window. The window will only be used to provide ventilation if required due to the mechanical system shut down.

Additional privacy analysis has been prepared by FJMT (refer to **Appendix B**). The additional diagrams show views looking perpendicular from 111 Carabella Street, views looking obliquely from 111 Carabella Street and views from the Innovation Centre looking towards 111 Carabella Street. The diagrams show that despite the proposed reconfiguration of windows on the building's western façade, there will be no opportunity to look directly from the Innovation Centre into 111 Carabella Street, and vice versa.

It is noted that the new roof top garden at lower ground level 3 will only be accessible by maintenance personnel and will not result in any adverse privacy impacts to adjoining properties.

3.3.5 Heritage

Heritage Statements have been prepared by GML Heritage and are included at **Appendix F**. The Statement assesses the minor impact of the proposed changes on the Chapel building and concludes that the proposed changes will not alter the conclusions of the Loreto Kirribilli Masterplan and Stage 1 Works Heritage Impact Assessment Statement prepared by GML in July 2017. The Statement identifies that the floor tiles on the Aloysius veranda are not a part of the building's original fabric and hence their removal will cause no adverse heritage impacts. Additionally, the air conditioning proposed as part of the Chapel renovation requires louvres on the facades of the building. It is proposed to remove window sashes to the small windows above the Aloysius verandah roof on the building's eastern elevation and replace them with louvre panels, a preferable option to forming new openings.

GML concludes that these louvres will have minimal impact on the heritage building given they are appropriately located on the building's least intact elevation. Overall, the proposed changes will not alter the conclusions made in the original statement prepared by GML in July 2017 which accommodated the SSDA.

3.3.6 Operational Noise Impacts

An Acoustic Statement has been prepared by Acoustic Logic and is included at **Appendix G**. As outlined above, the enclosure of the outdoor learning areas on the northern façade of the building is driven by the need to comply with Condition B6. Based on the noise emissions permitted under Condition B6 and the proximity of the nearest sensitive receiver (111 Carabella Street), it would take just two people (in a moderate/raised voice) to reach the noise emission limit of 50dB(A) – effectively making the balconies unusable for any activity apart from reading. By enclosing the outdoor learning areas, most typical classroom activities will be viable, even when the windows/louvres are open to allow for natural ventilation of the classrooms. It is only activities such as singing and music practice that would require the façade to be closed. If louder activities such as singing or music are proposed,

appropriately selected glazing (when closed) will also make these activities viable without excessive noise impact on adjacent development.

The proposed enclosure of the outdoor learning areas and amendments to the façade will ensure that future noise impacts on nearby residents are minimised.

3.3.7 Construction Impacts

No changes are proposed to the approved construction management arrangements. However, the proposed reduction in the extent of excavation will lessen the impacts of noise, dust and vibration on the school community and the surrounding locality. It is anticipated that the reduction in excavation will reduce the number of truck movements by approximately 30% and will see a reduction of approximately 3 weeks in the overall construction programme.

3.3.8 Stormwater Management

The Stormwater Management Report prepared by Northrop is provided at **Appendix H**. The Report notes that the proposed modifications will result in nominal changes to pervious areas from 19.70% (approved) to 19.75% (proposed) and impervious areas from 80.30% (approved) to 80.25% (proposed). Northrop concludes that the revised scheme involves no changes that would negatively impact catchment runoff, and that the proposed stormwater system remains consistent with the approved H&H SWMP and Council's stormwater guidelines.

3.3.9 Ecologically Sustainability Development (ESD)

As outlined in the ESD Statement prepared by Northrop at **Appendix J**, the proposed modifications will not alter the originally targeted building performance or ESD objectives.

3.3.10 Consistency with Reasons for the Grant of the Original Consent

In accordance with section 4.55(3) of the EP&A Act, in determining an application for modification of a consent, the consent authority must take into consideration the reasons given by the consent authority for the grant of the consent that is sought to be modified. The proposed modifications are consistent with the reasons given by the NSW Independent Planning Commission in that:

- Construction traffic impacts, parking impacts and operational traffic impacts are improved or unchanged.
- The built form remains reasonable for the site.
- The development continues to be in the public interest.
- The development continues to meet the objects of the EP&A Act.
- The development will not result in the loss of threatened or vulnerable species, population, communities or significant habitat.

4.0 Conclusion

In accordance with section 4.55(1A) of the EP&A Act, the modified development will be substantially the same as the originally approved development. This section 4.55(1A) seeks to facilitate amendments in order to improve the functionality of the approved education facility, reduce excavation and provide for an improved design. The proposed modifications will not alter the environmental impacts assessed and approved as part of the original development consent, nor will they give rise to any additional adverse amenity impacts.

In accordance with section 4.55(1A) of the EP&A Act, the Department may modify the consent as:

- The consent, as proposed to be modified, is substantially the same development as that originally approved.
- The modified development remains generally consistent with the approved Concept Proposal.

- The modifications will improve amenity offered by the approved educational facilities.
- The modifications are a result of ongoing design development and will improve the aesthetic appearance of the development and the functionality of its internal layout.
- The proposal will not result in any unacceptable adverse environmental, social or economic impacts.

In light of the above, we therefore recommend the proposed modification is supported by the Minister.

We trust that this information is sufficient to enable a prompt assessment of the proposed modification. Should you have any queries in relation to the above, please do not hesitate to contact me on 9956 6962 or ktudehope@ethosurban.com.

Yours sincerely,



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