Application No. SD-10291

Prepared for St. Luke's Grammar School
September 2020

SSDA Response to Submission (RTS)

St. Luke's Grammar School

New Senior School Campus

800 Pittwater Road, Dee Why NSW 2099
224 Headland Road, North Curl Curl NSW 2099

ST LUKE'S GRAMMAR SCHOOL

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ISSUE DATE	PURPOSE	ISSUED BY
September 2020	Issued for RTS	Peter Tonkin

ST LUKE'S GRAMMAR SCHOOL

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1.0

Urban Design

1.1 Second Lift

Northern Beaches Council Comments

(School Campus Connectivity)

The proposed links connecting No.224 Headland Road and No.800 Pittwater Road, being both the internal lift connection and previously approved pathway and stair connection is a logical and well-founded strategy. The circulation as a nodal point in the scheme provides a single and clear wayfinding strategy between the sites across the whole campus.

With just a single lift to provide this link, there is the potential to introduce a second lift in the main vertical circulation core to accommodate for the growth of student numbers over time. Given the scope and size of the campus and projected increase in numbers over time it would be prudent to provide several lifts.

DPIE Comments

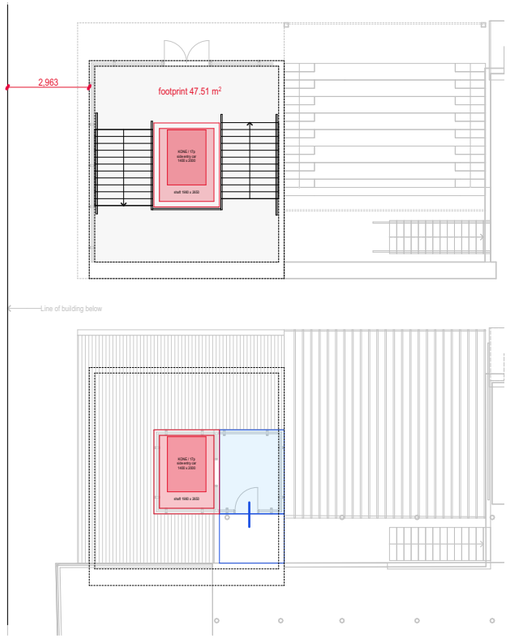
The Department concurs with the comments from Northern Beaches Council (Council) regarding the provision of a second elevator to connect the two sites and the revision to the roofline at 800 Pittwater Road, and considers that this should be addressed in the RTS.

RTS Response

A second lift, with a reduced lift car size, can be accommodated without an increase in footprint area of the vertical circulation tower (refer Option 3).

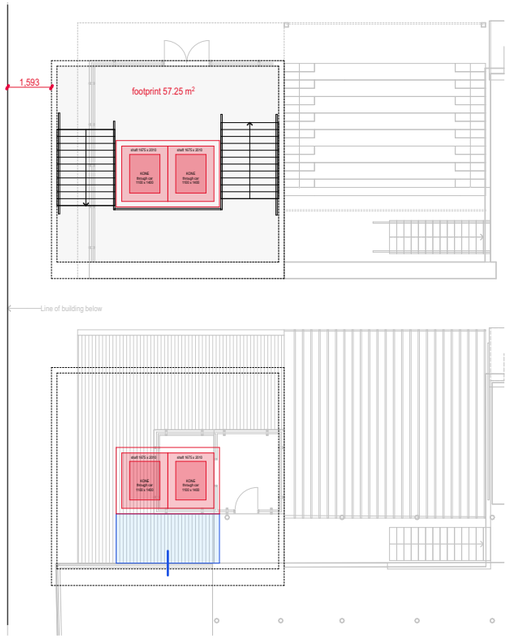
To avoid a loss in width for the external social stair to the east, the circulation tower has to be moved west towards the existing building, which will decrease the set-back to the building from 2.9m to 1.6m.

The lift lobby at 224 Headland Road will move from the eastern side to the southern side of the lift.



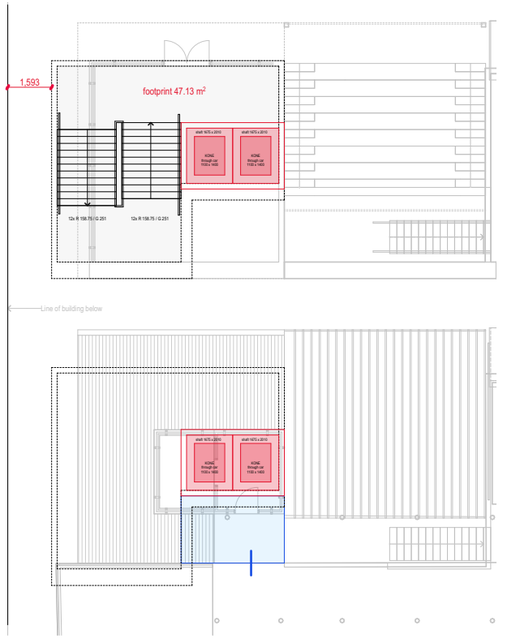
1 OPTION 1

Number of lifts: 1
Persons / lift: 17
Lift car size: 1400 x 2000
Lift shaft size : 1980 x 2650
Footprint: 47.51m2



2 OPTION 2

Number of lifts: 2
Persons / lift: 8
Lift car size: 1400 x 1100
Lift shaft size : 1675 x 2010
Footprint: 57.25m2



3 OPTION 3

Number of lifts: 2
Persons / lift: 8
Lift car size: 1400 x 1100
Lift shaft size : 1675 x 2010
Footprint: 47.13m2

1.2 Materiality Noise Barrier Wall

Northern Beaches Council Comments

(No. 800 Pittwater Road Architectural Design Statement)

In concurrence with the Government Architect NSW (GANSW) comments regarding the use of the plexiglass fencing elements, there needs to be testing that looks to an alternate material. An alternate must sit in harmony with the sandstone elements and the greater natural landscape context of the natural podium whilst tying in with the form and architectural style and horizontal banding of the building expression could be further tested.

A combination of landscaped planting elements combined with subtle detail in the fencing elements, noting it fronts Pittwater Road and frames the foreground and context of the whole site is encouraged.

(Noise Barrier Wall)

Council concurs with the comments of the GANSW on the plexi-glass noise wall barrier. This issue is complex as the plexi-glass offers a reduced bulk/ built form impact to the streetscape and views to the heritage building and is a well considered landscape response to the forecourt. Whilst noting support of deletion of the plexi-glass element, the applicant is encouraged to further test alternate options with the view to considering retention of the plexi-glass if further testing does not prove to result in a better urban design outcome.

Understanding the constraints of the acoustic requirements along with the visual and aesthetic result of a solid barrier wall of lapped and capped timber or opaque material (not a preferred option) this aspect of the development presents a difficult position.

The option presented in the Noise Barrier Wall Design Statement of the Urban Design Report integrates well with the topography, provides a clarity of wayfinding and addresses the context of the site geology, topography and built form heritage well. It is less desirable to fence off the forecourt of No. 800 Pittwater Road, and a better outcome to have a clarity of view to the existing/proposed building in it's context.

(Option Testing Plexi-glass Noise Barrier)

Noting the variegated ground plan treatment of the landscaping that articulates is there an opportunity to provide a plexi-glass screen that follows this meandering line of articulation that can be planted out with larger and smaller planting treatments at various points along this line to assist to soften the effect of a long straight plexi-glass wall. Possibly an option worth testing that could provide additional acoustic attenuation through the depth of planting and plexi-glass combined so as to break up the long linear elevation of plexiglass.

Northern Beaches Council - Heritage Comments

(Fencing)

No objections are raised to the proposed fencing along Pittwater Road. It is understood that it needs to act as a noise barrier, so the use of a clear acrylic top is supported to enable visibility of the heritage item, while still providing security and noise reduction. Such a solution is preferable to a solid fence or metal fence of 1.8 metres. The vertical fins however should only be in a neutral tone, so as to blend in with the facade of the heritage building and not compete with it.

DPIE Comments

Prior to the lodgement of the EIS, the State Design Review Panel recommended the reduction in the use of transparent materials such as plexiglass or acrylic material. The design of the fence along Pittwater Road incorporates an acrylic material on top. The RTS should justify that the use of the material responds appropriately to the previous State Design Review Panel comments.

RTS Response

In the course of the Schematic Design Phase the Design team has investigated a number of options for the noise barrier wall.

The full-height acrylic wall as initially investigated was not supported by the GANSW and the following comments were received:

"The use of plexiglass or similar materials for the noise barrier along Pittwater Rd is not supported. A material more sympathetic to the ecology and heritage of the area, such as sandstone or rendered masonry, is encouraged. Provide a view analysis from key vantage points to illustrate visual impacts of the noise barrier on the presentation of the Top Dog building to the public domain."

The GANSW comments were taken into account in the subsequent design development and the design team arrived at the proposed option with acrylic top and sandstone base. It was determined that the option best balances the requirements for visibility into the school, acoustic performance and integration into the landscape.

The acrylic top is supported by the Northern Beaches Council Heritage Division as it opens up the views to the heritage building and provides visibility of the heritage item (refer comments left).

In response to the comments received by the Urban Design division of Northern Beaches Council we tested further noise barrier wall options.

Existing Option 1 - Acrylic top / Sandstone base

This option is preferred as it provides good visibility into the school grounds from the street which enables crime prevention through passive surveillance and aligns with CPTED (Crime Prevention through Environmenntal Design) principles.

The acrylic top with metal fins is preferred as it integrates the noise barrier wall into the overall composition of the development by utilising the architectural language of the proposed fenestration band in the western facade.

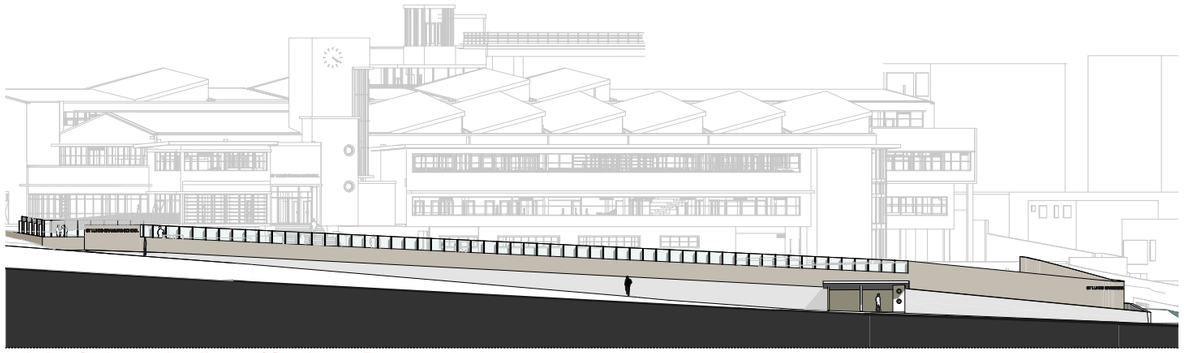
Alternative Option 2 - Acrylic full height

This option has been rejected as the extend of the acrylic material was not sympathetic with the heritage character of the site.

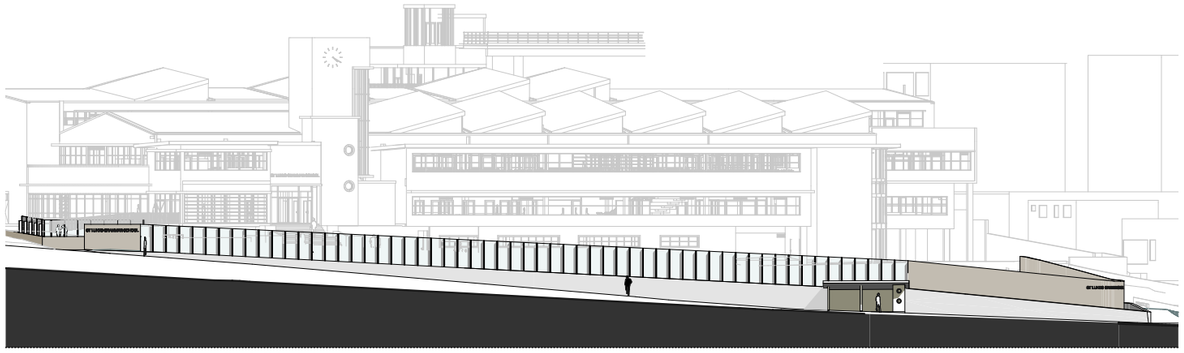
Alternative Option 3 - Sandstone full height

This option has been rejected as it does not comply with CPTED principles and does not fulfill heritage requirements of good visibility of the heritage item.

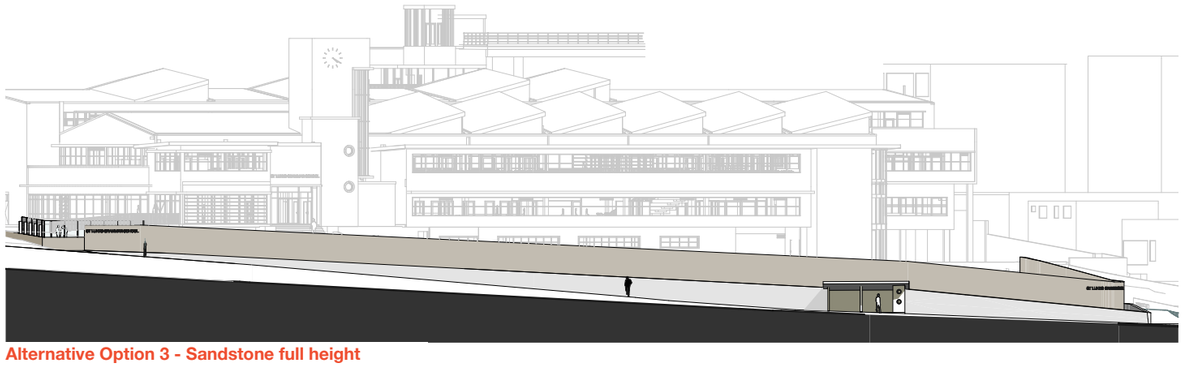
Existing Option 1 - Acrylic Top / Sandstone Base



Existing Option 1 - Acrylic Top / Sandstone Base



Alternative Option 2 - Acrylic full height



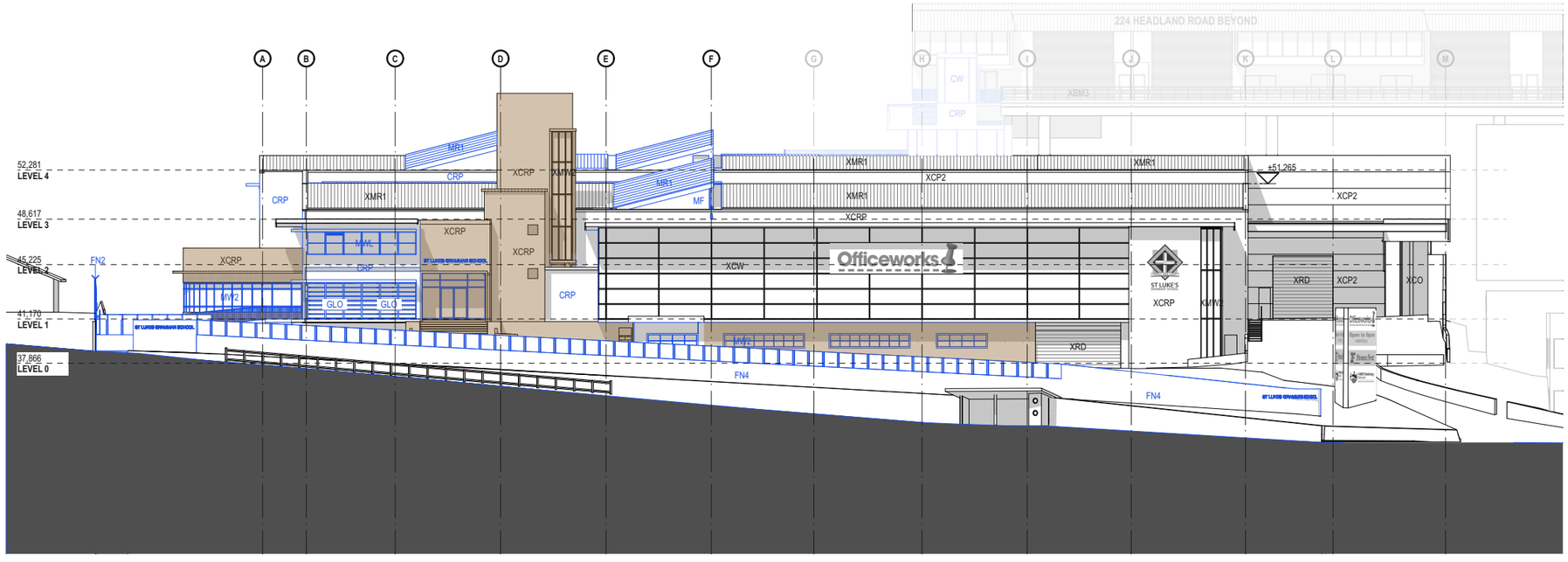
Alternative Option 3 - Sandstone full height

1.3 Stage 2 Facade Treatment

Northern Beaches Council - Heritage Comments

(Space Planning Stage 2)

The culmination with the stage 3 works demonstrates a clearly articulated and consolidated spatial planning regime. The only question is how the staging of works, with regards to the facade treatment will play out and affect current students, staff and users of the site and the general public. See further commentary below in Staging Report section.



LEGEND

- Existing to be retained
- Existing to be demolished
- Proposed
- Existing, significant heritage item

2.0
Heritage

2.1 Location of Western External Walls

Northern Beaches Council - Heritage Comments

(Building form and facade)

The new design fails to interpret the solidity and fenestration pattern of the original facade. The existing glazing on the western facade is proposed to be replaced with a new facade of solidity and fenestration which is not a lot different than the existing in terms of the location of the external walls. The original facade was located behind the leading edge of the clock tower with a parapet and recessed upper storey facade as well a large overhang. Similarly, the area to the left of the main entrance was also behind the leading edge of the tower. This original design ensured that the asymmetrical clock tower and building entrance took prominence as part of the original design, which has been lost in later additions. While the proposal does adopt a strong horizontal architectural statement, by adopting the line of the current Officeworks building for its new walls and large overhangs, this component will continue to affect views to and from the clock tower. It would be preferable if the overhangs are removed and the upper section on the southern end recessed, thereby reinstating the original parapet wall. This will help to interpret the solidity and fenestration and the articulation of the original fabric. Slightly recessed glazing behind this parapet wall could complete the second storey. By doing this the proposed second storey area will need to be reduced (a reduction in the size of the proposed atrium may be considered to regain the required internal area).The original colonnade on the ground floor should be reinstated. This again will result in a slightly reduced internal floor area but will help the building to regain its original fabric on the western facade. A similar design approach should apply to both sides of the main entry on the western facade, so as to retain the prominence of the tower element and also retain significant views to the tower and to the semi-circular canteen element at the north-west end of the building.

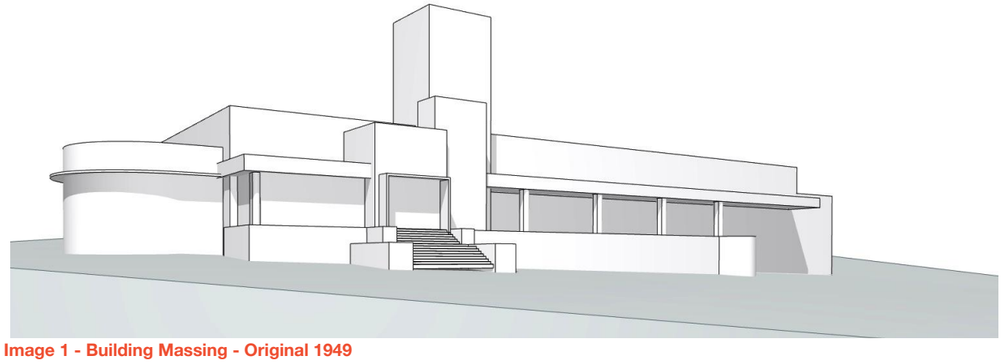


Image 1 - Building Massing - Original 1949

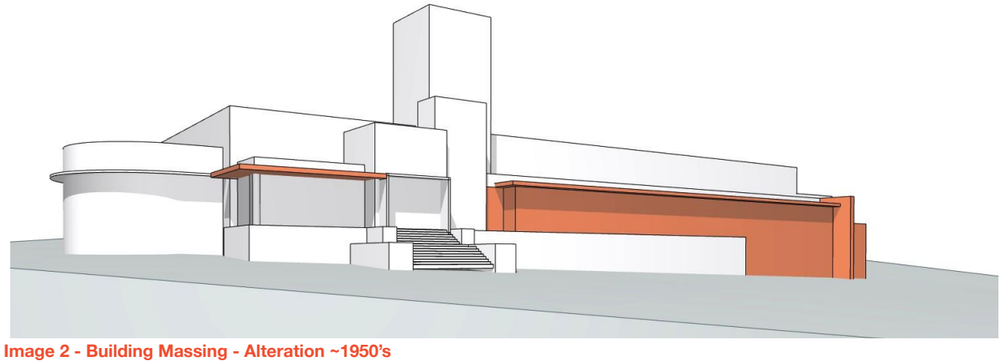


Image 2 - Building Massing - Alteration ~1950's

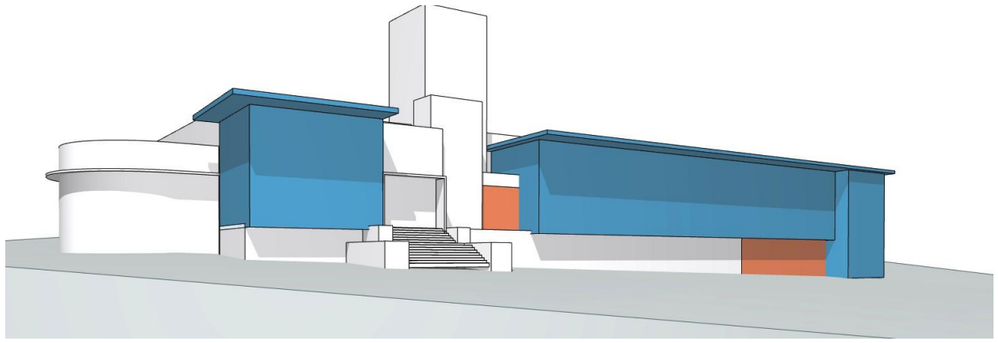


Image 3 - Building Massing - Alteration 1993

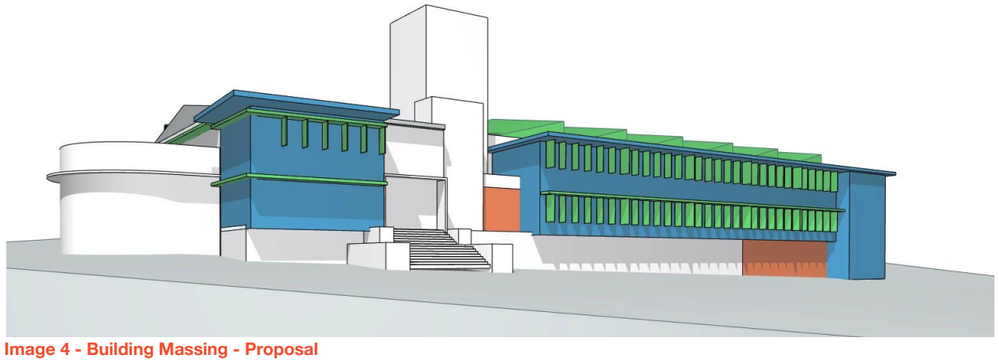


Image 4 - Building Massing - Proposal

Image 5 - Building Massing - Council Recommendation

RTS Response

The view study illustrates the history of the building alterartions since the oipening of the original Top Dog Men's Wear factory in 1949 and explores the impact to the obstruction of views to the clocktower and the semi-circular canteen element the later alterations impose.

The Northern Beaches Council objective is to open up the views to the clocktower and the semi-circular canteen element and to interpret the solidity, fenestration and articulation of the original fabric.

The Northern Beaches Council recommendation to reinstate the original parapet wall on Level 2 and the colonnade on Level 1, would require significant restructuring of fabric demolished in 1998.

The view study shows that the 1950's and 1993 additions and the proposed works, do not affect the views to the clocktower and canteen when approaching from Warringah Road, which is the main view of the building. The views are slightly improved when approaching from Pittwater Road or from Harbord Road.

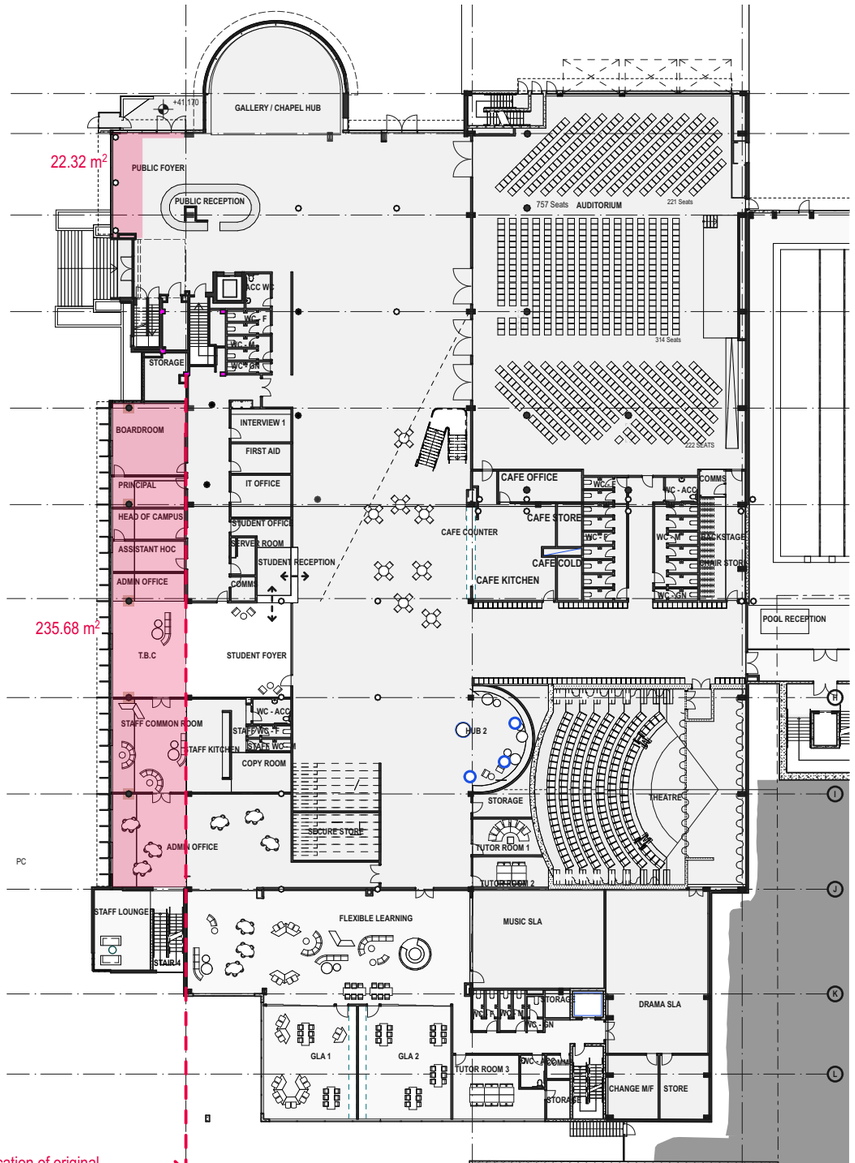
The GFA loss resulting from the set-back of the western facade walls as per Council's recommendations amounts to more than 500 m2.

To re-instate the original colonade on Level 1, the administration area would have to be reduced by ~235m2 and the public foyer area would have to be reduced by ~22m2. The remaining floor area would be insufficient to fit the required accommodation.

To re-instate the original parapet wall on Level 2, the general learning areas (GLA's) would have to be reduced by ~255m2, which will result in the loss of 5 GLA's. This remaining GLA's will be insufficient to fit the required number of students and does not meet the educational requirements.

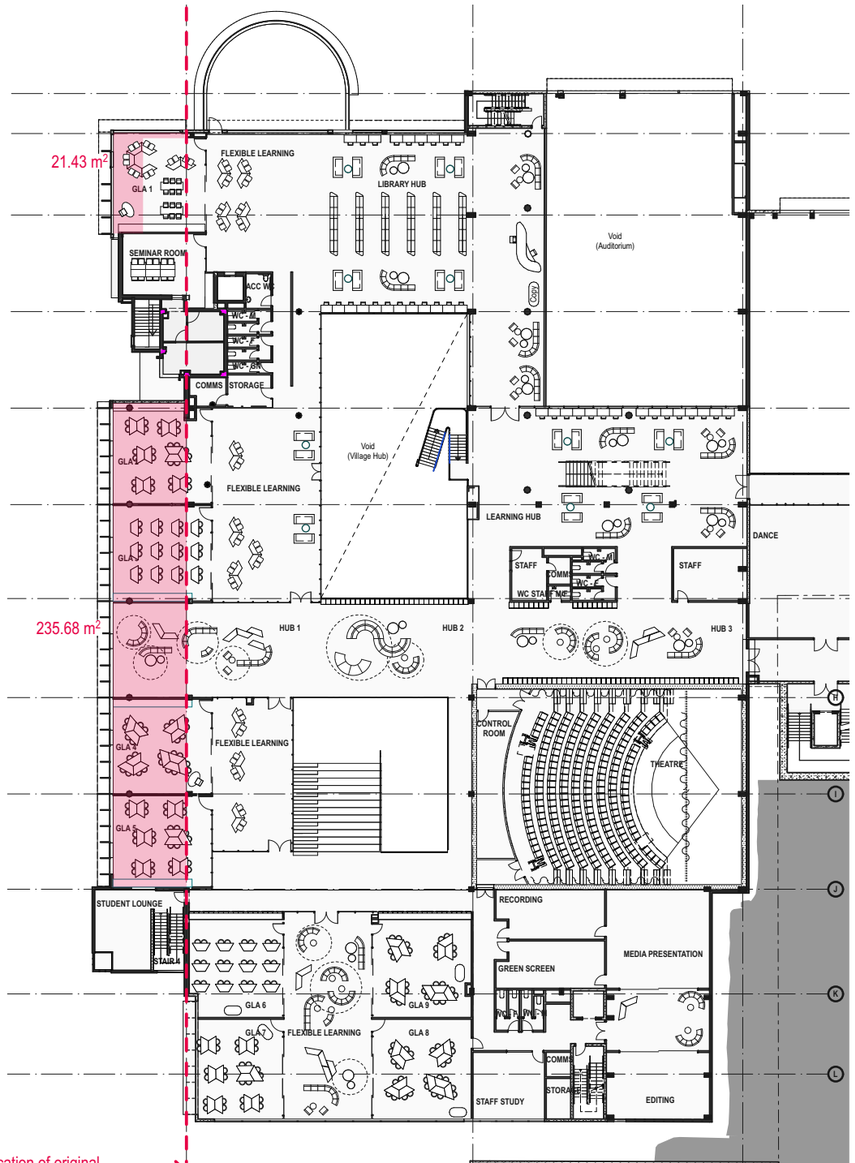
We conclude that the benefits of retaining the existing structure far outweigh the advantage of improving the views to the clocktower and canteen.

The environmental cost of re-building the western section of the building does contradict the ESD principle of retaining existing structure whenever possible. The loss of 500m2 GFA would futher make the project unviable as the briefed areas would not fit the envelope.



GFA Loss - Level 1

(Reinstatement of set-back to expose original colonnade)



GFA Loss - Level 2

(Reinstatement of set-back to expose original parapet wall)

Street View Warringah Road - Building Massing - Proposed

Street View Warringah Road - Building Massing - Council Recommendation

Street View Harbord Road - Building Massing - Proposed

Street View Harbord Road - Building Massing - Council Recommendation

Street View Pittwater Road - Building Massing - Proposed

Street View Pittwater Road - Building Massing - Council Recommendation

RTS Response

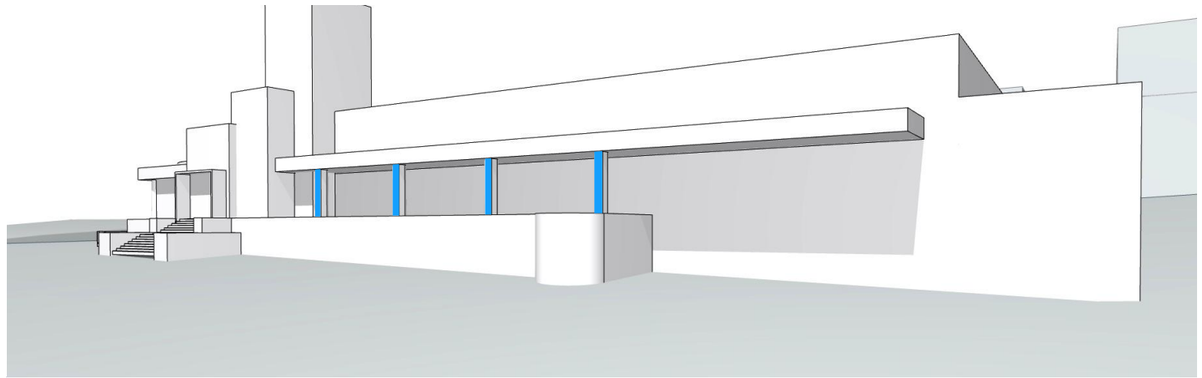
The original collonade columns were replaced by taller columns to support the new Western facade.

The proposal is to interpret the original collonade columns by larger shading fins to mark the original location of the columns. The enlarged shading fins (highlighted in blue) are integreated in the array of shading fins along the new fenestration bands of the western facade.

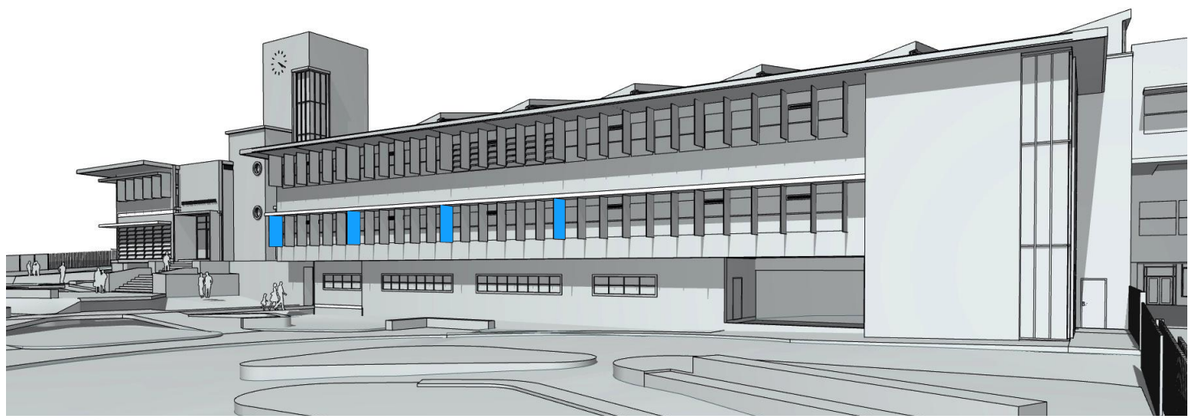
The proposed colour is a deep blue to enabable the enlarged shading fins to stand out from the adjoining slimmer shading fins. The colour of the remnaining fins is an array of toned down blues to respond to the school colours as used at the School Campus on 210 Headland Road (also refer Materials and Finishes, pg.17).

Note: the light blue colour used to highlight the columns on the images to the right is used for diagrammatic purposes only.

Site Photo (ca. 1950's)



Building Massing 1950



Proposed Column Interpretation

2.2 Saw Tooth Roof

Northern Beaches Council - Heritage Comments

(Roof)

The proposed roof form incorporating sawtooth roofs is acceptable from a heritage perspective as they will provide natural light into the central area of the building without compromising the facade treatment. However, it would be preferable if the height of the sawtooth roof was reduced, to minimise its visibility on the western facade, as the original roof was not readily visible above the original parapet.

RTS Response

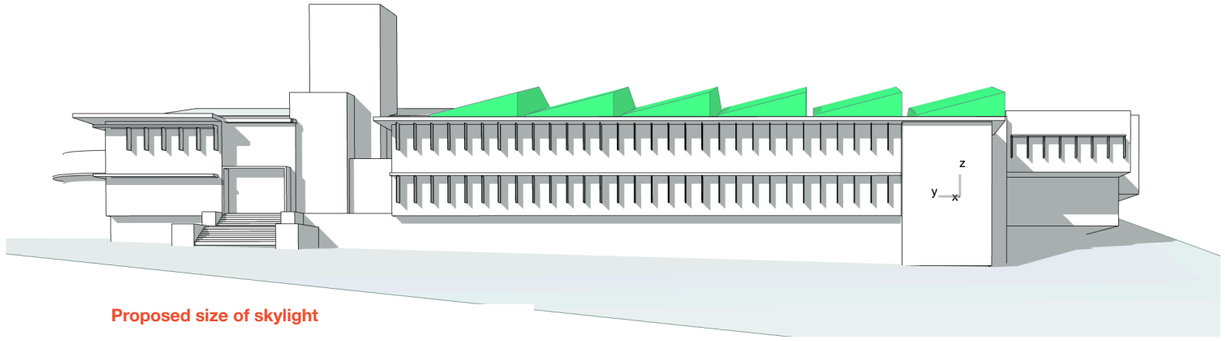
The size of the saw tooth roof was established by balancing the visual impact of the new pop-out structures with the natural light levels required in the general learning and the large communal areas. A full daylight analysis was undertaken to ensure BCA compliance for natural light levels in educational establishments.

The proposed skylight extends 2 metres above the current ridge line and provides 27.47m2 of clear glass area.

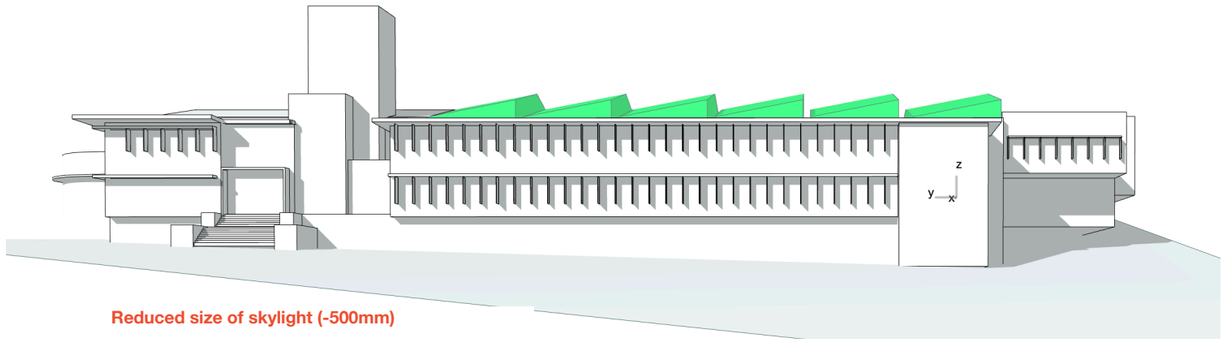
To test the visual impact and the resulting reduction in light levels for the reduced height skylights an arbitrary number of 500mm in height reduction was investigated. Any further reduction in size would make the skylights non-functional

The reduced size skylights extend 1.5 metres above the current ridge line and provide 17.50m2 of clear glass area. This is an reduction of more than 36% in clear glass area. To establish the resulting lux levels a new daylight analysis would need to be carried out. The currently proposed light levels are already at their minimum and a further reduction would result in the non-compliance of 6 GLA's (General Learning Areas) and reduced light levels in 3 Flexible Learning areas, 2 Learning Hub's, the Library and the Atrium on level 1.

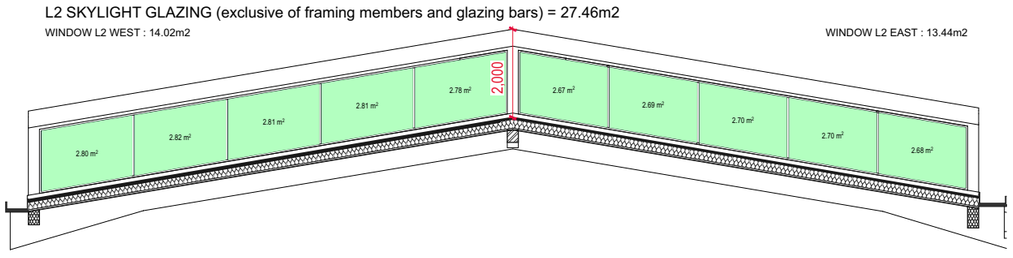
We conclude that the visual benefit of reducing the height of the skylight does not outweigh the loss in amenity and code non-compliance for the internal spaces. We believe that the skylights add character and are reminicent of the industrial past of the building, interpreting the original roof form.



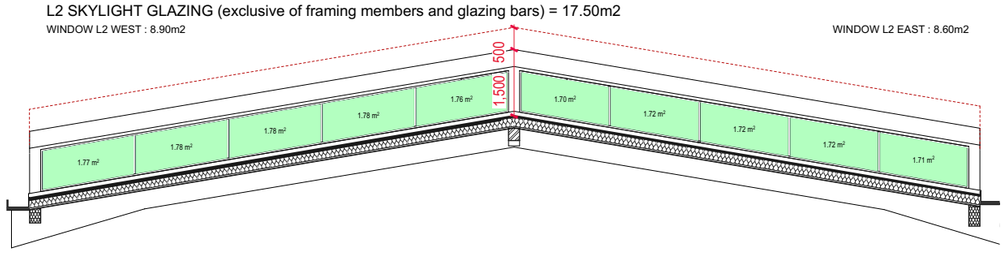
Proposed size of skylight



Reduced size of skylight (-500mm)



Proposed size of skylight



Reduced size of skylight

2.3 Materials and Finishes

Northern Beaches Council - Heritage Comments

(Materials and Finishes)

The preferred external colours are "Option 2 – Half-strength blue", with the heritage fabric rendered white to reflect the original finish.

From a heritage perspective, the preferred external colours would be those shown as "Option 3 - Neutral" in the Architectural Design Report (page 58). In addition to this, it is preferred that original components be painted in original colours (e.g. white), with the new components painted in a slightly different neutral shade. In doing so, the original fabric components would be clearly identifiable, but with the whole facade still presenting with a neutral palette, reflecting the original architectural design concept.

No objections are raised to the use of other colours (e.g. blue) for building components behind the facade, as darker colours will ensure that the heritage facade is prominent and distinct and that new building additions are recessive

RTS Response

Option 4 below shows the revised colour scheme to incorporate Council's recommendation.

The original building fabric is proposed to be painted white with the new walls in the western wing of the building to be painted in a slightly darker neutral tone. The skylights and the walls of the central wing of the building are proposed to be painted dark blue to appear recessiv. The walls of the eastern wing are proposed to be painted mid grey. The three different tones are to scale down the building mass and to emphasize the 3 structural wings of the building complex.

It is proposed to keep a toned down version of the blue colours for the shading fins to provide a contrast to the white walls and thus to reinforce the horizontality of the fenestration bands. The blues are referencing the St. Luke's School colour strategy as used at the Schools other campuses, including the campus at 210 headland Road. The blues will also indicate that the fins are part of the new building fabric.

The proposed selection of 5 different shades of blues has been toned down to respond to councils preferrecnce of neutral colours.

The darkest blue is proposed to be used only for the enlarged shading fins as a way to interprete the location of the original collonade columns (also refer pg.15). The remaining 4 blue tones are proposed to be radomly placed along the all other shading fins.

Shading Fin Colours

Option 4 - Revised Colour Scheme (Northern Beaches Council Heritage Division - Preferred Scheme)

2.4 Signage

Northern Beaches Council - Heritage Comments

(Signage)

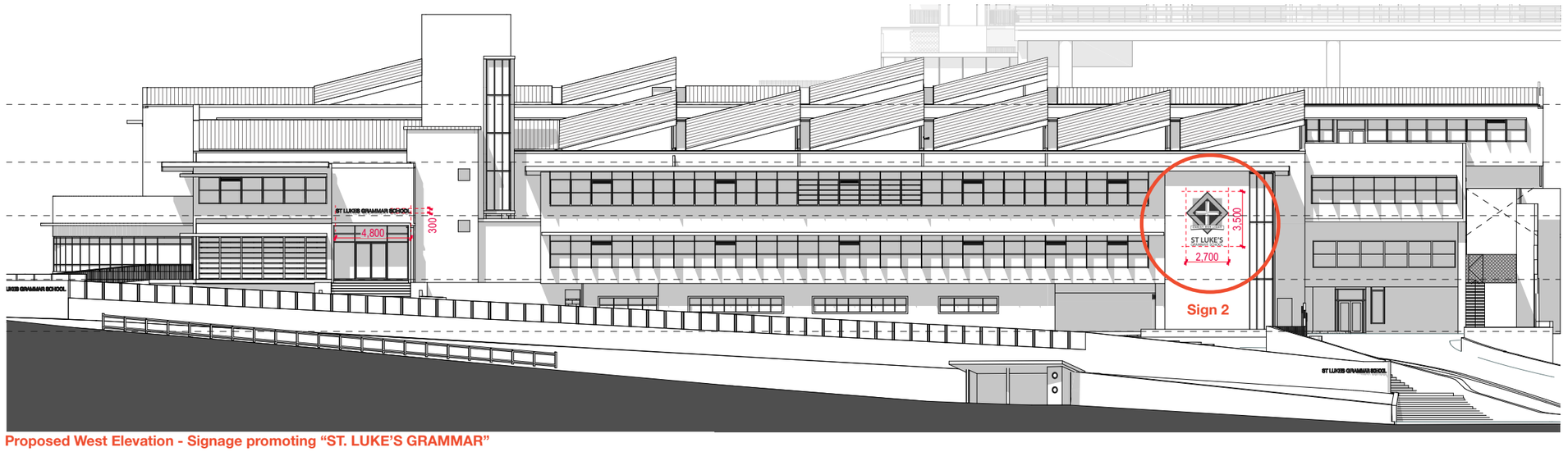
Proposed signage is generally acceptable. However, consideration should be given to a reduction in the size of proposed Sign 2, the main sign on the southern end of the front facade, so that it does not dominate the facade and compete with the heritage clock tower.

RTS Response

The proposed ST. LUKE'S GRAMMAR signage occupies a significantly smaller area of the western building facade than any previous signage, including the original TOP DOG MEN'S WEAR signage, the later BOND'S signage and the current OFFICE WORKS and FITNESS FIRST signage.

We have considered the size reduction of Sign 2 and advise that it does not dominate the facade or compete with the heritage clocktower. The current size is the minimum size required for legibility from Warringah road and Pittwater Road.

Site Photo current - Signage promoting "FITNESS FIRST" , "Officeworks" and "iMED RADIOLOGY"



Proposed West Elevation - Signage promoting "ST. LUKE'S GRAMMAR"

Site Photo 1949 - Signage promoting “TOP DOG MEN’S WEAR PRODUCTION CENTRE”

Site Photo ca. 1950’S - Signage promoting “BOND’S” Factory

3.0

Transport

3.1 Alternative Vehicle Access to 800 Pittwater Road

Northern Beaches Council - Transport Comments

(Access via Pittwater Road)

The preference of Council is that the access be provided on Pittwater to avoid the potential of rear end collisions when turning from Pittwater Road onto Harbord Road, being that the access point is close to the intersection.

An access directly off Pittwater Road would provide better accessibility and improve safety. Further, the reconfiguration would support the possibility for additional parking capacity.

Transport for NSW Comments

(Vehicle Access to 800 Pittwater Road)

The proposed development is likely to increase student movements along Harbord Street at a location where some of the right turning vehicles from Pittwater Road need to enter and exit the driveway located in close proximity to the Pittwater Road/Warringah Road/ Harbord Road intersection. The following comments are made in relation to the proposed access arrangement to the school:

- The proposed activities associated with the development would likely to increase pedestrian / vehicle conflicts and cause pedestrian related incidents at the entrance to the school with the increase in pedestrian movements. and

- The proposed school arrangement would have potential impact on the safety and operation efficiency of the Pittwater Road / Warringah Road signalised intersection as the proposed school activities such as off-street parking and pick up and drop off activities on site would likely to cause queuing onto Harbord Road, which results in immediate obstruction to the operation of the signalised intersection. As such, Transport for NSW does not support the vehicle access driveway from Harbord Road to the proposed development.

(Recommendation)

It is requested that the Proponent:

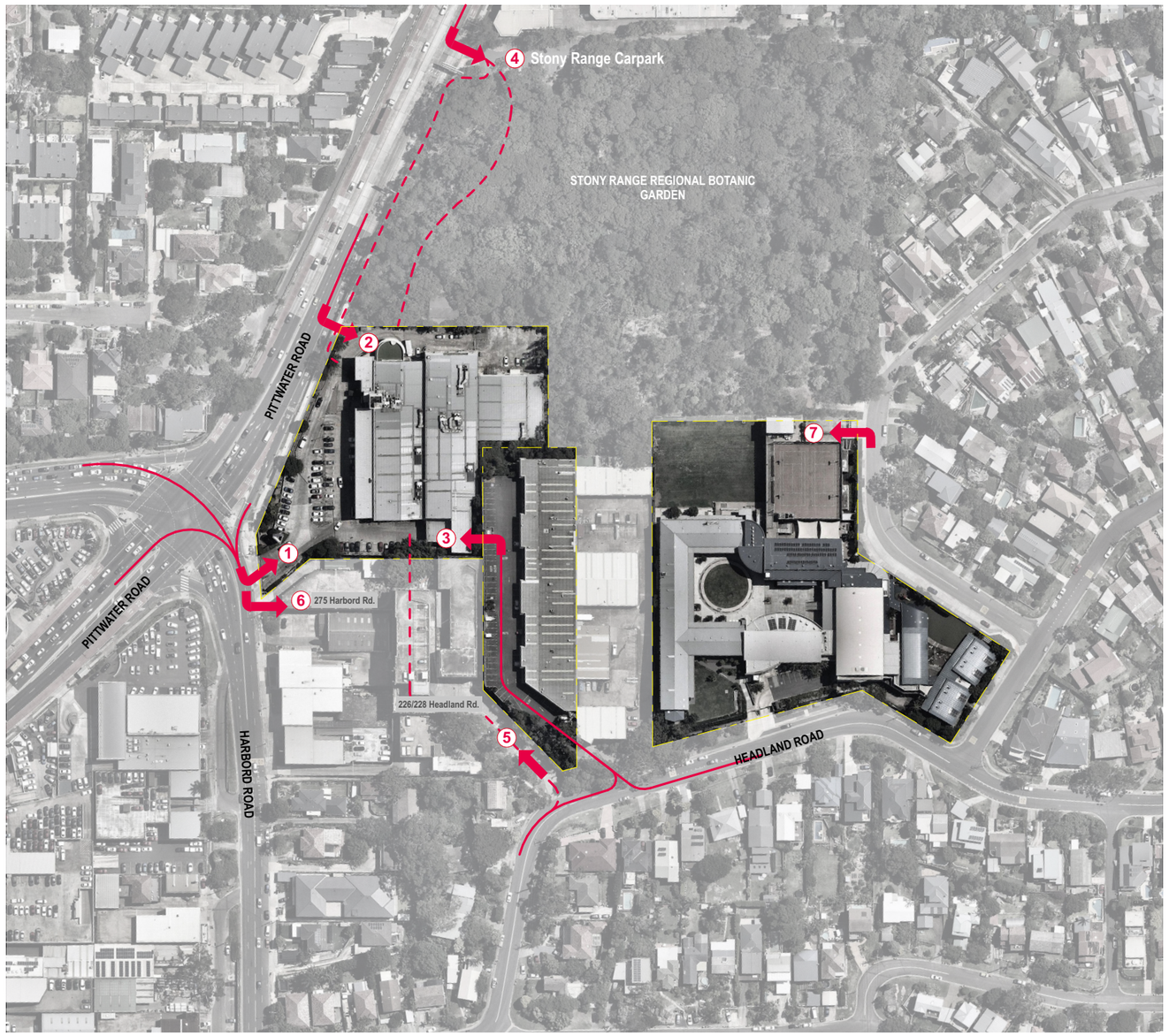
- Investigates an alternate access to Harbord Road driveway with the closure of this access in consultation with TfNSW during the preparation of the applicant's response to submission.

DPIE Comments

The Department notes that Transport for NSW (TfNSW) have raised concerns regarding the increase in pedestrian / vehicle conflicts associated with the Harbord Road driveway providing access to the senior school campus at 800 Pittwater Road. The Department agrees with the above concern. Noting the proposed change of use of the premises, the Department requires you to:

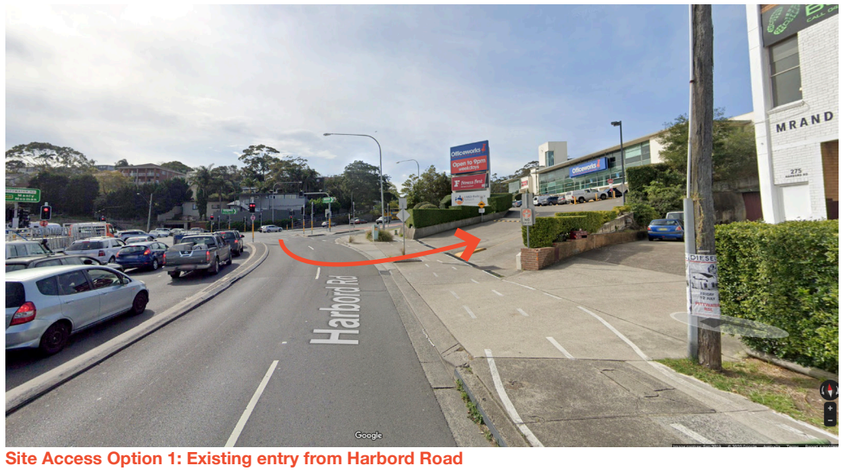
- investigate the feasibility of an alternative access point to the site, including the closure of the Harbour Road driveway. Or

- demonstrate that the existing driveway can operate safely in the future ameliorating the identified risks.



Site Access Option 1: Existing entry from Harbord Road

Site Access Option 2: New entry from Pittwater Road



Site Access Option 1: Existing entry from Harbord Road

Site Access Option 2: New entry from Pittwater Road

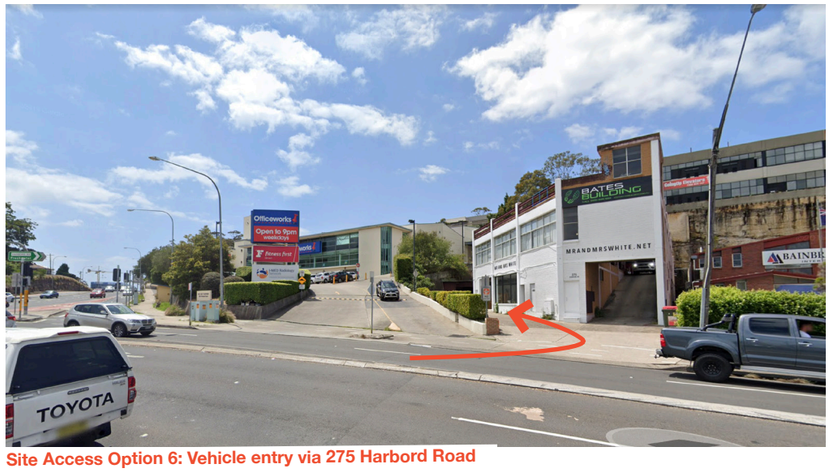
Site Access Option 3: Vehicle entry via 224 Headland Road

Site Access Option 3: Vehicle entry via 224 Headland Road

Site Access Option 4: Carpark of Stony Range Regional Botanic Gardens

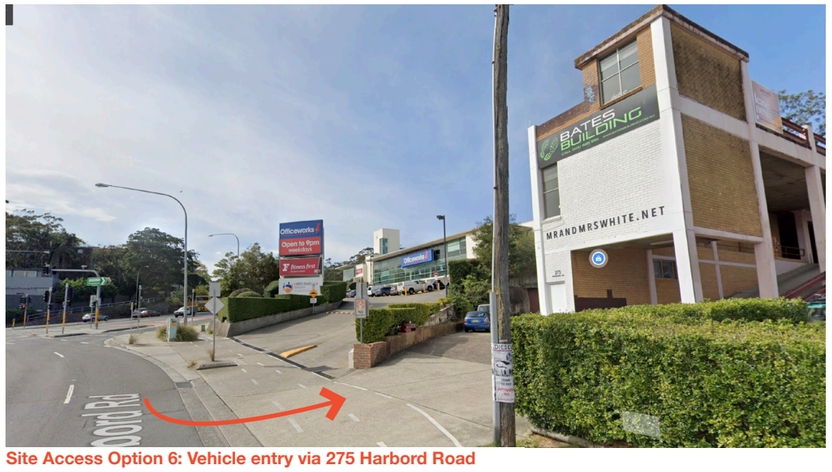
Site Access Option 4: Carpark of Stony Range Regional Botanic Gardens

Site Access Option 5: Vehicle entry via 226/228 Headland Road



Site Access Option 6: Vehicle entry via 275 Harbord Road

Site Access Option 5: Vehicle entry via 226/228 Headland Road



Site Access Option 6: Vehicle entry via 275 Harbord Road

Site Access Option 7: Vehicle entry via 210 Headland Road (Tango Avenue)

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SITE ACCESS OPTIONS	ADVANTAGES	DISADVANTAGES
Option 1 - Existing entry from Harbord Road	– Existing entry into 800 Pittwater Road (long established); – Moderate level change between road level and site (existing driveway has suitable gradients for vehicles); – Site in school ownership; – Potential impacts to signalised intersection can be appropriately mitigated	– Proximity to Pittwater Road/Warringah Road/Harbord Road signalised intersection; – Potential for traffic to queue (AM peak) into intersection; – Space in school forecourt used for vehicle access and at-grade parking;
Option 2: New entry from Pittwater Road	– Approximately 90m north of signalised intersection; – Separates pedestrian and vehicle traffic; – At-grade parking in forecourt could be replaced with additional play area / outdoor space for school; – Site in school ownership	– Require extensive excavation to provide new driveway and link into existing basement carpark; – New vehicular access point to site from classified road; – Potential impacts on heritage values of site (excavation beneath clock tower and former curved canteen); – Potential impacts to structural adequacy of existing building (excavation beneath existing building); – Impacts on existing bus lane along Pittwater Road
Option 3: Vehicle entry via 224 Headland Road	– Removes any vehicular access to site from classified road; – At-grade parking in forecourt could be replaced with additional play area/ outdoor space for school – Site in school ownership	– Increased traffic to local roads (Headland Road); – Level difference of 20m between 224 Headland Road and 800 Pittwater Road; – Impacts on shared driveway with 222 Headland Road; – New vehicle link + associated infrastructure between 224 Headland and 800 Pittwater Road result in visual (bulk / scale) and heritage impacts
Option 4: Carpark of Stony Range Regional Botanic Gardens	– Existing carpark to be used for drop-off/pick-up – potential reduce traffic generation during AM / PM school peak periods; – Approximately 220m north of signalised intersection;	– Would still require vehicle access from Harbord Road for staff / student parking as well as deliveries/servicing; – Not in school ownership would require agreement / approval between school and Council (as Crown Land Manager) for use; – Site - crown land dedicated for recreation (requirements under Crown Land Management Act and Local Government Act); – Students would have to walk through Stony Range RBG or along Pittwater Road footpath to access school
Option 5: Vehicle entry via 226/228 Headland Road	– Less of a level difference between 226 / 228 Headland Road and 800 Pittwater Road – Removal of vehicular access to site from classified road – At-grade parking in forecourt could be replaced with additional play area/ outdoor space for school	– Shared driveway between 226 and 228 Headland Road; – Strata titled lots; – Not in school ownership; – Increased traffic to local roads (Headland Road); – Loss of industrial units to provide vehicle access to school (inconsistent with zoning); – isual and heritage impacts as result of new vehicle connection to 800 Pittwater Road.
Option 6: Vehicle entry via 275 Harbord Road	– Potential for better separation between vehicle and pedestrian traffic	– Driveway in close proximity to signalised intersection. Would still need to include part of 800 Pittwater Road frontage to provide adequate driveway width; – Site not in school ownership; – Demolition / removal of existing industrial units; – Fill required to amended site levels.
Option 7: Vehicle entry via 210 Headland Road (Tango Avenue)	– Removal of vehicle access to the site form a classified road; – At-grade parking in forecourt could be replaced with additional play area / outdoor space for school	– Increased traffic to local roads (Headland Road and Tango Avenue); – Access via part of Stony Range Regional Botanic Garden (crown land dedicated for recreation) or Access via 222 Headland Road (not in school ownership)

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